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# ANNUAL REPORT

OF THE

# COMMISSIONER OF PATENTS

FOR THE YEAR

# 1903.




WASHINGTON:
GOVERNMENT PRINTING OFFICE.
1904.

SMITHSONIAN
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LIBRARIES

# REPORT

OF THE

# COMMISSIONER OF PATENTS

TO CONGRESS,

FOR THE YEAR ENDING DECEMBER 31, 1903.

[Laid before the Senate by the President *pro tempore*, January 28, 1904, referred to the Committee on Patents, and ordered to be printed.]

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
*Washington, D. C., January 28, 1904.*

*To the Senate and House of Representatives of the United States of America in Congress assembled:*

In compliance with section 494 of the Revised Statutes I have the honor to submit the following report of the business of the Patent Office for the year ending December 31, 1903:

## RECEIPTS.

*Detailed statement of all moneys received for patents, for copies of records or drawings, or from any source whatever.*

| | |
|---|---|
| Applications: | |
| Cash received | $1,439,146 00 |
| Cash refunded | 5,511 00 |
| Net cash | 1,433,635 00 |
| Certificates of deposit | 41,745 00 |
| Total cash and certificates | 1,475,380 00 |
| Copies: | |
| Cash received | 128,269 90 |
| Cash refunded | 8,707 05 |
| Net cash | 119,562 85 |
| Certificates of deposit | 661 75 |
| Total cash and certificates | 120,224 60 |
| Recording assignments: | |
| Cash received | 27,036 58 |
| Cash refunded | 1,386 02 |
| Net cash | 25,650 56 |
| Certificates of deposit | 96 00 |
| Total cash and certificates | 25,746 56 |
| Subscriptions to Official Gazette: | |
| Cash received | 12,602 00 |
| Cash refunded | 79 35 |
| Net cash | 12,522 65 |
| Certificates of deposit | 37 00 |
| Total cash and certificates | 12,559 65 |
| Registration of prints and labels: | |
| Cash received | 9,641 00 |
| Cash refunded | 1,416 00 |
| Net cash | 8,225 00 |
| Certificates of deposit | 66 00 |
| Total cash and certificates | 8,291 00 |
| *Aggregates.* | |
| Cash received | $1,616,695 48 |
| Cash refunded | 17,099 42 |
| Net cash | 1,599,596 06 |
| Certificates of deposit | 42,605 75 |
| Total cash and certificates | 1,642,201 81 |

## EXPENDITURES.

*Approximate amounts expended and incurred under the several appropriations from January 1, 1903, to December 31, 1903.*

| | Expended. | Estimated liabilities. | Total. |
|---|---|---|---|
| Salaries | $831,165 50 | | $831,165 50 |
| Scientific Library | 1,473 45 | | 1,473 45 |
| Transportation of publications to foreign countries | 720 25 | | 720 25 |
| International Union for Protection of Industrial Property | 703 03 | | 703 03 |
| Stationery | 10,847 11 | | 10,847 11 |
| Postage on foreign matter | 2,650 00 | | 2,650 00 |
| Furniture | 7,093 05 | | 7,093 05 |
| Carpets | 3,530 75 | | 3,530 75 |
| Ice | 467 96 | | 467 96 |
| Telephones | 1,396 94 | | 1,396 94 |
| Washing towels | 174 24 | | 174 24 |
| Sundries | 4,912 98 | | 4,912 98 |
| Law library | 508 85 | | 508 85 |
| Official Gazette, (illustrations,) paid contractor | 79,787 50 | | 79,787 50 |
| Equipment of Scientific Library | 2,218 00 | | 2,218 00 |
| Photolithographing, paid contractor | 112,932 90 | | 112,932 90 |
| Printing and binding, paid Public Printer for Official Gazette, indexes, printing specifications, miscellaneous work | 379,363 50 | $8,699 80 | 388,063 30 |
| Total | 1,439,946 01 | 8,699 80 | 1,448,645 81 |

## RECEIPTS AND EXPENDITURES.

| | |
|---|---|
| Receipts from all sources | $1,642,201 81 |
| Expenditures | 1,448,645 81 |
| Surplus | 193,556 00 |

*Statement of balance in the Treasury of the United States on account of the patent fund.*

| | |
|---|---|
| Amount to the credit of the fund January 1, 1903 | $5,488,984 61 |
| Amount of receipts during the year 1903 | 1,642,201 81 |
| Total | 7,131,186 42 |
| Deduct expenditures for the year 1903 | 1,448,645 81 |
| Balance January 1, 1904 | 5,682,540 61 |

## SUMMARY OF THE BUSINESS OF THE PATENT OFFICE.

| | |
|---|---|
| Number of applications for patents for inventions | 49,289 |
| Number of applications for patents for designs | 770 |
| Number of applications for reissues of patents | 154 |
| Total number of applications | 50,213 |
| Number of caveats filed | 1,771 |
| Number of applications for registration of trade-marks | 2,504 |
| Number of applications for registration of labels | 1,234 |
| Number of applications for registration of prints | 380 |
| Number of disclaimers filed | 8 |
| Number of appeals on the merits | 1,012 |
| Total | 6,909 |

| | |
|---|---|
| Total number of applications, etc., requiring investigation and action | 10,423 |
| Number of patents issued, including designs | 31,582 |
| Number of patents reissued | 117 |
| Total | 31,699 |
| Number of trade-marks registered | 2,186 |
| Number of labels registered | 990 |
| Number of prints registered | 270 |
| Total | 3,446 |
| Number of patents expired during the year | 21,797 |
| Number of patents withheld for non-payment of final fees | 5,236 |
| Number of applications allowed awaiting final fees | 10,545 |

## PATENTS ISSUED.

*Patents issued to citizens of the United States, with the ratio of population to each patent granted.*

| States and Territories. | Patents and designs. | One to every— | States and Territories. | Patents and designs. | One to every— |
|---|---|---|---|---|---|
| Alabama | 134 | 13,646 | Nevada | 13 | 3,256 |
| Alaska Territory | 3 | 21,147 | New Hampshire | 110 | 3,741 |
| Arizona Territory | 38 | 3,235 | New Jersey | 1,228 | 1,533 |
| Arkansas | 78 | 16,814 | New Mexico Territory | 23 | 8,491 |
| California | 979 | 1,516 | New York | 4,573 | 1,589 |
| Colorado | 404 | 1,335 | North Carolina | 125 | 15,150 |
| Connecticut | 912 | 996 | North Dakota | 68 | 4,693 |
| Delaware | 44 | 4,198 | Ohio | 2,156 | 1,928 |
| District of Columbia | 262 | 1,063 | Oklahoma Territory | 89 | 4,474 |
| Florida | 67 | 7,888 | Oregon | 125 | 3,308 |
| Georgia | 220 | 10,074 | Pennsylvania | 3,144 | 2,004 |
| Hawaii Territory | 13 | 11,846 | Porto Rico | 1 | ---------- |
| Idaho | 32 | 5,055 | Rhode Island | 350 | 1,224 |
| Illinois | 2,811 | 1,715 | South Carolina | 76 | 17,635 |
| Indiana | 788 | 3,193 | South Dakota | 92 | 4,364 |
| Indian Territory | 36 | 10,887 | Tennessee | 208 | 9,714 |
| Iowa | 627 | 3,559 | Texas | 434 | 7,024 |
| Kansas | 334 | 4,402 | Utah | 73 | 3,791 |
| Kentucky | 277 | 7,751 | Vermont | 63 | 5,454 |
| Louisiana | 143 | 9,661 | Virginia | 210 | 8,829 |
| Maine | 136 | 5,106 | Washington | 230 | 2,252 |
| Maryland | 340 | 3,500 | West Virginia | 152 | 6,307 |
| Massachusetts | 2,081 | 1,348 | Wisconsin | 619 | 3,342 |
| Michigan | 950 | 2,548 | Wyoming | 22 | 4,205 |
| Minnesota | 501 | 3,495 | United States Army | 8 | ---------- |
| Mississippi | 70 | 22,161 | United States Marine Corps | 1 | ---------- |
| Missouri | 979 | 3,173 | United States Navy | 15 | ---------- |
| Montana | 75 | 3,244 | | | |
| Nebraska | 277 | 3,857 | Total | 27,819 | ---------- |

*Patents granted to citizens of foreign countries.*

| | | | |
|---|---|---|---|
| Algeria | 2 | Java | 1 |
| Argentina | 10 | Mexico | 22 |
| Austria-Hungary | 136 | Natal | 1 |
| Belgium | 59 | Netherlands | 24 |
| Bolivia | 1 | Newfoundland | 1 |
| Brazil | 5 | New South Wales | 20 |
| British Honduras | 1 | New Zealand | 48 |
| British West Indies | 1 | Norway | 18 |
| Canada | 440 | Portugal | 1 |
| Cape Colony | 1 | Queensland | 5 |
| Chile | 1 | Roumania | 6 |
| China | 1 | Russia | 46 |
| Costa Rica | 1 | Scotland | 110 |
| Cuba | 9 | South Africa | 4 |
| Denmark | 36 | South Australia | 8 |
| England | 1,065 | Spain | 7 |
| France | 321 | Sweden | 76 |
| Germany | 1,053 | Switzerland | 78 |
| Guatemala | 2 | Tasmania | 2 |
| Honduras | 1 | Transvaal | 16 |
| India | 7 | Turkey | 1 |
| Ireland | 24 | Victoria | 50 |
| Italy | 30 | Western Australia | 4 |
| Jamaica | 1 | | |
| Japan | 6 | Total | 3,763 |

The following tables present a comparative statement of the business of the Patent Office since the enactment of the statute of 1836 and exhibit in detail the business of the Office during the last calendar year:

*Comparative statement of the business of the Office from 1837 to 1903, inclusive.*

| Year. | Applications. | Caveats filed. | Patents and reissues. | Cash received. | Cash expended. | Surplus. |
|---|---|---|---|---|---|---|
| 1837 | ---------- | ---------- | 435 | $29,289 08 | $33,506 98 | ---------- |
| 1838 | ---------- | ---------- | 520 | 42,123 54 | 37,338 92 | $4,784 62 |
| 1839 | ---------- | ---------- | 425 | 38,019 97 | 34,543 51 | 3,476 46 |
| 1840 | 765 | 228 | 473 | 38,056 51 | 39,020 67 | ---------- |
| 1841 | 847 | 312 | 495 | 40,413 01 | 52,666 87 | ---------- |
| 1842 | 761 | 291 | 517 | 36,505 63 | 31,241 43 | 5,264 20 |
| 1843 | 819 | 315 | 519 | 35,315 81 | 30,776 96 | 4,538 85 |
| 1844 | 1,045 | 380 | 497 | 42,509 26 | 36,344 53 | 6,164 73 |

*Comparative statement of the business of the Office from 1837 to 1903, inclusive*—Continued.

| Year. | Applications. | Caveats filed. | Patents and reissues. | Cash received. | Cash expended. | Surplus. |
|---|---|---|---|---|---|---|
| 1845 | 1,246 | 452 | 503 | $51,076 14 | $39,395 65 | $11,680 49 |
| 1846 | 1,272 | 448 | 638 | 50,264 16 | 46,158 71 | 4,105 45 |
| 1847 | 1,531 | 533 | 569 | 63,111 19 | 41,878 35 | 21,232 84 |
| 1848 | 1,628 | 607 | 653 | 67,576 69 | 58,905 84 | 8,670 85 |
| 1849 | 1,955 | 595 | 1,077 | 80,752 78 | 77,716 44 | 3,036 34 |
| 1850 | 2,193 | 602 | 993 | 86,927 05 | 80,100 95 | 6,826 10 |
| 1851 | 2,258 | 760 | 872 | 95,738 61 | 86,916 93 | 8,821 68 |
| 1852 | 2,639 | 996 | 1,019 | 112,056 34 | 95,916 91 | 16,139 43 |
| 1853 | 2,673 | 901 | 961 | 121,527 45 | 132,869 83 | ---------- |
| 1854 | 3,324 | 868 | 1,844 | 163,789 84 | 167,146 32 | ---------- |
| 1855 | 4,435 | 906 | 2,013 | 216,459 35 | 179,540 33 | 36,919 02 |
| 1856 | 4,960 | 1,024 | 2,505 | 192,588 02 | 199,931 02 | ---------- |
| 1857 | 4,771 | 1,010 | 2,896 | 196,132 01 | 211,582 09 | ---------- |
| 1858 | 5,364 | 943 | 3,710 | 203,716 16 | 193,193 74 | 10,522 42 |
| 1859 | 6,225 | 1,079 | 4,538 | 245,942 15 | 210,278 41 | 35,663 74 |
| 1860 | 7,653 | 1,084 | 4,819 | 256,352 59 | 252,820 80 | 3,531 79 |
| 1861 | 4,643 | 700 | 3,340 | 137,354 44 | 221,491 91 | ---------- |
| 1862 | 5,038 | 824 | 3,521 | 215,754 99 | 182,810 39 | 32,944 06 |
| 1863 | 6,014 | 787 | 4,170 | 195,593 29 | 189,414 14 | 6,179 15 |
| 1864 | 6,972 | 1,063 | 5,020 | 240,919 98 | 229,868 00 | 11,051 98 |
| 1865 | 10,664 | 1,932 | 6,616 | 348,791 84 | 274,199 34 | 74,592 50 |
| 1866 | 15,269 | 2,723 | 9,450 | 495,665 38 | 361,724 28 | 133,941 10 |
| 1867 | 21,276 | 3,597 | 13,015 | 646,581 92 | 639,263 32 | 7,318 60 |
| 1868 | 20,445 | 3,705 | 13,378 | 681,565 86 | 628,679 77 | 52,886 09 |
| 1869 | 19,271 | 3,624 | 13,986 | 693,145 81 | 486,430 74 | 206,715 07 |
| 1870 | 19,171 | 3,273 | 13,321 | 669,456 76 | 557,147 19 | 112,309 57 |
| 1871 | 19,472 | 3,366 | 13,033 | 678,716 46 | 562,091 64 | 116,624 82 |
| 1872 | 18,246 | 3,090 | 13,590 | 699,726 39 | 665,595 00 | 34,131 39 |
| 1873 | 20,414 | 3,248 | 12,864 | 703,191 77 | 691,178 98 | 12,012 79 |
| 1874 | 21,602 | 3,181 | 13,599 | 738,278 17 | 679,288 41 | 58,959 76 |
| 1875 | 21,638 | 3,094 | 14,837 | 743,453 36 | 721,657 71 | 21,795 65 |
| 1876 | 21,425 | 2,697 | 15,595 | 757,987 65 | 652,542 60 | 105,445 05 |
| 1877 | 20,308 | 2,809 | 14,187 | 732,342 85 | 613,152 62 | 119,190 23 |
| 1878 | 20,260 | 2,755 | 13,444 | 725,375 55 | 593,082 89 | 132,292 66 |
| 1879 | 20,059 | 2,620 | 13,213 | 703,931 47 | 529,638 97 | 174,292 50 |
| 1880 | 23,012 | 2,490 | 13,947 | 749,685 32 | 538,865 17 | 210,820 15 |
| 1881 | 26,059 | 2,406 | 16,584 | 853,665 89 | 605,173 28 | 248,492 61 |
| 1882 | 31,522 | 2,553 | 19,267 | 1,009,219 45 | 683,867 67 | 325,351 78 |
| 1883 | 34,576 | 2,741 | 22,383 | 1,146,240 00 | 675,234 86 | 471,005 14 |
| 1884 | 35,600 | 2,582 | 20,413 | 1,075,798 80 | 970,579 76 | 105,219 04 |
| 1885 | 35,717 | 2,552 | 24,233 | 1,188,089 15 | 1,024,378 85 | 163,710 30 |
| 1886 | 35,968 | 2,513 | 22,508 | 1,154,551 40 | 992,503 45 | 162,047 95 |
| 1887 | 35,613 | 2,622 | 21,477 | 1,144,509 60 | 994,472 22 | 150,037 38 |
| 1888 | 35,797 | 2,251 | 20,506 | 1,118,516 10 | 973,108 78 | 145,407 32 |
| 1889 | 40,575 | 2,481 | 24,158 | 1,281,728 05 | 1,052,955 96 | 228,772 09 |
| 1890 | 41,048 | 2,311 | 26,292 | 1,340,372 66 | 1,099,297 74 | 241,074 92 |
| 1891 | 40,552 | 2,408 | 23,244 | 1,371,285 78 | 1,139,713 35 | 131,572 43 |
| 1892 | 40,753 | 2,290 | 23,559 | 1,286,331 88 | 1,110,739 24 | 175,592 59 |
| 1893 | 38,473 | 2,247 | 23,769 | 1,242,871 64 | 1,141,038 45 | 101,833 19 |
| 1894 | 38,439 | 2,286 | 20,867 | 1,187,439 58 | 1,100,047 12 | 87,392 46 |
| 1895 | 40,680 | 2,415 | 22,057 | 1,245,246 93 | 1,106,389 49 | 138,857 44 |
| 1896 | 43,982 | 2,271 | 23,373 | 1,324,059 83 | 1,113,413 71 | 210,646 12 |
| 1897 | 47,905 | 2,176 | 23,794 | 1,375,641 72 | 1,122,843 13 | 252,798 59 |
| 1898 | 35,842 | 1,659 | 22,267 | 1,137,734 48 | 1,136,196 20 | 1,538 28 |
| 1899 | 41,443 | 1,716 | 25,527 | 1,325,457 03 | 1,211,783 73 | 113,673 30 |
| 1900 | 41,980 | 1,731 | 26,499 | 1,350,828 53 | 1,260,019 62 | 90,808 91 |
| 1901 | 46,449 | 1,842 | 27,373 | 1,449,398 16 | 1,297,385 64 | 152,012 52 |
| 1902 | 49,641 | 1,851 | 27,886 | 1,552,859 08 | 1,393,345 54 | 159,513 54 |
| 1903 | 50,213 | 1,771 | 31,699 | 1,642,201 81 | 1,448,645 81 | 193,556 00 |

*Statement showing the number of the first patent, Design patent, and reissued patent, and the number of the first certificate of registration of a Trade-Mark, Label, and Print issued in each calendar year since July 28, 1836, when the present series of numbers of Letters Patent commenced, together with the total number of each issued during the year.*

[The number of patents granted prior to the commencement of this series of numbering (July 28, 1836) was 9,957.]

| Calendar year. | Number of first patent and certificate issued in each calendar year. | | | | | | Number of patents and certificates of registration issued during each calendar year. | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Patents. | Designs. | Reissues. | Trade-Marks. | Labels. | Prints. | Patents. | Designs. | Reissues. | Total patents. | Trade-Marks. | Labels. | Prints. | Total certificates. |
| 1836 (July 28) | 1 | ---------- | ---------- | ---------- | ---------- | ---------- | 109 | ---------- | ---------- | ---------- | ---------- | ---------- | ---------- | ---------- |
| 1837 | 110 | ---------- | ---------- | ---------- | ---------- | ---------- | 436 | ---------- | ---------- | ---------- | ---------- | ---------- | ---------- | ---------- |
| 1838 | 546 | ---------- | 1 | ---------- | ---------- | ---------- | 515 | ---------- | 6 | ---------- | ---------- | ---------- | ---------- | ---------- |
| 1839 | 1,061 | ---------- | 7 | ---------- | ---------- | ---------- | 404 | ---------- | 13 | ---------- | ---------- | ---------- | ---------- | ---------- |
| 1840 | 1,465 | ---------- | 20 | ---------- | ---------- | ---------- | 458 | ---------- | 10 | ---------- | ---------- | ---------- | ---------- | ---------- |
| 1841 | 1,923 | ---------- | 30 | ---------- | ---------- | ---------- | 490 | ---------- | 6 | ---------- | ---------- | ---------- | ---------- | ---------- |
| 1842 | 2,413 | ---------- | 36 | ---------- | ---------- | ---------- | 488 | ---------- | 13 | ---------- | ---------- | ---------- | ---------- | ---------- |
| 1843 | 2,901 | 1 | 49 | ---------- | ---------- | ---------- | 494 | 14 | 11 | 519 | ---------- | ---------- | ---------- | ---------- |
| 1844 | 3,395 | 15 | 60 | ---------- | ---------- | ---------- | 478 | 12 | 7 | 497 | ---------- | ---------- | ---------- | ---------- |
| 1845 | 3,873 | 27 | 67 | ---------- | ---------- | ---------- | 475 | 17 | 11 | 503 | ---------- | ---------- | ---------- | ---------- |
| 1846 | 4,348 | 44 | 78 | ---------- | ---------- | ---------- | 566 | 59 | 13 | 638 | ---------- | ---------- | ---------- | ---------- |
| 1847 | 4,914 | 103 | 91 | ---------- | ---------- | ---------- | 495 | 60 | 14 | 569 | ---------- | ---------- | ---------- | ---------- |
| 1848 | 5,409 | 163 | 105 | ---------- | ---------- | ---------- | 584 | 46 | 23 | 653 | ---------- | ---------- | ---------- | ---------- |
| 1849 | 5,993 | 209 | 128 | ---------- | ---------- | ---------- | 988 | 49 | 30 | 1,067 | ---------- | ---------- | ---------- | ---------- |
| 1850 | 6,981 | 258 | 158 | ---------- | ---------- | ---------- | 884 | 83 | 26 | 993 | ---------- | ---------- | ---------- | ---------- |

*Statement showing the number of the first patent, Design patent, and reissued patent*—Continued.

| Calendar year. | Number of first patent and certificate issued in each calendar year. | | | | | | Number of patents and certificates of registration issued during each calendar year. | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Patents. | Designs. | Reissues. | Trade-Marks. | Labels. | Prints. | Patents. | Designs. | Reissues. | Total patents. | Trade-Marks. | Labels. | Prints. | Total certificates. |
| 1851 | 7,865 | 341 | 184 | | | | 757 | 90 | 25 | 872 | | | | |
| 1852 | 8,622 | 431 | 209 | | | | 890 | 109 | 20 | 1,019 | | | | |
| 1853 | 9,512 | 540 | 229 | | | | 846 | 86 | 29 | 961 | | | | |
| 1854 | 10,358 | 626 | 258 | | | | 1,759 | 57 | 28 | 1,844 | | | | |
| 1855 | 12,117 | 683 | 286 | | | | 1,892 | 70 | 51 | 2,013 | | | | |
| 1856 | 14,009 | 753 | 337 | | | | 2,315 | 107 | 83 | 2,505 | | | | |
| 1857 | 16,324 | 860 | 420 | | | | 2,686 | 113 | 97 | 2,896 | | | | |
| 1858 | 19,010 | 973 | 517 | | | | 3,467 | 102 | 126 | 3,695 | | | | |
| 1859 | 22,477 | 1,075 | 643 | | | | 4,165 | 108 | 231 | 4,504 | | | | |
| 1860 | 26,642 | 1,183 | 674 | | | | 4,363 | 183 | 232 | 4,778 | | | | |
| 1861 | 31,005 | 1,366 | 1,106 | | | | 3,040 | 142 | 147 | 3,329 | | | | |
| 1862 | 34,045 | 1,508 | 1,253 | | | | 3,221 | 195 | 116 | 3,532 | | | | |
| 1863 | 37,266 | 1,703 | 1,369 | | | | 3,781 | 176 | 227 | 4,184 | | | | |
| 1864 | 41,047 | 1,879 | 1,596 | | | | 4,638 | 139 | 248 | 5,025 | | | | |
| 1865 | 45,685 | 2,018 | 1,844 | | | | 6,099 | 221 | 296 | 6,616 | | | | |
| 1866 | 51,784 | 2,239 | 2,140 | | | | 8,874 | 294 | 290 | 9,458 | | | | |
| 1867 | 60,658 | 2,583 | 2,430 | | | | 12,301 | 325 | 400 | 13,026 | | | | |
| 1868 | 72,959 | 2,858 | 2,880 | | | | 12,544 | 446 | 420 | 13,410 | | | | |
| 1869 | 85,503 | 3,304 | 3,250 | | | | 12,957 | 506 | 534 | 13,997 | | | | |
| 1870 | 98,460 | 3,810 | 3,784 | 1 | | | 12,157 | 737 | 439 | 13,333 | 121 | | | 121 |
| 1871 | 110,617 | 4,547 | 4,223 | 122 | | | 11,687 | 905 | 464 | 13,056 | 486 | | | 486 |
| 1872 | 122,304 | 5,452 | 4,687 | 608 | | | 12,200 | 884 | 529 | 13,613 | 491 | | | 491 |
| 1873 | 134,504 | 6,336 | 5,216 | 1,099 | | | 11,616 | 747 | 501 | 12,864 | 492 | | | 492 |
| 1874 | 146,120 | 7,083 | 5,717 | 1,591 | 1 | | 12,230 | 886 | 483 | 13,599 | 559 | 232 | | 791 |
| 1875 | 158,350 | 7,969 | 6,200 | 2,150 | 233 | | 13,291 | 915 | 631 | 14,837 | 1,188 | 232 | | 1,370 |
| 1876 | 171,641 | 8,884 | 6,831 | 3,288 | 465 | | 14,172 | 802 | 621 | 15,595 | 959 | 472 | | 1,431 |
| 1877 | 185,813 | 9,686 | 7,452 | 4,247 | 937 | | 12,920 | 699 | 568 | 14,187 | 1,216 | 392 | | 1,608 |
| 1878 | 198,733 | 10,385 | 8,020 | 5,463 | 1,329 | | 12,345 | 590 | 509 | 13,444 | 1,455 | 492 | | 1,947 |
| 1879 | 211,078 | 10,975 | 8,529 | 6,918 | 1,821 | | 12,133 | 592 | 488 | 13,213 | 872 | 355 | | 1,227 |
| 1880 | 223,211 | 11,567 | 9,017 | 7,790 | 2,176 | | 12,926 | 515 | 506 | 13,947 | 349 | 203 | | 552 |
| 1881 | 236,137 | 12,082 | 9,523 | 8,139 | 2,379 | | 15,548 | 565 | 471 | 16,584 | 834 | 202 | | 1,036 |
| 1882 | 251,685 | 12,647 | 9,994 | 8,973 | 2,581 | | 18,135 | 861 | 271 | 19,267 | 947 | 304 | | 1,251 |
| 1883 | 269,820 | 13,508 | 10,265 | 9,920 | 2,885 | | 21,196 | 1,020 | 167 | 22,383 | 902 | 906 | | 1,808 |
| 1884 | 291,016 | 14,528 | 10,432 | 10,822 | 3,791 | | 19,147 | 1,150 | 116 | 20,413 | 1,021 | 513 | | 1,534 |
| 1885 | 310,163 | 15,678 | 10,548 | 11,843 | 4,304 | | 23,331 | 773 | 129 | 24,233 | 1,067 | 391 | | 1,458 |
| 1886 | 333,494 | 16,451 | 10,677 | 12,910 | 4,695 | | 21,797 | 595 | 116 | 22,508 | 1,029 | 378 | | 1,407 |
| 1887 | 355,291 | 17,046 | 10,798 | 13,939 | 5,073 | | 20,429 | 949 | 99 | 21,477 | 1,133 | 380 | | 1,513 |
| 1888 | 375,720 | 17,995 | 10,892 | 15,072 | 5,453 | | 19,585 | 835 | 86 | 20,506 | 1,059 | 327 | | 1,386 |
| 1889 | 395,305 | 18,830 | 10,978 | 16,131 | 5,780 | | 23,360 | 723 | 75 | 24,158 | 1,229 | 319 | | 1,548 |
| 1890 | 418,665 | 19,553 | 11,053 | 17,360 | 6,099 | | 25,322 | 886 | 84 | 26,292 | 1,415 | 304 | | 1,719 |
| 1891 | 443,987 | 20,439 | 11,137 | 18,775 | 6,403 | | 22,328 | 836 | 80 | 23,244 | 1,762 | 137 | | 1,899 |
| 1892 | 466,315 | 21,275 | 11,217 | 20,537 | 6,540 | | 22,661 | 817 | 81 | 23,559 | 1,737 | a6 | | 1,743 |
| 1893 | 488,976 | 22,092 | 11,298 | 22,274 | None. | 1 | 22,768 | 902 | 99 | 23,769 | 1,677 | None. | 2 | 1,679 |
| 1894 | 511,744 | 22,994 | 11,397 | 23,951 | Do. | 3 | 19,875 | 928 | 64 | 20,857 | 1,806 | Do. | 4 | 1,810 |
| 1895 | 531,619 | 23,922 | 11,461 | 25,757 | Do. | 7 | 20,883 | 1,115 | 59 | 22,057 | 1,829 | Do. | 3 | 1,832 |
| 1896 | 552,502 | 25,037 | 11,520 | 27,586 | 6,546 | 10 | 21,867 | 1,445 | 61 | 23,273 | 1,813 | 1 | 32 | 1,846 |
| 1897 | 574,369 | 26,482 | 11,581 | 29,399 | 6,547 | 42 | 22,098 | 1,631 | 65 | 23,794 | 1,671 | 14 | 16 | 1,701 |
| 1898 | 596,467 | 28,113 | 11,646 | 31,070 | 6,561 | 58 | 20,404 | 1,803 | 60 | 22,267 | 1,238 | 200 | 35 | 1,473 |
| 1899 | 616,871 | 29,916 | 11,706 | 32,308 | 6,761 | 93 | 23,296 | 2,139 | 92 | 25,527 | 1,649 | 511 | 100 | 2,260 |
| 1900 | 640,167 | 32,055 | 11,798 | 33,957 | 7,272 | 193 | 24,660 | 1,758 | 81 | 26,499 | 1,721 | 737 | 93 | 2,551 |
| 1901 | 664,827 | 33,813 | 11,879 | 35,678 | 8,009 | 286 | 25,558 | 1,734 | 81 | 27,373 | 1,928 | 878 | 159 | 2,965 |
| 1902 | 690,385 | 35,547 | 11,960 | 37,606 | 8,887 | 445 | 27,136 | 640 | 110 | 27,886 | 2,006 | 767 | 158 | 2,931 |
| 1903 | 717,521 | 36,187 | 12,070 | 39,612 | 9,654 | 603 | 31,046 | 536 | 117 | 31,699 | 2,186 | 990 | 270 | 3,446 |

a Registration of labels practically suspended May 27, 1891, under decision of the United States Supreme Court in *Higgins et al.* v. *Keuffel et al.* (55 O. G., 1139) with the registration of No. 6,545, June 14, 1892. Resumed June 9, 1896, with the registration of No. 6,546.

*Statement of prices paid for photolithographic work since 1884-85.*

| Fiscal year. | Contractor. | Patents issued. | Official Gazette. | | Publishing expired patents. | Total Official Gazettes. |
|---|---|---|---|---|---|---|
| | | | Per page. | Number of copies. | | |
| 1884-85 | Norris Peters | 21,496 | $7 86 | 6,500 | | $39,614 40 |
| 1885-86 | do | 24,134 | 7 45 | 6,500 | | 44,351 00 |
| 1886-87 | do | 21,731 | 7 45 | 6,500 | | 41,868 40 |
| 1887-88 | do | 20,653 | 7 45 | 6,500 | | 41,183 60 |
| 1888-89 | do | 21,518 | 7 45 | 6,500 | | 43,999 70 |
| 1889-90 | do | 25,857 | 7 45 | 6,500 | | 58,992 40 |
| 1890-91 | do | 25,307 | 7 45 | 7,000 | | 65,966 10 |
| 1891-92 | Norris Peters Co | 23,626 | 7 45 | 7,000 | | 52,969 50 |
| 1892-93 | do | 23,468 | 7 45 | 7,000 | | 54,998 30 |
| 1893-94 | National Lithographic Co | 22,546 | 6 30 | 7,000 | $4,999 70 | 49,997 70 |
| 1894-95 | Norris Peters Co | 20,745 | 5 25 | 7,000 | | 38,297 88 |
| 1895-96 | A. B. Graham | 22,791 | 5 10 | 7,000 | | 42,326 30 |
| 1896-97 | Norris Peters Co | 23,994 | 4 50 | 7,000 | | 35,712 00 |
| 1897-98 | do | 22,731 | 5 10 | 7,000 | | 39,749 40 |
| 1898-99 | do | 23,590 | 5 60 | 7,000 | | 46,065 60 |
| 1899-1900 | do | 26,540 | 5 60 | 7,000 | | 55,092 80 |
| 1900-1901 | do | 26,481 | 6 25 | 7,000 | | 62,100 00 |
| 1901-1902 | do | 27,387 | 6 25 | 7,000 | | 66,600 00 |
| 1902-1903 | do | 29,892 | 6 25 | 7,000 | | 75,112 50 |
| 1903-1904 | do | a34,000 | 6 25 | 7,000 | | a82,800 00 |

*Statement of prices paid for photolithographic work since 1884–85*—Continued.

| Fiscal year. | Contractor. | Drawings of Letters Patent per sheet, current issues. | | | Other lithographic work. | Total. |
|---|---|---|---|---|---|---|
| | | Thin copies. | Thick copies. | Bond copies. | | |
| 1884–85 | Norris Peters | $0 01 | $0 03 | $0 03 | $78,671 99 | $118,286 39 |
| 1885–86 | do | 01 | 03 | 03 | 84,940 19 | 129,291 19 |
| 1886–87 | do | 01 | 03 | 03 | 79,509 57 | 121,377 97 |
| 1887–88 | do | 01 | 03 | 03 | 77,907 96 | 119,091 56 |
| 1888–89 | do | 01 | 03 | 03 | 83,284 54 | 127,284 24 |
| 1889–90 | do | 01 | 03 | 03 | 101,292 67 | 160,285 07 |
| 1890–91 | do | 01 | 03 | 03 | 110,998 97 | 176,965 07 |
| 1891–92 | Norris Peters Co | *b*1 48 | 03 | 03 | 99,992 58 | 152,962 08 |
| 1892–93 | do | *b*1 48 | 02 | 03 | 99,788 92 | 154,787 22 |
| 1893–94 | National Lithographic Co | *b*1 46 | 03 | 03 | 94,911 33 | 144,909 03 |
| 1894–95 | Norris Peters Co | *b* 95 | 02 | 02 | 60,482 04 | 98,779 92 |
| 1895–96 | A. B. Graham | *c* 93 / *d* 01 | 0175 | 0175 | 58,866 60 | 101,192 90 |
| 1896–97 | Norris Peters Co | *c* 80 | 015 | 01 | 58,960 78 | 94,672 78 |
| 1897–98 | do | *c* 84 / *d* 015 | 015 | 02 | 68,999 28 | 108,748 68 |
| 1898–99 | do | *c* 90 / *d* 02 | 02 | 025 | 75,999 85 | 122,065 45 |
| 1899–1900 | do | *e* 89 / *d* 02 | 02 | 025 | 98,999 90 | 154,092 70 |
| 1900–1901 | do | *e* 93 / *d* 03 | 03 | 03 | 108,999 54 | 171,099 54 |
| 1901–1902 | do | *e* 93 / *d* 03 | 03 | 03 | 108,799 55 | 175,599 55 |
| 1902–1903 | do | *e* 93 / *d* 03 | 03 | 03 | 123,842 76 | 198,955 26 |
| 1903–1904 | do | *e* 93 / *d* 03 | 03 | 03 | *a*118,571 34 | *a*201,371 34 |

*a* Estimated amounts for current year based upon business for first half of fiscal year 1903–1904, without provision for increase. *b* For 102 copies. *c* For 100 copies. *d* Two proof copies each. *e* For 75 copies.

*Table showing the number of patents issued by the United States and foreign countries from the earliest period to December 31, 1903. (Foreign figures for 1903 estimated.)*

| Countries. | To 1870, inclusive. | 1871 to 1903. | Total. | Countries. | To 1870, inclusive. | 1871 to 1903. | Total. |
|---|---|---|---|---|---|---|---|
| Argentina | 83 | 4,816 | 4,899 | Mauritius | 113 | 257 | 370 |
| Austria | ---------- | 33,969 | 33,969 | Mexico | 22 | 4,015 | 4,037 |
| Austria-Hungary | 15,350 | 67,583 | 82,933 | Netherlands | 4,535 | ---------- | 4,535 |
| Bahamas | ---------- | 2 | 2 | Newfoundland | 40 | 272 | 312 |
| Barbados | ---------- | 128 | 128 | New South Wales | 236 | 11,393 | 11,629 |
| Belgium | 35,044 | 145,597 | 180,641 | New Zealand | 109 | 8,826 | 8,935 |
| Bolivia | 42 | 65 | 107 | Norway | 737 | 13,347 | 14,084 |
| Brazil | 185 | 4,424 | 4,609 | Peru | ---------- | 160 | 160 |
| British Guiana | 32 | 94 | 126 | Portugal | 245 | 3,847 | 4,092 |
| British Honduras | 1 | 19 | 20 | Queensland | 67 | 6,005 | 6,072 |
| Canada | 4,081 | 83,939 | 88,020 | Russia | 1,464 | 13,534 | 14,998 |
| Ceylon | 58 | 539 | 597 | St. Helena | ---------- | 4 | 4 |
| Chile | 20 | 375 | 395 | South African Republic | ---------- | 1,218 | 1,218 |
| Congo Free State | ---------- | 124 | 124 | South Australia | 123 | 6,071 | 6,194 |
| Denmark | 464 | 13,237 | 13,701 | Spain | ---------- | 29,341 | 29,341 |
| Fiji Islands | ---------- | 29 | 29 | Straits Settlements | ---------- | 113 | 113 |
| Finland | 112 | 1,899 | 2,011 | Sweden | 1,629 | 18,604 | 20,233 |
| France | 103,934 | 246,560 | 350,494 | Switzerland | ---------- | 27,727 | 27,727 |
| Germany | 9,996 | 155,818 | 165,814 | Tasmania | 43 | 2,346 | 2,389 |
| Great Britain | 53,408 | 270,771 | 324,179 | Trinidad | 6 | 162 | 168 |
| Guatemala | ---------- | 57 | 57 | Tunis | ---------- | 519 | 519 |
| Hawaii (prior to August 12, 1898) | ---------- | 148 | 148 | Turkey | ---------- | 1,240 | 1,240 |
| Hong-Kong | ---------- | 101 | 101 | Uruguay | ---------- | 232 | 232 |
| Hungary | ---------- | 24,885 | 24,885 | Venezuela | ---------- | 175 | 175 |
| India | 445 | 7,299 | 7,744 | Victoria | 822 | 11,585 | 12,407 |
| Italy and Sardinia | 4,723 | 60,162 | 64,885 | Western Australia | ---------- | 3,310 | 3,310 |
| Jamaica | 22 | 165 | 187 | | | | |
| Japan | ---------- | 6,221 | 6,221 | Total foreign | 238,191 | 1,298,791 | 1,536,982 |
| Leeward Islands | ---------- | 18 | 18 | United States | 120,573 | 637,950 | 758,523 |
| Liberia | ---------- | 2 | 2 | | | | |
| Luxemburg | ---------- | 5,379 | 5,379 | Grand total | 358,764 | 1,936,741 | 2,295,505 |
| Malta | ---------- | 63 | 63 | | | | |

*The following comparison between the receipts, expenditures, applications filed, issues of the Office, the printed copies sold, copies of records furnished, and the number of employees for the years ending, respectively, December 31, 1899, and December 31, 1903, illustrates the growth of the business of the Patent Office.*

| Class. | 1899. | 1903. | Increase. | Percentage of increase. |
|---|---|---|---|---|
| Receipts | $1,325,457 03 | $1,642,201 81 | $316,744 78 | 23.8 |
| Expenditures | $1,211,783 73 | $1,448,645 81 | $236,862 08 | 19.5 |
| Applications and caveats filed | 45,990 | 56,102 | 10,112 | 21.9 |
| Letters patent, design and reissue patents granted, and trade-marks, labels, and prints registered | 27,787 | 35,145 | 7,358 | 26.4 |
| Printed copies of patents furnished | 1,451,519 | 1,640,306 | 188,787 | 13.0 |
| Price received | $50,201 11 | $60,006 90 | $9,805 79 | 19.5 |
| Words written in copies of records furnished | 13,575,650 | 18,613,850 | 5,038,200 | 37.1 |
| Number of employees | 663 | 722 | 59 | 08.8 |

SUMMARY OF TABLES.

In 1903 there were received 49,289 applications for mechanical patents, 770 applications for design patents, 154 applications for reissues of patents, 2,504 applications for registration of trade-marks, 1,234 applications for registration of labels, and 380 applications for registration of prints. There were 31,582 patents issued, including designs, 117 patents reissued, 2,186 trade-marks registered, 990 labels, and 270 prints. The number of patents that expired was 21,797. The number of allowed applications awaiting the payment of final fees was 10,545. The number forfeited for non-payment of the final fees was 5,236. The total expenditures were $1,448,645.81. The receipts over expenditures were $193,556.00. The total balance to the credit of the Patent Office in the Treasury of the United States on January 1, 1904, was $5,682,540.61.

In proportion to population more patents were issued to citizens of Connecticut than to those of any other State—one to every 996. Next in order are the following: District of Columbia, 1 to every 1,063; Rhode Island, 1 to every 1,224; Colorado, 1 to every 1,335; Massachusetts, 1 to every 1,348; California, 1 to every 1,516; New Jersey, 1 to every 1,533; New York, 1 to every 1,589; Illinois, 1 to every 1,715; Ohio, 1 to every 1,928; Pennsylvania, 1 to every 2,004; Washington, 1 to every 2,252; Michigan, 1 to every 2,548; Missouri, 1 to every 3,173; Indiana, 1 to every 3,193; Arizona Territory, 1 to every 3,235; Montana, 1 to every 3,244; Nevada, 1 to every 3,256; Oregon, 1 to every 3,308; Wisconsin, 1 to every 3,342; Minnesota, 1 to every 3,495; Maryland, 1 to every 3,500; Iowa, 1 to every 3,559; New Hampshire, 1 to every 3,741; Utah, 1 to every 3,791; Nebraska, 1 to every 3,857; Delaware, 1 to every 4,198; Wyoming, 1 to every 4,205; South Dakota, 1 to every 4,364; Kansas, 1 to every 4,402; Oklahoma Territory, 1 to every 4,474; North Dakota, 1 to every 4,693; Idaho, 1 to every 5,055; Maine, 1 to every 5,106; Vermont, 1 to every 5,454; West Virginia, 1 to every 6,307; Texas, 1 to every 7,024; Kentucky, 1 to every 7,751; Florida, 1 to every 7,888; New Mexico Territory, 1 to every 8,491; Virginia, 1 to every 8,829; Louisiana, 1 to every 9,661; Tennessee, 1 to every 9,714; Georgia, 1 to every 10,074. The fewest patents granted in proportion to the number of inhabitants were in the following States and Territories: Mississippi, 1 to every 22,161; Alaska Territory, 1 to every 21,147; South Carolina, 1 to every 17,635; Arkansas, 1 to every 16,814; North Carolina, 1 to every 15,150; Alabama, 1 to every 13,646; Hawaii Territory, 1 to every 11,846; Indian Territory, 1 to every 10,887.

As to foreign patents, 1,065 were granted to residents of England; 1,053 to those of Germany; 440 to those of Canada; 321 to those of France; 136 to those of Austria-Hungary; 110 to those of Scotland; 78 to those of Switzerland; 76 to those of Sweden; 59 to those of Belgium; 50 to those of Victoria; 48 to those of New Zealand; 46 to those of Russia; 36 to those of Denmark; 30 to those of Italy; 24 each to those of Ireland and the Netherlands; 22 to those of Mexico; 20 to those of New South Wales; 18 to those of Norway; 16 to those of Transvaal; 10 to those of Argentina, 9 to those of Cuba; 8 to those of South Australia; India and Spain, 7 each; Japan and Roumania, 6 each; Brazil and Queensland, 5 each; South Africa and Western Australia, 4 each; Algeria, Guatemala, and Tasmania, 2 each, and Bolivia, British Honduras, British West Indies, Cape Colony, Chile, China, Costa Rica, Honduras, Jamaica, Java, Natal, Newfoundland, Portugal, and Turkey, 1 each.

The Patent Office issued 31,699 patents during the year 1903, the largest annual issue in its entire history.

The total number of trade-marks, prints, and labels registered for the year 1903 was 3,446, the largest issue of certificates of registration in the history of the Office.

The condition of the examining divisions upon December 31 is indicated by the fact that of the 38 divisions 23 were then taking up new cases for action within one month from the date of filing, and the remaining 15 were in arrears between one and two months. The total number of cases awaiting action on the part of the Office upon December 31 was 10,423.

The business transacted by the Patent Office during the calendar year 1903 has again exceeded all previous records, as appears in the foregoing tables. The preceding statement showing the number of patents and certificates of registration issued from year to year shows that uniform growth which indicates that the business of this Office is an accurate index of general conditions of prosperity in the industrial arts of this country, and the comparison hereinbefore made between the chief financial and work elements of this Office for the years 1899 and 1903 permits the rate of this increase to be accurately stated. From this statement it appears that in four years the average increase of business, as shown by the receipts, expenditures, applications filed, issues and copies of patents and records furnished, is 23 per cent., and this work has been accomplished with an increase of 8.8 per cent. in the number of employees. The work has been transacted as well as could be expected, in view of the force employed and the volume of the work, and has been without particular incident.

There is no reason to expect that the increase shown in the foregoing tables may not be found in the ensuing year, and it is evident that the force of employees will not be able to meet the requirements of an indefinite further increase of the work unless their number shall be correspondingly increased. Already there are delays in the transaction of our work and haste in the execution of other portions of the work which point to the imperative necessity for more employees.

The increase in work has made it necessary to organize a new division, known as the Manuscript and Photolithograph Division, and there should be added to the present force a new chief of division and assistant chief for the purposes of this new division. I have also asked for ten additional

clerks of class 1, at $1,200 per annum, to meet our most urgent necessities.

The increase of the appropriation for the scientific library of this Office from $2,000 to $2,500, made by the appropriation bill of last year, was a step in the right direction, and if this sum can be further increased, so as to furnish $4,000 per annum for the purposes of this library and for the transportation of publications of patents to foreign governments, I think the library can be maintained in a condition of efficiency.

One cannot look at the progress of the Patent Office since its present system of work was inaugurated by the act of July 4, 1836, without seeing that it has followed closely the development of the industrial arts in this country during all of this period, and it should require no extended argument beyond these figures to show that the system which has accomplished these results without expense to the Government, but which has, on the contrary, furnished a net balance of $5,682,540.61, should be furnished with all necessary facilities in the way of room and employees, so as to permit its future progress in the same measure as the expected growth of the arts in this country.

It was to me a matter of great interest last summer to be shown at Berlin the plans of the German Government for an extension of their patent office, which has been the first in Europe to follow the procedure of this country in the matter of granting patents by the establishment of a system of preliminary examination. Lands have been purchased by the German Government, and plans for buildings are now in hand which are to provide accommodation for 2,000 employees, and it was stated to me that such accommodation, it was thought, would suffice for their necessities until the year 1920. It is interesting to notice that the annual issue of patents by the German Government is about six thousand, and that our issue for the year 1903 was 31,699. It is to be hoped that Americans will not be obliged to look to Germany at any time in the next decade to see the best embodiment in practice of the system of issuance of patents upon preliminary examinations. If they have concluded that this system originated by us lies so close to the national welfare that they have decided to make great expenditures to possess themselves of its benefits, funds should not be wanting in this country to keep our system up to its present position of preëminence. The stimulus given to the industrial arts by the hope of reward which the patent system presents to the inventor is conceded by the thinking men of most civilized countries to-day, and the rapid progress of Japan has been accompanied with the adoption of a patent system in which they were largely influenced by impressions derived from an examination of the patent system of the United States.

At the present time the space provided for the Patent Office is inadequate, and it is very desirable that some plan looking to an extension of working room for the Patent Office shall be adopted without delay, since the present space will be insupportably crowded at the present rate of increase before any new building could be built to contain this Office. Our necessities are growing, while there seems to be as yet no plan for our relief in this regard. The matter is of the utmost concern to all friends of the patent system, and nothing but action in the direction of larger accommodation will save the work of this Office from difficulties plainly apparent and not far ahead in point of time. This subject is of such transcendent importance to this Bureau that I respectfully urge your earnest attention to it.

Respectfully submitted,

F. I. ALLEN,
*Commissioner of Patents.*

# ALPHABETICAL LIST

OF

# PATENTEES FOR THE YEAR 1903.

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[Patentees of Designs, Trade-Marks, Labels, and Prints, and parties who have filed Disclaimers follow this in separate indexes, but precede the Alphabetical List of Inventions.]

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|
| | | | Specification. | Drawing. | Volume. | Page. |
| A. Leschen & Sons Rope Company. (See Ernst, George F., assignor.) | | | | | | |
| A. Magnus Sons Company. (See Norkewitz, Max W., assignor.) | | | | | | |
| A. B. Dick Company. (See Dick, Albert B., assignor.) | | | | | | |
| A. B. Dick Company. (See Klaber, Augustus D., assignor.) | | | | | | |
| A. B. Klay Company. (See Klay, Abraham B., assignor.) | | | | | | |
| A. C. Evans Manufacturing Company. (See Monson, Philip T. J., assignor.) | | | | | | |
| A. F. Stowe Manufacturing Company. (See Stowe, Aaron F., assignor.) | | | | | | |
| A. G. Cox Manufacturing Company *et al.* (See Cox, Amos G., assignor.) | | | | | | |
| A. G. Spalding & Bros. (See Curtiss, Julian W., assignor.) | | | | | | |
| A. G. Spalding & Bros. (See Pierce, George L., assignor.) | | | | | | |
| A. I. Root Company. (See Root, Huber, assignor.) | | | | | | |
| A. J. Lindemann & Hoverson Co. (See Coulston, Earl V., assignor.) | | | | | | |
| A. J. Lindemann & Hoverson Co. (See Lindemann, Albert J., assignor.) | | | | | | |
| A. J. Phillip Co. (See Giles, Edwin S., assignor.) | | | | | | |
| A. P. Brantley Company. (See Brantley, Benjamin D., assignor.) | | | | | | |
| A. T. Hagen Company. (See Hagen and Cooper, assignors.) | | | | | | |
| A. T. Hagen Company. (See Hagen, Cooper, and Kane, assignors.) | | | | | | |
| A. T. Stearns Lumber Company. (See Lord, Francis S., assignor.) | | | | | | |
| A. W. Stevens Company. (See Swart, Lester D., assignor.) | | | | | | |
| Aachener Stahlwaarenfabrik, vorm. Carl Schwanemeyer, Actien-Gesellschaft. (See Küpper and Vorreiter, assignors.) | | | | | | |
| Aarland, Carl W. G. (See Bauermeister, Arno, assignor.) | | | | | | |
| Aarseth, Ole M., Echo, Minn. Mail-box | 720,651 | Feb. 17 | 2329 | 533 | 102 | 1341 |
| Abbath, Charles A., Quincy, Ill. Fish-hook-attaching device | 745,131 | Nov. 24 | 4505 | 975 | 107 | 1004 |
| Abbath, Charles A., Quincy, Ill. Fish-hook-attaching device | 745,751 | Dec. 1 | 777 | 177 | 107 | 1264 |
| Abbe, Charley J., Whiterock, S. D., assignor of one-half to C. J. Peterson, St. Paul, Minn. Portable and revolving whip-stand | 739,275 | Sept. 22 | 3379 | 751 | 106 | 771 |
| Abbé, Max F., New York, N. Y. Ball grinding-mill | 743,791 | Nov. 10 | 1950 | 413 | 107 | 432 |
| Abbé, Max F., New York, N. Y. Tubular ball-mill | 744,451 | Nov. 17 | 3249 | 696 | 107 | 724 |
| Abbé, Max F., New York, N. Y. Grinding-mill | 744,452 | Nov. 17 | 3251 | 697 | 107 | 725 |
| Abbee, Leslie H., Denver, Colo. Transit | 723,351 | Mar. 24 | 3155 | 709 | 103 | 708 |
| Abbey, Edward F., Toledo, Ohio. Brush-machine | 724,231 | Mar. 31 | 4866 | {1090 {1091 | {103 | 1075 |
| Abbey, Edward F., Toledo, Ohio. Brush-machine | 724,232 | Mar. 31 | 4873 | {1091 {1092 | {103 | 1077 |
| Abbey, Edward F., Toledo, Ohio. Brush-machine | 724,371 | Mar. 31 | 5136 | {1149 {1150 | {103 | 1131 |
| Abbey, George N., Union, Okla. Ter. Skinning-knife | 732,911 | July 7 | 386 | 93 | 105 | 83 |
| Abbey, Martin C. (See Metcalf and Abbey.) | | | | | | |
| Abbey, Orra E., Daily, Mich. Three-horse draft-equalizer | 726,611 | Apr. 28 | 4093 | 924 | 103 | 2070 |
| Abbey, William H., *et al.* (See Macklin, Charles H., assignor.) | | | | | | |
| Abbott, Benjamin J., assignor to Union Horse Nail Company, Chicago, Ill. Workholder for die-cutting machines | 732,691 | July 7 | 1 | 1 | 105 | 3 |
| Abbott, Charles M., Watertown, Mass. Support for storm-curtains | 723,431 | Mar. 24 | 3313 | 742 | 103 | 740 |
| Abbott, Everett L., New York, N. Y. Horseshoe attachment | 730,855 | June 16 | 2405 | 531 | 104 | 1663 |
| Abbott, Frank I. (See Bond, Nels, assignor.) | | | | | | |
| Abbott, Nathaniel B., and C. J. Marks, assignors to Imperial Bottle Cap and Machine Company, Baltimore, Md. Machine for sealing bottles | 734,031 | July 21 | 2448 | {572 {573 | {105 | 550 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|
| | | | Spec. | Drg. | Vol. | Page. |
| Abbott, Scott M., Watertown, Minn. Pump-rod coupling | 737,191 | Aug. 25 | 4017 | 891 | 105 | 1889 |
| Abeling, Otto, Moscow, Idaho. Differential high-pressure direct-pass valve | 723,803 | Mar. 31 | 3977 | 897 | 103 | 895 |
| Abell, Gerald L., Oakland, Cal. Therapeutical apparatus | 735,851 | Aug. 11 | 1567 | 334 | 105 | 1334 |
| Abell, Harry H., Port Ewen, N. Y. Propeller | 733,891 | July 14 | 2147 | 507 | 105 | 468 |
| Abell, Rollin, Boston, Mass. Back-pedaling brake and coaster | 723,352 | Mar. 24 | 3156 | 709<br>710 | 103 | 709 |
| Abercrombie, Charles M., assignor to Wheeler & Wilson Manufacturing Company, Bridgeport, Conn. Hemstitch sewing-machine | 724,233 | Mar. 31 | 4876 | 1092 | 103 | 1077 |
| Abercrombie, David T., Newark, N. J., assignor to Abercrombie & Fitch, New York, N. Y. Camping utensil | 730,731 | June 9 | 2188 | 487 | 104 | 1598 |
| Abercrombie, David T., Newark, N. J., assignor to Abercrombie and Fitch, New York, N. Y. Tent-slide | 745,551 | Dec. 1 | 441 | 104 | 107 | 1191 |
| Abercrombie & Fitch. (See Abercrombie, David T., assignor.) | | | | | | |
| Abercrombie, William R. (See Dimond, Dial, and Abercrombie.) | | | | | | |
| Aberl, Lena. (See Friedman, Paul, assignor.) | | | | | | |
| Aberle, Frederick, Bridgeport, Conn. Steam-engine indicator | 740,211 | Sept. 29 | 5136 | 1153 | 106 | 1164 |
| Abernathy, James R., Stranger, Tex. Gate-latch | 748,031 | Dec. 29 | 5064 | 1145 | 107 | 2292 |
| Abizaid, Ameen G., Washington, D. C. Registering and annunciating device for cars | 744,704 | Nov. 24 | 3705 | 800 | 107 | 839 |
| Abler, John B., Akron, Ohio. Corn-eradicator | 720,311 | Feb. 10 | 1669 | 380 | 102 | 1129 |
| Ablett, William J., London, England. Vessel for containing food | 733,111 | July 7 | 733 | 178 | 105 | 155 |
| Aborn, George P. (See De Laval and Aborn.) | | | | | | |
| Aborn, George P. (See Flinn and Aborn.) | | | | | | |
| Abraham, Isaac B., San Francisco, Cal. Portable disappearing fence | 745,471 | Dec. 1 | 305 | 73 | 107 | 1164 |
| Abraham, Lawrence, Brooklyn, N. Y. Conveyer | 734,151 | July 21 | 2685 | 631 | 105 | 601 |
| Abraham, Paul, New York, N. Y. Signal-lantern | 733,892 | July 14 | 2149 | 507 | 105 | 468 |
| Abrahamovitz, Max, Yonkers, N. Y. Sleigh attachment for automobiles | 741,211 | Oct. 13 | 1549 | 349 | 106 | 1597 |
| Abrahamson, Oscar F., Minneapolis, Minn. Storm-sash hanger | 732,692 | July 7 | 2 | 1 | 105 | 3 |
| Abram Cox Stove Company. (See Rankin, Thomas I., assignor.) | | | | | | |
| Abrell, Paul B., Newark, N. J. Beer-tap | 747,111 | Dec. 15 | 3314 | 754 | 107 | 1865 |
| Absalom, George M., Birtle, Canada. Threshing-machine | 746,431 | Dec. 8 | 2040 | 468 | 107 | 1554 |
| Accles, James G., F. H. de Veulle, Birmingham, and W. Starley, Coventry, England. Motor-cycle | 746,652 | Dec. 15 | 2447 | 559 | 107 | 1667 |
| Account Audit Company. (See Kittredge, Anson O., assignor.) | | | | | | |
| Accumulator Industries. (See Hunte, Joseph J. H., assignor.) | | | | | | |
| Acers, Arthur D., assignor to Acers-Renfrow Cabinet Company, Norman, Okla. Ter. Cabinet | 738,091 | Sept. 1 | 1050 | 234 | 106 | 227 |
| Acers, Nelson F. (See Jones, Thomas, assignor.) | | | | | | |
| Acers-Renfrow Cabinet Company. (See Acers, Arthur D., assignor.) | | | | | | |
| Acheson Company. (See Acheson, Edward G., assignor.) | | | | | | |
| Acheson, Edward G., Niagara Falls, N. Y. Reducing metallic oxids | 718,891 | Jan. 20 | 2603 | 582 | 102 | 583 |
| Acheson, Edward G., Niagara Falls, N. Y. Electric furnace | 718,892 | Jan. 20 | 2604 | 582 | 102 | 583 |
| Acheson, Edward G., Niagara Falls, N. Y. Electric furnace. (Reissue) | 12,104 | Apr. 7 | 1112 | 252 | 103 | 1406 |
| Acheson, Edward G., assignor to Acheson Company, Niagara Falls, N. Y. Manufacture of earthenware | 722,791 | Mar. 17 | 2142 | ------ | 103 | 488 |
| Acheson, Edward G., Stamford Township, Canada, assignor to Acheson Company, Niagara Falls, N. Y. Producing compounds containing silicon, oxygen, and carbon | 722,792 | Mar. 17 | 2144 | 479 | 103 | 488 |
| Acheson, Edward G., Stamford Township, Canada, assignor to Acheson Company, Niagara Falls, N. Y. Refractory material | 722,793 | Mar. 17 | 2145 | ------ | 103 | 488 |
| Acheson, Edward G., Stamford Township, Canada, assignor to Acheson Company, Niagara Falls, N. Y. Heating material | 723,631 | Mar. 24 | 3684 | 826 | 103 | 815 |
| Achilles, Hermann, Dortmund, Germany. Washboiler attachment | 730,071 | June 2 | 1002 | 224 | 104 | 1331 |
| Achterman, Joseph C., Brooklyn, N. Y. Can | 744,991 | Nov. 24 | 4211 | 911 | 107 | 943 |
| Acker, Charles E., Niagara Falls, N. Y. Electrode and conductor | 743,410 | Nov. 10 | 1209 | 250 | 107 | 273 |
| Acker, Finley. (See McKnight and Satarasky, assignors.) | | | | | | |
| Ackerman, Edwin D., New York, N. Y. Mechanical playing attachment for musical instruments | 722,476 | Mar. 10 | 1537 | 337 | 103 | 344 |
| Ackerman, Edwin D., New York, N. Y. Mechanical playing attachment for musical instruments | 748,142 | Dec. 29 | 5288 | 1202 | 107 | 2341 |
| Ackerman, Edwin T., assignor of one-half to T. A. Smyth, Chicago, Ill. Electric time-alarm system | 719,551 | Feb. 3 | 250 | 59 | 102 | 876 |
| Ackerman, Edwin T., assignor of one-half to T. A. Smyth, Chicago, Ill. Electric program-clock | 741,431 | Oct. 13 | 1979 | 439 | 106 | 1688 |
| Ackerman, Elmer H., assignor to Monitor Drill Company and J. Maher, Minneapolis, Minn. Pressure device for drills | 746,432 | Dec. 8 | 2041 | 469 | 107 | 1554 |
| Ackerman, Frank I., Paterson, N. J. Latch | 725,017 | Apr. 14 | 1115 | 253 | 103 | 1425 |
| Ackerman, George G., Newark, N. J. Interchangeable top for initial or insignia rings, buttons, &c. | 723,353 | Mar. 24 | 3161 | 710 | 103 | 710 |
| Ackerman, Joel E., Valley Junction, Wis. Pole and thill coupling | 718,893 | Jan. 20 | 2606 | 583 | 102 | 583 |
| Ackerman, William, assignor to United States Graphotype Company, New York, N. Y. Slack-provider for perforating-machines | 734,651 | July 28 | 3606 | 844 | 105 | 811 |
| Ackerman, William, assignor to United States Graphotype Company, New York, N. Y. Counting and indicating machine | 747,922 | Dec. 29 | 4845 | 1094<br>1095 | 107 | 2243 |
| Ackermann, Gregor, Biel, and G. Engisch, Madretsch, Switzerland. Winding device for cables to which movable electric apparatus is attached | 747,571 | Dec. 22 | 4156 | 934 | 107 | 2068 |
| Ackermann, Peter, Chicago, Ill. Engineer's brake-valve | 745,983 | Dec. 8 | 1235 | 279 | 107 | 1381 |
| Ackles, Noah D., and E. R. Koontz, Plymouth, Ind. Mold for plastic shingles | 746,771 | Dec. 15 | 2655 | 613 | 107 | 1713 |
| Ackley, Jacob W. (See Kerns and Ackley.) | | | | | | |
| Acklin, Alfred M., Pittsburg, Pa. Conveyer | 723,971 | Mar. 31 | 4324 | 970 | 103 | 968 |
| Acklin, Alfred M., assignor to Heyl and Patterson, Pittsburg, Pa. Casting metals | 741,751 | Oct. 20 | 2626 | 587 | 106 | 1840 |
| Acklin, Alfred M., assignor to Heyl and Patterson, Pittsburg, Pa. Apparatus for casting metals | 741,752 | Oct. 20 | 2629 | 587 | 106 | 1840 |
| Acklin, Alfred M., assignor to Heyl and Patterson, Pittsburg, Pa. Handling glass batch | 741,753 | Oct. 20 | 2631 | 587<br>588 | 106 | 1841 |
| Acklin, Alfred M., assignor to Heyl & Patterson, Pittsburg, Pa. Car-haul | 743,611 | Nov. 10 | 1633 | 342 | 107 | 365 |
| Acklin, Alfred M., assignor to Heyl & Patterson, Pittsburg, Pa. Car-haul | 743,612 | Nov. 10 | 1636 | 343 | 107 | 365 |
| Acklin, Alfred M., assignor to Heyl & Patterson, Pittsburg, Pa. Device for operating trippers for belt conveyers | 745,031 | Nov. 24 | 4302 | 930 | 107 | 962 |
| Acklin, Alfred M., assignor to Heyl & Patterson, Pittsburg, Pa. Device for operating trippers for belt conveyers | 745,032 | Nov. 24 | 4305 | 931 | 107 | 963 |
| Acly, Harry M. (See Wright and Acly.) | | | | | | |
| Acly, Harry M., assignor to Stanley Electric Manufacturing Company, Pittsfield, Mass. Dynamo-electric machine | 737,192 | Aug. 25 | 4020 | 891 | 105 | 1889 |
| Acly, Harry M., assignor to Stanley Electric Manufacturing Company, Pittsfield, Mass. Brush-holder for dynamo-electric machines | 738,747 | Sept. 15 | 2417 | 530 | 106 | 549 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|
| | | | Spec. | Drg. | Vol. | Page. |
| Acme Ball Bearing Caster Company. (See Cross, Henry S., assignor.) | | | | | | |
| Acme Ball Bearing Caster Company. (See Grove, Ralph M., assignor.) | | | | | | |
| Acme Ball Bearing Caster Company. (See Magoun, Francis P., assignor.) | | | | | | |
| Acme Ball Bearing Caster Company. (See Thomson, Clifford, assignor.) | | | | | | |
| Acme Flexible Clasp Company. (See MacMurray, James E., assignor.) | | | | | | |
| Acme Fumigator Company. (See Cock, Lewis W., assignor.) | | | | | | |
| Acme Gas Co. (See Harvey, Paul S., assignor.) | | | | | | |
| Acme Gas Company. (See Steele, Wilbur F., assignor.) | | | | | | |
| Acme Glass Machine Company. (See Welton, Park E., assignor.) | | | | | | |
| Acme Harvester Company. (See Appleby, John F., assignor.) | | | | | | |
| Acme Harvester Company. (See Green, Henry, assignor.) | | | | | | |
| Acme Harvester Company. (See Peck, Ezra A., assignor.) | | | | | | |
| Acme Heel Protector Manufacturing Company. (See Regester, Robert A., assignor.) | | | | | | |
| Acme Machinery Company. (See Richards, Charles W., assignor.) | | | | | | |
| Acme Oil Engine Co. (See Hurd, Hobert J., assignor.) | | | | | | |
| Acme Steel Company. (See Selleck, Theodore G., assignor.) | | | | | | |
| Acme Supply Co. (See Fuller, Samuel D., assignor.) | | | | | | |
| Acme Switch Company. (See Cogswell, Henry J., assignor.) | | | | | | |
| Acme White Lead & Color Works. (See Neal, Frank, assignor.) | | | | | | |
| Acme White Lead & Color Works. (See Woodward, Alfred M., assignor.) | | | | | | |
| Actien Gesellschaft für Anilin Fabrication. (See Dedichen, Jens, assignor.) | | | | | | |
| Actien Gesellschaft für Anilin Fabrikation. (See Gley, Richard, assignor.) | | | | | | |
| Actien Gesellschaft für Anilin Fabrikation. (See Gley and Siebert, assignors.) | | | | | | |
| Actien Gesellschaft für Anilin Fabrikation. (See Kaltwasser and Gaumer, assignors.) | | | | | | |
| Adair, Benjiman L., assignor of one-half to W. Wetteroth, Dallas, Tex. Lifting-jack | 737,891 | Sept. 1 | 673 | 143 | 106 | 147 |
| Adair, James, Leet Township, Allegheny county, Pa. Rack for pencils, penholders, &c. | 746,231 | Dec. 8 | 1686 | 375 | 107 | 1480 |
| Adair, Thomas, Belfast, Ireland. Machine for preparing soil for seeding | 746,653 | Dec. 15 | 2448 | 559 | 107 | 1667 |
| Adair, Thomas, Belfast, Ireland. Machine for sowing seed | 746,654 | Dec. 15 | 2450 | 560 | 107 | 1667 |
| Adam, Edwin, Newark, N. J. Apparatus for dispensing gas-impregnated beverages | 718,411 | Jan. 13 | 1645 | 363 | 102 | 368 |
| Adam, Joseph. (See Beauregard, Stanislas, assignor.) | | | | | | |
| Adams, Alexander W., Toronto, Canada. Automatic sash-lock | 719,981 | Feb. 10 | 1027 | 239 | 102 | 1057 |
| Adams, Arthur L., London, England. Photographic roller-blind shutter | 720,991 | Feb. 17 | 2925 | 670 | 102 | 1469 |
| Adams, Barnett V., *et al.* (See Moore, James S., assignor.) | | | | | | |
| Adams, Calvin T., New York, N. Y. Cushioned horseshoe | 734,111 | July 21 | 2611 | 614 | 105 | 585 |
| Adams, Charles, Kalgoorlie, Western Australia, Australia. Grilling or toasting stove | 735,331 | Aug. 4 | 561 | 115 | 105 | 1101 |
| Adams, Charles A., Dorchester, Mass. Candy-box | 722,199 | Mar. 10 | 1017 | 224 | 103 | 231 |
| Adams, Charles S., and A. J. Rice, Buffalo, N. Y. Cleaning and sterilizing milk-bottles, &c | 745,752 | Dec. 1 | 778 | 178 | 107 | 1264 |
| Adams, Charles W. (See Petterson, Ludwig, assignor.) | | | | | | |
| Adams Company. (See Farwell, Fay O., assignor.) | | | | | | |
| Adams, Cushing, Bellows Falls, Vt. Calcimine composition and producing same | 730,505 | June 9 | 1797 | ..... | 104 | 1513 |
| Adams, Cushing, Bellows Falls, Vt. Paint and producing same | 730,506 | June 9 | 1798 | ..... | 104 | 1513 |
| Adams, David, assignor of one-half to G. W. La Point, Wilson, Wis. Floor-machine | 737,691 | Sept. 1 | 242 | 51,52 | 106 | 56 |
| Adams, Edward M., Akron, Ohio. Boiler-tube cleaner | 725,018 | Apr. 14 | 1116 | 253 | 103 | 1425 |
| Adams, Edward T., Milwaukee, Wis. Supporting-frame for pumping-engines | 744,851 | Nov. 24 | 3966 | 854 | 107 | 893 |
| Adams, Ernest A., assignor to Thermoscopic Loop Syndicate, Limited, London, England. Steam-trap | 720,091 | Feb. 10 | 1261 | 289 | 102 | 1108 |
| Adams, Ernest K., New York, N. Y. Electric metronome | 734,032 | July 21 | 2452 | 573, 574 | 105 | 551 |
| Adams, Frank, North Adams, Mass. Electric canal system | 728,823 | May 26 | 3787 | 844 | 104 | 859 |
| Adams, Fred L., Prophetstown, Ill. Lawn-mower | 717,791 | Jan. 6 | 519 | 116 | 102 | 112 |
| Adams, Frederick W., Anerley, England. Means for closing double-action or swing doors. | 723,432 | Mar. 24 | 3314 | 742, 743 | 103 | 740 |
| Adams, Friederich O. (See Adams, Julius F. and F. O.) | | | | | | |
| Adams, Friederich O. (See Adams and Frederick.) | | | | | | |
| Adams, George B., Irvington, N. J., assignor to American Ring Company, Waterbury, Conn. Clasp | 744,017 | Nov. 17 | 2417 | 518 | 107 | 547 |
| Adams, George W., Stoughton, Mass. Angelus-clock | 736,918 | Aug. 25 | 3535 | 785 | 105 | 1787 |
| Adams, Harry E., and J. Mulvey, Ashtabula Harbor, Ohio. Eaves-trough hanger | 742,371 | Oct. 27 | 3856 | 866 | 106 | 2109 |
| Adams, Harry L., Dexter, Mo. File-scraper | 745,753 | Dec. 1 | 780 | 178 | 107 | 1264 |
| Adams, Henry A., Sandwich, Ill. Side-delivery hay-rake | 722,931 | Mar. 17 | 2385 | 533, 534 | 103 | 537 |
| Adams, Henry C. (See Uhlig, Richard W., assignor.) | | | | | | |
| Adams, Henry P., Kipton, Ohio. Corn-planter | 720,211 | Feb. 10 | 1472 | 335 | 102 | 1151 |
| Adams, James H., Fullerton, Cal. Wrench | 744,271 | Nov. 17 | 2912 | 623 | 107 | 651 |
| Adams, James L., Jr., Springfield, Ill. Transformer | 734,791 | July 28 | 3883 | 906 | 105 | 865 |
| Adams, Joel T. (See Roach, William H., assignor.) | | | | | | |
| Adams, Joel U., Cincinnati, Ohio. Hernial truss | 737,051 | Aug. 25 | 3769 | 837 | 105 | 1837 |
| Adams, Joel U., Cincinnati, Ohio. Truss | 745,311 | Dec. 1 | 1 | 1 | 107 | 1101 |
| Adams, John H. (See Hanson and Adams.) | | | | | | |
| Adams, John H., Alameda, Cal. Hydraulic elevator | 741,291 | Oct. 13 | 1709 | 382 | 106 | 1628 |
| Adams, John J., Charlotte, N. C. Bow | 736,051 | Aug. 11 | 1935 | 413 | 105 | 1413 |
| Adams, John L., New York, N. Y. Puzzle | 723,120 | Mar. 17 | 2717 | 610 | 103 | 606 |
| Adams, John Q., Tuscola, Mich. Potato-planter | 718,067 | Jan. 13 | 1025 | 229 | 102 | 235 |
| Adams, John Q., Tuscola, Mich. Picture-exhibitor | 729,111 | May 26 | 4291 | 948 | 104 | 958 |
| Adams, John Q., Jamestown, Ohio. Window-screen | 732,693 | July 7 | 3 | 2 | 105 | 3 |
| Adams, John Q., Marseilles, Ill. Grinding-mill | 744,705 | Nov. 24 | 3706 | 800, 801 | 107 | 839 |
| Adams, Joseph W., assignor of one-half to D. M. Frawley, Santa Ana, Cal. Window-screen | 736,919 | Aug. 25 | 3537 | 785 | 105 | 1787 |
| Adams, Julius F. and F. O., Allegheny Pa. Gas-stove | 745,711 | Dec. 1 | 715 | 163, 164 | 107 | 1250 |
| Adams, Julius F. and F. O., Allegheny, and E. E. Frederick, Avalon, Pa. Gas-stove | 720,771 | Feb. 17 | 2528 | 583 | 102 | 1385 |
| Adams Laundry Machine Company. (See Sharp, Alonzo, assignor.) | | | | | | |
| Adams Laundry Machinery Co. (See West, Robert N., assignor.) | | | | | | |
| Adams, Leslie E., Galena, Ohio. Lighting attachment for gas-stoves | 741,991 | Oct. 20 | 3102 | 691 | 106 | 1939 |
| Adams, Rennie D. (See Adams, Reuben H. and R. D.) | | | | | | |
| Adams, Reuben H. and R. D., Minneapolis, Minn. Automatic toy | 719,711 | Feb. 3 | 546 | 124 | 102 | 938 |
| Adams, Robert F., Birmingham, Ala. Electric jail-alarm | 741,992 | Oct. 20 | 3103 | 692 | 106 | 1939 |
| Adams, Samuel H., York, England. Filter construction and apparatus connected therewith | 745,754 | Dec. 1 | 780 | 178 | 107 | 1265 |
| Adams, Theodore F. (See Burden and Adams.) | | | | | | |
| Adams, Thomas, Mandan, N. D. Corn-planter | 720,391 | Feb. 10 | 1804 | 410 | 102 | 1221 |
| Adams, Thomas E., Cleveland, Ohio. Electric-arc lamp | 724,071 | Mar. 31 | 4521 | 1018, 1019 | 103 | 1006 |
| Adams, Thomas E., Cleveland, Ohio. Alternating-current arc-lamp | 724,072 | Mar. 31 | 4526 | 1019 | 103 | 1007 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Adams, Thomas E., Cleveland, Ohio. Alternating-current regulator | 724,073 | Mar. 31 | 4532 | 1020 | 103 | 1008 |
| Adams, Walter S. (See Brill and Adams.) | | | | | | |
| Adams, Walter S. (See Jenkins, Thomas, assignor.) | | | | | | |
| Adams, Walter S., assignor to J. A. Brill, Philadelphia, Pa. Car-truck | 739,771 | Sept. 22 | 4277 | 958, 959 | 106 | 966 |
| Adams, Walter S., assignor to J. A. Brill, Philadelphia, Pa. Car-truck | 739,772 | Sept. 22 | 4280 | 959, 960 | 106 | 967 |
| Adams, Walter S., assignor to J. A. Brill, Philadelphia, Pa. Car-truck | 739,800 | Sept. 22 | 4346 | 974, 975 | 106 | 981 |
| Adams, Walter S., assignor to J. A. Brill, Philadelphia, Pa. Car-truck | 739,801 | Sept. 22 | 4348 | 975, 976 | 106 | 982 |
| Adams and Westlake Company. (See Hamm, William S., assignor.) | | | | | | |
| Adams & Westlake Company. (See Mosher, John A., assignor.) | | | | | | |
| Adams & Westlake Company. (See Wishart and Seidel.) | | | | | | |
| Adams, William E., New York, N. Y. Indicator | 746,433 | Dec. 8 | 2043 | 469 | 107 | 1554 |
| Adams, William H., assignor to W. L. Barrell, Lawrence, Mass. Inner sole for boots or shoes | 740,351 | Sept. 29 | 5386 | 1214 | 106 | 1215 |
| Adams, William H., Jr., assignor of one-third to O. H. Hubbard, Los Angeles, Cal. Apparatus for treating ores | 745,472 | Dec. 1 | 307 | 73 | 107 | 1165 |
| Adams, William P. C., assignor of one-half to P. Barnes, Seattle, Wash. Strap-lock | 735,689 | Aug. 11 | 1263 | 269 | 105 | 1267 |
| Adams, William T. (See Beech, John M., assignor.) | | | | | | |
| Adams, William T., Reading, Pa. Door-check | 727,051 | May 5 | 451 | 95 | 104 | 99 |
| Adams, William W., Brockton, Mass. Transmission-gear | 743,792 | Nov. 10 | 1953 | 414 | 107 | 433 |
| Adamson, Andrew J., Chicago, Ill., assignor to Adamson Stock Car Company. Freight-car | 731,420 | June 23 | 3489 | 779 | 104 | 1903 |
| Adamson, Henry C., Pryorcreek, Ind. Ter. Dividers | 722,551 | Mar. 10 | 1665 | 367 | 103 | 374 |
| Adamson, James M., Philadelphia, Pa. Paint or water-color receptacle | 718,296 | Jan. 13 | 1445 | 321 | 102 | 327 |
| Adamson, James M., Philadelphia, Pa. Tailor's tape-measure | 736,052 | Aug. 11 | 1937 | 413 | 105 | 1413 |
| Adamson Stock Car Company. (See Adamson, Andrew J., assignor.) | | | | | | |
| Adaptable Sign Company. (See Bartlett, Edwin B., assignor.) | | | | | | |
| Adcock, Edward A., assignor to himself and Pulsometer Engineering Company, Limited, Reading, England. Type-setting machine | 717,960 | Jan. 6 | 824 | 186 | 102 | 177 |
| Addenbrooke, George L., Westminster, England. Electrical switch-box apparatus | 746,772 | Dec. 15 | 2656 | 613, 614 | 107 | 1713 |
| Addison, Mary M., Baltimore, Md. Non-refillable bottle | 745,552 | Dec. 1 | 442 | 104 | 107 | 1192 |
| Addison, Robert, Pasadena, assignor to Lindsay & Addison Foundry and Machine Works, Pomona, Cal. Double-plunger pump | 744,272 | Nov. 17 | 2913 | 623, 624 | 107 | 651 |
| Addressograph Company. (See Clément, Joseph O., assignor.) | | | | | | |
| Ade, William F., Jr., Williamsport, Pa. Spring-bed | 719,631 | Feb. 3 | 395 | 89 | 102 | 905 |
| Adelman, Oscar F. (See Farquharson and Adelman.) | | | | | | |
| Aden, Jurgen, Gothenburg, Nebr. Fire-escape | 730,072 | June 2 | 1002 | 224 | 104 | 1331 |
| Adjustable Book Bracket Company. (See Walsh, William J., assignor.) (Reissue.) | | | | | | |
| Adler, Adalbert, Constance, Germany. Adjustable seat | 720,549 | Feb. 17 | 2115 | 488 | 102 | 1301 |
| Adler, Augusta, assignor of one-fourth to H. T. Lemons, Tacoma, Wash. Woman's skirt | 723,191 | Mar. 17 | 2865 | 642 | 103 | 637 |
| Adler, Joshua, San Francisco, Cal. Fire-kindler | 739,131 | Sept. 15 | 3113 | 688 | 106 | 697 |
| Adler, Solomon, San Francisco, Cal. Ruler and line-gage | 721,271 | Feb. 24 | 3510 | 798 | 102 | 1612 |
| Adolph, John U. (See Prindle and Adolph.) | | | | | | |
| Adoscope Advertising Company. (See Barnes, Edward M., assignor.) | | | | | | |
| Adreon, Edward L., Jr., St. Louis, Mo. Brake-shoe key-bolt | 743,793 | Nov. 10 | 1954 | 414 | 107 | 433 |
| Adreon, Edward L., Jr., St. Louis, Mo. Brake-shoe key-bolt | 743,794 | Nov. 10 | 1956 | 414 | 107 | 434 |
| Adriance, Benjamin, Brooklyn, N. Y. Machine for closing circular seams of sheet-metal cans | 747,671 | Dec. 22 | 4350 | 982 | 107 | 2110 |
| Adriance, Benjamin, and A. Calleson, Brooklyn, N. Y.; said Calleson assignor to said Adriance. Carbonating apparatus | 725,531 | Apr. 14 | 2062 | 467, 468 | 103 | 1622 |
| Adriance, Benjamin, and A. Calleson, Brooklyn, N. Y., assignors to American Can Company. Sheet-metal box or can | 742,951 | Nov. 3 | 232 | 52 | 107 | 50 |
| Adriance, Platt & Company. (See Case, Henry J., assignor.) | | | | | | |
| Adrot, Georges, Marseilles, France. Making artificial fuel | 729,711 | June 2 | 328 | | 104 | 1196 |
| Adt, Leo F., Troy, N. Y. Eyeglasses | 725,910 | Apr. 21 | 2763 | 629 | 103 | 1787 |
| Adt, Leo F., Albany, N. Y. Eyeglass-holder | 735,431 | Aug. 4 | 762 | 162 | 105 | 1142 |
| Aeolian Co. (See Pain, Willard S., assignor.) | | | | | | |
| Aeolian Company. (See Dickinson, Joseph H., assignor.) | | | | | | |
| Aeolian Company. (See Haywood, Daniel H., assignor.) | | | | | | |
| Aeolian Company. (See Kelly, George B., assignor.) | | | | | | |
| Aeolian Company. (See Pain, Robert W., assignor.) | | | | | | |
| Aeolian Company. (See Tracy, James B., assignor.) | | | | | | |
| Aeolian Company. (See Votey, Edwin S., assignor.) | | | | | | |
| Aeolian Company. (See Wyckoff, Frank R., assignor.) | | | | | | |
| Aeolian Company. (See Young, Francis, assignor.) | | | | | | |
| Aero Pulverizer Company. (See Wheildon, William M., assignor.) | | | | | | |
| Affleck, David S., Chesterton, Ind. Cross-tie for railways | 742,144 | Oct. 27 | 3431 | 765 | 106 | 2021 |
| Agee, George S., Texarkana, Tex. Check-row attachment for corn-planters | 730,217 | June 9 | 1259 | 280 | 104 | 1399 |
| Agle, Erick. (See Lindquist and Agle.) | | | | | | |
| Agne, Charles H., Newark, N. J. Orchestra-bells | 742,952 | Nov. 3 | 234 | 52 | 107 | 50 |
| Agnell, Peter W., Bigspring, Tex. Draft attachment for railway-cars | 743,411 | Nov. 10 | 1211 | 250 | 107 | 273 |
| Agnew Auto-Mailing Machine Company. (See Agnew, Lee A., assignor.) | | | | | | |
| Agnew, Lee A., New York, N. Y., assignor, by mesne assignments, to Agnew Auto-Mailing Machine Company, Boston, Mass. Machine for folding, wrapping, addressing, and assorting newspapers or the like | 720,212 | Feb. 10 | 1474 | 335, 336, 337, 338, 339 | 102 | 1151 |
| Agnew, Lee A., New York, N. Y., assignor to G. L. Richards, Boston, Mass. Addressing and assorting machine | 720,213 | Feb. 10 | 1484 | 339, 340 | 102 | 1152 |
| Agnew, Nimrod P., Kansas City, Mo. Combined automatic spindle-oiler | 743,371 | Nov. 3 | 1099 | 234 | 107 | 233 |
| Agnew, Thomas, and F. Denman, Chicago, Ill. Horseshoe | 738,144 | Sept. 8 | 1181 | 260 | 106 | 271 |
| Ahlers, George F., Covington, Ky., assignor to Hoffman, Ahlers & Company, Cincinnati, Ohio. Still | 732,071 | Mar. 3 | 763 | 170 | 103 | 164 |
| Ahlheim, Edward C., Mansfield, Ohio. Bearing | 739,631 | Sept. 22 | 4040 | 901 | 106 | 913 |
| Ahlquist, Karl O., Rugby, England. Elastic wheel | 747,343 | Dec. 22 | 3765 | 848 | 107 | 1979 |
| Ahlstrom, Charles A., Jamestown, N. Y. Piano-action | 736,920 | Aug. 25 | 3539 | 786 | 105 | 1787 |
| Ahlstrom, Otto J. (See Lindner, Arthur E., assignor.) | | | | | | |
| Ahlum, Charles H., Lansdale, Pa. Door-knob alarm | 732,491 | June 30 | 5554 | 1231 | 104 | 2342 |
| Ahne, Bernard W., Mount Hope, N. J. Censer | 721,133 | Feb. 24 | 3241 | 742 | 102 | 1559 |
| Ahorn, Johann. (See Panitschek and Ahorn.) | | | | | | |
| Ahr, John, Cincinnati, Ohio. Corner for carriage-bodies | 747,572 | Dec. 22 | 4157 | 934 | 107 | 2068 |

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| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Ahrens, Albert, *et al.* (See Shepler, William H., assignor.) | | | | | | |
| Ahrens, John C. (See Flatten and Ahrens.) | | | | | | |
| Ahrle, Carl P. H., assignor to Metalline-Platten-Gesellschaft, M. B. H., Frankfort-on-the-Main, Germany. Bronze-coated plate | 731,831 | June 23 | 4256 | 947 | 104 | 2061 |
| Ahrle, Hermann. (See Huck, Fischer, Ahrle, and Schmieder.) | | | | | | |
| Aiken, Albion P. (See Garland and Aiken.) | | | | | | |
| Aiken, Albion P. (See Killeen, Lewis, and Aiken.) | | | | | | |
| Aiken, Albion P., *et al.* (See Lewis, John F., assignor.) | | | | | | |
| Aiken, Albion P., Port Perry, assignor of two-thirds to M. Killeen and J. F. Lewis, Braddock, Pa. Blast-furnace-charging apparatus | 729,831 | June 2 | 579 | 128 | 104 | 1246 |
| Aiken, Charles W. (See Mitchell and Aiken.) | | | | | | |
| Aiken, Edward L., Schenectady, N. Y., assignor to General Electric Company. Apparatus for making coils for electrical apparatus | 720,092 | Feb. 10 | 1262 | 289 | 102 | 1108 |
| Aiken, Edward L., Schenectady, N. Y., assignor to General Electric Company. Coil for electrical apparatus | 720,093 | Feb. 10 | 1267 | 290 | 102 | 1109 |
| Aiken, Edward L., Schenectady, N. Y., assignor to General Electric Company. Forming coils for electrical apparatus | 744,018 | Nov. 17 | 2419 | 518 | 107 | 547 |
| Aiken, Edward L., Warren, Pa., assignor to General Electric Company. Coil-forming apparatus | 744,671 | Nov. 17 | 3603 | 777 | 107 | 798 |
| Aiken, Henry, Pittsburg, Pa. Roof structure | 718,044 | Jan. 6 | 981 | 218, 219 | 102 | 211 |
| Aiken, Henry, Pittsburg, Pa. Tongs-operating mechanism | 729,251 | May 26 | 4541 | 1000, 1001 | 104 | 1011 |
| Aiken, Henry, Pittsburg, Pa. Charging-machine | 733,929 | July 21 | 2227 | 523 | 105 | 503 |
| Aiken, Robert H., Winthrop Harbor, Ill. Smelting copper ores | 746,773 | Dec. 15 | 2660 | ------ | 107 | 1714 |
| Aikin, John B., Bloomington, Ohio. Can opening or closing implement | 747,831 | Dec. 22 | 4643 | 1049 | 107 | 2178 |
| Aikin, William G., and J. T. Pulliam, Century, Fla. Cork or stopper | 722,657 | Mar. 17 | 1871 | 416 | 103 | 433 |
| Aims, Walton I., New York, N. Y. Safety air-lock | 721,991 | Mar. 3 | 636 | 141 | 103 | 138 |
| Ainley, John S., Huddersfield, England. Shuttle-box motion | 744,273 | Nov. 17 | 2915 | 624 | 107 | 651 |
| Ainsworth, Charles F., Horwich, and S. Anderton, Bolton, England. Combing-machine | 734,652 | July 28 | 3608 | 845 | 105 | 811 |
| Ainsworth, Frederick L., Turner, assignor of one-half to J. J. Hovey, Kansas City, Kans. Attachment for team-harness | 726,236 | Apr. 28 | 3339 | 758 | 103 | 1921 |
| Ainsworth, James V., Los Angeles, Cal. Trolley catcher and replacer | 739,632 | Sept. 22 | 4041 | 901, 902 | 106 | 914 |
| Airey, George H., Paris, France. Apparatus for loading or unloading vessels | 747,923 | Dec. 29 | 4849 | 1095 | 107 | 2244 |
| Aitcheson, Agnes L., *et al.* (See Murray, Peter, assignor.) | | | | | | |
| Aitken, Andrew W. (See Farquhar and Aitken.) | | | | | | |
| Aitken, Charles S., Plankinton, S. D. Windmill attachment | 734,494 | July 28 | 3325 | 779 | 105 | 751 |
| Aiton, Thomas A., New York, N. Y. Wire-core machine | 742,551 | Oct. 27 | 4187 | 942 | 106 | 2175 |
| Aizenman, Raphal, New York, N. Y. Combined photograph-album, toilet-box, and writing-desk | 739,571 | Sept. 22 | 3914 | 876, 877 | 106 | 886 |
| Ajax Manufacturing Company. (See Blakeslee, John R., assignor.) | | | | | | |
| Akass, Edward T. A., Chicago, Ill. Binding-file | 736,338 | Aug. 18 | 2437 | 533 | 105 | 1539 |
| Akass, Edward T. A., Chicago, Ill. Binding-file attachment | 736,339 | Aug. 18 | 2438 | 533 | 105 | 1539 |
| Akass, Edward T. A., Chicago, Ill. Expansion-back binder | 736,340 | Aug. 18 | 2439 | 533 | 105 | 1539 |
| Akass, Edward T. A., Chicago, Ill. Loose-leaf ledger and compressor | 736,341 | Aug. 18 | 2441 | 533 | 105 | 1539 |
| Akass, Edward T. A., Chicago, Ill. Loose-leaf binder | 736,342 | Aug. 18 | 2443 | 534 | 105 | 1540 |
| Akass, Edward T. A., Chicago, Ill. Binding-file | 736,343 | Aug. 18 | 2444 | 534 | 105 | 1540 |
| Akeley, Carl E., Chicago, Ill. Artificial foliage and making same | 719,632 | Feb. 3 | 395 | 90 | 102 | 905 |
| Akeroyd, Frederick W. (See Turner and Akeroyd.) | | | | | | |
| Akers, Charles. (See Bakeley, Charles, assignor.) | | | | | | |
| Akers, Charles E., and F. Wilson, Decatur, Ill. Draft attachment for vehicles | 731,331 | June 16 | 3310 | 738 | 104 | 1848 |
| Akers, Earl C., Port Huron, Mich., assignor to W. A. Page, Chicago, Ill. Steering-gear for boats | 733,893 | July 14 | 2151 | 508 | 105 | 469 |
| Akers, Erastus M., Ione, Oreg. Brake-lever | 730,431 | June 9 | 1652 | 370 | 104 | 1481 |
| Akers, George S., Ambia, Ind. Seat-supporting bicycle extension-frame | 739,633 | Sept. 22 | 4043 | 902 | 106 | 914 |
| Akers, Hughy P., Crisman, Ind. Spreader for oil-burners | 744,453 | Nov. 17 | 3253 | 697 | 107 | 725 |
| Akers, Matthew L., Louisville, Ky. Car-signal | 729,911 | June 2 | 709 | 158 | 104 | 1273 |
| Akers, Robert J. (See Chenhalls, John S., assignor.) | | | | | | |
| Akeson, Anders, Providence, R. I. Eyeglasses or spectacles | 732,991 | July 7 | 515 | 128 | 105 | 110 |
| Aksila, Mati, Worcester, Mass. Fruit-picker | 736,671 | Aug. 18 | 3055 | 675 | 105 | 1667 |
| Aktiebolaget L. M. Ericsson & Ce. (See Ericsson, Lars M., assignor.) | | | | | | |
| Aktiébolaget Stockholms Vapenfabrik. (See Friberg, Holsten, assignor.) | | | | | | |
| Aktiebolaget Svenska Motor-Och Naf-Fabriken. (See Ericson, Frithiof G., assignor.) | | | | | | |
| Aktiengesellschaft, vormals F. Martini & Co. (See Kugler, Friedrich, assignor.) | | | | | | |
| Alaska Packers Association. (See Johnson, John, assignor.) | | | | | | |
| Albanesius, Carl. (See George, Edwin R., assignor.) | | | | | | |
| Albaugh, Edgar G., Frederick, Md. Pea-huller | 738,145 | Sept. 8 | 1182 | 260, 261 | 106 | 271 |
| Albaugh, Gilbert R., Cleveland, Ohio. Current-breaker for hydrocarbon-engines | 733,894 | July 14 | 2156 | 509 | 105 | 470 |
| Albee, Honestus M., assignor of two-thirds to W. H. King, Newark, and F. H. La Pierre, East Orange, N. J. Engraving or carving machine | 734,792 | July 28 | 3885 | 906, 907, 908, 909 | 105 | 865 |
| Alberger Condenser Company. (See Alberger, Louis R., assignor.) | | | | | | |
| Alberger, Louis R. (See Sault, Thomas, assignor.) | | | | | | |
| Alberger, Louis R., assignor to Alberger Condenser Company, New York, N. Y. Jet-condenser | 723,972 | Mar. 31 | 4326 | 971 | 103 | 968 |
| Alberger, Louis R., Greenwich, Conn., assignor to Alberger Condenser Company, New York, N. Y. Condenser system | 731,832 | June 23 | 4257 | 948 | 104 | 2061 |
| Alberts, Henry, Swampscott, Mass. Making boots or shoes | 742,372 | Oct. 27 | 3857 | 866, 867 | 106 | 2109 |
| Albiez, John L., Jr., West Homestead, Pa. Switch | 726,612 | Apr. 28 | 4094 | 924 | 103 | 2070 |
| Albone, Daniel, Biggleswade, England. Motor-tractor for agricultural purposes | 724,531 | Apr. 7 | 207 | 50 | 103 | 1213 |
| Albrecht, Herman S. (See Schoellhorn and Albrecht.) | | | | | | |
| Albree, Chester B., Allegheny, Pa. Bolster | 733,791 | July 14 | 1946 | 458 | 105 | 428 |
| Albright, Harry W., assignor of one-half to B. P. Tinan and C. P. Young, York, Pa. Cigar-bunching machine | 744,951 | Nov. 24 | 4143 | 895, 896 | 107 | 929 |
| Albright, Lucian M., Kingwood, W. Va. Door-closer | 737,991 | Sept. 1 | 878 | 192 | 106 | 191 |
| Albright, Ralph D., Reynoldsville, assignor of one-half to D. E. Hibner, Dubois, Pa. Air-pump-operating device | 728,651 | May 19 | 3465 | 768, 769 | 104 | 775 |
| Alcohol Syndicate. (See Macalpine, Thomas, assignor.) | | | | | | |
| Alcorn, Theodore H., Kansas City, and E. L. Chatfield, Mount Washington, Mo. Rubber-disk attacher for bottle-stoppers | 728,351 | May 19 | 2901 | 641 | 104 | 656 |
| Alden, Dana K., Boston, Mass. Combination envelop-opener, folder, and rule | 742,373 | Oct. 27 | 3858 | 867 | 106 | 2109 |
| Alden, George, Wilkinsburg, Pa. Combined paper-weight and pincushion | 732,492 | June 30 | 5555 | 1232 | 104 | 2343 |
| Alden, George, Wilkinsburg, Pa. Attachment for trunks | 732,493 | June 30 | 5556 | 1232 | 104 | 2343 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | Spec. | Drgs. | Vol. | Page. |
| Alden, Harry B. (See Squires, John P., assignor.) | | | | | | |
| Alden, Sidney H., North Middleboro, Mass. Fruit-picker | 734,033 | July 21 | 2454 | 574 | 105 | 551 |
| Alden Type Machine Company. (See Johnson, Louis K., assignor.) | | | | | | |
| Alden Type Machine Company. (See Low and Breakey, assignors.) | | | | | | |
| Alderfer, John M., Sharon Center, Ohio. Vehicle-wheel | 730,073 | June 2 | 1004 | 225 | 104 | 1332 |
| Alderman, Charles N., Streator, Ill. Excavating-machine | 719,408 | Jan. 27 | 3590 | 802 | 102 | 804 |
| Alderman, E. L. (See Granger, Charles F., assignor.) | | | | | | |
| Aldrich, La Fayette, and W. Grange, Milwaukee, Wis. Heat-regulator | 741,610 | Oct. 20 | 2353 | 527 | 106 | 1783 |
| Aldrich, Reginald D., Chicago, Ill. Sprinkler attachment for road-rollers | 738,748 | Sept. 15 | 2418 | 530 | 106 | 549 |
| Aldrich, Shelly S., *et al.* (See Green, Fred P., assignor.) | | | | | | |
| Aldrich, William O., assignor to Whitin Machine Works, Incorporated, Whitinsville, Mass. Guide-eye for spinning-frames | 740,611 | Oct. 6 | 451 | 98 | 106 | 1343 |
| Aldridge, Charles H., Loughborough, England. Straight-fashioning knitting-machine | 725,647 | Apr. 21 | 2297 | 519, 520, 521 | 103 | 1687 |
| Alert Manufacturing Company. (See Miller, Louis W., assignor.) | | | | | | |
| Alexa, Victor, assignor to W. Schridde, Chicago, Ill. Soap-mold | 724,771 | Apr. 7 | 659 | 153 | 103 | 1309 |
| Alexander, Amzi W., Mount Holly, N. C. Clothes-pin | 728,824 | May 26 | 3788 | 844 | 104 | 859 |
| Alexander, Angus E. (See Biggs, Daniel, assignor.) | | | | | | |
| Alexander, Clinton B., Clearfield, Pa. Device for repairing metallic measuring-tapes | 721,411 | Feb. 24 | 3761 | 855 | 102 | 1664 |
| Alexander, Francis M., Palestine, Tex. Closet-seat catch | 723,973 | Mar. 31 | 4330 | 971, 972 | 103 | 969 |
| Alexander, James G., Fairfield, Iowa. Rod-coupling | 743,211 | Nov. 3 | 755 | 165 | 107 | 158 |
| Alexander, James S., Liberty, Mo. Hog-holding device | 732,029 | June 30 | 4637 | 1037 | 104 | 2155 |
| Alexander, James S., Jacksonville, Fla. Weighing-scoop | 734,653 | July 28 | 3609 | 845 | 105 | 812 |
| Alexander, James W., Bridgeport, Ohio. Attachment for air-brake systems | 728,071 | May 12 | 2354 | 524 | 104 | 518 |
| Alexander, Jesse, assignor of one-half to H. Benke, New York, N. Y. Ribbon mechanism for type-writers | 720,992 | Feb. 17 | 2929 | 671 | 102 | 1470 |
| Alexander, Jesse, assignor of one-half to H. Benke, New York, N. Y. Type-writer | 724,772 | Apr. 7 | 661 | 153, 154, 155, 156 | 103 | 1310 |
| Alexander, Jesse, assignor of one-half to H. Benke, New York, N. Y. Type-writer-bar movement | 724,773 | Apr. 7 | 669 | 157 | 103 | 1311 |
| Alexander, John W., New York, N. Y. Collar-fastening | 743,795 | Nov. 10 | 1957 | 415 | 107 | 434 |
| Alexander, Magnus W., Lynn, Mass., assignor to General Electric Company. Speed-regulating device | 738,871 | Sept. 15 | 2657 | 586 | 106 | 603 |
| Alexander, Malford. (See Olin and Alexander.) | | | | | | |
| Alexander, Moses H. (See Doner, Martin J., assignor.) | | | | | | |
| Alexander, Oliver A., Philadelphia, Pa. Engine for ringing bells or other purposes | 722,072 | Mar. 3 | 764 | 171 | 103 | 165 |
| Alexander, Theophilus W., Burlington, Iowa. Oil-can | 721,134 | Feb. 24 | 3243 | 742 | 102 | 1559 |
| Alexander, William W. (See Letord, Alexander, and Letord.) | | | | | | |
| Alexander, William W., assignor to L. A. Rheostat Co., Kansas City, Mo. Circuit-controller | 734,793 | July 28 | 3894 | 910 | 105 | 867 |
| Alexander, William W., assignor to L. A. Rheostat Company, Kansas City, Mo. Circuit-controller for surgico-dental engines | 742,374 | Oct. 27 | 3859 | 867, 868 | 106 | 2109 |
| Aley, Frank W., El Paso, Tex. Railway-switch | 736,911 | Aug. 18 | 3515 | 782 | 105 | 1763 |
| Alford, Samuel, and J. J. R. Smythe, assignors of one-third to C. L. Anderson, Johannesburg, Transvaal. Amalgamating-machine | 748,456 | Dec. 29 | 5848 | 1330 | 107 | 2462 |
| Alford, William B., Sumter, S. C. Water-motor | 718,967 | Jan. 27 | 2753 | 616 | 102 | 629 |
| Alford, William H., *et al.* (See Parrish, William N., assignor.) | | | | | | |
| Alfred, Clarence J., Lake Geneva, Wis., assignor to National Biscuit Company, Jersey City, N. J., and Chicago, Ill. Cracker or cake stacking machine | 738,749 | Sept. 15 | 2419 | 530, 531 | 106 | 549 |
| Alfred, Frank H., and P. Chipman, Saginaw, Mich. Railway-tie | 722,200 | Mar. 10 | 1018 | 224 | 103 | 231 |
| Alger, Charles M., Hannibal, Mo. Shipping-tag holder and lock | 741,091 | Oct. 13 | 1300 | 298 | 106 | 1544 |
| Alger, George A., Oshkosh, Wis. Combined couch and chest | 719,712 | Feb. 3 | 548 | 124 | 102 | 938 |
| Alger, John, and J. F. Cook, Hartford, Conn. Screw-making machinery | 747,833 | Dec. 22 | 4647 | 1049 | 107 | 2178 |
| Alger, Joseph, West Bridgewater, Mass. Making paper boxes | 737,692 | Sept. 1 | 243 | 52 | 106 | 56 |
| Alger, Richard E., West Richfield, Ohio. Hay-loader | 748,032 | Dec. 29 | 5065 | 1145, 1146 | 107 | 2292 |
| Alignum Company. (See Wheeler and Hargrave, assignors.) | | | | | | |
| Alke, Stephen, and S. A. Moss, Springfield, Ohio. Decorating art glass | 718,895 | Jan. 20 | 2608 | ------ | 102 | 584 |
| Alke, Stephen, and W. A. M. Hadley, Springfield, Ohio. Manufacturing art glass | 718,894 | Jan. 20 | 2607 | 583 | 102 | 584 |
| Alkins, Charles A., Chicago, Ill. Device for preventing the spreading of railway-track rails | 738,186 | May 19 | 2563 | 571 | 104 | 585 |
| Alkire, John W., Madison, Wis. Wire-working tool | 745,984 | Dec. 8 | 1238 | 279 | 107 | 1382 |
| Allan, Archibald F., and J. A. Lenhoff, Wilmington, Del. Coupling for air-brake hose | 743,796 | Nov. 10 | 1957 | 415 | 107 | 434 |
| Allan, Edward T., Cincinnati, Ohio, assignor to Union Special Sewing Machine Co., Chicago, Ill. Seam for sewed articles | 718,943 | Jan. 20 | 2709 | 606 | 102 | 606 |
| Allan, John R., assignor to Conners, Ducker and Fowler, Boston, Mass. Combined gas stove and heater | 743,412 | Nov. 10 | 1213 | 250 | 107 | 274 |
| Allan, John R., assignor to H. L. Nowell, Boston, Mass. Gas stove or heater | 747,529 | Dec. 22 | 4088 | 918 | 107 | 2051 |
| Allard, Daniel N., Pomeroy, Ohio. Plumb-level | 729,521 | June 2 | 1 | 1 | 104 | 1127 |
| Allard, Homer L. (See Shoecraft and Allard.) | | | | | | |
| Allard, Louis A., St. Louis, Mo. Toy | 737,992 | Sept. 1 | 879 | 192 | 106 | 191 |
| Allbright, William B., Chicago, Ill. Rendering lard | 732,151 | June 30 | 4890 | 1087 | 104 | 2207 |
| Allderdice, Winslow, Warren, Ohio. Fagot for tube-making | 736,344 | Aug. 18 | 2446 | 534 | 105 | 1540 |
| Allegheny Steel and Iron Company. (See Lewis, John E., assignor.) | | | | | | |
| Allen, Aaron B., Pueblo, Colo. Cross-tie and rail-fastening | 718,238 | Jan. 13 | 1333 | 295 | 102 | 301 |
| Allen, Alexander. (See Langham, Mary E., assignor.) | | | | | | |
| Allen, Anderson D., assignor of one-half to C. B. Seabury, Little Compton, R. I. Rotary engine | 720,993 | Feb. 17 | 2931 | 671, 672 | 102 | 1470 |
| Allen, Arthur C. (See Bennett and Allen.) | | | | | | |
| Allen, Arthur S., Boston, Mass. Tympan for printing-presses | 737,052 | Aug. 25 | 3770 | 837 | 105 | 1837 |
| Allen, Arthur S., Brookline, Mass. Knife | 739,371 | Sept. 22 | 3538 | 790 | 106 | 804 |
| Allen, Augustus V., Joplin, Mo. Grooving-machine | 718,968 | Jan. 27 | 2754 | 616 | 102 | 629 |
| Allen, Benjamin F., assignor of one-half to W. Somerville, St. Louis, Mo. Stove or range | 727,561 | May 12 | 1383 | 312 | 104 | 317 |
| Allen, Bona, Jr., Buford, Ga. Plow | 747,112 | Dec. 15 | 3315 | 755 | 107 | 1866 |
| Allen, Bona, Jr., and W. C., Buford, Ga. Tanning-wheel | 719,713 | Feb. 3 | 549 | 125 | 102 | 938 |
| Allen, Charles E., assignor to R. Wallace & Sons Mfg. Co., Wallingford, Conn. Heat-insulator for handled vessels | 738,391 | Sept. 8 | 1713 | 372 | 106 | 383 |
| Allen, Charles E., assignor to R. Wallace & Sons Mfg. Co., Wallingford, Conn. Heat-insulator for handled vessels | 743,797 | Nov. 10 | 1960 | 415 | 107 | 435 |
| Allen, Charles J., San Francisco, Cal. Hoisting and conveying apparatus | 747,113 | Dec. 15 | 3317 | 755 | 107 | 1866 |
| Allen, Charles W., Philadelphia, Pa. Fastener for envelops | 729,832 | June 2 | 580 | 128 | 104 | 1246 |
| Allen, David T., Maplelake, Minn. Belt-punch | 732,030 | June 30 | 4639 | 1037 | 104 | 2156 |
| Allen, Edgar R., Prescott, Ariz. Ter. Device for holding and counting mileage | 727,871 | May 12 | 1986 | 442 | 104 | 440 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| Allen, Edith L., Mineralpoint, Wis. Stove-mat | 727,251 | May 5 | 800 | 172 | 104 | 172 |
| Allen, Edward B. (See Sullivan and Allen.) | | | | | | |
| Allen, Edward B., Elizabeth, N. J., assignor to Singer Manufacturing Company. Power-transmitter | 732,391 | June 30 | 5360 | 1187 | 104 | 2305 |
| Allen, Edward B., Elizabeth, N. J., assignor to Singer Manufacturing Company. Buttonhole cutting and stitching machine | 734,495 | July 28 | 3326 | 779 | 105 | 751 |
| Allen, Edward B., Elizabeth, N. J., assignor to Singer Manufacturing Company. Buttonhole-sewing machine | 734,794 | July 28 | 3896 | 910, 911, 912, 913, 914, 915 | 105 | 868 |
| Allen, Edward B., Elizabeth, N. J., assignor to Singer Manufacturing Company. Thread-cutting device for sewing-machines | 735,432 | Aug. 4 | 763 | 162, 163 | 105 | 1143 |
| Allen, Edward B., Elizabeth, N. J., assignor to Singer Manufacturing Company. Stitched buttonhole | 735,433 | Aug. 4 | 769 | 163 | 105 | 1144 |
| Allen, Edward B., Elizabeth, N. J., assignor to Singer Manufacturing Company. Buttonhole-stitching machine | 735,434 | Aug. 4 | 770 | 163, 164 | 105 | 1145 |
| Allen, Edward B., Elizabeth, N. J., assignor to Singer Manufacturing Company. Buttonhole cutting and stitching machine | 736,471 | Aug. 18 | 2661 | 585, 586, 587 | 105 | 1586 |
| Allen, Edward B., Elizabeth, N. J., assignor to Singer Manufacturing Company. Buttonhole-stitching machine | 738,591 | Sept. 8 | 2085 | 455, 456, 457 | 106 | 464 |
| Allen, Edward B., Elizabeth, N. J., assignor to Singer Manufacturing Company. Needle-bar mechanism for sewing-machines | 739,132 | Sept. 15 | 3114 | 689 | 106 | 697 |
| Allen, Edward B., Elizabeth, N. J., assignor to Singer Manufacturing Company. Thread-cutting device for sewing-machines | 739,133 | Sept. 15 | 3116 | 689 | 106 | 698 |
| Allen, Edward B., Elizabeth, N. J., assignor to Singer Manufacturing Company. Buttonhole cutting and stitching machine | 743,212 | Nov. 3 | 757 | 165 | 107 | 159 |
| Allen, Edward B., Elizabeth, N. J., assignor to Singer Manufacturing Company. Buttonhole cutting and stitching machine | 743,213 | Nov. 3 | 759 | 166 | 107 | 159 |
| Allen, Edwin, Mount Vernon, N. Y., and G. W. Carver, Brookline, Mass., assignors to Greene, Tweed & Company, New York, N. Y. Lubricator | 731,731 | June 23 | 4074 | 908, 909 | 104 | 2020 |
| Allen, Edwin, Mount Vernon, N. Y., and G. W. Carver, Brookline, Mass., assignors to Greene, Tweed & Company, New York, N. Y. Lubricator | 731,833 | June 23 | 4260 | 948 | 104 | 2062 |
| Allen, Ellnathan, Chicago, Ill. Adjustable shelving | 739,804 | Sept. 29 | 4365 | 979 | 106 | 1003 |
| Allen, Ernest D., and W. A. McElney, Meriden, assignors of one-tenth to H. Hopkinson, Wallingford, Conn. Indicator for toilet-rooms | 720,871 | Feb. 17 | 2690 | 622 | 102 | 1419 |
| Allen, Frank E., Carney, Pa. Bird-trap | 732,794 | Mar. 17 | 2147 | 480 | 103 | 488 |
| Allen, Fred M., Auburn, R. I. Automatic fire-extinguisher | 732,494 | June 30 | 5557 | 1232 | 104 | 2343 |
| Allen, Frederick E., assignor to Improvements Manufacturing Company, Boston, Mass. Paper holding and feeding device | 747,344 | Dec. 22 | 3766 | 848 | 107 | 1979 |
| Allen, Frederick J., Somerville, Mass. Foot-rest or seat | 740,071 | Sept. 29 | 4882 | 1095 | 106 | 1110 |
| Allen, George E., Pittsburg, Pa. Phonograph attachment | 747,834 | Dec. 22 | 4648 | 1050 | 107 | 2179 |
| Allen, George E., Pittsburg, and G. Zimmer, Allegheny, Pa. Trolley | 732,495 | June 30 | 5559 | 1232 | 104 | 2344 |
| Allen, George F., assignor to Hoyt Metal Company, St. Louis, Mo. Piston-rod packing | 724,074 | Mar. 31 | 4535 | 1020 | 103 | 1009 |
| Allen, George O. (See Merriam, Lyman W., assignor.) | | | | | | |
| Allen, George T., Dallas, Tex. Oiler | 741,432 | Oct. 13 | 1983 | 439, 440 | 106 | 1689 |
| Allen, George T., and W. W. Moore, New York, N. Y., assignors to Excelsior Kneading Machine Company, Newark, N. J. Machine for mixing and raising dough | 722,658 | Mar. 17 | 1872 | 416 | 103 | 433 |
| Allen, George T., and W. W. Moore, New York, N. Y., assignors to Excelsior Kneading Machine Company, Newark, N. J. Machine for mixing and kneading dough | 726,491 | Apr. 28 | 3847 | 868 | 103 | 2022 |
| Allen, George W., New York, N. Y. Spiral barrel-chute | 745,985 | Dec. 8 | 1239 | 279 | 107 | 1382 |
| Allen, Harding. (See Howe, Lewis A., assignor.) | | | | | | |
| Allen, Herbert F., Arlington, Mass. Harrow | 747,573 | Dec. 22 | 4158 | 934 | 107 | 2068 |
| Allen, Herbert T., South Woodford, England. Rotary engine | 745,755 | Dec. 1 | 781 | 179 | 107 | 1265 |
| Allen, Irving W., St. Joseph, Mich. Box | 742,271 | Oct. 27 | 3675 | 821 | 106 | 2071 |
| Allen, James B., San Francisco, Cal. Display-frame for show-windows | 727,252 | May 5 | 802 | 172 | 104 | 173 |
| Allen, James B., Detroit, Mich. Nipple for linotype-machines | 733,571 | July 14 | 1571 | 374 | 105 | 350 |
| Allen, James B., Detroit, Mich. Perforating and round-cornering machine | 744,891 | Nov. 24 | 4026 | 868 | 107 | 906 |
| Allen, James B., Detroit, Mich. Filter | 748,251 | Dec. 29 | 5470 | 1246 | 107 | 2379 |
| Allen, James B., assignor to American Typograph Company, Detroit, Mich. Machine for perforating paper, &c. | 746,625 | Dec. 8 | 2376 | 545 | 107 | 1630 |
| Allen, James H., *et al.* (See Brantley, Thomas, assignor.) | | | | | | |
| Allen, James M., St. Louis, Mo., assignor to Solar Furnace and Power Company, Los Angeles, Cal. Storage battery | 723,804 | Mar. 31 | 3978 | 897 | 103 | 895 |
| Allen, Jefferson, Kennebunkport, Me. Plane | 721,771 | Mar. 3 | 196 | 45 | 103 | 43 |
| Allen, John B., Hainsburg, N. J. Device for holding lanterns | 727,253 | May 5 | 803 | 172 | 104 | 173 |
| Allen, John E., administrator. (See Johnston, James J.) | | | | | | |
| Allen, John H., New York, N. Y. Valve for reciprocating engines | 719,714 | Feb. 3 | 550 | 125 | 102 | 939 |
| Allen, John J., Portland, Oreg. Rack for rubber-tired vehicles | 731,651 | June 23 | 3934 | 876 | 104 | 1992 |
| Allen, John L. (See Habbert and Allen.) | | | | | | |
| Allen, Joseph W. E., San Francisco, Cal. Ore-separator | 743,413 | Nov. 10 | 1214 | 251 | 107 | 274 |
| Allen, Martin V. B., assignor of two-thirds to W. N. Thayer and T. Allen, New York, N. Y. Safety-lock for firearms | 741,754 | Oct. 20 | 2635 | 588 | 106 | 1842 |
| Allen, Nathan P., Smiths Grove, Ky. Leg-brace for animals | 739,634 | Sept. 22 | 4044 | 902 | 106 | 914 |
| Allen, O. Le Grand. (See Crane, Elliott H., assignor.) | | | | | | |
| Allen, Oliver P. (See Griffin and Allen.) | | | | | | |
| Allen, Oscar, Lincoln, Ill. Fishing-reel | 744,454 | Nov. 17 | 3254 | 698 | 107 | 725 |
| Allen, Patrick A., Toledo, Ohio. Water-closet | 717,651 | Jan. 6 | 225 | 57 | 102 | 49 |
| Allen, Redfield H. (See Edwards and Allen.) | | | | | | |
| Allen, Samuel L., Moorestown, N. J. Metal wheel | 730,591 | June 9 | 1948 | 434 | 104 | 1546 |
| Allen, Samuel L., Moorestown, N. J. Cultivator | 739,372 | Sept. 22 | 3538 | 790, 791 | 106 | 804 |
| Allen, Stanton. (See Bradley, Lynde, assignor.) | | | | | | |
| Allen Steam Trap and Separator Company. (See Cottle, Melvin W., assignor.) | | | | | | |
| Allen, Theodore, *et al.* (See Allen, Martin V. B., assignor.) | | | | | | |
| Allen, Thos. J., *et al.* (See Anderson, Alfred, assignor.) | | | | | | |
| Allen, Walter L., Norwich, Conn. Machine for corrugating paper | 739,276 | Sept. 22 | 3380 | 751, 752, 753 | 106 | 771 |
| Allen, Warren A., College Place, Wash. Bicycle seat-post and pump | 730,074 | June 2 | 1005 | 225 | 104 | 1332 |
| Allen, Wayne B. (See Billings, Frederick C., assignor.) | | | | | | |
| Allen, Will R. (See Scott, John S., assignor.) | | | | | | |
| Allen, Willard E., Toledo, Ohio. Bubble-blower | 721,135 | Feb. 24 | 3244 | 742 | 102 | 1559 |
| Allen, Willard E., Toledo, Ohio. Portable bath-mat | 745,553 | Dec. 1 | 443 | 104 | 107 | 1192 |
| Allen, William B., Longview, Tex. Water-heater | 745,712 | Dec. 1 | 717 | 164 | 107 | 1251 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | Spec. | Drg. | Vol. | Page. |
| Allen, William C. (See Allen, Bona, Jr., and W. C.) | | | | | | |
| Allen, William C. (See Willbanks and Allen.) | | | | | | |
| Allen, William C., Buford, Ga. Agricultural implement | 719,291 | Jan. 27 | 3362 | 750 | 102 | 755 |
| Allen, William W., Sloatsburg, N. Y., assignor to Standard Equipment Company, Mahwah, N. J. Switch-stand | 746,434 | Dec. 8 | 2044 | 469<br>470 | 107 | 1555 |
| Allendy, Armand, Paris, France. Folding bedstead | 719,292 | Jan. 27 | 3363 | 751 | 102 | 756 |
| Allert, Rudolf, Philadelphia, Pa. Grease-separator | 735,191 | Aug. 4 | 310 | 60 | 105 | 1047 |
| Allert, Rudolf, Philadelphia, Pa. Grease-separator | 735,192 | Aug. 4 | 311 | 61 | 105 | 1047 |
| Allert, Rudolf, Philadelphia, Pa. Grease-separator | 735,193 | Aug. 4 | 312 | 61 | 105 | 1047 |
| Alley, Eugene B., Arlington Heights, Mass. Calculating device | 733,930 | July 21 | 2229 | 523 | 105 | 503 |
| Alley, John J. (See Smith, Horace G., assignor.) | | | | | | |
| Alley, Stephen E., Glasgow, Scotland. Gas-compressor | 720,872 | Feb. 17 | 2691 | 622<br>623 | 102 | 1419 |
| Alliance Machine Company. (See Gilmore and Kendall, assignors.) | | | | | | |
| Alling, Adolf, Saltsjöbaden, Sweden. Ticket-control apparatus | 734,654 | July 28 | 3611 | 845 | 105 | 812 |
| Allis-Chalmers Company. (See Mather, Allan G., assignor.) | | | | | | |
| Allis-Chalmers Company. (See Peterson, John G., assignor.) | | | | | | |
| Allis-Chalmers Company. (See Sederholm, Edward T., assignor.) | | | | | | |
| Allis-Chalmers Company. (See Trout and Hinckley, assignors.) | | | | | | |
| Allis, Thomas V., Bridgeport, Conn. Metal-heating furnace | 729,712 | June 2 | 328 | 75 | 104 | 1196 |
| Allis, Thomas V., Bridgeport, Conn. Furnace for heating metal | 729,713 | June 2 | 332 | 76 | 104 | 1197 |
| Allis, Thomas V., Bridgeport, Conn. Manufacturing metal sheets | 729,714 | June 2 | 335 | ------ | 104 | 1198 |
| Allis, Thomas V., Bridgeport, Conn. Manufacturing thin metal sheets | 731,732 | June 23 | 4076 | 909 | 104 | 2020 |
| Allis, Thomas V., Bridgeport, Conn. Reducing hot metal bars into sheets | 733,112 | July 7 | 735 | 178<br>179 | 105 | 156 |
| Allis, Thomas V., Bridgeport, Conn. Reducing hot metal bars into sheets | 734,795 | July 28 | 3920 | ------ | 105 | 874 |
| Allison, Carl, Pocatello, Idaho. Coal-loading apparatus | 748,331 | Dec. 29 | 5601 | 1277 | 107 | 2407 |
| Allison, Charles P., Lodi, Cal. Safety-snap | 730,075 | June 2 | 1007 | 225 | 104 | 1332 |
| Allison, Ephraim, Charleroi, Pa. Music-leaf turner | 732,496 | June 30 | 5560 | 1233 | 104 | 2344 |
| Allison, James E., assignor to himself and G. M. Seeley, St. Louis, Mo. Block-signaling system and apparatus therefor | 744,706 | Nov. 24 | 3710 | 801 | 107 | 840 |
| Allison, James E., assignor to himself and G. M. Seeley, St. Louis, Mo. Signaling apparatus | 747,345 | Dec. 22 | 3769 | 849 | 107 | 1979 |
| Allison, Jesse H., New Vienna, Ohio. Check-hook | 730,592 | June 9 | 1950 | 434 | 104 | 1547 |
| Allison, Oscar W., deceased; C. A. Wolcott, Rochester, N. Y., executrix. Apparatus for disentangling cut tobacco | 726,607 | Apr. 28 | 4082 | 921<br>922 | 103 | 2068 |
| Allison, Samuel B., deceased, New Orleans, La.; C. A. Dorrestein, administrator. Stalk-breaking and fiber-cleaning machine | 737,311 | Aug. 25 | 4258 | 947 | 105 | 1939 |
| Allison, William D., Indianapolis, Ind. Tray-support and closet for physicians' tables | 739,471 | Sept. 22 | 3744 | 835 | 106 | 850 |
| Allison, William H., Morrisburg, Canada. Buoy | 747,114 | Dec. 15 | 3318 | 755 | 107 | 1866 |
| Alloatti, Joseph, Clermont-Ferrand, France. Alimentary-paste-drying apparatus | 735,931 | Aug. 11 | 1712 | 365 | 105 | 1365 |
| Alloways, Isaac, *et al.* (See Teamer, William H. B., assignor.) | | | | | | |
| Allsop, Robert O., Orpington, England. Petroleum-engine | 725,191 | Apr. 14 | 1437 | 325<br>326 | 103 | 1488 |
| Allwardt, Henry A., Detroit, Mich. Siphon-filler | 743,798 | Nov. 10 | 1961 | 416 | 107 | 435 |
| Alm, Nils A., Kurtz, Minn. Rail-joint | 747,115 | Dec. 15 | 3319 | 755 | 107 | 1867 |
| Alma Button Company. (See Kerngood, Herman, assignor.) | | | | | | |
| Alma Button Company of Baltimore City. (See Brewington, Henry S., assignor.) | | | | | | |
| Almond, Dorsey W., Leadville, Colo. Combined ore concentrator and amalgamator | 739,971 | Sept. 29 | 4692 | 1055 | 106 | 1070 |
| Alphin, Gilbert E., Mount Olive, N. C. Animal-trap | 742,953 | Nov. 3 | 236 | 52 | 107 | 51 |
| Alsip, Frank, Chicago, Ill. Furnace | 747,346 | Dec. 22 | 3770 | 849 | 107 | 1980 |
| Alsop, William T., Owensboro, Ky. Recapping device | 735,047 | Aug. 4 | 1 | 1 | 105 | 981 |
| Alsterlund, William A., Moline, Ill. Engine | 725,911 | Apr. 21 | 2764 | 630 | 103 | 1787 |
| Alston, Archibald, Jr. (See Rehlin, Charles J., assignor.) | | | | | | |
| Alston, Harry A., Cape Town, Cape Colony. Mouse or rat trap | 721,531 | Feb. 24 | 3974 | 905 | 102 | 1709 |
| Alston, James, South Melbourne, Victoria, Australia. Motion-changing gear for windmills | 741,005 | Oct. 13 | 1147 | 260 | 106 | 1511 |
| Alston, John S., Atlantic City, N. J. Cap for bottles or jars | 719,715 | Feb. 3 | 552 | 125 | 102 | 939 |
| Altenbaugh, William F., Tiffin, Ohio. Machine for grinding tumblers | 737,811 | Sept. 1 | 478 | 106<br>107 | 106 | 108 |
| Altenbaugh, William F., Tiffin, Ohio, assignor to G. Beatty, Washington, Pa. Machine for automatically gathering and delivering glass | 744,274 | Nov. 17 | 2917 | 624<br>625<br>626 | 107 | 652 |
| Altman, Emil, New York, N. Y. Advertising device | 746,232 | Dec. 8 | 1688 | 376 | 107 | 1480 |
| Altmann, Charles P., Lyons, France. Valve for steam-engines | 745,756 | Dec. 1 | 782 | 179 | 107 | 1265 |
| Altmyer, John W., Springville, assignor of one-half to C. Fisher, Central City, Iowa. Metallic post | 733,792 | July 14 | 1947 | 459 | 105 | 428 |
| Alton, George H., Lynn, Mass., assignor to General Electric Company. Bearing for electric meters | 733,611 | July 14 | 1630 | 386 | 105 | 362 |
| Altshul, Henry, New York, N. Y. Holder for polish or other substances | 718,969 | Jan. 27 | 2755 | 616 | 102 | 629 |
| Aluminum Bottle Cap Company. (See Gillette, George H., assignor.) | | | | | | |
| Aluminum Manufacturing Company. (See Koenig, Joseph, assignor.) | | | | | | |
| Alverson, Harry F., Omaha, Nebr. Gate for wire fences | 726,011 | Apr. 21 | 2935 | 668 | 103 | 1822 |
| Alves, John, London, England. Smoke-consuming apparatus for furnaces | 721,652 | Mar. 3 | 1 | 1 | 103 | 3 |
| Alvord, Edwin D., Talcottville, assignor to American Fiber Leather Company, Bridgeport, Conn. Machine for making leather-board | 727,872 | May 12 | 1987 | 442<br>443 | 104 | 440 |
| Alvord, Irvin T., View, Utah. Pencil-holder | 740,791 | Oct. 6 | 771 | 174 | 106 | 1409 |
| Alvord, John W., Chicago, Ill. Means for alining pump-shafts in well-casings | 735,690 | Aug. 11 | 1264 | 269 | 105 | 1267 |
| Alvord, John W., Chicago, Ill. High-speed rotary pump | 735,691 | Aug. 11 | 1265 | 269 | 105 | 1267 |
| Alvord, John W., Chicago, Ill. High-speed rotary pump | 735,692 | Aug. 11 | 1267 | 270<br>271 | 105 | 1268 |
| Alwart, Paul J., Chicago, Ill. Moistening device | 744,455 | Nov. 17 | 3255 | 698 | 107 | 726 |
| Ambert, Alexandre, Lyons, France. Permanent way of railways or tramways | 728,652 | May 19 | 3468 | 769 | 104 | 776 |
| Ambler, Alfred H., Winthrop, assignor of one-half to J. Bolt, Holyoke, Mass. Rail-joint | 722,660 | Mar. 17 | 1878 | 417 | 103 | 434 |
| Ambler, George A., Newark, N. J., assignor, by mesne assignments, to United Shoe Machinery Company. Machine for inserting fastenings | 722,659 | Mar. 17 | 1873 | 416 | 103 | 433 |
| Ambler, George B., assignor to Draper Company, Hopedale, Mass. Shedding mechanism for looms | 732,992 | July 7 | 516 | 128 | 105 | 110 |
| Ambler, George B., assignor to Draper Company, Hopedale, Mass. Warp stop-motion for looms | 747,311 | Dec. 15 | 3699 | 834 | 107 | 1949 |
| Ambler, Smith. (See Smith and Ambler.) | | | | | | |
| Ambrose, Harry T. (See Donning, George W., assignor.) | | | | | | |
| Ambrose, Jennings G., Houston, Tex. Heading-holder attachment for type-writers | 739,277 | Sept. 22 | 3383 | 753 | 106 | 771 |
| Ambursen, Nils F., Watertown, N. Y. Dam | 734,796 | July 28 | 3923 | 915 | 105 | 874 |
| Amelang, Charles A., Baltimore, Md. Cloth-cutting machine | 725,391 | Apr. 14 | 1794 | 402 | 103 | 1564 |
| Amend, Otto P. (See Colin and Amend.) | | | | | | |
| Amend, Otto P., New York, N. Y. Tanning hides, skins, or other animal tissues | 725,648 | Apr. 21 | 2305 | ------ | 103 | 1688 |
| Amend, Otto P., New York, N. Y., assignor of one-half to J. H. Macy, Boonton, N. J. Desulfurizing oils or distillates | 747,347 | Dec. 22 | 3772 | ------ | 107 | 1980 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | Spec. | Dr'g. | Vol. | Page. |
| Amend, Otto P., New York, N. Y., assignor of one-half to J. H. Macy, Boonton, N. J. Desulfurizing oils or distillates | 747,348 | Dec. 22 | 3774 | | 107 | 1980 |
| Amendt, Carl, Oppenheim, Germany. Plate or block for parquet floors | 745,554 | Dec. 1 | 444 | 104<br>105 | 107 | 1192 |
| America Company. (See Helm, Clinton B., assignor.) | | | | | | |
| America Marine Company. (See Dion, Léon, assignor.) | | | | | | |
| American Addograph Company. (See Cloud and Wood, assignors.) | | | | | | |
| American Amalgamating Company. (See Knappe, Paul A., assignor.) | | | | | | |
| American Arch and Culvert Company. (See Lane, Louis, assignor.) | | | | | | |
| American Arithmograph Company. (See Ellis, Halcolm, assignor.) | | | | | | |
| American Automatic Arms Company. (See Young and Sheriff, assignors.) | | | | | | |
| American Automatic Change Maker Company. (See Butcher and Parnall, assignors.) | | | | | | |
| American Automatic Photograph Company. (See Pifer, George N., assignor.) | | | | | | |
| American Bell Telephone Company. (See Rorty and Bullard, assignors.) | | | | | | |
| American Bell Telephone Company. (See Stone, John S., assignor.) | | | | | | |
| American Brake Company. (See Clark, Francis L , assignor.) | | | | | | |
| American Brake Shoe and Foundry Company. (See Jones, Harry, assignor.) | | | | | | |
| American Brake Shoe & Foundry Company. (See Sargent, William D., assignor.) | | | | | | |
| American Brake Shoe & Foundry Company. (See Streeter, Alfred L., assignor.) | | | | | | |
| American Brake Shoe & Foundry Company. (See Thompson, James S., assignor.) | | | | | | |
| American Brass Company. (See Dick, Alexander, assignor.) | | | | | | |
| American and British Manufacturing Company. (See Bevans, William H., assignor.) | | | | | | |
| American Broom & Brush Co. (See Ossenfort, John F., assignor.) | | | | | | |
| American Butter Separator Company. (See Cheney, Thomas J., assignor.) | | | | | | |
| American Calculating Machine Company. (See Maybaum, Levy, assignor.) | | | | | | |
| American Can Company. (See Adriance and Calleson, assignors.) | | | | | | |
| American Can Company. (See Harben, Thomas J., assignor.) | | | | | | |
| American Can Company. (See Hodgson, John G., assignor.) | | | | | | |
| American Can Company. (See Larkin, Bernard H., assignor.) | | | | | | |
| American Can Company. (See Lotz, Augustus, assignor.) | | | | | | |
| American Can Company. (See Record, George J., assignor.) | | | | | | |
| American Can Company. (See Sleeper, Charles W., assignor.) | | | | | | |
| American Can Company. (See Smith and Monroe, assignors.) | | | | | | |
| American Can Company. (See Stollberg, Charles, assignor.) | | | | | | |
| American Can Company. (See Taliaferro, John C., assignor.) | | | | | | |
| American Can Company. (See Weber, George W., assignor.) | | | | | | |
| American Can Company. (See Wells, William H., assignor.) | | | | | | |
| American Car & Foundry Company. (See Ames, John M., assignor.) | | | | | | |
| American Car & Foundry Company. (See Ames, Joseph H., assignor.) | | | | | | |
| American Car & Foundry Company. (See Field and Randel, assignors.) | | | | | | |
| American Car & Foundry Company. (See King, George I., assignor.) | | | | | | |
| American Car & Foundry Company. (See Randel, Ivar A., assignor.) | | | | | | |
| American Car & Foundry Company. (See Rogers and Shotwell, assignors.) | | | | | | |
| American Car & Foundry Company. (See Russell, George E., assignor.) | | | | | | |
| American Car & Foundry Company. (See Stevenson, John S., assignor.) | | | | | | |
| American Car & Foundry Company. (See Wolff and Lipschutz, assignors.) | | | | | | |
| American Car & Foundry Company. (See Wolff and Willoughby, assignors.) | | | | | | |
| American Casting Machine Company. (See Davies, Roderick W., assignor.) | | | | | | |
| American Cement Post Company. (See Huxley, Charles I., assignor.) | | | | | | |
| American Cigar Company. (See Prescott, Sydney I., assignor.) | | | | | | |
| American Coal Screen Company. (See Burke, James P., assignor.) | | | | | | |
| American Concrete-Steel Company. (See Simpson and Shoemaker, assignors.) | | | | | | |
| American Condensing Drier Company. (See Smith, John J., assignor.) | | | | | | |
| American Cotton Bale Company. (See Taft, Jerome C., assignor.) | | | | | | |
| American Cotton Picker Company. (See Campbell, Angus, assignor.) | | | | | | |
| American Crude Oil Burner Company. (See McDermott, John, assignor.) | | | | | | |
| American Electric Company. (See McDonnell, George P., assignor.) | | | | | | |
| American Electric Telephone Company. (See Clausen, Henry P., assignor.) | | | | | | |
| American Electric Telephone Company. (See Setter, Micheal, assignor.) | | | | | | |
| American Electric Telephone Company. (See Yaxley, Ernest E., assignor.) | | | | | | |
| American Elevated Railroad Company. (See Thomson, George H., assignor.) | | | | | | |
| American Engineering Company. (See Green, Francis J., assignor.) | | | | | | |
| American Exchange National Bank of New York. (See Durand, Louis, assignor.) | | | | | | |
| American Fiber Leather Company. (See Alvord, Edwin D., assignor.) | | | | | | |
| American Filter Press Extraction Company. (See Hack, Ernest B., assignor.) | | | | | | |
| American Fire Escape Company. (See Bielhen, Fredrick, assignor.) | | | | | | |
| American Fuel and Distillation Company. (See Zwillinger, Bernhard, assignor.) | | | | | | |
| American Fuel Oil Burner Manufacturing Company. (See Flaherty, Thomas E., assignor.) | | | | | | |
| American Furnace and Machine Co. (See Swindell, James D., assignor.) | | | | | | |
| American Gas Furnace Company. (See Reichhelm, Edward P., assignor.) | | | | | | |
| American Grain Purifier Constructing Company. (See McCray, Warren T., assignor.) | | | | | | |
| American Granite Machine Company. (See Jones, Albert F., assignor.) | | | | | | |
| American Graphophone Company. (See Capps, Frank L., assignor.) | | | | | | |
| American Graphophone Company. (See Emerson, Victor H., assignor.) | | | | | | |
| American Graphophone Company. (See Emerson and Capps, assignors.) | | | | | | |
| American Graphophone Company. (See Jones, Joseph W., assignor.) | | | | | | |
| American Graphophone Company. (See Macdonald, Thomas H., assignor.) | | | | | | |
| American Graphophone Company. (See Macdonald, Thomas H., assignor.) (Reissue.) | | | | | | |
| American Graphophone Company. (See Tainter, Charles S., assignor.) | | | | | | |
| American Harrow Company. (See Garst, Stephen H. and D., assignors.) | | | | | | |
| American Hoist & Derrick Co. (See Evans, George H., assignor.) | | | | | | |
| American Insulating Material Manufacturing Company. (See Hall, Charles C., assignor.) | | | | | | |
| American Interlaced Horse Collar Company. (See Maussner, Friedrich, assignor.) | | | | | | |
| American Key Can Company. (See Baker, Samuel A., assignor.) | | | | | | |
| American Lacing Hook Co. (See Bartel, William P., assignor.) | | | | | | |
| American Lady Corset Company. (See Siegel, Joseph, assignor.) | | | | | | |
| American Lamp Company. (See Black, John L., assignor.) | | | | | | |
| American Laundry Machinery Company. (See Nunn, Nathaniel G., assignor.) | | | | | | |
| American Lithographic Company. (See Frauenfelder, Paul G., assignor.) | | | | | | |
| American Lithographic Company. (See Pancoast, George E., assignor.) | | | | | | |
| American Lock Nut Company of Oregon. (See Whitney, William A., assignor.) | | | | | | |
| American Locomotive Company. (See Cole, Francis J., assignor.) | | | | | | |
| American Locomotive Company. (See Dalton and Cole, assignors.) | | | | | | |
| American Locomotive Company. (See Player, John, assignor.) | | | | | | |
| American Locomotive Sander Company. (See Longstreth, Charles, assignor.) | | | | | | |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drwg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| American McKenna Process Company. (See Lentz, David H., assignor.) | | | | | | |
| American Mechanical Cashier Company. (See Bassett, Charles F., assignor.) | | | | | | |
| American Mechanical Cashier Company. (See Dement, Isaac S., assignor.) | | | | | | |
| American Mechanical Cashier Company. (See Dement and Hull, assignors.) | | | | | | |
| American Mechanical Cashier Company. (See Hull, Foster J., assignor.) | | | | | | |
| American Metal Ware Co. (See Strobel, August, assignor.) | | | | | | |
| American Mining and Metal Extraction Company. (See Dolbear, Clinton E., assignor.) | | | | | | |
| American Motor Carriage Company. (See Washburn, George A., assignor.) | | | | | | |
| American Multigraph Company. (See Gammeter, Harry C., assignor.) | | | | | | |
| American Mutoscope & Biograph Company. (See Pross, John A., assignor.) | | | | | | |
| American Mutoscope Company. (See Casler, Herman, assignor.) | | | | | | |
| American Non-Refillable Bottle Company. (See Guernsey, Charles C., assignor.) | | | | | | |
| American Oar Company. (See Murdock, Horace B., assignor.) | | | | | | |
| American Optical Company. (See Riggs, Elwood, assignor.) | | | | | | |
| American Ordnance Company. (See Tasker, Vernon C., assignor.) | | | | | | |
| American Otophone Company. (See Redfield, Fred C., assignor.) | | | | | | |
| American Panograph Company. (See Rector, Enoch J., assignor.) | | | | | | |
| American Pneumatic Service Company. (See Burton, Charles H., assignor.) | | | | | | |
| American Pneumatic Service Company. (See Stoddard, Charles F., assignor.) | | | | | | |
| American Post-Office Equipment Company. (See Keller, Charles F., assignor.) | | | | | | |
| American Post-Office Equipment Company. (See Lavery, George L., assignor.) | | | | | | |
| American Producer-Gas Furnace Company. (See Gayner, John W., assignor.) | | | | | | |
| American Pulley Company. (See Budd, Edward G., assignor.) | | | | | | |
| American Radiator Company. (See Spear, John J., assignor.) | | | | | | |
| American Ring Company. (See Adams, George B., assignor.) | | | | | | |
| American Seeding Machine Company. (See Oates, George P., assignor.) | | | | | | |
| American Seeding Machine Company. (See Oates and Patric, assignors.) | | | | | | |
| American Seeding Machine Company. (See Packham, Frank R., assignor.) | | | | | | |
| American Separator Company. (See Collins and Hartmann, assignors.) | | | | | | |
| American Shearer Manufacturing Company. (See Priest, Joseph K., assignor.) | | | | | | |
| American Sheet Steel Company. (See Moeslein, Valentine, assignor.) | | | | | | |
| American Ship Windlass Company. (See Van Doorn, Henry D., assignor.) | | | | | | |
| American Shoe Machinery Company. (See Angell, Edwin E., assignor.) | | | | | | |
| American Signal and Power Co. (See Hunter, Robert L., assignor.) | | | | | | |
| American Snuff Company. (See Thom, James C., assignor.) | | | | | | |
| American Soda Fountain Company. (See Hopkins, Heber A., assignor.) | | | | | | |
| American Spindle Company. (See Potter, James C., assignor.) | | | | | | |
| American Steam Heating Specialty Company. (See Davis, James H., assignor.) | | | | | | |
| American Steel Foundries. (See Floyd, George G., assignor.) | | | | | | |
| American Steel Foundries. (See Hudson, Frank W., assignor.) | | | | | | |
| American Steel Foundries. (See Player and Floyd, assignors.) | | | | | | |
| American Steel & Wire Company. (See Bates, Albert J., assignor.) | | | | | | |
| American Steel & Wire Company. (See Brittan, Henry M., assignor.) | | | | | | |
| American Steel & Wire Company. (See Cocker, John A., assignor.) | | | | | | |
| American Steel & Wire Company. (See Farmer, Elmer, assignor.) | | | | | | |
| American Steel and Wire Company. (See Gorman, Michael, assignor.) | | | | | | |
| American Steel & Wire Company. (See Mitchell, John P., assignor.) | | | | | | |
| American Steel & Wire Company of New Jersey. (See Bates and Cocker, assignors.) | | | | | | |
| American Steel & Wire Company of New Jersey. (See Schnabel, Herman E., assignor.) | | | | | | |
| American Stove Co. (See Ruppel and Weaver, assignors.) | | | | | | |
| American Stove Company. (See Blackford, Atwell J., assignor.) | | | | | | |
| American Stove Company. (See Boekenkamp, Edward, assignor.) | | | | | | |
| American Stove Company. (See Stockstrom, Louis, assignor.) | | | | | | |
| American Stove & Furnace Company. (See Shafer, Samuel F., assignor.) | | | | | | |
| American Telephone and Telegraph Company. (See Barrett, Falk, and Shreeve, assignors.) | | | | | | |
| American Telephone and Telegraph Company. (See Bullard and Falk, assignors.) | | | | | | |
| American Telephone and Telegraph Company. (See Campbell, George A., assignor.) | | | | | | |
| American Telephone and Telegraph Company. (See Campbell and Richards, assignors.) | | | | | | |
| American Telephone and Telegraph Company. (See Duncan, James, assignor.) | | | | | | |
| American Telephone and Telegraph Company. (See O'Connell, Joseph J., assignor.) | | | | | | |
| American Telephone and Telegraph Company. (See Richards, Wilton L., assignor.) | | | | | | |
| American Telephone and Telegraph Company. (See Stetson, Almon B., assignor.) | | | | | | |
| American Telephone and Telegraph Company. (See Thompson, George K., assignor.) | | | | | | |
| American Telephone and Telegraph Company. (See Warren and Campbell, assignors.) | | | | | | |
| American Thread Company. (See Baker, Dickerson G., assignor.) | | | | | | |
| American Thread Company. (See Hubbard, Eber, assignor.) | | | | | | |
| American Tin Plate Company. (See Bennett, Charles W., assignor.) | | | | | | |
| American Tin Plate Company. (See Bennett and Goldsmith, assignors.) | | | | | | |
| American Tin Plate Company. (See Bray, Charles W., assignor.) | | | | | | |
| American Tin Plate Company. (See Goldsmith and Bennett, assignors.) | | | | | | |
| American Tin Plate Company. (See Phillips and Bray, assignors.) | | | | | | |
| American Tobacco Company. (See Coalter, William T., assignor.) | | | | | | |
| American Tobacco Company. (See Hall, Robert A., assignor.) | | | | | | |
| American Tobacco Company. (See Rakowitzky, Srul D. S. and S. S. D., assignors.) | | | | | | |
| American Tobacco Company. (See Simon, Caspar, assignor.) | | | | | | |
| American Tobacco Company. (See Tuttle, Washington I., assignor.) | | | | | | |
| American Tobacco Company. (See White, Edwin B., assignor.) | | | | | | |
| American Tobacco Company. (See Wojciechowski, Jakob, assignor.) | | | | | | |
| American Tool & Machine Company. (See Barker, Melville H., assignor.) | | | | | | |
| American Tool Works Company. (See Robinson and Laur, assignors.) | | | | | | |
| American Trackless Trolley Company. (See Upham, Artemas B., assignor.) | | | | | | |
| American Type Founders' Company. (See Baas, Isaac, assignor.) | | | | | | |
| American Type Founders' Company. (See Benton, Morris F., assignor.) | | | | | | |
| American Typograph Company. (See Allen, James B., assignor.) | | | | | | |
| American Universal Mill Company. (See Grey, Charles M., assignor.) | | | | | | |
| American Valve and Meter Company. (See Anderson, Frank C., assignor.) | | | | | | |
| American Vending Machine Company. (See Rowse, Frank J., assignor.) | | | | | | |
| American Waltham Watch Company. (See Fitch and Olney, assignors.) | | | | | | |
| American Waltham Watch Company. (See Olney, Charles J., Jr., assignor.) | | | | | | |
| American Well and Prospecting Company. (See Johnston, Horace G., assignor.) | | | | | | |
| American Wrapping & Box Machine Company. (See McGirr, Theodore G., assignor.) | | | | | | |
| Ames, Arthur N., Franklin, N. H., assignor to Mayo Knitting Machine and Needle Company. Knitting-machine | 725,311 | Apr. 14 | 1641 | 371 | 103 | 1533 |
| Ames, John F., Portland, Oreg. Printing-press. (Reissue) | 12,124 | June 23 | 4630 | 1085 | 104 | 2139 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| Ames, John H. (See Ames, John M. and J. H.) | | | | | | |
| Ames, John M., New York, N. Y., assignor to American Car & Foundry Company, St. Louis, Mo. Underframing for railway-cars | 731,782 | June 23 | 4077 | 909 | 104 | 2020 |
| Ames, John M., New York, N. Y., assignor to American Car & Foundry Company, St. Louis, Mo. Draw-bar | 745,132 | Nov. 24 | 4506 | 975 | 107 | 1004 |
| Ames, John M., New York, and J. H. Ames, Stapleton, assignors to B. A. Hegeman, Jr., New York, N. Y. Bolster | 748,332 | Dec. 29 | 5603 | 1278 | 107 | 2408 |
| Ames, Joseph A., Chillicothe, Ohio. Bottle | 722,477 | Mar. 10 | 1539 | 338 | 103 | 345 |
| Ames, Joseph H., assignor to American Car & Foundry Company, St. Louis, Mo. Erecting-crane | 728,825 | May 26 | 3790 | 844<br>845 | 104 | 859 |
| Ames, Joseph H., assignor to American Car & Foundry Company, St. Louis, Mo. Multiple punch | 734,496 | July 28 | 3328 | 779 | 105 | 752 |
| Ames, Samuel D. (See Widders, William D., assignor.) | | | | | | |
| Ames, William H., St. Louis, Mo., and E. E. Clement, Washington, D. C.; said Clement assignor to said Ames. Electrotherapeutic apparatus | 718,896 | Jan. 20 | 2609 | 583<br>584 | 102 | 584 |
| Amet, Edward H., Waukegan, assignor to Stereopticon and Film Exchange, Chicago, Ill. Composition of matter | 724,416 | Apr. 7 | 1 | 1 | 103 | 1171 |
| Amet, Edward H., assignor to Amet Engine Company, Waukegan, Ill. Engine | 727,562 | May 12 | 1384 | 312 | 104 | 317 |
| Amet Engine Company. (See Amet, Edward H., assignor.) | | | | | | |
| Amidon, Eugene C., Corry, Pa. Draftman's T-square | 725,532 | Apr. 14 | 2068 | 468 | 103 | 1623 |
| Amies Asphalt Company. (See Amies, Joseph H., assignor.) | | | | | | |
| Amies, Joseph H., assignor to Amies Asphalt Company, Philadelphia, Pa. Producing asphaltic paving composition | 743,051 | Nov. 3 | 444 | ------ | 107 | 93 |
| Aminoff, Hinrik C., Domnarfvet, assignor to A. C. Mark, Gothenburg, Sweden. Apparatus for continual charring and dry distillation of organic substances | 748,457 | Dec. 29 | 5851 | 1331 | 107 | 2463 |
| Ammann, Henry A., and A. D. Campbell, Spokane, Wash. Electric railway-signal | 736,345 | Aug. 18 | 2447 | 535 | 105 | 1540 |
| Ammann, Henry A., and A. D. Campbell, Spokane, Wash. Electric railway-signal | 737,053 | Aug. 25 | 3773 | 838 | 105 | 1837 |
| Ammerman, William M., assignor to E. J. Toof, New Haven, Conn. Tucking-guide for sewing-machines | 723,121 | Mar. 17 | 2718 | 611 | 103 | 606 |
| Amos, Alexander M., Buffalo, N. Y. Steam-cooker | 737,193 | Aug. 25 | 4020 | 891<br>892 | 105 | 1890 |
| Amos, Benjamin F., Hays, Ky. Pad for riding-saddles | 721,653 | Mar. 3 | 2 | 1 | 103 | 3 |
| Amos, William R., Saxton, Pa. Hose-coupling | 732,497 | June 30 | 5562 | 1233 | 104 | 2344 |
| Ampere Electro-Chemical Company. (See Jacobs, Charles B., assignor.) | | | | | | |
| Amphlett, Edgar M., London, England. Game of table or parlor cricket | 728,187 | May 19 | 2564 | 571 | 104 | 585 |
| Amsden, George A., Lowell, Mass., assignor to Lamson Consolidated Store Service Company, Newark, N. J. Conveying apparatus | 718,185 | Jan. 13 | 1238 | 272 | 102 | 283 |
| Amsden, Margaret J., assignor of one-half to J. H. Flander, Watertown, N. Y. Fish-hook | 720,392 | Feb. 10 | 1805 | 411 | 102 | 1221 |
| Amson, Arthur, Paris, France. Bag, reticule, or the like | 744,151 | Nov. 17 | 2680 | 571 | 107 | 600 |
| Amstalden, William, assignor of one-half to I. Hoxsie, Amador City, Cal. Combination-lock | 747,116 | Dec. 15 | 3320 | 756 | 107 | 1867 |
| Amstutz, Noah S., Cleveland, Ohio. Engraving | 744,852 | Nov. 24 | 3968 | 855 | 107 | 893 |
| Amundson, Henry O., Alexandria, Minn. Nail-bin | 717,792 | Jan. 6 | 521 | 116 | 102 | 112 |
| Amwake, Harry S., Camden, N. J. Solution for primary batteries | 729,833 | June 2 | 581 | ------ | 104 | 1246 |
| Anchor Manufacturing Company. (See Mowery and Bishop, assignors.) | | | | | | |
| Anderegg, David. (See Pillmore and Anderegg.) | | | | | | |
| Andersen, Hans W. A., Vejle, Denmark. Rotating steam-engine | 739,805 | Sept. 29 | 4368 | 979 | 106 | 1003 |
| Andersen, John, Gulfport, Miss. Hydraulic dredge | 723,122 | Mar. 17 | 2720 | 611 | 103 | 607 |
| Andersen, John A. (See Felsing and Andersen.) | | | | | | |
| Andersen, Rasmus P., St. Paul, Minn. Veneering for walls or ceilings | 718,593 | Jan. 20 | 2061 | 448 | 102 | 473 |
| Andersen, Richard C., assignor of one-half to C. E. McKee, El Paso, Tex. Transportation or storage receptacle | 731,150 | June 16 | 2981 | 662 | 104 | 1782 |
| Anderson, Abraham, Galesburg, Ill. Combined check-row and drill planter | 722,442 | Mar. 10 | 1451 | 321<br>322<br>323 | 103 | 325 |
| Anderson, Alfred, Lake Lillian, Minn. Belt or chain tightener | 733,113 | July 7 | 739 | 179 | 105 | 156 |
| Anderson, Alfred, Cambridge, Mass. Tracker-board attachment for pneumatic musical instruments | 739,134 | Sept. 15 | 3118 | 690 | 106 | 698 |
| Anderson, Alfred, assignor of one-half to W. Baer, Frazee, Minn. Stove-hood | 717,961 | Jan. 6 | 826 | 187 | 102 | 177 |
| Anderson, Alfred, assignor to T. J. Allen and W. F. Rick, Frazee, Minn. Frying-pan | 721,491 | Feb. 24 | 3905 | 888 | 102 | 1694 |
| Anderson, Alfred A., Jamestown, N. Y. Drawer-support | 734,497 | July 28 | 3330 | 779 | 105 | 752 |
| Anderson, Anders G., assignor to E. Converse, Worcester, Mass. Device for tightening bicycle-chains | 724,417 | Apr. 7 | 3 | 1 | 103 | 1171 |
| Anderson, Andrew, Euclid, Minn. Winding indicator | 738,971 | Sept. 15 | 2824 | 626 | 106 | 638 |
| Anderson, Andrew G. (See Lagerstrom and Anderson.) | | | | | | |
| Anderson, Andrew L. and O., Chicago, Ill. Crane | 725,312 | Apr. 14 | 1645 | 871<br>872 | 103 | 1533 |
| Anderson, Andrew L. and O., Chicago, Ill. Molding-machine | 726,492 | Apr. 28 | 3850 | 869<br>870<br>871<br>872<br>873<br>874<br>875 | 103 | 2023 |
| Anderson, Andrew P., Milburn, Utah. Rotary engine | 723,226 | Mar. 24 | 2929 | 656 | 103 | 665 |
| Anderson, Archibald L. (See Parkhurst, Friend T., assignor.) | | | | | | |
| Anderson, Arthur A., Youngstown, Ohio. Transportation-ticket | 741,871 | Oct. 20 | 2841 | 633<br>634 | 106 | 1886 |
| Anderson, Arthur L., Grundy Center, Iowa. Stereotype | 724,418 | Apr. 7 | 5 | 1 | 103 | 1171 |
| Anderson, Arvid, Hurley, Wis. Tug-hook | 741,755 | Oct. 20 | 2637 | 588 | 106 | 1842 |
| Anderson, Arwid, Cambridge, assignor to F. Peterson, Boston, Mass. Bread-cutter | 718,944 | Jan. 20 | 2710 | 606 | 102 | 606 |
| Anderson, August, Minneapolis, Minn. Butter-printing machine | 719,413 | Feb. 3 | 1 | 1 | 102 | 827 |
| Anderson-Barngrover Mfg. Co. (See Anderson, William C., assignor.) | | | | | | |
| Anderson Barngrover Mfg. Co. (See Anderson and Fleming, assignors.) | | | | | | |
| Anderson, Benjamin C., Brooklyn, N. Y. Bushing-valve and faucet-coupling | 725,912 | Apr. 21 | 2766 | 630 | 103 | 1787 |
| Anderson, Benjamin C., Brooklyn, N. Y. Bushing-valve and faucet-coupling | 725,913 | Apr. 21 | 2768 | 630 | 103 | 1788 |
| Anderson, Carl, Chicago, Ill. Elevator-gate | 719,071 | Jan. 27 | 2953 | 659<br>660 | 102 | 671 |
| Anderson, Carl F., assignor of one-half to T. W. Conway, Guttenberg, N. J. Gage | 740,212 | Sept. 29 | 5138 | 1153 | 106 | 1164 |
| Anderson, Cecil R., assignor to Martin Hardsocg Manufacturing Company, Limited, Allegheny, Pa. Lamp-holder for miners' caps | 730,076 | June 2 | 1007 | 225 | 104 | 1333 |
| Anderson, Charles, *et al.* (See Zimmerman, Casper, assignor.) | | | | | | |
| Anderson, Charles, Chicago, Ill. Combined carriage and hearse | 717,652 | Jan. 6 | 227 | 57, 58 | 102 | 50 |
| Anderson, Charles, New York, N. Y., assignor to J. C. Anderson, Jersey City, N. J. Winding-machine | 736,472 | Aug. 18 | 2672 | 588 | 105 | 1588 |

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| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| Anderson, Charles L. (See Alford and Smythe, assignors.) | | | | | | |
| Anderson, Charles P. (See Matson, Charles H., assignor.) | | | | | | |
| Anderson, Charles W., Albion, Mich. Shock-loader | 742,552 | Oct. 27 | 4189 | 943 | 106 | 2176 |
| Anderson, Christ P. (See Elgen, Magnus P., assignor.) | | | | | | |
| Anderson, Christopher, assignor of one-fourth to N. E. Knutzen, Manitowoc, Wis. Ice-vehicle | 744,853 | Nov. 24 | 3968 | 855 | 107 | 894 |
| Anderson, David, Clapham Park, England. Timing apparatus and alarm for machinery | 728,826 | May 26 | 3792 | 845 | 104 | 860 |
| Anderson, David, London, England. Apparatus for marking fabrics | 741,611 | Oct. 20 | 2355 | 527 | 106 | 1783 |
| Anderson, David W., Richmond, Va. Brick tile | 741,993 | Oct. 20 | 3106 | 692 | 106 | 1939 |
| Anderson, Edward L., assignor to J. A. Gilliam, trustee, St. Louis, Mo. Galvanic battery | 732,811 | July 7 | 215 | 54 | 105 | 49 |
| Anderson, Edward M., and G. E. Post; said Post assignor to Anderson & Prigge, New York, N. Y. Binder | 737,892 | Sept. 1 | 674 | 143 | 106 | 148 |
| Anderson, Elwin S., Canastota, N. Y. Bow-facing oar | 727,731 | May 12 | 1723 | 386, 387 | 104 | 388 |
| Anderson, Emil, Philadelphia, Pa. Fire-escape | 722,552 | Mar. 10 | 1665 | 367, 368, 369 | 103 | 374 |
| Anderson, Eric A., Greenville, Ill. Oil-stove | 737,993 | Sept. 1 | 880 | 192 | 106 | 192 |
| Anderson, Frank B., Davenport, Iowa. Teething-nipple | 722,350 | Mar. 10 | 1293 | 287 | 103 | 291 |
| Anderson, Frank C., assignor of one-half to N. P. Fenner, Jr., Cincinnati, Ohio. Adjustable switch connection | 726,613 | Apr. 28 | 4096 | 925 | 103 | 2071 |
| Anderson, Frank C., Cincinnati, assignor of one-third to M. E. C. Dorsey, Norwood, Ohio. Car-door fastening | 742,110 | Oct. 20 | 3369 | 752 | 106 | 1992 |
| Anderson, Frank C., assignor of one-half to American Valve and Meter Company, Cincinnati, Ohio. Automatic switch-stand | 742,818 | Nov. 3 | 1 | 1 | 107 | 3 |
| Anderson, Frank C., assignor of one-half to American Valve and Meter Company, Cincinnati, Ohio. Switch-stand | 746,911 | Dec. 15 | 2925 | 675 | 107 | 1773 |
| Anderson, Frank C., Cincinnati, assignor of part to R. H. Dorsey, Norwood, N. P. Fenner, Jr., and F. M. Foster, Cincinnati, Ohio. Draw-bar attachment | 724,372 | Mar. 31 | 5139 | 1150 | 103 | 1132 |
| Anderson, Frank E., New York, N. Y. Mail-chute | 746,233 | Dec. 8 | 1689 | 376 | 107 | 1481 |
| Anderson, Frank H., Milwaukee, Wis. Razor-strop hanger | 721,654 | Mar. 3 | 4 | 1 | 103 | 3 |
| Anderson, Frederick F., New York, N. Y., assignor of one-eighth to E. J. Mellen, Wichita, Kans. Type-writing machine | 731,834 | June 23 | 4262 | 948 | 104 | 2062 |
| Anderson, George S., and B. F. Jevons, Houston, Tex.; said Anderson assignor to said Jevons. Oil-burner for heating purposes | 743,414 | Nov. 10 | 1216 | 251 | 107 | 274 |
| Anderson, George W., Hollansburg, Ohio. Reversing mechanism for engines | 730,856 | June 16 | 2406 | 531 | 104 | 1663 |
| Anderson, George W., Ladoga, Ind. Lawn-rake | 731,421 | June 23 | 3491 | 779, 780 | 104 | 1903 |
| Anderson, Gotmar, Horace, N. D. Veterinary forceps | 733,114 | July 7 | 740 | 179 | 105 | 156 |
| Anderson, Gustaf B., Chicago, Ill. Pneumatic attachment for chairs | 739,972 | Sept. 29 | 4694 | 1055 | 106 | 1070 |
| Anderson, Gustaf Y., Dyea, Alaska. Saw-sharpening implement | 738,872 | Sept. 15 | 2659 | 586 | 106 | 604 |
| Anderson, Gustavus, Camden, N. J. Keel-block | 747,349 | Dec. 22 | 3775 | 849 | 107 | 1981 |
| Anderson, Harry T., Avalon, assignor to Standard Steel Car Company, Pittsburg, Pa. Truck-bolster | 743,415 | Nov. 10 | 1217 | 251, 252 | 107 | 275 |
| Anderson, Henry, Adrian, Ill. Chimney-flue thimble | 732,912 | July 7 | 387 | 94 | 105 | 84 |
| Anderson, Isaac, assignor to Saginaw Whistle Co., Saginaw, Mich. Chime-whistle | 742,375 | Oct. 27 | 3862 | 868 | 106 | 2110 |
| Anderson, James, Brooklyn, N. Y. Water-purifying apparatus | 742,954 | Nov. 3 | 237 | 53 | 107 | 51 |
| Anderson, James A., Brooklyn, N. Y. Gate-valve | 723,974 | Mar. 31 | 4333 | 972 | 103 | 970 |
| Anderson, James A., and C. M. Hollingsworth, Ottawa, Ill., assignors of one-third to J. R. Johnston, Hartford City, Ind. Annealing apparatus | 722,073 | Mar. 3 | 766 | 171 | 103 | 165 |
| Anderson, James C. (See Anderson, Charles, assignor.) | | | | | | |
| Anderson, James C., Highland Park, Ill. Spectacles | 724,151 | Mar. 31 | 4694 | 1054 | 103 | 1041 |
| Anderson, James C., Highland Park, Ill. Sparking plug | 732,812 | July 7 | 216 | 54 | 105 | 49 |
| Anderson, James C., Highland Park, Ill. Crushing and stamping ores | 743,799 | Nov. 10 | 1963 | 416, 417 | 107 | 435 |
| Anderson, James C., Highland Park, Ill. Stamp-mill machinery | 743,800 | Nov. 10 | 1965 | 417, 418 | 107 | 435 |
| Anderson, James C., Highland Park, Ill. Spectacles | 748,459 | Dec. 29 | 5854 | 1331 | 107 | 2463 |
| Anderson, James J., South Haven, Mich., assignor to Oil Burner Furnace Company. Furnace for melting metals | 733,931 | July 21 | 2230 | 524 | 105 | 503 |
| Anderson, James S., New York, N. Y. Advertising-sign | 739,635 | Sept. 22 | 4046 | 902, 903 | 106 | 915 |
| Anderson, James V., Stanton, Nebr. Wire-stretcher | 730,331 | June 9 | 1464 | 324 | 104 | 1442 |
| Anderson, James W. and R. M., assignors to J. H. Dick, J. and W. R. Polson, and A. J. Brown, Laclede, Mo., and said James W. Anderson. Rotary engine | 720,393 | Feb. 10 | 1806 | 411 | 102 | 1222 |
| Anderson, John. (See Day and Anderson.) | | | | | | |
| Anderson, John, Philadelphia, Pa. Coin-controlled liquid-vending machine | 747,835 | Dec. 22 | 4648 | 1050 | 107 | 2179 |
| Anderson, John, New York, N. Y. Ferry-bridge | 747,836 | Dec. 22 | 4650 | 1051 | 107 | 2179 |
| Anderson, John, Kealia, Hawaii. Molasses-burner | 748,458 | Dec. 29 | 5852 | 1331 | 107 | 2463 |
| Anderson, John, assignor of one-half to F. Strandberg, Lexington, Mo. Machine for distributing poison on cotton or other plants | 733,932 | July 21 | 2232 | 525 | 105 | 504 |
| Anderson, John, assignor to Draper Company, Hopedale, Mass. Molding-machine | 744,152 | Nov. 17 | 2681 | 571, 572 | 107 | 600 |
| Anderson, John H., Littlefalls, Minn. Wagon-body | 722,478 | Mar. 10 | 1540 | 338 | 103 | 345 |
| Anderson, John M., Pittsburg, Pa. Uniting metals | 729,113 | May 26 | 4294 | 949 | 104 | 959 |
| Anderson, John W., San Francisco, Cal. Oil-burner and feed mechanism therefor | 719,716 | Feb. 3 | 553 | 126 | 102 | 939 |
| Anderson, John W., Jr., Woodland, Ill. Bullet-mold | 748,460 | Dec. 29 | 5856 | 1332 | 107 | 2464 |
| Anderson, Joseph D., St. Marys, Ohio. Carbureter for explosive-engines | 743,416 | Nov. 10 | 1218 | 252 | 107 | 275 |
| Anderson, Joseph H., *et al.* (See Schug, Jacob, assignor.) | | | | | | |
| Anderson, Joseph H., St. Louis, Mo. Door-spring | 724,152 | Mar. 31 | 4696 | 1054 | 103 | 1041 |
| Anderson, Louis J., and C. Palmer, Escanaba, Mich. Storage-pocket | 747,837 | Dec. 22 | 4652 | 1052 | 107 | 2180 |
| Anderson, Martin H., Milwaukee, Wis. Street-car puzzle | 729,522 | June 2 | 2 | 1 | 104 | 1127 |
| Anderson, Mary, Birmingham, Ala. Window-cleaning device | 743,801 | Nov. 10 | 1970 | 419 | 107 | 436 |
| Anderson, Maurice, Chicago, Ill. Pneumatic-tube carrier | 742,819 | Nov. 3 | 3 | 1 | 107 | 3 |
| Anderson, Neal L., Montgomery, Ala. Type-writer | 732,498 | June 30 | 5563 | 1233, 1234 | 104 | 2344 |
| Anderson, Nelson F., and E. Bebler, Los Angeles, Cal. Device for attaching insulators to their supports | 741,994 | Oct. 20 | 3107 | 693 | 106 | 1940 |
| Anderson, Norval J., Pittsburg, Pa. Switch-throwing mechanism | 741,433 | Oct. 13 | 1984 | 440 | 106 | 1689 |
| Anderson, Olof G., Ironwood, Mich. Cracker-box rack | 721,992 | Mar. 3 | 638 | 142 | 103 | 138 |
| Anderson, Oscar. (See Anderson, Andrew L. and O.) | | | | | | |
| Anderson, Oscar. (See Fleming and Anderson.) | | | | | | |
| Anderson, Oscar, Kearny, N. J., assignor to National Dairy Machine Company. Centrifugal creamer | 723,354 | Mar. 24 | 3163 | 710 | 103 | 710 |

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| Anderson, Oscar, Kearny, N. J., assignor to National Dairy Machine Company. Centrifugal cream-separator | 726,297 | Apr. 28 | 3340 | 758, 759 | 103 | 1921 |
| Anderson, Oscar, Kearney, N. J., assignor to National Dairy Machine Company. Centrifugal separator | 727,052 | May 5 | 453 | 95 | 104 | 99 |
| Anderson, Oscar, Kearney, N. J., assignor to National Dairy Machine Company. Centrifugal creamer | 744,892 | Nov. 24 | 4028 | 869 | 107 | 906 |
| Anderson, Peter A., Stanhope, Iowa. Automatic regulator for windmills | 717,521 | Jan. 6 | 1 | 1 | 102 | 3 |
| Anderson, Peter W., *et al.* (See Burke, Edward J., assignor.) | | | | | | |
| Anderson & Prigge. (See Anderson and Post, assignors.) | | | | | | |
| Anderson, Riley M. (See Anderson, James W. and R. M.) | | | | | | |
| Anderson, Robert D. H., Cincinnati, Ohio. Feed-water heater and purifier | 735,693 | Aug. 11 | 1371 | 272 | 105 | 1269 |
| Anderson, Robert D. H., Cincinnati, Ohio. Oil-extracting device | 738,750 | Sept. 15 | 2[illegible] | 531 | 106 | 550 |
| Anderson, Robert T., Sterling, Kans. Cabinet | 741,434 | Oct. 13 | 1986 | 440 | 106 | 1690 |
| Anderson, Samuel H., Los Angeles, Cal. Electric-light mounting | 739,973 | Sept. 29 | 4695 | 1056 | 106 | 1070 |
| Anderson, Sven J., Winchester, Mass. Controlling-gear for automobiles | 748,252 | Dec. 29 | 5472 | 1247 | 107 | 2379 |
| Anderson, Thomas A., Lancaster, Pa. Cigar-bunch cutter | 739,278 | Sept. 22 | 3384 | 753 | 106 | 771 |
| Anderson, Tobias M., assignor to Hapgood Plow Company, Alton, Ill. Disk-sharpener | 731,263 | June 16 | 3171 | 706 | 104 | 1818 |
| Anderson, Tury E., Denver, Colo. Bucket-dumping apparatus | 723,771 | Mar. 24 | 3916 | 882 | 103 | 865 |
| Anderson, Valerius D., Cleveland, Ohio. Press | 731,734 | June 23 | 4078 | 909, 910 | 104 | 2021 |
| Anderson, Valerius D., Cleveland, Ohio. Press | 731,735 | June 23 | 4080 | 910, 911 | 104 | 2021 |
| Anderson, Valerius D., Cleveland, Ohio. Expressing oil from seeds | 731,736 | June 23 | 4084 | 911, 912 | 104 | 2122 |
| Anderson, Valerius D., Cleveland, Ohio. Press | 731,737 | June 23 | 4087 | 912, 913 | 104 | 2023 |
| Anderson, William C., assignor to Anderson-Barngrover Mfg. Co., San Jose, Cal. Evaporating apparatus | 737,812 | Sept. 1 | 483 | 107 | 106 | 108 |
| Anderson, William C., and C. F. Fleming, assignors to Anderson Barngrover Mfg. Co., San Jose, Cal. Device for pressing fruit into boxes | 737,054 | Aug. 25 | 3774 | 838 | 105 | 1838 |
| Anderson, William E., Waco, Tex., and F. L. Dyer, Washington, D. C., assignors, by mesne assignments, to J. F. Workum, Englewood, N. J. Bale-forming apparatus | 735,435 | Aug. 4 | 773 | 164, 165 | 105 | 1145 |
| Anderson, William G. (See Gillen and Anderson.) | | | | | | |
| Anderson, William O., Utica, assignor of one-half to F. Hedges, Rochester, N. Y. Egg-crate | 718,807 | Jan. 20 | 2447 | 542 | 102 | 549 |
| Anderson, William T. (See Turner and Anderson.) | | | | | | |
| Anderson, Winfield S., Cincinnati, Ohio. Molder's ladle | 730,218 | June 9 | 1260 | 280 | 104 | 1399 |
| Andersson, Carl O., Wellington, New Zealand. Saw-set | 717,522 | Jan. 6 | 2 | 1 | 102 | 3 |
| Andersson, Gustaf M., assignor to United States Butter Extractor Company, Newark, N. J. Gearing for centrifugal machines | 720,094 | Feb. 10 | 1271 | 290 | 102 | 1109 |
| Andersson, Louis H., Wardner, Idaho. Stanchion | 722,271 | Mar. 10 | 1159 | 255 | 103 | 262 |
| Anderton, Sylvanus. (See Ainsworth and Anderton.) | | | | | | |
| Andler, E. J. (See Klemm, Lawrence J., assignor.) | | | | | | |
| André, Hermann. (See Deininger and André.) | | | | | | |
| Andrén, Alban, Beverly, Mass. Tobacco-pipe | 724,651 | Apr. 7 | 430 | 104 | 103 | 1262 |
| Andresen, Christian, assignor to Lock Safety Pin Company, St. Louis, Mo. Safety-pin | 748,333 | Dec. 29 | 5605 | 1278 | 107 | 2408 |
| Andresen, Peter N., York, Nebr. Washing-machine | 732,913 | July 7 | 388 | 94 | 105 | 84 |
| Andresen, Thomas. (See Luhr and Andresen.) | | | | | | |
| Andress, Charles, Chicago, Ill. Attachment for street-car hand-straps | 740,792 | Oct. 6 | 772 | 174 | 106 | 1410 |
| Andrew, Howard E., Endicott, Wash. Nut-wrench | 726,012 | Apr. 21 | 2937 | 668 | 103 | 1822 |
| Andrew, Moses L., Delhi, Ohio. Variety boring-machine | 733,115 | July 7 | 740 | 179, 180 | 105 | 157 |
| Andrews, Alexander B., Jr. (See Heilig, Harris J., assignor.) | | | | | | |
| Andrews, Charles W. (See Harder, Walter C., assignor.) | | | | | | |
| Andrews, Edgar J. (See Stewart, Saffell, and Andrews.) | | | | | | |
| Andrews, Emanuel, Williamsport, Pa. Lever-handle lock | 724,419 | Apr. 7 | 6 | 1,2 | 103 | 1171 |
| Andrews, Emery, Kennebunk, Me. Roving-can | 731,151 | June 16 | 2983 | 663 | 104 | 1782 |
| Andrews, Ernest L. (See McVey, George E., assignor.) | | | | | | |
| Andrews, Frederick A., London, England. Gas tap or cock | 730,332 | June 9 | 1465 | 324 | 104 | 1443 |
| Andrews, George C. (See Pittman and Andrews.) | | | | | | |
| Andrews, George K., Webster Groves, Mo. Tether | 729,912 | June 2 | 711 | 158 | 104 | 1273 |
| Andrews, George T., G. A. Isbell, and A. L. Martin, Clinton, Iowa; said Isbell assignor of one-half to said Martin. Car-step | 722,074 | Mar. 3 | 767 | 171, 172 | 103 | 165 |
| Andrews, Harry, Lancaster, Pa. Insect-trap | 746,435 | Dec. 8 | 2048 | 471 | 107 | 1556 |
| Andrews, Herbert L. (See Schustek, Daniel, assignor.) | | | | | | |
| Andrews, James S., *et al.* (See Marshall, Cloyd, assignor.) | | | | | | |
| Andrews, Leonard, Hastings, England. Electrical distributing system | 726,837 | May 5 | 1 | 1,2 | 104 | 3 |
| Andrews, Leonard, Hastings, England, assignor to Stanley Electric Manufacturing Company, Pittsfield, Mass. Reverse-current indicator | 743,417 | Nov. 10 | 1220 | 252 | 107 | 276 |
| Andrews, Robert J. (See Mable, William, assignor.) | | | | | | |
| Andrews, Thomas M., assignor of one-fourth to J. A. Gaines and W. A. Bryan, Nashville, Tenn. Rotary engine | 732,671 | June 30 | 5885 | 1306 | 104 | 2416 |
| Andrews, William S., Schenectady, N. Y., assignor to General Electric Company. Automatic regulator for X-ray tubes | 720,095 | Feb. 10 | 1272 | 291 | 102 | 1109 |
| Andrews, William T., *et al.* (See Lightcap, William H., assignor.) | | | | | | |
| Andrus, Herbert B., Dillon, Mont. Gun-sight | 747,350 | Dec. 22 | 3776 | 849 | 107 | 1981 |
| Andrus, William G., Kalamazoo, Mich. Dampening device for paper-calendering machines | 746,655 | Dec. 15 | 2452 | 560 | 107 | 1668 |
| Angell, Edmund R., Derry, N. H. Acetylene-gas generator | 741,006 | Oct. 13 | 1148 | 260 | 106 | 1511 |
| Angell, Edwin E., Somerville, Mass., assignor to American Shoe Machinery Company, Portland, Me. Boot or shoe trimming machine | 719,414 | Feb. 3 | 3 | 1,2 | 102 | 827 |
| Angell, Fredrick P., Battlecreek, Mich. Column | 724,420 | Apr. 7 | 7 | 2 | 103 | 1172 |
| Angell, John, St. Louis, Mo. Feed-water heater and purifier | 738,751 | Sept. 15 | 2424 | 532 | 106 | 550 |
| Angell, Joseph P., Pine Bluff, Ark. Building construction | 729,913 | June 2 | 712 | 159 | 104 | 1274 |
| Angell, Joseph P., Pine Bluff, Ark. Car or other vehicle stopping device | 739,135 | Sept. 15 | 3119 | 690 | 106 | 698 |
| Anger, Edward W., Jr. (See Hornsby and Anger.) | | | | | | |
| Anger, Walter A., and A. C. Brenckle, assignors to Pabst Brewing Company, Milwaukee, Wis. Box-fastener | 745,986 | Dec. 8 | 1240 | 280 | 107 | 1382 |
| Angerer, Victor, assignor to William Wharton, Jr., & Company, Incorporated, Philadelphia, Pa. Railway-crossing | 718,297 | Jan. 13 | 1446 | 321 | 102 | 327 |
| Angier, Frank J. (See Olson, Angier, and Lambert.) | | | | | | |
| Angle, Andrew H., Philadelphia, Pa. Underground-conduit system for electric railways | 745,033 | Nov. 24 | 4308 | 931 | 107 | 964 |
| Angle, Edward H., St. Louis, Mo. Tooth-regulator | 721,655 | Mar. 3 | 5 | 2 | 103 | 3 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | Spec. | Drg. | Vol. | Page. |
| Anglund, Bror E. and F. J., Minneapolis, Minn. Computing device | 744,275 | Nov. 17 | 2930 | 626 | 107 | 655 |
| Anglund, Fred J. (See Anglund, Bror E. and F. J.) | | | | | | |
| Angst, Adolf, Schaffhausen, Switzerland. Speed-changing device for motor-cars | 732,993 | July 7 | 519 | 129 | 105 | 111 |
| Angus, William, London, England. Device for impregnating wood | 748,033 | Dec. 29 | 5068 | 1146 | 107 | 2293 |
| Anhaltzer Automatic Mantle Works. (See Anhaltzer, Henry, assignor.) | | | | | | |
| Anhaltzer, Henry, assignor to Anhaltzer Automatic Mantle Works, (Incorporated,) New York, N. Y. Loop for incandescent mantles | 737,549 | Aug. 25 | 4707 | 1056 | 105 | 2040 |
| Anilin Color and Extract Works, formerly John R. Geigy. (See Ris and Mylius, assignors.) | | | | | | |
| Aniline Colour and Extract-Works, formerly John R. Geigy. (See Ris and Mylius, assignors.) | | | | | | |
| Animal Automobile and Novelty Company. (See Phillips, Allen W., assignor.) | | | | | | |
| Annable, Warren W., assignor to Appliance Company, Limited, Grand Rapids, Mich. Pneumatic conveyer | 741,435 | Oct. 13 | 1988 | 440, 441 | 106 | 1690 |
| Annan, Edgar L. (See Gall and Annan.) | | | | | | |
| Annand, Robert C., South Shields, England. Delivery mechanism for printing-machines | 730,857 | June 16 | 2408 | 531, 532 | 104 | 1663 |
| Annand, Robert C., South Shields, England, assignor to R. Hoe, New York, N. Y. Web printing, associating, and folding machine | 734,112 | July 21 | 2612 | 614, 615 | 105 | 586 |
| Annesley, Charles G., assignor to Buffalo Gasoline Motor Company, Buffalo, N. Y. Spark-igniting mechanism for explosive-engines | 719,072 | Jan. 27 | 2955 | 660, 661 | 102 | 671 |
| Annett, Charles F., Chicago, Ill. Switch-lamp | 743,418 | Nov. 10 | 1222 | 253 | 107 | 276 |
| Annis, Willis J. (See Cuatt and Annis.) | | | | | | |
| Anschau, John, Glen Innes, New South Wales, Australia. Buckle for sealing mail-bags, &c | 733,116 | July 7 | 744 | 180 | 105 | 157 |
| Anschütz, Friedrich, Neunkirchen, near Trier, Germany. Device for the cleaning of explosion-chambers | 748,034 | Dec. 29 | 5070 | 1146 | 107 | 2293 |
| Anschütz, Friedrich, Neunkirchen, Germany. Apparatus for the loading of explosion-chambers | 748,035 | Dec. 29 | 5071 | 1147 | 107 | 2294 |
| Anson, Sidney, Toledo, Ohio. Sawing-machine | 720,873 | Feb. 17 | 2694 | 623 | 102 | 1420 |
| Ansorge, Carl, assignor of one-half to J. Erichsen, Chicago, Ill. Railway-coach | 722,795 | Mar. 17 | 2148 | 480 | 103 | 489 |
| Anstice, Josiah. (See Smith, Edward F., assignor.) | | | | | | |
| Antcliff, Harry R., Birmingham, England. Lock | 746,774 | Dec. 15 | 2664 | 614 | 107 | 1714 |
| Anthony, Alfred. (See Mumford and Anthony.) | | | | | | |
| Anthony, Charles N., Organ, N. Mex. Ter. Crucible assay-furnace | 743,214 | Nov. 3 | 762 | 166 | 107 | 160 |
| Anthony, Daniel L., Sacramento, Cal. Sewing-machine looper | 727,053 | May 5 | 455 | 95 | 104 | 100 |
| Anthony, Edgar W. (See Rollins, Charles H., assignor.) | | | | | | |
| Anthony, Frederick A., Hackensack, N. J. Manufacturing nitrocellulose films or sheets | 726,614 | Apr. 28 | 4097 | 925 | 103 | 2071 |
| Anthony, John, Attleboro, Mass. Ornamental finger-ring | 728,827 | May 26 | 3795 | 846 | 104 | 860 |
| Anthony, Malinda C., administratrix. (See Anthony, Mark.) | | | | | | |
| Anthony, Mark, deceased; M. C. Anthony, Oakland, Cal., administratrix, assignor to M. Joy, Milford, Conn. Toy gun | 723,227 | Mar. 24 | 2932 | 656 | 103 | 665 |
| Anthony, Richard A., New York, N. Y. Flexible photographic film | 735,436 | Aug. 4 | 777 | 165 | 105 | 1146 |
| Anthony, Robert T., Slatington, Pa. Easel | 728,653 | May 19 | 3469 | 769 | 104 | 776 |
| Anthony & Scovill Company. (See Bornmann, Carl, assignor.) | | | | | | |
| Anti-Bursting Pipe Company. (See Hopkins, Nevil M., assignor.) | | | | | | |
| Antiga, Juan, Mexico, Mexico. Hanger for trolley-wires | 746,436 | Dec. 8 | 2049 | 471 | 107 | 1556 |
| Antiga, Juan, Mexico, Mexico. Hanger for trolley-wires | 746,437 | Dec. 8 | 2050 | 471 | 107 | 1556 |
| Antonioli, Emilio. (See Carissimo, Crotti, and Antonioli.) | | | | | | |
| Apparatebauanstalt Ludwigsburg G. M. B. H. (See Hagspiel, Wilhelm, assignor.) | | | | | | |
| Appert, Leon, Paris, France. Machine for making sheet-glass | 735,048 | Aug. 4 | 2 | 1 | 105 | 981 |
| Apple, Vincent G., Dayton, Ohio. Electric-circuit and polarity indicator | 720,550 | Feb. 17 | 2115 | 488 | 102 | 1301 |
| Apple, Vincent G., Dayton, Ohio. Speed-regulator | 720,652 | Feb. 17 | 2331 | 533 | 102 | 1342 |
| Apple, Vincent G., Dayton, Ohio. Electric battery | 720,653 | Feb. 17 | 2333 | 534 | 102 | 1342 |
| Apple, Vincent G., Dayton, Ohio. Electric switchboard and circuits | 727,563 | May 12 | 1386 | 312 | 104 | 318 |
| Apple, Vincent G., Dayton, Ohio. Regulator for gas-engines | 727,564 | May 12 | 1389 | 313 | 104 | 318 |
| Apple, Vincent G., Dayton, Ohio. Electric governor for gas-engines | 727,565 | May 12 | 1391 | 313 | 104 | 318 |
| Apple, Vincent G., Dayton, Ohio. Igniting system | 727,566 | May 12 | 1392 | 314 | 104 | 319 |
| Apple, Vincent G., Dayton, Ohio. Electric switch | 727,567 | May 12 | 1395 | 314, 315 | 104 | 319 |
| Apple, Vincent G., Dayton, Ohio. Dynamo-electric machine | 727,568 | May 12 | 1399 | 315 | 104 | 320 |
| Apple, Vincent G., Dayton, Ohio. Zinc cup for primary batteries | 731,422 | June 23 | 3492 | 780 | 104 | 1904 |
| Apple, Vincent G., Dayton, assignor of one-half to H. G. Catrow, Miamisburg, Ohio. Variable-speed-transmission gear | 748,334 | Dec. 29 | 5606 | 1278, 1279 | 107 | 2409 |
| Appleby, James P., Hopkins, Minn. Molding-machine | 735,049 | Aug. 4 | 4 | 1, 2 | 105 | 981 |
| Appleby, John F., Harvey, Ill. Knotting mechanism for grain-binders | 744,153 | Nov. 17 | 2684 | 572 | 107 | 601 |
| Appleby, John F., assignor to Deering Harvester Company, Chicago, Ill. Grain-harvester | 720,096 | Feb. 10 | 1274 | 291 | 102 | 1110 |
| Appleby, John F., Chicago, assignor to Harvester King Company, Harvey, Ill. Harvester | 720,214 | Feb. 10 | 1488 | 340, 341 | 102 | 1153 |
| Appleby, John F., Chicago, assignor to Harvester King Company, Harvey, Ill. Bundle-carrier for self-binding harvesters | 721,351 | Feb. 24 | 3647 | 830 | 102 | 1641 |
| Appleby, John F., Chicago, assignor to Acme Harvester Company, Peoria, Ill. Reel-support for harvesters | 732,994 | July 7 | 522 | 130 | 105 | 112 |
| Appleby, John F., Chicago, Ill., assignor to International Harvester Company. Harvesting-machine | 736,921 | Aug. 25 | 3540 | 786 | 105 | 1788 |
| Applegarth, Robert, London, England. Steam and air injector for furnaces | 739,806 | Sept. 29 | 4369 | 979 | 106 | 1004 |
| Applegate, George F., Trenton, N. J. Eyeglasses or spectacles | 729,914 | June 2 | 713 | 159 | 104 | 1274 |
| Applegate, George F., Trenton, N. J. Pendent-lens eyeglasses | 732,251 | June 30 | 5086 | 1131 | 104 | 2247 |
| Applegate, John H., Camden, N. J. Shutter worker and lock | 720,874 | Feb. 17 | 2695 | 623 | 102 | 1420 |
| Appleman, Fred S., and W. McDuffie, Plymouth, Ind. Hollow concrete building-block | 732,152 | June 30 | 4893 | 1088 | 104 | 2207 |
| Appler, Henry, St. Louis, Mo. Vehicle-brake | 730,507 | June 9 | 1799 | 402 | 104 | 1513 |
| Appleton, David, London, England. Knife-cleaner | 739,807 | Sept. 29 | 4371 | 980 | 106 | 1004 |
| Appleton, Joseph, assignor to Electric Storage Battery Company, Philadelphia, Pa. Electric-battery switch | 734,291 | July 21 | 2958 | 690, 691, 692, 693, 694, 695, 696, 697 | 105 | 660 |
| Appleton, Ralph E., Orono, Me. Tool-handle fastening | 739,136 | Sept. 15 | 3122 | 690 | 106 | 699 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| Appliance Company. (See Annable, Warren W., assignor.) | | | | | | |
| Applin, Joseph, Philadelphia, Pa. Nut-lock | 721,3[illegible] | Feb. 24 | 3649 | 830 | 102 | 1641 |
| April, Bartolome, Azmoos, Switzerland. Automatic coupling for railway-vehicles | 725,649 | Apr. 21 | 2308 | 521 | 103 | 1688 |
| Arakelian, George H., assignor to Cluett, Peabody & Co., Troy, N. Y. Multiple button-hole-sewing machine | 743,971 | Nov. 10 | 2271 | 489 | 107 | 502 |
| Aranyi, Joseph, Brooklyn, N. Y. Apparatus for making and ornamenting bracelets, rings, &c | 745,555 | Dec. 1 | 446 | 105 | 107 | 1192 |
| Arbel, Pierre, assignor to Société Anonyme des Forges de Douai, Paris, France. Frame for motor-cars | 742,272 | Oct. 27 | 3676 | 822 | 106 | 2071 |
| Arbenz, Frederick A. (See Wengenroth, August, assignor.) | | | | | | |
| Arbenz, Frederick A., West Hoboken, N. J. Apparatus for printing fabrics | 721,492 | Feb. 24 | 3[illegible]06 | 888 | 102 | 1694 |
| Arbogast, Charles V. (See Arbogast, John I. and C. V.) | | | | | | |
| Arbogast, Charles V. (See Arbogast, John I., C. V., F. J., F. L., and P. R.) | | | | | | |
| Arbogast, Francis J. (See Arbogast, John I., C. V., F. J., F. L., and P. R.) | | | | | | |
| Arbogast, Frederick L. (See Arbogast, John I., C. V., F. J., F. L., and P. R.) | | | | | | |
| Arbogast, John I. and C. V., Pittsburg, Pa. Manufacturing articles of glass | 730,077 | June 2 | 1009 | 226 | 104 | 1333 |
| Arbogast, John I., C. V., F. J., F. L., and P. R., Pittsburg, Pa. Manufacturing glass-ware | 730,078 | June 2 | 1011 | 226 | 104 | 1333 |
| Arbogast, Philip R. (See Arbogast, John I., C. V., F. J., F. L., and P. R.) | | | | | | |
| Arbuckle Brothers. (See Arbuckle, John, assignor.) | | | | | | |
| Arbuckle, Charles H. (See Knapp, Vroom, Stephenson, and Arbuckle.) | | | | | | |
| Arbuckle, John, Brooklyn, N. Y. Apparatus for extracting stranded vessels | 721,851 | Mar. 3 | 354 | 78, 79 | 103 | 78 |
| Arbuckle, John, Brooklyn, assignor to Arbuckle Brothers, New York, N. Y. Apparatus for roasting coffee | 719,717 | Feb. 3 | 555 | 126 | 102 | 939 |
| Arbuthnot, Charles, McKees Rocks, Pa. Machine for bending horseshoe-blanks | 733,117 | July 7 | 745 | 180 | 105 | 157 |
| Arcade Manufacturing Company. (See Bitner, Harry, assignor.) | | | | | | |
| Arcade Manufacturing Company. (See Morgan, Charles, assignor.) | | | | | | |
| Arcade Manufacturing Company. (See Tscherning, Henry, assignor.) | | | | | | |
| Arcade Manufacturing Company. (See Wiles, Robert H., assignor.) | | | | | | |
| Archambault, George A., Clare, Mich. Sack-scale | 735,437 | Aug. 4 | 779 | 165 | 105 | 1147 |
| Archer, Charles A. (See Brewer and Archer.) | | | | | | |
| Archer, Daniel W. (See Rutter, John F., assignor.) | | | | | | |
| Archer, David J., Toronto, Canada. Gas and air mixer | 726,238 | Apr. 28 | 3343 | 759 | 103 | 1921 |
| Archer, George F., New York, N. Y. Switchboard for telephones | 739,636 | Sept. 22 | 4047 | 903 | 106 | 915 |
| Archer, James P. (See Seastrunk and Archer.) | | | | | | |
| Archer, Thomas, Woodside, N. Y. Static electrical machine | 744,707 | Nov. 24 | 3712 | 801<br>802 | 107 | 840 |
| Archerd, Maggie M., Wymore, Nebr. Cooker | 747,838 | Dec. 22 | 4654 | 1052 | 107 | 2180 |
| Archibald, Christopher J., New York, N. Y. Clothes-line holder | 738,873 | Sept. 15 | 2662 | 587 | 106 | 604 |
| Archute, Paul G., Philadelphia, Pa. Musical instrument | 718,298 | Jan. 13 | 1447 | 322 | 102 | 327 |
| Arcouet, Edward A., Chicago, Ill. Tire | 719,293 | Jan. 27 | 3364 | 751 | 102 | 756 |
| Areceneau, John J. (See Luchia, Henry M., assignor.) | | | | | | |
| Aregood, John W., Chicago, Ill. Brick-kiln | 743,215 | Nov. 3 | 763 | 167 | 107 | 160 |
| Arelt, Charles, *et al.* (See Mehlferber, John, assignor.) | | | | | | |
| Arend, Edward H., assignor of one-half to F. J. Mishler, Akron, Ohio. Register-fastener | 723,433 | Mar. 24 | 3316 | 743 | 103 | 740 |
| Arend, Francis J., *et al.* (See Berrigan, John J., assignor.) | | | | | | |
| Arens, Richard, Marxloh, Germany. Making glue | 721,852 | Mar. 3 | 359 | ..... | 103 | 78 |
| Arents, George, Jr., *et al.* (See Tyberg, Oluf, assignor.) | | | | | | |
| Arents, George, Jr., *et al.* (See Tyberg and Prescott, assignors.) | | | | | | |
| Arey, Allen C., Jr., assignor of one-half to L. Hannas, Utica, N. Y. Cam-race pin for cotton-combers, &c | 728,431 | May 19 | 3034 | 667 | 104 | 684 |
| Arft, Charles H., Hemlock, assignor of one-half to W. M. F. Lang, Saginaw, Mich. Beet-topper | 745,556 | Dec. 1 | 447 | 105 | 107 | 1192 |
| Argubright, Joseph W., and A. J. Olson, Streator, Ill. Bedstead | 748,036 | Dec. 29 | 5071 | 1147 | 107 | 2294 |
| Ariens, Henry, J. Thompson, Brillion, and J. Wolfinger, Dundas, Wis. Pulverizer | 717,653 | Jan. 6 | 228 | 58 | 102 | 50 |
| Ariens, Henry, and J. Thompson, assignors to Brillion Iron Works, Brillion, Wis. Pulverizer | 727,254 | May 5 | 804 | 173 | 104 | 173 |
| Arithmetical Scale Company. (See Kinser, Henry F., assignor.) | | | | | | |
| Arkell, James, assignor to S. H. Arkell, Canajoharie, N. Y. Paper fabric | 728,828 | May 26 | 3795 | 846 | 104 | 860 |
| Arkell, James, assignor to S. H. Arkell, Canajoharie, N. Y. Rolls for compound indenting of sheet fabrics | 728,829 | May 26 | 3797 | 846 | 104 | 860 |
| Arkell, Sarah H. (See Arkell, James, assignor.) | | | | | | |
| Arkins, Charles T., Rowena, Colo. Slimer attachment for concentrating-tables | 719,409 | Jan. 27 | 3593 | 803 | 102 | 805 |
| Arkins, Charles T., Denver, Colo. Slimer attachment for concentrating-tables | 730,732 | June 9 | 2189 | 487 | 104 | 1598 |
| Arlington Company. (See Dunn, William, assignor.) | | | | | | |
| Armandy, Léon M. J., Asnières, assignor to Société Anonyme des Produits Photographigues M. Y., Asnières, Seine, France. Manufacture of photographic films | 717,793 | Jan. 6 | 521 | 117 | 102 | 112 |
| Armat, Thomas, Washington, D. C. Picture-exhibiting apparatus | 743,419 | Nov. 10 | 1224 | 253<br>254 | 107 | 277 |
| Armbruster, Charles E. H., Denver, Colo. Depurator | 726,791 | Apr. 28 | 4423 | 996<br>997 | 103 | 2138 |
| Armbruster, F. G., *et al.* (See Donahue, Michael C., assignor.) | | | | | | |
| Armbruster, Florance. (See Armbruster, William J., assignor.) | | | | | | |
| Armbruster, William J., St. Louis, Mo. Pigment and making same | 719,073 | Jan. 27 | 2958 | ..... | 102 | 672 |
| Armbruster, William J., St. Louis, Mo. Pigment and making same | 719,415 | Feb. 3 | 4 | ..... | 102 | 827 |
| Armbruster, William J., St. Louis, Mo. Pigment and making same | 724,234 | Mar. 31 | 4878 | ..... | 103 | 1078 |
| Armbruster, William J., St. Louis, Mo. Making pigments | 724,235 | Mar. 31 | 4880 | ..... | 103 | 1078 |
| Armbruster, William J., St. Louis, Mo. Making pigments | 726,239 | Apr. 28 | 3344 | ..... | 103 | 1922 |
| Armbruster, William J., St. Louis, Mo. Making pigments | 731,152 | June 16 | 2985 | ..... | 104 | 1782 |
| Armbruster, William J., St. Louis, Mo. Pigment and making same | 731,153 | June 16 | 2987 | ..... | 104 | 1782 |
| Armbruster, William J., St. Louis, Mo. Making pigments | 733,612 | July 14 | 1633 | ..... | 105 | 363 |
| Armbruster, William J., St. Louis, Mo. Making pigments | 734,391 | July 21 | 3136 | ..... | 105 | 697 |
| Armbruster, William J., St. Louis, Mo. Pigment and making same | 734,392 | July 21 | 3137 | ..... | 105 | 697 |
| Armbruster, William J., St. Louis, Mo. Pigment and making same | 737,055 | Aug. 25 | 3776 | ..... | 105 | 1838 |
| Armbruster, William J., St. Louis, Mo. Making pigments | 737,056 | Aug. 25 | 3778 | ..... | 105 | 1838 |
| Armbruster, William J., St. Louis, Mo. Making pigments | 740,072 | Sept. 29 | 4883 | ..... | 106 | 1110 |
| Armbruster, William J., St. Louis, Mo. Making pigments | 740,073 | Sept. 29 | 4884 | ..... | 106 | 1110 |
| Armbruster, William J., St. Louis, Mo. Pigment and making same | 743,802 | Nov. 10 | 1971 | ..... | 107 | 436 |
| Armbruster, William J., St. Louis, Mo., assignor of one-half to F. Armbruster, New York, N. Y. Chlorination-barrel | 748,461 | Dec. 29 | 5858 | 1332 | 107 | 2464 |
| Armbruster, William J., St. Louis, Mo., assignor of one-half to F. Armbruster, New York, N. Y. Chlorination-barrel | 748,462 | Dec. 29 | 5860 | 1333 | 107 | 2465 |
| Armistead, Wilbur T., assignor of one-half to N. B. Bacon, Richmond, Va. Manufacture of paper | 719,982 | Feb. 10 | 1028 | ..... | 102 | 1057 |

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| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Armitage, John L., New Kensington, and A. Pinney, Allegheny, Pa.; said Pinney assignor to said Armitage. Sectional boiler | 724,373 | Mar. 31 | 5140 | 1150<br>1151 | 103 | 1132 |
| Armour Car Lines. (See Sharp, William E., assignor.) | | | | | | |
| Arms, Hiram P., assignor of two-thirds to E. C. Linn, West Hartford, Conn. Producing plates for printing | 740,352 | Sept. 29 | 5387 | 1214 | 106 | 1216 |
| Armspear Manufacturing Company. (See Spear, Furman D., assignor.) | | | | | | |
| Armstead, Frank C., Brooklyn, N. Y., assignor, by mesne assignments, to Westinghouse Machine Company, Pittsburg, Pa. Furnace-grate | 746,656 | Dec. 15 | 2454 | 561 | 107 | 1669 |
| Armstrong, Albert, Cincinnati, Ohio. Spring for vehicles | 724,421 | Apr. 7 | 8 | 2 | 103 | 1172 |
| Armstrong, Albert H., Schenectady, N. Y., assignor to General Electric Company. Controlling alternating-current motors | 735,438 | Aug. 4 | 780 | 166 | 105 | 1147 |
| Armstrong, Albert H., Schenectady, N. Y., assignor to General Electric Company. Apparatus for controlling alternating-current motors | 735,651 | Aug. 4 | 1178 | 250 | 105 | 1231 |
| Armstrong, Albert H., Schenectady, N. Y., assignor to General Electric Company. System of motor control | 739,572 | Sept. 22 | 3916 | 877 | 106 | 887 |
| Armstrong, Albert H., and J. E. Woodbridge, Schenectady, N. Y., assignors to General Electric Company. Means for varying delta-connected voltages | 726,391 | Apr. 28 | 3645 | 826 | 103 | 1984 |
| Armstrong Bros. Tool Co. (See Armstrong, John, assignor.) | | | | | | |
| Armstrong Bros. Tool Co. (See Armstrong and Welter, assignors.) | | | | | | |
| Armstrong, Charles D., Pittsburg, Pa. Cork washer or disk and making same | 742,553 | Oct. 27 | 4191 | 943 | 106 | 2177 |
| Armstrong, Charles M., Toronto, Canada. Gas-burner | 727,873 | May 12 | 1989 | 443 | 104 | 440 |
| Armstrong, Edward P., Dewdrop, Pa. Saw-swage | 724,236 | Mar. 31 | 4882 | 1092 | 103 | 1078 |
| Armstrong, Frank H., Auburn, N. Y. Type-writing machine | 717,794 | Jan. 6 | 523 | 117 | 102 | 112 |
| Armstrong, George W., and H. G. Morton, Shelby, Ohio. Metallic roofing | 731,264 | June 16 | 3172 | 706 | 104 | 1818 |
| Armstrong, Grant M. (See Grover and Armstrong.) | | | | | | |
| Armstrong, Harry Y., Elgin, Ill., assignor to Thos. Mills & Bro., Philadelphia, Pa. Means for adjustably spacing disk cutters | 737,194 | Aug. 25 | 4024 | 892 | 105 | 1890 |
| Armstrong, Harry Y., Elgin, assignor to F. M. Peters, Chicago, Ill. Caramel cutting and wrapping machine | 744,019 | Nov. 17 | 2421 | 519<br>520 | 107 | 547 |
| Armstrong, Harry Y., Elgin, assignor to F. M. Peters, Chicago, Ill. Caramel cutting and wrapping machine | 744,020 | Nov. 17 | 2425 | 520<br>521 | 107 | 548 |
| Armstrong, Henry D., London, England. Corkscrew | 747,351 | Dec. 22 | 3778 | 850 | 107 | 1981 |
| Armstrong, James E., *et al.*. (See Eddleman, Dudley E., assignor.) | | | | | | |
| Armstrong, James R., Pittsburg, Pa. Trick toy | 726,615 | Apr. 28 | 4100 | 925 | 103 | 2071 |
| Armstrong, James T., and A. Orling, London, England. System of electric communication | 743,999 | Nov. 10 | 2349 | 504<br>505 | 107 | 521 |
| Armstrong, James T., and A. Orling, London, England. System of electric communication | 744,000 | Nov. 10 | 2352 | 505 | 107 | 521 |
| Armstrong, James T., and A. Orling, London, England. System of telephonic communication | 744,001 | Nov. 10 | 2354 | 505 | 107 | 522 |
| Armstrong, James T., and A. Orling, London, England. Wireless telegraphy and transmission of power | 748,143 | Dec. 29 | 5290 | 1202 | 107 | 2341 |
| Armstrong, John, London, England. Furnace | 722,932 | Mar. 17 | 2387 | 534 | 103 | 537 |
| Armstrong, John, London, England. Mechanical furnace | 745,757 | Dec. 1 | 784 | 180 | 107 | 1265 |
| Armstrong, John, Chicago, Ill., assignor to Armstrong Bros. Tool Co. Tool-holder | 725,019 | Apr. 14 | 1117 | 253 | 103 | 1425 |
| Armstrong, John, and S. Welter, Chicago, Ill., assignors to Armstrong Bros. Tool Co. Slotting-machine tool-holder | 745,758 | Dec. 1 | 786 | 181 | 107 | 1266 |
| Armstrong, John M., *et al.* (See Leonard, George I., assignor.) | | | | | | |
| Armstrong, Lloyd W., Walla Walla, Wash. Paper-file | 724,237 | Mar. 31 | 4884 | 1093 | 103 | 1078 |
| Armstrong, Martin, Kenney, Tex. Telegraph instrument | 730,858 | June 16 | 2410 | 532 | 104 | 1664 |
| Armstrong, Milton W., East Otto, N. Y. Photographic-printing frame | 746,234 | Dec. 8 | 1690 | 376 | 107 | 1481 |
| Armstrong, Robert, and F. W. Burger, Des Moines, Iowa. Rotary drop corn-planter | 729,484 | May 26 | 4930 | 1092 | 104 | 1094 |
| Armstrong, Robert F., Effingham, Kans. Fishing and trapping device | 733,118 | July 7 | 748 | 180 | 105 | 156 |
| Armstrong, Sidney L. (See Wann, John M., assignor.) | | | | | | |
| Armstrong, Tully B., Cleveland, Ohio. Hatch-fastener | 736,053 | Aug. 11 | 1938 | 413 | 105 | 1414 |
| Armstrong, William. (See Detamore, Daniel F., assignor.) | | | | | | |
| Arndt, Albert F. R., Buffalo, N. Y. Metal guard for protecting trees or other objects | 727,054 | May 5 | 457 | 95 | 104 | 100 |
| Arndt, Louis, Jersey City, N. J., assignor to S. S. White Dental Manufacturing Company, Philadelphia, Pa. Dental charcoal point | 720,394 | Feb. 10 | 1808 | 411 | 102 | 1222 |
| Arndt, Max, Aix-la-Chapelle, Germany. Gas-analysis apparatus | 717,654 | Jan. 6 | 230 | 58 | 102 | 50 |
| Arndt, Max, Aix-la-Chapelle, Germany. Apparatus for analyzing gases | 725,533 | Apr. 14 | 2070 | 468<br>469 | 103 | 1623 |
| Arndt, Max, Aix-la-Chapelle, Germany. Pyrometer | 734,393 | July 21 | 3138 | 737 | 105 | 697 |
| Arner, Calvin. (See Arner, Joseph and C.) | | | | | | |
| Arner, Joseph and C., Weissport, Pa. Combination-lock | 724,774 | Apr. 7 | 671 | 157 | 103 | 1311 |
| Arnesen, Andrew, Des Moines, Iowa. Animal-trap | 743,420 | Nov. 10 | 1228 | 254 | 107 | 277 |
| Arneson, Thomas O., Garretson, S. D. Acetylene-gas generator | 734,394 | July 21 | 3140 | 738 | 105 | 698 |
| Arnett, Effie, Lincoln, Nebr. Tent, canopy, or awning | 721,993 | Mar. 3 | 639 | 142 | 103 | 139 |
| Arney, George F. (See Hyle, Jacob A., assignor.) | | | | | | |
| Arney, P. F. (See Waring, Bert B., assignor.) | | | | | | |
| Arno, Oliver H. (See Hagey and Arno.) | | | | | | |
| Arno, Oliver H., and J. C. Hagey, Boston, Mass. Organ | 736,054 | Aug. 11 | 1939 | 413<br>414<br>415<br>416 | 105 | 1414 |
| Arno, Riccardo, Milan, Italy. Producing appropriate phase relationship in alternating-current measuring or other devices | 746,775 | Dec. 15 | 2665 | 614 | 107 | 1714 |
| Arnold, Albert J., National City, Cal. Fishing-reel | 742,376 | Oct. 27 | 3863 | 868 | 106 | 2110 |
| Arnold, Bion J., Chicago, Ill. Power mechanism | 739,773 | Sept. 22 | 4282 | 960 | 106 | 967 |
| Arnold, David B., assignor of one-half to E. Ellis, Terre Haute, Ind. Grain-door for railway-cars | 720,654 | Feb. 17 | 2334 | 534 | 102 | 1343 |
| Arnold, Edwin E., Pittsburg, Pa., assignor to Westinghouse Machine Company. Valve for gas-engines | 718,299 | Jan. 13 | 1448 | 322 | 102 | 327 |
| Arnold, Edwin E., Wilkinsburg, Pa., assignor to Westinghouse Machine Company. Metal cylinder | 742,821 | Nov. 3 | 8 | 2 | 107 | 4 |
| Arnold, Edwin E., Pittsburg, and A. T. Kasley, Wilkinsburg, Pa., assignors to Westinghouse Machine Company. Gas-engine | 742,820 | Nov. 3 | 5 | 1,2 | 107 | 4 |
| Arnold, Ernest M., Putnam, Conn. Oil-burner | 736,473 | Aug. 18 | 2676 | 588 | 105 | 1589 |
| Arnold, Frederick H., Reading, Pa. Gate-pattern | 731,738 | June 23 | 4089 | 913 | 104 | 2023 |
| Arnold, Harry B., Hartford, Conn. Convertible berth and divan | 737,561 | Sept. 1 | 1 | 1 | 106 | 3 |
| Arnold, Jacob F., Massillon, Ohio. Extension-table | 726,888 | May 5 | 7 | 2 | 104 | 4 |
| Arnold, James W., Covington, Ky. Automatic charger for busheling-furnaces | 726,889 | May 5 | 8 | 2,3 | 104 | 5 |
| Arnold, Karl, Riga, Russia. Packing for stuffing-boxes | 727,055 | May 5 | 458 | 96 | 104 | 100 |

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| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Arnold, Lewis T., St. Louis, Mo. Roll-paper holder | 727,874 | May 12 | 1991 | 443 | 104 | 441 |
| Arnold, P. & J. (See Fitzsimmons, John F., assignor.) | | | | | | |
| Arnold, R. B., *et al.* (See Lewinski, William, assignor.) | | | | | | |
| Arnold, Satterlee, Verona, assignor to Arnold Sewing Machine Company, Newark, N. J. Overseaming sewing-machine | 719,552 | Feb. 3 | 254 | 59, 60 | 102 | 877 |
| Arnold Sewing Machine Company. (See Arnold, Satterlee, assignor.) | | | | | | |
| Arnold, Theron L., and F. E. Brown, Three Rivers, Mich. Prepayment attachment for electric meters | 728,531 | May 19 | 3215 | 713 | 104 | 721 |
| Arnold, Wilber E., Madisonville, Ohio. Electrical signal for adding security to safes | 732,813 | July 7 | 218 | 54 | 105 | 49 |
| Arnold, William B. (See Dunn, George F., assignor.) | | | | | | |
| Arnold, William B. (See McGrath, Peter J., assignor.) | | | | | | |
| Arnold, William B. (See St. Amand, John, assignor.) | | | | | | |
| Arnold, William B., North Abington, Mass. Welt-cutting machine | 728,532 | May 19 | 3218 | 714 | 104 | 721 |
| Arnold, William B., North Abington, Mass. Machine for scouring heels | 732,814 | July 7 | 221 | 55 | 105 | 49 |
| Arnsberger, Cyrus A., assignor of one-tenth to R. A. Craig, Rudy, Idaho. Water-motor | 731,835 | June 23 | 4262 | 949 | 104 | 2062 |
| Arntz, Adolph. (See Waters, Cornelius E., assignor.) | | | | | | |
| Arntz, Werner P., Chicago, Ill. Journal-bearing | 741,756 | Oct. 20 | 2638 | 589 | 106 | 1842 |
| Aron, Leonard J., Birmingham, assignor to Electric and Ordnance Accessories Company, Limited, Aston, near Birmingham, England. Electricity-meter | 739,251 | Sept. 15 | 3331 | 739 | 106 | 744 |
| Aronson, Morris, *et al.* (See Dement, Wallace E., assignor.) | | | | | | |
| Arpin, Eusebe, Springfield, Mass., assignor to himself, and J. O'Neill, Manchester, N. H. Bifurcated garment | 724,775 | Apr. 7 | 674 | 158 | 103 | 1312 |
| Arquembourg, Henri. (See Grouvelle and Arquembourg.) | | | | | | |
| Arrance, James, Allentown, Pa. Low-water alarm | 745,987 | Dec. 8 | 1241 | 280 | 107 | 1382 |
| Arrasmith, Ernest W. (See Williams and Arrasmith.) | | | | | | |
| Arriaga, Juan N., Mexico, Mexico. Game apparatus | 733,793 | July 14 | 1948 | 459 | 105 | 428 |
| Arrington, Francis M., Jenifer, Ala. Non-refillable bottle | 731,332 | June 16 | 3311 | 739 | 104 | 1848 |
| Arrington, John, Calista, Kans. Tool | 742,771 | Oct. 27 | 4557 | 1032 | 106 | 2257 |
| Arrington, William E. (See Mitchell, Charles T., assignor.) | | | | | | |
| Arrowsmith, James W. (See Vaughan and Arrowsmith.) | | | | | | |
| Arrowsmith, James W., Morristown, N. J. Instep-support or arch-prop | 717,523 | Jan. 6 | 3 | 1 | 102 | 3 |
| Arrowsmith, James W., Morristown, N. J. Instep-support or arch-prop | 748,553 | Dec. 29 | 6044 | 1368 | 107 | 2507 |
| Arsneau, Edward P., Duluth, Minn. Derrick | 718,897 | Jan. 20 | 2614 | 585 | 102 | 584 |
| Arsneau, Edward P., Duluth, Minn. Derrick | 723,434 | Mar. 24 | 3317 | 743 | 103 | 740 |
| Art Metal Construction Company. (See Hine, James W., assignor.) | | | | | | |
| Art Metal Construction Company. (See Ohnstrand, Enoch, assignor.) | | | | | | |
| Arthaud, Daniel, *et al.* (See Evans, Elmer O., assignor.) | | | | | | |
| Arthur, James B., Kansas City, Mo. Ore-concentrator | 722,933 | Mar. 17 | 2389 | 534, 535 | 103 | 537 |
| Arthur, John E., Lane, and A. D. Karr, Clinton, Ill. Link-block | 727,732 | May 12 | 1724 | 387 | 104 | 388 |
| Arthur Light Company. (See Mende, Arthur, assignor.) | | | | | | |
| Arthur, William E., Aberdeen, Md. Railway-rail brace or tie-bar | 738,592 | Sept. 8 | 2097 | 458 | 106 | 467 |
| Arthur, William H., Stamford, Conn. Rail-block | 725,914 | Apr. 21 | 2769 | 630 | 103 | 1788 |
| Arthurs, Biddle, Pittsburg, Pa. Burglar-alarm | 739,252 | May 26 | 4543 | 1001 | 104 | 1012 |
| Arundell, Henry G. (See Kunny, Arundell, and Kunney.) | | | | | | |
| Arzonia, Joe. (See Greenaway, Joseph R., assignor.) | | | | | | |
| Arzonia, Joe. (See Searles and Greenaway, assignors.) | | | | | | |
| Asbell, Noah, Ochlochnee, Ga. Cane-cutting knife and stripper | 725,811 | Apr. 21 | 2602 | 591 | 103 | 1752 |
| Asbestolith Company. (See Walter, Gustave E., assignor.) | | | | | | |
| Asbury, Dorsey F., Morgantown, N. C. Fluid-pressure turbine | 719,294 | Jan. 27 | 3365 | 751, 752 | 102 | 756 |
| Asbury, Dorsey F., Morgantown, N. C. Triple-expansion fluid-pressure turbine | 719,295 | Jan. 27 | 3369 | 752 | 102 | 757 |
| Asbury, Dorsey F., Newport News, Va. Steam-turbine | 733,119 | July 7 | 749 | 181, 182 | 105 | 158 |
| Asbury, John H., Lexington, Okla. Ter. Book for advertising | 740,511 | Oct. 6 | 243 | 48, 49 | 106 | 1298 |
| Asdell, Nelson D., Lakeview, Oreg. Bottle | 735,439 | Aug. 4 | 783 | 166 | 105 | 1147 |
| Asdell, Nelson D., assignor of one-half to O. F. Demorest, Lakeview, Oreg. Nut-lock | 737,893 | Sept. 1 | 675 | 143 | 106 | 148 |
| Ash, Horace W., Cambridge, assignor to Warren Brothers Company, Boston, Mass. Apparatus for preparing mineral ingredients of bituminous-macadam or other pavements for use | 725,641 | Apr. 14 | 2277 | 514, 515 | 103 | 1668 |
| Ash, Horace W., Cambridge, Mass., assignor to Warren Brothers Company, Charleston, W. Va., and Boston, Mass. Apparatus for grading minerals | 725,642 | Apr. 14 | 2280 | 515 | 103 | 1668 |
| Ash, Hugo, and A. Woltman, assignors to National Pneumatic Service Company, Chicago, Ill. Terminal for pneumatic-despatch systems | 720,395 | Feb. 10 | 1809 | 412 | 102 | 1222 |
| Ash, Walter V., Perth Amboy, N. J. Electric motor | 731,836 | June 23 | 4264 | 949, 950 | 104 | 2063 |
| Ash, Walter V., Perth Amboy, N. J. Rheostat | 738,392 | Sept. 8 | 1714 | 372 | 106 | 384 |
| Ash, Walter V., Perth Amboy, N. J. Apparatus for remote control of electric motors | 738,393 | Sept. 8 | 1718 | 373 | 106 | 385 |
| Ashby, Harry V. (See Slocum, Fitzroy M., assignor.) | | | | | | |
| Ashby, Hugh R., Mustard, Pa. Wrench | 739,252 | Sept. 15 | 3334 | 740 | 106 | 745 |
| Ashby, William J., Independent Hill, Va., assignor of one-half to J. J. Murphy, Washington, D. C. Broom-holder | 721,412 | Feb. 24 | 3762 | 855 | 102 | 1664 |
| Ashcraft, William, and J. C. Lubbes, assignors of one-third to E. G. Swartz, Greenville, Mo. Toggle-chain release for log-cars | 746,438 | Dec. 8 | 2051 | 471, 472 | 107 | 1556 |
| Ashenberger, Albert, Elkins, W. Va. Thermometer-case | 723,355 | Mar. 24 | 3164 | 711 | 103 | 710 |
| Asher, William J., Willimantic, Conn. Starching-machine. (Reissue) | 12,172 | Nov. 24 | 4881 | 1065, 1066 | 107 | 1081 |
| Asher, William J., Willimantic, Conn. Apron-guiding mechanism. (Reissue) | 12,173 | Nov. 24 | 4885 | 1066 | 107 | 1081 |
| Ashert, William, Des Moines, Iowa. Domestic steamer | 748,037 | Dec. 29 | 5073 | 1147 | 107 | 2294 |
| Ashland Iron Works. (See Redfield, Edward E., assignor.) | | | | | | |
| Ashley, Edward G., Rochester, N. Y. Cushion-frame | 735,194 | Aug. 4 | 313 | 61 | 105 | 1047 |
| Ashley, Edward L., assignor to Scovill Manufacturing Company, Waterbury, Conn. Bar-button | 742,145 | Oct. 27 | 3432 | 765 | 106 | 2021 |
| Ashley, Frank M. (See Miller and Ashley.) | | | | | | |
| Ashley, Frank M., *et al.* (See Miller, Joseph, assignor.) | | | | | | |
| Ashley, Frank M., New York, N. Y. Acetylene-gas generator | 724,374 | Mar. 31 | 5142 | 1151 | 103 | 1132 |
| Ashley, Frank M., Brooklyn, N. Y. Steam-generator | 736,922 | Aug. 25 | 3543 | 786, 787 | 105 | 1788 |
| Ashley, Frank M., Brooklyn, N. Y., assignor to General Electric Company. Electric railway | 718,068 | Jan. 13 | 1027 | 229, 230 | 102 | 235 |
| Ashley, Frank M., Brooklyn, N. Y., assignor to General Electric Company. Electric railway | 718,069 | Jan. 13 | 1029 | 230 | 102 | 236 |
| Ashley, Frank M., Brooklyn, N. Y., assignor to General Electric Company. Electric railway | 719,983 | Feb. 10 | 1029 | 239, 240 | 102 | 1057 |

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| Ashley, Frank M., Brooklyn, N. Y., assignor to General Electric Company. Electric railway | 719,984 | Feb. 10 | 1031 | 240 | 102 | 1058 |
| Ashley, Harvey L., *et al.* (See Cloud, William H., assignor.) | | | | | | |
| Ashley, Howard M., Ferrybridge, England. Steam-boiler and its setting | 723,805 | Mar. 31 | 3979 | 897<br>898 | 103 | 895 |
| Ashley, Jay A., Yuba City, Cal. Step-ladder | 741,872 | Oct. 20 | 2843 | 634 | 106 | 1887 |
| Ashlock, Henry H., Clyde, Kans. Hydrocarbon-burner | 734,152 | July 21 | 2687 | 632 | 105 | 602 |
| Ashmore, Edith B., Philadelphia, Pa. Neck-dressing for women | 731,837 | June 23 | 4266 | 950 | 104 | 2064 |
| Ashmusen, Christian, Kings Park, N. Y. Door-lock | 730,593 | June 9 | 1952 | 435<br>436 | 104 | 1547 |
| Ashoff Weavers' Supply Company, Charles. (See Walker, John, assignor.) | | | | | | |
| Ashton, William A., Saratoga Springs, N. Y., and J. C. Hooper, assignors to Economy Locomotive Sander Company, Baltimore, Md. Combined emergency and service valve for track-sanding apparatus | 747,839 | Dec. 22 | 4655 | 1052 | 107 | 2189 |
| Ashworth, Arthur, Bury, England. Ventilating and chimney cowl | 718,186 | Jan. 13 | 1240 | 273 | 102 | 283 |
| Ashworth, Thomas, Urmston, near Manchester, England. Foot-step for spindles | 727,255 | May 5 | 805 | 173 | 104 | 173 |
| Ashworth, Thomas, Urmston, near Manchester, assignor of one-half to J. S. Gaunt, Manchester, England. Apparatus for spinning and doubling | 742,554 | Oct. 27 | 4192 | 944 | 106 | 2177 |
| Ashworth, Thomas, Urmston, near Manchester, assignor of one-half to J. S. Gaunt, Manchester, England. Apparatus for spinning and doubling | 742,555 | Oct. 27 | 4193 | 944 | 106 | 2177 |
| Ashworth, Thomas, Urmston, near Manchester, assignor of one-half to J. S. Gaunt, Manchester, England. Apparatus for spinning and doubling | 742,822 | Nov. 3 | 10 | 2 | 107 | 5 |
| Askin, Jennie V., assignor to Spring Beater Manufacturing Company, Buffalo, N. Y. Holder for flat-irons | 741,007 | Oct. 13 | 1151 | 260 | 106 | 1512 |
| Asling, Charles H., Springfield, Mo. Combined water-heater, food-warmer, and drying-rack | 731,531 | June 23 | 3709 | 826 | 104 | 1949 |
| Aspden, James, *et al.* (See Fowler, Benjamin F., assignor.) | | | | | | |
| Asphalt Paper Pipe Company. (See Dixon, Albert S., assignor.) | | | | | | |
| Aspinall, Thomas, Bolton, England. Preparing sizing | 724,238 | Mar. 31 | 4885 | ------ | 103 | 1078 |
| Aspinwall, Lewis A., assignor to Aspinwall Manufacturing Company, Jackson, Mich. Liquid-sprayer | 726,616 | Apr. 28 | 4101 | 926 | 103 | 2072 |
| Aspinwall, Lewis A., assignor to Aspinwall Manufacturing Company, Jackson, Mich. Corn-husker | 727,875 | May 12 | 1992 | 444 | 104 | 441 |
| Aspinwall, Louis M., Wilkinsburg, assignor to G. Westinghouse, Pittsburg, Pa. Multiple-control system for railway vehicles or trains | 740,074 | Sept. 29 | 4885 | 1095 | 106 | 1111 |
| Aspinwall Manufacturing Company. (See Aspinwall, Lewis A., assignor.) | | | | | | |
| Aspland, Thomas C., New York, N. Y. Catamenial napkin | 728,432 | May 19 | 3035 | 667 | 104 | 684 |
| Asquith, James D., Leeds, England. Machine for milling fabrics | 746,912 | Dec. 15 | 2927 | 675 | 107 | 1774 |
| Assembled Tile and Slab Company. (See Semmer, Phillip, assignor.) | | | | | | |
| Assman, William, Omaha, Nebr. Cigar-pipe | 732,252 | June 30 | 5087 | 1131 | 104 | 2247 |
| Ast, Heinrich. (See Schuster and Ast.) | | | | | | |
| Astle, David, Vineland, N. J. Irrigating apparatus | 738,271 | Sept. 8 | 1459 | 315 | 106 | 330 |
| Astle, Richard T., Grover, Wyo. Cooking utensil | 717,655 | Jan. 6 | 231 | 59 | 102 | 51 |
| Aston, Samuel T. (See Crabtree, Louis, assignor.) | | | | | | |
| Astryke, Peter, assignor of one-half to J. S. Bordner, Alexandria, Va. Jar-closure | 728,830 | May 26 | 3799 | 847 | 104 | 860 |
| Aten, George B., *et al.* (See Perkins, William D., assignor.) | | | | | | |
| Aten, James H., *et al.* (See Perkins, William D., assignor.) | | | | | | |
| Atha, Benjamin, *et al.* (See Barnard, John H., assignor.) | | | | | | |
| Atha, C. G., *et al.* (See Barnard, John H., assignor.) | | | | | | |
| Atha, H. B., *et al.* (See Barnard, John H., assignor.) | | | | | | |
| Atha, H. G., *et al.* (See Barnard, John H., assignor.) | | | | | | |
| Athearn, William E., Brooklyn, N. Y. Telegraph system | 720,875 | Feb. 17 | 2696 | 623<br>624 | 102 | 1421 |
| Atherton, Edmond F., Cleveland, Ohio. Clam-shell bucket | 723,571 | Mar. 24 | 3574 | 798 | 103 | 792 |
| Atherton, Giles, Stockport, England. Brake for electric or other tram cars or vehicles | 732,914 | July 7 | 389 | 94 | 105 | 84 |
| Atherton, Jessie D., Philadelphia, Pa. Toy | 720,876 | Feb. 17 | 2698 | 624 | 102 | 1421 |
| Atherton Machine Company. (See Atherton, Robert, assignor.) | | | | | | |
| Atherton, Robert, assignor to Atherton Machine Company, Paterson, N. J. Quilling-machine | 746,439 | Dec. 8 | 2052 | 472<br>473 | 107 | 1557 |
| Athey, Isaac H., assignor to Railway-Commercial Cabinet and File Company, Chicago, Ill. File-cabinet | 744,276 | Nov. 17 | 2932 | 627 | 107 | 656 |
| Athey, Isaac H., assignor to Railway-Commercial Cabinet and File Company, Chicago, Ill. Adjustable file-cabinet partition | 748,335 | Dec. 29 | 5611 | 1279 | 107 | 2410 |
| Atkin, Rodrick J., and M. R. Eagleson, Lillooet, Canada. Acetylene-gas generator | 719,633 | Feb. 3 | 397 | 90, 91 | 102 | 905 |
| Atkins, Alden B., Sterling, Nebr. Flat-iron | 747,840 | Dec. 22 | 4657 | 1053 | 107 | 2181 |
| Atkins, Charles H., Springfield, Mass. Coffee-pot | 725,193 | Apr. 14 | 1441 | 327 | 103 | 1489 |
| Atkins, Charles H., Springfield, Mass. Air and water heating apparatus | 737,562 | Sept. 1 | 3 | 1 | 106 | 3 |
| Atkins, Charles H., Springfield, Mass. Thermostatic steam-trap | 739,279 | Sept. 22 | 3385 | 754 | 106 | 772 |
| Atkins, George J., Tottenham, England. Generating acetylene gas | 731,652 | June 23 | 3935 | 876 | 104 | 1993 |
| Atkins, Harold B., New York, N. Y., assignor, by mesne assignments, to Morton Trust Company, trustee. Vehicle running-gear | 729,031 | May 26 | 4153 | 920 | 104 | 932 |
| Atkins, John, *et al.* (See Lawson, Albert F., assignor.) | | | | | | |
| Atkins, John J., Louisville, Ky. Vapor-burner | 738,511 | Sept. 8 | 1954 | 426 | 106 | 434 |
| Atkinson, Hobart F. (See Denio, William L., assignor.) | | | | | | |
| Atkinson, Joseph J., Atlanta, Ga. Cotton-press | 733,451 | July 14 | 1353 | 319 | 105 | 303 |
| Atkinson, Lewis M., Rockport, Ind. Auriphone | 738,593 | Sept. 8 | 2098 | 458 | 106 | 467 |
| Atkinson, Willard S., New Brunswick, N. J. Inclosed fuse for electric circuits | 730,594 | June 9 | 1960 | 436 | 104 | 1550 |
| Atkinson, William H., Brooklyn, N. Y. Combined box and reel | 741,391 | Oct. 13 | 1920 | 424 | 106 | 1676 |
| Atlantic Refining Company. (See Livingston, Max, assignor.) | | | | | | |
| Atlantic Rubber Shoe Company. (See Doughty, Henry J., assignor.) | | | | | | |
| Atlas Tack Company. (See Giles, Isaac W., assignor.) | | | | | | |
| Atlee, Joshua W., Riverton, N. J. Ventilating-port for vessels | 719,416 | Feb. 3 | 6 | 2 | 102 | 827 |
| Atsatt, Isaiah P. (See Atsatt, John C. F., assignor.) | | | | | | |
| Atsatt, John C. F., assignor of one-half to I. P. Atsatt, Mattapoisett, Mass. Coin-controlled picture-exhibiting apparatus | 726,240 | Apr. 28 | 3346 | 759 | 103 | 1922 |
| Atterbury, George W. (See Rawson and Atterbury.) | | | | | | |
| Atterby, Edward, assignor to J. Cunningham Son, and Company, Rochester, N. Y. Thill-coupling | 719,985 | Feb. 10 | 1032 | 240 | 102 | 1058 |
| Atwater, Harry R., assignor to Osborn Manufacturing Company, Cleveland, Ohio. Rotary brush | 727,256 | May 5 | 807 | 173 | 104 | 174 |
| Atwater, Henry, Vacaville, Cal. Device for removing vehicle-tires | 743,131 | Nov. 3 | 601 | 130 | 107 | 125 |
| Atwood, Francis L., Shadygrove, Ky. Fertilizer-distributer | 721,272 | Feb. 24 | 3511 | 798 | 102 | 1612 |
| Atwood, James F., Malden, Mass. Buckle | 717,524 | Jan. 6 | 4 | 1 | 102 | 3 |

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| Atwood, John M., *et al.* (See Rowell, William L., Jr., assignor.) | | | | | | |
| Atwood, Leonard, Philadelphia, Pa. Tender for locomotives | 729,991 | June 2 | 871 | 194 | 104 | 1304 |
| Atwood, Leonard, Philadelphia, Pa. Drying brewers' grain | 741,436 | Oct. 13 | 1991 | 441 | 106 | 1691 |
| Atwood-Morrison Company. (See Bradley, Edward E., assignor.) | | | | | | |
| Atwood-Morrison Company. (See Morrison, Walter G., assignor.) | | | | | | |
| Atwood, Newhall. (See Terpening, Elmer A., assignor.) | | | | | | |
| Atzberger, Philip J., and F. W. Peters, Cleveland, Ohio. Non-refillable bottle | 721,493 | Feb. 24 | 3907 | 888 | 102 | 1694 |
| Aube, Adjudeur, Woonsocket, R. I. Shuttle-guard | 741,612 | Oct. 20 | 2358 | 528 | 106 | 1784 |
| Auble, James H., assignor of one-half to J. J. McDonald, Cincinnati, Ohio. Agricultural implement | 738,272 | Sept. 8 | 1460 | 315 | 106 | 330 |
| Auchincloss, William K., assignor to C. Vanderbilt, New York, N. Y. Railway-car | 727,876 | May 12 | 1995 | 444<br>445 | 104 | 442 |
| Audet, Frank X., Jr. (See Banks, William H., assignor.) | | | | | | |
| Audet, Frank X., Jr., Boston, Mass. Stringed musical instrument | 737,693 | Sept. 1 | 244 | 52, 53 | 106 | 56 |
| Aue, Henry, Noblestown, Pa. Quick-acting wrench | 726,013 | Apr. 21 | 2938 | 668 | 103 | 1822 |
| Auger, Joseph H. E., assignor of one-third to A. S. Mattes, Brainerd, Minn. Nigger-bar | 732,815 | July 7 | 222 | 55 | 105 | 50 |
| Augezd, Adolf F. O. von, Vienna, Austria-Hungary. Locking device for guns | 726,187 | Apr. 21 | 3247 | 736<br>737 | 103 | 1885 |
| Aughinbaugh, William A., Quebeck, Tenn. Railway-gate | 743,803 | Nov. 10 | 1973 | 419 | 107 | 437 |
| Aughinbaugh, William A., Quebeck, Tenn. Rail-joint | 743,804 | Nov. 10 | 1974 | 419 | 107 | 437 |
| Augros, Joseph, Paris, France. Safety device for trains | 739,808 | Sept. 29 | 4371 | 980 | 106 | 1004 |
| Augur, Charles D., Albert Lea, Minn. Cooking utensil | 742,955 | Nov. 3 | 238 | 53 | 107 | 51 |
| Augur, Robert C., Watertown, N. Y., and H. F. Bickel, Plainfield, N. J., assignors to New York Air Brake Company, New York, N. Y. Engineer's brake-valve | 725,020 | Apr. 14 | 1119 | 253<br>254 | 103 | 1426 |
| August Kern Barber Supply Company. (See Wilsdorf, Frank H., assignor.) | | | | | | |
| Augustine, Bernard W., Alameda, Cal. Molding-graining machine | 731,011 | June 16 | 2715 | 606 | 104 | 1728 |
| Auld, Hugh R., Boston, assignor of one-half to J. J. McGlinchy, Chelsea, Mass. Machine for setting vehicle-tires | 742,556 | Oct. 27 | 4194 | 944 | 106 | 2177 |
| Auldjo, Louis C., Sydney, New South Wales, Australia. Steam-boiler | 739,774 | Sept. 22 | 4284 | 960<br>961 | 106 | 967 |
| Aull, Jerome J. (See Burns and Aull.) | | | | | | |
| Ault, Playfair G. (See Davis and Ault.) | | | | | | |
| Aultman & Taylor Machinery Company. (See Brown, John R., assignor.) | | | | | | |
| Aultman & Taylor Machinery Company. (See Park, Kennedy, assignor.) | | | | | | |
| Aultman and Taylor Machinery Company. (See Temple, William C., assignor.) | | | | | | |
| Aultman & Taylor Machinery Company. (See Webster, Daniel M., assignor.) | | | | | | |
| Aultman & Taylor Machinery Company. (See Whiting, Lewis S., assignor.) | | | | | | |
| Aumann, Louis A., Chicopee, assignor to Draper Company, Hopedale, Mass. Automatic filling-replenishing loom | 725,194 | Apr. 14 | 1443 | 327 | 103 | 1489 |
| Aumen, William A., assignor of one-half to W. J. Ayres, Woodsboro, Md. Winding-indicator for timepieces | 744,456 | Nov. 17 | 3256 | 698 | 107 | 726 |
| Aune, Anders, Waltham, Mass. Stem-winding watch | 723,123 | Mar. 17 | 2722 | 612 | 103 | 607 |
| Aune, Ole O., Waltham, Mass. Watch roller and hands remover | 734,211 | July 21 | 2788 | 654 | 105 | 623 |
| Auradou, John G. (See Kutscher and Auradou.) | | | | | | |
| Aurin, Emil C. (See Crosby and Aurin.) | | | | | | |
| Aurnhamer, George, West Hoboken, assignor of two-thirds to A. A. Schlegel and S. Weiss, Union Hill, N. J. Non-refillable bottle | 726,811 | Apr. 28 | 4461 | 1007 | 103 | 2146 |
| Ausherman, David S. (See Ausherman, Isaac S. and D. S.) | | | | | | |
| Ausherman, Isaac S. and D. S., Zion City, Ill., assignors of one-third to J. J. Moore, Fredonia, Kans. Well-drilling machine | 735,694 | Aug. 11 | 1272 | 272 | 105 | 1269 |
| Austen, Edward J., St. Louis, Mo. Scenographic apparatus | 719,986 | Feb. 10 | 1033 | 240<br>241 | 102 | 1058 |
| Austin, Bingham F. S., Gastonia, N. C. Cloth thin-place detector and preventer | 735,050 | Aug. 4 | 6 | 2 | 105 | 982 |
| Austin, Bingham F. S., Gastonia, N. C., assignor to Draper Company, Hopedale, Mass. Filling-replenishing mechanism for looms | 726,493 | Apr. 28 | 3866 | 875 | 103 | 2025 |
| Austin, Bingham F. S., Gastonia, N. C., assignor to Draper Company, Hopedale, Mass. Fork-grid clearer for looms | 745,473 | Dec. 1 | 311 | 74 | 107 | 9911 |
| Austin, Charles D., Amsterdam, N. Y. Safety-guard for trolley-wires at railway-crossings | 729,523 | June 2 | 4 | 1 | 104 | 1127 |
| Austin, Ernest J., assignor to F. L. Maytag, Newton, Iowa. Computing measuring-cabinet | 735,852 | Aug. 11 | 1570 | 335 | 105 | 1335 |
| Austin, Frederick C. (See Bentson, Hans J., assignor.) | | | | | | |
| Austin, Frederick C. (See Bisbee, Frank M., assignor.) | | | | | | |
| Austin, Frederick C. (See Cameron, Arthur, assignor.) | | | | | | |
| Austin, Frederick C. (See Gray, Thomas J., assignor.) | | | | | | |
| Austin, Frederick C. (See Judd, William J., assignor.) | | | | | | |
| Austin, Frederick C. (See Ralph, Benjamin M., assignor.) | | | | | | |
| Austin, George M. (See Tupper and Austin.) | | | | | | |
| Austin, Herbert, Erdington, near Birmingham, England. Steering mechânism for motor-vehicles | 719,171 | Jan. 27 | 3147 | 700 | 102 | 709 |
| Austin, Herbert, Erdington, near Birmingham, England. Motor-car | 721,413 | Feb. 24 | 3763 | 855 | 102 | 1665 |
| Austin, Herbert, Erdington, England. Machine for cutting or shearing hair or wool | 726,014 | Apr. 21 | 2940 | 668 | 103 | 1823 |
| Austin, Herbert, Erdington, near Birmingham, England. Cylinder for oil, spirit, or gas engines | 731,265 | June 16 | 3173 | 707 | 104 | 1818 |
| Austin, John D., Thonotosassa, Fla. Apparatus for destroying floating vegetation | 733,360 | July 14 | 1191 | 283 | 105 | 267 |
| Austin, John T., Hartford, Conn., assignor of one-half to W. T. Blaine, New York, N. Y. Engraving-machine | 732,694 | July 7 | 4 | 2 | 105 | 3 |
| Austin, Leonard S., New York, N. Y. Apparatus for hoisting and conveying | 732,499 | June 30 | 5567 | 1234 | 104 | 2345 |
| Austin, Lewitt D., Kalamazoo, Mich. Weeder-tooth | 718,070 | Jan. 13 | 1033 | 230 | 102 | 238 |
| Austin, Oscar P., Washington, D. C. Educational appliance | 730,859 | June 16 | 2411 | 532<br>533 | 104 | 1664 |
| Austin, Paul V., Attica, N. Y. Wire-winding machine | 734,797 | July 28 | 3924 | 915 | 105 | 874 |
| Austin, Robert, Brooklyn, N. Y. Rubber tire | 727,877 | May 12 | 1996 | 445 | 104 | 442 |
| Austin, Samuel. (See Holcomb and Austin.) | | | | | | |
| Austin, Samuel E., New York, N. Y. Automatic device for operating hatch-covers for elevators | 737,312 | Aug. 25 | 4261 | 948 | 105 | 1939 |
| Austin Separator Company. (See Humphrey, Henry H., assignor.) | | | | | | |
| Austin, Walter S., Grand Rapids, Mich. Rotary pump or motor | 719,634 | Feb. 3 | 399 | 91 | 102 | 905 |
| Austin, Walter S., Grand Rapids, Mich. Variable-speed gearing | 725,812 | Apr. 21 | 2603 | 591<br>592 | 103 | 1752 |
| Austin, William L., assignor to Burnham, Williams & Company, Philadelphia, Pa. Joint for containers | 746,440 | Dec. 8 | 2055 | 473 | 107 | 1557 |
| Austrian, Joseph E. (See Harris, Charles R., assignor.) | | | | | | |
| Autenrieth, Charles F., Brooklyn, N. Y. Electric switch | 732,695 | July 7 | 6 | 2 | 105 | 4 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Auth, Nicholas. (See Hayes, Albert, assignor.) | | | | | | |
| Auto-Igniter Company. (See Ganz, Albert F., assignor.) | | | | | | |
| Auto-Igniter Company. (See Le Pontois, Leon J., assignor.) | | | | | | |
| Auto-Igniter Company. (See Mears and Aylward, assignors.) | | | | | | |
| Auto-Lock Clasp Co. (See Chandler, Frank M., assignor.) | | | | | | |
| Auto Ticker-Tape Display Company. (See Stiner, Clarence M., assignor.) | | | | | | |
| Auto Vehicle Company. (See Hain, Ralph B., assignor.) | | | | | | |
| Autocar Company. (See Heaslet, James G., assignor.) | | | | | | |
| Autoelectric Air Pump Company. (See Eck, Charles A., assignor.) | | | | | | |
| Automatic Focusing Camera Company. (See Stender, Herman, assignor.) | | | | | | |
| Automatic Glass Cutting Machine Syndicate. (See Hubbuch, Franz A., assignor.) | | | | | | |
| Automatic Hammer Company. (See Roberts, Odin B., assignor.) | | | | | | |
| Automatic Hammer Company. (See Stromdahl, Andrew, assignor.) | | | | | | |
| Automatic Humiditor Company. (See Boggs, Odin E., assignor.) | | | | | | |
| Automatic Measuring Machine Company of America. (See Brown and Hause, assignors.) | | | | | | |
| Automatic Packing and Weighing Machine Company. (See Phillips, Adelbert H., assignor.) | | | | | | |
| Automatic Pie Machinery Company. (See Jones, Harry H., assignor.) | | | | | | |
| Automatic Postage Stamp Box Company. (See Woodford, Milton E., assignor.) | | | | | | |
| Automatic Racking Machine Company. (See Colby, Harry W., assignor.) | | | | | | |
| Automatic Railway Mail Pouch Delivery Company. (See Pywell, Edwin F., assignor.) | | | | | | |
| Automatic Switch Company of Baltimore City. (See Whittingham, George H., assignor.) | | | | | | |
| Automatic Time Stamp Company. (See Wilson, John C., assignor.) | | | | | | |
| Automatic Time Switch Company. (See Eastman and Weaver, assignors.) | | | | | | |
| Automatic Train Controller Company of New Jersey. (See Shea, Christopher A., assignor.) | | | | | | |
| Automatic Tympan Company. (See Severy, Melvin L., assignor.) | | | | | | |
| Automatic Vacuum Canning Company. (See Hodgson, John G., assignor.) | | | | | | |
| Automatic Vacuum Canning Company. (See Norton, Edwin, assignor.) | | | | | | |
| Automatic Vacuum Canning Company. (See Norton and Hodgson, assignors.) | | | | | | |
| Automatic Weighing Machine Company. (See Thomas, Edward G., assignor.) | | | | | | |
| Automotous Boat Company. (See Ridgway, Herbert N., assignor.) | | | | | | |
| Averett, Andrew E., Schenectady, N. Y., assignor to General Electric Company. Induction-motor | 732,153 | June 30 | 4894 | 1088 | 104 | 2207 |
| Averill, Elias M., Sparta, Mich. Crate | 740,213 | Sept. 29 | 5139 | 1153 | 106 | 1164 |
| Averill, George E., assignor of one-half to H. S. Lavine, Cleveland, Ohio. Washing-machine motor | 747,352 | Dec. 22 | 3779 | 850 | 107 | 1981 |
| Averill, George F., Arverne, N. Y., assignor to W. C. Lynne and J. A. Frauenheim, Pittsburg, Pa. Composition | 723,124 | Mar. 17 | 2723 | ..... | 103 | 607 |
| Avery, Ashbel S., and C. R. Smith, Manilla, Iowa. Apparatus for carbureting air | 735,011 | July 28 | 4294 | 999 | 105 | 951 |
| Avery, Bertram R., Johannesburg, Transvaal, South Africa. Driving-gear for cycles or the like | 719,417 | Feb. 3 | 8 | 2 | 102 | 828 |
| Avery, Frank, Orin, Wyo. Bed-warmer | 731,012 | June 16 | 2717 | 606 | 104 | 1729 |
| Avery, Henry W., Cleveland, Ohio. Non-refillable receptacle | 721,494 | Feb. 24 | 3908 | 889 | 102 | 1694 |
| Avery, Henry W., Cleveland, Ohio. Non-refillable receptacle | 745,988 | Dec. 8 | 1242 | 280 | 107 | 1383 |
| Avery, James O., Peoria, Ill. Harrow | 732,331 | June 30 | 5225 | 1160 | 104 | 2276 |
| Avery Manufacturing Company. (See Bartholomew, John B., assignor.) | | | | | | |
| Avery, William G., Painesville, Ohio. Reinforced cylindrical cask | 732,995 | July 7 | 524 | 130 | 105 | 112 |
| Avey, Daniel N., and G. T. Hastings, Butler, Pa. Metallic railway-tie | 739,637 | Sept. 22 | 4050 | 904 | 106 | 915 |
| Avis, Walter H., Horseheads, N. Y., assignor to R. C. Fisher, Toronto, Canada. Cord-age-machine | 723,806 | Mar. 31 | 3981 | 898, 899 | 103 | 896 |
| Avril, Paul V., E. E. Marinier, and E. L. Navoit, Paris, France. Engraving-machine | 743,052 | Nov. 3 | 446 | 97, 98, 99 | 107 | 94 |
| Axdorfer, Gottfried, Innsbruck, Austria-Hungary. Burner for gas compounds | 730,079 | June 2 | 1013 | 226 | 104 | 1333 |
| Axelman, Mayer, New York, N. Y. Dress-suit case | 745,133 | Nov. 24 | 4507 | 976 | 107 | 1005 |
| Axelson, Charles F., assignor of one-half to G. A. Axelson, Los Angeles, Cal. Rod | 733,572 | July 14 | 1572 | 374 | 105 | 351 |
| Axelson, Gustavus A. (See Axelson, Charles F., assignor.) | | | | | | |
| Axtell, Lucien V., Perry, Ohio. Harvester-reel | 742,557 | Oct. 27 | 4196 | 945 | 106 | 2178 |
| Axtell, Spencer T., Oswego, N. Y. Heater | 747,312 | Dec. 15 | 3701 | 834 | 107 | 1949 |
| Ayars, Charles H., Salem, N. J., assignor to Ayars Machine Company. Can-filling machine | 722,075 | Mar. 3 | 769 | 172 | 103 | 166 |
| Ayars, Charles H., Salem, N. J., assignor to Ayars Machine Company. Can-soldering machine | 732,611 | June 30 | 5772 | 1279, 1280 | 104 | 2393 |
| Ayars Machine Company. (See Ayars, Charles H., assignor.) | | | | | | |
| Aydt, Alphons, *et al.* (See Glenn, Austin H., assignor.) | | | | | | |
| Ayer, Albert E., assignor of one-half to T. F. Lane, East Boston, Mass. Sash-lock | 731,266 | June 16 | 3174 | 707 | 104 | 1819 |
| Ayer, James I., Malden, assignor to Simplex Electric Heating Company, Boston, Mass. Heat-controller stand for electric smoothing-irons | 723,632 | Mar. 24 | 3686 | 826 | 103 | 815 |
| Ayer, James I., Malden, assignor to Simplex Electric Heating Company, Boston, Mass. Heat-controller stand for electric smoothing-irons | 723,633 | Mar. 24 | 3688 | 826 | 103 | 815 |
| Ayer, James I., Malden, assignor to Simplex Electrical Company, Boston, Mass. Electrical cooking apparatus | 726,241 | Apr. 28 | 3348 | 760 | 103 | 1922 |
| Ayer, James I., Malden, assignor to Simplex Electric Heating Company, Boston, Mass. Electric soldering-iron | 731,838 | June 23 | 4268 | 950 | 104 | 2064 |
| Ayer, James I., Cambridgeport, assignor to Simplex Electric Heating Company, Boston, Mass. Electric soldering-iron stand | 723,634 | Mar. 24 | 3689 | 827 | 103 | 816 |
| Ayer, James I., Cambridge, assignor to Simplex Electric Heating Company, Boston, Mass. Automatic switch-handle for electrical tools | 738,594 | Sept. 8 | 2099 | 458 | 106 | 467 |
| Ayer, Walter R., Planchette, La. Whiffletree-clip | 734,798 | July 28 | 3926 | 916 | 105 | 874 |
| Ayers, Albert M. (See Ayers, John W. and A. M.) | | | | | | |
| Ayers, Almond B., administrator. (See Ayers, John H.) | | | | | | |
| Ayers, Edward L., and W. F. Coffee, Modesto, Cal.; said Ayers assignor to said Coffee. Metal sign | 734,212 | July 21 | 2790 | 654 | 105 | 623 |
| Ayers, John, assignor to Oregon Rafting Company, Portland, Oreg. Mooring derrick-scows in raft construction | 738,595 | Sept. 8 | 2102 | 459 | 106 | 468 |
| Ayers, John H., deceased. Lansing, Mich.; A. B. Ayers, administrator. Centrifugal liquid-separator | 748,038 | Dec. 29 | 5074 | 1148 | 107 | 2294 |
| Ayers, John W. and A. M., New York, N. Y. Tablet-feeding machine | 742,377 | Oct. 27 | 3864 | 868, 869 | 106 | 2110 |
| Ayling, John, Toronto Junction, Canada. Fire-brick | 731,653 | June 23 | 3937 | ..... | 104 | 1993 |
| Aylward, Henry W. (See Mears and Aylward.) | | | | | | |
| Ayotte, Victor, Jr., Providence, R. I. Signal device for drip-pans | 730,733 | June 9 | 2191 | 487 | 104 | 1598 |
| Ayres, Walter S., Washington, Iowa. Machine for turning gloves | 748,463 | Dec. 29 | 5862 | 1333, 1334 | 107 | 2465 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|
| | | | Spec. | Dr'g. | Vol. | Page. |
| Ayres, William E., Boston, Mass. Wheel-securing device | 745,980 | Dec. 8 | 1244 | 281 | 107 | 1383 |
| Ayres, William J. (See Aumen, William A., assignor.) | | | | | | |
| Ayson, Alexander R., Mosgiel, New Zealand. Detachable handle for pails | 728,072 | May 12 | 2355 | 524 | 104 | 519 |
| B. B. Hill Manufacturing Company. (See Hill, Benjamin B., assignor.) | | | | | | |
| B. F. Goodrich Company. (See McGuire, John F., assignor.) | | | | | | |
| B. F. Goodrich Company. (See Work, Bertram G., assignor.) | | | | | | |
| B. F. Sturtevant Company. (See Balcome, Herbert A., assignor.) | | | | | | |
| B-W Automatic Jar & Bottle Company. (See Brown, William E., assignor.) | | | | | | |
| Baartmans, Edouard, Antwerp, Belgium. Wire or like cutter | 740,612 | Oct. 6 | 452 | 98 | 106 | 1343 |
| Baas, Isaac, Newark, N. J., assignor to American Type Founder's Company. Mold for casting printers' furniture | 733,531 | July 14 | 1495 | 356 | 105 | 333 |
| Baas, Isaac, Newark, N. J., assignor to American Type Founder's Company. Making printers' metal furniture | 733,895 | July 14 | 2157 | 509 | 105 | 470 |
| Babb, Fred L., Lynn, Mass. Shuttle for sewing-machines | 724,652 | Apr. 7 | 431 | 104 | 103 | 1262 |
| Babbitt, Bradford B., Brooklyn, N. Y. Self-soaping dish-mop | 743,132 | Nov. 3 | 603 | 131 | 107 | 126 |
| Babbitt, George A., Brownsboro, Ky. Wagon-loading apparatus | 717,962 | Jan. 6 | 827 | 187 | 102 | 177 |
| Babbitt, John M., Rensselaer, Mo., and A. C. Rumpel, Milwaukee, Wis. Game apparatus | 723,807 | Mar. 31 | 3987 | 900 | 103 | 897 |
| Babbitt, Rollin H., Jr., assignor to Weir Stove Company, Taunton, Mass. Cooking stove or range | 737,813 | Sept. 1 | 485 | 107 | 106 | 109 |
| Babcock, Allen H., Oakland, Cal., assignor to Stanley Electric Manufacturing Company, Pittsfield, Mass. Electric switch | 738,752 | Sept. 15 | 2427 | 532 | 106 | 551 |
| Babcock, Garrison, assignor to Stromberg-Carlson Telephone Manufacturing Company, Chicago, Ill. Telephone system | 743,421 | Nov. 10 | 1230 | 254 | 107 | 278 |
| Babcock, Graham E., Coronado, Cal. Brake | 747,672 | Dec. 22 | 4352 | 983 | 107 | 2111 |
| Babcock, W. Irving. (See Gunnell, Elias, assignor.) | | | | | | |
| Babcock & Wilcox Company. (See Rosenthal, James H., assignor.) | | | | | | |
| Babendreier, Arthur O., Baltimore, Md. Hydrant | 734,251 | July 21 | 2867 | 671<br>672 | 105 | 640 |
| Babin, Telesphore, and A. O. Hebert, Houma, La. Bucket | 735,440 | Aug. 4 | 784 | 166 | 105 | 1148 |
| Babion, Carrie, Chesaning, Mich. Abdominal bandage | 748,336 | Dec. 29 | 5614 | 1279 | 107 | 2410 |
| Babled, James, Dallas, Tex. Compound gas-engine | 724,239 | Mar. 31 | 4886 | 1093<br>1094 | 103 | 1079 |
| Babo, Arthur von, assignor of one-third to P. Barnes, Seattle, Wash. Map | 720,994 | Feb. 17 | 2933 | 672 | 102 | 1471 |
| Babson, Gustavus, *et al.* (See Smith, Williard, assignor.) | | | | | | |
| Babson, Sanford E., *et al.* (See Smith, Williard, assignor.) | | | | | | |
| Baby, George B., St. Catharines, Canada. Electric fuse | 738,874 | Sept. 15 | 2662 | 587 | 106 | 604 |
| Bach, Frank, Jr., and E. Crotteau, Phillips, Wis. Portable knockdown or folding camp-stove | 718,412 | Jan. 13 | 1648 | 363 | 102 | 369 |
| Bach, John A., Philadelphia, Pa. Cigar bunching and wrapping machine | 747,353 | Dec. 22 | 3779 | 850 | 107 | 1982 |
| Bach, Julius H., Chicago, Ill. Brick-clay crusher-rolls | 728,831 | May 26 | 3800 | 847 | 104 | 861 |
| Bach, Niels, Neenah, assignor to George Banta Printing Co., Menasha, Wis. Book and binding therefor | 722,418 | Mar. 10 | 1414 | 312 | 103 | 317 |
| Bach, William H. (See Binney, John H., assignor.) | | | | | | |
| Bacharach, Samuel, Brooklyn, N. Y. Penholder-guide | 747,574 | Dec. 22 | 4159 | 935 | 107 | 2069 |
| Bache & Co., Semon. (See Rouault, Louis, assignor.) | | | | | | |
| Bache-Wiig, Bertha. (See Bache-Wiig, Carl, assignor.) | | | | | | |
| Bache-Wiig, Carl, assignor to B. Bache-Wiig, Bön, near Christiania, Norway. Preserving eggs | 739,137 | Sept. 15 | 3123 | ------ | 106 | 699 |
| Bache, William H., Boundbrook, N. J. Package | 742,558 | Oct. 27 | 4197 | 945 | 106 | 2178 |
| Bachelet, Emile, Tacoma, Wash. Magnetic medical apparatus | 743,372 | Nov. 3 | 1100 | 234 | 107 | 233 |
| Bachelet, Emile, Tacoma, Wash. Electromagnetic therapeutic apparatus | 743,373 | Nov. 3 | 1102 | 234 | 107 | 233 |
| Bachler, Friedrich R., Oxnard, Cal. Dilating-bougie | 734,498 | July 28 | 3332 | 780 | 105 | 752 |
| Bachman, Frank E., Buffalo, N. Y. Apparatus for compressing air | 739,472 | Sept. 22 | 3745 | 835 | 106 | 850 |
| Bachman, Frank E, Buffalo, N. Y. Filter | 739,473 | Sept. 22 | 3746 | 836 | 106 | 850 |
| Bachman, Frank E., Buffalo, N. Y. Filter | 739,474 | Sept. 22 | 3750 | 836 | 106 | 851 |
| Bachner, Adolf, Frankfort-on-the-Main, Germany. Gas-burner | 727,257 | May 5 | 808 | 174 | 104 | 174 |
| Bachner, Adolf, Frankfort-on-the-Main, Germany. Incandescent gas-burner | 738,512 | Sept. 8 | 1955 | 426<br>427 | 106 | 434 |
| Bachner, Joseph M., Oakpark, Ill. Stem winding and setting watch | 741,092 | Oct. 13 | 1302 | 299 | 106 | 1545 |
| Bachrach, David, Baltimore, Md., assignor of one-third to E. Berliner, Washington, D. C. Compound of nitrocellulose or similar substances | 743,422 | Nov. 10 | 1234 | ------ | 107 | 279 |
| Bachtel, Isaac O. (See Blodget, Perry, assignor.) | | | | | | |
| Bachtel, William H., Canton, Ohio. Trolley | 726,211 | Apr. 21 | 3281 | 745 | 103 | 1893 |
| Backer, Arthur J., Syracuse, N. Y. Railway-switch and operating means therefor | 741,571 | Oct. 13 | 2276 | 508 | 106 | 1751 |
| Backus, Charles F. (See Caldwell, Winford N., assignor.) | | | | | | |
| Backus, Charles F. (See Peters, Frederick, assignor.) | | | | | | |
| Backus, James L., Aurora, Ill. Metal-cutting machine | 735,332 | Aug. 4 | 562 | 115 | 105 | 1101 |
| Backus, John C., Smethport, Pa. Lock-hanger for coats, hats, or the like | 727,056 | May 5 | 458 | 96 | 104 | 100 |
| Bacon, Charles H. (See Bacon, Mark E. and C. H.) | | | | | | |
| Bacon, Frederick J., Hartford, Conn., assignor of two-thirds to N. B. Bacon, Manchester, Va., and A. Johnson, Willimantic, Conn. Horseshoe | 744,277 | Nov. 17 | 2934 | 627 | 107 | 656 |
| Bacon, Herbert, assignor of one-half to P. J. Grace, Boston, Mass. Car-wheel | 734,113 | July 21 | 2615 | 615 | 105 | 586 |
| Bacon, Mark E. and C. H., Flushing, Mich. Gearing | 743,133 | Nov. 3 | 604 | 131 | 107 | 126 |
| Bacon, Nathan B. (See Armistead, Wilbur T., assignor.) | | | | | | |
| Bacon, Nathan B., *et al.* (See Bacon, Frederick J., assignor.) | | | | | | |
| Bacon, Nathan B., Manchester, assignor of one-half to J. E. Doherty, Richmond, Va. Clothes-pounder | 730,811 | June 9 | 2319 | 515 | 104 | 1625 |
| Bacon, Paul H., New Haven, Conn. Water-closet attachment | 737,814 | Sept. 1 | 486 | 108 | 106 | 109 |
| Bacon, Robert A., New York, N. Y. Light-excluding attachment for camera-plate holders | 743,216 | Nov. 3 | 766 | 167 | 107 | 161 |
| Badeau, Charles C. (See Hewlett and Badeau.) | | | | | | |
| Badeau, Charles C., Swissvale, Pa. Electric switch | 747,673 | Dec. 22 | 4353 | 983 | 107 | 2111 |
| Badeau, Charles C., Schenectady, N. Y., assignor to General Electric Company. Ground-detector | 730,595 | June 9 | 1961 | 436 | 104 | 1550 |
| Badeau, Isaac F., Schenectady, N. Y. Music type-writer | 730,508 | June 9 | 1803 | 402<br>403 | 104 | 1514 |
| Baden-Powell, Baden F. S., London, England. Velocipede steering mechanism | 722,171 | Mar. 3 | 940 | 209 | 103 | 200 |
| Bader, Charles W., assignor of one-half to H. Kamm, Chicago, Ill. Bag-fastener | 741,437 | Oct. 13 | 1992 | 441 | 106 | 1691 |
| Bader, Gustav A., assignor to E. Kirstein Sons Company, Rochester, N. Y. Lens-grinding machine | 737,313 | Aug. 25 | 4264 | 948<br>949 | 105 | 1940 |
| Bader, Nicholas, Marion, Ohio. Corn-harvester | 732,816 | July 7 | 224 | 55<br>56<br>57 | 105 | 50 |
| Badger, Arthur C., Boston, Mass. Chemical fire-extinguisher | 730,333 | June 9 | 1466 | 324 | 104 | 1443 |
| Badger, Arthur C., Boston, Mass. Joint for sheet-metal receptacles | 739,974 | Sept. 29 | 4698 | 1056 | 106 | 1071 |
| Badger Brass Manufacturing Company. (See Welles, Richard H., assignor.) | | | | | | |
| Badger, Charles E., Minneapolis, Minn. Switch-operating mechanism | 725,650 | Apr. 21 | 2309 | 521 | 103 | 1688 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Badger, George L., Quincy, assignor to Equitable Auto-Truck Power and Burner Company, Lynn, Mass. Apparatus for burning oil | 735,441 | Aug. 4 | 785 | 166 167 | 105 | 1148 |
| Badger, George L., Quincy, assignor to Equitable Auto-Truck Power and Burner Company, Lynn, Mass. Hydrocarbon-burner | 735,442 | Aug. 4 | 788 | 167 168 | 105 | 1149 |
| Badger, Harry S., Truro, Canada. Combined measuring and sampling machine | 725,915 | Apr. 21 | 2771 | 631 | 103 | 1788 |
| Badger, Oliver L., Pittsburg, Pa., assignor to Heating, Ventilating and Foundry Company, Elmgrove, W. Va. Warm-air furnace | 742,146 | Oct. 27 | 3433 | 765 | 106 | 2021 |
| Badger, Oliver L., Pittsburg, Pa., assignor to Heating, Ventilating and Foundry Company, Elmgrove, W. Va. Warm-air furnace | 742,147 | Oct. 27 | 3437 | 766 | 106 | 2022 |
| Badgerow, Justin, Lakeville Township, Dickinson county, Iowa. Device for securing cows' tails while milking | 743,671 | Nov. 10 | 1735 | 366 | 107 | 387 |
| Badgley, Edward J. (See Smith and Badgley.) | | | | | | |
| Badische Anilin & Soda Fabrik. (See Bally, Oscar, assignor.) | | | | | | |
| Badische Anilin & Soda Fabrik. (See Bazlen, Max, assignor.) | | | | | | |
| Badische Anilin & Soda Fabrik. (See Bohn, René, assignor.) | | | | | | |
| Badische Anilin & Soda Fabrik. (See Dehoff, Leopold H., assignor.) | | | | | | |
| Badische Anilin & Soda Fabrik. (See Graul, Otto J., assignor.) | | | | | | |
| Badische Anilin & Soda Fabrik. (See Haas, Louis, assignor.) | | | | | | |
| Badische Anilin & Soda Fabrik. (See Isler, Max H., assignor.) | | | | | | |
| Badische Anilin & Soda Fabrik. (See Julius, Paul, assignor.) | | | | | | |
| Badische Anilin & Soda Fabrik. (See Julius and Reubold, assignors.) | | | | | | |
| Badische Anilin & Soda Fabrik. (See Knietsch and Holt, assignors.) | | | | | | |
| Badische Anilin & Soda Fabrik. (See Müller, Carl L., assignor.) | | | | | | |
| Badische Anilin und Soda Fabrik. (See Münch, Eduard, assignor.) | | | | | | |
| Badische Anilin & Soda Fabrik. (See Oberreit, Paul E., assignor.) | | | | | | |
| Badische Anilin & Soda Fabrik. (See Schleicher and Dorrer, assignors.) | | | | | | |
| Badische Anilin & Soda Fabrik. (See Schraube and Voigtländer-Tetzner, assignors.) | | | | | | |
| Badische Anilin & Soda Fabrik. (See Seidel, Paul, assignor.) | | | | | | |
| Badische Anilin & Soda Fabrik. (See Stiegelmann, Armand J., assignor.) | | | | | | |
| Badische Anilin & Soda Fabrik. (See Voigtlaender-Tetzner, Walter, assignor.) | | | | | | |
| Baeger, Richard. (See Güttner and Baeger.) | | | | | | |
| Baehr, George, McKeesport, Pa., assignor to National Tube Company, New York, N. Y., and Pittsburg and McKeesport, Pa. Resisting device | 745,759 | Dec. 1 | 788 | 181 | 107 | 1266 |
| Baehr, George, McKeesport, Pa., assignor to National Tube Company, New York, N. Y., and Pittsburg and McKeesport, Pa. Lever-controller | 745,760 | Dec. 1 | 789 | 181 | 107 | 1266 |
| Baehr, George, McKeesport, Pa., assignor to National Tube Company, New York, N. Y., and Pittsburg and McKeesport, Pa. Electric welding-machine | 747,354 | Dec. 22 | 3781 | 851 | 107 | 1982 |
| Baehr, George, McKeesport, assignor to National Tube Company, Pittsburg, Pa. Electric apparatus for welding tubes | 747,841 | Dec. 22 | 4657 | 1053 | 107 | 2181 |
| Baehr, George, McKeesport, assignor to National Tube Company, Pittsburg, Pa. Electric apparatus for welding tubes | 747,842 | Dec. 22 | 4662 | 1054 | 107 | 2182 |
| Baer Brothers. (See Fuchs, Maximilian J., assignor.) | | | | | | |
| Baer, Ivan F., Monson, assignor to Carlow & Putnam Company, Worcester, Mass. Coat-hanger | 735,443 | Aug. 4 | 791 | 168 | 105 | 1149 |
| Baer, Walter W., Nanaimo, Canada. Type-writer-carriage-operating mechanism | 738,273 | Sept. 8 | 1463 | 316 | 106 | 330 |
| Baer, William. (See Anderson, Alfred, assignor.) | | | | | | |
| Baeuerle, Jerome A., Kalamazoo, Mich. Oil-can | 728,433 | May 19 | 3036 | 667 | 104 | 684 |
| Baeumle, John, Milwaukee, Wis. Elastic piano-support | 743,672 | Nov. 10 | 1736 | 366 | 107 | 387 |
| Baeumle, John, Milwaukee, Wis., assignor of one-half to J. P. Lindemann & Sons. Device for crimping sheet-metal elbows and pipe | 744,672 | Nov. 17 | 3605 | 777 | 107 | 798 |
| Bagg, Edward P., administrator. (See Clark and Farnsworth.) | | | | | | |
| Baggaley, Ralph. (See Gillies, Donald B., assignor.) | | | | | | |
| Baggaley, Ralph. (See Rites, Francis M., assignor.) | | | | | | |
| Baggaley, Ralph, Pittsburg, Pa. Converting mattes | 722,198 | Mar. 3 | 997 | | 103 | 211 |
| Baggaley, Ralph, Pittsburg, Pa. Boiler | 725,392 | Apr. 14 | 1796 | 403 | 103 | 1564 |
| Baggaley, Ralph, Pittsburg, Pa. Slag-boiler | 746,235 | Dec. 8 | 1694 | 376 377 | 107 | 1481 |
| Baggaley, Ralph, Pittsburg, Pa. Apparatus for precipitating injurious fumes from smelter-gases | 746,236 | Dec. 8 | 1696 | 377 378 | 107 | 1482 |
| Baggaley, Ralph, Pittsburg, Pa. Casting-machine | 746,237 | Dec. 8 | 1698 | 378 379 | 107 | 1483 |
| Baggaley, Ralph, Pittsburg, Pa. Converter | 746,238 | Dec. 8 | 1700 | 379 380 | 107 | 1483 |
| Baggaley, Ralph, Pittsburg, Pa. Slag-heated boiler | 746,239 | Dec. 8 | 1702 | 380 | 107 | 1483 |
| Baggaley, Ralph, Pittsburg, Pa. Slag-heated boiler | 746,240 | Dec. 8 | 1704 | 380 | 107 | 1484 |
| Baggaley, Ralph, Pittsburg, Pa. Converting matte | 746,241 | Dec. 8 | 1705 | | 107 | 1484 |
| Baggaley, Ralph, Pittsburg, Pa. Water-supply apparatus | 746,242 | Dec. 8 | 1706 | 380 | 107 | 1484 |
| Baggaley, Ralph, Pittsburg, Pa. Journal-lubricating device | 746,243 | Dec. 8 | 1707 | 381 | 107 | 1484 |
| Baggaley, Ralph, Pittsburg, Pa. Casting-machine | 746,244 | Dec. 8 | 1708 | 381 | 107 | 1485 |
| Baggaley, Ralph, Pittsburg, Pa. Machine for casting metal | 746,245 | Dec. 8 | 1710 | 382 | 107 | 1485 |
| Baggaley, Ralph, Pittsburg, Pa. Refining copper | 746,246 | Dec. 8 | 1711 | 382 383 | 107 | 1485 |
| Baggaley, Ralph, Pittsburg, Pa. Automatic warehousing-machine | 746,247 | Dec. 8 | 1714 | 384 | 107 | 1485 |
| Baggaley, Ralph, Pittsburg, Pa. Automatic warehousing apparatus | 746,248 | Dec. 8 | 1716 | 384 385 | 107 | 1486 |
| Baggaley, Ralph, Pittsburg, Pa. Converting copper matte | 746,249 | Dec. 8 | 1719 | 386 | 107 | 1486 |
| Baggaley, Ralph, Pittsburg, Pa. Car-loading apparatus | 746,250 | Dec. 8 | 1721 | 387 | 107 | 1487 |
| Baggaley, Ralph, Pittsburg, Pa. Arresting arsenic fumes | 746,251 | Dec. 8 | 1724 | 388 | 107 | 1487 |
| Baggaley, Ralph, Pittsburg, Pa. Loading apparatus for cars | 746,252 | Dec. 8 | 1725 | 388 389 | 107 | 1488 |
| Baggaley, Ralph, Pittsburg, Pa. Loading apparatus | 746,253 | Dec. 8 | 1728 | 389 390 | 107 | 1488 |
| Baggaley, Ralph, Pittsburg, Pa. Apparatus for arresting impurities from furnace-gases | 746,254 | Dec. 8 | 1730 | 390 | 107 | 1488 |
| Baggaley, Ralph, Pittsburg, Pa. Apparatus for the treatment of furnace-gases | 746,255 | Dec. 8 | 1731 | 390 391 392 | 107 | 1489 |
| Baggaley, Ralph, Pittsburg, Pa. Apparatus for precipitating injurious fumes from smelter-gases | 746,256 | Dec. 8 | 1734 | 392 393 | 107 | 1489 |
| Baggaley, Ralph, Pittsburg, Pa. Apparatus for precipitating injurious fumes from smelter-gases | 746,257 | Dec. 8 | 1737 | 394 | 107 | 1490 |
| Baggaley, Ralph, Pittsburg, Pa. Copper-smelting furnace | 746,258 | Dec. 8 | 1739 | 394 395 | 107 | 1490 |
| Baggaley, Ralph, Pittsburg, Pa. Recovering values from smelter-gases | 746,259 | Dec. 8 | 1740 | 395 | 107 | 1490 |
| Baggaley, Ralph, Pittsburg, Pa. Recovering values from silicious ores | 746,260 | Dec. 8 | 1741 | 395 | 107 | 1491 |
| Baggaley, Ralph, Pittsburg, Pa. Apparatus for removing impurities from furnace-gases | 746,261 | Dec. 8 | 1744 | 395 | 107 | 1491 |

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| | | | Spec. | Drg. | Vol. | Page. |
| Baggaley, Ralph, Pittsburg, Pa., and O. S. Garretson, Buffalo, N. Y.; said Garretson assignor to Garretson Furnace Company, Pittsburg, Pa. Slag-furnace | 727,057 | May 5 | 460 | 96, 97 | 104 | 101 |
| Baggerman, Peter C., assignor to St. Louis Car Company, St. Louis, Mo. Ratchet-handle for car-brakes | 725,393 | Apr. 14 | 1798 | 403 | 103 | 1565 |
| Baggett, Henry, London, England. Electric-arc lamp | 720,312 | Feb. 10 | 1670 | 380 | 102 | 1192 |
| Baggett, Henry, London, England. Electric-arc lamp | 720,772 | Feb. 17 | 2529 | 583 | 102 | 1385 |
| Baggett, Robert A., Belton, Tex. Combination-tool | 738,753 | Sept. 15 | 2429 | 533 | 106 | 551 |
| Bagnall, Alfred E. (See Beale and Bagnall.) | | | | | | |
| Bahle, Ole O., Fergus Falls, Minn. Bolt | 732,817 | July 7 | 256 | 57 | 105 | 51 |
| Bahler, Frederick, Spokane, Wash. Draft-equalizer | 736,191 | Aug. 11 | 2179 | 468 | 105 | 1465 |
| Bahn, Gustavus A., Austin, Tex. Sulfuric-acid process of extracting precious metals from solutions | 731,839 | June 23 | 4270 | | 104 | 2064 |
| Bähr, Gustav, Charlottenburg, Germany. Press for the manufacture of stove-tiles or the like | 722,661 | Mar. 17 | 1881 | 417, 418 | 103 | 434 |
| Bahr, Joseph C., San Francisco, Cal. Mouthpiece for speaking-tubes | 718,809 | Jan. 20 | 2451 | 542 | 102 | 550 |
| Baildon, Samuel R., London, England. Punka | 741,438 | Oct. 13 | 1993 | 441, 442 | 106 | 1691 |
| Bailey, Charles A., Cromwell, Conn. Cooling device for explosive-engines | 720,995 | Feb. 17 | 2934 | 672 | 102 | 1471 |
| Bailey, Charles A., Cromwell, Conn. Toy pistol | 725,534 | Apr. 14 | 2074 | 469 | 103 | 1624 |
| Bailey, Charles A., Cromwell, Conn. Winding-arbor for paper-tube machines | 743,217 | Nov. 3 | 767 | 167 | 107 | 161 |
| Bailey, Charles A., Cromwell, Conn. Primer | 745,761 | Dec. 1 | 791 | 182 | 107 | 1267 |
| Bailey, Charles H., assignor to Fuller & Warren Company, Troy, N. Y. Detachable band for stoves | 720,551 | Feb. 17 | 2117 | 488 | 102 | 1301 |
| Bailey, Charles J., Newton, Mass. Massage apparatus | 718,594 | Jan. 20 | 2061 | 448 | 102 | 473 |
| Bailey, Daniel H. (See Ridgway and Bailey.) | | | | | | |
| Bailey, Drury D. and J. O., Banner, Cal. Roasting-furnace attachment | 744,992 | Nov. 24 | 4211 | 911 | 107 | 943 |
| Bailey, Edmond H. (See Overholt, James W., assignor.) | | | | | | |
| Bailey, Frank T., and C. S. Mickey, Baltimore, Md. Third-rail conductor | 741,613 | Oct. 20 | 2359 | 528 | 106 | 1785 |
| Bailey, Fred L., St. Louis, Mo., assignor to Curtain Supply Company, Chicago, Ill. Curtain-fixture | 741,572 | Oct. 13 | 2278 | 508 | 106 | 1751 |
| Bailey, George C., Bluefield, W. Va. Indicator | 721,772 | Mar. 3 | 197 | 46 | 103 | 43 |
| Bailey, George C., Bluefield, W. Va. Heater for locomotive-engine cabs | 742,559 | Oct. 27 | 4199 | 945 | 106 | 2178 |
| Bailey, George D., Detroit, Mich. Display-stand | 737,314 | Aug. 25 | 4271 | 949 | 105 | 1941 |
| Bailey, James O. (See Bailey, Drury D. and J. O.) | | | | | | |
| Bailey, James W., assignor of one-half to L. E. Lynde, Merrimac, Mass. Car-sign | 737,815 | Sept. 1 | 487 | 108 | 106 | 109 |
| Bailey, John J., New York, N. Y. Curing-tube for pickling meat | 725,916 | Apr. 21 | 2772 | 631 | 103 | 1788 |
| Bailey, John M., Danville, Ky. Railway surfacing and lining device | 738,754 | Sept. 15 | 2430 | 533 | 106 | 552 |
| Bailey, John W., Jersey City, N. J., assignor to Union Lead and Oil Company. Making litharge | 733,896 | July 14 | 2158 | 509 | 105 | 470 |
| Bailey, Leonard, Wethersfield, Conn. Copying-press | 724,653 | Apr. 7 | 432 | 105 | 103 | 1262 |
| Bailey, Leonard, Wethersfield, and W. Eddy, Hartford, Conn.; said Eddy assignor to said Bailey. Copying-press | 726,840 | May 5 | 11 | 3 | 104 | 5 |
| Bailey, Lester J., Claflin, Kans. Rattle | 727,258 | May 5 | 810 | 174 | 104 | 174 |
| Bailey, Mahlon G., San Jose, Cal. Rule attachment | 718,300 | Jan. 13 | 1450 | 322 | 102 | 328 |
| Bailey, Nelson E., assignor of one-half to W. F. Keehn, Lake Crystal, Minn. Draft-equalizer | 718,239 | Jan. 13 | 1334 | 295 | 102 | 302 |
| Bailey, Ralph W., West Newbury, Mass. Fine adjustment for protractors | 741,292 | Oct. 13 | 1711 | 382 | 106 | 1628 |
| Bailey, Robert J., Norris City, Ill. Washing-machine | 731,840 | June 23 | 4271 | 951 | 104 | 2064 |
| Bailey, Samuel R., Amesbury, Mass. Axle-nut | 733,532 | July 14 | 1497 | 356 | 105 | 333 |
| Bailey, Samuel R., Amesbury, Mass. Axle-nut | 733,533 | July 14 | 1498 | 357 | 105 | 333 |
| Bailey, Theodore O., Nellie, Cal. Cutting apparatus for mowers, &c | 726,392 | Apr. 28 | 3647 | 827 | 103 | 1984 |
| Bailey, W. H. (See De Latimer, Walter, assignor.) | | | | | | |
| Bailey, William H., Monogah, W. Va. End-gate fastener | 731,739 | June 23 | 4090 | 913 | 104 | 2023 |
| Bailey, William J., Newark, N. J. Cigar-piercer | 729,715 | June 2 | 336 | 76 | 104 | 1198 |
| Bailey, William J., Newark, N. J. Cigar-piercing device | 735,333 | Aug. 4 | 564 | 115 | 105 | 1102 |
| Bailey, William J., Newark, N. J. Cigar-piercer | 741,893 | Nov. 24 | 4029 | 869 | 107 | 907 |
| Bailey, William T., Elmira, N. Y. Printing-machine | 745,134 | Nov. 24 | 4507 | 976 | 107 | 1005 |
| Bain, John W., and C. C. Durborow, Altoona, Pa. Liquid and gaseous fuel burner | 728,832 | May 26 | 3802 | 847, 848 | 104 | 861 |
| Bainville, Auguste, Nanterre, France. Electric-accumulator plate | 719,418 | Feb. 3 | 11 | 3 | 102 | 829 |
| Bair, Michael M., assignor to Société Anonyme le Carbone, Levallois-Perret, France. Galvanic battery | 722,662 | Mar. 17 | 1883 | 418 | 103 | 435 |
| Baird, Charles W., Millersburg, Iowa. Sweep-mill | 739,373 | Sept. 22 | 3542 | 791 | 106 | 805 |
| Baird, Clarence D., Alexandria, Tenn. Calculating and recording machine | 748,039 | Dec. 29 | 5076 | 1148, 1149 | 107 | 2295 |
| Baird, Edward P., Evanston, assignor to Baird Manufacturing Company, Chicago, Ill. Signal device for telephone systems | 728,833 | May 26 | 3804 | 848 | 104 | 862 |
| Baird, James R., *et al.* (See McGuire, Peter J., assignor.) | | | | | | |
| Baird, Jesse A., and E. O. H. H. Sass, Wilkinsburg, Pa., assignors to Westinghouse Electric & Manufacturing Company. Oil-distributing ring | 740,075 | Sept. 29 | 4889 | 1095 | 106 | 1111 |
| Baird, John E., Utica, N. Y. Potato-digger | 748,464 | Dec. 29 | 5864 | 1334 | 107 | 2466 |
| Baird Manufacturing Company. (See Baird, Edward P., assignor.) | | | | | | |
| Baird Manufacturing Company. (See Froelich, Henry C., assignor.) | | | | | | |
| Baird, Robert, West Orange, N. J. Hosiery-printing machine | 747,355 | Dec. 22 | 3784 | 851, 852, 853 | 107 | 1983 |
| Bakeley, Charles, assignor of one-half to C. Akers, Covington, Ky. Socket for incandescent electric lamps | 748,337 | Dec. 29 | 5615 | 1280 | 107 | 2410 |
| Bakeley, Charles, assignor of one-half to C. Akers, Covington, Ky. Socket for incandescent electric lamps | 748,338 | Dec. 29 | 5617 | 1280 | 107 | 2411 |
| Baker, Abner D., Swanton, Ohio. Valve-gear for engines | 721,994 | Mar. 3 | 641 | 142 | 103 | 139 |
| Baker, Adolph. (See Hengen, Jacob, assignor.) | | | | | | |
| Baker, Albert A., assignor to Farrell Foundry and Machine Company, Ansonia, Conn. Grinding-machine | 747,924 | Dec. 29 | 4850 | 1096 | 107 | 2244 |
| Baker, Andrew H., assignor of one-half to O. F. Curtis, Brockton, Mass. Boot or shoe holder | 728,533 | May 19 | 3224 | 715 | 104 | 723 |
| Baker, Anna, *et al.* (See Bower, Herman A., assignor.) | | | | | | |
| Baker, B. Frank, administrator. (See Vail, Horton.) | | | | | | |
| Baker Brothers. (See Colburn, Leslie H., assignor.) | | | | | | |
| Bäker, Carl, Berlin, Germany. Time-fuse for artillery projectiles | 728,151 | May 12 | 2495 | 555 | 104 | 548 |
| Baker, Charles, Delaware Township, Defiance county, Ohio. Feed-trough | 731,841 | June 23 | 4273 | 951 | 104 | 2065 |
| Baker, Charles A. (See Lamb, George L., assignor.) | | | | | | |
| Baker, Charles A., Waukesha, Wis. Wheelbarrow | 721,931 | Mar. 3 | 523 | 115 | 103 | 116 |
| Baker, Charles A., Waukesha, Wis. Wheelbarrow | 740,214 | Sept. 29 | 5141 | 1154 | 106 | 1164 |
| Baker, Charles A., Newark, N. J. Filter | 739,809 | Sept. 29 | 4374 | 980 | 106 | 1004 |
| Baker, Charles E., Trenton, Ohio. Railway signal device | 721,136 | Feb. 24 | 3245 | 743 | 102 | 1559 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|
| | | | Spec. | Drg. | Vol. | Page. |
| Baker, Charles E., Bloomdale, Ohio. Anchor device for engine-beds | 728,834 | May 26 | 3805 | 848 | 104 | 862 |
| Baker, Charles E., and A. W. Burwell, Cleveland, Ohio. Electrolytic apparatus for recovering metals from their compounds | 734,499 | July 28 | 3333 | 780 | 105 | 753 |
| Baker, Charles E., and A. W. Burwell, Cleveland, Ohio. Treating tellurid ores of gold and silver | 739,138 | Sept. 15 | 3123 | 691 | 106 | 699 |
| Baker, Charles E., and A. W. Burwell, Cleveland, Ohio. Electrolytic process of recovering metals from their compounds | 739,139 | Sept. 15 | 3125 | 691 | 106 | 699 |
| Baker, Charles E., and A. W. Burwell, Cleveland, Ohio. Apparatus for oxidizing metals dissolved in mercury | 739,140 | Sept. 15 | 3126 | 691 | 106 | 700 |
| Baker, Charles E., and A. W. Burwell, Cleveland, Ohio. Treating refractory complex ores of gold and silver | 739,374 | Sept. 22 | 3544 | 792 | 106 | 805 |
| Baker, Charles E., and A. W. Burwell, Cleveland, Ohio. Producing sodium peroxid | 739,375 | Sept. 22 | 3546 | ------ | 106 | 806 |
| Baker, Charles E., and A. W. Burwell, Cleveland, Ohio. Treating ores | 741,439 | Oct. 13 | 1994 | 442 | 106 | 1691 |
| Baker, Charles F. (See Curtis, George A., assignor.) | | | | | | |
| Baker, Charles H., Lynn, Mass. Socket for telegraph-poles | 722,663 | Mar. 17 | 1884 | 418 | 103 | 435 |
| Baker, Charles R., Philadelphia, Pa. Automatic feed-stopping mechanism for embossing-rolls | 731,091 | June 16 | 2865 | 637 | 104 | 1759 |
| Baker, Charles S. L., St. Joseph, Mo. Electromechanical automatic signaling and collision-preventing device | 718,071 | Jan. 13 | 1034 | 231 | 102 | 238 |
| Baker, Dickerson G., Willimantic, Conn., assignor to American Thread Company. Machine for packing bobbins, cops, or the like | 730,432 | June 9 | 1653 | 370<br>371 | 104 | 1481 |
| Baker, Edgar H., Whitebird, Idaho. Sash-fastener | 736,474 | Aug. 18 | 2677 | 588 | 105 | 1589 |
| Baker, Edward F., Passaic, N. J. Sticky fly-paper | 740,076 | Sept. 29 | 4890 | 1096 | 106 | 1112 |
| Baker, Florence G., Asheville, N. C. Keyboard attachment for stringed instruments | 745,557 | Dec. 1 | 449 | 106 | 107 | 1193 |
| Baker, Francis M., Fond du Lac, Wis. Syringe | 730,596 | June 9 | 1962 | 436 | 104 | 1550 |
| Baker, Francis M., Fond du Lac, assignor of one-fourth to P. J. Zeidler, Lomira, Wis. Hydrocarbon-burner | 717,795 | Jan. 6 | 524 | 117<br>118 | 102 | 113 |
| Baker, Frank L., assignor to Remington Machine Company, Wilmington, Del. Can-capping machine | 724,240 | Mar. 31 | 4889 | 1094<br>1095 | 103 | 1079 |
| Baker, Frederick H. (See Baker, Shevlin, and Baker.) | | | | | | |
| Baker, George O., New York, N. Y., assignor to General Electric Company. Electric-motor system | 730,860 | June 16 | 2418 | 533 | 104 | 1664 |
| Baker, George S. (See Baker, William K. and G. S.) | | | | | | |
| Baker, George S., Willesden Junction, England. Baker's oven | 741,757 | Oct. 20 | 2639 | 589<br>590 | 106 | 1843 |
| Baker, Gilbert L., Waterford, Cal. Combination-tool | 725,651 | Apr. 21 | 2311 | 522 | 103 | 1688 |
| Baker, Henry R., North Attleboro, Mass., assignor to R. F. Simmons Company. Clasp | 745,990 | Dec. 8 | 1245 | 281 | 107 | 1383 |
| Baker, Hugh C., Jr., New York, N. Y. Construction of manholes for conduits | 734,153 | July 21 | 2688 | 632 | 105 | 602 |
| Baker, Hugh C., Jr., New York, N. Y. Cable-holder for manholes | 743,805 | Nov. 10 | 1975 | 420 | 107 | 437 |
| Baker, Jacob S., Glenrock, Pa. Spectacles | 732,500 | June 30 | 5571 | 1234 | 104 | 2346 |
| Baker, James H., assignor to Jas. H. Baker Manufacturing Company, Allegheny, Pa. Apparatus for making chains | 718,810 | Jan. 20 | 2452 | 543 | 102 | 550 |
| Baker, James H., assignor to Jas. H. Baker Manufacturing Company, Allegheny, Pa. Manufacture of chains | 718,811 | Jan. 20 | 2453 | 543 | 102 | 550 |
| Baker, James H., Allegheny, assignor to Jas. H. Baker Manufacturing Company, Pittsburg, Pa. Brake-beam | 718,812 | Jan. 20 | 2454 | 543<br>544 | 102 | 551 |
| Baker, James H., Allegheny, assignor to Jas. H. Baker Manufacturing Company, Pittsburg, Pa. Bending-machine | 746,263 | Dec. 8 | 1746 | 396 | 107 | 1491 |
| Baker, James H., assignor to Baker & Shevlin Company, Saratoga Springs, N. Y. Feed-box for wood-chipping machines | 733,691 | July 14 | 1758 | 417 | 105 | 387 |
| Baker, James H., assignor to Baker and Shevlin Company, Saratoga Springs, N. Y. Treating sulfite, ground wood, or other paper-stock | 735,444 | Aug. 4 | 792 | 168<br>169 | 105 | 1150 |
| Baker, James H., G. F. Shevlin, and F. H. Baker, assignors to Baker and Shevlin Company, Saratoga Springs, N. Y. Centrifugal pulp-screen | 727,878 | May 12 | 1997 | 445 | 104 | 442 |
| Baker, James H., G. F. Shevlin, and F. H. Baker, assignors to Baker and Shevlin Company, Saratoga Springs, N. Y. Device for oiling and cooling bearings of vertical shafts | 738,513 | Sept. 8 | 1956 | 427 | 106 | 435 |
| Baker, Jay H., Canastota, N. Y. Weeder | 718,187 | Jan. 13 | 1241 | 273 | 102 | 283 |
| Baker, Jefferson C. (See Roberts, Baker, and Ross.) | | | | | | |
| Baker, John, Jr., San Francisco, Cal. Means for loading and discharging oil | 729,992 | June 2 | 872 | 194 | 104 | 1305 |
| Baker, John, Valparaiso, Ind. Machine for cleaning and scalding vegetables, &c. | 731,092 | June 16 | 2867 | 637 | 104 | 1760 |
| Baker, John G., assignor to Enterprise Manufacturing Company of Pennsylvania, Philadelphia, Pa. Cherry-stoner | 724,241 | Mar. 31 | 4894 | 1095 | 103 | 1080 |
| Baker, John M., Indianapolis, Ind. Mop-wringer | 727,879 | May 12 | 2000 | 445 | 104 | 443 |
| Baker, John W., *et al.* (See Hyer, Lincoln H., assignor.) | | | | | | |
| Baker, Lewis. (See Bright, Alvin J., assignor.) | | | | | | |
| Baker, Lewis A. (See Ruch and Baker.) | | | | | | |
| Baker, Lorenzo B., Racine, Wis. Ladder | 727,259 | May 5 | 810 | 175 | 104 | 175 |
| Baker, Malcolm H., East Liberty, Pa., assignor to Westinghouse Electric & Manufacturing Company. Shunt-wound series arc-lamp | 727,569 | May 12 | 1402 | 316 | 104 | 320 |
| Baker, Malcolm H., East Liberty, Pa., assignor to Westinghouse Electric and Manufacturing Company. Alternating-current arc-lamp | 729,114 | May 26 | 4295 | 950 | 104 | 959 |
| Baker, Malcolm H., East Liberty, Pa., assignor to Westinghouse Electric and Manufacturing Company. Electric-arc lamp | 737,315 | Aug. 25 | 4272 | 949 | 105 | 1942 |
| Baker, Malcolm H., East Liberty, Pa., assignor to Westinghouse Electric & Manufacturing Company. Regulating device for electric circuits | 748,144 | Dec. 29 | 5292 | 1203 | 107 | 2342 |
| Baker, Malcolm H., East Liberty, Pa., assignor to Westinghouse Electric & Manufacturing Company. Regulating electric circuits | 748,145 | Dec. 29 | 5293 | 1203 | 107 | 2342 |
| Baker, Malcolm H., East Liberty, Pa., assignor to Westinghouse Electric and Manufacturing Company. Constant-power-factor regulator for electric circuits | 748,146 | Dec. 29 | 5295 | 1203 | 107 | 2342 |
| Baker, Malcolm H., East Liberty, Pa., assignor to Westinghouse Electric and Manufacturing Company. Regulating electric circuits | 748,147 | Dec. 29 | 5297 | 1203 | 107 | 2343 |
| Baker, Malcolm H., Pittsburg, Pa., assignor to Westinghouse Electric and Manufacturing Company. Cut-out for arc-lamps | 748,148 | Dec. 29 | 5299 | 1204 | 107 | 2343 |
| Baker, Malcolm H., New York, N. Y., assignor to Westinghouse Electric & Manufacturing Company. Regulating device for electric circuits | 748,149 | Dec. 29 | 5301 | 1204 | 107 | 2343 |
| Baker, Norman G., Muscatine, Iowa. Automatic centering and drilling button-machine | 722,796 | Mar. 17 | 2150 | 481 | 103 | 489 |
| Baker, Philip, Memphis, Mo. Car-coupling | 735,695 | Aug. 11 | 1275 | 273 | 105 | 1269 |
| Baker, Reuben C., Coalinga, Cal. Drilling-bit | 747,575 | Dec. 22 | 4160 | 935 | 107 | 2069 |
| Baker, Richard J., El Paso, Tex. Stamp-mill | 733,933 | July 21 | 2234 | 525<br>526 | 105 | 504 |
| Baker, Riley, Otisco, Ind., assignor of one-half to A. O. Dailey, St. Louis, Mo. Adjustable implement-holder | 730,509 | June 9 | 1807 | 403 | 104 | 1515 |
| Baker, Riley A. (See Blakeney and Baker.) | | | | | | |
| Baker, Samuel A., Eastport, Me., assignor, by mesne assignments, to American Key Can Company, Chicago, Ill. Machine for soldering cans | 738,972 | Sept. 15 | 2825 | 626<br>627 | 106 | 638 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Baker & Shevlin Company. (See Baker, James H., assignor.) | | | | | | |
| Baker and Shevlin Company. (See Baker, Shevlin, and Baker, assignors.) | | | | | | |
| Baker-Vawter Company. (See Peugeot and Shoemaker, assignors.) | | | | | | |
| Baker, Wallace L., Painesville, Ohio. Trolley contact device | 742,378 | Oct. 27 | 3867 | 869 | 106 | 2110 |
| Baker, Walter C., Cleveland, Ohio. Y-union for trussed axles | 731,093 | June 16 | 2869 | 637 | 104 | 1760 |
| Baker, Willard D., Rogers, Ark. Safety-cushion for elevators | 747,357 | Dec. 22 | 3793 | 853 | 107 | 1985 |
| Baker, William, Sr., Claysville, Ky. Box-fastener | 724,242 | Mar. 31 | 4895 | 1096 | 103 | 1080 |
| Baker, William E., Minneapolis, Minn. Manufacturing coffee | 726,812 | Apr. 28 | 4462 | 1007 | 103 | 2147 |
| Baker, William E., Minneapolis, Minn. Treating coffee | 736,346 | Aug. 18 | 2448 | 535 | 105 | 1541 |
| Baker, William H., *et al.* (See Sargent, Charles E., assignor.) | | | | | | |
| Baker, William H., New York, N. Y. Double-acting combination-lock valve for barrels, &c | 743,134 | Nov. 3 | 606 | 131 | 107 | 126 |
| Baker, William H., Central Falls, R. I., and F. E. Kip, Montclair, N. J. Weft-case for loom-shuttles | 724,075 | Mar. 31 | 4536 | 1020 | 103 | 1009 |
| Baker, William H., Central Falls, R. I., and F. E. Kip, Montclair, N. J. Warp and weft stopping mechanism for looms | 727,733 | May 12 | 1724 | 387 / 388 | 104 | 388 |
| Baker, William H., Central Falls, R. I., and F. E. Kip, Montclair, N. J. Weft replenishing and controlling mechanism for looms | 739,573 | Sept. 22 | 3922 | 877 / 878 | 106 | 888 |
| Baker, William H., Central Falls, R. I., and F. E. Kip, Montclair, N. J., assignors to Kip-Armstrong Company. Warp stop-motion for looms | 741,951 | Oct. 20 | 3007 | 668 | 106 | 1921 |
| Baker, William I., St. Louis, Mo. Time feed-box | 727,058 | May 5 | 462 | 97 | 104 | 101 |
| Baker, William J., Newport, Ky. Metal clip | 718,301 | Jan. 13 | 1451 | 322 | 102 | 328 |
| Baker, William J., Scarborough, England. Steam-separator | 722,272 | Mar. 10 | 1160 | 255 / 256 | 103 | 262 |
| Baker, William J., Southgate, Ky. Pliers for clamping clips on wires | 732,501 | June 30 | 5572 | 1238 | 104 | 2346 |
| Baker, William J., Southgate, Ky. Collar-fastener | 745,135 | Nov. 24 | 4512 | 977 | 107 | 1005 |
| Baker, William K. and G. S., London, England. Whisking, mixing, or similar machine | 722,664 | Mar. 17 | 1885 | 419 / 420 | 103 | 435 |
| Baker, Willis, and S. Horn, Augusta, assignors of one-fifth to J. R. Miller, Lake, Okla. Ter. Foot-power hammer | 747,925 | Dec. 29 | 4856 | 1096 | 107 | 2246 |
| Balassa, Wilhelm, Vienna, Austria-Hungary. Elastic tire for vehicles | 737,816 | Sept. 1 | 489 | 108 | 106 | 110 |
| Balch, David M., assignor of one-half to A. P. Stephens, Coronado, Cal. Extracting potassium chlorid from fuci and algæ | 747,291 | Dec. 15 | 3660 | ------ | 107 | 1940 |
| Balch, Glen E., New York, N. Y. Apparatus for relieving grounded vessels | 727,059 | May 5 | 463 | 97, 98 | 104 | 101 |
| Balcome, Herbert A., Jamaica Plain, assignor to B. F. Sturtevant Company, Boston, Mass. Drum-armature | 720,511 | Feb. 10 | 2011 | 463 | 102 | 1263 |
| Baldenweg, Alexander, assignor to C. F. Bally Sons, Schoenenwerd, Switzerland. Machine for manufacturing dowels or rivets | 739,810 | Sept. 29 | 4376 | 981 | 106 | 1005 |
| Baldenweg, Alexander, assignor to C. F. Bally Sons, Schoenenwerd, Switzerland. Dowel forming and setting machine | 739,811 | Sept. 29 | 4378 | 982 | 106 | 1005 |
| Baldt, Frederick, Sr. (See Zell, Thomas B., assignor.) | | | | | | |
| Baldt, Frederick, Sr., Chester, Pa. Fusible pattern | 724,243 | Mar. 31 | 4896 | ------ | 103 | 1081 |
| Baldwin, Alfred, Goffs Falls, N. H. Automatic tension device for loom-shuttles | 717,796 | Jan. 6 | 527 | 118 | 102 | 114 |
| Baldwin, Alfred, Goffs Falls, N. H. Tension device for loom-shuttles | 725,652 | Apr. 21 | 2314 | 522 | 103 | 1689 |
| Baldwin, Alfred C. (See Whitcraft, Edgar, assignor.) | | | | | | |
| Baldwin, Alfred S., Syracuse, N. Y. Running-gear for vehicles | 718,072 | Jan. 13 | 1036 | 231 | 102 | 238 |
| Baldwin, Charles B., Brooklyn, N. Y. Box-fastener | 719,553 | Feb. 3 | 259 | 60 | 102 | 878 |
| Baldwin, David S., Oakpark, Ill. Mail-bag holder | 720,097 | Feb. 10 | 1275 | 291 | 102 | 1110 |
| Baldwin, Frank S., Newark, N. J. Computing and recording machine | 745,991 | Dec. 8 | 1246 | 281 / 282 | 107 | 1383 |
| Baldwin, Frederick M., Winterpark, Fla. Sanitary-napkin holder | 733,120 | July 7 | 754 | 182 | 105 | 159 |
| Baldwin, Henry S., Lynn, Mass., assignor, by mesne assignments, to General Electric Company. Multiple-cylinder steam-engine | 747,926 | Dec. 29 | 4857 | 1097 | 107 | 2246 |
| Baldwin, Herbert M., New York, N. Y. Vibrating hammer | 723,572 | Mar. 24 | 3575 | 799 | 103 | 792 |
| Baldwin, James E., East Williston, assignor to Pulverized Coal Stoker Company, New York, N. Y. Apparatus for feeding pulverized fuel to furnaces | 735,932 | Aug. 11 | 1713 | 365 / 366 | 105 | 1365 |
| Baldwin, James E., East Williston, assignor to A. A. Low and A. A. Day, Brooklyn, N. Y. Valve-operating device for steam-generators | 747,843 | Dec. 22 | 4665 | 1054 / 1055 | 107 | 2183 |
| Baldwin, James E., F. N. Van Zandt, and A. V. T. Day, assignors to Ideal Fuel-Feeder Company, Brooklyn, N. Y. Apparatus for feeding fine fuel to furnaces | 732,031 | June 30 | 4641 | 1037 / 1038 | 104 | 2156 |
| Baldwin, James L., Chicago, Ill. Cash-carrier | 745,951 | Dec. 1 | 1167 | 262 | 107 | 1349 |
| Baldwin, Josie, Tremont, Me. Chest-bandage | 728,434 | May 19 | 3037 | 667 | 104 | 685 |
| Baldwin, Le Roy W. (See Van Guysling and Romans, assignors.) | | | | | | |
| Baldwin, Louis W., Jersey City, N. J. Coin-operated vending-machine | 726,617 | Apr. 28 | 4103 | 926 / 927 | 103 | 2072 |
| Baldwin, Louis W., Jersey City, N. J. Vending-machine | 727,260 | May 5 | 811 | 175 | 104 | 175 |
| Baldwin, Orrin R., Detroit, Mich. Cultivator. (Reissue) | 12,186 | Dec. 22 | 4841 | 1093 | 107 | 2221 |
| Baldwin, Robert B. (See Harger and Baldwin.) | | | | | | |
| Baldwin, Rollin A., South Norwalk, Conn., assignor to Baldwin and Rowland Switch Company. Electromagnetic railway-switch | 736,055 | Aug. 11 | 1954 | 416 | 105 | 1417 |
| Baldwin and Rowland Switch Company. (See Baldwin, Rollin A., assignor.) | | | | | | |
| Baldwin, Stephen W., New York, assignor to C. C. Bradley, Syracuse, N. Y. Thill-coupling | 747,292 | Dec. 15 | 3661 | 827 | 107 | 1940 |
| Baldwin, William D., administrator. (See Neild and Campbell.) | | | | | | |
| Baldwin, William D., New York, and A. Sundh, Yonkers, N. Y., assignors to Otis Elevator Company, East Orange, N. J. Electric capstan | 741,995 | Oct. 20 | 3108 | 693 | 106 | 1940 |
| Bales, William C., Coolidge, Ga. Railway joint and chair | 741,440 | Oct. 13 | 1996 | 442 | 106 | 1692 |
| Balko, William, New York, N. Y. Music-leaf turner | 729,834 | June 2 | 582 | 128 | 104 | 1246 |
| Balkwill, Alfred J., Wakefield, England. Slide-valve arrangement for steam-engine cylinders | 746,776 | Dec. 15 | 2667 | 615 / 616 | 107 | 1714 |
| Ball, Augustus A., Jr., Lynn, Mass. Pump-regulator | 726,841 | May 5 | 13 | 3, 4 | 104 | 6 |
| Ball, Augustus A., Jr., Lynn, assignor to E. Thomson, Swampscott, Mass. Steering mechanism for vehicles | 723,975 | Mar. 31 | 4335 | 972 / 973 | 103 | 970 |
| Ball, Augustus A., Jr., Lynn, assignor to E. Thomson, Swampscott, Mass. Steering mechanism for vehicles | 723,976 | Mar. 31 | 4339 | 973 / 974 | 103 | 971 |
| Ball, Augustus A., Jr., Lynn, assignor to E. Thomson, Swampscott, Mass. Self-propelling vehicle | 725,394 | Apr. 14 | 1800 | 404 | 103 | 1565 |
| Ball, Augustus A., Jr., Lynn, assignor to E. Thomson, Swampscott, Mass. Flash-boiler | 733,613 | July 14 | 1635 | 386 / 387 | 105 | 363 |
| Ball, Augustus A., Jr., Lynn, Mass., assignor to General Electric Company. Hoisting-motor | 733,614 | July 14 | 1637 | 387 / 388 | 105 | 364 |
| Ball, Augustus A., Jr., Lynn, Mass., assignor, by mesne assignments, to General Electric Company. Exhaust-relief for steam-vehicles | 747,927 | Dec. 29 | 4860 | 1097 | 107 | 2247 |
| Ball Brothers Glass Manufacturing Company. (See Bingham, Alvah L., assignor.) | | | | | | |
| Ball, Charles, and H. E. Nock, assignors to C. C. Ball, Providence, R. I. Manufacture of steel dies | 722,351 | Mar. 10 | 1294 | 287 | 103 | 291 |

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| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | Spec. | Des. | Vol. | Page. |
| Ball, Charles C. (See Ball and Nock, assignors.) | | | | | | |
| Ball, Cortland, Indianapolis, Ind. Hydrocarbon-burner | 729,115 | May 26 | 4297 | 950 | 104 | 959 |
| Ball, Frederic J., New York, N. Y. Reversing mechanism | 743,053 | Nov. 3 | 455 | 99 | 107 | 95 |
| Ball, Henry P., assignor to General Incandescent Arc Light Company, New York, N. Y. Circuit-breaker | 721,273 | Feb. 24 | 3513 | 799 | 102 | 1612 |
| Ball, Henry P., assignor to General Incandescent Arc Light Company, New York, N. Y. Circuit-closing device | 725,195 | Apr. 14 | 1449 | 328 | 103 | 1491 |
| Ball, Henry P., assignor to General Incandescent Arc Light Company, New York, N. Y. Circuit-breaker | 732,253 | June 30 | 5089 | 1132 | 104 | 2247 |
| Ball, Henry P., assignor to General Incandescent Arc Light Company, New York, N. Y. Circuit-breaker | 732,254 | June 30 | 5090 | 1132 | 104 | 2248 |
| Ball, Henry P., assignor to General Incandescent Arc Light Company, New York, N. Y. Oil-switch | 732,255 | June 30 | 5092 | 1132<br>1133 | 104 | 2249 |
| Ball, Henry P., assignor to General Incandescent Arc Light Company, New York, N. Y. Electric switch | 732,672 | June 30 | 5889 | 1306<br>1307 | 104 | 2417 |
| Ball, Henry P., New York, N. Y., assignor of one-half to S. Insull, Chicago, Ill. Perforating device for music-rolls | 736,571 | Aug. 18 | 2853 | 625 | 105 | 1626 |
| Ball, Henry P., New York, N. Y., assignor of one-half to S. Insull, Chicago, Ill. Perforating device for music-rolls | 747,358 | Dec. 22 | 3795 | 854 | 107 | 1985 |
| Ball, John H. (See Robinson and Ball.) | | | | | | |
| Ball, Joseph P., Frankford, Pa. Rheostat | 725,196 | Apr. 14 | 1450 | 328 | 103 | 1491 |
| Ball, Martin H., Watervliet, N. Y. Outside calipers | 720,773 | Feb. 17 | 2531 | 584 | 102 | 1386 |
| Ball, Slade L. (See Heffner and Ball.) | | | | | | |
| Ball, Warren J., Leetonia, Ohio. Molder's flask-pin | 726,242 | Apr. 28 | 3349 | 760 | 103 | 1923 |
| Ball, William E., Zanesville, Ohio. Attachment for index-files | 725,197 | Apr. 14 | 1452 | 328 | 103 | 1492 |
| Ballard, Charles W. (See Sicklesteel and Ballard.) | | | | | | |
| Ballard, Frank C., Hawarden, Iowa. Envelop-moistener | 735,051 | Aug. 4 | 8 | 2 | 105 | 982 |
| Ballard, Samuel J., assignor of three-fourths to C. W. Brown, Los Angeles, Cal. Guard for speech receivers or transmitters | 719,987 | Feb. 10 | 1036 | 242 | 102 | 1059 |
| Ballard, Samuel J., assignor of three-fourths to C. W. Brown, Los Angeles, Cal. Guard for speech receivers and transmitters | 732,915 | July 7 | 390 | 95 | 105 | 84 |
| Ballard, Samuel J., assignor of three-fourths to C. W. Brown, Los Angeles, Cal. Appliance for sound-transmitters | 740,512 | Oct. 6 | 245 | 49 | 106 | 1298 |
| Ballasch, George F. (See Farley and Ballasch.) | | | | | | |
| Ballerstedt, William, Los Angeles, Cal. Motor, meter, or pump | 732,818 | July 7 | 227 | 57 | 105 | 51 |
| Ballou & Company, B. A. (See Morehouse, Eugene W., assignor.) | | | | | | |
| Ballou, Ernest H., Binghamton, N. Y., assignor of one-half to E. H. Beard, Academy, W. Va. Alarm system | 741,573 | Oct. 13 | 2280 | 509 | 106 | 1752 |
| Bally, Oscar, Mannheim, assignor to Badische Anilin & Soda Fabrik, Ludwigshafen-on-the-Rhine, Germany. Green anthracene dye and making same | 723,125 | Mar. 17 | 2724 | ..... | 103 | 607 |
| Bally Sons, C. F. (See Baldenweg, Alexander, assignor.) | | | | | | |
| Balph, Charles A., Pittsburg, Pa. Floor construction | 748,150 | Dec. 29 | 5302 | 1204 | 107 | 2344 |
| Balsa Transportation Company. (See Gambee and McCarthy, assignors.) | | | | | | |
| Balsley, Charles H., New Haven, assignor of two-thirds to J. J. Driscoll, Connellsville, and R. S. McKee, New Haven, Pa. Coin-controlled vending-machine for newspapers, magazines, &c. | 744,673 | Nov. 17 | 3606 | 777<br>778 | 107 | 799 |
| Baltimore Ball Bearing Co. (See Norwood, John E., assignor.) | | | | | | |
| Baltz, Henry W., Wyandotte, assignor of one-half to W. W. Gillett, Palermo, Cal. Bench-stop | 743,673 | Nov. 10 | 1737 | 366 | 107 | 387 |
| Baltzley, Edwin, Glen Echo, Md. Traveling stairway | 739,141 | Sept. 15 | 3127 | 691<br>692 | 106 | 700 |
| Baltzley, Edwin, Washington, D. C. Traveling conveyer | 739,574 | Sept. 22 | 3925 | 878 | 106 | 889 |
| Baltzley, Edwin, Washington, D. C. Traveling conveyer | 739,575 | Sept. 22 | 3928 | 879 | 106 | 889 |
| Baltzley, Edwin, Washington, D. C. Traveling conveyer | 744,457 | Nov. 17 | 3258 | 698<br>699 | 107 | 726 |
| Baltzley, Henry H. (See Yantis and Baltzley.) | | | | | | |
| Balze, John C. F., assignor to R. Hoe, New York, N. Y. Adhesive-applying mechanism | 733,361 | July 14 | 1193 | 283 | 105 | 267 |
| Balze, John C. F., assignor to R. Hoe, New York, N. Y. Adhesive-applying mechanism | 746,657 | Dec. 15 | 2458 | 562 | 107 | 1669 |
| Balzer Motor Company. (See Balzer, Stephen M., assignor.) | | | | | | |
| Balzer, Stephen M., New York, N. Y., assignor, by mesne assignments, to Balzer Motor Company, Incorporated. Gas or oil motor | 730,433 | June 9 | 1657 | 371<br>372<br>373 | 104 | 1482 |
| Balzer, Stephen M., New York, N. Y., assignor to W. H. Humphrey, Norfolk, Conn. Variable driving-gear | 730,597 | June 9 | 1964 | 437 | 104 | 1550 |
| Bamber, Henry K. G., Greenhithe, England. Manufacture of Portland cement | 743,218 | Nov. 3 | 769 | 168 | 107 | 161 |
| Bamber, Montague K. (See Roger and Bamber.) | | | | | | |
| Bamberger, Julius, *et al.* (See Drubech, Sam, assignor.) | | | | | | |
| Bamberger, Leon J. (See Landrum, Bamberger, and Wright.) | | | | | | |
| Bamford, Samuel B., Uttoxeter, England. Hay-tedder | 720,098 | Feb. 10 | 1277 | 291<br>292<br>293 | 102 | 1110 |
| Bamford, Walter. (See Howarth and Haden, assignors.) (Reissue.) | | | | | | |
| Bamforth, Thomas, Carron, Scotland, and F. R. E. Branston, East Molesey, England. Condensing gas-stove | 721,495 | Feb. 24 | 3910 | 889 | 102 | 1695 |
| Bancroft, Arthur, Waterport, N. Y. Vehicle-top | 747,356 | Dec. 22 | 3792 | 853 | 107 | 1985 |
| Bancroft, Edwin W., Passaic, N. J. Eyeglasses | 744,278 | Nov. 17 | 2936 | 627 | 107 | 656 |
| Bancroft, Frank H., assignor of one-half to H. M. Rich, Gardner, Mass. Press for bending wood | 723,573 | Mar. 24 | 3576 | 799 | 103 | 792 |
| Bancroft, James E., Toledo, Ohio. Hydrocarbon-burner | 738,755 | Sept. 15 | 2432 | 533 | 106 | 552 |
| Bancroft, John S., Philadelphia, Pa., assignor to Lanston Monotype Machine Company, New York, N. Y. Matrix-centering mechanism for type-machines | 725,653 | Apr. 21 | 2316 | 522 | 103 | 1689 |
| Bancroft, John S., Philadelphia, Pa., assignor to William Sellers and Company, Incorporated. Tool-grinding machine | 734,799 | July 28 | 3927 | 916<br>917 | 105 | 874 |
| Bandy, Fletcher, Trion Factory, Ga. Combined cultivator and cotton-chopper | 744,708 | Nov. 24 | 3714 | 802 | 107 | 841 |
| Bane, James O., Waseca, Minn. Spring attachment for pumps | 733,121 | July 7 | 756 | 183 | 105 | 160 |
| Banfill, William A., Ipswich, Mass. Supplemental pie-plate rim | 748,151 | Dec. 29 | 5304 | 1205 | 107 | 2344 |
| Bangs, Edwin D., Milwaukee, Wis. Locomotive-headlight | 739,051 | Sept. 15 | 2958 | 655 | 106 | 666 |
| Bangs, William F., Baton Rouge, La. Revolving axle | 728,352 | May 19 | 2903 | 641 | 104 | 656 |
| Banhagel, Edward, Ionia, Mich. Fire-escape | 736,056 | Aug. 11 | 1955 | 416<br>417 | 105 | 1418 |
| Banister, George W., *et al.* (See Somes, Walter F., assignor.) | | | | | | |
| Bankers Adding & Recording Machine Company. (See Dennis, Adolphus S., assignor.) | | | | | | |
| Bánki, Donát, Budapest, Austria-Hungary. Motor-pump | 725,813 | Apr. 21 | 2607 | 592 | 103 | 1753 |
| Bánki, Donát, Budapest, Austria-Hungary. High-speed pump | 725,814 | Apr. 21 | 2607 | 592 | 103 | 1753 |
| Bankmann, Richard, Washington, D. C. Portfolio-drawer | 731,654 | June 23 | 3938 | 876 | 104 | 1993 |
| Banks, Amos O. and G. E., Baltimore, Md. Hanger for freight-car doors | 747,117 | Dec. 15 | 3323 | 756 | 107 | 1868 |

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| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | Spec. | Dr'g. | Vol. | Page. |
| Banks, Charles J., Liverpool, England. Rope-machine | 724,776 | Apr. 7 | 674 | 158 | 103 | 1312 |
| Banks, George, assignor of one-half to F. A. Lamb, Greenville, Mich. Hook | 735,445 | Aug. 4 | 794 | 169 | 105 | 1150 |
| Banks, George C. (See Krieger, Gustave A., assignor.) | | | | | | |
| Banks, George E. (See Banks, Amos O. and G. E.) | | | | | | |
| Banks, Henry G., Baum, Ind. Ter. Grazing-muzzle | 732,502 | June 30 | 5574 | 1235 | 104 | 2347 |
| Banks, Theodore H., San Antonio, Tex. Churn | 745,762 | Dec. 1 | 792 | 182 | 107 | 1267 |
| Banks, William H., assignor to F. X. Audet, Jr., Boston, Mass. Zither | 718,962 | Jan. 20 | 2743 | 613 | 102 | 613 |
| Bankston, Hiram A., Macon, Ga. Framing-square | 721,274 | Feb. 24 | 3515 | 799 | 102 | 1613 |
| Bannan, Lewis M., San Francisco, Cal. Telephone special directory | 727,880 | May 12 | 2001 | 446 | 104 | 443 |
| Bannihr, Caesar R., New York, N. Y. Combined try-square and bevel | 725,021 | Apr. 14 | 1127 | 254 | 103 | 1426 |
| Bannister, Alfred, Alameda, Cal. Wooden-stave pipe | 738,394 | Sept. 8 | 1720 | 373 | 106 | 386 |
| Bansen, Fritz. (See Wehner, Maltner, and Bansen.) | | | | | | |
| Banwell, James, assignor of three-fourths to C. W. Nokes, J. C. Norton, W. H. Leppley, and W. J. Roblin, Cleveland, Ohio. Reversible and variable-speed mechanism | 723,228 | Mar. 24 | 2933 | 657 | 103 | 665 |
| Barager, Winfield S., Hunt, N. Y. Washing-machine | 734,154 | July 21 | 2690 | 633 | 105 | 602 |
| Baragwanath, Henry D., Chicago, Ill. Condenser | 745,312 | Dec. 1 | 3 | 1 | 107 | 1101 |
| Barathié, Pierre. (See Corne, Duffau, and Barathié.) | | | | | | |
| Barber, Ada S. (See Barber, William, assignor.) | | | | | | |
| Barber, Allan J., Woonsocket, R. I. Crochet-form | 742,148 | Oct. 27 | 3439 | 766 | 106 | 2022 |
| Barber, Arthur L., Heckmondwike, England. Paper-ruling machine | 745,136 | Nov. 24 | 4514 | 977 | 107 | 1006 |
| Barber Asphalt Paving Company. (See Laster, Harry W., assignor.) | | | | | | |
| Barber Asphalt Paving Company. (See Sink, Burt J., assignor.) | | | | | | |
| Barber, Cyrus, assignor of seven-eighths to D. R. Cole, J. W. Buckminster, C. G. Putney, Keene, N. H., and P. S. Horton, Warren, Pa. System of electrical signaling for railways | 734,655 | July 28 | 3612 | 846 | 105 | 812 |
| Barber, Hiram, administrator. (See Perry, John F.) | | | | | | |
| Barber, Joseph K., Stonington, Conn. Time-recording device | 722,934 | Mar. 17 | 2393 | 535 | 103 | 538 |
| Barber, Lewis S., assignor of one-half to J. P. Johnson, Greensboro, N. C. Safety attachment for car-brakes | 728,654 | May 19 | 3470 | 770 | 104 | 776 |
| Barber, Melvin, Oklahoma, Okla. Ter. Wrench | 722,665 | Mar. 17 | 1887 | 420 | 103 | 435 |
| Barber, Thomas L. (See Stearns, Henry O., assignor.) | | | | | | |
| Barber, Thomas W., London, England. Steering mechanism for motor-vehicles | 736,192 | Aug. 11 | 2180 | 468 | 105 | 1465 |
| Barber, Thurston B., Norwich, Conn. Fire-escape | 720,996 | Feb. 17 | 2935 | 673 | 102 | 1471 |
| Barber, William, assignor to A. S. Barber, Brooklyn, N. Y. Sparking plug | 732,032 | June 30 | 4646 | 1038 | 104 | 2157 |
| Barber, William, Lonsdale, R. I., assignor to Draper Company, Hopedale, Mass. Wear-protecting means for heddle-bars | 732,033 | June 30 | 4648 | 1038 | 104 | 2158 |
| Barber, William M., Somerville, assignor of one-half to Smith & Anthony Company, Boston, Mass. Apparatus for drying coated papers | 719,931 | Feb. 3 | 923 | 216 | 102 | 1019 |
| Barber, William M., Somerville, assignor of one-half to Smith and Anthony Company, Boston, Mass. Mechanism for drying paper | 737,817 | Sept. 1 | 489 | 108 | 106 | 110 |
| Barbier, Alexandre, Lyons, France. Shuttle-box-operating mechanism for looms | 731,532 | June 23 | 3710 | 826 | 104 | 1949 |
| Barbour, Thomas S., Wollaston, Mass. Slide-shifter for magic lanterns | 720,099 | Feb. 10 | 1279 | 293 | 102 | 1111 |
| Barbour, William B., and B. W. Meredith, Trenton, N. J. Clothes-line prop | 725,917 | Apr. 21 | 2772 | 631 | 103 | 1788 |
| Barboutau, Pierre, Paris, France. Color-printing | 738,875 | Sept. 15 | 2664 | 587 | 106 | 605 |
| Barcalo & Boll Manufacturing Company. (See Barcalo and Valone, assignors.) | | | | | | |
| Barcalo, Edward J. (See Vallone, Charles, assignor.) | | | | | | |
| Barcalo, Edward J., Buffalo, N. Y. Attachment for bedsteads | 726,393 | Apr. 28 | 3648 | 827 | 103 | 1984 |
| Barcalo, Edward J., and C. Valone, assignors to Barcalo & Boll Manufacturing Company, Buffalo, N. Y. Woven-wire bed-spring | 719,635 | Feb. 3 | 402 | 92 | 102 | 906 |
| Barclay, James A., Indianapolis, Ind. Railway-track scale | 741,212 | Oct. 13 | 1550 | 349 | 106 | 1597 |
| Barclay, James S., Marion, Ind. Harness attachment | 729,032 | May 26 | 4155 | 921 | 104 | 933 |
| Barclay, John C., New York, N. Y. Telegraph-repeater | 734,451 | July 21 | 3233 | 762 | 105 | 717 |
| Barclay, John C., New York, N. Y. Telegraph-relay | 734,452 | July 21 | 3235 | 762 | 105 | 717 |
| Barclay, John C., New York, N. Y. Telegraph-sounder | 734,453 | July 21 | 3237 | 762 | 105 | 717 |
| Barclay, John C., assignor to Western Union Telegraph Company, New York, N. Y. Telegraph apparatus | 727,060 | May 5 | 465 | 98 | 104 | 102 |
| Barclay, Robert L., Brooklyn, N. Y. Machine for twisting drill-blanks | 719,988 | Feb. 10 | 1039 | 242 | 102 | 1060 |
| Barclay, Robert L., Brooklyn, N. Y. Machine for straightening twist-drills | 720,215 | Feb. 10 | 1490 | 341 | 102 | 1153 |
| Barcus, George N., assignor of one-half to A. B. Rowley, Rensselaer, Ind. Halter | 741,873 | Oct. 20 | 2843 | 634 | 106 | 1887 |
| Barcus, Willard E., Philadelphia, Pa. Hair-pin | 730,080 | June 2 | 1013 | 226 | 104 | 1334 |
| Bard, George F., Norwich, Conn. Joint for pipe-couplings | 720,655 | Feb. 17 | 2336 | 534 | 102 | 1343 |
| Bard, James F., Winston, N. C. Seamless-fashioned stocking | 732,034 | June 30 | 4650 | 1039 | 104 | 2158 |
| Bard, James F., Philadelphia, Pa. Automatic circular-knitting machine | 739,975 | Sept. 29 | 4699 | 1056<br>1057<br>1058 | 106 | 1071 |
| Barden, Samuel O., Washington, Iowa. Breast-harness | 748,152 | Dec. 29 | 5305 | 1205 | 107 | 2344 |
| Bardenwerper, Charles H., *et al.* (See Farmer, Julius M., assignor.) | | | | | | |
| Bardill, John O., Desloge, Mo. Ore-concentrating-table launder | 720,774 | Feb. 17 | 2532 | 584 | 102 | 1386 |
| Bardin, Jean, Brussels, Belgium. Making perfumes and disinfectants | 738,274 | Sept. 8 | 1465 | 316 | 106 | 331 |
| Bardolle, Eugène, Paris, France. Centrifugal separator | 717,963 | Jan. 6 | 828 | 187 | 102 | 178 |
| Bardsley, Henry, Providence, R. I., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Cam for bag-looms | 731,655 | June 23 | 3939 | 876 | 104 | 1993 |
| Bardsley, Henry, Providence, R. I., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Center-selvage motion | 743,674 | Nov. 10 | 1738 | 367 | 107 | 387 |
| Bardsley, Henry, Providence, R. I., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Leno-motion for loom-dobbies | 743,675 | Nov. 10 | 1740 | 367 | 107 | 387 |
| Bardsley, Joseph. (See Rosentreter, Albert J., assignor.) | | | | | | |
| Bardsley, Joseph, Montclair, N. J. Door closer and check | 723,808 | Mar. 31 | 3989 | 900 | 103 | 897 |
| Bardsley, Joseph, Montclair, N. J. Automatic safety appliance for railways | 730,219 | June 9 | 1262 | 280 | 104 | 1399 |
| Bardsley, Joseph, Montclair, and A. J. Rosentreter, Boonton, N. J.; said Rosentreter assignor to said Bardsley. Hydraulic brake | 740,513 | Oct. 6 | 247 | 49, 50 | 106 | 1299 |
| Bardsley, Joseph, Montclair, and A. J. Rosentreter, Boonton, N. J.; said Rosentreter assignor to said Bardsley. Door closer and check | 744,709 | Nov. 24 | 3717 | 802<br>803 | 107 | 841 |
| Bardsly, George H., Philadelphia, Pa. Vehicle-brake | 730,861 | June 16 | 2414 | 534 | 104 | 1665 |
| Bardwell, Arthur F., assignor to F. A. Bardwell, Boston, Mass. Voting-machine | 742,273 | Oct. 27 | 3677 | 822<br>823 | 106 | 2071 |
| Bardwell, Arthur F., assignor to F. A. Bardwell, Boston, Mass. Voting-machine | 742,274 | Oct. 27 | 3682 | 823<br>824 | 106 | 2072 |
| Bardwell, Arthur F., assignor to F. A. Bardwell, Boston, Mass. Voting-machine | 742,275 | Oct. 27 | 3685 | 824 | 106 | 2073 |
| Bardwell, Arthur F., assignor to F. A. Bardwell, Boston, Mass. Booth construction for voting-machines | 742,276 | Oct. 27 | 3686 | 824 | 106 | 2073 |
| Bardwell, Arthur F., assignor to F. A. Bardwell, Boston, Mass. Voting-machine | 742,277 | Oct. 27 | 3687 | 825 | 106 | 2074 |
| Bardwell, Arthur F., assignor to F. A. Bardwell, Boston, Mass. Voting-machine | 742,278 | Oct. 27 | 3691 | 825 | 106 | 2075 |
| Bardwell, Frederick A. (See Bardwell, Arthur F., assignor.) | | | | | | |
| Baremore, Samuel, *et al.* (See Clark, Frederick, assignor.) | | | | | | |
| Bargeboer, Hartog, Wunstorf, Germany. Means for delivering cattle | 745,992 | Dec. 8 | 1255 | 283 | 107 | 1384 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|
| | | | Spec. | Drgs. | Vol. | Page. |
| Barger, Nathaniel S., St. Joseph, Mo. Disk cultivator | 743,220 | Nov. 3 | 772 | 168, 169 | 107 | 162 |
| Barger, Silas S., Eddyville, Ill. Revolving furnace | 721,275 | Feb. 24 | 3516 | 799 | 102 | 1613 |
| Barham, Charles H. (See Becraft, Eli S., assignor.) | | | | | | |
| Barham, Henry K. P., Portsmouth, England. Electrical storage battery | 718,045 | Jan. 6 | 982 | 219 | 102 | 211 |
| Barhite, Samuel R., Des Moines, Iowa. Cream-separator | 746,264 | Dec. 8 | 1747 | 397 | 107 | 1492 |
| Barke, Martin O., Fergus Falls, Minn. Fire-escape | 736,347 | Aug. 18 | 2449 | 535 | 105 | 1541 |
| Barker, Charles L., Norwalk, Conn. Sparking device | 745,474 | Dec. 1 | 313 | 74 | 107 | 1166 |
| Barker, Clarence I. J., David City, Nebr. Cultivator and weed-exterminator | 747,118 | Dec. 15 | 3324 | 756 | 107 | 1868 |
| Barker, England J., Morgan Park, Ill. Means for holding and centering the rolls of paper contained in autographic registers | 733,934 | July 21 | 2236 | 526 | 105 | 504 |
| Barker, George G. (See Pridmore and Barker.) | | | | | | |
| Barker, George G., and H. Corl, assignors to International Harvester Company, Chicago, Ill. Machine for testing cutter-bar sections | 733,794 | July 14 | 1950 | 460, 461 | 105 | 429 |
| Barker, George J. (See Sprague, George W., assignor.) | | | | | | |
| Barker, James, and W. N. Winfield, Detroit, Mich. Ledger or binder leaf | 745,475 | Dec. 1 | 317 | 74 | 107 | 1167 |
| Barker, John F., assignor to Gilbert & Barker Manufacturing Company, Springfield, Mass. Heating-furnace | 731,333 | June 16 | 3312 | 739 | 104 | 1848 |
| Barker, John J. (See Sargeant and Barker.) | | | | | | |
| Barker, Joseph, Carson City, Nev. Lumber-truck | 740,613 | Oct. 6 | 453 | 98 | 106 | 1344 |
| Barker, Melville H., assignor to American Tool & Machine Company, Boston, Mass. Centrifugal machine | 748,465 | Dec. 29 | 5870 | 1335 | 107 | 2467 |
| Barker, Robert W., Paterson, N. J. Automatic wood-turning machine | 723,809 | Mar. 31 | 3995 | 901 | 103 | 898 |
| Barker, Ruben F., assignor of one-half to M. Corry, Marinette, Wis. Sawmill set-works | 737,563 | Sept. 1 | 5 | 2 | 106 | 4 |
| Barker, Thomas. (See Hoyle and Barker.) | | | | | | |
| Barker, Wells T., Grand Rapids, Mich. Furnace-feeder | 746,265 | Dec. 8 | 1749 | 397 | 107 | 1492 |
| Barker, Wendell A., assignor to E. A. Thomas, Chicago, Ill. Hoisting-machine | 736,572 | Aug. 18 | 2856 | 625, 626 | 105 | 1627 |
| Barker, William S., Dayton, Ohio. Fence-post | 723,435 | Mar. 24 | 3320 | 744 | 103 | 741 |
| Barkley, James. (See Moore, Otho C., assignor.) | | | | | | |
| Barkley, Matthew B., and C. B. Jenkins, Charleston, S. C. Packing | 720,656 | Feb. 17 | 2336 | 535 | 102 | 1343 |
| Barkowsky, Gustav A. W., Rochester, assignor to Gowanda Novelty Company, Gowanda, N. Y. Gas-igniting device | 735,195 | Aug. 4 | 317 | 61 | 105 | 1049 |
| Barkowsky, Gustav A. W., assignor to Gowanda Novelty Company, Gowanda, N. Y. Self-igniting gas-burner | 735,196 | Aug. 4 | 319 | 62 | 105 | 1049 |
| Barlet, Frédéric, deceased, assignor to W. T. P. Hollingsworth, New York, N. Y. Loom. (Reissue) | 12,082 | Feb. 17 | 3232 | 739, 740 | 102 | 1542 |
| Barley, Job M., Bedford, assignor to S. Barley, Bedford Township, Pa. Gate | 727,734 | May 12 | 1729 | 388 | 104 | 389 |
| Barley, Susan. (See Barley, Job M., assignor.) | | | | | | |
| Barley, Thomas K., Sedalia, Mo. Hay-rake | 746,658 | Dec. 15 | 2460 | 562 | 107 | 1670 |
| Barling, Joseph A., assignor of two-thirds to C. H. Bellack and J. Schwarz, Jr., Milwaukee, Wis. Safety-pocket for garments | 732,996 | July 7 | 525 | 130 | 105 | 112 |
| Barling, Walter R., Brooklyn, N. Y. Starting-machine | 745,411 | Dec. 1 | 183 | 41 | 107 | 1138 |
| Barlow, Bertus G., Manchester, N. H. Electrically-controlled motor-stopping apparatus | 745,763 | Dec. 1 | 793 | 182 | 107 | 1267 |
| Barlow, Herbert D., London, England. Lift | 737,316 | Aug. 25 | 4274 | 950 | 105 | 1942 |
| Barman, Max, Brooklyn, N. Y. Heater | 724,777 | Apr. 7 | 677 | 158 | 103 | 1313 |
| Barnaman, James L., Butte, Mont. Bed-spring | 745,764 | Dec. 1 | 796 | 182 | 107 | 1268 |
| Barnard, Alfred C., *et al.* (See Hancock, Charles E., assignor.) | | | | | | |
| Barnard, Alfred W. A., and W. G. Reid, Dunedin, New Zealand. Secateur | 747,359 | Dec. 22 | 3798 | 854 | 107 | 1986 |
| Barnard, Davis, assignor to Dave Barnard & Co., Bakersfield, Cal. Acetylene-gas apparatus | 725,198 | Apr. 14 | 1453 | 328, 329 | 103 | 1492 |
| Barnard, Frank L., Saugus, Mass. Mandolin attachment for pianos | 727,261 | May 5 | 815 | 175 | 104 | 175 |
| Barnard, Jacob M., *et al.* (See Hancock, Charles E., assignor.) | | | | | | |
| Barnard, John H., assignor of one-half to B., H. G., H. B., and C. G. Atha, Newark, N. J. Apparatus for transmitting power | 745,952 | Dec. 1 | 1169 | 263 | 107 | 1349 |
| Barnard, John H., assignor of one-half to B., H. G., H. B., and C. G. Atha, Newark, N. J. Apparatus for transmitting power | 745,953 | Dec. 1 | 1173 | 263, 264 | 107 | 1350 |
| Barnard, Joseph. (See Pelton, Willis E., assignor.) | | | | | | |
| Barnard, Percy A., *et al.* (See Bryant, John M., assignor.) | | | | | | |
| Barnard, Sidney M., Forestville, Conn. Cattle-stanchion | 746,913 | Dec. 15 | 2928 | 676 | 107 | 1774 |
| Barnard, Walter E., Sag Harbor, N. Y. Music-holder | 744,458 | Nov. 17 | 3262 | 699 | 107 | 727 |
| Barnes, Albert T. (See Cameron, Bell, and Barnes.) | | | | | | |
| Barnes, Albert T., *et al.* (See Daniels, William H., assignor.) | | | | | | |
| Barnes, Alvin N. and E. J., Scranton, Pa. Apparatus for applying adhesives | 719,554 | Feb. 3 | 261 | 61 | 102 | 878 |
| Barnes, Charles A., Liverpool, N. Y. Fire-truck and fire-escape | 738,395 | Sept. 8 | 1721 | 374, 375 | 106 | 386 |
| Barnes, Charles K., and A. Y. Smith, Pearce, Ariz. Ter. Mine-timber-framing machine | 735,933 | Aug. 11 | 1716 | 366, 367 | 105 | 1366 |
| Barnes, Charles O., assignor to M. I. Barnes, Buffalo, N. Y. Garment holder and supporter | 726,494 | Apr. 28 | 3867 | 875 | 103 | 2025 |
| Barnes, Chauncey J. (See Wagner and Barnes.) | | | | | | |
| Barnes, David, Axtell, Kans. Grain-loader | 734,292 | July 21 | 2970 | 698 | 105 | 661 |
| Barnes, Edward M., assignor to Adoscope Advertising Company, Cleveland, Ohio. Device for projecting images | 728,655 | May 19 | 3470 | 770 | 104 | 776 |
| Barnes & Erb Company. (See Benjamin, Dana H., assignor.) | | | | | | |
| Barnes, Ernest J. (See Barnes, Alvin N. and E. J.) | | | | | | |
| Barnes, George I., and F. E. Woodford, assignors of one-third to H. Mueller, Chicago, Ill. Car-door | 734,155 | July 21 | 2691 | 633 | 105 | 602 |
| Barnes, George S., and S. Ruffin, Boston, Mass. Bottle-stopper | 729,835 | June 2 | 583 | 129 | 104 | 1247 |
| Barnes, Gertrude J., Minneapolis, Minn. Infant's nail-cleaner | 732,819 | July 7 | 228 | 57 | 105 | 51 |
| Barnes, H. C., *et al.* (See Cutting, Edward M., assignor.) | | | | | | |
| Barnes, James P., Lytal, Miss. Spring tongue-support | 730,585 | June 9 | 1967 | 437 | 104 | 1551 |
| Barnes, Jeremiah, Rummel, assignor of one-half to J. Levant, Windber, Pa. Car-moving mechanism | 745,034 | Nov. 24 | 4311 | 931, 932 | 107 | 964 |
| Barnes, John, assignor to W. F. & John Barnes Company, Rockford, Ill. Fountain-pen | 726,495 | Apr. 28 | 3869 | 875 | 103 | 2025 |
| Barnes, John, assignor to W. F. & John Barnes Company, Rockford, Ill. Fountain-pen | 738,876 | Sept. 15 | 2667 | 587 | 106 | 605 |
| Barnes, John S. (See Willmarth and Barnes.) | | | | | | |
| Barnes, John S., Payette, Idaho. Coyote-alarm | 726,131 | Apr. 21 | 3138 | 709 | 103 | 1863 |
| Barnes, John S., assignor to Majestic Wire Fence Company, Limited, Detroit, Mich. Wire fence | 746,441 | Dec. 8 | 2056 | 473 | 107 | 1558 |
| Barnes, John W., San Francisco, Cal. Mowing-machine | 741,874 | Oct. 20 | 2845 | 634, 635 | 106 | 1888 |
| Barnes, Joshua, Smithtown Branch, N. Y. Hot-water bag | 734,213 | July 21 | 2791 | 654 | 105 | 624 |
| Barnes, Joshua B., Springfield, Ill., assignor of one-half to C. A. Thompson, St. Louis, Mo. Portable pneumatic ram | 732,696 | July 7 | 8 | 3 | 105 | 4 |
| Barnes, Leroy E., assignor of one-half to F. E. Palmer, Toledo, Ohio. Mailing-wrapper | 728,435 | May 19 | 3038 | 668 | 104 | 685 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | Spec. | Dr. | Vol. | Page. |
| Barnes, Marcia I. (See Barnes, Charles O., assignor.) | | | | | | |
| Barnes, Marcia I., Fruit Valley, assignor of one-half to K. Kellogg, Oswego, N. Y. Jack-o'-lantern | 741,293 | Oct. 13 | 1713 | 382 | 106 | 1628 |
| Barnes, Omer F., Arcola, Ill. Gold-dredger | 727,202 | May 5 | 816 | 176 | 104 | 175 |
| Barnes, Philo M., Lockport, N. Y. Combined window and screen | 741,441 | Oct. 13 | 1997 | 442, 443 | 106 | 1692 |
| Barnes, Pierre. (See Adams, William P. C., assignor.) | | | | | | |
| Barnes, Pierre. (See Babo, Arthur von, assignor.) | | | | | | |
| Barnes, Pierre. (See Emett, George H. H., assignor.) | | | | | | |
| Barnes, Robert, Bexley Heath, assignor to Vickers Sons & Maxim, Limited, Westminster, England. Sighting apparatus for ordnance | 734,395 | July 21 | 3142 | 738 | 105 | 698 |
| Barnes, Robert E., Sunbury, N. C. Trace-holder | 727,061 | May 5 | 468 | 98 | 104 | 102 |
| Barnes, Thomas, Anaconda, Mont. Water-gage shield | 744,710 | Nov. 24 | 3721 | 803 | 107 | 842 |
| Barnes, Truman R., Shelton, Conn. Cap and mantle-support for incandescent burners | 734,656 | July 28 | 3614 | 846 | 105 | 813 |
| Barnes, Walter, Toledo, Ohio. Support for horns for talking-machines | 718,073 | Jan. 13 | 1039 | 232 | 102 | 239 |
| Barnes, Walter, Toledo, Ohio. Elbow for talking-machine horns | 718,074 | Jan. 13 | 1041 | 232 | 102 | 239 |
| Barnes, Walter, Toledo, Ohio. Case for talking-machines | 725,815 | Apr. 21 | 2609 | 593 | 103 | 1753 |
| Barnes, William B., Fayette, Ill. Mail-box | 728,353 | May 19 | 2904 | 641 | 104 | 656 |
| Barnes, William F., assignor to W. F. & John Barnes Company, Rockford, Ill. Speed-changing mechanism | 735,012 | July 28 | 4298 | 999 | 105 | 952 |
| Barnes, William H., assignor to F. Will, Rochester, N. Y. Culinary device | 740,384 | Oct. 6 | 1 | 1 | 106 | 1245 |
| Barnes, William M., Philadelphia, Pa. Starching-machine | 728,436 | May 19 | 3039 | 668 | 104 | 685 |
| Barnes, William M., Philadelphia, Pa. Starching-machine | 728,437 | May 19 | 3042 | 669 | 104 | 686 |
| Barnes, William M., Philadelphia, Pa. Ironing-machine | 731,267 | June 16 | 3175 | 707 | 104 | 1819 |
| Barnes, William M., Philadelphia, Pa. Indicator apparatus for clothes-drying machines | 731,656 | June 23 | 3941 | 877 | 104 | 1993 |
| Barnes, William M., Philadelphia, Pa. Goods-support for clothes-drying machines | 746,659 | Dec. 15 | 2463 | 563 | 107 | 1670 |
| Barnet, Harry M., Minneapolis, Minn. Ticket-spindle | 738,275 | Sept. 8 | 1467 | 316 | 106 | 331 |
| Barnett Equipment Company of America. (See Barnett, Stephen D., assignor.) | | | | | | |
| Barnett, John, Erie, Pa. Paper-watermarking device | 722,553 | Mar. 10 | 1670 | 369 | 103 | 375 |
| Barnett, John, commonly known as John Francis Barnett, London, England. Device for cleaning the wires of pianofortes | 719,718 | Feb. 3 | 557 | 126 | 102 | 940 |
| Barnett, John B., San Antonio, Tex. Torpedo-receptacle | 747,313 | Dec. 15 | 3703 | 834 | 107 | 1949 |
| Barnett, John F., Jr., West Suffield, Conn. Vehicle-wheel | 733,935 | July 21 | 2238 | 526, 527 | 105 | 505 |
| Barnett, John S., *et al.* (See Moore, Enos T., assignor.) | | | | | | |
| Barnett, Laura K. (See Montague, John L. C., assignor.) | | | | | | |
| Barnett, Morrisson J. (See Bowen, Newnham, and Barnett.) | | | | | | |
| Barnett, Stephen D., assignor to Barnett Equipment Company of America, Newark, N. J. Safety car-coupling | 717,525 | Jan. 6 | 5 | 2 | 102 | 4 |
| Barnett, William O., assignor of one-half to T. W. Callaway, Americus, Ga. Trace-carrier | 735,652 | Aug. 4 | 1181 | 250 | 105 | 1232 |
| Barnett, William S., Jacksonville, Fla. Stopper for bottles | 744,676 | Nov. 17 | 3611 | 778 | 107 | 800 |
| Barnett, William S., assignor to Non-Refillable Bottle and Cork Company, Jacksonville, Fla. Non-refillable bottle | 744,674 | Nov. 17 | 3608 | 778 | 107 | 799 |
| Barnett, William S., assignor to Non-Refillable Bottle and Cork Company, Jacksonville, Fla. Non-refillable bottle | 744,675 | Nov. 17 | 3610 | 778 | 107 | 800 |
| Barnett, Willis, *et al.* (See Gary, Jefferson, assignor.) | | | | | | |
| Barney, Alice P., Washington, D. C. Fluid-agitator | 723,977 | Mar. 31 | 4340 | 974 | 103 | 971 |
| Barney, Everett H., Springfield, Mass. Shiftable car-sign | 743,676 | Nov. 10 | 1742 | 368 | 107 | 388 |
| Barney, James E., Boston, Mass. Valve-pliers | 717,526 | Jan. 6 | 9 | 3 | 102 | 4 |
| Barney & Smith Car Company. (See Tesseyman, Henry, assignor.) | | | | | | |
| Barngrover, Harvey M., San Jose, Cal. Fruit-dipper | 739,531 | Sept. 22 | 3840 | 860 | 106 | 870 |
| Barnhart, Alson E., Chicago, Ill. Playing-ball | 731,154 | June 16 | 2989 | 663 | 104 | 1783 |
| Barnhart Brothers & Spindler. (See Halvorson, Severin, assignor.) | | | | | | |
| Barnhart, Harry J. (See King, Barnhart, and King.) | | | | | | |
| Barnhart, Robert L., Charleroi, Pa. Electrical smelting apparatus | 724,778 | Apr. 7 | 677 | 159 | 103 | 1313 |
| Barnhart, Robert L., Charleroi, Pa. Rotary engine | 743,135 | Nov. 3 | 608 | 131, 132 | 107 | 127 |
| Barnhill, James W., Lagrange, Ky. Gate | 746,777 | Dec. 15 | 2668 | 616 | 107 | 1715 |
| Barnhill, Milton R., Brookville, Miss. Wire stretcher and clamp | 735,918 | Apr. 21 | 2773 | 632 | 103 | 1789 |
| Barns, Jesse B., St. Paul, Minn. Ink-filler | 748,040 | Dec. 29 | 5088 | 1149 | 107 | 2297 |
| Barnstead, Robert P., Boston, Mass. Automatic cut-off | 729,116 | May 26 | 4298 | 950 | 104 | 960 |
| Barnstead, Robert P., Ashmont, Mass. Sterilizer | 742,560 | Oct. 27 | 4200 | 945, 946 | 106 | 2178 |
| Barnum, Amos F., Binghamton, N. Y. Garment-hanger | 720,396 | Feb. 10 | 1810 | 412 | 102 | 1222 |
| Barnum, Thomas E., assignor to Cutler-Hammer Manufacturing Company, Milwaukee, Wis. System of motor control | 743,423 | Nov. 10 | 1235 | 254, 255 | 107 | 279 |
| Baron, Christopher P., Haymond, Ind. Music-cabinet | 721,532 | Feb. 24 | 3975 | 905 | 102 | 1709 |
| Baron, Louis B., London, England. Cigarette-making machine | 718,813 | Jan. 20 | 2455 | 544, 545 | 102 | 551 |
| Baron, Louis B., London, England. Cigarette-making machine | 721,533 | Feb. 24 | 3976 | 906 | 102 | 1710 |
| Baroni, Domenick, *et al.* (See Farmer, Julius M., assignor.) | | | | | | |
| Barr, Andrew J. (See Lore and Barr.) | | | | | | |
| Barr, Archibald, Glasgow, Scotland, and W. Stroud, Leeds, England. Range-finder or telemeter | 739,475 | Sept. 22 | 3752 | 837, 838 | 106 | 852 |
| Barr, Archibald, Glasgow, Scotland, W. Stroud, Leeds, England, and L. Becker, Glasgow, Scotland. Pawl-and-ratchet mechanism for electric clocks | 729,253 | May 26 | 4545 | 1002 | 104 | 1012 |
| Barr, Benjamin H., *et al.* (See Way, George C., assignor.) | | | | | | |
| Barr, David W., Sioux City, Iowa. Adjustable-clamp horseshoe | 722,935 | Mar. 17 | 2395 | 535 | 103 | 538 |
| Barr, Frederic, New York, N. Y. Buckle | 718,240 | Jan. 13 | 1336 | 296 | 102 | 302 |
| Barr, Harry, *et al.* (See Way, George C., assignor.) | | | | | | |
| Barr, James R. (See Caldwell and Barr.) | | | | | | |
| Barr, Mark, Broadheath, assignor to Linotype Company, Ltd., London, England. Pantograph | 723,978 | Mar. 31 | 4342 | 974, 975 | 103 | 971 |
| Barr, Mark, Broadheath, assignor to Linotype Company, Limited, London, England. Pantograph engraving-machine | 725,654 | Apr. 21 | 2318 | 523 | 103 | 1690 |
| Barr, Mark, Broadheath, assignor to Linotype Company, Limited, London, England. Pantograph engraving-machine | 731,533 | June 23 | 3712 | 827 | 104 | 1949 |
| Barr, Mark, Broadheath, assignor to Linotype Company, Limited, London, England. Machine for grinding tracers and tools for engraving-machines | 736,193 | Aug. 11 | 2181 | 468, 469 | 105 | 1465 |
| Barr, Mark, Kensingson, assignor to Linotype Company, Limited, London, England. Machine-engraving | 732,154 | June 30 | 4895 | 1088 | 104 | 2208 |
| Barr, Mark, Kensington, assignor to Linotype Company, Limited, London, England. Pantograph engraving-machine | 741,442 | Oct. 13 | 1999 | 443, 444 | 106 | 1692 |
| Barr, Mark, assignor to Linotype Company, Limited, London, England. Three-dimension engraving-machine | 736,475 | Aug. 18 | 2678 | 589 | 105 | 1589 |
| Barr, Robert, Carrollton, Wash., assignor of one-half to D. J. Finn, Portland, Oreg. Logging-spool | 733,795 | July 14 | 1953 | 461 | 105 | 429 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| Barr, Victor G., New Rochelle, N. Y. Tool for cutting elliptical or other curved picture-mats, stencils, &c | 735,197 | Aug. 4 | 322 | 62 | 105 | 1049 |
| Barrall, George, Nanticoke, Pa. Brick-truck | 737,564 | Sept. 1 | 7 | 2 | 106 | 5 |
| Barrallon, Antony, St. Etienne, France. Cartridge-case | 725,395 | Apr. 14 | 1801 | 404 | 103 | 1565 |
| Barratt, Edward W., Wood Green, England. Manufacture of sweetmeats or similar articles of confectionery | 743,219 | Nov. 3 | 769 | 168 | 107 | 161 |
| Barré, Stanislaus M., and C. Mignault, Winnipeg, Canada. Pasteurizer | 732,035 | June 30 | 4651 | 1039 | 104 | 2158 |
| Barrell, William L. (See Adams, William H., assignor.) | | | | | | |
| Barrett, Albert. (See Condon and Barrett.) | | | | | | |
| Barrett, Charles A., and R. W. Page, assignors to R. Barrett & Son, Limited, London, England. Photographic developing apparatus | 741,213 | Oct. 13 | 1552 | 350 | 106 | 1598 |
| Barrett, Charles A., and R. W. Page, assignors to R. Barrett & Son, Limited, London, England. Flash-light apparatus | 741,214 | Oct. 13 | 1554 | 350 / 351 | 106 | 1598 |
| Barrett, Charles A., and R. W. Page, assignors to R. Barrett & Son, Limited, London, England. Magazine photographic-plate holder | 741,215 | Oct. 13 | 1556 | 351 | 106 | 1599 |
| Barrett, Glenn J. (See Fox and Barrett.) | | | | | | |
| Barrett, Glenn J., assignor to Fred Macey Company, Limited, Grand Rapids, Mich. Type-writer cabinet | 719,419 | Feb. 3 | 12 | 3 | 102 | 829 |
| Barrett, James, Brooklyn, N. Y. Pruning implement | 727,263 | May 5 | 817 | 176 | 104 | 176 |
| Barrett, James, Tombstone, Ariz. Ter. Tension device | 733,936 | July 21 | 2239 | 527 | 105 | 505 |
| Barrett, James F., Carbondale, Pa. Feed-water filter | 744,459 | Nov. 17 | 3263 | 699 / 700 | 107 | 727 |
| Barrett, John A., L. A. Falk, and H. E. Shreeve, Boston, Mass., assignors to American Telephone and Telegraph Company. Telephone | 736,672 | Aug. 18 | 3056 | 675 | 105 | 1667 |
| Barrett, John C., Washington, Pa. Steam or hot-water heater | 717,527 | Jan. 6 | 10 | 3 | 102 | 4 |
| Barrett, John R., Chicago, Ill. Tip for cords | 734,500 | July 28 | 3334 | 780 | 105 | 753 |
| Barrett, John R., assignor to E. L. Krag, Chicago, Ill. Loose-leaf binder | 737,317 | Aug. 25 | 4275 | 950 | 105 | 1942 |
| Barrett, Josiah, Bellevue, Pa. Oil-well jack | 739,812 | Sept. 29 | 4380 | 982 | 106 | 1005 |
| Barrett, Josiah, Bellevue, Pa. Oil-well swivel-wrench | 748,153 | Dec. 29 | 5306 | 1205 | 107 | 2344 |
| Barrett, Lawrence J., *et al.* (See Musso, Alfredo, assignor.) | | | | | | |
| Barrett, Noah, assignor of one-half to L. Spencer, Truro, Canada. Machine for dovetailing window-sashes | 741,093 | Oct. 13 | 1304 | 299 | 106 | 1545 |
| Barrett, Patrick S., and J. P. Durkin, Scranton, Pa. Controller apparatus | 730,334 | June 9 | 1468 | 325 | 104 | 1443 |
| Barrett, Roy, Palmyra, N. Y. Self-measuring can | 733,937 | July 21 | 2239 | 527 | 105 | 505 |
| Barrett, Roy, Palmyra, N. Y. Traveling rocking-horse | 737,818 | Sept. 1 | 490 | 109 | 106 | 110 |
| Barrett & Son, R. (See Barrett and Page, assignors.) | | | | | | |
| Barrett, William F., Orangeburg, N. Y., assignor to Empire Engine and Motor Company. Rotary engine | 741,574 | Oct. 13 | 2281 | 509 | 106 | 1752 |
| Barrick, Jacob L., Wellington, Ohio. Machine for washing molds | 740,793 | Oct. 6 | 773 | 174 | 106 | 1410 |
| Barringer, J. Frank, *et al.* (See Perry, Algie, assignor.) | | | | | | |
| Barron, Charles A. (See Berry, John V., assignor.) | | | | | | |
| Barron, John J., assignor of one-half to E. L. Coates and E. C. Mason, Boulder, Colo. Plant-thinning machine | 717,797 | Jan. 6 | 529 | 118 | 102 | 114 |
| Barron, Walter J., Brooklyn, assignor to Densmore Typewriter Company, Syracuse, N. Y. Type-writing machine | 725,919 | Apr. 21 | 2775 | 632 | 103 | 1789 |
| Barron, Walter J., Brooklyn, N. Y., and H. W. Merritt, Springfield, Mass., assignors to Densmore Typewriter Company, Syracuse, N. Y. Type-writing machine | 739,576 | Sept. 22 | 3932 | 879 / 880 | 106 | 890 |
| Barron, William G. (See Demory, Alexander F., assignor.) | | | | | | |
| Barrow, Thomas, Cleveland, Ohio, assignor, by mesne assignments, to Chicago Pneumatic Tool Company. Oscillating engine | 721,932 | Mar. 3 | 526 | 115 | 103 | 117 |
| Barrow, Thomas E., Mansfield, Ohio. Washing-machine | 725,022 | Apr. 14 | 1129 | 254 / 255 | 103 | 1426 |
| Barrow, Thomas E., and W. H. Bowers, Mansfield, Ohio. Voting-booth | 727,735 | May 12 | 1730 | 389 | 104 | 389 |
| Barrows, George S., Philadelphia, Pa., assignor to Welsbach Light Company, Gloucester City, N. J. Incandescent gas-light | 725,199 | Apr. 14 | 1456 | 329 | 103 | 1493 |
| Barrows, Wilber S. (See Hibbard and Barrows.) | | | | | | |
| Barrs, Amander W., Jacksonville, Fla. Railway-tie-cutting machine | 728,835 | May 26 | 3806 | 848 | 104 | 862 |
| Barry, Charles E., Schenectady, N. Y., assignor to General Electric Company. Electric-brake system | 722,936 | Mar. 17 | 2396 | 535 | 103 | 539 |
| Barry, Charles E., Schenectady, N. Y., assignor to General Electric Company. Motor-control system | 729,117 | May 26 | 4299 | 950 | 104 | 960 |
| Barry, Charles E., and W. O. Mundy, Schenectady, N. Y., assignors to General Electric Company. Motor-control system | 739,577 | Sept. 22 | 3936 | 880 | 106 | 891 |
| Barry Four-Row Corn Planter Company. (See Barry, Richard V., assignor.) | | | | | | |
| Barry, Harry G., Pontiac, Mich. Hose-coupling | 747,360 | Dec. 22 | 3799 | 854 | 107 | 1986 |
| Barry, Henry, San Francisco, Cal. Hanger | 747,119 | Dec. 15 | 3325 | 756 | 107 | 1868 |
| Barry, James D., Coronado Beach, Cal. Fountain-inkstand | 725,920 | Apr. 21 | 2785 | 633 | 103 | 1792 |
| Barry, James R., Syracuse, N. Y. Top | 748,154 | Dec. 29 | 5307 | 1205 | 107 | 2344 |
| Barry, Richard V., assignor to Barry Four-Row Corn Planter Company, Iowa City, Iowa. Corn-planter | 731,658 | June 23 | 3944 | 877 / 878 | 104 | 1994 |
| Barry, Thomas J. (See Busch, Gull, and Barry.) | | | | | | |
| Barry, Thomas J., A. Wehmiller, and J. W. Dawson, St. Louis, Mo. Bottle-soaking machine | 737,195 | Aug. 25 | 4025 | 892 | 105 | 1890 |
| Barstad, Johan M., Providence, R. I. Magazine-tool | 728,188 | May 19 | 2566 | 571 / 572 | 104 | 585 |
| Barstow Stove Company. (See Spicer, William A., assignor.) | | | | | | |
| Barta, John, Chicago, Ill. Cradle | 744,993 | Nov. 24 | 4213 | 912 | 107 | 944 |
| Bartel, Leo A., Sidney, Ohio. Weather-strip | 722,352 | Mar. 10 | 1296 | 287 | 103 | 291 |
| Bartel, Rudolph F., Bayonne, N. J. Cast-off | 728,073 | May 12 | 2356 | 524 | 104 | 519 |
| Bartel, Rudolph F., Bayonne, N. J. Cast-off | 744,279 | Nov. 17 | 2938 | 627 | 107 | 657 |
| Bartel, William P., assignor to American Lacing Hook Co., Waltham, Mass. Machine for setting lacing-hooks | 729,524 | June 2 | 5 | 1, 2, 3 | 104 | 1127 |
| Bartel, William P., assignor to American Lacing Hook Co., Waltham, Mass. Lacing-hook-setting machine | 729,525 | June 2 | 10 | 3, 4 | 104 | 1128 |
| Bartel, William P., assignor to American Lacing Hook Co., Waltham, Mass. Mechanism for separating and feeding lacing-hooks or the like to raceways | 729,526 | June 2 | 14 | 4, 5 | 104 | 1129 |
| Bartelme, Mary M., administratrix. (See Raymond, Albert.) | | | | | | |
| Bartels, Johann H. J., Waterloo, near Liverpool, England. Cement for uniting wood | 725,816 | Apr. 21 | 2610 | | 103 | 1754 |
| Bartelstone, Louis, New York, N. Y. Reflective wall or ceiling | 718,302 | Jan. 13 | 1452 | 323 | 102 | 328 |
| Barth, John W., Pittsburg, Pa. Milk-strainer | 724,153 | Mar. 31 | 4697 | 1054 | 103 | 1041 |
| Barth, John W., Pittsburg, Pa. Automatic car-coupling | 742,379 | Oct. 27 | 3868 | 869 | 106 | 2111 |
| Barth, John W., Pittsburg, Pa. Car-coupling | 742,380 | Oct. 27 | 3871 | 869 / 870 | 106 | 2111 |
| Barthélemy, Eugène, Paris, France. Exhibiting apparatus | 733,796 | July 14 | 1954 | 461 / 462 | 105 | 430 |
| Barthelmes, Alexander A., Toronto, Canada. Piano-action | 737,565 | Sept. 1 | 8 | 2 | 106 | 5 |

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| Barthold, Ferdinand. (See Rosmann and Barthold.) | | | | | | |
| Bartholme, Joseph A., Baltimore, Md. Neckband-shaper | 730,220 | June 9 | 1265 | 281 | 104 | 1400 |
| Bartholmes, Charles W., assignor to Remington Arms Company, Ilion, N. Y. Ejector for firearms | 730,862 | June 16 | 2416 | 534 | 104 | 1665 |
| Bartholomäus, Rudolf, assignor to W. Bartholomäus, Altdorf, near Nuremberg, Germany. Apparatus for boring or drilling angular holes | 724,422 | Apr. 7 | 9 | 2, 3 | 103 | 1172 |
| Bartholomäus, Rudolf, assignor to Sueddeutsche Praecisionswerkzeugefabrik Bartholomaeus & Co., Nuremberg, Germany. Die-stock | 734,034 | July 21 | 2455 | 574, 575 | 105 | 551 |
| Bartholomäus, Wilhelmine. (See Bartholomäus, Rudolf, assignor.) | | | | | | |
| Bartholomew, John A., New York, N. Y. Musical instrument | 733,122 | July 7 | 757 | 183 | 105 | 160 |
| Bartholomew, John B., assignor to Avery Manufacturing Company, Peoria, Ill. Cultivator | 725,200 | Apr. 14 | 1458 | 329, 330 | 103 | 1493 |
| Bartholomew, John B., assignor to Avery Manufacturing Company, Peoria, Ill. Cultivator | 725,201 | Apr. 14 | 1461 | 330 | 103 | 1494 |
| Bartholomew, John B., assignor, by mesne assignments, to Avery Manufacturing Company, Peoria, Ill. Traction-engine | 743,424 | Nov. 10 | 1239 | 255 | 107 | 280 |
| Bartholomew, Phineas L., Aurora, assignor of one-half to W. G. Stephens, Chicago, Ill. Paper-bag machine | 736,673 | Aug. 18 | 3060 | 675, 676, 677 | 105 | 1668 |
| Bartholomew, William H. (See Von der Lühe and Bartholomew.) | | | | | | |
| Bartholow, William E., Salem, S. D. Support for concaves | 740,215 | Sept. 29 | 5143 | 1154 | 106 | 1165 |
| Bartle, Harry J. (See Battle, John F., assignor.) | | | | | | |
| Bartlett, Albert O., Paullina, Iowa. Shingle-carrier | 723,229 | Mar. 24 | 2934 | 657 | 103 | 666 |
| Bartlett, Alden A., Eureka, Cal. Fern or other wood cutting machine | 732,916 | July 7 | 393 | 95 | 105 | 85 |
| Bartlett, Charles E., Wayne, Nebr. Beet-harvester | 721,496 | Feb. 24 | 3911 | 889, 890 | 102 | 1695 |
| Bartlett, Clive H. (See Bartlett, Leroy S. and C. H.) | | | | | | |
| Bartlett & Company, C. O. (See Snow, Karl F., assignor.) | | | | | | |
| Bartlett, Edwin B., assignor to Adaptable Sign Company, Boston, Mass. Sign | 747,293 | Dec. 15 | 3663 | 828 | 107 | 1940 |
| Bartlett, Frank, *et al.* (See Hayden and Packard, assignors.) | | | | | | |
| Bartlett, Frank, *et al.* (See Packard, William F., assignor.) | | | | | | |
| Bartlett, Frank L., Denver, Colo. Ore-concentrator | 718,970 | Jan. 27 | 2756 | 616 | 102 | 629 |
| Bartlett, Frank L., Denver, Colo. Concentrator for fine ores | 744,021 | Nov. 17 | 2429 | 522 | 107 | 549 |
| Bartlett, Frank L., Denver, Colo. Movement for shaking-tables or the like | 744,022 | Nov. 17 | 2431 | 522 | 107 | 549 |
| Bartlett, Frederick W., New York, N. Y. Non-refillable lamp | 740,077 | Sept. 29 | 4891 | 1096 | 106 | 1112 |
| Bartlett, George W., assignor of one-half to J. T. Montgomery, Sedalia, Mo. Automobile-jack | 727,264 | May 5 | 818 | 176 | 104 | 176 |
| Bartlett, Henry B., Berlin, Germany. Linotype-machine | 719,296 | Jan. 27 | 3372 | 753 | 102 | 758 |
| Bartlett, Henry B., Berlin, Germany. Linotype-machine | 741,294 | Oct. 13 | 1715 | 383, 384 | 106 | 1629 |
| Bartlett, Henry E., assignor of one-half to F. W. France, Chicago, Ill. Automatic railway safety-gate | 743,221 | Nov. 3 | 777 | 169 | 107 | 163 |
| Bartlett, Henry E., assignor of one-half to F. W. France, Chicago, Ill. Automatic railway-alarm | 743,222 | Nov. 3 | 782 | 170 | 107 | 164 |
| Bartlett, Jeremy, Collins, N. Y. Pipe-wrench | 717,528 | Jan. 6 | 12 | 3 | 102 | 5 |
| Bartlett, L. A. (See Foster, John C., assignor.) | | | | | | |
| Bartlett, Leroy S. and C. H., St. Louis, Mo. Bottle-closure | 724,779 | Apr. 7 | 679 | 159 | 103 | 1314 |
| Bartlett, Marcus J., Chicago, Ill., assignor to Veneer Package and Machine Company, Wilmington, Del. Veneer coiling and nailing machine | 743,425 | Nov. 10 | 1244 | 256 | 107 | 282 |
| Bartlett, Owen M. (See Shepherd and Bartlett.) | | | | | | |
| Bartlett, Thomas E. E., Meridian, Miss. Rotary engine | 742,561 | Oct. 27 | 4202 | 946 | 106 | 2179 |
| Bartley, Milton, Allegheny, Pa. Nut-lock | 722,649 | Mar. 10 | 1835 | 409 | 103 | 411 |
| Bartley, Milton, Pittsburg, Pa. Nut-lock | 730,599 | June 9 | 1968 | 437 | 104 | 1551 |
| Bartol, August, New York, N. Y. Photographic developing apparatus | 745,558 | Dec. 1 | 451 | 106 | 107 | 1193 |
| Barton, George F., Elmira, assignor of one-half to F. F. Weston, New York, N. Y. Coaster-brake | 747,576 | Dec. 22 | 4160 | 935 | 107 | 2069 |
| Barton, John D., Lawrence, Kans. Feeder for threshing-machines | 744,994 | Nov. 24 | 4215 | 912 | 107 | 944 |
| Barton, Robert W., Chicago, Ill. Steam-boiler | 731,657 | June 23 | 3943 | 877 | 104 | 1994 |
| Barton, Robert W., Chicago, Ill. Steam-boiler | 741,094 | Oct. 13 | 1305 | 299, 300 | 106 | 1545 |
| Barton, Robert W., assignor of fifty-one one-hundredths to E. Rich, Chicago, Ill. Steam-boiler | 719,420 | Feb. 3 | 13 | 3 | 102 | 829 |
| Barton, Ross J., Antoine, Ark. Implement for stretching hides | 738,276 | Sept. 8 | 1468 | 316 | 106 | 332 |
| Barton, Silas H., Enon, Ohio. Street-car fender | 730,335 | June 9 | 1470 | 325 | 104 | 1444 |
| Barton, William E. (See Willey and Barton.) | | | | | | |
| Bartoszek, Anthony, Chicago, Ill. Boot or shoe cleaner | 747,031 | Dec. 15 | 3158 | 724 | 107 | 1826 |
| Bartow, George C., East Orange, N. J. Oil-gage | 747,032 | Dec. 15 | 3159 | 724 | 107 | 1827 |
| Bartram, George C. (See Bowers, John C., assignor.) | | | | | | |
| Bartran, David W., Neame, La. Sawmill attachment | 738,396 | Sept. 8 | 1725 | 375 | 106 | 387 |
| Bartrug, Benjamin F., Ross, W. Va. Grinding-machine | 748,339 | Dec. 29 | 5618 | 1281 | 107 | 2411 |
| Baruch, Edgar. (See Haas and Baruch.) | | | | | | |
| Baruch, Nathan, New York, N. Y. Wardrobe-trunk | 726,618 | Apr. 28 | 4107 | 927 | 103 | 2073 |
| Baruch, Nathan, New York, N. Y. Bureau-trunk | 729,993 | June 2 | 873 | 194 | 104 | 1305 |
| Barz, Paul H., assignor of one-half to A. Stoltz, Chicago, Ill. Tobacco-pipe | 737,550 | Aug. 25 | 4707 | 1056 | 105 | 2040 |
| Basch, David, New York, N. Y. Dress-shield | 719,636 | Feb. 3 | 403 | 92 | 102 | 906 |
| Basch, David, New York, N. Y. Hose-supporter | 721,414 | Feb. 24 | 3764 | 856 | 102 | 1665 |
| Basch, David, New York, N. Y. Dress-shield | 722,395 | Mar. 10 | 1369 | 303 | 103 | 307 |
| Basch, David, New York, N. Y. Hose-supporter | 730,863 | June 16 | 2417 | 534 | 104 | 1665 |
| Basch, David, New York, N. Y. Garment-supporter | 746,660 | Dec. 15 | 2464 | 563 | 107 | 1670 |
| Basch, Samuel, London, England. Automatic boiler-feeder | 726,394 | Apr. 28 | 3650 | 827, 828 | 103 | 1985 |
| Baseman, Ernest. (See Heath and Baseman.) | | | | | | |
| Baseman, Ernest, assignor to Bickford and Huffman Company, Macedon, N. Y. Seeding-machine | 735,921 | Apr. 21 | 2786 | 633 | 103 | 1792 |
| Baseman, Ernest, assignor to Bickford and Huffman Company, Macedon, N. Y. Speed mechanism | 735,446 | Aug. 4 | 795 | 169 | 105 | 1150 |
| Basenau, Fritz, and A. Cohen, Amsterdam, Netherlands. Producing insulating mediums | 733,797 | July 14 | 1957 | ..... | 105 | 430 |
| Basford, Claude R., Healdsburg, assignor to Basford Manufacturing Company, San Francisco, Cal. Attachment for dental engines | 718,561 | Jan. 13 | 1988 | 433 | 102 | 441 |
| Basford, Claude R., Healdsburg, assignor to Basford Manufacturing Co., San Francisco, Cal. Obtunding attachment for dental drills | 727,736 | May 12 | 1732 | 389 | 104 | 390 |
| Basford Manufacturing Company. (See Basford, Claude R., assignor.) | | | | | | |
| Bashford, William L., Benton Harbor, Mich. Churn | 742,823 | Nov. 3 | 11 | 2 | 107 | 5 |
| Bashlin Company. (See Bashlin, William B. M., assignor.) | | | | | | |
| Bashlin, William B. M., assignor to Bashlin Company, Warren, Pa. Check-valve | 720,100 | Feb. 10 | 1281 | 293 | 102 | 1112 |

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| Baskerville, Glenn, Charlotte, N. C. Magazine fuse-block | 729,033 | May 26 | 4157 | 921 | 104 | 933 |
| Baskett, James N., Mexico, Mo. Electric signaling system for railways | 741,952 | Oct. 20 | 3011 | 668<br>669 | 106 | 1922 |
| Baskin, Edwin T., Independence, Mo. Brush | 722,666 | Mar. 17 | 1889 | 420 | 103 | 436 |
| Baskin, William H., Mineola, Ga. Cotton-gin | 741,443 | Oct. 13 | 2001 | 444 | 106 | 1693 |
| Basle Chemical Works. (See Bischler, Augustus, assignor.) | | | | | | |
| Basnett, Gaylord S. (See Snyder, Albert W., assignor.) | | | | | | |
| Bass, Abe, New York, N. Y. Automatic snow-melting machine | 738,146 | Sept. 8 | 1186 | 261 | 106 | 271 |
| Bass, Charles P., Portland, Oreg., assignor of one-half to T. Thomas, Detroit, Mich. Danger-signal for railways | 719,932 | Feb. 3 | 924 | 216 | 102 | 1020 |
| Bass, Ephraim, New York, N. Y. Support for telephone-receivers | 737,894 | Sept. 1 | 676 | 143 | 106 | 148 |
| Bass, George. (See Bergstrom and Bass.) | | | | | | |
| Bass, Isaac W., Smithfield, N. C. Plant-protector attachment for plows | 728,074 | May 12 | 2357 | 524 | 104 | 519 |
| Bassell, William B., Columbus, Ohio. Electrotherapeutic appliance | 740,385 | Oct. 6 | 2 | 1 | 106 | 1245 |
| Bassett, Charles F., Chicago, Ill., assignor, by mesne assignments, to American Mechanical Cashier Company. Mechanical cashier | 720,552 | Feb. 17 | 2118 | 488<br>489<br>490<br>491<br>492 | 102 | 1301 |
| Bassett, David W. (See Wilson, Bassett, and Dring.) | | | | | | |
| Bassett, Elmer C. (See Williams, Henry A., assignor.) | | | | | | |
| Bassett, Linton T., Holyoke, Mass. Motor-vehicle | 718,303 | Jan. 13 | 1453 | 323 | 102 | 328 |
| Bassett, Norman C., Lynn, Mass., assignor to General Electric Company. Means for electrically operating counter-shafts | 729,716 | June 2 | 339 | 76, 77 | 104 | 1199 |
| Bassett, Norman C., Lynn, Mass., assignor to General Electric Company. Commutator-brush | 731,740 | June 23 | 4091 | 914 | 104 | 2024 |
| Bassett, Norman C., Boston, Mass., assignor to General Electric Company. Electric motor | 735,052 | Aug. 4 | 9 | 3 | 105 | 983 |
| Bassett, Pliny E., Worcester, Mass. Sandal | 736,194 | Aug. 11 | 2184 | 469 | 105 | 1466 |
| Bassett, Walter E., *et al.* (See Verdin, Alois N., assignor.) | | | | | | |
| Bassler, Edwin M., Chicago, Ill., assignor of three-fourths to E. Worthing, C. W. Rogers, and J. W. Mathis. Pneumatic feeder | 724,780 | Apr. 7 | 680 | 159 | 103 | 1314 |
| Bastian, Charles L., Chicago, Ill. Means for separating air from liquid in carbonating or other apparatus | 727,570 | May 12 | 1405 | 316 | 104 | 320 |
| Bastian, Charles L., Chicago, Ill. Bowling-alley pin-spotter | 729,118 | May 26 | 4301 | 951 | 104 | 960 |
| Bastian, Charles L., Chicago, Ill. Pressure-regulating valve | 737,057 | Aug. 25 | 3779 | 839 | 105 | 1838 |
| Bastian, Charles O., London, England. Prepayment attachment for electricity-meters | 740,216 | Sept. 29 | 5144 | 1154<br>1155 | 106 | 1165 |
| Bastian, John B., and J. H. Sussman, Charlestown, Ind. Crupper-former | 719,637 | Feb. 3 | 404 | 92 | 102 | 907 |
| Bastian, John B., and J. H. Sussman, Charlestown, Ind. Crupper stuffer | 725,535 | Apr. 14 | 2075 | 469 | 103 | 1624 |
| Batchder, Peter. (See Lovely and Batchder.) | | | | | | |
| Batchelder, Asa F., Schenectady, N. Y., assignor to General Electric Company. Brush-holder | 727,571 | May 12 | 1406 | 316 | 104 | 321 |
| Batchelder, Asa F., Schenectady, N. Y., assignor to General Electric Company. Insulating means for electrical apparatus | 728,152 | May 12 | 2499 | 555 | 104 | 549 |
| Batchelder, Charles A., Brockton, Mass., assignor to O. A. Miller Treeing Machine Company, Portland, Me., and Brockton, Mass. Form for boots or shoes | 723,574 | Mar. 24 | 3578 | 800 | 103 | 792 |
| Batchelder, Chester S., Spokane, Wash. Lime or cement kiln | 718,075 | Jan. 13 | 1042 | 232 | 102 | 239 |
| Batcheller, Birney C., Philadelphia, Pa. Pneumatic-despatch-tube apparatus | 719,421 | Feb. 3 | 15 | 3, 4 | 102 | 830 |
| Batcheller, Birney C., Philadelphia, Pa. Pneumatic transmission system | 722,667 | Mar. 17 | 1890 | 421<br>422<br>423<br>424<br>425 | 103 | 436 |
| Batcheller, Birney C., Philadelphia, Pa. Sending device for pneumatic tubes | 746,266 | Dec. 8 | 1750 | 397<br>398 | 107 | 1493 |
| Batcheller, Birney C., Philadelphia, Pa. Pneumatic-despatch apparatus | 746,267 | Dec. 8 | 1756 | 398 | 107 | 1494 |
| Batcheller Pneumatic Tube Company. (See Stuart, Kenneth E., assignor.) | | | | | | |
| Batdorf, Charles S., Brooklyn, N. Y. Coin-package | 717,964 | Jan. 6 | 829 | 187 | 102 | 178 |
| Batdorff, Brooks, Delta, Ohio. Fence-lifter | 724,532 | Apr. 7 | 208 | 51 | 103 | 1214 |
| Bate, Frederic G., London, assignor of two-thirds to J. Walton, Shrewsbury, and C. Bauer, London, England. Ventilator | 745,313 | Dec. 1 | 4 | 1 | 107 | 1101 |
| Bate, Ira D., West Jefferson, Ohio. Feeding mechanism for husking-machines | 721,137 | Feb. 24 | 3247 | 743 | 102 | 1560 |
| Bate, William, Hayle, and F. G. Orme, London, England. Condenser for nitric or other acids | 733,452 | July 14 | 1358 | 319 | 105 | 304 |
| Bateman, Frank, Grenloch, N. J. Cultivator | 747,844 | Dec. 22 | 4668 | 1055 | 107 | 2184 |
| Bateman, Frank, assignor to Bateman Manufacturing Company, Grenloch, N. J. Mounting for cultivator-teeth | 748,466 | Dec. 29 | 5873 | 1335 | 107 | 2468 |
| Bateman Manufacturing Company. (See Bateman, Frank, assignor.) | | | | | | |
| Bateman, Omer C., Taylor Ridge, Ill. Cultivator attachment | 721,277 | Feb. 24 | 3520 | 800 | 102 | 1614 |
| Bateman, Talbot O., assignor to Texas Crude Oil Burner Co., San Antonio, Tex. Hydrocarbon-burner | 726,212 | Apr. 21 | 3282 | 745 | 103 | 1893 |
| Bates, Adelmer M., Chicago, Ill. Sack, bag, &c. (Reissue) | 12,081 | Feb. 17 | 3230 | 739 | 102 | 1541 |
| Bates, Adelmer M., Cleveland, Ohio. Measuring device | 737,058 | Aug. 25 | 3782 | 839 | 105 | 1839 |
| Bates, Albert J., Joliet, Ill., assignor to American Steel & Wire Company. Machine for making wire hoops | 746,442 | Dec. 8 | 2057 | 474<br>475 | 107 | 1558 |
| Bates, Albert J., and J. A. Cocker, Joliet, Ill., assignors to American Steel & Wire Company of New Jersey. Wire-fence machine | 732,155 | June 30 | 4896 | 1088<br>1089 | 104 | 2208 |
| Bates, Alonzo L. (See Winn and Bates.) | | | | | | |
| Bates & Bacon. (See Wallenthin, Walfrid, assignor.) | | | | | | |
| Bates, Edward, Newark, Ohio. Brooder | 733,938 | July 21 | 2242 | 527 | 105 | 506 |
| Bates, Edward C., Grand Forks, N. D. Pocket pencil-holder | 747,366 | Dec. 22 | 3805 | 856 | 107 | 1988 |
| Bates, Edwin G., assignor to Bates Machine Company, New York, N. Y. Numbering or similar machine | 721,276 | Feb. 24 | 3517 | 800 | 102 | 1614 |
| Bates, Francis G., Philadelphia, Pa. Rotary pump | 730,081 | June 2 | 1014 | 227 | 104 | 1334 |
| Bates, Frank H., San Francisco, Cal. Vapor-generator | 746,914 | Dec. 15 | 2929 | 676 | 107 | 1774 |
| Bates, George A., Brooklyn, N. Y., assignor to Mergenthaler Linotype Company. Linotype-machine | 719,422 | Feb. 3 | 18 | 4, 5 | 102 | 830 |
| Bates, George A., Brooklyn, N. Y., assignor to Mergenthaler Linotype Company. Linotype-machine | 722,353 | Mar. 10 | 1297 | 287 | 103 | 291 |
| Bates, George A., Brooklyn, N. Y., assignor to Mergenthaler Linotype Company. Linotype-machine | 722,354 | Mar. 10 | 1298 | 288 | 103 | 292 |
| Bates, George A., Brooklyn, N. Y., assignor to Mergenthaler Linotype Company. Linotype-machine | 730,734 | June 9 | 2192 | 488 | 104 | 1598 |
| Bates, George E., Orion, Mich. Shoulder-braces | 733,897 | July 14 | 2158 | 509 | 105 | 470 |
| Bates, George M., Fairplay, Mo. Gate | 735,053 | Aug. 4 | 10 | 3 | 105 | 983 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| Bates, George M., Gault, Mo. Gate | 744,154 | Nov. 17 | 2686 | 572, 573 | 107 | 601 |
| Bates, Henry A., Middletown, Conn., and L. J. Labrum, Albany, N. Y., assignors to Summit Thread Company, East Hampton, Conn. Cone-thread-holder support | 734,293 | July 21 | 2972 | 698 | 105 | 662 |
| Bates, Irving B. (See Green, Homer V., assignor.) | | | | | | |
| Bates, John D., Calais, Me. Lumber-surface meter | 732,697 | July 7 | 10 | 3 | 105 | 5 |
| Bates, Joseph D., Westfield, Mass. Dish or plate | 730,082 | June 2 | 1016 | 227 | 104 | 1334 |
| Bates, Lindon W., Chicago, Ill. Forming navigable channels | 725,202 | Apr. 14 | 1463 | 331 | 103 | 1495 |
| Bates, Lindon W., Chicago, Ill. Apparatus for forming navigable channels | 725,203 | Apr. 14 | 1466 | 331, 332, 333 | 103 | 1495 |
| Bates, Lindon W., Chicago, Ill. Cutter for dredges | 725,817 | Apr. 21 | 2610 | 593 | 103 | 1754 |
| Bates, Lindon W., Chicago, Ill. Cutter for suction-dredges | 725,818 | Apr. 21 | 2611 | 593, 594 | 103 | 1754 |
| Bates Machine Company. (See Bates, Edwin G., assignor.) | | | | | | |
| Bates, Madison F., Lansing, Mich. Carbureting device for explosive-engines | 729,254 | May 26 | 4547 | 1003 | 104 | 1013 |
| Bates, Ralph E., Winchester, assignor of two-fifths to H. Van Everen, Cambridge, Mass. Coin-controlled electric meter | 724,654 | Apr. 7 | 434 | 105, 106 | 103 | 1262 |
| Bates, Sherman A., Collins, Iowa. Draft-equalizer | 725,819 | Apr. 21 | 2613 | 594 | 103 | 1755 |
| Bates, William H., and R. C. Douglass, assignors to Marine Iron Works, Chicago, Ill. Variable cut-off for steam-engines | 738,147 | Sept. 8 | 1186 | 261, 262 | 106 | 272 |
| Bath, John, Waltham, Mass. Tool-holder for grinding-machines | 736,573 | Aug. 18 | 2859 | 626 | 105 | 1627 |
| Batson, Samuel R., Penge, England. Grip-pulley | 741,614 | Oct. 20 | 2360 | 528 | 106 | 1785 |
| Batt, Edwin A. (See Sidaway, Joseph, assignor.) | | | | | | |
| Batten, William, and W. Hayes, Auburn, Me. Traveling-flat carding-engine | 726,496 | Apr. 28 | 3870 | 876 | 103 | 2025 |
| Batter, Frank, Tillamook, Oreg. Portable foot and body warmer | 719,638 | Feb. 3 | 405 | 92 | 102 | 907 |
| Battice, William, Seneca, Ill. Device for binding corn-shocks | 747,365 | Dec. 22 | 3804 | 856 | 107 | 1988 |
| Battle, Anthony J., Brooklyn, N. Y. Automatic coat-rack | 718,688 | Jan. 20 | 2329 | 488 | 102 | 505 |
| Battle Creek Novelty Company. (See Stoddard, Oscar, assignor.) | | | | | | |
| Battle Creek Pure Food Company. (See Bourdeau, Arthur C., assignor.) | | | | | | |
| Battle, John F., Schenectady, assignor to H. J. Bartle, Cohoes, N. Y. Lawn-sweeper | 744,460 | Nov. 17 | 3265 | 700 | 107 | 728 |
| Battle, Leander R., assignor of one-third to H. J. Drane, Lakeland, Fla. Railway-brake | 729,034 | May 26 | 4158 | 921 | 104 | 933 |
| Batty, A. D. (See Bredahl, Samuel, assignor.) | | | | | | |
| Batty, George, assignor to himself and P. McGinty, Newark, N. J. Overshoe for horses | 746,268 | Dec. 8 | 1758 | 399 | 107 | 1494 |
| Bauch, Robert, Rockford, Ill. Sectional bookcase | 746,915 | Dec. 15 | 2932 | 676, 677 | 107 | 1775 |
| Bauduin, Fritz, La Haye, Netherlands. Torpedo for submarine mines | 720,101 | Feb. 10 | 1282 | 293 | 102 | 1112 |
| Bauer, Aleck, Chicago, Ill. Box | 732,156 | June 30 | 4899 | 1090 | 104 | 2208 |
| Bauer, Aleck, assignor to Bauer & Black, Chicago, Ill. Box | 735,013 | July 28 | 4299 | 1000 | 105 | 952 |
| Bauer, August G., Columbus, Ohio. Book-mark | 727,572 | May 12 | 1408 | 317 | 104 | 321 |
| Bauer & Black. (See Bauer, Aleck, assignor.) | | | | | | |
| Bauer & Black. (See Toles, Justin K., assignor.) | | | | | | |
| Bauer, Charles, *et al.* (See Bate, Frederic G., assignor.) | | | | | | |
| Bauer, Daniel C. (See Geiger, Bauer, and Pejchar.) | | | | | | |
| Bauer, Ervan L., Wellsburg, W. Va. Ventilating lid or cover for culinary articles | 737,694 | Sept. 1 | 248 | 53 | 106 | 57 |
| Bauer, Gottlieb F. (See Carlinet, John G., assignor.) | | | | | | |
| Bauer, John. (See Hartung and Bauer.) | | | | | | |
| Bauer, John G., Ravenna, Ohio. Wire-winding machine | 743,136 | Nov. 3 | 610 | 132 | 107 | 128 |
| Bauer, John L. F., Jr., Strasburg, Ill. Heating-stove | 743,223 | Nov. 3 | 788 | 170 | 107 | 165 |
| Bauer, Joseph P., Dayton, Ohio. Boiler-brace | 724,593 | Apr. 7 | 209 | 51 | 103 | 1214 |
| Bauer, M. (See Schoenfelder, Paul E., assignor.) | | | | | | |
| Bauer, Mathias. (See Wilke and Bauer.) | | | | | | |
| Bauer, Perry S., Chicago, Ill. Garter | 722,274 | Mar. 10 | 1162 | 257 | 103 | 262 |
| Bauer, Perry S., Chicago, Ill. Hose-supporter | 726,842 | May 5 | 15 | 4 | 104 | 6 |
| Bauer, Theodor von, Berlin, Germany. Coke-oven | 740,078 | Sept. 29 | 4893 | 1096, 1097 | 106 | 1112 |
| Bauer, Valentin, Höchst-on-the-Main, Germany. Apparatus for cleaning, drying, and polishing the inking-rollers of printing-presses | 728,354 | May 19 | 2906 | 641 | 104 | 657 |
| Bauer, Valentine G., Brooklyn, N. Y. Self-acting air-inlet | 721,853 | Mar. 3 | 360 | 79 | 103 | 78 |
| Bauer, William L., Troygrove, Ill. Railway splice-bar | 742,956 | Nov. 3 | 239 | 53 | 107 | 51 |
| Bauermeister, Arno, assignor to C. W. G. Aarland, Leipzig, Germany. Making photographic color-filters | 734,454 | July 21 | 3239 | 762 | 105 | 718 |
| Bauers, Isadore L. (See Crawford, William R., assignor.) | | | | | | |
| Baughan, Thomas M., Paducah, Ky. Draft-block attachment for freight-cars | 719,989 | Feb. 10 | 1041 | 242 | 102 | 1060 |
| Baughman, Arthur H., Jackson, Minn. Scoop | 718,814 | Jan. 20 | 2457 | 546 | 102 | 551 |
| Baughman, James D. (See Hunt and Baughman.) | | | | | | |
| Baughman, William J., *et al.* (See Monroe, Charles W., assignor.) | | | | | | |
| Bauknecht, Carl, Paris, France, assignor to Hamburg Amerikanische Uhrenfabrik, Schramberg, Germany. Bell | 718,241 | Jan. 13 | 1337 | 296 | 102 | 302 |
| Baulieu, William J. (See Cole and Baulieu.) | | | | | | |
| Baulk, Charles, assignor of one-half to J. Humphries and Sons, Limited, Kidderminster, England. Means for lubricating the pile-wires of looms | 730,201 | June 2 | 1206 | 270 | 104 | 1373 |
| Baum, Albert J. (See Kyle and Baum.) | | | | | | |
| Baum, Frank G., Paloalto, Cal., assignor to Stanley Electric Manufacturing Company, Pittsfield, Mass. Compensator | 738,756 | Sept. 15 | 2433 | 534 | 106 | 552 |
| Baum, Frank G., Paloalto, Cal., assignor to Stanley Electric Manufacturing Company, Pittsfield, Mass. Compensating system | 738,757 | Sept. 15 | 2435 | 534 | 106 | 553 |
| Bauman, Max A., *et al.* (See Farmer, Julius M., assignor.) | | | | | | |
| Baumann, Gustav A., Fort Myers, Fla. Vise | 747,033 | Dec. 15 | 3160 | 724 | 107 | 1827 |
| Baumann, Henry, Hoboken, N. J. Stone-cutter's gage | 740,079 | Sept. 29 | 4895 | 1098 | 106 | 1113 |
| Baumann, Robert. (See Wurmb and Baumann.) | | | | | | |
| Baumgarten, Henry, London, England. Acetylene-gas generator | 730,221 | June 9 | 1266 | 281 | 104 | 1400 |
| Baumgarten, Josef, New York, N. Y. Necktie-fastener | 730,222 | June 9 | 1268 | 281 | 104 | 1401 |
| Baumgartner, Blassie, Waxahachie, Tex. Wire-fence machine | 743,806 | Nov. 10 | 1976 | 420 | 107 | 437 |
| Baumgartner, Frank J. (See Kaup, Joseph, assignor.) | | | | | | |
| Bausch, Edward, and G. Hommel, assignors to Bausch & Lomb Optical Company, Rochester, N. Y. Microtome | 728,656 | May 19 | 3472 | 771, 772 | 104 | 777 |
| Bausch, Edward, and G. Hommel, assignors to Bausch & Lomb Optical Company, Rochester, N. Y. Microscope | 734,501 | July 28 | 3334 | 780, 781 | 105 | 753 |
| Bausch & Lomb Optical Company. (See Bausch, William, assignor.) | | | | | | |
| Bausch & Lomb Optical Company. (See Bausch and Hommel, assignors.) | | | | | | |
| Bausch & Lomb Optical Company. (See Brueck, Theodor, assignor.) | | | | | | |
| Bausch, William, assignor to Bausch & Lomb Optical Company, Rochester, N. Y. Eyeglasses | 735,334 | Aug. 4 | 566 | 115 | 105 | 1102 |
| Bausher, Thomas D. (See Briner, Thomas J., assignor.) | | | | | | |
| Bausman, David H., Bausman, Pa. Lawn-swing | 725,396 | Apr. 14 | 1802 | 404 | 103 | 1566 |

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| Bausset, Arthur de, assignor to himself and C. A. McCready, New York, N. Y. Propeller. | 719,172 | Jan. 27 | 3148 | 700 | 102 | 709 |
| Bavier, Hattie, New York, N. Y. Garment-supporter | 718,304 | Jan. 13 | 1455 | 323 | 102 | 329 |
| Bawden, Edwin, New York, N. Y. Game apparatus | 724,244 | Mar. 31 | 4897 | 1096 | 103 | 1081 |
| Baxendall, Richard F. G., Ben Rhydding, England. Time, speed, and distance recorder. | 734,156 | July 21 | 2693 | 633, 634 | 105 | 603 |
| Baxeres de Alzugaray, José, assignor to Baxeres Gold Extraction Company, Limited, London, England. Extraction of precious metals from their ores | 738,758 | Sept. 15 | 2436 | ..... | 106 | 553 |
| Baxeres de Alzugaray, José, and W. A. Mercer, assignors to Baxeres Gold Extraction Company, Limited, London, England. Apparatus for extraction of precious metals | 724,076 | Mar. 31 | 4538 | 1021 | 103 | 1009 |
| Baxeres de Alzugaray, José, and W. A. Mercer, assignors to Baxeres Gold Extraction Company, Limited, London, England. Apparatus for extraction of precious metals from their ores | 738,148 | Sept. 8 | 1188 | 262 | 106 | 272 |
| Baxeres Gold Extraction Company. (See Baxeres de Alzugaray, José, assignor.) | | | | | | |
| Baxeres Gold Extraction Company. (See Baxeres de Alzugaray and Mercer, assignors.) | | | | | | |
| Baxter, George F., Singer, La. Sawmill-carriage | 742,149 | Oct. 27 | 3440 | 766 | 106 | 2022 |
| Baxter, Isaac O., Afton, Iowa. Broom-corn harvester | 735,696 | Aug. 11 | 1276 | 273 | 105 | 1270 |
| Baxter, John, *et al.* (See Clark, Oliver, assignor.) | | | | | | |
| Baxter, John, Buffalo, N. Y. Course and bearing correcting device | 745,314 | Dec. 1 | 5 | 1 | 107 | 1102 |
| Baxter, O. H. P., *et al.* (See Land, Gordon, assignor.) | | | | | | |
| Baxter, William, Jr., Jersey City, N. J. Electromagnet | 731,741 | June 23 | 4092 | 914 | 104 | 2024 |
| Baxter, William, Jr., Jersey City, N. J. Electrically controlling motors from a distance. | 736,476 | Aug. 18 | 2680 | 589, 590 | 105 | 1590 |
| Baxter, William, Jr., Jersey City, N. J. Type-writer | 736,477 | Aug. 18 | 2688 | 590 | 105 | 1591 |
| Baxter, William, Jr., Jersey City, N. J. System for operating electric elevators | 743,426 | Nov. 10 | 1248 | 257 | 107 | 282 |
| Baxter, William, Fitchburg, assignor to Draper Company, Hopedale, Mass. Unwrapping mechanism for yarn chains | 745,993 | Dec. 8 | 1255 | 283 | 107 | 1384 |
| Baxter, William C., East Bridgewater, assignor to United States Automatic Box Machinery Company, Bridgewater, Mass. Paper-box machine | 737,819 | Sept. 1 | 494 | 109, 110 | 106 | 111 |
| Bay, James L., Lineville, Iowa. Plow-clevis | 744,854 | Nov. 24 | 3969 | 855 | 107 | 894 |
| Bay State Electric Heat & Light Company. (See Porter, Edwin F., assignor.) | | | | | | |
| Bayard, Hyram J., Chicago, Ill. Boat or vessel | 739,775 | Sept. 22 | 4288 | 961, 962 | 106 | 968 |
| Bayard, Hyram J., Chicago, Ill. Railway-car | 744,155 | Nov. 17 | 2688 | 573 | 107 | 601 |
| Bayer, Henry, Schenectady, N. Y., assignor to General Electric Company. Electric switch | 729,255 | May 26 | 4548 | 1003 | 104 | 1013 |
| Bayer, Henry E., Pittsburg, Pa. Window-cleaning device | 724,534 | Apr. 7 | 210 | 51 | 103 | 1214 |
| Bayer, Jacob. (See Castle, Samuel D., assignor.) | | | | | | |
| Bayer, John, and H. W. Wigan, New York, N. Y. Hatchway-gate | 720,216 | Feb. 10 | 1492 | 342 | 102 | 1154 |
| Bayer, William F., assignor to Buffalo Musical Instrument Company, Buffalo, N. Y. Mechanical piano or organ player | 731,423 | June 23 | 3493 | 780 | 104 | 1904 |
| Bayles, Alfred G., assignor of one-half to J. Untermann, New York, N. Y. Radiator | 718,898 | Jan. 20 | 2616 | 585 | 102 | 585 |
| Bayles, Allen D., Kansas City, Mo. Storm-apron for vehicles | 718,413 | Jan. 13 | 1649 | 364 | 102 | 369 |
| Bayles, Havens B., New York, N. Y. Fuel | 743,677 | Nov. 10 | 1745 | ..... | 107 | 388 |
| Bayless, Thomas B., Lexington, Ky. Fireplace-heater | 728,355 | May 19 | 2907 | 642 | 104 | 657 |
| Bayless, William C., Jefferson City, and J. S. Dallas, Knoxville, Tenn. Fence | 741,095 | Oct. 13 | 1306 | 300 | 106 | 1545 |
| Bayley, Abel H. (See Bryan and Bayley.) | | | | | | |
| Bayley, George W. (See Willoughby, John, assignor.) | | | | | | |
| Bayley, Harry P., assignor to Pyle-National Electric Headlight Company, Chicago, Ill. Carbon-holder for electric-arc lamps | 726,497 | Apr. 28 | 3872 | 876 | 103 | 2026 |
| Bayley, Thomas, Hamilton, Canada. Rotary steam-engine | 723,436 | Mar. 24 | 3320 | 744 | 103 | 741 |
| Bayliss, Edward M. (See Robinson, Fawcett, assignor.) | | | | | | |
| Bayliss, William. (See Fasenmeyer, Andy, assignor.) | | | | | | |
| Baylor, Charles S., Fredericksburg, Va. Toilet-brush | 739,638 | Sept. 22 | 4051 | 904 | 106 | 916 |
| Baynes, Frederick W., London, assignor to P. Eckhaus, West Kensington, England. Game apparatus | 719,719 | Feb. 3 | 560 | 127 | 102 | 940 |
| Baynes, Frederick W., London, assignor to P. Eckhaus, West Kensington, England. Time-reminder | 729,527 | June 2 | 17 | 5 | 104 | 1130 |
| Bayrer, William J., Plantsville, Conn. Nippers | 723,356 | Mar. 24 | 3166 | 711 | 103 | 711 |
| Bays, William W., Salisbury, N. C. Automatic cut-off and filter | 740,217 | Sept. 29 | 5147 | 1156 | 106 | 1166 |
| Baysinger, Stuart L. (See Johnson, Richard L., assignor.) | | | | | | |
| Bazlen, Max, assignor to Badische Anilin & Soda Fabrik, Ludwigshafen-on-the-Rhine, Germany. Hydrosulfite for reducing indigo | 719,720 | Feb. 3 | 560 | ..... | 102 | 941 |
| Beach, Charles E., Washington, D. C. Supplemental press-base for printing-plates | 747,845 | Dec. 22 | 4670 | 1055, 1056 | 107 | 2184 |
| Beach, Clarence E. (See Doughty and Beach.) | | | | | | |
| Beach, Edward S. (See Tucker and Goddard, assignors.) | | | | | | |
| Beach, Fitzhugh H. (See Beach, Fred S. and F. H.) | | | | | | |
| Beach, Fred H., *et al.* (See Sisson, Harry D., assignor.) | | | | | | |
| Beach, Fred S. and F. H., Lyons, Mich. Culvert | 722,396 | Mar. 10 | 1371 | 303 | 103 | 308 |
| Beach, Henry, Carthage, and J. B. Coe, Clayton, Ill. Heating-stove | 747,674 | Dec. 22 | 4354 | 983 | 107 | 2111 |
| Beach, Henry B., Meriden, Conn. Condiment-holder | 730,510 | June 9 | 1809 | 403 | 104 | 1516 |
| Beach, Thaddeus C., Buffalo, N. Y., assignor to St. Johns Table Company, St. Johns, Mich. Table | 748,041 | Dec. 29 | 5089 | 1150 | 107 | 2297 |
| Beach, Warren B., Clyde, Kans. Combined prescription-blank and label | 730,083 | June 2 | 1017 | 228 | 104 | 1334 |
| Beagan, John P. (See Jordan, David N., assignor.) | | | | | | |
| Beakley, Edward J., assignor of one-half to J. W. Ferell, Charlotte, Tenn. Rotary engine | 732,612 | June 30 | 5776 | 1280, 1281 | 104 | 2394 |
| Beal, Albert R., Cambridge, Mass. Register | 728,836 | May 26 | 3808 | 849 | 104 | 862 |
| Beal, George F., *et al.* (See Lightcap, William H., assignor.) | | | | | | |
| Beal, Joseph. (See Sharpe, John E., assignor.) | | | | | | |
| Beale, Bertram R., and A. E. Bagnall, London, England. Coin-freed mechanism for gas or other fluid meters | 722,554 | Mar. 10 | 1671 | 369, 370 | 103 | 375 |
| Beale, William S., assignor of one-half to B. F. Day, Terre Haute, Ind. Stove or furnace. | 724,781 | Apr. 7 | 682 | 160 | 103 | 1314 |
| Beall, Albert E., assignor to C. E. Beall, Clinton, Iowa. Bed-spring | 727,265 | May 5 | 820 | 177 | 104 | 176 |
| Beall, Albert E., assignor to C. E. Beall, Clinton, Iowa. Bed-bottom | 728,438 | May 19 | 3043 | 669 | 104 | 686 |
| Beall, Allen M., Walkerton, Ind. Switch | 741,444 | Oct. 13 | 2004 | 445 | 106 | 1693 |
| Beall, Cora E. (See Beall, Albert E., assignor.) | | | | | | |
| Beall, W. W., *et al.* (See Kersey, James M., assignor.) | | | | | | |
| Beall, William L., assignor to Gale Manufacturing Company, Albion, Mich. Clutch for planters | 734,502 | July 28 | 3337 | 781 | 105 | 754 |
| Beall, William L., assignor to Gale Manufacturing Company, Albion, Mich. Riding or walking cultivator | 734,657 | July 28 | 3615 | 846, 847 | 105 | 813 |
| Beals, Erl V., Boston, Mass. Electromagnetic clutch | 727,573 | May 12 | 1408 | 317 | 104 | 321 |
| Beals, Luther H., Westfield, Mass. Whip | 732,917 | July 7 | 394 | 95 | 105 | 85 |
| Beam, Aron M., Denver, Colo., assignor to Beam Converting Furnace Company. Treating rebellious or refractory ores | 737,059 | Aug. 25 | 3785 | ..... | 105 | 1840 |

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| Beam, Aron M., Denver, Colo., assignor to Beam Converting Furnace Company. Treating ores for recovery of zinc and copper | 737,060 | Aug. 25 | 3789 | ..... | 105 | 1840 |
| Beam, Aron M., Denver, Colo., assignor to Beam Converting Furnace Company. Recovering precious metals | 737,061 | Aug. 25 | 3790 | ..... | 105 | 1840 |
| Beam, Aron M., assignor to National Automatic Furnace Mills and Mining Company, Denver, Colo. Ore-roasting furnace | 745,765 | Dec. 1 | 798 | 183<br>184 | 107 | 1268 |
| Beam Converting Furnace Company. (See Beam, Aron M., assignor.) | | | | | | |
| Beam, Edith E. (See Beam, Ira R., assignor.) | | | | | | |
| Beam, Ira R., assignor of one-third to E. E. Beam, Elmira, N. Y. Engraving-machine | 738,149 | Sept. 8 | 1189 | 262 | 106 | 272 |
| Beam, Jacob B., Bigrun, Pa. Oil-can | 741,096 | Oct. 13 | 1308 | 300 | 106 | 1546 |
| Beam, Jacob B., Bigrun, assignor of one-half to C. W. Hughes, Eleanor, Pa. Steam-boiler | 741,575 | Oct. 13 | 2285 | 510 | 106 | 1752 |
| Beam, John W., Argos, Ind. Harness attachment | 719,721 | Feb. 3 | 562 | 127 | 102 | 941 |
| Beaman, Harry L., Winchendon, Mass. Dipper-holder | 725,655 | Apr. 21 | 2320 | 523 | 103 | 1690 |
| Beaman & Smith Company. (See Smith, George H., assignor.) | | | | | | |
| Beamer, George R., Detroit, Mich. Packing | 747,846 | Dec. 22 | 4672 | ..... | 107 | 2184 |
| Bean, Fred S. (See Williams and Bean.) | | | | | | |
| Bean, Henry, Athens, Ohio. Registering apparatus | 719,423 | Feb. 3 | 23 | 5 | 102 | 831 |
| Bean, John, Los Gatos, Cal. Nozzle | 721,656 | Mar. 3 | 6 | 2 | 103 | 4 |
| Bean, Minot A., Chelmsford, Mass. Game apparatus | 748,467 | Dec. 29 | 5874 | 1335 | 107 | 2468 |
| Bean, Samuel I. (See Haymond, Frank U., assignor.) | | | | | | |
| Bean, Samuel I. (See Haymond and Bean.) | | | | | | |
| Bean, William L. (See Conkling, De Witt C., assignor.) | | | | | | |
| Bear, Mary K., Mount Morris, Ill. Music-holder | 743,678 | Nov. 10 | 1745 | 368 | 107 | 388 |
| Bear, William L., Williamsport, Pa. Convertible device | 742,381 | Oct. 27 | 3873 | 870 | 106 | 2111 |
| Beard, Arthur L., Minneapolis, Minn. Duplicate-whist case | 744,280 | Nov. 17 | 2939 | 628 | 107 | 657 |
| Beard, David F., Horton, Kans. Fence | 736,195 | Aug. 11 | 2185 | 469 | 105 | 1466 |
| Beard, Edward J., Kansas City, Mo. Excavator | 745,137 | Nov. 24 | 4515 | 977<br>978 | 107 | 1006 |
| Beard, Ernest H. (See Ballou, Ernest H., assignor.) | | | | | | |
| Beard, George M., Angola, Ind. Clutch | 745,559 | Dec. 1 | 454 | 106<br>107 | 107 | 1194 |
| Beard-Hayne Defiberator Company. (See Beard and Hayne, assignors.) | | | | | | |
| Beard, Isaac C., and J. H. Stephens, assignors of one-half to T. R. Hall and L. Lancaster, Stroud, Okla. Ter. Pipe-jack | 742,111 | Oct. 20 | 3370 | 752 | 106 | 1992 |
| Beard, James F., Carmen Station, Mexico, and R. Hayne, assignors to Beard-Hayne Defiberator Company, St. Louis, Mo. Four-way defibrator | 744,281 | Nov. 17 | 2940 | 628<br>629 | 107 | 657 |
| Beard, James T., and M. D. Mackie, Scranton, Pa. Gas-detecting attachment for miners' safety-lamps | 722,555 | Mar. 10 | 1673 | 370 | 103 | 375 |
| Beard, Malden G. (See Stallsmith and Beard.) | | | | | | |
| Beard, Michael A., Springhill, La. Combined cotton chopper and cultivator | 723,126 | Mar. 17 | 2726 | 612 | 103 | 607 |
| Beard, Thomas J., Omaha, Nebr. Wall-paper exhibitor | 717,731 | Jan. 6 | 371 | 91 | 102 | 79 |
| Beard, William H., Garden, Ohio. Automatic wagon-brake | 727,737 | May 12 | 1734 | 389 | 104 | 390 |
| Beardemphl, Lydia E., Ashton, S. D. Dish-washing machine | 724,535 | Apr. 7 | 213 | 52 | 103 | 1215 |
| Beardsley, Aaron, Omaha, Nebr. Clothes scraper and cleaner | 739,813 | Sept. 29 | 4382 | 982 | 106 | 1006 |
| Beardsley, Chauncey H., Tremont, Ohio, assignor of fifty-one one-hundredths to C. Gibson and W. D. Totten, Detroit, Mich. Soft-tread horseshoe | 737,695 | Sept. 1 | 248 | 53 | 106 | 57 |
| Beardsley, Melvin W., Oakland, Cal. Explosive and making same | 727,062 | May 5 | 468 | ..... | 104 | 103 |
| Beardsley, Robert F. W., assignor, by mesne assignments, to I. Pieser and C. G. Livingston, Chicago, Ill. Machine for pasting up the ends of cartons, &c | 733,453 | July 14 | 1359 | 320<br>321 | 105 | 304 |
| Beardsley, Rufus C., Elkhart, Ind. Dam | 733,123 | July 7 | 758 | 183 | 105 | 160 |
| Beardsley, William J., assignor of one-half to G. J. Schumacher, Jackson, Mich. Tie for bags, bales, or the like | 732,673 | June 30 | 5891 | 1307 | 104 | 2417 |
| Bearse, Aaron, Syracuse, N. Y. Ground-anchor for cables or wires | 742,279 | Oct. 27 | 3696 | 826 | 106 | 2076 |
| Beasley, Hedley R., Stroud Green, London, England. Drawing-compasses | 729,717 | June 2 | 340 | 77 | 104 | 1199 |
| Beasley, Maria E., New York, N. Y. Kneading-machine | 739,142 | Sept. 15 | 3132 | 693 | 106 | 701 |
| Beasley, William V., Bryant, Ga. Furnace | 748,468 | Dec. 29 | 5875 | 1335 | 107 | 2468 |
| Beason, Albert M., Whitney, Ala. Rail-joint | 741,295 | Oct. 13 | 1717 | 384 | 106 | 1629 |
| Beatey, John, Bone Hill, Fla. Apparatus for mining phosphates | 740,731 | Oct. 6 | 644 | 145 | 106 | 1385 |
| Beatley, Charles O., McKees Rocks, Pa. Cigarette-former | 729,256 | May 26 | 4550 | 1003 | 104 | 1013 |
| Beaton, Allan J., New Britain, Conn. Bracket for steam-pipes | 746,269 | Dec. 8 | 1760 | 399 | 107 | 1495 |
| Beatty, Albert, Pittsburg, Pa. Hose and pipe coupling | 736,057 | Aug. 11 | 1959 | 417 | 105 | 1419 |
| Beatty, Charles, Mansfield, Mass. Car-door bearing | 728,657 | May 19 | 3479 | 772 | 104 | 779 |
| Beatty, David. (See Mosher, David, assignor.) | | | | | | |
| Beatty, George. (See Altenbaugh, William F., assignor.) | | | | | | |
| Beatty, Robert P., Cleveland, Ohio. Package | 732,332 | June 30 | 5226 | 1160 | 104 | 2276 |
| Beatty, Robert S., Trenton, N. J. Street-sweeping machine | 740,218 | Sept. 29 | 5152 | 1156<br>1157 | 106 | 1166 |
| Beatty, Ross J. (See Stephens, Danks, and Beatty.) | | | | | | |
| Beatty, William. (See Davidson, Thomas, Jr., assignor.) | | | | | | |
| Beatty, William E., *et al.* (See Hodgson, Walter W., assignor.) | | | | | | |
| Beauchamp, Lafayette. (See Beauchamp, Robert C. and L.) | | | | | | |
| Beauchamp, Robert C. and L., Falls of Rough, Ky. Corn-harvester | 734,800 | July 28 | 3930 | 917 | 105 | 875 |
| Beauchemin, Frederic, *et al.* (See Renaud, Ernest, assignor.) | | | | | | |
| Beauchemin, Henri, *et al.* (See Renaud, Ernest, assignor.) | | | | | | |
| Beaufait, Theodore L., Grossepointe, Mich. Column-support | 745,315 | Dec. 1 | 7 | 2 | 107 | 1102 |
| Beaulieu, Damase, St. Ulric, Canada. Automatic fire-alarm | 730,364 | June 16 | 2419 | 534 | 104 | 1666 |
| Beaumel, Léonce, Toulouse, France. Manufacture of compositions forming imitations of statuary-marble | 730,600 | June 9 | 1970 | ..... | 104 | 1551 |
| Beaumont, Frederick J., Stroud Green, assignor to R. and A. Main, Limited, Clerkenwell, London, England. Atmospheric gas-burner | 730,735 | June 9 | 2194 | 488 | 104 | 1599 |
| Beaumont, Godfrey, Dallas, Tex. Vaporizer | 741,996 | Oct. 20 | 3111 | 694 | 106 | 1940 |
| Beaumont, John W., Los Angeles, Cal. Well-lining | 731,742 | June 23 | 4094 | 914<br>915 | 104 | 2024 |
| Beaumont, John W., Los Angeles, Cal. Construction of roofs and walls of buildings | 747,120 | Dec. 15 | 3326 | 757 | 107 | 1868 |
| Beauregard, Stanislas, St. Henri, assignor to J. Adam, Montreal, Canada. Nail-making machine | 739,976 | Sept. 29 | 4704 | 1058<br>1059 | 106 | 1072 |
| Beauregard, Stanislas, St. Henri, assignor to J. Adam, Montreal, Canada. Tack-driver | 744,282 | Nov. 17 | 2943 | 629<br>630 | 107 | 658 |
| Beauregard, Stanislas, assignor to J. Adam, Montreal, Canada. Hand lasting-tool | 740,794 | Oct. 6 | 775 | 174<br>175 | 106 | 1410 |
| Beauregard, Victor, Boston, and C. S. Gooding, Brookline, Mass.; said Beauregard assignor to said Gooding. Door check and spring | 734,658 | July 28 | 3617 | 848 | 105 | 813 |
| Beauvais, Arthur, Laprairie, Canada. Plow | 739,814 | Sept. 29 | 4382 | 982<br>983 | 106 | 1006 |
| Beauvais, William C., New Orleans, La. Dash-pot | 725,656 | Apr. 21 | 2321 | 524 | 103 | 1690 |
| Beaver, Isador, New York, N. Y. Combined suspenders and belt | 721,415 | Feb. 24 | 3766 | 856 | 102 | 1665 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Beazley, John, Laporte, Tex. Window-sash | 722,797 | Mar. 17 | 2154 | 481 | 103 | 490 |
| Beazley, John, Laporte, Tex. Post-protector | 725,820 | Apr. 21 | 2613 | 594 | 103 | 1755 |
| Beazley, John, Laporte, Tex. Railway-tie | 732,256 | June 30 | 5094 | 1133 | 104 | 2249 |
| Beazley, John, Laporte, Tex. Railway-tie | 735,198 | Aug. 4 | 324 | 62 | 105 | 1050 |
| Beazley, John, Laporte, and W. H. Beazley, Shepherd, Tex. Fence-post | 736,058 | Aug. 11 | 1962 | 417 | 105 | 1419 |
| Beazley, William H. (See Beazley, John and W. H.) | | | | | | |
| Bebb, Maurice J., Xenia, and E. G. Eaton, Athens, Ohio. Curtain-display apparatus | 737,318 | Aug. 25 | 4277 | 950 | 105 | 1943 |
| Bebb, Maurice J., Xenia, and E. G. Eaton, Athens, Ohio. Device for exhibiting goods | 744,461 | Nov. 17 | 3267 | 700 | 107 | 728 |
| Bebler, Elwood. (See Anderson and Bebler.) | | | | | | |
| Bebout, William N., Pittsburg, Pa. Envelop | 722,076 | Mar. 3 | 772 | 173 | 103 | 166 |
| Becher, Heinrich, Berlin, Germany. Concrete column with ball-bearing | 731,743 | June 23 | 4097 | 915 | 104 | 2025 |
| Bechtel, Byron E., Waterloo, Canada. Brick-cutter | 719,722 | Feb. 3 | 563 | 127, 128 | 102 | 941 |
| Bechtold, William S., Newark, N. J. Manufacturing combs | 732,997 | July 7 | 526 | 130 | 105 | 113 |
| Bechtold, William S., and A. Faber du Faur, Jr., Newark, N. J. Gas heating stove or furnace | 747,928 | Dec. 29 | 4862 | 1097, 1098 | 107 | 2247 |
| Beck, Alexander. (See Stevenson, Charles M., assignor.) | | | | | | |
| Beck, August, Graz, Austria-Hungary. Metal preserving and cleansing compound | 719,074 | Jan. 27 | 2960 | ------ | 102 | 672 |
| Beck, Benedict M., *et al.* (See Roberts, Henry P., assignor.) | | | | | | |
| Beck, Charles L., assignor, by mesne assignments, to Towanda Paint Remover Company, Towanda, Pa. Composition for removing paint or varnish | 743,427 | Nov. 10 | 1257 | ------ | 107 | 283 |
| Beck, Charles W., assignor, by mesne assignments, to Electrolite Gas Lamp Company, New York, N. Y. Acetylene-gas generator | 737,196 | Aug. 25 | 4026 | 893 | 105 | 1891 |
| Beck, Charles W., New York, N. Y., assignor to Electrolite Gas Lamp Co. Acetylene-gas generator | 738,514 | Sept. 8 | 1960 | 427 | 106 | 436 |
| Beck, Denis M., Cincinnati, Ohio. Lift-cutting and heel-building apparatus | 728,658 | May 19 | 3479 | 772, 773 | 104 | 779 |
| Beck, Frank E., Harvard, Ill. Stamp-affixer | 744,894 | Nov. 24 | 4033 | 869, 870 | 107 | 908 |
| Beck, George C., Beavercreek, Minn. Register for pool-tables | 732,503 | June 30 | 5575 | 1235 | 104 | 2347 |
| Beck, George C., Beavercreek, Minn. Register for pool-tables | 738,515 | Sept. 8 | 1964 | 428 | 106 | 437 |
| Beck, Joseph W., Cincinnati, Ohio. Water-lifting device | 718,414 | Jan. 13 | 1650 | 364 | 102 | 369 |
| Beck, Julius F. (See Van Wormer, John R., assignor.) | | | | | | |
| Beck, Martin C., Indianapolis, Ind. Stock-car attachment for shipping hogs in hot weather | 741,875 | Oct. 20 | 2847 | 635 | 106 | 1888 |
| Beck, Nicolas, and R. Dior, Granville, France. Burner for liquid fuel | 728,356 | May 19 | 2909 | 642 | 104 | 657 |
| Beck, Oliver P., Murphysboro, assignor to Wolf, Sayer and Heller, Chicago, Ill. Skewer-machine | 719,639 | Feb. 3 | 407 | 93, 94 | 102 | 907 |
| Beck, Oliver P., Murphysboro, assignor to Wolf, Sayer, and Heller, Chicago, Ill. Feed mechanism for skewer-machines | 733,362 | July 14 | 1195 | 284 | 105 | 268 |
| Beck, Oliver P., Murphysboro, assignor to Wolf, Sayer, and Heller, Chicago, Ill. Feed mechanism for skewer-machines | 733,363 | July 14 | 1197 | 284 | 105 | 268 |
| Beck, Warren F., Elmira, N. Y. Manifold sales-book | 732,257 | June 30 | 5095 | 1133 | 104 | 2249 |
| Beckbissinger, Jacob F., Saginaw, Mich. Filing-case | 727,881 | May 12 | 2002 | 446 | 104 | 443 |
| Becker, Auguste. (See Houget and Becker.) | | | | | | |
| Becker-Brainard Milling Machine Company. (See Edgar, John, assignor.) | | | | | | |
| Becker, Clarence E., assignor to E. R. Thomas Motor Company, Buffalo, N. Y. Cushion-truss for cycles | 739,476 | Sept. 22 | 3754 | 838 | 106 | 852 |
| Becker, Edmund, Washington, D. C. Establishing subaqueous foundations | 720,997 | Feb. 17 | 2937 | 673, 674 | 102 | 1471 |
| Becker, Edmund, Washington, D. C. Marine structure | 720,998 | Feb. 17 | 2941 | 674, 675, 676 | 102 | 1472 |
| Becker, Edward P. (See Shelton, John, assignor.) | | | | | | |
| Becker, Frank J., Hamilton, Ohio, assignor, by mesne assignments, to A. Bybee, Indianapolis, Ind. Adjustable support for telephone-receivers | 723,635 | Mar. 24 | 3691 | 827 | 103 | 816 |
| Becker, Frank T., Pittsburg, Pa. Clamping device for papers | 742,824 | Nov. 3 | 14 | 3 | 107 | 6 |
| Becker, George, New York, N. Y. Adjustable mirror-holder | 724,782 | Apr. 7 | 683 | 160 | 103 | 1315 |
| Becker, George H., Covington, Ky. Compressed coal compound | 739,815 | Sept. 29 | 4385 | ------ | 106 | 1006 |
| Becker, George W., Canton, Ohio. Water-closet | 718,971 | Jan. 27 | 2757 | 617 | 102 | 630 |
| Becker, Gustav, and R. J. Sprenger, Chicago, Ill. Box | 744,855 | Nov. 24 | 3971 | 855 | 107 | 894 |
| Becker, John, Hydepark, Mass. Film-holder | 726,843 | May 5 | 17 | 4 | 104 | 6 |
| Becker, John J. (See Clover, Griffith H., assignor.) | | | | | | |
| Becker, Karl. (See Perrelet and Becker.) | | | | | | |
| Becker, Ludwig. (See Barr, Stroud, and Becker.) | | | | | | |
| Becker, Otto W., and W. G. Stuelpnagel, Milwaukee, Wis.; said Stuelpnagel assignor to said Becker. Jail | 727,063 | May 5 | 470 | 99 | 104 | 103 |
| Becker, Theodor. (See Eichengrün and Becker.) | | | | | | |
| Beckerman, Fred J., Cameron, Tex. Riding-saddle | 726,844 | May 5 | 17 | 4, 5 | 104 | 7 |
| Beckers, Wilhelm, New York, N. Y. Organic acid mordant and making same | 719,555 | Feb. 3 | 262 | ------ | 102 | 878 |
| Beckett, William H., Detour, Mich. Governor attachment | 738,973 | Sept. 15 | 2830 | 627 | 106 | 639 |
| Beckfield, John C., Pittsburg, Pa. Rotary engine | 731,155 | June 16 | 2990 | 663, 664 | 104 | 1783 |
| Beckley, Francis J., Royal Center, Ind. Ditching-machine | 736,348 | Aug. 18 | 2451 | 535, 536 | 105 | 1541 |
| Beckman, Carl H. A. (See Le Beau, John F., assignor.) | | | | | | |
| Beckman, Herman C., Chicago, Ill., assignor to De Laval Separator Co., New York, N. Y. Centrifugal separator | 743,428 | Nov. 10 | 1257 | 257 | 107 | 283 |
| Beckmann, Richard, Charlottenburg, Germany. Device for holding flexible sensitive sheets | 741,445 | Oct. 13 | 2006 | 445 | 106 | 1694 |
| Beckwith, Arthur K., Dowagiac, Mich. Multiple molding apparatus | 738,277 | Sept. 8 | 1469 | 317 | 106 | 332 |
| Beckwith, Arthur K., Dowagiac, Mich. Molding apparatus | 738,278 | Sept. 8 | 1470 | 317, 318 | 106 | 332 |
| Beckwith, Arthur K., Dowagiac, Mich. Molding apparatus | 738,279 | Sept. 8 | 1472 | 318 | 106 | 332 |
| Beckwith, Charles E., Galesburg, Ill., and R. M. Clark, Newton, Mass. Workman's time-check receiver | 746,778 | Dec. 15 | 2670 | 616 | 107 | 1715 |
| Beckwith, Dean A. (See Taber, David F., assignor.) | | | | | | |
| Beckwith, Frank A., Evanston, Wyo. Firearm | 720,775 | Feb. 17 | 2534 | 584 | 102 | 1386 |
| Beckwith, Nelson, Somerville, Mass. Operating mechanism for dumb-waiters | 740,614 | Oct. 6 | 454 | 99 | 106 | 1344 |
| Beckwith, Townsend, Bigflats, N. Y. Hernial truss | 733,124 | July 7 | 759 | 184 | 105 | 160 |
| Beckwith, Walter C., Fostoria, Ohio. Railway-fusee projector | 720,397 | Feb. 10 | 1812 | 412, 413 | 102 | 1223 |
| Beckwith, William, assignor of one-third to W. M. Rushworth, Lowell, Mass. Mud-guard for bicycles | 741,997 | Oct. 20 | 3112 | 694 | 106 | 1940 |
| Beckworth, Otto Q., *et al.* (See Isbell, John F., assignor.) | | | | | | |
| Becraft, Eli S., assignor of one-half to C. H. Barham, Idalia, Mo. Dust-cap for vehicle-wheels | 742,562 | Oct. 27 | 4203 | 946 | 106 | 2179 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|
| | | | Spec. | Drg. | Vol. | Page. |
| Becroft, William H., Philadelphia, Pa. Flag-pole holder | 726,015 | Apr. 21 | 2942 | 669 | 103 | 1828 |
| Becroft, William H., Philadelphia, Pa. Time-controlled vulcanizer | 739,578 | Sept. 22 | 3941 | 880 | 106 | 892 |
| Bedard, Hormidas L. (See Tremblay, Hormidas, assignor.) | | | | | | |
| Beddow, George, assignor of one-half to J. H. Beddow, Detroit, Mich. Combined heating and ventilating apparatus | 732,698 | July 7 | 12 | 3 | 105 | 5 |
| Beddow, James H. (See Beddow, George, assignor.) | | | | | | |
| Bedell, Benjamin H., assignor of nine-tenths to W. Griffiths, London, England. Collector for use on electrically propelled or lighted vehicles | 728,659 | May 19 | 3484 | 773 | 104 | 779 |
| Bedell, Benjamin H., assignor of nine-tenths to W. Griffiths, London, England. Preventing leakage of current to studs in surface-contact systems of electric traction | 738,651 | Sept. 8 | 3213 | 484 | 106 | 491 |
| Bedell, Benjamin H., London, assignor of one-half to W. Griffiths, County of London, England. Contact-stud and fixing for use with surface-contact systems of electric traction | 739,816 | Sept. 29 | 4386 | { 983 / 984 | { 106 | 1007 |
| Bedell, George E., Herkimer, N. Y. Awning | 720,999 | Feb. 17 | 2947 | 676 | 102 | 1473 |
| Bedell, Harry M., Washington, D. C. Box-couch | 734,659 | July 28 | 3621 | 848 | 105 | 814 |
| Bedford, Ebenezer S. (See Snyder and Bedford.) | | | | | | |
| Bedford, Lyman N., Los Angeles, Cal. Hook and eye | 725,922 | Apr. 21 | 2788 | 633 | 103 | 1792 |
| Bedient, Emory A., Erie, assignor to Glen Manufacturing Company, Ellwood City, Pa. Metal fabric for mats, &c | 730,223 | June 9 | 1269 | 281 | 104 | 1401 |
| Bedingfield, John H., Bethlehem, Ga. Seed-planter | 728,660 | May 19 | 3486 | { 773 / 774 | { 104 | 780 |
| Bedingfield, John H., Bethlehem, Ga. Combined seed-planter and fertilizer-distributer | 737,319 | Aug. 25 | 4278 | 951 | 105 | 1943 |
| Bedworth, Arthur H. (See Bedworth, John A. and A. H.) | | | | | | |
| Bedworth, Arthur H., Boston, Mass., assignor of two-thirds to F. S. Webster Company, Boston, Mass.; New York, N. Y.; Chicago, Ill., and London, England, and J. A. Bedworth, Boston, Mass. Electric railway | 732,157 | June 30 | 4900 | 1090 | 104 | 2209 |
| Bedworth, John A., *et al.* (See Bedworth, Arthur H., assignor.) | | | | | | |
| Bedworth, John A., assignor to F. S. Webster Company, Boston, Mass. Clip or fastener | 742,150 | Oct. 27 | 3441 | 766 | 106 | 2023 |
| Bedworth, John A and A. H., assignors of one-third to F. S. Webster Company, Boston, Mass. Valve for gas or vapor burners | 726,395 | Apr. 28 | 3654 | 828 | 103 | 1985 |
| Beebe, Dillon, Newark, N. J. Racking apparatus | 737,895 | Sept. 1 | 678 | { 144 / 145 | { 106 | 149 |
| Beebe, Eugene W., Milwaukee, Wis. Optical apparatus | 721,773 | Mar. 3 | 199 | 46 | 103 | 43 |
| Beebe, Joseph E., Harlan, Iowa. Garden-tool | 719,723 | Feb. 3 | 567 | 128 | 102 | 942 |
| Beebe, William L., and T. A. McFarland, Chicago, Ill. Sketching-camera | 735,697 | Aug. 11 | 1277 | 273 | 105 | 1270 |
| Beeby, James, Chicago, Ill. Scrubbing-brush | 728,837 | May 26 | 3811 | 849 | 104 | 863 |
| Beech, John M., Cincinnati, Ohio, assignor, by mesne assignments, of one-half to W. T. Adams, Corinth, Miss. Hot-air furnace | 730,202 | June 2 | 1209 | 271 | 104 | 1374 |
| Beech-Nut Packing Company *et al.* (See Honiss, William H., assignor.) | | | | | | |
| Beech-Nut Packing Company *et al.* (See Lorenz, William A., assignor.) | | | | | | |
| Beech-Nut Packing Company *et al.* (See Millett, Charles W., assignor.) | | | | | | |
| Beecher, Frederick, Seymour, Conn. Meat-slicer | 729,915 | June 2 | 715 | 159 | 104 | 1274 |
| Beecher, Thomas, assignor of one-half to G. Rotman, New Haven, Conn. Lap-ring trace-loop | 747,034 | Dec. 15 | 3162 | 724 | 107 | 1827 |
| Beehler, Charles W., St. Louis, Mo. Box-fastener | 739,639 | Sept. 22 | 4052 | 904 | 106 | 916 |
| Beehler, Charles W., St. Louis, Mo. Box-fastener | 739,640 | Sept. 22 | 4053 | 904 | 106 | 916 |
| Beehler, Charles W., St. Louis, Mo. Box-fastener | 740,732 | Oct. 6 | 645 | 145 | 106 | 1386 |
| Beehler, Charles W., St. Louis, Mo. Box-fastener | 742,563 | Oct. 27 | 4204 | 947 | 106 | 2179 |
| Beehler, Charles W., St. Louis, Mo. Box-fastener | 745,138 | Nov. 24 | 4520 | 978 | 107 | 1008 |
| Beehler, Charles W., St. Louis, Mo. Box-fastener | 747,035 | Dec. 15 | 3162 | 725 | 107 | 1827 |
| Beekman, Ross C., Independence, Kans. Clothes-wringer | 721,138 | Feb. 24 | 3249 | 743 | 102 | 1560 |
| Beeler, Isaac W., Miami, Ind. Ter., assignor of one-fourth to H. C. & M. A. Nicholson, Kansas City, Mo. Churn-operating mechanism | 748,155 | Dec. 29 | 5308 | 1206 | 107 | 2345 |
| Beeler, Walter W., Baltimore, Md. Brush-holder | 717,656 | Jan. 6 | 231 | 59 | 102 | 51 |
| Beeman, Henry F., Blue River, Wis. Lifting device | 725,923 | Apr. 21 | 2789 | 633 | 103 | 1792 |
| Beeman, Joseph S., London, England. Cigarette-mouthpiece-applying machine | 739,376 | Sept. 22 | 3546 | { 792 / 793 | { 106 | 806 |
| Beeman, Phosa D., Minneapolis, Minn. Breast-supporter | 719,075 | Jan. 27 | 2961 | 661 | 102 | 672 |
| Beeney, Maurice J. (See Steffee and Beeney.) | | | | | | |
| Beer, Berthold. (See Pollacsek and Beer.) | | | | | | |
| Beer, Ephraim, and F. Crane, assignors of one-half to M. M. St. Clair and A. Wickstrom, Fort Collins, Colo. Beet-harvester | 742,151 | Oct. 27 | 3442 | 767 | 106 | 2023 |
| Beer, Stewart, Pittsburg, Pa. Dredger | 726,213 | Apr. 21 | 3284 | 746 | 103 | 1894 |
| Beers, Alexander W., Bayonne, N. J. Knockdown paper box | 738,516 | Sept. 8 | 1967 | 428 | 106 | 438 |
| Beerwald, Benjamin, New York, N. Y. Switchboard | 739,052 | Sept. 15 | 2960 | 656 | 106 | 667 |
| Beerwald, Benjamin, assignor of one-half to T. J. Ryan, Philadelphia, Pa. Amusement apparatus | 717,798 | Jan. 6 | 532 | 119 | 102 | 115 |
| Beetchenow, William D., assignor to W. Hornich, Jr., Newark, N. J. Button-badge and pin therefor | 720,553 | Feb. 17 | 2129 | 492 | 102 | 1303 |
| Begeman, Louis, Cedar Falls, Iowa. Battery | 718,076 | Jan. 13 | 1043 | 233 | 102 | 240 |
| Begg, Alexander L. W., Chicago, Ill. Store-service apparatus | 722,937 | Mar. 17 | 2398 | 536 | 103 | 539 |
| Begg, James, Ventura, Cal. Horseshoer's tool-box | 743,807 | Nov. 10 | 1978 | 421 | 107 | 438 |
| Beggs, Samuel E. (See Logue, William A., assignor.) | | | | | | |
| Beghtel, Eli, Huntington, Ind. Mail-conveyer | 737,320 | Aug. 25 | 4279 | 951 | 105 | 1943 |
| Béha, Joseph, Thann, Germany. Feed-water heater and purifier | 726,243 | Apr. 28 | 3351 | { 760 / 761 | { 103 | 1923 |
| Behe, Chrysostom. (See Spena and Behe.) | | | | | | |
| Behm, Christian C., Bloomville, Ohio. Clover-buncher | 717,529 | Jan. 6 | 15 | 4 | 102 | 6 |
| Behm, Joseph, San Francisco, Cal. Cement and gravel separator | 726,498 | Apr. 28 | 3873 | 876 | 103 | 2026 |
| Behnke, Otto. (See Krone and Behnke.) | | | | | | |
| Behnke, Otto, assignor to F. Krupp, Essen-on-the-Ruhr, Germany. Saddle for guns or cradles | 721,353 | Feb. 24 | 3651 | 831 | 102 | 1642 |
| Behnke, Otto, assignor to F. Krupp, Essen-on-the-Ruhr, Germany. Fluid-pressure brake for guns | 733,798 | July 14 | 1958 | 462 | 105 | 430 |
| Behnke, Otto, and J. Friese, assignors to F. Krupp, Essen-on-the-Ruhr, Germany. Gun-carriage | 719,724 | Feb. 3 | 568 | 128 | 102 | 942 |
| Behrend, Ernst R. and O. F., Erie, Pa. Producing watermarked paper | 717,799 | Jan. 6 | 535 | 120 | 102 | 115 |
| Behrend, Otto F. (See Behrend, Ernst R. and O. F.) | | | | | | |
| Behrendt, Eugene. (See Sheridan and Behrendt.) | | | | | | |
| Behrens, August, Jr. (See Behrens, Johann G. and A., Jr.) | | | | | | |
| Behrens, Charles W., assignor to Behrens Combination Wagon Bed Company, Lancaster, Ohio. Wagon-body | 731,534 | June 23 | 3715 | { 827 / 828 | { 104 | 1949 |
| Behrens Combination Wagon Bed Company. (See Behrens, Charles W., assignor.) | | | | | | |
| Behrens, Edward C. H., Charleston, S. C. Match-striker | 726,845 | May 5 | 19 | 5 | 104 | 7 |
| Behrens, Johann G. and A., Jr., Bremen, Germany. Making acetic acid | 741,615 | Oct. 20 | 2361 | | 106 | 1785 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| Behringer, Edward A., Brooklyn, N. Y. Gas-main stopper | 740,795 | Oct. 6 | 776 | 175 | 106 | 1410 |
| Behringer, Friedrich, Munich, Germany. Device for loosening piano-hammer felts | 738,877 | Sept. 15 | 2668 | 588 | 106 | 605 |
| Beiber, Edward. (See Hemphill and Beiber.) | | | | | | |
| Beidler, William H., Coopersburg, Pa. Corn-fodder shredder | 736,196 | Aug. 11 | 2186 | 470 | 105 | 1466 |
| Beien, Alexander, Herne, Germany. Apparatus for changing winding-ropes in mines | 723,437 | Mar. 24 | 3324 | 745 | 103 | 742 |
| Beiermeister Bros. & Co. (See Beiermeister, John M., assignor.) | | | | | | |
| Beiermeister, John M., Troy, assignor to Beiermeister Bros. & Co., Cohoes, N. Y. Fold-collar | 723,575 | Mar. 24 | 3580 | 800 | 103 | 793 |
| Beiler, Joel H. (See Beiler, Samuel H. and J. H.) | | | | | | |
| Beiler, Samuel H. and J. H., Witmer, Pa. Harvesting-machine | 725,023 | Apr. 14 | 1130 | 255 | 103 | 1426 |
| Beilfuss, Richard A. F., Lansing, Mich. Gas or vapor engine | 730,084 | June 2 | 1018 | 228 | 104 | 1334 |
| Beisel, Charles P., Wilkesbarre, Pa. Roundabout | 741,758 | Oct. 20 | 2641 | 591 | 106 | 1843 |
| Beiser, Adolf. (See Kurz and Beiser.) | | | | | | |
| Beiser, John, Montreal, Canada. Bottling apparatus | 721,854 | Mar. 3 | 361 | 79 | 103 | 79 |
| Beiser, John, Montreal, Canada. Safety appliance for steam-boilers | 732,333 | June 30 | 5228 | 1161 | 104 | 2277 |
| Beitler, Henry C. (See Duffy, Jean H., assignor.) | | | | | | |
| Beittenmiller, Charles A., Philadelphia, Pa. Folding crate | 743,808 | Nov. 10 | 1979 | 421 | 107 | 438 |
| Beitzel, Georg G., Copenhagen, Denmark. Device for transmitting motion | 739,641 | Sept. 22 | 4054 | 905 | 106 | 916 |
| Beker, Rudolph G., assignor of two-thirds to F. H. Kindl, Pittsburg, Pa. Upsetting-machine | 733,898 | July 14 | 2161 | 510 | 105 | 471 |
| Beker, Rudolph G., assignor of two-thirds to F. H. Kindl, Pittsburg, Pa. Coil-heating furnace | 734,114 | July 21 | 2616 | 615<br>616 | 105 | 586 |
| Bekker, Jacobus J. E., Amsterdam, Netherlands. Three-roll crushing-mill | 733,125 | July 7 | 760 | 184 | 105 | 161 |
| Beland, Benjamin O. (See Hamel, Eugene, assignor.) | | | | | | |
| Béland, Benjamin O., Montreal, Canada. Peg-strip leather joint | 738,150 | Sept. 8 | 1192 | 263 | 106 | 273 |
| Belanger, François, Longdon, N. D. Darning-machine | 724,783 | Apr. 7 | 685 | 160 | 103 | 1315 |
| Belanger, John D. (See Dion and Belanger.) | | | | | | |
| Belber, A., *et al.* (See Bryson, David K., assignor.) | | | | | | |
| Belcher, Dean E. (See Belcher, Warren J., assignor.) | | | | | | |
| Belcher, George E., Stoughton, Mass. Shoe-tree | 744,156 | Nov. 17 | 2689 | 573 | 107 | 602 |
| Belcher, Warren J., assignor of one-half to D. E. Belcher, Hartford, Conn. Bicycle motor-tender | 725,924 | Apr. 21 | 2790 | 634 | 103 | 1793 |
| Belches, Peter B., Haymarket, Va. Steam-engine valve | 728,838 | May 26 | 3812 | 849<br>850 | 104 | 863 |
| Belcia, L. E. (See Wafer, William H., assignor.) | | | | | | |
| Belden, Roy K., San Francisco, Cal. Filling teeth with porcelain | 738,517 | Sept. 8 | 1969 | 428 | 106 | 438 |
| Belding, Warren S., Hackensack, N. J., assignor to Eyssen-Packer Defibrator Company. Machine for defibrating fibrous plants | 722,556 | Mar. 10 | 1674 | 370<br>371 | 103 | 375 |
| Belenger, Exear, Montreal, Canada. Wheeled toy | 721,855 | Mar. 3 | 364 | 80 | 103 | 79 |
| Belfert, Ribeci, New York, N. Y. Face-powder | 745,139 | Nov. 24 | 4521 | ..... | 107 | 1008 |
| Belfield, A. Miller, *et al.* (See Davis, Charles L., assignor.) | | | | | | |
| Belfry, Alfred W. (See Maurer, George H., assignor.) | | | | | | |
| Belknap, Charles F., Philadelphia, Pa. Combined ash shovel and sifter | 732,504 | June 30 | 5577 | 1236 | 104 | 2348 |
| Belknap, Henry H., assignor of one-half to C. S. Hirst, Philadelphia, Pa. Box | 727,531 | May 5 | 1312 | 292 | 104 | 282 |
| Belknap, Theodore T. (See Ottignon, Augustus W., assignor.) | | | | | | |
| Bell, Arthur, New York, N. Y. Candy-bucket | 730,511 | June 9 | 1811 | 403 | 104 | 1516 |
| Bell, Augustus D., New York, N. Y. Placket-fastener | 745,766 | Dec. 1 | 81) | 184 | 107 | 1271 |
| Bell, Carroll M. (See Blake and Bell.) | | | | | | |
| Bell, Charles E. (See Cameron, Bell, and Barnes.) | | | | | | |
| Bell, Charles E. (See McClanahan and Bell.) | | | | | | |
| Bell, Charles H., Cleveland, Ohio. Window-shade-trimming device | 717,800 | Jan. 6 | 537 | 120 | 102 | 116 |
| Bell, Charles R. E. (See Muir and Bell.) | | | | | | |
| Bell, Eleanor, Sidmouth, England. Corset attachment | 718,899 | Jan. 20 | 2617 | 585 | 102 | 585 |
| Bell, Francis A., Bardue, W. Va. Device for side-dressing saws | 723,810 | Mar. 31 | 3998 | 901 | 103 | 899 |
| Bell, Frank K., St. George, Canada. Oil-can | 744,025 | Nov. 17 | 2434 | 523 | 107 | 550 |
| Bell, Frank N., Milford, Mass. Device for extinguishing burning oil-wells and for collecting oil therefrom | 739,377 | Sept. 22 | 3553 | 793 | 106 | 807 |
| Bell, George and G. W., Liverpool, England. Electrolytic apparatus | 737,566 | Sept. 1 | 10 | 3 | 106 | 5 |
| Bell, George, assignor to T. and G. Hillman, Muncie, Ind. Shade or curtain-pole holder | 726,244 | Apr. 28 | 3352 | 761 | 103 | 1923 |
| Bell, George A., Norwalk, Conn. Sash-lock | 729,916 | June 2 | 716 | 160 | 104 | 1274 |
| Bell, George A., assignor of one-half to H. W. Smith, Port Huron, Mich. Grinding-mill | 745,560 | Dec. 1 | 455 | 107 | 107 | 1194 |
| Bell, George W. (See Bell, George and G. W.) | | | | | | |
| Bell, Harry L., and C. C. Sweitzer, Mishawaka, Ind. Apparatus for forming pipe-cores | 746,779 | Dec. 15 | 2671 | 617 | 107 | 1715 |
| Bell, Horace R., Lyttelton, New Zealand. Bottle and stopper therefor | 724,655 | Apr. 7 | 439 | 106 | 103 | 1263 |
| Bell, James H. (See Kitsee, Isidor, assignor.) | | | | | | |
| Bell, Joseph R., Peckville, Pa. Insulator for electric wires | 726,846 | May 5 | 19 | 5 | 104 | 7 |
| Bell, Joshua A., and L. T. Leet, Montreal, Canada, assignors to Composite Stone and Brick Company. Artificial stone | 732,674 | June 30 | 5892 | ..... | 104 | 2417 |
| Bell, Joshua A., and L. T. Leet, Montreal, Canada, assignors to Composite Stone and Brick Company. Steam-indurated stone | 745,476 | Dec. 1 | 319 | ..... | 107 | 1167 |
| Bell, Louis, Newton Center, Mass., assignor to General Electric Company. Lightning-arrester | 730,601 | June 9 | 1970 | 438 | 104 | 1551 |
| Bell, Major S., New York, N. Y. Thermostatic apparatus | 732,699 | July 7 | 13 | 4 | 105 | 6 |
| Bell, Morris F., Fulton, Mo. Sectional rail | 733,692 | July 14 | 1760 | 417 | 105 | 388 |
| Bell Organ and Piano Company. (See Warren, Charles, assignor.) | | | | | | |
| Bell, Oscar G., assignor to Norwich Pharmacal Company, Norwich, N. Y. Clinical thermometer | 726,619 | Apr. 28 | 4108 | 927 | 103 | 2073 |
| Bell, R. A. (See Saling, Thomas W., assignor.) | | | | | | |
| Bell, Thomas M., Philadelphia, Pa. Brake-shoe | 736,350 | Aug. 18 | 2454 | 536 | 105 | 1542 |
| Bell, Walter J., assignor of one-half to L. F. Moss, Los Angeles, Cal. Street-railway switch | 721,000 | Feb. 17 | 2949 | 677 | 102 | 1473 |
| Bell, Walter J., assignor of one-half to L. F. Moss, Los Angeles, Cal. Street-railway switch | 721,416 | Feb. 24 | 3767 | 856 | 102 | 1665 |
| Bell, Walter J., assignor of one-half to L. F. Moss, Los Angeles, Cal. Circuit-closer | 727,064 | May 5 | 471 | 99 | 104 | 103 |
| Bell, Walter J., assignor of one-half to L. F. Moss, Los Angeles, Cal. Street-railway switch | 741,097 | Oct. 13 | 1310 | 301 | 106 | 1546 |
| Bell, Walter J., assignor of one-half to L. F. Moss, Los Angeles, Cal. Street-railway switching mechanism | 747,847 | Dec. 22 | 4672 | 1056 | 107 | 2185 |
| Bell, William, *et al.* (See Butler, Joseph, assignor.) | | | | | | |
| Bell, William, Saginaw, Mich. Stove | 738,974 | Sept. 15 | 2832 | 627 | 106 | 639 |
| Bell, William E., and F. W. Brown, Devine, Tex. Lock | 738,280 | Sept. 8 | 1474 | 318<br>319 | 106 | 333 |
| Bell, William G., Newton, Mass. Receptacle for corned beef, &c | 736,349 | Aug. 18 | 2453 | 536 | 105 | 1542 |
| Bell, William J., Tyler, Tex. Felt-picker | 731,535 | June 23 | 3718 | 828 | 104 | 1950 |
| Bell, William J., Tyler, Tex. Support for attachment to desks | 735,853 | Aug. 11 | 1574 | 335 | 105 | 1335 |

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| Bell, William T., West Bridgford, England. Illuminated clock | 738,281 | Sept. 8 | 1478 | 319<br>320 | 106 | 333 |
| Bellack, Charles H., *et al.* (See Barling, Joseph A., assignor.) | | | | | | |
| Bellairs, John W., and J. H. Langton, Centerville, Mich. Machine for husking corn | 734,035 | July 21 | 2456 | 575 | 105 | 552 |
| Bellamy, Charles J., Springfield, Mass. Handwriting-board | 732,700 | July 7 | 14 | 4 | 105 | 6 |
| Bellamy, Charles J., Springfield, Mass. Type-writer attachment | 734,660 | July 28 | 3622 | 849 | 105 | 815 |
| Belle, Philias, Montreal, Canada. Machine for making pasted leather-stock | 743,972 | Nov. 10 | 2274 | 489<br>490<br>491 | 107 | 502 |
| Belle, Philias, Montreal, Canada. Knife-grinding apparatus | 744,002 | Nov. 10 | 2355 | 505 | 107 | 522 |
| Bellis, Daniel K., Manton, Mich. Harness-trace | 738,596 | Sept. 8 | 2103 | 459 | 106 | 468 |
| Bellocq, George C. (See Prejean and Bellocq.) | | | | | | |
| Bellon-Lencauchez, James A., (called J. A. Lencauchez,) Paris, France. Purifying gas | 727,266 | May 5 | 822 | 177 | 104 | 177 |
| Bellows, Arthur B. (See Miller, Marion M., assignor.) | | | | | | |
| Bellows, Arthur B., Pittsburg, Pa. Switch-stand | 724,656 | Apr. 7 | 440 | 106 | 103 | 1263 |
| Bellows, Arthur B., Pittsburg, Pa. Switch-stand | 724,657 | Apr. 7 | 441 | 107 | 103 | 1264 |
| Bellows, Arthur B., Pittsburg, Pa. Switch-stand | 724,658 | Apr. 7 | 443 | 107 | 103 | 1264 |
| Bellows, Arthur B., Pittsburg, Pa. Switch-stand | 724,659 | Apr. 7 | 445 | 108 | 103 | 1265 |
| Bellows, Arthur B., Pittsburg, Pa. Steel-car construction | 726,499 | Apr. 28 | 3876 | 876 | 103 | 2027 |
| Bellows, Arthur B., Pittsburg, Pa. Car truck and bolster | 726,500 | Apr. 28 | 3877 | 877 | 103 | 2027 |
| Bellows, Arthur B., Pittsburg, Pa. Steel gondola car | 729,257 | May 26 | 4551 | 1003<br>1004 | 104 | 1013 |
| Bellows, Benjamin F., assignor to Electric Compositor Company, Cleveland, Ohio. Machine for justifying type-lines | 727,267 | May 5 | 823 | 177<br>178<br>179 | 104 | 175 |
| Bellows, Charles F., Brookline, Mass. Tool-holder | 733,126 | July 7 | 763 | 184 | 105 | 161 |
| Bellows, Horace M., Huntingdon Valley, Pa. Railway-bond | 737,896 | Sept. 1 | 683 | 145 | 106 | 150 |
| Bellows, Theodore P., Memphis, Tenn. Car-coupling | 722,798 | Mar. 17 | 2155 | 482 | 103 | 491 |
| Bellwald, John N., Trenton, N. J. Aerial tramway | 722,557 | Mar. 10 | 1681 | 372 | 103 | 377 |
| Belonga, George W. (See Melanson, Ranchford B., assignor.) | | | | | | |
| Belt, Carleton T. (See Hall, James M., assignor.) | | | | | | |
| Belton, Arthur J. (See Merrill and Belton.) | | | | | | |
| Beltz, Daniel C., Haleysville, Ala. Automatic fan | 730,736 | June 9 | 2194 | 489 | 104 | 1599 |
| Belyeu, John W., Alexander City, Ala. Automatic leveling instrument | 732,258 | June 30 | 5097 | 1134 | 104 | 2250 |
| Belz, John H., assignor of one-half to B. Steyermark, St. Louis, Mo. Pneumatic branding and heating iron | 723,230 | Mar. 24 | 2936 | 657 | 103 | 666 |
| Bement, Frank, Toms River, N. J. Interlocking mechanism | 748,156 | Dec. 29 | 5309 | 1206 | 107 | 2345 |
| Bement, William O., assignor to Wire Goods Company, Worcester, Mass. Wire brush | 729,528 | June 2 | 18 | 5 | 104 | 1130 |
| Bemis, Charles E. (See Durboraw, Charles L., assignor.) | | | | | | |
| Bemis, Thomas, *et al.* (See Hert, Henry J., assignor.) | | | | | | |
| Bemis, Wallace L., Brockton, Mass. Eyeglasses | 743,679 | Nov. 10 | 1746 | 368 | 107 | 389 |
| Benbow, William C., Columbus, Ohio. File-case | 743,429 | Nov. 10 | 1260 | 258 | 107 | 284 |
| Bender, Albert N., assignor of two-thirds to F. G. Hensler and R. H. McMahon, Milwaukee, Wis. Calf-weaning device | 731,424 | June 23 | 3496 | 781 | 104 | 1904 |
| Bender, Francisco, San Felin de Guixols, Spain. Machine for sorting corks | 746,916 | Dec. 15 | 2935 | 677 | 107 | 1776 |
| Bender, Fritz, Littlerock, Mo. Hoisting mechanism for portable and traction engines | 721,001 | Feb. 17 | 2951 | 677 | 102 | 1473 |
| Bender, George L., San Francisco, Cal. Railway repair-car | 721,856 | Mar. 3 | 365 | 80 | 103 | 79 |
| Bender, W. Howard. (See Van Loan, Warren P., assignor.) | | | | | | |
| Bending, Peter, Columbus, Ohio. Safety device for elevators | 730,865 | June 16 | 2421 | 535 | 104 | 1666 |
| Bendixen, Peter, Davenport, Iowa. Mechanical movement | 738,282 | Sept. 8 | 1482 | 321 | 106 | 334 |
| Benedict, Aaron A., Riverton Township, Mich. Fastening for baskets, &c. | 724,245 | Mar. 31 | 4898 | 1096 | 103 | 1081 |
| Benedict and Burnham Manufacturing Company. (See Webb, James N., assignor.) | | | | | | |
| Benedict, Charles R., Lidgerwood, N. D. Grain-elevator | 731,268 | June 16 | 3179 | 708 | 104 | 1820 |
| Benedict, E. Cornelius, *et al.* (See Fouché, Edmond, assignor.) | | | | | | |
| Benedict, Edmond H., O'Neill, Nebr. Windmill | 733,799 | July 14 | 1961 | 462 | 105 | 431 |
| Benedict, Harvey O., Salt Lake City, Utah. Vehicle-brake | 734,115 | July 21 | 2618 | 616 | 105 | 587 |
| Benedict, James E., Woodside, Md. Pinwheel-support | 726,847 | May 5 | 20 | 5 | 104 | 7 |
| Benedict, James Z., Oneida, Iowa. Pulley-block | 723,231 | Mar. 24 | 2937 | 658 | 103 | 666 |
| Benedict, Lewis. (See Leiger, George F., assignor.) | | | | | | |
| Benedict, Read, West New Brighton, N. Y. Collar or cuff button or stud | 740,615 | Oct. 6 | 456 | 99 | 106 | 1344 |
| Benesh, Charles, Wahpeton, N. D. Combined wrench and thread-cutter | 720,554 | Feb. 17 | 2130 | 493 | 102 | 1303 |
| Benét, Laurence V., Paris, France. Field-mount for automatic machine-guns | 718,900 | Jan. 20 | 2618 | 585<br>586<br>587 | 102 | 586 |
| Benét, Laurence V., and H. A. Mercié, Paris, France. Automatic or semi-automatic attachment for quick-firing guns | 747,848 | Dec. 22 | 4674 | 1056<br>1057<br>1058 | 107 | 2185 |
| Benford, Rezin B., Sharpsburg, Pa. Crupper-blind | 729,035 | May 26 | 4159 | 921 | 104 | 933 |
| Benge, John, Yorklyn, assignor to T. Williamson, Hockessin, Del. Grinding-machine | 722,938 | Mar. 17 | 2400 | 536 | 103 | 540 |
| Bengtson, John A., Crompton, R. I. Mortise-gage | 724,077 | Mar. 31 | 4539 | 1021 | 103 | 1010 |
| Benham, Arthur D., Milford, Mich. Clamping device for street-signs | 737,065 | May 5 | 472 | 100 | 104 | 103 |
| Benham, Robert B., Jr., Bland, N. Mex. Ter. Feed-water heater | 743,809 | Nov. 10 | 1980 | 421<br>422 | 107 | 438 |
| Benigar, Samuel B., East Monroe, Ohio. Ladder | 724,423 | Apr. 7 | 11 | 3 | 103 | 1172 |
| Benjamin, Bert R. (See Pridmore and Benjamin.) | | | | | | |
| Benjamin, Bert R., assignor to International Harvester Company, Chicago, Ill. Shock-forming post for corn-shockers | 722,397 | Mar. 10 | 1372 | 304 | 103 | 308 |
| Benjamin, Bert R., assignor to International Harvester Company, Chicago, Ill. Snapping-rolls for corn harvesting or husking machines | 736,478 | Aug. 18 | 2691 | 590<br>591 | 105 | 1592 |
| Benjamin, Bert R., assignor to International Harvester Company, Chicago, Ill. Cord-holder for self-binders | 741,296 | Oct. 13 | 1718 | 384<br>385 | 106 | 1630 |
| Benjamin, Dana H., Philadelphia, Pa., assignor to Barnes and Erb Company. Ironing-machine | 731,269 | June 16 | 3180 | 708 | 104 | 1820 |
| Benjamin, Dana H., Lebanon, assignor to Barnes & Erb Company, Philadelphia, Pa. Ironing shirt-bosoms | 734,503 | July 28 | 3338 | 781<br>782 | 105 | 754 |
| Benjamin, Darius C., Jackson, Minn. Device for preventing animals from breaching wire fences | 747,577 | Dec. 22 | 4163 | 935 | 107 | 2070 |
| Benjamin Electric Manufacturing Company. (See Benjamin, Reuben B., assignor.) | | | | | | |
| Benjamin, John M. (See Knight and Benjamin.) | | | | | | |
| Benjamin, Maxwell W. (See Phillips, William J., assignor.) | | | | | | |
| Benjamin, Morris, Atlanta, Ga. Lock or connection for bed-rails | 733,127 | July 7 | 763 | 185 | 105 | 161 |
| Benjamin, Reuben B., assignor to Benjamin Electric Manufacturing Company, Chicago, Ill. Plural-lamp socket | 721,774 | Mar. 3 | 202 | 46 | 103 | 44 |
| Benjamin, Reuben B., assignor to Benjamin Electric Manufacturing Company, Chicago, Ill. Plural-lamp socket | 721,775 | Mar. 3 | 206 | 47 | 103 | 46 |

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| Benjamin, Reuben B., assignor to Benjamin Electric Manufacturing Company, Chicago, Ill. Plural-lamp socket | 721,776 | Mar. 3 | 209 | 47 | 103 | 47 |
| Benjamin, Reuben B., assignor to Benjamin Electric Manufacturing Company, Chicago, Ill. Plural-lamp socket | 721,777 | Mar. 3 | 211 | 47 | 103 | 47 |
| Benjamin, Reuben B., assignor to Benjamin Electric Manufacturing Company, Chicago, Ill. Plural-lamp socket | 721,778 | Mar. 3 | 213 | 48 | 103 | 48 |
| Benjamin, Reuben B., assignor to Benjamin Electric Manufacturing Company, Chicago, Ill. Plural-lamp socket | 721,779 | Mar. 3 | 215 | 48 | 103 | 48 |
| Benjamin, Reuben B., assignor to Benjamin Electric Manufacturing Company, Chicago, Ill. Cluster of plural-lamp sockets | 721,780 | Mar. 3 | 217 | 48 | 103 | 49 |
| Benjamins, Asser J., Brooklyn, N. Y. Diamond-splitting machine | 724,536 | Apr. 7 | 213 | 52, 53 | 103 | 1215 |
| Benke, Charles A., assignor of four-fifths to G. Koch, L. V. Raulet, F. J. Nickolson, and G. S. Royal, Detroit, Mich. Suspending device | 729,836 | June 2 | 585 | 129 | 104 | 1247 |
| Benke, Herman. (See Alexander, Jesse, assignor.) | | | | | | |
| Benner, Lafayette W., Rockland, Me. Safety thill-bow or thill-tug and holdback | 729,529 | June 2 | 19 | 5 | 104 | 1130 |
| Benner, Reuben H., Cincinnati, Ohio. Saw | 720,313 | Feb. 10 | 1672 | 380 | 102 | 1192 |
| Bennet, Karl T., Helsingborg, and J. T. Johansson, Stockholm, Sweden. Electric cable | 736,351 | Aug. 18 | 2456 | 536, 537 | 105 | 1542 |
| Bennett, Albert, assignor of one-half to J. Mugford, Puyallup, Wash. Box-fastener | 730,336 | June 9 | 1472 | 325 | 104 | 1444 |
| Bennett, Alice J. (See Ross, Joseph, assignor.) | | | | | | |
| Bennett, Arthur E., Buffalo, N. Y. Exhibiting and vending machine | 728,534 | May 19 | 3225 | 715, 716 | 104 | 723 |
| Bennett, Arthur J., Cambridge, Ohio. Glass vessel | 746,780 | Dec. 15 | 2674 | 617 | 107 | 1716 |
| Bennett, C. W., *et al.* (See Denton, Thomas B., assignor.) | | | | | | |
| Bennett, Charles A., Taunton, Mass. Puzzle | 722,668 | Mar. 17 | 1913 | 426 | 103 | 440 |
| Bennett, Charles M., Zanesville, Ohio. Low-joint-indicating mechanism | 721,933 | Mar. 3 | 528 | 116, 117 | 103 | 117 |
| Bennett, Charles W. (See Goldsmith and Bennett.) | | | | | | |
| Bennett, Charles W., Elwood, Ind., assignor to American Tin Plate Company, New York, N. Y. Automatic catcher for sheet or tin plate mills | 727,532 | May 5 | 1313 | 292, 293 | 104 | 282 |
| Bennett, Charles W., Elwood, Ind., and B. Goldsmith, Pittsburg, Pa., assignors to American Tin Plate Company, New York, N. Y. Machine for piling metal sheets | 734,058 | July 21 | 2506 | 584 | 105 | 563 |
| Bennett, Dosier A. (See Horton and Bennett.) | | | | | | |
| Bennett, Edgar A., Providence, R. I. Fob-bar | 737,062 | Aug. 25 | 3793 | 839 | 105 | 1841 |
| Bennett, Edmund J., Flint, Mich. Bottle-stopper | 731,659 | June 23 | 3946 | 878 | 104 | 1995 |
| Bennett, Edward P. (See Smith, Seth E., assignor.) | | | | | | |
| Bennett, Edwin, Mill Village, Pa. Paint compound | 731,660 | June 23 | 3947 | | 104 | 1995 |
| Bennett, Edwin G., Everett, and A. G. Hunting, Fitchburg, Mass. Curtain-cord winder | 746,270 | Dec. 8 | 1761 | 399 | 107 | 1495 |
| Bennett, Elmer E., and A. C. Allen, Bowling Green, Ky. Fruit-gatherer | 733,128 | July 7 | 764 | 185 | 105 | 162 |
| Bennett, Fayette H., Topeka, Kans. Device for fastening grain-doors in cars | 734,801 | July 28 | 3932 | 917 | 105 | 876 |
| Bennett, Fredrick R., assignor of one-half to H. M. Greenwood, London, England. Music-stool | 720,776 | Feb. 17 | 2536 | 584 | 102 | 1387 |
| Bennett, George L., Chicago, Ill. Device for administering anesthetics | 736,059 | Aug. 11 | 1963 | 418 | 105 | 1419 |
| Bennett, George L., Chicago, Ill. Vaporizer for anesthetics | 747,364 | Dec. 22 | 3803 | 856 | 107 | 1987 |
| Bennett, George S., assignor to O. C. Hamlet and D. P. Foley, San Francisco, Cal. Gas-regulator | 728,153 | May 12 | 2500 | 555 | 104 | 549 |
| Bennett, Ida D., Coldwater, Mich. Window-shelf | 747,363 | Dec. 22 | 3803 | 855 | 107 | 1987 |
| Bennett, James E., Momence, Ill. Running-gear for wagons | 736,674 | Aug. 18 | 3075 | 677, 678 | 105 | 1670 |
| Bennett, John A., Harrison Township, Franklin county, Kans. Pie or cake plate | 725,657 | Apr. 21 | 2322 | 524 | 103 | 1691 |
| Bennett, John H., Worcester, Mass. Oiler | 734,036 | July 21 | 2462 | 576 | 105 | 553 |
| Bennett, John W., Sturgis, Mich. Railway-crossing | 748,469 | Dec. 29 | 5876 | 1336 | 107 | 2469 |
| Bennett, Joseph, North Adams, Mass., assignor to Windsor Company, New York, N. Y., and North Adams, Mass. Apparatus for coloring relief or raised ornamentations on fabrics | 724,660 | Apr. 7 | 446 | 108, 109 | 103 | 1265 |
| Bennett, Robert J., assignor to Lyon & Healy, Chicago, Ill. Musical instrument | 740,514 | Oct. 6 | 254 | 50, 51 | 106 | 1300 |
| Bennett, Silas W., McDonald, Pa. Invalid-bedstead | 718,746 | Jan. 20 | 2340 | 516, 517 | 102 | 528 |
| Bennett, Thomas G., assignor to Winchester Repeating Arms Co., New Haven, Conn. Extractor for firearms | 747,675 | Dec. 22 | 4356 | 984 | 107 | 2112 |
| Bennett, Thomas H., El Paso, Tex. Shaft-support for vehicles | 729,119 | May 26 | 4305 | 951 | 104 | 961 |
| Bennett, Thomas S., assignor to D. F. Briggs Company, Attleboro, Mass. Clasp | 739,477 | Sept. 22 | 3756 | 838 | 106 | 853 |
| Bennett, Will F. (See Livingstone and Bennett.) | | | | | | |
| Bennett, William H., assignor of one-half to L. Field, Rochester, N. Y. Brush | 747,902 | Dec. 22 | 4789 | 1082 | 107 | 2209 |
| Bennett, William H., assignor of one-half to L. Field, Rochester, N. Y. Brush | 747,903 | Dec. 22 | 4790 | 1083 | 107 | 2210 |
| Bennett, William T., Sunderland, Canada. Compound steam-engine | 734,037 | July 21 | 2464 | 576 | 105 | 553 |
| Benney, Walter, New York, N. Y. Fire-escape | 737,197 | Aug. 25 | 4030 | 893 | 105 | 1892 |
| Benns, George B., assignor of two-thirds to W. B. Graves and F. Mellish, Chicago, Ill. Apparatus for smoothing and ironing fabrics | 723,192 | Mar. 17 | 2866 | 643 | 103 | 638 |
| Benoit, Fredrick, assignor to himself and F. Schultz, Chicago, Ill. Machine for tufting mattresses | 718,901 | Jan. 20 | 2621 | 587, 588, 589 | 102 | 586 |
| Bensing, Jacob, Malinta, Ohio. Tile or brick cutting machine | 718,077 | Jan. 13 | 1044 | 233 | 102 | 240 |
| Bensing, Jacob, Malinta, Ohio. Receiving-table for brick or tile cutting machines | 718,078 | Jan. 13 | 1048 | 234 | 102 | 240 |
| Bensinger, Moses, assignor to Brunswick-Balke-Collender Co., Chicago, Ill. Refrigerator. (Reissue) | 12,127 | June 30 | 5924 | 1314 | 104 | 2424 |
| Benson, Alfred. (See Sellergren, Carl, assignor.) | | | | | | |
| Benson, Arthur E., New Bedford, assignor to Draper Company, Hopedale, Mass. Filling-detecting mechanism for looms | 742,564 | Oct. 27 | 4205 | 947 | 106 | 2180 |
| Benson, Benjamin E. (See Benson, Charles T., assignor.) | | | | | | |
| Benson, Charles C., Newburyport, Mass. Electric-street-car lamp | 726,848 | May 5 | 22 | 6 | 104 | 8 |
| Benson, Charles P. (See Katzke, Albert, assignor.) | | | | | | |
| Benson, Charles T., assignor of one-fourth to B. E. Benson, Chicago, Ill. Rotary engine | 731,425 | June 23 | 3497 | 781 | 104 | 1905 |
| Benson, Egbert, New York, N. Y. Float-valve | 740,515 | Oct. 6 | 260 | 52 | 106 | 1302 |
| Benson, Frank V., Topeka, Kans. Hand-lantern | 717,801 | Jan. 6 | 538 | 120 | 102 | 116 |
| Benson, Frank V., Topeka, Kans. Signal-lantern | 721,657 | Mar. 3 | 7 | 2 | 103 | 4 |
| Benson, George L., *et al.* (See Shepard, Sylvander C., assignor.) | | | | | | |
| Benson, Harry S. (See Sinclair and Benson.) | | | | | | |
| Benson, John D. (See Boss, Francis M., assignor.) | | | | | | |
| Benson, Robert. (See Hardill, Joseph, assignor.) | | | | | | |
| Benson, Robert L., Chicago, Ill. Nebulizer | 733,364 | July 14 | 1199 | 285 | 105 | 268 |
| Benson, Robert L., Chicago, Ill. Pump | 740,386 | Oct. 6 | 3 | 1 | 106 | 1245 |
| Benson, Simeon L., Chicago, Ill. Lawn-mower | 725,397 | Apr. 14 | 1806 | 404 | 103 | 1566 |
| Benson, William E., Kansas City, Mo. Type-writer attachment | 726,132 | Apr. 21 | 3139 | 710 | 103 | 1864 |
| Benson, William E., Kansas City, Mo. Type-writing attachment | 726,133 | Apr. 21 | 3141 | 710 | 103 | 1864 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| Benson, William S. (See Goldstein and Benson.) | | | | | | |
| Benson, William W., Philadelphia, Pa. Coupling for pipes, conduits, &c. | 733,534 | July 14 | 1499 | 357 | 105 | 333 |
| Benson, William W., Philadelphia, Pa. Coupling for pipes or conduits. | 733,535 | July 14 | 1500 | 357, 358 | 105 | 334 |
| Bent, George P. (See Granzow, Frank J., assignor.) | | | | | | |
| Bent, Richard M., New York, N. Y. Piano pedal-action. | 736,675 | Aug. 18 | 3077 | 678 | 105 | 1671 |
| Bentley, A. M. (See Giles, Edwin S., assignor.) | | | | | | |
| Bentley, Carrie, Lincoln, Ill. Egg-beater. | 724,246 | Mar. 31 | 4899 | 1097 | 103 | 1081 |
| Bentley, Charles E., New York, N. Y. Embroidery-seam. | 726,245 | Apr. 28 | 3353 | 761 | 103 | 1923 |
| Bentley, Linn, assignor of one-half to L. F. Fieser, Columbus, Ohio. Blast-furnace. | 718,945 | Jan. 20 | 2712 | 607 | 102 | 606 |
| Bentley, Oliver D. H., Schenectady, N. Y., assignor to General Electric Company. Means for adjusting intermediate buckets. | 735,054 | Aug. 4 | 12 | 4 | 105 | 983 |
| Bentley, Thomas, Milford, Mass., assignor of two-thirds to J. Roney and J. C. Rae, Woonsocket, R. I. Stopping mechanism for roving-frames, &c. | 723,576 | Mar. 24 | 3581 | 800, 801 | 103 | 793 |
| Benton, George E., East Hampton, N. Y. Lid-operating device for letter-boxes. | 728,839 | May 26 | 3821 | 851 | 104 | 865 |
| Benton, George E., East Hampton, N. Y. Twine-cutter. | 745,994 | Dec. 8 | 1258 | 283 | 107 | 1385 |
| Benton, John W., Boyce, Tex. Planting attachment for cultivators. | 733,801 | July 14 | 1966 | 463 | 105 | 432 |
| Benton, Morris F., assignor to American Type Founders' Company, New York, N. Y. Type. | 720,314 | Feb. 10 | 1674 | 380 | 102 | 1193 |
| Benton, Roy L., Greeley, and W. R. Benton, Salida, Colo. Permutation-lock. | 735,447 | Aug. 4 | 798 | 169, 170 | 105 | 1151 |
| Benton & Walter Manufacturing Company. (See Walter, Frank J., assignor.) | | | | | | |
| Benton, William R. (See Benton, Roy L. and W. R.) | | | | | | |
| Bentson, Hans J., assignor to F. C. Austin, Chicago, Ill. Trenching-machine. | 717,530 | Jan. 6 | 15 | 4,5 | 102 | 6 |
| Bentz, Harry, New York, N. Y. Telphorage system. | 736,197 | Aug. 11 | 2187 | 470, 471 | 105 | 1466 |
| Benz, Frederick, Jr. (See Frank and Benz.) | | | | | | |
| Benz, Frederick, Jr., Haledon, assignor to Frank & Dugan, Paterson, N. J. Let-off mechanism for looms. | 748,253 | Dec. 29 | 5473 | 1247 | 107 | 2380 |
| Benz, Max, Nashville, Tenn. Folding bedstead. | 741,446 | Oct. 13 | 2007 | 446 | 106 | 1694 |
| Benziger Brothers. (See Nehr, Herman F., assignor.) | | | | | | |
| Benziger, Rufus, assignor to Warner Silver Manufacturing Company, Chicago, Ill. Picture-frame. | 723,577 | Mar. 24 | 3587 | 801 | 103 | 794 |
| Benzing, William M., and H. Gimber, Pittsburg, Pa. Screw-driver. | 737,897 | Sept. 1 | 683 | 146 | 106 | 150 |
| Benzinger, Frederick, Union Hill, N. J., and L. Freund, New York, N. Y. Skein-holding device. | 740,616 | Oct. 6 | 457 | 99, 100 | 106 | 1344 |
| Beranek, Carl, Jaroslau, Austria-Hungary. Tightening device for harness. | 722,077 | Mar. 3 | 772 | 173 | 103 | 167 |
| Berard, Charles J. de, Jr. (See Berard, Louis A. de, assignor.) | | | | | | |
| Berard, Louis A. de, assignor of one-half to C. J. de Berard, Jr., Chicago, Ill. Selector for railway-signals. | 746,661 | Dec. 15 | 2465 | 563, 564 | 107 | 1670 |
| Berbecker, Julius, Waterbury, Conn. Album-easel. | 727,574 | May 12 | 1410 | 317 | 104 | 322 |
| Berberich, Frank J., Jr., Brooklyn, N. Y. Case for clinical or other thermometers. | 733,536 | July 14 | 1501 | 358 | 105 | 334 |
| Bercha, Joseph, assignor of one-half to W. I. Chapman, Atkinson, Nebr. Grinding-machine. | 735,448 | Aug. 4 | 801 | 170 | 105 | 1151 |
| Berchtold, Otto C., Cleveland, Ohio. Meat-cutter. | 739,817 | Sept. 29 | 4388 | 984 | 106 | 1007 |
| Berchtold, Otto C., Lakewood, Ohio. Non-refillable bottle. | 748,042 | Dec. 29 | 5000 | 1150 | 107 | 2297 |
| Berdan, Sinclair. (See Roberts, Clarence P. and G. P., assignors.) | | | | | | |
| Berendes, Rudolf, Elberfeld, Germany, assignor to Farbenfabriken of Elberfeld Co., New York, N. Y. Making methylene citric acid. | 722,275 | Mar. 10 | 1163 | | 103 | 263 |
| Berford, Victor F. W., Tara, Canada. Grain-door. | 724,784 | Apr. 7 | 686 | 161 | 103 | 1315 |
| Berg, Anton J. G. E., Copenhagen, Denmark. Cylinder relief-valve. | 730,085 | June 2 | 1021 | 228 | 104 | 1335 |
| Berg, Bernard, Chicago, Ill. Malting. | 743,810 | Nov. 10 | 1982 | 422 | 107 | 438 |
| Berg, Ernst J. (See Rice and Berg.) | | | | | | |
| Berg, Ernst J., Schenectady, N. Y., assignor to General Electric Company. Speed-indicator for electric motors. | 734,294 | July 21 | 2973 | 698 | 105 | 662 |
| Berg, Ernst J., Schenectady, N. Y., assignor to General Electric Company. Speed-indicator for electric motors. | 734,455 | July 21 | 3240 | 763 | 105 | 718 |
| Berg, Friedrich, Warrensville, Ohio. Deodorizing or purifying petroleum. | 736,479 | Aug. 18 | 2692 | 591 | 105 | 1592 |
| Berg, Friedrich, Warrensville, Ohio. Apparatus for deodorizing or purifying petroleum. | 736,480 | Aug. 18 | 2695 | 591, 592 | 105 | 1592 |
| Berg, George W. von, *et al.* (See Decker, Carl W., assignor.) | | | | | | |
| Berg, Hans, Riga, Russia. Steam-valve. | 726,620 | Apr. 28 | 4109 | 927 | 103 | 2073 |
| Berg, Henry. (See Gibbs, William E., assignor.) | | | | | | |
| Berg, John, New York, N. Y. Fountain marking-pen. | 743,430 | Nov. 10 | 1262 | 258 | 107 | 284 |
| Berg, Joseph. (See Campbell and Berg.) | | | | | | |
| Berg, Joseph, New York, N. Y. Means for utilizing liquid fuel in furnaces. | 728,154 | May 12 | 2502 | 555, 556 | 104 | 550 |
| Berg, Joseph, assignor of three-fourths to J. E. Coates, T. E. Glynn, and M. Laux, Little Rock, Ark. Cinder-hopper. | 721,139 | Feb. 24 | 3250 | 744 | 102 | 1560 |
| Berg, Louis, Brooklyn, N. Y. Appliance for molding apparatus. | 732,918 | July 7 | 395 | 95 | 105 | 85 |
| Berg, Rudolf, assignor of one-half to F. Wenig, Pittsburg, Pa. Blast-furnace. | 721,417 | Feb. 24 | 3768 | 857 | 102 | 1666 |
| Berg, Rudolf, assignor of one-half to F. Wenig, Pittsburg, Pa. Apparatus for preventing top explosions in blast-furnaces. | 721,418 | Feb. 24 | 3770 | 857 | 102 | 1666 |
| Berg, Segvart C. O., Kansas City, Mo. Barrel-washer. | 720,315 | Feb. 10 | 1676 | 381 | 102 | 1193 |
| Berg, Torkel H., Crawford, S. D. Harvester-reel. | 747,362 | Dec. 22 | 3801 | 855 | 107 | 1987 |
| Bergé, Charles K., Mobile, Ala. Oil-burner. | 724,247 | Mar. 31 | 4899 | 1097 | 103 | 1081 |
| Bergé, Charles K., Mobile, Ala. Hydrocarbon-burner. | 724,248 | Mar. 31 | 4901 | 1097 | 103 | 1081 |
| Berge, Jacob L., Minneapolis, Minn. Oil-stove. | 739,143 | Sept. 15 | 3134 | 693 | 106 | 701 |
| Berger, Alfred A. R. (See Kalb and Berger.) | | | | | | |
| Berger, George, *et al.* (See Pugh, Milton E., assignor.) | | | | | | |
| Berger, Henry A., Brooklyn, N. Y. Button-turning machine. | 722,479 | Mar. 10 | 1543 | 338, 339, 340 | 103 | 346 |
| Berger Manufacturing Company. (See Good and Schlafly, assignors.) | | | | | | |
| Berger Manufacturing Company. (See Mallory, Elwyn A., assignor.) | | | | | | |
| Berger, Oswald. (See Souder, Bittner, and Berger.) | | | | | | |
| Berger, Otto, New York, N. Y. Device for maintaining the water-level in boilers. | 719,424 | Feb. 3 | 25 | 6 | 102 | 831 |
| Berger, Otto, Galveston, Tex. Pipe. | 735,449 | Aug. 4 | 803 | 170 | 105 | 1151 |
| Berger, Ulysses L., Washington, D. C. Picture-exhibitor. | 733,802 | July 14 | 1968 | 463 | 105 | 432 |
| Bergersen, Peter, Cheyenne, Wyo. Practice-barrel for rifles. | 745,561 | Dec. 1 | 457 | 107 | 107 | 1195 |
| Bergey, Aaron E., Avalon, Pa. Calculating-machine. | 745,562 | Dec. 1 | 459 | 108 | 107 | 1195 |
| Bergey, Aaron E., Bellevue, Pa. Calculating-machine. | 745,995 | Dec. 8 | 1259 | 283, 284 | 107 | 1385 |
| Bergh Clarified Milk Company. (See Bergh, Jefferson L., assignor.) | | | | | | |
| Bergh, Jefferson L., Cobleskill, assignor to Bergh Clarified Milk Company, New York, N. Y. Apparatus for clarifying and aerating milk, &c. | 726,134 | Apr. 21 | 3142 | 710 | 103 | 1864 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| Berghauser, John H. (See Norman and Berghauser.) | | | | | | |
| Berglund, Karl V., assignor to Vägfabriks Aktiebolaget Stathmos, Stockholm, Sweden. Automatic weighing apparatus | 727,268 | May 5 | 838 | 179 | 104 | 180 |
| Berglund, Peter, Newman Grove, Nebr. Ditching-machine | 738,597 | Sept. 8 | 2105 | 459, 460 | 106 | 468 |
| Bergman, Amos C., New York, N. Y. Practice-clavier | 736,923 | Aug. 25 | 3545 | 787 | 105 | 1789 |
| Bergman, Andrew, Chicago, Ill. Butterin and making same | 722,276 | Mar. 10 | 1164 | ..... | 103 | 263 |
| Bergman, Bror A., Nyfors, Sweden. Recovering tin from scraps of tinned iron | 736,924 | Aug. 25 | 3548 | 787 | 105 | 1789 |
| Bergmann, Carl R., Berlin, Germany. Machine for manufacturing envelops, paper bags, or the like | 746,917 | Dec. 15 | 2936 | 677, 678 | 107 | 1776 |
| Bergmann, Charles, Pittsburg, Pa. Automatic train-controlling apparatus | 731,013 | June 16 | 2718 | 606, 607 | 104 | 1729 |
| Bergmann Elektricitäts Werke, Aktiengesellschaft. (See Zahikjanz, Gabriel, assignor.) | | | | | | |
| Bergmann, Hermann, Berlin, Germany. Rotary engine | 722,480 | Mar. 10 | 1550 | 340 | 103 | 347 |
| Bergmann, Ignaz, Fort Madison, Iowa. Pen guide or rest | 718,595 | Jan. 20 | 2062 | 448 | 102 | 473 |
| Bergmann, Theodor, Baden, Germany. Automatic machine-gun | 723,232 | Mar. 24 | 2938 | 658, 659 | 103 | 666 |
| Bergom, Hans A., Stoughton, Wis. Pin-locking mechanism for clevises or similar purposes | 748,043 | Dec. 29 | 5091 | 1150 | 107 | 2298 |
| Bergren, Ernest Q., assignor of one-half to G. Dorn, Chicago, Ill. Attachment for guitars | 743,054 | Nov. 3 | 456 | 100 | 107 | 95 |
| Bergstrom, Oscar, and G. Bass, New York, N. Y. Press for molding and compressing various articles | 748,340 | Dec. 29 | 5620 | 1281 | 107 | 2411 |
| Bergstrom, Otto, Austin, Tex. Apparatus for molding pipe | 732,939 | Mar. 17 | 2401 | 537 | 103 | 540 |
| Berhenke, Carl, Billerbeck, Germany. Apparatus for drying bricks, &c | 736,060 | Aug. 11 | 1965 | 418 | 105 | 1420 |
| Bering, James E., assignor to Chambers, Bering Quinlan Company, Decatur, Ill. Check-row corn-planter | 719,076 | Jan. 27 | 2962 | 661, 662 | 102 | 672 |
| Bering, James E., assignor to Chambers Bering Quinlan Company, Decatur, Ill. Seeding mechanism for corn-planters | 726,849 | May 5 | 23 | 6,7 | 104 | 8 |
| Berkimer, M. A., *et al.* (See McGuire, Peter J., assignor.) | | | | | | |
| Berkley, Norman W., Johnstown, Pa., assignor to Lorain Steel Company. Templet for use in the manufacture of railway-track structures | 745,767 | Dec. 1 | 811 | 185 | 107 | 1272 |
| Berkowitz, Louis I., Boston, Mass. Support for hinged or other movable members | 729,530 | June 2 | 20 | 6 | 104 | 1130 |
| Berkstresser, Robert H., York, Pa. Pie crimper and trimmer | 727,269 | May 5 | 839 | 180 | 104 | 180 |
| Berle, Kort. (See Lyon and Berle.) | | | | | | |
| Berliner, Emile. (See Bachrach, David, assignor.) | | | | | | |
| Berliner, Erich, Berlin, Germany. Corking apparatus | 726,621 | Apr. 28 | 4111 | 928 | 103 | 2073 |
| Berliner Machinenbau Actien-Gesellschaft, vormals L. Schwartzkopff. (See Ziehl, Emil, assignor.) | | | | | | |
| Berling, Franz G., Bay City, Mich. Clock striking mechanism | 747,676 | Dec. 22 | 4357 | 984 | 107 | 2112 |
| Berman, John, Chicago, Ill. Binder | 731,270 | June 16 | 3183 | 709 | 104 | 1821 |
| Bernard, Aden H., Melrose, Mass. Top for mucilage or glue containing devices | 748,254 | Dec. 29 | 5474 | 1247 | 107 | 2380 |
| Bernard, Benjamin. (See Weber, Morris, assignor.) | | | | | | |
| Bernard, Harry R., assignor of one-half to A. Gutsch, San Francisco, Cal. Hat-hook | 723,193 | Mar. 17 | 2868 | 643 | 103 | 638 |
| Bernard, William, New York, N. Y. Match-box holder | 719,173 | Jan. 27 | 3150 | 701 | 102 | 710 |
| Bernard, William A., assignor to William Schollhorn Company, New Haven, Conn. Punch | 734,157 | July 21 | 2696 | 634 | 105 | 603 |
| Bernauer, Albert, Hannibal, Mo., assignor to G. E. Potts, Dover, N. J. Wrapping-machine | 718,747 | Jan. 20 | 2341 | 517, 518 | 102 | 528 |
| Bernauer, Alexander, San Francisco, Cal. Glove-fastener | 725,536 | Apr. 14 | 2077 | 470 | 103 | 1625 |
| Berneck, Rudolph M. von. (See Krauss and Berneck.) | | | | | | |
| Bernegau, Carl M., Hoboken, N. J., assignor to Keuffel & Esser Company. Illuminator for surveying instruments | 728,357 | May 19 | 2910 | 642 | 104 | 657 |
| Berner, Frederick. (See Neubling, Louis W., assignor.) | | | | | | |
| Berner, Paul B. T., Brooklyn, N. Y. Gearing | 742,382 | Oct. 27 | 3874 | 870 | 106 | 2112 |
| Bernhard, John. (See Ulbricht, Charles J., assignor.) | | | | | | |
| Bernier, Alsime, Providence, R. I. Drip-catching device for refrigerators | 745,768 | Dec. 1 | 814 | 185 | 107 | 1272 |
| Berninger, Adam, Pittsburg, Pa. Embossed picture | 731,744 | June 23 | 4099 | 915 | 104 | 2025 |
| Berns, Andrew H. and H. A., Chebanse, Ill. Corn-sheller | 728,661 | May 19 | 3489 | 774, 775 | 104 | 780 |
| Berns, Herman A. (See Berns, Andrew H. and H. A.) | | | | | | |
| Bernstein, Alexander, assignor of one-half to C. Levy, London, England. Pocket-shield. | 726,850 | May 5 | 26 | 7 | 104 | 9 |
| Bernstein, Joseph, Philadelphia, Pa. Necktie | 745,563 | Dec. 1 | 460 | 108 | 107 | 1195 |
| Bernstrom, John, *et al.* (See Berrigan, John J., assignor.) | | | | | | |
| Berns, Otto, Newark, N. J. Plumber's blast-furnace | 738,518 | Sept. 8 | 1970 | 429 | 106 | 438 |
| Berquist, Henry, St. Croix Falls, Wis. Screw-driver | 724,154 | Mar. 31 | 4698 | 1055 | 103 | 1042 |
| Berr, August W. R., Eureka, Cal. Bed-covering | 725,821 | Apr. 21 | 2614 | 594 | 103 | 1755 |
| Berrenberg, Adolph. (See Krauss and Berrenberg.) | | | | | | |
| Berrigan, John J., East Orange, N. J. Centrifugal machine | 717,802 | Jan. 6 | 540 | 120, 121 | 102 | 116 |
| Berrigan, John J., Orange, N. J. Centrifugal machine | 717,803 | Jan. 6 | 542 | 121 | 102 | 117 |
| Berrigan, John J., Orange, N. J. Centrifugal machine | 717,804 | Jan. 6 | 544 | 121, 122 | 102 | 117 |
| Berrigan, John J., Avon, N. Y., assignor to De Laval Separator Company. Centrifugal liquid-separator | 729,531 | June 2 | 22 | 6,7 | 104 | 1131 |
| Berrigan, John J., Avon, N. Y., assignor to De Laval Separator Company. Centrifugal cream-separator | 729,532 | June 2 | 26 | 7 | 104 | 1132 |
| Berrigan, John J., Orange, N. J., assignor to F. J. Arend, New York, N. Y., and J. Bernstrom, Stockholm, Sweden. Centrifugal machine | 737,063 | Aug. 25 | 3794 | 840 | 105 | 1841 |
| Berriman, Edward C., Chicago, Ill. Maintaining an even temperature and humidity in places where tobacco and cigars are stored | 747,121 | Dec. 15 | 3328 | 757 | 107 | 1868 |
| Berry, Albert E., assignor to A. B. Roberts & Co., Limited, Stratford, England. Fining. | 738,151 | Sept. 8 | 1193 | ..... | 106 | 273 |
| Berry Buoyant Soap Company. (See Berry, Washington, assignor.) | | | | | | |
| Berry, Charles E., Somerville, Mass. Combined shaft-loop and buckle | 725,658 | Apr. 21 | 2322 | 524 | 103 | 1691 |
| Berry, Daniel D., Springfield, Mo. Stove or range | 733,129 | July 7 | 766 | 185, 186 | 105 | 162 |
| Berry, David C., Saxonburg, Pa. Cross head | 738,975 | Sept. 15 | 2832 | 628 | 106 | 640 |
| Berry, Edward T. (See Weber, Henry, assignor.) | | | | | | |
| Berry, Ervin W., Paducah, Ky. Smoke-consuming furnace | 723,511 | Mar. 24 | 3473 | 777 | 103 | 771 |
| Berry, George A. (See Cooley, Harry W., assignor.) | | | | | | |
| Berry, George W., Albert Park, near Melbourne, Victoria, Australia. Apparatus for soldering or joining the seams of can-bodies | 724,785 | Apr. 7 | 689 | 161, 162 | 103 | 1316 |
| Berry, Ira G., assignor, by mesne assignments, to T. A. Galt, Sterling, Ill. Corn-husker and fodder-shredder | 718,902 | Jan. 20 | 2629 | 590 | 102 | 587 |
| Berry, James E., assignor of one-half to M. E. Ross, Indianapolis, Ind. Foot-rest for chairs | 735,450 | Aug. 4 | 804 | 171 | 105 | 115 |

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| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| Berry, James W., Iowa City, Iowa. Fencing | 741,216 | Oct. 13 | 1558 | 351 | 106 | 1599 |
| Berry, Jehu, Witwatersrand, Gold Fields, Transvaal. Safety mechanism for winding apparatus for mines or the like | 746,271 | Dec. 8 | 1762 | 400 | 107 | 1495 |
| Berry, John, St. Louis, Mo. Air-ship | 723,736 | Mar. 24 | 3692 | 827 | 103 | 816 |
| Berry, John V., assignor of one-half to C. A. Barron, Shamokin, Pa. Nut-lock | 738,598 | Sept. 8 | 2107 | 460 | 106 | 469 |
| Berry, Joseph E., Carterville, Mo. Brake | 720,777 | Feb. 17 | 2537 | 585 | 102 | 1387 |
| Berry, Joseph H. (See Carpenter, Franklin R., assignor.) | | | | | | |
| Berry, Margret, Pittsburg, Pa. Combination trunk and dressing-table | 719,298 | Jan. 27 | 3376 | 754 | 102 | 759 |
| Berry, Orman P., Petrolia, Pa. Pump piston or plunger | 723,811 | Mar. 31 | 3999 | 902 | 103 | 899 |
| Berry, Peter H. (See Cretors, Jesse B., assignor.) | | | | | | |
| Berry, Robert C. (See Duke and Berry.) | | | | | | |
| Berry, Sparks M., and K. W. Gale, Los Angeles, Cal. Basement-door apparatus | 740,080 | Sept. 29 | 4366 | 1098 | 106 | 1113 |
| Berry, Thomas B., Tavern, Mo. Fence | 746,781 | Dec. 15 | 2078 | 618 | 107 | 1716 |
| Berry, Thomas E., Youngstown, Ohio. Folding scaffold | 742,565 | Oct. 27 | 4207 | 947 | 106 | 2180 |
| Berry, Washington, Chicago, Ill. Sash-balance | 743,224 | Nov. 3 | 789 | 170<br>171 | 107 | 165 |
| Berry, Washington, Chicago, Ill. Sash balance and lock | 743,225 | Nov. 3 | 791 | 171 | 107 | 165 |
| Berry, Washington, Chicago, Ill. Sash-balance | 744,995 | Nov. 24 | 4216 | 913 | 107 | 944 |
| Berry, Washington, Chicago, Ill. Sash-balance | 744,996 | Nov. 24 | 4219 | 913 | 107 | 945 |
| Berry, Washington, assignor to Berry Buoyant Soap Company, Chicago, Ill. Making soap cakes provided with inserts | 740,387 | Oct. 6 | 5 | 2 | 106 | 1246 |
| Berry, William E., Bryn Mawr, Pa. Kitchen utensil | 748,255 | Dec. 29 | 5475 | 1248 | 107 | 2380 |
| Berry, William H., Chester, Pa. Feed-water regulator | 726,792 | Apr. 28 | 4425 | 997 | 103 | 2138 |
| Berrye, Miles E., New York, J. A. Kane, Brooklyn, and J. E. Stengard, New York, N. Y. Candy pulling or aerating machine | 728,075 | May 12 | 2359 | 525 | 104 | 519 |
| Berryman, Warren, assignor of one-half to R. B. Gordon, St. Marys, Ohio. Packing-box | 731,156 | June 16 | 2992 | 664 | 104 | 1783 |
| Bertelsmann, Edward, Washington, Mo. Adjustable barrel-cover | 744,026 | Nov. 17 | 2435 | 523 | 107 | 550 |
| Bertges, Peter, Allegheny, Pa. Window | 718,596 | Jan. 20 | 2063 | 448<br>449 | 102 | 473 |
| Berthold, Ferdinand. (See Rosmann and Berthold.) | | | | | | |
| Berthold, Richard E., New York, N. Y. Self-igniting mantle | 719,174 | Jan. 27 | 3151 | 701 | 102 | 710 |
| Bertou, Camille, Paris, France. Pulverizing metals | 719,725 | Feb. 3 | 570 | 128 | 102 | 942 |
| Bertram, David N., and R. Milne, Edinburgh, Scotland. Machine for printing linoleum, floor-cloth, &c. | 739,818 | Sept. 29 | 4389 | 984 | 106 | 1007 |
| Bertram, David N., and S. Milne, Edinburgh, Scotland. Expanding rope-pulley | 725,024 | Apr. 14 | 1132 | 255 | 103 | 1427 |
| Bertram, Gustav, Brooklyn, N. Y. Third-rail electric-railway system | 729,120 | May 26 | 4305 | 951 | 104 | 961 |
| Bertrand, Emile G., Paris, France. Paint or protective composition | 729,258 | May 26 | 4552 | | 104 | 1014 |
| Bertrand, Joseph, Chicago, Ill. Saw-level | 725,925 | Apr. 21 | 2794 | 634 | 103 | 1794 |
| Bertrand, Léon, Paris, France. Apparatus for charging retorts | 729,259 | May 26 | 4553 | 1004<br>1005 | 104 | 1014 |
| Bertrand, Louis. (See Lavagne and Bertrand.) | | | | | | |
| Bertschmann, Albert, assignor to Society of Chemical Industry in Basle, Basle, Switzerland. Azo dye and making same | 724,078 | Mar. 31 | 4540 | | 103 | 1010 |
| Bertschy, Frederick H., assignor to C. L. Brownell, Splitrock, Wis. Tool for reaching store goods | 744,157 | Nov. 17 | 2690 | 574 | 107 | 602 |
| Bérubé, François X., Fraserville, Canada. Car-brake | 722,201 | Mar. 10 | 1020 | 224<br>225 | 103 | 232 |
| Beschorner, Karl E., Bad Soden, assignor to E. Schade, Frankfort-on-the-Main, Germany. Apparatus for the manufacture of cardboard boxes | 742,383 | Oct. 27 | 3875 | 870 | 106 | 2112 |
| Besenbruch, Ernst. (See Meyer and Besenbruch.) | | | | | | |
| Besly, Charles H. (See Gardner, Frederick N., assignor.) | | | | | | |
| Besse, Elmer, Stroud, Okla. Ter. Buggy-step | 724,155 | Mar. 31 | 4699 | 1055 | 103 | 1042 |
| Bessette, Aldei, Danielson, Conn. Refrigerator drip-pan attachment | 740,516 | Oct. 6 | 261 | 52 | 106 | 1302 |
| Bessier, Vetal, Brooklyn, N. Y. Key-actuated musical instrument | 729,260 | May 26 | 4556 | 1005 | 104 | 1014 |
| Besson, Jules A., Caen, France. Apparatus for treating sugar-juice | 738,397 | Sept. 8 | 1728 | 376 | 106 | 388 |
| Besson, Jules A., Caen, France. Purifying and concentrating sugar-juices | 738,398 | Sept. 8 | 1729 | | 106 | 388 |
| Best, Daniel, San Leandro, Cal. Sidehill harvesting-machine | 741,876 | Oct. 20 | 2849 | 635<br>636 | 106 | 1888 |
| Best, Daniel, San Leandro, Cal. Wheel | 741,877 | Oct. 20 | 2852 | 637 | 106 | 1889 |
| Best, Jas. M., *et al.* (See Mendenhall, Amos, assignor.) | | | | | | |
| Best, John A., Augusta, Ga. Index-book | 738,599 | Sept. 8 | 2109 | 460<br>461 | 106 | 469 |
| Best, William J., Grand Rapids, Mich. Wood-holder | 732,036 | June 30 | 4655 | 1039 | 104 | 2159 |
| Best, William J., Grand Rapids, Mich. Folding carrier | 732,037 | June 30 | 4655 | 1040 | 104 | 2159 |
| Best, William N., assignor of one-half to J. F. Gulick, B. F. Masten, and W. A. Cooper, Los Angeles, Cal. Steam-boiler for locomobiles or other machines | 728,840 | May 26 | 3823 | 851 | 104 | 866 |
| Beswick, Laura H., Memphis, Mo. Musical notation | 733,351 | July 7 | 1168 | 277 | 105 | 246 |
| Bete, John E., Stoughton, Mass. Form or last for boots or shoes | 737,321 | Aug. 25 | 4280 | 951 | 105 | 1943 |
| Bethlehem Steel Company. (See Gathmann, Emil, assignor.) | | | | | | |
| Bethlehem Steel Company. (See Hughes, Frederick G., assignor.) | | | | | | |
| Bethlehem Steel Company. (See Jakobsson, Herman G., assignor.) | | | | | | |
| Bethlehem Steel Company. (See Meigs, John F., assignor.) | | | | | | |
| Bethlehem Steel Company. (See Meigs and Collins, assignors.) | | | | | | |
| Bethlehem Steel Company. (See Meigs and Gathmann, assignors.) | | | | | | |
| Bethlehem Steel Company. (See Meigs and Hammar, assignors.) | | | | | | |
| Bethlehem Steel Company. (See Meigs and Jakobsson, assignors.) | | | | | | |
| Bethlehem Steel Company. (See Meigs and Mixsell, assignors.) | | | | | | |
| Bethlehem Steel Company. (See Meigs and Stout, assignors.) | | | | | | |
| Bethlehem Steel Company. (See Meigs, Hammar, and Mixsell, assignors.) | | | | | | |
| Bethlehem Steel Company. (See Stout, Robert P., assignor.) | | | | | | |
| Bethlehem Steel Company. (See Stout and Hughes, assignors.) | | | | | | |
| Bethlehem Steel Company. (See Taylor and Gantt, assignors.) | | | | | | |
| Bethmann, Fritz. (See Schmidt and Bethmann.) | | | | | | |
| Bethuy, Henry, Emmett, Mich. Threshing-machine | 737,898 | Sept. 1 | 684 | 146 | 106 | 150 |
| Bettendorf, William P., Davenport, Iowa. Car-truck | 740,617 | Oct. 6 | 458 | 100 | 106 | 1345 |
| Bettendorf, William P., Davenport, Iowa. Brake-beam | 744,027 | Nov. 17 | 2436 | 523 | 107 | 550 |
| Bettinger, Posey W., San Jose, Cal. Power-transmitting mechanism | 737,696 | Sept. 1 | 249 | 53, 54 | 106 | 57 |
| Bettman, Patrick H. (See Fraley, Gassner F., assignor.) | | | | | | |
| Betts, Auson G., Lansingburg, N. Y. Electrodeposited lead. (Reissue) | 12,117 | June 9 | 2396 | 529 | 104 | 1642 |
| Betts, Charles L., Brooklyn, assignor to R. E. Dietz Company, New York, N. Y. Vehicle-lamp | 744,952 | Nov. 24 | 4146 | 896 | 107 | 930 |
| Betts, Edwin, Newark, N. J. Dentist's tool for crimping edges of metal crowns | 738,152 | Sept. 8 | 1194 | 263 | 106 | 273 |
| Betts, George E. (See Marsh, Eugene S., assignor.) | | | | | | |
| Betts, John C., Philadelphia, Pa. Milk-jar lock | 732,613 | June 30 | 5778 | 1281 | 104 | 2395 |
| Betts, Kate V., East Orange, N. J. Paper doll | 723,438 | Mar. 24 | 3325 | 745 | 103 | 742 |
| Betts, Lewis F., New York, N. Y. Gas-burning heater | 744,283 | Nov. 17 | 2946 | 630 | 107 | 658 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | Spec. | Drg. | Vol. | Page. |
| Betts, Robert H. (See Roux, Charles F., assignor.) | | | | | | |
| Betts, Stephen N., Hillsdale, Mich. Supervisor's assistant | 724,424 | Apr. 7 | 12 | 4 | 103 | 1173 |
| Betts, Stephen N., Hillsdale, Mich. Mathematical device | 736,481 | Aug. 18 | 2699 | 592 | 105 | 1593 |
| Betts, William H., assignor of one-half to M. J. Johnson, Shellrock, Iowa. Plow attachment | 745,996 | Dec. 8 | 1262 | 284 | 107 | 1385 |
| Betts, William L., Petroleum Center, Pa. Standing valve for pumps | 741,217 | Oct. 13 | 1559 | 352 | 106 | 1599 |
| Betty, Thomas H., Manchester, assignor to Richmond Wood Working Company, Richmond, Va. Show-case | 738,759 | Sept. 15 | 2438 | 534 | 106 | 553 |
| Betz, Frank S. (See Joseph, Benjamin E., assignor.) | | | | | | |
| Betz, Frank S. (See Kimble, Austin, assignor.) | | | | | | |
| Betzner, David. (See Ziegler and Betzner.) | | | | | | |
| Beugler, Hugh M., assignor to W. C. Smith, Elmira, N. Y. Day or night sign | 733,800 | July 14 | 1965 | 463 | 105 | 432 |
| Beurrier, Alexis, Montguyon, France. Road-vehicle | 739,280 | Sept. 22 | 3387 | 754 | 106 | 772 |
| Beust, Anton von, Orange, N. J. Making multicolor-printing surfaces | 735,854 | Aug. 11 | 1577 | 336 | 105 | 1336 |
| Beust, Anton von, Orange, N. J. Polychromatic printing-surface and making same | 741,297 | Oct. 13 | 1721 | ..... | 106 | 1630 |
| Bevans, William H., Bridgeport, Conn., assignor to American and British Manufacturing Company, New York, N. Y. Semi-automatic breech-loading ordnance | 732,259 | June 30 | 5099 | 1134<br>1135 | 104 | 2250 |
| Bevans, William H., Bridgeport, Conn., assignor to American and British Manufacturing Company, New York, N. Y. Ordnance | 742,825 | Nov. 3 | 15 | 3 | 107 | 6 |
| Bevans, William H., Washington, D. C., assignor to American and British Manufacturing Company, New York, N. Y. Breech-loading ordnance | 735,934 | Aug. 11 | 1718 | 367 | 105 | 1366 |
| Bever, Alexander, Chicago, Ill., assignor of one-half to M. C. Hyer, New York, N. Y. Cabinet show-case | 730,512 | June 9 | 1812 | 404 | 104 | 1516 |
| Beveridge, Stephen T., Richmond, Va. Cipher-code system | 724,786 | Apr. 7 | 692 | 163 | 103 | 1317 |
| Bevier, Abram M., Superior, Wis. Earth-boring auger | 738,760 | Sept. 15 | 2439 | 535 | 106 | 554 |
| Bevilacqua, Giovanni and G., Genoa, Italy. Rustproof and fireproof composition | 733,573 | July 14 | 1573 | ..... | 105 | 351 |
| Bevilacqua, Giuseppe. (See Bevilacqua, Giovanni and G.) | | | | | | |
| Bevill, Sidi H., Anderson, S. C., assignor to Draper Company, Hopedale, Mass. Lay rocker-shaft box or bearing | 725,659 | Apr. 21 | 2323 | 524 | 103 | 1691 |
| Bevis, Luther L., Franklin, Ga. Seed-planter | 722,799 | Mar. 17 | 2156 | 482 | 103 | 491 |
| Bew, Martha, Chicago, Ill. Garment-supporter | 734,504 | July 28 | 3340 | 782 | 105 | 754 |
| Beyer, Friedrich K., Bielefeld, and C. W. W. T. List, Hanover, Germany. Spittoon | 743,226 | Nov. 3 | 793 | 171 | 107 | 165 |
| Beyer, John A., Redhill, Pa. Automatic brake for vehicles | 718,903 | Jan. 20 | 2631 | 590 | 102 | 588 |
| Beyer, John C., Indianapolis, Ind. Extension boring-bit | 722,481 | Mar. 10 | 1552 | 341 | 103 | 348 |
| Beyer, Otto S., Carlstadt, N. J., assignor to E. W. Bliss Company, Brooklyn, N. Y. Double-seaming machine | 737,567 | Sept. 1 | 12 | 4 | 106 | 6 |
| Beyer, Otto S., Carlstadt, N. J., assignor to E. W. Bliss Company, Brooklyn, N. Y. Drawing-press | 739,378 | Sept. 22 | 3554 | 793<br>794 | 106 | 808 |
| Beyer, Otto S., Carlstadt, N. J., assignor to E. W. Bliss Company, Brooklyn, N. Y. Drawing-press | 739,379 | Sept. 22 | 3558 | 794<br>795 | 106 | 808 |
| Beylik, Marc W., Burbank, Cal., assignor to J. M. Sherman, Fremont, Ohio. Cetyl-guaiacyl and making same | 736,061 | Aug. 11 | 1967 | ..... | 105 | 1420 |
| Beymer, Fred L., Indianola, Iowa. Trace-carrier | 722,277 | Mar. 10 | 1164 | 257 | 103 | 263 |
| Beynon, Gomer G., Des Moines, Iowa. Churn | 717,531 | Jan. 6 | 18 | 5 | 102 | 7 |
| Bez, Paul, Léran, France. Product for prevention of furring in boilers | 748,341 | Dec. 29 | 5622 | ..... | 107 | 2412 |
| Bézard, Johann von, Neusohl, Austria-Hungary. Instrument for ascertaining direction in marching or traveling | 736,925 | Aug. 25 | 3549 | 787 | 105 | 1789 |
| Bezzera, Luigi, assignor to D. Pavoni, Milan, Italy. Coffee-making machine | 726,793 | Apr. 28 | 4428 | 997<br>998 | 103 | 2139 |
| Biava, Louis, New York, N. Y. Vehicle-wheel | 739,053 | Sept. 15 | 2962 | 656 | 106 | 667 |
| Bibler, Jacob O., Florence, Kans. Luggage-carrier | 741,098 | Oct. 13 | 1311 | 301 | 106 | 1546 |
| Bicalky, Charles H., Oneida, N. Y. Pulley | 736,926 | Aug. 25 | 3550 | 788 | 105 | 1790 |
| Bicalky, Charles H., Oneida, N. Y. Bushing for split pulleys | 736,927 | Aug. 25 | 3552 | 788 | 105 | 1790 |
| Bice, Daniel, Spencerville, Ohio. Fence-post | 747,361 | Dec. 22 | 3800 | 854 | 107 | 1987 |
| Bichel, Christian E. (See Blochmann, Georg F. R., assignor.) | | | | | | |
| Bickel, Charles, Newark, N. J. Window | 727,882 | May 12 | 2003 | 446 | 104 | 444 |
| Bickel, Henry F. (See Augur and Bickel.) | | | | | | |
| Bickford and Huffman Company. (See Baseman, Ernest, assignor.) | | | | | | |
| Bickford and Huffman Company. (See Heath and Baseman, assignors.) | | | | | | |
| Bicking, Jules. (See Brun and Bicking.) | | | | | | |
| Bicking, Jules. (See Wenning and Bicking.) | | | | | | |
| Bickley, George H., Orwigsburg, Pa. Relasting-machine | 719,077 | Jan. 27 | 2964 | 662 | 102 | 673 |
| Bicknell, George J., Boston, Mass. Exhibit-frame for lace draperies | 732,158 | June 30 | 4904 | 1091 | 104 | 2209 |
| Biddle, Edward. (See Coad and Biddle.) | | | | | | |
| Biddle, George H., *et al.* (See Chandler, James, assignor.) | | | | | | |
| Biddle, Joseph H. (See Shank, Samuel N., assignor.) | | | | | | |
| Bidwell, Charles H., Batavia, N. Y. Threshing-machine | 734,214 | July 21 | 2792 | 655 | 105 | 624 |
| Bieberneit, John, New York, N. Y. Steaming-board | 748,470 | Dec. 29 | 5877 | 1336 | 107 | 2469 |
| Biebinger, David A., assignor to Deere & Company, Moline, Ill. Double-row listing-plow | 718,415 | Jan. 13 | 1651 | 364<br>365 | 102 | 370 |
| Bieder, Jacob L., Chicago, Ill. Advertising-card | 744,158 | Nov. 17 | 2691 | 574 | 107 | 602 |
| Bieger, Wilhelm, Heilbronn-on-the-Neckar, assignor of one-half to W. Rudolph, Giessen, Germany. Piano-plate | 739,380 | Sept. 22 | 3562 | 795<br>796 | 106 | 809 |
| Biehn, Frank A., assignor of one-half to W. R. and E. A. Rummler, Chicago, Ill. Wrench | 743,227 | Nov. 3 | 794 | 172 | 107 | 166 |
| Biehn, Hans, assignor to Pyrisolith Isolating Material Manufacturing Company, Limited, Budapest, Austria-Hungary. Producing electric insulating bodies | 724,079 | Mar. 31 | 4542 | ..... | 103 | 1010 |
| Bielenberg, Albertus. (See Dorgan, William J., assignor.) | | | | | | |
| Bieler, Jacob L. (See Malpas, Samuel H., assignor.) | | | | | | |
| Bielhen, Fredrick, assignor to American Fire Escape Company, St. Louis, Mo. Fire-escape | 745,140 | Nov. 24 | 4521 | 978<br>979 | 107 | 1008 |
| Bielhen, Fredrick, assignor to American Fire Escape Company, St. Louis, Mo. Fire-escape | 745,141 | Nov. 24 | 4524 | 979 | 107 | 1009 |
| Bieman, Phillip H., Chicago, Ill. Needle for grain-binders | 745,769 | Dec. 1 | 815 | 185 | 107 | 1272 |
| Bienenstock, Isidor, Philadelphia, Pa. Strap-holder for dress-suit cases or trunks | 735,698 | Aug. 11 | 1280 | 274 | 105 | 1270 |
| Bierbaum, Christopher H., Buffalo, N. Y. Making castings | 740,733 | Oct. 6 | 646 | 146 | 106 | 1386 |
| Bierce, George N. (See Warner, Hugh L., assignor.) | | | | | | |
| Bierich, Johann G., Menkenhof, near Lievenhof, Russia. Manufacture of meal from raw horn or the like | 718,597 | Jan. 20 | 2064 | ..... | 102 | 474 |
| Bierley, Henry A., Portsmouth, Ohio. Fire-extinguisher | 719,176 | Jan. 27 | 3153 | 701 | 102 | 710 |
| Bierley, Henry A., Portsmouth, Ohio. Fly-trap | 731,842 | June 23 | 4274 | 951 | 104 | 2065 |
| Bierley, Henry A., Portsmouth, Ohio. Fly-trap | 731,843 | June 23 | 4274 | 951<br>952 | 104 | 2065 |
| Bierley, Henry A., Portsmouth, Ohio. Hen's nest | 747,677 | Dec. 22 | 4359 | 985 | 107 | 2112 |
| Bierley, Henry A., Portsmouth, Ohio. Washing-machine | 747,849 | Dec. 22 | 4681 | 1058 | 107 | 2187 |
| Bierley, Henry A., and J. G. Nehrbas, Indianapolis, Ind. Applicator | 719,175 | Jan. 27 | 3152 | 701 | 102 | 710 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | Spec. | Dr'g. | Vol. | Page. |
| Biernatzki & Co., Firm of. (See Foulis, David, assignor.) | | | | | | |
| Bierwirth, Ernst A. G., Kansas City, Mo. Box | 744,284 | Nov. 17 | 2948 | 630 | 107 | 659 |
| Bigelow, George H., Auckland, New Zealand. Nut-lock | 731,497 | Feb. 24 | 3914 | 890 | 102 | 1695 |
| Bigelow, Lewis L., Seattle, Wash. Switch-turning device | 744,159 | Nov. 17 | 2692 | 574 | 107 | 603 |
| Biggerstaff, John M., Kalamazoo, Mich. Show-case | 742,957 | Nov. 3 | 239 | 53, 54 | 107 | 52 |
| Biggs, Daniel, assignor of one-half to A. E. Alexander, Terrell, Tex. Nut-lock | 721,140 | Feb. 24 | 3252 | 744 | 102 | 1561 |
| Bigham, John, Pittsburg, Pa. Sliding-block puzzle | 737,899 | Sept. 1 | 686 | 146 | 106 | 151 |
| Bigney, Sidney O., Attleboro, Mass. Fob-chain | 727,883 | May 12 | 2004 | 447 | 104 | 444 |
| Bigney, Sidney O., Attleboro, Mass. Bracelet | 737,064 | Aug. 25 | 3796 | 840 | 105 | 1842 |
| Bigwood, Henry M. and H. M., Wolverhampton, England. Electrical tramway or railway rail | 739,819 | Sept. 29 | 4391 | 985 | 106 | 1008 |
| Bigwood, Horace M. (See Bigwood, Henry M. and H. M.) | | | | | | |
| Bihler, Charles S., *et al.* (See Calentine, George C., assignor.) | | | | | | |
| Bihlman, Alexander, Pittsburg, Pa. Spirit-level | 747,850 | Dec. 22 | 4682 | 1058 | 107 | 2188 |
| Bijur, Joseph, New York, N. Y. Making battery-plates | 728,189 | May 19 | 2569 | 572 573 | 104 | 586 |
| Bijur, Joseph, New York, N. Y. Storage-battery plate | 744,895 | Nov. 24 | 4035 | 870 | 107 | 908 |
| Biladeau, Calice, and A. P. Chapdelaine, Brockton, Mass. Machine for polishing boots or shoes | 738,976 | Sept. 15 | 2833 | 628 | 106 | 640 |
| Bilat, Aristide, Boston, Mass. Watchcase | 736,574 | Aug. 18 | 2861 | 626 | 105 | 1628 |
| Bilfinger, Carl W., Fayetteville, N. C. Wood-distilling apparatus | 738,153 | Sept. 8 | 1196 | 263 264 | 106 | 274 |
| Bilfinger, Carl W., assignor of one-half to W. M. Morgan, Fayetteville, N. C. Paint vehicle | 729,837 | June 2 | 585 | 129 | 104 | 1247 |
| Bilfinger, Carl W., assignor of one-half to W. M. Morgan, Fayetteville, N. C. Treating creosote-oil | 729,838 | June 2 | 586 | 129 | 104 | 1247 |
| Bilfinger, Carl W., and C. F. Hallock, Moultrie, Ga. Apparatus for the manufacture of turpentine | 737,994 | Sept. 1 | 882 | 193 | 106 | 192 |
| Bilgram, Hugo, Philadelphia, Pa. Paper-feed | 734,215 | July 21 | 2793 | 655 | 105 | 624 |
| Bill, Leon E., *et al.* (See Whitnight, Charles F., assignor.) | | | | | | |
| Billaud, André, Paris, France. Apparatus for depilating skins and furs | 724,249 | Mar. 31 | 4903 | 1097 1098 | 103 | 1082 |
| Billetop, Torben C. (See Watson and Billetop.) | | | | | | |
| Billin, Charles E. (See McKinney, Walter S., assignor.) | | | | | | |
| Billings, Charles E., Hartford, Conn. Combination measuring-tool | 735,935 | Aug. 11 | 1720 | 367 | 105 | 1367 |
| Billings, Charles E., Hartford, Conn. Beam-calipers | 744,028 | Nov. 17 | 2437 | 524 | 107 | 550 |
| Billings, Edgar F., Boston, Mass. Apparatus for generating formaldehyde | 732,159 | June 30 | 4905 | 1091 | 104 | 2210 |
| Billings, Frederic C. (See Johnson, Daniel E., assignor.) | | | | | | |
| Billings, Frederick C., Macon, Mo. Bed-cover holder | 731,844 | June 23 | 4275 | 952 | 104 | 2065 |
| Billings, Frederick C., Macon, assignor to himself, and W. B. Allen, Columbia, Mo. Flange | 740,796 | Oct. 6 | 777 | 175 | 106 | 1411 |
| Billings, Irving W. (See Blakeslee, Merrick C., assignor.) | | | | | | |
| Billington, Robert, Jr., Blackpool, England. Outdoor seat | 742,152 | Oct. 27 | 3445 | 767 768 | 106 | 2023 |
| Billman, Gustus S., Indianapolis, Ind. Automatic gas-engine starter | 742,566 | Oct. 27 | 4208 | 947 948 | 106 | 2180 |
| Bills, Wilmont, assignor to Dowagiac Manufacturing Company, Dowagiac, Mich. Disk furrow-opener | 744,711 | Nov. 24 | 3722 | 803 | 107 | 842 |
| Billstrom, Nels J., Rockford, Ill. Carrier for gluing-clamps | 740,219 | Sept. 29 | 5154 | 1157 | 106 | 1166 |
| Billstrom, Nels J., Rockford, Ill. Barb-wire machine | 740,220 | Sept. 29 | 5156 | 1158 | 106 | 1167 |
| Bilz, Aloys. (See McCluer, Jay, assignor.) | | | | | | |
| Bilz, Gustav R., New York, N. Y. Match-box | 719,726 | Feb. 3 | 571 | 129 | 102 | 943 |
| Bimel, Conrad, Portland, Ind. Window-screen mechanism | 740,517 | Oct. 6 | 262 | 52 | 106 | 1302 |
| Binder, Gottlieb, Louisville, assignor of one-half to J. Binder, Riverside, Ky. Bolt-clipper | 737,198 | Aug. 25 | 4033 | 894 | 105 | 1892 |
| Binder, John. (See Binder, Gottlieb, assignor.) | | | | | | |
| Binder, Xavier, Paris, France. Making milk extract similar to meat extract | 747,678 | Dec. 22 | 4360 | ..... | 107 | 2113 |
| Bindhammer, Charles A., Chicago, Ill. Fish-grapple | 718,079 | Jan. 13 | 1053 | 234 | 102 | 241 |
| Binett, Oliver D., New York, N. Y. Device for repairing or splicing rails | 743,811 | Nov. 10 | 1986 | 422 | 107 | 439 |
| Bing, Edward, and H. Nevill, Pernambuco, Brazil. Telegraph instrument | 719,556 | Feb. 3 | 263 | 61 | 102 | 878 |
| Bingenheimer, Edward W., *et al.* (See Fowler, Benjamin F., assignor.) | | | | | | |
| Bingham, Alvah L., assignor to Ball Brothers Glass Manufacturing Company, Muncie, Ind. Chute for glassware | 737,568 | Sept. 1 | 20 | 5 | 106 | 7 |
| Bingham, Edmund G. H. (See Hylard, John, assignor.) | | | | | | |
| Bingham, Robert O., Sidney, Ohio. Lock for vessel-covers | 724,425 | Apr. 7 | 13 | 4 | 103 | 1173 |
| Bingham, Robert W. (See Schuman, Alexander C., assignor.) | | | | | | |
| Bingham, Tracy F., Farwell, Mich. Bee-smoker | 718,689 | Jan. 20 | 2232 | 488 | 102 | 506 |
| Binkerd, Aaron T., Allegheny, Pa. Plumb, rule, and level | 732,614 | June 30 | 5780 | 1282 | 104 | 2395 |
| Binner, Charles S., Malden, Mass. Manifold-book holder | 725,926 | Apr. 21 | 2795 | 634 | 103 | 1794 |
| Binner, Charles S., Malden, Mass. Order-book holder | 728,662 | May 19 | 3491 | 775 | 104 | 781 |
| Binney, Harold, New York, N. Y. Apparatus for cleaning and treating ships' hulls, &c. | 741,298 | Oct. 13 | 1723 | 385 | 106 | 1630 |
| Binney, John H., assignor of one-half to W. H. Bach, Lillydale, N. Y. Postage-stamp holder | 738,600 | Sept. 8 | 2110 | 461 | 106 | 470 |
| Binnian, William H. (See Johnston, William H., assignor.) | | | | | | |
| Binns, Charles S. (See Binns, David, assignor.) (Reissue.) | | | | | | |
| Binns, David, Campchase, Ohio. Corn-harvester | 745,091 | Nov. 24 | 4438 | 960 | 107 | 989 |
| Binns, David. Campchase, assignor of one-fourth to C. S. Binns, Columbus, Ohio. Corn-harvester. (Reissue) | 12,116 | June 9 | 2390 | 528 529 | 104 | 1641 |
| Binsse, Henry B., New York, N. Y. Boring-machine | 739,381 | Sept. 22 | 3563 | 796 | 106 | 809 |
| Biogen Company. (See Elias, Friedrich, assignor.) | | | | | | |
| Biot, Gustave E., Brooklyn, N. Y. Safety gas-cock | 725,660 | Apr. 21 | 2325 | 525 | 103 | 1691 |
| Bippus, Frederick J. (See Williams, Ebenezer B., assignor.) | | | | | | |
| Birch, Charles F., Sr., *et al.* (See Hart, Matthew H., assignor.) | | | | | | |
| Birch, Frank. (See Perks and Birch.) | | | | | | |
| Birch, Frank C., assignor of one-half to A. Lachman, San Francisco, Cal. Distributing system for liquids | 731,661 | June 23 | 3948 | 878 | 104 | 1995 |
| Birch, George, Boston, Mass. Display or advertising device | 735,451 | Aug. 4 | 805 | 171 | 105 | 1152 |
| Birch, John, McConnellsville, Ohio. Cheese-cutter | 721,658 | Mar. 3 | 10 | 3 | 103 | 5 |
| Birch, William, Manchester, England. Roller for stretching fabrics | 731,745 | June 23 | 4100 | 916 | 104 | 2025 |
| Birchall, George W., *et al.* (See Justen, Joseph M., assignor.) | | | | | | |
| Birchbauer, Ferdinand, Baltimore, Md. Bottle-destroying stopper | 723,812 | Mar. 31 | 4000 | 902 | 103 | 900 |
| Bircher, Cornelius A., Hedrick, Iowa. Fence-post | 735,199 | Aug. 4 | 325 | 63 | 105 | 1050 |
| Bircher, Eugene A., Rochester, N. Y. Rule-gage | 727,884 | May 12 | 2005 | 447 | 104 | 444 |
| Birchmore, Woodbridge H., Brooklyn, assignor of one-half to C. A. Collins, New York, N. Y. Siphon-bottle | 732,038 | June 30 | 4656 | 1040 | 104 | 2159 |
| Bird, Charles A. (See Riggs, William H., assignor.) | | | | | | |
| Bird, Charles S., East Walpole, Mass. Fireproof structure | 735,335 | Aug. 4 | 567 | 116 | 105 | 1102 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| Bird, Frederick J., Philadelphia, Pa. Centrifugal clothes-drying apparatus | 724,250 | Mar. 31 | 4905 | 1098 | 103 | 1082 |
| Bird, Lewis J. (See Ripson, John D., assignor.) | | | | | | |
| Bird, Oliver M., Byhalia, Ohio. Combined pulverizer and harrow | 724,375 | Mar. 31 | 5144 | 1151 | 103 | 1133 |
| Bird, Reginald W., Boston, Mass. Paint-spraying apparatus | 728,439 | May 19 | 3045 | 669<br>670 | 104 | 687 |
| Bird and Son, F. W. (See Hanscom, John B., assignor.) | | | | | | |
| Bird & Son, F. W. (See Wyman, George R., assignor.) | | | | | | |
| Bird, William T. (See Le Valley and Bird.) | | | | | | |
| Birdsall, Charles H., Corona, Cal. Gopher-trap | 744,029 | Nov. 17 | 2439 | 524 | 107 | 551 |
| Birdsall, Edgar M., Buffalo, N. Y., assignor to D. H. Bothwell, Toledo, Ohio. Elastic tire for vehicles | 748,256 | Dec. 29 | 5476 | 1248 | 107 | 2381 |
| Birdzell, William, Charleston, Ill. Collar-button | 738,977 | Sept. 15 | 2835 | 628 | 106 | 640 |
| Bireley, Joseph W., Alexandria, Ind. Cattle-guard | 730,224 | June 9 | 1271 | 282 | 104 | 1402 |
| Birge, Alvin C., Cleveland, Ohio. Knockdown miter-box | 737,322 | Aug. 25 | 4282 | 951<br>952 | 105 | 1944 |
| Birkenstein & Co., F. (See Birkenstein, Ferdinand, assignor.) | | | | | | |
| Birkenstein, Ferdinand, assignor to F. Birkenstein & Co., Frankfort-on-the-Main, Germany. Spring for folding eyeglasses | 742,384 | Oct. 27 | 3876 | 871 | 106 | 2112 |
| Birkett, Edward J., Milwaukee, Wis., assignor to International Harvester Co., Chicago, Ill. Divider attachment for harvesters | 727,066 | May 5 | 473 | 100<br>101 | 104 | 103 |
| Birkholz, Julius W., administrator. (See Birkholz, Richard.) | | | | | | |
| Birkholz, Richard, Milwaukee, Wis., assignor to E. Goldman & Co., Chicago, Ill. Pressure-regulating device for pumps | 722,443 | Mar. 10 | 1465 | 323 | 103 | 328 |
| Birkholz, Richard, deceased; J. W. Birkholz, Milwaukee, Wis., administrator, assignor to Link Belt Machinery Company, Chicago, Ill. Treating bottled goods | 727,575 | May 12 | 1411 | 317 | 104 | 322 |
| Birmelin, Jacob, Toledo, Ohio. Window-screen | 726,851 | May 5 | 27 | 7 | 104 | 9 |
| Birmingham, Grant C., Milwaukee, Wis. Calf-weaner | 723,637 | Mar. 24 | 3694 | 828 | 103 | 817 |
| Birmingham, James F. (See O'Loughlin and Birmingham.) | | | | | | |
| Birmingham, John P., assignor of three-fifths to W. H. Partlow, Lexington, and E. J. McCulloch, Buchanan, Va. Automatic emergency air-brake for railways | 741,299 | Oct. 13 | 1726 | 385 | 106 | 1631 |
| Birnbaum, Theodore, Berlin, Germany. Device for throwing gramophones in and out of operation | 732,820 | July 7 | 229 | 58 | 105 | 51 |
| Birtels, John M., Cass Lake, Minn. Stirrup | 725,204 | Apr. 14 | 1469 | 334 | 103 | 1496 |
| Birtels, John M., Cass Lake, Minn. Saw-gummer | 726,246 | Apr. 28 | 3355 | 761 | 103 | 1924 |
| Birtman, Charles F. (See Reade and Birtman.) | | | | | | |
| Bisbee, Edgar C., Minneapolis, Minn., assignor of one-half to C. F. Elmes, Cook County, Ill. Oil-cake-forming apparatus | 739,478 | Sept. 22 | 3757 | 838<br>839<br>840 | 106 | 853 |
| Bisbee, Edgar C., Minneapolis, Minn., assignor of one-half to C. F. Elmes, Cook County, Ill. Oil-cake-stripping machine | 739,479 | Sept. 22 | 3762 | 840<br>841 | 106 | 854 |
| Bisbee, Frank M., assignor to F. C. Austin, Chicago, Ill. Excavating-machine | 733,939 | July 21 | 2244 | 528<br>529<br>530 | 105 | 506 |
| Bisbee, Frank M., assignor to F. C. Austin, Chicago, Ill. Excavating-machine | 741,099 | Oct. 13 | 1312 | 301<br>302<br>303 | 106 | 1547 |
| Bischler, Augustus, assignor to Basle Chemical Works, Basle, Switzerland. Making indoxyl | 727,270 | May 5 | 840 | ..... | 104 | 180 |
| Bischler, Augustus, assignor to Basle Chemical Works, Basle, Switzerland. Making sodium oxid | 731,746 | June 23 | 4100 | ..... | 104 | 2026 |
| Bischoff, August H. (See Miller, Augustus P., assignor.) | | | | | | |
| Bischoff, Frederick F., Chicago, Ill., assignor to C. C. Law, Pittsburg, Pa. Making tubing | 724,426 | Apr. 7 | 13 | 4.5 | 103 | 1173 |
| Bischoff, John C. W., Butler, Pa. Rail-joint | 723,512 | Mar. 24 | 3475 | 777<br>778 | 103 | 771 |
| Bishoff, Louis F. (See Gaskill, Roland R., assignor.) | | | | | | |
| Bishop, Abner W., Racine, Wis. Fishing-reel | 718,416 | Jan. 13 | 1658 | 365 | 102 | 371 |
| Bishop, Abner W., Racine, Wis. Fish-hook shield | 744,462 | Nov. 17 | 3268 | 701 | 107 | 728 |
| Bishop, Clement B., Philadelphia, Pa. Spectacles or eyeglasses | 746,443 | Dec. 8 | 2061 | 475 | 107 | 1559 |
| Bishop, George H., Chicago, Ill. Starching-machine | 734,038 | July 21 | 2465 | 576 | 105 | 553 |
| Bishop, George H., Lawrenceburg, Ind. Trowel-handle | 747,086 | Dec. 15 | 3163 | 725 | 107 | 1828 |
| Bishop, Harry W., San Francisco, Cal. Theatrical stage | 731,094 | June 16 | 2870 | 637<br>638 | 104 | 1760 |
| Bishop, James D., New York, N. Y. Trunk-fastener | 746,782 | Dec. 15 | 2676 | 618 | 107 | 1716 |
| Bishop, Joseph, Westbrook, assignor of one-half to C. R. Peters, South Portland, Me. Trolley-head | 744,463 | Nov. 17 | 3269 | 701 | 107 | 728 |
| Bishop, McKendree F., Alameda, Cal. Hat-holder | 740,734 | Oct. 6 | 649 | 146 | 106 | 1386 |
| Bishop, Ralph C., St. Joseph, Mich. Brick-making machine | 725,025 | Apr. 14 | 1133 | 256 | 103 | 1427 |
| Bishop, Theophilus E. (See Mowery and Bishop.) | | | | | | |
| Bishop, Wilbert J., Buffalo, N. Y. Overflow-alarm | 741,759 | Oct. 20 | 2644 | 591<br>592 | 106 | 1843 |
| Bissell, Dwight, *et al.* (See Ten Winkel, August, assignor.) | | | | | | |
| Bissell, Herbert S. (See Deal, Josiah J., assignor.) | | | | | | |
| Bissell, Stanley H., *et al.* (See Ten Winkel, August, assignor.) | | | | | | |
| Bisset, David L., assignor to Cutlery Manufacturers Supply Company, Limited, Sheffield, England. Grinding or polishing machinery | 732,505 | June 30 | 5578 | 1236 | 104 | 2348 |
| Bissett, John H., *et al.* (See Herrick, Bissett, and Merrick.) | | | | | | |
| Bissing, Justus, Hays City, Kans. Valve-operating mechanism | 726,622 | Apr. 28 | 4112 | 928 | 103 | 2073 |
| Bissinger, Benjamin, Chattanooga, Tenn. Trimming attachment for sewing-machines | 735,699 | Aug. 11 | 1281 | 274 | 105 | 1271 |
| Bitner, Harry, Berwyn, Ill. Elevator-door | 723,813 | Mar. 31 | 4002 | 902 | 103 | 900 |
| Bitner, Harry, Berwyn, Ill. Curtain-pole bracket | 732,821 | July 7 | 230 | 58 | 105 | 51 |
| Bitner, Harry, Berwyn, Ill. Elevator-door | 735,055 | Aug. 4 | 13 | 4 | 105 | 984 |
| Bitner, Harry, Berwyn, Ill. Elevator-door-operating mechanism | 735,056 | Aug. 4 | 15 | 4 | 105 | 984 |
| Bitner, Harry, Berwyn, assignor to Arcade Manufacturing Company, Freeport, Ill. Mop-head | 733,537 | July 14 | 1502 | 358 | 105 | 334 |
| Bitner, John R., Cleveland, Ohio, assignor of one-third to S. Heimlich. Rail-joint bed-plate | 728,190 | May 19 | 2572 | 573 | 104 | 586 |
| Bitterling, Charles F. A., Nottingham, England. Apparatus for dressing intestinal skins | 744,712 | Nov. 24 | 3724 | 804 | 107 | 843 |
| Bittle, James F., Brunswick, Md. Gate-latch | 727,738 | May 12 | 1736 | 390 | 104 | 391 |
| Bittner, Hubert, Vienna, Austria-Hungary. Fabric-racking machine | 731,014 | June 16 | 2726 | 607<br>608 | 104 | 1730 |
| Bittner, Julius. (See Souder, Bittner, and Berger.) | | | | | | |
| Bixby, Mary D. (See Smith, Charles H., assignor.) | | | | | | |
| Bizouarne, Leon F., and E. Kugler, Paris, France. Non-refillable bottle | 732,506 | June 30 | 5581 | 1236 | 104 | 2348 |
| Björnstad, Lizzie S., Chicago, Ill. Curtain-holder | 731,747 | June 23 | 4102 | 916 | 104 | 2026 |
| Bjur, John A., Kulm, N. D. Reversing mechanism | 743,228 | Nov. 3 | 795 | 172 | 107 | 166 |

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| Blaauboer, Cornelius. (See Kievit and Blaauboer.) | | | | | | |
| Blaauw, Geert, New York, N. Y. Hoisting apparatus | 719,177 | Jan. 27 | 3154 | 702 | 102 | 711 |
| Blaauw, Geert, New York, N. Y. Hoisting apparatus | 733,615 | July 14 | 1639 | 388 | 105 | 364 |
| Blach, August, Jersey City, N. J. Chip-rack | 742,567 | Oct. 27 | 4211 | 948 | 106 | 2181 |
| Black, Charles C., Healdsburg, Cal. Chair | 733,803 | July 14 | 1969 | 463, 464 | 105 | 433 |
| Black, Henry C., Oakland, Cal. Can-body forming and seaming machine | 731,157 | June 16 | 2993 | 664, 665 | 104 | 1784 |
| Black, Henry C., San Francisco, Cal. Can-body forming and seaming machine | 747,578 | Dec. 22 | 4165 | 936 | 107 | 2070 |
| Black, John, Mendota, Ill. Clamp | 732,160 | June 30 | 4906 | 1091 | 104 | 2210 |
| Black, John L., assignor to American Lamp Company, St. Louis, Mo. Incandescent-gas-lamp fixture | 742,568 | Oct. 27 | 4212 | 948, 949 | 106 | 2181 |
| Black, John O., Toledo, Ohio. Collapsible crate or box | 745,092 | Nov. 24 | 4441 | 960 | 107 | 990 |
| Black, Joseph, and F. J. Smith, San Francisco, Cal. Soldering-machine | 729,261 | May 26 | 4558 | 1005, 1006 | 104 | 1015 |
| Black, Joseph, and F. J. Smith, San Francisco, Cal. Can-heading machine | 746,662 | Dec. 15 | 2469 | 564, 565 | 107 | 1671 |
| Black, Michael S., Milton, Pa. Hair-clipper | 736,198 | Aug. 11 | 2189 | 471 | 105 | 1467 |
| Black, Richard, Canonsburg, Pa. Metallic railway-tie | 744,285 | Nov. 17 | 2949 | 631 | 107 | 659 |
| Black, Robert. (See Dressel and Black.) | | | | | | |
| Black, Robert, assignor to Dressel Railway Lamp Works, New York, N. Y. Signal-lantern | 723,127 | Mar. 17 | 2728 | 612, 613 | 103 | 608 |
| Black, Robert, assignor to Dressel Railway Lamp Works, New York, N. Y. Signal-lamp for railway-cars | 724,156 | Mar. 31 | 4700 | 1055 | 103 | 1042 |
| Black, Robert, New York, N. Y., assignor to Dressel Railway Lamp Works. Lantern | 745,770 | Dec. 1 | 815 | 185 | 107 | 1272 |
| Black, W. M. (See Graham, Muckersie G., assignor.) | | | | | | |
| Black, Walter, Chicago, Ill. Mortising-machine | 718,972 | Jan. 27 | 2759 | 617 | 102 | 630 |
| Black, William, *et al.* (See Mowbray, Frank H., assignor.) | | | | | | |
| Black, William. (See Mowbray and Black.) | | | | | | |
| Black, William H. (See Wheat and Black.) | | | | | | |
| Black, William L., Fort McKavett, Tex. Antifriction device for sucker-rods | 735,200 | Aug. 4 | 326 | 63 | 105 | 1050 |
| Black, William M., Wolfville, and H. F. Worrall; said Worrall assignor to M. Worrall, Halifax, Canada. Fruit-sizer | 738,092 | Sept. 1 | 1052 | 234 | 106 | 228 |
| Blackburn, Charles F., Garresonville, Va. Corn-harvesting attachment for mowing-machines | 747,122 | Dec. 15 | 3331 | 757 | 107 | 1869 |
| Blackburn, Jasper, Chillicothe, Mo. Post-anchor | 725,398 | Apr. 14 | 1807 | 405 | 103 | 1567 |
| Blackburn, Warren S., Dumbarton, Va. Locomotive-headlight signaling apparatus | 741,760 | Oct. 20 | 2646 | 592 | 106 | 1844 |
| Blackburn, Wilmuth E., and G. H. Swartwout, New York, N. Y. Binder | 736,482 | Aug. 18 | 2700 | 592 | 105 | 1593 |
| Blackford, Atwell J., Cleveland, Ohio, assignor to American Stove Company, Jersey City, N. J. Gasolene-burner | 739,144 | Sept. 15 | 3136 | 694 | 106 | 702 |
| Blackinton, Louis A., Providence, R. I., assignor to W. & S. Blackinton Company. Locket | 718,562 | Jan. 13 | 1988 | 433 | 102 | 442 |
| Blackman, George B. (See Eaton, James B., assignor.) | | | | | | |
| Blackman, Henry, New York, N. Y. Electrode | 745,412 | Dec. 1 | 185 | 41 | 107 | 1139 |
| Blackman, John J., New Britain, Conn. Surface finish for floors, &c | 741,100 | Oct. 13 | 1320 | 303 | 106 | 1548 |
| Blackmarr, Frederick S., and J. L. Willford, Minneapolis, Minn. Converting oxygen into ozone | 743,431 | Nov. 10 | 1264 | 258 | 107 | 285 |
| Blackmarr, Frederick S., and J. L. Willford, Minneapolis, Minn. Apparatus for converting oxygen into ozone | 743,432 | Nov. 10 | 1265 | 258, 259, 260 | 107 | 285 |
| Blackmarr, Frederick S., and J. L. Willford, Minneapolis, Minn. Apparatus for converting oxygen into ozone | 743,433 | Nov. 10 | 1268 | 260 | 107 | 286 |
| Blackmer, Herbert C., Melrose, Mass. Binder | 730,225 | June 9 | 1272 | 282, 283 | 104 | 1402 |
| Blackmon, Frank A., assignor of two thirds to C. C. Gates and T. H. Densmore, Geneva, N. Y. Vegetable-blanching machine | 727,271 | May 5 | 841 | 180 | 104 | 181 |
| Blackmon, Paul J., Corsicana, Tex. Pump attachment for portable cans | 740,221 | Sept. 29 | 5158 | 1158 | 106 | 1167 |
| Blackmore, Henry S., Mount Vernon, N. Y. Composition for disinfecting or other purposes. (Reissue) | 12,084 | Feb. 24 | 4225 | 960, 961 | 102 | 1766 |
| Blackmore, Henry S., Mount Vernon, N. Y. Producing sulfuric acid and metallic oxids. | 724,251 | Mar. 31 | 4906 | | 103 | 1082 |
| Blackmore, Lawrence R., Arlington, N. J. Refrigerator | 723,979 | Mar. 31 | 4344 | 975, 976 | 103 | 972 |
| Blackmore, Lawrence R., Arlington, N. J. Floor or wall tile | 731,158 | June 16 | 2998 | 665, 666 | 104 | 1784 |
| Blackmore, Lawrence R., Arlington, N. J. Apparatus for molding glass tiles | 734,216 | July 21 | 2794 | 655, 656 | 105 | 624 |
| Blackstone, A. L. (See Koehn, William J., assignor.) | | | | | | |
| Blackstone, Clarence W. (See Knapp and Blackstone.) | | | | | | |
| Blackstone, George V., Jamestown, N. Y. Washtub | 732,507 | June 30 | 5583 | 1236 | 104 | 2349 |
| Blackwood, Mary E., Bodicote, England. Machine for tending lawns, &c | 743,229 | Nov. 3 | 796 | 172, 173, 174 | 107 | 166 |
| Blackwood, Nancy G., Duluth, Minn. Dish-washing tray | 724,252 | Mar. 31 | 4908 | 1099 | 103 | 1083 |
| Bladon, James B., assignor of one-half to W. A. McKay, Montreal, Canada. Liquid-fuel burner | 733,693 | July 14 | 1761 | 418 | 105 | 388 |
| Blain, Walter A., Columbia, S. C. Shoe-jack | 740,971 | Oct. 6 | 1077 | 244 | 106 | 1476 |
| Blaine, William T. (See Austin, John T., assignor.) | | | | | | |
| Blair, Alexander J., Tarbert, Canada. Burial-casket | 723,638 | Mar. 24 | 3696 | 828 | 103 | 817 |
| Blair, Benjamin L., Indianapolis, Ind. Hollow-block construction | 721,534 | Feb. 24 | 3977 | 906 | 102 | 1710 |
| Blair, Duncan R., and C. Kirby, Birmingham, England. Sad-iron | 733,616 | July 14 | 1640 | 389 | 105 | 364 |
| Blair, George H., Spokane, Wash. Musical instrument | 734,802 | July 28 | 3933 | 918 | 105 | 876 |
| Blair, George W., Pittsburg, Pa., assignor to Pittsburgh Lamp, Brass & Glass Company, Jersey City, N. J. Lamp-chimney holder | 728,663 | May 19 | 3492 | 775 | 104 | 781 |
| Blair, Henry W. (See Williams, Albert K., Jr., assignor.) | | | | | | |
| Blair, Henry W., Manchester, N. H. Means for diminishing, deadening, and preventing sound | 740,081 | Sept. 29 | 4898 | 1098 | 106 | 1113 |
| Blair, Homer C., *et al.* (See Horton, Peter D., assignor.) | | | | | | |
| Blair, John, Brooklyn, N. Y. Fountain-pen | 734,116 | July 21 | 2620 | 616 | 105 | 587 |
| Blair, John, New York, N. Y. Fountain-pen | 740,618 | Oct. 6 | 459 | 100 | 106 | 1345 |
| Blair, John B., Indooroopilly, Queensland, Australia. Means for turning or swinging ships when not under way | 744,160 | Nov. 17 | 2695 | 574 | 107 | 603 |
| Blair, John L., San Jose, Cal. Foldable holder for railway-folders | 742,958 | Nov. 3 | 241 | 54 | 107 | 52 |
| Blair, Joseph C., Newark, N. J. Ventilating sash-lock, &c | 743,137 | Nov. 3 | 613 | 133 | 107 | 128 |
| Blair, Joseph H., assignor to Wagner Electric Manufacturing Company, St. Louis, Mo. Electric motor | 742,280 | Oct. 27 | 3698 | 826 | 106 | 2077 |
| Blair, William C., Wilkinsburg, Pa. Wrench | 747,851 | Dec. 22 | 4684 | 1059 | 107 | 2188 |

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| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Blaisdell, Frederick E., Ealing, England. Wiper for cleaning the surfaces of engraved plates when printing therefrom | 731,334 | June 16 | 3314 | 739 | 104 | 1849 |
| Blaisdell, Frederick E., County of Surrey, England. Conveyer | 733,804 | July 14 | 1972 | 464 | 105 | 433 |
| Blaisdell, Frederick E., London, England. Wiper for engraved plates | 742,091 | Oct. 20 | 3337 | 744 | 106 | 1985 |
| Blaisdell, Hiram W., Yuma, Ariz. Ter. Apparatus for cleaning sand filter-beds | 729,718 | June 2 | 341 | 77, 78, 79 | 104 | 1199 |
| Blaisdell, Hiram W., Yuma, Ariz. Ter. Apparatus for cleaning sand filter-beds | 729,719 | June 2 | 347 | 79, 80 | 104 | 1200 |
| Blaisdell, Hiram W., Yuma, Ariz. Ter. Apparatus for cleaning sand filter-beds | 729,720 | June 2 | 354 | 80, 81 | 104 | 1201 |
| Blaisdell, Hiram W., Yuma, Ariz. Ter. Apparatus for cleaning sand filter-beds | 729,721 | June 2 | 359 | 81, 82 | 104 | 1202 |
| Blaisdell, Hiram W., Yuma, Ariz. Ter. Apparatus for cleaning sand filter-beds | 729,722 | June 2 | 365 | 83 | 104 | 1203 |
| Blaisdell, Hiram W., Yuma, Ariz. Ter. Conveyer system | 741,447 | Oct. 13 | 2010 | 446 | 106 | 1694 |
| Blaisdell, Hiram W., Los Angeles, Cal. Mixing apparatus | 742,385 | Oct. 27 | 3877 | 871 | 106 | 2112 |
| Blaisdell, John H., assignor to Blaisdell Screen Plate Company, Oakland, Me. Screen-plate holder | 735,057 | Aug. 4 | 16 | 5 | 105 | 984 |
| Blaisdell, Joseph F., Brooklyn, N. Y. Apple-shooting toy | 734,661 | July 28 | 3630 | 850 | 105 | 816 |
| Blaisdell, Robert W., *et al.* (See Woodbury, Hezekiah O., assignor.) | | | | | | |
| Blaisdell, Robert W., assignor of one-half to H. O. Woodbury, Beverly, Mass. Bicyclist's strength-testing machine | 734,662 | July 28 | 3631 | 850 | 105 | 816 |
| Blaisdell, Robert W., assignor of one-half to H. O. Woodbury, Beverly, Mass. Apparatus for moistening leather stock | 740,388 | Oct. 6 | 8 | 2, 3 | 106 | 1246 |
| Blaisdell, Robert W., assignor of one-half to H. O. Woodbury, Beverly, Mass. Bicyclist's strength-testing machine | 747,294 | Dec. 15 | 3663 | 828 | 107 | 1940 |
| Blaisdell Screen Plate Company. (See Blaisdell, John H., assignor.) | | | | | | |
| Blaisdell, Sidney S., Providence, assignor of one-half to F. N. Bushnell, Edgewood, Cranston, R. I. Automatic weighing-machine | 731,845 | June 23 | 4276 | 952, 953 | 104 | 2065 |
| Blake, David. (See Hyatt, John W., assignor.) | | | | | | |
| Blake, Edwin L., and R. H. Platt, assignors to "Gnu" Pen (and Patentees) Company, Limited, Oldham, England. Fountain or reservoir pen | 718,417 | Jan. 13 | 1659 | 365 | 102 | 371 |
| Blake, Frank O. (See Nesmith and Blake.) | | | | | | |
| Blake, George E., and C. M. Bell, Greencastle, Ind. Pressure-generator | 727,067 | May 5 | 475 | 101 | 104 | 104 |
| Blake, George W., Natrona, Pa. Filling-machine | 740,735 | Oct. 6 | 651 | 147, 148 | 106 | 1386 |
| Blake, Hubert V., Accrington, England. Machine for testing the lubricating power of oils | 745,997 | Dec. 8 | 1264 | 284 | 107 | 1386 |
| Blake, John A., Watertown, N. Y., assignor to Prentiss Vise Company. Bench-vise | 742,281 | Oct. 27 | 3700 | 826 | 106 | 2077 |
| Blake and Johnson. (See Stannard, Robert R., assignor.) | | | | | | |
| Blake, Joseph E., Amesbury, Mass. Mouthpiece for smoking devices | 720,555 | Feb. 17 | 2131 | 493 | 102 | 1304 |
| Blake, Matthew. (See Lang, Blake, and Smart.) | | | | | | |
| Blake, Richard C., Cincinnati, Ohio. Plug-valve | 745,316 | Dec. 1 | 8 | 2 | 107 | 1102 |
| Blake, Richard C., Cincinnati, Ohio. High or low water alarm | 745,317 | Dec. 1 | 9 | 2 | 107 | 1103 |
| Blakeley, John D., Lima, Ohio. Glass-blower's tube | 733,130 | July 7 | 767 | 186 | 105 | 162 |
| Blakely, John S., Kansas City, Mo. Grain-meter | 742,959 | Nov. 3 | 242 | 54 | 107 | 52 |
| Blakeman, John D., deceased; M. B. Blakeman, Smiths Grove, Ky., administratrix. Trace-detacher | 724,787 | Apr. 7 | 693 | 163 | 103 | 1317 |
| Blakeman, Mildred B., administratrix. (See Blakeman, John D.) | | | | | | |
| Blakeman, William N., Jr., New York, N. Y. Pigment and making same | 726,623 | Apr. 28 | 4114 | ..... | 103 | 2074 |
| Blakeney, Henry, and R. A. Baker, Dallas, Tex. Alarm attachment for electric bells | 737,900 | Sept. 1 | 687 | 147 | 106 | 151 |
| Blakeslee, John R. (See Scott, Elmer D., assignor.) | | | | | | |
| Blakeslee, John R., Glenville, Ohio. Die | 721,659 | Mar. 3 | 16 | 3 | 103 | 6 |
| Blakeslee, John R., Glenville, assignor to Ajax Manufacturing Company, Cleveland, Ohio. Forging-machine | 737,065 | Aug. 25 | 3797 | 840, 841 | 105 | 1842 |
| Blakeslee, Merrick C., assignor of one-third to I. W. Billings, Nicholson, Pa. Crippled draw-bar for locomotive railway-cars | 745,771 | Dec. 1 | 817 | 186 | 107 | 1272 |
| Blakesley, Elmon J., Baltimore, Md. Means for securing bolts to slabs | 737,323 | Aug. 25 | 4284 | 952 | 105 | 1944 |
| Blakesley, James E., Chicago, Ill. Shoe for third rails | 741,392 | Oct. 13 | 1922 | 425 | 106 | 1677 |
| Blakesley, James E., Chicago, Ill. Support or chair for third rails | 741,393 | Oct. 13 | 1923 | 425 | 106 | 1677 |
| Blakey, Benjamin. (See Pickles and Blakey.) | | | | | | |
| Blakey, George G. and R. O., Pittsburg, Pa. Manufacture of tubular articles | 735,936 | Aug. 11 | 1723 | 368 | 105 | 1368 |
| Blakey, Robert O. (See Blakey, George G. and R. O.) | | | | | | |
| Blanc, François, Chambon, France. Classifying apparatus for coal or other materials | 735,855 | Aug. 11 | 1580 | 336 | 105 | 1336 |
| Blanchard, Alva W., assignor of one-half to W. H. C. Leverich, New York, N. Y. Tire-detacher | 724,157 | Mar. 31 | 4702 | 1055 | 103 | 1043 |
| Blanchard, Charles H., St. Louis, Mo. Dish-washing machine | 726,016 | Apr. 21 | 2943 | 669 | 103 | 1824 |
| Blanchard, Edward R. (See Moss and Blanchard.) | | | | | | |
| Blanchard, Horace, assignor of one-half to C. L. Boodry, Boston, and H. N. Wilson, Lynn, Mass. Railway-switch | 719,557 | Feb. 3 | 264 | 61 | 102 | 878 |
| Blanchard, Isaac H., Orange, N. J. Picture puzzle | 718,305 | Jan. 13 | 1457 | 323 | 102 | 329 |
| Blanchard, Jerome B., Denver, Colo. Solar evaporator | 737,551 | Aug. 25 | 4708 | 1057 | 105 | 2040 |
| Blanchard, Joseph A., Waterbury, Conn. Supporting-rest for invalids | 719,078 | Jan. 27 | 2966 | 662 | 102 | 673 |
| Blanchard, Joseph A., Ellisville, Miss. Logging-car stanchion | 724,537 | Apr. 7 | 215 | 53 | 103 | 1215 |
| Blanchard, Kirk S., Syracuse, N. Y. Press | 725,313 | Apr. 14 | 1648 | 372, 373 | 103 | 1534 |
| Blanchard, Kirk S., Syracuse, N. Y. Press | 729,723 | June 2 | 368 | 84 | 104 | 1204 |
| Blanchard, Maurice, and C. D. Williams, Dillard, Oreg. Blast-furnace | 739,281 | Sept. 22 | 3387 | 754 | 106 | 772 |
| Blanchard, Thomas E., Rifle, Colo. Washing-machine | 742,960 | Nov. 3 | 244 | 55 | 107 | 53 |
| Blanchard, Winslow, Boston, Mass. Lock for pneumatic-despatch-tube carriers | 726,017 | Apr. 21 | 2945 | 669, 670 | 103 | 1824 |
| Blanchet, Nicholas, Pendleton, Oreg. Automatic bait-box | 731,335 | June 16 | 3315 | 739 | 104 | 1849 |
| Blanchette, Joseph, Salem, Mass. Pick-ball holder or guard for looms | 720,316 | Feb. 10 | 1679 | 381 | 102 | 1193 |
| Bland, Henry, Waverley, near Sydney, New South Wales, Australia. Apparatus for elastic-fluid compression | 722,558 | Mar. 10 | 1683 | 372, 373 | 103 | 377 |
| Bland, John E., and E. J. Gilligan, assignors of one-half to E. W. and F. J. McDuff, Pawtucket, R. I. Bleaching yarn-cops | 739,751 | Sept. 22 | 4249 | 951, 952 | 106 | 960 |
| Blandford, Joseph J., Elizabeth, and J. MacGregor, Newark; said Blandford assignor of fifteen one-hundredths to R. J. Montgomery, Elizabeth, N. J. Woodworking-tool | 736,575 | Aug. 18 | 2862 | 627 | 105 | 1628 |
| Blandin, Walker H., Sedalia, Mo. Instrument for cutting cloth on the bias | 735,201 | Aug. 4 | 327 | 63 | 105 | 1051 |
| Blanding, Forrest H., assignor to W. G. Dodd, San Francisco, Cal. Adjusting means for cross-head slippers | 727,739 | May 12 | 1739 | 390 | 104 | 391 |
| Blaney, William H., assignor of one-half to R. B. Macdonald, Attleboro, Mass. Locket | 720,317 | Feb. 10 | 1679 | 382 | 102 | 1194 |
| Blank, Bernard H. (See Riglander and Blank.) | | | | | | |
| Blank, Charles B., assignor of one-half to J. Rarden, Fort Riley, Kans. Automatic switch attachment | 745,413 | Dec. 1 | 186 | 42 | 107 | 1139 |
| Blanpied, David S., Newtonville, Mass. Combined cigar-cutter, pipe-tamper, and pipe-cleaner | 734,295 | July 21 | 2975 | 698 | 105 | 662 |
| Blaschke, Eduard E., Jr., Clifton, Wis. Tile for lining silos | 717,532 | Jan. 6 | 19 | 5 | 102 | 7 |
| Blasdell, Grant C., Towanda, Pa. Razor-strop | 731,402 | June 16 | 3444 | 769 | 104 | 1875 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | Spec. | Dr'g. | Vol. | Page. |
| Blasdell, Grant C., Towanda, Pa. Rotary explosive-engine | 715,220 | Nov. 3 | 799 | 174<br>175 | 107 | 167 |
| Blast Furnace Power Syndicate. (See Thwaite, Benjamin H., assignor.) | | | | | | |
| Blaubach, Paul, Bremen, Germany. Machinery for manufacturing patterned linoleum | 736,673 | Aug. 18 | 3078 | 678 | 105 | 1671 |
| Blaw, Jacob B., Atlantic City, N. J. Sewer-mold | 727,272 | May 5 | 842 | 181 | 104 | 181 |
| Blaxter, George H. (See King and Wolfe, assignors.) | | | | | | |
| Blechschmidt, Charles E., Bellevue, Ky., assignor to Victor Safe & Lock Co., Cincinnati, Ohio. Day-lock for screw-door safes | 742,569 | Oct. 27 | 4213 | 949 | 106 | 2181 |
| Bledsoe, Nathaniel H. (See Tarmon and Thompson, assignors.) | | | | | | |
| Bleh, George, Cincinnati, Ohio. Machine for cutting stone columns | 742,570 | Oct. 27 | 4215 | 949<br>950 | 106 | 2182 |
| Bleichert & Co., Adolf. (See Pfaffenbach, Rudolf, assignor.) | | | | | | |
| Blenio, Guido, New York, N. Y. Rendering fabrics fireproof | 724,788 | Apr. 7 | 695 | | 103 | 1317 |
| Blenio, Guido, New York, N. Y. Composition of matter | 729,036 | May 26 | 4160 | | 104 | 934 |
| Blenke, Joseph A., Covington, Ky. Cross for church-towers | 738,601 | Sept. 8 | 2111 | 461 | 106 | 470 |
| Bleoo, John H., Brooklyn, assignor to A. B. Levy, New York, N. Y. Air-brake | 742,386 | Oct. 27 | 3880 | 871<br>873 | 106 | 2113 |
| Blesch, August F., Columbus, Ohio. Water-closet seat and cover hinge | 720,657 | Feb. 17 | 2337 | 535 | 102 | 1343 |
| Blessing, Edgar F., assignor of two-thirds to H. M. Shimer, Philadelphia, and F. Blessing, Harrisburg, Pa. Smelting-furnace | 725,661 | Apr. 21 | 2326 | 525 | 103 | 1692 |
| Blessing, Frank, *et al.* (See Blessing, Edgar F., assignor.) | | | | | | |
| Blessing, James H., Albany, N. Y. Steam-trap | 741,448 | Oct. 13 | 2012 | 446<br>447 | 106 | 1695 |
| Blethen, Nathan W., *et al.* (See Waterbury, George H., assignor.) | | | | | | |
| Bletso, William. (See Morgan and Bletso.) | | | | | | |
| Blevney, John C., Newark, N. J. Power-transmitting means for engines | 721,995 | Mar. 3 | 643 | 143 | 103 | 140 |
| Bley, Charles P., Cedarfalls, Iowa. Book-support | 734,218 | July 21 | 2798 | 656 | 105 | 625 |
| Blickensderfer, George C., Stamford, Conn. Type-writing machine | 717,732 | Jan. 6 | 372 | 91<br>92<br>93 | 102 | 80 |
| Bliemeister, John C., Buffalo, N. Y. Washboiler | 737,820 | Sept. 1 | 503 | 110 | 106 | 113 |
| Blincoe, Aloysius G., Bardstown, Ky. Memory-jogger | 728,358 | May 19 | 2911 | 642 | 104 | 657 |
| Blincoe, Aloysius G., Bardstown, Ky. Pencil-holding case | 734,396 | July 21 | 3143 | 738 | 105 | 698 |
| Bline, Frank D., Vanatta, Ohio. Railway-tie and antispreading device | 746,918 | Dec. 15 | 2938 | 678 | 107 | 1776 |
| Bliss, Annie S., Boston, Mass. Revolving stand for stove-ovens | 747,929 | Dec. 29 | 4865 | 1098 | 107 | 2248 |
| Bliss, Charles F., Carbondale, Colo. Wrench | 747,679 | Dec. 22 | 4361 | 985 | 107 | 2113 |
| Bliss & Company, L. C. (See Snowdon, Richard W., assignor.) | | | | | | |
| Bliss, Donald M., Brookline, Mass., assignor to Holtzer-Cabot Electric Company. Induction-motor | 745,772 | Dec. 1 | 818 | 186 | 107 | 1273 |
| Bliss, Dwight J., Carthage, Mo. Rotary engine | 720,102 | Feb. 10 | 1283 | 294 | 102 | 1112 |
| Bliss, Dwight J., Carthage, Mo. Water-filter | 723,639 | Mar. 24 | 3696 | 828 | 103 | 817 |
| Bliss Electric Car Lighting Company. (See Bliss, William L., assignor.) | | | | | | |
| Bliss, John L., New York, N. Y. Compass attachment | 725,399 | Apr. 14 | 1808 | 405 | 103 | 1567 |
| Bliss, Melville S., Gaylord, Mich. Game apparatus | 733,365 | July 14 | 1200 | 285 | 105 | 268 |
| Bliss, Milton C., New Whatcom, Wash. Floor-scrubbing device | 728,664 | May 19 | 3492 | 776 | 104 | 781 |
| Bliss, William L., Brooklyn, assignor to Bliss Electric Car Lighting Company, New York, N. Y. Electric switch | 735,452 | Aug. 4 | 806 | 171 | 105 | 1152 |
| Blivin, Howard C., assignor of one-half to H. Krohnson, Providence, R. I. Head-rest | 735,453 | Aug. 4 | 808 | 172 | 105 | 1152 |
| Bloch, Emil. (See Wolf, Henry, Jr., assignor.) | | | | | | |
| Bloch, Emil, Cincinnati, Ohio. Transparent mirror | 720,877 | Feb. 17 | 2699 | 624 | 102 | 1421 |
| Bloch, Julius F., New York, N. Y. Chair attachment | 722,482 | Mar. 10 | 1553 | 341 | 103 | 348 |
| Blocher, Oliver B., Plano, Ill. Saw-file attachment | 740,736 | Oct. 6 | 654 | 148 | 106 | 1387 |
| Blochmann, Georg F. R., Kiel, assignor of one-half to C. E. Bichel, Hamburg, Germany. Telegraphic transmitting and receiving apparatus | 736,483 | Aug. 18 | 2702 | 592 | 105 | 1594 |
| Block, Alexander E., St. Louis, Mo. Coffee-pot | 719,727 | Feb. 3 | 573 | 129 | 102 | 943 |
| Block, Ferdinand, *et al.* (See Hauslehner, Leopold, assignor.) | | | | | | |
| Block, Francis L., Sidney, Ill. Grain sorter or separator | 741,616 | Oct. 20 | 2362 | 528<br>529 | 106 | 1785 |
| Block, Louis, Mamaroneck, N. Y. Apparatus for the manufacture of ice | 726,852 | May 5 | 28 | 7 | 104 | 9 |
| Block, William, New York, N. Y. Metal-bending machine | 732,260 | June 30 | 5102 | 1135 | 104 | 2250 |
| Block, William H., Huron, Ohio. Lock-nut | 742,282 | Oct. 27 | 3702 | 827 | 106 | 2078 |
| Blocki, Franz, Sheboygan, Wis. Lifting-guard for mowing or other agricultural machines | 727,576 | May 12 | 1412 | 318 | 104 | 322 |
| Blodget, Perry, assignor of one-half to I. O. Bachtel, Auburn, Ind. Liquid-fuel and air burner | 738,978 | Sept. 15 | 2836 | 629 | 106 | 640 |
| Blodgett, Edgar D. (See Potter and Blodgett.) | | | | | | |
| Blodgett, John W., assignor to N Tire Company, Chicago, Ill. Making self-mending tires | 719,425 | Feb. 3 | 27 | 6 | 102 | 832 |
| Blohm, Ernst J. H., Shiner, Tex. Siding-gage | 742,571 | Oct. 27 | 4217 | 950 | 106 | 2182 |
| Blomberg, Hjalmar R., Prentice, Wis. Bicycle attachment | 722,078 | Mar. 3 | 774 | 173 | 103 | 167 |
| Blome, Martin, St. Charles, Mo. Sash-balance | 729,994 | June 2 | 874 | 195 | 104 | 1305 |
| Blomfeldt, Peter A., *et al.* (See Nordstrom, Axel, assignor.) | | | | | | |
| Blomqvist, Carl G. P., Omaha, Nebr. Spine-stretching device | 738,283 | Sept. 8 | 1483 | 321 | 106 | 334 |
| Blomqvist, Carl G. P., Omaha, Nebr. Device for correcting spinal curvature | 744,713 | Nov. 24 | 3726 | 804 | 107 | 843 |
| Blondel, André, Paris, France. Galvanometer | 728,076 | May 12 | 2360 | 525 | 104 | 520 |
| Blondel, André, Paris, France. Electric-arc lamp | 739,977 | Sept. 29 | 4707 | 1059 | 106 | 1073 |
| Blood, Charles W. H., assignor to S. A. Woods Machine Company, Boston, Mass. Vertical-feed transverse-cutting machine | 742,772 | Oct. 27 | 4557 | 1032<br>1033 | 106 | 2257 |
| Blood, Ephraim B., Ticonderoga, N. Y. Cope for graves | 728,191 | May 19 | 2573 | 574 | 104 | 587 |
| Blood, George, Jr., Philadelphia, Pa., assignor, by mesne assignments, to Kilbourn Knitting Machine Company, New Brunswick, N. J. Seamless hosiery | 743,231 | Nov. 3 | 803 | 175 | 107 | 167 |
| Blood, Horace B., Rochester, N. Y. Swage-block | 727,885 | May 12 | 2008 | 447 | 104 | 445 |
| Bloom, Caspar, Brooklyn, N. Y. Resistance-tube | 736,677 | Aug. 18 | 3079 | 679 | 105 | 1671 |
| Bloom, John J., and A. W. Mensor, Seattle, Wash. Garment-supporter | 718,418 | Jan. 13 | 1660 | 366 | 102 | 371 |
| Bloom, John S., Winthrop, Iowa. Machine for cutting and crushing corn | 733,454 | July 14 | 1363 | 321 | 105 | 305 |
| Bloom, Nicklas H., Nashua, Iowa. Flexible harrow | 737,324 | Aug. 25 | 4285 | 952 | 105 | 1944 |
| Bloomer, Robert A. S., Newark, N. Y. Folding box | 734,217 | July 21 | 2797 | 656 | 105 | 625 |
| Bloomer, Roland, Temple Balsall, assignor to Webley and Scott Revolver and Arms Company, Limited, Birmingham, England. Safety-sear for firearms | 728,791 | May 19 | 3712 | 828 | 104 | 825 |
| Bloomfield, Marie A., New York, and H. E. Hawes, Brooklyn, assignors of one-third to W. D. Edmonds, New York, N. Y. Marking attachment for sewing-machines | 718,080 | Jan. 13 | 1054 | 234 | 102 | 242 |
| Blose, William T., *et al.* (See Lyman, Chauncey O., assignor.) | | | | | | |
| Bloss, Thomas J., Boaz, Ala. Milling and key-seat-cutting machine | 745,414 | Dec. 1 | 188 | 42 | 107 | 1139 |
| Bloss, William G., Pontiac, Ill. Apparatus for cooling air | 738,761 | Sept. 15 | 2441 | 535 | 106 | 554 |
| Bloss, William G., Pontiac, Ill. Apparatus for cooling air | 738,762 | Sept. 15 | 2442 | 535<br>536 | 106 | 554 |
| Blossom, Charles, and O. W. Dysert, Rockford, Ohio. Making signs | 731,846 | June 23 | 4280 | | 104 | 2067 |
| Blossom, E. W., *et al.* (See Ring, Francis C., assignor.) | | | | | | |
| Blount, Edward, Camilla, Ga. Ax | 746,783 | Dec. 15 | 2677 | 618 | 107 | 1717 |

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| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| Blount, Lewis. (See Reese and Blount.) | | | | | | |
| Blount, Warren F., Baltimore, Md. Device for forming letters, &c | 725,205 | Apr. 14 | 1470 | 334 | 103 | 1496 |
| Blow, Henry, assignor of one-fourth to W. Blow, Elliston, Mont. Knee for sleigh-runners | 720,878 | Feb. 17 | 2700 | 624 | 102 | 1421 |
| Blow, William. (See Blow, Henry, assignor.) | | | | | | |
| Blucker, Eric, assignor of one-half to W. N. Chatfield, Chicago, Ill. Rotary engine | 728,077 | May 12 | 2363 | 526 | 104 | 520 |
| Blue, Charles E., Wheeling, W. Va. Machine for the manufacture of glassware | 733,805 | July 14 | 1974 | 465 | 105 | 433 |
| Blue, Charles E., and W. B. Jones, Wheeling, W. Va. Machine for the manufacture of glassware | 733,806 | July 14 | 1978 | 465 | 105 | 434 |
| Blue, Peter V., Thackery, assignor to A. Neer, St. Paris, Ohio. Hay-tedder attachment | 727,577 | May 12 | 1413 | 318 | 104 | 322 |
| Blue, William E., Niagara Falls, N. Y. Paper-roll holder and cutter | 740,389 | Oct. 6 | 9 | 3 | 106 | 1246 |
| Blueher, Herman, Albuquerque, N. Mex. Ter. Sand trap and strainer | 738,878 | Sept. 15 | 2670 | 588 | 106 | 606 |
| Bluff, John T., Rossland, Canada. Fastener for ladies' hats | 740,797 | Oct. 6 | 778 | 175 | 106 | 1411 |
| Bluhm, Charles A., Michigan City, Ind. Incandescent gas-burner | 748,471 | Dec. 29 | 5878 | 1336 | 107 | 2469 |
| Blum, Joseph, Chicago, Ill. Overflow attachment for sinks | 740,737 | Oct. 6 | 655 | 148 | 106 | 1387 |
| Blum, Joseph, Chicago, Ill. Towel-holder | 742,153 | Oct. 27 | 3446 | 768 | 106 | 2024 |
| Blum, Richard, Berlin, Germany. Conveyer | 719,178 | Jan. 27 | 3155 | 702 | 102 | 711 |
| Blumenberg, Henry, Jr., Daggett, Cal. Sulfur-burner | 734,397 | July 21 | 3144 | 739 | 105 | 698 |
| Blumer, James, New York, N. Y. Corrugating-tool | 733,131 | July 7 | 768 | 186 | 105 | 162 |
| Blumer, Louis. (See Meyer, Carl H., assignor.) | | | | | | |
| Blumstein, Louis, Brighton, Ill. Traction-wheel attachment | 734,803 | July 28 | 3935 | 918 | 105 | 876 |
| Blun, Ferdinand S. M. (See Knoll, Charles A. G., assignor.) | | | | | | |
| Blundell, John C., Boston, Mass., assignor to Pneumatic Textile Machinery Company, Jersey City, N. J. Pneumatic driver and cushion for loom-shuttles | 717,965 | Jan. 6 | 831 | 188 | 102 | 178 |
| Blundell, Mary R. (See Blundell and Brower, assignors.) | | | | | | |
| Blundell, William C., and C. F. Brower; said Brower assignor to M. R. Blundell, Kansas City, Mo. Electric time-switch | 727,578 | May 12 | 1416 | 318 | 104 | 323 |
| Bly, Clark W., Pittsford, N. Y. Potato-picker | 732,039 | June 30 | 4658 | 1040 | 104 | 2159 |
| Blydenburgh, Levi N., New Haven, Conn. Building construction | 747,579 | Dec. 22 | 4167 | 936 | 107 | 2070 |
| Blye, Harry C. (See Hull, Joseph V., assignor.) | | | | | | |
| Blye, Harry C. (See Otto, Albert T., assignor.) | | | | | | |
| Blyholder, Amos B., Raymore, Mo. Farm-gate | 726,396 | Apr. 28 | 3655 | 828<br>829 | 103 | 1986 |
| Boa, John S. (See O'Mara and Boa.) | | | | | | |
| Boardman, Charles H., Columbus, Ohio, assignor of one-half to T. King, Quincy, Mass. Apparatus for storing and delivering coal | 743,434 | Nov. 10 | 1270 | 261 | 107 | 286 |
| Boardman, Charles H., and J. W. Miskell, Vivian, W. Va., assignors of one-third to T. King, Quincy, Mass. Apparatus for separating bone, slate, &c., from coal | 734,219 | July 21 | 2799 | 656<br>657 | 105 | 625 |
| Boardman, Freeman O., *et al.* (See Calentine, George C., assignor.) | | | | | | |
| Boardman, William F., and F. H. Jackson; said Jackson assignor to B. Jackson, San Francisco, Cal. Spherical pipe-joint and stuffing-box | 731,159 | June 16 | 3000 | 666 | 104 | 1785 |
| Boardman, William H., Scio, Ohio. Boring-bar | 744,286 | Nov. 17 | 2949 | 631 | 107 | 659 |
| Boast, William F., Colby, Kans. Jewel-setter | 746,444 | Dec. 8 | 2062 | 475 | 107 | 1559 |
| Bobo, Sylvester, Albany, Ohio. Bicycle seat-post | 720,658 | Feb. 17 | 2338 | 535 | 102 | 1343 |
| Boby, William, London, England. Water-softening apparatus | 729,121 | May 26 | 4307 | 952 | 104 | 962 |
| Bock, Emil, Dusseldorf, Germany. Manufacturing conical tubes | 722,398 | Mar. 10 | 1374 | 304 | 103 | 308 |
| Bock, Walter, Bromberg, Germany. Press for pressing the parings of diffusion-chambers in the manufacture of sugar | 736,484 | Aug. 18 | 2704 | 593 | 105 | 1594 |
| Bockmeyer, Charles C. (See Bockmeyer and Palmer.) | | | | | | |
| Bockmeyer, Henry F. and C. C., and J. Palmer, Philadelphia, Pa. Stop-motion for knitting-machines | 719,728 | Feb. 3 | 574 | 129 | 102 | 943 |
| Bocorselski, Frank E., Springfield, Mass. Universal joint | 719,411 | Jan. 27 | 3601 | 806 | 102 | 807 |
| Bocorselski, Frank E., Springfield, Mass. Universal joint | 739,642 | Sept. 22 | 4055 | 905 | 106 | 916 |
| Bodé Automobile Co. (See Dayton and Brennan, assignors.) | | | | | | |
| Boden, Francis X., *et al.* (See Farmer, Julius M., assignor.) | | | | | | |
| Boden, George, Watertown, assignor to Oakville Company, Waterbury, Conn. Bookholder | 738,763 | Sept. 15 | 2445 | 536 | 106 | 555 |
| Boden, William E., Pasadena, Cal. Hoisting-crane | 723,128 | Mar. 17 | 2730 | 613 | 103 | 608 |
| Bodenstein, Henry, Arlington, Mass. Ice-cutter | 729,122 | May 26 | 4309 | 952 | 104 | 962 |
| Bodle, Alexander T., Dallas, Pa. Egg-crate | 743,232 | Nov. 3 | 804 | 175 | 107 | 168 |
| Bodley, Mark, Johannesburg, Transvaal, South Africa. Tappet for use in stamp-batteries or the like | 726,624 | Apr. 28 | 4115 | 929 | 103 | 2074 |
| Bodley, William S., Louisville, Ky. Hotbed | 720,318 | Feb. 10 | 1681 | 382 | 102 | 1194 |
| Bodwell, Charles A. (See Wiggin, Albert J., assignor.) | | | | | | |
| Boeckmann, Paul von, New York, N. Y. Lung-exercising apparatus | 734,252 | July 21 | 2870 | 672 | 105 | 640 |
| Boedefeld, Franz S., San Francisco, Cal. Envelop | 729,123 | May 26 | 4310 | 952 | 104 | 963 |
| Boedefeld, Franz S., assignor of one-half to W. L. Spencer, San Francisco, Cal. Waist-former | 727,273 | May 5 | 844 | 181 | 104 | 181 |
| Boegner, Frank F. (See Stock and Boegner.) | | | | | | |
| Boehm, Frederick J., Brooklyn, N. Y. Combined tweezers and magnifying-glass | 718,748 | Jan. 20 | 2346 | 518 | 102 | 529 |
| Boehm, George, Cleveland, Ohio. Scroll-bending machine | 725,026 | Apr. 14 | 1135 | 256 | 103 | 1428 |
| Boehm, Oscar G. (See Jacobi, Maurice, assignor.) | | | | | | |
| Boehme, Louis A., Chicago, Ill. Shoe-fastening | 738,399 | Sept. 8 | 1730 | 376 | 106 | 388 |
| Boehme, Louis A., Chicago, Ill. Shoe-fastening | 743,680 | Nov. 10 | 1747 | 369 | 107 | 389 |
| Boehringer & Soehne, C. F. (See Buchner, Max, assignor.) | | | | | | |
| Boehringer & Soehne, C. F. (See Tafel, Julius, assignor.) | | | | | | |
| Boekel, Julius. (See Boekel, William and J.) | | | | | | |
| Boekel, William and J., Philadelphia, Pa. Nebulizer and means for attaching same to supporting-tanks | 745,415 | Dec. 1 | 191 | 43 | 107 | 1140 |
| Boeken, Hubert J., Düren, Germany. Machine for divesting parts of plants of their fleshy substances | 732,161 | June 30 | 4908 | 1091<br>1092 | 104 | 2210 |
| Boekenkamp, Edward, assignor to American Stove Company, St. Louis, Mo. Oil-burner | 748,257 | Dec. 29 | 5478 | 1248 | 107 | 2381 |
| Boeklen, Reinhold. (See Purper, Moser, and Boeklen.) | | | | | | |
| Boemper, Willie J., assignor of one-half to A. Herzberg, New York, N. Y. Motor | 729,995 | June 2 | 875 | 195 | 104 | 1306 |
| Boenker, Henry H., St. Charles, Mo. Wheel-plow | 730,737 | June 9 | 2197 | 489 | 104 | 1599 |
| Boepple Button Company. (See Pelton, George W., assignor.) | | | | | | |
| Boes, Johann, Cologne, Germany. Machine for removing fat from entrails | 731,536 | June 23 | 3719 | 828 | 104 | 1950 |
| Boettner, John, Jr. (See Enos, Charles W., assignor.) | | | | | | |
| Bogardus, Erwin C., *et al.* (See McBeth, Warren F., assignor.) | | | | | | |
| Bogart, Henry W., Cleveland, Ohio. Fruit-jar holder | 723,980 | Mar. 31 | 4349 | 976 | 103 | 972 |
| Bogart, Henry W., Cleveland, Ohio. Rotary engine | 741,617 | Oct. 20 | 2364 | 529 | 106 | 1785 |
| Bogart, Peter B., Milwaukee, Wis. Writing-tablet | 741,878 | Oct. 20 | 2853 | 637 | 106 | 1889 |
| Bogert, Harvey G., Chicago, Ill. Jointed square | 739,054 | Sept. 15 | 2963 | 656 | 106 | 667 |
| Boggess, Perry J., Liberty, Mo. Stalk-cutting machine | 745,564 | Dec. 1 | 461 | 109 | 107 | 1195 |
| Boggs, Odin E., assignor to Automatic Humiditor Company, Cincinnati, Ohio. Apparatus for automatically controlling the humidity of atmosphere | 735,856 | Aug. 11 | 1581 | 337 | 105 | 1337 |
| Boggs, Thaddeus M., Monongahela, Pa. Brick-machine | 735,058 | Aug. 4 | 17 | 5,6 | 105 | 985 |

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| Bogle, William L., assignor of three-fourths to H. L. Bowlin, Columbus, Miss. Lamp-burner | 726,217 | Apr. 28 | 3357 | 762 | 103 | 1924 |
| Bogue and Crowe Manufacturing Company. (See Crowe, Frederick C., assignor.) | | | | | | |
| Bogue, Judson L., and D. M. Jennings, Denison, Tex. Apparatus for controlling trolley-poles | 743,435 | Nov. 10 | 1272 | 261 | 107 | 287 |
| Bohlen, John, Big Rapids, Mich. Sash-fastener | 725,662 | Apr. 21 | 2327 | 525 | 103 | 1692 |
| Bohman, Carl E. (See Carlsson and Bohman.) | | | | | | |
| Bohn, Christian C. (See Jolly, Mathias L., assignor.) | | | | | | |
| Bohn, Christian C., New York, N. Y. Joint-cover or kick-plate | 739,282 | Sept. 22 | 3389 | 755 | 106 | 773 |
| Bohn, René, Mannheim, assignor to Badische Anilin & Soda Fabrik, Ludwigshafen-on-the-Rhine, Germany. Blue dye and making same | 724,789 | Apr. 7 | 695 | ..... | 103 | 1317 |
| Bohn, René, Mannheim, assignor to Badische Anilin & Soda Fabrik, Ludwigshafen-on-the-Rhine, Germany. Anthracene dye | 739,145 | Sept. 15 | 3138 | ..... | 106 | 702 |
| Bohn, René, Mannheim, assignor to Badische Anilin & Soda Fabrik, Ludwigshafen-on-the-Rhine, Germany. Blue coloring-matter | 739,579 | Sept. 22 | 3942 | ..... | 106 | 892 |
| Bohn, René, Mannheim, assignor to Badische Anilin & Soda Fabrik, Ludwigshafen-on-the-Rhine, Germany. Dyeing textile fiber blue | 746,784 | Dec. 15 | 2678 | ..... | 107 | 1717 |
| Bohner, George. (See Christian, John B., assignor.) | | | | | | |
| Bohner, George, Chicago, Ill. Incandescent vapor-lamp | 732,334 | June 30 | 5230 | 1161 | 104 | 2277 |
| Bohner, Joseph E., New York, N. Y. Portable gas or electric light | 725,027 | Apr. 14 | 1137 | 257 | 103 | 1428 |
| Bohr, William H., Westphalia, Mich. Seed-sower | 739,752 | Sept. 22 | 4251 | 952 | 106 | 960 |
| Bohrman, Henry W., Los Angeles, Cal. Sand-drier | 730,086 | June 2 | 1023 | 229 | 104 | 1335 |
| Boice, Augustin. (See Heaton, John W., assignor.) | | | | | | |
| Boice, Augustin. (See Wheeler and Boice.) | | | | | | |
| Bois, Nathaniel, assignor to himself, M. and A. Goldberg, New York, N.Y. Stair structure | 724,790 | Apr. 7 | 697 | 163 | 103 | 1318 |
| Boisclaire, Alfred, Highwood, Mont. Fire-escape | 725,206 | Apr. 14 | 1472 | 334 | 103 | 1496 |
| Boisclaire, Alfred, Belt, Mont. Bottle | 731,804 | July 28 | 3936 | 918 | 105 | 877 |
| Boise, Alvarado T., Boyne, Mich. Core for use in wall-molds | 740,445 | Dec. 8 | 2063 | 476 | 107 | 1559 |
| Boise, Frank C. (See Warner, Isaac M., assignor.) | | | | | | |
| Boivin, Joseph, Paterson, N. J. Machine for drying, lustering, and stretching | 739,253 | Sept. 15 | 3334 | 740 | 106 | 745 |
| Boland, Christopher G. (See Collins, Patrick J., assignor.) | | | | | | |
| Boland, Christopher G., *et al.* (See Watson, Robert, assignor.) | | | | | | |
| Boldrew, George W., *et al.* (See Gary, Jefferson, assignor.) | | | | | | |
| Boldt, Ernest. (See Boldt, Fred, E., and H.) | | | | | | |
| Boldt, Fred, E., and H., Albion, Mich. Harness-buckle | 744,714 | Nov. 24 | 3726 | 804 | 107 | 843 |
| Boldt, Herman. (See Boldt, Fred, E., and H.) | | | | | | |
| Bolduc, Arthur, St. Roch de Quebec, Canada. Bread-slicer | 725,537 | Apr. 14 | 2078 | 470 | 103 | 1625 |
| Bole, William A., Pittsburg, Pa., assignor to Westinghouse Machine Company. Making metal castings | 741,618 | Oct. 20 | 2366 | 529 | 106 | 1786 |
| Bolen, Arthur L., and G. E. Krause, Indianapolis, Ind. Electric motor and generator | 736,928 | Aug. 25 | 3554 | 788 | 105 | 1790 |
| Bolen, Harry B., assignor of one-half to J. and M. Stanton, College Springs, Iowa. Wagon-body lifter | 725,400 | Apr. 14 | 1809 | 405, 406 | 103 | 1567 |
| Bolens, Harry W., Port Washington, Wis. Seat-spider | 719,729 | Feb. 3 | 575 | 130 | 102 | 943 |
| Bolens, Harry W., Port Washington, Wis. Seat-spider | 719,730 | Feb. 3 | 576 | 130 | 102 | 943 |
| Bolens, Harry W., Port Washington, Wis. Chair adjustment | 740,619 | Oct. 6 | 461 | 101 | 106 | 1345 |
| Bolger, James W., Stratford, Canada. Printing device for paper-rolls | 747,580 | Dec. 22 | 4168 | 937 | 107 | 2070 |
| Bolin, Arthur R., and J. B. Goff; said Goff assignor to H. H. Bolin, Cordele, Ga. Lifting-jack | 745,142 | Nov. 24 | 4527 | 980 | 107 | 1010 |
| Bolin, Henry H. (See Bolin and Goff, assignors.) | | | | | | |
| Bollermann, Dominick L., West Hoboken, N. J., assignor to E. Bollermann, New York, N. Y. Stopper for bottles or jars | 740,620 | Oct. 6 | 462 | 101 | 106 | 1345 |
| Bollermann, Edward. (See Bollermann, Dominick L., assignor.) | | | | | | |
| Bolles, Archibald L., Brooklyn, assignor to F. Cunningham, New York, N. Y. Window-sash | 731,847 | June 23 | 4280 | 953 | 104 | 2067 |
| Bolles, William, assignor of one-half to J. L. Chase, Toledo, Ohio. Collapsible tube for fountain-pens | 737,697 | Sept. 1 | 251 | 53, 54 | 106 | 58 |
| Bölling, Johann F., Frankfort-Bockenheim-on-the-Main, Germany, assignor, by mesne assignments, to Prometheus Electric Company, New York, N. Y. Electrical resistance device or heater | 725,663 | Apr. 21 | 2328 | 525, 526 | 103 | 1692 |
| Bollinger, J. M., *et al.* (See Rogers, Lou R., assignor.) | | | | | | |
| Bollman, George W., Pittsburg, Pa., assignor to Otis Elevator Company, East Orange, N. J. Charging-car for blast-furnaces | 736,352 | Aug. 18 | 2457 | 537 | 105 | 1542 |
| Bollman, George W., Pittsburg, Pa., assignor to Otis Elevator Company, East Orange, N. J. Blast-furnace | 736,353 | Aug. 18 | 2458 | 537 | 105 | 1542 |
| Bollmann, Friedrich. (See Gehricke and Bollmann.) | | | | | | |
| Bolly, William F., Sandusky, Ohio. Acetylene-gas generator | 735,937 | Aug. 11 | 1725 | 368 | 105 | 1368 |
| Bolser, Gilbert, Indianapolis, Ind. Burial-vault | 729,262 | May 26 | 4560 | 1006 | 104 | 1015 |
| Bolser, Thomas L., assignor of one-half to C. Wagner, Indianapolis, Ind. Disk-jointer for plows | 728,359 | May 19 | 2912 | 643 | 104 | 658 |
| Bolsinger, Milton H., Windber, Pa. Envelop-fastener | 728,841 | May 26 | 3824 | 851 | 104 | 866 |
| Bolsinger, Milton H., assignor of one-half to G. B. Somerville, Windber, Pa. Button-hole-cutting attachment for scissors or shears | 739,643 | Sept. 22 | 4059 | 905 | 106 | 917 |
| Bolt, John. (See Ambler, Alfred H., assignor.) | | | | | | |
| Bolt, Joseph T. (See Wells, George, assignor.) | | | | | | |
| Bolte, Charles J., Columbus, Wis. Draft attachment for vehicles | 727,886 | May 12 | 2010 | 447 | 104 | 445 |
| Bolton, Andrew, Manchester, England. Apparatus for superheating steam | 730,087 | June 2 | 1024 | 229 | 104 | 1335 |
| Bolton, John T. (See McAuliffe and Bolton.) | | | | | | |
| Bolton, Samuel S., Scottville, Mich. Side-board-rod fastening | 723,640 | Mar. 24 | 3698 | 828, 829 | 103 | 818 |
| Bolund, Anders and P., San Jose, Cal. Horse grooming and shampooing machine | 734,805 | July 28 | 3937 | 918, 919 | 105 | 877 |
| Bolund, Pehr. (See Bolund, Anders and P.) | | | | | | |
| Bolz, Leonard. (See Loew and Bolz.) | | | | | | |
| Bolz, Leonard, Cleveland, Ohio. Combined filter and press | 722,172 | Mar. 3 | 942 | 209 | 103 | 200 |
| Bolzani, Anton, Berlin, Germany. Friction-clutch | 722,800 | Mar. 17 | 2159 | 482 | 103 | 491 |
| Bolzano, André, Munich, Germany. Collector for electric tramways or railways | 727,068 | May 5 | 476 | 101, 102 | 104 | 104 |
| Bolze, Henry, Hawthorne, assignor to Sicilian Asphalt Paving Company, New York, N. Y. Waterproof construction | 739,820 | Sept. 29 | 4392 | 985 | 106 | 1008 |
| Boma, John, assignor of one-half to C. A. Webster, Rochester, N. Y. Voting-machine | 723,357 | Mar. 24 | 3167 | 711, 712, 713, 714, 715 | 103 | 711 |
| Bomeisler, Carl, *et al.* (See Wendling, Theobald, assignor.) | | | | | | |
| Bomeisler, Carl, New York, N. Y. Atomizer | 727,069 | May 5 | 478 | 102 | 104 | 105 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | Spec. | Dr'g. | Vol. | Page. |
| Bommarias, Frederick, New Orleans, La. Filter | 737,325 | Aug. 25 | 4287 | 952 | 105 | 1945 |
| Bommarius, Frederick, New Orleans, La. Filter | 739,146 | Sept. 15 | 3139 | 694 | 106 | 702 |
| Bommer, Emil, New York, N. Y. Spring-hinge | 746,272 | Dec. 8 | 1764 | 400 | 107 | 1496 |
| Bommer, Emil, New York, N. Y. Spring-hinge | 747,680 | Dec. 22 | 4362 | 985 | 107 | 2113 |
| Bonar, Charles C., Evanston, Ill. Wax-pad | 737,066 | Aug. 25 | 3799 | 842 | 105 | 1842 |
| Bonbrake, Norman L. (See Kyle, George S., assignor.) | | | | | | |
| Bond, Benjamin F., Kingbee, assignor of one-half to E. T. Burk, Doniphan, Mo. Shoe-protector | 719,933 | Feb. 3 | 927 | 216 | 102 | 1020 |
| Bond, Charles. (See Houghtaling, Paul A., assignor.) | | | | | | |
| Bond, Edgar M. (See Fletcher, Edward W., assignor.) | | | | | | |
| Bond, Gilbert. (See Gustin, Mahlon R., assignor.) | | | | | | |
| Bond, Hiram A., West Springfield, assignor, by mesne assignments, to National Loom and Wire Company, Incorporated, Springfield, Mass. Let-off and take-up mechanism for looms | 727,533 | May 5 | 1315 | 293<br>294 | 104 | 283 |
| Bond, Nathan O., Hyannis, Mass. Device for opening or closing blinds | 732,261 | June 30 | 5105 | 1135 | 104 | 2252 |
| Bond, Nathan O., Hyannis, Mass. Blind-operating device | 732,262 | June 30 | 5107 | 1136 | 104 | 2252 |
| Bond, Nathan O., Hyannis, Mass. Shutter-worker | 732,615 | June 30 | 5781 | 1282 | 104 | 2396 |
| Bond, Nels, assignor of one-half to F. I. Abbott, Chicago, Ill. Screw center-punch and nail-set | 722,559 | Mar. 10 | 1685 | 374 | 103 | 378 |
| Bonde, Axel, *et al.* (See Engwall, Oscar F., assignor.) | | | | | | |
| Bonderson, Daniel G., Lafayette, Minn. Whip-rack | 725,207 | Apr. 14 | 1473 | 335 | 103 | 1496 |
| Bondurant, John, Monterey, Ky. Weed-destroyer | 723,129 | Mar. 17 | 2732 | 613 | 103 | 609 |
| Bone, James, and M. Reid, Glasgow, Scotland. Chain-casting mold | 736,678 | Aug. 18 | 3080 | 679 | 105 | 1671 |
| Bonelli, George A., Kingman, Ariz. Ter. Incandescent vapor-burner | 748,342 | Dec. 29 | 5623 | 1282 | 107 | 2412 |
| Bones, Clifton W., assignor of one-half to H. F. Harvey, Austin, Tex. Framometer | 745,271 | Nov. 24 | 4782 | 1044 | 107 | 1062 |
| Bonham, George R., Empire Prairie, Mo. Telephone-protecting device | 720,103 | Feb. 10 | 1285 | 294 | 102 | 1113 |
| Bonham, John A., Gainesville, Ark. Fence | 739,821 | Sept. 29 | 4393 | 985<br>986 | 106 | 1008 |
| Bonham, John S. C., Richmond, near Melbourne, Victoria, Australia. Pump | 736,062 | Aug. 11 | 1969 | 418<br>419 | 105 | 1420 |
| Bonhoeffer, Otto. (See Hofmann and Bonhoeffer.) | | | | | | |
| Boniecki, Edward, Kouzmincy, Russia. Driving-wheel for traction-motors | 722,278 | Mar. 10 | 1165 | 257 | 103 | 263 |
| Bonle, Charles F., Chicago, Ill. Kitchen-cabinet | 747,581 | Dec. 22 | 4170 | 937 | 107 | 2071 |
| Bonneau, Joseph C., Vancouver, Canada. Stereotype-matrix frame | 743,812 | Nov. 10 | 1988 | 423 | 107 | 439 |
| Bonnefoi, Léon, Troyes, France. Wrapping-machine | 724,538 | Apr. 7 | 217 | 53, 54 | 103 | 1215 |
| Bonnefont, Martin, Paris, France. Nursing-bottle | 730,337 | June 9 | 1473 | 325 | 104 | 1444 |
| Bonnell, Mark, Princeton, Kans. Kaffir-corn harvester | 721,278 | Feb. 24 | 3521 | 800<br>801 | 102 | 1615 |
| Bonnell, William R., assignor of one-fourth to G. M. Levi, Elizabeth, N. J. Back-pressure valve for traps | 729,996 | June 2 | 877 | 195 | 104 | 1306 |
| Bonner, Calvin A., and E. E. Euchenhofer, Dayton, assignors to D. M. Stewart, Xenia, Ohio. Ore-concentrator | 737,326 | Aug. 25 | 4290 | 953 | 105 | 1945 |
| Bonner, Clarence E., Cherrypoint, Ill. Wrench | 737,199 | Aug. 25 | 4035 | 894 | 105 | 1893 |
| Bonner, William T., Montreal, Canada. Mechanical stoker | 742,826 | Nov. 3 | 16 | 3, 4 | 107 | 6 |
| Bonnet, Joseph. (See Muller and Bonnet.) | | | | | | |
| Bonnet, Léonce. (See Floquet and Bonnet.) | | | | | | |
| Bonnett, Charles H., Port Huron, Mich. Tunnel-shield | 745,954 | Dec. 1 | 1179 | 264 | 107 | 1351 |
| Bonneville, Arthur A. de, and A. Johnston, New York, N. Y. Crane and appurtenances | 744,464 | Nov. 17 | 3270 | 701<br>702 | 107 | 729 |
| Bonney, Charles S., Portsmouth, Ohio. Pipe wrench and cutter | 721,660 | Mar. 3 | 17 | 4 | 103 | 6 |
| Bonney, Charles S., Portsmouth, Ohio. Pliers | 726,794 | Apr. 28 | 4430 | 998 | 103 | 2140 |
| Bonney, Charles S., Portsmouth, Ohio. Wrench | 728,842 | May 26 | 3825 | 851 | 104 | 866 |
| Bonney, Henry E., Abingdon, Ill. Rotary churn | 739,283 | Sept. 22 | 3390 | 755 | 106 | 773 |
| Bonney, Henry H., Fairmount, Minn. Mop-cabinet | 735,700 | Aug. 11 | 1283 | 274 | 105 | 1271 |
| Bonny, Frederick C. (See Davies, Frederick D., assignor.) | | | | | | |
| Bonsall, Seymour W., New York, N. Y. Garment-hanger | 724,427 | Apr. 7 | 15 | 5 | 103 | 1173 |
| Bonsall, Seymour W., New York, N. Y. Necktie-rack | 727,274 | May 5 | 845 | 181 | 104 | 181 |
| Bonsall, Seymour W., New York, N. Y. Trousers-hanger | 737,569 | Sept. 1 | 22 | 5 | 106 | 8 |
| Bonschur, Herman E., Philadelphia, Pa. Eyeglasses | 737,327 | Aug. 25 | 4291 | 953 | 105 | 1946 |
| Bonschur, Herman E., Philadelphia, Pa. Eyeglasses | 741,953 | Oct. 20 | 3015 | 669 | 106 | 1923 |
| Bonson, William W., Dubuque, Iowa. Combined boiler and furnace | 745,998 | Dec. 8 | 1265 | 284<br>285 | 107 | 1386 |
| Bonton, George D., *et al.* (See Scott, Gordon J., assignor.) | | | | | | |
| Bonus, George Y., assignor to H. L. Bonus, Chicago, Ill. Construction of buildings | 727,579 | May 12 | 1419 | 319 | 104 | 324 |
| Bonus, Hannah L. (See Bonus, George Y., assignor.) | | | | | | |
| Booco, Gillispa V., and J. W. Henault, Leadville, Colo. Express or mail protection car | 728,078 | May 12 | 2366 | 526 | 104 | 521 |
| Boodry, Charles L., *et al.* (See Blanchard, Horace, assignor.) | | | | | | |
| Book, John R., *et al.* (See McAdams, Sylvester L., assignor.) | | | | | | |
| Booker, Benjamin W., Berkeley, Cal. Detachable life-raft for ships | 738,400 | Sept. 8 | 1731 | 376 | 106 | 388 |
| Boone, Albert G., Detroit, Mich. Cooking utensil | 742,961 | Nov. 3 | 245 | 55 | 107 | 53 |
| Boone, Charles H., *et al.* (See Hoerichs, Edward, assignor.) | | | | | | |
| Boone, Charles H., San Leandro, Cal. Tube-sheet protector | 732,508 | June 30 | 5584 | 1237 | 104 | 2349 |
| Boone, J. Edward. (See Kemper, Otto, assignor.) | | | | | | |
| Boone, Samuel H., and C. W. Staples, assignors of one-third to W. T. Foster, Burtts Corner, Canada. Wagon | 740,798 | Oct. 6 | 779 | 176 | 106 | 1411 |
| Boone, Thomas R., Rochester, N. Y. Tailor's measuring-square | 743,436 | Nov. 10 | 1278 | 262 | 107 | 288 |
| Boone, William C., New York, N. Y. Expansion-bolt | 719,426 | Feb. 3 | 29 | 7 | 102 | 832 |
| Boone, William C., New York, N. Y. Expansion-bolt | 729,124 | May 26 | 4312 | 952 | 104 | 963 |
| Boorum and Pease Company. (See Gresham, George H., assignor.) | | | | | | |
| Boos, Edward. (See Dann and Boos.) | | | | | | |
| Booth, Benjamin F., Indianola, Iowa. Automatic hog-waterer | 740,972 | Oct. 6 | 1079 | 244 | 106 | 1476 |
| Booth, Christopher S., Camppoint, Ill. Type-writer | 719,079 | Jan. 27 | 2967 | 663 | 102 | 673 |
| Booth, David N., New York, N. Y. Artificial tooth | 742,572 | Oct. 27 | 4218 | 950 | 106 | 2182 |
| Booth, Ezra S. (See Dallas, George M., assignor.) | | | | | | |
| Booth, George J., Rochdale, England. Driving-belt | 741,998 | Oct. 20 | 3114 | 694 | 106 | 1941 |
| Booth, Hiram E., Salt Lake City, Utah. Talking-machine | 738,764 | Sept. 15 | 2446 | 536<br>537 | 106 | 555 |
| Booth, Hobart, assignor to Booth Manufacturing Company, Bristol, Conn. Garment-fastener | 736,811 | Aug. 18 | 3329 | 738 | 105 | 1723 |
| Booth, Hobert, assignor to Booth Manufacturing Company, Bristol, Conn. Snap-fastening | 740,518 | Oct. 6 | 264 | 52 | 106 | 1302 |
| Booth, James, East Liverpool, Ohio, assignor of one-half to J. F. H. Wark, Joplin, Mo. Rail-joint | 743,437 | Nov. 10 | 1279 | 262 | 107 | 289 |
| Booth, James K. (See Cooke, James E., assignor.) | | | | | | |
| Booth, John, Central Falls, R. I. Yarn-spinning apparatus | 741,101 | Oct. 13 | 1323 | 304 | 106 | 1549 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | Spec. | Dr'g. | Vol. | Page. |
| Booth Manufacturing Company. (See Booth. Hobert, assignor.) | | | | | | |
| Booth, Nathan. (See Scott. James C., assignor.) | | | | | | |
| Booth, Otis, Saratoga Springs, N. Y. Arch-supporter | 724,158 | Mar. 31 | 4704 | 1056 | 103 | 1043 |
| Booth, Thomas W., Windsor, Canada. Truss | 730,226 | June 9 | 1278 | 283 | 104 | 1403 |
| Booth, Zachariah E., New Bedford, Mass. Ring and traveler for spinning-frames | 743,138 | Nov. 3 | 615 | 133 | 107 | 128 |
| Booth, Zachariah E., New Bedford, Mass. Ring and traveler for spinning-frames | 743,139 | Nov. 3 | 616 | 133, 134 | 107 | 129 |
| Boothe, Daniel, Canton, Mo. Wheel-fender | 729,263 | May 26 | 4562 | 1007 | 104 | 1016 |
| Bootland, William R., *et al.* (See Westley, James, assignor.) | | | | | | |
| Booz, Edward D., Baltimore, Md. Gas-cock | 731,271 | June 16 | 3184 | 709 | 104 | 1821 |
| Boqvist, Lars E., Seattle, Wash. Water-motor | 743,055 | Nov. 3 | 457 | 100 | 107 | 95 |
| Boral, Robin, and A. Kymer, Middleton, near Manchester, England, assignors to Windsor Company, New York, N. Y. Apparatus for mercerizing | 739,580 | Sept. 22 | 3943 | 881 | 106 | 892 |
| Borden, Bradford, assignor to F. S. Chryst, trustee, Warren, Ohio. Pipe-threading machine | 740,799 | Oct. 6 | 780 | 176 | 106 | 1411 |
| Borden, Bradford, assignor to F. S. Chryst, trustee, Warren, Ohio. Nipple-chuck | 741,954 | Oct. 20 | 3016 | 669 | 106 | 1923 |
| Borden, Bradford, assignor to F. S. Chryst, trustee, Warren, Ohio. Adjustable die-stock | 744,465 | Nov. 17 | 3272 | 702, 703 | 107 | 729 |
| Borden, Bradford, assignor to F. S. Chryst, trustee, Warren, Ohio. Chuck or work-holder for pipe-threading machines | 745,773 | Dec. 1 | 820 | 186 | 107 | 1273 |
| Borden, Firman H., Vincennes, Ind. Tool for cutting window-jamb pockets | 728,843 | May 26 | 3826 | 852 | 104 | 866 |
| Border, Charles C., Richmond, Ind. Nut-lock | 728,665 | May 19 | 3493 | 776 | 104 | 781 |
| Border, Rupert L., Pittsburg, Pa., assignor of one-half to W. H. Tudor. Electrical switch | 736,063 | Aug. 11 | 1970 | 419 | 105 | 1420 |
| Bordner, John S. (See Astryke, Peter, assignor.) | | | | | | |
| Bordner, William R., Canton, Ohio. Fence-post | 741,761 | Oct. 20 | 2647 | 592 | 106 | 1844 |
| Bordson, Ole O., Black Earth, Wis. Foundation-fastener for hive-frames | 736,679 | Aug. 18 | 3082 | 679 | 105 | 1672 |
| Borein, Charley A., and L. P. Desimone, Oakland, Cal. Automatic cut-out | 746,273 | Dec. 8 | 1765 | 400, 401 | 107 | 1496 |
| Boren, Addison, Pittsburg, Pa. Dust-guard for axle-boxes | 740,621 | Oct. 6 | 462 | 101 | 106 | 1345 |
| Borgen, Ellef G., *et al.* (See Sanoden, Olaf, assignor.) | | | | | | |
| Borges, Ferdinand E. (See Robinson, Fayette S., assignor.) | | | | | | |
| Borglum, Miller L. (See Michelsen and Borglum.) | | | | | | |
| Borgmann, Henry, Washington, D. C. Extension-table | 726,853 | May 5 | 32 | 8 | 104 | 10 |
| Boring, Amos E., Canton, Ohio. Coupling for pump-rods | 718,306 | Jan. 13 | 1458 | 324 | 102 | 330 |
| Boring, Hilliard H., Floral, Ark. Insect-exterminator | 723,641 | Mar 24 | 3700 | 829 | 103 | 818 |
| Borland, Arthur E., assignor to A. Wesson, Danville, Vt. Game | 739,254 | Sept. 15 | 3336 | 740 | 106 | 745 |
| Bormann, Rudolf, Berlin, Germany. Solder | 736,812 | Aug. 18 | 3331 | ------ | 105 | 1724 |
| Born, Early W., *et al.* (See Born, Marion A., assignor.) | | | | | | |
| Born, Marion A., Lawrenceville, assignor of part to E. W. Born, Norcross, E. W. Vance, Buford, Ga., M. H. Loudon, Kansas City, Mo., D. McConville, Steubenville, Ohio, and E. Byles, Washington, D. C. Automatic brake-operating mechanism | 725,611 | Apr. 14 | 2205 | 498 | 103 | 1654 |
| Bornhoeft, Edward, assignor to D. H. Schmidt, New York, N. Y. Action-bracket for pianos | 728,192 | May 19 | 2574 | 574 | 104 | 587 |
| Bornhoeft, Edward, assignor to D. H. Schmidt, New York, N. Y. Action for upright pianos | 728,193 | May 19 | 2575 | 574 | 104 | 587 |
| Bornhoeft, Edward, assignor to D. H. Schmidt, New York, N. Y. Piano-damper | 729,533 | June 2 | 28 | 7 | 104 | 1132 |
| Bornhoeft, Edward, assignor to D. H. Schmidt, New York, N. Y. Action for upright pianos | 730,866 | June 16 | 2422 | 536 | 104 | 1667 |
| Bornmann, Carl, New Haven, Conn., assignor to Anthony & Scovill Company, New York, N. Y. Camera | 731,537 | June 23 | 3721 | 829 | 104 | 1951 |
| Bornmann, Carl, New Haven, Conn., assignor to Anthony & Scovill Company, New York, N. Y. Photographic shutter | 745,272 | Nov. 24 | 4785 | 1044, 1045 | 107 | 1062 |
| Borough Construction Co. (See Meem, James C., assignor.) | | | | | | |
| Börs, Otto, Coola, Trundle, New South Wales, Australia. Sheep-shears | 743,438 | Nov. 10 | 1280 | 262 | 107 | 289 |
| Borsch, Henry. (See Zeiser, Charles A., assignor.) | | | | | | |
| Borsch, Henry, Chicago, Ill. Nose-guard for eyeglasses. (Reissue) | 12,070 | Jan. 6 | 1017 | 227 | 102 | 219 |
| Borsig, A. (See Steen, Theodor, assignor.) | | | | | | |
| Borst, Frank A., and J. Groscop, Auburn, Ind. Machine for manufacturing hollow concrete building-blocks | 735,938 | Aug. 11 | 1726 | 368, 369 | 105 | 1369 |
| Borst, George, Rochester, N. Y. Necktie-fastener | 718,307 | Jan. 13 | 1459 | 324 | 102 | 330 |
| Borsum, Louis. (See Holst, Lodewyk J. R., assignor.) | | | | | | |
| Borsum, Louis, Plainfield, N. J. Photographic camera | 720,217 | Feb. 10 | 1493 | 342, 343 | 102 | 1154 |
| Borsum, Louis, Plainfield, N. J. Photographic focal-plane shutter | 720,659 | Feb. 17 | 2340 | 535, 536 | 102 | 1344 |
| Borsum, Louis, Plainfield, N. J. Photographic camera | 741,102 | Oct. 13 | 1324 | 304 | 106 | 1549 |
| Borsum, Louis, Plainfield, N. J. Focal-plane shutter | 741,103 | Oct. 13 | 1328 | 305 | 106 | 1550 |
| Bort, Charles G., Sterling, Ill. Agitator for corn-husking rolls | 742,387 | Oct. 27 | 3882 | 872 | 106 | 2113 |
| Bortle, George P. (See Hawley, De Witt, assignor.) | | | | | | |
| Borton, Stockton, Providence, R. I., assignor to Willcox and Gibbs Sewing Machine Company, New York, N. Y. Overedge sewing-machine | 736,199 | Aug. 11 | 2191 | 471 | 105 | 1467 |
| Borton, Stockton, Providence, R. I., assignor to Willcox and Gibbs Sewing Machine Company, New York, N. Y. Edging for open-work goods | 736,200 | Aug. 11 | 2192 | 472 | 105 | 1467 |
| Bortree, Louis S., Toledo, Ohio. Hay-tedder | 738,284 | Sept. 8 | 1484 | 321 | 106 | 335 |
| Bortree, Louis S., Toledo, Ohio. Hay-rake | 738,285 | Sept. 8 | 1486 | 321 | 106 | 335 |
| Bosch, Frank, Crescent City, Cal. Vehicle-spring | 733,940 | July 21 | 2255 | 530 | 105 | 509 |
| Boschelli, Angelo A., Harrisburg, Pa. Bottle | 741,879 | Oct. 20 | 2854 | 637 | 106 | 1889 |
| Bosemer, Charles, Chicago, Ill. Baker's oven | 723,233 | Mar. 24 | 2942 | 659 | 103 | 667 |
| Bosqui, Francis L., *et al.* (See Davis, William H., assignor.) | | | | | | |
| Boss, Francis M., assignor of one-third to J. D. Benson, Waldron, Ark. Nut-lock | 740,222 | Sept. 29 | 5159 | 1159 | 106 | 1167 |
| Boss, James P. (See Picher and Boss.) | | | | | | |
| Boss Manufacturing Company. (See Waller, Peter A., assignor.) | | | | | | |
| Boss, Martin P., San Francisco, Cal. Compression-coupling | 729,534 | June 2 | 28 | 7,8 | 104 | 1132 |
| Boss, Martin P., San Francisco, Cal., assignor to Hydro-Carbon Smelting Company. Metallurgical furnace | 732,263 | June 30 | 5108 | 1136 | 104 | 2252 |
| Boss, Martin P., San Francisco, Cal., assignor to Hydro-Carbon Smelting Company. Metallurgical furnace | 732,264 | June 30 | 5110 | 1136, 1137 | 104 | 2253 |
| Boss, Martin P., San Francisco, Cal., assignor to Hydro-Carbon Smelting Company. Metallurgical furnace | 732,265 | June 30 | 5112 | 1137 | 104 | 2253 |
| Boss, Martin P., San Francisco, Cal., assignor to Hydro-Carbon Smelting Company. Metallurgical furnace | 732,266 | June 30 | 5114 | 1137 | 104 | 2254 |
| Boss, Martin P., San Francisco, Cal., assignor to Hydro-Carbon Smelting Company. Metallurgical furnace | 732,267 | June 30 | 5116 | 1137 | 104 | 2254 |
| Boss, Martin P., San Francisco, Cal., assignor to Hydro-Carbon Smelting Company. Metallurgical furnace | 732,268 | June 30 | 5118 | 1138 | 104 | 2255 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| Boss, Martin P., San Francisco, Cal., assignor to Hydro-Carbon Smelting Company. Metallurgical furnace | 732,269 | June 30 | 5121 | 1138 | 104 | 2255 |
| Boss, Thomas H., assignor to Independent Manufacturing Company, Chicago, Ill. Numbering-machine | 728,194 | May 19 | 2575 | 574<br>575 | 104 | 587 |
| Boss, Thomas H., assignor to Independent Manufacturing Company, Chicago, Ill. Numbering-machine | 743,233 | Nov. 3 | 805 | 176 | 107 | 168 |
| Bossart, Johann. (See Wild, Johann, assignor.) | | | | | | |
| Bossell, August P. J., Angels Camp, Cal. Sectional cam for ore-stamps | 743,681 | Nov. 10 | 1748 | 369 | 107 | 389 |
| Bosselman, Charles, Worms, Nebr. Machine for loading sand | 719,427 | Feb. 3 | 31 | 7 | 102 | 832 |
| Bossert Electric Construction Company. (See Bossert, William F., assignor.) | | | | | | |
| Bossert Electric Construction Company. (See Bossert and Foxenberger, assignors.) | | | | | | |
| Bossert, William F. (See Taylor and Bossert.) | | | | | | |
| Bossert, William F., Utica, N. Y. Fish-plate joint for railway-rails | 723,439 | Mar. 24 | 3326 | 745 | 103 | 742 |
| Bossert, William F., Utica, N. Y. Combined railway brace and tie-plate | 739,822 | Sept. 29 | 4395 | 986 | 106 | 1008 |
| Bossert, William F., Utica, N. Y. Guard for journal-boxes | 744,896 | Nov. 24 | 4037 | 870 | 107 | 908 |
| Bossert, William F., Utica, N. Y. Railway brace and chair | 747,930 | Dec. 29 | 4866 | 1098 | 107 | 2248 |
| Bossert, William F., Utica, N. Y. Railway chair and brace | 747,931 | Dec. 29 | 4867 | 1098<br>1099 | 107 | 2249 |
| Bossert, William F., assignor of one-third to H. P. Crouse, Utica, N. Y. Railway switching apparatus | 725,401 | Apr. 14 | 1811 | 406 | 103 | 1568 |
| Bossert, William F., assignor to Bossert Electric Construction Company, Utica, N. Y. Outlet-box for interior conduits | 725,664 | Apr. 21 | 2330 | 526 | 103 | 1693 |
| Bossert, William F., assignor to Bossert Electric Construction Company, Utica, N. Y. Electric switchboard | 738,519 | Sept. 8 | 1971 | 429 | 106 | 438 |
| Bossert, William F., and F. T. Foxenberger, assignors to Bossert Electric Construction Company, Utica, N. Y. Ring-bushing for interior conduits | 731,426 | June 23 | 3498 | 781 | 104 | 1905 |
| Bostedo, Louis G., assignor to Bostedo Pneumatic Tube Company, Chicago, Ill. Pneumatic tube | 736,680 | Aug. 18 | 3084 | 680 | 105 | 1672 |
| Bostedo Pneumatic Tube Company. (See Bostedo, Louis G., assignor.) | | | | | | |
| Bostedo Pneumatic Tube Company. (See Fordyce, Edmond A., assignor.) | | | | | | |
| Bostock, Edwin, Jr., Stafford, England, assignor to O. A. Miller, Brockton, Mass. Last. | 718,946 | Jan. 20 | 2713 | 607 | 102 | 607 |
| Boston Automatic Bed Company. (See Ruggles, Horatio B., assignor.) | | | | | | |
| Boston Bottle Wiring and Labeling Company. (See Cassidy, Patrick F., assignor.) | | | | | | |
| Bostwick, Frederick C. (See Hill, Charles H., Jr., assignor.) | | | | | | |
| Bostwick, John C. (See South and Bostwick.) | | | | | | |
| Bostwick, Paul S., Woodbine, Iowa. Steam-engine | 729,997 | June 2 | 878 | 196 | 104 | 1306 |
| Bostwick, Paul S., Woodbine, Iowa. Valve-gear | 729,998 | June 2 | 882 | 197 | 104 | 1307 |
| Boswell, George G. F., Indianapolis, Ind. Form for cisterns, &c | 732,509 | June 30 | 5585 | 1237 | 104 | 2349 |
| Boswell, Lewis A., Eastaboga, Ala. Steering mechanism for dirigible air-ships | 728,844 | May 26 | 3827 | 852 | 104 | 866 |
| Boswell, William G., Soledad, Cal. Lumber-registering attachment | 721,857 | Mar. 3 | 368 | 81, 82 | 103 | 80 |
| Bosworth, Charles B., Somerville, assignor to Star Brass Manufacturing Company, Boston, Mass. Device for testing pressure-gages | 747,530 | Dec. 22 | 4090 | 919 | 107 | 2052 |
| Bosworth, Luther L., Cleveland, O. Frictional gearing for dental machines | 733,807 | July 14 | 1982 | 466 | 105 | 435 |
| Bothwell, De Witt H. (See Birdsall, Edgar M., assignor.) | | | | | | |
| Botkin, Murray R., assignor of one-half to J. W. Dowd, Kokomo, Colo. Sewing-awl | 723,981 | Mar. 31 | 4351 | 977 | 103 | 973 |
| Bott, Riley C., Grouse, Oreg. Rail-joint | 747,037 | Dec. 15 | 3165 | 725 | 107 | 1828 |
| Böttcher, Jacob H. L. and J. D. A., Hamburg, Germany. Rotary engine | 725,028 | Apr. 14 | 1138 | 257 | 103 | 1428 |
| Böttcher, Johann D. A. (See Böttcher, Jacob H. L. and J. D. A.) | | | | | | |
| Bottjer, Herman, Augusta, Ga. Insulator for electric wires | 739,147 | Sept. 15 | 3141 | 694 | 106 | 702 |
| Bottlers' Special Machinery Company. (See Glab, Nicholas, assignor.) | | | | | | |
| Bottlers Specialty Manufacturing Co. (See Strasburger, Frank C. H., assignor.) | | | | | | |
| Bottomley, Henry N., Shelf, near Halifax, England. Pattern-chain | 735,202 | Aug. 4 | 329 | 63 | 105 | 1051 |
| Bottomley, Joseph A., Norwich, Conn. Picker-stick connection for looms | 745,143 | Nov. 24 | 4527 | 980 | 107 | 1010 |
| Bötz, Heinrich W., assignor to Columbus Electrizitäts-Gesellschaft mit Beschränkter Haftung, Ludwigshafen-on-the-Rhine, Germany. Electrolytic coating apparatus | 725,208 | Apr. 14 | 1474 | 335 | 103 | 1497 |
| Bouchard, Henry. (See Ziller and Bouchard.) | | | | | | |
| Bouchard, John J., assignor to himself, E. C. Emery, B. H. Collins, and W. F. Ensor, Bradford, Pa. Overhead trolley | 720,879 | Feb. 17 | 2701 | 625 | 102 | 1422 |
| Bouchard, John J., and W. F. Ensor, assignors to themselves, B. H. Collins, and E. C. Emery, Bradford, Pa. Trolley-stand | 738,602 | Sept. 8 | 2113 | 462 | 106 | 471 |
| Boucher, Pierre J., assignor to Standard Water Purifying Company, Cleveland, Ohio. Purifying apparatus | 728,440 | May 19 | 3046 | 670 | 104 | 687 |
| Boucher, Samuel A., Barton, Md. Photographic plate and film bath-tank | 718,904 | Jan. 20 | 2632 | 590 | 102 | 588 |
| Bouck, Charles A., Los Angeles, Cal. Tradesman's lift | 722,444 | Mar. 10 | 1467 | 324<br>325 | 103 | 329 |
| Boughton, Charles H., Chicago, Ill. Manifolding-pad | 745,713 | Dec. 1 | 719 | 164 | 107 | 1251 |
| Boughton, John A., Everett, Ohio. Metallic tie and rail fastener | 725,665 | Apr. 21 | 2331 | 526 | 103 | 1693 |
| Boughton, John W., Philadelphia, Pa. State-room for ships | 731,848 | June 23 | 4283 | 953<br>954 | 104 | 2067 |
| Boulanger, Narcisse, Black Lake, Canada. Pipe-wrench | 733,617 | July 14 | 1642 | 389 | 105 | 365 |
| Boulanger, Paul, Havana, Cuba. Centrifugal machine | 741,999 | Oct. 20 | 3115 | 695 | 106 | 1941 |
| Boulard, Cyril, Worcester, Mass. Hitching attachment for vehicles | 719,731 | Feb. 3 | 578 | 130 | 102 | 944 |
| Boulding, George R., assignor of one-half to R. M. Steele and A. C. Olmstead, Wells, Nev. Vehicle-frame and driving-axle gear | 732,510 | June 30 | 5587 | 1237<br>1238 | 104 | 2350 |
| Bouticault, Jean B., assignor of one-half to E. B. Campbell, St. Louis, Mo. Vehicle-wheel | 721,002 | Feb. 17 | 2952 | 678 | 102 | 1474 |
| Boullet, Georges, Paris, France. Means for consuming smoke | 722,940 | Mar. 17 | 2402 | 537 | 103 | 540 |
| Bourband, Louis M., *et al.* (See Boyd, George W., assignor.) | | | | | | |
| Bourcart, Edmond, Mülhausen, assignor to "Fabriques de Produits Chimiques de Thann et de Mulhouse." Thann and Mulhouse, Alsace, Germany. Printing sulfur dyestuffs | 747,295 | Dec. 15 | 3664 | ..... | 107 | 1941 |
| Bourdeau, Arthur C., assignor to Battle Creek Pure Food Company, Ltd., Battlecreek, Mich. Making malted flakes | 746,663 | Dec. 15 | 2472 | ..... | 107 | 1672 |
| Bourdeau, Arthur C., Battlecreek, Mich., assignor to Malta Vita Pure Food Company, Jersey City, N. J. Means for mixing cereal with malt | 746,664 | Dec. 15 | 2474 | 565 | 107 | 1672 |
| Bourdeau, Arthur C., Battlecreek, Mich., assignor to Malta Vita Pure Food Company, Jersey City, N. J. Means for feeding ovens | 746,665 | Dec. 15 | 2475 | 565 | 107 | 1673 |
| Bourdeau, Arthur C., Battlecreek, Mich., assignor to Malta Vita Pure Food Company, Jersey City N. J. Means for filling packages | 746,666 | Dec. 15 | 2476 | 566 | 107 | 1673 |
| Bourk, Charles T., Lima, Ohio. Telegraph-transmitter | 717,966 | Jan. 6 | 833 | 188<br>189 | 102 | 179 |
| Bourke, Richard J., trustee. (See Collins, Patrick J., assignor.) | | | | | | |
| Bourke, Robert E., and H. Wittekind, Chicago, Ill. Drinking-receptacle | 747,123 | Dec. 15 | 3332 | 758 | 107 | 1869 |
| Bourlon, Eugene A., New Caney, Tex. Insecticide | 729,264 | May 26 | 4562 | ..... | 104 | 1016 |
| Bourn, Augustus O., Providence, R. I. Vulcanizing rubber | 735,059 | Aug. 4 | 21 | 6 | 105 | 986 |
| Bourne, Edward, Jr., Dallas, Tex. Laundry-bag | 722,801 | Mar. 17 | 2160 | 483 | 103 | 491 |
| Bourne, Eugene C., Sandwich, Mass. Minnow-pail and shipping-can | 724,539 | Apr. 7 | 220 | 54 | 103 | 1217 |

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| Bourne-Henry Engineering Company. (See Henry, Thomas, assignor.) | | | | | | |
| Bournonville, Eugene, *et al.* (See Fouché, Edmond, assignor.) | | | | | | |
| Boussemaere, Hyppolite, Chicago, Ill. Coupling for straight-edges | 735,060 | Aug. 4 | 23 | 6,7 | 105 | 986 |
| Boutell Manufacturing Company. (See Pease, Franklin B., assignor.) | | | | | | |
| Bouton, George D., *et al.* (See Scott, Gordon J., assignor.) | | | | | | |
| Bouton, Georges. (See Dion and Bouton.) | | | | | | |
| Bouton, Harold, Boonton, N. J. Stopper for bottles or similar vessels | 722,802 | Mar. 17 | 2161 | 483 | 103 | 492 |
| Bouton, Samuel, Salem, Mass. Noise-muffler | 748,157 | Dec. 29 | 5310 | 1206 | 107 | 2345 |
| Boutwell, Walter B., Lawrence, Mass. Collapsible crate | 721,008 | Feb. 17 | 2953 | 678 | 102 | 1474 |
| Boutwood, Charles E. (See Browning and Boutwood.) | | | | | | |
| Boutwood, Charles E., Hinsdale, Ill. Golf-ball | 737,698 | Sept. 1 | 252 | 54 | 106 | 58 |
| Bouvier, Alexander, Concord, Mass. Switch | 726,501 | Apr. 28 | 3878 | 878 | 103 | 2028 |
| Bouvier, Alexander, assignor to J. A. Finigan, Concord, Mass. Car-replacer | 742,154 | Oct. 27 | 3446 | 768 | 106 | 2024 |
| Bovard, John C., Kansas City, Mo. Printer's furniture | 728,845 | May 26 | 3828 | 852 | 104 | 867 |
| Bovee, Jacob L., Richford, N. Y. Wrench | 719,299 | Jan. 27 | 3377 | 754 | 102 | 759 |
| Bovier, Archie M., Elmira, N. Y. Perforating-machine | 746,274 | Dec. 8 | 1767 | 401 | 107 | 1496 |
| Bowe, Albert A. (See Grover and Bowe.) | | | | | | |
| Bowe, James C., Indianapolis, Ind. Adjustable rolling window-screen | 744,953 | Nov. 24 | 4148 | 896 | 107 | 930 |
| Bowen, Adna G., New York, N. Y. Coin-holder | 734,806 | July 28 | 3940 | 919 | 105 | 877 |
| Bowen, Calvin C., assignor to Rindge Manufacturing Company, Los Angeles, Cal. Animal-trap | 727,275 | May 5 | 846 | 182 | 104 | 182 |
| Bowen, Calvin C., assignor to Rindge Manufacturing Company, Los Angeles, Cal. Animal-trap | 730,434 | June 9 | 1666 | 373 | 104 | 1484 |
| Bowen, Calvin C., F. Newnham, and M. J. Barnett, assignors to Rindge Manufacturing Company, Los Angeles, Cal. Car-coupling | 729,037 | May 26 | 4161 | 922 | 104 | 934 |
| Bowen, Charles B. (See Poyser and Bowen.) | | | | | | |
| Bowen, Daniel, Darlington, Ind. Scrubbing-machine | 742,283 | Oct. 27 | 3705 | 827 | 106 | 2078 |
| Bowen, George W. (See Grubb, Eugene H., assignor.) | | | | | | |
| Bowen, Philip A., assignor of one-half to R. C. Bowen, Milwaukee, Wis. Locking mechanism for telescoping tubing | 737,570 | Sept. 1 | 24 | 5 | 106 | 8 |
| Bowen, Robert S., Boston, Mass., assignor to Chickering & Sons, New York, N. Y. Hinge | 719,640 | Feb. 3 | 409 | 94 | 102 | 907 |
| Bowen, Robert S., Newtonville, Mass., assignor to Chickering & Sons., New York, N. Y. Piano | 742,573 | Oct. 27 | 4219 | 950 | 106 | 2183 |
| Bowen, Robert S., Newtonville, Mass., assignor to Chickering & Sons, New York, N. Y. Music-desk for pianos | 743,140 | Nov. 3 | 618 | 134 | 107 | 129 |
| Bowen, Robert S., Newtonville, Mass., assignor to Chickering & Sons, New York, N. Y. Music-desk for pianos | 743,682 | Nov. 10 | 1750 | 369 | 107 | 390 |
| Bowen, Roy C. (See Bowen, Philip A., assignor.) | | | | | | |
| Bower, Abram L., Boyertown, Pa. Dental preparation for use in the operation of capping pulps | 731,849 | June 23 | 4284 | ..... | 104 | 2067 |
| Bower, Almond P., Pleasanthill, assignor of one-half to P. D. and J. Roberts, Martinsburg, Ill. Mail-crane | 725,209 | Apr. 14 | 1476 | 335 | 103 | 1497 |
| Bower, Byron B., Bainbridge, Ga. Water-motor | 721,661 | Mar. 3 | 18 | 4 | 103 | 6 |
| Bower, Byron B., Bainbridge, Ga. Air-pumping apparatus | 721,662 | Mar. 3 | 20 | 4 | 103 | 6 |
| Bower, Frank, Methuen, Mass. Sash adjuster and locking device | 722,079 | Mar. 3 | 775 | 174 | 103 | 167 |
| Bower, Henry, *et al.* (See Bower, Herman A., assignor.) | | | | | | |
| Bower, Herman A., assignor to H. Bower, A. Baker, and M. Bower, Findlay, Ohio. Pump for deep wells | 741,880 | Oct. 20 | 2855 | 637 | 106 | 1890 |
| Bower, John A., Chicago, assignor, by mesne assignments, to Practical Gas Construction Company, North Chicago, Ill. Street lamp-post and connections | 734,158 | July 21 | 2697 | 634 | 105 | 604 |
| Bower, John A., Waukegan, assignor to Practical Gas Construction Company, North Chicago, Ill. Treating air for use in connection with the manufacture of gas | 737,901 | Sept. 1 | 689 | 147<br>148 | 106 | 151 |
| Bower, John A., assignor to Practical Gas Construction Company, North Chicago, Ill. Carbureter-feed | 743,439 | Nov. 10 | 1281 | 262<br>263 | 107 | 289 |
| Bower, Mary, *et al.* (See Bower, Herman A., assignor.) | | | | | | |
| Bower, Robert A., *et al.* (See Reynolds, George H., assignor.) | | | | | | |
| Bower, Sigmund, assignor of fifty one-hundredths to J. L. Levy, New York, N. Y. Insulator | 745,999 | Dec. 8 | 1267 | 285 | 107 | 1387 |
| Bower, Thomas F., Warpole, Ohio. Boiler-flue | 730,338 | June 9 | 1474 | 326 | 104 | 1444 |
| Bower, William, Olney, Ill. Show-case | 727,887 | May 12 | 2011 | 448 | 104 | 445 |
| Bower, William, Olney, Ill. Ointment or pill slab | 734,663 | July 28 | 3632 | 850 | 105 | 817 |
| Bowers, Bose B., Macon, Ga. Stop-motion for twine-winding spindles | 727,888 | May 12 | 2013 | 448 | 104 | 446 |
| Bowers, Christopher, McKeesport, Pa. Rotary engine | 744,466 | Nov. 17 | 3275 | 703 | 107 | 730 |
| Bowers, Doctor C., Chelsea, Ind. Ter. Harness-saddletree | 741,104 | Oct. 13 | 1330 | 305 | 106 | 1550 |
| Bowers, Ebenezer A., Lucerne, Mo. Foot-blocking for guard-rails | 732,511 | June 30 | 5589 | 1238 | 104 | 2350 |
| Bowers, Frank, Lebanon, Pa., and T. Reese, Jr., Newark, N. J. Gate-operating mechanism for hoppers | 737,200 | Aug. 25 | 4036 | 894<br>895 | 105 | 1893 |
| Bowers, George H. (See Godfrey and Rivers, assignors.) | | | | | | |
| Bowers, John C., Boston, assignor of one-half to G. C. Bartram, Brookline, Mass. Bottle-stopper | 745,477 | Dec. 1 | 320 | 75 | 107 | 1167 |
| Bowers, William H. (See Barrow and Bowers.) | | | | | | |
| Bowers, William P., Esplen Borough, assignor of one-fourth to E. J. Hampton, Braddock, Pa. Rail-joint | 737,552 | Aug. 25 | 4710 | 1057 | 105 | 2040 |
| Bowker, Amaziah C., St. John, Kans. Wagon end-gate | 728,846 | May 26 | 3829 | 852 | 104 | 867 |
| Bowker, Ernest S., Chicago, Ill. Corset-fastening | 723,234 | Mar. 24 | 2943 | 660 | 103 | 667 |
| Bowker, William H. (See Smith, Frederic J., assignor.) | | | | | | |
| Bowler, Noadiah P. (See Roberts, Albert E., assignor.) | | | | | | |
| Bowles, John G., Chicago, Ill. Locking-bolt | 735,336 | Aug. 4 | 569 | 116 | 105 | 1102 |
| Bowles, John G., Chicago, Ill. Rein-holder | 741,619 | Oct. 20 | 2367 | 530 | 106 | 1786 |
| Bowles, Robert C. M., Boston, Mass. Stethoscopic instrument | 734,159 | July 21 | 2698 | 635 | 105 | 604 |
| Bowley, William H. K., London, England. Flexible metallic tubing for armoring insulated electrical conductors | 747,367 | Dec. 22 | 3806 | 856 | 107 | 1988 |
| Bowlin, Henry L. (See Bogle, William L., assignor.) | | | | | | |
| Bowling, Joseph R. (See Ingoldsby and Bowling.) | | | | | | |
| Bowling, Joseph R. (See Lombard and Bowling.) | | | | | | |
| Bowling, Joseph R., assignor to Ingoldsby Automatic Car Company, St. Louis, Mo. False-top stake | 721,004 | Feb. 17 | 2954 | 678 | 102 | 1474 |
| Bowling, Madison. (See Farris, Emory L., assignor.) | | | | | | |
| Bowlzer, Alfred H., Cleveland, Ohio. Lath-spacing table and tie | 738,979 | Sept. 15 | 2838 | 629 | 106 | 641 |
| Bowmaker, John P., Okeene, Okla. Ter. Bridle-bit attachment | 724,791 | Apr. 7 | 698 | 164 | 103 | 1318 |
| Bowman, Arthur M. (See Irwin and Bowman.) | | | | | | |
| Bowman, Erasmus R., Newmarket, assignor of one-half to R. H. Wakeman, Brockroad, Va. Cider-press | 732,040 | June 30 | 4659 | 1041 | 104 | 2160 |
| Bowman, Frederic E., Manchester, England. Gas-producing plant | 723,814 | Mar. 31 | 4004 | 903 | 103 | 900 |
| Bowman, Henry W., Barboursville, Ky. Latch | 737,995 | Sept. 1 | 884 | 193 | 106 | 192 |
| Bowman, Hurlbut C., Des Moines, Iowa. Lighted-match protector | 738,652 | Sept. 8 | 2214 | 484 | 106 | 491 |

*Alphabetical list of patentees*—Continued.

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| Bowman, Lewis H., Racine, Wis. Hook | 724,428 | Apr. 7 | 18 | 6 | 103 | 1174 |
| Bowman, Mark K., Montclair, N. J. Fusible plug for steam-boilers | 729,038 | May 26 | 4165 | 922 | 104 | 934 |
| Bowman, Max M., Cincinnati, Ohio. Trousers-support | 718,690 | Jan. 20 | 2233 | 489 | 102 | 506 |
| Bowman, Newton K., North Lawrence, Ohio. Hoop | 732,270 | June 30 | 5124 | 1139 | 104 | 2256 |
| Bowman, Newton K., North Lawrence, Ohio. Mine-gate | 739,978 | Sept. 29 | 4711 | 1059<br>1060 | 106 | 1073 |
| Bowman, Newton K., North Lawrence, Ohio. Signal system for mines | 742,962 | Nov. 3 | 247 | 55 | 107 | 54 |
| Bowman, Oliver, *et al.* (See Jones, Frederick A., assignor.) | | | | | | |
| Bowman, Oliver C., Christopher, Mo. Apparatus for feeding baling-presses | 727,740 | May 12 | 1739 | 390 | 104 | 332 |
| Bowman, Ziba F., Washington, D. C. Water-cooler | 724,792 | Apr. 7 | 698 | 164 | 103 | 1318 |
| Bown, Frederick S., Charleston, W. Va. Convertible chair and couch | 746,446 | Dec. 8 | 2065 | 476 | 107 | 1559 |
| Bowring, Joseph. (See Hudson and Bowring.) | | | | | | |
| Bowser, Allen A., assignor to S. F. Bowser and Company, Incorporated, Fort Wayne, Ind. Computing attachment for dispensing-pumps | 747,296 | Dec. 15 | 3666 | 828 | 107 | 1941 |
| Bowsher, Jay C., South Bend, Ind. Grinding-mill | 746,275 | Dec. 8 | 1768 | 401<br>402 | 107 | 1496 |
| Box, Alfred, Philadelphia, Pa., assignor to F. Lane, Malden, Mass. Rotary engine | 728,157 | May 12 | 2504 | 556<br>557 | 104 | 550 |
| Box, William A., and E. Y. Sayer, Denver, Colo. Drill apparatus for drilling rock, mining, &c | 720,319 | Feb. 10 | 1683 | 382<br>383 | 102 | 1194 |
| Boxley, George, Troy, N. Y. Garment | 727,070 | May 5 | 480 | 102 | 104 | 105 |
| Boxter, Charles. (See Irvine, John J., assignor.) | | | | | | |
| Boyce, Hiram H., Chicago, Ill. Pulley | 738,765 | Sept. 15 | 2449 | 537 | 106 | 556 |
| Boyce, John E., New York, and L. Shonnard, Yonkers, N. Y. Door-lock for elevator-shafts | 726,018 | Apr. 21 | 2946 | 670 | 103 | 1824 |
| Boyce, William D., St. Louis, Mo. Boiler | 736,354 | Aug. 18 | 2459 | 537<br>538 | 105 | 1543 |
| Boyce, William D., St. Louis, Mo. Fire-box | 741,218 | Oct. 13 | 1561 | 352 | 106 | 1600 |
| Boyce, William J. (See Robbins, Joseph H., assignor.) | | | | | | |
| Boyd, Bertran K., Bancroft, Mich. Folding crate | 735,939 | Aug. 11 | 1728 | 369 | 105 | 1369 |
| Boyd, Bertron K. (See Symes and Boyd.) | | | | | | |
| Boyd, David P. and L. F., Toledo, Ohio. Action for stringed musical instruments | 719,641 | Feb. 3 | 411 | 94 | 102 | 908 |
| Boyd, George W., Washington, D. C. Device for holding and displaying goods | 736,813 | Aug. 18 | 3332 | 738 | 105 | 1724 |
| Boyd, George W., assignor of one-half to J. O. Low and L. M. Bourband, San Francisco, Cal. Hydrocarbon-burner | 740,082 | Sept. 29 | 4899 | 1098<br>1099 | 106 | 1114 |
| Boyd, Hugh, assignor to R. W. Smith, Downey, Iowa. Dumping end-gate | 723,815 | Mar. 31 | 4005 | 903 | 103 | 900 |
| Boyd, Jefferson and J. D., Enon, assignors of one-third to J. F. Mulford, Bismarck, Miss. Fertilizer-distributer | 748,343 | Dec. 29 | 5625 | 1282 | 107 | 2412 |
| Boyd, Jesse C., assignor of one-third to J. N. M. Garten, Rushville, Ind. Vehicle running-gear | 747,531 | Dec. 22 | 4093 | 919 | 107 | 2053 |
| Boyd, John A., Webster, Pa. Wrench | 722,483 | Mar. 10 | 1554 | 341 | 103 | 348 |
| Boyd, John D. (See Boyd, Jefferson and J. D.) | | | | | | |
| Boyd, John L., St. Louis, Mo. Adjustment for metallic window sashes and frames | 721,498 | Feb. 24 | 3915 | 890 | 102 | 1696 |
| Boyd, Leander F. (See Boyd, David P. and L. F.) | | | | | | |
| Boyd, Robert R., Memphis, Tenn. Apparatus for treating cotton-waste | 743,813 | Nov. 10 | 1990 | 423 | 107 | 440 |
| Boyd, Robert R., Memphis, Tenn. Treating cotton-waste | 743,814 | Nov. 10 | 1994 | 423 | 107 | 441 |
| Boyd, Rosa H., Seattle, Wash. Plastic composition | 744,997 | Nov. 24 | 4220 | ..... | 107 | 945 |
| Boydston, Luke S. (See Hellums and Boydston.) | | | | | | |
| Boye, James H., Minneapolis, Minn. Needle-case | 747,368 | Dec. 22 | 3807 | 857 | 107 | 1988 |
| Boyer, Addison J., *et al.* (See Warner, Isaac M., assignor.) | | | | | | |
| Boyer, Allen, Penns Creek, Pa. Open-air furnace | 746,276 | Dec. 8 | 1771 | 402 | 107 | 1497 |
| Boyer, Samuel R., Cleveland, Ohio. Milling-machine | 726,248 | Apr. 28 | 3358 | 762 | 103 | 1924 |
| Boyer, William C. F. (See Nageldinger, John, assignor.) | | | | | | |
| Boykin, Claud W., assignor of one-half to E. P. Simmons, Corinth, Miss. Barrel-head-doweling machine | 743,440 | Nov. 10 | 1283 | 263 | 107 | 289 |
| Boykin, Claud W., assignor of one-half to E. P. Simmons, Corinth, Miss. Vehicle-wheel | 743,815 | Nov. 10 | 1997 | 423 | 107 | 442 |
| Boylan, Aaron F., and E. C. Chamberlin, Denison, Iowa. Watchmaker's pliers | 747,852 | Dec. 22 | 4685 | 1059 | 107 | 2188 |
| Boylan, John B., Jr., Peoria, Ill. Device for exterminating rodents | 721,535 | Feb. 24 | 3977 | 906 | 102 | 1710 |
| Boylan, Joseph, Bradford, England. Feeding mechanism | 730,602 | June 9 | 1972 | 438 | 104 | 1552 |
| Boylan, Tell E. (See Utterback, Joseph A., assignor.) | | | | | | |
| Boyle, Barney J. (See Stults, William H., assignor.) | | | | | | |
| Boyle, Charles W., assignor of one-half to G. O. Cole, Grand Rapids, Mich. Machine for making sand or chemical brick | 742,574 | Oct. 27 | 4223 | 951 | 106 | 2184 |
| Boyle, Hugh C., and J. Maum, Elizabeth, N. J. Wire-cover | 737,328 | Aug. 25 | 4203 | 954 | 105 | 1946 |
| Boyle, Hugh C., and J. Maum, Elizabeth, N. J. Envelop for coiled wire | 739,644 | Sept. 22 | 4060 | 905 | 106 | 917 |
| Boyle, Hugh C., and J. Maum, Elizabeth, N. J. Wire-cover | 744,467 | Nov. 17 | 3277 | 703 | 107 | 730 |
| Boyle, Hugh C., and J. Maum, Elizabeth, N. J. Wire-coverer | 746,447 | Dec. 8 | 2067 | 476 | 107 | 1560 |
| Boyle, James L., and H. E. Brett, Los Angeles, Cal.; said Brett assignor to said Boyle. Machine for perforating cylinders | 747,582 | Dec. 22 | 4171 | 938 | 107 | 2071 |
| Boyle, James L., and H. E. Brett, Los Angeles, Cal.; said Brett assignor to said Boyle. Producing cylindrical bodies | 747,583 | Dec. 22 | 4175 | 939 | 107 | 2072 |
| Boyle, John, New York, N. Y. Buttonhole substitute | 721,419 | Feb. 24 | 3773 | 857 | 102 | 1667 |
| Boyle, John L., Harrisburg, Oreg. Sack-sewing machine | 729,724 | June 2 | 373 | 84, 85 | 104 | 1204 |
| Boyle, Thomas L., Ogden, Utah. Motor-vehicle | 727,276 | May 5 | 848 | 182 | 104 | 182 |
| Boyle, William H., Oswego, N. Y. Ash-sifter | 737,699 | Sept. 1 | 254 | 54 | 106 | 58 |
| Boyles, David S., Walnutcove, N. C. Clothes-pin | 723,130 | Mar. 17 | 2733 | 613 | 103 | 609 |
| Boynton, Alonzo R. (See Bundy and Boynton.) | | | | | | |
| Boynton, Alonzo R., Binghamton, N. Y., assignor to Bundy Manufacturing Company. Calculating-machine | 745,144 | Nov. 24 | 4528 | 980<br>981<br>982<br>983<br>984 | 107 | 1010 |
| Boynton, Alonzo R., Binghamton, N. Y., assignor to Bundy Manufacturing Company. Printing-machine | 745,145 | Nov. 24 | 4542 | 984<br>985<br>986<br>987<br>988 | 107 | 1011 |
| Boynton, Alonzo R., Binghamton, N. Y., assignor to Bundy Manufacturing Company. Attachment for calculating, printing, or analogous machines | 748,158 | Dec. 29 | 5312 | 1206<br>1207 | 107 | 2346 |
| Boynton, Eben M., West Newbury, Mass. Embankment-protector | 722,445 | Mar. 10 | 1474 | 325 | 103 | 330 |
| Boynton, Edward C., Newburgh, N. Y. Electric railway | 732,512 | June 30 | 5590 | 1238 | 104 | 2351 |
| Boynton, Frank D., Ithaca, N. Y. Complete school-record card | 742,827 | Nov. 3 | 20 | 4 | 107 | 7 |
| Boynton Furnace Company. (See Marshall, Rouse, and Kniffin, assignors.) | | | | | | |
| Boynton, James D. (See Mack, Charles E., assignor.) | | | | | | |
| Boyte, Eli C. (See Huffstickler, Noah G., assignor.) | | | | | | |
| Bozarth, George S., Creston, Iowa. Sunshade attachment for vehicles | 722,803 | Mar. 17 | 2164 | 483 | 103 | 492 |
| Bozell, John E., Anderson, Ind. Brake for railway-cars | 723,642 | Mar. 24 | 3701 | 829 | 103 | 818 |
| Brabant, Charles C., Alpena, Mich. Beet-root cutter | 743,683 | Nov. 10 | 1752 | 369 | 107 | 390 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | Spec. | Drg. | Vol. | Page. |
| Brabson, Tom, assignor to Fulton Brass & Manufacturing Company, Brooklyn, N. Y. Gas-lamp | 736,681 | Aug. 18 | 3086 | 680<br>681 | 105 | 1673 |
| Brace, Edson, St. Louis, Mo. Apparatus for removing bars and shoals | 723,131 | Mar. 17 | 2734 | 614 | 103 | 609 |
| Brach, Isidor, Philadelphia, Pa. Cigar mold and lifter | 740,6[illegible] | Oct. 6 | 464 | 102 | 106 | 1346 |
| Brachhausen, Gustav A., assignor to Regina Music Box Company, Rahway, N. J. Automatic mechanical musical instrument | 723,237 | Mar. 24 | 2944 | 660<br>661 | 103 | 668 |
| Brachhausen, Gustav A., assignor to Regina Music Box Company, Rahway, N. J. Stop-mechanism for music-boxes | 723,578 | Mar. 24 | 3588 | 801<br>802 | 103 | 794 |
| Brachhausen, Gustav A., assignor to Regina Music Box Company, Rahway, N. J. Indicating device for music-boxes | 725,666 | Apr. 21 | 2333 | 526<br>527 | 103 | 1693 |
| Brachhausen, Gustav A., assignor to Regina Music Box Company, Rahway, N. J. Gas-check | 726,249 | Apr. 28 | 3760 | 763 | 103 | 1924 |
| Brachhausen, Gustav A., assignor to Regina Music Box Company, Rahway, N. J. Gas-check | 733,618 | July 14 | 1643 | 589 | 105 | 365 |
| Brachhausen, Gustav A., assignor to Regina Music Box Company, Rahway, N. J. Gas-cock | 734,505 | July 28 | 3341 | 782 | 105 | 754 |
| Brackbill, Christian E., assignor of two-thirds to W. D. and F. Detweiler, Penrose, Ill. Display-rack | 722,279 | Mar. 10 | 1167 | 257<br>258 | 103 | 263 |
| Bracken, Howard W., assignor to Draper Company, Hopedale, Mass. Loom harness-frame | 719,080 | Jan. 27 | 2969 | 663 | 102 | 674 |
| Bracken, Howard W., assignor to Draper Company, Hopedale, Mass. Protector mechanism for looms | 729,039 | May 26 | 4166 | 923 | 104 | 934 |
| Brackett, Charles A., Newtonville, Mass. Box for bottles, candy-boxes, &c | 718,081 | Jan. 13 | 1056 | 235 | 102 | 242 |
| Brackett, David W. (See Garrison and Brackett.) | | | | | | |
| Brackett, Winfred A., Boston, Mass. Window | 730,867 | June 16 | 2423 | 536 | 104 | 1667 |
| Brackin, George W., Philadelphia, Pa. Countersink | 727,580 | May 12 | 1420 | 319 | 104 | 324 |
| Bracklo, Hermann, New York, N. Y. Fire-escape and ladder | 719,990 | Feb. 10 | 1042 | 243 | 102 | 1060 |
| Bracklow, Carl G., H. G. E. Timm, and H. Bünz, Neuminster, Germany. Smoke-consuming apparatus for furnaces or boilers | 731,015 | June 16 | 2729 | 608 | 104 | 1730 |
| Bracklow, Richard M., Washington, D. C. Lamp-stove | 741,105 | Oct. 13 | 1332 | 305 | 106 | 1551 |
| Bradbury, Benjamin F., Castile, Pa. Cream-separator | 744,023 | Nov. 17 | 2431 | 522 | 107 | 549 |
| Bradbury, Robert E., Roberts, Ill. Umbrella-holder | 735,454 | Aug. 4 | 809 | 172 | 105 | 1152 |
| Bradbury, Roderick S., Buglawton, Congleton, England. Game | 731,850 | June 23 | 4285 | 954 | 104 | 2067 |
| Bradbury, William H., assignor of one-half to T. J. Kirkpatrick, Springfield, Ohio. Knapsack | 747,681 | Dec. 22 | 4363 | 985<br>986 | 107 | 2113 |
| Braddock, Edward I., Winchester, Mass. Composite tire for wheels | 722,804 | Mar. 17 | 2165 | 483 | 103 | 492 |
| Braddock, Edward I., Winchester, assignor to H. W. Lamb, Brookline, and D. A. Ritchie, Cambridge, Mass. Mandrel | 718,082 | Jan. 13 | 1057 | 235 | 102 | 242 |
| Braddock, Isaac A., Haddonfield, N. J. Subaqueous tunnel | 725,029 | Apr. 14 | 1140 | 257<br>258 | 103 | 1428 |
| Braden, John B. (See Irvine and Braden.) | | | | | | |
| Braden, Stanley M., Oakpark, Ill. Automatic lock for facing-point switches | 740,223 | Sept. 29 | 5160 | 1159 | 106 | 1168 |
| Bradfield, Mason, Los Angeles, Cal. Fall-rope carrier | 723,816 | Mar. 31 | 4006 | 903 | 103 | 901 |
| Bradford, Chester. (See Hood and Bradford.) | | | | | | |
| Bradford, Chester, Indianapolis, Ind. Grain elevator and weigher | 732,335 | June 30 | 5231 | 1161 | 104 | 2277 |
| Bradford, Chester, Indianapolis, Ind. Pneumatic elevator | 747,124 | Dec. 15 | 3334 | 758 | 107 | 1869 |
| Bradford, John A., Cripplecreek, Colo. Machine for reducing the width of window-shades and rollers | 723,358 | Mar. 24 | 3184 | 716 | 103 | 713 |
| Bradford, John T., and A. R. Gordon, Toledo, Ohio. Oil-pump | 740,738 | Oct. 6 | 656 | 148 | 106 | 1387 |
| Bradford Machine Tool Company. (See Donaldson, William, assignor.) | | | | | | |
| Bradford, William D. (See Klippelt, Jeffers, and Bradford.) | | | | | | |
| Bradley, Andrew J., New York, N. Y. Garment fastener | 735,653 | Aug. 4 | 1182 | 250 | 105 | 1232 |
| Bradley, Andrew J., New York, N. Y. Garment-fastener | 735,654 | Aug. 4 | 1184 | 250 | 105 | 1232 |
| Bradley, Andrew J., New York, N. Y. Garment-fastener | 735,655 | Aug. 4 | 1185 | 251 | 105 | 1233 |
| Bradley, Bernard F. (See Bradley and Pidgeon, assignors.) | | | | | | |
| Bradley, Carl D., *et al.* (See La Burt, John, assignor.) | | | | | | |
| Bradley, Carl D., *et al.* (See La Burt and Campbell, assignors.) | | | | | | |
| Bradley, Charles, Indianapolis, Ind. Pressman's tray | 738,980 | Sept. 15 | 2840 | 630 | 106 | 641 |
| Bradley, Charles S., Avon, N. Y. Utilization of liquefied air in the production of mechanical energy | 720,778 | Feb. 17 | 2540 | 585 | 102 | 1388 |
| Bradley, Charles S., New York, N. Y. Electric furnace | 723,643 | Mar. 24 | 3701 | 829<br>830 | 103 | 819 |
| Bradley, Charles S., New York, N. Y. Canal and power-generating system | 725,927 | Apr. 21 | 2796 | 634 | 103 | 1794 |
| Bradley, Charles S., Avon, N. Y., assignor to General Electric Company. Generating alternating currents | 718,083 | Jan. 13 | 1058 | 235 | 102 | 243 |
| Bradley, Charles S., Avon, N. Y., assignor to General Electric Company. Generating alternating currents | 718,084 | Jan. 13 | 1060 | 235 | 102 | 243 |
| Bradley, Charles S., Avon, N. Y., assignor to General Electric Company. Alternating-current induction-motor | 732,822 | July 7 | 231 | 58 | 105 | 52 |
| Bradley, Christopher C. (See Baldwin, Stephen W., assignor.) | | | | | | |
| Bradley, Christopher C., Syracuse, N. Y. Thill-coupling | 747,038 | Dec. 15 | 3166 | 725 | 107 | 1828 |
| Bradley, Christopher C., Syracuse, N. Y. Thill-coupling | 747,039 | Dec. 15 | 3167 | 726 | 107 | 1828 |
| Bradley, Christopher C., Syracuse, N. Y. Thill-coupling | 747,040 | Dec. 15 | 3168 | 726 | 107 | 1828 |
| Bradley, Christopher C., Syracuse, N. Y. Thill-coupling | 747,041 | Dec. 15 | 3169 | 726 | 107 | 1828 |
| Bradley, Christopher C., Syracuse, N. Y. Thill-coupling | 747,042 | Dec. 15 | 3170 | 726 | 107 | 1829 |
| Bradley, Edward E., assignor to Atwood-Morrison Company, Stonington, Conn. Spindle-driving mechanism | 724,080 | Mar. 31 | 4543 | 1022 | 103 | 1010 |
| Bradley, Edward E., assignor to Atwood-Morrison Company, Stonington, Conn. Combined spinning and twisting machine | 731,272 | June 16 | 3186 | 709<br>710 | 104 | 1821 |
| Bradley, Edward F., and W. R. Pidgeon, London, England, assignors to B. F. Bradley, New York, N. Y. Clutch | 739,255 | Sept. 15 | 3337 | 740<br>741 | 106 | 745 |
| Bradley, Edward R. (See Fletcher and Bradley.) | | | | | | |
| Bradley, George W. and W. H., Philadelphia, Pa.; said George W. Bradley assignor to said W. H. Bradley. Horseshoe | 740,623 | Oct. 6 | 465 | 102 | 106 | 1346 |
| Bradley, Henry L., New Haven, and F. W. Otis, Orange, Conn.; said Otis assignor to said Bradley. Tinning-machine | 746,000 | Dec. 8 | 1268 | 285 | 107 | 1387 |
| Bradley, Horace W., and H. Peace, Thrybergh, near Rotherham, England. Pipe-coupling | 731,538 | June 23 | 3723 | 829 | 104 | 1951 |
| Bradley & Hubbard Mfg. Co. (See Walker, Robert, assignor.) | | | | | | |
| Bradley, James T. (See Cooper and Bradley.) | | | | | | |
| Bradley, John C., and T. H. Gilbert, assignors to Pratt & Letchworth Company, Buffalo, N. Y. Machine for drawing patterns | 725,210 | Apr. 14 | 1478 | 336 | 103 | 1498 |
| Bradley, John M., and J. F. Senter, Birmingham, Ala. Steam-boiler | 728,847 | May 26 | 3830 | 853 | 104 | 867 |
| Bradley, John T., Littlefalls, N. Y. Shoemaker's measuring device | 723,236 | Mar. 24 | 2947 | 661 | 103 | 668 |
| Bradley, Lynde, assignor of one-half to S. Allen, Milwaukee, Wis. Electric-current controller | 723,817 | Mar. 31 | 4008 | 903<br>904 | 103 | 901 |
| Bradley, Robert, Minneapolis, Minn. Metal wheel | 747,369 | Dec. 22 | 3808 | 857 | 107 | 1988 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| Bradley, Robert D., Linchester, Md. Canned-goods-processing apparatus | 743,234 | Nov. 3 | 807 | 176 | 107 | 169 |
| Bradley, Robert D., assignor to Canton Rubber Company, Canton, Ohio. Water-bottle funnel-neck | 733,809 | July 14 | 2166 | 511 | 105 | 472 |
| Bradley, Royal H., assignor to Kelsey Heating Company, Syracuse, N. Y. Hot-air heater | 747,904 | Dec. 22 | 4791 | 1083 | 107 | 2210 |
| Bradley, Samuel T. H., New Orleans, La. Manufacture of bricks | 727,071 | May 5 | 481 | 103 | 104 | 105 |
| Bradley, Silas W., assignor to Canada Motor Bearing Company, Cornwall, Canada. Casting-machine | 738,880 | Sept. 15 | 2676 | 589 590 | 106 | 607 |
| Bradley, William, Sheffield, England. Construction of high-pressure water-taps | 728,848 | May 26 | 3833 | 853 | 104 | 868 |
| Bradley, William H. (See Bradley, George W. and W. H.) | | | | | | |
| Bradley, William H., Bellevue, Pa. Apparatus for burning fuel-gas | 735,337 | Aug. 4 | 570 | 116 | 105 | 1103 |
| Bradley, William H., Pittsfield, Mass. Feeding-gage for printing-presses | 745,318 | Dec. 1 | 11 | 2 | 107 | 1103 |
| Bradley, William W., assignor to Plume and Atwood Manufacturing Company, Waterbury, Conn. Adjustable wick-raiser | 733,132 | July 7 | 770 | 186 | 105 | 163 |
| Bradner, Hosea T. (See Johnson and Bradner.) | | | | | | |
| Bradshaw, Charles H. (See Foisy, Hyacinthe, assignor.) | | | | | | |
| Bradshaw, Charles H. (See Kimball, Frank C., assignor.) | | | | | | |
| Bradshaw, Hugh E., Holland, Mich. Chicken-brooder | 729,125 | May 26 | 4314 | 953 | 104 | 963 |
| Bradshaw, Ira J., assignor of one-half to J. J. Dietmeyer, Waukegan, Ill. Electrical annunciator for trolley-cars | 746,001 | Dec. 8 | 1275 | 286 | 107 | 1388 |
| Bradshaw, William B., Ennis, Tex. Plumb-level | 745,146 | Nov. 24 | 4557 | 988 | 107 | 1013 |
| Bradway, Frederick A., Monson, Mass. Water-motor | 729,917 | June 2 | 718 | 160 | 104 | 1275 |
| Brady, Everett S., Brooklyn, assignor of one-half to A. V. King, New York, N. Y. Straightway valve | 745,774 | Dec. 1 | 822 | 186 | 107 | 1274 |
| Brady, Francis W., Englewood, N. J., assignor to Electric Boat Company, New York, N. Y. Reciprocating-piston engine | 737,201 | Aug. 25 | 4039 | 895 896 | 105 | 1894 |
| Brady, Francis W., Englewood, N. J., assignor to Electric Boat Company, New York, N. Y. Automatic diving mechanism for submarine boats | 738,879 | Sept. 15 | 2672 | 588 589 | 106 | 606 |
| Brady, Francis W., Englewood, N. J., assignor to Electric Boat Company, New York, N. Y. Recreation submarine-boat device | 743,816 | Nov. 10 | 1998 | 424 | 107 | 442 |
| Brady, Frank, Denver, Colo. Railway-velocipede | 734,491 | July 21 | 3307 | 776 | 105 | 730 |
| Brady, George, Jackson, Mich. Machine for molding concrete blocks | 735,061 | Aug. 4 | 24 | 7, 8 | 105 | 986 |
| Brady, James, Brooklyn, assignor to H. R. Palmer, New York, N. Y., and L. S. Leason, Philadelphia, Pa. Metronome | 738,093 | Sept. 1 | 1058 | 235 | 106 | 229 |
| Brady, James N., Chicago, Ill. Changeable sign | 730,603 | June 9 | 1973 | 438 439 | 104 | 1552 |
| Brady, James P., Brooklyn, N. Y. Awl | 726,135 | Apr. 21 | 3143 | 710 | 103 | 1864 |
| Brady, James W., South Bend, Ind. Guide for planes | 729,725 | June 2 | 376 | 85 | 104 | 1205 |
| Brady, John, Philadelphia, Pa. Means for filtering, attemperating, and moistening or drying air | 727,581 | May 12 | 1421 | 319 | 104 | 324 |
| Brady, John A. (See Pfanstiehl, Pease, and Brady.) | | | | | | |
| Brady, John P., Baltimore, Md. Burial-casket | 727,277 | May 5 | 849 | 182 | 104 | 182 |
| Brady, Joseph H., Kansas City, Mo. Pneumatic signal | 725,402 | Apr. 14 | 1815 | 406 407 | 103 | 1569 |
| Brady, Joseph H., Kansas City, Mo. Urinal-trap | 730,227 | June 9 | 1279 | 283 | 104 | 1403 |
| Brady, Thomas H., New Britain, Conn. Sectional cover for boxes | 728,195 | May 19 | 2578 | 575 | 104 | 588 |
| Brady, William, San Francisco, Cal. Rock-drill | 740,800 | Oct. 6 | 783 | 176 177 | 106 | 1412 |
| Brady, William W., Rochester, assignor to T. P. Kelly, trustee, New York, N. Y. Agricultural implement | 728,535 | May 19 | 3228 | 716 | 104 | 724 |
| Bragg, Elbert S., Greenfield, Ind. Carpet stretcher and tacker | 738,520 | Sept. 8 | 1973 | 429 | 106 | 439 |
| Bragg, Isaac W., St. Joseph, Mo. Bell-ringer | 737,329 | Aug. 25 | 4294 | 954 | 105 | 1946 |
| Bragunier, Daniel H., Hagerstown, Md. Combined counter and bin | 739,581 | Sept. 22 | 3946 | 881 | 106 | 893 |
| Brainard, Omar L., Verdi, Nev. Tool-turret for lathes | 738,653 | Sept. 8 | 2215 | 484 | 106 | 491 |
| Braine, Bancroft G., New York, N. Y., assignor to Continuous Rail Joint Co. of America. Insulated joint for railway-rail joints | 731,016 | June 16 | 2730 | 608 | 104 | 1731 |
| Brainerd, George S., Boston, Mass. Steam-trap | 722,650 | Mar. 10 | 1836 | 410 | 103 | 411 |
| Braithwaite, James H., Barnsley, England. Variable-speed gearing | 719,732 | Feb. 3 | 580 | 130 131 | 102 | 944 |
| Brake, Alfred, Wellington, New Zealand. Apparatus for drawing off liquids | 725,211 | Apr. 14 | 1480 | 336 | 103 | 1498 |
| Brakeley, Asher. (See Brakeley, Joseph, assignor.) | | | | | | |
| Brakeley, Joseph, Freehold, assignor of one-half to A. Brakeley, Bordentown, N. J. Vine-harvesting machine | 747,314 | Dec. 15 | 3704 | 835 | 107 | 1949 |
| Brambach, Aloys, New York, N. Y., assignor to R. H. Lanyon, Chicago, Ill. Piano-tuner | 718,691 | Jan. 20 | 2235 | 489 | 102 | 506 |
| Bramlette, Andrew J., Downey, Cal. Clay-cutting sand-pump | 727,072 | May 5 | 485 | 103 | 104 | 106 |
| Brammer, James H., Hunters, assignor to himself, G. H. Starke and S. P. Hay, Edwall, Wash. Harvesting-machine | 745,035 | Nov. 24 | 4314 | 932 933 | 107 | 965 |
| Bramwell, Joseph W., Philadelphia, Pa. Cement-testing machine | 733,133 | July 7 | 772 | 187 | 105 | 163 |
| Bramwell, Joseph W., assignor to Falkenau-Sinclair Machine Company, Philadelphia, Pa. Briquet-mold | 726,136 | Apr. 21 | 3145 | 711 | 103 | 1865 |
| Branch, Joseph G., St. Louis, Mo. Hydrocarbon-burner | 722,202 | Mar. 10 | 1021 | 225 | 103 | 232 |
| Branch, Joseph G., St. Louis, Mo. Liquid-fuel burner | 724,253 | Mar. 31 | 4910 | 1099 | 103 | 1083 |
| Branch, Joseph G., St. Louis, Mo. Steam-trap | 724,254 | Mar. 31 | 4913 | 1099 | 103 | 1084 |
| Branche, Louis, Jr., Rosiere, N. Y. Speed-regulator for traction-engines | 721,005 | Feb. 17 | 2955 | 679 | 102 | 1474 |
| Brand, Bernhard, Braila, Roumania. Car-coupling | 720,398 | Feb. 10 | 1814 | 413 | 102 | 1223 |
| Brand, Bernhard, Braila, Roumania. Shoe for cloven-footed animals | 732,998 | July 7 | 527 | 131 | 105 | 113 |
| Brand, Charles F., Wheeling, W. Va. Hot-air heater | 746,002 | Dec. 8 | 1277 | 287 | 107 | 1389 |
| Brand, George, Brooklyn, N. Y. Spring-support for bed-bottoms | 725,030 | Apr. 14 | 1142 | 258 | 103 | 1429 |
| Brand, George, Brooklyn, N. Y. Supporting-spring for bed-bottoms | 725,031 | Apr. 14 | 1143 | 258 | 103 | 1429 |
| Brand, George, assignor to D. Frank, Brooklyn, and J. Trounstine, New York, N. Y. Corner-joint for bedsteads | 724,159 | Mar. 31 | 4705 | 1056 | 103 | 1043 |
| Brand, George and W., Cairo, Nebr. Trap-nest | 732,162 | June 30 | 4910 | 1092 | 104 | 2211 |
| Brand, Louis, Los Angeles, Cal. Non-refillable bottle | 734,039 | July 21 | 2467 | 576 | 105 | 554 |
| Brand, William. (See Brand, George and W.) | | | | | | |
| Brandes, Herman H., Corydon, Ky. Combined cane and whip | 741,219 | Oct. 13 | 1563 | 352 | 106 | 1600 |
| Brandes, Julius C., New York, N. Y. Office file-holder | 729,040 | May 26 | 4168 | 923 | 104 | 935 |
| Brandes, Theodore A. (See Stephenson, Miner A., assignor.) | | | | | | |
| Brandner, Frida, Brooklyn, N. Y. Producing beverages | 740,519 | Oct. 6 | 266 | ..... | 106 | 1302 |
| Brandner, Paul, Brooklyn, N. Y. Building-block | 729,535 | June 2 | 29 | 8 | 104 | 1133 |
| Brandon, James, New York, N. Y. Cotton-gin | 731,273 | June 16 | 3192 | 711 | 104 | 1822 |
| Brandon, James, New York, N. Y. Cotton-gin | 735,455 | Aug. 4 | 810 | 172 173 | 105 | 1153 |
| Brandon, James G., Charleston, Ill. Nut-lock | 733,808 | July 14 | 1983 | 466 | 105 | 436 |
| Brandstetter, Frank A. (See Doll and Brandstetter.) | | | | | | |
| Brandstetter, Joseph, Salem, Ohio. Tool-holder for lathes or planers | 741,449 | Oct. 13 | 2014 | 447 | 106 | 1695 |
| Brandt, August F. (See Brandt, Louis, Jr., and A. F.) | | | | | | |
| Brandt, Louis, Jr., and A. F., Spokane, Wash. Air-feeding apparatus for stoves | 748,472 | Dec. 29 | 5880 | 1336 | 107 | 2470 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Brandt, Max E., Gössnitz, Germany. Toy box of bricks | 725,032 | Apr. 14 | 1144 | 258 | 103 | 1429 |
| Brandt, Miriam, Baltimore, Md. Adjustable washbasin | 717,538 | Jan. 6 | 20 | 5,6 | 102 | 7 |
| Brandt, Winfield S., Binghamton, N. Y. Mechanism for the reduction of pyroligneous acids | 737,067 | Aug. 25 | 3801 | 842 | 105 | 1843 |
| Brandweiner, Adolf, Oetzsch, Germany. Photographic-diaphragm-adjusting mechanism | 738,654 | Sept. 8 | 2217 | 485 | 106 | 491 |
| Branfield, Wilfrid, Sheffield, England. File-cutting machine | 735,338 | Aug. 4 | 571 | 117 | 105 | 1103 |
| Branham, Alvin J., Springfield, Mo. Game | 738,401 | Sept. 8 | 1733 | 377 | 106 | 389 |
| Braniff, Henry, Berlin, Canada. Apparatus for the removal and dumping of spent tanbark | 741,300 | Oct. 13 | 1727 | 386 | 106 | 1631 |
| Branin, Mark H., Newark, N. J., assignor to General Electric Company. Adjustable vacuum-tube | 732,823 | July 7 | 233 | 59 | 105 | 52 |
| Bransfield, Michael T., Chicago, Ill. Horse-stock | 742,575 | Oct. 27 | 4225 | 952 | 106 | 2184 |
| Branson, Charley. (See Swallow, Fred, assignor.) | | | | | | |
| Branston, Frederick R. E. (See Bamforth and Branston.) | | | | | | |
| Brantley, Benjamin D., assignor to A. P. Brantley Company, Blackshear, Ga. Ginning cotton | 747,315 | Dec. 15 | 3706 | ------ | 107 | 1950 |
| Brantley, Henry J., Valdosta, Ga., and J. C. Brantley, Marksville, Miss. Liquid-measure | 727,278 | May 5 | 851 | 183 | 104 | 183 |
| Brantley, John C. (See Brantley, Henry J. and J. C.) | | | | | | |
| Brantley, Thomas, Albany, Ga. Cotton-gin brush | 732,999 | July 7 | 528 | 131 | 105 | 113 |
| Brantley, Thomas, assignor of one-half to A. J. Smith and J. H. Allen, Albany, Ga. Brush | 723,579 | Mar. 24 | 3590 | 802 | 103 | 795 |
| Brantley, Thomas, assignor of one-half to A. J. Smith and J. H. Allen, Albany, Ga. Brush for cotton-gins | 745,273 | Nov. 24 | 4786 | 1045 | 107 | 1062 |
| Brantner, Asa K., Mingo Junction, Ohio. Railway-switch | 721,141 | Feb. 24 | 3254 | {744 / 745 | {102 | 1561 |
| Brasel, Royal H., Muskogee, Ind. Ter. Arm-rest | 744,287 | Nov. 17 | 2951 | 631 | 107 | 660 |
| Brasington, John M., Bennettsville, S. C. Pea-threshing machine | 724,793 | Apr. 7 | 699 | 164 | 103 | 1318 |
| Brass, John F., Chicago, Ill. Automatic sprinkler system | 721,858 | Mar. 3 | 376 | 82 | 103 | 82 |
| Brassel, John H. (See McCann and Brassel.) | | | | | | |
| Brattlof, Carl E., Irvington, N. J. Socket-wrench | 737,902 | Sept. 1 | 692 | 148 | 106 | 152 |
| Brauburger, Ernst, Steglitz, assignor to Firm of P. Goerz, Friedenau, near Berlin, Germany. Shutter for photographic objectives | 738,402 | Sept. 8 | 1734 | 377 | 106 | 389 |
| Braucher, Edward F., Meyersdale, Pa. Dumping-wheelbarrow | 719,428 | Feb. 3 | 33 | 7 | 102 | 832 |
| Brauchli, Jacob, Hampton, Va. T and angle square | 717,534 | Jan. 6 | 22 | 6,7 | 102 | 7 |
| Braun, August K., New York, N. Y. Electric motor | 737,553 | Aug. 25 | 4711 | 1057 | 105 | 2041 |
| Braun, Carl A., and W. M. Scott, Cupertino, Cal. Fruit-packing apparatus | 718,308 | Jan. 13 | 1460 | 324 | 102 | 330 |
| Braun, Ferdinand, Strassburg, Germany. Wireless telegraphy | 743,056 | Nov. 3 | 460 | 100 | 107 | 95 |
| Braun, Ferdinand, Strassburg, Germany. Means for directing electric waves for use in wireless telegraphy | 744,897 | Nov. 24 | 4038 | 870 | 107 | 908 |
| Braun, Frederick W. (See Cary, Henry B., assignor.) | | | | | | |
| Braun, Johann L., Pittsburg, Pa. Brick | 729,918 | June 2 | 720 | {160 / 161 | {104 | 1275 |
| Braun, John, Waterbury, Conn. Decorative device | 732,513 | June 30 | 5593 | 1239 | 104 | 2351 |
| Braun, Robert, Kellogg, Minn. Combined heater and stock-feed cooker | 747,584 | Dec. 22 | 4177 | {939 / 940 | {107 | 2072 |
| Braund, Louis. (See Phelan and Braund.) | | | | | | |
| Braunsdorf, Julius E. (See Butts, Frederick P., assignor.) | | | | | | |
| Braunstein, Frederick W., Covington, Ky. Tile, &c., made of vitrified clay | 746,448 | Dec. 8 | 2068 | ------ | 107 | 1560 |
| Braxton, Elias L., Pactolus, N. C. Fertilizer-distributer | 721,142 | Feb. 24 | 3255 | 745 | 102 | 1561 |
| Bray, Annie E., Los Gatos, Cal. Jar-closure | 729,726 | June 2 | 377 | 85 | 104 | 1206 |
| Bray, Charles A., and F. C. Fry, Schenectady, N. Y., assignors to General Electric Company. Trolley-pole | 725,667 | Apr. 21 | 2334 | 527 | 103 | 1693 |
| Bray, Charles W. (See Phillips and Bray.) | | | | | | |
| Bray, Charles W., Pittsburg, Pa., assignor to American Tin Plate Company, Orange, N. J. Apparatus for rolling sheet and tin plate | 718,974 | Jan. 27 | 2764 | {618 / 619 | {102 | 631 |
| Bray, Charles W., Pittsburg, Pa., assignor to American Tin Plate Company, Orange, N. J. Furnace-feeding apparatus | 724,376 | Mar. 31 | 5145 | 1152 | 103 | 1133 |
| Bray, Charles W., Pittsburg, Pa., assignor to American Tin Plate Company, Orange, N. J. Furnace-feeding apparatus | 724,377 | Mar. 31 | 5147 | 1153 | 103 | 1133 |
| Bray, Charles W., Pittsburg, Pa., assignor to American Tin Plate Company, Orange, N. J. Apparatus for rolling plates or sheets | 728,849 | May 26 | 3835 | {853 / 854 | {104 | 868 |
| Bray, Charles W., Pittsburg, Pa., assignor to American Tin Plate Company, Orange, N. J. Roll heating and cooling apparatus | 737,571 | Sept. 1 | 25 | 5 | 106 | 9 |
| Bray, Everett K., and R. H. Seegar, Ocoee, Fla. Whiffletree-hook | 720,556 | Feb. 17 | 2132 | 493 | 102 | 1304 |
| Bray, John W., Leeds, England. Acetylene-burner | 717,535 | Jan. 6 | 23 | 7 | 102 | 8 |
| Bray, John W., Leeds, England. Means for packing double-jet acetylene-gas burners | 721,536 | Feb. 24 | 3979 | 907 | 102 | 1710 |
| Bray, Mellen, trustee. (See Rooney, Henry F., assignor.) | | | | | | |
| Bray, Stephen T. J., Moscow, Russia. Boiler | 737,903 | Sept. 1 | 693 | {148 / 149 | {106 | 152 |
| Bray, Thomas J., Jr., Pittsburg, Pa. Tube-handling apparatus | 721,006 | Feb. 17 | 2956 | 679 | 102 | 1475 |
| Bray, Thomas J., Jr., assignor of one-half to United Engineering and Foundry Company, Pittsburg, Pa. Tube-handling apparatus | 728,666 | May 19 | 3494 | 776 | 104 | 781 |
| Bray, William C., Newton, assignor to Tubular Rivet & Stud Company, Boston, Mass. Spacing mechanism | 743,684 | Nov. 10 | 1753 | 370 | 107 | 390 |
| Brayton, James T., Chicago, Ill. Sight for firearms | 727,073 | May 5 | 486 | 103 | 104 | 106 |
| Brazel, Peter B., Cheboygan, Mich. Snow-plow | 729,265 | May 26 | 4563 | {1007 / 1008 | {104 | 1016 |
| Brazell, David, Brunswick, Ga. Varnish and method of compounding | 732,514 | June 30 | 5594 | ------ | 104 | 2352 |
| Brazier, Henry B., Philadelphia, Pa. Universal coupling | 730,604 | June 9 | 1974 | 439 | 104 | 1552 |
| Brazier, Henry B., Philadelphia, Pa. Variable-speed mechanism | 735,456 | Aug. 4 | 813 | {173 / 174 | {105 | 1153 |
| Breakell, Thomas, Wirksworth, near Derby, England. Grinding and pulverizing mill | 733,574 | July 14 | 1574 | 374 | 105 | 351 |
| Breakell, Thomas, Wirksworth, England. Mortar and muller for grinding, crushing, and mixing ores, chemicals, &c | 745,416 | Dec. 1 | 192 | 43,44 | 107 | 1140 |
| Breakey, James. (See Low and Breakey.) | | | | | | |
| Breast, Archibald A., Columbus, Miss. Trace-carrier | 744,161 | Nov. 17 | 2696 | 575 | 107 | 603 |
| Brecher, Adolf. (See Jung and Kittel, assignors.) | | | | | | |
| Breckenridge, David. (See Eilrich and Breckenridge.) | | | | | | |
| Breckenridge, John C., *et al.* (See Crist, George J., assignor.) | | | | | | |
| Bredahl, Samuel, Powhattan, Kans. Plow-handle | 746,003 | Dec. 8 | 1279 | 287 | 107 | 1389 |
| Bredahl, Samuel, assignor of one-fourth to A. D. Batty, Powhattan, Kans. Stove | 741,220 | Oct. 13 | 1564 | 353 | 106 | 1600 |
| Breed, George P., and E. L. Hawn, Rockelm, Wis. Traction-wheel | 723,132 | Mar. 17 | 2735 | 614 | 103 | 609 |
| Breed, George P., Rockelm, and E. L. Hawn, Olivet, Wis. Rotary engine | 728,536 | May 19 | 3229 | {716 / 717 | {104 | 724 |
| Breen, Cornelius M., assignor of one-half to W. F. Prendergast, New York, N. Y. Test-trap or seal | 745,319 | Dec. 1 | 12 | 3 | 107 | 1103 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|
| | | | Spec. | Dr'g. | Vol. | Page. |
| Breen, Thomas E. (See Dexter and Breen.) | | | | | | |
| Breese, Charles P., Norfolk, Va., assignor to Hall Signal Company. Trolley circuit-breaker | 733,619 | July 14 | 1645 | 389 | 105 | 365 |
| Brehm, Frederick W., assignor to Gundlach Optical Company, Rochester, N. Y. Photographic camera | 744,024 | Nov. 17 | 2433 | 522 | 107 | 549 |
| Breidenstein, Charles F., assignor to C. H. Kewell, San Francisco, Cal. Fishing-spoon | 728,360 | May 19 | 2914 | 643 | 104 | 658 |
| Breiding, Henry, Sterling, Ill. Holdback for vehicles | 738,286 | Sept. 8 | 1488 | 322 | 106 | 335 |
| Breiding, Henry, Sterling, Ill. Shaft-coupling | 745,714 | Dec. 1 | 720 | 165 | 107 | 1251 |
| Breisch, Millie E. (See Mintzer, Harry H., assignor.) | | | | | | |
| Breitenmoser, Louis, Napoleonville, La. Violin-piano | 746,004 | Dec. 8 | 1281 | 287 | 107 | 1390 |
| Breitwiser, J. Edison, Springfield, Ohio. Ball-bearing mechanism | 725,403 | Apr. 14 | 1820 | 407 | 103 | 1569 |
| Bremberg, Axel. (See Holmström and Bremberg.) | | | | | | |
| Bremer, Carl A. G., assignor to G. E. Stoop, Hamburg, Germany. Hook provided with counting mechanism | 748,473 | Dec. 29 | 5881 | 1337 | 107 | 2470 |
| Bremer, Caroline, Davenport, Iowa. Combined waist-brace and belt-holder | 743,235 | Nov. 3 | 808 | 176 | 107 | 169 |
| Bremer, Hugo, Neheim, Germany. Electrode for arc-lamps | 743,236 | Nov. 3 | 808 | 177 | 107 | 169 |
| Bremer, Hugo, Neheim, Germany. Electric-arc lamp | 743,237 | Nov. 3 | 810 | 177 | 107 | 169 |
| Bremer, Hugo, Neheim, Germany. Electric-arc lamp | 743,238 | Nov. 3 | 813 | 177 | 107 | 169 |
| Bremer, Hugo, Neheim, Germany. Electric-arc lamp | 743,239 | Nov. 3 | 815 | 178 | 107 | 170 |
| Bremer, Hugo, Neheim, Germany. Electric-arc lamp | 743,240 | Nov. 3 | 816 | 178 | 107 | 170 |
| Bremer, Hugo, Neheim, Germany. Electric-arc lamp | 743,241 | Nov. 3 | 818 | 178 | 107 | 170 |
| Bremer, Otto A., Burlington, Iowa. Automatic alarm for cotton-feeders | 744,468 | Nov. 17 | 3277 | 703<br>704 | 107 | 730 |
| Bremer, Wilhelm, Emden, near Erxleben, Germany. Tiles for ceilings | 733,134 | July 7 | 775 | 187<br>188 | 105 | 164 |
| Brenckle, Arthur C. (See Anger and Brenckle.) | | | | | | |
| Brendlinger, Joseph E., *et al.* (See Stout, George H., assignor.) | | | | | | |
| Breneman, Herbert N. (See Edwards, Wisch, and Breneman.) | | | | | | |
| Brengel, Andrew A., Jersey City, N. J. Combined cap and truck for flagstaffs | 723,580 | Mar. 24 | 3591 | 802 | 103 | 795 |
| Brennan, Edward J., St. Paul, Minn. Track-laying machine | 735,457 | Aug. 4 | 818 | 174 | 105 | 1154 |
| Brennan, Henry H., New York, N. Y. Musical instrument | 729,041 | May 26 | 4170 | 923 | 104 | 935 |
| Brennan, James N., Newark, N. J. Joint and pipe support | 746,277 | Dec. 8 | 1772 | 403 | 107 | 1497 |
| Brennan, John, Brookline, Mass. Electric-car bunter | 732,041 | June 30 | 4661 | 1041 | 104 | 2160 |
| Brennan, Lawrence E. (See Dayton and Brennan.) | | | | | | |
| Brennan, Louis, Gillingham, England. Reducing-valve | 721,499 | Feb. 24 | 3915 | 891 | 102 | 1696 |
| Brennan, Martin J., Fortyfort, Pa. Coal-chute | 741,450 | Oct. 13 | 2015 | 447<br>448 | 106 | 1696 |
| Brennan, Patrick H., Syracuse, N. Y. Carbureter for gas-engines | 746,449 | Dec. 8 | 2069 | 477 | 107 | 1560 |
| Brennan, William J. (See Englen, Frederick J., assignor.) | | | | | | |
| Brenner, Henry C. (See Sanguinet, Edward A., assignor.) | | | | | | |
| Brent, Edwin, Newark, N. J. Door-hanger | 743,141 | Nov. 3 | 619 | 134 | 107 | 129 |
| Brenzinger, Adam, New York, N. Y. Dumping-cart | 729,266 | May 26 | 4565 | 1008 | 104 | 1016 |
| Breslin, Denis F., Johannesburg, Transvaal. Dredging apparatus | 739,382 | Sept. 22 | 3564 | 796<br>797 | 106 | 809 |
| Bresman, John, assignor of one-fourth to J. F. Wilcox, Minneapolis, Minn. Cutter-head | 743,374 | Nov. 3 | 1104 | 235 | 107 | 234 |
| Bresnahan, Maurice V. (See Heys, John J., assignor.) | | | | | | |
| Bressensdorf, Felix von. (See Rudometoff, Michael, assignor.) | | | | | | |
| Brett, George E., Philadelphia, Pa. Automatic bridge for electrical loop-lines | 734,456 | July 21 | 3242 | 763 | 105 | 718 |
| Brett, Henry E. (See Boyle and Brett.) | | | | | | |
| Brett, Henry E., Los Angeles, Cal. Conveyer | 724,540 | Apr. 7 | 221 | 54, 55 | 103 | 1217 |
| Bretteville, Alexander de, San Francisco, Cal. Feed-water heater and filter | 724,661 | Apr. 7 | 449 | 109 | 103 | 1265 |
| Brewer, Benjamin B., and W. M. H. Burfeind, San Francisco, Cal. Apparatus for swaging gold crowns. (Reissue) | 12,143 | Aug. 11 | 2426 | 530 | 105 | 1520 |
| Brewer, C. C. (See Williams, George M., assignor.) | | | | | | |
| Brewer, Charles A., Chicago, Ill. Vending-machine | 739,979 | Sept. 29 | 4712 | 1060 | 106 | 1073 |
| Brewer, Frank A., Jr., and Frank A., Sr., Watsonville, Cal. Riveting device for dental bridgework | 743,817 | Nov. 10 | 1999 | 424 | 107 | 442 |
| Brewer, Frederick L., Chicago, Ill. Door-operating appliance | 720,399 | Feb. 10 | 1815 | 413 | 102 | 1223 |
| Brewer, Joel L. (See Nesmith and Brewer.) | | | | | | |
| Brewer, John M., Cleburne, Tex. Cultivator attachment | 717,733 | Jan. 6 | 398 | 93 | 102 | 87 |
| Brewer, William M., and C. A. Archer, Warren, Ohio. Railway-rail joint | 728,196 | May 19 | 2579 | 575 | 104 | 588 |
| Brewington, Henry S. (See Stineman, William H. H., assignor.) | | | | | | |
| Brewington, Henry S., Baltimore, Md. Bottle-stopper | 724,794 | Apr. 7 | 705 | 165 | 103 | 1320 |
| Brewington, Henry S., Baltimore, Md. Bottle-seal | 730,812 | June 9 | 2320 | 515 | 104 | 1625 |
| Brewington, Henry S., Baltimore, Md. Bottle-cap | 733,352 | July 7 | 1171 | 277 | 105 | 246 |
| Brewington, Henry S., Baltimore, Md., assignor of one-half to W. F. Seim. Bottle-washer | 723,818 | Mar. 31 | 4012 | 904 | 103 | 902 |
| Brewington, Henry S., Baltimore, Md., assignor to Alma Button Company of Baltimore City. Garment-hook | 724,541 | Apr. 7 | 226 | 55 | 103 | 1218 |
| Brewster, F. G., *et al.* (See Scruggs, Robert C., assignor.) | | | | | | |
| Brewster, John O. (See Walder and Schaffer, assignors.) | | | | | | |
| Brewster, William N., *et al.* (See Ding Cie Sui, assignor.) | | | | | | |
| Breyer, Friedrich, Kogel, Austria-Hungary. Softening water | 717,536 | Jan. 6 | 24 | ..... | 102 | 8 |
| Breyer, Friedrich, Kogel, near Sieghartskirchen, Austria-Hungary. Making sugar from beets | 718,692 | Jan. 20 | 2237 | ..... | 102 | 507 |
| Breymann, George H. (See Little, Breymann, and Shaw.) | | | | | | |
| Brice, Edward C., Colwyn, Pa. Roasting-furnace | 736,929 | Aug. 25 | 3556 | 789 | 105 | 1790 |
| Brice, Edward C., Colwyn, Pa. Furnace | 744,954 | Nov. 24 | 4151 | 897 | 107 | 931 |
| Brice, Seth, Unionville, Mo. Regulating attachment for windmills | 740,224 | Sept. 29 | 5162 | 1159<br>1160 | 106 | 1168 |
| Brichaux, Arthur, Brussels, Belgium, assignor to Solvay Process Company, Syracuse, N. Y. Electrolytic process | 738,094 | Sept. 1 | 1064 | 235 | 106 | 230 |
| Bricker, Edward J. (See Michaud and Bricker.) | | | | | | |
| Briden, Samuel J., Brooklyn, N. Y., assignor to Mergenthaler Linotype Company. Linotype-machine | 726,019 | Apr. 21 | 2948 | 670 | 103 | 1824 |
| Bridge, Homer E., Hazardville, Conn. Rotary steam-engine | 735,203 | Aug. 4 | 330 | 64 | 105 | 1051 |
| Bridge, John A., Wall Station, Pa. Rail-joint | 747,125 | Dec. 15 | 3336 | 758 | 107 | 1870 |
| Bridgeport Brass Company. (See Stapley, William S., assignor.) | | | | | | |
| Bridger, Herbert K., London, and G. H. Scetrini, Stratford, England; said Scetrini assignor to said Bridger. Shoe-sewing machine | 748,044 | Dec. 29 | 5093 | 1150<br>1151 | 107 | 2298 |
| Bridges, George H. (See Parsons, Frank, assignor.) | | | | | | |
| Bridges, John S., Baltimore, Md. Moisture and rust trap for air-pipes | 732,042 | June 30 | 4662 | 1041 | 104 | 2160 |
| Bridges, Joseph A., San Francisco, Cal. Safety-clutch for elevators | 733,455 | July 14 | 1365 | 322 | 105 | 305 |
| Bridgewater, William. (See Hammond and Bridgewater.) | | | | | | |
| Briede, Otto, Benrath, Germany. Forging-machine | 741,301 | Oct. 13 | 1732 | 386<br>387 | 106 | 1632 |
| Briede, Otto, and H. W. Friderichsen, Benrath, near Dusseldorf, Germany. Trolley for traversing cranes | 719,558 | Feb. 3 | 265 | 61 | 102 | 879 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Briel, John S. and N. R., Brownsville, Pa. Trace-hitch | 737,068 | Aug. 25 | 3804 | 843 | 105 | 1843 |
| Briel, John S. and N. R., Brownsville, Pa. Rail-joint | 739,823 | Sept. 29 | 4396 | 986 | 106 | 1060 |
| Briel, Nicol R. (See Briel, John S. and N. R.) | | | | | | |
| Brierton, Charles W., Dixon, Ill. Feeder for corn-huskers | 746,005 | Dec. 8 | 1282 | 288 | 107 | 1390 |
| Brigel, Leo A., Cincinnati, Ohio. Bottom wheel for bucket or conveyer pumps | 728,850 | May 26 | 3837 | 855 | 104 | 869 |
| Briggs, Arthur J., Allegheny, Pa. Telephone-receiver holder | 720,889 | Feb. 17 | 2703 | 625 | 102 | 1422 |
| Briggs, Arthur J., Allegheny, Pa. Telephone-receiver holder | 729,267 | May 26 | 4567 | 1008 | 104 | 1017 |
| Briggs, Daniel, and S. H. Farnham, Brooklyn, assignors to Wyckoff, Seamans & Benedict, Ilion, N. Y. Type-writing machine | 719,300 | Jan. 27 | 3378 | 754, 755 | 102 | 759 |
| Briggs, Earl W., New York, N. Y. Copy-holding attachment | 740,520 | Oct. 6 | 266 | 53 | 106 | 1303 |
| Briggs, Edmund W., Clinton, Iowa. Well-boring machine | 747,126 | Dec. 15 | 3336 | 759 | 107 | 1870 |
| Briggs, Frank, Caro, Mich. Beet topper and puller | 722,484 | Mar. 10 | 1555 | 341 | 103 | 348 |
| Briggs, Frank, Torquay, England. Electric heater for liquids | 742,963 | Nov. 3 | 250 | 56 | 107 | 54 |
| Briggs, Frank J., Everett, assignor of one-third to G. F. Tarbell and H. A. Locke, Cambridge, Mass. Electrolytic apparatus | 727,889 | May 12 | 2644 | 448, 449 | 104 | 446 |
| Briggs, Franz S. (See Getz, Phares E., assignor.) | | | | | | |
| Briggs, Frederick J., Hounslow, England. Shackle | 733,575 | July 14 | 1575 | 335 | 105 | 351 |
| Briggs, George, Fargo, N. D. Bundle-loader | 730,605 | June 9 | 1975 | 439, 440 | 104 | 1552 |
| Briggs, Henry, Boston, Mass. Heel-nail | 223,819 | Mar. 31 | 4013 | 904 | 103 | 903 |
| Briggs, Isaac, Jr., Wakefield, England. Mule-spinning machinery | 718,419 | Jan. 13 | 1662 | 366, 367, 368 | 102 | 371 |
| Briggs, James, Idle, near Bradford, England. Scavengering-machine | 719,733 | Feb. 3 | 582 | 131 | 102 | 945 |
| Briggs, Jefferson S., Brooklyn, N. Y. Device for recording speed of vessels | 748,159 | Dec. 29 | 5314 | 1207 | 107 | 2346 |
| Briggs, Richmond B., assignor of one-half to L. W. Godfrey, North Adams, Mass. Miter-box | 744,677 | Nov. 17 | 3612 | 779 | 107 | 800 |
| Briggs, Warren R., Bridgeport, Conn. Latch for swinging shutters or blinds | 747,532 | Dec. 22 | 4095 | 919 | 107 | 2053 |
| Brigham, Albert H., Whitman, Mass. Apparatus for heading nails or tacks | 722,669 | Mar. 17 | 1914 | 426 | 103 | 441 |
| Brigham, Frank A., Rochester, N. Y. Snow-plow | 728,197 | May 19 | 2580 | 576 | 104 | 588 |
| Brigham, Isaac N., Cleveland, assignor A. Hoeffer, A. M. McCarty, and A. C. McDowell, Canton, Ohio. Dental chair | 725,033 | Apr. 14 | 1145 | 259 | 103 | 1429 |
| Brigham, Melville S., Hingham, Mass. Washer | 746,006 | Dec. 8 | 1283 | 288 | 107 | 1390 |
| Bright, Alvin J., assignor of one-half to L. Baker, Dayton, Ohio. Burial-vault | 718,420 | Jan. 13 | 1666 | 368 | 102 | 372 |
| Bright, Colonel E., *et al.* (See Dyarman, George W., assignor.) | | | | | | |
| Bright, F. S. (See Coon, Gustavus W., assignor.) | | | | | | |
| Bright, George E., Maplewood, N. J. Device for measuring irregular objects | 741,881 | Oct. 20 | 2856 | 638 | 106 | 1890 |
| Bright, William, Kimberly, Utah. Glass-tube water-gage for steam-boilers | 718,046 | Jan. 6 | 983 | 219 | 102 | 212 |
| Briigel, Charles A., Williamsport, Pa. Tube-bending machine | 740,803 | Oct. 6 | 790 | 178 | 106 | 1413 |
| Briley, Benjamin F., Bluff City, Kans. Saw-setting machine | 731,851 | June 23 | 4286 | 954 | 104 | 2067 |
| Brill, George M., Philadelphia, Pa. Semiconvertible car | 723,644 | Mar. 24 | 3703 | 830 | 103 | 819 |
| Brill, John A. (See Adams, Walter S., assignor.) | | | | | | |
| Brill, John A. (See Curwen, Samuel M., assignor.) | | | | | | |
| Brill, John A. (See Haddock, Henry E., assignor.) | | | | | | |
| Brill, John A. (See Hastings, George S., assignor.) | | | | | | |
| Brill, John A. (See Smith, Warren M., assignor.) | | | | | | |
| Brill, John A., Philadelphia, Pa. Car-truck | 728,792 | May 19 | 3713 | 828, 829 | 104 | 825 |
| Brill, John A., Philadelphia, Pa. Street-car | 734,253 | July 21 | 2872 | 672, 673, 674 | 105 | 641 |
| Brill, John A., Philadelphia, Pa. Street-car | 739,582 | Sept. 22 | 3947 | 881 | 106 | 893 |
| Brill, John A., and H. E. Haddock, Philadelphia, Pa.; said Haddock assignor to said Brill. Convertible car | 722,280 | Mar. 10 | 1168 | 258, 259 | 103 | 263 |
| Brill, John A., and W. S. Adams, Philadelphia, Pa.; said Adams assignor to said Brill. Car-truck | 739,802 | Sept. 22 | 4349 | 976, 977 | 106 | 982 |
| Brilliant Hydrocarbon Burner Company. (See McFarlane and Pushaw, assignors.) | | | | | | |
| Brillion Iron Works. (See Ariens and Thompson, assignors.) | | | | | | |
| Brimmer, John F., *et al.* (See Deal, William M., assignor.) | | | | | | |
| Brimmer, John F., *et al.* (See Rote, Charles V., assignor.) | | | | | | |
| Brindos, Ernest E., Canosia, Minn. Logging or tie-handling tongs | 727,379 | May 5 | 853 | 183 | 104 | 183 |
| Briner, Emil A., Philadelphia, Pa. Steam-generator | 718,815 | Jan. 20 | 2458 | 546 | 102 | 551 |
| Briner, Thomas J., Reading, Pa. Fishing-rod holder | 729,485 | May 26 | 4931 | 1092 | 104 | 1094 |
| Briner, Thomas J., assignor of one-half to T. D. Bausher, Reading, Pa. Tree-holder | 726,854 | May 5 | 33 | 8 | 104 | 10 |
| Brining, Frank P., Westgrove, Pa. Vehicle-tire | 719,179 | Jan. 27 | 3156 | 703 | 102 | 711 |
| Brink, Bengt A., Cushing, Wis. Saw-guide | 737,330 | Aug. 25 | 4295 | 954, 955 | 105 | 1946 |
| Brink, John L., Baldwin, Wis. Cane | 727,074 | May 5 | 486 | 104 | 104 | 107 |
| Brinkhaus, Hugo, Hamburg, Germany. Eyeglasses | 740,624 | Oct. 6 | 466 | 102 | 106 | 1346 |
| Brinkley, Thomas C., *et al.* (See Nunn, Alfred W., assignor.) | | | | | | |
| Brinkman, John J., Bakersfield, Cal. Well-tube perforator | 726,625 | Apr. 28 | 4116 | 929 | 103 | 2074 |
| Brinkmann, Albert, Philadelphia, Pa. Tongs | 738,154 | Sept. 8 | 1197 | 264 | 106 | 274 |
| Brinkmann, August H., Baltimore, Md. Asparagus-holder | 738,521 | Sept. 8 | 1974 | 429 | 106 | 439 |
| Brinkmann, Joseph. (See Ernst, Louis, assignor.) | | | | | | |
| Brinkmann, Joseph, Reading, Ohio. Game apparatus | 726,397 | Apr. 28 | 3657 | 829 | 103 | 1986 |
| Brintnell, Archibald H., Toronto, assignor to D. J. McKinnon, St. Catherines, Canada. Rubber cushion-tire for vehicles | 727,582 | May 12 | 1423 | 320 | 104 | 325 |
| Brinton & Co., H. (See Duemler, John C., assignor.) | | | | | | |
| Brinton, Francis D., Westchester, Pa. Puzzle or toy | 736,930 | Aug. 25 | 3558 | 789 | 105 | 1791 |
| Brinton, George H., Elwyn, Pa. Corkscrew and cork-holder | 723,581 | Mar. 24 | 3593 | 802 | 103 | 795 |
| Brinton, J. H. (See Davis, Herbert A., assignor.) | | | | | | |
| Brinton, Walter, Highbridge, N. J. Making stamp shoes or dies | 731,748 | June 23 | 4102 | 916 | 104 | 2026 |
| Briscoe, Louis T., Sandyhook, Conn. Neck-yoke attachment | 730,088 | June 2 | 1025 | 230 | 104 | 1336 |
| Briscoe Manufacturing Company. (See Puddefoot, Charles, assignor.) | | | | | | |
| Brisky, Dudley, Milltown, Ala. Hernial truss-pad | 718,421 | Jan. 13 | 1668 | 368 | 102 | 372 |
| Brislin, Andrew J., Brooklyn, N. Y. Railway-car appliance | 747,370 | Dec. 22 | 3809 | 857 | 107 | 1989 |
| Bristol Brass & Clock Company. (See Church, Walter A., assignor.) | | | | | | |
| Bristol Company. (See Bristol, William H. and E. H., assignors.) | | | | | | |
| Bristol, Edgar H. (See Bristol, William H. and E. H.) | | | | | | |
| Bristol, Henry D., Oceanside, N. Y. Means for checking separate accounts | 732,271 | June 30 | 5125 | 1139 | 104 | 2256 |
| Bristol, Horace F., and G. W. D. Upton, Springfield, Mass. Illuminated car-sign | 731,749 | June 23 | 4104 | 916 | 104 | 2026 |
| Bristol, William H., Hoboken, N. J., and E. H. Bristol, Naugatuck, assignors to Bristol Company, Waterbury, Conn. Thermostatic apparatus | 747,297 | Dec. 15 | 3668 | 828, 829 | 107 | 1941 |
| Bristol, William M., East Highlands, and G. F. Eberhard, assignors to Geo. F. Eberhard Company, San Francisco, Cal. Animal-trap | 721,537 | Feb. 24 | 3979 | 907 | 102 | 1711 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| Britain, Perry L., Busch, Okla. Ter. Building-block-molding machine | 741,451 | Oct. 13 | 2018 | 448<br>449 | 106 | 1696 |
| Britain, William, Jr., Muswell Hill, county of Middlesex, England. Apparatus for displaying advertisements | 726,250 | Apr. 28 | 3361 | 763 | 103 | 1925 |
| Britelite Lamp Company. (See Moreau, Eugene, assignor.) | | | | | | |
| British Charrier Wood Carving Company. (See Charrier, Leon C. H., assignor.) | | | | | | |
| British Mannesmann Tube Co. (See Williams, Charles, assignor.) | | | | | | |
| British Uralite Company. (See Friswell, Richard J., assignor.) | | | | | | |
| British Uralite Company. (See Salamon and Williams, assignors.) | | | | | | |
| Britsch, Otto C., Maspeth, assignor to D. Wald, New York, N. Y. Device for actuating and controlling electric motors | 728,537 | May 19 | 3234 | 717<br>718 | 104 | 724 |
| Brittan, Henry M., San Francisco, Cal., assignor to American Steel & Wire Company. Rope-socket swivel | 734,664 | July 28 | 3633 | 850 | 105 | 817 |
| Brittingham, Thomas W., Hampton, Va. Door-holder | 726,626 | Apr. 28 | 4118 | 929 | 103 | 2075 |
| Britton, Joseph A. (See Schleicher, John C., assignor.) | | | | | | |
| Britton, Lester B. (See Williams and Britton.) | | | | | | |
| Britton, William M., assignor of one-half to T. R. Clure, Columbus, Ohio. Internal-combustion engine | 748,045 | Dec. 29 | 5095 | 1151<br>1152 | 107 | 2298 |
| Britz, Frank, West Superior, Wis. Pipe-core machine | 722,670 | Mar. 17 | 1917 | 426 | 103 | 441 |
| Brixey, William R., Seymour, Conn. Vulcanized kerite compound | 728,851 | May 26 | 3838 | ..... | 104 | 869 |
| Brizard, Jules, Domène, France. Faucet | 732,824 | July 7 | 234 | 59 | 105 | 52 |
| Broad, William, assignor of one-half to W. J. Crawford, Beaverfalls, Pa. Electric toy motor | 746,278 | Dec. 8 | 1775 | 403 | 107 | 1498 |
| Broadbooks, Peter, Batavia, N. Y. Wire-working tool | 740,739 | Oct. 6 | 657 | 149 | 106 | 1388 |
| Broadfoot, Wm. J. (See Davidson, Martin B., assignor.) | | | | | | |
| Broadhurst, Ernest E., Brooklyn, N. Y. Polishing implement | 743,685 | Nov. 10 | 1756 | 370 | 107 | 391 |
| Broadhurst, Robert A., and W. Mitchell, Chicago, Ill. Sash-fastener | 738,766 | Sept. 15 | 2450 | 537 | 106 | 556 |
| Broadwell, Edward C. (See Lyons and Broadwell.) | | | | | | |
| Brobeck, David W. (See Peters, Harry S., assignor.) | | | | | | |
| Brocius, Harvey R., and T. A. Eshelman, Summerville, Pa. Flux | 728,079 | May 12 | 2367 | ..... | 104 | 521 |
| Brock, Charles W., Lynn, Mass., assignor to General Electric Company. Formed cutter | 733,311 | July 7 | 1091 | 260 | 105 | 230 |
| Brock, Erwin. (See Wittenberg, Brock, and Koch.) | | | | | | |
| Brock, Frederick E. A., assignor to Busy Bee Candy Company, St. Louis, Mo. Cream-whipping machine | 733,456 | July 14 | 1366 | 322 | 105 | 306 |
| Brock, Ira A., Monroe, Iowa. Jointed beam for cultivators | 745,478 | Dec. 1 | 320 | 75 | 107 | 1167 |
| Brock, John W. (See Small, Wily, assignor.) | | | | | | |
| Brock, Robert A., Springfield, Ohio. Street-car switch-operating mechanism | 721,279 | Feb. 24 | 3522 | 801 | 102 | 1615 |
| Brockett, Frank S., Pittsburg, Pa. Machine for surfacing plates or sheets | 741,001 | Oct. 6 | 1135 | 256 | 106 | 1487 |
| Brockett, Herbert W., Hamden, assignor of one-half to East Hampton Bell Company, East Hampton, Conn. Trolley-wheel | 747,371 | Dec. 22 | 3811 | 858 | 107 | 1989 |
| Brockmeyer, Ludwig, Onsnabrück, Germany. Vehicle-top | 721,007 | Feb. 17 | 2957 | 680 | 102 | 1475 |
| Brocksmith, John C., Chicago, Ill. Storage battery | 728,667 | May 19 | 3496 | 777 | 104 | 782 |
| Brockton Supply Company. (See Lyon, Harry, assignor.) | | | | | | |
| Brodbeck, Louis A. (See Weiglein and Brodbeck.) | | | | | | |
| Broderick & Bascom Rope Company. (See Brown, Edward A., assignor.) | | | | | | |
| Broderick, Robert, and F. W. Gordon, Cleveland, Ohio. Electric-arc lamp | 732,701 | July 7 | 20 | 5 | 105 | 7 |
| Brodie, Hugh, *et al.* (See Foley, James E., assignor.) | | | | | | |
| Brodin, Arvid, St. Joseph, Mo. Clasp for shaping hat or bonnet frames | 747,682 | Dec. 22 | 4366 | 986 | 107 | 2114 |
| Broenen, John, Milwaukee, Wis. Folding seat for carriages | 736,355 | Aug. 18 | 2460 | 538 | 105 | 1543 |
| Brogan, James A. (See Galbreath, Charles E., assignor.) | | | | | | |
| Brokenshire, John J., Chicago, Ill. Brush | 745,775 | Dec. 1 | 823 | 187 | 107 | 1274 |
| Bromberg, Samuel A., Richmond, Va. Eyeglass-guard | 732,080 | Mar. 3 | 776 | 174 | 103 | 167 |
| Bromberg, Samuel A., Richmond, Va. Hook and eye | 738,655 | Sept. 8 | 2220 | 486 | 106 | 492 |
| Bromhead, Samuel S., London, England. Tap valve or faucet | 721,500 | Feb. 24 | 3917 | 891 | 102 | 1696 |
| Bromley & Sons, John. (See Hanson, Charles H. L., assignor.) | | | | | | |
| Bronaugh, Joseph W., Jr., Manchester, Va. Lathe attachment | 742,576 | Oct. 27 | 4226 | 952<br>953 | 106 | 2184 |
| Bronder, Gaston A., Brooklyn, N. Y. Conveyer | 743,613 | Nov. 10 | 1640 | 344 | 107 | 366 |
| Bronnenkant, Joseph, Racine, Wis. Protecting device | 739,824 | Sept. 29 | 4397 | 986 | 106 | 1009 |
| Bronson, Adelbert E., Jr., assignor to Bronson-Walton Company, Cleveland, Ohio. Coffee-mill | 743,818 | Nov. 10 | 2001 | 425 | 107 | 442 |
| Bronson, Charles M., Labelle, Mo. Hoop or band for milk-crocks | 740,390 | Oct. 6 | 10 | 3 | 106 | 1246 |
| Bronson, Edward L. (See Campbell and Bronson.) | | | | | | |
| Bronson, George S., assignor to Homer D. Bronson Company, Beacon Falls, Conn. Hinge | 744,030 | Nov. 17 | 2440 | 524 | 107 | 551 |
| Bronson-Walton Company. (See Bronson, Adelbert E., Jr., assignor.) | | | | | | |
| Bronzefarbenwarke Aktiengesellschaft vormals Carl Schlenk. (See Huth, Karl, assignor.) | | | | | | |
| Brook Company. (See Neuberth, Franklin G., assignor.) | | | | | | |
| Brooke, Charles D., Coshocton, Ohio. Hypodermic needle | 722,203 | Mar. 10 | 1023 | 225 | 103 | 232 |
| Brooke, Henry J., Svendborg, Denmark. Ship's anchor | 721,663 | Mar. 3 | 23 | 4 | 103 | 7 |
| Brooke, Homer, Jersey City, N. J. Receptacle for containing molten material | 723,982 | Mar. 31 | 4352 | 977 | 103 | 974 |
| Brooke, Homer, Jersey City, N. J. Device for cutting molten material and distributing the same | 723,983 | Mar. 31 | 4355 | 978 | 103 | 974 |
| Brooke, Joseph V., Vancouver, Canada. Display-rack | 745,776 | Dec. 1 | 825 | 187 | 107 | 1274 |
| Brooke, Robert G., Macclesfield, England. Steam trap | 727,075 | May 5 | 487 | 104 | 104 | 107 |
| Brookfield, William B., Syracuse, N. Y. Manufacturing steel | 744,031 | Nov. 17 | 2442 | 524 | 107 | 551 |
| Brookfield, William B., Syracuse, N. Y. Manufacturing steel | 744,032 | Nov. 17 | 2443 | 525 | 107 | 551 |
| Brookfield, William B., Syracuse, N. Y. Manufacturing steel | 744,033 | Nov. 17 | 2444 | 525 | 107 | 552 |
| Brookfield, William B., Syracuse, N. Y. Manufacturing steel | 744,034 | Nov. 17 | 2445 | 525 | 107 | 552 |
| Brookfield, William B., Syracuse, N. Y. Manufacturing steel | 744,035 | Nov. 17 | 2447 | 525 | 107 | 552 |
| Brookfield, William B., Syracuse, N. Y. Manufacturing steel | 744,036 | Nov. 17 | 2449 | 526 | 107 | 553 |
| Brooks, Arthur A., Liverpool, England. Magazine-plate-changing apparatus for photographic cameras | 743,614 | Nov. 10 | 1643 | 344 | 107 | 367 |
| Brooks, Arthur A., and G. A. Watson, Liverpool, England. Sensitized plate for photographic cameras | 718,242 | Jan. 13 | 1337 | 296 | 102 | 302 |
| Brooks, Chapin C., Wilton, Me. Magazine bolt-gun | 726,251 | Apr. 28 | 3362 | 764 | 103 | 1925 |
| Brooks, Edward J., East Orange, N. J. Snap-seal | 719,642 | Feb. 3 | 412 | 94, 95 | 102 | 908 |
| Brooks, Edward J., East Orange, N. J. Snap-seal | 719,643 | Feb. 3 | 415 | 95 | 102 | 908 |
| Brooks, Edward J., East Orange, N. J. Ratchet seal-press | 727,890 | May 12 | 2020 | 449 | 104 | 447 |
| Brooks, Edward J., East Orange, N. J. Seal | 734,807 | July 28 | 3940 | 919 | 105 | 877 |
| Brooks, Edward J., East Orange, N. J. Snap-seal | 736,682 | Aug. 18 | 3089 | 681 | 105 | 1673 |
| Brooks, Emerson S., assignor of one-half to H. L. Hix, Frankfort, Ind. Commercial directory | 721,132 | Feb. 17 | 3229 | 739 | 102 | 1541 |
| Brooks, Enos A., Yonah, Ga. Plow | 731,017 | June 16 | 2731 | 608 | 104 | 1731 |

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| Brooks, Everett W., *et al.* (See Nistle, George W., assignor.) | | | | | | |
| Brooks, Everett W. (See Sharpneck, William S., assignor.) | | | | | | |
| Brooks, Everett W., Chicago, Ill. Centrifugal pump | 731,095 | June 16 | 2873 | 638 | 104 | 1761 |
| Brooks, Everett W., Chicago, Ill. Rotary pump | 735,339 | Aug. 4 | 572 | 117 | 105 | 1103 |
| Brooks, Everett W., Chicago, Ill. Electrical ignition device | 737,202 | Aug. 25 | 4041 | 896 | 105 | 1894 |
| Brooks, Franklin W., Washington, D. C. Sheet-metal seal | 745,036 | Nov. 24 | 4318 | 933 | 107 | 966 |
| Brooks, Franklin W., Washington, D. C. Seal-press | 748,474 | Dec. 29 | 5881 | 1337 | 107 | 2470 |
| Brooks, Frederick E., assignor to Brooks-Grant Roller Bearing Company, San Francisco, Cal. Roller-bearing | 741,008 | Oct. 13 | 1153 | 261 | 106 | 1512 |
| Brooks, George H., Louisville, Ky. Badge | 721,008 | Feb. 17 | 2958 | 680 | 102 | 1475 |
| Brooks-Grant Roller Bearing Company. (See Brooks, Frederick E., assignor.) | | | | | | |
| Brooks, Guss A., Covington, Ky. Controller for street or railway cars | 723,359 | Mar. 24 | 3186 | 716 | 103 | 714 |
| Brooks, Henry, Brooklyn, Ohio. Trace-support | 727,280 | May 5 | 854 | 183 | 104 | 183 |
| Brooks, Henry G., Marshall, Mich. Water-gage | 734,040 | July 21 | 2468 | 577 | 105 | 554 |
| Brooks, Henry K. (See Waddell and Brooks.) | | | | | | |
| Brooks, Henry K., New York, N. Y., assignor to United States Light & Heating Company, of New Jersey. Brush-holder | 746,450 | Dec. 8 | 2071 | 477 | 107 | 1561 |
| Brooks, Howard, Wheaton, Ill. Electric railway-signal | 741,955 | Oct. 20 | 3018 | 669 | 106 | 1924 |
| Brooks, Howard, assignor of two-thirds to G. W. Brown and J. C. Mastick, Wheaton, Ill. Electric terminal | 743,441 | Nov. 10 | 1285 | 264 | 107 | 290 |
| Brooks Improved Steam Valve Company. (See Kiernan, Thomas J., assignor.) | | | | | | |
| Brooks, James M., Clifton, Tex. Egg-preserving compound | 726,627 | Apr. 28 | 4121 | ..... | 103 | 2075 |
| Brooks, James M., Molena, Ga. Wheeled scraper | 744,856 | Nov. 24 | 3971 | 856, 857 | 107 | 894 |
| Brooks, Jesse W., Church Hill, Tex. Wire-reeling apparatus | 726,855 | May 5 | 35 | 8 | 104 | 10 |
| Brooks, Jesse W., Church Hill, Tex. Water-motor | 741,762 | Oct. 20 | 2648 | 592, 593 | 106 | 1845 |
| Brooks, John, Brockton, Mass. Disk cutter | 742,000 | Oct. 20 | 3117 | 695 | 106 | 1942 |
| Brooks, John C., Paterson, N. J., assignor to Draper Company, Hopedale, Mass. Loom | 731,274 | June 16 | 3195 | 711 | 104 | 1823 |
| Brooks, John C., Paterson, N. J., assignor, by mesne assignments, to Draper Company, Hopedale, Mass. Loom | 732,043 | June 30 | 4663 | 1042 | 104 | 2161 |
| Brooks, Joseph A., Warren, Ill. Treating metallic vessels | 720,660 | Feb. 17 | 2343 | 536 | 102 | 1345 |
| Brooks, Mott B., Rochester, N. Y. Truss | 736,356 | Aug. 18 | 2461 | 538 | 105 | 1543 |
| Brooks, Richards T., Swarthmore, assignor to Keystone Type Foundry, Philadelphia, Pa. Pen-clamp for ruling-machines | 747,127 | Dec. 15 | 3341 | 759 | 107 | 1871 |
| Brooks, Rufus W., Portsmouth, Va. Vehicle-tire | 727,076 | May 5 | 490 | 105 | 104 | 108 |
| Brooks, Stephen H., Cleveland, Ohio. Means or appliance for transmitting fluid under pressure | 726,628 | Apr. 28 | 4121 | 930 | 103 | 2075 |
| Brooks, William D., *et al.* (See Mount, Rolla, assignor.) | | | | | | |
| Brooks, William D., assignor of one-half to D. D. Mallory, Baltimore, Md. Can-making machine | 741,620 | Oct. 20 | 2369 | 530, 531 | 106 | 1786 |
| Brooks, William E. (See Glover, Herschel, assignor.) | | | | | | |
| Brooks, Williams B., Jr., assignor to Walter Baker and Company, Limited, Boston, Mass. Box | 747,932 | Dec. 29 | 4869 | 1099 | 107 | 2249 |
| Broomfield, Austin, Craigs, Miss. Harrow | 744,715 | Nov. 24 | 3727 | 805 | 107 | 843 |
| Brophy, John P., assignor to Cleveland Machine Screw Company, Cleveland, Ohio. Manufacturing engine-cranks | 718,422 | Jan. 13 | 1669 | 368 | 102 | 372 |
| Brophy, John P., assignor to Cleveland Machine Screw Company, Cleveland, Ohio. Speed-changing mechanism for automatic lathes | 735,701 | Aug. 11 | 1284 | 275 | 105 | 1271 |
| Brophy, Stephen. (See Deneal, Jackson, assignor.) | | | | | | |
| Bropson, James, Cleveland, Ohio. Roof-joint for vent-pipes | 730,089 | June 2 | 1026 | 230 | 104 | 1336 |
| Brosius, Herman, Milwaukee, Wis. Display-card | 721,143 | Feb. 24 | 3257 | 745, 746 | 102 | 1561 |
| Broste, Sigurd A., Sisseton, S. D. Bicycle-pump | 724,795 | Apr. 7 | 706 | 165 | 103 | 1320 |
| Brothem, Ralph J., Hendrum, Minn. Drill | 721,009 | Feb. 17 | 2959 | 680, 681 | 102 | 1475 |
| Brothers, Oliver, Hartland, Vt. Attachment for street-cleaning machines | 748,160 | Dec. 29 | 5316 | 1207, 1208 | 107 | 2347 |
| Brotherton, William, Peekskill, N. Y. Nut-lock | 731,427 | June 23 | 3500 | 781 | 104 | 1905 |
| Brott, Ernest E., Burlington, Kans. Eaves-trough hanger | 718,085 | Jan. 13 | 1061 | 236 | 102 | 244 |
| Brott, John R., Southbury, Conn. Chair | 727,741 | May 12 | 1740 | 390 | 104 | 392 |
| Brough, William, Baltimore, Md. Pill-counting machine | 740,801 | Oct. 6 | 786 | 177 | 106 | 1412 |
| Brougham, Edward, Brandon, Canada. Pneumatic seat-post for bicycles | 746,279 | Dec. 8 | 1776 | 404 | 107 | 1498 |
| Broughton Copper Company. (See Tomlinson, Frederick, assignor.) | | | | | | |
| Broughton, James I., Walkerville, Mont. Boiler compound | 745,147 | Nov. 24 | 4558 | ..... | 107 | 1014 |
| Brouillet, Georges A., Boston, Mass. Dental impression-cup | 720,105 | Feb. 10 | 1288 | 295 | 102 | 1113 |
| Brouillette, Charles. (See D'Artois and Brouillette.) | | | | | | |
| Brouillette, Charles E., Woonsocket, R. I. Shuttle-driving mechanism | 744,037 | Nov. 17 | 2450 | 526 | 107 | 553 |
| Brousseau, Harry, West Superior, Wis. Hatch | 736,357 | Aug. 18 | 2463 | 538, 539 | 105 | 1544 |
| Broux, Louis, and R. Gregoire, Douai, France. Apparatus for cleaning the interiors of casks or like receptacles | 746,785 | Dec. 15 | 2679 | 619 | 107 | 1717 |
| Brouyette, Charles D., Chicago, Ill., assignor of one-half to F. Karr, Holland, Mich. Spring bed-bottom | 732,392 | June 30 | 5362 | 1187 | 104 | 2305 |
| Brower, Anna, Coldwater, Mich. Frame for attaching drapery | 744,955 | Nov. 24 | 4152 | 897 | 107 | 931 |
| Brower, Cady F. (See Blundell and Brower.) | | | | | | |
| Brower, Harry. (See Clayton and Brower.) | | | | | | |
| Brower, Irving B., Philadelphia, Pa. Electric car-sign | 719,180 | Jan. 27 | 3158 | 703 | 102 | 711 |
| Brower, Julius L., assignor to Weiller & Sons, New York, N. Y. Belt-buckle | 739,645 | Sept. 22 | 4061 | 906 | 106 | 918 |
| Brower, Marcus T. (See McGehee and Brower.) | | | | | | |
| Brown, A. J., *et al.* (See Anderson, James W. and R. M., assignors.) | | | | | | |
| Brown, Aaron A., *et al.* (See Weed, James, assignor.) | | | | | | |
| Brown, Abner L., assignor of two-thirds to J. C. Greenwood and K. M. Thompson, Elkin, N. C. Automatic lathe | 747,043 | Dec. 15 | 3171 | 727, 728 | 107 | 1829 |
| Brown, Alexander E., assignor to Brown Hoisting Machinery Company, Cleveland, Ohio. Grab-bucket | 723,133 | Mar. 17 | 2736 | 614, 615 | 103 | 610 |
| Brown, Alexander E., assignor to Brown Hoisting Machinery Company, Cleveland, Ohio. Composite piling | 727,583 | May 12 | 1425 | 320 | 104 | 325 |
| Brown, Alexander T., and C. E. Lipe, Syracuse, N. Y. Driving mechanism for bicycles or like vehicles | 744,038 | Nov. 17 | 2452 | 526, 527 | 107 | 553 |
| Brown, Alice T., administratrix. (See Brown, Gilbert F.) | | | | | | |
| Brown, Andrew B., Edinburgh, Scotland. Telemotor apparatus for ships or the like | 738,767 | Sept. 15 | 2452 | 538 | 106 | 557 |
| Brown, Andrew B., Edinburgh, Scotland. Reversing valve-gear | 743,615 | Nov. 10 | 1648 | 345, 346 | 107 | 368 |
| Brown, Anna M., Kansas City, Mo. Combination skirt-supporter and shirt-waist holder | 721,280 | Feb. 24 | 3523 | 801 | 102 | 1615 |

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| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| Brown, Arthur F., and H. B. Holtvoigt, assignors to Stoddard Manufacturing Company, Dayton, Ohio. Horse hay-rake | 728,852 | May 26 | 3841 | 855 | 104 | 869 |
| Brown, Arthur M., Lincoln, England. Portable table, book-rest, &c | 729,919 | June 2 | 721 | 161 | 104 | 1275 |
| Brown, Benson E., *et al.* (See Scott, James E., assignor.) | | | | | | |
| Brown, Byron B., Quincy, Ill. Scaffold-bracket | 730,606 | June 9 | 1977 | 440 | 104 | 1553 |
| Brown, Calvin W. (See Ballard, Samuel J., assignor.) | | | | | | |
| Brown, Charles A. F. G., assignor of one-half to F. M. Glasgow, Kansas City, Mo. Clothes-line reel | 730,868 | June 16 | 2424 | 536 | 104 | 1667 |
| Brown, Charles E., Allegheny, Pa. Lathe attachment | 734,808 | July 28 | 3943 | 919 | 105 | 878 |
| Brown, Charles E. L., Baden, Switzerland. Regulating device for electrical machines driven by steam-motors | 720,661 | Feb. 17 | 2345 | 537 | 102 | 1345 |
| Brown, Charles F. and H. R., Greeneville, Tenn. Pin-holder | 726,252 | Apr. 28 | 3365 | 764 | 103 | 1925 |
| Brown, Charles H., Perry, Iowa. Torch | 718,598 | Jan. 20 | 2065 | 449 | 102 | 474 |
| Brown, Charles H., assignor of one-half to J. H. Smith, Dubois, Pa. Cake or doughnut cutter | 717,537 | Jan. 6 | 24 | 7 | 102 | 8 |
| Brown, Charles T., assignor to W. F. Grower, Chicago, Ill. Automatic weighing-machine | 744,162 | Nov. 17 | 2698 | 575<br>576 | 107 | 604 |
| Brown, Charles W., Boston, Mass. Mud-guard for wheeled vehicles | 726,398 | Apr. 28 | 3657 | 829 | 103 | 1986 |
| Brown, Clarence, Bishop, Cal. Ore-concentrator | 719,181 | Jan. 27 | 3160 | 703 | 102 | 712 |
| Brown, Clayton, Arcanum, Ohio. Buggy attachment | 736,814 | Aug. 18 | 3333 | 738 | 105 | 1724 |
| Brown and Company, John. (See Hingelberg, George R., assignor.) | | | | | | |
| Brown, Cyril P., Springlake, Mich. Folding bed | 722,485 | Mar. 10 | 1556 | 342 | 103 | 349 |
| Brown, Cyril P., Springlake, Mich. Folding bed | 743,142 | Nov. 3 | 621 | 135 | 107 | 130 |
| Brown, Cyrus E., Johnstown, Pa., assignor to Lorain Steel Company. Switch and signal operating mechanism | 727,281 | May 5 | 855 | 184 | 104 | 184 |
| Brown, Daniel H. (See Lyons and Brown.) | | | | | | |
| Brown, David, Jersey City, N. J., assignor of one-half to C. H. Goodfield, New York, N. Y. Fire-escape | 723,194 | Mar. 17 | 2869 | 643 | 103 | 638 |
| Brown, Davis. (See Raymond and Brown.) | | | | | | |
| Brown, Edgar P., Cottonwood Falls, Kans. Lamp | 731,275 | June 16 | 3198 | 712 | 104 | 1824 |
| Brown, Edward A., assignor of one-half to Broderick & Bascom Rope Company, St. Louis, Mo. Tramway bucket-clip | 745,148 | Nov. 24 | 4558 | 988<br>989 | 107 | 1014 |
| Brown, Edward C., Rochester, N. Y. Pump mechanism | 742,828 | Nov. 3 | 22 | 5 | 107 | 7 |
| Brown, Edward G., Buffalo, N. Y. Shirt-waist holder and skirt-supporter | 737,821 | Sept. 1 | 504 | 111 | 106 | 113 |
| Brown, Edwin C., Philadelphia, Pa. Collapsible bucket or pail | 724,255 | Mar. 31 | 4915 | 1100 | 103 | 1084 |
| Brown, Edwin F., Evanston, Ill. Savings-bank | 743,442 | Nov. 10 | 1289 | 264 | 107 | 291 |
| Brown, Edwin F., assignor of one-half to G. A. Morris, Chicago, Ill. Cigar-moistener | 743,819 | Nov. 10 | 2002 | 425 | 107 | 443 |
| Brown, Enu, Peekskill, N. Y. Hair-pin | 718,188 | Jan. 13 | 1243 | 273 | 102 | 284 |
| Brown, Francis G., Sheffield, Ala. Strainer | 740,225 | Sept. 29 | 5164 | 1160 | 106 | 1169 |
| Brown, Francis W. (See Bell and Brown.) | | | | | | |
| Brown, Frank C., and W. E. Chenery, Framingham, Mass. Adjustable regulator for picture-frames | 733,809 | July 14 | 1984 | 466 | 105 | 436 |
| Brown, Frank E. (See Arnold and Brown.) | | | | | | |
| Brown, Frank S., assignor of one-half to Silberzahn Manufacturing Company, Westbend, Wis. Traction-engine | 736,931 | Aug. 25 | 3559 | 789 | 105 | 1791 |
| Brown, Frank S., Chelsea, Ind. Ter., assignor of one-third to T. E. Mulvihill and E. C. Dodge, St. Louis, Mo. Clothes-line | 718,086 | Jan. 13 | 1062 | 236 | 102 | 244 |
| Brown, Frank T., Dale, Ind. Stave-cutting machine | 720,400 | Feb. 10 | 1817 | 414<br>415 | 102 | 1224 |
| Brown, Fred H., Los Angeles, Cal. Apparatus for locating metals, minerals, buried treasures, &c., without digging | 727,077 | May 5 | 491 | 105 | 104 | 108 |
| Brown, Fred H., Los Angeles, Cal. Electrovibratory apparatus for therapeutical purposes | 738,403 | Sept. 8 | 1737 | 378 | 106 | 389 |
| Brown, George, Boston, Mass. Convertible furniture | 720,320 | Feb. 10 | 1687 | 383 | 102 | 1195 |
| Brown, George E., Alaska, Mich. Bag-holder | 725,538 | Apr. 14 | 2082 | 471 | 103 | 1625 |
| Brown, George E., assignor of one-half to J. H. Wright, Selma, Cal. Fumigator | 723,513 | Mar. 24 | 3476 | 778 | 103 | 772 |
| Brown, George E., assignor of one-half to J. H. Wright, Selma, Cal. Limb-support | 740,740 | Oct. 6 | 658 | 149 | 106 | 1388 |
| Brown, George E., assignor of one-half to J. H. Wright, Selma, Cal. Limb-support | 740,741 | Oct. 6 | 660 | 149 | 106 | 1388 |
| Brown, George L. (See McDonald, Brown, and Teare.) | | | | | | |
| Brown, George T., assignor of one-half to J. D. Brown, Baltimore, Md. Lantern | 727,891 | May 12 | 2022 | 450 | 104 | 448 |
| Brown, George T., assignor of one-half to J. D. Brown, Baltimore, Md. Tubular lantern | 727,892 | May 12 | 2025 | 450 | 104 | 449 |
| Brown, George T., assignor of one-half to J. D. Brown, Baltimore, Md. Lamp burner and font | 728,080 | May 12 | 2367 | 527 | 104 | 521 |
| Brown, George W., *et al.* (See Brooks, Howard, assignor.) | | | | | | |
| Brown, George W., *et al.* (See Gary, Jefferson, assignor.) | | | | | | |
| Brown, George W., Vandalia, Ill. Lock-nut | 719,559 | Feb. 3 | 266 | 62 | 102 | 879 |
| Brown, George W., Colorado Springs, Colo. Coin-detective | 735,702 | Aug. 11 | 1287 | 275 | 105 | 1272 |
| Brown, George W., Cambridge, Ohio. Protecting dry-color pictures | 741,763 | Oct. 20 | 2650 | ..... | 106 | 1845 |
| Brown, Gilbert F., Clinton, Ill., deceased; A. T. Brown, administratrix. Return water-feed for steam-heating systems | 725,314 | Apr. 14 | 1655 | 373 | 103 | 1535 |
| Brown, Goodwin, Yonkers, N. Y. Vegetable flour | 745,565 | Dec. 1 | 463 | ..... | 107 | 1195 |
| Brown, Harold G., Melrose, assignor, by mesne assignments, to P. Winsor, Weston, Mass. Signaling system | 732,272 | June 30 | 5127 | 1139<br>1140 | 104 | 2256 |
| Brown, Harold P. (See Smith, William B., assignor.) | | | | | | |
| Brown, Harold P., Montclair, N. J. Reflector attachment for vehicles | 718,309 | Jan. 13 | 1461 | 324<br>325 | 102 | 330 |
| Brown, Harold P., Montclair, N. J. Flexible shaft | 746,451 | Dec. 8 | 2073 | 477 | 107 | 1561 |
| Brown, Harriet, Woonsocket, R. I. Fountain-brush | 722,281 | Mar. 10 | 1173 | 259 | 103 | 265 |
| Brown, Harrison H., Fond du Lac, Wis. Sad-iron heater | 740,083 | Sept. 29 | 4900 | 1099 | 106 | 1114 |
| Brown, Harry A. J., Allegheny, assignor of one-half to H. C. Drake, Newcastle, Pa. Combined calipers, compasses, dividers, &c | 723,237 | Mar. 24 | 2948 | 661 | 103 | 668 |
| Brown, Haydn, London, England. Syringe-nozzle | 738,603 | Sept. 8 | 2115 | 462 | 106 | 471 |
| Brown, Henry R. (See Brown, Charles F. and H. R.) | | | | | | |
| Brown, Herbert E., and R. D. Moon, Goldthwaite, Tex. Car-brake | 741,621 | Oct. 20 | 2373 | 531<br>532 | 106 | 1787 |
| Brown Hoisting Machinery Company. (See Brown, Alexander E., assignor.) | | | | | | |
| Brown Hoisting Machinery Company. (See Williams, Gurdon H., assignor.) | | | | | | |
| Brown, Hugh E., Columbia, Mo. Addition-tester | 719,734 | Feb. 3 | 583 | 132 | 102 | 945 |
| Brown, Irving A., Allegan, Mich. Window-bead lock | 744,469 | Nov. 17 | 3279 | 704 | 107 | 730 |
| Brown, Isaiah R. and L. A., Ebensburg, Pa. Flask-clamp | 742,001 | Oct. 20 | 3118 | 695 | 106 | 1942 |
| Brown, J Grove, Jersey City, N. J., assignor to J. Scholl & Company, New York, N. Y. Portable elevator | 747,044 | Dec. 15 | 3174 | 728 | 107 | 1829 |
| Brown, James A., Sublette, Ill. Automatic watering-trough | 738,768 | Sept. 15 | 2453 | 539 | 106 | 557 |
| Brown, James A., Pocahontas, Va. Holder for miners' lamps | 748,475 | Dec. 29 | 5883 | 1337 | 107 | 2470 |
| Brown, James D. (See Brown, George T., assignor.) | | | | | | |
| Brown, James L., assignor of one-half to J. G. Young, Los Angeles, Cal. Water-elevator | 744,288 | Nov. 17 | 2952 | 632 | 107 | 660 |

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| Brown, James P., Hillsboro, Ill. Mail-receptacle | 736,815 | Aug. 18 | 3334 | 738 | 105 | 1724 |
| Brown, James T. (See Fretwell and Brown.) | | | | | | |
| Brown, James W., Osceola, Ark. Gate | 727,584 | May 12 | 1426 | 320 | 104 | 325 |
| Brown, James W., Los Angeles, Cal. Comb-frame for beehives | 741,761 | Oct. 20 | 2651 | 593 | 106 | 1845 |
| Brown, James W., assignor of one-half to E. T. Niquet, Milwaukee, Wis. Hat-forming block | 732,163 | June 30 | 4911 | 1092 | 104 | 2211 |
| Brown, Jasper M., assignor of one-half to D. C. Piper, Denver, Colo. Spoke-auger | 720,512 | Feb. 10 | 2013 | 464 | 102 | 1264 |
| Brown, John, Violet Town, Victoria, Australia. Wire-strainer | 728,198 | May 19 | 2582 | 576 | 104 | 589 |
| Brown, John, Jr., and W., Ossining, N. Y. Basket | 743,057 | Nov. 3 | 461 | 100 | 107 | 96 |
| Brown, John A., Portland, Oreg. Portable conveyer | 744,163 | Nov. 17 | 2702 | 576 | 107 | 604 |
| Brown, John D., Gatesville, Tex. Ditcher | 732,702 | July 7 | 21 | 5 | 105 | 8 |
| Brown, John R., assignor to Aultman & Taylor Machinery Company, Mansfield, Ohio. Superheater | 744,470 | Nov. 17 | 3280 | 704<br>705 | 107 | 730 |
| Brown, John R., assignor to Aultman & Taylor Machinery Company, Mansfield, Ohio. Superheater | 744,471 | Nov. 17 | 3281 | 705 | 107 | 731 |
| Brown, John S., Knoxville, Tenn. Stovepipe-thimble | 731,336 | June 16 | 3317 | 740 | 104 | 1849 |
| Brown, John W., *et al.* (See Sterne, Davey, assignor.) | | | | | | |
| Brown, John W., Jr., Philadelphia, Pa. Automatic drilling-machine | 726,137 | Apr. 21 | 3146 | 711<br>712 | 103 | 1865 |
| Brown, John W., Jr., Philadelphia, Pa. Meat-shaving machine | 742,577 | Oct. 27 | 4232 | 953 | 106 | 2185 |
| Brown, Jonathan T., Marblehead, assignor to O. A. Miller, Brockton, Mass. Last | 725,404 | Apr. 14 | 1820 | 408 | 103 | 1570 |
| Brown, Jonathan T., Marblehead, assignor to O. A. Miller, Brockton, Mass. Last-turning lathe | 726,253 | Apr. 28 | 3366 | 764<br>765 | 103 | 1926 |
| Brown, Joseph, Salem, Mass. Amusement apparatus | 721,631 | Feb. 24 | 4183 | 951<br>952 | 102 | 1756 |
| Brown, Joseph S. (See Wilson and Brown.) | | | | | | |
| Brown, Lewis A. (See Brown, Isaiah R. and L. A.) | | | | | | |
| Brown, Lewis W., St. Louis, Mo. Stove-plate | 720,401 | Feb. 10 | 1819 | 415 | 102 | 1224 |
| Brown, Louis, New York, N. Y. Photographic-plate-developing apparatus | 728,538 | May 19 | 3238 | 718 | 104 | 725 |
| Brown, Luther, Platte County, Mo. Horse hay-rake | 741,452 | Oct. 13 | 2021 | 449 | 106 | 1697 |
| Brown, Marion M., New York, N. Y. Filing-cabinet | 742,829 | Nov. 3 | 23 | 5 | 107 | 8 |
| Brown, Mary E., Pittsburg, Pa. Curtain-support | 738,287 | Sept. 8 | 1489 | 322 | 106 | 336 |
| Brown, Milton S., Washington, D. C. Game apparatus | 743,820 | Nov. 10 | 2004 | 425 | 107 | 443 |
| Brown, Morris. (See Engel, Henry, assignor.) | | | | | | |
| Brown, Morris, New York, N. Y. Cigar-box | 729,999 | June 2 | 884 | 197 | 104 | 1308 |
| Brown, Morris, New York, N. Y. Cigar-box | 732,919 | July 7 | 396 | 96 | 105 | 85 |
| Brown, Nathaniel H., Philadelphia, Pa., assignor to Williams, Brown & Earle. Photographic-printing apparatus | 721,011 | Feb. 17 | 2968 | 682 | 102 | 1477 |
| Brown, Nathaniel H., Philadelphia, Pa., assignor to Williams, Brown & Earle. Photographic-printing apparatus | 744,039 | Nov. 17 | 2455 | 527 | 107 | 554 |
| Brown, Ned, Portland, Ind. Adjustable cistern-forming device | 733,810 | July 14 | 1985 | 467 | 105 | 436 |
| Brown, Norman E., assignor to St. Joseph Iron Works, St. Joseph, Mich. Jointing and blank-forming machine | 721,010 | Feb. 17 | 2961 | 681<br>682 | 102 | 1475 |
| Brown, Oliver W., Bloomington, and W. F. Oesterle, Marion, Ind. Metallurgical process. | 742,830 | Nov. 3 | 26 | ------ | 107 | 8 |
| Brown, Orville E., Lanark, Ill. Mechanism for running underground pipes | 740,521 | Oct. 6 | 268 | 53 | 105 | 1303 |
| Brown, Oscar W., Abilene, Kans. Band-cutter and feeder | 743,143 | Nov. 3 | 625 | 135<br>136 | 107 | 130 |
| Brown, Patrick, Buffalo, N. Y. Car-coupling | 733,620 | July 14 | 1646 | 390 | 105 | 366 |
| Brown, Paul, Dayton, S. D. Bag-holder | 742,578 | Oct. 27 | 4233 | 953 | 106 | 2185 |
| Brown, Perry, Wilmington, Del. Car-door | 722,941 | Mar. 17 | 2403 | 537<br>538 | 103 | 541 |
| Brown, Peter, Greeley, Colo. Potato-digger | 721,354 | Feb. 24 | 3652 | 831 | 102 | 1642 |
| Brown, Peter C., *et al.* (See Laist, Frederick, assignor.) | | | | | | |
| Brown, Richard. (See Bucking and Brown.) | | | | | | |
| Brown, Richard. (See Haug and Brown.) | | | | | | |
| Brown, Richard B., Philadelphia, Pa. Shaft-oiler | 742,579 | Oct. 27 | 4234 | 954 | 106 | 2185 |
| Brown, Richard T. (See Stiefel and Brown.) | | | | | | |
| Brown, Robert E., Lennig, Va. Well-borer | 736,201 | Aug. 11 | 2193 | 472 | 105 | 1467 |
| Brown, Robert K., Northbridge, Mass. Sash-fastener | 724,081 | Mar. 31 | 4545 | 1022 | 103 | 1011 |
| Brown, Robert P., Philadelphia, Pa. Safety-pin | 720,106 | Feb. 10 | 1289 | 295 | 102 | 1113 |
| Brown, Robert P., Philadelphia, Pa. Machine for filling and closing paper boxes | 732,703 | July 7 | 21 | 5, 6 | 105 | 8 |
| Brown, Robert S., assignor to New Britain Machine Company, New Britain, Conn. Metallic fabric | 736,485 | Aug. 18 | 2704 | 593 | 105 | 1595 |
| Brown, Robert S., assignor to New Britain Machine Company, New Britain, Conn. Metallic fabric | 736,486 | Aug. 18 | 2706 | 593<br>594 | 105 | 1595 |
| Brown, Roy W., Chicago, Ill. Electric controller | 719,991 | Feb. 10 | 1043 | 243 | 102 | 1061 |
| Brown, Royl A., Ashland, Ohio. Buckle | 726,856 | May 5 | 37 | 9 | 104 | 11 |
| Brown, Samuel, Waterloo, Canada. Clothes-clamp | 745,777 | Dec. 1 | 826 | 187 | 107 | 1274 |
| Brown, Samuel J. (See Smith and Brown.) | | | | | | |
| Brown, Samuel J., Denver, Colo. Ironing-board | 745,955 | Dec. 1 | 1180 | 264 | 107 | 1351 |
| Brown, Samuel J., Leitchfield, Ky., assignor of one-half to W. A. Morgan, Eastman, Ga. Dish-washer | 729,536 | June 2 | 30 | 8 | 104 | 1133 |
| Brown, Samuel J., Ekron, Ky., assignor of one-half to W. A. Morgan, Eastman, Ga. Mail-bag fastener | 738,522 | Sept. 8 | 1975 | 430 | 106 | 440 |
| Brown, Samuel P., Bridgeport, Conn. Lap-seam-felling attachment for sewing-machines | 729,126 | May 26 | 4316 | 953 | 104 | 964 |
| Brown & Sharpe Manufacturing Company. (See Gabriel, Charles R., assignor.) | | | | | | |
| Brown and Sharpe Manufacturing Company. (See Norton, Charles H., assignor.) | | | | | | |
| Brown and Sharpe Manufacturing Company. (See Parker, John, assignor.) | | | | | | |
| Brown & Sharpe Manufacturing Company. (See Spalding, Frank, assignor.) | | | | | | |
| Brown, Sherman A., Alden, Kans. Traveling clothes-line | 747,586 | Dec. 22 | 4186 | 941 | 107 | 2074 |
| Brown, Sidney G., Bournemouth, England. System of wireless telegraphy | 741,622 | Oct. 20 | 2375 | 532 | 106 | 1788 |
| Brown, Silas M., Chicago, Ill. Flash-light apparatus | 720,881 | Feb. 17 | 2705 | 625 | 102 | 1422 |
| Brown, Stuart A., New York, N. Y. Stair-rod and securer | 744,472 | Nov. 17 | 3282 | 705 | 107 | 731 |
| Brown, Stuart A., Mount Fair, Va., assignor of one-half to J. W. Points, Washington, D. C. Weighing and computing scale | 722,173 | Mar. 3 | 944 | 209<br>210 | 103 | 200 |
| Brown, Sydney G. (See Hill and Brown.) | | | | | | |
| Brown, Theodore P. (See Welin, Peter, assignor.) | | | | | | |
| Brown, Theodore P., Worcester, Mass. Automatic playing attachment for musical instruments | 723,820 | Mar. 31 | 4014 | 904<br>905 | 103 | 903 |
| Brown, Theodore P., Worcester, Mass. Tracker-board for automatic musical instruments | 735,062 | Aug. 4 | 26 | 8 | 105 | 987 |
| Brown, Theodore P., Worcester, Mass. Pneumatic-action for self-playing musical instruments | 740,391 | Oct. 6 | 11 | 3 | 106 | 1247 |
| Brown, Theophilus, assignor to Richardson Manufacturing Company, Worcester, Mass. Manure-spreader | 731,539 | June 23 | 3724 | 829<br>830 | 104 | 1951 |

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| Brown, Thomas. (See Garratt and Brown.) | | | | | | |
| Brown, Thomas D., G. W. and J. H. Hause, assignors to Automatic Measuring Machine Company of America, Philadelphia, Pa. Apparatus for measuring distances of distant objects | 738,155 | Sept. 8 | 1198 | 264 | 106 | 274 |
| Brown, Thomas H., Sterling, Kans. Truck | 740,802 | Oct. 6 | 789 | 177<br>178 | 106 | 1413 |
| Brown, Thomas H., and J. E. Staples, Wellington, New Zealand. Branding fluid | 720,779 | Feb. 17 | 2542 | ------ | 102 | 1388 |
| Brown, Thomas R., administrator. (See Brown, William J.) | | | | | | |
| Brown, Thurman G., Gillespieville, Ohio. Spike-puller | 719,735 | Feb. 3 | 585 | 132 | 102 | 945 |
| Brown, Virgil, Watrous, N. Mex. Ter. Dumping-wagon | 730,607 | June 9 | 1978 | 440 | 104 | 1553 |
| Brown, Walter, and W. O. Collins, assignors to National Manufacturing Company, Elkhart, Ind. Paper-bag machine | 721,144 | Feb. 24 | 3258 | 746<br>747 | 102 | 1562 |
| Brown, West H. (See Harter and Brown.) | | | | | | |
| Brown, Willard J., Portland, Oreg. Temporary binder | 722,651 | Mar. 10 | 1838 | 410 | 103 | 411 |
| Brown, William. (See Brown, John, Jr., and W.) | | | | | | |
| Brown, William, Melbourne, Victoria, Australia. Engine worked by oil-vapor or gas | 737,069 | Aug. 25 | 3805 | 843 | 105 | 1843 |
| Brown, William C., Ottawa, Ill. Curtain-fixture | 737,700 | Sept. 1 | 257 | 55 | 106 | 59 |
| Brown, William C., U. S. Army. Spur attachment for leggings | 740,226 | Sept. 29 | 5165 | 1160 | 106 | 1169 |
| Brown, William C., New York, N. Y., assignor to Henry R. Worthington. Condenser system | 725,212 | Apr. 14 | 1483 | 336<br>337 | 103 | 1499 |
| Brown, William C., New York, N. Y., assignor to H. R. Worthington. Compensating steam-engine and pressure-accumulator therefor | 729,268 | May 26 | 4569 | 1008<br>1009 | 104 | 1017 |
| Brown, William C., assignor to H. R. Worthington, New York, N. Y. Valve-movement for steam-engines | 746,667 | Dec. 15 | 2477 | 566 | 107 | 1673 |
| Brown, William E. (See Twitchell and Brown.) | | | | | | |
| Brown, William E., assignor to B-W Automatic Jar & Bottle Company, Los Angeles, Cal. Jar-closure | 723,645 | Mar. 24 | 3706 | 831 | 103 | 820 |
| Brown, William E., assignor to B-W Automatic Jar & Bottle Company, Los Angeles, Cal. Jar-closure | 724,256 | Mar. 31 | 4916 | 1100 | 103 | 1085 |
| Brown, William E., assignor to B-W Automatic Jar & Bottle Company, Los Angeles, Cal. Jar-closure | 726,629 | Apr. 28 | 4123 | 930 | 103 | 2075 |
| Brown, William E., assignor to Brown-Winstanley Manufacturing Company, Los Angeles, Cal. Bottle-crate | 724,796 | Apr. 7 | 707 | 165 | 103 | 1320 |
| Brown, William E., assignor to Brown-Winstanley Manufacturing Company, Los Angeles, Cal. Bottle-crate | 724,797 | Apr. 7 | 708 | 166 | 103 | 1320 |
| Brown, William E., assignor to Brown-Winstanley Manufacturing Company, Los Angeles, Cal. Bottle-filling machine | 734,809 | July 28 | 3944 | 920 | 105 | 878 |
| Brown, William E., assignor to Brown-Winstanley Manufacturing Company, Los Angeles, Cal. Cork-retainer | 736,202 | Aug. 11 | 2194 | 472 | 105 | 1468 |
| Brown, William E., assignor to Brown-Winstanley Manufacturing Company, Los Angeles, Cal. Bottle-washing machine | 743,821 | Nov. 10 | 2006 | 426 | 107 | 443 |
| Brown, William F., Goldthwaite, Tex. Support for buggy-tops | 721,538 | Feb. 24 | 3981 | 907 | 102 | 1711 |
| Brown, William F., Goldthwaite, Tex. Egg-preserving compound | 747,372 | Dec. 22 | 3811 | ------ | 107 | 1989 |
| Brown, William H., Menominee, Mich. Tack-extractor | 728,668 | May 19 | 3498 | 777 | 104 | 782 |
| Brown, William H., Cleveland, Ohio. Dust-guard for autocars | 742,580 | Oct. 27 | 4235 | 954 | 106 | 2186 |
| Brown, William H., Elyria, assignor of one-half to W. Gallup, Medina, Ohio. Mixing and measuring machine for concrete | 718,905 | Jan. 20 | 2633 | 591 | 102 | 588 |
| Brown, William J., deceased; T. R. Brown, administrator, assignor of one-half to J. W. Paxson Company, Philadelphia, Pa. Melting-furnace | 731,991 | June 23 | 4539 | 1013 | 104 | 2121 |
| Brown, William M., Johnstown, Pa., assignor to Lorain Steel Company. Electric railway | 730,869 | June 16 | 2425 | 536 | 104 | 1668 |
| Brown, William M., Johnstown, Pa., assignor to Lorain Steel Company. Surface-contact electric-railway system | 735,340 | Aug. 4 | 574 | 118 | 105 | 1104 |
| Brown, Wlliam M., Johnstown, Pa., assignor to Lorain Steel Company. Contact-box for electric railways | 745,778 | Dec. 1 | 827 | 187 | 107 | 1275 |
| Brown, William S., Wichita, Kans. Animal-poke | 728,853 | May 26 | 3842 | 855 | 104 | 869 |
| Brown, William S., Wichita, Kans. Animal-poke | 744,164 | Nov. 17 | 2703 | 576 | 107 | 604 |
| Brown, William T. (See O'Bryan, Francis L., assignor.) | | | | | | |
| Brown, Willis G., Washington, D. C. Button | 726,630 | Apr. 28 | 4124 | 930 | 103 | 2076 |
| Brown-Winstanley Manufacturing Company. (See Brown, William E., assignor.) | | | | | | |
| Brown-Winstanley Manufacturing Company. (See Twitchell and Brown, assignors.) | | | | | | |
| Browne, Arthur W., Princebay, N. Y., assignor to S. S. White Dental Manufacturing Company, Philadelphia, Pa. Automatic mallet | 723,134 | Mar. 17 | 2740 | 616 | 103 | 611 |
| Browne, Arthur W., Princebay, N. Y., assignor to S. S. White Dental Manufacturing Company, Philadelphia, Pa. Sleeve for flexible shafting | 723,135 | Mar. 17 | 2743 | 616 | 103 | 611 |
| Browne, George A. (See Wamsley, Charles, assignor.) | | | | | | |
| Browne, Herbert J., assignor of one-fourth to J. L. Steele, Washington, D. C. Index-leaf for books | 718,816 | Jan. 20 | 2460 | 546 | 102 | 552 |
| Browne, Richard B., Brooklyn, assignor to Richey, Browne & Donald, Long Island City, N. Y. Window frame and sash | 718,975 | Jan. 27 | 2766 | 620 | 102 | 631 |
| Browne, Wilkie C. (See Goodwin and Browne.) | | | | | | |
| Browne, William F., New York, N. Y., assignor to Fuel and Gas Manufacturing Company. Emulsion fuel compound | 728,854 | May 26 | 3843 | ------ | 104 | 869 |
| Browne, William F., New York, N. Y., assignor to Fuel and Gas Manufacturing Company. Emulsion fuel compound | 728,855 | May 26 | 3846 | ------ | 104 | 869 |
| Browne, William G., Kingston, N. Y. Culinary utensil | 727,742 | May 12 | 1741 | 391 | 104 | 392 |
| Browne, William G., assignor to W. G. Browne Manufacturing Company, Kingston, N. Y. Egg-beater | 733,621 | July 14 | 1648 | 390 | 105 | 366 |
| Browne, William G., assignor to W. G. Browne Manufacturing Company, Kingston, N. Y. Mop | 737,572 | Sept. 1 | 26 | 6 | 106 | 9 |
| Browne, William G., assignor to W. G. Browne Manufacturing Company, Kingston, N. Y. Tack-claw | 742,284 | Oct. 27 | 3706 | 827 | 106 | 2078 |
| Browne, William H. (See Woods, Charles G., assignor.) | | | | | | |
| Brownell, C. L. (See Bertschy, Frederick H., assignor.) | | | | | | |
| Brownell, Frank A., assignor to Eastman Kodak Company, Rochester, N. Y. Photographic camera | 725,034 | Apr. 14 | 1147 | 259<br>260 | 103 | 1430 |
| Brownell, Frank A., assignor to Eastman Kodak Company, Rochester, N. Y. Spool | 742,964 | Nov. 3 | 250 | 56 | 107 | 54 |
| Brownell, George H., Janesville, Wis. Packing-tube | 722,204 | Mar. 10 | 1024 | 226 | 103 | 232 |
| Brownell, James S., San Francisco, Cal. Concentrator | 717,805 | Jan. 6 | 546 | 122 | 102 | 118 |
| Brownell, Willard H., Battlecreek, Mich. Eraser-tip for lead-pencils | 737,070 | Aug. 25 | 3807 | 843 | 105 | 1844 |
| Brownell, William W., Lake Placid, N. Y. Hammer | 724,542 | Apr. 7 | 227 | 55 | 103 | 1218 |
| Browning, Charles M. (See Shelton, William J., assignor.) | | | | | | |
| Browning, Earl H. and V. R., Cleveland, Ohio. Hoisting apparatus | 719,182 | Jan. 27 | 3161 | 703<br>704 | 102 | 712 |
| Browning, Eli, assignor of one-half to C. H. Lantz, Iowa City, Iowa. Combined light and rein holder | 730,203 | June 2 | 1212 | 271 | 104 | 1374 |

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| Browning, George, *et al.* (See Davison, John C., assignor.) | | | | | | |
| Browning, George, Hinsdale, assignor to Commercial Cash Register Company, Chicago, Ill. Cash-register | 747,128 | Dec. 15 | 3342 | 759, 760 | 107 | 1871 |
| Browning, George, Hinsdale, and C. E. Boutwood, Rogers Park, Ill. Golf-ball | 726,502 | Apr. 28 | 3879 | 878 | 103 | 2028 |
| Browning, George, and C. E. Boutwood, Hinsdale, Ill. Golf-ball | 726,503 | Apr. 28 | 3880 | 878 | 103 | 2028 |
| Browning, George, and C. E. Boutwood, Hinsdale, Ill. Golf-ball | 726,504 | Apr. 28 | 3882 | 878 | 103 | 2028 |
| Browning, John M., Ogden, Utah. Recoil-operated firearm | 730,870 | June 16 | 2427 | 537, 538 | 104 | 1668 |
| Browning, John M., Ogden, Utah. Automatic firearm | 747,585 | Dec. 22 | 4179 | 940 | 107 | 2073 |
| Browning, Victor R. (See Browning, Earl H. and V. R.) | | | | | | |
| Browning, Victor R., Cleveland, Ohio. Mechanism for unloading vehicles, &c. | 720,557 | Feb. 17 | 2133 | 493 | 102 | 1304 |
| Browning, Walter J. (See Hannes, William F., assignor.) | | | | | | |
| Brownlee, James H., Philadelphia, Pa. Gas-heater | 744,898 | Nov. 24 | 4039 | 871 | 107 | 909 |
| Brownlow, Joseph, Caton, England. Kiln | 737,573 | Sept. 1 | 29 | 6 | 106 | 9 |
| Brownlow, Richard S., Manchester, England. Filter | 733,622 | July 14 | 1650 | 390, 391 | 105 | 366 |
| Brownrigg, John J., and J. K. Norstrom, assignors to Globe Automatic Telephone Company, Chicago, Ill. Automatic telephone apparatus | 738,156 | Sept. 8 | 1202 | 265 | 106 | 275 |
| Brownrigg, John J., and J. K. Norstrom, assignors, by mesne assignments, to Globe Automatic Telephone Company, Chicago, Ill. Calling mechanism for automatic telephone systems | 738,157 | Sept. 8 | 1211 | 265, 266 | 106 | 277 |
| Brownrigg, John J., and J. K. Norstrom, assignors to Globe Automatic Telephone Company, Chicago, Ill. Automatic telephone system | 738,158 | Sept. 8 | 1220 | 266, 267 | 106 | 280 |
| Brownrigg, John J., and J. K. Norstrom, assignors to Globe Automatic Telephone Company, Chicago, Ill. Calling mechanism for automatic telephone systems | 738,159 | Sept. 8 | 1232 | 268 | 106 | 282 |
| Broxey, John H., Dayton, Ohio. Plant-support | 726,631 | Apr. 28 | 4125 | 931 | 103 | 2076 |
| Broyles, Henry F., assignor of one-half to J. A. Welsh, Western Port, Md. Elevating-truck | 721,281 | Feb. 24 | 3524 | 801, 802 | 102 | 1615 |
| Broyles, Lester E., assignor to Union Luncheon Box Company, New York, N. Y. Lunch-box | 735,656 | Aug. 4 | 1186 | 251 | 105 | 1233 |
| Broyles, Oliver P., assignor of one-half to M. A. Patrick and C. M. Lewis, Western Port, Md. Nut-lock | 733,457 | July 14 | 1367 | 322 | 105 | 306 |
| Broyles, Winfield S., Spring City, Tenn. Pea-huller | 733,941 | July 21 | 2256 | 530, 531 | 105 | 510 |
| Bruce, David R., Ponders End, England. Automatic electrical cut-out | 731,428 | June 23 | 3501 | 782 | 104 | 1905 |
| Bruce, John H., Pittsburg, Pa. Brake-operating mechanism for railway-cars | 743,144 | Nov. 3 | 627 | 136 | 107 | 131 |
| Bruce, Robert A., Mart, Tex. Gate | 737,331 | Aug. 25 | 4296 | 951 | 105 | 1947 |
| Brucker, Julius, Brooklyn, N. Y. Door for sterilizers | 720,107 | Feb. 10 | 1290 | 295, 296 | 102 | 1113 |
| Bruckman, John. (See McFarland, James D., Jr., assignor.) | | | | | | |
| Bruckmann, Ludwig, Pforzheim, Germany. Machine for making chains | 724,798 | Apr. 7 | 709 | 166, 167 | 103 | 1321 |
| Bruden, Charles W., *et al.* (See Tyndall, Charles A., assignor.) | | | | | | |
| Brueck, Theodor, assignor to Bausch & Lomb Optical Company, Rochester, N. Y. Photographic shutter | 744,998 | Nov. 24 | 4221 | 914 | 107 | 945 |
| Brueckner, Mary, New York, N. Y. Apparel-belt | 719,560 | Feb. 3 | 267 | 62 | 102 | 879 |
| Bruhn, George, Winona, Minn. Cleaning and scrubbing appliance | 723,223 | Mar. 17 | 2912 | 652 | 103 | 647 |
| Bruhn, Hugo J. H., Baltimore, Md. Door-mat | 736,358 | Aug. 18 | 2464 | 539 | 105 | 1544 |
| Bruinekool, Peter H., Pella, Iowa. Band-fastener for tanks | 721,539 | Feb. 24 | 3982 | 907 | 102 | 1711 |
| Brumbaugh, M. P. (See McKinney, Clayton A., assignor.) | | | | | | |
| Brun, Camille and G., St. Etienne, France, and J. Bicking, Mulhouse, Germany. Thread-parting mechanism for weft-replenishing looms | 722,081 | Mar. 3 | 777 | 174 | 103 | 168 |
| Brun, Gustave. (See Brun and Bicking.) | | | | | | |
| Brunacci, Richard E., assignor of one-half to B. C. Sobrero, San Francisco, Cal. Printing attachment for roll-paper holders | 737,822 | Sept. 1 | 506 | 111 | 106 | 114 |
| Brüncker, Ewald, Cologne, Germany. Propeller | 746,007 | Dec. 8 | 1284 | 288, 289 | 107 | 1390 |
| Brundage, Wm. D., *et al.* (See Miller, Carey W., assignor.) | | | | | | |
| Brunelle, Arthur, North Yakima, Wash. Manual motor | 724,429 | Apr. 7 | 19 | 6 | 103 | 1174 |
| Brunelle, Francois X., Worcester, Mass. Automatic boiler-feed controller | 726,813 | Apr. 28 | 4463 | 1008 | 103 | 2147 |
| Bruner, Preston M., Lebanon, Ill. Hot-air furnace | 746,008 | Dec. 8 | 1285 | 289 | 107 | 1390 |
| Bruner, Preston M., Lebanon, Ill. Floor and strengthening member therefor | 746,009 | Dec. 8 | 1288 | 289 | 107 | 1391 |
| Brunett, Philip, Clarksboro, N. J. Asparagus-buncher | 719,561 | Feb. 3 | 268 | 62 | 102 | 879 |
| Bruni, Louis, Laredo, Tex. Combination-tool | 733,366 | July 14 | 1202 | 285 | 105 | 269 |
| Bruning, Friedrick, St. Louis, Mo. Buffer | 738,288 | Sept. 8 | 1490 | 322 | 106 | 336 |
| Brünjes, Ferdinand, Langelsheim, Germany. Obtaining sulfid of zinc from copper slag. | 733,000 | July 7 | 530 | ..... | 105 | 113 |
| Brunn, Charles H., *et al.* (See Wackerow, George L., assignor.) | | | | | | |
| Brunnemer, William T. M., assignor to Monmouth Plow Company, Monmouth, Ill. Sulky-plow | 736,932 | Aug. 25 | 3559 | 790, 791 | 105 | 1791 |
| Brunner, George W., San Francisco, Cal. Heater | 736,203 | Aug. 11 | 2195 | 472 | 105 | 1468 |
| Brunner, Henry E., and E. J. Patterson, Haywards, Cal. Oil cock or valve | 727,743 | May 12 | 1742 | 391 | 104 | 302 |
| Brunner, Henry E., and E. J. Patterson, Haywards, Cal. Oil-burner nozzle | 736,487 | Aug. 18 | 2709 | 594 | 105 | 1595 |
| Brunner, Henry E., and E. J. Patterson, Haywards, Cal. Hydrocarbon-burner | 742,965 | Nov. 3 | 251 | 56 | 107 | 55 |
| Bruno, Carlo, assignor to L. Palestini, Rome, Italy. Storage battery | 731,429 | June 23 | 3502 | 782 | 104 | 1906 |
| Bruno, Herman E., St. Louis, Mo. Extension step-ladder | 745,320 | Dec. 1 | 14 | 3 | 107 | 1104 |
| Bruns, Henry, St. Louis, Mo. Draft-rigging for railway-cars | 718,563 | Jan. 13 | 1989 | 433, 434 | 102 | 442 |
| Brunst, William M., assignor to Kinnear Manufacturing Company, Columbus, Ohio. Roller for fireproof blinds | 742,155 | Oct. 27 | 3447 | 768 | 106 | 2024 |
| Brunswick-Balke-Collender Co. (See Bensinger, Moses, assignor.) (Reissue.) | | | | | | |
| Brunswick-Balke-Collender Company. (See Reisky, Emil, assignor.) | | | | | | |
| Brunswick-Balke-Collender Company. (See Wiggins, William H., assignor.) | | | | | | |
| Brunswick Refrigerating Company. (See Francke, William J., assignor.) | | | | | | |
| Brunt, John R., and R. C. Pitt, Christchurch, New Zealand. Pneumatic tire | 742,831 | Nov. 3 | 27 | 5 | 107 | 8 |
| Brunt, Wilson F., Hammond, Ind. Check and waste cock | 722,419 | Mar. 10 | 1416 | 312 | 103 | 317 |
| Brush, Alanson P., Detroit, Mich. Carbureting device for internal-combustion engines. | 730,608 | June 9 | 1981 | 441 | 104 | 1554 |
| Brush, Alanson P., Detroit, Mich. System of splash lubrication | 730,738 | June 9 | 2199 | 490 | 104 | 1600 |
| Brush, Alanson P., assignor of one-half to Cadillac Automobile Company, Detroit, Mich. Steering-gear for automobiles | 719,562 | Feb. 3 | 270 | 62 | 102 | 879 |
| Brush, Amanda M., Wilmerding, Pa. Curtain or portière holder | 718,976 | Jan. 27 | 2768 | 620 | 102 | 632 |
| Brush, Charles F. (See Linde, Carl, assignor.) | | | | | | |
| Brush, Charles F., Cleveland, Ohio. Manufacturing gas | 746,452 | Dec. 8 | 2074 | 478 | 107 | 1561 |
| Brush, John T. (See Cox, Henry G., assignor.) | | | | | | |
| Brush Lubricating System. (See Harrison, James R., assignor.) | | | | | | |
| Brush, Stephen C., Buffalo, N. Y. Brick-machine | 720,218 | Feb. 10 | 1497 | 343 | 102 | 1155 |
| Brüssel-Aachener Glas-Manufactur Leymanns & Keim. (See Emonds, Hubert, assignor.) | | | | | | |
| Brust, Charles A., Memphis, Tenn. Electromagnet | 732,273 | June 30 | 5130 | 1140 | 104 | 2257 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|
| | | | Spec. | Dr'g. | Vol. | Page. |
| Bryan, Edgar J., assignor of one-half to A. W. Miller, Riverside, Cal. Truck | 732,825 | July 7 | 235 | 59,60 | 105 | 52 |
| Bryan, Frank, London, and A. H. Bayley, Niton, Isle of Wight, England. Combination internal-combustion and compressed or liquid gas or compressed or liquid air engine | 734,220 | July 21 | 2801 | 657 | 105 | 626 |
| Bryan, George F., Young Island, S. C. Boat propelling mechanism | 730,090 | June 2 | 1027 | 230 | 104 | 1336 |
| Bryan, John, Yellow Springs, Ohio. Pumping system | 732,704 | July 7 | 25 | 6 | 105 | 8 |
| Bryan, John B. (See Edwards and Bryan.) | | | | | | |
| Bryan, T. M., *et al.* (See McCabe and Thomas, assignors.) | | | | | | |
| Bryan, Thomas A., *et al.* (See Hoerichs, Edward, assignor.) | | | | | | |
| Bryan, Thomas A., Baltimore, Md. Artificial fish-bait | 726,020 | Apr. 21 | 2950 | 671 | 103 | 1825 |
| Bryan, Thomas A., Baltimore, Md. Artificial fish-bait | 726,021 | Apr. 21 | 2951 | 671 | 103 | 1825 |
| Bryan, William, and W. A. Palfreyman, Angola, Ind. Tank-mold | 738,769 | Sept. 15 | 2454 | 539 | 106 | 557 |
| Bryan, Worcester A., *et al.* (See Andrews, Thomas M., assignor.) | | | | | | |
| Bryant, Arthur H., East Hartford, Conn., assignor of one-half to W. N. Haskell, Albany, N. Y. Keeper-ring for buttons | 740,353 | Sept. 29 | 5389 | 1215 | 106 | 1216 |
| Bryant, Charles F., Chicago, Ill. Educational appliance for dental students | 739,980 | Sept. 29 | 4714 | 1060<br>1061 | 106 | 1074 |
| Bryant, Cyrus A. (See May, Franz X., assignor.) | | | | | | |
| Bryant, Edward M. (See Dammond, William H., assignor.) | | | | | | |
| Bryant Electric Company. (See Goodridge, Gilbert W., assignor.) | | | | | | |
| Bryant Electric Company. (See Platt, Clarence D., assignor.) | | | | | | |
| Bryant, Ellsworth S., Detroit, Mich. Concrete-mixer | 733,942 | July 21 | 2259 | 531 | 105 | 510 |
| Bryant, Elwin C. (See Osborne and Bryant.) | | | | | | |
| Bryant, George, assignor of one-half to P. H. Sandlin, San Francisco, Cal. Shoe-fastening | 733,001 | July 7 | 531 | 131 | 105 | 113 |
| Bryant, Harry H., Allegheny, and J. B. McGaw, assignors of one-third to O. A. MacVay Pittsburg, Pa. Trolley | 723,646 | Mar. 24 | 3707 | 831 | 103 | 820 |
| Bryant, James W., Crewe, Va. Spark-extinguisher | 740,227 | Sept. 29 | 5166 | 1160<br>1161 | 106 | 1169 |
| Bryant, John M., Minneapolis, Minn. Thill-coupling | 738,881 | Sept. 15 | 2679 | 590 | 106 | 608 |
| Bryant, John M., Minneapolis, Minn. Trace-holder | 738,882 | Sept. 15 | 2680 | 590 | 106 | 608 |
| Bryant, John M., Minneapolis, Minn., assignor of one-half to E. J. Newell and P. A. Barnard, Detroit, Mich. Hoof-trimming nippers | 728,856 | May 26 | 3847 | 855<br>856 | 104 | 869 |
| Bryant, Richard S., Columbus, Ohio. Wheel | 734,254 | July 21 | 2883 | 674 | 105 | 644 |
| Bryant, Thomas P. (See Smythe and Bryant.) | | | | | | |
| Bryant, William P., assignor of seven-eighths to W. B. Roberts, G. W. Gray, D. W. Walkinshaw, P. S. Gruendike, W. M. Tilson, H. A. Wood, and W. G. Tower, Corona, Cal. Railway construction | 739,981 | Sept. 29 | 4716 | 1061 | 106 | 1074 |
| Bryant, Willis C., Elizabeth, N. J. Signal for railways | 744,716 | Nov. 24 | 3728 | 805 | 107 | 844 |
| Bryar, George, assignor of five-eighths to R. L. Johnston, J. Walsh, and J. M. Smith, St. John, Canada. Lock-nut and washer | 743,822 | Nov. 10 | 2008 | 426 | 107 | 444 |
| Bryar, George, assignor of three-fourths to R. L. Johnston, J. Walsh, J. M. Smith, and M. A. Harding, St. John, Canada. Spike-puller | 743,823 | Nov. 10 | 2009 | 426 | 107 | 444 |
| Bryce, Henry, Troy, N. Y. Machine for shaping and trimming pieces of fabrics | 748,476 | Dec. 29 | 5885 | 1337<br>1338 | 107 | 2471 |
| Bryson, David K., assignor of one-third to A. Belber and M. A. Goodstone, Pittsburg, Pa. Pawl-and-ratchet connection | 739,583 | Sept. 22 | 3949 | 882 | 106 | 893 |
| Brzykcy, Antoni, assignor of one-half to S. Miller, Minneapolis, Minn. Window-shade bracket | 731,540 | June 23 | 3728 | 830 | 104 | 1952 |
| Bubb, Oliver M., Ellwood City, Pa. Stovepipe | 718,599 | Jan. 20 | 2066 | 449 | 102 | 474 |
| Bubenheim, Henry J., Pittsburg, Pa. Rail-joint | 737,071 | Aug. 25 | 3808 | 844 | 105 | 1844 |
| Bubolz, Albert J. (See Schott, Hugo, assignor.) | | | | | | |
| Buch, Henry G., Oregon, Pa. Nut-lock | 723,821 | Mar. 31 | 4016 | 905 | 103 | 903 |
| Buch, Royer S., Elizabethtown, Pa. Land-roller | 746,453 | Dec. 8 | 2075 | 478 | 107 | 1561 |
| Buchan, Ewing, Owen Sound, Canada. Fountain bouquet-holder | 742,832 | Nov. 3 | 27 | 6 | 107 | 8 |
| Buchanan, Albert E., Indianapolis, Ind. Syringe for dental or other uses | 723,822 | Mar. 31 | 4017 | 905 | 103 | 903 |
| Buchanan, Alexander H. (See Thompson, John F., assignor.) | | | | | | |
| Buchanan, Bettie A., Lapel, Ind. Grave-covering | 728,081 | May 12 | 2370 | 527 | 104 | 522 |
| Buchanan, C. C., *et al.* (See Buchanan, William R., assignor.) | | | | | | |
| Buchanan, Frank, Dayton, Ohio. Secondary battery | 720,321 | Feb. 10 | 1688 | 383 | 102 | 1196 |
| Buchanan, Frank, Dayton, Ohio. Electric-arc light | 733,135 | July 7 | 776 | 188 | 105 | 164 |
| Buchanan, Frank, Dayton, Ohio. Reflector for headlights | 733,136 | July 7 | 778 | 188 | 105 | 164 |
| Buchanan, George P., Allegheny, Pa. Keyboard for stringed instruments | 730,000 | June 2 | 885 | 197 | 104 | 1308 |
| Buchanan, James W., Asheville, N. C. Sash-fastener | 744,473 | Nov. 17 | 3284 | 705 | 107 | 731 |
| Buchanan, John J. (See Smith and Buchanan.) | | | | | | |
| Buchanan, Judson, Chattanooga, Tenn. Plow | 747,129 | Dec. 15 | 3347 | 760 | 107 | 1872 |
| Buchanan, Judson, and E. M. Hickman, Chattanooga, Tenn., assignors to Chattanooga Plow Company. Wheel-plow | 722,205 | Mar. 10 | 1025 | 226 | 103 | 232 |
| Buchanan, Thomas, Newcastle-upon-Tyne, England. Motor | 744,899 | Nov. 24 | 4041 | 871 | 107 | 909 |
| Buchanan, Thomas, assignor of one-half to C. A. Ryall, Leamington, Canada. Railway-tie | 734,810 | July 28 | 3945 | 920 | 105 | 878 |
| Buchanan, William R., assignor of three-fourths to W. H. Hardy and C. C. Buchanan, Eldorado, Ill. Wagon-jack and end-gate | 741,765 | Oct. 20 | 2652 | 593 | 106 | 1845 |
| Bucher, Frederick, and R. B. Stephenson, Morgan Park, Ill. Marble-shooter | 720,558 | Feb. 17 | 2134 | 494 | 102 | 1304 |
| Buchheit, Charles R. (See Humphrey, Alexander F., assignor.) | | | | | | |
| Buchner, Albert, and E. P. McClure, Chicago, Ill. Vapor-engine governor | 748,477 | Dec. 29 | 5888 | 1338 | 107 | 2471 |
| Buchner, Max, Mannheim, assignor to C. F. Boehringer & Soehne, Mannheim-Waldhof, Baden, Germany. Reduction of nitro and azo compounds | 736,204 | Aug. 11 | 2196 | 473 | 105 | 1468 |
| Buchner, Max, Mannheim, assignor to C. F. Boehringer & Soehne, Mannheim-Waldhof, Baden, Germany. Reduction of nitro compounds | 736,205 | Aug. 11 | 2198 | 473 | 105 | 1469 |
| Buchner, Max, Mannheim, assignor to C. F. Boehringer & Soehne, Mannheim-Waldhof, Baden, Germany. Reduction of aromatic nitro compounds | 736,206 | Aug. 11 | 2200 | 473 | 105 | 1469 |
| Buchner, Max, assignor to C. F. Boehringer & Soehne, Mannheim-Waldhof, Germany. Reducing nitro compounds | 738,404 | Sept. 8 | 1739 | ..... | 106 | 390 |
| Bucholt, William, Jamaica, N. Y. Cap for shade-rollers | 728,441 | May 19 | 3048 | 671 | 104 | 687 |
| Buchwald, Fritz, assignor to Philippsohn and Leschziner, Berlin, Germany. Cloth-cutting machine | 729,127 | May 26 | 4318 | 953<br>954 | 104 | 964 |
| Buck, Edward C., Pretoria, Transvaal, South Africa. Marine-engine governor | 721,012 | Feb. 17 | 2970 | 683 | 102 | 1478 |
| Buck, Fred, assignor to Lufkin Rule Company, Saginaw, Mich. Measuring-tape | 736,359 | Aug. 18 | 2465 | 539 | 105 | 1544 |
| Buck, George H., assignor of one-half to A. M. Kraft, Brooklyn, N. Y. Woven-wire mattress | 731,662 | June 23 | 3949 | 878<br>879 | 104 | 1996 |
| Buck, Harold W., Niagara Falls, N. Y., assignor to General Electric Company. Transmission of power | 729,269 | May 26 | 4573 | 1009 | 104 | 1018 |
| Buck, Harold W., Niagara Falls, N. Y., assignor to General Electric Company. Indicating the relative positions of moving parts | 731,992 | June 23 | 4540 | 1013 | 104 | 2122 |
| Buck, Harold W., Niagara Falls, N. Y., assignor to General Electric Company. Controlling electric motors | 739,776 | Sept. 22 | 4291 | 962 | 106 | 968 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Buck, Harold W., Schenectady, N. Y., assignor to General Electric Company. Means for indicating the relative positions of moving parts | 731,750 | June 23 | 4106 | 917 | 104 | 2027 |
| Buck, Madison A. (See Hall, Olds, and Buck.) | | | | | | |
| Buck, Mary M., Machias, N. Y., and J. F. Mallinckrodt, Denver, Colo.; said Mallinckrodt assignor to said Buck. Curling-iron heater | 727,893 | May 12 | 2027 | 451 | 104 | 449 |
| Buckau, Mary L., New York, N. Y. Garter-supporter | 717,806 | Jan. 6 | 548 | 122 | 102 | 118 |
| Buckel, Charles, San Francisco, Cal. Safety-chair for window-cleaning | 724,799 | Apr. 7 | 719 | 167 | 103 | 1324 |
| Buckelew, Albert H., Newark, assignor, by mesne assignments, to Otis Elevator Company, East Orange, N. J. Controlling device for elevators | 724,662 | Apr. 7 | 451 | 110 | 103 | 1266 |
| Buckenberger, Charles P., Columbus, Ohio. Mirror | 735,204 | Aug. 4 | 335 | 64 | 105 | 1053 |
| Buckeye Iron and Brass Works. (See Hubbell, Joseph H., assignor.) | | | | | | |
| Buckeye Malleable Iron and Coupler Co. (See Timms and Bush, assignors.) | | | | | | |
| Buckeye Malleable Iron and Coupler Company. (See Bush, Samuel P., assignor.) | | | | | | |
| Buckeye Malleable Iron and Coupler Company. (See Bush and McCormick, assignors.) | | | | | | |
| Buckeye Malleable Iron and Coupler Company. (See Timms, James, assignor.) | | | | | | |
| Buckhalter, George N., *et al.* (See McGuire, Peter J., assignor.) | | | | | | |
| Buckham, George T. (See Dawson and Buckham.) | | | | | | |
| Buckham, Stephen T., Brooklyn, N. Y. Combined paper-weight, receptacle, and pin-cushion | 741,882 | Oct. 20 | 2862 | 638 | 106 | 1891 |
| Bucking, Henry, and R. Brown, San Francisco, Cal. Sharpener | 722,805 | Mar. 17 | 2167 | 484 | 103 | 493 |
| Buckingham, Albert E., East Oakland, assignor of three-fourths to F. Tindell, F. Klingeberg, and G. F. Foye, Oakland, Cal. Pencil | 744,474 | Nov. 17 | 3285 | 706 | 107 | 732 |
| Buckingham, Charles L., New York, N. Y. Automatic printing-telegraph | 737,203 | Aug. 25 | 4043 | 896, 897, 898 | 105 | 1894 |
| Buckingham, Charles L., New York, and E. Germann, Brooklyn, N. Y.; said Germann assignor to said Buckingham. Automatic printing-telegraph | 736,933 | Aug. 25 | 3566 | 791 | 105 | 1793 |
| Buckingham, George B., Brookville, Ind. Portable stall | 721,540 | Feb. 24 | 3983 | 908 | 102 | 1711 |
| Buckingham, Waite B. (See Coye, William H., assignor.) | | | | | | |
| Buckingham, William, Sydney, New South Wales, Australia. Rotary engine | 722,560 | Mar. 10 | 1687 | 374, 875, 876 | 103 | 378 |
| Buckius, Albert O., Jr., assignor, by mesne assignments, to W. H. Miner Company, Chicago, Ill. Rocker side bearing for railway-cars | 725,315 | Apr. 14 | 1656 | 374 | 103 | 1535 |
| Buckland, Alfred L., Marietta, Minn. Weighing apparatus | 721,934 | Mar. 3 | 533 | 117 | 103 | 118 |
| Buckland, Edward S., Binghamton, N. Y. Fire-extinguisher | 717,967 | Jan. 6 | 834 | 189 | 102 | 179 |
| Buckland, Elizabeth J., Hunts Corners, N. Y. Fire-extinguisher | 742,156 | Oct. 27 | 3448 | 769 | 106 | 2024 |
| Buckler, James, Worcester, Mass. Loom for weaving pile fabrics | 747,587 | Dec. 22 | 4187 | 941, 942 | 107 | 2074 |
| Buckler, James, Worcester, Mass. Woven pile fabric | 747,588 | Dec. 22 | 4191 | 943 | 107 | 2075 |
| Buckley, Charles, and I. C. Hollinger, New Albany, Ind. Check-hook | 734,160 | July 21 | 2699 | 635 | 105 | 604 |
| Buckley, Elijah S., New Berlin, N. Y. Pulley | 739,148 | Sept. 15 | 3142 | 694 | 106 | 703 |
| Buckley, John, Everett, and J. W. Buckley, Chelsea, Mass. Trap clean-out | 738,289 | Sept. 8 | 1491 | 323 | 106 | 336 |
| Buckley, John J., Dwight, Ill. Track-raising implement | 735,703 | Aug. 11 | 1288 | 275 | 105 | 1272 |
| Buckley, John P., Washington, D. C. Garment-drafting rule | 744,475 | Nov. 17 | 3286 | 706 | 107 | 732 |
| Buckley, Joseph W. (See Buckley, John and J. W.) | | | | | | |
| Buckley, Minnie E., St Louis, Mo. Shirt-waist fitter | 725,035 | Apr. 14 | 1151 | 260 | 103 | 1431 |
| Bucklin, Charles S., Redbank, N. J. Can-cap | 730,739 | June 9 | 2201 | 490 | 104 | 1600 |
| Buckman, Alexander, Brookview, assignor of two-thirds to H. E. Cole and F. H. McKnight, New York, N. Y. Bottle-stopper | 748,161 | Dec. 29 | 5318 | 1208 | 107 | 2347 |
| Buckman, Benjamin J., Newfield, N. J. Rocker for chairs, hobby-horses, &c | 720,882 | Feb. 17 | 2708 | 626 | 102 | 1423 |
| Buckminster, Josiah W., *et al.* (See Barber, Cyrus, assignor.) | | | | | | |
| Bucknam, Worthy C., assignor to Geneva Automobile and Manufacturing Company, Geneva, Ohio. Pump-regulating mechanism | 737,332 | Aug. 25 | 4297 | 955 | 105 | 1947 |
| Bucknam, Worthy C., assignor to Geneva Automobile and Manufacturing Company, Geneva, Ohio. Gas-burner | 739,584 | Sept. 22 | 3950 | 882 | 106 | 894 |
| Budd, Edward G., Philadelphia, Pa., assignor to American Pulley Company. Machine for curving pulley-rims | 735,704 | Aug. 11 | 1289 | 276 | 105 | 1272 |
| Budd, Harry, Independence, Kans. Laundry apparatus | 727,078 | May 5 | 493 | 105, 106 | 104 | 108 |
| Buddie, Clarence. (See Eddins and Buddie.) | | | | | | |
| Buderus, Hugo, Hirzenhain, Germany. Treating molten iron | 721,282 | Feb. 24 | 3525 | 802 | 102 | 1615 |
| Budesheim, Harry, Baltimore, Md. Nut-cracker | 718,977 | Jan. 27 | 2769 | 620 | 102 | 632 |
| Bueb, Julius, Dessau, Germany. Producing cyanogen compounds | 720,402 | Feb. 10 | 1821 | 415 | 102 | 1225 |
| Bueb, Julius, Dessau, Germany. Gas-retort | 720,780 | Feb. 17 | 2543 | 585 | 102 | 1388 |
| Buechling, Ernest W., Knoxville, Pa. Bank | 735,940 | Aug. 11 | 1730 | 369 | 105 | 1369 |
| Buehler, Fred., Jr. (See Fuqua, David P., Sr., assignor.) | | | | | | |
| Buehler, Frederick C., Jr. (See Fuqua and Buehler.) | | | | | | |
| Buehler, Oscar L., Detroit, Mich. Cigar-maker's knife | 722,282 | Mar. 10 | 1174 | 260 | 103 | 265 |
| Buehne, William G., St. Louis, Mo. Tablet-dispensing machine | 743,686 | Nov. 10 | 1758 | 370 | 107 | 391 |
| Buek, Charles E. (See Geer, George, assignor.) | | | | | | |
| Buel, James W., Philadelphia, Pa. Thesaurus dictionary | 723,823 | Mar. 31 | 4018 | 905, 906 | 103 | 903 |
| Buell, William C., Camden, N. J. Ladder | 719,183 | Jan. 27 | 3165 | 704 | 102 | 713 |
| Buente, Charles F., Allegheny, Pa. Fireproof floor construction | 728,857 | May 26 | 3848 | 856 | 104 | 870 |
| Buff, Ernest U., Herisau, Switzerland. Ornamented embroidery and manufacturing same | 741,302 | Oct. 13 | 1733 | 387 | 106 | 1633 |
| Buff, George L., Jamaica Plain, Mass. Transit | 719,429 | Feb. 3 | 35 | 8 | 102 | 833 |
| Buffalo Gasoline Motor Company. (See Annesley, Charles G., assignor.) | | | | | | |
| Buffalo Musical Instrument Company. (See Bayer, William F., assignor.) | | | | | | |
| Buffalo Pitts Company. (See Farquhar and Aitken, assignors.) | | | | | | |
| Buffalo Scale Company. (See Richmond, Theodore L., assignor.) | | | | | | |
| Bufford, George W., assignor to J. H. Williams and Company, Brooklyn, N. Y. Chain wrench | 743,058 | Nov. 3 | 462 | 101 | 107 | 96 |
| Buffum, Herbert H., Abington, Mass. Automobile steering mechanism | 721,859 | Mar. 3 | 380 | 83 | 103 | 83 |
| Buffum, Herbert H., Abington, Mass. Piston-bearing oiler | 729,537 | June 2 | 33 | 8 | 104 | 1133 |
| Buffum, Herbert H., Abington, Mass. Automobile steering apparatus | 729,538 | June 2 | 34 | 9 | 104 | 1133 |
| Buford, Luther V., *et al.* (See Gray, Charles W., assignor.) | | | | | | |
| Buford, Luther V., Virginia City, Mont. Gate | 720,662 | Feb. 17 | 2346 | 537 | 102 | 1345 |
| Buford, Paschal, Marshall, Tex. Temporary binder | 727,744 | May 12 | 1743 | 391 | 104 | 392 |
| Buge, Bernhard A., New York, N. Y. Non-freezing water-closet | 734,811 | July 28 | 3946 | 920 | 105 | 879 |
| Buhl, William H. (See Modlin and Buhl.) | | | | | | |
| Buhle, Louis. (See Wiseburn and Buhle.) | | | | | | |
| Bühne, Friedrich W., Freiburg, Germany. Accumulator-plate | 745,274 | Nov. 24 | 4787 | 1045 | 107 | 1062 |
| Buhoup, Harry C. (See Klohs, Samuel F., assignor.) | | | | | | |
| Buhoup, Harry C., Chicago, Ill. Metallic-car construction | 717,540 | Jan. 6 | 29 | 8,9 | 102 | 9 |

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| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| Buhoup, Harry C., Chicago, Ill. Brake-beam | 721,664 | Mar. 3 | 23 | 5 | 103 | 7 |
| Buhoup, Harry C., Chicago, Ill. Car construction | 725,213 | Apr. 14 | 1485 | 337<br>338 | 103 | 1499 |
| Buhoup, Harry C., Chicago, Ill. Brake-beam strut | 731,541 | June 23 | 3729 | 830<br>831 | 104 | 1952 |
| Buhoup, Harry C., Chicago, Ill. Brake-beam | 742,388 | Oct. 27 | 3883 | 872 | 106 | 2113 |
| Buhoup, Harry C., and G. P. Ritter, Chicago, Ill. Manufacturing car-wheels | 717,538 | Jan. 6 | 26 | 7, 8 | 102 | 8 |
| Buhoup, Harry C., and G. P. Ritter, Chicago, Ill. Car-wheel and tire rolling mill | 717,539 | Jan. 6 | 27 | 8 | 102 | 8 |
| Buhoup, Harry C., and G. P. Ritter, Chicago, Ill. Manufacturing car-wheels | 721,632 | Feb. 24 | 4185 | 952 | 102 | 1757 |
| Buhoup, Harry C., and G. P. Ritter, Chicago, Ill. Manufacture of car-wheels, tires, &c. | 734,041 | July 21 | 2469 | 577 | 105 | 554 |
| Buice, Orral O., Montgomery, Ala. Door for bookcases or the like | 729,270 | May 26 | 4575 | 1010 | 104 | 1019 |
| Buick Manufacturing Company. (See Richard, Eugene C., assignor.) | | | | | | |
| Buker, James, Chicago, Ill. Journal-bearing | 748,258 | Dec. 29 | 5479 | 1248<br>1249 | 107 | 2381 |
| Bulask, Francis J., Toledo, Ohio. Artificial fuel | 746,668 | Dec. 15 | 2479 | ..... | 107 | 1674 |
| Bulger, Matthew J., New York, N. Y. Printing device | 718,189 | Jan. 13 | 1244 | 273 | 102 | 284 |
| Bulgin, George C., Newark, N. J. Kettle-cover | 722,082 | Mar. 3 | 778 | 175 | 103 | 168 |
| Bulkley, Louis C., Hillside, Mo. Apparatus for humidifying the atmosphere | 719,430 | Feb. 3 | 37 | 8 | 102 | 833 |
| Bull, Edmund W., Cobourg, Canada. Rotary engine | 743,443 | Nov. 10 | 1290 | 264<br>265 | 107 | 291 |
| Bull, Einar, Glasgow, Scotland. Toy | 733,353 | July 7 | 1172 | 277 | 105 | 246 |
| Bull, John J. (See Wheeler and Bull.) | | | | | | |
| Bullard, Albert M. (See Rorty and Bullard.) | | | | | | |
| Bullard, Albert M., Somerville, and L. A. Falk, Boston, Mass., assignors to American Telephone and Telegraph Company. Service-meter system and apparatus for telephone-exchanges | 719,736 | Feb. 3 | 587 | 133 | 102 | 946 |
| Bullard, Dudley B., assignor to Bullard Machine Tool Company, Bridgeport, Conn. Lathe | 737,996 | Sept. 1 | 885 | 193<br>194<br>195<br>196 | 106 | 193 |
| Bullard, Edward P., assignor to Bullard Machine Tool Company, Bridgeport, Conn. Chuck-jaw | 729,727 | June 2 | 379 | 86 | 104 | 1206 |
| Bullard, Edwin W., Springfield, Mass. Screw-cutting device | 737,204 | Aug. 25 | 4048 | 898 | 105 | 1895 |
| Bullard, Frank D., Los Angeles, Cal. Pipe-wrench | 729,728 | June 2 | 380 | 86 | 104 | 1206 |
| Bullard, Frank D., Los Angeles, Cal. Pipe-wrench | 733,138 | July 7 | 780 | 189 | 105 | 165 |
| Bullard, Frank D., Los Angeles, Cal. Pipe-wrench | 742,389 | Oct. 27 | 3884 | 872 | 106 | 2114 |
| Bullard, Geo. W., *et al.* (See Smith, Marshall S., assignor.) | | | | | | |
| Bullard, James H., Springfield, Mass. Tennis-court marker | 735,705 | Aug. 11 | 1293 | 277 | 105 | 1273 |
| Bullard, James H., Springfield, assignor to Overman Automobile Company, Chicopee, Mass. Valve for steam-pumps. (Reissue) | 12,088 | Mar. 3 | 998 | 221 | 103 | 211 |
| Bullard, Lewis H. (See Chambers and Bullard.) | | | | | | |
| Bullard Machine Tool Company. (See Bullard, Dudley B., assignor.) | | | | | | |
| Bullard Machine Tool Company. (See Bullard, Edward P., assignor.) | | | | | | |
| Bullard, Paul R., Waltham, assignor to W. C. Scarborough, Newton, Mass. Device for carrying and supporting maps, &c | 733,137 | July 7 | 779 | 189 | 105 | 165 |
| Bullard, Paul R., Waltham, assignor to W. C. Scarborough, Newton, Mass. Support for map-carrying devices | 741,009 | Oct. 13 | 1156 | 261 | 106 | 1513 |
| Bulles, George A., Aurora, Ill. Horse-blanket | 726,857 | May 5 | 38 | 9 | 104 | 11 |
| Bulles, George A., Aurora, Ill. Horse-blanket | 742,285 | Oct. 27 | 3707 | 828 | 106 | 2079 |
| Bulles, George A., Aurora, Ill. Tail wrapper and crupper for horse-blankets | 742,286 | Oct. 27 | 3709 | 828 | 106 | 2079 |
| Bulling, Anton, Munich, Germany. Inhaler | 725,928 | Apr. 21 | 2797 | 635 | 103 | 1794 |
| Bullis, Benson S., assignor, by mesne assignments, of one-half to D. Sheppard, St. Louis, Mo. Window-screen | 723,824 | Mar. 31 | 4021 | 906 | 103 | 904 |
| Bulloch, Alva B., Birmingham, assignor of one-half to T. J. Burton, Edwardsville, Ala. Switch-stand | 734,042 | July 21 | 2471 | 577 | 105 | 555 |
| Bullock, Arthur R., assignor to B. Parmely, Jr., Cleveland, Ohio. Gas-pressure-reducing apparatus | 728,361 | May 19 | 2914 | 643 | 104 | 658 |
| Bullock, Edmund L., assignor of one-half to J. R. Phillips, Hartford, Conn. Washing-machine | 733,139 | July 7 | 781 | 189 | 105 | 165 |
| Bullock, Forty & Co. (See Bullock and Forty, assignors.) | | | | | | |
| Bullock, Lewis C., Jr., Milesburg, Pa. Combined wheel-chair and hammock | 728,082 | May 12 | 2371 | 527 | 104 | 522 |
| Bullock, Lovell D., Pompanoosuc, Vt. Wood-turning machine | 722,486 | Mar. 10 | 1558 | 342 | 103 | 349 |
| Bullock, Owen, Hemel Hempstead, and W. H. Forty, Boxmoor, assignors to Bullock, Forty and Company, Limited, Hemel Hempstead, England. Shuttle-motion for looms | 728,158 | May 12 | 2506 | 557 | 104 | 551 |
| Bullock, Owen, Hemel Hempstead, and W. H. Forty, Boxmoor, assignors to Bullock, Forty & Co., Limited, Hemel Hempstead, England. Loom for the manufacture of coir mats | 730,339 | June 9 | 1475 | 326<br>327 | 104 | 1444 |
| Bullock, Thomas J., Freedom, Ky. Whiffletree-clip | 719,431 | Feb. 3 | 39 | 8 | 102 | 833 |
| Bullock, Thomas J., Freedom, Ky. Whiffletree-clip | 738,405 | Sept. 8 | 1740 | 378 | 106 | 390 |
| Bulova, Joseph. (See Gosling, Charles, assignor.) | | | | | | |
| Bultman, George C., Harrison, N. J. Wrench | 747,130 | Dec. 15 | 3348 | 761 | 107 | 1872 |
| Bumford, Emanuel, Birmingham, Ala. Gas-valve water-seat | 736,488 | Aug. 18 | 2710 | 594 | 105 | 1596 |
| Bumford, Emanuel, Birmingham, Ala. Gas-burning furnace | 747,533 | Dec. 22 | 4096 | 919 | 107 | 2054 |
| Bump, James G., Brad, Tex. Excavating apparatus | 730,228 | June 9 | 1281 | 282<br>284 | 104 | 1404 |
| Bumpus, Delos H., assignor of one-half to J. W. Hutchison, Centerview, Ohio. Gas-governor | 729,271 | May 26 | 4577 | 1010 | 104 | 1019 |
| Bunch, John W., assignor of two-thirds to J. P. Hornish and C. H. Wolfe, Keokuk, Iowa. Match-box | 725,822 | Apr. 21 | 2615 | 595 | 103 | 1755 |
| Bunch, Josiah, El Reno, Okla. Ter. Sound-beam for violins | 722,561 | Mar. 10 | 1690 | 377 | 103 | 378 |
| Buncke, Richard D., Jersey City, N. J., assignor to Fuchs & Lang Manufacturing Company, New York, N. Y. Lithographic press | 721,420 | Feb. 24 | 3774 | 857<br>858 | 102 | 1667 |
| Buncke, Richard D., Jersey City, N. J., assignor to Fuchs & Lang Manufacturing Company, New York, N. Y. Machine for cleaning sheet-metal plates | 721,935 | Mar. 3 | 534 | 117 | 103 | 118 |
| Bundy, Benjamin, Pasadena, Cal. Machine for adding and subtracting integers and fractions | 740,522 | Oct. 6 | 270 | 53 | 106 | 1303 |
| Bundy, Herbert F., Mount Vision, N. Y. Neck-yoke | 734,398 | July 21 | 3145 | 739 | 105 | 699 |
| Bundy Manufacturing Company. (See Boynton, Alonzo R., assignor.) | | | | | | |
| Bundy Manufacturing Company. (See Bundy and Boynton, assignors.) | | | | | | |
| Bundy, Willard L., and A. R. Boynton, Binghamton, N. Y., assignors to Bundy Manufacturing Company. Calculating-machine | 745,149 | Nov. 24 | 4559 | 989<br>990<br>991<br>992 | 107 | 1014 |
| Bunger, Ora H., Davis, S. D. Pipe-driving head | 735,205 | Aug. 4 | 336 | 64 | 105 | 1053 |
| Bunker, Carey E., Oregon, Mo. Telegraph instrument | 725,214 | Apr. 14 | 1487 | 338 | 103 | 1500 |
| Bunker, Carey E., Oregon, Mo. Telegraph-key | 725,215 | Apr. 14 | 1489 | 339 | 103 | 1500 |

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| Bunker, Ira S., Freewater, Oreg. Fire and burglar alarm | 719,563 | Feb. 3 | 271 | 63 | 102 | 880 |
| Bunker, Louis A. (See Shaw, Irvin A., assignor.) | | | | | | |
| Bunkers, John B., Remsen, Iowa. Trace-buckle | 719,737 | Feb. 3 | 594 | 133 | 102 | 947 |
| Bunnell, Andrew J., Chicago, Ill. Wrapper for furniture or the like | 718,906 | Jan. 20 | 2634 | 591 | 102 | 589 |
| Bunnell, Leslie C., Paris, Ky. Paper-bag holder | 721,996 | Mar. 3 | 646 | 141 | 103 | 140 |
| Bunnell, Louisa P., and W. Nichols, assignors of one-third to G. K. Detwiler, Toledo, Ohio. Self-threading needle | 735,458 | Aug. 4 | 819 | 175 | 105 | 1154 |
| Bunnell, Morton G., Chicago, assignor, by mesne assignments, to Western Wheeled Scraper Company, Aurora, Ill. Road-scraper | 739,383 | Sept. 22 | 3567 | 797 | 106 | 810 |
| Bunnell, Morton G., Chicago, assignor, by mesne assignments, to Western Wheeled Scraper Company, Aurora, Ill. Running-gear | 739,777 | Sept. 22 | 4294 | 962 | 106 | 969 |
| Bunnell Telegraphic & Electrical Company. (See Tismer, Paul G., assignor.) | | | | | | |
| Bunning, John W. P., Boston, Mass. Shoe-fastening | 746,280 | Dec. 8 | 1779 | 404 | 107 | 1499 |
| Bunt, Alfred E., Vallentyne, assignor of one-half to W. Shier, Sunderland, Canada. Root-puller | 737,333 | Aug. 25 | 4298 | 955 | 105 | 1947 |
| Buntenbach, August, London, Oreg. Food-container | 738,981 | Sept. 15 | 2841 | 630 | 106 | 641 |
| Buntenbach, August, London, Oreg. Earth-auger | 738,982 | Sept. 15 | 2842 | 630 | 106 | 642 |
| Bunting, Norman E., Marion, Iowa. Car-mover | 742,157 | Oct. 27 | 3450 | 769 | 106 | 2024 |
| Bunyan, Frank, Stratford, Canada. Food product and preparing same | 737,585 | May 12 | 1427 | ..... | 104 | 325 |
| Bünz, Heinrich. (See Bracklow, Timm, and Bünz.) | | | | | | |
| Bunzl, Ernest, *et al.* (See Kuhn, Edmond, assignor.) | | | | | | |
| Bunzl, Gustav, *et al.* (See Kuhn, Edmond, assignor.) | | | | | | |
| Buob, Frederick, Cincinnati, Ohio. Cushion | 721,936 | Mar. 3 | 535 | 118 | 103 | 118 |
| Burbank, George M., Bay City, Mich. Cement railway-tie | 734,506 | July 28 | 3342 | 782 | 105 | 755 |
| Burbridge, William A., and E. Chesebrough; said Burbridge assignor to J. Chesebrough, Jersey City, N. J. Extension-ladder hook | 719,081 | Jan. 27 | 2970 | 663 | 102 | 674 |
| Burch, Frank H., Allegheny, assignor, by mesne assignments, to Williamsport Mirror and Glass Company, Williamsport, Pa. Glass-chipping machine | 743,824 | Nov. 10 | 2009 | 426 | 107 | 444 |
| Burcher, William H., London, England. Shaft-support for vehicles | 732,806 | Mar. 17 | 2168 | 484 | 103 | 493 |
| Burckett, Charles H., Glenridge, N. J. Malt-sugar confection and making same | 732,807 | Mar. 17 | 2169 | 484 | 103 | 493 |
| Burd, Fred W., Springfield, Vt. Thermostat for incubators | 741,303 | Oct. 13 | 1734 | 387 | 106 | 1633 |
| Burda, Franz A. E., London, England. Chronometric stamp | 737,745 | May 12 | 1745 | 392 | 104 | 393 |
| Burden, Oscar H., and T. F. Adams, Kaslo, Canada. Amalgamator | 720,883 | Feb. 17 | 2709 | 626 | 102 | 1423 |
| Burdett-Rowntree Manufacturing Company. (See Rowntree, Harold, assignor.) | | | | | | |
| Burdick, Albert C., Seattle, Wash. Floating fish-trap | 717,807 | Jan. 6 | 549 | 123 | 102 | 118 |
| Burdick, Albert C., Seattle, Wash. Floating fish-trap | 719,738 | Feb. 3 | 595 | 133<br>134 | 102 | 947 |
| Burdick, Charles L., London, England. Machine for printing patterns | 746,786 | Dec. 15 | 2680 | 619 | 107 | 1717 |
| Burdick, Chester R., Watertown, N. Y. Cushion | 727,079 | May 5 | 494 | 106 | 104 | 108 |
| Burdick, Hiram M., Utica, N. Y. Wing for corn-harvesters | 733,140 | July 7 | 782 | 190 | 105 | 165 |
| Burdick, Hiram M., Utica, N. Y. Securing device for weeder-teeth or the like | 746,919 | Dec. 15 | 2939 | 678 | 107 | 1777 |
| Burdick, Nelson A., Sault Ste. Marie, Mich. Handcuff | 738,983 | Sept. 15 | 2843 | 630 | 106 | 642 |
| Burdick, Samuel M., Colorado Springs, Colo. Flexible shaft | 741,106 | Oct. 13 | 1332 | 306 | 106 | 1551 |
| Burdon, William M., Bellshill, Scotland. Cambering or straightening device for girders or beams | 732,164 | June 30 | 4914 | 1092<br>1093 | 104 | 2211 |
| Bureau Can and Manufacturing Company. (See Rehfuss, John G. and M. O., assignors.) | | | | | | |
| Burfeind, Joachim H. (See Officer, Burfeind, and Neill.) | | | | | | |
| Burfeind, William M. H. (See Brewer and Burfeind.) (Reissue.) | | | | | | |
| Burge, John, and S. B. Cornell, Smithfield, W. Va. Churn | 719,739 | Feb. 3 | 597 | 134 | 102 | 948 |
| Bürger, Charles, Chêne-Bougeries, near Geneva, Switzerland. Tire | 734,296 | July 21 | 2976 | 699 | 105 | 662 |
| Burger, Edward, Kokomo, Ind. Heater attachment | 739,384 | Sept. 22 | 3571 | 797 | 106 | 811 |
| Burger, Franz. (See Williams, Henry M., assignor.) | | | | | | |
| Burger, Franz, assignor of three-fourths to H. M. Williams, Fort Wayne, Ind. Mechanical stoker for furnaces | 736,207 | Aug. 11 | 2204 | 473<br>474 | 105 | 1470 |
| Burger, Franz, assignor of three-fourths to H. M. Williams, Fort Wayne, Ind. Flexible stay-bolt | 746,010 | Dec. 8 | 1290 | 290 | 107 | 1391 |
| Burger, Franz, assignor of three-fourths to H. M. Williams, Fort Wayne, Ind. Hot-air engine or power-generator | 747,316 | Dec. 15 | 3707 | 835 | 107 | 1950 |
| Burger, Franz, and H. M. Williams, Fort Wayne, Ind.; said Burger assignor of one-half to said Williams. Fire-tube boiler | 743,825 | Nov. 10 | 2012 | 427 | 107 | 445 |
| Burger, Frederick W. (See Armstrong and Burger.) | | | | | | |
| Burger, John, Providence, R. I. Automatic signaling device for linotype-machines | 747,534 | Dec. 22 | 4098 | 920 | 107 | 2054 |
| Burger, Leopold F., assignor to Woolley Foundry and Machine Works, Anderson, Ind. Gas-engine | 722,671 | Mar. 17 | 1919 | 427 | 103 | 442 |
| Burger, Leopold F., assignor to Woolley Foundry and Machine Works, Anderson, Ind. Valve for gas-engines | 722,672 | Mar. 17 | 1922 | 427 | 103 | 443 |
| Burger, Leopold F., assignor to Woolley Foundry and Machine Works, Anderson, Ind. Governing mechanism for gas-engines | 725,668 | Apr. 21 | 2335 | 527 | 103 | 1694 |
| Burger, Leopold F., assignor to Woolley Foundry and Machine Works, Anderson, Ind. Speed-governing mechanism | 725,669 | Apr. 21 | 2338 | 528 | 103 | 1694 |
| Burgess, Andrew, Owego, N. Y. Gas-operated firearm | 726,399 | Apr. 28 | 3659 | 830 | 103 | 1986 |
| Burgess, Benjamin, Danville, Ill. Rail-anchor | 717,808 | Jan. 6 | 551 | 123 | 102 | 119 |
| Burgess, Charles F., and B. Frankenfield, Madison, Wis. Regulation of electric circuits | 720,884 | Feb. 17 | 2712 | 626<br>627 | 102 | 1423 |
| Burgess, Charles F., and C. Hambuechen, Madison, Wis. Applying heat to electrotypes | 732,616 | June 30 | 5782 | 1282 | 104 | 2396 |
| Burgess, Charles F., Madison, Wis., and B. Frankenfield, Pittsburg, Pa. Means for regulating self-inductance in electric circuits | 743,444 | Nov. 10 | 1292 | 265<br>266 | 107 | 291 |
| Burgess, Edward W., Milwaukee, Wis., assignor to International Harvester Company. Pitman connection | 720,663 | Feb. 17 | 2348 | 537 | 102 | 1346 |
| Burgess, Edward W., Milwaukee, Wis., assignor to International Harvester Company, Chicago, Ill. Corn-harvester | 727,080 | May 5 | 495 | 106<br>107 | 104 | 108 |
| Burgess, Edward W., Milwaukee, Wis., assignor to International Harvester Company, Chicago, Ill. Compressor and top-retainer for corn-harvesters | 727,081 | May 5 | 499 | 107 | 104 | 109 |
| Burgess, Edward W., Milwaukee, Wis., assignor to International Harvester Company, Chicago, Ill. Corn-harvester frame | 727,082 | May 5 | 501 | 108 | 104 | 110 |
| Burgess, Edward W., Milwaukee, Wis., assignor to International Harvester Company, Chicago, Ill. Chain-tightener | 727,083 | May 5 | 502 | 108 | 104 | 110 |
| Burgess, Edward W., Milwaukee, Wis., assignor to International Harvester Company, Chicago, Ill. Gear-shipping mechanism | 727,084 | May 5 | 503 | 108 | 104 | 110 |
| Burgess, Edward W., Milwaukee, Wis., assignor to International Harvester Company, Chicago, Ill. Draft connection for mowers | 727,085 | May 5 | 505 | 108 | 104 | 111 |
| Burgess, Edward W., Milwaukee, Wis., assignor to International Harvester Company, Chicago, Ill. Raising or lowering device for harvester-frames | 728,199 | May 19 | 2583 | 576<br>577 | 104 | 589 |
| Burgess, George M., Hopedale, Mass. Spring-packing for spindle-bolsters | 744,040 | Nov. 17 | 2458 | 528 | 107 | 554 |
| Burgess, James C., Georgetown, N. Mex. Ter., assignor to L. V. Voght, Indianapolis, Ind. Coal-bucket | 733,002 | July 7 | 531 | 131 | 105 | 113 |

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| Burgess, James R., Port Huron, Mich. Pneumatic conveyer | 721,145 | Feb. 24 | 3262 | 747 | 102 | 1562 |
| Burgess, Mortimer B., Lincoln University, Pa. Folding umbrella | 744,476 | Nov. 17 | 3288 | 706 | 107 | 732 |
| Burgess, Neilson, assignor to A. Stoddart, Highlands, N. J. Apparatus for exercising horses or other animals on shipboard or other places | 736,360 | Aug. 18 | 2466 | 540 | 105 | 1545 |
| Burgess, William S., Boston, Mass. Alidade or indicator for ships' compasses | 731,751 | June 23 | 4108 | 917 | 104 | 2027 |
| Burgham, Oliver H. (See Johnston, John F., assignor.) | | | | | | |
| Burgher, Francis L., Stapleton, N. Y. Steaming apparatus for cloth | 745,321 | Dec. 1 | 15 | 3 | 107 | 1104 |
| Burgher, Juan F., Belt, Mont. Sheep-shears | 740,523 | Oct. 6 | 274 | 54 | 106 | 1304 |
| Burgon, Harry, Sheffield, England. Sheep-shears | 730,609 | June 9 | 1983 | 441 | 104 | 1554 |
| Burgum, William C., assignor of one-half to H. H. Francies, Pittsburg, Pa. Brick-machine | 738,406 | Sept. 8 | 1740 | 378 | 106 | 390 |
| Burk, Ashbel C., Gypsum, Ohio. Fruit-sizing machine | 746,011 | Dec. 8 | 1291 | 290 | 107 | 1392 |
| Burk, E. T. (See Bond, Benjamin F., assignor.) | | | | | | |
| Burk, M. W. (See Ehrmanntraut, William A., assignor.) | | | | | | |
| Burk, Patrick, Canton, Ohio. Locomotive steam-boiler | 744,042 | Nov. 17 | 2461 | 528<br>529 | 107 | 555 |
| Burk, Patrick, Canton, Ohio. Stationary steam-boiler | 744,043 | Nov. 17 | 2462 | 529 | 107 | 555 |
| Burk, Sidney M., assignor of one-half to S. Whittle, Jr., Philadelphia, Pa. Electric-conductor molding | 737,997 | Sept. 1 | 894 | 196 | 106 | 195 |
| Burkart, Oliver R., St. Louis, Mo. Flesh-rubber | 728,159 | May 12 | 2508 | 558 | 104 | 551 |
| Burke, Charles G., *et al.* (See Ripley, Robert A., assignor.) | | | | | | |
| Burke, Charles G., New York, N. Y. Wireless telegraphy | 737,072 | Aug. 25 | 3809 | 844 | 105 | 1844 |
| Burke, Charles G., Brooklyn, N. Y. Telegraphic code | 744,041 | Nov. 17 | 2459 | 528 | 107 | 555 |
| Burke, Charles G., Brooklyn, N. Y., assignor of one-half to J. Q. A. Whittemore, Boston, Mass. Telephonic apparatus | 719,432 | Feb. 3 | 40 | 8 | 102 | 834 |
| Burke, Charles G., Brooklyn, N. Y., assignor of one-half to J. Q. A. Whittemore, Boston, Mass. Telephonic apparatus. (Reissue) | 12,103 | Mar. 24 | 3974 | 896 | 103 | 877 |
| Burke, Charles G., Brooklyn, N. Y., assignor of one-half to J. Q. A. Whittemore, Boston, Mass. Telephone apparatus | 736,489 | Aug. 18 | 2711 | 595 | 105 | 1596 |
| Burke, Edmund. (See Egan, William J., assignor.) | | | | | | |
| Burke, Edward J., assignor of one-half to J. F. Cummings and P. W. Anderson, Olyphant, Pa. Electric insulator | 728,442 | May 19 | 3049 | 671 | 104 | 688 |
| Burke, Ira N., Butcher Ranch, assignor of one-half to E. C. Kavanaugh, Foresthill, Cal. Non-refillable bottle | 745,566 | Dec. 1 | 463 | 109 | 107 | 1195 |
| Burke, James J., Hartford, Conn. Steam-trap | 719,740 | Feb. 3 | 599 | 134 | 102 | 948 |
| Burke, James J., Hartford, Conn. Steam-engine | 722,083 | Mar. 3 | 779 | 175 | 103 | 168 |
| Burke, James P., Cornwall Landing, N. Y., assignor to American Coal Screen Company. Coal-screen | 742,158 | Oct. 27 | 3450 | 769<br>770 | 106 | 2025 |
| Burke, Michael. (See Reilly and Burke.) | | | | | | |
| Burke, Michael J. (See Warner, Jason T., assignor.) | | | | | | |
| Burke, Thomas F., Newcastle, Pa. Steel-car construction | 740,804 | Oct. 6 | 792 | 178 | 106 | 1414 |
| Burke, Washington P., Quitman, Ga. Crupper-shield | 723,136 | Mar. 17 | 2744 | 616 | 103 | 612 |
| Burke, William P., Fethard, Ireland. Fusible electric cut-out | 729,729 | June 2 | 981 | 86 | 104 | 1206 |
| Burkholder, Charles E., Marion, Pa. Pump-operating device | 720,322 | Feb. 10 | 1690 | 383 | 102 | 1169 |
| Burkholder, John H., Ashland, Ohio. Door-hanger | 741,221 | Oct. 13 | 1568 | 353 | 106 | 1601 |
| Burkman, Simon, assignor of one-half to A. Dahlberg, Chicago, Ill. Bottle-stoppering apparatus | 726,505 | Apr. 28 | 3883 | 879 | 103 | 2029 |
| Burks, B. B. (See Charlton, Joseph A., assignor.) | | | | | | |
| Burleigh, Joseph H., Laconia, N. H., assignor to V. D. Smith, Boston, and B. F. Smith, Somerville, Mass. Boot or shoe lining | 735,459 | Aug. 4 | 820 | 175 | 105 | 1154 |
| Burley, Harry S., assignor of one-half to B. A. Estep, Chicago, Ill. Adjustable extension-hanger | 733,003 | July 7 | 532 | 132 | 105 | 114 |
| Burlingame, Edwin A., Providence, R. I. Lamp-filling indicator | 725,670 | Apr. 21 | 2339 | 528 | 103 | 1695 |
| Burlingame, George L., assignor to Kellogg Switchboard and Supply Company, Chicago, Ill. Self-indicating operator's key | 720,885 | Feb. 17 | 2715 | 627 | 102 | 1424 |
| Burlingame, Joseph P., assignor of one-half to J. E. Field, Lakewood, R. I. Ball-float | 740,625 | Oct. 6 | 467 | 103 | 106 | 1346 |
| Burlington Blanket Company. (See Rasch, William G., assignor.) | | | | | | |
| Burlington Brass Works. (See Storle, Ole O., assignor.) | | | | | | |
| Burmeister, Louis, Milwaukee, Wis. Elevator-leg | 718,907 | Jan. 20 | 2635 | 591 | 102 | 589 |
| Burn, Robinson S., Kingston-upon-Hull, England. Safety-guard for electric tram-cars or similarly-propelled vehicles | 730,740 | June 9 | 2202 | 490 | 104 | 1601 |
| Burnam, Clarence M., assignor of one-half to J. Heinsfurter, Chicago, Ill. Golf-club | 727,086 | May 5 | 507 | 109 | 104 | 111 |
| Burnam, William L., Kansas City, Mo. Refractometer | 735,460 | Aug. 4 | 821 | 175<br>176 | 105 | 1155 |
| Burnell, Arthur S., Marshalltown, Iowa. Flexible flat-metal floor-mat | 737,574 | Sept. 1 | 30 | 7 | 106 | 10 |
| Burnell, Harry M., Denver, Colo., assignor to M. E. Mogg, Chicago, Ill. Vapor-gasolene burner | 727,087 | May 5 | 509 | 109 | 104 | 112 |
| Burner, Daniel E., Homer, Ohio, assignor to Sprout, Waldron & Company, Muncy, Pa. Gyrating sieve or bolting-machine | 720,559 | Feb. 17 | 2136 | 494 | 102 | 1305 |
| Burnes, Worley W., McCoy, Tex. Fan construction | 741,107 | Oct. 13 | 1333 | 306 | 106 | 1551 |
| Burnett, Douglass, Brooklyn, N. Y. Apparatus for measuring illumination | 733,538 | July 14 | 1503 | 359 | 105 | 334 |
| Burnett, Douglass, Brooklyn, N. Y. Measuring illumination | 736,064 | Aug. 11 | 1971 | 419 | 105 | 1421 |
| Burnett, Edward. (See Turner and Burnett.) | | | | | | |
| Burnett, Edward, J. F. Turner, and J. C. Oatman, Clifford, Mich. Bean-separating machine | 741,956 | Oct. 20 | 3021 | 670 | 106 | 1924 |
| Burnett, George M., Coney Island, assignor of one-half to J. Imrie, New York, N. Y. Vegetable-cutter | 747,933 | Dec. 29 | 4870 | 1099 | 107 | 2249 |
| Burnett, Hiram A. (See Summersby and Grieve, assignors.) | | | | | | |
| Burnett, John. (See George and Burnett.) | | | | | | |
| Burnett, Joshua E., Moscow, Tenn. Evaporating-pan | 720,323 | Feb. 10 | 1691 | 384 | 102 | 1197 |
| Burney, Charles E., New York, N. Y. Manhole-cover | 729,272 | May 26 | 4578 | 1011 | 104 | 1019 |
| Burnham, Arthur M., Gardiner, Me., assignor of one-half to W. B. Rand, Boston, Mass. Shutter-worker | 732,393 | June 30 | 5364 | 1188 | 104 | 2306 |
| Burnham, Arthur M., Gardiner, Me., assignor to W. B. Rand, Boston, Mass. Mop-wringer | 736,065 | Aug. 11 | 1972 | 420 | 105 | 1421 |
| Burnham, Arthur M., assignor of eleven-sixteenths to L. B. Libby, Gardiner, Me., and W. G. Crawford, Washington, D. C. Mail-box | 718,190 | Jan. 13 | 1246 | 274 | 102 | 284 |
| Burnham, Edward, Chicago, Ill. Hair-drying device | 744,044 | Nov. 17 | 2463 | 529 | 107 | 555 |
| Burnham, Francis H., Essex, Mass. Trolley-reverser | 723,360 | Mar. 24 | 3189 | 717 | 103 | 714 |
| Burnham, William A., Lincoln, Mass. Light-shield | 743,687 | Nov. 10 | 1759 | 371 | 107 | 391 |
| Burnham, Williams & Company. (See Austin, William L., assignor.) | | | | | | |
| Burnham, Williams & Company. (See Hamilton, George W., assignor.) | | | | | | |
| Burnham, Williams & Company. (See Rushton, Kenneth, assignor.) | | | | | | |
| Burnham, Williams & Company. (See Van Kirk, Benjamin R., assignor.) | | | | | | |
| Burnham, Williams & Company. (See Vauclain, Samuel M., assignor.) | | | | | | |
| Burnham, Williams & Company. (See Webster, Walter O., assignor.) | | | | | | |
| Burns, Emma, Allegheny, Pa. Washboiler | 724,800 | Apr. 7 | 720 | 167 | 103 | 1324 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Burns, Frank, Philadelphia, Pa. Door-step cabinet | 726,138 | Apr. 21 | 3148 | 712 | 103 | 1866 |
| Burns, George J. (See Chandler, Daniel L., assignor.) | | | | | | |
| Burns, James, Brooklyn, N. Y. Fifth-wheel | 731,276 | June 16 | 3199 | 712 | 104 | 1824 |
| Burns, James S., Ann Arbor, assignor of one-third to G. P. Goodale, Detroit, Mich. Compound for artificial stone | 737,334 | Aug. 25 | 4298 | ..... | 105 | 1947 |
| Burns, John E., Northport, N. Y. Fire-escape and table | 731,160 | June 16 | 3001 | 666 | 104 | 1785 |
| Burns, John G., assignor of one-third to W. G. Kilhoffer, Buffalo, N. Y. Gas-heater | 743,059 | Nov. 3 | 466 | 101 | 107 | 96 |
| Burns, John W., Terre Haute, Ind. Water-filter | 723,238 | Mar. 24 | 2949 | 662 | 103 | 669 |
| Burns, Martin J., and J. J. Aull, assignors to Lunkenheimer Company, Cincinnati, Ohio. Melting-furnace | 740,084 | Sept. 29 | 4902 | {1099 {1100 | 106 | 1114 |
| Burns, Owen, Chicago, Ill. Money-bank | 718,908 | Jan. 20 | 2638 | 592 | 102 | 590 |
| Burns, Owen, assignor to W. F. Burns Company, Chicago, Ill. Coin-bank | 727,282 | May 5 | 856 | 184 | 104 | 184 |
| Burns, William E. (See Casswell, Richard H., assignor.) | | | | | | |
| Burns, William H., Streator, Ill. Nut or bolt lock | 735,706 | Aug. 11 | 1204 | 277 | 105 | 1273 |
| Burnsen, John, West Superior, Wis. Conduit for hose, cables, electric wires, or the like | 746,920 | Dec. 15 | 2941 | 679 | 107 | 1777 |
| Burnside, Myrtle V., Columbus, Ohio. Trunk | 732,165 | June 30 | 4915 | 1093 | 104 | 2211 |
| Burpee, George H., Philadelphia, Pa., assignor to Fuel Economizer Company of America, Camden, N. J. Fuel-economizer | 729,273 | May 26 | 4579 | 1011 | 104 | 1019 |
| Burpee, George H., Philadelphia, Pa., assignor to Fuel Economizer Company of America, Camden, N. J. Mechanical movement | 733,141 | July 7 | 785 | 190 | 105 | 166 |
| Burpee, George H., Philadelphia, Pa., assignor to Fuel Economizer Company of America, Camden, N. J. Mechanical movement | 736,208 | Aug. 11 | 2205 | 474 | 105 | 1470 |
| Burpitt, John, Battersea, England. Candle-molding apparatus | 742,833 | Nov. 3 | 28 | 6 | 107 | 9 |
| Burr, Jesse T., Glenville, Ohio. Separator | 730,229 | June 9 | 1284 | 284 | 104 | 1404 |
| Burr, Jesse T., Cleveland, Ohio. Burner | 738,290 | Sept. 8 | 1492 | 323 | 106 | 336 |
| Burrell & Company, D. H. (See Feldmeier, Harvey, assignor.) | | | | | | |
| Burrell & Company, D. H. (See Hoyt, Matthew L., assignor.) | | | | | | |
| Burrell, Ezra A., Salt Lake City, Utah. Trousers hanger and stretcher | 737,335 | Aug. 25 | 4299 | 956 | 105 | 1947 |
| Burrell, Harry S., Belleville, Canada. Valve for rock-drills | 726,632 | Apr. 28 | 4127 | 931 | 103 | 2076 |
| Burrell, Harry S., Belleville, Canada. Lubricator | 745,567 | Dec. 1 | 464 | 109 | 107 | 1196 |
| Burri, Alois, and L. Helferich, Lausanne, Switzerland. Folding support or trestle | 718,600 | Jan. 20 | 2067 | 449 | 102 | 474 |
| Burridge, Lee S., New York, N. Y., assignor to Union Typewriter Company, Jersey City, N. J. Type-writer carriage | 720,219 | Feb. 10 | 1498 | {343 {344 | 102 | 1155 |
| Burridge, Lee S., New York, N. Y., assignor to Union Typewriter Company, Jersey City, N. J. Type-writing machine | 746,787 | Dec. 15 | 2683 | 619 | 107 | 1718 |
| Burridge, Lee S., New York, N. Y., assignor to Union Typewriter Company, Jersey City, N. J. Type-writing machine | 747,589 | Dec. 22 | 4192 | 943 | 107 | 2075 |
| Burriel, Ramon V., *et al.* (See Navascuez, Santiago N., assignor.) | | | | | | |
| Burrough, Thomas E., Trenton, N. J. Garbage-box | 745,322 | Dec. 1 | 16 | 4 | 107 | 1104 |
| Burroughs, Edwin M., Detroit, Mich. Beer-pipe cleaner | 746,012 | Dec. 8 | 1293 | 290 | 107 | 1392 |
| Burrow, Walter B., Norfolk, Va. Electric incandescent lamp | 737,575 | Sept. 1 | 32 | 7 | 106 | 10 |
| Burrow, Walter B., Norfolk, Va. Magnet-core for dynamo-electric machines | 737,576 | Sept. 1 | 34 | 7 | 106 | 10 |
| Burrow, Walter B., Norfolk, Va. Converter for making iron or steel | 737,577 | Sept. 1 | 35 | 7 | 106 | 10 |
| Burrow, Walter B., Norfolk, Va. Converter | 737,578 | Sept. 1 | 37 | 8 | 106 | 11 |
| Burrowes, Edward T. (See Davis, George H., assignor.) | | | | | | |
| Burrowes, Edward T., Portland, Me. Game-counter | 729,839 | June 2 | 588 | 130 | 104 | 1248 |
| Burrowes, Edward T., Portland, Me. Screen | 730,230 | June 9 | 1286 | 284 | 104 | 1405 |
| Burrowes, Edward T., Portland, Me. Game-board | 739,284 | Sept. 22 | 3391 | 755 | 106 | 773 |
| Burrowes, Edward T., Portland, Me. Game-board | 739,285 | Sept. 22 | 3394 | 756 | 106 | 773 |
| Burrowes, Katharine H., Detroit, Mich. Kindergarten game-board | 720,886 | Feb. 17 | 2720 | 627 | 102 | 1426 |
| Burrows Development Company. (See Burrows, Linus P., assignor.) | | | | | | |
| Burrows, Linus P., Washington, D. C. Mixing and dissolving apparatus | 735,206 | Aug. 4 | 337 | 65 | 105 | 1053 |
| Burrows, Linus P., Washington, D. C. Electrolytic apparatus | 737,554 | Aug. 25 | 4712 | 1058 | 105 | 2041 |
| Burrows, Linus P., assignor to Burrows Development Company, Washington, D. C. Apparatus for utilizing steam | 740,085 | Sept. 29 | 4904 | 1100 | 106 | 1115 |
| Burrows, William E., Rosendale, Mo. Horse hay-rake | 747,535 | Dec. 22 | 4099 | 920 | 107 | 2054 |
| Burrows, William R., Newark, N. J., assignor to General Electric Company. Incandescent lamp | 729,730 | June 2 | 383 | 87 | 104 | 1206 |
| Burrus, Henry, assignor of one-half to T. H. Johnson, Springfield, Mass. Horseshoe | 725,036 | Apr. 14 | 1153 | 260 | 103 | 1431 |
| Burry, John, Ridgeville Park, N. J. Paper-feeding mechanism | 734,297 | July 21 | 2977 | {699 {700 {701 | 105 | 663 |
| Bursch, Wilhelm, Berlin, Germany. Spring for furniture, &c | 720,108 | Feb. 10 | 1292 | 296 | 102 | 1114 |
| Burschell, Ernst, Landau, Germany. Purifying gas | 737,579 | Sept. 1 | 38 | ..... | 106 | 11 |
| Burson, Abraham. (See Conroy, Burson, and Fitch.) | | | | | | |
| Burson, Amos, Reissing, assignor of one-fifth to W. Schutte, Pittsburg, and G. Dillig, Millvale, Pa. Holder for envelops, papers, &c | 720,109 | Feb. 10 | 1293 | 296 | 102 | 1114 |
| Burson, William W., Chicago, Ill. Corn-harvester | 722,487 | Mar. 10 | 1559 | {343 {344 | 103 | 349 |
| Bürstenfabrik Erlangen A.-G., vormals Emil Kränzlein. (See Möbius, Paul, assignor.) | | | | | | |
| Burt, Alonzo L., assignor to Burt Company, Milburn, N. J. Manufacturing game-balls | 731,542 | June 23 | 3731 | 831 | 104 | 1952 |
| Burt, Andrew S. (See Stewart, John C., assignor.) | | | | | | |
| Burt Company. (See Burt, Alonzo L., assignor.) | | | | | | |
| Burt, Edgar R. (See Hicks, William B., assignor.) | | | | | | |
| Burt, Eli A., Brooklyn, and H. Harris, New York, N. Y. Hat-marker | 734,043 | July 21 | 2473 | 578 | 105 | 555 |
| Burt, James H., *et al.* (See Cook, Francis L., assignor.) | | | | | | |
| Burtanger, J. A. (See Simon, Frank, assignor.) | | | | | | |
| Burtch, Frank F., Fonda, N. Y. Broom-rack | 742,581 | Oct. 27 | 4236 | 954 | 106 | 2186 |
| Burtch, Gilbert F., Onida, S. D. Mower attachment | 722,673 | Mar. 17 | 1924 | 428 | 103 | 443 |
| Burtch, Gilbert F., Onida, S. D. Sulky attachment for harrows | 734,507 | July 28 | 3344 | 783 | 105 | 755 |
| Burton, Andrew J., Denver, Ala. Motor | 732,705 | July 7 | 27 | 7 | 105 | 9 |
| Burton, Charles F., trustee. (See Stoddard, Elliott J., assignor.) | | | | | | |
| Burton, Charles H., Boston, Mass. Pneumatic carrier | 726,022 | Apr. 21 | 2953 | 671 | 103 | 1826 |
| Burton, Charles H., Boston, Mass., assignor, by mesne assignments, to American Pneumatic Service Company, Dover, Del. Carrier for pneumatic-despatch-tube apparatus | 722,562 | Mar. 10 | 1691 | 377 | 103 | 379 |
| Burton, Charles H., Boston, Mass., assignor to American Pneumatic Service Company, Dover, Del. Pneumatic carrier | 742,390 | Oct. 27 | 3885 | 873 | 106 | 2114 |
| Burton, Charles S. (See Heuning and Burton.) | | | | | | |
| Burton, Charles S., trustee. (See Crook, Charles M., assignor.) | | | | | | |
| Burton, Charles S., Oakpark, Ill., assignor to E. Tyden, Hastings, Mich. Pedestal-table lock | 733,367 | July 14 | 1203 | 286 | 105 | 269 |
| Burton, Charles S., Oakpark, Ill., assignor to E. Tyden, Hastings, Mich. Pedestal-extension-table lock | 747,131 | Dec. 15 | 3350 | 761 | 107 | 1872 |
| Burton, Charles S., Oakpark, Ill., assignor to E. Tyden, Hastings, Mich. Pedestal-extension-table lock | 747,132 | Dec. 15 | 3352 | 761 | 107 | 1873 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|
| | | | Spec. | Drgs. | Vol. | Page. |
| Burton, Charles V., Fulham, assignor of one-half to W. J. Hartley, London, England. Manufacturing steel | 746,281 | Dec. 8 | 1781 | ..... | 107 | 1499 |
| Burton, Clyde H., Honeoye Falls, N. Y. Mail-bag | 746,013 | Dec. 8 | 1294 | 291 | 107 | 1392 |
| Burton, Frank F. (See Mason and Burton.) | | | | | | |
| Burton, George D., Boston, Mass. Treating animal hides or skins | 739,825 | Sept. 29 | 4398 | 987 | 106 | 1009 |
| Burton, Harry S., Oxford, England. Blowpipe-burner | 724,257 | Mar. 31 | 4917 | 1100 | 103 | 1085 |
| Burton, Jared, Wheaton, Minn. Blanket-holding attachment for vehicles | 739,286 | Sept. 22 | 3396 | 756 | 106 | 774 |
| Burton, John T., near Jonesburg, Mo. Vehicle-brake | 745,779 | Dec. 1 | 828 | 188 | 107 | 1275 |
| Burton, John W., Maplehill, Kans. Separator | 719,741 | Feb. 3 | 602 | 135 | 102 | 949 |
| Burton, Josiah L., Martinsville, Ind. Sectional hollow boat-gunwale | 727,894 | May 12 | 2030 | 452 | 104 | 450 |
| Burton, Josiah L., Martinsville, Ind. Rowing apparatus | 732,336 | June 30 | 5233 | {1161 {1162 | {104 | 2278 |
| Burton, Josiah L., Martinsville, Ind. Rowlock for metallic boats | 740,626 | Oct. 6 | 467 | 103 | 106 | 1347 |
| Burton, Matthew, Batavia, Ill. Mechanical movement | 731,277 | June 16 | 3201 | 712 | 104 | 1824 |
| Burton, Matthew, Batavia, Ill. Mechanical movement | 738,770 | Sept. 15 | 2456 | ..... | 106 | 558 |
| Burton, T. J. (See Bulloch, Alva B., assignor.) | | | | | | |
| Burton, W. E., *et al.* (See Lewinski, William, assignor.) | | | | | | |
| Burton, Walter. (See Dawson and Burton.) | | | | | | |
| Burton, William E., New York, N. Y. Folding box | 742,159 | Oct. 27 | 3452 | 770 | 106 | 2025 |
| Burull, Albert, Stoughton, Wis., assignor to Mandt Wagon Company. Bolster-spring | 724,801 | Apr. 7 | 721 | 168 | 103 | 1324 |
| Burwell, Arthur W. (See Baker and Burwell.) | | | | | | |
| Burwell, Arthur W., assignor to E. A. Sperry, agent, Cleveland, Ohio. Compound for use in tinning-baths | 735,941 | Aug. 11 | 1731 | ..... | 105 | 1369 |
| Burwell, Arthur W., and L. O. Sherman, Cleveland, Ohio; said Burwell assignor to said Sherman. Desulfurizing crude petroleum | 738,656 | Sept. 8 | 2221 | 486 | 106 | 492 |
| Burwell, Cyrus, Madison County, Ill. Coal-box | 732,706 | July 7 | 28 | 7 | 105 | 9 |
| Busby, Arthur W., Milwaukee, Wis. Bedstead post and rail joint-coupling | 720,887 | Feb. 17 | 2721 | 627 | 102 | 1426 |
| Busby, Frederick H., San Francisco, Cal. Stovepipe-fastener | 723,984 | Mar. 31 | 4357 | 978 | 103 | 975 |
| Busby, Frederick H., San Francisco, Cal. Glove | 729,731 | June 2 | 383 | 87 | 104 | 1207 |
| Busby, Frederick H., San Francisco, Cal. Glove | 745,150 | Nov. 24 | 4572 | 992 | 107 | 1016 |
| Busch, Adolphus. (See Hecking, Max, assignor.) | | | | | | |
| Busch, August A., R. Gull, and T. J. Barry, St. Louis, Mo. Bottle-washing machine | 736,209 | Aug. 11 | 2206 | 475 | 105 | 1471 |
| Busch, Charles, Paris, France. Acetylene-gas-generating apparatus | 726,139 | Apr. 21 | 3149 | 712 | 103 | 1866 |
| Busch, Henry, and A. Jaeger, Brooklyn, N. Y. Game-board | 726,023 | Apr. 21 | 2955 | 672 | 103 | 1826 |
| Busch, Henry P., Philadelphia, Pa. Antiseptic and deodorizing compound | 730,231 | June 9 | 1288 | ..... | 104 | 1405 |
| Busch, Julius C. (See Sternberger and Busch.) | | | | | | |
| Buschmann, Charles L., Indianapolis, Ind. Suspenders | 722,942 | Mar. 17 | 2405 | 538 | 103 | 541 |
| Buschmann, Friedrich, assignor to Mecklenburgische Gewerkschaft Friedrich Franz, Lübtheen, Germany. Deep-boring tool | 718,909 | Jan. 20 | 2639 | 592 | 102 | 590 |
| Buschner, Albert C., Brooklyn, N. Y. Apparatus for making covered cord | 734,508 | July 28 | 3345 | 783 | 105 | 755 |
| Busenbenz, Jacob J., Chicago, Ill., and E. Lange, Davenport, Iowa, assignors to F. M. Utt, Chicago, Ill., and Railway Journal Lubricating Company. Dust-guard | 740,524 | Oct. 6 | 275 | 54 | 106 | 1304 |
| Busenbenz, Jacob J., Chicago, Ill., and E. Lange, Davenport, Iowa, assignors to F. M. Utt, Chicago, Ill., and Railway Journal Lubricating Company. Journal-lubricator | 740,525 | Oct. 6 | 277 | 54 | 106 | 1305 |
| Buser, William E., Chillicothe, Ohio. Tufting-machine | 726,400 | Apr. 28 | 3661 | 830 | 103 | 1987 |
| Busey, Jerome F., Venice, Pa. Swinging rail-clamp | 732,420 | Mar. 10 | 1418 | 313 | 103 | 318 |
| Bush, Alden, assignor of one-half to C. A. Hawley, Columbus, Ohio. Dental plugger | 732,044 | June 30 | 4666 | 1042 | 104 | 2161 |
| Bush, Charles A., Corry, assignor of one-half to J. J. Loomis, Northeast, Pa. Automobile | 731,993 | June 23 | 4541 | {1013 {1014 | {104 | 2122 |
| Bush, Edwin J., New York, N. Y. Beadwork-loom | 737,073 | Aug. 25 | 3810 | 844 | 105 | 1844 |
| Bush Engine Company. (See White, George, assignor.) | | | | | | |
| Bush, George F., Pricedale, Pa., assignor of one-half to F. E. Comstock, Rockbridge, Ohio. Weight-supporting device | 744,477 | Nov. 17 | 3289 | 706 | 107 | 732 |
| Bush, James F., Waterville, Me. Filter or screen for service-pipes | 734,812 | July 28 | 3947 | 920 | 105 | 879 |
| Bush, James F., Waterville, Me. Rule | 740,742 | Oct. 6 | 661 | 150 | 106 | 1389 |
| Bush, James J., New York, N. Y. Steam-generator | 744,900 | Nov. 24 | 4042 | 872 | 107 | 909 |
| Bush, Martin L., Lawrence, Mass. Candle attachment | 745,151 | Nov. 24 | 4574 | 992 | 107 | 1016 |
| Bush, Robert S., Greensburg, Pa. Switch-lock | 745,275 | Nov. 24 | 4789 | 1046 | 107 | 1063 |
| Bush, Samuel P. (See Timms and Bush.) | | | | | | |
| Bush, Samuel P., Columbus, Ohio. Car-bolster | 747,934 | Dec. 29 | 4871 | 1100 | 107 | 2250 |
| Bush, Samuel P., assignor to Buckeye Malleable Iron and Coupler Company, Columbus, Ohio. Car-coupling | 734,813 | July 28 | 3948 | 921 | 105 | 879 |
| Bush, Samuel P., assignor to Buckeye Malleable Iron and Coupler Company, Columbus, Ohio. Bolster for cars and car-trucks | 734,814 | July 28 | 3950 | 921 | 105 | 879 |
| Bush, Samuel P., and J. H. McCormick, assignors to Buckeye Malleable Iron and Coupler Company, Columbus, Ohio. Bolster for cars and car-trucks | 734,665 | July 28 | 3635 | 851 | 105 | 817 |
| Bush, William C., Wilmington, Del. Gun-cartridge | 743,242 | Nov. 3 | 820 | 178 | 107 | 171 |
| Bush, William M. (See Cooper, John W., assignor.) | | | | | | |
| Bush, Willis A., South Pottstown, Pa. Shredder-cylinder | 740,627 | Oct. 6 | 469 | 103 | 106 | 1347 |
| Busha, Joseph, Pittsburg, Pa. Hose-nozzle | 721,665 | Mar. 3 | 26 | 5 | 103 | 8 |
| Bushnell, Alvah, Jr., Philadelphia, Pa. Card-holder for envelops or wallets | 720,324 | Feb. 10 | 1693 | 384 | 102 | 1197 |
| Bushnell, Frederic N. (See Blaisdell, Sidney S., assignor.) | | | | | | |
| Bushnell, John W., *et al.* (See Wever, La Fayette T., assignor.) | | | | | | |
| Busiel, Frank P., Boston, Mass. Air-feeding apparatus for locomotives | 736,066 | Aug. 11 | 1974 | 420 | 105 | 1421 |
| Busky, John S., Jr., New York, N. Y. Electric shoe | 741,623 | Oct. 20 | 2377 | 532 | 106 | 1788 |
| Busley, John F. (See Martin and Busley.) | | | | | | |
| Busser, William H., Dayton, Ohio. Bread-cutter | 748,344 | Dec. 29 | 5627 | 1282 | 107 | 2412 |
| Buswell, Arthur T., Boston, Mass., assignor of one-half to J. Emison, New York, N. Y. Trousers | 730,741 | June 9 | 2203 | 491 | 104 | 1601 |
| Busy Bee Candy Company. (See Brock, Frederick E. A., assignor.) | | | | | | |
| Butcher, Elmer E., North Ridgeville, Ohio. Wireless telegraphy | 739,287 | Sept. 22 | 3398 | 756 | 106 | 774 |
| Butcher, James M., and A. E. Parnall, St. Louis, Mo., assignors to American Automatic Change Maker Company, Chicago, Ill. Change-maker | 744,478 | Nov. 17 | 3291 | {707 {708 | {107 | 733 |
| Butcher, Joseph J., Thompsonville, Conn. Shower-bath | 743,616 | Nov. 10 | 1651 | {346 {347 | {107 | 369 |
| Butcher, Leopold E., London, England. Lighter for cigars, cigarettes, or the like | 739,982 | Sept. 29 | 4718 | 1061 | 106 | 1075 |
| Buteau, Alphonse, Auburn, Me., assignor to Peerless Machinery Company, Charleston, W. Va.; New York, N. Y., and Boston, Mass. Buffing-machine | 729,274 | May 26 | 4581 | 1012 | 104 | 1020 |
| Butin, Louis M. A., Paris, France. Rotary engine | 726,024 | Apr. 21 | 2956 | {672 {673 | {103 | 1826 |
| Butler, Albert E., Gloucester, Mass. Fishing-net | 742,160 | Oct. 27 | 3454 | 770 | 106 | 2026 |
| Butler, Alfred J., Boston, Mass. Lock and pull for sliding doors | 723,239 | Mar. 24 | 2951 | 662 | 103 | 669 |
| Butler, Allen L. (See Simonds and Butler.) | | | | | | |
| Butler, Alvin I., Clifford, N. D. Horse-collar | 734,399 | July 21 | 3146 | 739 | 105 | 699 |
| Butler, Braxton R., Fayetteville, N. C. Invalid-bed | 717,809 | Jan. 6 | 552 | 124 | 102 | 119 |
| Butler, Calvin L., Greenfield, Mass. Device for cutting rods | 719,934 | Feb. 3 | 928 | 217 | 102 | 1020 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | Spec. | Drgs. | Vol. | Page. |
| Butler, Charles A., Port Townsend, Wash. Acetylene-gas generator | 745,037 | Nov. 24 | 4320 | 933 | 107 | 966 |
| Butler, Clinton C. (See Butler, Joseph C. and C. C.) | | | | | | |
| Butler, Cora A., Chicago, Ill. Steamer | 735,461 | Aug. 4 | 825 | 176 | 105 | 1155 |
| Butler, Dennis, Watson, Ill. Fruit-picker | 721,013 | Feb. 17 | 2971 | 683 | 102 | 1478 |
| Butler, E. A., *et al.* (See McGuire, Peter J., assignor.) | | | | | | |
| Butler, George P., New York, N. Y. Oval cigarette | 725,671 | Apr. 21 | 2340 | 528 | 103 | 1695 |
| Butler, Graham R., Omaha, Nebr. String-cutter | 740,526 | Oct. 6 | 278 | 55 | 106 | 1305 |
| Butler, Henry S., Des Moines, Iowa. Post-hole auger | 743,445 | Nov. 10 | 1296 | 266 | 107 | 292 |
| Butler, Hiram E., Jamestown, N. Y. Smoke-bell | 741,883 | Oct. 20 | 2863 | 639 | 106 | 1891 |
| Butler, Ira E., Chicago, Ill. Muffler or silencer for carbureters | 728,200 | May 19 | 2584 | 577 | 104 | 589 |
| Butler, James H., Columbia Heights, Ill. Pianoforte | 721,666 | Mar. 3 | 29 | 6 | 103 | 8 |
| Butler, John. (See Williams and Butler.) | | | | | | |
| Butler, John A., Southington, Conn. Razor-stropping device | 744,479 | Nov. 17 | 3297 | 708 | 107 | 734 |
| Butler, Joseph, Altrincham, assignor of two-thirds to W. Bell, Knutsford, and W. A. Jones, Manchester, England. Outer cover for pneumatic tires | 721,146 | Feb. 24 | 3264 | 747 | 102 | 1563 |
| Butler, Joseph C. and C. C., Iowa Falls, Iowa. End-gate | 729,840 | June 2 | 589 | 130 | 104 | 1248 |
| Butler, Louis F., Syracuse, N. Y. Bread-toaster | 743,688 | Nov. 10 | 1760 | 371 | 107 | 391 |
| Butler Machine Company. (See Swonson, John E., assignor.) | | | | | | |
| Butler, Milton H., Cherrycreek, N. Y. String-bean grader | 741,304 | Oct. 13 | 1735 | 387 | 106 | 1633 |
| Butler, Samuel, Westbury-on-Trym, England. Antiskidding device for vehicle-wheels | 736,683 | Aug. 18 | 3093 | 681<br>682 | 105 | 1674 |
| Butler, Samuel, Westbury-on-Trym, England. Antiskidding device for vehicle-wheels | 739,826 | Sept. 29 | 4400 | 987 | 106 | 1010 |
| Butler, Thomas H., Baltimore, Md. Anchor-bar for ice-cakes | 730,001 | June 2 | 887 | 198 | 104 | 1309 |
| Butler, Thomas H., Baltimore, Md. Ice-table for ice-cutting machines | 737,904 | Sept. 1 | 694 | 149 | 106 | 152 |
| Butler, Thomas H., Baltimore, Md. Hoisting mechanism | 737,998 | Sept. 1 | 895 | 196 | 106 | 196 |
| Butler, Thomas H., Baltimore, Md. Freezing-tank for ice-machines | 742,582 | Oct. 27 | 4238 | 955 | 106 | 2186 |
| Butler, Thomas H., Baltimore, Md. Tank | 742,583 | Oct. 27 | 4239 | 955 | 106 | 2187 |
| Butler, Thomas H., Baltimore, Md. Ice-machine | 742,584 | Oct. 27 | 4240 | 955 | 106 | 2187 |
| Butler, Thomas H., Baltimore, Md. Ice-table | 742,585 | Oct. 27 | 4242 | 955 | 106 | 2187 |
| Butler, William A., San Francisco, Cal. Continuous kiln | 735,462 | Aug. 4 | 827 | 176 | 105 | 1156 |
| Butler, William H., New York, N. Y. Machine for making and filling boxes | 721,667 | Mar. 3 | 30 | 6, 7, 8 | 103 | 8 |
| Butler, William M., and C. E. Whitney; said Butler assignor to Whitney Manufacturing Company, Hartford, Conn. Drive-chain | 741,453 | Oct. 13 | 2022 | 449 | 106 | 1697 |
| Butman, Thomas R., Chicago, Ill. Mechanical stoker | 728,362 | May 19 | 2916 | 643<br>644 | 104 | 658 |
| Butterfield, Charles, Haxtum, Colo. Well-drilling machine | 730,340 | June 9 | 1478 | 327 | 104 | 1445 |
| Butterfield, John W., Columbus, Ohio. Pamphlet-binding machine | 723,825 | Mar. 31 | 4023 | 906<br>907<br>908<br>909 | 103 | 904 |
| Butterworth, Paul S., Richmond, Va. Rotary railway-time-table jacket | 735,463 | Aug. 4 | 828 | 176 | 105 | 1156 |
| Butterworth, Samuel, Boston, Mass. Clothes-drier | 744,901 | Nov. 24 | 4044 | 872 | 107 | 909 |
| Buttler, William, Redkey, Ind. Glass-shaping apparatus | 738,657 | Sept. 8 | 2222 | 486<br>487 | 106 | 492 |
| Buttner, Henry F., Idaho Falls, Idaho. Shoe | 719,742 | Feb. 3 | 604 | 135<br>136 | 102 | 949 |
| Buttner, Henry F., Idaho Falls, Idaho. Non-refillable bottle | 731,852 | June 23 | 4288 | 955 | 104 | 2068 |
| Buttner, Henry F., Idaho Falls, Idaho. Fountain-pen | 731,853 | June 23 | 4289 | 955 | 104 | 2068 |
| Büttner, Max, Deutsch Wilmersdorf, Germany. Electric illumination for railway-cars | 734,298 | July 21 | 2982 | 701<br>702 | 105 | 664 |
| Button, Jesse S. (See Page and Button.) | | | | | | |
| Buttorff, John H., Fort Collins, Colo. Head-gate | 726,401 | Apr. 28 | 3663 | 830 | 103 | 1987 |
| Butts, Frederick P., assignor of one-seventh to J. E. Braunsdorf, New York, N. Y. Rail-joint | 725,216 | Apr. 14 | 1490 | 339 | 103 | 1500 |
| Butz, Albert M., Oakpark, Ill. Electric damper-regulator | 736,490 | Aug. 18 | 2713 | 595 | 105 | 1596 |
| Butz, Albert M., Oakpark, Ill. Thermostatic heat-regulator | 739,055 | Sept. 15 | 2965 | 657 | 106 | 668 |
| Butz, John F., Fort Worth, Tex. Insect-destroyer | 744,902 | Nov. 24 | 4045 | 872<br>873 | 107 | 910 |
| Butz, John F., Fort Worth, Tex. Feeding-trough | 747,590 | Dec. 22 | 4194 | 943 | 107 | 2076 |
| Butzbach, George H., San Francisco, Cal. Trick bass viol | 739,827 | Sept. 29 | 4401 | 988 | 106 | 1010 |
| Buyers, David M. (See Varin and Buyers.) | | | | | | |
| Buysse, Edward, South Bend, Ind. Balance-escapement | 725,037 | Apr. 14 | 1154 | 260 | 103 | 1431 |
| Buysse, Emile, Bassevelde, Belgium. Apparatus for assorting potatoes, fruits, or the like | 723,826 | Mar. 31 | 4029 | 909 | 103 | 905 |
| Byar, William H., Reading, Pa. Combined coal-hod and sieve | 741,454 | Oct. 13 | 2024 | 450 | 106 | 1697 |
| Byars, George W. (See Duncan and Byars.) | | | | | | |
| Bybee, Addison. (See Becker, Frank J., assignor.) | | | | | | |
| Bybee, Addison. (See Shiek, Daniel W., assignor.) | | | | | | |
| Byde, George R., assignor of one-half to E. E. Manheim, Fresno, Cal. Cutting attachment for cornice-breaks | 727,895 | May 12 | 2032 | 452 | 104 | 450 |
| Byer, Edgar H., assignor to Emmert Manufacturing Company, Waynesboro, Pa. Vise | 728,858 | May 26 | 3850 | 856 | 104 | 870 |
| Byerly, Wm. A., *et al.* (See Gibbs, James E., assignor.) | | | | | | |
| Byers, Firm B. (See Ellmore, John, assignor.) | | | | | | |
| Byers, Firm B., Altoona, Pa. Rail-joint | 737,074 | Aug. 25 | 3812 | 844 | 105 | 1845 |
| Byers, John E., Butler, Pa. Overhead trolley | 721,147 | Feb. 24 | 3266 | 748 | 102 | 1563 |
| Byers, John F., Ravenna, Ohio. Tire-fastening | 727,746 | May 12 | 1748 | 393 | 104 | 393 |
| Byers, John H., San Francisco, Cal. Flushing apparatus | 748,046 | Dec. 29 | 5101 | 1153 | 107 | 2299 |
| Byers, John Y., assignor of one-half to J. F. Forward, Descanso, Cal. Quartz-mill | 742,966 | Nov. 3 | 253 | 56, 57 | 107 | 55 |
| Byers, Robert, New York, N. Y. Non-refillable bottle | 731,854 | June 23 | 4290 | 955 | 104 | 2068 |
| Byers, Robert, New York, N. Y. Gas-check and vent apparatus | 738,095 | Sept. 1 | 1065 | 236 | 106 | 230 |
| Byers, William J. (See Moore, Andrew R., assignor.) | | | | | | |
| Byles, Emma, *et al.* (See Born, Marion A., assignor.) | | | | | | |
| Bynum, Henry L., Brazil, Ind. Hollow building-block | 744,480 | Nov. 17 | 3298 | 709 | 107 | 734 |
| Byrd, Jesse S., Linden, N. C. Guano-distributer | 746,282 | Dec. 8 | 1782 | 404 | 107 | 1499 |
| Byrne, James H. (See Witham and Byrne.) | | | | | | |
| Byrne, John J., Chicago, Ill. Measuring instrument | 730,742 | June 9 | 2204 | 491 | 104 | 1601 |
| Byrne, John P., Parnell, Mich. Planter | 739,385 | Sept. 22 | 3572 | 798 | 106 | 811 |
| Byrne, Michael F., Monticello, Iowa. Screen and storm door | 732,274 | June 30 | 5130 | 1140 | 104 | 2257 |
| Byrne, William M., Chicago, Ill. Reinforcement for book-sheets | 740,086 | Sept. 29 | 4905 | 1100 | 106 | 1115 |
| Byrnes, Clarence P. (See Mercàder and Byrnes.) | | | | | | |
| Byrnes, Clarence P., Pittsburg, Pa. Water-cooled valve | 723,582 | Mar. 24 | 3594 | 803 | 103 | 796 |
| Byrnes, Clarence P., Sewickley, Pa. Spring-cushioning device | 743,689 | Nov. 10 | 1761 | 371<br>372 | 107 | 391 |
| Byrnes, Eugene A., Washington, D. C. Electrolytic diaphragm | 735,464 | Aug. 4 | 829 | 177 | 105 | 1156 |
| Byro, Johan O., Hanska, Minn. Stack-knife | 719,992 | Feb. 10 | 1047 | 243 | 102 | 1061 |

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| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| Bystrom Gas Lamp Company. (See Bystrom, John, assignor.) | | | | | | |
| Bystrom, John, Chicago, Ill. Wrench | 741,394 | Oct. 13 | 1925 | 425 | 106 | 1678 |
| Bystrom, John, assignor to Bystrom Gas Lamp Company, Chicago, Ill. Hydrocarbon-lamp | 740,392 | Oct. 6 | 14 | 4 | 106 | 1247 |
| Bystrom, John A., Carlton, Minn. Tie-plate and rail-brace | 737,701 | Sept. 1 | 258 | 55 | 106 | 59 |
| C. Pardee Works. (See Metzner, Max A., assignor.) | | | | | | |
| C. B. Cottrell & Sons Company. (See Cottrell, Charles P., assignor.) | | | | | | |
| C. B. Cottrell & Sons Company. (See Cottrell, Edgar H., assignor.) | | | | | | |
| C. B. Cottrell & Sons Company. (See Cundall, Constant T., assignor.) | | | | | | |
| C. B. Cottrell & Sons Company. (See Seymour, Ralph C., assignor.) | | | | | | |
| C. B. Hutchins & Sons. (See Herbert, Samuel, assignor.) | | | | | | |
| C. and C. Drill Company. (See Clark and Currier, assignors.) | | | | | | |
| C. F. Gessert Company. (See Gessert, Charles F., assignor.) | | | | | | |
| C. G. Braxmar Co. (See Zimmerman, Emil O., assignor.) | | | | | | |
| C. H. Allen & Company. (See Lamb, William A., assignor.) | | | | | | |
| C. O. Burns Company. (See Loch, Joseph, assignor.) | | | | | | |
| Cabaniss, Robert, *et al.* (See Mannooch, Charles W., assignor.) | | | | | | |
| Cable, Charles A., Johnstown, Pa. Window-scaffold | 744,717 | Nov. 24 | 3732 | 805, 806 | 107 | 845 |
| Cable, Frank T., New Suffolk, N. Y., assignor to Electric Boat Company. Submarine boat | 732,920 | July 7 | 398 | 96 | 105 | 86 |
| Cable, Frank T., New Suffolk, N. Y., assignor to Electric Boat Company. Gage | 736,067 | Aug. 11 | 1975 | 420 | 105 | 1422 |
| Cable, Frank T., New Suffolk, N. Y., assignor to Electric Boat Company. Exhaust-muffler for engines | 738,160 | Sept. 8 | 1239 | 269 | 106 | 284 |
| Cable, Frank T., New Suffolk, N. Y., assignor to Electric Boat Company. Clinometer | 738,407 | Sept. 8 | 1742 | 379 | 106 | 390 |
| Cable, Frank T., New Suffolk, N. Y., assignor to Electric Boat Company. Steering mechanism | 741,395 | Oct. 13 | 1927 | 425, 426 | 106 | 1678 |
| Cable, John H., Montclair, N. J. Ball cock or valve | 738,523 | Sept. 8 | 1978 | 430 | 106 | 440 |
| Cable, Martin L. (See Tate and Cable.) | | | | | | |
| Cabot, Samuel. (See Weaver, Ralph B., assignor.) | | | | | | |
| Cadden, Charles C., Cleveland, Ohio. Telephone-transmitter | 718,310 | Jan. 13 | 1463 | 325 | 102 | 330 |
| Cadena, Celedonio. (See Russi and Cadena.) | | | | | | |
| Cadett, James W. T. (See Peto and Cadett.) | | | | | | |
| Cadillac Automobile Company. (See Brush, Alanson P., assignor.) | | | | | | |
| Cadman, Alexander W., Edgewood Park, Pa. Gage-cock | 742,002 | Oct. 20 | 3119 | 696 | 106 | 1942 |
| Cadogan, John H. (See Monson, Samuel B., assignor.) | | | | | | |
| Cadoo, James H., and J. M. Van Why, Elmira, N. Y. Rotary engine | 739,288 | Sept. 22 | 3399 | 756, 757 | 106 | 774 |
| Cadotte, Damase J. (See Holz, Bernhard, Jr., assignor.) | | | | | | |
| Cadwallader, Charles G., Philadelphia, Pa. Coal and ash sifter for heaters, &c | 721,937 | Mar. 3 | 537 | 118 | 103 | 118 |
| Cadwell, Edwin B., New York, N. Y. Tire | 737,205 | Aug. 25 | 4050 | 898 | 105 | 1895 |
| Cadwell, Edwin B., New York, N. Y. Tire | 737,702 | Sept. 1 | 259 | 55 | 106 | 59 |
| Cadwell, Edward L. and W. H., Wayne, Mich. Fence-post | 731,752 | June 23 | 4113 | 917 | 104 | 2028 |
| Cadwell, William H. (See Cadwell, Edward L. and W. H.) | | | | | | |
| Cadwell, William H., Wayne, Mich. Device for building cement or concrete structures with hollow walls, flues, &c | 725,038 | Apr. 14 | 1155 | 261 | 103 | 1431 |
| Cadwell, William H., Williamston, Mich. Elevating baggage-truck | 747,133 | Dec. 15 | 3354 | 761 | 107 | 1873 |
| Cady, Horace G., Auburn, N. Y. Carpet or rug beater | 726,025 | Apr. 21 | 2959 | 673 | 103 | 1827 |
| Cady, Ira D., Minneapolis, Minn. Whip-socket | 721,383 | Feb. 24 | 3526 | 802 | 102 | 1616 |
| Cady, Parker B., Binghamton, N. Y. Flexible photographic film | 727,283 | May 5 | 858 | 184 | 104 | 184 |
| Cady, Parker B., Binghamton, N. Y. Flexible photographic cartridge-film | 733,539 | July 14 | 1505 | 359 | 105 | 335 |
| Cady, Will F., Harrison Valley, Pa. Automatic sanding device | 739,386 | Sept. 22 | 3574 | 799 | 106 | 811 |
| Caesar, Jacob, New York, N. Y. Adjustable metal leg | 734,509 | July 28 | 3346 | 783 | 105 | 755 |
| Caffall, Edward M., Sparkill, N. Y. Treating surfaces for waterproofing or preservative purposes | 747,935 | Dec. 29 | 4871 | 1100 | 107 | 2250 |
| Caffarel, Paul, Manchac, La. Disk-sharpener | 717,657 | Jan. 6 | 232 | 59 | 102 | 51 |
| Caha, Frank, Wahoo, Nebr. Compound steam-engine | 733,811 | July 14 | 1987 | 467, 468, 469 | 105 | 436 |
| Cahen, Emile D. (See Sévène and Cahen.) | | | | | | |
| Cahill & Hall Elevator Company. (See Clennam, Milton A., assignor.) | | | | | | |
| Cahill, James J., Denver, Colo. Merchandise-weighing delivery-wagon | 729,841 | June 2 | 591 | 130 | 104 | 1249 |
| Cahill, Lawrence B., Cincinnati, Ohio. Detachable plug for shoes | 732,045 | June 30 | 4668 | 1043 | 104 | 2161 |
| Cahill, Michael F., Lynchburg, Va. Windlass | 725,405 | Apr. 14 | 1822 | 408 | 103 | 1570 |
| Cahill, Michael F., Lynchburg, Va. Crowbar | 727,284 | May 5 | 859 | 184, 185 | 104 | 184 |
| Cahill, Mortimer. (See Cattelle, William H., assignor.) | | | | | | |
| Cahill, Thomas J., Lopez, Pa. Rail tie and brace | 729,539 | June 2 | 36 | 9 | 104 | 1134 |
| Cahill, Walter M., Winona, Minn. Animal-shears | 748,478 | Dec. 29 | 5890 | 1339 | 107 | 2472 |
| Cahoon, Everett B., Akron, Ohio. Fish or minnow trap | 744,903 | Nov. 24 | 4046 | 873 | 107 | 910 |
| Cahoone, Edwin R., Troy, N. Y. Downdraft-stove | 742,161 | Oct. 27 | 3454 | 771 | 106 | 2026 |
| Caille, Auguste A., Detroit, Mich. Vending-machine | 730,232 | June 9 | 1289 | 284 | 104 | 1405 |
| Caille Brothers Company. (See Moughler, William F., assignor.) | | | | | | |
| Caille, Charles, Le Perreux, France. Wave or tide motor | 721,501 | Feb. 24 | 3918 | 891 | 102 | 1696 |
| Caille, Charles, Le Perreux, France. Apparatus for sterilizing water or other liquids | 729,732 | June 2 | 385 | 87 | 104 | 1207 |
| Caille, Charles, Le Perreux, France. Double-action feed-pump for steam-generators or other applications | 739,828 | Sept. 29 | 4402 | 988 | 106 | 1010 |
| Cailyer, Joseph E., St. Henry, Canada. Snow-plow | 739,387 | Sept. 22 | 3576 | 799 | 106 | 812 |
| Cain, Bertha. (See Munson and Cain.) | | | | | | |
| Cain, Francis C., assignor of one-half to O. C. Herrenkind, Beaumont, Tex. Pumping apparatus | 737,336 | Aug. 25 | 4300 | 956 | 105 | 1947 |
| Cain, John J., Bayonne, N. J. Tube-expander | 736,684 | Aug. 18 | 3094 | 682 | 105 | 1674 |
| Cain, Napoleon B. (See Cain, Wesley R. and N. B.) | | | | | | |
| Cain, Patrick E., Boston, Mass. Reducing-valve | 722,355 | Mar. 10 | 1299 | 288 | 103 | 292 |
| Cain, Wesley R. and N. B., Port Jervis, N. Y. Beating or whisking device | 742,773 | Oct. 27 | 4560 | 1033 | 106 | 2258 |
| Cain, William M., Carlton, Minn. Securing means for load-retaining stakes | 739,829 | Sept. 29 | 4404 | 989 | 106 | 1010 |
| Cain, William M., Carlton, Minn. Load retaining and releasing means for vehicles | 741,455 | Oct. 13 | 2026 | 450 | 106 | 1697 |
| Caird, Charles S., Helena, Mont. Axle | 741,305 | Oct. 13 | 1737 | 388 | 106 | 1633 |
| Cairns, Robert, Toronto, Canada. Mechanical toy | 737,337 | Aug. 25 | 4304 | 956 | 105 | 1949 |
| Cairns, William, assignor to Elyria Iron and Steel Company, Elyria, Ohio. Tube-forming apparatus | 734,299 | July 21 | 2984 | 702 | 105 | 664 |
| Cairns, William, assignor to Elyria Iron and Steel Company, Elyria, Ohio. Tube-forming apparatus | 734,300 | July 21 | 2986 | 702, 703 | 105 | 664 |
| Cake, John A., Sunbury, Pa. Singletree attachment | 719,743 | Feb. 3 | 605 | 136 | 102 | 949 |
| Cake, Luther B., New York, N. Y. Ironing-board | 731,278 | June 16 | 3203 | 713 | 104 | 1825 |

*Alphabetical list of patentees*—Continued.

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| Calahan, Edward L., Clifton, N. J. Expectoration-pouch | 743,826 | Nov. 10 | 2014 | 427 | 107 | 445 |
| Calcutt, Montezuma S., Chicago, Ill. Diagram-book | 747,936 | Dec. 29 | 4873 | 1100 | 107 | 2250 |
| Caldwell & Company, Edward F. (See Wagner, Charles, assignor.) | | | | | | |
| Caldwell, Edward P., Chicago, Ill., assignor to Centrifugal Feed Water Separator and Purifier Company, Chicago, Ill., and Redfield, S. D. Feed-water purifier | 746,921 | Dec. 15 | 2942 | 679<br>680 | 107 | 1777 |
| Caldwell, Eugene W., New York, N. Y. X-ray apparatus | 720,888 | Feb. 17 | 2723 | 628 | 102 | 1426 |
| Caldwell, Francis C. (See Mulford and Caldwell.) | | | | | | |
| Caldwell, Frederick W., Schenectady, N. Y., assignor to General Electric Company. Combined motor-controller and engineer's valve | 742,967 | Nov. 3 | 254 | 57 | 107 | 55 |
| Caldwell, Harry J., and J. R. Barr, Earlpark, Ind. Treating grain | 724,258 | Mar. 31 | 4918 | 1100 | 103 | 1085 |
| Caldwell, Harry J., and J. R. Barr, Earlpark, Ind. Grain treating and drying apparatus | 728,859 | May 26 | 3851 | 856<br>857 | 104 | 870 |
| Caldwell, Henry, Ocosta, Wash. Saw-set | 740,393 | Oct. 6 | 15 | 4 | 106 | 1247 |
| Caldwell, James P., Winnsboro, S. C. Planter | 727,285 | May 5 | 860 | 185 | 104 | 185 |
| Caldwell, John, Edgewood, assignor to R. F. Morse, Providence, R. I. Combined bolster and step for spinning-spindles | 736,491 | Aug. 18 | 2717 | 595 | 105 | 1597 |
| Caldwell, Julia. (See Cary, Lewis C., assignor.) | | | | | | |
| Caldwell Manufacturing Company. (See Rosentreter, Frank L., assignor.) | | | | | | |
| Caldwell, Stevenson A., and S. B. Terry, Little Sioux, Iowa. Protracting-square | 718,817 | Jan. 20 | 2461 | 547 | 102 | 552 |
| Caldwell, W. E., *et al.* (See Rothchild, Joseph, assignor.) | | | | | | |
| Caldwell, William L., New York, N. Y. Vault-light construction | 741,010 | Oct. 13 | 1157 | 261<br>262 | 106 | 1513 |
| Caldwell, Winford N., Springfield, Mass., assignor to C. F. Backus, Detroit, Mich. Paper sheet | 743,375 | Nov. 3 | 1105 | 235 | 107 | 234 |
| Calentine, George C., assignor of one-half to J. C. Donnelly, Tacoma, Wash. Crutch | 725,612 | Apr. 14 | 2207 | 499 | 103 | 1654 |
| Calentine, George C., assignor of two-thirds to F. O. Boardman and A. J. Haywood, Tacoma, Wash. Extension-table | 742,003 | Oct. 20 | 3120 | 696 | 106 | 1942 |
| Calentine, George C., assignor of one-half to H. Hewit, Jr., C. S. Bihler, and J. C. Donnelly, Tacoma, Wash. Railway-switch | 744,289 | Nov. 17 | 2957 | 632<br>633 | 107 | 661 |
| Caler, Francis M., Los Angeles, Cal. Acetylene-gas generator | 739,532 | Sept. 22 | 3843 | 860 | 106 | 871 |
| Caley, Charles J., assignor to Russell & Erwin Manufacturing Company, New Britain, Conn. Lock and latch | 733,142 | July 7 | 788 | 191 | 105 | 167 |
| Caley, Charles J., assignor to Russell & Erwin Manufacturing Company, New Britain, Conn. Hub and roll-back | 733,368 | July 14 | 1205 | 286 | 105 | 270 |
| Caley, Charles J., assignor to Russell & Erwin Manufacturing Company, New Britain, Conn. Ball-bearing knob-shank | 733,943 | July 21 | 2260 | 531 | 105 | 510 |
| Caley, Charles J., assignor to Russell & Erwin Manufacturing Company, New Britain, Conn. Knob-spindle | 734,117 | July 21 | 2620 | 617 | 105 | 587 |
| Caley, Charles J., assignor to Russell & Erwin Manufacturing Company, New Britain, Conn. Ball-bearing knob-shank | 738,096 | Sept. 1 | 1066 | 236 | 106 | 230 |
| Caley, Charles J., assignor to Russell & Erwin Manufacturing Company, New Britain, Conn. Ball-bearing washer | 738,097 | Sept. 1 | 1067 | 236 | 106 | 231 |
| Caley, Charles J., assignor to Russell & Erwin Manufacturing Company, New Britain, Conn. Compensating knob-bearing | 745,568 | Dec. 1 | 465 | 110 | 107 | 1196 |
| Calhoun, Laura A., Los Angeles, Cal. Bottle for containing sauce, condiments, &c. | 726,402 | Apr. 28 | 3664 | 830 | 103 | 1987 |
| Calhoun, William C., and D. E. Meyer, assignors to Frosts Veneer Seating Company, Sheboygan, Wis. Machine for edging veneers | 726,403 | Apr. 28 | 3665 | 831 | 103 | 1988 |
| California Cereal Company. (See Osborn, Ambrose A., assignor.) | | | | | | |
| California Concentrated Fruit Company. (See Sherman, Daniel F., assignor.) | | | | | | |
| Calkins, Albert C., assignor to Calkins Company, Los Angeles, Cal. Assayer's ore-crusher | 735,942 | Aug. 11 | 1731 | 369 | 105 | 1369 |
| Calkins, Almon H., Santa Monica, Cal. Oil-burning device | 720,889 | Feb. 17 | 2725 | 628 | 102 | 1426 |
| Calkins Company. (See Calkins, Albert C., assignor.) | | | | | | |
| Calkins, Lillian C., Grand Rapids, Mich. Stocking | 723,361 | Mar. 24 | 3191 | 717 | 103 | 715 |
| Calkins, Walter J., assignor of one-third to E. Comer, Rockyford, Colo. Vehicle-tongue supporter | 728,363 | May 19 | 2918 | 644 | 104 | 659 |
| Call, Bernard F., *et al.* (See Lewis, Harry L., assignor.) | | | | | | |
| Call, Henry L., Chicago, Ill. Vehicle | 747,937 | Dec. 29 | 4875 | 1101 | 107 | 2251 |
| Callaghan, Henry J., *et al.* (See McCarthy, William J., assignor.) | | | | | | |
| Callahan, Americus F. (See Callahan, Earle H., assignor.) | | | | | | |
| Callahan & Co., W. P. (See Williams, Edward E., assignor.) | | | | | | |
| Callahan, Earle H., assignor of one-half to A. F. Callahan, Chicago, Ill. Mailing-wrapper | 746,014 | Dec. 8 | 1295 | 291 | 107 | 1393 |
| Callahan, George J., Rifle, Colo. Nut-lock | 732,166 | June 30 | 4916 | 1094 | 104 | 2312 |
| Callahan, John. (See Jackson, James E., assignor.) | | | | | | |
| Callahan, William K. (See Callahan and De Armon.) | | | | | | |
| Callahan, William K. (See Callahan, De Armon, and Callahan.) | | | | | | |
| Callahan, William P., deceased, (W. K. Callahan, executor,) W. K. Callahan, and T. De Armon, Dayton, Ohio. Oil-press box | 727,896 | May 12 | 2034 | 452<br>453 | 104 | 451 |
| Callahan, William P., deceased, (W. K. Callahan, executor,) T. De Armon, and W. K. Callahan, Dayton, Ohio. Re-pressing oil-meal into soft cakes | 727,897 | May 12 | 2036 | 453 | 104 | 451 |
| Callanan, William A., Colorado Springs, Colo., assignor of one-half to P. C. Peck, New York, N. Y. Hat-fastener | 726,633 | Apr. 28 | 4129 | 931 | 103 | 2077 |
| Callander, John M., Des Moines, Iowa. Package-display cabinet | 730,871 | June 16 | 2437 | 538 | 104 | 1670 |
| Callaway, Timothy W. (See Barnett, William O., assignor.) | | | | | | |
| Callender, Edwin F. (See Callender, Ira S. and E. F.) | | | | | | |
| Callender, Ira S. and E. F., Galesburg, Ill. Electric time-switch | 733,369 | July 14 | 1206 | 286 | 105 | 270 |
| Callender, Ward G., Plainfield, Iowa. Shoe-cleaner | 726,634 | Apr. 28 | 4130 | 931 | 103 | 2077 |
| Callender, Ward G., Plainfield, Iowa. Shoe-blacking device | 733,370 | July 14 | 1207 | 286 | 105 | 270 |
| Callender's Cable & Construction Company. (See Hastings, Harold, assignor.) | | | | | | |
| Calleson, Amos. (See Adriance and Calleson.) | | | | | | |
| Calleson, Amos. (See Calleson, Christian A., assignor.) | | | | | | |
| Calleson, Christian A., New York, assignor to A. Calleson, Brooklyn, N. Y. Metal cap for bottles or jars | 731,096 | June 16 | 2875 | 638 | 104 | 1761 |
| Callin, Alexander B., Russell, Canada. Scale or weighing beam | 746,454 | Dec. 8 | 2077 | 478 | 107 | 1562 |
| Calling, Ernest A., Brady, Nebr. Harvester | 743,243 | Nov. 3 | 820 | 179 | 107 | 171 |
| Callow, John, Liverpool, England. Apparatus for dividing and compressing or molding dough | 733,143 | July 7 | 789 | 191 | 105 | 167 |
| Callsen, Jürgen, Elberfeld, Germany, assignor to Farbenfabriken of Elberfeld Co., New York, N. Y. Alkyloxyalkyliden esters of salicylic acid | 740,628 | Oct. 6 | 470 | ..... | 106 | 1347 |
| Calm, Charles E. (See Scheinert and Calm.) | | | | | | |
| Caloin, Louis P., Dunkerque, France. Lubricator | 721,284 | Feb. 24 | 3528 | 803 | 102 | 1616 |
| Caloun, Joseph C., and E. R. Disbro, Cleveland, Ohio. Repeating detonator | 737,338 | Aug. 25 | 4305 | 957 | 105 | 1949 |
| Calvert, C. H. (See McPherson, Charles E., assignor.) | | | | | | |
| Calvert, Ira, Chesterhill, Ohio. Sawmill | 745,780 | Dec. 1 | 830 | 188 | 107 | 1276 |
| Calvert, John B., Guthrie, Okla. Ter. Self-closing ink-well | 739,289 | Sept. 22 | 3403 | 757 | 106 | 776 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drgs. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Cambridge Manufacturing Company. (See Davis, Cleland, assignor.) | | | | | | |
| Camden Iron Works. (See Shem, George W., assignor.) | | | | | | |
| Cameron, Addison B., Cameron, Mont. Gate | 725,039 | Apr. 14 | 1156 | 261 | 103 | 1432 |
| Cameron, Arthur, assignor to F. C. Austin, Chicago, Ill. Well-machine | 734,510 | July 28 | 3347 | 783, 784 | 105 | 756 |
| Cameron, Daniel, C. E. Bell, and A. T. Barnes, Kansas City, Mo. Preparing cans for shipment | 732,046 | June 30 | 4670 | 1043 | 104 | 2161 |
| Cameron, Edward F., Helena, Mont. Steam-turbine | 735,341 | Aug. 4 | 575 | 118 | 105 | 1104 |
| Cameron, Herbert G. (See Mackrow and Cameron.) | | | | | | |
| Cameron, James A., Brooklyn, N. Y. Sewing-machine | 744,045 | Nov. 17 | 2464 | 530 | 107 | 555 |
| Cameron, John C., *et al.* (See Smith, Lewis C., assignor.) | | | | | | |
| Cameron, Julia E. (See Coryell, Edwin M., assignor.) | | | | | | |
| Cameron, Murdick, Duluth, assignor of one-half to G. L. Woolen, St. Louis County, Minn. Rotary engine | 729,042 | May 26 | 4172 | 923, 924 | 104 | 936 |
| Cameron, Walter A. (See Towers and Cameron.) | | | | | | |
| Cameron, William, Chicago, Ill. Can-soldering machine | 741,222 | Oct. 13 | 1569 | 353 | 106 | 1601 |
| Camins, Samvel, Pittsburg, Pa. Lamp-support | 736,685 | Aug. 18 | 3096 | 683 | 105 | 1674 |
| Camp, Foster K., Chicago, Ill., assignor to Wyckoff, Seamans & Benedict, Ilion, N. Y. Type-writing machine | 746,788 | Dec. 15 | 2685 | 620 | 107 | 1718 |
| Camp, James G., Sacramento, Cal. Machine for washing and cleaning gravel in gold-mining | 738,408 | Sept. 8 | 1743 | 379 | 106 | 390 |
| Camp, Joseph E., Washington, Ill. Portable elevator | 741,108 | Oct. 13 | 1334 | 306 | 106 | 1551 |
| Camp, Samuel H., assignor to Imperial Skirt Company, Jackson, Mich. Skirt | 736,576 | Aug. 18 | 2863 | 627 | 105 | 1628 |
| Campana, Vincenzo, *et al.* (See Prioletta, Giovanni, assignor.) | | | | | | |
| Campbell, A. M., *et al.* (See McGuire, Peter J., assignor.) | | | | | | |
| Campbell, Adaline P. (See Hogeland, Israel, assignor.) | | | | | | |
| Campbell, Adoniram J., Media, Pa. Sad-iron | 718,311 | Jan. 13 | 1465 | 325 | 102 | 331 |
| Campbell, Adoniram J., Media, Pa. Sad-iron | 728,669 | May 19 | 3499 | 777 | 104 | 782 |
| Campbell, Albert D. (See Ammann and Campbell.) | | | | | | |
| Campbell, Albert D. (See Flood, Sayer, and Campbell.) | | | | | | |
| Campbell, Alexander. (See Haight, William H., assignor.) | | | | | | |
| Campbell, Alexander C., Sanford, N. C. Combined cupboard and refrigerator | 724,802 | Apr. 7 | 723 | 168 | 103 | 1325 |
| Campbell, Alva V., London, England. Oil-lamp | 733,004 | July 7 | 536 | 132 | 105 | 115 |
| Campbell, Andrew C., Waterbury, assignor of one-half to C. W. Warner, Middletown, Conn. Wire-forming machine | 728,201 | May 19 | 2586 | 577, 578 | 104 | 590 |
| Campbell, Andrew C., assignor to E. J. Manville Machine Company, Waterbury, Conn. Wire-feeding mechanism | 737,340 | Aug. 25 | 4310 | 959 | 105 | 1950 |
| Campbell, Andrew C., assignor to E. J. Manville Machine Company, Waterbury, Conn. Machine for forming garment-hooks | 737,341 | Aug. 25 | 4313 | 959, 960, 961, 962 | 105 | 1951 |
| Campbell, Andrew C., and E. L. Bronson, assignors to E. J. Manville Machine Company, Waterbury, Conn. Wire-bending machine | 737,339 | Aug. 25 | 4306 | 957, 958, 959 | 105 | 1949 |
| Campbell, Andrew J., Luray, Va. Fish-spear | 746,455 | Dec. 8 | 2078 | 478 | 107 | 1562 |
| Campbell, Angus, assignor to American Cotton Picker Company, Pittsburg, Pa. Cotton-harvester | 722,421 | Mar. 10 | 1419 | 313 | 103 | 318 |
| Campbell, Archibald U., Kalamazoo, Mich. Device for delivering messages to moving trains | 736,361 | Aug. 18 | 2468 | 540 | 105 | 1545 |
| Campbell, Benjamin F., and J. Berg, assignors of one-third to J. E. Coates, Little Rock, Ark. Lubricating device | 730,813 | June 9 | 2321 | 516 | 104 | 1626 |
| Campbell, Benjamin F., and J. Berg, assignors of one-third to J. E. Coates, Little Rock, Ark. Lubricating device | 730,814 | June 9 | 2323 | 516 | 104 | 1626 |
| Campbell, Bertha M., *et al.* (See Campbell, Everett J., assignor.) | | | | | | |
| Campbell, Bosworth Machinery Company. (See Dodge and Wilson, assignors.) | | | | | | |
| Campbell, Carl T., Sistersville, W. Va. Swing | 719,301 | Jan. 27 | 3389 | 755 | 102 | 762 |
| Campbell, Carl T., assignor to T. K. Smith, Sistersville, W. Va. Lawn-stand | 743,827 | Nov. 10 | 2015 | 427 | 107 | 446 |
| Campbell, Charles, Grantpark, Ill. Unloading apparatus | 725,406 | Apr. 14 | 1823 | 408 | 103 | 1570 |
| Campbell, Charles B., assignor to Storm Railway Signal Company, Waterloo, Iowa. Make-and-break switch for electric signals | 739,056 | Sept. 15 | 2967 | 657 | 106 | 668 |
| Campbell, Charles B., assignor to Storm Railway Signal Company, Waterloo, Iowa. Automatic signal for electric railways | 739,057 | Sept. 15 | 2969 | 657, 658 | 106 | 668 |
| Campbell, Colin, Tallmans, N. Y. Boot or shoe heel | 727,898 | May 12 | 2037 | 453 | 104 | 452 |
| Campbell, Daniel J. (See Doscher, William C., assignor.) | | | | | | |
| Campbell, David M. P. (See La Burt and Campbell.) | | | | | | |
| Campbell, Donald, *et al.* (See Kent, Henry E., assignor.) | | | | | | |
| Campbell, E. B. (See Boulicault, Jean B., assignor.) | | | | | | |
| Campbell, Edward, assignor of two-thirds to A. G. Street and J. J. Campbell, Rossland, Canada. Smelting-furnace | 730,610 | June 9 | 1984 | 441 | 104 | 1555 |
| Campbell, Emerson B., Bakersfield, Cal. Sucker-rod joint | 735,030 | July 28 | 4323 | 1005 | 105 | 957 |
| Campbell, Everett J., assignor to B. M. Campbell and O. B. Thayer, Elmira, N. Y. Stove-pipe-collar | 718,047 | Jan. 6 | 984 | 219 | 102 | 212 |
| Campbell, Frank, *et al.* (See Daniels, William H., assignor.) | | | | | | |
| Campbell, Frank. (See Neild and Campbell.) | | | | | | |
| Campbell, George A. (See Warren and Campbell.) | | | | | | |
| Campbell, George A., Newton, Mass., assignor to American Telephone and Telegraph Company. Self-induction coil | 737,703 | Sept. 1 | 261 | 55 | 106 | 59 |
| Campbell, George A., Newton, and W. L. Richards, Malden, Mass., assignors to American Telephone and Telegraph Company. Self-induction coil | 737,704 | Sept. 1 | 262 | 56 | 106 | 60 |
| Campbell, George G., Rochester, N. Y. Closing head or stopper for bottles | 719,184 | Jan. 27 | 3166 | 704 | 102 | 713 |
| Campbell, Harry T., Pendleton, Ind. Rail-joint | 733,144 | July 7 | 792 | 191, 192 | 105 | 167 |
| Campbell, Henry, Baltimore, Md., assignor to Keystone Cork Seal Company, Philadelphia, Pa. Bottle-stopper | 721,541 | Feb. 24 | 3086 | 908 | 102 | 1712 |
| Campbell, Henry, Baltimore, Md., assignor to Keystone Cork Seal Company, Camden, N. J. Stopper | 735,031 | July 28 | 4324 | 1005 | 105 | 957 |
| Campbell, Henry F., Melrose, Mass. Concentrating ores | 723,362 | Mar. 24 | 3191 | 718 | 103 | 715 |
| Campbell, Henry F., Melrose, Mass. Concentrating ore | 723,363 | Mar. 24 | 3195 | ..... | 103 | 715 |
| Campbell, Henry F., Melrose, assignor to National Magnetic Mineral Separating Company, Boston, Mass. Magnet | 744,481 | Nov. 17 | 3300 | 709 | 107 | 735 |
| Campbell, Hilda. (See Campbell, John R. and H.) | | | | | | |
| Campbell, Jeremiah, Newton, Mass. Gate for coal or other pockets | 733,623 | July 14 | 1651 | 391 | 105 | 366 |
| Campbell, John, Sr., Webster, N. Y. Animal-trap | 726,140 | Apr. 21 | 3150 | 712 | 103 | 1866 |
| Campbell, John, New York, N. Y. Hoof-pad | 734,301 | July 21 | 2987 | 703 | 105 | 665 |
| Campbell, John, Cascade Locks, Oreg. Gage-square | 735,207 | Aug. 4 | 339 | 65 | 105 | 1053 |
| Campbell, John D., Comanche, Tex. Plow | 746,015 | Dec. 8 | 1297 | 291 | 107 | 1393 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|
| | | | Spec. | Drg. | Vol. | Page. |
| Campbell, John D., Newton, assignor to himself, and W. C. Whittingham, Milburn, N. J. Screen | 718,978 | Jan. 27 | 2770 | 621 | 102 | 633 |
| Campbell, John D., Newton, assignor to himself, and W. C. Whittingham, Milburn, N. J. Screen-strip for window-sashes | 719,082 | Jan. 27 | 2972 | 663 | 102 | 674 |
| Campbell, John D., Newton, assignor to himself, and W. C. Whittingham, Milburn, N. J. Adjustable window-shade holder | 721,014 | Feb. 17 | 2973 | 683<br>684 | 102 | 1479 |
| Campbell, John D., Newton, assignor to himself, and W. C. Whittingham, Milburn, N. J. Sash-screen fastening | 721,015 | Feb. 17 | 2975 | 684 | 102 | 1479 |
| Campbell, John F., Mapleton, Kans. Mitten | 725,217 | Apr. 14 | 1492 | 339 | 103 | 1501 |
| Campbell, John J., *et al.* (See Campbell, Edward, assignor.) | | | | | | |
| Campbell, John R. and H., New York, N. Y. Sponge | 720,890 | Feb. 17 | 2727 | 628 | 102 | 1427 |
| Campbell, Joseph E., Pittsburg, Pa. Switch-operating device | 748,345 | Dec. 29 | 5628 | 1283 | 107 | 2413 |
| Campbell, Joseph G., Wilkinsburg, Pa. Wrench | 736,912 | Aug. 18 | 3517 | 782 | 105 | 1763 |
| Campbell, Joseph H., New York, N. Y. Treating milk and product thereof | 717,968 | Jan. 6 | 836 | 189 | 102 | 180 |
| Campbell, Joseph H., New York, N. Y. Making desiccated milk | 718,191 | Jan. 13 | 1248 | ..... | 102 | 285 |
| Campbell, Joseph H., New York, N. Y. Milk product resembling cheese and making same | 746,016 | Dec. 8 | 1298 | 292 | 107 | 1393 |
| Campbell, Kate W., *et al.* (See Kent, Henry E., assignor.) | | | | | | |
| Campbell, Lute E., and W. B. Weaver, Elreno, Okla. Ter. Dispensing-cabinet | 726,635 | Apr. 28 | 4131 | 932 | 103 | 2077 |
| Campbell, Malcolm, Boston, Mass. Friction-clutch | 719,993 | Feb. 10 | 1049 | 244 | 102 | 1062 |
| Campbell, Malcolm, Boston, Mass. Spinning-machine | 739,983 | Sept. 29 | 4719 | 1061 | 106 | 1075 |
| Campbell, Malcolm, Boston, Mass. Flier | 747,134 | Dec. 15 | 3357 | 762 | 107 | 1874 |
| Campbell, Mary E., Toronto, Canada. Guide for sewing-machines | 718,818 | Jan. 20 | 2463 | 547 | 102 | 552 |
| Campbell, Milton, Philadelphia, Pa. Hypodermic syringe | 718,979 | Jan. 27 | 2772 | 621 | 102 | 633 |
| Campbell, Peter, Carrolltown, Pa. Safety-platform for car ends | 738,658 | Sept. 8 | 2224 | 487 | 106 | 493 |
| Campbell Printing Press & Manufacturing Company. (See Johnston, Robert T., assignor.) | | | | | | |
| Campbell Printing Press & Manufacturing Company. (See Wood, Henry A. W., assignor.) | | | | | | |
| Campbell, Richard. (See Railton and Campbell.) | | | | | | |
| Campbell, Richmond L., Sr., G. W. and C. H. Schwartz, Grass Valley, Oreg. Header-platform | 722,488 | Mar. 10 | 1562 | 344 | 103 | 350 |
| Campbell, Robert, Gadsden, Ala. Molding-machine | 720,220 | Feb. 10 | 1503 | 344 | 102 | 1156 |
| Campbell, Robert G., assignor of one-half to C. Cone, Greensboro, N. C. Picker-stick lug-strap for looms | 730,743 | June 9 | 2208 | 491 | 104 | 1602 |
| Campbell, Robert L., assignor of one-half to B. T. Washington, Tuskegee, Ala. Valve-gear for steam-engines | 728,364 | May 19 | 2919 | 644 | 104 | 659 |
| Campbell, Samuel G. (See Whiteside and Campbell.) | | | | | | |
| Campbell, Thomas E., Mexia, Tex. Wrench | 717,734 | Jan. 6 | 399 | 94 | 102 | 87 |
| Campbell, Thomas R., Marietta, Ind. Ter. Vehicle-top support | 737,705 | Sept. 1 | 263 | 56 | 106 | 60 |
| Campbell, Victor E., Goldendale, Wash. Automatic gas cut-off | 740,805 | Oct. 6 | 793 | 179 | 106 | 1414 |
| Campbell, William A., and A. J. Henderson, Cherryvale, Kans. Draft-equalizer | 719,564 | Feb. 3 | 272 | 63 | 102 | 880 |
| Campbell, William D., *et al.* (See Perkins, Lindsay S., assignor.) | | | | | | |
| Campbell, Wilson. (See Fox, Helen M., assignor.) | | | | | | |
| Campen, Elmo M., Tampa, Fla. Mold | 733,145 | July 7 | 793 | 192 | 105 | 167 |
| Campion, Cornelius, Tunbridge, Vt. Hymn-book | 721,148 | Feb. 24 | 3268 | 748 | 102 | 1564 |
| Campion, Grant, and M. Wyant, Anderson, Ind. Regenerator-furnace | 725,539 | Apr. 14 | 2083 | 471 | 103 | 1626 |
| Campion, Grant, and M. Wyant, Anderson, Ind. Gas-producer | 745,781 | Dec. 1 | 831 | 188<br>189 | 107 | 1276 |
| Campkin, Frederick, New Haven, Conn. Pneumatic action and coupler for organs | 741,884 | Oct. 20 | 2864 | 639 | 106 | 1891 |
| Campton, James V. and W. W., Des Moines, Iowa, and W. Campton, St. Cloud, Colo. Corn harvester and husker | 718,564 | Jan. 13 | 1991 | 434 | 102 | 442 |
| Campton, Wilbur W. (See Campton, James V., W. W., and W.) | | | | | | |
| Campton, William. (See Campton, James V., W. W., and W.) | | | | | | |
| Campus, Cesare, Naples, Italy. Motor | 728,860 | May 26 | 3853 | 857<br>858 | 104 | 871 |
| Campus, Cesare, Naples, Italy. Steam-boiler | 736,068 | Aug. 11 | 1976 | 421 | 105 | 1422 |
| Camus, Joseph, Grand Croix, France. Apparatus for discharging bottles or tubes of liquefied carbonic acid or the like | 726,214 | Apr. 21 | 3285 | 746 | 103 | 1894 |
| Canada Motor Bearing Company. (See Bradley, Silas W., assignor.) | | | | | | |
| Canadian General Electric Company. (See Kynoch, James, assignor.) | | | | | | |
| Canales, Frank W., Portland, Me. Grain-car door | 739,149 | Sept. 15 | 3143 | 695 | 106 | 703 |
| Canary, Daniel J., Oakpark, Ill. Theatrical appliance | 722,808 | Mar. 17 | 2171 | 484 | 103 | 494 |
| Canchester, David J., Chicago, Ill. Burner for liquid hydrocarbons | 746,283 | Dec. 8 | 1783 | 405 | 107 | 1499 |
| Canda, Ferdinand E., New York, N. Y. Welding | 726,026 | Apr. 21 | 2960 | 673 | 103 | 1827 |
| Candy, Adolphe R., Urbana, Ill. Floor-cuspidor | 725,672 | Apr. 21 | 2341 | 529 | 103 | 1695 |
| Candy, Thomas. (See King, Alfred J., assignor.) | | | | | | |
| Cane, Richard, London, England. Bedstead | 729,842 | June 2 | 592 | 130 | 104 | 1249 |
| Canet, Jean B. G. A. (See Schneider and Canet.) | | | | | | |
| Canfield, A. C. (See Kleber, John P., assignor.) | | | | | | |
| Canfield, Charles G., Cleveland, Ohio. Apparatus for construction of buildings of cement | 732,167 | June 30 | 4916 | 1094 | 104 | 2212 |
| Canfield, Charles G., Cleveland, Ohio. Inclosure for buildings in course of construction | 746,789 | Dec. 15 | 2689 | 621 | 107 | 1720 |
| Canfield, Frank, assignor to Western Wire Fence Company, Denver, Colo. Wire-fence tool | 718,243 | Jan. 13 | 1338 | 296<br>297 | 102 | 303 |
| Canfield, George W., *et al.* (See Treese, Albert L., assignor.) | | | | | | |
| Canfield, Louis T., and J. D. Murray, Scranton, Pa. Brake-operating apparatus | 742,834 | Nov. 3 | 30 | 6 | 107 | 9 |
| Canfield Rubber Company. (See Davis, Theron, assignor.) | | | | | | |
| Canfield, Wilber E., *et al.* (See Treese, Albert L., assignor.) | | | | | | |
| Canivan, Thomas J., Honesdale, Pa. Spring bed-bottom | 730,872 | June 16 | 2438 | 539 | 104 | 1670 |
| Cann, Frank W., Brooklyn, N. Y. Anode-hook | 745,479 | Dec. 1 | 321 | 75 | 107 | 1168 |
| Cann, M. C. (See Toohey, John, assignor.) | | | | | | |
| Cannan, Robert, assignor of one-half to P. Kennedy, Brooklyn, N. Y. Cotton-harvester | 723,985 | Mar. 31 | 4359 | 978<br>979<br>980 | 103 | 975 |
| Canning, Alexander H., Toronto, Canada. Automatic weighing-machine | 726,858 | May 5 | 40 | 9<br>10<br>11 | 104 | 11 |
| Cannock, Frank B., Annadale, assignor of one-half to R. G. Hollaman, Brooklyn, N. Y. Moving-picture mechanism | 745,956 | Dec. 1 | 1182 | 265 | 107 | 1352 |
| Cannom, Charles, London, Canada. Hydrocarbon-burner | 737,999 | Sept. 1 | 896 | 197 | 106 | 196 |
| Cannon, Clinton D., assignor of one-third to C. S. Cannon, Battlecreek, Mich. Casting and article made thereby | 719,744 | Feb. 3 | 607 | 136 | 102 | 950 |
| Cannon, Corodon S. (See Cannon, Clinton D., assignor.) | | | | | | |
| Cannon, George C., New York, N. Y. Furnace | 741,456 | Oct. 13 | 2027 | 450 | 106 | 1698 |
| Cannon, Joseph M., Bowen, Ill. Door-hinge | 718,423 | Jan. 13 | 1670 | 369 | 102 | 372 |

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| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | Spec. | Des. | Vol. | Page. |
| Cannon Metal Wheel Works. (See Halfpenny, Martin, assignor.) | | | | | | |
| Cannon, Theodore J. (See Garner, John S., assignor.) | | | | | | |
| Cannon, Warren B., assignor to Williams Manufacturing Company, Kalamazoo, Mich. Silo | 746,017 | Dec. 8 | 1301 | 292 | 107 | 1394 |
| Canon, Edward L., Quitman, Ga. Pneumatic waterworks | 739,150 | Sept. 15 | 3144 | 695 | 106 | 703 |
| Cantelo, John L., Liverpool, England. Type-writing machine | 734,044 | July 21 | 2474 | 578, 579 | 105 | 555 |
| Canton Machine and Manufacturing Company. (See Schmeltzer, Samuel M., assignor.) | | | | | | |
| Canton Rubber Company. (See Bradley, Robert D., assignor.) | | | | | | |
| Cantor, Abraham, assignor of one-half to B. J. Schiff, Chicago, Ill. Folding cot | 729,486 | May 26 | 4931 | 1093 | 104 | 1095 |
| Cantrell, Louis G., assignor of one-half to J. M. Johnson, Nashville, Tenn. Adjustable trestle | 731,994 | June 23 | 4544 | 1014 | 104 | 2122 |
| Cantrell, William C. (See Luttrell and Cantrell.) | | | | | | |
| Cantril, Simeon W., *et al.* (See Powell, Daniel P., assignor.) | | | | | | |
| Cantwell, Mary, Leavenworth, Kans. Nursing-bottle | 735,707 | Aug. 11 | 1295 | 277 | 105 | 1274 |
| Capen, Charles P., St. Louis, Mo. Tile flooring | 726,506 | Apr. 28 | 3885 | 879 | 103 | 2029 |
| Capen, Charles P., St. Louis, Mo. Tile flooring | 729,128 | May 26 | 4319 | 954 | 104 | 965 |
| Capewell, George J., Hartford, Conn. Metal-cutting tool | 726,859 | May 5 | 45 | 11 | 104 | 12 |
| Capewell, George J., Hartford, Conn. Forming tacks | 737,206 | Aug. 25 | 4052 | 898 | 105 | 1895 |
| Cappeau, Joseph P., Joplin, Mo. Zinc-smelting furnace | 720,664 | Feb. 17 | 2349 | 538 | 102 | 1346 |
| Cappelen, John J., Massillon, Ohio. Bottle-neck supporter | 720,665 | Feb. 17 | 2351 | 539 | 102 | 1347 |
| Capps, Frank L. (See Emerson and Capps.) | | | | | | |
| Capps, Frank L., Bridgeport, Conn., assignor to American Graphophone Company, Washington, D. C. Reproducer for graphophones | 727,899 | May 12 | 2038 | 454 | 104 | 452 |
| Capron, Clarence P., Norwichtown, Conn. Removable spout for pails | 744,999 | Nov. 24 | 4224 | 915 | 107 | 946 |
| Caracciola, Otto, Cologne, Germany. Reversible gear with adjustable stroke | 741,624 | Oct. 20 | 2378 | 532 | 106 | 1788 |
| Carbon-Hydrate Chemical Company. (See Wideen, Knut C., assignor.) | | | | | | |
| Carbone, Tito L., Berlin, Germany. Electric-arc lamp | 735,708 | Aug. 11 | 1296 | 277, 278 | 105 | 1274 |
| Carbone, Tito L., Grunewald, near Berlin, Germany. Electric-arc lamp | 737,342 | Aug. 25 | 4318 | 962 | 105 | 1953 |
| Carbone, Tito L., Grunewald, near Berlin, Germany. Electric-arc lamp | 737,343 | Aug. 25 | 4319 | 962 | 105 | 1953 |
| Carbone, Tito L., Grunewald, near Berlin, Germany. Electric-arc lamp | 737,823 | Sept. 1 | 508 | 111, 112 | 106 | 114 |
| Carbone, Tito L., Grunewald, near Berlin, Germany. Electric-arc lamp | 737,824 | Sept. 1 | 509 | 112 | 106 | 114 |
| Carbone, Tito L., Grunewald, near Berlin, Germany. Electric-arc lamp | 737,825 | Sept. 1 | 511 | 112 | 106 | 115 |
| Carbone, Tito L., assignor of thirty-one sixtieths to H. Wollheim, Berlin, Germany. Metal-tube-cutting machine | 738,409 | Sept. 8 | 1744 | 379, 380 | 106 | 391 |
| Cardella, Alexander S., assignor of one-half to W. H. Wallis, Chicago, Ill. Hydraulic apparatus | 718,424 | Jan. 13 | 1671 | 369 | 102 | 373 |
| Carden, Luther W., Crestview, Tenn. Cattle-guard | 730,002 | June 2 | 888 | 198 | 104 | 1309 |
| Cardwell, George A., New York, N. Y., assignor, by mesne assignments, to International Electric Controller Company. Current-regulator | 746,669 | Dec. 15 | 2479 | 566, 567 | 107 | 1674 |
| Carey, Abner, Mills, Pa. Dumping-wagon | 719,644 | Feb. 3 | 417 | 95 | 102 | 909 |
| Carey, George F., New York, N. Y. Device for opening buckles | 743,145 | Nov. 3 | 631 | 137 | 107 | 132 |
| Carey, John, Brockton, Mass. Meat-press | 729,733 | June 2 | 387 | 87 | 104 | 1207 |
| Carey, Robert F., Cricklewood, assignor of one-half to Joseph Richmond and Company, Limited, Hatton Garden, London, England. Lift | 747,317 | Dec. 15 | 3710 | 836 | 107 | 1950 |
| Cargill, Don F., Akely, Minn., assignor of one-half to P. O. Egeland and B. P. Eagan. Car-reflector | 748,346 | Dec. 29 | 5630 | 1283 | 107 | 2413 |
| Carichoff, Eugene R., East Orange, N. J., assignor to Sprague Electric Company. Switch for electrical apparatus | 733,146 | July 7 | 795 | 192 | 105 | 168 |
| Carissimo, Antonio, G. Crotti, and E. Antonioli, Milan, Italy. Carbureting apparatus | 738,604 | Sept. 8 | 2116 | 462, 468 | 106 | 471 |
| Carl Anderson Company. (See Joranson, Gustaf, assignor.) | | | | | | |
| Carl, Franz J. and H. G., Chicago, Ill. Window | 741,457 | Oct. 13 | 2029 | 451 | 106 | 1698 |
| Carl, Hermann G. (See Carl, Franz J. and H. G.) | | | | | | |
| Carlberg, Walfred F., Sisseton, S. D. Automatic pump | 744,483 | Nov. 17 | 3302 | 710 | 107 | 735 |
| Carleton, Henry G., New York, N. Y. Lock | 726,254 | Apr. 28 | 3368 | 765, 766 | 103 | 1926 |
| Carleton, John W., New Britain, Conn. Scraper | 740,087 | Sept. 29 | 4906 | 1101 | 106 | 1115 |
| Carleton, John W., assignor to Union Manufacturing Company, New Britain, Conn. Plate-chuck | 746,284 | Dec. 8 | 1786 | 405 | 107 | 1500 |
| Carleton, John W., assignor to Union Manufacturing Company, New Britain, Conn. Plane-iron | 746,286 | Dec. 8 | 1788 | 406 | 107 | 1500 |
| Carleton, John W., and G. E. Trask, assignors to Union Manufacturing Company, New Britain, Conn. Plane | 746,285 | Dec. 8 | 1787 | 405, 406 | 107 | 1500 |
| Carleton, Oscar M., Somerville, Mass. Valve for engines | 731,161 | June 16 | 3003 | 666 | 104 | 1785 |
| Carley, Horace S., Hydepark, Mass. Buoyant seat or couch | 723,647 | Mar. 24 | 3708 | 831 | 103 | 820 |
| Carley, Horace S., Hydepark, Mass., assignor to Carley Life Float Company, Philadelphia, Pa. Life-raft | 734,118 | July 21 | 2621 | 617 | 105 | 587 |
| Carley Life Float Company. (See Carley, Horace S., assignor.) | | | | | | |
| Carlhime, Jacob C., Ashville, Pa. Revolving ratchet-wrench | 719,645 | Feb. 3 | 418 | 95 | 102 | 909 |
| Carlinet, John G., assignor of one-half to G. F. Bauer, Philadelphia, Pa. Motor | 743,244 | Nov. 3 | 821 | 179 | 107 | 171 |
| Carlisle, Alphonso B., Chattanooga, Tenn. Hat-holder | 735,208 | Aug. 4 | 339 | 65 | 105 | 1054 |
| Carlisle, Bryant B., and J. R. Elder, assignors of one-third to L. D. Hagerty, Columbus, Ohio. Emergency car-coupling | 745,093 | Nov. 24 | 4442 | 961 | 107 | 990 |
| Carlisle, William S., assignor to Davis Sewing Machine Company, Dayton, Ohio. Automatic lift and drop cabinet | 732,168 | June 30 | 4919 | 1094 | 104 | 2212 |
| Carll, Addison B., Brooklyn, N. Y. Hanger for pipes, conduits, or the like | 726,636 | Apr. 28 | 4132 | 932 | 103 | 2077 |
| Carlos, Earl W. (See Riter and Carlos.) | | | | | | |
| Carlow & Putnam Company. (See Baer, Ivan F., assignor.) | | | | | | |
| Carlsen, Andrew M., assignor to F. E. Mahler, St. Paul, Minn. Track-gage | 731,097 | June 16 | 2876 | 638 | 104 | 1761 |
| Carlson, Alfred, Boston, Mass. Sash-fastener | 728,670 | May 19 | 3500 | 777 | 104 | 783 |
| Carlson, Axel, Chicago, Ill. Rein-holder | 724,430 | Apr. 7 | 21 | 6 | 103 | 1175 |
| Carlson, Carl A., Barberton, Ohio. Brick-truck | 740,629 | Oct. 6 | 471 | 103 | 106 | 1347 |
| Carlson, Carl A., assignor to Viigfabriks Aktiebolaget Stathmos, Stockholm, Sweden. Registering device in automatic scales | 727,286 | May 5 | 864 | 185, 186 | 104 | 185 |
| Carlson, Carl P., Langbron, Dingelvik, Sweden, assignor to A. W. Waern, Brooklyn, N. Y. Apparatus for retaining soda-ash dust | 727,088 | May 5 | 510 | 109 | 104 | 112 |
| Carlson, Charley A., Chicago, Ill. Mechanical movement | 739,533 | Sept. 22 | 3845 | 861 | 106 | 871 |
| Carlson, Charlie, Joplin, Mo. Ore-washer | 733,944 | July 21 | 2261 | 532 | 105 | 510 |
| Carlson, Gabriel, Springfield, Mass. Chocolate-coating machine | 717,969 | Jan. 6 | 839 | 190 | 102 | 180 |
| Carlson, Gabriel, Springfield, Mass. Confectionery-coating machine | 717,970 | Jan. 6 | 842 | 190 | 102 | 181 |
| Carlson, Hugo O. S., Chicago, Ill. Sample-book | 722,283 | Mar. 10 | 1175 | 260 | 103 | 265 |
| Carlson, John, New York, N. Y. Split gear-wheel | 737,075 | Aug. 25 | 3813 | 845 | 105 | 1845 |
| Carlson, John A., Stromsburg, Nebr. Header for water-pipes | 736,934 | Aug. 25 | 3569 | 792 | 105 | 1794 |

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| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drgs. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Carlson, Sven, Stockholm, Sweden. Petroleum-lamp | 741,223 | Oct. 13 | 1573 | 354 | 106 | 1602 |
| Carlsson, Carl A. V., and C. E. Bohman, Auburn, N. Y. Automatic cross-head-pin oiler | 719,565 | Feb. 3 | 273 | 63 | 102 | 880 |
| Carlsson, Carl H. (See Lind and Carlsson.) | | | | | | |
| Carlton, Edward, Brenham, Tex. Spindle-nut attachment | 719,745 | Feb. 3 | 609 | 136 | 102 | 950 |
| Carlton, Harvey B., assignor to Carlton Manufacturing Company, Rochester, N. Y. Pay-roll computer | 740,394 | Oct. 6 | 16 | 4 | 106 | 1247 |
| Carlton, Harvey B., assignor to Carlton Manufacturing Co., Rochester, N. Y. Reel | 742,587 | Oct. 27 | 4246 | 956 | 106 | 2188 |
| Carlton, Harvey B., and C. E. Hutchings, assignors to Carlton Manufacturing Company, Rochester, N. Y. Fishing-reel | 742,586 | Oct. 27 | 4242 | 956 | 106 | 2187 |
| Carlton, Howard, Roland Park, Md. Car-door | 746,456 | Dec. 8 | 2080 | 479 | 107 | 1562 |
| Carlton, Howard, Roland Park, Md. Floor-frame for cars | 746,457 | Dec. 8 | 2082 | 479 | 107 | 1563 |
| Carlton, John A., and H. L. Harrell, assignors of one-half to T. H. Parker and E. I. Dukes, Moultrie, Ga. Cotton-chopper | 738,659 | Sept. 8 | 2226 | 487 / 488 | 106 | 493 |
| Carlton Manufacturing Company. (See Carlton, Harvey B., assignor.) | | | | | | |
| Carlton Manufacturing Company. (See Carlton and Hutchings, assignors.) | | | | | | |
| Carlton, Robert, Jonesboro, Ark. Ellipsograph | 731,018 | June 16 | 2731 | 609 | 104 | 1731 |
| Carlton, Thomas J., Iola, Kans. Composition of matter used for protecting the walls of retorts, &c | 732,707 | July 7 | 29 | ..... | 105 | 9 |
| Carlyon, Philip H., Olympia, Wash. Gold-saving device | 738,291 | Sept. 8 | 1493 | 323 | 106 | 336 |
| Carmack, Irving G., Vienna, Ga. Back-band hook | 742,835 | Nov. 3 | 31 | 7 | 107 | 9 |
| Carman, Terry O., East Liverpool, Ohio. Heater for sweat-bath cabinets | 746,018 | Dec. 8 | 1302 | 292 | 107 | 1394 |
| Carman, William, Napanoch, N. Y. Knife construction | 728,861 | May 26 | 3856 | 858 | 104 | 871 |
| Carmichael, Alexander, Westerly, R. I. Damper-regulator | 717,810 | Jan. 6 | 554 | 124 | 102 | 119 |
| Carmichael, Archibald D., Broken Hill, New South Wales, Australia. Desulfurizing sulfid ores. (Reissue) | 12,105 | Apr. 21 | 3337 | ..... | 103 | 1903 |
| Carmichael, Henry, Malden, Mass., assignor to Static Carbonating Company, New York, N. Y. Siphon-filler | 734,302 | July 21 | 2988 | 703 | 105 | 665 |
| Carmichael, James, Chicago, Ill. Shower-bath attachment for bath-tubs | 719,994 | Feb. 10 | 1051 | 244 | 102 | 1062 |
| Carmiencke, Ferdinand F. (See Graham, Carmiencke, and Neely.) | | | | | | |
| Carmont, Hazelwood, Kingston-upon-Thames, England. Resilient tire for wheels | 724,259 | Mar. 31 | 4920 | 1101 | 103 | 1085 |
| Carnahan, Cyrus M., Allegheny, Pa. Brake-beam | 729,487 | May 26 | 4934 | 1093 / 1094 | 104 | 1095 |
| Carnahan, Cyrus M., Allegheny, assignor to National Rolled Steel Car Company, Pittsburg, Pa. Metallic car | 739,290 | Sept. 22 | 3404 | 757 / 758 | 106 | 776 |
| Carnahan, William M., *et al.* (See Steeb, John L., assignor.) | | | | | | |
| Carnduff, Edward, Colfax, Iowa. Fastening device | 746,670 | Dec. 15 | 2482 | 567 | 107 | 1674 |
| Carnegie, William C., Cumberland Island, Ga. Golf-club | 742,004 | Oct. 20 | 3121 | 696 | 106 | 1942 |
| Carnes, Oscar, and M. Farley, Preston, Iowa. Boiler | 741,885 | Oct. 20 | 2865 | 639 / 640 | 106 | 1892 |
| Carney, Charles J., Dunkirk, N. Y., and J. C. Gorton, Cleveland, Ohio. Riveting mechanism | 737,344 | Aug. 25 | 4320 | 962 | 105 | 1953 |
| Carney, John E., Montgomery, Ala. Game apparatus | 738,771 | Sept. 15 | 2457 | 540 | 106 | 558 |
| Carney, Thomas, assignor to National Cash Register Company, Dayton, Ohio. Cash-register | 748,259 | Dec. 29 | 5480 | 1249 / 1250 | 107 | 2381 |
| Carney, Thomas, Dayton, Ohio, assignor to National Cash Register Company, Jersey City, N. J. Cash-register | 748,260 | Dec. 29 | 5484 | 1250 / 1251 | 107 | 2383 |
| Carnochan, John W., assignor to Huntley Manufacturing Company, Silvercreek, N. Y. Bean separator | 721,421 | Feb. 24 | 3775 | 858 / 859 | 102 | 1668 |
| Carnochan, John W., assignor to Huntley Manufacturing Company, Silvercreek, N. Y. Can-filling machine | 735,209 | Aug. 4 | 342 | 65, 66 | 105 | 1054 |
| Carns, Harry O., Basco, Ill. Hog-catcher | 745,323 | Dec. 1 | 18 | 4 | 107 | 1105 |
| Caroland, Stonewall J., Clarksville, Tenn. Hoop-coiling machine | 741,109 | Oct. 13 | 1336 | 307 | 106 | 1551 |
| Caron, Arrestide, Minneapolis, Minn. Float-controlled valve | 721,938 | Mar. 3 | 538 | 118 | 103 | 119 |
| Carpenter, Albert, Cherry Creek Basin, Mont. Hook | 738,000 | Sept. 1 | 898 | 197 | 106 | 196 |
| Carpenter, Charles. (See Carpenter, John H. and C.) | | | | | | |
| Carpenter, Charles W., *et al.* (See Read, George F., assignor.) | | | | | | |
| Carpenter, Daniel A., assignor to J. W. Cushman, New York, N. Y. Device for tying packages | 726,404 | Apr. 28 | 3667 | 831 | 103 | 1988 |
| Carpenter, Daniel G., Highview, N. Y. Fruit-jar | 725,407 | Apr. 14 | 1825 | 409 | 103 | 1570 |
| Carpenter, Delos. (See Green and Carpenter.) | | | | | | |
| Carpenter, Edward B., Plymouth, Ind. Card | 740,228 | Sept. 29 | 5170 | 1161 | 106 | 1170 |
| Carpenter, Edward B., Plymouth, Ind. Article-attacher | 740,229 | Sept. 29 | 5170 | 1161 | 106 | 1171 |
| Carpenter, Franklin R., Deadwood, S. D., assignor of one-half to J. H. Berry, Detroit, Mich. Separating precious metals from their ores | 718,087 | Jan. 13 | 1063 | 236 | 102 | 244 |
| Carpenter, Franklin R., Deadwood, S. D., assignor of one-half to J. H. Berry, Detroit, Mich. Separating precious metals | 735,032 | July 28 | 4325 | 1005 | 105 | 958 |
| Carpenter, Franklin R., Denver, Colo., assignor of one-half to J. H. Berry, Detroit, Mich. Separating precious metals from ores | 718,088 | Jan. 13 | 1065 | 236 | 102 | 244 |
| Carpenter, Franklin R., Denver, Colo., assignor of one-half to J. H. Berry, Detroit, Mich. Recovering precious metals from mattes containing them | 718,089 | Jan. 13 | 1066 | ..... | 102 | 245 |
| Carpenter, Franklin R., Denver, Colo., assignor of one-half to J. H. Berry, Detroit, Mich. Separating precious metals from matte | 718,601 | Jan. 20 | 2067 | 450 | 102 | 474 |
| Carpenter, Franklin R., Denver, Colo., assignor of one-half to J. H. Berry, Detroit, Mich. Treating ores | 722,809 | Mar. 17 | 2172 | ..... | 103 | 494 |
| Carpenter, George W. (See Kuhlman and Carpenter.) | | | | | | |
| Carpenter, Henry W., U. S. Marine Corps. Rotary engine | 717,541 | Jan. 6 | 31 | 9, 10 | 102 | 9 |
| Carpenter, Herbert L., Brooklyn, N. Y. Means for modifying high-potential electric currents for low-potential use | 745,715 | Dec. 1 | 721 | 165 | 107 | 1252 |
| Carpenter, John H. and C., Chicago, Ill. Massage instrument | 731,543 | June 23 | 3733 | 831 | 104 | 1953 |
| Carpenter, Mattie L., Norman, Okla. Ter. Coffin-frame | 737,580 | Sept. 1 | 39 | 8 | 106 | 11 |
| Carpenter, Samuel F., Pawtucket, R. I. Self-centering spindle | 740,354 | Sept. 29 | 5391 | 1215 | 106 | 1216 |
| Carpenter Steel Company. (See Hamilton, Isaac N., assignor.) | | | | | | |
| Carper, James R. (See Rife and Carper.) | | | | | | |
| Carpet Yarn Printing Company. (See Fornander, Alfred, assignor.) | | | | | | |
| Carpet Yarn Printing Company. (See Webb, William J., assignor.) | | | | | | |
| Carr, Albert, Philadelphia, Pa. Horseshoe | 744,482 | Nov. 17 | 3301 | 710 | 107 | 735 |
| Carr, Cassius M., Colorado Springs, Colo. Anchored denture | 744,292 | Nov. 17 | 2963 | 633 | 107 | 662 |
| Carr, Cassius M., Washington, D. C., assignor, by mesne assignments, of one-half to C. H. Hamilton, Milwaukee, Wis. Anchored denture | 744,291 | Nov. 17 | 2960 | 633 | 107 | 662 |
| Carr & Co., M. W. (See Farrell, George R., assignor.) | | | | | | |
| Carr, David W., New York, N. Y. Awning-hook | 748,479 | Dec. 29 | 5892 | 1339 | 107 | 2472 |
| Carr, Griffin P. (See Carr and Williams.) | | | | | | |
| Carr, James H., Dubuque, Iowa. Scale | 726,027 | Apr. 21 | 2961 | 674 | 103 | 1827 |
| Carr, John. (See Rodabaugh and Carr.) | | | | | | |
| Carr, John F., St. Louis, Mo. Starting-machine | 728,539 | May 19 | 3239 | 719 | 104 | 726 |

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| Carr, Mahlon M., Fostoria, Ohio. Railway-torpedo | 720,666 | Feb. 17 | 2352 | 539 | 102 | 1347 |
| Carr, May E. (See Lanphear, Lewis C., assignor.) | | | | | | |
| Carr, Michael J., Grand Marais, Mich. Kitchen-cabinet | 721,860 | Mar. 3 | 381 | 83 | 103 | 83 |
| Carr, Walter C. (See Shedd, Joel H., assignor.) | | | | | | |
| Carr, Washington, *et al.* (See Miesse, Americus, assignor.) | | | | | | |
| Carr, William C., Indianapolis, Ind. Advertising device | 729,843 | June 2 | 593 | 131 | 104 | 1249 |
| Carr, William T. and G. P., and H. E. Williams, assignors of one-fourth to A. U. Walker, Savannah, Tenn. Baling-press | 731,663 | June 23 | 3950 | 879 | 104 | 1996 |
| Carrera, Victor, *et al.* (See Navascuez, Santiago N., assignor.) | | | | | | |
| Carrerè, Joseph M., New Brighton, N. Y. Electric furnace | 726,860 | May 5 | 45 | 11 | 104 | 12 |
| Carrick, William B., Chicago, Ill. Gas-burner | 721,997 | Mar. 3 | 647 | 144 | 103 | 140 |
| Carrick, William B., Chicago, Ill. Gas-burner | 744,290 | Nov. 17 | 2959 | 633 | 107 | 661 |
| Carrier, Roy J., assignor to Howe and Davidson Company, Chicago, Ill. Machine for paraffining paper | 737,826 | Sept. 1 | 512 | 113 | 106 | 115 |
| Carroll, Charles J., Baltimore, Md. Means or apparatus for reclaiming the sheet metal of cans | 742,391 | Oct. 27 | 3888 | 873 | 106 | 2115 |
| Carroll, Daniel, assignor to Columbus Chain Company, Columbus, Ohio. Making chain-links | 746,287 | Dec. 8 | 1789 | 406 | 107 | 1501 |
| Carroll, Edward, Clay, Mo. Winker-brace fastener | 732,617 | June 30 | 5785 | 1282 | 104 | 2396 |
| Carroll, Edward J. (See Millea and Carroll.) | | | | | | |
| Carroll, Elbert H., Worcester, Mass. Furnace for heating billets | 726,814 | Apr. 28 | 4465 | 1008 | 103 | 2147 |
| Carroll, Elbert H., assignor to Morgan Construction Company, Worcester, Mass. Furnace | 729,540 | June 2 | 37 | 9,10 | 104 | 1134 |
| Carroll, Elbert H., assignor to Morgan Construction Company, Worcester, Mass. Wire-drawing block | 729,541 | June 2 | 40 | 10 | 104 | 1135 |
| Carroll, Fred M., assignor to E. S. Swift, trustee, New Haven, Conn. Antifriction-bearing | 742,836 | Nov. 3 | 32 | 7 | 107 | 9 |
| Carroll, George P. (See Singer, William F., assignor.) | | | | | | |
| Carroll, James H., Waco, Tex. Vegetable-transplanting machine | 719,995 | Feb. 10 | 1052 | 244, 245 | 102 | 1062 |
| Carroll, James R., McCall, La. Door-holder | 720,560 | Feb. 17 | 2139 | 495 | 102 | 1305 |
| Carroll, James R., McCall, La. Rein-holder | 746,288 | Dec. 8 | 1791 | 406 | 107 | 1501 |
| Carroll, John, Canisteo, N. Y. Combined ironing-table and clothes-rack | 719,433 | Feb. 3 | 42 | 9 | 102 | 834 |
| Carroll, John, assignor to G. B. Sloan, Jr., Oswego, N. Y. End plate for springs | 718,090 | Jan. 13 | 1067 | 237 | 102 | 245 |
| Carroll, John B., Chicago, Ill. Acetylene-gas burner | 728,862 | May 26 | 3858 | 859 | 104 | 872 |
| Carroll, John B., Chicago, Ill. Manufacturing acetylene-gas burners | 728,863 | May 26 | 3859 | 859 | 104 | 872 |
| Carroll, Linus B. (See Symonds, Herbert, assignor.) | | | | | | |
| Carroll, Martin T. (See Shaw and Carroll.) | | | | | | |
| Carroll, Michael J. (See Millea and Carroll.) | | | | | | |
| Carroll, Philip F., Joliet, Ill. Mechanical oven | 740,395 | Oct. 6 | 19 | 5 | 106 | 1248 |
| Carroll, Sidney C., administrator. (See Morton, Wilson.) | | | | | | |
| Carroll, Timothy, Anaheim, Cal. Clutch | 747,298 | Dec. 15 | 3670 | 829 | 107 | 1942 |
| Carroll, William R., Oxford, La. Derailment-brake | 732,921 | July 7 | 399 | 96 | 105 | 86 |
| Carruthers, Joseph A., St. James, Victoria, Australia. Electric clock | 731,279 | June 16 | 3204 | 713 | 104 | 1825 |
| Carruthers, Joseph A., St. James, Victoria, Australia. Electric clock | 731,280 | June 16 | 3205 | 713 | 104 | 1825 |
| Carson, Arthur, assignor of one-half to J. S. Greer, Melbourne, Victoria, Australia. Safety household-lamp | 729,542 | June 2 | 41 | 10 | 104 | 1135 |
| Carson, Howard A., Malden, Mass. Submarine tunneling | 723,986 | Mar. 31 | 4362 | 980, 981 | 103 | 975 |
| Carson, Robert J., New York, assignor to R. H. Mayland, Freeport, N. Y. Strength-testing or punching machine | 741,625 | Oct. 20 | 2379 | 533 | 106 | 1788 |
| Carson, William D., Centralia, Ill. Harness for breaking and training horses | 718,425 | Jan. 13 | 1674 | 369 | 102 | 373 |
| Carson, William D., Centralia, Ill. Draft attachment for vehicles | 724,803 | Apr. 7 | 724 | 169 | 103 | 1325 |
| Carter, Alvah L., Chicago, Ill. Ink-well | 721,542 | Feb. 24 | 3987 | 908 | 102 | 1712 |
| Carter, Arthur L., *et al.* (See Donnell, Junius S., assignor.) | | | | | | |
| Carter, Arthur M., Dennison, Ohio. Automatically-emptying cuspidor | 739,388 | Sept. 22 | 3579 | 800 | 106 | 812 |
| Carter, Byron B., Hinsdale, and F. J. Stratton, Grossdale, Ill. Molding-machine | 727,900 | May 12 | 2040 | 454 | 104 | 452 |
| Carter, Byron J., Jackson, Mich. Steam-engine | 732,206 | Mar. 10 | 1027 | 226, 227 | 103 | 233 |
| Carter, Charles D., *et al.* (See McVey, George E., assignor.) | | | | | | |
| Carter, Charles E., assignor of two-thirds to L. Carter and L. Wirth, Cincinnati, Ohio. Cuspidor | 743,446 | Nov. 10 | 1298 | 266 | 107 | 292 |
| Carter, Charles H., Brooklyn, N. Y. Electric incandescent lamp | 736,069 | Aug. 11 | 1978 | 421 | 105 | 1422 |
| Carter, Charles W. (See Draper and Carter.) | | | | | | |
| Carter, Charles W., Aledo, Ill. Snap-hook | 731,162 | June 16 | 3004 | 667 | 104 | 1786 |
| Carter, Charles W., St. Johns, Mich. Snow or road roller | 732,826 | July 7 | 242 | 60 | 105 | 54 |
| Carter, Edward C., Evanston, Ill. Derail | 725,316 | Apr. 14 | 1658 | 374 | 103 | 1536 |
| Carter, Edward C., Evanston, Ill. Ore-dock | 745,038 | Nov. 24 | 4321 | 934 | 107 | 966 |
| Carter, Edward D., Brenham, Tex. Cotton-press | 719,083 | Jan. 27 | 2974 | 664 | 102 | 674 |
| Carter, Frank, Brighton, England. Toy | 728,864 | May 26 | 3862 | 859 | 104 | 872 |
| Carter, Franklin M., Hull Prairie, Ohio. Grain-separator for threshing-machines | 742,392 | Oct. 27 | 3891 | 874 | 106 | 2115 |
| Carter, Franklin P. (See Hakes and Carter.) | | | | | | |
| Carter & Hakes Machine Company. (See Hakes and Carter, assignors.) | | | | | | |
| Carter, Hiram C., Groesbeck, Tex. Gate-latch | 735,857 | Aug. 11 | 1582 | 337 | 105 | 1337 |
| Carter, James. (See Garsed and Carter.) | | | | | | |
| Carter, James E., and S. A. Wright, Halifax, England. Cold-iron-sawing machine | 722,810 | Mar. 17 | 2175 | 485 | 103 | 494 |
| Carter, James H., Chicago, Ill. Cell-case | 741,306 | Oct. 13 | 1738 | 388 | 106 | 1634 |
| Carter, John. (See Smith, Edson J., assignor.) | | | | | | |
| Carter, John A., Summit, N. J. Sectional wall or ceiling | 739,646 | Sept. 22 | 4062 | 906 | 106 | 918 |
| Carter, John L., Brooklyn, assignor to Carter Rotary Door Company, New York, N. Y. Rotating storm-door | 724,804 | Apr. 7 | 724 | 169, 170 | 103 | 1325 |
| Carter, John L., Brooklyn, assignor to Carter Rotary Door Company, New York, N. Y. Rotating storm-door | 724,805 | Apr. 7 | 726 | 170 | 103 | 1326 |
| Carter, John L., Brooklyn, assignor to Carter Rotary Door Company, New York, N. Y. Rotating storm-door | 724,806 | Apr. 7 | 728 | 171 | 103 | 1326 |
| Carter, John R., Augusta, Ky. Mechanical movement | 722,674 | Mar. 17 | 1927 | 428 | 103 | 444 |
| Carter, John R., Augusta, Ky., assignor to E. H. Huenefeld, Cincinnati, Ohio. Mechanical movement | 720,561 | Feb. 17 | 2140 | 495 | 102 | 1306 |
| Carter, John R., Augusta, Ky., assignor to E. H. Huenefeld, Cincinnati, Ohio. Gearing. | 721,149 | Feb. 24 | 3269 | 748 | 102 | 1564 |
| Carter, John R., Augusta, Ky., assignor to E. H. Huenefeld, Cincinnati, Ohio. Pitman connection | 721,502 | Feb. 24 | 3919 | 892 | 102 | 1696 |
| Carter, John R., Augusta, Ky., assignor to E. H. Huenefeld, Cincinnati, Ohio. Operating means for washing-machines | 724,431 | Apr. 7 | 22 | 7 | 103 | 1175 |
| Carter, John R., Augusta, Ky., assignor to E. H. Huenefeld, Cincinnati, Ohio. Gearing. | 735,465 | Aug. 4 | 832 | 177 | 105 | 1157 |
| Carter, John R., Augusta, Ky., assignor to E. H. Huenefeld, Cincinnati, Ohio. Coupling. | 740,527 | Oct. 6 | 279 | 55 | 106 | 1305 |

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| Carter, John T., administrator. (See Carter, John W.) | | | | | | |
| Carter, John W., Nutley, N. J. Gas-heater | 735,063 | Aug. 4 | 27 | 8 | 105 | 987 |
| Carter, John W., deceased; J. T. Carter, Racetrack, Mont., administrator, assignor of one-half to C. A. Warren, Chicago, Ill. Vehicle-tire | 733,540 | July 14 | 1507 | 359 | 105 | 335 |
| Carter, Lincoln J., Chicago, Ill. Theatrical scenery | 747,045 | Dec. 15 | 3178 | 729 | 107 | 1830 |
| Carter, Louis C., Advance, Tex. Car-coupling | 746,458 | Dec. 8 | 2083 | 480 | 107 | 1564 |
| Carter, Luena, *et al.* (See Carter, Charles E., assignor.) | | | | | | |
| Carter, Mary F., *et al.* (See McVey, George E., assignor.) | | | | | | |
| Carter, Mason V., Jefferson, Wis. Vignetter | 745,324 | Dec. 1 | 19 | 4 | 107 | 1105 |
| Carter, Neill A., Raynham, N. C. Tobacco-curing furnace | 740,230 | Sept. 29 | 5172 | 1162 | 106 | 1171 |
| Carter Oil Company. (See Rogers, Thomas C., assignor.) | | | | | | |
| Carter, Robert A., Pittsburg, Pa. Furnace | 735,064 | Aug. 4 | 29 | 9 | 105 | 987 |
| Carter Rotary Door Company. (See Carter, John L., assignor.) | | | | | | |
| Carter, Samuel C., Denver, Colo. Steam-engine | 747,135 | Dec. 15 | 3359 | 762, 763 | 107 | 1875 |
| Carter, Taylor, Frankford, Ky. Insulator | 746,671 | Dec. 15 | 2483 | 568 | 107 | 1674 |
| Carter, Theodore W. (See Richard, Alfred L., assignor.) | | | | | | |
| Carter, Wallace H., East Milton, Mass. Gripping-lever | 723,827 | Mar. 31 | 4031 | 909 | 103 | 905 |
| Carter's Ink Company. (See Gordon, Charles B., assignor.) | | | | | | |
| Carter's Ink Company. (See Spohn, Hermann H., assignor.) | | | | | | |
| Cartey, Harvey R. (See Keller and Cartey.) | | | | | | |
| Carthage Sand Machine Company. (See Sappington, Kendrick, and Wright, assignors.) | | | | | | |
| Cartin, Ransom G., Tusculum, Ga., assignor of one-half to E. E. and J. E. Foy. Fertilizer-distributer | 738,605 | Sept. 8 | 2117 | 463, 464 | 106 | 471 |
| Cartmell, Joseph B. (See Erter, David, assignor.) | | | | | | |
| Cartwright, John M., *et al.* (See Scruggs, Robert C., assignor.) | | | | | | |
| Cartwright, Joseph J., Shrewsbury, England. Cooking-range furnace, &c. | 727,287 | May 5 | 866 | 186 | 104 | 186 |
| Cartwright, Joseph W., Southport, England. Weighing-scale | 721,998 | Mar. 3 | 648 | 144 | 103 | 141 |
| Cartwright, William, Cleethorpes, England. Expansion-standard tree-support | 720,667 | Feb. 17 | 2353 | 539 | 102 | 1347 |
| Cartwright, William, Philadelphia, Pa., assignor to C. Cory & Sons, New York, N. Y. Mouthpiece for speaking-tubes | 720,110 | Feb. 10 | 1296 | 296 | 102 | 1115 |
| Carty, Charles F., Washington, N. C. Tube-expander | 743,146 | Nov. 3 | 633 | 137 | 107 | 132 |
| Carver, George W. (See Allen and Carver.) | | | | | | |
| Carver, Thomas F., Worcester, Mass. Friction-clutch | 719,434 | Feb. 3 | 43 | 9 | 102 | 834 |
| Cary, Henry B., assignor to F. W. Braun, Los Angeles, Cal. Furnace | 740,528 | Oct. 6 | 281 | 56 | 106 | 1305 |
| Cary, James H., Providence, R. I., assignor to Consolidated Engine-Stop Company. Engine-stop | 735,210 | Aug. 4 | 343 | 66 | 105 | 1055 |
| Cary, James H., Providence, R. I., assignor to Consolidated Engine-Stop Company. Engine-stop | 746,672 | Dec. 15 | 2484 | 568 | 107 | 1675 |
| Cary, John S., Denver, Colo. Beamless car-brake | 736,686 | Aug. 18 | 3097 | 683 | 105 | 1674 |
| Cary, Lewis C., St. Louis, Mo., assignor of one-half to J. Caldwell, El Paso, Tex. Combined street-car and air-brake coupling | 720,325 | Feb. 10 | 1693 | 384 | 102 | 1197 |
| Casaday, William L., South Bend, Ind. Compound reciprocating steam-engine | 730,873 | June 16 | 2439 | 539 | 104 | 1670 |
| Casady, James B., Toledo, Ohio. Adjustable curtain and shade holder | 731,544 | June 23 | 3734 | 831 | 104 | 1953 |
| Casalonga, Dominique A., Paris, France. Passenger-conveyer | 723,240 | Mar. 24 | 2953 | 662, 663 | 103 | 669 |
| Casanova, Luigi, Brooklyn, N. Y. Fire-escape | 719,646 | Feb. 3 | 420 | 96 | 102 | 916 |
| Casanovas y Amat, Carlos, Barcelona, Spain. Producing perforated or open-work patterns in fabrics | 725,823 | Apr. 21 | 2617 | 595 | 103 | 1755 |
| Cascaden Manufacturing Company. (See Menges, Theodore C., assignor.) | | | | | | |
| Case, Ada V., Detroit, Mich. Corset | 744,484 | Nov. 17 | 3303 | 710 | 107 | 735 |
| Case, Adelbert B., Springfield, Mass. Forming pawl-openings through round shafts of metal | 721,781 | Mar. 3 | 219 | 49 | 103 | 49 |
| Case, Albert W., Brookline, Mass. Conduit and sewer rod coupling | 730,186 | June 2 | 1184 | 265 | 104 | 1369 |
| Case, Alfred W., Highland Park, Conn. Pressure-blower | 718,693 | Jan. 20 | 2239 | 489 | 102 | 507 |
| Case, Alfred W., Highland Park, Conn. Heat-engine | 719,084 | Jan. 27 | 2981 | 665 | 102 | 676 |
| Case, Alfred W., Highland Park, Conn. Duplex steam-turbine | 725,673 | Apr. 21 | 2342 | 529 | 103 | 1695 |
| Case, Alfred W., Highland Park, Conn. Water-pumping engine | 742,588 | Oct. 27 | 4248 | 957 | 106 | 2188 |
| Case, Calvin S., Chicago, Ill. Dental pliers | 731,337 | June 16 | 3318 | 740 | 104 | 1849 |
| Case, Charles A., Trenton, N. J. Carriage for track-cables | 720,781 | Feb. 17 | 2544 | 586 | 102 | 1388 |
| Case, Charles A., Trenton, N. J. Roller-bearing support for track-cables | 739,984 | Sept. 29 | 4721 | 1062 | 106 | 1075 |
| Case, Frank B., Rochester, N. Y. Sliding joint for camera-tripods | 736,210 | Aug. 11 | 2208 | 475 | 105 | 1471 |
| Case, Frank B., Rochester, N. Y. Photographic camera | 736,211 | Aug. 11 | 2208 | 475 | 105 | 1471 |
| Case, Frank B., Rochester, N. Y. Reversible back for cameras | 736,212 | Aug. 11 | 2210 | 476 | 105 | 1471 |
| Case, Frank B., Rochester, N. Y. Connection for the swinging elements of cameras | 736,213 | Aug. 11 | 2211 | 476 | 105 | 1472 |
| Case, Frank B., Rochester, N. Y. Laterally-adjustable lens-carriage | 736,214 | Aug. 11 | 2213 | 476 | 105 | 1472 |
| Case, Frank B., Rochester, N. Y. Camera-front | 739,585 | Sept. 22 | 3951 | 882 | 106 | 894 |
| Case, Frank B., Rochester, N. Y. Lens-board clamp for cameras | 739,586 | Sept. 22 | 3952 | 882 | 106 | 894 |
| Case, Frank B., Rochester, N. Y. Detachable lens-board for cameras | 739,587 | Sept. 22 | 3953 | 883 | 106 | 894 |
| Case, Frank B., assignor to Seneca Camera Company, Rochester, N. Y. Lens-carriage for photographic cameras | 746,459 | Dec. 8 | 2085 | 480 | 107 | 1564 |
| Case, Frank E., Schenectady, N. Y. Braking moving loads | 733,901 | July 14 | 2173 | 512 | 105 | 473 |
| Case, Frank E., Schenectady, N. Y., assignor to General Electric Company. Electric brake | 719,566 | Feb. 3 | 275 | 64 | 102 | 880 |
| Case, Frank E., Schenectady, N. Y., assignor to General Electric Company. Motor-control system | 728,540 | May 19 | 3240 | 719 | 104 | 726 |
| Case, Frank E., Schenectady, N. Y., assignor to General Electric Company. Braking system | 729,734 | June 2 | 388 | 88 | 104 | 1208 |
| Case, Frank E., Schenectady, N. Y., assignor to General Electric Company. System of motor control | 730,341 | June 9 | 1479 | 328, 329 | 104 | 1445 |
| Case, Frank E., Schenectady, N. Y., assignor to General Electric Company. System of motor control | 730,342 | June 9 | 1488 | 329 | 104 | 1447 |
| Case, Frank E., Schenectady, N. Y., assignor to General Electric Company. Electric brake system | 733,900 | July 14 | 2167 | 511 | 105 | 472 |
| Case, Frank E., Schenectady, N. Y., assignor to General Electric Company. System of train control | 736,816 | Aug. 18 | 3335 | 739 | 105 | 1724 |
| Case, Frank E., Schenectady, N. Y., assignor to General Electric Company. Electric brake | 736,817 | Aug. 18 | 3347 | 740 | 105 | 1727 |
| Case, Frank E., Schenectady, N. Y., assignor to General Electric Company. Disrupting arcs | 736,913 | Aug. 18 | 3519 | 782 | 105 | 1764 |
| Case, Frank E., Schenectady, N. Y., assignor to General Electric Company. Operating electric brakes | 736,914 | Aug. 18 | 3520 | 782, 783 | 105 | 1764 |
| Case, Frank E., Schenectady, N. Y., assignor to General Electric Company. Electric braking | 739,588 | Sept. 22 | 3955 | 883 | 106 | 895 |
| Case, George A., Joplin, Mo. Railway-rail | 727,288 | May 5 | 867 | 187 | 104 | 186 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Specification | Monthly volume. Drawing | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Case, George W., and D. L. Swinton, Jr., deceased, (F. Swinton, administratrix,) Port Jervis, N. Y. Means for repairing boots or shoes | 731,281 | June 16 | 3206 | 714 | 104 | 1825 |
| Case, Henry. (See Harris and Case.) | | | | | | |
| Case, Henry J., Owasco, assignor to Adriance, Platt & Company, Poughkeepsie, N. Y., Harvester | 744,956 | Nov. 24 | 4154 | 897, 898 | 107 | 931 |
| Case, Lawrence W., Highland Park, Conn. Paper-polishing machine | 734,666 | July 28 | 3635 | 851 | 105 | 817 |
| Case Manufacturing Company. (See Holland, John H., assignor.) | | | | | | |
| Case & Son, W. A. (See Hirsch, Charles, assignor.) | | | | | | |
| Case, Theodore N., Mount Vernon, N. Y. Air-pump | 746,019 | Dec. 8 | 1303 | 292, 293 | 107 | 1394 |
| Case, Walter D., Granby, assignor to F. B. Griffin, North Bloomfield, Conn. Device for operating the ventilating-doors of tobacco-barns | 739,985 | Sept. 29 | 4722 | 1062 | 106 | 1075 |
| Case, Willis W., Denver, Colo. Crusher | 741,458 | Oct. 13 | 2031 | 451 | 106 | 1699 |
| Casebeer, Adam L., Sedalia, Mo. Wheel-clamp for railway-jacks | 728,365 | May 19 | 2920 | 645 | 104 | 659 |
| Casein Company of America. (See Charles, Aubrey D., assignor.) | | | | | | |
| Casein Company of America. (See Dunham, Andrew A., assignor.) | | | | | | |
| Casein Company of America. (See Hopkins, Henry S., assignor.) | | | | | | |
| Casevitz, Henry, Paris, France. Printing-telegraph | 727,089 | May 5 | 512 | 110, 111, 112 | 104 | 113 |
| Casevitz, Henry, Paris, France. Electric printing-telegraph apparatus | 744,046 | Nov. 17 | 2469 | 530, 531 | 107 | 556 |
| Casey, John T., Philadelphia, Pa., assignor to Keystone Lantern Company. Lantern | 729,844 | June 2 | 596 | 131 | 104 | 1250 |
| Casey, Joseph E., assignor to Providence Gas Burner Company, Providence, R. I. Incandescent-electric-lamp base | 744,957 | Nov. 24 | 4157 | 898 | 107 | 932 |
| Casey, Mark J., New Richmond, Wis. Metallic bedstead | 732,515 | June 30 | 5595 | 1239 | 104 | 2352 |
| Casey, Owen E., Nashua, Minn. Wagon | 742,162 | Oct. 27 | 3456 | 771 | 106 | 2026 |
| Casey, Vasco F., and J. P. Stendebach, San Francisco, Cal. Automatic feed-water regulator | 723,440 | Mar. 24 | 3327 | 745 | 103 | 743 |
| Casgrain, Louis A., Winchester, assignor to United Shoe Machinery Company, Boston, Mass. Attaching soles of boots or shoes or securing together layers of material | 721,016 | Feb. 17 | 2977 | 684 | 102 | 1480 |
| Casgrain, Louis A., Winchester, assignor to United Shoe Machinery Company, Boston, Mass. Attaching the outer soles of boots or shoes to their inner soles | 724,432 | Apr. 7 | 23 | 7 | 103 | 1175 |
| Cash, Arthur W., Newark, N. J. Shaft-coupling | 734,815 | July 28 | 3951 | 921 | 105 | 880 |
| Caskey, Isaac I. (See Gaskill, Marion L., assignor.) | | | | | | |
| Caskey, Samuel S., Philadelphia, Pa. Fluid-pressure riveter or punch | 722,489 | Mar. 10 | 1563 | 344 | 103 | 350 |
| Caskey, William J. (See Lewis, Harry A., assignor.) | | | | | | |
| Casler, Alonzo A., Mansfield, Ohio, assignor to T. B. Crary, Binghamton, N. Y. Washing-machine | 723,648 | Mar. 24 | 3709 | 831 | 103 | 820 |
| Casler, Benjamin G., assignor to West Coast Company, Chicago, Ill. Felt or fabric roofing | 742,589 | Oct. 27 | 4249 | 957 | 106 | 2189 |
| Casler, Fannie E. (See Casler, Herman, assignor.) | | | | | | |
| Casler, Fannie E. (See Marvin and Casler, assignors.) | | | | | | |
| Casler, Herman. (See Marvin and Casler.) | | | | | | |
| Casler, Herman, Canastota, assignor to American Mutoscope Company, New York, N. Y. Photographic-printing machine | 731,282 | June 16 | 3208 | 714, 715, 716, 717 | 104 | 1826 |
| Casler, Herman, assignor, by mesne assignments, to F. E. Casler, Canastota, N. Y. Embossing or punching machine | 735,709 | Aug. 11 | 1298 | 278, 279 | 105 | 1274 |
| Casper, Joseph W., and W. Gerder, Sacramento, Cal. Safety-pin | 743,690 | Nov. 10 | 1763 | 372 | 107 | 392 |
| Casper, Louis, Chicago, Ill. Automatic printing-telegraph system | 744,165 | Nov. 17 | 2704 | 577, 578 | 107 | 605 |
| Casper, Louis, Chicago, Ill., assignor to Hygeia Vibratory Company. Massage instrument | 742,287 | Oct. 27 | 3710 | 828, 829 | 106 | 2079 |
| Casperson, Henry L., Wilmington, Del. Sign | 746,020 | Dec. 8 | 1306 | 293 | 107 | 1395 |
| Cass, Edwin T., Whitewater, Wis. Rotary engine | 719,302 | Jan. 27 | 3390 | 756 | 102 | 763 |
| Cassady, George, Vancouver, Canada. Sash-lifter | 733,147 | July 7 | 796 | 193 | 105 | 168 |
| Cassady, Simon. (See Herbert, Stockton C., assignor.) | | | | | | |
| Cassedy, John I., *et al.* (See Wren, Harry B., assignor.) | | | | | | |
| Cassel Gold Extracting Company. (See Ewan, Thomas, assignor.) | | | | | | |
| Cassel, Henry R., New York, N. Y. Barrel-filter | 722,399 | Mar. 10 | 1375 | 305 | 103 | 309 |
| Cassel, Henry R., New York, N. Y. Extracting gold from ores | 732,708 | July 7 | 30 | 7 | 105 | 9 |
| Cassel, Henry R., New York, N. Y. Apparatus for extracting gold from ores | 732,709 | July 7 | 31 | 8 | 105 | 10 |
| Cassell, Virginia A., Snakecreek, Va. Dish-pan | 743,447 | Nov. 10 | 1299 | 266 | 107 | 293 |
| Cassella & Co., Leopold. (See Herz, Richard, assignor.) | | | | | | |
| Cassella & Co., Leopold. (See Weinberg, Arthur, assignor.) | | | | | | |
| Cassels, David Y. (See Pott, Cassels, Williamson, and Stuart.) | | | | | | |
| Cassels, John H. (See Pott, Cassels, Williamson, and Stuart.) | | | | | | |
| Cassidy, Andrew G., Waltham, Mass. Grinding-machine | 734,221 | July 21 | 2804 | 657, 658, 659 | 105 | 626 |
| Cassidy, Isabel, New York, N. Y. Massage appliance | 744,718 | Nov. 24 | 3732 | 806 | 107 | 845 |
| Cassidy, Mars, Washington, D. C. Race-horse starter | 738,524 | Sept. 8 | 1980 | 430, 431 | 106 | 441 |
| Cassidy, Patrick F., assignor to Boston Bottle Wiring and Labeling Company, Boston, Mass. Bottle-wire detacher | 735,466 | Aug. 4 | 833 | 177 | 105 | 1157 |
| Cassidy, William B., Columbus, Ohio. Gas-stove | 733,005 | July 7 | 538 | 132 | 105 | 115 |
| Cassie, William, Brantwood, Englefield Green, England. Boot | 721,668 | Mar. 3 | 37 | 9 | 103 | 10 |
| Cassopolis Manufacturing Company. (See Kingsbury, George M., assignor.) | | | | | | |
| Casswell, Richard H., assignor of one-half to W. E. Burns, Vancouver, British Columbia, Canada. Milk-cooler | 719,935 | Feb. 3 | 929 | 217 | 102 | 1021 |
| Castelin, André, assignor to Société Anonyme d'Etudes et d'Exploitation des Brevets A. Castelin pour Machines Agricoles Automobiles, Paris, France. Means for coupling agricultural machines to motors | 729,275 | May 26 | 4584 | 1012 | 104 | 1021 |
| Castelin, André, assignor to Société Anonyme d'Etudes et d'Exploitations des Brevets A. Castelin pour Machines Agricoles Automobiles, Paris, France. Adjusting or regulating device for beaters | 742,112 | Oct. 20 | 3372 | 753 | 106 | 1992 |
| Castelin, Joseph, Paris, France. Phonographic apparatus | 745,782 | Dec. 1 | 833 | 189 | 107 | 1276 |
| Castelnau, Marcellin, Paris, France. Steam-engine | 734,816 | July 28 | 3952 | 922 | 105 | 880 |
| Castelnau, Marcellin, Paris, France. Boiler-feeder | 741,459 | Oct. 13 | 2033 | 451 | 106 | 1699 |
| Casterline, Edwin D., A. E. Sexton, H. C. Stockwell, and W. E. Swalm, assignors to Single Sheet Paper Company, Los Angeles, Cal. Device for the containing and delivery of sheets of paper, such as toilet-paper, &c | 744,047 | Nov. 17 | 2474 | 531, 532 | 107 | 557 |
| Castillo, Emilio J., Washington, D. C. Cigar-maker's work-box | 720,111 | Feb. 10 | 1298 | 297 | 102 | 1116 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Castle, Arthur H., assignor of one-half to S. M. Hauser, Minneapolis, Minn. Storm hood and cover for launches | 739,389 | Sept. 22 | 3580 | 800 | 106 | 812 |
| Castle, Charles L. (See Castle, Oliver H., assignor.) | | | | | | |
| Castle, Edward, Sheerness, assignor to H. C. W. Gibson and W. Castle, London, England. Oil or liquid spraying or ejecting apparatus | 742,113 | Oct. 20 | 3373 | 753 | 106 | 1992 |
| Castle, Oliver H., assignor to C. L. Castle, Indianapolis, Ind. Means for packaging liquids | 720,562 | Feb. 17 | 2141 | 495 / 496 | 102 | 1306 |
| Castle, Samuel D., Callender, assignor of one-half to J. Bayer, Des Moines, Iowa. Machine for cleaning, softening, and drying tanned hides for robes | 730,815 | June 9 | 2325 | 516 | 104 | 1627 |
| Castle, William, *et al.* (See Castle, Edward, assignor.) | | | | | | |
| Castleman, Stephen, Belzona, Miss. Grabot-gin system | 731,855 | June 23 | 4291 | 955 / 956 | 104 | 2069 |
| Castleman, Thomas W., New Orleans, La. Oil-tank | 734,045 | July 21 | 2483 | 579 | 105 | 558 |
| Castles, William H. (See Rand and Castles.) | | | | | | |
| Casto, Jabez C. (See Gunckel, Winfield O., assignor.) | | | | | | |
| Castor, Ellis L., Reading, Pa. Shuttle | 731,856 | June 23 | 4292 | 956 | 104 | 2069 |
| Caswell, Arthur F., assignor of one-half to H. H. Shumway, Taunton, Mass. Loom take-up | 748,262 | Dec. 29 | 5496 | 1253 | 107 | 2386 |
| Caswell, Frederick J., and C. C. Wood, Woodville, Mass. Trolley-harp | 717,542 | Jan. 6 | 34 | 10 | 102 | 10 |
| Cate, John Q. A., Arlington, Mass. Combination toilet-case | 744,485 | Nov. 17 | 3304 | 711 | 107 | 736 |
| Cathcart, Charles P., Kansas City, Mo. Automatic car-fender and sweeper | 729,543 | June 2 | 42 | 10, 11 | 104 | 1135 |
| Cathcart, Charles P., Kansas City, Mo. Automatic car fender and sweeper | 737,076 | Aug. 25 | 3813 | 845 / 846 | 105 | 1845 |
| Cathell, Mitchell K., *et al.* (See Smith, James T., assignor.) | | | | | | |
| Cathell, Robert V., *et al.* (See Smith, James T., assignor.) | | | | | | |
| Catherman, Oliver P., Mifflinburg, Pa. Compound for removing paint and varnish from woodwork | 721,150 | Feb. 24 | 3270 | ..... | 102 | 1564 |
| Catlin, Henry G. (See Lautreppe, Albert L. de, assignor.) | | | | | | |
| Caton, Curtis H. (See Caton, George A., assignor.) | | | | | | |
| Caton, Fred E., assignor to Caton's Foundry & Machine Co., San Jose, Cal. Truck | 724,991 | Apr. 7 | 1059 | 242 | 103 | 1394 |
| Caton, Fred E., assignor to Caton's Foundry & Machine Co., San Jose, Cal. Clod-crusher | 747,536 | Dec. 22 | 4102 | 920 | 107 | 2055 |
| Caton, George A., assignor of one-half to C. H. Caton, Louisville, Ky. Joiner | 738,883 | Sept. 15 | 2681 | 591 | 106 | 608 |
| Caton's Foundry & Machine Co. (See Caton, Fred E., assignor.) | | | | | | |
| Catrow, Herbert G. (See Apple, Vincent G., assignor.) | | | | | | |
| Catt, George H., Hythe, England. Wheel for boot-finishing machines | 733,577 | July 14 | 1580 | 376 | 105 | 352 |
| Cattelle, William H., Chicago, Ill. Window-cleaner | 731,338 | June 16 | 3319 | 740 | 104 | 1849 |
| Cattelle, William H., assignor of one-half to M. Cahill, Chicago, Ill. Window-cleaner | 742,590 | Oct. 27 | 4250 | 957 | 106 | 2189 |
| Catterall, Albert B., Davenport, Iowa. Valve-coupling for pneumatic tires | 729,129 | May 26 | 4319 | 954 | 104 | 965 |
| Catton, Arthur W., West Seattle, Wash. Furnace for roasting and smelting ores | 726,861 | May 5 | 49 | 12 | 104 | 13 |
| Catudal, James, Dallas, Tex. Attachment for band-saws | 724,433 | Apr. 7 | 25 | 8 | 103 | 1175 |
| Caughey, Albert E., Omaha, Nebr., assignor of one-half to J. E. Hollenbeck, Pottawattamie County, Iowa. Electric signal | 729,276 | May 26 | 4585 | 1013 | 104 | 1021 |
| Caughey, Albert E., Omaha, Nebr., assignor of one-half to J. E. Hollenbeck, Pottawattamie County, Iowa. Railway signal and alarm | 743,245 | Nov. 3 | 824 | 179 | 107 | 172 |
| Cauzard, Henri, Troyes, France. Motor road-vehicle | 732,710 | July 7 | 33 | 8 | 105 | 10 |
| Cavanagh, Daniel, New York, N. Y. Gas-bracket | 724,434 | Apr. 7 | 27 | 8 | 103 | 1176 |
| Cavanagh, Joseph R., J. B. Hannan, and J. D. Clarke, Indianapolis, Ind. Car-record device | 734,817 | July 28 | 3953 | 922 / 923 | 105 | 880 |
| Cavanaugh, James L., Canton, Ohio. Globe or mantle protector | 746,460 | Dec. 8 | 2086 | 480 | 107 | 1564 |
| Cavanaugh, Mary E., Alameda, Cal. Combination-suit | 722,490 | Mar. 10 | 1567 | 345 | 103 | 352 |
| Cave, John D., and J. F. Phillips, Indianapolis, Ind. Car-replacer | 728,541 | May 19 | 3246 | 720 | 104 | 727 |
| Cavenaugh, Ralph W. (See Schwechler, John, assignor.) | | | | | | |
| Cavenaugh, Ralph W., St. Paul, Minn. Smoke-preventer furnace | 740,743 | Oct. 6 | 662 | 150 | 106 | 1389 |
| Cavicchioli, Dante, New York, N. Y. Accompanist for musical instruments | 724,082 | Mar. 31 | 4547 | 1023 | 103 | 1011 |
| Cawenburgh, Frank von, Rockford, Ill. Wrench | 729,544 | June 2 | 45 | 11 | 104 | 1136 |
| Cawker, Samuel M., Denver, Colo. Non-refillable bottle | 727,534 | May 5 | 1317 | 294 | 104 | 283 |
| Cawley, George, Westminster, England. Steam-boiler | 725,540 | Apr. 14 | 2084 | 471 | 103 | 1626 |
| Cawley, Michael J., Brooklyn, N. Y. Puzzle | 741,766 | Oct. 20 | 2653 | 593 | 106 | 1846 |
| Cawood, Walter E., Sr., Toledo, Ohio. Eyeglass-guard | 734,667 | July 28 | 3637 | 852 | 105 | 818 |
| Cawood, Walter E., Toledo, Ohio. Eyeglasses | 737,827 | Sept. 1 | 515 | 113 | 106 | 115 |
| Caylor, Joseph J. (See Niemeyer, William H., assignor.) | | | | | | |
| Cayron, Auguste de, Paris, France. Type-writing machine | 728,671 | May 19 | 3502 | 778 | 104 | 783 |
| Caywood, Albert D., Chicago, Ill. Door-controlling means | 733,624 | July 14 | 1654 | 392 | 105 | 367 |
| Cazin, Francis M. F., Hoboken, N. J. Bucket or vane for impact power-wheels | 738,392 | Sept. 8 | 1496 | 323 | 106 | 337 |
| Cazin, Franz. (See McArthur and Cazin.) | | | | | | |
| Cazin, Franz, Denver, Colo., and L. J. W. Jones, Tacoma, Wash. Dust-chamber for furnaces | 734,818 | July 28 | 3955 | 923 | 105 | 881 |
| Cebulla, Carl, Chicago Heights, Ill. Brick-kiln | 736,492 | Aug. 18 | 2718 | 596 | 105 | 1597 |
| Cecil, Price, Hazlewood, Pa. Scrubbing-machine | 728,542 | May 19 | 3247 | 720 | 104 | 727 |
| Cedargren, Fred, Chicago, Ill. Pole-changer and Crookes-tube controller | 734,511 | July 28 | 3349 | 784 | 105 | 756 |
| Celluloid Company. (See Stevens, John H., assignor.) | | | | | | |
| Cemental Fireproofing Company. (See Simpson and Shoemaker, assignors.) | | | | | | |
| Cemental Fireproofing Company. (See Wilmoth, William F., assignor.) | | | | | | |
| Cemental Fireproofing Company. (See Wilmoth, Smith, and Golliek, assignors.) | | | | | | |
| Central Electric Construction Company. (See Fowler, George L., assignor.) | | | | | | |
| Central Lighting Company. (See Denayrouze, Louis, assignor.) | | | | | | |
| Central Mfg. Co. (See Deaton, Angus, assignor.) | | | | | | |
| Central Telephone & Electric Company. (See Gilgen, Adolph C., assignor.) | | | | | | |
| Central Trust Company of New York, trustee. (See Dyer, Frank L., assignor.) | | | | | | |
| Centrifugal Feed Water Separator and Purifier Company. (See Caldwell, Edward P., assignor.) | | | | | | |
| Century Camera Company. (See Locke, Harvey W., assignor.) | | | | | | |
| Century Manufacturing Company. (See Stimson and McManis, assignors.) | | | | | | |
| Cerebotani, Luigi, Munich, Germany. Printing-telegraph | 720,668 | Feb. 17 | 2354 | 539 / 540 | 102 | 1347 |
| Cereghino, Joseph, San Francisco, Cal. Igniter for gas-engines | 721,285 | Feb. 24 | 3529 | 803 | 102 | 1616 |
| Cernatesco, Nicolas, Craiova, Roumania. Motor road-vehicle | 731,545 | June 23 | 3735 | 832 | 104 | 1953 |
| Cerruti, Antonio, San Francisco, Cal. Can-filling machine | 744,048 | Nov. 17 | 2477 | 532 | 107 | 558 |
| Cerruti, Antonio, San Francisco, Cal. Can-filling machine | 744,049 | Nov. 17 | 2479 | 532 / 533 | 107 | 558 |
| Cesana, Luigi, Rome, Italy. Linotype-machine | 722,284 | Mar. 10 | 1176 | 260 | 103 | 266 |
| Cesinger, George V., Eaglelake, Tex. Washing-machine | 719,185 | Jan. 27 | 3167 | 705 | 102 | 714 |
| Chabot, Ephraim, Providence, R. I. Adjustable shade-roller holder | 723,583 | Mar. 24 | 3599 | 804 | 103 | 797 |
| Chaboty, Jules, New York, N. Y. Game apparatus | 737,207 | Aug. 25 | 4053 | 899 | 105 | 1896 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | Spec. | Drg. | Vol. | Page. |
| Chadbourne, Henry R., Jr., Waban, I. S. Craig, Somerville, and C. W. B. Fuller, Wakefield, assignors to Chadbourne & Moore, Boston, Mass. Machine for covering straps | 742,163 | Oct. 27 | 3458 | 772, 773, 774 | 106 | 2027 |
| Chadbourne, Joseph H., *et al.* (See Pierce, John, assignor.) | | | | | | |
| Chadbourne & Moore. (See Chadbourne, Craig, and Fuller, assignors.) | | | | | | |
| Chadbourne, Zebulon L., New Brighton, N. Y. Finger mechanism for looms | 724,260 | Mar. 31 | 4921 | 1101 | 103 | 1086 |
| Chaddock, George A., Liverpool, England. Door or window or the like aperture-closing device | 745,783 | Dec. 1 | 836 | 189, 190 | 107 | 1277 |
| Chadwick, James N., Chicago, Ill. Music-holder | 718,091 | Jan. 13 | 1069 | 237 | 102 | 245 |
| Chadwick, Lee S., Ridley Park, Pa. Combined vehicle door and seat | 740,396 | Oct. 6 | 20 | 5 | 106 | 1248 |
| Chadwick, Lee S., Ridley Park, Pa. Combined cut-out and controlling switch | 743,246 | Nov. 3 | 826 | 180 | 107 | 172 |
| Chadwick, Lee S., Ridley Park, Pa. Controlling mechanism for gas-engines | 744,486 | Nov. 17 | 3306 | 711 | 107 | 736 |
| Chafee, Charles W., Marengo, Ill. Mechanical figure | 722,207 | Mar. 10 | 1029 | 227 | 103 | 233 |
| Chaffee, Edward F., Albany, N. Y. Centering device for car-couplings. (Reissue) | 12,106 | Apr. 28 | 4517 | 1017 | 103 | 2159 |
| Chaffee, Edward F., Albany, N. Y., assignor to Forsyth Brothers Company, Chicago, Ill. Coupling-centering device | 727,901 | May 12 | 2043 | 455 | 104 | 453 |
| Chaffee, Frank W., Albany, N. Y. Railway-brake mechanism | 745,569 | Dec. 1 | 466 | 110 | 107 | 1196 |
| Chaffin, George W., Dayton, Ohio. Revolving cabinet | 727,586 | May 12 | 1429 | 320 | 104 | 325 |
| Chaffin, William, Huntington, W. Va. Conversational game-piece | 740,397 | Oct. 6 | 22 | 5 | 106 | 1249 |
| Chainey, Emanuel, Florence, Wis. Saw-gummer | 726,637 | Apr. 28 | 4134 | 932, 933 | 103 | 2077 |
| Chaize, Jacques. (See Chaize, Nicolas and J.) | | | | | | |
| Chaize, Nicolas and J., St. Etienne, France. Apparatus for preventing the production of reed-stripes in woven fabrics | 728,366 | May 19 | 2921 | 645 | 104 | 660 |
| Chalfant, Mary S. (See Piper, William M., assignor.) | | | | | | |
| Chalkley, Henry G., New York, N. Y. Telephone test instrument | 737,345 | Aug. 25 | 4321 | 963 | 105 | 1953 |
| Challenge Machinery Co. (See Lee, James L., assignor.) | | | | | | |
| Chalmers, Harvey, assignor to H. Chalmers & Son, Amsterdam, N. Y. Button-working machine | 740,231 | Sept. 29 | 5173 | 1162, 1163 | 106 | 1171 |
| Chalmers & Son, Harvey. (See Chalmers, Harvey, assignor.) | | | | | | |
| Chalmers, William, San Francisco, Cal. Lock and escutcheon | 723,828 | Mar. 31 | 4032 | 910 | 103 | 905 |
| Chalmot, Guillaume de, Leaksville, N. C., assignor to Willson Laboratory Company, New York, N. Y. Production of nitrogen compounds | 741,396 | Oct. 13 | 1928 | 426, 427 | 106 | 1679 |
| Chaloner, Thomas T., New York, N. Y. Safety device for stopping railway-trains | 724,807 | Apr. 7 | 730 | 171 | 103 | 1326 |
| Chaloner, Thomas T., New York, N. Y. Railway-switch | 740,232 | Sept. 29 | 5178 | 1164 | 106 | 1172 |
| Chamberlain, Arthur N., and W. L. Hall, assignors to Hoskins & Son, Limited, Birmingham, England. Folding ladder | 720,891 | Feb. 17 | 2728 | 628 | 102 | 1427 |
| Chamberlain, Blanchard, Bellefontaine, Ohio. Surgical truss | 724,808 | Apr. 7 | 731 | 172 | 103 | 1327 |
| Chamberlain, Charles G., Pacific Grove, Cal. Railway-rail fastener | 747,136 | Dec. 15 | 3365 | 763 | 107 | 1876 |
| Chamberlain, Chauncey C., Ionia, Mich. Mixer for hydrocarbon-engines | 742,774 | Oct. 27 | 4561 | 1034 | 106 | 2258 |
| Chamberlain, Frank J. (See O'Bannon and Chamberlain.) | | | | | | |
| Chamberlain, George W., Atlanta, Ga. Brake attachment for elevators | 720,403 | Feb. 10 | 1822 | 415 | 102 | 1225 |
| Chamberlain, George W., Atlanta, Ga. Hat-forming machine | 733,812 | July 14 | 1993 | 469 | 105 | 437 |
| Chamberlain, Minor E., Lebanon, Mo. Egg-case | 737,905 | Sept. 1 | 696 | 149 | 106 | 153 |
| Chamberlain, Robert. (See Cummings and Chamberlain.) | | | | | | |
| Chamberlain, Robert. (See Vance, Jones, and Chamberlain.) | | | | | | |
| Chamberlain, Rufus N., assignor, by mesne assignments, to Gould Storage Battery Company, New York, N. Y. Preparing storage-battery plates | 720,326 | Feb. 10 | 1695 | 385 | 102 | 1198 |
| Chamberlain, Rufus N., Depew, assignor to Gould Storage Battery Company, New York, N. Y. Electric switch | 720,327 | Feb. 10 | 1696 | 385 | 102 | 1198 |
| Chamberlain, Rufus N., Depew, assignor to Gould Storage Battery Company, New York, N. Y. Storage-battery system | 720,563 | Feb. 17 | 2143 | 496 | 102 | 1307 |
| Chamberlain, Rufus N., Depew, assignor to Gould Storage Battery Company, New York, N. Y. Storage battery | 725,218 | Apr. 14 | 1493 | 339, 340 | 103 | 1501 |
| Chamberlain, Rufus N., Depew, assignor to Gould Storage Battery Company, New York, N. Y. Storage battery | 733,813 | July 14 | 1994 | 470 | 105 | 437 |
| Chamberlain, Rufus N., Depew, assignor to Gould Storage Battery Company, New York, N. Y. Storage battery | 746,289 | Dec. 8 | 1792 | 407 | 107 | 1501 |
| Chamberlaine, Robert L., Baltimore, Md. Photographic developing apparatus | 730,091 | June 2 | 1028 | 231 | 104 | 1337 |
| Chamberland, Damas M., Minneapolis, Minn. Clothes-line hook and elevator | 732,711 | July 7 | 34 | 8 | 105 | 10 |
| Chamberlin, Elzie C. (See Boylan and Chamberlin.) | | | | | | |
| Chamberlin, Frank H., Cleveland, Ohio. Telephone-directory | 746,021 | Dec. 8 | 1307 | 293 | 107 | 1395 |
| Chamberlin, Franklin L., Cleveland, Ohio. Combined signal and trumpet | 721,151 | Feb. 24 | 3271 | 748 | 102 | 1564 |
| Chamberlin, John R. (See Hill and Chamberlin.) | | | | | | |
| Chamberlin Metal Weather Strip Company. (See Kenny, Hugh E., assignor.) | | | | | | |
| Chamberlin Metal Weather Strip Company. (See McMahon, Josiah C., assignor.) | | | | | | |
| Chamberlin, Walter H. (See De Zeng, Henry L., assignor.) | | | | | | |
| Chambers, Arthur E., and L. H. Bullard, assignors to Michigan Steel Boat Company, Detroit, Mich. Machine for cutting sheet metal | 730,874 | June 16 | 2442 | 540 | 104 | 1671 |
| Chambers Bering Quinlan Company. (See Bering, James E., assignor.) | | | | | | |
| Chambers Bering Quinlan Company. (See Gray, Christian N. E., assignor.) | | | | | | |
| Chambers Brothers Company. (See Chambers, Cyrus, Jr., assignor.) | | | | | | |
| Chambers, Clarence E., San Jacinto, Cal. Straw-burning traction-engine boiler | 723,241 | Mar. 24 | 2956 | 663 | 103 | 670 |
| Chambers, Cyrus, Jr., Overbrook, assignor to Chambers Brothers Company, Philadelphia, Pa. Lubricating device for brick machines | 721,152 | Feb. 24 | 3271 | 749 | 102 | 1564 |
| Chambers, George M., Erie, Pa. Corner construction for show-windows, show-cases, &c. | 719,435 | Feb. 3 | 45 | 10 | 102 | 835 |
| Chambers, Henry C., assignor to Chambers Machine Co., Cincinnati, Ohio. Mixing-machine | 723,987 | Mar. 31 | 4365 | 981 | 103 | 976 |
| Chambers, James A. (See Lubbers, John H., assignor.) | | | | | | |
| Chambers, John E., *et al.* (See Gray, Charles W., assignor.) | | | | | | |
| Chambers, John E., Chicago, Ill. Means for inspecting or testing eyes | 745,784 | Dec. 1 | 840 | 190 | 107 | 1278 |
| Chambers, John S., Wilmington, N. C. Throttle-valve | 733,006 | July 7 | 540 | 132 | 105 | 116 |
| Chambers, John S., Wilmington, N. C. Throttle-valve | 737,706 | Sept. 1 | 264 | 56 | 106 | 60 |
| Chambers, Joseph, Jr., Dallas, Tex. Electrically-operating door | 722,446 | Mar. 10 | 1476 | 326 | 103 | 330 |
| Chambers, Joseph, Jr., Dallas, Tex. Electrically-operated latch and door | 728,367 | May 19 | 2922 | 645 | 104 | 660 |
| Chambers Machine Co. (See Chambers, Henry C., assignor.) | | | | | | |
| Chambers, Silas, Sterling City, Tex. Combination-tool | 732,827 | July 7 | 243 | 60 | 105 | 54 |
| Chambliss, Smith G., assignor to R. A. Kelly Company, Xenia, Ohio. Table-support for shapers | 728,368 | May 19 | 2925 | 645 | 104 | 661 |
| Chambordon, Frank, Braburn, Pa. Rail-joint nut-lock | 723,364 | Mar. 24 | 3199 | 718 | 103 | 716 |
| Chamness, Marvin E. (See Conwell and Chamness.) | | | | | | |
| Champ, John K., near Paris, Ky. Foldable clothes-drier | 719,186 | Jan. 27 | 3169 | 705 | 102 | 714 |
| Champine, Frederick L., Lynn, Mass. Sole and heel edge trimming machine | 743,448 | Nov. 10 | 1300 | 267 | 107 | 293 |
| Champion, John W., Denver, Colo., assignor to Mergenthaler Linotype Company. Linotype-machine | 719,436 | Feb. 3 | 46 | 10 | 102 | 835 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drgs. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Champion Safety Lock Company. (See Hasenpflug, Ezra W., assignor.) | | | | | | |
| Champion Sanitary Enamel Ware Co. (See McGuire, Peter J., assignor.) | | | | | | |
| Chance, Edward F., near Birmingham, England. Glass facing-tile, &c. | 737,707 | Sept. 1 | 265 | 56 | 106 | 60 |
| Chandler, Alfred, Paignton, England. Metallic label | 733,148 | July 7 | 797 | 193 | 105 | 168 |
| Chandler, Alfred D., Reading, assignor to Draper Company, Hopedale, Mass. Separator for spinning-machines | 719,085 | Jan. 27 | 2984 | 665 / 666 | 102 | 677 |
| Chandler, Bartlett B., Jr., Nevada City, Cal. Fluid-clutch | 719,746 | Feb. 3 | 611 | 137 | 102 | 951 |
| Chandler, Daniel L., Ayer, Mass. Roll for plaiting-machines | 724,083 | Mar. 31 | 4549 | 1023 | 103 | 1011 |
| Chandler, Daniel L., Ayer, Mass. Machine for plaiting heavy webs | 724,084 | Mar. 31 | 4550 | 1023 / 1024 | 103 | 1012 |
| Chandler, Daniel L., assignor to G. J. Burns, Ayer, Mass. Presser-foot for sewing-machines. | 725,929 | Apr. 21 | 799 | 635 | 103 | 1794 |
| Chandler, Daniel L., assignor to G. J. Burns, Ayer, Mass. Plaiting-machine | 733,694 | July 14 | 1763 | 418 | 105 | 388 |
| Chandler, Daniel L., assignor to G. J. Burns, Ayer, Mass. Plaiting-machine | 737,077 | Aug. 25 | 3817 | 846 / 847 | 105 | 1846 |
| Chandler, Frank M., assignor to Auto-Lock Clasp Co., Buffalo, N. Y. Clasp | 736,935 | Aug. 25 | 3570 | 792 | 105 | 1794 |
| Chandler, Frank M., assignor to W. H. Faxon and E. L. Parker, Buffalo, N. Y. Hook | 731,019 | June 16 | 2733 | 609 | 104 | 1732 |
| Chandler, George E., Taunton, Mass. Acetylene-gas generator | 738,410 | Sept. 8 | 1748 | 380 | 106 | 392 |
| Chandlee, George H. (See McGwin, James, assignor.) | | | | | | |
| Chandler, James, assignor to M. Halstead, Birmingham, and G. H. Biddle, Mosley, England. Spanner or wrench | 736,687 | Aug. 18 | 3099 | 683 | 105 | 1675 |
| Chandler, Leonard D., Somerville, Mass. Automatic dry-pipe valve | 725,541 | Apr. 14 | 2085 | 472 | 103 | 1626 |
| Chandler, Richard P., Philadelphia, Pa. Electric fan | 722,208 | Mar. 10 | 1030 | 227 | 103 | 234 |
| Chandler, Robert D., Fairhaven, N. J. Internal-combustion engine | 728,543 | May 19 | 3248 | 720 | 104 | 727 |
| Chandler, Walter H., Toronto, Canada. Vaccine-tube | 741,886 | Oct. 20 | 2867 | 640 | 106 | 1802 |
| Chandler, Worthen D., Chicago, Ill. Time-stamp | 736,070 | Aug. 11 | 1980 | 421 | 105 | 1423 |
| Channon, James. (See Russell, John J., assignor.) | | | | | | |
| Chantraine, Alphonse B., Maubeuge, France. Casting small steel ingots | 741,460 | Oct. 13 | 2035 | 452 | 106 | 1699 |
| Chantraine, Alphonse B., Maubeuge, France. Arrangement for casting small steel ingots | 747,137 | Dec. 15 | 3366 | 764 | 107 | 1876 |
| Chapdelaine, Adelard P. (See Biladeau and Chapdelaine.) | | | | | | |
| Chapel, George H., Howell, Mich. Eyeglasses | 727,747 | May 12 | 1748 | 393 | 104 | 393 |
| Chapin Construction Company. (See Coffey, John J., assignor.) | | | | | | |
| Chapin, David L., *et al.* (See Hughes, Hugh T., assignor.) | | | | | | |
| Chapin, James M., Newark, N. J. Shingle-kiln | 720,669 | Feb. 17 | 2357 | 540 | 102 | 1347 |
| Chapin, William U., Collinsville, Conn. Tobacco-stick | 746,922 | Dec. 15 | 2946 | 680 | 107 | 1779 |
| Chaplin-Fulton Manufacturing Company. (See Fulton, Louis B., assignor.) | | | | | | |
| Chaplin, Manley J., assignor of one-half to H. Rutschow, Seattle, Wash. Tap for beer-barrels | 729,545 | June 2 | 46 | 12 | 104 | 1136 |
| Chapman, A. A. (See Johnson, Lorenzio, assignor.) | | | | | | |
| Chapman, Albert C. L. (See Thyberg and Chapman.) | | | | | | |
| Chapman, Charles A., Horley, England. Starting apparatus for races | 738,293 | Sept. 8 | 1498 | 324 | 106 | 337 |
| Chapman, Charles E. (See Chapman and McNaughton.) | | | | | | |
| Chapman, Earle E., assignor to Standard Bottle Closure Company, Los Angeles, Cal. Closure | 741,307 | Oct. 13 | 1739 | 388 | 106 | 1634 |
| Chapman, Earle E., assignor to Standard Bottle Closure Company, Los Angeles, Cal. Closure | 747,373 | Dec. 22 | 3812 | 858 | 107 | 1989 |
| Chapman, Edward C., Providence, R. I. Lacing | 742,164 | Oct. 27 | 3465 | 774 | 106 | 2028 |
| Chapman, F. A. (See Kersey, James M., assignor.) | | | | | | |
| Chapman, Frank M. and C. E., and F. McNaughton, Fort Edward, N. Y. Pulp-strainer | 736,215 | Aug. 11 | 2214 | 476 / 477 | 105 | 1472 |
| Chapman, Frank S., Kenton, Ohio. Apparatus for heating fluids or fluid mixtures | 731,339 | June 16 | 3320 | 740 | 104 | 1850 |
| Chapman, Frederick A., Toledo, Ohio. Account-carrier | 721,422 | Feb. 24 | 3779 | 859 / 860 | 102 | 1668 |
| Chapman, George E., Cleveland, Ohio. Trolley-wheel bearing | 729,130 | May 26 | 4321 | 955 | 104 | 965 |
| Chapman, George F., Marlboro, assignor of one-half to L. Wallace, Ayer, Mass. Adjustable headlight for street-cars or other vehicles | 717,811 | Jan. 6 | 556 | 124 | 102 | 120 |
| Chapman, George F., Marlboro, Mass., assignor to Chapman Headlight Adjuster Company, Portland, Me. Headlight-operating mechanism | 743,449 | Nov. 10 | 1301 | 267 / 268 | 107 | 293 |
| Chapman Headlight Adjuster Company. (See Chapman, George F., assignor.) | | | | | | |
| Chapman, Hemen C., Rockford, Mich. Corn-husker | 743,450 | Nov. 10 | 1305 | 268 / 269 | 107 | 294 |
| Chapman, James W., and M. Seips, assignors to Manning, Bowman & Company, Meriden, Conn. Alcohol-lamp | 724,543 | Apr. 7 | 228 | 55, 56 | 103 | 1218 |
| Chapman, John, Sunderland, England. Plate for ship-building | 737,078 | Aug. 25 | 3820 | 847 | 105 | 1846 |
| Chapman, John S., Albany, N. Y. Apparatus for burning oil fuel | 725,408 | Apr. 14 | 1827 | 409 | 103 | 1571 |
| Chapman, Joseph L., Haddonfield, N. J., assignor to Watson and McDaniel Company, Philadelphia, Pa. Fluid-pressure-regulating valve | 718,694 | Jan. 20 | 2240 | 490 | 102 | 507 |
| Chapman, Joseph L., Haddonfield, N. J., assignor to Watson & McDaniel Co., Philadelphia, Pa. Steam-trap | 722,400 | Mar. 10 | 1376 | 305 | 103 | 309 |
| Chapman, Lewis S., Schenectady, N. Y., assignor to General Electric Company. Valveless pump | 732,169 | June 30 | 4921 | 1095 | 104 | 2213 |
| Chapman, Oliver E. (See Reynolds and Chapman.) | | | | | | |
| Chapman, Penrose E., St. Louis, Mo. Changing the frequency of single-phase induction-motors | 733,149 | July 7 | 798 | 193 | 105 | 168 |
| Chapman, Penrose E., assignor to Universal Accountant Machine Company, St. Louis, Mo. Electric motor | 731,857 | June 23 | 4293 | 956 / 957 | 104 | 2069 |
| Chapman, Philip, Council Grove, Kans. Fence-post | 733,150 | July 7 | 799 | 193 | 105 | 169 |
| Chapman, Washington I. (See Bercha, Joseph, assignor.) | | | | | | |
| Chapman, William A., Saugerties, N. Y. Railway-frog | 746,022 | Dec. 8 | 1308 | 294 | 107 | 1395 |
| Chapman, William H., Portland, Me. Controlling electric motors | 718,910 | Jan. 20 | 2640 | 592 | 102 | 590 |
| Chapman, William H., Portland, Me. Controller for electric motors | 736,493 | Aug. 18 | 2721 | 596 | 105 | 1598 |
| Chapman, William H., Banbury, England. Flower-pot stand | 737,581 | Sept. 1 | 41 | 9 | 106 | 11 |
| Chapman, William J., Minneapolis, Minn. Lightning-arrester | 721,939 | Mar. 3 | 539 | 118 / 119 | 103 | 119 |
| Chappell, George P., New York, N. Y. Tiling | 746,290 | Dec. 8 | 1794 | 407 | 107 | 1501 |
| Chappell, Howard F. (See Spaulding, George H., assignor.) | | | | | | |
| Chappell, Thomas A., Bronwood, Ga. Hypodermic-syringe case | 722,943 | Mar. 17 | 2406 | 538 | 103 | 541 |
| Chappell, Thomas A., Bronwood, Ga. Hypodermic syringe | 728,160 | May 12 | 2508 | 558 | 104 | 551 |
| Chappell, William H., Morenci, Mich. Hot-air furnace | 718,980 | Jan. 27 | 2773 | 621 | 102 | 633 |
| Chapple, William A., Wellington, New Zealand. Necktie-fastener | 739,256 | Sept. 15 | 3339 | 741 | 106 | 746 |
| Chaquette, Ephraiem, New Rochelle, N. Y. Electric clam-dredge | 718,695 | Jan. 20 | 2241 | 490 / 491 | 102 | 508 |
| Chaquette, Ephraiem, New Rochelle, N. Y. Canal-dredger | 725,409 | Apr. 14 | 1828 | 409 / 410 | 103 | 1571 |
| Chaquette, Ephraiem, New Rochelle, N. Y. Mop-wringer | 731,098 | June 16 | 2879 | 639 | 104 | 1762 |

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| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | Spec. | Drgs. | Vol. | Page. |
| Chard, Nicholas D., assignor to Lodge & Shipley Machine Tool Company, Cincinnati, Ohio. Variable-speed mechanism | 744,678 | Nov. 17 | 3613 | 779 | 107 | 800 |
| Chardonnet, Hilaire de, Paris, France. Reciprocating rotary motor | 735,943 | Aug. 11 | 1733 | 370 | 105 | 1370 |
| Charlebois, Edwin G., Watertown, N. Y. Sheet-metal angle-section | 720,892 | Feb. 17 | 2730 | 629 | 102 | 1427 |
| Charlebois, Edwin G., Watertown, N. Y. Sheet-metal siding | 720,893 | Feb. 17 | 2732 | 629 | 102 | 1428 |
| Charles, Aubrey D., Bellows Falls, Vt., assignor to Casein Company of America. Producing casein | 721,999 | Mar. 3 | 649 | ------ | 103 | 141 |
| Charles, Bernt, Newark, N. J. Propeller for vessels | 731,020 | June 16 | 2734 | 609 | 104 | 1732 |
| Charles, Elbert R., Petaluma, Cal. Air-vent controller for barrels | 739,058 | Sept. 15 | 2971 | 659 | 106 | 669 |
| Charles, John, *et al.* (See Sansone, Antonio, assignor.) | | | | | | |
| Charles, John, Charlton, Md. Cloth-cleaning attachment for flour-bolts, &c | 740,806 | Oct. 6 | 795 | 179 | 106 | 1414 |
| Charles Parker Co. (See Lyon, William H., assignor.) | | | | | | |
| Charles, Richard P., and C. C. Detherage, Bristol, Tenn. Hand-operated tool | 717,543 | Jan. 6 | 35 | 10 | 102 | 10 |
| Charles, Trueman L., Elm Valley, N. Y. Extension-foot for ladders, &c | 742,288 | Oct. 27 | 3712 | 829 | 106 | 2079 |
| Charlier, Andrew C. J., Glasgow, Scotland. Manufacturing lead pigments | 720,670 | Feb. 17 | 2359 | 540 | 102 | 1348 |
| Charlier, Andrew C. J., assignor, by mesne assignments, to W. Oliphant, Glasgow, Scotland. Apparatus for drawing gaseous liquids | 729,277 | May 26 | 4587 | 1013 | 104 | 1021 |
| Charlton, Alfred W., assignor of one-half to P. Ryan, Toronto, Canada. Storage battery | 728,202 | May 19 | 2587 | 578 | 104 | 590 |
| Charlton, Joseph A., assignor of one-half to B. B. Burks, Hinton, W. Va. Curtain or awning | 748,347 | Dec. 29 | 5632 | {1283 {1284 | 107 | 2414 |
| Charlton, Richard B., Milwaukee, Wis. Railway-rail-joint-connecting plate | 725,613 | Apr. 14 | 2209 | 499 | 103 | 1654 |
| Charlton, Richard B., Milwaukee, Wis. Base-plate for railway-rail joints | 727,902 | May 12 | 2044 | 455 | 104 | 453 |
| Charlton, Richard B., Milwaukee, Wis., assignor to Continuous Rail Joint Company of America. Fish-plate-forming machine | 729,488 | May 26 | 4936 | 1094 | 104 | 1096 |
| Charlton, Thomas, assignor of one-half to C. R. Dallas, Pittsburg, Pa. Air and gas mixer for explosive-engines | 733,902 | July 14 | 2177 | 512 | 105 | 473 |
| Charrier, Leon C. H., Vendôme, France, assignor to British Charrier Wood Carving Company, Limited, London, England. Wood-carving machine | 723,772 | Mar. 24 | 3918 | {882 {883 {884 | 103 | 866 |
| Charroin, Frank B., Fairhaven, Wash. Water-trap for waste-pipes | 736,688 | Aug. 18 | 3100 | 684 | 105 | 1675 |
| Charron, Ferdinand, and L. Girardot, Puteaux, France. Shaft-connecting gear for motor road-vehicles | 727,289 | May 5 | 868 | 187 | 104 | 186 |
| Charron, Ferdinand, and L. Girardot, Paris, France. Brake for motor road-vehicles | 731,753 | June 23 | 4114 | 918 | 104 | 2028 |
| Charron, Ferdinand, and L. Girardot, Paris, France. Pulverizing-carbureter for petroleum-motors | 733,695 | July 14 | 1765 | 419 | 105 | 389 |
| Charron, Ferdinand, and L. Girardot, Paris, France. Reservoir for motor-vehicles | 736,494 | Aug. 18 | 2723 | 597 | 105 | 1599 |
| Charron, Ferdinand, and L. Girardot, Paris, France. Variable-speed and reversing-motion driving mechanism | 737,208 | Aug. 25 | 4055 | 899 | 105 | 1896 |
| Charron, Ferdinand, and L. Girardot, Paris, France. Charge-inlet device for explosive-engines | 738,772 | Sept. 15 | 2458 | 540 | 106 | 558 |
| Charron, Ferdinand, and L. Girardot, Paris, France. Cap for naves of wheels | 739,830 | Sept. 29 | 4405 | 989 | 106 | 1011 |
| Chartier, Romeo. (See Rosenberg and Chartier.) | | | | | | |
| Chas. Mulvey Mfg. Co. (See Gervais, Wainwright B., assignor.) | | | | | | |
| Chase, Andrew J., Melrose, Mass. Refrigerating apparatus | 719,086 | Jan. 27 | 2987 | 666 | 102 | 677 |
| Chase, Arthur W., Avoca, Iowa. Briquet | 728,369 | May 19 | 2926 | ------ | 104 | 661 |
| Chase, Aurin M., Syracuse, N. Y. Tempering apparatus | 737,079 | Aug. 25 | 3821 | {848 {849 | 105 | 1847 |
| Chase, Charles P. (See Osborne, Heman, assignor.) | | | | | | |
| Chase, Charles P., *et al.* (See Osborne, Heman, assignor.) | | | | | | |
| Chase & Company, L. C. (See Harris, James B., assignor.) | | | | | | |
| Chase, Frank H., Chicago, Ill. Wheel-tire | 729,131 | May 26 | 4322 | 955 | 104 | 965 |
| Chase, Frank H., Jaffrey, N. H. Locking attachment for boxes | 734,255 | July 21 | 2884 | 674 | 105 | 645 |
| Chase, Frederick, *et al.* (See Goodwin, Julius C., assignor.) | | | | | | |
| Chase, Frederick S. (See Conkling and Chase.) | | | | | | |
| Chase, Henry H., Brigham, Utah. Vehicle-scale | 730,435 | June 9 | 1667 | {373 {374 | 104 | 1484 |
| Chase, Henry M., Holyoke, Mass. Pump | 720,112 | Feb. 10 | 1301 | 297 | 102 | 1116 |
| Chase, James L. (See Bolles, William, assignor.) | | | | | | |
| Chase, James L., assignor of one-half to G. Hemenway, Ayer, Mass. Roof-bracket | 718,602 | Jan. 20 | 2070 | 450 | 102 | 474 |
| Chase, John F., St. Petersburg, Fla. Water-distilling apparatus | 720,671 | Feb. 17 | 2360 | 541 | 102 | 1348 |
| Chase, John Q., assignor to W. I. Ohmer, Dayton, Ohio. Controlling-gear for motor-vehicles | 720,404 | Feb. 10 | 1824 | 416 | 102 | 1226 |
| Chase, Philander F., Berwyn, Ill. Child's exercising and amusement apparatus | 726,028 | Apr. 21 | 2962 | 674 | 103 | 1827 |
| Chase Rolling Mill Co. (See Conkling and Chase, assignors.) | | | | | | |
| Chase-Shawmut Co. (See Morse, Harry L., assignor.) | | | | | | |
| Chase, Stephen H., San Jose, Cal. Log or lumber hauling attachment | 733,007 | July 7 | 542 | 133 | 105 | 116 |
| Chase, Winsor. (See Combs, Hiram S., assignor.) | | | | | | |
| Chassé, Raphael, New York, N. Y. Animal-trap | 725,040 | Apr. 14 | 1157 | 261 | 103 | 1432 |
| Chatfield, Charles H., Ripon, Wis. Glove | 735,342 | Aug. 4 | 579 | {118 {119 | 105 | 1105 |
| Chatfield, Earl L. (See Alcorn and Chatfield.) | | | | | | |
| Chatfield, Horatio F. (See Phipps and Chatfield.) | | | | | | |
| Chatfield, Irving G., Waterbury, Conn. Detachable fire-box for cook-stoves | 727,090 | May 5 | 519 | 112 | 104 | 113 |
| Chatfield, W. N. (See Blucker, Eric, assignor.) | | | | | | |
| Chattanooga Medicine Company. (See Scribner, George H. T., assignor.) | | | | | | |
| Chattanooga Plow Company. (See Buchanan and Hickman, assignors.) | | | | | | |
| Chattanooga Plow Company. (See Hickman, Edgar M., assignor.) | | | | | | |
| Chattin, F. W., *et al.* (See McGuire, Peter J., assignor.) | | | | | | |
| Chaumont, Adolphe, Brussels, Belgium. Compressed-air or other similar brake | 737,906 | Sept. 1 | 697 | {150 {151 | 106 | 153 |
| Chauncey Thomas & Company. (See Lawrence, Joseph L., assignor.) | | | | | | |
| Chautard, Paul H. J., and H. Kessler, Paris, France. Devulcanizing gums | 722,944 | Mar. 17 | 2408 | ------ | 103 | 541 |
| Chavasse, James J., Naunton, England. Domestic fire-grate | 718,603 | Jan. 20 | 2072 | {450 {451 | 102 | 475 |
| Check, Edward W. (See Smith and Check.) | | | | | | |
| Cheesebrough, Oscar E., Anaheim, Cal. Wood-splitting machine | 748,162 | Dec. 29 | 5320 | 1208 | 107 | 2347 |
| Cheesewright, Fred C., Denver, Colo. Draft device for automobile-furnaces | 733,354 | July 7 | 1173 | 278 | 105 | 247 |
| Cheesman, George R., Auburn, N. Y. Wrench | 746,023 | Dec. 8 | 1311 | 294 | 107 | 1396 |
| Cheesman, George R., Auburn, N. Y. Sliding-jaw wrench | 746,673 | Dec. 15 | 2486 | 568 | 107 | 1675 |
| Cheesman, George R., Auburn, N. Y. Chain wrench | 746,674 | Dec. 15 | 2488 | 569 | 107 | 1676 |
| Cheetham, Joseph, Esbon, Kans. Invalid-bed | 728,865 | May 26 | 3862 | 859 | 104 | 872 |
| Cheever, William H. (See Fassett and Warren, assignors.) | | | | | | |
| Chellis, William H., and F. W. McAnanny, Racine, Wis. Exercising-machine | 735,065 | Aug. 4 | 30 | 9 | 105 | 988 |
| Chellis, William H., and F. W. McAnanny, Racine, Wis. Exercising device | 742,393 | Oct. 27 | 3892 | 874 | 106 | 2116 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drgs. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Chemical Power Company. (See Hite, Charles E., assignor.) | | | | | | |
| Chemical Works, formerly Sandoz. (See Steiner, Arnold, assignor.) | | | | | | |
| Chemische Fabrik auf Actien, vorm. E. Schering. (See Nicolaier and Hunsalz, assignors.) | | | | | | |
| Chemische Fabrik auf Actien, vorm. E. Schering. (See Stephan, Karl, assignor.) | | | | | | |
| Chemische Fabrik auf Actien, vorm. E. Schering. (See Wichmann and Kippenberg, assignors.) | | | | | | |
| Chemische Fabrik Griesheim Electron. (See Dieffenbach and Schäfer, assignors.) | | | | | | |
| Chemische Fabrik Griesheim Electron. (See Quedenfeldt, Erwin, assignor.) | | | | | | |
| Chemische Fabrik Griesheim Electron. (See Specketer, Heinrich, assignor.) | | | | | | |
| Chemische Fabrik Griesheim Electron. (See Specketer and Weber, assignors.) | | | | | | |
| Chemische Fabrik Griesham Electron. (See Suchy and Specketer, assignors.) | | | | | | |
| Chemische Fabrik Rhenania. (See Simon, Carl F., assignor.) | | | | | | |
| Chemische Fabrik Uerdingen Lienau and Co. (See Naschold, Wilhelm, assignor.) | | | | | | |
| Chemische Fabrik von Heyden Actiengesellschaft. (See Hentschel, Willibald, assignor.) | | | | | | |
| Chemische Fabrik von Heyden, Actiengesellschaft. (See Hoessle, Carl H. von, assignor.) | | | | | | |
| Chemische Fabrik von Heyden, Actiengesellschaft. (See Seifert and Engelhardt, assignors.) | | | | | | |
| Chenery, William E. (See Brown and Chenery.) | | | | | | |
| Cheney, Ethan R., Chelsea, Mass. Lathe for dressing stone | 746,024 | Dec. 8 | 1313 | 294, 295 | 107 | 1396 |
| Cheney, Frank P., Lowell, Mass. Machine for making sides for packing-cases | 725,930 | Apr. 21 | 2800 | 635, 636, 637 | 103 | 1795 |
| Cheney, George K., New York, N. Y. Sound-box for sound recording and reproducing machines | 724,435 | Apr. 7 | 28 | 8 | 103 | 1176 |
| Cheney, Samuel, Freeling, South Australia, Australia. Railway-brake | 733,312 | July 7 | 1093 | 260, 261 | 105 | 230 |
| Cheney, Thomas J., Lorain, Ohio, assignor to American Butter Separator Company. Churn | 720,513 | Feb. 10 | 2016 | 464 | 102 | 1264 |
| Cheney, Walter L., Meriden, Conn., assignor of one-half to B. H. Warren, Pittsburg, Pa. Traveler's brush | 723,365 | Mar. 24 | 3200 | 718 | 103 | 716 |
| Chenhalls, John S., Plymouth, England. Vehicle-tire | 718,696 | Jan. 20 | 2243 | 491 | 102 | 508 |
| Chenhalls, John S., Plymouth, assignor to R. J. Akers, Glenrosa Vale, Woldingham, Surrey, England. Steam-generator | 737,346 | Aug. 25 | 4323 | 963 | 105 | 1954 |
| Chenu, Charles A. A., Étampes, France. Means for coupling together endwise shafts and bars of any section | 733,008 | July 7 | 545 | 134 | 105 | 117 |
| Cherne, John, and J. F. Sundermeyer, Fenton, Iowa. Pump attachment | 747,374 | Dec. 22 | 3814 | 858 | 107 | 1989 |
| Cherry, Charles C., Hidalgo, Ill. Needle-guide attachment for sewing-machines | 729,132 | May 26 | 4324 | 955 | 104 | 966 |
| Cherry, William M., Granite City, Ill. Windmill | 729,845 | June 2 | 598 | 131 | 104 | 1250 |
| Chesborough, Horace H., Seattle, Wash. Cash-drawer | 734,400 | July 21 | 3147 | 740 | 105 | 699 |
| Chesbro, John, Oneonta, N. Y. Oil-cup | 745,152 | Nov. 24 | 4576 | 993 | 107 | 1017 |
| Chesebrough, Elias. (See Burbridge and Chesebrough.) | | | | | | |
| Chesebrough, Joseph. (See Burbridge and Chesebrough, assignors.) | | | | | | |
| Cheshire, Basil F., St. Joseph, Mo. Sash-lock | 738,411 | Sept. 8 | 1750 | 380 | 106 | 392 |
| Cheshire, Basil F., St. Joseph, Mo. Wick-adjuster for lamps | 738,984 | Sept. 15 | 2844 | 631 | 106 | 642 |
| Cheshire, Edward. (See Search and Cheshire.) | | | | | | |
| Cheshire, Louis L. (See Thunen and Cheshire.) | | | | | | |
| Chesney, Cummings C. (See Kelly and Chesney.) | | | | | | |
| Chesney, Cummings C., Pittsfield, Mass. Induction-motor | 718,697 | Jan. 20 | 2244 | 491, 492 | 102 | 508 |
| Chesney, Cummings C., Pittsfield, Mass. Return-current circuit-breaker | 734,046 | July 21 | 2485 | 579, 580 | 105 | 558 |
| Chesney, Cummings C., and W. J. Lloyd, Pittsfield, Mass. Alternating-current regulator | 731,430 | June 23 | 3503 | 783 | 104 | 1906 |
| Chesney, Oliver M., Topeka, Kans., assignor of one-half to C. R. Frederickson, Kansas City, Mo. Spring-hinge | 741,626 | Oct. 20 | 2380 | 533 | 106 | 1789 |
| Chessrown, William L., Eaton, Colo. Side-dumping body for vehicles | 726,638 | Apr. 28 | 4137 | 933 | 103 | 2078 |
| Chester, Arthur T., Washington, D. C. Street or station indicator | 735,944 | Aug. 11 | 1735 | 371 | 105 | 1370 |
| Chester, Elizabeth A., Washington, D. C. Sketching-pad | 726,141 | Apr. 21 | 3151 | 713 | 103 | 1866 |
| Chester, Frank S., Hartford, Conn. Suppository-molding machine | 726,507 | Apr. 28 | 3886 | 879, 880 | 103 | 2029 |
| Chester, George T. (See Ellsworth, John F., assignor.) | | | | | | |
| Chestnut, Marcus M. (See Jordan, Joseph E., assignor.) | | | | | | |
| Chevalier, Charles G. (See Woodworth, Albert J., assignor.) | | | | | | |
| Chevenier, Louis, St. Symphorien de Lay, France. Tackle | 739,986 | Sept. 29 | 4723 | 1062, 1063 | 106 | 1076 |
| Cheves, Merrell A., Marshall, Tex. Scaffold | 740,398 | Oct. 6 | 23 | 5, 6 | 106 | 1249 |
| Chevola, Henry, New York, N. Y. Coal and gas range | 721,423 | Feb. 24 | 3783 | 860, 861, 862 | 102 | 1669 |
| Chew, Thomas, Bradford, Pa. Car-coupling | 746,025 | Dec. 8 | 1317 | 295 | 107 | 1397 |
| Cheyney, Algeron R., Philadelphia, Pa. Retarding device for electric-circuit breakers | 747,853 | Dec. 22 | 4686 | 1059 | 107 | 2188 |
| Chicago American Fuel Briquetting Company. (See Meyer, Frederick, assignor.) | | | | | | |
| Chicago Car Seal and Manufacturing Company. (See Foote, Lewis A., assignor.) | | | | | | |
| Chicago City Railway Company. (See O'Brien, Michael, assignor.) | | | | | | |
| Chicago Corset Company. (See Schopbach, Charles H., assignor.) | | | | | | |
| Chicago Fuse Wire & Manufacturing Company. (See Goodman, William R., assignor.) | | | | | | |
| Chicago Grain-Door Company. (See Hill, Edward A., assignor.) | | | | | | |
| Chicago Lubricator Company. (See Edwards, Frank W., assignor.) | | | | | | |
| Chicago Machine Tool Company. (See Wigglesworth and Norstrom, assignors.) | | | | | | |
| Chicago Motor Vehicle Company. (See Worth, William O., assignor.) | | | | | | |
| Chicago Nut Company. (See Yeatman and Messinger, assignors.) | | | | | | |
| Chicago Ornamental Iron Company. (See White and Steuer, assignors.) | | | | | | |
| Chicago Pneumatic Tool Company. (See Barrow, Thomas, assignor.) | | | | | | |
| Chicago Pneumatic Tool Company. (See Doughty, Alfred J., assignor.) | | | | | | |
| Chicago Pneumatic Tool Company. (See Hayes, George H., assignor.) | | | | | | |
| Chicago Pneumatic Tool Company. (See Soley, William H., assignor.) | | | | | | |
| Chicago Railway Equipment Company. (See Frost, Harry W., assignor.) | | | | | | |
| Chicago Railway Equipment Company. (See Harrison, Philip B., assignor.) | | | | | | |
| Chicago Railway Equipment Company. (See Huntoon, Charles F., assignor.) | | | | | | |
| Chicago Railway Equipment Company. (See Huntoon and Robischung, assignors.) | | | | | | |
| Chicago Railway Equipment Company. (See Williams, Charles H., Jr., assignor.) | | | | | | |
| Chicago Spring Butt Company. (See Keene, William J., assignor.) | | | | | | |
| Chicago Writing Machine Company. (See Seifried, Samuel J., assignor.) | | | | | | |
| Chichester, Charles D., New York, N. Y. Compartment record-book | 738,098 | Sept. 1 | 1068 | 236 | 106 | 231 |
| Chichester, Frederick I., Poughkeepsie, N. Y. Type-writer chair | 730,875 | June 16 | 2444 | 540 | 104 | 1952 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|
| | | | Spec. | Drg. | Vol. | Page. |
| Chick, Martines, San Diego, Cal., assignor of one-half to H. McMurchy, Fulton, N. Y. Tool for decapping and recapping cartridge-shells | 739,151 | Sept. 15 | 3146 | 695 | 106 | 704 |
| Chickering, Kenton, Oil City, Pa. Casing and tubing elevator | 729,846 | June 2 | 600 | 132 | 104 | 1251 |
| Chickering, Kenton, Oil City, Pa. Casing or tubing elevator | 730,233 | June 9 | 1290 | 285 | 104 | 1405 |
| Chickering & Sons. (See Bowen, Robert S., assignor.) | | | | | | |
| Chicola Manufacturing Company. (See Shafer and Howe, assignors.) | | | | | | |
| Chiger, Siegmund, Gross-Lichterfelde, near Berlin, Germany. Paper-file | 735,710 | Aug. 11 | 1301 | 279 | 105 | 1275 |
| Chilcote, Maurice A., West Milgrove, Ohio. Belt-fastener | 720,782 | Feb. 17 | 2546 | 586 | 102 | 1389 |
| Child Acme Cutter and Press Co. (See Hilsinger, Alburtis C., assignor.) | | | | | | |
| Childers, Charles T., Galesburg, Ill. Campaign horn and rattler | 728,088 | May 12 | 2374 | 528 | 104 | 523 |
| Childress, Benjamin F., Lynchburg, assignor to Norfolk Canopy Company, Norfolk, Va., Mosquito-canopy | 744,487 | Nov. 17 | 3308 | 711 712 | 107 | 737 |
| Childress, Henderson P. (See Powers, James, assignor.) | | | | | | |
| Childress, Henderson P., assignor to Childress Manufacturing Company, Memphis, Tenn. Cover | 746,675 | Dec. 15 | 2489 | 569 | 107 | 1676 |
| Childress, John W., Mineralwells, Tex. Fence-post | 745,153 | Nov. 24 | 4577 | 993 | 107 | 1017 |
| Childress, Lulu, Rome, Ga. Laundry-indicator | 728,866 | May 26 | 3864 | 860 | 104 | 872 |
| Childress Manufacturing Company. (See Childress, Henderson P., assignor.) | | | | | | |
| Childress, Walter D., St. Louis, Mo. Furniture-brace | 730,092 | June 2 | 1032 | 231 | 104 | 1337 |
| Childs, Eugene, Boston, Mass. Pyrometer | 730,513 | June 9 | 1813 | 404 | 104 | 1516 |
| Childs, James E., Spokane, Wash. Harp | 739,647 | Sept. 22 | 4063 | 906 | 106 | 918 |
| Chiloteguy, Juan E., Buenos Aires, Argentina. Horse-collar or the like | 747,375 | Dec. 22 | 3815 | 858 | 107 | 1990 |
| Chilson, Samuel. (See Donehower and Chilson.) | | | | | | |
| Chilton, William S., Springboro, Ohio. Stump-extractor and grubber | 733,151 | July 7 | 800 | 194 | 105 | 169 |
| Chinnock, Charles E., Brooklyn, N. Y. Instrument for teaching and practice of telegraphy | 736,936 | Aug. 25 | 3571 | 792 | 105 | 1794 |
| Chipman, Paul. (See Alfred and Chipman.) | | | | | | |
| Chipman, William R., New York, N. Y. Electrode | 732,047 | June 30 | 4671 | ..... | 104 | 2162 |
| Chisholm, Arthur, *et al.* (See Davison, John C., assignor.) | | | | | | |
| Chisholm, Charles W. (See De Laval and Chisholm.) | | | | | | |
| Chisholm, George, Birmingham, England. Manufacture of metal unions | 730,093 | June 2 | 1033 | 231 232 | 104 | 1337 |
| Chisholm, James W. (See Faller, Ernest A., assignor.) | | | | | | |
| Chisholm, Murdoch, Halifax, Canada. Empyema drainage device | 733,152 | July 7 | 801 | 194 | 105 | 169 |
| Chism, George, assignor to Mexican Disinfectant Company, Carrollton, Ill. Disinfectant | 731,340 | June 16 | 3321 | ..... | 104 | 1850 |
| Chittum, Charles H., Lexington, Va. Nut-lock | 738,660 | Sept. 8 | 2228 | 488 | 106 | 494 |
| Chitty, A. L., *et al.* (See Flanigan, Joseph H., assignor.) | | | | | | |
| Chitty, Henry, South Norwood, England. Dynamo-electric machinery | 736,362 | Aug. 18 | 2470 | 540 | 105 | 1545 |
| Chlada, Ferdinand H., Ouray, Colo. Exercising-machine | 745,154 | Nov. 24 | 4578 | 993 | 107 | 1017 |
| Choat, Isom R., Strawn, Tex. Baling-press | 737,347 | Aug. 25 | 4324 | 963 964 | 105 | 1954 |
| Choate, Walter A. (See Vernon and Choate.) | | | | | | |
| Chouinard, Theodore O., Quebec, Canada. Electric switch | 732,170 | June 30 | 4923 | 1095 | 104 | 2213 |
| Choulet, Joseph, Algiers, Algeria. Acetylene-gas generator | 719,303 | Jan. 27 | 3392 | 756 | 102 | 763 |
| Choulet, Joseph, Algiers, Algeria. Disinfectant and making same | 747,138 | Dec. 15 | 3367 | 764 | 107 | 1876 |
| Chowen, Richard J., and W. Hartly, Peterborough, Canada. Warping-reel | 744,293 | Nov. 17 | 2964 | 634 | 107 | 662 |
| Chowen, Richard J., and W. Hartly, Peterborough, Canada. Warping-reel | 744,294 | Nov. 17 | 2967 | 634 635 | 107 | 663 |
| Chrisman, Horace, assignor to Pittsburgh Meter Company, Pittsburg, Pa. Proportional meter | 740,088 | Sept. 29 | 4907 | 1101 | 106 | 1115 |
| Christ, Ernest W., assignor to Stanley Works, New Britain, Conn. Hinge | 730,876 | June 16 | 2445 | 541 | 104 | 1672 |
| Christ, Josiah A., Pinegrove, Pa. Nut-lock | 746,026 | Dec. 8 | 1319 | 295 | 107 | 1397 |
| Christensen, Anton, Chicago, Ill. Car-brake | 732,516 | June 30 | 5596 | 1240 | 104 | 2352 |
| Christensen, Emilie H., New York, N. Y. Envelop | 718,426 | Jan. 13 | 1674 | 370 | 102 | 374 |
| Christensen, James P., Vinland, Wis. Silo | 721,543 | Feb. 24 | 3990 | 909 | 102 | 1712 |
| Christensen, James P., Vinland, Wis. Silo | 726,639 | Apr. 28 | 4140 | 934 | 103 | 2079 |
| Christensen, Jens. (See Jensen and Christensen.) | | | | | | |
| Christensen, Jörgen C., Aalborg, Denmark. Lock | 719,087 | Jan. 27 | 2988 | 666 | 102 | 677 |
| Christensen, Niels A., Milwaukee, Wis. Triple valve for air-brakes | 718,911 | Jan. 20 | 2642 | 592 593 | 102 | 591 |
| Christensen, Niels A., Milwaukee, Wis. Lubricating mechanism | 722,209 | Mar. 10 | 1031 | 228 229 | 103 | 234 |
| Christensen, Niels A., Milwaukee, Wis. Electric-brush holder | 724,544 | Apr. 7 | 231 | 56 | 103 | 1219 |
| Christensen, Niels A., Milwaukee, Wis. Automatic governor for fluid-compressors | 738,161 | Sept. 8 | 1240 | 269 | 106 | 284 |
| Christensen, Waldemar, New York, N. Y. Toy wagon | 718,192 | Jan. 13 | 1251 | 274 | 102 | 285 |
| Christenson, Algot L., Stockholm, Sweden. Centrifugal separator | 739,648 | Sept. 22 | 4065 | 906 | 106 | 918 |
| Christenson, Christian A., assignor to L. C. Christenson, Viroqua, Wis. Shearing attachment for anvils | 717,658 | Jan. 6 | 233 | 59 | 102 | 51 |
| Christenson, John. (See Willing, Christenson, and McLean.) | | | | | | |
| Christenson, Lars, New York, N. Y. Metallic revolving window | 722,675 | Mar. 17 | 1928 | 428 | 103 | 444 |
| Christenson, Lars, New York, N. Y. Revolving metallic window | 743,828 | Nov. 10 | 2017 | 428 | 107 | 446 |
| Christenson, Louise C. (See Christenson, Christian A., assignor.) | | | | | | |
| Christersson, Albin, Etelhem, Sweden. Adjustable door-hinge | 719,747 | Feb. 3 | 614 | 137 | 102 | 951 |
| Christersson, Albin, Etelhem, Sweden. Apparatus for counting pieces of goods | 729,133 | May 26 | 4325 | 955 956 | 104 | 966 |
| Christian, James H. (See Rockwell and Christian.) | | | | | | |
| Christian, John B., assignor to G. Bohner, Chicago, Ill. Incandescent vapor-lamp | 728,672 | May 19 | 3504 | 779 | 104 | 783 |
| Christian, Peter, Johnstown, Pa. Mechanical movement | 725,041 | Apr. 14 | 1159 | 262 | 103 | 1432 |
| Christian, Robert W., Bannack, Mont. Dredging-bucket | 726,640 | Apr. 28 | 4141 | 934 | 103 | 2079 |
| Christiansen, Charles, Gelsenkirchen, Germany. Coupling device for screw-drills | 745,039 | Nov. 24 | 4323 | 934 | 107 | 967 |
| Christiansen, Eduard G., Drammen, Norway. Press | 720,672 | Feb. 17 | 2361 | 541 | 102 | 1348 |
| Christianson, Andrew, Allegheny, assignor to Standard Steel Car Company, Pittsburg, Pa. Bolster for hopper-cars | 720,221 | Feb. 10 | 1505 | 345 | 102 | 1157 |
| Christianson, Andrew, Allegheny, assignor to Standard Steel Car Company, Pittsburg, Pa. Corner-post pocket | 720,222 | Feb. 10 | 1507 | 345 | 102 | 1157 |
| Christianson, Andrew, Allegheny, assignor to Standard Steel Car Company, Pittsburg, Pa. End-post pocket | 720,223 | Feb. 10 | 1508 | 345 | 102 | 1158 |
| Christianson, Andrew, Allegheny, assignor to Standard Steel Car Co., Pittsburg, Pa. Fastening for car safety-chains | 720,224 | Feb. 10 | 1509 | 346 | 102 | 1158 |
| Christianson, Andrew, Allegheny, assignor to Standard Steel Car Company, Pittsburg, Pa. Door-operating device for hopper-cars | 727,587 | May 12 | 1430 | 321 | 104 | 326 |
| Christianson, Andrew, Allegheny, assignor to Standard Steel Car Company, Pittsburg, Pa. Bolster | 743,451 | Nov. 10 | 1308 | 269 | 107 | 294 |
| Christianson, Andrew, Butler, assignor of one-half to W. Milligan, Allegheny, Pa. Friction draft-gear | 736,071 | Aug. 11 | 1981 | 421 | 105 | 1423 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|
| | | | Spec. | Drg. | Vol. | Page. |
| Christianson, John A. (See Nelson and Christianson.) | | | | | | |
| Christie, George S., Nottingham, England. Printing-surface | 736,937 | Aug. 25 | 3572 | ..... | 105 | 1794 |
| Christie, James, Philadelphia, Pa. Spacing-table for punching-machines | 732,517 | June 30 | 5597 | {1240 / 1241} | 104 | 2352 |
| Christman, Peter, Greenbay, Wis. Store-goods lifter | 747,376 | Dec. 22 | 3816 | 859 | 107 | 1990 |
| Christopher, Calvin F., Cruso, N. C. Scale | 746,461 | Dec. 8 | 2087 | 480 | 107 | 1564 |
| Christopher, Erick B. (See Talen, Pearson, Christopher, Johnson, and Lindberg.) | | | | | | |
| Christopher, John H., assignor to Dempster Manufacturing Company, Des Moines, Iowa. Band-fastening | 734,512 | July 28 | 3351 | 784 | 105 | 757 |
| Christopher, William B., Jersey City, N. J. Jewelry stand or easel | 732,828 | July 7 | 244 | 61 | 105 | 54 |
| Chritton, Robert B., Enid, Okla. Ter. Rotary engine | 719,996 | Feb. 10 | 1053 | {245 / 246} | {102} | 1063 |
| Chrome Steel Works. (See Slattery, John, assignor.) | | | | | | |
| Chronik, Louis, New York, assignor to United States Battery Company, Brooklyn, N. Y. Battery element | 733,696 | July 14 | 1766 | 419 | 105 | 389 |
| Chronik, Louis, New York, assignor to United States Battery Company, Brooklyn, N. Y. Battery connection | 733,697 | July 14 | 1766 | 419 | 105 | 389 |
| Chrysler, William L., and J. H. Day, Woodlake, Nebr. Attachment for oil-cans | 740,529 | Oct. 6 | 285 | 56 | 106 | 1306 |
| Chryst, Frank S. (See Borden, Bradford, assignor.) | | | | | | |
| Chryst, Frank S., trustee. (See Borden, Bradford, assignor.) | | | | | | |
| Chubb, Arthur G., Ironbridge, assignor to Parkinson and W. & B. Cowan, Limited, Birmingham, England. Lighting attachment for gas-burners | 738,711 | Sept. 8 | 2330 | {511 / 512} | {106} | 513 |
| Chubb, Daniel. (See Prehn, Charles T., assignor.) | | | | | | |
| Chubbuck, C. I. (See Robinson, William T., assignor.) | | | | | | |
| Church, Albert E., West Hartford, Conn. Carpenter's plane | 721,017 | Feb. 17 | 2978 | 684 | 102 | 1480 |
| Church, Duane H., Newton, Mass. Balance-staff | 744,719 | Nov. 24 | 3733 | 806 | 107 | 845 |
| Church, Duane H., Newton, Mass. Machine for gaging jewels | 745,417 | Dec. 1 | 194 | 44, 45 | 107 | 1141 |
| Church, George, Milton, Oreg. Folding clothes-drier | 726,641 | Apr. 28 | 4143 | 934 | 103 | 2080 |
| Church, Herbert A., Syracuse, N. Y. Massage instrument | 743,147 | Nov. 3 | 634 | 137 | 107 | 132 |
| Church, Joseph P., Decatur, Ill. Automatic crossing-alarm | 733,698 | July 14 | 1767 | {419 / 420} | {105} | 389 |
| Church, Josiah W., and M. J. O'Gorman, Wylie, Tex. Grain-car door | 728,203 | May 19 | 2589 | 579 | 104 | 591 |
| Church, Julian E. (See Joyal, Joseph, assignor.) | | | | | | |
| Church, Merton, Detroit, Mich. Wire-fence-stapling device | 744,166 | Nov. 17 | 2710 | {578 / 579} | {107} | 605 |
| Church, Obadiah S., San Francisco, Cal. Windmill | 723,988 | Mar. 31 | 4367 | 981 | 103 | 976 |
| Church, Stephen H., Los Angeles, Cal. Chicken or fowl fountain | 746,790 | Dec. 15 | 2690 | 621 | 107 | 1720 |
| Church, Walter A., Binghamton, N. Y., assignor to Bristol Brass & Clock Company, Bristol, Conn. Lamp-socket | 736,577 | Aug. 18 | 2864 | 627 | 105 | 1629 |
| Church, Walter A., Binghamton, N. Y., assignor to Bristol Brass & Clock Company, Bristol, Conn. Incandescent-lamp socket | 738,099 | Sept. 1 | 1070 | 237 | 106 | 231 |
| Church, Walter A., Binghamton, N. Y., assignor to Bristol Brass & Clock Company, Bristol, Conn. Lamp-socket | 738,294 | Sept. 8 | 1501 | 325 | 106 | 338 |
| Churchill, Aaron F. (See Kennedy, John H., assignor.) | | | | | | |
| Churchill, Durand. (See Mayer, Durand.) | | | | | | |
| Churchill, Henry P., Portland, Me. Speed-indicator | 742,968 | Nov. 3 | 256 | 57 | 107 | 56 |
| Churchill, Henry P., and I. J. Keene, Portland, Me. Toothpick-machine | 746,462 | Dec. 8 | 2090 | 481 | 107 | 1565 |
| Churchill, James H., trustee. (See Tolman, Charles P., assignor.) | | | | | | |
| Churchill, Mary S., Shelbyville, Ind. Clothes-rack | 742,394 | Oct. 27 | 3893 | {874 / 875} | {106} | 2116 |
| Churchill, Thomas H., Truro, Canada. Infant's crib | 730,514 | June 9 | 1815 | 404 | 104 | 1517 |
| Churchill, William L., assignor to National Pneumatic Service Company, Chicago, Ill. Store-service apparatus | 723,829 | Mar. 31 | 4033 | {910 / 911} | {103} | 906 |
| Churchill, William L., assignor to National Pneumatic Service Company, Chicago, Ill. Station for store-service apparatus | 726,815 | Apr. 28 | 4466 | {1008 / 1009} | {103} | 2148 |
| Churchill, William L., assignor to National Pneumatic Service Company, Chicago, Ill. Station for store-service apparatus | 726,816 | Apr. 28 | 4469 | {1009 / 1010} | {103} | 2148 |
| Churchill, William L., assignor to National Pneumatic Service Company, Chicago, Ill. Take-up device for store-service apparatus | 739,059 | Sept. 15 | 2972 | 659 | 106 | 669 |
| Churchill, William L., assignor to National Pneumatic Service Company, Chicago, Ill. Cash-carrier | 743,060 | Nov. 3 | 467 | 102 | 107 | 97 |
| Churchill, William W. (See Stranahan, Churchill, and Roney.) | | | | | | |
| Churchill, William W. (See Yawger and Churchill.) | | | | | | |
| Churchward, Alexander, New York, N. Y. Alternating-current motor | 745,957 | Dec. 1 | 1187 | 266 | 107 | 1353 |
| Churchward, Alexander, Chicago, Ill., assignor to General Electric Company. Pole-shoe for dynamo-electric machines | 723,989 | Mar. 31 | 4369 | 981 | 103 | 977 |
| Churchward, Alexander, Chicago, Ill., assignor to General Electric Company. Brush-holder | 732,171 | June 30 | 4926 | 1095 | 104 | 2214 |
| Churchward, Alexander, New York, N. Y., assignor to General Electric Company. Anti-hunting device | 745,327 | Dec. 1 | 26 | 5 | 107 | 1106 |
| Churchward, Alexander J., Brooklyn, N. Y. Alternating-current motor | 730,343 | June 9 | 1492 | 329 | 104 | 1448 |
| Churchward, Alexander J., Brooklyn, N. Y. Alternating-current motor | 745,325 | Dec. 1 | 21 | 5 | 107 | 1105 |
| Churchward, Alexander J., Brooklyn, N. Y. Alternating-current motor | 745,326 | Dec. 1 | 24 | 5 | 107 | 1106 |
| Cie Ame Continentale pour la Fabrication des Compteurs á Gaz et Autres Appareils. (See Rouget, Paul, assignor.) | | | | | | |
| Cigol, Frank A., Paterson, N. J., assignor to Mattson Rubber Company, New York, N. Y. Game-piece | 729,489 | May 26 | 4938 | 1095 | 104 | 1096 |
| Cilley, William W. (See Kennedy, George A., assignor.) | | | | | | |
| Cincinnati Butchers' Supply Co. (See Schmidt and Werner, assignors.) | | | | | | |
| Cincinnati Butchers Supply Company. (See Schmidt and Heine, assignors.) | | | | | | |
| Cincinnati Coffin Company. (See Hoefle, Francis I., assignor.) | | | | | | |
| Cincinnati Machine Tool Co. (See Schauer, Sherman C., assignor.) | | | | | | |
| Civry, Ulric de, Paris, France. Brake | 726,862 | May 5 | 51 | 12 | 104 | 14 |
| Claassen, Hermann, Dormagen, Germany. Boiling sugar solutions | 723,990 | Mar. 31 | 4370 | ..... | 103 | 977 |
| Clagett, George M. and S. C., Brooklyn, N. Y. Attachment for Welsbach or similar gas-burners | 734,668 | July 28 | 3638 | 852 | 105 | 818 |
| Clagett, Sarah C. (See Clagett, George M. and S. C.) | | | | | | |
| Claghorn, Clarence R., Vintondale, Pa. Car-axle lubricator | 736,689 | Aug. 18 | 3101 | 684 | 105 | 1676 |
| Claghorn, Clarence R., Vintondale, Pa. Car-unloading apparatus | 736,690 | Aug. 18 | 3104 | {684 / 685} | {105} | 1676 |
| Claghorn, Clarence R., Vintondale, Pa. Car-stop | 736,818 | Aug. 18 | 3353 | {740 / 741} | {105} | 1728 |
| Claghorn, Clarence R., Wehrum, Pa. Car-stop | 736,691 | Aug. 18 | 3109 | {685 / 686} | {105} | 1678 |
| Claghorn, Clarence R., Wehrum, Pa. Car-axle lubricator | 736,819 | Aug. 18 | 3355 | 741 | 105 | 1728 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|
| | | | Spec. | Dr'g. | Vol. | Page. |
| Clancy, John R. (See Strohmenger and Clancy.) | | | | | | |
| Clancy, John T., New York, N. Y. Cooking-stove | 719,187 | Jan. 27 | 3171 | 706 | 102 | 714 |
| Clancy, William L., New York, N. Y. Scaffold | 719,188 | Jan. 27 | 3173 | 706, 707 | 102 | 715 |
| Clap, Harvey E., assignor to Daggett & Clap Company, Attleboro, Mass. Locket | 741,308 | Oct. 13 | 1741 | 388 | 106 | 1634 |
| Clapham, Robert I., Brooklyn, N. Y. Combined blanket-roll, field-mattress, and clothing-bag | 730,877 | June 16 | 2446 | 541 | 104 | 1672 |
| Clapp, Carl J., *et al.* (See Clapp, George W., assignor.) | | | | | | |
| Clapp, Charles R., *et al.* (See Justen, Joseph M., assignor.) | | | | | | |
| Clapp, Eben P., Evanston, Ill. Heater | 727,091 | May 5 | 520 | 112 | 104 | 113 |
| Clapp, Edward, deceased, Montague, Mass.; C. L. Field, executor. Apparatus for automatically feeding poultry or other creatures | 742,969 | Nov. 3 | 257 | 57 | 107 | 56 |
| Clapp, George D., Boston, Mass. Sole-leather-cutting machine | 734,819 | July 28 | 3956 | 923, 924 | 105 | 881 |
| Clapp, George D., Boston, Mass. Welt-support | 734,820 | July 28 | 3959 | 924 | 105 | 881 |
| Clapp, George W., assignor of two-thirds to G. G. and C. J. Clapp, Greensboro, N. C. Ironing-table | 732,394 | June 30 | 5365 | 1188 | 104 | 2306 |
| Clapp, Gurney G., *et al.* (See Clapp, George W., assignor.) | | | | | | |
| Clapp, Mortimer A., and G. Sague, assignors to Hudson River Foundry Company, Poughkeepsie, N. Y. Molder's flask | 746,291 | Dec. 8 | 1795 | 407 | 107 | 1501 |
| Clapp, William, Valparaiso, Ind. Vehicle-tire | 723,366 | Mar. 24 | 3201 | 718 | 103 | 716 |
| Clare, Earle S., Portsmouth, Ohio. Fire-pot | 734,401 | July 21 | 3150 | 740 | 105 | 700 |
| Clark, Absolam F., assignor to Electric Vehicle Equipment Company, Philadelphia, Pa. Separator for secondary batteries | 736,216 | Aug. 11 | 2215 | 477 | 105 | 1473 |
| Clark, Absolam F., assignor to Electric Vehicle Equipment Company, Philadelphia, Pa. Secondary-battery plate and making same | 736,217 | Aug. 11 | 2217 | 477 | 105 | 1473 |
| Clark, Alexander L., assignor of one-half to P. and H. Stiles, Princeton, Iowa. Boiler-feeder | 737,348 | Aug. 25 | 4327 | 964 | 105 | 1954 |
| Clark, Alfred L., assignor to M. M. Clark, Dubuque, Iowa. Means for operating roller-awnings | 726,863 | May 5 | 52 | 12 | 104 | 14 |
| Clark, Allison N., Plainville, Conn. Filter | 746,292 | Dec. 8 | 1797 | 408 | 107 | 1502 |
| Clark, Alton N. (See Pierce, George A., assignor.) | | | | | | |
| Clark, Arthur G. (See Newland, Grant, assignor.) | | | | | | |
| Clark, Arthur W. (See Mitchell, Andrew F., assignor.) | | | | | | |
| Clark, Barton, *et al.* (See Clark, Frederick, assignor.) | | | | | | |
| Clark, Castle B., Piedmont, Ala. Combined heating and lighting apparatus | 740,530 | Oct. 6 | 286 | 56 | 106 | 1306 |
| Clark, Chancy P., Chattanooga, Tenn. Axle | 743,829 | Nov. 10 | 2018 | 428 | 107 | 446 |
| Clark, Charles A., Hartford, Conn. Snap-switch-operating mechanism | 737,349 | Aug. 25 | 4328 | 964 | 105 | 1955 |
| Clark, Charles K., Pulaski, N. Y. Game apparatus | 731,163 | June 16 | 3006 | 667 | 104 | 1786 |
| Clark, Charles M., South Orange, N. J. Electric conductor | 746,463 | Dec. 8 | 2090 | 481 | 107 | 1565 |
| Clark, Charles S., Altoona, assignor to Frick Company, Waynesboro, Pa. Skimming-regulator for ice-machines | 729,278 | May 26 | 4588 | 1013, 1014 | 104 | 1022 |
| Clark, Chester E., Chicago, Ill. Hat-binding | 730,851 | June 9 | 2386 | 527 | 104 | 1640 |
| Clark, Clarence D. (See Potter and Clark.) | | | | | | |
| Clark, Daniel J., Jersey City, N. J., assignor, by mesne assignments, to "Secretary," New York, N. Y. Gas-stove | 733,699 | July 14 | 1769 | 420, 421 | 105 | 390 |
| Clark, David P., Dayton, Ohio. Locomotive toy | 738,412 | Sept. 8 | 1751 | 381 | 106 | 392 |
| Clark, Edred W., Hartford, Conn. Coaster-brake | 721,018 | Feb. 17 | 2979 | 685 | 102 | 1480 |
| Clark, Edward B., Pittsburg, Pa., assignor of three-fourths to Pittsburgh Blue Print Company. Ticket-printing machine | 748,163 | Dec. 29 | 5321 | 1208, 1209 | 107 | 2347 |
| Clark, Edward F., Minneapolis, Minn. Flour process and apparatus | 741,887 | Oct. 20 | 2868 | 640 | 106 | 1892 |
| Clark, Edwin F., Cleveland, Ohio. Carbureter for explosive-engines | 741,224 | Oct. 13 | 1574 | 354 | 106 | 1602 |
| Clark, Egbert A., Washington, D. C. Pivot-pin for teeth | 732,922 | July 7 | 400 | 97 | 105 | 86 |
| Clark, Egbert A., Washington, D. C. Cuff-holder | 743,617 | Nov. 10 | 1654 | 347 | 107 | 369 |
| Clark, Elbert V., Providence, R. I. Toy | 729,546 | June 2 | 47 | 12 | 104 | 1136 |
| Clark, Ellsworth A., assignor of one-half to T. L. Keller, Boulder, Colo. Window-blind | 725,042 | Apr. 14 | 1161 | 262 | 103 | 1432 |
| Clark, Ellsworth E. (See Clark, Omar E., E. E., and W. L.) | | | | | | |
| Clark, Ernest C., Detroit, Mich. Pill-coating machine | 724,436 | Apr. 7 | 29 | 8, 9 | 103 | 1176 |
| Clark, Ernest C., assignor to Parke Davis & Company, Detroit, Mich. Pill-machine | 741,461 | Oct. 13 | 2036 | 452 | 106 | 1700 |
| Clark, Ernest G., Chicago, Ill. Adjustable spool for musical-instrument-controlling sheets | 743,830 | Nov. 10 | 2019 | 429 | 107 | 447 |
| Clark, Francis L., assignor to Westinghouse Air Brake Company, Pittsburg, Pa. Brake apparatus | 726,864 | May 5 | 54 | 13 | 104 | 15 |
| Clark, Francis L., Pittsburg, Pa., assignor to American Brake Company, St. Louis, Mo. Automatic slack-adjuster | 728,443 | May 19 | 3050 | 671, 672 | 104 | 688 |
| Clark, Frank E., Independence, Kans. Carpenter's rule | 734,514 | July 28 | 3354 | 785 | 105 | 757 |
| Clark, Frank I., Augusta, Me. Attachment for printing-presses or other machines | 740,233 | Sept. 29 | 5179 | 1164 | 106 | 1172 |
| Clark, Frank T., New Haven, Conn., assignor of one-half to J. H. Springer, New York, N. Y. Device for effecting the radiation of heat | 735,945 | Aug. 11 | 1737 | 371 | 105 | 1371 |
| Clark, Franklin S., New York, N. Y., and E. A. Harris, Fargo, Ga. Making sheep-dips | 721,153 | Feb. 24 | 3273 | ..... | 102 | 1565 |
| Clark, Fred W., Utica, N. Y. Abdominal support | 747,139 | Dec. 15 | 3369 | 764 | 107 | 1877 |
| Clark, Frederick, assignor to A. F. Collins, Minneapolis, Minn. Spring check-hook | 733,903 | July 14 | 2179 | 513 | 105 | 474 |
| Clark, Frederick, Minneapolis, assignor of two-thirds to B. Clark and S. Baremore, Clear-lake, Minn. Station-indicator | 747,938 | Dec. 29 | 4879 | 1101, 1102, 1103 | 107 | 2251 |
| Clark, Frederick O. (See Mosher, Peter W., assignor.) | | | | | | |
| Clark, George A., deceased, Holyoke, (E. P. Bagg, administrator,) and H. R. Farnsworth, Turners Falls, Mass. Refining-engine | 734,669 | July 28 | 3639 | 852 | 105 | 818 |
| Clark, George E., Northampton, Mass. Electric signaling device | 728,544 | May 19 | 3251 | 721 | 104 | 728 |
| Clark, George E., Detroit, Mich. Combined switch and fuse | 745,155 | Nov. 24 | 4580 | 994 | 107 | 1018 |
| Clark, George P., assignor of one-half to E. M. Vynne, New York, N. Y. Adjustable shaft connection | 727,903 | May 12 | 2047 | 456 | 104 | 454 |
| Clark, George P., assignor of one-half to E. M. Vynne, New York, N. Y. Steam-engine | 740,089 | Sept. 29 | 4910 | 1101, 1102 | 106 | 1116 |
| Clark, George P., Alexandria, Va., assignor of one-half to E. M. Vynne, New York, N. Y. Low-speed steam-engine | 731,664 | June 23 | 3952 | 880 | 104 | 1996 |
| Clark, George V., West Carlisle, Ohio. Tellurian | 734,513 | July 28 | 3352 | 785 | 105 | 757 |
| Clark, George W., Opal, Va. Fruit-picker | 721,154 | Feb. 24 | 3275 | 749 | 102 | 1565 |
| Clark, Herbert W. (See Cooper, Willard L., assignor.) | | | | | | |
| Clark, Howard L., *et al.* (See Robinson, Thomas, assignor.) | | | | | | |
| Clark, Huber, administrator. (See Morrison, Walter G.) | | | | | | |
| Clark, Hugh D., Columbus, Ohio. Burial-case protector | 721,355 | Feb. 24 | 3654 | 831 | 102 | 1642 |
| Clark, James H., Portage, Wis. Automatic pressure-actuated governor for steam engines or pumps | 742,290 | Oct. 27 | 3713 | 829 | 106 | 2080 |
| Clark, James H., assignor to James H. Clark Company, Portage, Wis. Stove attachment | 746,923 | Dec. 15 | 2948 | 680 | 107 | 1779 |

*Alphabetical list of patentees*—Continued

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Clark, James P. K. (See Driver and Clark.) | | | | | | |
| Clark, James W., Pawtucket, R. I. Blind-slat lock | 719,648 | Feb. 3 | 423 | 97 | 102 | 919 |
| Clark, Jefferson D., Scranton, Miss. Display-rack | 721,424 | Feb. 24 | 3788 | 862 | 102 | 1660 |
| Clark, John A., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Weft stop-motion for looms | 719,647 | Feb. 3 | 421 | 96 | 102 | 910 |
| Clark, John A., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Loom for weaving tufted fabrics | 732,518 | June 30 | 5599 | 1241 | 104 | 2353 |
| Clark, John A., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Dobby for looms | 741,225 | Oct. 13 | 1575 | 354 | 106 | 1603 |
| Clark, John L., Rockford, Ill. Flue-stopper | 719,997 | Feb. 10 | 1055 | 246 | 102 | 1063 |
| Clark, John L., Rockford, Ill. Toaster | 729,547 | June 2 | 48 | 12 | 104 | 1137 |
| Clark, John P., Terre Haute, Ind. Car-fender | 727,290 | May 5 | 869 | 187 / 188 | 104 | 186 |
| Clark, John R., Dahlgren, Ill. Mail-box attachment | 744,904 | Nov. 24 | 4048 | 873 | 107 | 910 |
| Clark, John T., St. Joseph, Mo. Combined potato-digger and listing-plow | 736,218 | Aug. 11 | 2219 | 478 | 105 | 1473 |
| Clark, Jonathan E., Denver, Colo. Game apparatus | 736,938 | Aug. 25 | 3574 | 792 | 105 | 1795 |
| Clark, Joseph J. (See Springer, Ernest C., assignor.) | | | | | | |
| Clark, Kimball V., Buffalo, N. Y. Spring-hinge | 733,153 | July 7 | 802 | 194 | 105 | 169 |
| Clark, Leander, Greenville, Ohio. Attachment for mowers | 741,888 | Oct. 20 | 2870 | 641 | 106 | 1893 |
| Clark, Leon H., Philadelphia, Pa. Chair | 740,531 | Oct. 6 | 288 | 57 | 106 | 1306 |
| Clark, Lucas C., Southington, Conn. Plane | 718,981 | Jan. 27 | 2774 | 621 / 622 | 102 | 633 |
| Clark, Lyonel E., London, England. Floating dock | 731,858 | June 23 | 4295 | 957 | 104 | 2069 |
| Clark, Mathew J., Chaparal, Ariz. Ter. Vehicle-wheel | 725,410 | Apr. 14 | 1830 | 410 | 103 | 1571 |
| Clark, Matthew J., Covington, Ky., assignor to C. Shaw, Cincinnati, Ohio. Means for clearing well-strainers | 736,219 | Aug. 11 | 2220 | 478 | 105 | 1474 |
| Clark, May M. (See Clark, Alfred L., assignor.) | | | | | | |
| Clark, Melville, Chicago, Ill. Musical-instrument bellows | 725,824 | Apr. 21 | 2618 | 596 | 103 | 1755 |
| Clark, Melville, Chicago, Ill. Sound-muffler for automatic musical instruments | 727,904 | May 12 | 2048 | 456 | 104 | 454 |
| Clark, Nelson W., *et al.* (See Whittlesey, Edith O., assignor.) | | | | | | |
| Clark, Oliver, assignor of two-thirds to J. Baxter, Newcastle, Pa., and C. Hillman, Middletown, Ind. Apparatus for handling sheet-metal plates | 727,291 | May 5 | 870 | 188 | 104 | 187 |
| Clark, Oliver L., McDonald, Pa. Pump | 739,831 | Sept. 29 | 4406 | 989 | 106 | 1011 |
| Clark, Omar E., E. E., and W. L., Vicksburg, Mich. Vending-machine | 746,028 | Dec. 8 | 1323 | 296 / 297 | 107 | 1398 |
| Clark, Paul L., Schenectady, N. Y., assignor to General Electric Company. Switch-control mechanism | 729,134 | May 26 | 4326 | 956 | 104 | 966 |
| Clark, Philippe L., assignor of one-tenth to A. H. Overman, Chelmstord, England. Operating steam-power plants | 736,578 | Aug. 18 | 2865 | 627 | 105 | 1629 |
| Clark, Philippe L., assignor of one-tenth to A. H. Overman, Chelmsford, England. Steam-power apparatus | 736,579 | Aug. 18 | 2869 | 628 | 105 | 1630 |
| Clark, Robert M. (See Beckwith and Clark.) | | | | | | |
| Clark, S. E. (See Lilly, Francis G., assignor.) | | | | | | |
| Clark, Sarah W., New York, N. Y. Piano or similar instrument | 723,584 | Mar. 24 | 3600 | 804 | 103 | 797 |
| Clark, Thomas E., assignor to Thomas E. Clark Wireless Telegraph-Telephone Co., Detroit, Mich. Coherer for wireless signaling | 741,767 | Oct. 20 | 2655 | 594 | 106 | 1846 |
| Clark, Thomas G. (See Welles, Edward B., assignor.) | | | | | | |
| Clark, Thomas K., Ponca City, Okla. Ter. Water-shed for cellar-doors | 732,275 | June 30 | 5131 | 1140 | 104 | 2257 |
| Clark, Victor E., assignor of one-third to C. H. Rice, Grand Rapids, Mich. Fastening for knockdown furniture | 747,683 | Dec. 22 | 4368 | 986 | 107 | 2114 |
| Clark, Victor E., assignor of one-third to C. H. Rice, Grand Rapids, Mich. Furniture-fastening | 747,854 | Dec. 22 | 4688 | 1060 | 107 | 2189 |
| Clark, Vincent W. (See Daniels and Clark.) | | | | | | |
| Clark, Wallace S., Schenectady, N. Y., assignor to General Electric Company. Machine for forming tubes of soft metal | 732,829 | July 7 | 245 | 61 | 105 | 55 |
| Clark, Wesley L. (See Clark, Omar E., E. E., and W. L.) | | | | | | |
| Clark, Willet M. (See Schneider, John G., assignor.) | | | | | | |
| Clark, William, Caledonia, N. Y. Cement-mixer | 742,591 | Oct. 27 | 4252 | 958 | 106 | 2189 |
| Clark, William E., Charlestown, N. H., assignor to Continuous Rail Joint Company of America. Insulated rail connection | 737,350 | Aug. 25 | 4329 | 965 | 105 | 1955 |
| Clark, William G., Waterloo, near Liverpool, England. Cargo-transport vessel | 725,219 | Apr. 14 | 1495 | 340 / 341 | 103 | 1501 |
| Clark, William H., and F. J. Currier, San Francisco, Cal. Drill for boring wells | 724,160 | Mar. 31 | 4707 | 1056 / 1057 | 103 | 1043 |
| Clark, William H., and F. J. Currier, assignors to C. and C. Drill Company, San Francisco, Cal. Drill-bit | 726,255 | Apr. 28 | 3371 | 766 | 103 | 1927 |
| Clark, William K., assignor of one-half to J. S. Du Quesne, Philadelphia, Pa. Pile-supporter | 717,659 | Jan. 6 | 235 | 60 | 102 | 52 |
| Clark, William K., and J. S. Du Quesne, Philadelphia, Pa. Smoke-consuming furnace | 731,546 | June 23 | 3738 | 832 / 833 | 104 | 1954 |
| Clark, William P. (See Stewart, William, assignor.) | | | | | | |
| Clark, William R., Tehachapi, Cal. Combination-tool | 731,859 | June 23 | 4296 | 957 | 104 | 2070 |
| Clark, William T., Schenectady, N. Y., assignor to Tabor Manufacturing Company, Philadelphia, Pa. Electric engine | 721,669 | Mar. 3 | 38 | 9 | 103 | 10 |
| Clark, William T., Schenectady, N. Y., assignor to Tabor Manufacturing Company, Philadelphia, Pa. Electric engine | 721,670 | Mar. 3 | 39 | 9 | 103 | 10 |
| Clark, William T., Schenectady, N. Y., assignor to Tabor Manufacturing Company, Philadelphia, Pa. Molding-machine | 732,276 | June 30 | 5132 | 1141 | 104 | 2257 |
| Clarke, Alex, Paris, France. Obtaining cattle-food | 742,289 | Oct. 27 | 3713 | | 106 | 2080 |
| Clarke, Arthur, Glenville, assignor to King Bridge Company, Cleveland, Ohio. Spacing-table | 739,060 | Sept. 15 | 2973 | 659 / 660 | 106 | 669 |
| Clarke, Frank, Birmingham, England. Time-controlling mechanism | 740,234 | Sept. 29 | 5180 | 1164 | 106 | 1172 |
| Clarke, George F., Fenton, Mich. Oil-cup for engines | 741,309 | Oct. 13 | 1742 | 389 | 106 | 1634 |
| Clarke, George R., Montel, Tex. Farm-gate | 747,140 | Dec. 15 | 3369 | 765 | 107 | 1877 |
| Clarke, George W. (See Laing, Edwin H. B., assignor.) | | | | | | |
| Clarke, Graham, assignor to Lennox Chemical Company, Cleveland, Ohio. Apparatus for administering gas | 725,542 | Apr. 14 | 2086 | 472 | 103 | 1627 |
| Clarke, Henry, Nottingham, England. Knitting-machine | 720,405 | Feb. 10 | 1827 | 416 / 417 | 102 | 1226 |
| Clarke, Henry T., Jr., trustee. (See Gardiner, William, assignor.) | | | | | | |
| Clarke, J. N., *et al.* (See Frink and Lee, assignors.) | | | | | | |
| Clarke, John S., St. Clair, Mich. Salt-graining apparatus | 731,754 | June 23 | 4115 | 918 | 104 | 2029 |
| Clarke, Joseph D. (See Cavanagh, Hannan, and Clarke.) | | | | | | |
| Clarke, Louis S., Haverford, Pa. Gearing | 746,027 | Dec. 8 | 1320 | 295 / 296 | 107 | 1397 |
| Clarke, Octave B., St. Louis, Mo. Dam construction | 734,222 | July 21 | 2809 | 659 | 105 | 627 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Des. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Clarke, Peete B., New York, N. Y. Swivel chute-head | 718,092 | Jan. 13 | 1071 | 237, 238 | 102 | 245 |
| Clarke, Peete B., New York, N. Y. Compensating-valve for hydraulic rams | 722,676 | Mar. 17 | 1929 | 429, 430 | 103 | 445 |
| Clarke, Peete B., New York, N. Y. Vertical stoker-scale | 742,005 | Oct. 20 | 3122 | 696, 697, 698, 699 | 106 | 1942 |
| Clarke, Peyton N., *et al.* (See Oppelt, Otto, assignor.) | | | | | | |
| Clarke, Richard T., assignor to Invisible Suspender Company, Columbus, Ohio. Suspenders | 726,865 | May 5 | 56 | 13 | 104 | 15 |
| Clarke, Richard T., assignor to Invisible Suspender Company, Columbus, Ohio. Combined trousers and hose supporter | 745,156 | Nov. 24 | 4582 | 994 | 107 | 1018 |
| Clarke, Robert E., Langston, Okla. Ter. Agricultural implement | 726,642 | Apr. 28 | 4145 | 935 | 103 | 2080 |
| Clarke, William A., assignor to Weyburn Company, Rockford, Ill. Upsetting-machine for plowshares | 734,161 | July 21 | 2700 | 635, 636 | 105 | 604 |
| Clarke, William C., New York, N. Y., assignor to De Lery Light Company. Gas-burner | 727,588 | May 12 | 1432 | 322 | 104 | 326 |
| Clarke, William H., Washington, D. C. Metallic structure | 745,570 | Dec. 1 | 469 | 110 | 107 | 1197 |
| Clarke, William K., Weatherford, Tex. End-gate fastening for vehicles | 743,452 | Nov. 10 | 1309 | 269 | 107 | 295 |
| Clarkson, Margaret A., Providence, R. I. Shoe-lace fastener | 724,809 | Apr. 7 | 732 | 172 | 103 | 1327 |
| Clarkson, William S., Livingston, Mont. Steam-nozzle | 733,154 | July 7 | 803 | 194 | 105 | 169 |
| Clary, Daniel, St. Louis, Mo. Wagon wrench and jack | 724,437 | Apr. 7 | 33 | 9 | 103 | 1177 |
| Clary, William M., *et al.* (See Richards, Frank R., assignor.) | | | | | | |
| Clason, Milo B. (See Reich and Clason.) | | | | | | |
| Classen, Alexander, Aix-la-Chapelle, Germany. Treating comminuted wood, &c | 726,029 | Apr. 21 | 2964 | ------ | 103 | 1827 |
| Classen, Alexander, Aachen, Germany. Converting wood into sugar. (Reissue) | 12,108 | May 5 | 1381 | ------ | 104 | 298 |
| Claudin, John L., assignor, by mesne assignments, to Interlocking Fence Company, Morton, Ill. Woven-wire-fence fabric | 739,797 | Sept. 22 | 4341 | 973 | 106 | 980 |
| Claudin, John L., assignor, by mesne assignments, to Interlocking Fence Company, Morton, Ill. Wire-fence fabric | 739,798 | Sept. 22 | 4343 | 973, 974 | 106 | 981 |
| Claudio, Eduardo, Rio Janeiro, Brazil. Propeller | 738,985 | Sept. 15 | 2845 | 631 | 106 | 642 |
| Claudon, Daniel H., Meadows, Ill. Car-loader | 735,858 | Aug. 11 | 1584 | 337 | 105 | 1337 |
| Claus, Frank, Philadelphia, Pa. Power-transmitting device | 722,491 | Mar. 10 | 1569 | 345 | 103 | 352 |
| Claus, Frank, Philadelphia, Pa. Clutch | 722,492 | Mar. 10 | 1570 | 345, 346 | 103 | 353 |
| Claus, Hubert, Berlin, Germany. Enameling-machine | 721,155 | Feb. 24 | 3276 | 749 | 102 | 1565 |
| Clausen, Hans C., New York, N. Y. Fastener for elevator-doors | 739,061 | Sept. 15 | 2975 | 660 | 106 | 670 |
| Clausen, Henry P., assignor to American Electric Telephone Company, Chicago, Ill. Telephone-jack | 718,093 | Jan. 13 | 1074 | 238 | 102 | 246 |
| Clausen, Henry P., assignor to American Electric Telephone Company, Chicago, Ill. Circuit arrangement for lamp-jacks | 726,215 | Apr. 21 | 3287 | 746 | 103 | 1894 |
| Clausen, Henry P., Chicago, Ill., assignor to American Electric Telephone Company. Line-annunciator | 742,165 | Oct. 27 | 3466 | 774 | 106 | 2028 |
| Clausen, Moritz D. (See Hansen, Morten B., assignor.) | | | | | | |
| Clauson-Kaas, Axel V. H. F. C., Copenhagen, Denmark. Durable elastic albuminate and albuminate-containing material | 724,810 | Apr. 7 | 733 | ------ | 103 | 1327 |
| Clauss, Henrie, Fremont, Ohio. Display-carton | 735,467 | Aug. 4 | 834 | 178 | 105 | 1157 |
| Claussen, Edward E., Hartford, Conn. Paper-bag machine | 726,866 | May 5 | 57 | 14, 15, 16 | 104 | 16 |
| Clawson, Aquiller, assignor of one-half to J. E. Eastburn, Chicago, Ill. Lifting and dropping gate | 725,043 | Apr. 14 | 1161 | 262 | 103 | 1433 |
| Clawson, Archie, Rockvale, Mont. Horseshoe | 731,431 | June 23 | 3505 | 783 | 104 | 1906 |
| Clawson, Spencer, Salt Lake City, Utah. Brace | 721,861 | Mar. 3 | 382 | 84 | 103 | 83 |
| Claxton, Louis L., Paterson, N. J. Folding box | 723,830 | Mar. 31 | 4035 | 911 | 103 | 906 |
| Clay, Francis W. H., Cincinnati, Ohio. Making sound-reproducing records | 728,867 | May 26 | 3865 | 860 | 104 | 873 |
| Clay, Harry C. (See Kailor and Clay.) | | | | | | |
| Clay, Harry C., assignor to Reeves & Company, Columbus, Ind. Steam and governor connection for twin engines | 724,438 | Apr. 7 | 34 | 9 | 103 | 1177 |
| Clay, Harry C., assignor to Reeves & Company, Columbus, Ind. Detachable fuel-box for traction-engines | 737,209 | Aug. 25 | 4056 | 899 | 105 | 1896 |
| Clay, Harry C., assignor to Reeves & Company, Columbus, Ind. Belt-tightener for traction-engines | 738,162 | Sept. 8 | 1243 | 269 | 106 | 285 |
| Clay, Harry C., assignor to Reeves & Company, Columbus, Ind. Detachable trunnion and supplemental wheel for traction-engines | 738,884 | Sept. 15 | 2682 | 591 | 106 | 608 |
| Clay, James O., Aiken, S. C. Wardrobe | 728,673 | May 19 | 3505 | 779, 780 | 104 | 783 |
| Claydon, Charles, Searcy, Tex. Insulator | 725,044 | Apr. 14 | 1162 | 263 | 103 | 1433 |
| Claypool, Samuel F., West Franklin, Pa. Log-conveyer | 732,519 | June 30 | 5601 | 1241, 1242 | 104 | 2353 |
| Clayton, Charles H., Freehold, N. J. Welding-machine | 731,665 | June 23 | 3954 | 880 | 104 | 1996 |
| Clayton, Harry, and H. Brower, Turkey, N. J. Poison-distributer | 719,748 | Feb. 3 | 615 | 138 | 102 | 951 |
| Clayton, Herbert D., Edmond, Kans. Device for cutting weeds and stirring soil | 719,189 | Jan. 27 | 3175 | 707, 708 | 102 | 715 |
| Clayton, Herbert F., Huddersfield, England. Fog-signal apparatus for railways | 726,867 | May 5 | 64 | 16, 17 | 104 | 16 |
| Clayton, Herbert F., Huddersfield, England. Detonator holder or clip for use in railway fog signaling apparatus | 745,328 | Dec. 1 | 27 | 6 | 107 | 1106 |
| Clayton, James, Brooklyn, N. Y. Balanced slide-valve | 721,356 | Feb. 24 | 3655 | 832 | 102 | 1642 |
| Clayton, John, Minneapolis, Minn. Colter-clamp | 733,155 | July 7 | 805 | 195 | 105 | 170 |
| Clayton, John, Minneapolis, Minn. Plow | 744,488 | Nov. 17 | 3311 | 712 | 107 | 737 |
| Clayton, John, Minneapolis, Minn. Show-case | 744,489 | Nov. 17 | 3312 | 713 | 107 | 737 |
| Clayton, John R., Shelbyville, Ind. Eyeglasses | 747,141 | Dec. 15 | 3371 | 765 | 107 | 1877 |
| Clayton, Nicholas J., Sr., Galveston, Tex. Tank | 730,344 | June 9 | 1494 | 330 | 104 | 1449 |
| Claytor, James E., Hartford City, Ind. Escape-gas receiver | 732,712 | July 7 | 35 | 8 | 105 | 11 |
| Cleal, Joseph P., Dayton, Ohio, assignor, by mesne assignments, to National Cash Register Company, Jersey City, N. J. Cash-register | 718,565 | Jan. 13 | 1994 | 435, 436 | 102 | 443 |
| Cleal, Joseph P., Dayton, Ohio, assignor, by mesne assignments, to National Cash Register Company, Jersey City, N. J. Cash-register | 724,378 | Mar. 31 | 5148 | 1153, 1154 | 103 | 1134 |
| Cleal, Joseph P., Dayton, Ohio, assignor to National Cash Register Company, Jersey City, N. J. Cash-register | 739,649 | Sept. 22 | 4066 | 907 | 106 | 919 |
| Cleal, Joseph P., assignor to National Cash Register Company, Dayton, Ohio. Printing device for cash-registers | 747,855 | Dec. 22 | 4690 | 1060, 1061 | 107 | 2189 |
| Cleal, Joseph P., Dayton, Ohio, assignor to National Cash Register Company, Jersey City, N. J. Cash-register | 748,261 | Dec. 29 | 5459 | 1251, 1252, 1253 | 107 | 2384 |
| Cleal, Joseph P., and A. Macauley, Dayton, Ohio, assignors to National Cash Register Company, Jersey City, N. J. Cash-register | 735,066 | Aug. 4 | 32 | 10 | 105 | 988 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drgs. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Cleary, Edward, assignor to Connecticut Web Company, Bridgeport, Conn. Buckle | 741,226 | Oct. 13 | 1577 | 355 | 106 | 1603 |
| Cleathero, Edward T., Altrincham, England. Paper-feeding machine | 734,670 | July 28 | 3641 | 852, 853, 854, 855 | 105 | 819 |
| Cleathero, Edward T., Altrincham, England. Control for sheet-feeders | 740,532 | Oct. 6 | 289 | 57, 58 | 106 | 1307 |
| Cleathero, Edward T., Altrincham, England. Bed-motion for printing-machines | 740,533 | Oct. 6 | 292 | 59 | 106 | 1307 |
| Cleathero, Edward T., Altrincham, England. Lifter for pneumatic sheet-feeding apparatus | 740,534 | Oct. 6 | 294 | 59, 60 | 106 | 1308 |
| Cleathero, Edward T., Altrincham, England. Platen-press, such as is used for printing, stamping, or the like | 747,989 | Dec. 29 | 4882 | 1103, 1104, 1105, 1106 | 107 | 2252 |
| Cleaver, Fremont J., Oak Station, Pa. Combined ratchet and drill brace | 747,940 | Dec. 29 | 4887 | 1106 | 107 | 2253 |
| Cleaver, Mamie, Lebanon, Ky. Horse-blanket | 725,931 | Apr. 21 | 2808 | 637 | 103 | 1796 |
| Cleek, Florence, Ladonia, Tex. Dish-drainer | 725,825 | Apr. 21 | 2619 | 596 | 103 | 1756 |
| Cleff, Friedrich, Rauenthal, near Barmen-Rittershausen, Germany. Dyeing and printing in anilin-black | 727,292 | May 5 | 872 | ..... | 104 | 187 |
| Clegg, Alfred S. (See Freed and Clegg.) | | | | | | |
| Clegg, Cora, Madison, Wis. Combined toy cradle and savings-bank | 747,941 | Dec. 29 | 4888 | 1107 | 107 | 2253 |
| Clegg, James, Christchurch, New Zealand. Umbrella | 735,711 | Aug. 11 | 1302 | 279 | 105 | 1275 |
| Clegg, James F., Elizabeth, N. J. Bolt-locking device | 733,541 | July 14 | 1508 | 360 | 105 | 336 |
| Cleghorn, Thomas, London, England. Matrix for casting type | 732,395 | June 30 | 5367 | 1188 | 104 | 2306 |
| Clemens, Burley, Moundsville, W. Va. Non-refillable bottle | 730,003 | June 2 | 889 | 198 | 104 | 1309 |
| Clément, Adolphe. (See Le Pontois and Clément.) | | | | | | |
| Clément, Adolphe, Levallois-Perret, France. Wheel for motor-cycles | 718,094 | Jan. 13 | 1075 | 238 | 102 | 246 |
| Clément, Adolphe, Levallois-Perret, France. Regulator for suction-valves of explosive-engines | 732,830 | July 7 | 247 | 61 | 105 | 55 |
| Clément, Adolphe, Levallois-Perret, France. Carbureter for motor-bicycles | 733,625 | July 14 | 1655 | 392 | 105 | 367 |
| Clément, Adolphe, Levallois-Perret, France. Petrol-motor | 742,970 | Nov. 3 | 259 | 58 | 107 | 56 |
| Clement, Burton H. and G. A., Beloit, Wis. Self-centering punch | 718,427 | Jan. 13 | 1675 | 370 | 102 | 374 |
| Clement, Edward E. (See Ames and Clement.) | | | | | | |
| Clement, Edward E., Philadelphia, Pa. Telephone system | 719,998 | Feb. 10 | 1055 | 246 | 102 | 1063 |
| Clement, Edward E., Philadelphia, Pa. Signaling apparatus and system | 719,999 | Feb. 10 | 1061 | 246, 247 | 102 | 1065 |
| Clement, Garrett A. (See Wheeler, Edgar S., assignor.) | | | | | | |
| Clement, George A. (See Clement, Burton H. and G. A.) | | | | | | |
| Clement, John F., Philadelphia, Pa. Impact-tool | 724,811 | Apr. 7 | 734 | 172 | 103 | 1327 |
| Clément, Joseph O., London, England, assignor to Addressograph Company, Chicago, Ill. Machine for printing and addressing circulars, &c. | 722,811 | Mar. 17 | 2178 | 486 | 103 | 495 |
| Clement, Louis, *et al.* (See Leduc, William O., assignor.) | | | | | | |
| Clements, Benjamin J. (See Utley and Clements.) | | | | | | |
| Clements, John H., Coperas Cove, Tex. Sash-lock | 737,351 | Aug. 25 | 4330 | 965 | 105 | 1955 |
| Clements, William G., assignor of one-half to F. G. Lewis, Vancouver, Canada. Try-square | 725,614 | Apr. 14 | 2210 | 499 | 103 | 1655 |
| Clemm, Adolf, and W. Hasenbach, Mannheim, Germany. Manufacturing sulfuric anhydrid | 729,735 | June 2 | 391 | ..... | 104 | 1208 |
| Clemons, Harry K., St. Paul, Minn. Road-grading machine | 741,768 | Oct. 20 | 2656 | 594 | 106 | 1846 |
| Clemons, Melvin C., Delevan, N. Y. Vending-machine | 732,337 | June 30 | 5235 | 1162 | 104 | 2278 |
| Clendenon, William H., Healdsburg, Cal. Sawing-machine | 740,535 | Oct. 6 | 296 | 60 | 106 | 1308 |
| Clennam, Milton A., assignor of one-half to Cahill & Hall Elevator Company, San Francisco, Cal. Elevator driving mechanism | 724,663 | Apr. 7 | 455 | 111 | 103 | 1266 |
| Clerc, Eduard. (See Forsbach and Clerc.) | | | | | | |
| Clerc-Renaud, Marius. (See Ratignier and Clerc-Renaud.) | | | | | | |
| Clerico, Dominick, Yonkers, N. Y. Machine for curling hat-brims | 746,293 | Dec. 8 | 1798 | 408 | 107 | 1502 |
| Clerque, Francis H. (See Sjöstedt and James, assignors.) | | | | | | |
| Cleveland Car Specialty Company. (See Maltby, George B., assignor.) | | | | | | |
| Cleveland, Charles E., Fond du Lac, Wis. Log-turner | 743,247 | Nov. 3 | 827 | 180 | 107 | 173 |
| Cleveland, Francis D., Winchester, Mass. Paper box or carton | 720,894 | Feb. 17 | 2734 | 629, 630 | 102 | 1428 |
| Cleveland, Jay H., Chicago, Ill. Speed-varying machine | 742,837 | Nov. 3 | 33 | 7, 8 | 107 | 10 |
| Cleveland Machine Screw Company. (See Brophy, John P., assignor.) | | | | | | |
| Cleveland, Newcomb, New York, N. Y. Can-opener | 727,905 | May 12 | 2049 | 456 | 104 | 454 |
| Cleveland Pneumatic Tool Company. (See Covey, Herbert S., assignor.) | | | | | | |
| Cleveland Pneumatic Tool Company. (See Richards, Charles B., assignor.) | | | | | | |
| Cleveland Reversible Window Company. (See Wolfensperger, Jacob, assignor.) | | | | | | |
| Cleveland Trust Company, trustee. (See Cowles, William B., assignor.) | | | | | | |
| Cleveland Twist Drill Company. (See Hagedorn, Henry F., assignor.) | | | | | | |
| Clevenger, Addison J., Ontario, and C. C. Field, Sodus, N. Y. Tuning-pin | 727,589 | May 12 | 1433 | 322 | 104 | 326 |
| Cliff, Edward. (See Tucker, Benjamin W., assignor.) | | | | | | |
| Cliff, Edward, New York, N. Y. Car-truck | 738,773 | Sept. 15 | 2459 | 540, 541 | 106 | 558 |
| Cliff, Edward, New York, N. Y. Car-truck | 738,774 | Sept. 15 | 2463 | 541 | 106 | 559 |
| Cliff, Edward, Newark, N. J., assignor to Vose and Cliff Manufacturing Company, New York, N. Y. Car-truck bolster | 728,868 | May 26 | 3868 | 860 | 104 | 873 |
| Cliff, Edward R., New York, N. Y. Electric-current-shunting device | 725,826 | Apr. 21 | 2620 | 596 | 103 | 1756 |
| Cliffe, Daniel B. and W. R., Marion, Ohio. Street-sweeper | 746,029 | Dec. 8 | 1326 | 297 | 107 | 1399 |
| Cliffe, William R. (See Cliffe, Daniel B. and W. R.) | | | | | | |
| Clifford, Alfred C. (See Clifford, Charles C. and A. C.) | | | | | | |
| Clifford, Charles C. and A. C., assignors to J. Wellner, Philadelphia, Pa. Return mechanism for sound-producing records | 747,299 | Dec. 15 | 3672 | 829 | 107 | 1942 |
| Clifford & Co., James J. (See Clifford, James J., assignor.) | | | | | | |
| Clifford, James J., assignor to J. J. Clifford & Co., Green Island, N. Y. Demijohn-crate | 723,649 | Mar. 24 | 3710 | 832 | 103 | 820 |
| Clifford, Stanley, London, England. Device for teaching the golf-swing | 720,406 | Feb. 10 | 1829 | 417 | 102 | 1227 |
| Clifford, Thomas G., Hoboken, assignor of one-half to W. Cranstoun, Summit, N. J. Folding car-step | 731,164 | June 16 | 3008 | 667 | 104 | 1786 |
| Clifford, Thomas G., Hoboken, N. J., assignor to G. F. Rose, New York, N. Y., and Thomas G. Clifford, Jr., Hoboken, N. J. Testing-plug for plumbers' use | 739,589 | Sept. 22 | 3958 | 883 | 106 | 895 |
| Clifton, Archer E., assignor of one-half to G. H. Trump, Pittsburg, Pa. Lubricator | 748,480 | Dec. 29 | 5894 | 1339 | 107 | 2472 |
| Clifton, Jesse A., Orangeburg, S. C. Obstetrical forceps | 746,791 | Dec. 15 | 2692 | 621 | 107 | 1721 |
| Clifton Manufacturing Company. (See Smith, William R., assignor.) | | | | | | |
| Clifton, William E., and B. Oaksford, Nottingham, England. Phonograph or grapho-phone, &c. | 741,462 | Oct. 13 | 2039 | 452, 453 | 106 | 1700 |
| Climenson, William W., Honeybrook, Pa. Umbrella | 735,033 | July 28 | 4327 | 1005 | 105 | 958 |
| Cline, David, Watsontown, Pa. Combined heater and steam-generator | 723,991 | Mar. 31 | 4372 | 982 | 103 | 977 |
| Cline, David, Watsontown, Pa. Combined cooking-stove and steam-generator | 733,371 | July 14 | 1208 | 287 | 105 | 271 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Cline, Fred N., Chicago, Ill. Casting-machine | 739,062 | Sept. 15 | 2977 | 660, 661 | 106 | 670 |
| Cline, Fred N., Chicago, Ill. Horseshoe | 741,110 | Oct. 13 | 1338 | 307 | 106 | 1552 |
| Cline, George C., Batavia, N. Y. Single-trigger mechanism for firearms | 748,263 | Dec. 29 | 5499 | 1253, 1254 | 107 | 2386 |
| Cline, George J., Goshen, Ind. Folding crate | 720,328 | Feb. 10 | 1698 | 385 | 102 | 1198 |
| Cline, Tod W. (See Jones and Cline.) | | | | | | |
| Clinger, Fred D., assignor to Washington Tool Company, Owatonna, Minn. Steam-pump | 732,713 | July 7 | 36 | 9 | 105 | 11 |
| Clink, Elisha N., East Jordan, Mich. Draft attachment for vehicles | 722,084 | Mar. 3 | 784 | 175 | 103 | 170 |
| Clinton, Dwight C., and J. S. Keel, Holly Springs, Miss. Clothes-pounder | 731,021 | June 16 | 2735 | 610 | 104 | 1732 |
| Clinton, Henry A., Newark, N. J. Non-refillable bottle | 742,592 | Oct. 27 | 4254 | 958 | 106 | 2190 |
| Clinton, Thomas J., *et al.* (See Perkins, George C., assignor.) | | | | | | |
| Closson, John G., Harvard, Ill. Hat-fastener | 730,436 | June 9 | 1669 | 374 | 104 | 1485 |
| Closz, Charles, Webster City, Iowa. Grain-separating screen | 721,940 | Mar. 3 | 541 | 119 | 103 | 119 |
| Cloud, Anna C., Philadelphia, Pa. Device for correcting facial defects | 724,812 | Apr. 7 | 737 | 173 | 103 | 1328 |
| Cloud, John D., Roxboro, Pa., and J. Marple, Westville, N. J. Drill-operating mechanism | 729,043 | May 26 | 4177 | 924 | 104 | 937 |
| Cloud, Otho E., and A. F. Wood, Philadelphia, Pa., assignors to American Addograph Company. Calculating-machine | 746,924 | Dec. 15 | 2950 | 681, 682, 683 | 107 | 1780 |
| Cloud, William H., assignor of three-fourths to C. A. Styer and H. L. Ashley, Kokomo, Ind. Metallic step-ladder | 736,495 | Aug. 18 | 2724 | 597 | 105 | 1599 |
| Clough, Charles W., Watsonville, Cal. Antiseptic attachment for telephone-mouthpieces | 720,783 | Feb. 17 | 2546 | 587 | 102 | 1389 |
| Clough, E. R. (See Stone, Charles F., assignor.) | | | | | | |
| Clough, Henry H., Elyria, Ohio. Mold for concrete posts | 742,166 | Oct. 27 | 3468 | 775 | 106 | 2029 |
| Clough, John L. (See Flora and Clough.) | | | | | | |
| Clough, Victor W., Geneseo, Ill., assignor to P. S. Houghton, trustee, Grand Forks, N. D. Traction-separator | 743,453 | Nov. 10 | 1311 | 270 | 107 | 295 |
| Cloukey, Charles, St. Joseph, Mo. Safety set-collar | 732,714 | July 7 | 37 | 9 | 105 | 11 |
| Clover, Griffith H., assignor of one-half to J. J. Becker, Chicago, Ill. Cut-off-valve controller | 717,812 | Jan. 6 | 557 | 124, 125 | 102 | 120 |
| Clover, Richard P., and J. L. Johnston, assignors of one-fourth to W. R. Rulofson and C. H. McNaughton, Strattonville, Pa. Rail-joint | 721,019 | Feb. 17 | 2981 | 685 | 102 | 1480 |
| Clower, Edwin S., Philadelphia, Pa. Gas-furnace | 723,514 | Mar. 24 | 3478 | 778 | 103 | 772 |
| Clowes, George A., *et al.* (See Jenks, Robert L., assignor.) | | | | | | |
| Clubb, Sherman, Buckhorn, Mo. Stopper-extractor | 730,878 | June 16 | 2448 | 541 | 104 | 1673 |
| Cluett, Peabody & Co. (See Arakelian, George H., assignor.) | | | | | | |
| Clum, Ira E., Lima, Ohio. Pole or post anchor | 720,225 | Feb. 10 | 1510 | 346 | 102 | 1158 |
| Clum, Ira E., Lima, Ohio. Pole or post anchor | 740,399 | Oct. 6 | 24 | 6 | 106 | 1249 |
| Clune, John H., Springfield, Mass. Valve | 740,807 | Oct. 6 | 797 | 179 | 106 | 1415 |
| Clunies, Arthur B., assignor to Sill Stove Works, Rochester, N. Y. Stove-grate | 718,604 | Jan. 20 | 2073 | 451 | 102 | 475 |
| Clure, T. R. (See Britton, William M., assignor.) | | | | | | |
| Clutter, Joseph F., Omaha, Nebr. Metal column | 738,163 | Sept. 8 | 1244 | 270 | 106 | 285 |
| Clutter, Joseph F., Omaha, Nebr. Making metallic columns | 739,650 | Sept. 22 | 4072 | 907 | 106 | 920 |
| Clyde, Robert J., Shelter Island, N. Y. Support for firearms | 721,425 | Feb. 24 | 3790 | 862 | 102 | 1670 |
| Clyde, Sheridan, *et al.* (See Webber and Davis, assignors.) | | | | | | |
| Coad, Frank J., and E. Biddle, Dallas, Oreg. Bed-plate for baling-presses | 743,973 | Nov. 10 | 2286 | 491 | 107 | 505 |
| Coad, Henry, and W. G. Miller, Ainsworth, Nebr. Corn-husker | 739,390 | Sept. 22 | 3583 | 800 | 106 | 813 |
| Coakley, Charles H., *et al.* (See Johnson, Charles M., assignor.) | | | | | | |
| Coakley, William F., *et al.* (See Johnson, Charles M., assignor.) | | | | | | |
| Coalter, William T., Barton Heights, Va., assignor to American Tobacco Company, New York, N. Y. Delivery mechanism for cigarette-machines | 739,987 | Sept. 29 | 4725 | 1063 | 106 | 1076 |
| Coate, Orin M. (See Reich and Coate.) | | | | | | |
| Coates, Arthur R., *et al.* (See Miller, Henry J., assignor.) | | | | | | |
| Coates, Edward H., Macon, Ga. Warming device for use by invalids | 745,785 | Dec. 1 | 844 | 191 | 107 | 1278 |
| Coates, Edwin L., *et al.* (See Barron, John J., assignor.) | | | | | | |
| Coates, Frank R. (See Weber and Coates.) | | | | | | |
| Coates, George H., Worcester, Mass. Hair-clipper | 718,095 | Jan. 13 | 1076 | 239 | 102 | 247 |
| Coates, George H., Worcester, Mass. Hair-clipper | 723,650 | Mar. 24 | 3711 | 832 | 103 | 821 |
| Coates, Gilbert P., Uncasville, Conn. Pocket implement | 719,088 | Jan. 27 | 2989 | 666 | 102 | 678 |
| Coates, John, Hemet, Cal. Windmill | 733,009 | July 7 | 546 | 134 | 105 | 117 |
| Coates, John E., *et al.* (See Berg, Joseph, assignor.) | | | | | | |
| Coates, John E. (See Campbell and Berg, assignors.) | | | | | | |
| Coates, Joseph S., *et al.* (See Miller, Henry J., assignor.) | | | | | | |
| Coates, Robert. (See Suverkrop and Coates.) | | | | | | |
| Coats, Ernest S. (See Watson, Thomas, assignor.) | | | | | | |
| Cobb, Edward S., Los Angeles, Cal. Educational puzzle | 734,821 | July 28 | 3961 | 925 | 105 | 882 |
| Cobb, Edward S., Los Angeles, Cal. Resilient multiple-contact trolley-wheel | 737,582 | Sept. 1 | 42 | 9 | 106 | 12 |
| Cobb, Frank S. (See Marsden, Mark W., assignor.) | | | | | | |
| Cobb, Oscar, Chicago, Ill. Revolving door | 729,548 | June 2 | 48 | 12, 13 | 104 | 1137 |
| Cobb, Samuel C., Janesville, Wis. Sulky-plow | 730,744 | June 9 | 2209 | 491 | 104 | 1602 |
| Cobb, William B., Cleveland, Ohio. Carpet-strip-cutting machine | 718,982 | Jan. 27 | 2776 | 622 | 102 | 633 |
| Cobedesh, Todd D. (See McGuire and Cobedesh.) | | | | | | |
| Cobenzl, Albert, Bingen, Germany. Silver bromid gelatin and making same | 718,312 | Jan. 13 | 1467 | ------ | 102 | 331 |
| Coble, Robert L., *et al.* (See Coble, William H., assignor.) | | | | | | |
| Coble, William H., Gallinas, assignor of two-thirds to R. L. Coble, B. and N. J. Johnson, Calaveras, Tex. Seed-planter | 740,536 | Oct. 6 | 297 | 61 | 106 | 1308 |
| Coburn, Addison A., Coldspring, and F. Harnden, Palmyra, Wis. Band-cutter and self-feeder for corn husking and shredding machines | 739,988 | Sept. 29 | 4728 | 1064 | 106 | 1077 |
| Coburn, Avon M., Daunt, Cal. Two-cycle gas-engine | 730,345 | June 9 | 1495 | 331 | 104 | 1449 |
| Coburn, Charles F. (See Ward, George R., assignor.) | | | | | | |
| Coburn, Joseph A., Norwood, assignor of one-third to H. E. Farrington, Norfolk, Mass. Means for holding cylindrical tool-shanks | 732,048 | June 30 | 4672 | 1043 | 104 | 2162 |
| Coburn, Nathan P., assignor to J. G. McCarter Company, Boston, Mass. Slug-strip | 721,357 | Feb. 24 | 3656 | 832 | 102 | 1642 |
| Coburn Trolley Track Manufacturing Company. (See Edmonds, Frank M., assignor.) | | | | | | |
| Coburn Trolley Track Manufacturing Company. (See Spiller, William H., assignor.) | | | | | | |
| Coburn Trolley Track Manufacturing Company. (See Werner, Paul F., assignor.) | | | | | | |
| Cochems, M. V. (See Nelson and Herrmann, assignors.) | | | | | | |
| Cochran, James K., assignor of one-half to J. A. Simpson, Chicago, Ill. Cotton-compress | 724,813 | Apr. 7 | 738 | 173, 174 | 103 | 1328 |
| Cochran, John, Bealls Mills, W. Va. Casing-head for oil-wells | 738,001 | Sept. 1 | 899 | 197 | 106 | 196 |
| Cochran, John O., assignor of one-half to M. K. Kelter, Wilmington, Del. Fork | 732,675 | June 30 | 5894 | 1307 | 104 | 2418 |
| Cochran, Michael L., Dunlo, Pa. Wrench | 720,784 | Feb. 17 | 2547 | 587 | 102 | 1389 |
| Cochrane, Charles H., Brooklyn, N. Y. Means for justifying type | 731,666 | June 23 | 3956 | 880 | 104 | 1997 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Cochrane, Charles H., New York, N. Y. Type-space and means for coöperating therewith for justifying lines of type | 740,537 | Oct. 6 | 299 | 61 | 106 | 1308 |
| Cochrane, Charles H., New York, N. Y. Printing-press | 746,464 | Dec. 8 | 2092 | 481, 482 | 107 | 1565 |
| Cochrane, David, assignor to Harrison Safety Boiler Works, Philadelphia, Pa. Device for heating and purifying water | 719,749 | Feb. 3 | 616 | 138, 139 | 102 | 952 |
| Cochrane, Josephine G., Chicago, Ill. Dish-washing machine | 731,341 | June 16 | 3322 | 741 | 104 | 1850 |
| Cochrane, William F. (See Hewson, James J., assignor.) | | | | | | |
| Cock, Lewis W., San Marcos, Tex., assignor to Acme Fumigator Company, Chicago, Ill. Means for fumigating | 742,838 | Nov. 3 | 36 | 8,9 | 107 | 10 |
| Cocker, John A. (See Bates and Cocker.) | | | | | | |
| Cocker, John A., Joliet, Ill., assignor to American Steel & Wire Company, of New Jersey. Wire-fence machine | 745,480 | Dec. 1 | 323 | 75,76 | 107 | 1168 |
| Cockerell, Robert, Dunedin, New Zealand. Eccentric-lever rope grip and brake for ascending or descending ropes | 733,458 | July 14 | 1368 | 323 | 105 | 306 |
| Cockrell, Wyvle B., assignor of one-half to D. Harrison, Columbus, Ohio. Non-refillable bottle | 743,974 | Nov. 10 | 2288 | 491 | 107 | 505 |
| Coda, Carlo, Pisa, Italy. Hydraulic plant and vessel or reservoir for containing water | 740,808 | Oct. 6 | 798 | 180 | 106 | 1415 |
| Code, George, Melrose, assignor to United States Atmospheric Oxygen Company, Boston, Mass. Air-compressor | 734,303 | July 21 | 2991 | 704 | 105 | 665 |
| Codington, William R., *et al.* (See Hetfield, John M., assignor.) | | | | | | |
| Cody, George, assignor of one-half to L. Munzinger, New York, N. Y. Fresh-air inlet for sanitary ventilation of the drainage systems of houses, buildings, or the like | 736,220 | Aug. 11 | 2221 | 478 | 105 | 1474 |
| Cody, Martin, New York, N. Y. Fire-escape | 738,164 | Sept. 8 | 1245 | 270 | 106 | 285 |
| Cody, Miles S., Washington, D C. Vending apparatus | 725,317 | Apr. 14 | 1660 | 374, 375 | 103 | 1536 |
| Cody, Robert D., Chicago, Ill. Hydrocarbon lighting system | 737,708 | Sept. 1 | 266 | 57 | 106 | 60 |
| Coe, Addison. (See Kisling and Coe.) | | | | | | |
| Coe, James B. (See Beach and Coe.) | | | | | | |
| Coen, Charles M., New York, N. Y. Apparatus for the propulsion of vessels | 733,010 | July 7 | 548 | 134 | 105 | 118 |
| Coenen, Henry J., assignor of one-half to R. Weyenberg and J. W. Walsh, Depere, Wis. Screen | 730,745 | June 9 | 2210 | 492 | 104 | 1603 |
| Coerver, Michael. (See Sutton, Steele, and Coerver.) | | | | | | |
| Coes, Loring, Worcester, Mass. Wrench | 720,785 | Feb. 17 | 2548 | 587 | 102 | 1389 |
| Coes, Loring, assignor to Coes Wrench Company, Worcester, Mass. Wrench | 742,006 | Oct. 20 | 3132 | 699 | 106 | 1945 |
| Coes Wrench Company. (See Coes, Loring, assignor.) | | | | | | |
| Coes, Zorester B., Philadelphia, Pa., assignor to De Laval Steam Turbine Company. Stock-feed mechanism for turret-lathes | 721,862 | Mar. 3 | 384 | 84 | 103 | 84 |
| Coffee, Robert A., Anderson, S. C. Grain-drill and fertilizer-distributer | 746,676 | Dec. 15 | 2491 | 569, 570 | 107 | 1676 |
| Coffee, William F. (See Ayers and Coffee.) | | | | | | |
| Coffey, Barton H., assignor to International Contracting Company, New York, N. Y. Dipper-handle | 745,329 | Dec. 1 | 28 | 6 | 107 | 1106 |
| Coffey, John J., New York, assignor to Chapin Construction Company, Brooklyn, N. Y. Evaporator | 737,583 | Sept. 1 | 43 | 9 | 106 | 12 |
| Coffey, Michael, Chicago, Ill. Garment-clasp | 721,782 | Mar. 3 | 221 | 49 | 103 | 49 |
| Coffey, Theodore, Bloomington, Ill. Needle-threader | 735,211 | Aug. 4 | 345 | 66, 67 | 105 | 1055 |
| Coffield, Jesse M., assignor of one-half to W. J. Harvey, Bellaire, Ohio. Tile | 745,000 | Nov. 24 | 4225 | 915 | 107 | 946 |
| Coffield, Jesse M., assignor of one-half to S. A. Kirkland, Bellaire, Ohio. Bench-vise | 745,001 | Nov. 24 | 4226 | 915 | 107 | 946 |
| Coffin, Albert S., assignor to M. H. Treadwell & Company, New York, N. Y. Furnace-grate | 734,671 | July 28 | 3646 | 855, 856 | 105 | 819 |
| Coffin, Edward F., Worcester, Mass. Construction of show-cases, show-windows, aquariums, &c | 740,235 | Sept. 29 | 5182 | 1165 | 106 | 1173 |
| Coffin, John W. (See Hazen, Nathan T., assignor.) | | | | | | |
| Coffin, Thomas A., West New Brighton, N. Y. Coal-handling machinery | 732,923 | July 7 | 402 | 97, 98 | 105 | 87 |
| Coffin, Thomas A., West New Brighton, and M. C. Lewis, Hamden, N. Y. Endless conveyer and elevator | 748,481 | Dec. 29 | 5896 | 1340 | 107 | 2473 |
| Coffin, Walter G., St. Paul, Minn. Wire-breaking tool | 717,735 | Jan. 6 | 401 | 94 | 102 | 88 |
| Coffin, William C., Pittsburg, Pa. Blast-furnace | 718,313 | Jan. 13 | 1468 | 325, 326 | 102 | 331 |
| Coffing, Samuel T., Attica, Ind. Rust preventing and removing composition | 719,190 | Jan. 27 | 3177 | ..... | 102 | 716 |
| Coffin's Box & Lumber Company. (See Irvine, Frank C., assignor.) | | | | | | |
| Coffman, Jacob H., assignor of one-half to T. Ott, Philadelphia, Pa. Door stop and securer | 731,342 | June 16 | 3324 | 741 | 104 | 1850 |
| Coffman, Jesse M., Montalvo, Cal. Water-distilling apparatus | 732,831 | July 7 | 248 | 62 | 105 | 55 |
| Coffman, John, and G. Dorn, Youngstown, Ohio. Cushion-heel for boots or shoes | 726,405 | Apr. 28 | 3668 | 832 | 103 | 1988 |
| Coffman, Savilla A., Paris, Ill. Bedclothes-holder | 728,204 | May 19 | 2591 | 579 | 104 | 591 |
| Cofran, George W. (See Long and Cofran.) | | | | | | |
| Cogan, Henry M., New York, N. Y. Railway-signal | 747,142 | Dec. 15 | 3372 | 765, 766 | 107 | 1878 |
| Cogan, Thomas. (See Fitzgibbon, Tom, assignor.) | | | | | | |
| Coghe, Andrew J., Carnegie, Pa. Folding box or crate | 742,593 | Oct. 27 | 4255 | 958 | 106 | 2190 |
| Coghe, Andrew J., Pittsburg, Pa. Burner | 743,148 | Nov. 3 | 635 | 137 | 107 | 133 |
| Coghlan, William T., Morristown, N. J. Can | 728,869 | May 26 | 3869 | 861 | 104 | 874 |
| Coghlin, Bernard W., Montreal, Canada. Forming-machine | 719,304 | Jan. 27 | 3394 | 757 | 102 | 763 |
| Cogswell, Henry J., assignor to Acme Switch Company, Hartford, Conn. Electric time-switch | 730,234 | June 9 | 1292 | 285, 286 | 104 | 1406 |
| Cogswell, John H. (See Starr and Cogswell.) | | | | | | |
| Cogswell, Samuel E., Pretty Prairie, Kans. Poultry-fountain | 723,651 | Mar. 24 | 3714 | 832 | 103 | 821 |
| Cogswell, William B., Syracuse, N. Y. Device for feeding ash into glass-furnaces | 722,812 | Mar. 17 | 2183 | 486 | 103 | 496 |
| Cohen, Ali. (See Basenau and Cohen.) | | | | | | |
| Cohen, Burnett, Newark, N. J. Strap-folding device | 733,700 | July 14 | 1771 | 421 | 105 | 391 |
| Cohen, George W., Allegheny, Pa. Curtain-support ring | 740,090 | Sept. 29 | 4912 | 1102 | 106 | 1116 |
| Cohen, Isidore, Chicago, Ill. Grain-elevator construction | 729,135 | May 26 | 4327 | 956 | 104 | 966 |
| Cohen, Louis, and J. Gross, Sombrerete, Mexico. Pulp distributer and feeder | 725,932 | Apr. 21 | 2809 | 637 | 103 | 1796 |
| Cohen, Morris I., Chicago, Ill. Water-heater | 733,011 | July 7 | 549 | 135 | 105 | 118 |
| Cohen, Stanley A., New York, N. Y. Ball-catcher | 724,814 | Apr. 7 | 746 | 174 | 103 | 1330 |
| Cohen, Stanley A., New York, N. Y. Chip-rack | 740,236 | Sept. 29 | 5184 | 1165 | 106 | 1173 |
| Cohn, Adolph H., New York, N. Y. Garment-clasp | 718,314 | Jan. 13 | 1470 | 326 | 102 | 332 |
| Cohn, Adolph H., New York, N. Y. Garment-clasp or hose-supporter | 722,285 | Mar. 10 | 1178 | 260 | 103 | 266 |
| Cohn, Adolph H., New York, N. Y. Garment-supporter | 723,367 | Mar. 24 | 3202 | 719 | 103 | 716 |
| Cohn, Adolph H., New York, N. Y. Hose-supporter | 746,030 | Dec. 8 | 1327 | 297, 298 | 107 | 1399 |
| Cohn, Adolph H., New York, N. Y. Hose-supporter | 746,677 | Dec. 15 | 2493 | 570 | 107 | 1677 |
| Cohn, Bernard, New York, N. Y. Parcel-fastener | 748,482 | Dec. 29 | 5897 | 1340 | 107 | 2473 |
| Cohn, Charles H., Chicago, Ill. Clasp | 743,454 | Nov. 10 | 1318 | 271 | 107 | 296 |

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|---|---|---|---|---|---|---|
| Cohoes Rolling Mill Co. (See Page and Button, assignors.) | | | | | | |
| Coin, Louis, Tassin La Demi Lune, near Lyons, France. Fastener for sliding doors | 727,293 | May 5 | 873 | 189 | 104 | 187 |
| Coke, Mildred. (See Mallalieu and Coke.) | | | | | | |
| Col, Alphonse G. (See Sainsevain, Paul C., assignor.) | | | | | | |
| Colahan, Charles, Chicago, Ill. Grain-binder | 726,256 | Apr. 28 | 3373 | 766 | 103 | 1927 |
| Colahan, Charles, Chicago, Ill. Carrier-apron | 726,257 | Apr. 28 | 3374 | 767 | 103 | 1928 |
| Colbath, Monroe D., Easton, Me. Dish-cleaner | 719,936 | Feb. 3 | 931 | 217 | 102 | 1021 |
| Colbath, Monroe D., Easton, Me. Dish-cleaner | 735,657 | Aug. 4 | 1189 | 251, 252 | 105 | 1233 |
| Colbert, Cassius E., assignor of one-half to R. P. and R. B. Morden, Jefferson, Iowa. Hay-loader | 741,111 | Oct. 13 | 1339 | 307, 308 | 106 | 1552 |
| Colburn, Leslie H., Franklin, Pa., assignor of one-half to Baker Brothers, Toledo, Ohio. Upright tapping and boring machine | 742,291 | Oct. 27 | 3715 | 829, 830, 831 | 106 | 2080 |
| Colby, Benjamin D., Chicago, Ill. Lock for automobiles | 730,515 | June 9 | 1817 | 405 | 104 | 1517 |
| Colby, Clarence L., New Paris, Ohio, assignor of one-half to Richmond Safety Gate Company, Richmond, Ind. Mechanism for operating elevator-gates | 733,459 | July 14 | 1370 | 323 | 105 | 306 |
| Colby, Harry W., assignor to Automatic Racking Machine Company, Chicago, Ill. Dumping-floor for malt-kilns | 747,143 | Dec. 15 | 3374 | 766 | 107 | 1878 |
| Coldren, William P., Lebanon, Pa. Apparatus for making sealing-rings | 738,295 | Sept. 8 | 1503 | 325 | 106 | 338 |
| Coldren, William P., Lebanon, Pa. Making lipped sealing-rings for canning-jars | 738,885 | Sept. 15 | 2683 | 591, 592 | 106 | 609 |
| Coldren, William P., Lebanon, Pa. Apparatus for making sealing-rings for canning-jars | 747,377 | Dec. 22 | 3817 | 859 | 107 | 1990 |
| Coldwell, Joseph, and C. G. Gildard, Fall River, Mass. Loom-shuttle | 736,580 | Aug. 18 | 2874 | 628 | 105 | 1630 |
| Coldwell, Joseph, and C. G. Gildard, Fall River, Mass. Stop-motion for looms | 747,856 | Dec. 22 | 4694 | 1061 | 107 | 2190 |
| Coldwell, Joseph, Fall River, and C. G. Gildard, Swansea, Mass. Combined picker-staff and shuttle-check | 736,581 | Aug. 18 | 2875 | 628 | 105 | 1631 |
| Coldwell, Joseph, Fall River, and C. G. Gildard, Swansea, Mass. Combined picker-staff and shuttle-check | 736,582 | Aug. 18 | 2877 | 628 | 105 | 1631 |
| Cole, Albert L., Auburndale, Mass. Machine for fibering metals | 745,786 | Dec. 1 | 845 | 191 | 107 | 1279 |
| Cole, Albert L., West Newton, Mass., assignor to Standard Packing Manufacturing Company. Semimetallic packing | 723,831 | Mar. 31 | 4037 | 911 | 103 | 906 |
| Cole, Albert L., Auburndale, Mass., assignor to Standard Packing Manufacturing Company. Metallic-waste packing | 733,156 | July 7 | 806 | 195 | 105 | 170 |
| Cole, Charles K. (See Soss, Joseph, assignor.) | | | | | | |
| Cole, Charles S., Bridgeport, Conn. Controlling mechanism for motors | 724,261 | Mar. 31 | 4922 | 1101, 1102 | 103 | 1086 |
| Cole, Charles S., Bridgeport, Conn. Relief-valve for motors | 724,262 | Mar. 31 | 4927 | 1103 | 103 | 1086 |
| Cole, Charles S., and W. J. Baulieu, Bridgeport, Conn.; said Baulieu assignor to said Cole. Motor for automobiles, &c | 724,379 | Mar. 31 | 5152 | 1154, 1155 | 103 | 1135 |
| Cole, Charles S., and W. J. Baulieu, Bridgeport, Conn.; said Baulieu assignor to said Cole. Motor for automobiles, &c | 724,380 | Mar. 31 | 5156 | 1155, 1156, 1157, 1158 | 103 | 1135 |
| Cole, Christopher C., *et al.* (See Matthews, James F., assignor.) | | | | | | |
| Cole, Daniel R., *et al.* (See Barber, Cyrus, assignor.) | | | | | | |
| Cole, Francis J. (See Dalton and Cole.) | | | | | | |
| Cole, Francis J., Schenectady, assignor to American Locomotive Company, New York, N. Y. Locomotive-engine | 722,356 | Mar. 10 | 1300 | 288, 289 | 103 | 292 |
| Cole, Fred'k W. (See Gammons, Welcome P., Jr., assignor.) | | | | | | |
| Cole, George O. (See Boyle, Charles W., assignor.) | | | | | | |
| Cole, Harry E., *et al.* (See Buckman, Alexander, assignor.) | | | | | | |
| Cole, Harry S., Newtonsville, Ohio. Arm-rest for crutches | 736,072 | Aug. 11 | 1983 | 422 | 105 | 1424 |
| Cole, Harvey W., Buenavista, Ill. Filler and support for carriage-bows | 730,094 | June 2 | 1034 | 232 | 104 | 1338 |
| Cole, Henry W. N., Brooklyn, assignor of one-half to W. A. Downs, New York, N. Y. Grinding apparatus | 736,939 | Aug. 25 | 3576 | 793 | 105 | 1795 |
| Cole, Herbert R., Millville, N. J. Fire-escape | 727,748 | May 12 | 1750 | 393 | 104 | 393 |
| Cole, James R., Jr., *et al.* (See Matthews, James F., assignor.) | | | | | | |
| Cole, James T., Chicago, Ill. Water-cooler equipment | 745,571 | Dec. 1 | 470 | 111 | 107 | 1197 |
| Cole, James T., Chicago, Ill., assignor to Consumers Company. Water-cooler equipment | 738,712 | Sept. 8 | 2333 | 512 | 106 | 514 |
| Cole, Jeff M. (See Kennedy, William L., assignor.) | | | | | | |
| Cole, John A., Chicago, Ill. Recording device | 736,583 | Aug. 18 | 2877 | 629 | 105 | 1631 |
| Cole, Leon L. (See Smith, David L., assignor.) | | | | | | |
| Cole, Riley, Hudson, Mich. Grain-drill | 740,091 | Sept. 29 | 4913 | 1102 | 106 | 1117 |
| Cole, Thomas and W. L., London, England. Machine for making brick or the like | 731,860 | June 23 | 4297 | 958, 959 | 104 | 2070 |
| Cole, Walter, Montreal, Canada. Making cheese | 731,432 | June 23 | 3506 | ..... | 104 | 1906 |
| Cole, Walter, Olympia, Wash. Excavating mechanism | 732,172 | June 30 | 4929 | 1096 | 104 | 2215 |
| Cole, Walter, Olympia, Wash. Earth-breaking apparatus | 732,173 | June 30 | 4931 | 1096 | 104 | 2215 |
| Cole, Walter, San Francisco, Cal. Excavating-machine | 744,490 | Nov. 17 | 3313 | 713 | 107 | 738 |
| Cole, Walter, San Francisco, Cal. Excavating mechanism | 744,491 | Nov. 17 | 3315 | 714 | 107 | 738 |
| Cole, William H., Watertown, assignor of one-half to W. E. Holmes, Newton, Mass. Lamp-socket | 727,590 | May 12 | 1434 | 322 | 104 | 327 |
| Cole, William L. (See Cole, Thomas and W. L.) | | | | | | |
| Colean Manufacturing Company. (See Edes, Benjamin F., assignor.) | | | | | | |
| Coleman, Anna M., Philadelphia, Pa. Bust-form | 745,787 | Dec. 1 | 846 | 191 | 107 | 1279 |
| Coleman, Clarence W. (See Coleman, Clyde J., assignor.) | | | | | | |
| Coleman, Clyde, Chicago, Ill., assignor to G. B. French, Boston, Mass., and F. L. Hall, New York, N. Y. Automatic musical instrument | 727,906 | May 12 | 2050 | 456 | 104 | 454 |
| Coleman, Clyde J., Chicago, Ill., assignor, by mesne assignments, to C. W. Coleman. Refrigerating apparatus | 726,216 | Apr. 21 | 3289 | 746 | 103 | 1895 |
| Coleman, Clyde J., Chicago, Ill., assignor, by mesne assignments, to C. W. Coleman. Refrigeration system | 726,217 | Apr. 21 | 3291 | 747 | 103 | 1895 |
| Coleman, Clyde J., Chicago, Ill., assignor, by mesne assignments, to C. W. Coleman. Refrigeration system | 726,218 | Apr. 21 | 3293 | 747 | 103 | 1896 |
| Coleman, Clyde J., Chicago, Ill., assignor, by mesne assignments, to C. W. Coleman. Refrigeration system | 746,792 | Dec. 15 | 2693 | 621 | 107 | 1721 |
| Coleman, Clyde J., New York, N. Y., assignor to Hall Signal Company. Signal apparatus | 743,975 | Nov. 10 | 2289 | 491, 492 | 107 | 505 |
| Coleman, Clyde J., New York, N. Y., assignor to Rockaway Automobile Company, Rockaway, N. J. Means for operating motor-vehicles | 745,157 | Nov. 24 | 4584 | 994, 995 | 107 | 1018 |
| Coleman, Edgar P., Chicago, Ill. Extension valve-gear | 733,157 | July 7 | 807 | 195 | 105 | 170 |
| Coleman, George D., Boston, Mass., assignor, by mesne assignments, to Coleman Ship Coppering Company. Making antifouling coatings | 741,227 | Oct. 13 | 1578 | ..... | 106 | 1603 |
| Coleman, George D., Boston, Mass., assignor, by mesne assignments, to Coleman Ship Coppering Company. Antifouling coating | 741,228 | Oct. 13 | 1579 | ..... | 106 | 1604 |

*Alphabetical list of patentees*—Continued.

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| Coleman, George D., Boston, Mass., assignor, by mesne assignments, to Coleman Ship Coppering Company. Antifouling coating for metal structures | 741,769 | Oct. 20 | 2659 | ------ | 106 | 1847 |
| Coleman, James C., and E. Toxey, Mobile, Ala. Paper-pulp | 723,137 | Mar. 17 | 2745 | ------ | 103 | 612 |
| Coleman, James G., and L. Wilhite, Cleburne, Tex. Word-counting attachment for type-writers | 735,468 | Aug. 4 | 836 | 178 | 105 | 1158 |
| Coleman, John H. (See Dowd and Coleman.) | | | | | | |
| Coleman, John K., and J. G. Harner, Philadelphia, Pa. Removable sign for street-cars | 735,946 | Aug. 11 | 1738 | 372 | 105 | 1371 |
| Coleman, John P., Edgewood Park, assignor to Union Switch and Signal Company, Swissvale, Pa. Lightning-arrester | 720,226 | Feb. 10 | 1511 | 346 | 102 | 1158 |
| Coleman, John P., Edgewood Park, assignor to Union Switch and Signal Company, Swissvale, Pa. Railway signal system | 725,674 | Apr. 21 | 2345 | 530 | 103 | 1696 |
| Coleman, John P., Edgewood, assignor to Union Switch and Signal Company, Swissvale, Pa. Clip for detector-bars | 724,439 | Apr. 7 | 35 | 9, 10 | 103 | 1177 |
| Coleman, John P., Edgewood, assignor to Union Switch and Signal Company, Swissvale, Pa. Railway-signal | 745,308 | Nov. 24 | 4870 | 1064 | 107 | 1079 |
| Coleman, John P., Edgewood, assignor to Union Switch and Signal Company, Swissvale, Pa. Railway-signal | 745,309 | Nov. 24 | 4874 | {1064 {1065 | {107 | 1080 |
| Coleman, John P., Edgewood, assignor to Union Switch & Signal Company, Swissvale, Pa. Wheel and lever stand | 746,793 | Dec. 15 | 2696 | 622 | 107 | 1721 |
| Coleman, John P., assignor to Union Switch and Signal Company, Swissvale, Pa. Fluid-pressure mechanism | 745,307 | Nov. 24 | 4866 | {1062 {1063 | {107 | 1078 |
| Coleman, Joseph H., Tottenham, Canada. Fare-box | 739,832 | Sept. 29 | 4408 | 989 | 106 | 1011 |
| Coleman, Lucius E., Santa Ana, assignor to E. B. Johnson, Orange, J. S. Hatfield and G. J. Stock, Anaheim, Cal. Hydrocarbon-burner | 743,976 | Nov. 10 | 2304 | 492 | 107 | 512 |
| Coleman, Robert F., Philadelphia, Pa. Adjustable strainer for down-spouts | 725,933 | Apr. 21 | 2811 | 637 | 103 | 1796 |
| Coleman Ship Coppering Company. (See Coleman, George D., assignor.) | | | | | | |
| Coleman, Spalding. (See Schuman, Alexander C., assignor.) | | | | | | |
| Coleman, Walter E., Newdorp, N. Y. Fan | 721,156 | Feb. 24 | 3278 | {749 {750 | {102 | 1566 |
| Coleman, Walter E., Newdorp, N. Y. Fan | 721,157 | Feb. 24 | 3279 | 750 | 102 | 1566 |
| Coler, Peter P., Chicago, Ill., assignor to McCormick Harvesting Machine Company. Machine for harvesting corn | 726,508 | Apr. 28 | 3889 | {880 {881 {882 | {103 | 2030 |
| Colestock, Harry H., assignor to Malleable Iron Truck Company, St. Paul, Minn. Truck | 726,406 | Apr. 28 | 3670 | 832 | 103 | 1989 |
| Colin, Theodore F., Elizabeth, N. J. Desulfurizing sulfur-bearing petroleum | 744,720 | Nov. 24 | 3735 | ------ | 107 | 845 |
| Colin, Theodore F., Elizabeth, N. J., and O. P. Amend, New York, N. Y. Purifying and desulfurizing crude petroleum and petroleum distillates | 723,368 | Mar. 24 | 3203 | ------ | 103 | 717 |
| Coll, Hugh J. (See Kissinger and Coll.) | | | | | | |
| Collamore, James C., Brooklyn, N. Y. Chart-table | 729,736 | June 2 | 391 | 88 | 104 | 1208 |
| Collamore, James C., and G. W. Kerst, Brooklyn, N. Y. Launch-cover | 734,516 | July 28 | 3357 | 786 | 105 | 758 |
| Collamore, James C., and G. W. Kerst, Brooklyn, N. Y.; said Kerst assignor to said Collamore. Chart-table | 729,847 | June 2 | 601 | 132 | 104 | 1251 |
| Colleen, Ivar H. P., St. Louis, Mo., assignor of one-half to G. L. Elliott, Jacksonville, Fla. Copy-holder for type-writers | 742,395 | Oct. 27 | 3894 | {875 {876 | {106 | 2116 |
| Colleen, Ivar H. P., St. Louis, Mo., assignor of one-half to G. L. Elliott, Jacksonville, Fla. Copy-holder for carriages of type-writers, &c | 748,047 | Dec. 29 | 5102 | 1153 | 107 | 2299 |
| Collen, Charles A., assignor of one-half to C. Decker, Kalamazoo, Mich. Joint-breaking device for carriage-tops | 739,391 | Sept. 22 | 3584 | 801 | 106 | 813 |
| Colleran, John J., Toronto, Canada. Rubber horseshoe | 726,643 | Apr. 28 | 4146 | 935 | 103 | 2080 |
| Colles, George W. (See Meuschel, August, assignor.) | | | | | | |
| Collet, Jules A., Brooklyn, N. Y. Vehicle-tire | 733,158 | July 7 | 809 | 196 | 105 | 171 |
| Collicutt, Daniel F., Columbia, S. C. Level and plumb | 736,073 | Aug. 11 | 1985 | 422 | 105 | 1424 |
| Collier, Arthur T., St. Albans, assignor of one-third to A. E. Williams, London, England. Internal-combustion engine | 731,995 | June 23 | 4545 | {1014 {1015 | {104 | 2122 |
| Collier, Christopher W., *et al.* (See French, Ira G., assignor.) | | | | | | |
| Collier, Mary C., Washington, D. C. Folding crib | 732,618 | June 30 | 5785 | 1283 | 104 | 2396 |
| Collier, Thomas, Trezevant, Tenn. Baling-press | 723,652 | Mar. 24 | 3715 | {832 {833 | {103 | 821 |
| Collings, Richard, and A. C. Griscom, New York, N. Y. Carbonator | 721,671 | Mar. 3 | 40 | 9 | 103 | 10 |
| Collins, Albert F. (See Clark, Frederick, assignor.) | | | | | | |
| Collins, Albert H., *et al.* (See Collins, Henry and C. W., assignors.) | | | | | | |
| Collins, Arthur, *et al.* (See Collins, Henry and C. W., assignors.) | | | | | | |
| Collins, Arthur L., *et al.* (See Davis, William H., assignor.) | | | | | | |
| Collins, Benjamin F., Clarksville, Tex. Oil-tank | 726,142 | Apr. 21 | 3153 | 713 | 103 | 1867 |
| Collins, Burt H., *et al.* (See Bouchard, John J., assignor.) | | | | | | |
| Collins, Burt H., *et al.* (See Bouchard and Ensor, assignors.) | | | | | | |
| Collins, Charles E., *et al.* (See Wolger, James H., assignor.) | | | | | | |
| Collins, Charles H. (See Smith, George M., assignor.) | | | | | | |
| Collins, Charles W. (See Collins, Henry and C. W.) | | | | | | |
| Collins, Clarence L. (See Johnston, Abner, assignor.) | | | | | | |
| Collins, Clarkson A. (See Birchmore, Woodbridge H., assignor.) | | | | | | |
| Collins Electric Clock Company. (See Collins, Ulysses L., assignor.) | | | | | | |
| Collins, Ernest W., *et al.* (See Collins, Henry and C. W., assignors.) | | | | | | |
| Collins, Francis E., Conshohocken, Pa. Valve | 719,750 | Feb. 3 | 619 | 139 | 102 | 952 |
| Collins, Francis E., Conshohocken, Pa. Oil-filtering and oiling system | 721,426 | Feb. 24 | 3792 | 863 | 102 | 1670 |
| Collins, Frank W., and E. Tobias, Hastings, Mich. Combined feed-water regulator, indicator, and alarm | 738,661 | Sept. 8 | 2229 | 488 | 106 | 494 |
| Collins, George A., New Bedford, assignor to Draper Company, Hopedale, Mass. Warp-stop-motion mechanism | 724,381 | Mar. 31 | 5163 | 1158 | 103 | 1137 |
| Collins, George E. (See Morey, Edward L., assignor.) | | | | | | |
| Collins, George E., Atkinson, Nebr. Egg-beater | 743,149 | Nov. 3 | 637 | 138 | 107 | 133 |
| Collins, Guy N., Washington, D. C. Photographic camera | 724,085 | Mar. 31 | 4552 | 1025 | 103 | 1012 |
| Collins, Harry R. (See Meigs and Collins.) | | | | | | |
| Collins, Henry and C. W., assignors to A. H. Collins, Manchester, E. W. and A. Collins and S. H. Hyde, Salford, Manchester, England. Means for operating the points of overhead wires on electric railways | 723,441 | Mar. 24 | 3329 | 746 | 103 | 743 |
| Collins, Henry and J. W., Pawtucket, R. I. Stop-motion for twisting and winding machines | 718,912 | Jan. 20 | 2646 | 593 | 102 | 591 |
| Collins, Horatio, Witwatersrand, Gold Fields, Transvaal, South Africa. Rock-drill bit | 734,515 | July 28 | 3355 | 785 | 105 | 757 |
| Collins, Ira F., Sabetha, Kans. Mail-box | 740,237 | Sept. 29 | 5185 | 1165 | 106 | 1174 |
| Collins, Jacob, Sewee, Tenn. Weighing-scale | 737,907 | Sept. 1 | 699 | 151 | 106 | 153 |
| Collins, James W., Howard, R. I. Horseshoe | 737,908 | Sept. 1 | 702 | 151 | 106 | 154 |
| Collins, Jerrey W., Sherrill, assignor to Oneida Community, Limited, Kenwood, N. Y. Snap-hook | 720,673 | Feb. 17 | 2362 | 541 | 102 | 1348 |
| Collins, John R., Owatonna, Minn. Combination pliers and pipe-wrench | 744,167 | Nov. 17 | 2712 | 579 | 107 | 606 |
| Collins, John T. (See Merrow and Collins.) | | | | | | |
| Collins, John T., assignor to Hartford Motor Machine Company, Hartford, Conn. Brush for street-sweepers | 742,839 | Nov. 3 | 38 | 9 | 107 | 11 |

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| Collins, John W. (See Dare, Lee, assignor.) | | | | | | |
| Collins, Joseph W. (See Collins, Henry and J. W.) | | | | | | |
| Collins, Julius M., Elgin, Okla. Ter. Tree-cultivator | 720,113 | Feb. 10 | 1304 | 297 | 102 | 1117 |
| Collins, Livingston G., Alice, Tex. Pipe connection | 720,407 | Feb. 10 | 1830 | 417 | 102 | 1227 |
| Collins, Lucius J., Dash, N. D. Rotary engine | 719,305 | Jan. 27 | 3396 | 757 | 102 | 764 |
| Collins, M. G., *et al.* (See Raby, Richard, assignor.) | | | | | | |
| Collins, Major, *et al.* (See Hert, Henry J., assignor.) | | | | | | |
| Collins, Matthew G., assignor to York Silk Manufacturing Company, York, Pa. Woven fabric | 746,465 | Dec. 8 | 2095 | 482 | 107 | 1566 |
| Collins, Norman. (See Kraus and Collins.) | | | | | | |
| Collins, Patrick J., *et al.* (See Watson, Robert, assignor.) | | | | | | |
| Collins, Patrick J., assignor, by mesne assignments, to R. J. Bourke, trustee, Scranton, Pa. System of regulation for electric motors | 722,563 | Mar. 10 | 1693 | 377 | 103 | 379 |
| Collins, Patrick J., assignor to R. J. Bourke, trustee, Scranton, Pa. Driving mechanism for self-propelled vehicles | 725,675 | Apr. 21 | 2346 | 530 | 103 | 1697 |
| Collins, Patrick J., assignor of one-half to C. G. Boland, Scranton, Pa. Motor-vehicle | 729,737 | June 2 | 394 | 88 | 104 | 1209 |
| Collins, Patrick J., assignor of one-half to C. G. Boland, Scranton, Pa. Motor-vehicle | 731,022 | June 16 | 2736 | 610 | 104 | 1733 |
| Collins, Thomas, San Jose, Cal. Bumper for railway-cars | 737,709 | Sept. 1 | 268 | 57 | 106 | 61 |
| Collins, Thomas, and E. L. Hartmann, Bainbridge, N. Y., assignors to American Separator Company. Centrifugal liquid-separator | 732,520 | June 30 | 5604 | 1242 | 104 | 2354 |
| Collins, Timothy, San Francisco, Cal. Structural metal support | 719,191 | Jan. 27 | 3178 | 708 | 102 | 716 |
| Collins, Ulysses L., assignor to Collins Electric Clock Company, St. Louis, Mo. Electric clock | 733,159 | July 7 | 812 | 196, 197 | 105 | 171 |
| Collins, Ward O. (See Brown and Collins.) | | | | | | |
| Collins, Warren, Collegepoint, N. Y., assignor to Stamford Gas Stove Company, Stamford, Conn. Gas-burner | 742,594 | Oct. 27 | 4256 | 958 | 106 | 2190 |
| Collins, William B., Santa Rosa, Mo. Grinding-mill | 744,492 | Nov. 17 | 3317 | 714 | 107 | 739 |
| Collins, William H., Kansas City, Mo. Desk-lock | 729,549 | June 2 | 52 | 13 | 104 | 1137 |
| Collis, Fred L., Iowa Falls, Iowa. Shelf-supporter | 742,607 | Oct. 20 | 3133 | 699 | 106 | 1945 |
| Collis, John, Des Moines, Iowa, assignor to W. P. Collis, New York, N. Y. Pop safety-valve | 736,820 | Aug. 18 | 3358 | 741 | 105 | 1729 |
| Collis, William P. (See Collis, John, assignor.) | | | | | | |
| Collison, Thomas M., and F. P. Currie, Atlantic City, N. J. System of extinguishing fires | 740,238 | Sept. 29 | 5186 | 1166 | 106 | 1174 |
| Collister, John J. (See Mann and Collister.) | | | | | | |
| Collman, Henry L. (See McCalley and Collman.) | | | | | | |
| Colman, George E., assignor of one-third to C. W. Prann, Branford, Conn. Door-check | 717,813 | Jan. 6 | 559 | 125 | 102 | 121 |
| Colman, William R., Quincy, Ill. Baling-press | 727,907 | May 12 | 2054 | 457 | 104 | 455 |
| Colman, William R., Quincy, Ill. Baling-press | 736,496 | Aug. 18 | 2726 | 597 | 105 | 1599 |
| Colom y Marca, Buenaventura, Barcelona, Spain. Pipe-cutter | 747,942 | Dec. 29 | 4888 | 1107 | 107 | 2253 |
| Colombani, Colomban, Marseilles, France. Inkstand | 728,545 | May 19 | 3254 | 721 | 104 | 728 |
| Colombo, George, North Bergen, N. J. Engine | 727,908 | May 12 | 2056 | 457 | 104 | 455 |
| Colonial Column Company. (See Mertes, August, assignor.) | | | | | | |
| Colorado Iron Works Company *et al.* (See Gross, Frederick D., assignor.) | | | | | | |
| Colson, William L., assignor to F. M. Wever, Savannah, Ga. Acid or other liquid distributing system | 728,084 | May 12 | 2375 | 528 | 104 | 523 |
| Colt, Alva M., Batavia, N. Y. Quick-acting clamp | 735,947 | Aug. 11 | 1739 | 372 | 105 | 1371 |
| Colt, Mitchell D., assignor of one-half to W. C. Wescott, Minneapolis, Minn. Folding vise | 748,048 | Dec. 29 | 5104 | 1153 | 107 | 2300 |
| Colt, Samuel G., assignor to Stanley Electric Manufacturing Company, Pittsfield, Mass. Electric stop mechanism | 737,210 | Aug. 25 | 4057 | 900 | 105 | 1896 |
| Colthar, William U., Springfield, assignor to W. J. Johnson, Yellowsprings, Ohio. Spring-motor | 744,295 | Nov. 17 | 2969 | 635, 636 | 107 | 663 |
| Colton, Arthur D., assignor to Illinois Malleable Iron Company, Chicago, Ill. Smoke-jack | 724,161 | Mar. 31 | 4710 | 1057 | 103 | 1044 |
| Colts Patent Fire Arms Manufacturing Company. (See Ehbets, Carl J., assignor.) | | | | | | |
| Colt's Patent Fire Arms Manufacturing Company. (See Tansley, George H., assignor.) | | | | | | |
| Columbia Machine Works and Malleable Iron Company. (See Grady, James, assignor.) | | | | | | |
| Columbian Hardware Co. (See Valentine, Harry J., assignor.) | | | | | | |
| Columbus, Bernhard, New York, N. Y. Gas-burner | 733,160 | July 7 | 815 | 197 | 105 | 171 |
| Columbus Chain Company. (See Carroll, Daniel, assignor.) | | | | | | |
| Columbus Electrizitäts-Gesellschaft mit Beschränkter Haftung. (See Bötz, Heinrich W., assignor.) | | | | | | |
| Columbus Machine Co. (See Frayer, Lee A., assignor.) | | | | | | |
| Columbus Pharmacal Company. (See Lyons, Charles, assignor.) | | | | | | |
| Columbus Polishing and Plating Company. (See Jennings, Jacob C., assignor.) | | | | | | |
| Columbus Steel Rolling Shutter Company. (See Ebner, Peter, assignor.) | | | | | | |
| Colvin, Emery, Scranton, Pa. Separator | 717,971 | Jan. 6 | 845 | 191 | 102 | 181 |
| Colvin, Francis M. (See Kelley, Henry, assignor.) | | | | | | |
| Colvin, Frank M. (See Kelley, Henry, assignor.) | | | | | | |
| Colvin, Henry F., Philadelphia, Pa. Mechanism illustrating steam-engine valve-motions of different constructions | 718,193 | Jan. 13 | 1251 | 274 | 102 | 285 |
| Colwell, Frank A., Oakesdale, Wash. Safety-nipple | 733,372 | July 14 | 1214 | 288 | 105 | 273 |
| Colwell, Frank A., Oakesdale, Wash. Band-cutter and feeder for threshing-machines | 739,833 | Sept. 29 | 4410 | 990 | 106 | 1012 |
| Comber, Edwin F., Selkirk, Canada. Boiler-furnace | 746,031 | Dec. 8 | 1328 | 298 | 107 | 1399 |
| Combes, Charles, Paris, France. Making carbon tetrachlorid | 735,948 | Aug. 11 | 1740 | 372 | 105 | 1371 |
| Combrun, Leon, Clichy-on-the-Seine, France. Supporting-shoe for vehicles with air-tires | 718,244 | Jan. 13 | 1341 | 297 | 102 | 303 |
| Combs, George W., Leavenworth, Kans. Gyrating machine | 720,114 | Feb. 10 | 1305 | 298 | 102 | 1117 |
| Combs, Hiram S., Sharon, Pa., assignor to W. Chase, Evanston, Ill. Wire-netting machine | 743,248 | Nov. 3 | 828 | 180, 181, 182 | 107 | 173 |
| Comee, George W., Waseca, Minn. Coupling for iron beds | 719,192 | Jan. 27 | 3179 | 708 | 102 | 716 |
| Comegys, Courtney B., Ashgrove, Mo. Sifter | 733,161 | July 7 | 816 | 198 | 105 | 172 |
| Comer, Elmer. (See Calkins, Walter J., assignor.) | | | | | | |
| Comer, Joseph M., Spokane, Wash. Automatic switch | 744,168 | Nov. 17 | 2713 | 579 | 107 | 606 |
| Comfort, Edward W., assignor to National Regulator Company, Chicago, Ill. Thermostat | 730,816 | June 9 | 2327 | 517 | 104 | 1627 |
| Comins, John R., assignor of two-thirds to C. K. Underwood and B. L. Gay, Syracuse, N. Y. Seamless gold crown for teeth | 726,644 | Apr. 28 | 4147 | 935 | 103 | 2081 |
| Commercial Cash Register Company. (See Browning, George, assignor.) | | | | | | |
| Commercial Manufacturing Company. (See Riecke, John C. A., assignor.) | | | | | | |
| Common, Andrew A., Ealing, England. Galilean telescope | 729,848 | June 2 | 604 | 132 | 104 | 1251 |
| Commons, Elmer E. (See Jackson, Frederick F., assignor.) | | | | | | |
| Compagnie des Récipients et Lampes Inexplosibles. (See Posno, Victor, assignor.) | | | | | | |
| Compliment, Frank J., and J. O. Robinson, assignors of one-third to W. C. McKee, Ironton, Ohio. Axle-gage | 725,411 | Apr. 14 | 1831 | 410 | 103 | 1572 |

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| Composite Stone and Brick Company. (See Bell and Leet, assignors.) | | | | | | |
| Composite Stone & Brick Company. (See Leet and Rosell, assignors.) | | | | | | |
| Composite Stone and Brick Company. (See Rosell, Claude A. O., assignor.) | | | | | | |
| Compound Magnet Brake Company. (See Wetzler and Green, assignors.) | | | | | | |
| Comptoir Industriel de Berne, A. Schopfer, *et al.* (See Schirmer, Friederich W., assignor.) | | | | | | |
| Compton, Charles H., Chicago, Ill. Lamp-burner | 733,012 | July 7 | 552 | 135 | 105 | 118 |
| Compton, Lun W., Alexandria, Tenn. Harrow | 727,092 | May 5 | 522 | 112 | 104 | 114 |
| Compton, Melvin D., New York, N. Y. Coin-controlled adjustable current-transmitter | 739,291 | Sept. 22 | 3407 | 758, 759 | 106 | 777 |
| Compton, Melvin D., New York, N. Y. Apparatus for feeding fluid fuel | 739,292 | Sept. 22 | 3411 | 760 | 106 | 777 |
| Computing Scale Company. (See Hotsapillar, Jacob, assignor.) | | | | | | |
| Comstock, Alphonso S., Evanston, Ill. Pressure-controlling valve | 720,000 | Feb. 10 | 1066 | 247 | 102 | 1065 |
| Comstock, Asa M., assignor to Independent Manufacturing Company, Chicago, Ill. Hand-stamp | 743,455 | Nov. 10 | 1319 | 271 | 107 | 296 |
| Comstock, Clark S., Bloomfield, N. J. Buckle | 735,343 | Aug. 4 | 580 | 119 | 105 | 1105 |
| Comstock, Francis M., Topeka, Kans. Rotary engine | 744,050 | Nov. 17 | 2482 | 533 | 107 | 559 |
| Comstock, Frank E. (See Bush, George F., assignor.) | | | | | | |
| Comstock, Frederick H. (See Putnam, Israel C., assignor.) | | | | | | |
| Conant, Albert F., Nahant, Mass. Closet or case | 729,279 | May 26 | 4590 | 1014 | 104 | 1022 |
| Conant, Frederick W., Greenfield, Mass. Screw-plate and die | 719,089 | Jan. 27 | 2990 | 667 | 102 | 678 |
| Conant, Herbert E., Newtonville, Mass. Towel-rack | 731,343 | June 16 | 3325 | 741 | 104 | 1850 |
| Conant, Julius D., Willimantic, Conn. Doubling and rewinding machinery | 719,090 | Jan. 27 | 2991 | 667 | 102 | 678 |
| Conant, Roger W., Cambridge, Mass. Apparatus for measuring electrical resistances | 723,369 | Mar. 24 | 3206 | 719 | 103 | 717 |
| Conant, Samuel M. (See Swift, John P., assignor.) | | | | | | |
| Conard, Waldo, Willcockson, Ark. Check-row planter | 742,596 | Oct. 27 | 4264 | 960 | 106 | 2192 |
| Conboy, Philip J., assignor of one-half to W. H. Hurm, Hamilton, Ohio. Brake apparatus | 747,378 | Dec. 22 | 3818 | 859 | 107 | 1990 |
| Concentrated Beer Company. (See Hobson, Herbert A., assignor.) | | | | | | |
| Concern Schiedmayer Pianofortefabrik. (See Hesse, Carl, assignor.) | | | | | | |
| Conde, Joseph, assignor of three-fifths to C. B. Halsall and H. C. Marshall, Philadelphia, Pa. Machine for glazing tubes, &c | 727,294 | May 5 | 874 | 189, 190 | 104 | 187 |
| Condict, George H., New York, N. Y. Vehicle running-gear | 731,755 | June 23 | 4118 | 918 | 104 | 2030 |
| Condict, George H., New York, N. Y., assignor, by mesne assignments, to Electric Vehicle Company, Jersey City, N. J., and New York, N. Y. Battery-jar | 729,550 | June 2 | 53 | 13 | 104 | 1137 |
| Condict, Nathan W., Jersey City, N. J. Still for absorption refrigerating apparatus. (Reissue) | 12,089 | Mar. 3 | 1001 | 221 | 103 | 211 |
| Condict, Nathan W., Jersey City, N. J. Generator for refrigerating apparatus | 747,943 | Dec. 29 | 4890 | 1107 | 107 | 2253 |
| Condict, Nathan W., Jersey City, N. J. Ammonia-still | 747,944 | Dec. 29 | 4891 | 1107 | 107 | 2253 |
| Condit, Frank L., assignor of one-half to P. N. Condit, Chicago, Ill. Photographic developing apparatus | 722,813 | Mar. 17 | 2184 | 487 | 103 | 496 |
| Condit, Howard C., Madison, N. J. Pliers | 732,715 | July 7 | 38 | 9 | 105 | 11 |
| Condit, Park N. (See Condit, Frank L., assignor.) | | | | | | |
| Condon, Daniel E., San Francisco, Cal. Spiral elevator | 719,751 | Feb. 3 | 620 | 139, 140, 141 | 102 | 952 |
| Condon, John, Philadelphia, Pa., assignor to Sunlight by Night Acetylene Gas Company, Charleston, W. Va., and Philadelphia, Pa. Acetylene-gas generator | 723,138 | Mar. 17 | 2746 | 616, 617 | 103 | 612 |
| Condon, Samuel E., Brooklyn, N. Y. Device for shaping and setting tubes | 740,239 | Sept. 29 | 5188 | 1166 | 106 | 1174 |
| Condon, Thomas F., East Dorset, Vt. Clothes stick or lifter | 736,497 | Aug. 18 | 2730 | 598 | 105 | 1600 |
| Condon, William, and A. Barrett, Kansas City, Mo. Anti-induction method for telephone systems | 737,710 | Sept. 1 | 269 | 57 | 106 | 61 |
| Condon, William, and A. Barrett, Kansas City, Mo. Anti-induction telephone system | 737,711 | Sept. 1 | 273 | 58 | 106 | 61 |
| Condory, Golla, New York, N. Y. Apparatus for delivering mail | 718,698 | Jan. 20 | 2245 | 492, 493 | 102 | 509 |
| Condren, Hugh, Vancouver, Canada. Body-indicating buoy | 736,692 | Aug. 18 | 3111 | 686 | 105 | 1678 |
| Condula, Max, Budapest, Austria-Hungary. Crushing-roll | 744,296 | Nov. 17 | 2972 | 636 | 107 | 664 |
| Cone, Caesar. (See Campbell, Robert G., assignor.) | | | | | | |
| Coney, Andrew J. (See Williams and Coney.) | | | | | | |
| Confectioners and Bakers Supply Co. (See Dickson, George F., assignor.) | | | | | | |
| Conger, George R. (See Foreman and Conger.) | | | | | | |
| Conger, John B., assignor, by mesne assignments, to R. A. Schwab, Buffalo, N. Y. Non-refillable bottle | 724,992 | Apr. 7 | 1061 | 242 | 103 | 1395 |
| Conger, John B., assignor, by mesne assignment, to R. A. Schwab, Buffalo, N. Y. Duplex furnace | 724,993 | Apr. 7 | 1063 | 243, 244 | 103 | 1395 |
| Conill, Fernan O., Roxbury, Mass. Electric heater for liquids | 740,240 | Sept. 29 | 5193 | 1166 | 106 | 1175 |
| Conkle, Bernard F., and J. T. Hall, Junction City, Ohio. Weeding apparatus | 730,095 | June 2 | 1036 | 232 | 104 | 1338 |
| Conkle, Samuel, Hookstown, assignor of one-half to J. W. Ramsey, Green Township, Pa. Railway-rail joint | 737,584 | Sept. 1 | 45 | 10 | 106 | 12 |
| Conklin, Edward D., assignor to Whitehead & Hoag Company, Newark, N. J. Snapping-button | 724,545 | Apr. 7 | 232 | 56 | 103 | 1219 |
| Conklin, John R. (See Smith, James J., assignor.) | | | | | | |
| Conklin Pen Company. (See Conklin, Roy, assignor.) | | | | | | |
| Conklin, Roy, assignor to Conklin Pen Company, Toledo, Ohio. Self-filling fountain-pen | 745,481 | Dec. 1 | 325 | 76 | 107 | 1168 |
| Conkling, De Witt C., Cincinnati, assignor of two-thirds to W. L. Bean, Kennedy Heights, Ohio. Automatic cut-out device for electrical transformers | 732,174 | June 30 | 4932 | 1096 | 104 | 2215 |
| Conkling, George T., and C. C. Mitchell, Plainfield, N. J. Device for removing impurities from boiler feed-water | 724,815 | Apr. 7 | 748 | 174 | 103 | 1330 |
| Conkling, Ira L., Philadelphia, Pa. Apparatus for trimming blocks of clay | 717,544 | Jan. 6 | 37 | 11 | 102 | 11 |
| Conkling, Ira L., Philadelphia, Pa. Apparatus for forming cornices or ornamental moldings from plaster-of-paris | 717,545 | Jan. 6 | 41 | 11 | 102 | 11 |
| Conkling, Ira L., Philadelphia, Pa. Apparatus for grooving or scoring blocks of clay | 717,546 | Jan. 6 | 46 | 12 | 102 | 12 |
| Conkling, John H., and F. S. Chase, assignors to Chase Rolling Mill Co., Waterbury, Conn. Tumbling-barrel | 717,814 | Jan. 6 | 560 | 125 | 102 | 121 |
| Conlee, Carlton N., Oshkosh, Wis. Oscillating body-support for vehicles | 740,809 | Oct. 6 | 799 | 180 | 106 | 1415 |
| Conley, Frederick V. and K. E., Springvalley, Minn. Camera-shutter | 732,175 | June 30 | 4934 | 1097 | 104 | 2216 |
| Conley, Frederick V. and K. E., Springvalley, Minn. Camera-shutter | 739,834 | Sept. 29 | 4412 | 990 | 106 | 1012 |
| Conley, Kerry E. (See Conley, Frederick V. and K. E.) | | | | | | |
| Conley, Michael, Chicago, Ill. Steam or hot-water trap | 719,568 | Feb. 3 | 281 | 65 | 102 | 882 |
| Conley, Michael R., Brooklyn, assignor to Electric Furnace Company, New York, N. Y. Making steel direct from iron ore | 730,746 | June 9 | 2211 | 492 | 104 | 1603 |
| Conley, Thomas, Pittsburg, Pa. Gage for punching-machines | 735,469 | Aug. 4 | 838 | 178 | 105 | 1158 |
| Conley, William G., *et al.* (See Hulings, James H., assignor.) | | | | | | |
| Conlin, Frederick. (See Franklin, William S., assignor.) | | | | | | |
| Conlin, John J., San Francisco, Cal. Dredging and excavating machine | 719,567 | Feb. 3 | 278 | 64, 65 | 102 | 881 |

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| Conly, Art. B., *et al.* (See Huntley, Stephen A., assignor.) | | | | | | |
| Conly, J. Griffin, *et al.* (See Huntley, Stephen A., assignor.) | | | | | | |
| Conn, Byron O. (See Root and Conn.) | | | | | | |
| Conn, Charles A., Pittsburg, Pa. Oil-filter | 718,428 | Jan. 13 | 1676 | 370 | 102 | 374 |
| Conn, Charles G., Elkhart, Ind. Cornet | 745,788 | Dec. 1 | 847 | 192 | 107 | 1279 |
| Conn, Charles G., Elkhart, Ind. Cornet-mouthpiece | 747,591 | Dec. 22 | 4195 | 943 | 107 | 2076 |
| Conn, Herbert J. (See Currie and Conn.) | | | | | | |
| Conn, Joshua, assignor to R. W. Wright, Dunkirk, N. Y. Tubular metal crutch | 724,382 | Mar. 31 | 5167 | 1158 | 103 | 1137 |
| Connable, Ralph M., Baltimore, Md. Tire-fastener | 727,295 | May 5 | 877 | 190 | 104 | 188 |
| Connable, Ralph M., Baltimore, Md. Vehicle-tire and fastening therefor | 727,296 | May 5 | 878 | 190 | 104 | 188 |
| Connable, Ralph M., Baltimore, Md. Vehicle-tire | 744,493 | Nov. 17 | 3319 | 715 | 107 | 739 |
| Conne, Philip A. (See Taussig and Conne.) | | | | | | |
| Connecticut Web Company. (See Cleary, Edward, assignor.) | | | | | | |
| Connell, Marguerite I., New York, N. Y. Hair-crimper | 731,861 | June 23 | 4299 | 959 | 104 | 2070 |
| Connelly, James A., Hamilton, Ohio. Swivel pipe-joint | 745,482 | Dec. 1 | 326 | 76 | 107 | 1168 |
| Connelly, Robert I., Lagrange, and I. W. Read, Monroe City, Mo. Adjustable stovepipe | 747,379 | Dec. 22 | 3820 | 859 | 107 | 1991 |
| Conner, Abner F., assignor of one-half to G. A. Miller, Indianapolis, Ind. Hinged ladder | 737,080 | Aug. 25 | 3824 | 850 | 105 | 1848 |
| Conner, George F. (See Watson, Leslie J., assignor.) | | | | | | |
| Conner, George F., Port Huron, Mich. Feed-water heater | 718,819 | Jan. 20 | 2464 | 547 | 102 | 553 |
| Conner, George F., Port Huron, Mich. Steering-gear for traction-engines | 721,020 | Feb. 17 | 2982 | 686 | 102 | 1481 |
| Conner, George F., Port Huron, Mich. Elevator for grain-separators | 722,945 | Mar. 17 | 2409 | 538 | 103 | 541 |
| Conner, George F., Port Huron, Mich. Deflector for stackers | 727,093 | May 5 | 524 | 113 | 104 | 114 |
| Conner, George F., Port Huron, Mich. Pump | 741,627 | Oct. 20 | 2381 | 533 | 106 | 1789 |
| Conner, George F., Port Huron, Mich. Conveyer-chute | 741,770 | Oct. 20 | 2662 | 595 | 106 | 1847 |
| Conner, George F., Port Huron, Mich. Pulley | 741,889 | Oct. 20 | 2873 | 641 | 106 | 1893 |
| Conner, John L., Washington, D. C. Washboard | 748,164 | Dec. 29 | 5326 | 1209 | 107 | 2348 |
| Conner, Lendell A., Jr., Pittsburg, Pa. Jack | 742,595 | Oct. 27 | 4259 | {959 / 960 | {106 | 2191 |
| Conner, Russel L., Mount Gilead, Ohio. Rail-joint | 733,814 | July 14 | 1996 | 470 | 105 | 438 |
| Conner, William J. (See Price and Conner.) | | | | | | |
| Conners, Ducker and Fowler. (See Allan, John R., assignor.) | | | | | | |
| Connery, John, Corning, N. Y. Musical instrument | 730,611 | June 9 | 1986 | 441 | 104 | 1555 |
| Connery, John I., *et al.* (See Sargent, Charles E., assignor.) | | | | | | |
| Connett, Albert N., London, England, assignor to General Electric Company. Electric railway | 729,136 | May 26 | 4329 | 956 | 104 | 967 |
| Connett, Albert N., London, England, assignor to General Electric Company. Plow-raising means for conduit-railways | 729,137 | May 26 | 4332 | 957 | 104 | 967 |
| Connett, John W., Pawnee Station, Kans. Churn | 727,094 | May 5 | 525 | 113 | 104 | 114 |
| Connolly, Hugh. (See Corley, John W., assignor.) | | | | | | |
| Connolly, James B., New York, N. Y. Clamp for suspending books or the like | 733,945 | July 21 | 2262 | 532 | 105 | 511 |
| Connolly, Joseph B. (See Snyder and Connolly.) | | | | | | |
| Connor, Albert W., assignor to Simmons Hardware Company, St. Louis, Mo. Combined card and book for holding fish-hooks | 726,509 | Apr. 28 | 3895 | 882 | 103 | 2031 |
| Connor, Frank C., Waco, Tex. Vending-machine | 717,815 | Jan. 6 | 561 | {125 / 126 | {102 | 121 |
| Connor, George J., Boston, Mass. Door-check | 726,645 | Apr. 28 | 4148 | 935 | 103 | 2081 |
| Connor, Mark, New Brighton, Pa. Automatic operating flush-tank for closets | 743,618 | Nov. 10 | 1656 | 347 | 107 | 369 |
| Connor, Miles A., Lockport, N. Y. Liquid-cooler | 736,221 | Aug. 11 | 2222 | 478 | 105 | 1474 |
| Connors, Charles, *et al.* (See Neubauer, Carl E., assignor.) | | | | | | |
| Connors, Jerome J., Marlboro, Mass. Soft-pie filler | 722,210 | Mar. 10 | 1036 | 229 | 103 | 236 |
| Connors, Maurice S., *et al.* (See Laughridge, William H., assignor.) | | | | | | |
| Connors, Patrick C., Montpelier, Ind. Means for operating wells | 743,249 | Nov. 3 | 835 | 183 | 107 | 174 |
| Conover, Charles F., New York, N. Y. Cooler | 730,612 | June 9 | 1987 | 442 | 104 | 1555 |
| Conrad, Frank P., Buffalo, N. Y. Vehicle-body | 742,167 | Oct. 27 | 3469 | {775 / 776 | {106 | 2029 |
| Conrad, Hugh V., assignor to Rand Drill Company, New York, N. Y. Valve operating and controlling mechanism | 746,032 | Dec. 8 | 1330 | 298 | 107 | 1400 |
| Conrad, Miller E., Atlantic, Iowa. Voltaic cell | 719,752 | Feb. 3 | 623 | ------ | 102 | 953 |
| Conrader, Rudolph Erie, Pa. Governor | 722,564 | Mar. 10 | 1694 | 378 | 103 | 379 |
| Conradson, Conrad M., Warren, Pa. Variable-speed counter-shaft | 745,789 | Dec. 1 | 849 | {192 / 193 | {107 | 1279 |
| Conradt, Christian J., Baltimore, Md. Window-awning | 746,294 | Dec. 8 | 1799 | 408 | 107 | 1502 |
| Conran, Charles, Ogden, Utah. Tie dumping and turning mechanism for railway building | 721,783 | Mar. 3 | 222 | 49 | 103 | 49 |
| Conrey, Jacob A., *et al.* (See Forster, Frank L., assignor.) | | | | | | |
| Conrey, Mary, *et al.* (See Forster, Frank L., assignor.) | | | | | | |
| Conroy, Frank M., A. Burson, and F. W. Fitch, Fonda, Iowa. Combined side-delivery hay and shocked-grain loader | 730,879 | June 16 | 2449 | {542 / 543 | {104 | 1673 |
| Conroy, James, Salt Lake City, Utah. Fire-box sheet | 736,693 | Aug. 18 | 3112 | 686 | 105 | 1678 |
| Conroy, John M., Allegheny, Pa. Ornamenting glass | 723,139 | Mar. 17 | 2749 | {617 / 618 | {103 | 613 |
| Conroy, John M., Allegheny, Pa. Machine for ornamenting glass | 731,667 | June 23 | 3957 | {880 / 881 | {104 | 1997 |
| Conroy, John M., Allegheny, Pa. Support for mirrors | 733,162 | July 7 | 817 | 198 | 105 | 172 |
| Conroy, John M., Allegheny, Pa. Machine for ornamenting glass | 735,949 | Aug. 11 | 1742 | {372 / 373 | {105 | 1371 |
| Conroy, Michael J., Wellsburg, W. Va. Bottle-stopper | 722,814 | Mar. 17 | 2189 | 488 | 103 | 497 |
| Consolidated Car Heating Company. (See Kelley and McElroy, assignors.) | | | | | | |
| Consolidated Car Heating Company. (See McElroy, James F., assignor.) | | | | | | |
| Consolidated Engine-Stop Company. (See Cary, James H., assignor.) | | | | | | |
| Consolidated Engine-Stop Company. (See Millea and Carroll, assignors.) | | | | | | |
| Consolidated Fastener Company. (See Devine, William P., assignor.) | | | | | | |
| Consolidated Fastener Company. (See MacKenzie, Irvine K., assignor.) | | | | | | |
| Consolidated Fastener Company. (See Upton, Samuel, assignor.) | | | | | | |
| Consolidated Railway Electric Lighting and Equipment Company. (See Kennedy, Patrick, assignor.) | | | | | | |
| Consolidated Safety Pin Company. (See Jenkins, Joel, assignor.) | | | | | | |
| Consolidated Wireless Telegraph and Telephone Company. (See Ehret, Cornelius D., assignor.) | | | | | | |
| Consolidated Wireless Telegraph and Telephone Company *et al.* (See Shoemaker, Harry, assignor.) | | | | | | |
| Consolidated Wireless Telegraph and Telephone Company *et al.* (See Shoemaker and Pickard, assignors.) | | | | | | |
| Constine, Conrad, Kingstree, S. C. Coffee-roaster | 742,168 | Oct. 27 | 3472 | 776 | 106 | 2029 |
| Consumers Company. (See Cole, James T., assignor.) | | | | | | |
| Contant, Claude A., Fort Wayne, Ind. Forming gib-seats on spring-leaves | 725,220 | Apr. 14 | 1497 | 341 | 103 | 1502 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Continental Rubber Company. (See Lawrence, William A., assignor.) | | | | | | |
| Continuous Glass Press Company. (See Shuman, Frank and A., assignors.) | | | | | | |
| Continuous Metal Refining Company. (See Talbot, Benjamin, assignor.) | | | | | | |
| Continuous Rail Joint Co. of America. (See Braine, Bancroft G., assignor.) | | | | | | |
| Continuous Rail Joint Company. (See Charlton, Richard B., assignor.) | | | | | | |
| Continuous Rail Joint Company of America. (See Clark, William E., assignor.) | | | | | | |
| Continuous Rail Joint Company of America. (See McGough, Samuel P., assignor.) | | | | | | |
| Controller Company of America. (See Goeb, Rudolph W., assignor.) | | | | | | |
| Controller Company of America. (See Head, James E., assignor.) | | | | | | |
| Controller Company of America. (See Lewis, Edward G., assignor.) | | | | | | |
| Controller Company of America. (See Moore, Gales P., assignor.) | | | | | | |
| Controllor Company of America. (See Scott, William H., assignor.) | | | | | | |
| Convers, George G., and A. B. de Saulles, South Bethlehem, Pa. Apparatus for producing zinc-dust | 727,297 | May 5 | 879 | 190, 191 | 104 | 188 |
| Convers, George G., and A. B. de Saulles, South Bethlehem, Pa. Apparatus for producing zinc-dust | 727,298 | May 5 | 880 | 191 | 104 | 188 |
| Converse, Edmund. (See Anderson, Anders G., assignor.) | | | | | | |
| Converse, Emile P., Massillon, and J. J. Leiter, Canton, Ohio; said Leiter assignor to said Converse. Tool for making marbles | 733,013 | July 7 | 553 | 135 | 105 | 119 |
| Converse, Francis B., Jr., assignor to Converse Manufacturing Company, Cleveland, Ohio. Justifying mechanism | 738,741 | Sept. 8 | 2371 | 521, 522, 523, 524, 525 | 106 | 523 |
| Converse, Francis B., Jr., Louisville, Ky., assignor to Converse Manufacturing Company, Cleveland, Ohio. Justifying mechanism | 746,295 | Dec. 8 | 1800 | 409, 410, 411 | 107 | 1502 |
| Converse, Frederic S., *et al.*, trustees. (See Steiger, Andrew W., assignor.) | | | | | | |
| Converse, Frederic S., Lyons, N. Y. Coal or wood bag | 733,542 | July 14 | 1509 | 360 | 105 | 336 |
| Converse Manufacturing Company. (See Converse, Francis B., Jr., assignor.) | | | | | | |
| Converse, Vernon G., Pittsburg, Pa. Insulator | 735,212 | Aug. 4 | 347 | 67 | 105 | 1055 |
| Conway, Henry D., Jackson, Mich. Construction of buildings | 718,429 | Jan. 13 | 1680 | 371 | 102 | 374 |
| Conway, Henry D., Jackson, Mich. Hopper | 741,112 | Oct. 13 | 1341 | 308 | 106 | 1552 |
| Conway, Joseph P., Los Angeles, Cal. Telegraphic transmitter | 738,525 | Sept. 8 | 1982 | 431 | 106 | 441 |
| Conway, Michael R., assignor to Kisinger-Ison Company, Cincinnati, Ohio. Friction-clutch | 726,646 | Apr. 28 | 4149 | 936 | 103 | 2081 |
| Conway, Thomas J., Blanchester, Ohio. Mail-crane | 727,909 | May 12 | 2057 | 458 | 104 | 456 |
| Conway, Thomas W. (See Anderson, Carl F., assignor.) | | | | | | |
| Conway, William J., Chicago, Ill. Foot-pad | 723,442 | Mar. 24 | 3331 | 746 | 103 | 744 |
| Conwell, James S., Anderson, and M. E. Chamness, Hagerstown, assignors to Wilke Manufacturing Company, Anderson, Ind. Water-trap | 725,318 | Apr. 14 | 1664 | 375 | 103 | 1537 |
| Cooey, Edward W., Hydepark, Mass. Rotary engine | 723,242 | Mar. 24 | 2958 | 664 | 103 | 670 |
| Cook, Adolphus H. and C. R., Almira, and W. H. Hood, Hagerman, Canada. Gate or end post and anchor therefor | 743,250 | Nov. 3 | 837 | 183 | 107 | 174 |
| Cook, Arthur J., Westfield, Mass. Whip-load | 737,352 | Aug 25 | 4331 | 965 | 105 | 1955 |
| Cook, Carl M., Conneaut, Ohio. Penholder | 744,494 | Nov 17 | 3321 | 715 | 107 | 739 |
| Cook, Charles, New Britain, Conn. Antislipping device for shoes | 741,011 | Oct. 13 | 1160 | 262 | 106 | 1514 |
| Cook, Charles H., Gardiner, Me. Welt-guide for shoe-sewing machines | 738,886 | Sept. 15 | 2684 | 592 | 106 | 609 |
| Cook, Charles J., St. Paul, Minn. Extension-table | 723,140 | Mar. 17 | 2751 | 618, 619 | 103 | 613 |
| Cook, Charles J., Brooklyn, N. Y. Reversing mechanism | 724,263 | Mar. 31 | 4930 | 1103, 1104 | 103 | 1087 |
| Cook, Charles L (See Dinneen, Daniel W., assignor.) | | | | | | |
| Cook, Charles O., assignor to C. A. Koenig, Auburn, N. Y. Fish trap-hook | 739,989 | Sept. 29 | 4729 | 1064 | 106 | 1077 |
| Cook, Charles R., Ethanac, Cal. Rotary concrete-flume machine | 723,243 | Mar 24 | 2961 | 665 | 103 | 671 |
| Cook, Charles W., Topeka, Kans. Rack for holding railway-tariffs | 747,945 | Dec. 29 | 4892 | 1108 | 107 | 2253 |
| Cook, Chester R. (See Cook and Hood.) | | | | | | |
| Cook, Clarence N., Mungen, Ohio. Starting mechanism for explosive-engines | 744,857 | Nov. 24 | 3975 | 857 | 107 | 895 |
| Cook, Clayton E., Kansas City, Mo. Valve and valve-operating mechanism | 723,832 | Mar. 31 | 4038 | 912 | 103 | 906 |
| Cook, Daniel, Voorhies, Ill. Straw-stack former | 731,862 | June 23 | 4300 | 959 | 104 | 2070 |
| Cook, Edmond R., Sacramento, Cal. Fluid-pressure regulator | 744,297 | Nov. 17 | 2973 | 636 | 107 | 664 |
| Cook, Edmond R., Sacramento, Cal., assignor to C. A. Herriman, Chicago, Ill. Quick-acting vise | 720,895 | Feb. 17 | 2735 | 630 | 102 | 1428 |
| Cook, Edmond R., Sacramento, Cal., assignor of one-half to G. F. Heusner, Portland, Oreg. Gas-regulator | 744,679 | Nov. 17 | 3616 | 780 | 107 | 801 |
| Cook, Edward J., Sterling, Ill. Curtain-draping device | 742,008 | Oct. 20 | 3134 | 699 | 106 | 1945 |
| Cook, Eugene, Kalamazoo, Mich. Cattle-guard | 723,833 | Mar. 31 | 4039 | 912 | 103 | 907 |
| Cook, Francis L., Springfield, Mass., assignor, by mesne assignments, to P. S. and W. Kinsey and J. H. Burt, New York, N. Y. Spinning-top | 724,664 | Apr. 7 | 456 | 111 | 103 | 1267 |
| Cook, Frank B., Chicago, Ill. Polarized electric bell | 740,744 | Oct. 6 | 665 | 151 | 106 | 1389 |
| Cook, Frank E., Wilmerding, and W. C. Ferguson, assignors to Westinghouse Air Brake Company, Pittsburg, Pa. Movable furnace | 735,712 | Aug. 11 | 1302 | 280 | 105 | 1275 |
| Cook, Frederick J., St. Joseph, Mo. Combination check and pocket book | 730,096 | June 2 | 1039 | 233 | 104 | 1339 |
| Cook, Frederick W., Seattle, Wash. Saw-shifter for gang-edgers | 738,296 | Sept. 8 | 1504 | 325, 326 | 106 | 339 |
| Cook, George W. (See Foster and Cook.) | | | | | | |
| Cook, Harry, McKeesport, Pa. Automatic feed-water regulator | 723,653 | Mar. 24 | 3717 | 833 | 103 | 822 |
| Cook, Henry J., Ottumwa, Iowa. Fishing-float | 728,674 | May 19 | 3506 | 780 | 104 | 784 |
| Cook, Howard A., Southfield, Mass. Racer | 724,546 | Apr. 7 | 233 | 56 | 103 | 1219 |
| Cook, Irving A., Lancaster, Ohio. Sewing-machine horn | 740,810 | Oct. 6 | 800 | 180 | 106 | 1415 |
| Cook, John, Pittsburg, Pa. Distributer for blast-furnaces | 736,074 | Aug. 11 | 1986 | 422 | 105 | 1424 |
| Cook, John A. (See Hiller, Louis C., assignor.) | | | | | | |
| Cook, John F. (See Alger and Cook.) | | | | | | |
| Cook, John F., Oxnard, Cal. Combination bed and table | 739,990 | Sept. 29 | 4731 | 1064 | 106 | 1077 |
| Cook, John H., Brooklyn, N. Y., assignor to H. B. Newhall, Plainfield, N. J. Slaughtering apparatus | 727,591 | May 12 | 1435 | 322 | 104 | 327 |
| Cook, Junius F., Johannesburg, Transvaal, South Africa. Apparatus for hoisting or lowering material | 720,329 | Feb. 10 | 1699 | 385, 386 | 102 | 1198 |
| Cook, Junius F., Johannesburg, Transvaal, South Africa. Conveyer | 733,373 | July 14 | 1215 | 288 | 105 | 272 |
| Cook, Lewis J., Battlecreek, Mich. Vehicle-wheel | 718,096 | Jan. 13 | 1080 | 239 | 102 | 247 |
| Cook, Otto W., Wilkinsburg, Pa. Try-square for die-makers' use | 718,913 | Jan. 20 | 2647 | 593 | 102 | 592 |
| Cook, Samuel G. B. (See Simpson, William S., assignor.) | | | | | | |
| Cook, Thomas F. (See Hudson, Benjamin F., assignor.) | | | | | | |
| Cook, Willard J., Dexter, Iowa. Locking-washer | 730,880 | June 16 | 2454 | 544 | 104 | 1673 |
| Cook, William A., assignor to Manhattan Brass Company, New York, N. Y. Gas-burner | 745,790 | Dec. 1 | 856 | 193 | 107 | 1282 |
| Cook, William E., Ogdensburg, N. Y. Match-machine | 718,048 | Jan. 6 | 985 | 220 | 102 | 212 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|
| | | | Spec. | Dr'g. | Vol. | Page. |
| Cook, William E., London, England. Rotary pump | 721,863 | Mar. 3 | 385 | 84,85 | 103 | 84 |
| Cook, William E., London, England. Rotary pump | 727,749 | May 12 | 1752 | 393 | 104 | 394 |
| Cook, William H., Newark, Del. Device for opening or closing trolley-car doors | 722,422 | Mar. 10 | 1421 | 313 | 103 | 318 |
| Cooke, Edward P., Baltimore, Md. Vessel-seal | 723,515 | Mar. 24 | 3481 | 778 | 103 | 773 |
| Cooke, Helen H., Toronto, Canada. Hot-meal portable cabinet | 724,547 | Apr. 7 | 235 | 57 | 103 | 1220 |
| Cooke, James E., assignor of one-half to J. K. Booth, Greenville, Pa. Locomotive smoke-box | 738,742 | Sept. 8 | 2393 | 526 | 106 | 528 |
| Cooke, James F., and A. Keller, New York, N. Y. Ruler | 747,380 | Dec. 22 | 3822 | 860 | 107 | 1991 |
| Cooke, John B., Boston, Mass. Antirattler thill-support | 718,820 | Jan. 20 | 2465 | 548 | 102 | 553 |
| Cooke, John J., Cherry Valley, N. Y. Treadle-power | 731,863 | June 23 | 4301 | 960 | 104 | 2071 |
| Cookson, Henry. (See Cookson, Richard S. and H.) | | | | | | |
| Cookson, Richard S. and H., Philadelphia, Pa. Woven pile fabric | 731,433 | June 23 | 3506 | 783 | 104 | 1906 |
| Cool, Louis A. (See Fish, Philmer C., assignor.) | | | | | | |
| Coolbaugh, Frank W. (See O'Connor, John F., assignor.) | | | | | | |
| Coolbaugh, Frank W., Easton, Pa. Fulcrum for brake-beams | 722,565 | Mar. 10 | 1697 | 378 | 103 | 380 |
| Cooley Epicycloidal Engine Company *et al.* (See Cooley, John F., assignor.) | | | | | | |
| Cooley Epicycloidal Engine Development Company. (See Cooley, John F., assignor.) | | | | | | |
| Cooley Epicycloidal Engine Development Company *et al.* (See Cooley, John F., assignor.) | | | | | | |
| Cooley, George T., Joplin, Mo. Ore-discharge for jig-tanks | 720,564 | Feb. 17 | 2145 | 496, 497 | 102 | 1307 |
| Cooley, Harry W., Lonerock, assignor of one-half to G. A. Berry, Glen, Oreg. Pawl-and-ratchet device | 734,822 | July 28 | 3962 | 925, 926 | 105 | 882 |
| Cooley, John F., Boston, Mass. Fluid-bearing | 741,628 | Oct. 20 | 2382 | 534 | 106 | 1789 |
| Cooley, John F., Boston, Mass., assignor to Cooley Epicycloidal Engine Development Company, Jersey City, N. J., and Boston, Mass. Rotary fluid-motor | 724,665 | Apr. 7 | 458 | 111 | 103 | 1267 |
| Cooley, John F., assignor, by mesne assignments, to Cooley Epicycloidal Engine Development Company, Boston, Mass. Rotary fluid-engine | 724,994 | Apr. 7 | 1066 | 244 | 103 | 1396 |
| Cooley, John F., Boston, Mass., assignor to Cooley Epicycloidal Engine Development Company, Jersey City, N. J., and Boston, Mass. Mechanical movement | 731,283 | June 16 | 3224 | 717, 718 | 104 | 1830 |
| Cooley, John F., Boston, Mass., assignor to Cooley Epicycloidal Engine Development Company, Jersey City, N. J., and Boston, Mass., and Cooley Epicycloidal Engine Company. Rotary fluid-engine | 725,615 | Apr. 14 | 2212 | 499, 500 | 103 | 1655 |
| Cooley, John F., assignor to Cooley Epicycloidal Engine Development Company, Jersey City, N. J., and Boston, Mass., and Cooley Epicycloidal Engine Company. Rotary fluid-engine | 748,348 | Dec. 29 | 5633 | 1284 | 107 | 2414 |
| Cooley, John F., assignor to C. S. Farquhar and A. Eastman, Boston, Mass. Electrical method of dispersing fluids | 745,276 | Nov. 24 | 4790 | 1046 | 107 | 1063 |
| Coomber, James, assignor to H. Reisinger, New York, N. Y., and F. Gerlach, trustee, Chicago, Ill. Corking-machine | 743,251 | Nov. 3 | 838 | 183, 184 | 107 | 175 |
| Coombs, Charles H., Allegheny, assignor, by mesne assignments, to Williamsport Mirror & Glass Company, Williamsport, Pa. Wire-bending machine | 740,241 | Sept. 29 | 5194 | 1167, 1168 | 106 | 1175 |
| Coombs, Frank E., Boston, Mass. Roofing-tile | 719,193 | Jan. 27 | 3181 | 708, 709 | 102 | 717 |
| Coombs, Walter J., Wollaston, assignor to Tubular Rivet & Stud Company, Boston, Mass. Lacing hook or stud setting machine | 734,823 | July 28 | 3965 | 926 | 105 | 882 |
| Coon Brothers. (See Coon, David B., assignor.) | | | | | | |
| Coon, Charles B., *et al.* (See Reynolds, George H., assignor.) | | | | | | |
| Coon, David B., assignor to Coon Brothers, Troy, N. Y. Neckband for shirts | 723,141 | Mar. 17 | 2752 | 619 | 103 | 613 |
| Coon, Gustavus W., assignor, by mesne assignments, to F. S. Bright, Washington, D. C. Chemical fire-extinguisher | 724,440 | Apr. 7 | 36 | 10 | 103 | 1177 |
| Cooney, John W., New York, N. Y. Sewage-ejector | 745,791 | Dec. 1 | 859 | 193, 194 | 107 | 1283 |
| Cooney, Peter J., Philadelphia, Pa. Galley | 719,194 | Jan. 27 | 3182 | 709 | 102 | 717 |
| Cooney, Walter E. (See Zachry, William E., assignor.) | | | | | | |
| Cooper, Alfred E., Hackensack, assignor to H. H. Turner, Newark, N. J. Machine for pressing and blocking hats | 720,565 | Feb. 17 | 2147 | 497 | 102 | 1307 |
| Cooper, Arthur W., Chicago, Ill. Window | 717,816 | Jan. 6 | 563 | 126 | 102 | 121 |
| Cooper, Byron, *et al.* (See Grubbs, Joseph W., assignor.) | | | | | | |
| Cooper, Charles R. (See Wood and Cooper.) | | | | | | |
| Cooper, Daniel M. (See Hagen and Cooper.) | | | | | | |
| Cooper, Daniel M. (See Hagen, Cooper, and Kane.) | | | | | | |
| Cooper, Duncan D., *et al.* (See Stinson, William, assignor.) | | | | | | |
| Cooper, Edmund L., and D. T. Davies, Birmingham, England. Water-cooler for motive-power engines | 739,293 | Sept. 22 | 3412 | 760 | 106 | 777 |
| Cooper, Edward, assignor to Sills-Eddy Mica Company, Newark, N. J. Machine for making laminated sheets or plates | 718,914 | Jan. 20 | 2648 | 593, 594 | 102 | 592 |
| Cooper, Edwin J., Wimbledon, England. Newspaper-page | 740,242 | Sept. 29 | 5197 | 1168 | 106 | 1176 |
| Cooper, Frederick G., New Haven, Conn. Furnace | 727,750 | May 12 | 1753 | 394 | 104 | 394 |
| Cooper, George B. F., Detroit, Mich. Brake-beam fulcrum | 742,597 | Oct. 27 | 4265 | 961 | 106 | 2193 |
| Cooper, George D., assignor of one-half to S. D. Watson, St. Johns, Mich. Steam-generator | 738,526 | Sept. 8 | 1984 | 431 | 106 | 442 |
| Cooper, George W., Kansas City, Mo. Horse-receptacle | 718,915 | Jan. 20 | 2650 | 594 | 102 | 592 |
| Cooper, Henry J., Mount Vernon, Ind. Fence-post | 743,150 | Nov. 3 | 639 | 138 | 107 | 134 |
| Cooper Hewitt Electric Company. (See Flichtner, Stanwood E., assignor.) | | | | | | |
| Cooper Hewitt Electric Company. (See Hewitt, Peter C., assignor.) | | | | | | |
| Cooper Hewitt Electric Company. (See Recklinghausen, Max von, assignor.) | | | | | | |
| Cooper, Isaac M., Glenelder, Kans. Grain-separator for threshing-machines | 722,815 | Mar. 17 | 2189 | 488 | 103 | 497 |
| Cooper, Jeremiah S., Pittsburg, Pa. Furnace-door | 736,222 | Aug. 11 | 2224 | 479 | 105 | 1474 |
| Cooper, John E., Tampico, Va. Whiffletree-hook | 725,934 | Apr. 21 | 2812 | 638 | 103 | 1796 |
| Cooper, John W., Boston, Mass., assignor of one-half to W. M. Bush, Providence, R. I., Railway road-bed | 718,430 | Jan. 13 | 1682 | 371, 372 | 102 | 375 |
| Cooper, Joseph R., Spargursville, Ohio. Overcheckrein-spring | 739,152 | Sept. 15 | 3148 | 695 | 106 | 704 |
| Cooper, Rowan, *et al.* (See Cox, Amos G., assignor.) | | | | | | |
| Cooper, Theodore, New York, N. Y. Tunneling-shield | 724,666 | Apr. 7 | 461 | 111 | 103 | 1268 |
| Cooper, Thomas J., Paterson, N. J. Pneumatic tire | 745,040 | Nov. 24 | 4325 | 934 | 107 | 967 |
| Cooper, Tracy L., Collins, Iowa. Check-hook and rein-piece | 736,498 | Aug. 18 | 2730 | 598 | 105 | 1600 |
| Cooper, Walter, Seattle, Wash. Air-pump piston-rod oiler | 717,547 | Jan. 6 | 50 | 12 | 102 | 13 |
| Cooper, Wilford G., and J. T. Bradley, Jackson, Mich. Wood-turning machine | 742,840 | Nov. 3 | 39 | 10 | 107 | 11 |
| Cooper, Willard L., assignor of one-half to H. W. Clark, Spigners Station, Ala. Automatic fire-extinguishing sprinkler | 718,566 | Jan. 13 | 2000 | 436 | 102 | 444 |
| Cooper, William, *et al.* (See Noyes, Mayhew E., assignor.) | | | | | | |
| Cooper, William, Denver, Colo. Steel or other metal rolling | 723,834 | Mar. 31 | 4040 | 912 | 103 | 907 |
| Cooper, William, Denver, Colo. Power-transmitting mechanism | 735,859 | Aug. 11 | 1585 | 337 | 105 | 1337 |
| Cooper, William, Denver, Colo. Valve | 735,950 | Aug. 11 | 1743 | 373 | 105 | 1372 |
| Cooper, William, Chicago, Ill. Snap-hook | 731,023 | June 16 | 2738 | 610 | 104 | 1733 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Cooper, William A., *et al.* (See Best, William N., assignor.) | | | | | | |
| Cooper, William F., Meriden, Conn. Bellows for musical and pneumatic devices | 725,677 | Apr. 21 | 2349 | 531 | 103 | 1697 |
| Cooper, William F., Bridgeport, assignor to O. Turney, Fairfield, Conn. Striking mechanism for automatic piano-players | 725,676 | Apr. 21 | 2348 | 531 | 103 | 1697 |
| Cooper, William H., New York, N. Y. Stair cover and nosing | 718,821 | Jan. 20 | 2466 | 548 | 102 | 553 |
| Coover, Amos J., Osborn, Ohio. Adjustable stirrup-step for cars | 720,001 | Feb. 10 | 1068 | 247 | 102 | 1066 |
| Coover, Amos J., Osborn, Ohio. Adjustable car-step | 720,002 | Feb. 10 | 1070 | 248 | 102 | 1066 |
| Cope, Fred T., *et al.* (See Esmond, Frederick J., assignor.) | | | | | | |
| Cope, Joseph H., assignor of one-half to H. Teller, New Windsor, Colo. Hay-stacker | 723,992 | Mar. 31 | 4376 | 982, 983 | 103 | 978 |
| Cope, Thomas J., Philadelphia, Pa. Coupling for conveyers or rods for purposes of underground conduits | 721,427 | Feb. 24 | 3793 | 863 | 102 | 1671 |
| Cope, Troy, New Waterford, Ohio. Electric switch | 725,221 | Apr. 14 | 1499 | 342 | 103 | 1502 |
| Copeland, Ira, Newton, Mass. Fastening rails to wooden ties upon railways | 728,675 | May 19 | 3507 | 780 | 104 | 784 |
| Copeland, James S., Hartford, Conn., assignor to Pope Manufacturing Company, Portland, Me. Bicycle | 727,592 | May 12 | 1437 | 323 | 104 | 327 |
| Copeland, Jay B., Stann Creek, British Honduras. Means for preventing hens from setting | 736,821 | Aug. 18 | 3360 | 742 | 105 | 1730 |
| Copeland, Robert J., Toronto, Canada. Manifold-sheet | 723,835 | Mar. 31 | 4042 | 912, 913 | 103 | 907 |
| Copenhaver, John M., Luton, Iowa. Hay-stacker | 718,605 | Jan. 20 | 2076 | 451, 452 | 102 | 476 |
| Copley, N. Guy. (See Short, Robert L., assignor.) | | | | | | |
| Copp, Gideon A., Chicago, Ill. Steam-heating furnace and boiler | 722,493 | Mar. 10 | 1572 | 346 | 103 | 353 |
| Copp, Gideon A., Chicago, Ill. Device for preventing train-robberies | 722,494 | Mar. 10 | 1575 | 347 | 103 | 354 |
| Coppell, Arthur. (See McCarty, William F. M., assignor.) | | | | | | |
| Coppola, Rosario, Chicago, Ill. Refrigerating apparatus | 718,606 | Jan. 20 | 2078 | 452 | 102 | 477 |
| Corbet, Elizabeth G. (See Corbet, George G., assignor.) | | | | | | |
| Corbet, George G., Fairville, assignor to E. G. Corbet, St. John, Canada. Cuff-holder | 744,298 | Nov. 17 | 2975 | 637 | 107 | 664 |
| Corbett, James, Toronto, Canada. Electrically-controlled lock | 730,346 | June 9 | 1497 | 331, 332 | 104 | 1449 |
| Corbett, William H., Portland, Oreg. Road-spool | 739,294 | Sept. 22 | 3414 | 760 | 106 | 778 |
| Corbin Cabinet Lock Company. (See Townsend, Harry P., assignor.) | | | | | | |
| Corbin Screw Corporation. (See Glover, Charles, assignor.) | | | | | | |
| Corby, Charles I. (See Corby, William S. and C. I.) | | | | | | |
| Corby, William S. and C. I., Washington, D. C., assignors to Ward-Corby Company, Pittsburg, Pa. Machine for making and mixing dough | 724,162 | Mar. 31 | 4711 | 1057 | 103 | 1045 |
| Corcoran, Anthony, Seattle, Wash. Detachable calk for horseshoes | 720,115 | Feb. 10 | 1306 | 298 | 102 | 1118 |
| Corcoran, James B., *et al.* (See Richmond, Benedict, assignor.) | | | | | | |
| Cordes, John F., Chicago, Ill. Loose-leaf binder or file | 747,144 | Dec. 15 | 3375 | 766, 767 | 107 | 1878 |
| Cordes, geboren Müller, Mathilde, Hanover, Germany. Making artificial stone | 739,835 | Sept. 29 | 4413 | ..... | 106 | 1012 |
| Cordley, Henry G., Glenridge, N. J. Fastening and sealing device for pails | 745,418 | Dec. 1 | 199 | 45 | 107 | 1141 |
| Cords, Fredrick, Bentinck, Canada. Holder for bags, &c | 743,691 | Nov. 10 | 1764 | 372 | 107 | 392 |
| Cords, Mathilde R., assignor to Pacific Pine Needle Co., San Francisco, Cal. Pine-needle stuffing for mattresses and making same | 738,002 | Sept. 1 | 900 | ..... | 106 | 197 |
| Corey, Daniel W., St. Louis, Mo. Boot or shoe | 741,012 | Oct. 13 | 1161 | 262 | 106 | 1514 |
| Corey, Fred B., Schenectady, N. Y., assignor to General Electric Company. Trolley-wheel | 726,868 | May 5 | 65 | 17 | 104 | 17 |
| Corey, Fred B., Schenectady, N. Y., assignor to General Electric Company. Trolley-wheel | 726,869 | May 5 | 67 | 18 | 104 | 17 |
| Corey, Fred B., Schenectady, N. Y., assignor to General Electric Company. Ice-scraper | 727,593 | May 12 | 1438 | 323 | 104 | 328 |
| Corey, Fred B., Schenectady, N. Y., assignor to General Electric Company. Time-limit device for motor-controllers | 744,051 | Nov. 17 | 2483 | 533 | 107 | 559 |
| Corey, James B. (See Griffiths, Daniel E., assignor.) | | | | | | |
| Corey, Justin C., Minneapolis, Minn. Soap-lock | 721,021 | Feb. 17 | 2984 | 686 | 102 | 1481 |
| Corey, William W., St. Louis, Mo. Fire-hydrant. (Reissue) | 12,122 | June 16 | 3481 | 778 | 104 | 1882 |
| Corey, William W., St. Louis, Mo. Automatic drain-valve for valves and fire-hydrants. (Reissue) | 12,123 | June 16 | 3484 | 778 | 104 | 1883 |
| Coriasco, Stephen W., Clinton, Mass. Machine for making wire rope | 727,751 | May 12 | 1754 | 394 | 104 | 394 |
| Cork, George E., Packerton, Ind. Rotary extension-bell switch | 734,402 | July 21 | 3151 | 740, 741 | 105 | 700 |
| Corkling, Robert. (See Whitbread, William E., assignor.) | | | | | | |
| Corl, Chauncey B., Riverside, Cal. Horse-controlling device | 721,022 | Feb. 17 | 2985 | 687 | 102 | 1482 |
| Corl, Henry. (See Barker and Corl.) | | | | | | |
| Corlett, Robert S., assignor to W. A. Mayr, Chicago, Ill. Curtain-stretcher lock and hinge | 732,277 | June 30 | 5134 | 1141 | 104 | 2258 |
| Corley, Benjamin R. (See Turner and Corley.) | | | | | | |
| Corley, John W., New York, N. Y., assignor of one-half to H. Connolly, Detroit, Mich. Eyeglasses | 748,554 | Dec. 29 | 6046 | 1368 | 107 | 2508 |
| Corliss, William, Providence, R. I. Pneumatic tire | 736,584 | Aug. 18 | 2880 | 629 | 105 | 1632 |
| Cormack, George H. (See Redd and Cormack.) | | | | | | |
| Cormack, George H., Rockford, assignor, by mesne assignments, to I. Pieser and C. G. Livingston, Chicago, Ill. Carton-holder for machines for folding and gluing the end flaps of cartons | 733,460 | July 14 | 1371 | 323, 324 | 105 | 307 |
| Cormack, William, Eskbank, assignor of one-half to J. G. F. Lawson, Polton, Scotland. Making gelatin | 728,205 | May 19 | 2592 | 580 | 104 | 592 |
| Corman, William C., Rochester, N. H. Elastic tap for soles of boots or shoes | 745,792 | Dec. 1 | 861 | 194 | 107 | 1284 |
| Corman, William C., Rochester, N. H. Elastic pad for heels | 745,793 | Dec. 1 | 862 | 194 | 107 | 1284 |
| Cormany, Walter, assignor to Holzman Bros., New York, N. Y. Machine for cutting cloth | 720,227 | Feb. 10 | 1512 | 347 | 102 | 1159 |
| Corn King Husker Company. (See Martindale, Warren B., assignor.) | | | | | | |
| Cornberg, Emil, Gardner, Mass. Lock-hinge | 726,870 | May 5 | 68 | 18 | 104 | 18 |
| Corne, Jean, P. Duffau, and P. Barathié, Villeneuve-sur-Lot, France. Carbureter for explosion-motors | 731,547 | June 23 | 3740 | 833 | 104 | 1954 |
| Cornelius, George F. (See Vianest, Francis A., assignor.) | | | | | | |
| Cornelius, James, Ridgewood, N. J., and J. S. Eubank, Brooklyn, N. Y. Card-cutting machine | 720,896 | Feb. 17 | 2739 | 630, 631 | 102 | 1429 |
| Cornelius, Jesse W., and J. Niemer, Cincinnati, Ohio. Connecting-hook for electrotypers | 737,353 | Aug. 25 | 4331 | 965 | 105 | 1955 |
| Cornelius, Samuel S., Rogers, Ark. Rein-holder | 719,306 | Jan. 27 | 3397 | 758 | 102 | 765 |
| Cornelius, William L., New Lisbon, Ind. Ballot-box | 719,195 | Jan. 27 | 3183 | 709 | 102 | 717 |
| Corneliussen, Ivar, Galveston, Tex. Marine-engine governor | 736,363 | Aug. 18 | 2471 | 541 | 105 | 1546 |
| Cornell, Alfred C., Philadelphia, Pa. Smoker's article | 724,667 | Apr. 7 | 463 | 112 | 103 | 1268 |
| Cornell Incubator Mfg. Co. (See Stoneburn, Frederick H., assignor.) | | | | | | |
| Cornell, John M., New York, N. Y. Hoist for derricks | 724,668 | Apr. 7 | 464 | 112 | 103 | 1268 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Cornell, Minnie S., *et al.* (See Hunter, George E., assignor.) | | | | | | |
| Cornell, Samuel B. (See Burge and Cornell.) | | | | | | |
| Cornell, William A., Toorak, near Melbourne, Victoria, Australia. Means for attaching brake-drums to the hubs of wheels of vehicles | 746,466 | Dec. 8 | 2096 | 482 | 107 | 1566 |
| Cornell, William H., Pittsburg, Pa. Rotary engine | 725,412 | Apr. 14 | 1832 | 410, 411 | 103 | 1572 |
| Cornell, William N., Starlake, N. Y. Imitation tile | 735,344 | Aug. 4 | 581 | 119 | 105 | 1105 |
| Cornely, Robert, Paris, France. Embroidering-machine | 738,370 | May 19 | 2927 | 646 | 104 | 661 |
| Corner, William J. (See Hornaday and Corner.) | | | | | | |
| Cornils, Peter V., Seattle, Wash. Marine-engine governor | 726,647 | Apr. 28 | 4151 | 936 | 103 | 2081 |
| Corning Glass Works. (See Houghton, Alanson B., assignor.) | | | | | | |
| Cornitius, Ernst, Waco, Tex. Metallic awning | 722,566 | Mar. 10 | 1699 | 378 | 103 | 381 |
| Cornu, Jean, assignor to Société Francaise des Tondeuses Électriques, Lyons, France. Electric clipping-machine | 726,795 | Apr. 28 | 4432 | 998 | 103 | 2140 |
| Coronation Embroidery Hoop Company. (See Howden, William N., assignor.) | | | | | | |
| Corporation of Chemical Works, formerly Sandoz. (See Rongger, Niklaus, assignor.) | | | | | | |
| Corrington, Murray, New York, N. Y. Automatic fluid-pressure brake apparatus | 721,428 | Feb. 24 | 3794 | 863 | 102 | 1671 |
| Corrington, Murray, New York, N. Y. Engineer's brake-valve | 729,044 | May 26 | 4178 | 924, 925 | 104 | 937 |
| Corry, Michael. (See Barker, Ruben F., assignor.) | | | | | | |
| Corse, Williaum H., Norwich, N. Y. Muffler | 744,495 | Nov. 17 | 3322 | 715 | 107 | 739 |
| Corwin, Charlton B., Jefferson City, Mo. Back-seam trimmer | 723,585 | Mar. 24 | 3601 | 804 | 103 | 797 |
| Cory, John M., assignor to C. Cory & Son, New York, N. Y. Counter and index | 733,626 | July 14 | 1656 | 392, 393 | 105 | 367 |
| Cory & Son, Charles. (See Cory, John M., assignor.) | | | | | | |
| Cory & Son, Charles. (See Wood, Frank W., assignor.) | | | | | | |
| Cory & Sons, Charles. (See Cartwright, William, assignor.) | | | | | | |
| Coryell, Edwin M., assignor to J. E. Cameron, New York, N. Y. Compound engine | 725,935 | Apr. 21 | 2813 | 638 | 103 | 1796 |
| Coryell, Edwin M., assignor to J. E. Cameron, New York, N. Y. Double-cylinder sinking-pump | 726,871 | May 5 | 69 | 18 | 104 | 18 |
| Coryell, Edwin M., assignor to J. E. Cameron, New York, N. Y. Synchronizing device for duplex steam-engines | 741,013 | Oct. 13 | 1162 | 262, 263 | 106 | 1514 |
| Coryell, George B. (See Rowcliff, Montague C., assignor.) | | | | | | |
| Coryell, George R. (See Morrison, William, assignor.) | | | | | | |
| Cosgrove, Will L. (See Durkee and Cosgrove.) | | | | | | |
| Cosper, Fred B., Seattle, Wash. Grease-cup | 721,023 | Feb. 17 | 2988 | 687 | 102 | 1482 |
| Cossar, Thomas, Govan, Scotland. Flat-bed oscillating-cylinder printing-machine | 733,461 | July 14 | 1373 | 324, 325 | 105 | 307 |
| Cossar, Thomas, Govan, Scotland. Printing-machine | 738,527 | Sept. 8 | 1985 | 432 | 106 | 442 |
| Cossar, Thomas, Govan, Scotland. Register-gear for web-printing machines | 745,572 | Dec. 1 | 471 | 111 | 107 | 1197 |
| Cossey, Myron, Brooklyn, N. Y., assignor to Reliance Ball Bearing Door Hanger Company. Latch | 742,092 | Oct. 20 | 3338 | 745 | 106 | 1986 |
| Costello, George M., Philadelphia, Pa. Packing | 718,607 | Jan. 20 | 2080 | 452 | 102 | 477 |
| Costello, Henry O., Providence, R. I. Mutoscope | 747,684 | Dec. 22 | 4369 | 986 | 107 | 2114 |
| Costello, Mary L., administratrix. (See Costello, Patrick J.) | | | | | | |
| Costello, Patrick J., deceased, Chicago, Ill.; M. L. Costello, administratrix. Chocolate-dipping machine | 740,811 | Oct. 6 | 801 | 180, 181, 182 | 106 | 1415 |
| Costello, Thomas, Jr., and V. B. Post, Spencerville, Ohio. Automatic coupling for sectional pump-rods | 742,598 | Oct. 27 | 4266 | 961 | 106 | 2193 |
| Costenbader, Samuel D., Lehighton, Pa. Carpet-fastener | 723,586 | Mar. 24 | 3 03 | 805 | 103 | 798 |
| Coster, Charles. (See Paget, Leonard, assignor.) | | | | | | |
| Coster, Thomas J., Depew, N. Y. Machine for making battery-grids | 737,081 | Aug. 25 | 3825 | 850 | 105 | 1848 |
| Cota, Frederick J., Menominee, Mich. Manifolding tablet or book | 738,413 | Sept. 8 | 1753 | 381 | 106 | 393 |
| Cota, Frederick J., Menominee, Mich. Name or index plate holder | 743,831 | Nov. 10 | 2021 | 429 | 107 | 447 |
| Côté, Henry, Woonsocket, R. I., assignor to Draper Company, Hopedale, Mass. Loom-shuttle | 728,371 | May 19 | 2929 | 646 | 104 | 662 |
| Côté, Henry, Woonsocket, R. I., assignor to Draper Company, Hopedale, Mass. Loom-shuttle | 747,300 | Dec. 15 | 3676 | 830 | 107 | 1943 |
| Cothran, Grove, Summitville, Ind., assignor to Crude Oil Gas Company, Chicago, Ill. Gas-manufacturing apparatus | 731,434 | June 23 | 3508 | 783, 784 | 104 | 1907 |
| Cotner, David R., Bardwell, Ky. Chair | 736,822 | Aug. 18 | 3361 | 742 | 105 | 1730 |
| Cotter, Curtis C. (See Souders, Cotter, and Wilson.) | | | | | | |
| Cotter, Joseph H., Winnipeg, Canada. Domestic refuse-crematory | 730,004 | June 2 | 891 | 198 | 104 | 1309 |
| Cottle, Melvin W., assignor to Allen Steam Trap and Separator Company, St. Louis, Mo. Steam-separator | 725,413 | Apr. 14 | 1833 | 411 | 103 | 1572 |
| Cottle, Melvin W., assignor to Allen Steam Trap and Separator Company, St. Louis, Mo. Steam-trap | 731,756 | June 23 | 4121 | 919 | 104 | 2030 |
| Cottom, James B., Dayton, Ohio. Machine for molding building-blocks | 748,049 | Dec. 29 | 5106 | 1154 | 107 | 2300 |
| Cotton, Charles L. (See Spence, John D., assignor.) | | | | | | |
| Cotton, Florence M., *et al.* (See Ten Winkel, August, assignor.) | | | | | | |
| Cotton, Frank, Sydney, New South Wales, Australia. Apparatus for burning heavy oils | 739,153 | Sept. 15 | 3149 | 696 | 106 | 704 |
| Cotton, Orville D. (See Miller and Cotton.) | | | | | | |
| Cotton Seed Company. (See Stanley, John C. W., assignor.) | | | | | | |
| Cotton, Walter H., assignor to A. Kunze, Chicago, Ill. Electrical igniting apparatus | 735,213 | Aug. 4 | 348 | 67 | 105 | 1055 |
| Cottrell, Charles P., Westerly, R. I., assignor to C. B. Cottrell & Sons Company, New York, N. Y., and Stonington, Conn. Machinery for cutting and padding paper or other materials | 718,315 | Jan. 13 | 1470 | 326, 327, 328 | 102 | 332 |
| Cottrell, Edgar H., Stonington, Conn., assignor to C. B. Cottrell & Sons Company, New York, N. Y., and Stonington, Conn. Machinery for cutting and folding paper or other materials | 718,316 | Jan. 13 | 1482 | 328, 329, 330 | 102 | 334 |
| Cottrell, Edgar H., Stonington, Conn., assignor to C. B. Cottrell & Sons Company, New York, N. Y., and Stonington, Conn. Machinery for cutting and folding paper or other fabrics | 732,338 | June 30 | 5242 | 1163, 1164 | 104 | 2280 |
| Cottrell, Edgar H., Stonington, Conn., assignor to C. B. Cottrell & Sons Company, New York, N. Y., and Stonington, Conn. Machinery for cutting and folding paper or other fabrics | 732,339 | June 30 | 5249 | 1164, 1165 | 104 | 2281 |
| Cottrell, Edgar H., Stonington, Conn., assignor to C. B. Cottrell & Sons Company, New York, N. Y. Machinery for cutting and folding fabrics | 743,061 | Nov. 3 | 469 | 102, 103 | 107 | 97 |
| Cottrell, Edgar H., Stonington, Conn., assignor to C. B. Cottrell & Sons Company, New York, N. Y., and Stonington, Conn. Machinery for cutting and folding paper, &c | 743,456 | Nov. 10 | 1321 | 271, 272 | 107 | 297 |
| Cottrell, Herbert, Newark, N. J. Frame for battery-electrodes | 722,946 | Mar. 17 | 2410 | 539 | 103 | 542 |
| Cottrell, Herbert, Newark, N. J. Electrode for reversible galvanic batteries | 722,947 | Mar. 17 | 2411 | 539 | 103 | 542 |
| Cottrell, Herbert, assignor to L. A. Sayre & Co., Newark, N. J. Fence-maker's tool | 724,669 | Apr. 7 | 466 | 113 | 103 | 1269 |
| Cottrell, Herbert, assignor to L. A. Sayre & Co., Newark, N. J. Saw-set | 731,864 | June 23 | 4302 | 960 | 104 | 2071 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | Spec. | Dr'g. | Vol. | Page. |
| Cottrell, Herbert, assignor to L. A. Sayre & Co., Newark, N. J. Ticket-punch | 744,958 | Nov. 24 | 4158 | 898 | 107 | 932 |
| Cottrell, James F., Albany, N. Y. Melting-furnace | 725,936 | Apr. 21 | 2815 | 638 | 103 | 1797 |
| Couch, Andrew G., Memphis, Tenn., assignor to Couch Brothers & J. J. Eagan Co., Atlanta, Ga. Horse-collar | 743,832 | Nov. 10 | 2021 | 429<br>430 | 107 | 447 |
| Couch Brothers & J. J. Eagan Co. (See Couch, Andrew G., assignor.) | | | | | | |
| Couch, Elbert M., assignor to Whitney Manufacturing Company, Hartford, Conn. Drilling-machine | 719,569 | Feb. 3 | 282 | 65<br>66<br>67 | 102 | 882 |
| Couch, James H., Hannibal, Mo. Automatic hose-reel attachment | 720,228 | Feb. 10 | 1514 | 347 | 102 | 1159 |
| Couch, Joel, Clayton, N. Y. Sail | 721,286 | Feb. 24 | 3532 | 803 | 102 | 1617 |
| Couch, Levi J., Hartford, Conn. Theatrical apparatus | 732,049 | June 30 | 4674 | 1043 | 104 | 2162 |
| Coughlin, Daniel. (See Coughlin, Owen J. and D.) | | | | | | |
| Coughlin, Edward W., New York, N. Y. Switch operating and locking mechanism | 737,354 | Aug. 25 | 4334 | 966 | 105 | 1956 |
| Coughlin, Owen J., Joliet, Ill., and D. Coughlin, Dodge City, Kans. Automatic water-feed and safety apparatus for steam-boilers | 736,940 | Aug. 25 | 3582 | 793<br>794 | 105 | 1797 |
| Coughlin, William H., Worcester, Mass. Injector-condenser | 721,158 | Feb. 24 | 3281 | 750 | 102 | 1566 |
| Coulet, Lucien, St. Etienne, and P., J., and A. Poméon, assignors to said Coulet and La Société A. Poméon et ses Fils, St. Chamond, France. Poster | 746,794 | Dec. 15 | 2697 | 622 | 107 | 1732 |
| Coulom, Otis C., Merrimack, N. H. Hoof-shears | 721,672 | Mar. 3 | 42 | 10 | 103 | 11 |
| Coulson, Maggie A. (See Ebner, Peter, assignor.) | | | | | | |
| Coulston, Earl V., assignor to A. J. Lindemann & Hoverson Co., Milwaukee, Wis. Heating-drum | 738,414 | Sept. 8 | 1754 | 381 | 106 | 393 |
| Coulter, Andrew, Mitau, Russia. Belt-shipping device | 720,566 | Feb. 17 | 2149 | 498<br>499 | 102 | 1307 |
| Coulter, Andrew F., Pittsburg, Pa. Door-hanger | 745,716 | Dec. 1 | 724 | 166 | 107 | 1253 |
| Coulter, Louis C. (See Philbrick and Coulter.) | | | | | | |
| Coulter, Thomas H., Brooklyn, assignor of one-half to G. M. Hayner, Dayton, Ohio. Center-grinder for lathes | 742,599 | Oct. 27 | 4268 | 961 | 106 | 2193 |
| Coulter, William J., Chesley, Canada. Clothes-drier | 740,243 | Sept. 29 | 5198 | 1168 | 106 | 1176 |
| Coulthard & Company, T. (See Norris, William, assignor.) | | | | | | |
| Counter, John, Cleveland, Ohio. Watch-holding case | 734,403 | July 21 | 3154 | 741 | 105 | 709 |
| Country Home Telephone Manufacturing Company. (See Farwell, Hart F., assignor.) | | | | | | |
| Counts, Edmund, Flat River, Mo. Cant-hook | 720,567 | Feb. 17 | 2150 | 499 | 102 | 1308 |
| Counts, Jacob C., Prosperity, S. C. Grain-cradle | 734,672 | July 28 | 3648 | 856 | 105 | 820 |
| Counts, John H. J., Ocala, Fla. Mowing-machine | 747,946 | Dec. 29 | 4894 | 1108<br>1109 | 107 | 2254 |
| Coursen, George L., Newark, N. J. Photographic shutter | 718,983 | Jan. 27 | 2778 | 622 | 102 | 634 |
| Courson, John F., Pitcairn, Pa. Draw-gear for railway-cars | 732,521 | June 30 | 5606 | 1242<br>1243 | 104 | 2354 |
| Courson, John F., Pitcairn, Pa. Draw-gear for railway-cars | 736,823 | Aug. 18 | 3363 | 742 | 105 | 1730 |
| Courson, John F., Pitcairn, Pa. Draw-gear for railway-cars | 736,824 | Aug. 18 | 3365 | 743 | 105 | 1731 |
| Courson, John F., Pitcairn, Pa. Draw-head for cars | 737,712 | Sept. 1 | 277 | 58 | 106 | 62 |
| Courtenay, William. (See Currie, Stanley C. C., assignor.) | | | | | | |
| Courtland, Theodore, Ludington, Mich. Apparatus for packing salt | 726,143 | Apr. 21 | 3154 | 713<br>714 | 103 | 1867 |
| Courtney, Daniel C , Allegheny, Pa. Drop-doors and operating mechanism for cars | 748,165 | Dec. 29 | 5327 | 1209 | 107 | 2348 |
| Courtney, Daniel C., Allegheny, Pa. Car construction | 748,166 | Dec. 29 | 5328 | 1210<br>1211 | 107 | 2349 |
| Courtney, Daniel C., Allegheny, Pa. Truck-bolster | 748,167 | Dec. 29 | 5330 | 1211<br>1212 | 107 | 2349 |
| Courtney, Julia, executrix. (See Herbert, Frederick J.) | | | | | | |
| Courts, William C., Manchester, England. Smoke-consuming apparatus for furnaces | 720,229 | Feb. 10 | 1515 | 347<br>348 | 102 | 1159 |
| Courts, William C., Manchester, England. Smoke-consuming apparatus | 744,905 | Nov. 24 | 4049 | 873 | 107 | 911 |
| Courville, Joseph. (See Draper and Courville.) | | | | | | |
| Courville, Joseph, assignor to Farrand Organ Company, Detroit, Mich. Motor for mechanical musical instruments | 722,196 | Mar. 3 | 995 | 220 | 103 | 210 |
| Courville, Joseph, assignor to Farrand Organ Company, Detroit, Mich. Music-roll for mechanical players | 741,463 | Oct. 13 | 2041 | 453 | 106 | 1701 |
| Couse, John P., Glendale, Cal. Air lift-pump | 740,999 | Oct. 6 | 1133 | 255 | 106 | 1487 |
| Cousinne, Denis, Horrues, Belgium. Cigar-making machine | 733,576 | July 14 | 1576 | 375<br>376 | 105 | 351 |
| Cousins, Judson T., assignor of one-half to F.W. Estabrook, Norwich, Conn. Trolley-arm | 731,284 | June 16 | 3227 | 718 | 104 | 1830 |
| Coustillac, Henri G., Jr., Braddock, Pa. Steam-engine | 724,816 | Apr. 7 | 750 | 174 | 103 | 1331 |
| Covar, Oliver E., Newark, N. J. Interchangeable wrench | 740,812 | Oct. 6 | 810 | 182 | 106 | 1418 |
| Covell, Harry N., Brooklyn, N. Y., assignor to Lidgerwood Manufacturing Company. Combined brake and friction operating mechanism | 718,916 | Jan. 20 | 2651 | 594 | 102 | 593 |
| Cover, John W., Boston, Mass. Cable-coupling | 730,235 | June 9 | 1295 | 286 | 104 | 1406 |
| Covert, Byron V., Lockport, N. Y. Motor-vehicle | 727,910 | May 12 | 2060 | 458<br>459 | 104 | 456 |
| Covert, Enoch, Farmer, N. Y. Tent-wall clasp | 724,817 | Apr. 7 | 751 | 175 | 103 | 1331 |
| Covert, Henry W., Waterford, N. Y. Convertible car | 736,941 | Aug. 25 | 3586 | 794<br>795 | 105 | 1798 |
| Covert, James C., Watervliet, N. Y. Screw lifting-jack | 718,431 | Jan. 13 | 1685 | 372 | 102 | 375 |
| Covert, Mabel B., Norfolk, Nebr. Frying-pan cover | 738,986 | Sept. 15 | 2845 | 631 | 106 | 642 |
| Covert, Robert F., Salida, Cal. Snap-hook | 741,014 | Oct. 13 | 1164 | 263 | 106 | 1514 |
| Covey, Herbert S., Chicago, Ill., assignor to Cleveland Pneumatic Tool Company, Cleveland, Ohio. Holder-on for pneumatic tools | 720,786 | Feb. 17 | 2549 | 587 | 102 | 1390 |
| Covill, Adelbert L., Nelsonville, Wis. Purifying device for steam | 726,872 | May 5 | 71 | 19 | 104 | 18 |
| Covington, George W., Emeryville, Cal. Jockey's grip or hand-hold | 747,145 | Dec. 15 | 3378 | 767 | 107 | 1879 |
| Cowan, John, Edinburgh, Scotland. Water-tube boiler | 729,738 | June 2 | 395 | 89 | 104 | 1209 |
| Cowan, John, Edinburgh, Scotland. Water-tube-boiler setting or casing | 741,629 | Oct. 20 | 2383 | 534<br>535 | 106 | 1790 |
| Cowan, William J., Kansas City, Mo. Spring-hinge | 720,116 | Feb. 10 | 1308 | 298 | 102 | 1118 |
| Cowden, Bertus C., Hillsdale, Okla. Ter. Vehicle-tongue support | 728,870 | May 26 | 3870 | 861 | 104 | 874 |
| Cowdrey, Henry E., Fitchburg, Mass. Sun-dial | 747,046 | Dec. 15 | 3179 | 729 | 107 | 1831 |
| Cowell, Newell P., Pittsburg, assignor of one-half to W. Milligan, Allegheny, Pa. Marker for pressed steel | 724,163 | Mar. 31 | 4714 | 1058 | 103 | 1045 |
| Cowell, Richard, and A. White, Lowell, Mass. Electric feeler for weft-replenishing looms | 747,146 | Dec. 15 | 3379 | 767 | 107 | 1879 |
| Cowell, William G., New Haven, Conn. Roll for cutting paper-box blanks | 738,528 | Sept. 8 | 1988 | 433 | 106 | 442 |
| Cowey, Leonard E., London, England. Weighing apparatus | 727,299 | May 5 | 881 | 191<br>192 | 104 | 189 |
| Cowgill, George A., Euphemia, Ohio. Carpet-cleaner | 724,441 | Apr. 7 | 38 | 10 | 103 | 1178 |
| Cowgill, George A , Euphemia, Ohio. Carpet-cleaner | 724,442 | Apr. 7 | 40 | 11 | 103 | 1178 |
| Cowgill, George A., Euphemia, Ohio. Carpet-cleaner | 744,721 | Nov. 24 | 3737 | 806 | 107 | 845 |
| Cowham, William F. (See Normandin, Levi P., assignor.) | | | | | | |
| Cowing, John P., Cleveland, Ohio. Automatic derailer for drawbridges | 738,297 | Sept. 8 | 1507 | 326 | 106 | 339 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| Cowing, Percy F., New York, N. Y. Photographic apparatus | 719,196 | Jan. 27 | 3187 | 710 | 102 | 718 |
| Cowing, Percy F., New York, N. Y. Induction apparatus | 723,836 | Mar. 31 | 4046 | 913 | 103 | 908 |
| Cowles, Alfred A., New York, N. Y. Sprinkler apparatus | 725,827 | Apr. 21 | 2622 | 597 | 103 | 1756 |
| Cowles, Edward P., Warren, Ohio. Musical instrument | 731,435 | June 23 | 3510 | 784<br>785 | 104 | 1908 |
| Cowles, Frederick H., New York, N. Y. Hanger for trousers or skirts | 723,587 | Mar. 24 | 3604 | 805 | 103 | 798 |
| Cowles, George C., assignor to R. H. Munson, Bay Mills, Mich. Undressed lumber and preserving same | 746,678 | Dec. 15 | 2494 | ..... | 107 | 1677 |
| Cowles, Robert H., *et al.* (See Steele, Elijah F., assignor.) | | | | | | |
| Cowles, Walter L. (See Holman and Cowles.) | | | | | | |
| Cowles, William B., Cleveland, Ohio. Electrically-operated system for closing water tight doors, hatches, or the like | 729,280 | May 26 | 4591 | 1014<br>1015<br>1016 | 104 | 1022 |
| Cowles, William B., assignor to "Long Arm" System Company, Cleveland, Ohio. Bulk-head-door | 721,024 | Feb. 17 | 2990 | 687<br>688 | 102 | 1483 |
| Cowles, William B., assignor, by mesne assignments, to Cleveland Trust Company, trustee, Cleveland, Ohio. Apparatus for operating water-tight power doors or hatches | 743,252 | Nov. 3 | 843 | 184 | 107 | 176 |
| Cowley, James T., Boston, Mass., assignor to Lamson Consolidated Store Service Company, Newark, N. J. Terminal for pneumatic tube apparatus | 726,030 | Apr. 21 | 2964 | 674 | 103 | 1828 |
| Cowley, James T., Lowell, Mass., assignor, by mesne assignments, to Planters Compress Company of Maine. Thrust-bearing | 744,906 | Nov. 24 | 4050 | 874 | 107 | 911 |
| Cowperthwait, Allan, assignor to A. B. See and W. L. Tyler, New York, N. Y. Elevator mechanism | 732,522 | June 30 | 5609 | 1243 | 104 | 2355 |
| Cox, Amos G., assignor to himself, R. Cooper, and A. G. Cox Manufacturing Company, Winterville, N. C. Tobacco-truck | 721,864 | Mar. 3 | 387 | 85 | 103 | 85 |
| Cox and Brother, George S. (See Cox, Walter S., assignor.) | | | | | | |
| Cox, Caine L., Athens, and J. W. Southerland, Chandler, Tex. Wire-stretcher | 723,244 | Mar. 24 | 2962 | 665 | 103 | 671 |
| Cox, Carrie F., Los Angeles, Cal. Clothes-hanging device | 737,828 | Sept. 1 | 517 | 114 | 106 | 116 |
| Cox, Charles B., New York, N. Y. Motor | 722,948 | Mar. 17 | 2412 | 539 | 103 | 542 |
| Cox, David H., Jr., Rahway, N. J. Bicycle repair-plug | 733,014 | July 7 | 554 | 135 | 105 | 119 |
| Cox, David H., Jr., Rahway, N. J. Darning-last | 740,400 | Oct. 6 | 26 | 6 | 106 | 1250 |
| Cox, Edwin R., Jr., Birmingham, Ala. Dynamo-electric machine or motor | 742,600 | Oct. 27 | 4270 | 962 | 106 | 2194 |
| Cox, Frank P. (See Thomson and Cox.) | | | | | | |
| Cox, Frank P., Lynn, Mass., assignor to General Electric Company. Maximum-demand indicator | 728,546 | May 19 | 3256 | 721 | 104 | 728 |
| Cox, Frank P., Lynn, Mass., assignor to General Electric Company. Meter | 730,613 | June 9 | 1989 | 442 | 104 | 1556 |
| Cox, Frank P., Lynn, Mass., assignor to General Electric Company. Compensating friction in electric meters | 732,176 | June 30 | 4935 | 1097 | 104 | 2216 |
| Cox, Frank P., Lynn, Mass., assignor to General Electric Company. Polarity-indicator | 733,627 | July 14 | 1659 | 393 | 105 | 368 |
| Cox, George E., assignor to Union Carbide Company, Niagara Falls, N. Y. Utilizing calcium-carbid refuse and product thereof | 727,095 | May 5 | 526 | ..... | 104 | 114 |
| Cox, Henry G., assignor to J. T. Brush, Indianapolis, Ind. Mechanical stoker | 726,258 | Apr. 28 | 3375 | 767 | 103 | 1928 |
| Cox, Henry G., assignor to Economic Hot Water Furnace Company, Indianapolis, Ind. Vertical underfeed-furnace | 745,573 | Dec. 1 | 474 | 112 | 107 | 1198 |
| Cox, Howard L., Toronto, Canada. Aseptic ligature-receptacle | 728,444 | May 19 | 3053 | 672 | 104 | 688 |
| Cox, James. (See Deane, Edwin, assignor.) | | | | | | |
| Cox, James D., *et al.* (See Kilborn, Chauncey W., assignor.) | | | | | | |
| Cox, James D., *et al.* (See Reeves, Albert S., assignor.) | | | | | | |
| Cox, Jefferson L., Quoit, assignor of one-half to A. L. Dickerson and S. M. Stanley, Rorer, Va. Corn-planter | 729,490 | May 26 | 4939 | 1095 | 104 | 1096 |
| Cox, John E., Abingdon, Ill. Fly-catcher | 728,871 | May 26 | 3872 | 861 | 104 | 874 |
| Cox, Mary A., Pittsburg, Pa. Lace | 730,614 | June 9 | 1991 | 442 | 104 | 1556 |
| Cox, Milton H., *et al.* (See Reeves, Albert S., assignor.) | | | | | | |
| Cox, Randolph W., Cincinnati, Ohio. Rope-fastener | 739,392 | Sept. 22 | 3585 | 801 | 106 | 813 |
| Cox, Robert S., Buffalo, N. Y. Dump-car | 747,381 | Dec. 22 | 3826 | 860 | 107 | 1992 |
| Cox, Walter S., Philadelphia, Pa., assignor to G. S. Cox and Brother. Woven interlining for skirts | 726,648 | Apr. 28 | 4154 | 937 | 103 | 2082 |
| Cox, William H., Virden, Ill. Lifting-jack | 732,523 | June 30 | 5611 | 1243 | 104 | 2355 |
| Coxe, Virginia R., Knoxville, Tenn. Playing-card | 718,917 | Jan. 20 | 2653 | 595 | 102 | 593 |
| Coyan, William E., Homestead, Pa. Making steel castings | 729,281 | May 26 | 4598 | 1017 | 104 | 1023 |
| Coye, William H., assignor to W. H. Coye and W. B. Buckingham, Stevens Point, Wis. Drawer | 747,685 | Dec. 22 | 4370 | 987 | 107 | 2115 |
| Coykendall, Marcus A., Grand Rapids, Mich. Flushing-spittoon | 740,538 | Oct. 6 | 301 | 61 | 106 | 1308 |
| Coyle, Andrew M. (See Otis and Coyle.) | | | | | | |
| Coyne, John T., Albany, N. Y. Smoke-consumer | 725,045 | Apr. 14 | 1163 | 263 | 103 | 1433 |
| Crabb, James N. (See Messick, John F., assignor.) | | | | | | |
| Crabtree, Louis, Newark, N. J., assignor of one-half to S. T. Aston, New York, N. Y. Vitrifiable photographic decoration | 719,197 | Jan. 27 | 3188 | 710 | 102 | 718 |
| Craft, Charles C. (See Waldorf, Joseph W., assignor.) | | | | | | |
| Craft, John, D. Reel, and W. L. Hawes, Cincinnati, Ohio. Machine for painting vehicle-wheels or the like | 731,099 | June 16 | 2879 | 639 | 104 | 1762 |
| Craft, Owen B., Strattonville, Pa. Saw-handle | 723,837 | Mar. 31 | 4047 | 913 | 103 | 908 |
| Crafts, Francis H., assignor to Crafts Machine & Tool Company, Buffalo, N. Y. Journal-box | 728,547 | May 19 | 3258 | 722 | 104 | 729 |
| Crafts Machine & Tool Company. (See Crafts, Francis H., assignor.) | | | | | | |
| Crafts, Wilbur F., Washington, D. C. File-envelop | 722,816 | Mar. 17 | 2190 | 488 | 103 | 497 |
| Crafts, Wilbur F., Washington, D. C. Buckle | 728,206 | May 19 | 2593 | 580 | 104 | 592 |
| Cragg, George L., assignor to Stromberg-Carlson Telephone Manufacturing Company, Chicago, Ill. Telephone-exchange system | 743,457 | Nov. 10 | 1326 | 272<br>273 | 107 | 298 |
| Craig, Alvin, and W. Gunnell, Cadiz, Ohio. Scalper, grader, and purifier | 736,364 | Aug. 18 | 2476 | 541<br>542 | 105 | 1547 |
| Craig, David, Melrose, Mass. Pressure-resisting seal | 725,937 | Apr. 21 | 2816 | 639 | 103 | 1797 |
| Craig, David, Melrose, Mass. Clean-out stopper for pipes | 735,470 | Aug. 4 | 839 | 179 | 105 | 1158 |
| Craig, Edward C., *et al.* (See Dinkins, George B., assignor.) | | | | | | |
| Craig, George L., Kennard, Ind. Kitchen-cabinet | 745,574 | Dec. 1 | 475 | 112<br>113 | 107 | 1198 |
| Craig, George W. (See Craig, James A., assignor.) | | | | | | |
| Craig, George W., Lyons, Mich. Means for protecting safes | 720,330 | Feb. 10 | 1701 | 386 | 102 | 1199 |
| Craig, H. (See Sheperd, William B., assignor.) | | | | | | |
| Craig, Isaac S. (See Chadbourne, Craig, and Fuller.) | | | | | | |
| Craig, James. (See Slocomb and Craig.) | | | | | | |
| Craig, James A., assignor of one-half to G. W. Craig, Omaha, Nebr. Elevator-shaft damper | 719,437 | Feb. 3 | 48 | 10,11 | 102 | 835 |
| Craig, James W., *et al.* (See Dinkins, George B., assignor.) | | | | | | |
| Craig, John F., and T. V. Fleming, Paris, Ill. Governor for rotary engines | 722,085 | Mar. 3 | 785 | 176 | 103 | 170 |
| Craig, John F., and T. V. Fleming, Paris, Ill. Rotary steam-engine | 722,086 | Mar. 3 | 787 | 176 | 103 | 170 |

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| Craig, Robert A. (See Arnsberger, Cyrus A., assignor.) | | | | | | |
| Craig, Samuel, Garden City, Kans. Cigar-holder | 747,147 | Dec. 15 | 3382 | 768 | 107 | 1879 |
| Craig, Thomas, assignor to Edwin Harrington, Son & Company, Incorporated, Philadelphia, Pa. Lathe | 732,050 | June 30 | 4675 | 1044 | 104 | 2163 |
| Craig, Thomas J. I. (See Spence, Craig, and Hood.) | | | | | | |
| Craig, Thomas J. I. (See Spence, Shearer, and Craig.) | | | | | | |
| Craigie, Henry, assignor of one-half to J. W. Rooch, San Francisco, Cal. Dental dam | 741,890 | Oct. 20 | 2874 | 641 | 106 | 1893 |
| Craigie, Hugh A. (See Smith, Craigie, and Holston.) | | | | | | |
| Crain, William O., and G. W. Gwinn, assignors to E. A. Griffith, Baltimore, Md. Cloth-piler | 718,699 | Jan. 20 | 2248 | 493, 494 | 102 | 509 |
| Craine, William, Brookfield, N. Y. Silo | 726,649 | Apr. 28 | 4155 | 937 | 103 | 2083 |
| Craley, Clarence C. (See Peffer, Frank, assignor.) | | | | | | |
| Cram, Alonzo W., Haverhill, Mass. Pipe connection | 738,662 | Sept. 8 | 2231 | 489 | 106 | 494 |
| Cram, Maurice L., Charlevoix, Mich. Ballot-box | 742,009 | Oct. 20 | 3135 | 700 | 106 | 1945 |
| Cram, Walter M., Philadelphia, Pa. Coin-controlled vending-machine | 740,244 | Sept. 29 | 5199 | 1169 | 106 | 1176 |
| Cramer, Anthon W. P., New York, N. Y. Golf-ball | 734,256 | July 21 | 2885 | 674 | 105 | 645 |
| Cramer, Anthony F., assignor to F. Goebel, Detroit, Mich. Bottle-cleaning machine | 737,355 | Aug. 25 | 4339 | 966, 967 | 105 | 1957 |
| Cramer, Augustus S., Coopersville, Mich. Collapsible core for molds | 733,313 | July 7 | 1095 | 261 | 105 | 231 |
| Cramer, Augustus S., Coopersville, Mich. Mold for concrete walls | 735,214 | Aug. 4 | 350 | 67 | 105 | 1056 |
| Cramer, Enoch, Trenton, N. J. Grinding or polishing machine | 726,510 | Apr. 28 | 3896 | 882 | 103 | 2031 |
| Cramer, Herman, and F. Schraudner, assignors to Gus. V. Brecht Butcher Supply Company, St. Louis, Mo. Steam-box | 727,096 | May 5 | 527 | 113 | 104 | 114 |
| Cramer, Jennie H., Upper Sandusky, Ohio. Lamb or calf feeder | 723,195 | Mar. 17 | 2870 | 643 | 103 | 638 |
| Cramer, Joseph C., Sawtelle, Cal. Holder for atomizers | 729,138 | May 26 | 4335 | 957 | 104 | 968 |
| Cramer, Ralph W., Vanwert, Ohio. Spice-feeding receptacle | 733,628 | July 14 | 1660 | 394 | 105 | 368 |
| Cramer, Stephen S., *et al.* (See Johnson, Charles M., assignor.) | | | | | | |
| Crandall, Charles H., Danbury, Conn. Game | 721,544 | Feb. 24 | 3991 | 909 | 102 | 1713 |
| Crandall, Edwin E., Los Angeles, Cal. Bookkeeping | 743,151 | Nov. 3 | 640 | 138 | 107 | 134 |
| Crandall, Henry F., Milwaukee, Wis., assignor to International Harvester Co. Sheaf-carrier | 728,676 | May 19 | 3509 | 780, 781 | 104 | 784 |
| Crandall, Herman E., New Britain, Conn., assignor to C. and M. Scheuer, New York, N. Y. Hose-supporter | 738,713 | Sept. 8 | 2335 | 513 | 106 | 514 |
| Crandall, Jesse A., Brooklyn, assignor to O. Reiffarth, New York, N. Y. Garment-supporter | 738,775 | Sept. 15 | 2465 | 541 | 106 | 560 |
| Crandall, Nathan W., Meriden, assignor to Russell & Erwin Manufacturing Company, New Britain, Conn. Lock | 733,163 | July 7 | 818 | 198 | 105 | 173 |
| Crandall, Nathan W., Meriden, assignor to Russell & Erwin Manufacturing Company, New Britain, Conn. Padlock | 734,119 | July 21 | 2623 | 617 | 105 | 588 |
| Crandall, Nathan W., Meriden, assignor to Russell & Erwin Manufacturing Company, New Britain, Conn. Hub for locks and latches | 734,824 | July 28 | 3968 | 927 | 105 | 883 |
| Crane & Breed Manufacturing Company. (See Davoran and Warther, assignors.) | | | | | | |
| Crane, Clarence A., Warren, Ohio. Incandescent electric lamp | 744,496 | Nov. 17 | 3323 | 715 | 107 | 740 |
| Crane Company. (See Doolittle, William W., assignor.) | | | | | | |
| Crane Company. (See Koester, Henry, assignor.) | | | | | | |
| Crane, Elliott H., Kalamazoo, assignor to O. L. Allen, Benton Harbor, Mich. Fishing-rod | 735,471 | Aug. 4 | 841 | 179 | 105 | 1159 |
| Crane, Frank. (See Beer and Crane.) | | | | | | |
| Crane, George S., Philadelphia, Pa. Pleasure-railway | 746,467 | Dec. 8 | 3097 | 483 | 107 | 1567 |
| Crane, George W., Veedersburg, Ind. Shredder-feeder | 740,245 | Sept. 29 | 5200 | 1169 | 106 | 1177 |
| Crane, James L., Cleveland, Ohio. Show-case or show-front | 739,295 | Sept. 22 | 3414 | 761 | 106 | 778 |
| Crane, James L., assignor to T. J. Crane, Cleveland, Ohio. Show-front or show-case | 745,158 | Nov. 24 | 4589 | 995 | 107 | 1020 |
| Crane, James L., assignor to T. J. Crane, Cleveland, Ohio. Show-front or show-case | 747,148 | Dec. 15 | 3383 | 768 | 107 | 1880 |
| Crane, Joshua, Jr., Westwood, Mass. Closure for milk-jars | 736,694 | Aug. 18 | 3113 | 686 | 105 | 1678 |
| Crane, Newton, Boston, Mass. Tool | 724,818 | Apr. 7 | 752 | 175 | 103 | 1331 |
| Crane, Newton, assignor to Newton Crane Gas Engine Company, Boston, Mass. Internal-combustion engine | 746,925 | Dec. 15 | 2971 | 683 | 107 | 1785 |
| Crane, Quince, San Diego, Cal. Waffle-iron | 746,033 | Dec. 8 | 1332 | 298, 299 | 107 | 1400 |
| Crane, Thomas J. (See Crane, James L., assignor.) | | | | | | |
| Craney, Thomas, Bay City, Mich. Attachment for cash-registers | 741,229 | Oct. 13 | 1580 | 355 | 106 | 1604 |
| Cranstoun, William. (See Clifford, Thomas G., assignor.) | | | | | | |
| Cranz, Ewald, Amsterdam, Netherlands, and F. Cranz, Yonkers, N. Y. Means for packing goods | 723,245 | Mar. 24 | 2964 | 665 | 103 | 671 |
| Cranz, Ferdinand. (See Cranz, Ewald and F.) | | | | | | |
| Crapp, John B., Indianapolis, Ind. Cigar or pipe tray | 743,253 | Nov. 3 | 848 | 185 | 107 | 178 |
| Crary, Thomas B. (See Casler, Alonzo A., assignor.) | | | | | | |
| Craun, Leander M., and C. M. Harris, Edgerton, Ohio. Toy | 732,051 | June 30 | 4678 | 1044 | 104 | 2163 |
| Craven, James F., assignor to McDowell Manufacturing Company, Pittsburg, Pa. Ice-cream dipper | 741,015 | Oct. 13 | 1165 | 263 | 106 | 1515 |
| Craven, James F., assignor to McDowell Manufacturing Company, Pittsburg, Pa. Machine for making expanded metal | 741,016 | Oct. 13 | 1167 | 263, 264 | 106 | 1515 |
| Craven, Phinehas P., Ardwick, Manchester, England. Apparatus for cutting appliqué lace, &c. | 725,543 | Apr. 14 | 2088 | 473 | 103 | 1627 |
| Crawford, Ephraim A., and J. F. Dixon, Carthage, Mo. Spring-bed | 746,034 | Dec. 8 | 1334 | 299 | 107 | 1401 |
| Crawford, Francis M., Wayland, Mo. Paper-holding clip | 748,264 | Dec. 29 | 5502 | 1254 | 107 | 2387 |
| Crawford, Francis M., Wayland, Mo., assignor of one-third to E. S. Currier, Keokuk, Iowa, and C. P. Fore, Wayland, Mo. Package-tie fastener | 736,499 | Aug. 18 | 2732 | 598 | 105 | 1600 |
| Crawford, Ida M. (See Jacobson, John, assignor.) | | | | | | |
| Crawford, James, Boston, Mass. Adjustable support for tubs or sinks | 737,082 | Aug. 25 | 3826 | 850 | 105 | 1848 |
| Crawford, James, Boston, Mass. Combined trap and thimble | 739,154 | Sept. 15 | 3150 | 696 | 106 | 704 |
| Crawford, James E., Canyon, Tex. Window-lock | 725,046 | Apr. 14 | 1165 | 263 | 103 | 1433 |
| Crawford, James S., Sarnia, and G. W. Kinder, Strathroy, Canada. Automatic alarm for heated journals | 730,097 | June 2 | 1040 | 233 | 104 | 1339 |
| Crawford, John, Denver, Colo. Pole-changer | 728,372 | May 19 | 2930 | 647 | 104 | 662 |
| Crawford, John F. (See Railton and Campbell, assignors.) | | | | | | |
| Crawford McGregor and Canby Co. (See Mattern, George W., assignor.) | | | | | | |
| Crawford, Middleton, London, England. Self-propelled vehicle | 725,222 | Apr. 14 | 1501 | 342 | 103 | 1503 |
| Crawford, Middleton, London, England. Variable-speed gear | 725,223 | Apr. 14 | 1502 | 342, 343 | 103 | 1503 |
| Crawford, Middleton, assignor to Silent Motor Car Syndicate, Limited, London, England. Exhaust-silencer | 722,567 | Mar. 10 | 1700 | 379 | 103 | 381 |
| Crawford, William C. (See Guyer, Clinton, assignor.) | | | | | | |
| Crawford, William G., *et al.* (See Burnham, Arthur M., assignor.) | | | | | | |
| Crawford, William J. (See Broad, William, assignor.) | | | | | | |
| Crawford, William R., assignor of one-half to I. L. Bauers, Fort Worth, Tex. Boltless fish and bed plate for railway-rails | 718,317 | Jan. 13 | 1487 | 330 | 102 | 335 |

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| Crawley, Arthur, Arlington, Ohio. Reversing mechanism | 725,414 | Apr. 14 | 1834 | 411 | 103 | 1573 |
| Crawley, Mansfield C., St. Louis, Mo. Coffee-pot | 730,747 | June 9 | 2213 | 492 | 104 | 1603 |
| Creager, James A., Oklaunion, Tex. Disk plow | 731,436 | June 23 | 3523 | 785 | 104 | 1910 |
| Creamery Package Manufacturing Company. (See Penn, William E., assignor.) | | | | | | |
| Creamery Package Manufacturing Company. (See Valerius, Theodore L., assignor.) | | | | | | |
| Creasy, John A., Kansas City, Mo. Ore-washing pan | 728,677 | May 19 | 3510 | 781 | 104 | 784 |
| Creath, Thomas L., Mount Sterling, Ohio. Corn-shocker | 743,833 | Nov. 10 | 2023 | 430 | 107 | 447 |
| Crecelius, Theodore E., assignor to Crescent Novelty Company, St. Louis, Mo. Band-cutter | 734,304 | July 21 | 2992 | 704 | 105 | 666 |
| Crecelius, Theodore E., and G. E. Pfennighausen, St. Louis, Mo. Combined bell and door-knob | 718,432 | Jan. 13 | 1688 | 372 | 102 | 376 |
| Creech, Lewis T. (See Tyler, Allen, assignor.) | | | | | | |
| Creed, Fred A., Whatcom, Washington. Motor-power for boats | 720,897 | Feb. 17 | 2742 | 631 | 102 | 1429 |
| Creekmore, Ad W., *et al.* (See Martin, Sidney B., assignor.) | | | | | | |
| Creekmore, Horatio G., *et al.* (See Martin, Sidney B., assignor.) | | | | | | |
| Creelman, Richard I., Georgetown, Canada. Knitting-machine | 741,113 | Oct. 13 | 1343 | 308<br>309 | 106 | 1553 |
| Crees, Charles W., St. Joseph, Mo. Car-roof | 722,817 | Mar. 17 | 2192 | 488 | 103 | 498 |
| Creider, Simon S., and I. Korn, Sterling, Ill. Corn-husking and fodder-shredding machine | 738,776 | Sept. 15 | 2467 | 541<br>542 | 106 | 560 |
| Creighton, Elmer E. F., assignor to Stanley Electric Manufacturing Company, Pittsfield, Mass. Compensating system | 743,458 | Nov. 10 | 1331 | 273 | 107 | 299 |
| Creighton, Elmer E. F., assignor to Stanley Electric Manufacturing Company, Pittsfield, Mass. Compensating system | 743,459 | Nov. 10 | 1334 | 274 | 107 | 300 |
| Cremer, Henry, Chicago, Ill. Grating-machine | 739,836 | Sept. 29 | 4415 | 991 | 106 | 1013 |
| Crepeau, John B., Haverhill, Mass. Cartridge-recapper | 723,838 | Mar. 31 | 4048 | 914 | 103 | 908 |
| Crescent Company. (See Meyer, Frederick W. A., assignor.) | | | | | | |
| Crescent Novelty Company. (See Crecelius, Theodore E., assignor.) | | | | | | |
| Crespin, Lucien E., Paris, France. Steam-turbine | 718,918 | Jan. 20 | 2654 | 595 | 102 | 593 |
| Cress, Edward C. (See Eiler, Watkins, and Cress.) | | | | | | |
| Cress, Emmet J. (See Reed, Charles A., assignor.) | | | | | | |
| Cresson, Emlen V., assignor to George V. Cresson Company, Philadelphia, Pa. Shaft-hanger | 743,619 | Nov. 10 | 1656 | 347<br>348 | 107 | 370 |
| Cresswell, Robert, Spring Creek, New Zealand. Reaping, mowing, or binding machine finger | 731,344 | June 16 | 3326 | 742 | 104 | 1851 |
| Creswell & Waters Co. (See Stuart, Charles C., assignor.) | | | | | | |
| Cretors, Charles, Chicago, Ill. Steam-boiler | 728,548 | May 19 | 3260 | 722 | 104 | 729 |
| Cretors, Charles, Chicago, Ill. Roasting apparatus | 728,549 | May 19 | 3262 | 723 | 104 | 730 |
| Cretors, Charles, Chicago, Ill. Corn-popping apparatus | 728,550 | May 19 | 3264 | 723 | 104 | 730 |
| Cretors, Jesse B., assignor of one-half to P. H. Berry, St. Paris, Ohio. Vehicle-apron | 732,716 | July 7 | 38 | 9,10 | 105 | 11 |
| Creveling, John L., New York, N. Y. System of electrical distribution | 719,753 | Feb. 3 | 624 | 141 | 102 | 953 |
| Creveling, John L., New York, N. Y. System of electrical distribution | 720,674 | Feb. 17 | 2363 | 541<br>542 | 102 | 1349 |
| Creveling, John L., New York, N. Y. System of distribution | 720,675 | Feb. 17 | 2366 | 542 | 102 | 1359 |
| Creveling, John L., New York, N. Y. Dynamo driving mechanism | 721,025 | Feb. 17 | 2991 | 688 | 102 | 1483 |
| Creveling, John L., New York, N. Y. System of electrical regulation | 747,686 | Dec. 22 | 4371 | 987 | 107 | 2115 |
| Crichton, William E. (See Van Valkenburg, Randall T., assignor.) | | | | | | |
| Cricks, John O. (See Hatch and Cricks.) | | | | | | |
| Cridge, Edmund L , Passaic, N. J. Automatic trip-brake | 721,503 | Feb. 24 | 3919 | 892 | 102 | 1697 |
| Cridge, Edmund L., Passaic, N. J. Automatic brake for railway-vehicles | 740,246 | Sept. 29 | 5201 | 1169 | 106 | 1177 |
| Criffield, William R., Walla Walla, Wash. Plow-jointer or rolling colter | 736,695 | Aug. 18 | 3115 | 687 | 105 | 1679 |
| Crimins, John C., Indianapolis, Ind. Storm-apron. (Reissue) | 12,170 | Nov. 17 | 3700 | 798 | 107 | 821 |
| Cripe, Jacob M., Mattoon, Ill. Portable radiator | 722,286 | Mar. 10 | 1178 | 261 | 103 | 266 |
| Crippen, H. Durell. (See Maxwell, George S., assignor.) | | | | | | |
| Crippen, John W., and H. F. Kellemen, Utica, N. Y., assignors to Utica Drop Forge & Tool Company. Machine-vise | 722,677 | Mar. 17 | 1932 | 430 | 103 | 445 |
| Crisp, Richard O. (See Willey, Edward S., assignor.) | | | | | | |
| Crissy, Samuel T., Hackensack, N. J. Jar-closure | 734,047 | July 21 | 2488 | 580 | 105 | 559 |
| Crissy, William, Philadelphia, Pa. Milk-jar lock | 747,592 | Dec. 22 | 4196 | 944 | 107 | 2076 |
| Crist, Alfred D., Ada, Ohio. Music-holder and leaf-turner | 718,984 | Jan 27 | 2784 | 623 | 102 | 636 |
| Crist, Alfred D., Vanwert, Ohio. Music-leaf turner | 738,298 | Sept. 8 | 1508 | 327 | 106 | 340 |
| Crist, George J., assignor, by mesne assignments, to M. L. Milligan, J. C Breckenridge, and P. Young, Springfield, Ohio. Support for lamp-globes or the like | 719,754 | Feb. 3 | 626 | 141 | 102 | 954 |
| Crist, William A., assignor of one-half to E. V. Markel, Codorus, Pa. Thill-tug | 723,246 | Mar. 24 | 2964 | 666 | 103 | 671 |
| Cristadoro, Charles, St. Paul, Minn., assignor to Whirlpool Mixer and Kneader Company, Seneca Falls, N. Y. Kneading and mixing machine | 738,663 | Sept. 8 | 2232 | 489 | 106 | 494 |
| Critchfield, Melvel L., *et al.* (See Johnson, William C., assignor.) | | | | | | |
| Crites, Henry M., Circleville, Ohio Conveyer | 727,911 | May 12 | 2062 | 459 | 104 | 457 |
| Croasdale, Stuart. (See Pohlé and Croasdale.) | | | | | | |
| Crobarger, George T., deceased, Newton, Kans.; M. E. Crobarger, administratrix. Shock-corn harvester | 718,919 | Jan. 20 | 2655 | 595<br>596 | 102 | 593 |
| Crobarger, Mary E., administratrix. (See Crobarger, George T.) | | | | | | |
| Crocker, Ernest B., Boston, Mass. Window-screen | 725,319 | Apr. 14 | 1665 | 376 | 103 | 1537 |
| Crocker, James N., Saratoga Springs, N. Y. Time damper mechanism | 726,873 | May 5 | 73 | 19 | 104 | 18 |
| Crocker, Rawson. (See Sibley, Frank J., assignor.) | | | | | | |
| Crocker-Wheeler Company. (See Douglas, Edwin R., assignor.) | | | | | | |
| Crocker-Wheeler Company. (See Dunn, Gano S., assignor.) | | | | | | |
| Crocker-Wheeler Company. (See Dunn and Douglas, assignors.) | | | | | | |
| Crocker-Wheeler Company. (See Earll, Charles I., assignor.) | | | | | | |
| Crocker, William O., Turners Falls, Mass. Turbine water-wheel | 734,673 | July 28 | 3649 | 856 | 105 | 820 |
| Crockett, Fred P., and O. P. Johnson, assignors to Star Brass Works, Kalamazoo, Mich. Trolley-wheel | 725,938 | Apr. 21 | 2819 | 639 | 103 | 1798 |
| Crockett, John. (See Greer, William N., assignor.) | | | | | | |
| Crockett, Samuel R., Sr., Vinita, Ind. Ter. Wall-papering machine | 739,393 | Sept. 22 | 3586 | 801 | 106 | 814 |
| Crofford, Chester E., Newcastle, Wyo. Antifriction chafe-iron for vehicles | 726,407 | Apr. 28 | 3671 | 832 | 103 | 1989 |
| Crofoot, Mert R., Colorado City, Colo. Automatic screen-brush | 735,713 | Aug. 11 | 1304 | 281 | 105 | 1276 |
| Croft, Emma, *et al.* (See Higginson, George, assignor.) | | | | | | |
| Croft, Frederick and R., Jr., Salt Lake City, Utah. Boring-machine | 734,825 | July 28 | 3969 | 927 | 105 | 882 |
| Croft, Harry W., Pittsburg, Pa. Brick-drying floor | 741,630 | Oct. 20 | 2386 | 535 | 106 | 1790 |
| Croft, Robert, Jr. (See Croft, Frederick and R., Jr.) | | | | | | |
| Crofts, John C. (See Johnson and Crofts.) | | | | | | |
| Crofutt, George A., Hoboken, N. J. Continuous power-chain of water-lifts | 741,631 | Oct. 20 | 2389 | 535<br>536 | 106 | 1790 |
| Crofutt, George A., Hoboken, N. J. Water-lift for irrigation | 741,632 | Oct. 20 | 2391 | 536 | 106 | 1791 |
| Croghan, James J., *et al.* (See Danner, Joseph, assignor.) | | | | | | |
| Crohn, Marcus, New York, N. Y. Safety device for scarf-pins, studs, &c | 737,356 | Aug. 25 | 4340 | 967 | 105 | 1957 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Crompton, Charles, Worcester, Mass. Motor-vehicle | 718,097 | Jan. 13 | 1081 | 240 | 102 | 247 |
| Crompton, Charles, Worcester, Mass. Boiler-feeding apparatus | 721,159 | Feb. 24 | 3282 | 751, 752 | 102 | 1566 |
| Crompton, Charles, Worcester, Mass. Steam-engine | 727,752 | May 12 | 1757 | 395 | 104 | 395 |
| Crompton, Charles, Worcester, Mass. Steam-generator | 738,664 | Sept. 8 | 2234 | 490 | 106 | 495 |
| Crompton & Knowles Loom Works. (See Bardsley, Henry, assignor.) | | | | | | |
| Crompton & Knowles Loom Works. (See Clark, John A., assignor.) | | | | | | |
| Crompton & Knowles Loom Works. (See Cyr, Joseph T., assignor.) | | | | | | |
| Crompton & Knowles Loom Works. (See Dearden and Sharp, assignors.) | | | | | | |
| Crompton & Knowles Loom Works. (See Eaton, Willie G., assignor.) | | | | | | |
| Crompton & Knowles Loom Works. (See Guilette, Frederick A. and H. A., assignors.) | | | | | | |
| Crompton & Knowles Loom Works. (See Hollingworth, Edward, assignor.) | | | | | | |
| Crompton & Knowles Loom Works. (See Hutchins, George F., assignor.) | | | | | | |
| Crompton & Knowles Loom Works. (See Ledoux, Hector, assignor.) | | | | | | |
| Crompton & Knowles Loom Works. (See McGuiness, Benjamin F., assignor.) | | | | | | |
| Crompton & Knowles Loom Works. (See O'Reilly, Anthony J., assignor.) | | | | | | |
| Crompton & Knowles Loom Works. (See Patten, Alonzo R., assignor.) | | | | | | |
| Crompton & Knowles Loom Works. (See Ryon, Eppa H., assignor.) | | | | | | |
| Crompton & Knowles Loom Works. (See Wattie, William, assignor.) | | | | | | |
| Crompton & Knowles Loom Works. (See Wyman, Horace, assignor.) | | | | | | |
| Crompton, Randolph, Worcester, Mass. Loom | 739,651 | Sept. 22 | 4073 | 907, 908, 909 | 106 | 920 |
| Cromwell, Albert. (See Webster, William L., assignor.) | | | | | | |
| Cromwell, John C., assignor to Garrett-Cromwell Engineering Company, Cleveland, Ohio. Blast-furnace-charging apparatus | 727,754 | May 12 | 1763 | 397 | 104 | 396 |
| Cromwell, John C., assignor to Garrett Cromwell Engineering Company, Cleveland, Ohio. Blast-furnace | 736,365 | Aug. 18 | 2478 | 542 | 105 | 1547 |
| Cromwell, John C., and C. W. A. Koelkebeck, Cleveland, Ohio. Blast-furnace top | 724,670 | Apr. 7 | 467 | 113 | 103 | 1269 |
| Cromwell, John C., and C. W. A. Koelkebeck, Cleveland, Ohio. Bell-gear for blast-furnaces | 736,366 | Aug. 18 | 2478 | 542, 543, 544 | 105 | 1547 |
| Cromwell, John C., and C. W. A. Koelkebeck, assignors of three-fourths to Garrett-Cromwell Engineering Company, Cleveland, Ohio. Blast-furnace-charging apparatus | 727,753 | May 12 | 1762 | 395, 396 | 104 | 396 |
| Crone, Seth A., New York, N. Y. Brake-beam | 720,676 | Feb. 17 | 2369 | 543 | 102 | 1351 |
| Crone, Seth A., New York, N. Y. Brake-beam | 720,677 | Feb. 17 | 2370 | 543 | 102 | 1351 |
| Crone, Seth A., New York, N. Y. Brake-beam | 720,678 | Feb. 17 | 2372 | 543 | 102 | 1351 |
| Crone, Seth A., New York, N. Y. Brake-beam | 731,668 | June 23 | 3059 | 881 | 104 | 1997 |
| Crone, Seth A., New York, N. Y. Brake-beam | 731,865 | June 23 | 4303 | 960 | 104 | 2071 |
| Crone, Seth A., New York, N. Y. Brake-head for railway-car brake-beams | 740,092 | Sept. 29 | 4914 | 1102 | 106 | 1117 |
| Crone, Seth A., New York, N. Y. Brake-beam for railway-cars | 742,169 | Oct. 27 | 3473 | 776 | 106 | 2030 |
| Crone, Seth A., New York, N. Y. Brake-beam for railway-cars | 744,722 | Nov. 24 | 3739 | 807 | 107 | 846 |
| Crone, Seth A., New York, N. Y. Brake-beam | 744,723 | Nov. 24 | 3741 | 807 | 107 | 846 |
| Cronemeyer, August H., New York, N. Y. Solidifying volatile hydrocarbons and alcohol and products thereof | 718,318 | Jan. 13 | 1488 | ------ | 102 | 335 |
| Cronholm, Neander N., Chicago, Ill. Edible fat and making same | 747,301 | Dec. 15 | 3678 | ------ | 107 | 1944 |
| Cronin, Lizzie H., administratrix. (See Cronin, William D.) | | | | | | |
| Cronin, Martha L., New York, N. Y. Movable fire-escape balcony | 719,755 | Feb. 3 | 628 | 141 | 102 | 954 |
| Cronin, Thomas, Marietta, Ohio. Pitman | 736,223 | Aug. 11 | 2224 | 479 | 105 | 1474 |
| Cronin, William D., deceased, (L. H. Cronin, administratrix,) assignor of one-half to S. Gregson, Atlantic City N. J. Cycloidal chariot | 745,159 | Nov. 24 | 4591 | 995 | 107 | 1020 |
| Cronk, William, Montour Falls N. Y. Nut-lock | 746,296 | Dec. 8 | 1811 | 411 | 107 | 1505 |
| Cronkright, W. G. (See Mock, Charles H., assignor.) | | | | | | |
| Crook, Charles M., New Britain, Conn., assignor to C. S. Burton, trustee, Oakpark, Ill. Self-winding electric clock | 734,674 | July 28 | 3651 | 856 | 105 | 820 |
| Crook, Edwin E. (See Stump, Ira E., assignor.) | | | | | | |
| Crook, Edwin E. (See Stump and Crook.) | | | | | | |
| Crook, William E., Surry Hills, near Sydney, New South Wales, Australia. Automatic coupling for railway-cars | 745,794 | Dec. 1 | 863 | 195 | 107 | 1284 |
| Crooke, J. W., *et al.* (See Taylor, James A., assignor.) | | | | | | |
| Croom, Nannie V., and S. Ledger, Dallas, Tex. Garment-fastener | 740,813 | Oct. 6 | 812 | 182 | 106 | 1418 |
| Crosby, Charles E., and E. C. Aurin, Indianapolis, Ind. Contractible core-bar | 718,700 | Jan. 20 | 2250 | 494 | 102 | 510 |
| Crosby, Jesse, Madelia, Minn. Band-cutter and feeder for corn-shredding machines | 729,739 | June 2 | 396 | 89, 90 | 104 | 1209 |
| Crosby, John M., Frenchtown, N. J. Wheel | 742,841 | Nov. 3 | 40 | 11 | 107 | 11 |
| Crosby, Joseph B., Duxbury, assignor to Hersey Manufacturing Company, South Boston, Mass. Machine for seeding raisins | 729,551 | June 2 | 55 | 13, 14 | 104 | 1138 |
| Crosby, Robert G., San Antonio, Tex. Tag | 724,264 | Mar. 31 | 4932 | 1104 | 103 | 1088 |
| Crosby Steam Gage and Valve Company. (See Reed, Samuel G., assignor.) | | | | | | |
| Crosby, William H., Waterville, Me. Pulp-screening machine | 718,098 | Jan. 13 | 1087 | 240, 241 | 102 | 249 |
| Crosett, James H. (See Haven, Egbert D., assignor.) | | | | | | |
| Croskey, John H., Pittsburg, Pa. Glass-finishing apparatus | 742,601 | Oct. 27 | 4272 | 962, 963 | 106 | 2194 |
| Croskey, John H., Pittsburg, Pa. Finishing glassware | 742,602 | Oct. 27 | 4275 | 963 | 106 | 2195 |
| Crosley, George E., assignor of one-half to F. B. Lawton, Albion, Wis. Knife attachment | 745,795 | Dec. 1 | 864 | 195 | 107 | 1284 |
| Crosley, William, Bulawayo, South Africa. Slide-rule and calculator | 748,050 | Dec. 29 | 5108 | 1154 | 107 | 2301 |
| Cross, Edwin, Burnham, Pa. Molding apparatus | 720,408 | Feb. 10 | 1832 | 417, 418 | 102 | 1228 |
| Cross, George R., Lewiston, Me. Chimney-cap | 740,247 | Sept. 29 | 5203 | 1170 | 106 | 1177 |
| Cross, George W., Carbondale, Pa. Slate-picker | 739,837 | Sept. 29 | 4417 | 991 | 106 | 1013 |
| Cross, Harry, and G. J. Griffiths, Woodstock, assignors to Oliver Typewriter Company, Chicago, Ill. Type-writing machine | 724,671 | Apr. 7 | 468 | 113, 114 | 103 | 1269 |
| Cross, Harry, and G. J. Griffiths, Woodstock, assignors to Oliver Typewriter Company, Chicago, Ill. Type-writing machine | 732,340 | June 30 | 5254 | 1166 | 104 | 2282 |
| Cross, Henry S., Mount Vernon, N. Y., assignor, by mesne assignments, to Acme Ball Bearing Caster Company. Ball-caster | 747,947 | Dec. 29 | 4895 | 1109 | 107 | 2254 |
| Cross, Milton L., Philadelphia, Pa. Bedstead | 725,320 | Apr. 14 | 1668 | 376 | 103 | 1538 |
| Cross, Richard A., *et al.* (See Hanby, Edward, assignor.) | | | | | | |
| Cross, Robert G., *et al.* (See Hanby, Edward, assignor.) | | | | | | |
| Cross, Samuel B., Mouth of Seneca, and A. S. Ours, Hopeville, W. Va. Suspension-bridge | 746,679 | Dec. 15 | 2496 | 570, 571 | 107 | 1677 |
| Cross, William, Montreal, Canada. Combined feed-water heater, circulator, and scummer | 745,797 | Dec. 1 | 867 | 196 | 107 | 1285 |
| Cross, William A., Chicago, Ill. Automatic door-closing mechanism | 727,097 | May 5 | 528 | 114 | 104 | 115 |
| Cross, William A., Chicago, Ill. Well-door for elevators | 727,098 | May 5 | 531 | 114 | 104 | 116 |
| Crossgrove, Thomas A., Darlington, England. Motor | 735,215 | Aug. 4 | 352 | 68 | 105 | 1056 |
| Crossland, George J., Mobile, Ala. Electrical switch | 747,537 | Dec. 22 | 4103 | 921 | 107 | 2055 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|
| | | | Spec. | Drg. | Vol. | Page. |
| Crossley, Albert, New Bedford, Mass. Foot-ball | 731,165 | June 16 | 3008 | 667, 668 | 104 | 1786 |
| Crossley, Albert D., South Norwalk, assignor of forty-nine one-hundredths to J. H. Crossley, Bridgeport, Conn. Trolley-pole base | 736,942 | Aug. 25 | 3589 | 795 | 105 | 1799 |
| Crossley, Bernard, Burnley, England. Shuttle for looms | 738,987 | Sept. 15 | 2846 | 631 | 106 | 642 |
| Crossley, Daniel L., Denver, Colo. Sliding curtain-support | 737,585 | Sept. 1 | 47 | 10 | 106 | 12 |
| Crossley, James H. (See Crossley, Albert D., assignor.) | | | | | | |
| Crossley, William, Westhaven, Conn. Multiple punching-press | 743,620 | Nov. 10 | 1659 | 348 | 107 | 370 |
| Crossley, William H., assignor of one-half to J. R. Schuyler, Bloomsburg, Pa. Track attachment | 721,504 | Feb. 24 | 3921 | 892 | 102 | 1697 |
| Crossley, William H., assignor of one-half to I. W. Willitts, Bloomsburg, Pa. Folding crate or box | 745,796 | Dec. 1 | 865 | 195, 196 | 107 | 1284 |
| Crossman, Abner, trustee. (See Duffy, Thomas I., assignor.) | | | | | | |
| Crossman, John G., Watford, England. Filter and extractor press | 719,438 | Feb. 3 | 49 | 11, 12 | 102 | 836 |
| Crosthwaite, Walker G. (See Foster, David B., assignor.) | | | | | | |
| Crother, Wilfred, St. Paul, Minn. Shade-roller bracket and sash-stop | 724,548 | Apr. 7 | 236 | 57 | 103 | 1220 |
| Crothers, N. E., *et al.* (See McBeth, Warren F., assignor.) | | | | | | |
| Crôtte, Francisque, New York, N. Y. Preserving beer | 734,305 | July 21 | 2993 | 704 | 105 | 666 |
| Crotteau, Eli. (See Bach and Crotteau.) | | | | | | |
| Crotti, Giovanni. (See Carissimo, Crotti, and Antonioli.) | | | | | | |
| Crotto, Gilbert A., Reading, Pa. Time stock-feeder | 741,310 | Oct. 13 | 1744 | 389 | 106 | 1635 |
| Crouse, Henry P. (See Bossert, William F., assignor.) | | | | | | |
| Crouse, Huntington B. (See Payne, Charles A., assignor.) | | | | | | |
| Crouse, Jacob F. (See Walker, William S., assignor.) | | | | | | |
| Crouse, John L., New York, N. Y., assignor to G. Westinghouse, Pittsburg, Pa. Controlling system for railway vehicles or trains | 735,714 | Aug. 11 | 1305 | 281 | 105 | 1276 |
| Crow, John C., Los Angeles, Cal. Scaffold for window-washing or the like | 724,406 | Mar. 31 | 5212 | 1168 | 103 | 1147 |
| Crow, John M., Mustang, Okla. Ter. Windmill | 739,394 | Sept. 22 | 3588 | 802 | 106 | 814 |
| Crow, John W. (See Haas and Crow.) | | | | | | |
| Crow, Joseph T., Kieferville, Ohio. Fence-post | 717,736 | Jan. 6 | 401 | 94 | 102 | 88 |
| Crow, Robert D., Henderson, Tex. Cotton-compress | 730,881 | June 16 | 2456 | 544, 545 | 104 | 1674 |
| Crow, Robert D., Henderson, Tex. Cotton-press | 739,838 | Sept. 29 | 4418 | 991, 992 | 106 | 1013 |
| Crowder, Charles F., assignor of one-third to J. B. Gordon, Richmond, Ind. Cash-register | 733,815 | July 14 | 1997 | 470, 471 | 105 | 438 |
| Crowdes, Jackson G., Boston, Mass., assignor to Lidgerwood Manufacturing Company. Cableway-carriage | 741,633 | Oct. 20 | 2391 | 536, 537 | 106 | 1791 |
| Crowe, Edward, Sheffield, England. Valve-gear for pumps or the like | 725,047 | Apr. 14 | 1166 | 263 | 103 | 1434 |
| Crowe, Frederick C., Chicago, Ill., assignor to Bogue and Crowe Manufacturing Company. Rope-clamp | 722,949 | Mar. 17 | 2414 | 539 | 103 | 542 |
| Crowe, Harry A. (See Meneely and Crowe.) | | | | | | |
| Crowe, John T., Clarinda, Iowa. Shoe-nailing machine | 742,396 | Oct. 27 | 3898 | 876 | 106 | 2117 |
| Crowell, Edward E., Waterville, assignor of one-half to J. H. Kelleher, Portland, Me. Slack-adjuster for brakes | 740,814 | Oct. 6 | 813 | 182, 183 | 106 | 1419 |
| Crowell, Elvaro Z. and Z. H., Mount Vernon, Mich. Cheese-cutter | 718,920 | Jan. 20 | 2657 | 596 | 102 | 594 |
| Crowell, John H., Vineyard Haven, Mass. Fountain-pen | 729,139 | May 26 | 4337 | 957 | 104 | 969 |
| Crowell, Nathan J., L. R. Wanger, and S. Wright, Newark, N. J. Soap-dispensing apparatus | 717,817 | Jan. 6 | 567 | 126, 127, 128 | 102 | 122 |
| Crowell, Pearl K., assignor to Farmers Compress Company, Memphis, Tenn. Cotton-compress | 730,347 | June 9 | 1498 | 332, 333 | 104 | 1450 |
| Crowell, Zalmon H. (See Crowell, Elvaro Z. and Z. H.) | | | | | | |
| Crowl, Andrew M., Sebring, assignor to E. A. Wilson, Niles, Ohio. Steam-engine-lubricator filler | 748,483 | Dec. 29 | 5898 | 1340 | 107 | 2473 |
| Crowley, Daniel P. Turtlecreek, Pa. Metallic tie | 734,306 | July 21 | 2994 | 705 | 105 | 666 |
| Crowley, Dennis F., Fort Leavenworth, Kans. Hydrocarbon-gas generator and burner for crude petroleum | 735,472 | Aug. 4 | 843 | 179 | 105 | 1159 |
| Crowley, James M., Carl Junction, Mo. Rotary motor | 724,819 | Apr. 7 | 754 | 175 | 103 | 1331 |
| Crowley, John H., Duluth, Minn. Tie-plate | 717,819 | Jan. 6 | 576 | 129 | 102 | 124 |
| Crowley, John H., assignor of one-half to S. F. Snively, Duluth, Minn. Railway-track securer | 717,818 | Jan. 6 | 574 | 129 | 102 | 124 |
| Crowley, William F., Philadelphia, Pa. Bung-faucet | 734,404 | July 21 | 3155 | 741 | 105 | 701 |
| Crown Cork and Seal Company. (See Hall, Robert A., assignor.) | | | | | | |
| Crown Cork & Seal Company. (See Keizer, Lewis M., assignor.) | | | | | | |
| Crown Cork & Seal Company. (See Painter, Gwynne E., assignor.) | | | | | | |
| Crown Dryer Company. (See Hornsey, John W., assignor.) | | | | | | |
| Crown Paper Company. (See How, Fred B., assignor.) | | | | | | |
| Crowner, James M. and S. R., Marion, Iowa. Stove | 724,820 | Apr. 7 | 755 | 176 | 103 | 1332 |
| Crowner, States R. (See Crowner, James M. and S. R.) | | | | | | |
| Crowther, David. (See Glover and Crowther.) | | | | | | |
| Crowther, Edgar F., Vicksburg, Miss. Car-ventilator | 729,282 | May 26 | 4600 | 1017, 1018 | 104 | 1024 |
| Croy, Edward B., Lima, Ohio. Duplex force-pump | 726,650 | Apr. 28 | 4158 | 937 | 103 | 2083 |
| Crozier, Alfred O. (See Jaques, William E., assignor.) | | | | | | |
| Crozier, Henry B. (See Hey and Crozier.) | | | | | | |
| Crozier, James J., Central Islip, N. Y. Combined try-square and adjustable bevel | 746,468 | Dec. 8 | 2098 | 483 | 107 | 1567 |
| Crozier, Robert J., and A. Feilbach, Elmore, Ohio. Hot-air furnace | 738,777 | Sept. 15 | 2469 | 542, 543 | 106 | 561 |
| Crozzi, Carlo. (See Diamant, Sigismondo, assignor.) | | | | | | |
| Crude Oil Gas Company. (See Cothran, Grove, assignor.) | | | | | | |
| Crude Oil Stove and Furnace Company. (See Dahl, Louis, assignor.) | | | | | | |
| Cruikshank, James W., Pittsburg, Pa. Plate-glass-annealing oven | 737,909 | Sept. 1 | 703 | 152 | 106 | 154 |
| Crump, Harry, and L. Metz, Frank, Pa. Hose-coupling | 737,357 | Aug. 25 | 4341 | 967 | 105 | 1957 |
| Crumpton, Oliver C., Paragould, Ark. Knockdown crate | 744,299 | Nov. 17 | 2977 | 637 | 107 | 665 |
| Cruse, Amandus H., assignor to R. Hoe, New York, N. Y. Machine for making saws | 746,297 | Dec. 8 | 1812 | 411, 412 | 107 | 1506 |
| Crutchlow, William, Paterson, N. J. Dobby | 745,041 | Nov. 24 | 4327 | 935 | 107 | 968 |
| Cruzan, Albert O., assignor of one-half to J. I. Ross, Madison, Ind. Boiler tube or flue scraper and cleaner | 728,085 | May 12 | 2378 | 528 | 104 | 523 |
| Cruzan, Edward L., assignor of one-half to H. King, Stillwater, Okla. Ter. Bed-brace | 739,839 | Sept. 29 | 4422 | 992 | 106 | 1014 |
| Cryderman, John, Edmonton, Canada. Vehicle-body raiser | 742,292 | Oct. 27 | 3719 | 831 | 106 | 2080 |
| Cryer, Henry M., Goldthwaite, Tex. Axle-skein | 740,093 | Sept. 29 | 4917 | 1103 | 106 | 1118 |
| Crytser, Robert, Gibsonia, Pa. Bail for sand-pumps | 736,696 | Aug. 18 | 3116 | 687 | 105 | 1679 |
| Csányi, Henry, Felsö-Dobsza, Austria-Hungary. Electric battery | 734,826 | July 28 | 3970 | 927 | 105 | 883 |
| Cuatt, Lewis, Union City, and W. J. Annis, Tekonsha, Mich. Building-block | 732,832 | July 7 | 249 | 62 | 105 | 56 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| Cudahy Packing Co. (See Taliaferro, Thomas W., assignor.) | | | | | | |
| Cudd, Simeon S., assignor to S. J. H. Howell, Kelton, S. C. Fertilizer-distributer and seed-dropper | 734,405 | July 21 | 3156 | 742 | 105 | 701 |
| Culbreath, Wm. D. (See Ried, George M., assignor.) | | | | | | |
| Cull, Henry, Chicago, Ill. Material-elevator | 739,296 | Sept. 22 | 3416 | 761 | 106 | 778 |
| Cullen, Beauregard, New Albany, Ind. Electric-wire support | 726,651 | Apr. 28 | 4159 | 937 | 103 | 2083 |
| Cullen, Beauregard, New Albany, Ind. Electrical-wire support | 746,469 | Dec. 8 | 2099 | 483 | 107 | 1567 |
| Cullen, Martin, Boston, Mass. Catch-basin | 730,817 | June 9 | 2331 | 517 | 104 | 1628 |
| Culley, Carl R., assignor of one-half to W. H. Peck, Norwalk, Ohio. Printing-press | 720,331 | Feb. 10 | 1702 | 387 | 102 | 1199 |
| Culley, Carl R., assignor of one-half to W. H. Peck, Norwalk, Ohio. Numbering-machine | 741,311 | Oct. 13 | 1745 | 389 | 106 | 1635 |
| Cullinan, Joseph S., *et al.* (See Sloan, James W., assignor.) | | | | | | |
| Cullman, Joseph F., *et al.* (See Deal, William M., assignor.) | | | | | | |
| Cullman, Joseph F., *et al.* (See Rote, Charles V., assignor.) | | | | | | |
| Cullum, Ella C., Denver, Colo. Garment-hanger | 725,678 | Apr. 21 | 2351 | 531 | 103 | 1697 |
| Culmann, Edward, assignor to Schoellkopf, Hartford & Hanna Company, Buffalo, N. Y. Green sulfur dye and making same | 731,669 | June 23 | 3961 | ..... | 104 | 1997 |
| Culmann, Edward, assignor to Schoellkopf, Hartford & Hanna Company, Buffalo, N. Y. Orange to yellow brown sulfur dye and making same | 746,926 | Dec. 15 | 2973 | ..... | 107 | 1786 |
| Culmer, John W., Cleveland, Ohio, assignor to E. M. Moore, Allegheny, Pa. Gas-meter | 721,026 | Feb. 17 | 2993 | 688 | 102 | 1484 |
| Culmer, John W., and F. C. Hoyt, assignors to National Computing Scale Company, Cleveland, Ohio. Spring-balance scale | 743,460 | Nov. 10 | 1338 | 274 | 107 | 301 |
| Culp, John M., Cottagegrove, assignor of one-half to E. Jenks, Bohemia, Oreg. Bottle | 724,443 | Apr. 7 | 41 | 11 | 103 | 1178 |
| Culpan, Herbert, Aims, Oreg. Hydraulic ram | 731,285 | June 16 | 3227 | 718 | 104 | 1830 |
| Culver, Charles R., assignor to H. A. Ley, Springfield, Mass. Amusement apparatus | 724,672 | Apr. 7 | 473 | 114 | 103 | 1270 |
| Culver, Charles R., assignor to H. A. Ley, Springfield, Mass. Trackway for bicycle-riders or other performers | 739,155 | Sept. 15 | 3151 | 696 | 106 | 705 |
| Culver, Frederick S., Taunton, Mass. Loop-banding machine | 730,516 | June 9 | 1818 | 405 | 104 | 1517 |
| Culver, Willard B., *et al.* (See Simpson and Speicher, assignors.) | | | | | | |
| Culver, Willard B., assignor to E. E. Hendrick, Carbondale, Pa. Pump | 726,259 | Apr. 28 | 3377 | 767<br>768 | 103 | 1928 |
| Cumbie, William A., Morris Station, Ga. Wrench | 738,003 | Sept. 1 | 901 | 197 | 106 | 197 |
| Cuming, Mari A., New York, N. Y. Hat-shaping die | 740,815 | Oct. 6 | 815 | 183 | 106 | 1419 |
| Cumins, J. P. (See Waaser, Frank L., assignor.) | | | | | | |
| Cummer, Albert E., Cleveland, Ohio. Filter | 742,971 | Nov. 3 | 260 | 58 | 107 | 57 |
| Cumming, David B., Baltimore, Md. Feed-water heater | 729,283 | May 26 | 4603 | 1018 | 104 | 1025 |
| Cumming, Robert, Edinburgh, Scotland. Rotary explosive-engine | 731,286 | June 16 | 3229 | 719 | 104 | 1830 |
| Cumming, Robert, Edinburgh, Scotland. Rotary explosive-engine | 734,827 | July 28 | 3971 | 928 | 105 | 884 |
| Cumming, William S., *et al.* (See Stecher, Charles, assignor.) | | | | | | |
| Cumming, William S. (See Stecher and Fulford, assignors.) | | | | | | |
| Cummings, Albert G., Millersburg, Pa., assignor to F. W. Wood, Baltimore, Md. Hydraulic packing device | 718,701 | Jan. 20 | 2253 | 495 | 102 | 510 |
| Cummings, Charles J., Tully, N. Y. Potato-digger | 735,216 | Aug. 4 | 353 | 68 | 105 | 1057 |
| Cummings, Daniel J., New Haven, Conn. Breast-link for double harness | 746,680 | Dec. 15 | 2497 | 571 | 107 | 1677 |
| Cummings, Enoch. (See Trivett and Cummings.) | | | | | | |
| Cummings, George H., Detroit, Mich. Adjustable table | 745,160 | Nov. 24 | 4592 | 996 | 107 | 1021 |
| Cummings, George W., Detroit, Mich. Hitching device | 726,874 | May 5 | 74 | 19 | 104 | 19 |
| Cummings, Henry C. (See Winter, John P., assignor.) | | | | | | |
| Cummings, Henry H., Malden, Mass., assignor to Peerless Machinery Company, Charleston, W. Va. Lasting-machine | 737,586 | Sept. 1 | 49 | 11 | 106 | 13 |
| Cummings, Henry H., Malden, Mass., assignor to Subtarget Gun Company, Saco, Me., and Boston, Mass. Target-practice apparatus | 739,778 | Sept. 22 | 4296 | 962<br>963<br>964 | 106 | 970 |
| Cummings, Henry H., Malden, Mass., assignor to Subtarget Gun Company, Saco, Me., and Boston, Mass. Subtarget | 739,779 | Sept. 22 | 4307 | 964<br>965 | 106 | 972 |
| Cummings, Herbert G. (See Cummings and Chamberlain.) | | | | | | |
| Cummings, John, Grand Rapids, Mich. Vehicle-spring | 742,114 | Oct. 20 | 3374 | 753 | 106 | 1993 |
| Cummings, John, assignor of one-half to A. D. Rathbone, Jr., Grand Rapids, Mich. Thill-coupling | 722,401 | Mar. 10 | 1378 | 305 | 103 | 309 |
| Cummings, John, assignor of one-half to A. D. Rathbone, Jr., Grand Rapids, Mich. Vehicle | 728,872 | May 26 | 3873 | 861 | 104 | 874 |
| Cummings, John, assignor of one-half to A. D. Rathbone, Jr., Grand Rapids, Mich. Shifting rail for carriage-seats | 743,621 | Nov. 10 | 1660 | 349 | 107 | 371 |
| Cummings, John F., *et al.* (See Burke, Edward J., assignor.) | | | | | | |
| Cummings, Lincoln C., Pasadena, Cal. Resilient tire | 728,678 | May 19 | 3511 | 781 | 104 | 785 |
| Cummings, Lincoln C., Pasadena, Cal. Noiseless tire-protector | 732,278 | June 30 | 5136 | 1141 | 104 | 2258 |
| Cummings, Margaret, Jersey City, N. J. Plaiter attachment for sewing-machines | 740,094 | Sept. 29 | 4918 | 1103 | 106 | 1118 |
| Cummings, Montraville D., Columbus, Ohio. Mail-bag catching and delivery device | 724,673 | Apr. 7 | 475 | 115 | 103 | 1271 |
| Cummings, Scott, *et al.* (See Myers, Harry J., assignor.) | | | | | | |
| Cummings, William J. and H. G., and R. Chamberlain, Vancouver, Canada. Wrecking device | 748,484 | Dec. 29 | 5899 | 1341 | 107 | 2474 |
| Cummins, Edwin M., Sioux City, Iowa. Wheelbarrow | 736,697 | Aug. 18 | 3117 | 687 | 105 | 1679 |
| Cummins, William R., Reading, England. Water-tube boiler | 735,067 | Aug. 4 | 34 | 10, 11 | 105 | 989 |
| Cummons, Clarence B., Charleston, Mo. Wheat-shocking attachment for self-binding harvesters | 726,260 | Apr. 28 | 3380 | 768<br>769 | 103 | 1929 |
| Cummons, Clarence B., Charleston, Mo. Scaffold | 745,094 | Nov. 24 | 4445 | 961 | 107 | 991 |
| Cumnock, Robert L., Anderson, S. C. Automatic threading device for loom-shuttles | 736,500 | Aug. 18 | 2733 | 598 | 105 | 1601 |
| Cundall, Constant T., Ashaway, R. I., assignor to C. B. Cottrell & Sons Company, New York, N. Y. Sheet-delivery apparatus for printing and folding machinery | 738,778 | Sept. 15 | 2474 | 543<br>544 | 106 | 562 |
| Cundall, Henry C. (See Cundall, John S., R. D., W. D., and H. C.) | | | | | | |
| Cundall, John S., R. D., W. D., and H. C., Baildon, England. Oil-engine | 728,873 | May 26 | 3874 | 862 | 104 | 874 |
| Cundall, Robert D. (See Cundall, John S., R. D., W. D., and H. C.) | | | | | | |
| Cundall, William D. (See Cundall, John S., R. D., W. D., and H. C.) | | | | | | |
| Cunniff, Edward. (See Cunniff, John V. and E.) | | | | | | |
| Cunniff, Edward, *et al.* (See Tichon, Joseph E., assignor.) | | | | | | |
| Cunniff, Edward and J. V., New Bedford, assignors to Draper Company, Hopedale, Mass. Filling-feeder for automatic looms | 721,784 | Mar. 3 | 223 | 49 | 103 | 50 |
| Cunniff, John V. (See Cunniff, Edward and J. V.) | | | | | | |
| Cunniff, John V., *et al.* (See Tichon, Joseph E., assignor.) | | | | | | |
| Cunniff, John V., New Bedford, assignor to Draper Company, Hopedale, Mass. Let-off mechanism for looms | 747,302 | Dec. 15 | 3679 | 830 | 107 | 1944 |
| Cunniff, John V., New Bedford, assignor to Draper Company, Hopedale, Mass. Warp-stop-motion mechanism | 748,168 | Dec. 29 | 5332 | 1212 | 107 | 2350 |
| Cunniff, John V. and E., New Bedford, assignors to Draper Company, Hopedale, Mass. Stopping mechanism for looms | 720,117 | Feb. 10 | 1309 | 299 | 102 | 1118 |
| Cunningham, Albert, Milwaukee, Wis. Set-works for sawmill-carriages | 721,160 | Feb. 24 | 3287 | 752<br>753 | 102 | 1568 |

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| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| Cunningham, Charles S. (See Grayson, Lawrence W., assignor.) | | | | | | |
| Cunningham, Cleophus K., Algonquin, assignor of one-half to W. Loofbourrow, Carrollton, Ohio. Feed-water heater and purifier | 735,715 | Aug. 11 | 1307 | 281 | 105 | 1276 |
| Cunningham, Colin A., Brainerd, Minn. Back-pressure relief-valve | 747,538 | Dec. 22 | 4104 | 921 | 107 | 2055 |
| Cunningham, Edward. (See Henderson, John N., assignor.) | | | | | | |
| Cunningham, Elkana F., Brown, W. Va. Double cant-hook | 734,162 | July 21 | 2702 | 636 | 105 | 605 |
| Cunningham, Frank. (See Bolles, Archibald L., assignor.) | | | | | | |
| Cunningham, George E., Macon, Ga. Folding car-step | 727,755 | May 12 | 1764 | 397 | 104 | 397 |
| Cunningham, Harvy S., Shelbyville, Tenn. Combined wagon-body and hay-rack | 722,678 | Mar. 17 | 1933 | 430 | 103 | 446 |
| Cunningham, Harvey S., Shelbyville, Tenn. Hinge or hay-rack attachment | 743,461 | Nov. 10 | 1340 | 274 | 107 | 302 |
| Cunningham, John E. (See Mills and Cunningham.) | | | | | | |
| Cunningham, John F., assignor of one-half to J. A. Donnell, Springfield, Mo. Lock-faucet | 726,031 | Apr. 21 | 2965 | 675 | 103 | 1828 |
| Cunningham, John G., Bellavista, Cal. Cream and butter separator | 718,319 | Jan. 13 | 1489 | 330 | 102 | 335 |
| Cunningham Son, and Company, James. (See Atterby, Edward, assignor.) | | | | | | |
| Cunningham, Thomas O., South Hadley Falls, Mass. Roll-cleaner for spinning-machines | 727,099 | May 5 | 532 | 114 | 104 | 116 |
| Cunningham, William J., Philadelphia, Pa. Bottle-washing machine | 721,673 | Mar. 3 | 43 | 10 | 103 | 11 |
| Cunningham, William J., Toledo, Ohio. Ripping attachment for sewing-machines | 737,358 | Aug. 25 | 4342 | 968 | 105 | 1958 |
| Cunningham, William J., assignor to Spalding Manufacturing Company, Chicopee Falls, Mass. Support for striking-bag disks | 732,396 | June 30 | 5368 | 1189 | 104 | 2306 |
| Cunningham, William P., Coulee City, Wash. Railway rail and tie distributer | 717,820 | Jan. 6 | 576 | 129 | 102 | 124 |
| Cunningham, William R., Bucyrus, Ohio. Antifriction thrust-bearing | 724,265 | Mar. 31 | 4934 | 1104 | 103 | 1088 |
| Cunningham, Wilson M., and W. H. Spear; said Spear assignor to W. V. Hoagland, North Platte, Nebr. Calf or colt weaner and udder-protector | 745,419 | Dec. 1 | 200 | 46 | 107 | 1141 |
| Cuntz, Hermann F., Hartford, Conn., assignor to Electric Vehicle Company, Jersey City, N. J. Automobile controlling mechanism | 738,100 | Sept. 1 | 1073 | 237 | 106 | 232 |
| Curley, Terence F. (See Hilton, John H., assignor.) | | | | | | |
| Currah, Jonathan C., and R. A. Willson, Helena, Mont. Electric advertising device | 737,359 | Aug. 25 | 4344 | 968 | 105 | 1958 |
| Curran, Charles H. (See Whalley, Enoch, assignor.) | | | | | | |
| Curran, Charles H., Holyoke, Mass. Game-board | 734,307 | July 21 | 2996 | 705 | 105 | 667 |
| Curran, Edward, Chicago, Ill. Device for drafting skirt-patterns | 718,320 | Jan. 13 | 1490 | 331 | 102 | 336 |
| Curran, Edward T., New York, N. Y. Non-refillable bottle | 748,051 | Dec. 29 | 5110 | 1155 | 107 | 2301 |
| Curran, Philip B., Philadelphia, Pa., assignor to Kitson Hydrocarbon Heating and Incandescent Lighting Company. Hydrocarbon incandescent lamp | 739,064 | Sept. 15 | 2989 | 662 | 106 | 673 |
| Curren, Henry L., Newark, N. J. Catch for instrument-cases, &c | 724,164 | Mar. 31 | 4716 | 1058 | 103 | 1046 |
| Currey, Enos P., Woodward, Okla. Ter. Plow | 728,445 | May 19 | 3054 | 672 | 104 | 689 |
| Currie, Frederick P. (See Collison and Currie.) | | | | | | |
| Currie, James E., Jr., Montreal, Canada, assignor of one-half to H. L. Walter, Rutherford, N. J. Brush | 745,420 | Dec. 1 | 201 | 46 | 107 | 1142 |
| Currie, Stanley C. C., assignor of one-fourth to W. Courtenay, New York, N. Y. Reducing ores | 718,099 | Jan. 13 | 1088 | ..... | 102 | 249 |
| Currie, Stanley C. C., assignor of one-half to W. Courtenay, New York, N. Y. Mechanism for mixing and storing liquids and gases for ore treatment | 719,756 | Feb. 3 | 629 | 142 | 102 | 954 |
| Currie, Stanley C. C., assignor of one-half to W. Courtenay, New York, N. Y. Treating ores containing precious metals | 719,757 | Feb. 3 | 632 | 142 | 102 | 955 |
| Currie, Stanley C. C., assignor of one-half to W. Courtenay, New York, N. Y. Apparatus for treating ores | 725,321 | Apr. 14 | 1670 | 377 | 103 | 1538 |
| Currie, William E., and H. J. Conn, Detroit, Mich. Dumping-wagon | 728,207 | May 19 | 2595 | 580 | 104 | 592 |
| Currier, Arthur, assignor to Dodge Needle Company, Manchester, N. H. Knitting-machine needle | 743,152 | Nov. 3 | 643 | 139 | 107 | 135 |
| Currier, Burleigh. (See Porter and Currier.) | | | | | | |
| Currier, Charles W., Columbus, Ohio. Gas-lamp | 740,401 | Oct. 6 | 26 | 7 | 106 | 1250 |
| Currier, Edmonde S., *et al.* (See Crawford, Francis M., assignor.) | | | | | | |
| Currier, Frank J. (See Clark and Currier.) | | | | | | |
| Currier, Frank T., Worcester, Mass. Reversible driving mechanism for motor-driven machinery | 727,100 | May 5 | 537 | 115 | 104 | 117 |
| Currier, Hiram D., Ottawa, Ohio, assignor of one-half to J. M. Lorenz, Chicago, Ill. Electric telephone system | 731,166 | June 16 | 3010 | 668 | 104 | 1786 |
| Currier, James C., Salix, Iowa. Composite railway-tie | 724,165 | Mar. 31 | 4718 | 1058 | 103 | 1046 |
| Currier, John W., North Troy, Vt. Oilstone-box | 728,874 | May 26 | 3876 | 862 | 104 | 875 |
| Currier, John W., North Troy, Vt. Changeable sign | 728,875 | May 26 | 3877 | 862 | 104 | 875 |
| Currle, Albert, Stuttgart, Germany. Apparatus for winding flat strips of paste and cutting same | 733,164 | July 7 | 819 | 198<br>199<br>200 | 105 | 173 |
| Curry, Elmer E., *et al.* (See Taylor, Santley M., assignor.) | | | | | | |
| Curry, William J., Kamloops, Canada. Portable bed | 726,408 | Apr. 28 | 3672 | 833 | 103 | 1989 |
| Curryer, Joseph C., St. Paul, Minn. Hame and tug connection | 739,065 | Sept. 15 | 2991 | 662 | 106 | 673 |
| Curtain Supply Company. (See Bailey, Fred L., assignor.) | | | | | | |
| Curtain Supply Company. (See Forsyth, Henry H., assignor.) | | | | | | |
| Curtain Supply Company. (See Milans, Joseph H., assignor.) | | | | | | |
| Curtis, Charles G., New York, N. Y. Elastic-fluid turbine | 745,575 | Dec. 1 | 476 | 113<br>114 | 107 | 1198 |
| Curtis, Charles G., New York, N. Y. Elastic-fluid turbine | 747,857 | Dec. 22 | 4697 | 1061 | 107 | 2190 |
| Curtis, Charles G., New York, N. Y., assignor, by mesne assignments, to Curtis Steam Turbine Company. Elastic-fluid turbine | 726,032 | Apr. 21 | 2968 | 675 | 103 | 1828 |
| Curtis, Charles G., New York, N. Y., assignor, by mesne assignments, to Curtis Steam Turbine Company. Elastic-fluid turbine | 727,912 | May 12 | 2063 | 460 | 104 | 457 |
| Curtis, Edmund A., Chicago, assignor to F. B. Tait, Decatur, Ill. Brake-rigging | 737,713 | Sept. 1 | 279 | 58, 59 | 106 | 63 |
| Curtis, Frederic A., Chicago, Ill. Oil-burner | 743,376 | Nov. 3 | 1106 | 235 | 107 | 234 |
| Curtis, George A., Medford, assignor to C. F. Baker, Boston, Mass. Tumbling apparatus | 721,027 | Feb. 17 | 2996 | 689 | 102 | 1484 |
| Curtis, George A., Medford, assignor to C. F. Baker, Boston, Mass. Tumbling apparatus | 726,511 | Apr. 28 | 3897 | 882 | 103 | 2031 |
| Curtis, George A., Reading, assignor to C. F. Baker, Boston, Mass. Wire clenching-nail | 734,163 | July 21 | 2703 | 636 | 105 | 605 |
| Curtis, George L., New York, N. Y., assignor to E. C. Goodwin, Worcester, Mass. Ozone-generator | 727,101 | May 5 | 539 | 115<br>116 | 104 | 117 |
| Curtis, Henry E., New York, N. Y. Pencil-sharpening device | 747,382 | Dec. 22 | 3827 | 860 | 107 | 1992 |
| Curtis, Herbert E., Nottingham, England. Necktie-fastener | 746,035 | Dec. 8 | 1335 | 299 | 107 | 1401 |
| Curtis, Homer P., assignor of one-fourth to G. B. Stannard and J. B. Waterbury, Denver, Colo. Rotary force-pump | 738,101 | Sept. 1 | 1075 | 238 | 106 | 232 |
| Curtis, Hugh E. (See Jones, Horace W., assignor.) | | | | | | |
| Curtis, James G. (See Moore, James, assignor.) | | | | | | |
| Curtis, John D., Worcester, Mass. Speed-changing mechanism | 735,068 | Aug. 4 | 36 | 11 | 105 | 989 |
| Curtis, John H., *et al.* (See Michelsen and Borglum, assignors.) | | | | | | |
| Curtis & Marble Machine Company. (See Marble, Edwin H., assignor.) | | | | | | |
| Curtis, Nelson, Boston, Mass. Boiler | 719,439 | Feb. 3 | 52 | 12 | 102 | 837 |
| Curtis, Nelson, assignor to Sumner & Goodwin Company, Boston, Mass. Flushing-valve for sanitary apparatus | 748,265 | Dec. 29 | 5503 | 1254 | 107 | 2387 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| Curtis, Otis F. (See Baker, Andrew H., assignor.) | | | | | | |
| Curtis Steam Turbine Company. (See Curtis, Charles G., assignor.) | | | | | | |
| Curtis, Thomas H., Astoria, Oreg. Rafting-dog | 733,629 | July 14 | 1661 | 394 | 105 | 368 |
| Curtis, Truman H., and P. J. King, Milwaukee, Wis. Fishing-bait and preparing same | 742,293 | Oct. 27 | 3720 | ..... | 106 | 2081 |
| Curtis, Wallace B., *et al.* (See Dunihue, William J., assignor.) | | | | | | |
| Curtis, Walter T., Wilmette, Ill. Gate | 743,463 | Nov. 10 | 1342 | 275 | 107 | 302 |
| Curtis, William W., *et al.* (See Gorman, Edward J., assignor.) | | | | | | |
| Curtis, Winfield, Sacramento, assignor of one-half to E. F. May, San Francisco, Cal. Windmill | 748,485 | Dec. 29 | 5901 | 1341 | 107 | 2474 |
| Curtiss, Charles E., assignor to McCormick Harvesting Machine Company, Chicago, Ill. Corn husker and shredder | 727,300 | May 5 | 885 | 192<br>193 | 104 | 190 |
| Curtiss, Charles E., Chicago, Ill., assignor to McCormick Harvesting Machine Company. Corn-husking and fodder-preparing machine | 745,483 | Dec. 1 | 327 | 76,77 | 107 | 1169 |
| Curtiss, Charles E., assignor to International Harvester Company, Chicago, Ill. Cleaning device for fodder-shredders | 736,501 | Aug. 18 | 2735 | 599 | 105 | 1601 |
| Curtiss, Charles E., assignor, by mesne assignments, to International Harvester Company, Chicago, Ill. Shredder-head | 747,905 | Dec. 22 | 4792 | 1083 | 107 | 2210 |
| Curtiss, Edward W., Sheffield, Mass. Harmony and transposition chart | 741,017 | Oct. 13 | 1170 | 264 | 106 | 1515 |
| Curtiss, Enos, Findlay, Ohio. Street-sweeper | 725,939 | Apr. 21 | 2820 | 639 | 103 | 1798 |
| Curtiss, George W., Peoria, Ill. Carbonizing apparatus | 723,654 | Mar. 24 | 3719 | 833<br>834 | 103 | 822 |
| Curtiss, Jay C. D., *et al.* (See Dunihue, William J., assignor.) | | | | | | |
| Curtiss, Julian W., Greenwich, Conn., assignor to A. G. Spalding & Bros., Jersey City, N. J., and New York, N. Y. Head-harness for foot-ball players | 724,444 | Apr. 7 | 42 | 11 | 103 | 1178 |
| Curtiss, Samuel W., assignor to Garden City Sand Company, Chicago, Ill. Steam-pipe covering | 720,003 | Feb. 10 | 1072 | 248 | 102 | 1066 |
| Curtiss-Way Company. (See White, Herman A., assignor.) | | | | | | |
| Curwen, Samuel M., assignor to J. A. Brill, Philadelphia, Pa. Arm-rest for semi-convertible or other cars | 739,799 | Sept. 22 | 4345 | 974 | 106 | 981 |
| Cushing, Charles L., New Paynesville, Minn. Pumping apparatus | 741,634 | Oct. 20 | 2394 | 537 | 106 | 1792 |
| Cushing, Cyrus F., Braintree, assignor of one-half to F. E. Lovejoy, Boston, Mass. Stopper-confiner for flexible bottles, &c. | 745,421 | Dec. 1 | 202 | 46 | 107 | 1142 |
| Cushing, Henry W., Rockland, Mass. Shoe-fastener | 746,927 | Dec. 15 | 2974 | 684 | 107 | 1786 |
| Cushman, Abe L., Concord, N. H. Change-speed driving mechanism | 739,257 | Sept. 15 | 3339 | 741 | 106 | 746 |
| Cushman, Abe L., assignor of one-half to B. A. Kimball, Concord, N. H. Induction-motor | 725,224 | Apr. 14 | 1505 | 343 | 103 | 1504 |
| Cushman, Abe L., assignor of one-half to B. A. Kimball, Concord, N. H. Induction-motor | 725,225 | Apr. 14 | 1506 | 343 | 103 | 1504 |
| Cushman, Abe L., assignor of one-half to B. A. Kimball, Concord, N. H. Shaft-driving mechanism | 726,409 | Apr. 28 | 3675 | 833 | 103 | 1990 |
| Cushman and Denison. (See Shedlock, Alfred, assignor.) | | | | | | |
| Cushman, Edward P., Lynn, Mass. Book-cover protector | 732,524 | June 30 | 5612 | 1244 | 104 | 2356 |
| Cushman, Everett B. (See Cushman, Leslie S. and E. B.) | | | | | | |
| Cushman, Everett B. and L. S., assignors to Cushman Motor Co., Incorporated, Lincoln, Nebr. Gas-engine | 736,224 | Aug. 11 | 2227 | 479<br>480 | 105 | 1475 |
| Cushman, George B. (See Cushman, Evans, and Cushman.) | | | | | | |
| Cushman, Joseph W. (See Carpenter, Daniel A., assignor.) | | | | | | |
| Cushman, Leslie S. (See Cushman, Everett B. and L. S.) | | | | | | |
| Cushman, Leslie S. and E. B., Lincoln, Nebr. Packing for engines | 721,287 | Feb. 24 | 3533 | 803 | 102 | 1617 |
| Cushman Motor Co. (See Cushman, Everett B. and L. S., assignors.) | | | | | | |
| Cushman, William F., Boston, Mass. Fountain-pen | 747,948 | Dec. 29 | 4897 | 1109 | 107 | 2255 |
| Cushman, William F., L. O. Evans, and G. B. Cushman, Kansas City, Mo. Water-heater | 721,941 | Mar. 3 | 542 | 119 | 103 | 119 |
| Cusick, John J. (See McWilliams, Thomas, assignor.) | | | | | | |
| Custer, Dwight W., Parkersburg, W. Va. Awning-shutter | 719,758 | Feb. 3 | 634 | 142 | 102 | 956 |
| Custer, Sheldon M. (See Entriken and Everett, assignors.) | | | | | | |
| Cutcheon, Frederick R. M. (See Pearson and Cutcheon.) | | | | | | |
| Cuthriell, Alonzo P., assignor to Dolphin Paint Company, Portsmouth, Va. Antifouling composition | 736,698 | Aug. 18 | 3120 | ..... | 105 | 1680 |
| Cuthriell, Alonzo P., assignor to Dolphin Paint Company, Portsmouth, Va. Anticorrosive composition | 736,699 | Aug. 18 | 3120 | ..... | 105 | 1680 |
| Cutler Electrical and Manufacturing Company. (See Scott, William M., assignor.) | | | | | | |
| Cutler-Hammer Manufacturing Company. (See Barnum, Thomas E., assignor.) | | | | | | |
| Cutler-Hammer Manufacturing Company. (See Cutler, Henry H., assignor.) | | | | | | |
| Cutler, Henry H., assignor to Cutler-Hammer Manufacturing Company, Milwaukee, Wis. Controller for electric motors | 743,463 | Nov. 10 | 1345 | 275 | 107 | 303 |
| Cutler, James G., Rochester, N. Y. Mail-chute | 726,261 | Apr. 28 | 3385 | 769 | 103 | 1930 |
| Cutler, John M., Ukiah, Cal. Furnace for calcining quicksilver ores | 740,539 | Oct. 6 | 303 | 62 | 106 | 1309 |
| Cutler, Joseph W., Rochester, N. Y. Closure for mail-chutes | 744,724 | Nov. 24 | 3742 | 807 | 107 | 847 |
| Cutler & Son, A. (See Throm, Anthony J., assignor.) | | | | | | |
| Cutlery Manufacturers Supply Company. (See Bisset, David L., assignor.) | | | | | | |
| Cutten, Elisha B., New York, and A. C. Fraser, assignors to said Fraser and G. H. Fraser, Brooklyn, N. Y. Electric signal for railways | 721,161 | Feb. 24 | 3291 | 753<br>754 | 102 | 1569 |
| Cutten, Lewyn F., Boissevain, Canada. Damper for stovepipes | 721,429 | Feb. 24 | 3795 | 863 | 102 | 1671 |
| Cutter Electrical & Manufacturing Company. (See Scott, William M., assignor.) | | | | | | |
| Cutter, Horace L., Los Angeles, Cal. Telephone hygienic appliance | 744,497 | Nov. 17 | 3324 | 716 | 107 | 740 |
| Cutter, Solomon M., Reading, Mass., assignor, by mesne assignments, to United Shoe Machinery Company. Reel for holding wire in nailing-machines | 736,825 | Aug. 18 | 3368 | 743 | 105 | 1732 |
| Cutting, Edwin M., Oakland, assignor of one-half to W. W. Slater, San Francisco, and H. C. Barnes, Oakland, Cal. Railway signaling device | 726,512 | Apr. 28 | 3899 | 883 | 103 | 2031 |
| Cutting, Frederick C., Rochester, N. Y., assignor to Lamson Consolidated Store Service Company, Newark, N. J. Automatic switch for pneumatic-despatch apparatus | 726,033 | Apr. 21 | 2970 | 675 | 103 | 1829 |
| Cutting, Leonard M., Jerseyville, Ill. Rope-lock | 725,048 | Apr. 14 | 1167 | 264 | 103 | 1434 |
| Cutting, Samuel B., Bridgeport, Conn., assignor to Salts Textile Manufacturing Company, New York, N. Y. Self-threading shuttle | 727,594 | May 12 | 1439 | 323 | 104 | 328 |
| Cuzner, John B., Glastonbury, Conn. Tobacco-hanger | 732,924 | July 7 | 403 | 98 | 105 | 87 |
| Cyanid-Gesellschaft M. B. H. (See Frank and Freudenberg, assignors.) | | | | | | |
| Cyphers, Lindlow W., East Orange, N. J. Ironing-board | 732,525 | June 30 | 5614 | 1244 | 104 | 2356 |
| Cyr, Joseph T., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Pinwheel and star-wheel motion | 719,198 | Jan. 27 | 3189 | 710 | 102 | 718 |
| Cyr, Joseph T., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Warp stop-motion for looms | 722,818 | Mar. 17 | 2193 | 489 | 103 | 498 |
| Cyr, Joseph T., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Loom pattern-chain | 736,700 | Aug. 18 | 3121 | 687 | 105 | 1680 |
| Cyr, Joseph T., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Loom pattern-chain | 741,230 | Oct. 13 | 1582 | 356 | 106 | 1604 |
| Cyrenius, Frederick H., Oswego, N. Y. Steam-boiler damper-regulator | 718,100 | Jan. 13 | 1091 | 241 | 102 | 250 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| Czapikowski, Jan, Nymburk, Austria-Hungary. Sugar-boiler | 735,345 | Aug. 4 | 582 | 119, 120 | 105 | 1105 |
| Czapikowski, Jan, Derebczyn, near Rachny, Russia. Apparatus for mixing sugar | 742,603 | Oct. 27 | 4277 | 964 | 106 | 2196 |
| Czermak, John W., and J. Tischler, Port Chester, N. Y. Portable seat | 731,437 | June 23 | 3525 | 785 | 104 | 1911 |
| Czermak, Victor, Jenbach, Austria-Hungary. Scythe | 745,798 | Dec. 1 | 870 | 196 | 107 | 1285 |
| D. Clint Prescott Company. (See Prescott and Thurlow, assignors.) | | | | | | |
| D. Clint Prescott Company. (See Scherer, John, assignor.) | | | | | | |
| D. C. & U. Gas Engine Company. (See Uhlin, Ernest, assignor.) | | | | | | |
| D. F. Briggs Company. (See Bennett, Thomas S., assignor.) | | | | | | |
| D. F. Holman Railway Track Layer Company. (See Holman and Cowles, assignors.) | | | | | | |
| D. H. Burrell & Company (See Lane, Frederic A., assignor.) | | | | | | |
| D. & W. Fuse Company. (See Downes, Louis W., assignor.) | | | | | | |
| D'Abramo, Raffaele, Brooklyn, N. Y. Pool-ball frame | 743,464 | Nov. 10 | 1347 | 276 | 107 | 303 |
| D'Aix, Fritz C. L., Brooklyn, N. Y. Matrix and justifying device for linotype-machines | 747,832 | Dec. 22 | 4644 | 1049 | 107 | 2178 |
| D'Almeida, Guilherme J., and H. D. Guimaraës, Lisbon, Portugal. Water-tube boiler | 729,112 | May 26 | 4292 | 948, 949 | 104 | 959 |
| D'Aquila, Ernest A., Newark, N. J., and B. Martelli, New York, N. Y. Safety gas-burner | 738,418 | Sept. 8 | 1760 | 383 | 106 | 394 |
| D'Arcy, Frank P., Kalamazoo, Mich. Spring | 726,817 | Apr. 28 | 4473 | 1010 | 103 | 2149 |
| D'Arcy, Frank P., Kalamazoo, Mich. Spring | 746,299 | Dec. 8 | 1818 | 413 | 107 | 1507 |
| D'Arsonval, Arsène, Paris, and G. Vaugeois, Billancourt, France. Die for forming battery-plates | 725,192 | Apr. 14 | 1440 | 327 | 103 | 1489 |
| D'Artois, Joseph N., and C. Brouillette, Waterloo, Canada. Mowing-machine | 747,384 | Dec. 22 | 3832 | 861, 862, 863 | 107 | 1993 |
| D'Auria, Luigi, Philadelphia, Pa. Non-rotative pumping-engine | 718,808 | Jan. 20 | 2450 | 542 | 102 | 550 |
| D'Halewyn, Joseph, Nominingue, Canada. Rotary engine | 747,418 | Dec. 22 | 3889 | 875, 876 | 107 | 2007 |
| D'Unger, Robert, Chicago, Ill. Running-gear for vehicles | 718,108 | Jan. 13 | 1103 | 243 | 102 | 253 |
| Da Costa, Isaak, *et al.* (See Ronsdorf, August, assignor.) | | | | | | |
| Da Rozir, William L., Worcester, Mass. Lasting-hook | 730,238 | June 9 | 1299 | 287 | 104 | 1407 |
| Daab, John F., Jersey City, N. J. Attachment for washboilers | 746,036 | Dec. 8 | 1336 | 299 | 107 | 1401 |
| Daab, Martin, Jr. (See Magee, Frederick N., assignor.) | | | | | | |
| Daake, William von, Vancouver, Wash. Railway cattle-guard | 739,590 | Sept. 22 | 3961 | 884 | 106 | 896 |
| Dabb, Charles W., and C. E. Macduffee, New York, N. Y. Means for locking incandescent-light bulbs | 740,248 | Sept. 29 | 5204 | 1170 | 106 | 1177 |
| Dabbs, John L., assignor of one-half to J. R. London, Rockhill, S. C. Stop-motion for cloth-tentering machines | 737,910 | Sept. 1 | 705 | 152 | 106 | 154 |
| Daellenbach, Charles R., Parkgate, assignor to H. C. Fricke, J. J. Flannery, G. E. Turner, Pittsburg, and J. M. Flannery, Braddock, Pa. Explosive-engine | 745,422 | Dec. 1 | 203 | 46 | 107 | 1142 |
| Daellenbach, Charles R., Parkgate, assignor to H. C. Fricke, J. J. Flannery, G. E. Turner, Pittsburg, and J. M. Flannery, Braddock, Pa. Explosive-engine | 745,423 | Dec. 1 | 206 | 47 | 107 | 1143 |
| Daemicke, Paul J., Chicago, Ill. Store-service ladder | 743,692 | Nov. 10 | 1765 | 373 | 107 | 392 |
| Daffin, Thomas, Philadelphia, assignor of one-half to R. T. Hogg, Frankford, Philadelphia, Pa. Woven carpet fabric | 746,298 | Dec. 8 | 1818 | 412 | 107 | 1507 |
| Daft, Leo, Ealing, and A. Williams, Wimbledon, assignors to Electrical Ore Finding Company, Limited, London, England. Repeating break for electric circuits | 730,236 | June 9 | 1296 | 286, 287 | 104 | 1406 |
| Dages, Jules N., Brussels, Belgium. Cushion-tire for vehicle-wheels | 738,415 | Sept. 8 | 1755 | 382 | 106 | 393 |
| Dagger, Emma, Toronto, Canada. Shoe-polishing machine | 722,679 | Mar. 17 | 1935 | 430, 431 | 103 | 446 |
| Daggett & Clap Company. (See Clap, Harvey E., assignor.) | | | | | | |
| Daggett & Clap Company. (See Giguere, Thomas, assignor.) | | | | | | |
| Daggett, George E., Harrisburg, Pa., assignor to Weber Railway Joint Mfg. Co., New York, N. Y. Railway-rail joint | 728,373 | May 19 | 2934 | 647 | 104 | 662 |
| Daggett, Herbert M., Woodbury, assignor to Welsbach Light Company, Gloucester City, N. J. Gas-fixture | 727,102 | May 5 | 541 | 116 | 104 | 118 |
| Daggett, John, assignor of one-half to M. H. Landers, Elyria, Ohio. Device for reinsulating electric and aerial telephone or other cables | 727,756 | May 12 | 1766 | 397 | 104 | 397 |
| Daggett, William A., Vineland, N. J. Trolley for electric cars | 717,821 | Jan. 6 | 578 | 130 | 102 | 125 |
| Dahl, Charles A., Lynn, and G. S. Hill, Haverhill, Mass., assignors to Reece Buttonhole Machine Company, Portland, Me., and Boston, Mass. Cutting mechanism for button-hole-stitching machines | 723,247 | Mar. 24 | 2965 | 666 | 103 | 672 |
| Dahl, Jacob, Bohnsack Township, Cass county, assignor of one-half to D. H. Houston, Hunter Township, N. D. Cylinder-tooth for threshing-machines | 740,540 | Oct. 6 | 305 | 62 | 106 | 1309 |
| Dahl, Louis, Paloalto, assignor to Crude Oil Stove and Furnace Company, San Francisco, Cal. Vapor-stove | 727,301 | May 5 | 890 | 193, 194 | 104 | 190 |
| Dahl, Ole J., Anthony, Wis. Stump-extractor | 728,551 | May 19 | 3266 | 723, 724 | 104 | 731 |
| Dahlander, Robert, and K. A. Lindström, Westerås, Sweden, assignors to General Electric Company, Schenectady, N. Y. Device for varying the number of poles in alternate-current motors | 725,415 | Apr. 14 | 1836 | 411 | 103 | 1573 |
| Dahlberg, August. (See Burkman, Simon, assignor.) | | | | | | |
| Dahlberg, John A. (See McCutchen, John, Jr., assignor.) | | | | | | |
| Dahle, Philip, Eureka, Cal. House-moving truck | 744,907 | Nov. 24 | 4055 | 874 | 107 | 912 |
| Dahlhaus, Charles W. (See Seidel and Dahlhaus.) | | | | | | |
| Dahlquist, Jacob C., St. Paul, Minn. Slidable support | 735,716 | Aug. 11 | 1308 | 281 | 105 | 1277 |
| Dahlstrom, Charles, Jamestown, N. Y. Metallic door | 747,149 | Dec. 15 | 3386 | 768 | 107 | 1881 |
| Dahmen, Hans von, assignor to J. Führer, Vienna, Austria-Hungary. Detonating composition | 740,355 | Sept. 29 | 5392 | | 106 | 1217 |
| Dahmke, Adolph G., Chicago, Ill. Railway signaling system | 741,312 | Oct. 13 | 1746 | 389, 390 | 106 | 1635 |
| Daigh, Charles A., Chicago, Ill. Multiported balanced valve | 737,211 | Aug. 25 | 4059 | 900 | 105 | 1897 |
| Dailey, Arthur O. (See Baker, Riley, assignor.) | | | | | | |
| Dailey, Charles W. (See Waltz and Dailey.) | | | | | | |
| Dailey, Herbert M., assignor of two-thirds to L. M. Erb and C. Hetherington, Chicago, Ill. Rotary engine | 741,018 | Oct. 13 | 1171 | 264, 265 | 106 | 1516 |
| Dailey, John A., Burlington, Iowa. Boiler-brace | 744,300 | Nov. 17 | 2977 | 637 | 107 | 665 |
| Daily, Charles H. F., Herminie, Pa. Curtain-pole bracket | 719,307 | Jan. 27 | 3399 | 758 | 102 | 765 |
| Daily, John W., Boston, Mass. Pendulum clock | 737,587 | Sept. 1 | 53 | 12 | 106 | 13 |
| Daily, William H., Carthage, Ill. Cam | 740,816 | Oct. 6 | 816 | 183 | 106 | 1419 |
| Daime, Joseph, Marseilles, France. Strengthened cast cement | 725,544 | Apr. 14 | 2089 | 473 | 103 | 1627 |
| Daimler Manufacturing Company. (See Hanauer, Darwin, assignor.) | | | | | | |
| Daimler Manufacturing Company. (See MacMulkin, John J., assignor.) | | | | | | |
| Dake, Charles W., Grand Rapids, Mich. Railway-joint | 745,330 | Dec. 1 | 29 | 6 | 107 | 1106 |
| Dakin, Robert B., Toledo, Ohio. Antiseptic razor-wiper | 718,822 | Jan. 20 | 2468 | 548 | 102 | 553 |
| Dale, Jessie A., Daleville, Pa. Table attachment for chairs | 741,019 | Oct. 13 | 1173 | 265 | 106 | 1516 |

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| Daleiden, Peter M., *et al.* (See Richmond, Benedict, assignor.) | | | | | | |
| Daley, Fred A., assignor to Under-Feed Stoker Company of America, Chicago, Ill. Stoking mechanism | 733,374 | July 14 | 1216 | 288 | 105 | 272 |
| Dallamore, George C. (See Rathbun, Frank W., assignor.) | | | | | | |
| Dallas, Charles R. (See Charlton, Thomas, assignor.) | | | | | | |
| Dallas, George M., assignor to E. S. Booth, Chicago, Ill. Compound for promoting combustion in coal | 744,908 | Nov. 24 | 4055 | ..... | 107 | 912 |
| Dallas, Jackson S. (See Bayless and Dallas.) | | | | | | |
| Dallett and Company, Thomas H. (See Soley, William H., assignor.) | | | | | | |
| Dally, Charles A., Carnot, Pa., assignor of one-half to N. E. Whitaker, Wheeling, W. Va. Air and gas mixer | 718,049 | Jan. 6 | 988 | 220 | 102 | 213 |
| Dalmas, Henry A., Linden, Va. Rock-drill | 735,717 | Aug. 11 | 1309 | 282 | 105 | 1277 |
| Dalrymple, James C., Mobile, Ala. Ax-handle protector | 739,652 | Sept. 22 | 4082 | 909 | 106 | 922 |
| Dalrymple, James C., Mobile, Ala. Oiler for gun-barrels | 739,653 | Sept. 22 | 4083 | 909 | 106 | 922 |
| Dalton, Frank R., *et al.* (See Robinson, Joseph W., assignor.) | | | | | | |
| Dalton, Harry G., *et al.* (See Robinson, Joseph W., assignor.) | | | | | | |
| Dalton, John B. (See Wilson and Dalton.) | | | | | | |
| Dalton, William, and F. J. Cole, Schenectady, assignors to American Locomotive Company, New York, N. Y. Electric locomotive | 744,301 | Nov. 17 | 2978 | 638 | 107 | 665 |
| Dalton, William, and F. J. Cole, Schenectady, assignors to American Locomotive Company, New York, N. Y. Electric locomotive | 744,302 | Nov. 17 | 2979 | 638 | 107 | 665 |
| Dalton, William, and F. J. Cole, Schenectady, assignors to American Locomotive Company, New York, N. Y. Electric locomotive | 744,303 | Nov. 17 | 2981 | 638<br>639 | 107 | 666 |
| Dalton, William, and F. J. Cole, Schenectady, assignors to American Locomotive Company, New York, N. Y. Electric locomotive | 744,304 | Nov. 17 | 2984 | 639 | 107 | 667 |
| Dalton, William H., Lynn, Mass. Coin-controlled kaleidoscope | 747,383 | Dec. 22 | 3829 | 861 | 107 | 1993 |
| Dalton, William J., Auckland, New Zealand. Combined nozzle and tap | 733,701 | July 14 | 1772 | 421 | 105 | 391 |
| Dalton, William S. (See McCarty, Lewis C., assignor.) | | | | | | |
| Dalton, Winnall A., Tucson, Ariz. Ter. Stamp-mill | 734,828 | July 28 | 3973 | 928<br>929 | 105 | 884 |
| Dalwigk, Hermann, West Hoboken, N. J. Horse-hitching device | 731,757 | June 23 | 4123 | 919 | 104 | 2030 |
| Daly, Frank M., Nevada, Mo. Knuckle-joint | 737,360 | Aug. 25 | 4345 | 968 | 105 | 1958 |
| Daly, John, New York, N. Y. Registering-bank | 728,876 | May 26 | 3878 | 863 | 104 | 875 |
| Damas, John B., Sonora, Cal. Drilling-engine | 738,416 | Sept. 8 | 1757 | 382 | 106 | 393 |
| Damascus Brake Beam Company. (See Handiges, Philip T., assignor.) | | | | | | |
| Dambach, Edward. (See Holbein, Joseph E., assignor.) | | | | | | |
| Dambach, Edward, Evans City, Pa. Garment-stretcher | 740,249 | Sept. 29 | 5205 | 1170 | 106 | 1178 |
| Dameron, Warren P., assignor of one-third to J. A. Martin and O. W. Rariden, Pueblo, Colo. Revolving circular track | 736,225 | Aug. 11 | 2229 | 480<br>481 | 105 | 1475 |
| Dames, Paul. (See Glebsattel, August, assignor.) | | | | | | |
| Damm, Theodore F., Milwaukee, Wis. Loom or frame for beadwork | 736,701 | Aug. 18 | 3122 | 687 | 105 | 1680 |
| Damm, William, San Antonio, Tex. Water-heater | 735,069 | Aug. 4 | 38 | 11 | 105 | 990 |
| Dammeier, Charles F., Metz, Iowa. Pneumatic straw-stacker | 719,308 | Jan. 27 | 3400 | 758 | 102 | 765 |
| Dammond, William H., assignor of one-fourth to E. M. Bryant, Detroit, Mich. Signaling system | 747,949 | Dec. 29 | 4899 | 1109<br>1110 | 107 | 2255 |
| Damon, Frank P., *et al.* (See Wever, La Fayette T., assignor.) | | | | | | |
| Dampf, Charles J., Brooklyn, N. Y. Life-saving appliance | 728,208 | May 19 | 2597 | 580<br>581 | 104 | 593 |
| Damron, Carson W., assignor to Wagner-Palmros Manufacturing Co., Fairmont, W. Va. Single-cable mine-haul | 722,951 | Mar. 17 | 2416 | 540 | 103 | 543 |
| Dana, Frederick I., Providence, R. I., assignor, by mesne assignments, to Textile Finishing Machinery Company. Pressure-roller | 733,630 | July 14 | 1663 | 394 | 105 | 368 |
| Danckwardt, Paul, Deadwood, S. D. Apparatus for receiving and handling molten materials | 721,288 | Feb. 24 | 3534 | 804 | 102 | 1617 |
| Danckwardt, Paul, Deadwood, S. D. Manufacturing alkali cyanids | 746,795 | Dec. 15 | 2698 | 622 | 107 | 1722 |
| Danckwardt, Paul, Deadwood, S. D. Simultaneously producing alkali cyanid and alkali metal | 746,796 | Dec. 15 | 2699 | 622 | 107 | 1722 |
| Danckwardt, Paul, Deadwood, S. D. Separating metals from matte or ore | 746,797 | Dec. 15 | 2699 | 623 | 107 | 1727 |
| Danckwardt, Paul, Deadwood, S. D. Recovering zinc from sulfid ores | 746,798 | Dec. 15 | 2701 | 623 | 107 | 1732 |
| Dancyger, Simon, Dayton, Ohio. Tag-clasp | 720,787 | Feb. 17 | 2550 | 588 | 102 | 1390 |
| Dancyger, Simon, Dayton, Ohio. Tag | 747,593 | Dec. 22 | 4197 | 944 | 107 | 2072 |
| Dancyger, Simon, Dayton, Ohio. Marking-tag and check | 747,594 | Dec. 22 | 4198 | 944 | 107 | 2077 |
| Dando, Percy H., Whangarei, New Zealand. Chamber utensil and attachment therefor | 717,972 | Jan. 6 | 848 | 191 | 102 | 181 |
| Dangerfield, James, Hartford, Conn. Tool-holder | 744,725 | Nov. 24 | 3744 | 808 | 107 | 847 |
| Danglemyer, Charles W. (See Lucas and Danglemyer.) | | | | | | |
| Dangler, Charles I., Cleveland, Ohio. Heating and igniting attachment for steam-propelled vehicles | 726,875 | May 5 | 76 | 19,20 | 104 | 19 |
| Daniel, Albert J., Boone, Iowa. Peanut-roaster | 726,876 | May 5 | 78 | 20 | 104 | 20 |
| Daniel, Charles A. (See Howe, Henry A., assignor.) | | | | | | |
| Daniel, Charles A., Philadelphia, Pa. Metallic packing for piston-rods | 729,284 | May 26 | 4605 | 1018 | 104 | 1025 |
| Daniel, James, Carrollton, Ohio, deceased; J. C. Oglevee, administrator. Die for making roofing-tiles | 726,144 | Apr. 21 | 3157 | 714 | 103 | 1867 |
| Daniel, Leon, assignor of one-half to I. Falk, Stanislau, Austria-Hungary. Door or slide for railway-cars | 718,702 | Jan. 20 | 2255 | 495<br>496 | 102 | 511 |
| Daniel, Samuel C., Gas City, Ind. Fly-screen | 726,145 | Apr. 21 | 3157 | 715 | 103 | 1868 |
| Daniels, August, Chicago, Ill. Dustless ash-sifting machine | 733,314 | July 7 | 1097 | 261 | 105 | 231 |
| Daniels, Benjamin F., Nogales, Ariz. Ter. Match-box | 740,541 | Oct. 6 | 306 | 62 | 106 | 1310 |
| Daniels, Benjamin F., and V. W. Clark, Nogales, Ariz. Ter. Prospector's smelter | 744,305 | Nov. 17 | 2987 | 640 | 107 | 667 |
| Daniels, Charles L. (See Loveless, Fred H., assignor.) | | | | | | |
| Daniels, Eugene O., Toledo, Ohio. Gas-burner | 740,402 | Oct. 6 | 28 | 7 | 106 | 1250 |
| Daniels, Frank A., Haverhill, Mass. Chalk-holder | 730,237 | June 9 | 1299 | 287 | 104 | 1406 |
| Daniels, Fred H., Worcester, Mass. Heating-furnace | 718,433 | Jan. 13 | 1689 | 373 | 102 | 377 |
| Daniels, Fred H., Worcester, Mass. Melting-furnace | 723,443 | Mar. 24 | 3332 | 747 | 103 | 744 |
| Daniels, Fred H., Worcester, Mass. Apparatus for treating wire rods | 737,361 | Aug. 25 | 4346 | 969 | 105 | 1958 |
| Daniels, Fred H., Worcester, Mass. Apparatus for treating wire rods | 737,362 | Aug. 25 | 4348 | 969 | 105 | 1959 |
| Daniels, Fred H., Worcester, Mass., S. T. and C. H. Wellman; said Wellman and Wellman assignors to Wellman-Seaver-Morgan Engineering Company, Cleveland, Ohio. Ingot-heating furnace | 724,549 | Apr. 7 | 237 | 57,58 | 103 | 1220 |
| Daniels, Fred H., Worcester, Mass., S. T. and C. H. Wellman; said Wellman and Wellman assignors to Wellman-Seaver-Morgan Engineering Company, Cleveland, Ohio. Ingot-heating furnace | 724,550 | Apr. 7 | 239 | 58 | 103 | 1221 |
| Daniels, Fred H., Worcester, Mass., S. T. and C. H. Wellman; said Wellman and Wellman assignors to Wellman-Seaver-Morgan Engineering Company, Cleveland, Ohio. Ingot-heating furnace | 724,551 | Apr. 7 | 241 | 58,59 | 103 | 1221 |
| Daniels, Fred H., Worcester, Mass., S. T. and C. H. Wellman; said Wellman and Wellman assignors to Wellman-Seaver-Morgan Engineering Company, Cleveland, Ohio. Ingot-heating furnace | 724,552 | Apr. 7 | 242 | 59,60 | 103 | 1221 |

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| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| Daniels, Frederic L (See Daniels, John S. and F. L.) | | | | | | |
| Daniels, George W., Springfield, Ohio. Combination-tool | 743,622 | Nov. 10 | 1662 | 349 | 107 | 371 |
| Daniels, Henry A., Newark, N. J. Non-refillable bottle | 720,230 | Feb. 10 | 1517 | 348 | 102 | 1160 |
| Daniels, John E. (See Lawson and Daniels.) | | | | | | |
| Daniels, John S. and F. L., Stroud, England. Gas-producer | 738,004 | Sept. 1 | 903 | 198 | 106 | 197 |
| Daniels, Louis A., Haverhill, Mass. Boot or shoe | 728,679 | May 19 | 3514 | 781 | 104 | 786 |
| Daniels, Merwin G., New York, N. Y., assignor to Standard Caster and Wheel Company. Caster | 744,169 | Nov. 17 | 2716 | 579 | 107 | 607 |
| Daniels, Rensselaer W., *et al.* (See Lawson, Albert F., assignor.) | | | | | | |
| Daniels, Taylor E., Chicago, Ill. Excavating cutting-machine | 726,877 | May 5 | 80 | 21 | 104 | 20 |
| Daniels, Taylor E., Chicago, Ill. Excavating-machine | 740,095 | Sept. 29 | 4920 | {1103<br>1104 | 106 | 1118 |
| Daniels, Thomas E., Jr., Provo, Utah. Circuit-breaker | 736,502 | Aug. 18 | 2737 | 599 | 105 | 1602 |
| Daniels, William H. (See Jackson and Daniels.) | | | | | | |
| Daniels, William H., Kansas City, Kans., assignor of two-thirds to A. T. Barnes, Kansas City, Mo., and F. Campbell, Kansas City, Kans. Smoke-consuming boiler-furnace | 718,608 | Jan. 20 | 2081 | 453 | 102 | 477 |
| Danielson, Gustaf A., Boston, Mass. Type-writer attachment | 727,595 | May 12 | 1441 | 323 | 104 | 328 |
| Danks, Frank, Troy, N. Y. Drying-shed for brick-molds | 725,940 | Apr. 21 | 2822 | 640 | 103 | 1798 |
| Danks, John G. (See Stephens, Danks, and Beatty.) | | | | | | |
| Danmar, Ada, Jamaica, N. Y. Composition for bleaching potatoes | 728,374 | May 19 | 2935 | ..... | 104 | 662 |
| Dann, Albert C., and E. Boos, assignors to Ohio Cultivator Company, Bellevue, Ohio. Planter | 717,548 | Jan. 6 | 51 | 12, 13 | 102 | 13 |
| Dann, Francis M., Footville, Wis. Gate | 723,248 | Mar. 24 | 2967 | 666 | 103 | 672 |
| Danne, Harold A., Richmond, Victoria, Australia. Weighing-machine | 727,302 | May 5 | 896 | 194 | 104 | 193 |
| Danner, Joseph, assignor of two-thirds to J. J. Croghan and A. Turner, Scranton, Pa. Plant for disposal of sewage | 726,513 | Apr. 28 | 3901 | 883 | 103 | 2032 |
| Danner, Joseph, assignor of two-thirds to J. J. Croghan and A. Turner, Scranton, Pa. Dry-closet system | 727,303 | May 5 | 899 | {194<br>195 | 104 | 194 |
| Danner, Joseph, assignor of two-thirds to J. J. Croghan and A. Turner, Scranton, Pa. Portable dry closet | 743,834 | Nov. 10 | 2027 | 431 | 107 | 448 |
| Danner, Oscar B., Allegan, Mich. Mechanical amusement | 743,377 | Nov. 3 | 1109 | 236 | 107 | 235 |
| Danquard, Thomas, assignor to Kohler & Campbell, New York, N. Y. Pneumatic motor-valve mechanism for automatic piano-players | 737,363 | Aug. 25 | 4349 | 970 | 105 | 1959 |
| Dansboe, Harry R., Marshall, Tex. Gate | 741,464 | Oct. 13 | 2041 | 453 | 106 | 1701 |
| Dansereau, Joseph A., Woonsocket, R. I. Plate-lifter | 721,865 | Mar. 3 | 389 | 86 | 103 | 85 |
| Dansereau, Pierre, Montreal, Canada. Axle-nut | 738,417 | Sept. 8 | 1759 | 382 | 106 | 394 |
| Danvin, Roger, Courbevoie, France. Burner for incandescent lighting | 734,308 | July 21 | 2997 | 705 | 105 | 667 |
| Danz, Hillmar. (See Kayser, William J., assignor.) | | | | | | |
| Danzenbaker, Francis, Washington, D. C. Beehive | 736,226 | Aug. 11 | 2231 | 481 | 105 | 1476 |
| Darbee, H. C. (See Mears, Oswald S., assignor.) | | | | | | |
| Darby, Catharine L., Brooklyn, N. Y. Device for preventing flat feet | 735,860 | Aug. 11 | 1586 | 338 | 105 | 1337 |
| Dare, Lee, assignor of one-half to J. W. Collins, Columbia City, Ind. Harness-oiling apparatus | 725,679 | Apr. 21 | 2352 | 531 | 103 | 1698 |
| Dargie, Charles, Fitzroy, Victoria, Australia. Adjustable figure or show stand | 720,231 | Feb. 10 | 1519 | 348 | 102 | 1160 |
| Darlay, André, Paris, France. Depositing metallic coatings on metallic objects | 744,170 | Nov. 17 | 2717 | ..... | 107 | 607 |
| Darley, John W., Jr., Baltimore, Md. Speed-indicating and distance-measuring mechanism | 733,816 | July 14 | 2000 | {471<br>472 | 105 | 438 |
| Darley, John W., Jr., Baltimore, Md. Speed-indicating mechanism | 733,817 | July 14 | 2008 | {472<br>473<br>474 | 105 | 440 |
| Darley, John W., Jr., Baltimore, Md. Means for securing buttons to fabrics | 747,047 | Dec. 15 | 3181 | 729 | 107 | 1831 |
| Darley, John W., Jr., Baltimore, Md. Button-sewing machine | 747,048 | Dec. 15 | 3182 | {729<br>730<br>731<br>732 | 107 | 1831 |
| Darling & Co., C. C. (See Kunze, Louis G., assignor.) | | | | | | |
| Darling, Edward J., Pittsburg, Pa. Combined chair, step-ladder, and trestle | 739,395 | Sept. 22 | 3590 | 802 | 106 | 814 |
| Darling, George W., Marshalltown, Iowa. Vehicle-seat | 748,349 | Dec. 29 | 5636 | 1284 | 107 | 2415 |
| Darling, Henry M., assignor to Seneca Falls Manufacturing Company, Seneca Falls, N. Y. Tool-rest for lathes | 745,576 | Dec. 1 | 481 | 114 | 107 | 1199 |
| Darling, Robert, Rye, N. Y. Storage battery | 729,140 | May 26 | 4338 | 958 | 104 | 969 |
| Darlington, Lionel, New York, N. Y. Plate-holder-changing box for cameras | 744,498 | Nov. 17 | 3327 | 716 | 107 | 741 |
| Darlington, Philip J., Glenridge, N. J., assignor to Sprague Electric Company. Controller for electric hoists | 732,619 | June 30 | 5787 | 1283 | 104 | 2397 |
| Darlington, Thomas, South Melbourne, Victoria, Australia. Means for ventilating brick buildings | 718,823 | Jan. 20 | 2469 | 548 | 102 | 554 |
| Darnstaedt, Frederick W., assignor of two-thirds to H. S. Hart, New Britain, Conn. Heat-radiator for internal-combustion motors, &c | 737,083 | Aug. 25 | 3827 | 851 | 105 | 1848 |
| Darragh, John J., Jr., Memphis, Tenn. Non-refillable bottle | 746,681 | Dec. 15 | 2498 | 571 | 107 | 1678 |
| Darrah, Joseph M., Rolla, N. D. Safety-lantern and foot-warmer | 731,024 | June 16 | 2739 | 611 | 104 | 1733 |
| Darrah, Mary E. G., New York, N. Y. Combined hip-reducer and hose-supporter | 746,037 | Dec. 8 | 1337 | 300 | 107 | 1401 |
| Darrohn, Percy S., administrator. (See Green, Jerome M.) | | | | | | |
| Darrow, Marcus H., *et al.* (See Goodwin, Julius C., assignor.) | | | | | | |
| Darsie, Elmer H., Donora, Pa. Combination-measure | 735,951 | Aug. 11 | 1745 | 373 | 105 | 1372 |
| Darst, Peter M., Racine, Ohio, assignor of one-half to J. H. Harpold, Cottageville, W. Va. Wire-stretcher | 740,630 | Oct. 6 | 472 | 104 | 106 | 1348 |
| Dart, Samuel E., South Manchester, Conn. Machine for glassing paper or leather | 725,680 | Apr. 21 | 2353 | 532 | 103 | 1698 |
| Dart, Samuel E., assignor of one-half to Rogers Paper Manufacturing Company, Incorporated, South Manchester, Conn. Machine for polishing press-board | 743,062 | Nov. 3 | 471 | 103 | 107 | 98 |
| Dastur, Ardeshir M., Jalna, India. Cotton-gin | 736,227 | Aug. 11 | 2234 | 482 | 105 | 1476 |
| Daub, Carl, Antwerp, Belgium, assignor of one-half to J. C. Deuther, Detroit, Mich. Apparatus for making sulfuric anhydrid | 731,758 | June 23 | 4124 | 919 | 104 | 2031 |
| Daube, Oscar, New York, N. Y. Apparatus for treatment of ores | 746,928 | Dec. 15 | 2975 | 684 | 107 | 1786 |
| Daubenspeck, P. E. (See Robinson, Lawrence E., assignor.) | | | | | | |
| Daubresse, Achille. (See Huet and Daubresse.) | | | | | | |
| Daudelin, Jean B., Fall River, Mass. Self-threading shuttle | 729,141 | May 26 | 4340 | 958 | 104 | 969 |
| Daudelin, Narcisse N. S., Fall River, Mass. Ring-spinning machine | 732,526 | June 30 | 5615 | 1245 | 104 | 2357 |
| Daudelin, Narcisse N. S., Fall River, Mass. Automatic thread-board lifter for spinning-frames | 737,084 | Aug. 25 | 3829 | 851 | 105 | 1849 |
| Daudelin, Narcisse N. S., Fall River, Mass. Thread-board lifter | 739,840 | Sept. 29 | 4423 | {992<br>993 | 106 | 1014 |
| Daudelin, Narcisse N. S., Fall River, Mass. Thread-board lifter | 740,250 | Sept. 29 | 5207 | {1170<br>1171 | 106 | 1178 |
| Daudelin, Narcisse N. S., Fall River, Mass. Roving mechanism | 744,306 | Nov. 17 | 2988 | 640 | 107 | 667 |
| Daudelin, Pierre P., Fall River, Mass. Shuttle and shuttle-eye | 737,714 | Sept. 1 | 282 | 59 | 106 | 63 |
| Daudt, Frank R., Scotia, Nebr. Speed-governor for spring-motors | 743,465 | Nov. 10 | 1349 | 276 | 107 | 303 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
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| Daugherty, George L., *et al.* (See Wood, James B., assignor.) | | | | | | |
| Daugherty, James D., Kittanning, Pa. Type-writer-ribbon-actuating mechanism | 718,824 | Jan. 20 | 2470 | 549 | 102 | 554 |
| Daus, Louis A. (See Frazee, Frank D., assignor.) | | | | | | |
| Dauvergne, André, Lyons, France. Machine for folding fabrics | 727,304 | May 5 | 900 | 195 | 104 | 194 |
| Dave Barnard & Co. (See Barnard, Davis, assignor.) | | | | | | |
| Davènes, Emile, Sierra Madre, Cal. Wrapper for fruit and making same | 724,266 | Mar. 31 | 4936 | ..... | 103 | 1088 |
| Davenport, Elmer E., Denver, Colo. Chair-pad | 720,788 | Feb. 17 | 2551 | 588 | 102 | 1390 |
| Davenport, Elmer E., assignor of one-half to A. F. Ekstrom, Denver, Colo. Barrel-head | 744,499 | Nov. 17 | 3328 | 716 | 107 | 741 |
| Davenport, Frederick S., assignor of two-thirds to C. J. Simmons and F. V. Turner, Atlanta, Ga. Photographic developing apparatus | 738,665 | Sept. 8 | 3239 | 491 | 106 | 496 |
| Davenport, George H., Chadron, Nebr. Pump attachment | 739,480 | Sept. 22 | 3765 | 841 | 106 | 855 |
| Davenport, John J., assignor of one-half to A. G. Jennings, Brooklyn, N. Y. Machine for baling fiber | 729,285 | May 26 | 4607 | 1019 | 104 | 1026 |
| Daves, Walter W., Cartersville, Ga. Latch | 745,042 | Nov. 24 | 4329 | 935 | 107 | 968 |
| Davey, Elijah C., Chicago, Ill. Single-delivery match-box | 740,542 | Oct. 6 | 307 | 63 | 106 | 1310 |
| Davey, John F., Beverly, Mass., assignor to United Shoe Machinery Company, Paterson, N. J., and Boston, Mass. Pegging-machine | 732,052 | June 30 | 4679 | 1044 | 104 | 2164 |
| David Bradley Manufacturing Company. (See Paul, William L., assignor.) | | | | | | |
| David, Lucien and T., Lyons, France. Ornamenting cloth | 722,447 | Mar. 10 | 1480 | 326 | 103 | 331 |
| David, Tony. (See David, Lucien and T.) | | | | | | |
| Davidson, Ellis, Manhattan, Kans. Harness-buckle | 743,254 | Nov. 3 | 849 | 185 | 107 | 178 |
| Davidson, Frank B., New York, N. Y., assignor to Howe and Davidson Company, Chicago, Ill. Separator for candy-pails | 725,226 | Apr. 14 | 1506 | 343 | 103 | 1504 |
| Davidson, Frank F., and G. T. Strite, Tama, Iowa. Yieldable pitman for power-hammers | 739,992 | Sept. 29 | 4735 | 1065 | 106 | 1079 |
| Davidson, George M., Chicago, Ill. Water-purifier | 729,286 | May 26 | 4610 | {1019 {1020 | 104 | 1026 |
| Davidson, George R., Lenox, Mich. Brush for bran-dusters, bolters, scalpers, grain-scourers, and separators | 738,166 | Sept. 8 | 1248 | 271 | 106 | 286 |
| Davidson, Harold L., assignor of one-half to J. C. Davidson, Louisville, Ky. Copying-press | 719,759 | Feb. 3 | 636 | {142 {143 | 102 | 956 |
| Davidson, James B., Philadelphia, Pa. Piano card-punching machine | 724,674 | Apr. 7 | 478 | 115 | 103 | 1271 |
| Davidson, James B., Philadelphia, Pa. Piano card-punching machine | 735,952 | Aug. 11 | 1747 | {373 {374 | 105 | 1372 |
| Davidson, James B., Philadelphia, Pa. Piano card-punching machine | 742,170 | Oct. 27 | 3475 | {776 {777 | 106 | 2030 |
| Davidson, James R., Maxwell, Iowa. Carriage-seat | 735,070 | Aug. 4 | 39 | 12 | 105 | 990 |
| Davidson, John C. (See Davidson, Harold L., assignor.) | | | | | | |
| Davidson, Maberry L., Dorchester, Mass., assignor of one-half to Wilkins Brothers, Milford, N. H. Duplicate-order book | 724,995 | Apr. 7 | 1070 | {244 {245 | 103 | 1397 |
| Davidson, Martin B., assignor to W. J. Broadfoot, Joplin, Mo. Baby-jumper | 736,826 | Aug. 18 | 3369 | 743 | 105 | 1732 |
| Davidson, Samuel C., Belfast, Ireland. Detachable bearing for shafts | 732,053 | June 30 | 4680 | 1045 | 104 | 2164 |
| Davidson, Samuel C., Belfast, Ireland. Means for supporting or carrying the inclosing casings of centrifugal fans | 743,693 | Nov. 10 | 1766 | {373 {374 | 107 | 393 |
| Davidson, Samuel C., Belfast, Ireland. Apparatus for enhancing draft through furnace-fires | 743,694 | Nov. 10 | 1768 | {374 {375 | 107 | 393 |
| Davidson, Samuel C., Belfast, Ireland. Apparatus for enhancing draft | 744,003 | Nov. 10 | 2356 | 506 | 107 | 522 |
| Davidson, Samuel C., Belfast, Ireland. Stove or apparatus for heating air | 746,682 | Dec. 15 | 2500 | {572 {573 {574 | 107 | 1678 |
| Davidson, Samuel C., Belfast, Ireland. Back-gearing | 746,683 | Dec. 15 | 2504 | {574 {575 | 107 | 1679 |
| Davidson, Silas C., Birmingham, Ala. Building or roofing block or material | 740,099 | Sept. 29 | 4930 | 1105 | 106 | 1121 |
| Davidson, Thomas, Jr., assignor of one-half to W. Beatty, Philadelphia, Pa. Knife and fork cleaner | 722,174 | Mar. 3 | 949 | 211 | 103 | 201 |
| Davidson, William E., North Shields, England. Cigar or cigarette holder | 720,232 | Feb. 10 | 1521 | 349 | 102 | 1161 |
| Davidson, William J., Hagerstown, assignor of one-half to S. A. Gates, Gapland, Md. Spring attachment for straps | 741,232 | Oct. 13 | 1585 | 356 | 106 | 1604 |
| Davie, James, Glasgow, Scotland. Water-heater | 726,219 | Apr. 21 | 3295 | 747 | 103 | 1896 |
| Davies Brothers and Company. (See Davies, Edward A., assignor.) | | | | | | |
| Davies, Charles F., *et al.* (See Waterbury, George H., assignor.) | | | | | | |
| Davies, Charles W. T., New York, N. Y. Pen or pencil grip | 737,085 | Aug. 25 | 3830 | 852 | 105 | 1849 |
| Davies, Charles W. T., assignor to Good Form Manufacturing Company, New York, N. Y. Necktie-band fastener | 728,877 | May 26 | 3880 | 863 | 104 | 875 |
| Davies, David T. (See Cooper and Davies.) | | | | | | |
| Davies, Edward A., assignor to Davies Brothers and Company, Limited, Wolverhampton, England. Apparatus for galvanizing metal sheets | 748,350 | Dec. 29 | 5637 | 1285 | 107 | 2415 |
| Davies, Frederick D., assignor of one-half to F. C. Bonny, Brooklyn, N. Y. Shaft and harness support | 736,915 | Aug. 18 | 3524 | 783 | 105 | 1764 |
| Davies, Frederick D., assignor of one-half to F. C. Bonny, Brooklyn, N. Y. Shears or the like | 741,576 | Oct. 13 | 2285 | 510 | 106 | 1753 |
| Davies, Frederick D., assignor of one-half to F. C. Bonny, Brooklyn, N. Y. Lace-holder | 745,577 | Dec. 1 | 483 | 114 | 107 | 1200 |
| Davies, John L., London, England. Electric-arc lamp | 731,025 | June 16 | 2741 | 611 | 104 | 1733 |
| Davies, John V., Flushing, N. Y. Apparatus for facilitating tunnel construction | 735,718 | Aug. 11 | 1312 | 282 | 105 | 1277 |
| Davies, Mary A., New Haven, Conn. Game apparatus | 726,262 | Apr. 28 | 3387 | 769 | 103 | 1930 |
| Davies, Randall. (See Higgins, Frederick H. W., assignor.) | | | | | | |
| Davies, Roderick W., Canton, Ohio, assignor to American Casting Machine Company. Apparatus for casting metal | 726,878 | May 5 | 85 | 22 | 104 | 21 |
| Davies, Thomas. (See Fry, Stephen D., assignor.) | | | | | | |
| Davies, Thomas, Liverpool, England. Road tank-wagon for oil or the like | 732,397 | June 30 | 5369 | 1189 | 104 | 2307 |
| Davies, Thomas H., Duquesne, Pa. Rail joint and fastening | 722,175 | Mar. 3 | 950 | 211 | 103 | 201 |
| Davies, William. (See Matthews and Davies.) | | | | | | |
| Davis Acetylene Company. (See Davis, Augustine, assignor.) | | | | | | |
| Davis, Albert G., Schenectady, N. Y., assignor to General Electric Company. Electric-arc lamp | 727,596 | May 12 | 1443 | 324 | 104 | 329 |
| Davis, Alexander C., Lafayette, Ind. Insect-trap | 721,866 | Mar. 3 | 390 | 86 | 103 | 85 |
| Davis, Augustine, Chicago, Ill. Acetylene-gas generator | 719,570 | Feb. 3 | 287 | 67, 68 | 102 | 883 |
| Davis, Augustine, assignor to Davis Acetylene Company, Chicago, Ill. Acetylene-gas generator | 719,091 | Jan. 27 | 2994 | {668 {669 | 102 | 678 |
| Davis Automatic Boiler Feed Company. (See Davis and Ault, assignors.) | | | | | | |
| Davis, Axel, San Francisco, Cal. Oil-burner | 735,014 | July 28 | 4301 | 1000 | 105 | 953 |
| Davis, Ben, *et al.* (See Harp and Starkweather, assignors.) | | | | | | |
| Davis, Calvin R., assignor to Oliver Chilled Plow Works, South Bend, Ind. Plow | 720,118 | Feb. 10 | 1310 | {299 {300 | 102 | 1118 |
| Davis, Calvin R., assignor to Oliver Chilled Plow Works, South Bend, Ind. Plow | 736,503 | Aug. 18 | 2739 | 600 | 105 | 1602 |
| Davis, Charles A., Rockvale, Colo. Rail-bender | 719,760 | Feb. 3 | 639 | 143 | 102 | 957 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | Spec. | Dr'g. | Vol. | Page. |
| Davis, Charles A., Pasadena, Cal. Dental vulcanizer | 728,375 | May 19 | 2936 | 648 | 104 | 662 |
| Davis, Charles A., Pasadena, Cal. Fastening device for artificial teeth | 740,096 | Sept. 29 | 4925 | 1104 | 106 | 1120 |
| Davis, Charles C., Coontocook, N. H., and E. W. Webster, Whitman, Mass., assignors to Kingsbury & Davis Machine Company, South Coventry, Conn. Paper-box machine | 728,086 | May 12 | 2380 | 529, 530 | 104 | 524 |
| Davis, Charles E. (See Fletcher, Davis, and Douglas.) | | | | | | |
| Davis, Charles E., Chicago, Ill., assignor to E. A. Sperry, Cleveland, Ohio. Preserving perishable food products | 724,553 | Apr. 7 | 245 | 60 | 103 | 1222 |
| Davis, Charles E., Chicago, Ill., assignor to E. A. Sperry, Cleveland, Ohio. Apparatus for preserving perishable food products | 724,554 | Apr. 7 | 248 | 60 | 103 | 1222 |
| Davis, Charles L., assignor to Wilcox & White Company, Meriden, Conn. Mechanical musical instrument | 730,517 | June 9 | 1821 | 406 | 104 | 1518 |
| Davis, Charles L., assignor to Wilcox & White Company, Meriden, Conn. Music-sheet for mechanical musical instruments | 736,228 | Aug. 11 | 2235 | 482 | 105 | 1477 |
| Davis, Charles L., assignor to Wilcox & White Company, Meriden, Conn. Mechanical musical instrument | 744,052 | Nov. 17 | 2485 | 533, 534 | 107 | 559 |
| Davis, Charles L., assignor to E. and W. H. Heuer and A. M. Belfield, Chicago, Ill. Mechanical musical instrument | 725,941 | Apr. 21 | 2823 | 640 | 103 | 1798 |
| Davis, Cleland, U. S. Navy, assignor to Cambridge Manufacturing Company, Wilmington, Del. Making hollow balls | 736,229 | Aug. 11 | 2236 | 482 | 105 | 1477 |
| Davis, Cleland, U. S. Navy, assignor to Cambridge Manufacturing Company, Wilmington, Del. Golf-ball | 736,230 | Aug. 11 | 2237 | 482 | 105 | 1477 |
| Davis, Cleland, U. S. Navy, assignor to Cambridge Manufacturing Company, Wilmington, Del. Golf-ball | 736,231 | Aug. 11 | 2238 | 483 | 105 | 1477 |
| Davis, Cleland, U. S. Navy, assignor to Cambridge Manufacturing Company, Wilmington, Del. Golf-ball | 736,232 | Aug. 11 | 2238 | 483 | 105 | 1478 |
| Davis, Cleland, U. S. Navy, assignor to Cambridge Manufacturing Company, Wilmington, Del. Golf-ball | 736,233 | Aug. 11 | 2240 | 483 | 105 | 1478 |
| Davis, Crit, Harrodsburg, Ky. Bridle-bit | 720,679 | Feb. 17 | 2374 | 543 | 102 | 1352 |
| Davis, David O. (See Davis, William O., assignor.) | | | | | | |
| Davis, David W., assignor to R. R. Howard, trustee, Detroit, Mich. Railway-brake | 738,005 | Sept. 1 | 905 | 199 | 106 | 198 |
| Davis, E. E. (See Rye, Alford M., assignor.) | | | | | | |
| Davis, Edward E., New York, N. Y. Lubricator | 725,545 | Apr. 14 | 2090 | 473 | 103 | 1627 |
| Davis, Edward P., Ilkeston, England. Pipe-stove for heating the blast for blast-furnaces | 728,377 | May 19 | 2940 | 648, 649 | 104 | 663 |
| Davis, Edward P., assignor to Whiting & Davis, Wrentham, Mass. Bracelet or the like | 725,322 | Apr. 14 | 1671 | 377 | 103 | 1538 |
| Davis, Edwin C., Elyria, Ohio. Interchangeable hub | 728,376 | May 19 | 2938 | 648 | 104 | 663 |
| Davis, Edwin W. (See Jinks and Davis.) | | | | | | |
| Davis, Ella H., *et al.* (See Davis, William D., assignor.) | | | | | | |
| Davis, Erastus D., *et al.* (See Davis, William D., assignor.) | | | | | | |
| Davis, Ernest F., Noank, Conn. Wrench | 740,251 | Sept. 29 | 5208 | 1171 | 106 | 1178 |
| Davis, Eugene M., Alton, Ill. Orders-out book | 732,717 | July 7 | 40 | 10 | 105 | 12 |
| Davis, Frank. (See Plummer and Davis.) | | | | | | |
| Davis, Frank, assignor of one-half to R. J. Fleming, Salem, Oreg. Display-front for boxes | 747,950 | Dec. 29 | 4903 | 1110 | 107 | 2256 |
| Davis, Frank B., Audubon, Iowa, and F. W. Henshaw, Elkpoint, S. D.; said Henshaw assignor to said Davis. Submerged force-pump | 746,038 | Dec. 8 | 1338 | 300 | 107 | 1402 |
| Davis, Frank C., San Antonio, Tex. Dumping-cart | 740,252 | Sept. 29 | 5209 | 1171 | 106 | 1179 |
| Davis, Frank E., Indianapolis, Ind. Tool-handle | 719,440 | Feb. 3 | 56 | 12 | 102 | 837 |
| Davis, Frank E., La Crosse, Wis. Sulky lister seeding-machine | 729,552 | June 2 | 57 | 14, 15 | 104 | 1138 |
| Davis, Frank M., Milwaukee, Wis. Automatic multispindle machine | 730,882 | June 16 | 2459 | 545, 546, 547 | 104 | 1674 |
| Davis, Frank R., assignor of one-half to L. H. L. Davis, Washington, D. C. Toy | 740,817 | Oct. 6 | 817 | 184 | 106 | 1419 |
| Davis, Frederick A. W., Indianapolis, Ind. Filtering system | 730,518 | June 9 | 1823 | 406 | 104 | 1518 |
| Davis, Frederick L., Boston, Mass. Pulley | 742,171 | Oct. 27 | 3477 | 777 | 106 | 2030 |
| Davis, George E., Dubuque, Iowa. Power-hammer | 726,879 | May 5 | 89 | 22 | 104 | 22 |
| Davis, George H. (See Davis, Herbert L., assignor.) | | | | | | |
| Davis, George H., New York, N. Y. Electric self-playing piano | 719,092 | Jan. 27 | 3001 | 669, 670 | 102 | 679 |
| Davis, George H., New York, N. Y. Electric self-playing piano attachment | 730,098 | June 2 | 1041 | 233, 234 | 104 | 1339 |
| Davis, George H., New York, N. Y. Electrically-operated musical instrument | 733,702 | July 14 | 1773 | 421, 422 | 105 | 391 |
| Davis, George H., Brooklyn, N. Y. Electrical self-playing musical instrument | 719,093 | Jan. 27 | 3009 | 670, 671 | 102 | 681 |
| Davis, George H., Orange, N. J. Electric attachment for pianos | 739,396 | Sept. 22 | 3591 | 802, 803 | 106 | 815 |
| Davis, George H., Orange, N. J. Apparatus for marking perforated music-sheets for mechanical musical instruments | 747,858 | Dec. 22 | 4698 | 1062 | 107 | 2191 |
| Davis, George H., West Orange, N. J. Machine for securing end caps and journal-pins to music rolls or spools | 739,991 | Sept. 29 | 4733 | 1065 | 106 | 1078 |
| Davis, George H., West Orange, N. J. Tracing-machine | 745,424 | Dec. 1 | 211 | 47 | 107 | 1145 |
| Davis, George H., West Orange, N. J. Apparatus for duplicating indicator-lines on music-sheets | 747,687 | Dec. 22 | 4374 | 988 | 107 | 2115 |
| Davis, George H., West Orange, N. J. Compensating music roll or spool | 747,859 | Dec. 22 | 4702 | 1062 | 107 | 2192 |
| Davis, George H., West Orange, N. J. Expression-indicator for automatic music-playing mechanisms | 748,266 | Dec. 29 | 5508 | 1255 | 107 | 2388 |
| Davis, George H., assignor of one-half to E. T. Burrowes, Portland, Me. Acetylene-gas generator | 741,771 | Oct. 20 | 2665 | 595 | 106 | 1848 |
| Davis, George L., Watertown, N. Y. Spirit-level | 742,010 | Oct. 20 | 3136 | 700 | 106 | 1946 |
| Davis, George P., Detroit, Mich. Wrapping-machine | 740,818 | Oct. 6 | 819 | 184 | 106 | 1420 |
| Davis, George W. (See Morton, Ellis S., assignor.) | | | | | | |
| Davis, George W., Vacaville, Cal. Truck | 722,952 | Mar. 17 | 2419 | 540, 541 | 103 | 544 |
| Davis, Gilmer W., St. Joseph, Mo. Holder for sleeve-protectors | 719,650 | Feb. 3 | 426 | 97 | 102 | 911 |
| Davis, Grace P. (See Davis, Lewis K., assignor.) | | | | | | |
| Davis, Harry P., Pittsburg, Pa., assignor to Westinghouse Electric & Manufacturing Co. Controlling induction-motors | 725,681 | Apr. 21 | 2355 | 532, 533 | 103 | 1698 |
| Davis, Henry J., assignor of two-thirds to W. E. Jones and W. H. Davis, Waynesboro, Ga. Vending-machine | 742,295 | Oct. 27 | 3724 | 832 | 106 | 2081 |
| Davis, Henry J., and P. G. Ault, assignors to Davis Automatic Boiler Feed Company, Birmingham, Ala. Boiler-feeder | 736,702 | Aug. 18 | 3124 | 688, 689 | 105 | 1680 |
| Davis, Henry J., and P. G. Ault, assignors to Davis Automatic Boiler Feed Company, Birmingham, Ala. Boiler-feeder | 742,294 | Oct. 27 | 3721 | 831, 832 | 106 | 2081 |
| Davis, Henry T., and E. Perrett, Lewisham, assignors to Davis-Perrett, Limited, London, England. Separating oily or similar impurities from water | 744,171 | Nov. 17 | 2718 | 580 | 107 | 607 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | Spec. | Dr'g. | Vol. | Page. |
| Davis, Herbert, Walthamstow, assignor to H. Swanton, London, England. Apparatus for delivering air under pressure | 726,263 | Apr. 28 | 3388 | 770 | 103 | 1930 |
| Davis, Herbert A., assignor to J. H. Brinton, Philadelphia, Pa. Carbureter for gas-engines | 722,357 | Mar. 10 | 1302 | 289 | 103 | 293 |
| Davis, Herbert L., Washington, D. C., assignor to G. H. Davis, Orange, N. J. Electrically-controlled perforating-machine | 732,279 | June 30 | 5139 | 1141 | 104 | 2258 |
| Davis, Herman, New Orleans, La. Trunk | 739,397 | Sept. 22 | 3599 | 804 | 106 | 817 |
| Davis, Howard. (See Rubly, Charles P., assignor.) | | | | | | |
| Davis, Isaac F., Rome, Ga. Submerged-gudgeon bearing | 724,086 | Mar. 31 | 4554 | 1025 | 103 | 1013 |
| Davis, Isaac P., assignor to J. W. Hyde, Springfield, Mass. Overseaming and blind-stitching machine | 741,465 | Oct. 13 | 2044 | 454 | 106 | 1701 |
| Davis, Isaac R. (See Messer, Walther L., assignor.) | | | | | | |
| Davis, James C., St. Louis, Mo. Making castings | 727,103 | May 5 | 542 | 116 | 104 | 118 |
| Davis, James C., assignor to Sargent Company, Chicago, Ill. Producing carbon-steel castings | 746,039 | Dec. 8 | 1339 | ..... | 107 | 1402 |
| Davis, James H. (See Kehm, August, assignor.) | | | | | | |
| Davis, James H., Chicago, Ill., assignor to American Steam Heating Specialty Company. Automatic controlling device for steam-heating systems | 726,264 | Apr. 28 | 3391 | 770 | 103 | 1931 |
| Davis, James L. (See Lyon and Davis.) | | | | | | |
| Davis, John, Sterling, Ill. Lightning arrester and protector | 738,988 | Sept. 15 | 2848 | 632 | 106 | 643 |
| Davis, John B., Dayton, Ohio. Attachment for leading bicycles | 718,322 | Jan. 13 | 1495 | 332 | 102 | 337 |
| Davis, John F. (See Mitchell and Lewis, assignors.) | | | | | | |
| Davis, John H., Elizabethtown, Ky. Harrow | 722,287 | Mar. 10 | 1180 | 261 | 103 | 266 |
| Davis, John H., Elizabethtown, Ky. Carpet-display rack | 730,239 | June 9 | 1300 | 287 | 104 | 1407 |
| Davis, John H., Oakland, Cal. Oil-burner | 748,267 | Dec. 29 | 5511 | 1255 | 107 | 2389 |
| Davis, John H., assignor to United States Graphite Company, Glens Falls, N. Y. Graphite separator | 722,211 | Mar. 10 | 1038 | 229 | 103 | 236 |
| Davis, John T., San Francisco, Cal. Manufacture of artificial fuel from brea | 728,680 | May 19 | 3516 | ..... | 104 | 786 |
| Davis, John W., Palmyra, Ill. Jar-closure | 723,142 | Mar. 17 | 2753 | 619 | 103 | 613 |
| Davis, John W., Salisbury, N. C. Eccentric | 729,287 | May 26 | 4613 | 1020 | 104 | 1027 |
| Davis, John W., Clinton, Ind. Adjustable fastener for grain-car doors | 747,150 | Dec. 15 | 3389 | 769 | 107 | 1881 |
| Davis, Jonah E., Lindsey, Pa. Rail-joint | 741,313 | Oct. 13 | 1752 | 390 | 106 | 1636 |
| Davis, Joseph. (See Oler, Harry P., assignor.) | | | | | | |
| Davis, Joseph L. (See Rypinski and Davis.) | | | | | | |
| Davis, Joseph L., Schenectady, N. Y., assignor to General Electric Company. Device for alternating-current-motor control | 744,053 | Nov. 17 | 2488 | 534 | 107 | 560 |
| Davis, Leonadus A., Sloans, Ga. Sidehill-plow | 721,545 | Feb. 24 | 3992 | 909 | 102 | 1713 |
| Davis, Leonard H. L. (See Davis, Frank R., assignor.) | | | | | | |
| Davis, Lewis K., assignor to G. P. Davis, Indianapolis, Ind. Wagon | 718,921 | Jan. 20 | 2659 | 596 | 102 | 594 |
| Davis, Lewis K., assignor to G. P. Davis, Indianapolis, Ind. Fuel-feeding apparatus | 718,985 | Jan. 27 | 2787 | 623<br>624 | 102 | 636 |
| Davis, Lewis K., assignor to G. P. Davis, Indianapolis, Ind. Fuel-feeding device | 727,305 | May 5 | 902 | 195<br>196 | 104 | 194 |
| Davis, Lewis K., assignor to G. P. Davis, Indianapolis, Ind. Fuel-feeding apparatus | 730,883 | June 16 | 2468 | 548 | 104 | 1677 |
| Davis, Lewis K., assignor to G. P. Davis, Indianapolis, Ind. Fuel-feeding apparatus | 730,884 | June 16 | 2470 | 548 | 104 | 1678 |
| Davis, Lewis K., assignor to G. P. Davis, Indianapolis, Ind. Fuel-feeding apparatus | 740,097 | Sept. 29 | 4926 | 1105 | 106 | 1120 |
| Davis, Linford J., Battlecreek, Mich. Automatic poultry-feeder | 728,378 | May 19 | 2941 | 649 | 104 | 664 |
| Davis, Louis N., Westchester, Pa. Valve | 735,719 | Aug. 11 | 1313 | 282 | 105 | 1278 |
| Davis, Michael J., assignor of one-half to E. D. Nichols, Chicago, Ill. Graining-tool | 746,684 | Dec. 15 | 2507 | 576 | 107 | 1680 |
| Davis, Mirabeau L. T. (See Holton, Abner L., assignor.) | | | | | | |
| Davis, Nathan, assignor of two-thirds to M. J. Hardenburgh and E. Metzger, Kingston, N. Y. Railway-car cuspidor | 745,484 | Dec. 1 | 332 | 78 | 107 | 1170 |
| Davis, Nathan H., Philadelphia, Pa., assignor to McCord & Company, Chicago, Ill. Dust-guard for axle-boxes | 725,049 | Apr. 14 | 1170 | 264 | 103 | 1435 |
| Davis, Orren, Mount Andrew, Ala. Root-cutter | 726,514 | Apr. 28 | 3904 | 883 | 103 | 2033 |
| Davis-Perrett. (See Davis and Perrett, assignors.) | | | | | | |
| Davis, Robert D., *et al.* (See Stark, Benjamin F., assignor.) | | | | | | |
| Davis, Robert W., Jackson, Ohio. Filter | 719,309 | Jan. 27 | 3401 | 758 | 102 | 765 |
| Davis & Roesch Temperature Controlling Company. (See Roesch, Alfred, assignor.) | | | | | | |
| Davis, Ronell K., Despatch, N. Y. Document-cabinet | 740,098 | Sept. 29 | 4928 | 1105 | 106 | 1121 |
| Davis, Samuel, assignor of one-half to A. Hanson, Sherman, Tex. Dry closet | 725,050 | Apr. 14 | 1171 | 264 | 103 | 1435 |
| Davis, Samuel H. (See Farr, John W., assignor.) | | | | | | |
| Davis Sewing Machine Company. (See Carlisle, William S., assignor.) | | | | | | |
| Davis, Smith W., Pickens, W. Va. Boiler-setting | 735,473 | Aug. 4 | 844 | 180 | 105 | 1160 |
| Davis & Sons, S. (See Marier, Gustave A., assignor.) | | | | | | |
| Davis, Spencer E., Minneapolis, Minn. Disk drill | 718,825 | Jan. 20 | 2472 | 549 | 102 | 554 |
| Davis, Stephen M., Ninetysix, S. C. Harrow-cultivator | 718,434 | Jan. 13 | 1691 | 373 | 102 | 377 |
| Davis, Stephen M., Ninetysix, S. C. Automatic danger-signal for railways | 743,063 | Nov. 3 | 473 | 103 | 107 | 98 |
| Davis, Theron, New York, N. Y. Sharpener for edged tools | 744,726 | Nov. 24 | 3746 | 808 | 107 | 847 |
| Davis, Theron, New York, N. Y., assignor to Canfield Rubber Company, Bridgeport, Conn. Dress-shield holder | 737,364 | Aug. 25 | 4352 | 970 | 105 | 1960 |
| Davis, Thomas E., Cambridge, Mass. Cash-register | 746,300 | Dec. 8 | 1820 | 413 | 107 | 1508 |
| Davis, Thomas G., Youngstown, Ohio. Toy | 721,674 | Mar. 3 | 44 | 10 | 103 | 11 |
| Davis, Thomas W., Jr., assignor of one-half to W. H. Thornton, Elizabeth, N. J. Truck | 725,828 | Apr. 21 | 2626 | 597 | 103 | 1757 |
| Davis, Wilbur G., Newton, assignor to Single Tube Transmission Company, Boston, Mass. Pneumatic-tube system | 735,861 | Aug. 11 | 1587 | 338<br>339<br>340 | 105 | 1338 |
| Davis, Wilbur G., Newton, assignor to Single Tube Transmission Company, Boston, Mass. Pneumatic-carrier system | 738,102 | Sept. 1 | 1079 | 238<br>239 | 106 | 233 |
| Davis, William A., Chapelhill, Ala. Seeder and fertilizer-distributer | 737,588 | Sept. 1 | 55 | 12 | 106 | 14 |
| Davis, William C., Denver, Colo. Rabble mechanism | 734,492 | July 21 | 3309 | 776<br>777 | 105 | 731 |
| Davis, William D., assignor to E. D. and E. H. Davis, Lockport, N. Y. Barrel-heading press | 721,430 | Feb. 24 | 3797 | 864 | 102 | 1671 |
| Davis, William F., *et al.* (See Jenkins, Charles H., assignor.) | | | | | | |
| Davis, William F., and J. C. Mikkelson, Utica, Nebr. End-gate fastener | 733,165 | July 7 | 825 | 200 | 105 | 173 |
| Davis, William H., *et al.* (See Davis, Henry J., assignor.) | | | | | | |
| Davis, William H., *et al.* (See Pagenhart, Charles L., assignor.) | | | | | | |
| Davis, William H., Kent, Ohio. Combined filling and blow-off valve for boilers | 734,675 | July 28 | 3653 | 857 | 105 | 820 |
| Davis, William H., Boulder, assignor of two-thirds to A. L. Collins, Denver, and F. L. Bosqui, Telluride, Colo. Treating cyanid solutions | 741,231 | Oct. 13 | 1583 | 356 | 106 | 1604 |
| Davis, William J. (See Schanamen and Davis.) | | | | | | |
| Davis, William J. (See Webber and Davis.) | | | | | | |
| Davis, William L. (See Wack, John, assignor.) | | | | | | |
| Davis, William M., Chicago, Ill., assignor, by mesne assignments, to Stromberg-Carlson Telephone Manufacturing Company, Rochester, N. Y. Electromagnet | 737,589 | Sept. 1 | 57 | 13 | 106 | 14 |

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| | | | Spec. | Drg. | Vol. | Page. |
| Davis, William M., Chicago, Ill., assignor, by mesne assignments, to Stromberg-Carlson Telephone Manufacturing Company, Rochester, N. Y. Telephone-exchange system | 737,590 | Sept. 1 | 59 | 13 | 106 | 14 |
| Davis, William M., Chicago, Ill., assignor, by mesne assignments, to Stromberg-Carlson Telephone Manufacturing Company, Rochester, N. Y. Telephone-exchange system | 737,715 | Sept. 1 | 283 | 59, 60 | 106 | 64 |
| Davis, William O., assignor of one-half to D. O. Davis, Jackson, Ohio. Garden-plow | 720,680 | Feb. 17 | 2375 | 544 | 102 | 1352 |
| Davis, William W., assignor of one-half to G. F. Duffing, Baldwin, Mich. Hydrocarbon tire-heater | 718,567 | Jan. 13 | 2002 | 436 | 102 | 445 |
| Davis, Willie H., Parachute, Colo. Dumping-car | 740,819 | Oct. 6 | 821 | 184, 185 | 106 | 1420 |
| Davison, Edwin F., Marysville, Wash. Fly-trap | 736,827 | Aug. 18 | 3371 | 744 | 105 | 1732 |
| Davison, Fred, assignor of one-half to A. D. Harlow, Bath, N. Y. Car-operated automatic tramway-switch mechanism | 724,821 | Apr. 7 | 757 | 176 | 103 | 1332 |
| Davison, George B., Utica, N. Y. Lifting-jack | 739,654 | Sept. 22 | 4084 | 910 | 106 | 923 |
| Davison, George J., Richmond, Va. Artificial denture | 742,011 | Oct. 20 | 3138 | 700 | 106 | 1946 |
| Davison, George R., assignor to Stanley Electric Manufacturing Company, Pittsfield, Mass. Electric-arc lamp | 742,604 | Oct. 27 | 4278 | 964 | 106 | 2196 |
| Davison, Gregory C., U. S. Navy. Compound turbine | 733,818 | July 14 | 2015 | 474, 475 | 105 | 441 |
| Davison, Henry L., and D. J. Woolley, Lincoln, Nebr. Copying-press | 732,833 | July 7 | 251 | 62 | 105 | 56 |
| Davison, John C., assignor of one-half to A. Chisholm and G. Browning, Friendsville, Md. Wrench | 747,385 | Dec. 22 | 3837 | 863 | 107 | 1994 |
| Davison, Joseph B., Milwaukee, Wis. Head-cap for vapor-bath cabinets | 718,435 | Jan. 13 | 1692 | 373 | 102 | 377 |
| Davison, Sarah M., Ethel Landing, Pa. Collapsible pie and pastry rack | 719,441 | Feb. 3 | 57 | 13 | 102 | 837 |
| Davison, William S., Janesville, Wis. Seal | 734,517 | July 28 | 3359 | 786 | 105 | 758 |
| Davison, William S., Janesville, Wis. Seal-press | 734,518 | July 28 | 3361 | 786 | 105 | 759 |
| Davisson, Clinton J. (See Gulliford, George L., assignor.) | | | | | | |
| Davoran, Michael F., and F. Warther, assignors to Crane & Breed Manufacturing Company, Cincinnati, Ohio. Handle for burial-caskets | 723,993 | Mar. 31 | 4378 | 983 | 103 | 979 |
| Davy, Alonzo M., Clare, Mich. Curtain-display mechanism | 722,568 | Mar. 10 | 1703 | 379 | 103 | 382 |
| Davy, William J., *et al.* (See Haste and Wilding, assignors.) | | | | | | |
| Daw, Albert W. and Z. W., London, England. Turbine | 742,972 | Nov. 3 | 263 | 58, 59, 60 | 107 | 57 |
| Daw, Zacharias W. (See Daw, Albert W. and Z. W.) | | | | | | |
| Dawe, Elijah, Collingwood, Canada. Sleeping-berth | 734,519 | July 28 | 3362 | 787 | 105 | 759 |
| Dawes, Charles B., Johnstown, N. Y. Fastener for curtain-pole tips | 726,265 | Apr. 28 | 3393 | 771 | 103 | 1931 |
| Dawes, Francis H., Johnstown, N. Y. Toilet-package cabinet | 735,474 | Aug. 4 | 846 | 180 | 105 | 1160 |
| Dawkins, William T., Jr. (See Jeffers, Harry I., assignor.) | | | | | | |
| Dawley, Winfield W., Geneva, Ohio. Hatch-cover for marine vessels | 746,929 | Dec. 15 | 2977 | 684, 685 | 107 | 1787 |
| Dawson, Arthur T., and G. T. Buckham, assignors to Vickers Sons & Maxim, Limited, London, England. Firing mechanism for guns | 718,051 | Jan. 6 | 990 | 221 | 102 | 213 |
| Dawson, Arthur T., and G. T. Buckham, assignors to Vickers Sons & Maxim, Limited, London, England. Recoil apparatus for guns | 718,749 | Jan. 20 | 2347 | 518 | 102 | 529 |
| Dawson, Arthur T., and G. T. Buckham, assignors to Vickers Sons & Maxim, Limited, London, England. Fluid recoil-check | 732,676 | June 30 | 5895 | 1308 | 104 | 2418 |
| Dawson, Arthur T., and G. T. Buckham, assignors to Vickers Sons & Maxim, Limited, Westminster, England. Field-gun carriage | 733,166 | July 7 | 826 | 200, 201 | 105 | 173 |
| Dawson, Arthur T., and G. T. Buckham, assignors to Vickers Sons & Maxim, Limited, Westminster, London, England. Separable gun-carriage | 742,973 | Nov. 3 | 267 | 60 | 107 | 58 |
| Dawson, Arthur T., and G. T. Buckham, assignors to Vickers Sons & Maxim, Limited, Westminster, London, England. Ordnance | 743,466 | Nov. 10 | 1350 | 276 | 107 | 304 |
| Dawson, Arthur T., and G. T. Buckham, Westminster, London, assignors to Vickers Sons & Maxim, Limited, London, England. Gun-mounting | 718,050 | Jan. 6 | 989 | 221 | 102 | 213 |
| Dawson, Arthur T., and G. T. Buckham, London, assignors to Vickers Sons & Maxim, Limited, Westminster, England. Elevating, traversing, and sighting apparatus for field-guns | 743,255 | Nov. 3 | 850 | 185, 186 | 107 | 178 |
| Dawson, Arthur T., and G. T. Buckham, London, assignors to Vickers Sons & Maxim, Limited, Westminster, England. Gun-carriage or limber or ammunition-car | 748,351 | Dec. 29 | 5640 | 1285 | 107 | 2416 |
| Dawson, Arthur T., London, and J. Horne, Barrow-in-Furness, assignors to Vickers Sons & Maxim, Limited, London, England. Ammunition-hoist for ordnance | 736,075 | Aug. 11 | 1988 | 422 | 105 | 1424 |
| Dawson, Arthur T., and L. Silverman, London, assignors to Vickers Sons & Maxim, Limited, Westminster, England. Quick-firing gun | 738,666 | Sept. 8 | 2243 | 491, 492 | 106 | 497 |
| Dawson, Arthur T., and W. Burton, Westminster, assignors to Vickers Sons & Maxim, Limited, London, England. Gun-mounting | 734,406 | July 21 | 3157 | 742 | 105 | 701 |
| Dawson, Charles E., Hythe, England. Internal-combustion engine | 719,199 | Jan. 27 | 3190 | 711, 712 | 102 | 719 |
| Dawson, Frank B., *et al.* (See Heybeck, William H., assignor.) | | | | | | |
| Dawson, J. L. B., *et al.* (See Heybeck, William H., assignor.) | | | | | | |
| Dawson, John H., Oxford, assignor to Griscom and McFeely, Philadelphia, Pa. Machine for separating garlic and cockle from grain | 718,321 | Jan. 13 | 1492 | 331, 332 | 102 | 336 |
| Dawson, John T., and L. Sunderland, Shaw, England. Outdoor seat | 728,209 | May 19 | 2601 | 581 | 104 | 593 |
| Dawson, John W. (See Wilt, William E., assignor.) | | | | | | |
| Dawson, Joseph W. (See Barry, Wehmiller, and Dawson.) | | | | | | |
| Dawson, Oliver B., Caldwell, N. J. Apparatus for reducing and concentrating ores | 738,006 | Sept. 1 | 908 | 199 | 106 | 198 |
| Dawson, Oliver B., Caldwell, N. J. Reducing minerals | 738,007 | Sept. 1 | 910 | 200 | 106 | 199 |
| Dawson, William F., Schenectady, N. Y., assignor to General Electric Company. Device for shifting the field-magnet frames of dynamo-electric machines | 725,416 | Apr. 14 | 1838 | 412 | 103 | 1574 |
| Daxbek, Joseph, Fils, assignor to E. Veeck & Cy., Brussels, Belgium. Rapid manufacture of pasteboard horses or other animals | 730,615 | June 9 | 1991 | 442 | 104 | 1557 |
| Day, Albert, Leeds, England. Packaging-machine | 744,172 | Nov. 17 | 2721 | 580, 581 | 107 | 607 |
| Day, Albert A., *et al.* (See Baldwin, James E., assignor.) | | | | | | |
| Day, Albert V. T. (See Baldwin, Van Zandt, and Day.) | | | | | | |
| Day, Alfred L., New York, N. Y. Cryptographic perforator | 739,398 | Sept. 22 | 3602 | 804, 805 | 106 | 818 |
| Day, Alfred L., New York, N. Y. Cryptographic perforator | 739,399 | Sept. 22 | 3611 | 805, 806 | 106 | 820 |
| Day, B. F. (See Beale, William S., assignor.) | | | | | | |
| Day, Charles M., Hopedale, Mass., assignor to Draper Company, Portland, Me., and Hopedale, Mass. Molding apparatus | 726,515 | Apr. 28 | 3905 | 884 | 103 | 2033 |
| Day, Charles M., and J. Anderson, assignors to Draper Company, Hopedale, Mass. Apparatus for making pulley-molds | 721,785 | Mar. 3 | 225 | 50 | 103 | 50 |
| Day, George H., Hartford, Conn., assignor to Electric Vehicle Company, Jersey City, N. J. Automobile controlling mechanism | 738,167 | Sept. 8 | 1249 | 271 | 106 | 286 |
| Day, George J., Boston, Mass. Stove | 736,585 | Aug. 18 | 2883 | 630 | 105 | 1633 |

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| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
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| Day, Howard D., Providence, R. I. Ball | 740,403 | Oct. 6 | 30 | 7 | 106 | 1251 |
| Day, James H. (See Chrysler and Day.) | | | | | | |
| Day, John. (See Greenley and Day.) | | | | | | |
| Day, John M., Lincoln, Nebr. Automatic watering device | 727,597 | May 12 | 1444 | 324 | 104 | 329 |
| Day, Peter V., Independence, Iowa. Box-fastener | 729,288 | May 26 | 4614 | 1020 | 104 | 1027 |
| Day, Will S., Spokane, Wash. Puzzle | 742,397 | Oct. 27 | 3900 | 877 | 106 | 2117 |
| Day, William C., Rumford Falls, assignor of two-thirds to J. L. Howard and C. B. Richards, Mexico, Me. Advertising apparatus | 728,446 | May 19 | 3057 | 673, 674 | 104 | 689 |
| Day, William O., assignor of one-half to T. Williams, Chicago, Ill. Safety attachment for elevators | 720,332 | Feb. 10 | 1705 | 387 | 102 | 1200 |
| Dayton Autolectric Co. (See Klumpp, August, assignor.) | | | | | | |
| Dayton, Melville E. (See Fletcher, Nathan W., assignor.) | | | | | | |
| Dayton, Melville E., Washington, D. C., assignor to Westinghouse Air Brake Company, Pittsburg, Pa. Draw-gear and buffing apparatus | 745,425 | Dec. 1 | 214 | 48 | 107 | 1145 |
| Dayton Motor Vehicle Co. (See Warner, Hugh L., assignor.) | | | | | | |
| Dayton Paper Novelty Co. (See Haas, Walter G., assignor.) | | | | | | |
| Dayton, Wilbur O., and L. E. Brennan, assignors to Bodé Automobile Co., Chicago, Ill. Gearing | 732,834 | July 7 | 252 | 63 | 105 | 56 |
| Dayton, William H., Cleveland, Ohio. Disinfecting device | 739,297 | Sept. 22 | 3419 | 762 | 106 | 779 |
| De Armon, Thomas. (See Callahan and De Armon.) | | | | | | |
| De Armon, Thomas. (See Callahan, De Armon, and Callahan.) | | | | | | |
| De Baun, William H., Ramsey, N. J. Ice-cutting machine | 722,681 | Mar. 17 | 1938 | 431, 432 | 103 | 447 |
| De Bevoise, Abraham. (See Tirrill and De Bevoise.) | | | | | | |
| De Bruin, Joost, Chicago, Ill. Match-safe | 732,177 | June 30 | 4937 | 1097 | 104 | 2216 |
| De Camp, George W., Terre Haute, Ind. Revolving sign | 741,635 | Oct. 20 | 2395 | 537 | 106 | 1792 |
| De Castro, Jacob W., New York, N. Y. Making sugar | 729,920 | June 2 | 722 | 161 | 104 | 1274 |
| De Celle, Jerry D., Fort Collins, Colo. Dehorning-knife | 725,546 | Apr. 14 | 2091 | 474 | 103 | 1628 |
| De Costa, Benjamin F., assignor to Highland Machine Co., Boston, Mass. Mounting of the cutting-beds for paper-cutting machines | 726,266 | Apr. 28 | 3394 | 771 | 103 | 1931 |
| De Costa, Benjamin F., assignor to Highland Machine Company, Boston, Mass. Clamping apparatus for paper-cutting machines | 742,974 | Nov. 3 | 270 | 61 | 107 | 58 |
| De Forest, Lee, West Haven, Conn. Wireless telegraphy | 730,247 | June 9 | 1323 | 291 | 104 | 1412 |
| De Forest, Lee, Chicago, Ill., assignor to Wireless Telegraph Company of America. Space telegraphy | 720,568 | Feb. 17 | 2151 | 500 | 102 | 1308 |
| De Forest, Lee, New Haven, Conn., assignor to Greater New York Security Company, New York, N. Y. Space telegraphy | 730,246 | June 9 | 1313 | 289, 290 | 104 | 1412 |
| De Forest, Lee, New Haven, Conn., assignor to Greater New York Security Company, New York, N. Y. Wireless signaling | 730,819 | June 9 | 2333 | 517 | 104 | 1629 |
| De France, Murry A., assignor of two-thirds to C. E. Krebs and N. Paulson, Newark, Ohio. Track-sanding device | 741,116 | Oct. 13 | 1351 | 310 | 106 | 1554 |
| De Garms, George C., *et al.* (See Mills and Piddington, assignors.) | | | | | | |
| De Golyer, Watts. (See Fuller, David S., assignor.) | | | | | | |
| De Graw, Wilbur, Clovis, Cal. Tread-power | 722,820 | Mar. 17 | 2197 | 490 | 103 | 499 |
| De Hart, Tazwell C., Oakland, Cal. Coffee-pot | 722,213 | Mar. 10 | 1043 | 230 | 103 | 238 |
| De Hart, Tazwell C., Oakland, Cal. Non-refillable bottle | 725,051 | Apr. 14 | 1172 | 265 | 103 | 1435 |
| De Hodell, Alfred, Lima, Ohio. Angle-cock for air-brake systems | 731,867 | June 23 | 4306 | 961 | 104 | 2071 |
| De Kaiser, Isaac, Pittsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Coil for electrical machines | 747,595 | Dec. 22 | 4199 | 944 | 107 | 2077 |
| De Knight, Victor P., Washington, D. C. Door-equalizer | 726,411 | Apr. 28 | 3678 | 834 | 103 | 1990 |
| De la Bonninière, Marc L., *et al.* (See Heilmann, Jean J., assignor.) | | | | | | |
| De la Croix, Arthur J., St. Petersburg, Russia. Air-brake | 738,165 | Sept. 8 | 1246 | 270 | 106 | 286 |
| De La Hunt, Reverdy C., Cedar Rapids, Iowa. Deodorizing device | 732,926 | July 7 | 408 | 99 | 105 | 88 |
| De La Mare, Thomas, Tooele, Utah. Hay-derrick | 727,104 | May 5 | 544 | 117 | 104 | 118 |
| De la Sablière, Charles R., Toronto, Canada. Child's go-cart or chair | 724,740 | Apr. 7 | 608 | 143 | 103 | 1298 |
| De Lancey, John J., Binghamton, N. Y. Draft attachment for locomotive-boilers | 742,605 | Oct. 27 | 4279 | 964 | 106 | 2196 |
| De Laski, Albert, and P. D. Thropp, Trenton, N. J. Clencher-tire for vehicle-wheels | 740,877 | Oct. 6 | 910 | 204 | 106 | 1440 |
| De Latimer, Walter, assignor of one-half to W. H. Bailey, Houston, Tex. Hydrocarbon-burner | 728,683 | May 19 | 3520 | 782 | 104 | 786 |
| De Laval, George, Cambridge, and C. W. Chisholm, Somerville, Mass., assignors to George F. Blake Manufacturing Company, New York, N. Y. Work-holding chuck | 718,573 | Jan. 13 | 2010 | 438 | 102 | 447 |
| De Laval, George, Cambridge, and G. P. Aborn, Boston, Mass., assignors to Geo. F. Blake Mfg. Co., New York, N. Y. Air-compressor | 731,692 | June 23 | 3999 | 892, 893 | 104 | 2004 |
| De Laval, George, Cambridge, and G. P. Aborn, Boston, Mass., assignors to Geo. F. Blake Mfg. Co., New York, N. Y. Air-compressor | 738,920 | Sept. 15 | 2741 | 606 | 106 | 621 |
| De Laval Separator Co. (See Beckman, Herman C., assignor.) | | | | | | |
| De Laval Separator Company. (See Berrigan, John J., assignor.) | | | | | | |
| De Laval Separator Company. (See Price, William W., assignor.) | | | | | | |
| De Laval Steam Turbine Company. (See Coes, Zorester B., assignor.) | | | | | | |
| De Laval Steam Turbine Company. (See Richardson, Charles G., assignor.) | | | | | | |
| De Leeuw, Adolph L., assignor to Niles Tool Works Company, Hamilton, Ohio. Electric switch system | 721,942 | Mar. 3 | 544 | 119, 120 | 103 | 120 |
| De Leeuw, Adolph L., assignor to Niles Tool Works Company, Hamilton, Ohio. Controlling-switch system | 723,840 | Mar. 31 | 4050 | 914, 915 | 103 | 909 |
| De Lery Light Company. (See Clarke, William C., assignor.) | | | | | | |
| De Loach, Alonzo A., *et al.* (See Pierce, Aaron H., assignor.) | | | | | | |
| De Loach, Alonzo A., Atlanta, Ga. Variable-speed mechanism | 729,289 | May 26 | 4616 | 1021 | 104 | 1027 |
| De Loach, Alonzo A., Atlanta, Ga. Shoe-lacing attachment | 746,042 | Dec. 8 | 1348 | 301 | 107 | 1405 |
| De Lon, John A., Russiaville, Ind. Game apparatus | 718,986 | Jan. 27 | 2789 | 624 | 102 | 637 |
| De Long Hook and Eye Company. (See Straw, Wilfred, assignor.) | | | | | | |
| De Long, Joseph J., Brooklyn, N. Y. Match-box holder | 727,306 | May 5 | 904 | 196 | 104 | 195 |
| De Long, Julius, Brooklyn, N. Y. Pneumatic apparatus for producing mats or bats of fibrous material | 735,217 | Aug. 4 | 358 | 69 | 105 | 1057 |
| De Long, Julius, Brooklyn, N. Y. Producing mats or bats of fibrous material | 735,218 | Aug. 4 | 361 | 69 | 105 | 1058 |
| De Long, Oscar A., Williamsport, Pa. Card or mount for garment-fastenings | 719,442 | Feb. 3 | 58 | 13 | 102 | 838 |
| De Long, Samuel R., East Berlin, Conn. Display apparatus | 729,879 | May 26 | 3883 | 863 | 104 | 876 |
| De Man, Alphonse, New York, N. Y. Floor construction | 730,616 | June 9 | 1992 | 443 | 104 | 1557 |
| De Mareno, William C., Westfield, Vt. Axle-nut | 727,757 | May 12 | 1767 | 397 | 104 | 397 |
| De Monco, Almo, Denver, Colo. Composition of matter for cement-plaster | 734,678 | July 28 | 3658 | ------ | 105 | 821 |
| De Monco, Almo, Denver, Colo. Composition of matter for cement-plaster | 734,679 | July 28 | 3660 | ------ | 105 | 821 |
| De Moulin, Edmond and U. S., Greenville, Ill. Initiating apparatus | 736,704 | Aug. 18 | 3129 | 689 | 105 | 1682 |
| De Moulin, Ulysses S. (See De Moulin, Edmond and U. S.) | | | | | | |
| De Puy, Herbert C. (See Rogalla, Narloch, and De Puy.) | | | | | | |
| De Rocco, Hector, Buenos Aires, Argentina. Bottle | 725,419 | Apr. 14 | 1843 | 413 | 103 | 1575 |
| De Ronde-Osborn Co. (See Osborn, Guy, assignor.) | | | | | | |
| De Rusett, Edwin W., Tynemouth, England. Cover for vessels' hatchways | 722,215 | Mar. 10 | 1046 | 230 | 103 | 238 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|
| | | | Spec. | Drg. | Vol. | Page. |
| De Simone, Anthony, New York, N. Y. Awning-fixture | 743,257 | Nov. 3 | 854 | 186 | 107 | 179 |
| De Staebler, George W., St. Louis, Mo. Detachable leg for steam-coils or the like | 723,655 | Mar. 24 | 3721 | 834 | 103 | 823 |
| De Sutter, Bernard V., New York, N. Y. Governor-block and oil-receptacle for explosive-engines | 743,977 | Nov. 10 | 2306 | 492 | 107 | 512 |
| De Vilbiss, Allen, Jr., Toledo, Ohio, assignor, by mesne assignments, to Toledo Scale and Cash Register Company, Newark, N. J. Scale. (Reissue) | 12,137 | July 28 | 4360 | 1013 | 105 | 964 |
| De Vilbiss, Allen, Jr., Toledo, Ohio, assignor, by mesne assignments, to Toledo Scale and Cash Register Company, Newark, N. J. Scale. (Reissue) | 12,138 | July 28 | 4363 | 1013 | 105 | 965 |
| De Vilbiss, Allen, Jr., assignor of two-thirds to W. T. Wells and J. F. Pixley, Columbus, Ohio. Recording-lock | 735,034 | July 28 | 4328 | 1006 | 105 | 958 |
| De Vilbiss, Allen, Jr., and N. M. Hansen, Columbus, Ohio, assignors to Hallwood Cash Register Company, Jersey City, N. J. Cash register and indicator | 747,597 | Dec. 22 | 4201 | 945 / 946 | 107 | 2077 |
| De Vilbiss, Thomas, Toledo, Ohio. Showering device for attachment to bath-brushes | 733,018 | July 7 | 560 | 136 | 105 | 120 |
| De Vilbiss, Thomas, Toledo, Ohio. Nebulizer | 735,723 | Aug. 11 | 1318 | 284 | 105 | 1279 |
| De Ville, Edward, Bridgeport, Conn. Adjustable cloth-presser for sewing-machines | 732,719 | July 7 | 43 | 11 | 105 | 12 |
| De Vito, John A., Boston, Mass. Boot-blacking machine | 718,102 | Jan. 13 | 1093 | 241 / 242 | 102 | 250 |
| De Vore, James A., Macksville, Kans. Well-pipe puller | 719,444 | Feb. 3 | 60 | 13 | 102 | 838 |
| De Vore, Morris H., St. Louis, Mo. Journal-box | 719,445 | Feb. 3 | 61 | 14 | 102 | 838 |
| De Vries, Luitjen J. R., Panola, Ill. Combined screen and storm door | 736,802 | Aug. 18 | 3314 | 734 | 105 | 1720 |
| De Vou, James L., Wissahickon, Pa. Derrick | 739,955 | Sept. 29 | 4665 | 1048 | 106 | 1064 |
| De Wallace, Harry, Watertown, N. Y. Train-order signal | 720,569 | Feb. 17 | 2155 | 500 / 501 | 102 | 1308 |
| De Wallace, Harry, Watertown, N. Y. Gear-case and bracket | 744,308 | Nov. 17 | 2990 | 641 | 107 | 668 |
| De Wallace, Harry, Watertown, N. Y. Lubricating device for train-order signals | 744,309 | Nov. 17 | 2992 | 641 | 107 | 668 |
| De Wallace, Harry, Watertown, N. Y. Miter-gear case | 744,310 | Nov. 17 | 2993 | 641 | 107 | 669 |
| De Witt, Frederick J., assignor to A. C. Macintosh, Cardiff, Wales, England. Machine for automatically shaping masses of dough to the form required for loaves | 747,901 | Dec. 22 | 4787 | 1082 | 107 | 2209 |
| De Woody, Wilfred S., Franklin, Pa. Ornamental multiple candle | 735,724 | Aug. 11 | 1319 | 284 | 105 | 1279 |
| De Woody, Wilfred S., Franklin, Pa. Broom-hanger | 735,725 | Aug. 11 | 1320 | 284 | 105 | 1279 |
| De Woody, Wilfred S., Franklin, Pa. Rail-joint | 735,726 | Aug. 11 | 1321 | 284 | 105 | 1279 |
| De Woody, Wilfred S., Franklin, Pa. Noodle-cutter | 735,727 | Aug. 11 | 1321 | 285 | 105 | 1279 |
| De Wright, Richard, Saugatuck, Mich. Crate | 725,942 | Apr. 21 | 2827 | 640 / 641 | 103 | 1799 |
| De Zeng, A. M., *et al.* (See De Zeng, Henry L., assignor.) | | | | | | |
| De Zeng, Henry L., Philadelphia, Pa., assignor of one-fifth to W. H. Chamberlin, Chicago, Ill. Retinoscope | 737,087 | Aug. 25 | 3833 | 852 | 105 | 1850 |
| De Zeng, Henry L., assignor to A. M. De Zeng, Philadelphia, Pa., and W. H. Chamberlin, Chicago, Ill. Ophthalmoscope | 738,887 | Sept. 15 | 2685 | 592 | 106 | 609 |
| Deagan, John C., Chicago, Ill. Musical instrument | 734,676 | July 28 | 3654 | 857 | 105 | 821 |
| Deagan, John C., Chicago, Ill. Musical instrument | 747,340 | Dec. 15 | 3753 | 845 | 107 | 1960 |
| Deagan, John C., Chicago, Ill. Musical instrument | 747,341 | Dec. 15 | 3755 | 846 | 107 | 1960 |
| Deal, Josiah J., assignor to H. S. Bissell, Canton, Ohio. Curtain-stretcher frame | 740,543 | Oct. 6 | 308 | 63 | 106 | 1310 |
| Deal, W. F., *et al.* (See Smith, George A., assignor.) | | | | | | |
| Deal, Willam M., Philadelphia, Pa., assignor to J. F. Cullman, New York, N. Y., and J. F. Brimmer, Lancaster, Pa. Combined rail and wheel car-brake | 738,299 | Sept. 8 | 1510 | 327 / 328 | 106 | 340 |
| Dean, Corbt G. (See Tupper, John B., assignor.) | | | | | | |
| Dean, Charles G., Indianapolis, Ind. Apparatus for supplying explosive-engines with explosive mixture | 745,578 | Dec. 1 | 484 | 115 | 107 | 1200 |
| Dean, Frank, Orange, N. J. Toy | 719,200 | Jan. 27 | 3192 | 712 | 102 | 719 |
| Dean, Franklin P., assignor of one-half to O. C. Wold, Chicago, Ill. Easel | 735,346 | Aug. 4 | 583 | 120 | 105 | 1105 |
| Dean, John H. (See Newell and Dean.) | | | | | | |
| Dean, Mark, New York, N. Y. Loose lug | 734,677 | July 28 | 3657 | 857 | 105 | 821 |
| Dean, Seward A., Minneapolis, Minn. Time-recorder | 744,173 | Nov. 17 | 2731 | 581 / 582 | 107 | 611 |
| Dean, William T., Chicago, Ill., assignor to General Electric Company. Electrolytic arc-light | 728,210 | May 19 | 2602 | 582 | 104 | 593 |
| Dean, William W. (See Dunbar and Dean.) | | | | | | |
| Dean, William W., assignor to Kellogg Switchboard and Supply Company, Chicago, Ill. Testing system for telephone-lines | 717,973 | Jan. 6 | 849 | 191 / 192 | 102 | 182 |
| Dean, William W., assignor to Kellogg Switchboard and Supply Company, Chicago, Ill. Testing system for telephone-lines. (Reissue) | 12,090 | Mar. 3 | 1002 | 222 | 103 | 212 |
| Dean, William W., assignor to Kellogg Switchboard and Supply Company, Chicago, Ill. Subscriber's telephone-circuit | 722,212 | Mar. 10 | 1039 | 229 | 103 | 236 |
| Dean, William W., assignor to Kellogg Switchboard and Supply Company, Chicago, Ill. Telephone-receiver | 736,076 | Aug. 11 | 1989 | 423 | 105 | 1425 |
| Dean, William W., assignor to Kellogg Switchboard and Supply Company, Chicago, Ill. Telephone-exchange system | 745,579 | Dec. 1 | 488 | 115 | 107 | 1201 |
| Dean, William W., assignor to Kellogg Switchboard and Supply Company, Chicago, Ill. Telephone system | 746,040 | Dec. 8 | 1341 | 300 | 107 | 1402 |
| Dean, William W., assignor to Kellogg Switchboard and Supply Company, Chicago, Ill. Subscriber's telephone-circuit | 747,331 | Dec. 15 | 3737 | 842 | 107 | 1956 |
| Dean, William W., assignor to Kellogg Switchboard and Supply Company, Chicago, Ill. Connection terminal and plug | 747,911 | Dec. 22 | 4805 | 1086 | 107 | 2213 |
| Dean, William W., assignor to Western Electric Company, Chicago, Ill. Relay | 722,680 | Mar. 17 | 1936 | 431 | 103 | 446 |
| Dean, William W., assignor to Western Electric Company, Chicago, Ill. Electromagnetic signal-indicator | 735,953 | Aug. 11 | 1749 | 374 | 105 | 1373 |
| Dean, William W., assignor to Western Electric Company, Chicago, Ill. Apparatus for telephone trunk-lines | 741,114 | Oct. 13 | 1345 | 309 | 106 | 1553 |
| Dean, William W., assignor to Western Electric Company, Chicago, Ill. Relay | 741,115 | Oct. 13 | 1350 | 309 | 106 | 1554 |
| Deane, Edwin, assignor of one-half to J. Cox, New York, N. Y. Stone-breaker | 731,866 | June 23 | 4304 | 960 | 104 | 2071 |
| Dearborn, Eugene L. (See Dearborn, Henry, assignor.) | | | | | | |
| Dearborn, Henry, assignor to E. L. Dearborn, Pescadero, Cal. Lifting-jack | 718,947 | Jan. 20 | 2715 | 607 | 102 | 607 |
| Dearden, Frederic J., and G. S. Sharp, New Bedford, assignors to Crompton & Knowles Loom Works, Worcester, Mass. Lappet-loom | 744,307 | Nov. 17 | 2989 | 641 | 107 | 668 |
| Deardorff, Peter, Hagerstown, Ind. Gate-latch | 728,087 | May 12 | 2385 | 531 | 104 | 525 |
| Deardurff, Charles F., Belvidere, Ill. Adjustable head-rest | 722,950 | Mar. 17 | 2415 | 540 | 103 | 543 |
| Dearing, David M., Jackson, Mich. Mechanically-propelled vehicle | 747,860 | Dec. 22 | 4704 | 1062 | 107 | 2192 |
| Dearsley, John W., Racine, Wis. Molding-machine | 735,347 | Aug. 4 | 584 | 120 / 121 | 105 | 1106 |
| Deatherage, J. L. (See Riley, James E., assignor.) | | | | | | |
| Deaton, Angus, assignor of one-half to Central Mfg. Co., Connersville, Ind. Carving-tool | 726,516 | Apr. 28 | 3906 | 884 | 103 | 2033 |
| Debes, Eduard, Blankenese, assignor to H. Eckert, Munich, Germany. Ball-and-socket joint for dolls, &c | 719,310 | Jan. 27 | 3402 | 759 | 102 | 765 |
| Decatur Harrow Works. (See Oppen, Ole K., assignor.) | | | | | | |
| Decay, Louis, Laplace, La. Sugar-cane harvester | 741,314 | Oct. 13 | 1752 | 390 | 106 | 1637 |

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| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Decherd, Constant K., assignor to International Silver Co., Meriden, Conn. Heat-insulator for handled vessels | 745,331 | Dec. 1 | 30 | 6 | 107 | 1107 |
| Deck, Theodore J., Baltimore, Md. Puzzle | 718,323 | Jan. 13 | 1497 | 332 | 102 | 337 |
| Decker, Carl W., assignor of two-thirds to F. E. Hirsch and G. W. von Berg, Charles City, Iowa. Windmill-pump coupling | 744,500 | Nov. 17 | 3329 | 717 | 107 | 741 |
| Decker, Claude. (See Collen, Charles A., assignor.) | | | | | | |
| Decker, Daniel S., New York, N. Y. Machine for separating ores, &c | 731,438 | June 23 | 3526 | 786 | 104 | 1911 |
| Decker, Edward J., assignor to P. S. Reeves, Philadelphia, Pa. Journal-bearing | 722,495 | Mar. 10 | 1576 | 347 | 103 | 354 |
| Decker, Edward J., Philadelphia, assignor to P. S. Reeves, Phoenixville, Pa. Journal-bearing | 723,839 | Mar. 31 | 4049 | 914 | 103 | 909 |
| Decker, Frank A., and W. P. Divine, Philadelphia, Pa.; said Divine assignor to said Decker. Diaphragm for batteries | 717,549 | Jan. 6 | 54 | 13 | 102 | 14 |
| Decker, Frank L., Sandfork, assignor of one-half to L. C. Pfouts, Hurst, W. Va. Nut-lock | 738,008 | Sept. 1 | 911 | 200 | 106 | 199 |
| Decker, Gussie D., Chicago, Ill. Doll | 724,822 | Apr. 7 | 761 | 177 | 103 | 1333 |
| Decker, Harry R., Beaumont, Tex. Oil-well drill | 732,925 | July 7 | 404 | 98 | 105 | 87 |
| Decker, Herman G., *et al.* (See Farmer, Julius M., assignor.) | | | | | | |
| Decker, James M., Chicago, Ill. Wall-cabinet | 742,012 | Oct. 20 | 3140 | 701 | 106 | 1946 |
| Decker, Lucious E., assignor of three-fourths to P. B. Griffin, C. V. Hoover, Chattanooga, Tenn., and C. B. Rogers, Bessemer, Ala. Rock-drill | 725,227 | Apr. 14 | 1508 | 344 | 103 | 1504 |
| Decker, Ransom, Medford, Okla. Ter. Windmill | 725,829 | Apr. 21 | 2627 | 598 | 103 | 1757 |
| Decker, Rudolph J., assignor to W. M. Ferry, Salt Lake City, Utah. Fluid-conducting pipe | 724,675 | Apr. 7 | 480 | 116 | 103 | 1272 |
| Decker, Simon H., Elmira, N. Y. Crayon-holder | 724,445 | Apr. 7 | 43 | 11 | 103 | 1179 |
| Decker, Ward, Owego, N. Y. Motor-vehicle | 739,993 | Sept. 29 | 4736 | 1065 | 106 | 1079 |
| Decker, Ward, Owego, N. Y. Variable-speed and reversing mechanism | 743,467 | Nov. 10 | 1352 | 277 | 107 | 304 |
| Decker, William A., assignor of two-thirds to V. N. Theriot and C. A. Prechtel, Streator, Ill. Display-frame | 744,174 | Nov. 17 | 2736 | 583 | 107 | 611 |
| Decker, William H. H., Cincinnati, Ohio. Latch | 718,101 | Jan. 13 | 1092 | 241 | 102 | 250 |
| Decker, William M., Buffalo, N. Y. Syringe | 722,819 | Mar. 17 | 2195 | 489 | 103 | 498 |
| Decker, William M., Buffalo, N. Y. Rectal nozzle for syringes | 722,953 | Mar. 17 | 2420 | 541 | 103 | 544 |
| Decker, William M., Buffalo, N. Y. Vaginal nozzle for syringes | 722,954 | Mar. 17 | 2421 | 541 | 103 | 544 |
| Decker, William S., Dallas, Tex. Printer's quoin | 736,077 | Aug. 11 | 1992 | 423 | 105 | 1426 |
| Deckert, Charles. (See Rhoads and Deckert.) | | | | | | |
| Deckert, Joseph O., Philadelphia, Pa., assignor to William Mann Company. Binder-frame | 724,166 | Mar. 31 | 4719 | 1058, 1059 | 103 | 1046 |
| Deckert, Joseph O., Philadelphia, Pa., assignor to Wm. Mann Company. Binder | 724,168 | Mar. 31 | 4724 | 1060 | 103 | 1047 |
| Deckert, Joseph O., assignor of one-half to H. A. Prizer, Philadelphia, Pa. Copying-ribbon | 747,861 | Dec. 22 | 4705 | 1062 | 107 | 2192 |
| Deckert, Joseph O., Philadelphia, Pa., C. H. Mann, Haddonfield, N. J., and H. A. Prizer, Philadelphia, Pa. Recording device | 724,167 | Mar. 31 | 4722 | 1459 | 103 | 1047 |
| Deckert, Joseph O., Philadelphia, Pa., C. H. Mann, Haddonfield, N. J., and H. A. Prizer, Philadelphia, Pa. Manifolding device | 728,681 | May 19 | 3516 | 782 | 104 | 786 |
| Dedichen, Jens, assignor to Actien Gesellschaft für Anilin Fabrication, Berlin, Germany. Making black polyazo dyes | 717,550 | Jan. 6 | 55 | ..... | 102 | 14 |
| Dedicke, Eduard, Dolgeville, N. Y. Stretcher for felt, fabric, or the like | 728,682 | May 19 | 3518 | 782 | 104 | 786 |
| Dedman, James O., G. L. Webb, and D. V. Hanna, Harrodsburg, Ky.; said Webb assignor to said Dedman. Carpet-fastener | 730,240 | June 9 | 1301 | 288 | 104 | 1407 |
| Dedreux, Frederick, Cleveland, Ohio. Feeder for bag-filling machines | 744,175 | Nov. 17 | 2737 | 583 | 107 | 612 |
| Deeks, Hiram C. J., Paterson, N. J. Stencil and making same | 734,120 | July 21 | 2625 | 618 | 105 | 588 |
| Deem, Arthur S., assignor of one-third to H. S. Deem, Reading, Pa. Trolley | 733,015 | July 7 | 556 | 136 | 105 | 119 |
| Deem, Harry S. (See Deem, Arthur S., assignor.) | | | | | | |
| Deemer, Frank J. (See Prentice and Deemer.) | | | | | | |
| Deere & Company. (See Biebinger, David A., assignor.) | | | | | | |
| Deere and Company. (See Melvin, Charles H., assignor.) | | | | | | |
| Deere & Company. (See Poole, Staley D., assignor.) | | | | | | |
| Deering, Charles H., Saco, and W. F. Goodwin, Biddeford, Me. Green-corn husker | 742,172 | Oct. 27 | 3479 | 777 | 106 | 2031 |
| Deering Harvester Company. (See Appleby, John F., assignor.) | | | | | | |
| Deering Harvester Company. (See Ellis, George H., assignor.) | | | | | | |
| Deering Harvester Company. (See Ellithorp, Orren S., assignor.) | | | | | | |
| Deering Harvester Company. (See Latimer, John W., assignor.) | | | | | | |
| Deering Harvester Company. (See Packer, George W., assignor.) | | | | | | |
| Deering Harvester Company. (See Rand, Charles A. A., assignor.) | | | | | | |
| Deering Harvester Company. (See Ryther, Frank A., assignor.) | | | | | | |
| Deering Harvester Company. (See Shively, Joseph M., assignor.) | | | | | | |
| Deering Harvester Company. (See Webster, John W., assignor.) | | | | | | |
| Deering, William. (See Ellis, George H., assignor.) | | | | | | |
| Deery, John J., Philadelphia, Pa. Liquid-purifying system | 719,201 | Jan. 27 | 3193 | 712, 713 | 102 | 719 |
| Deffaulx, Louis F., Indianapolis, Ind. Wood-scraper | 723,143 | Mar. 17 | 2756 | 619 | 103 | 614 |
| Defiance Lantern & Stamping Company. (See Hill, James H., assignor.) | | | | | | |
| Defiance Machine Works. (See Ensign, George A., assignor.) | | | | | | |
| Defiance Machine Works. (See Ensign, George A., assignor.) (Reissue.) | | | | | | |
| Defiance Machine Works. (See Seymour, Charles, assignor.) | | | | | | |
| Defiance Machine Works. (See Unckrich, Ferdinand, assignor.) | | | | | | |
| Degendorfer, John, Grand Forks, N. D. Flax-carrier | 740,820 | Oct. 6 | 823 | 185 | 106 | 1421 |
| Degenhardt, Johannes, Cassel, Germany. Skylight | 745,310 | Nov. 24 | 4880 | 1065 | 107 | 1031 |
| Degree, Edgar L., assignor of one-half to J. R. Lockwood, Burlington, Vt. Sand-guard | 731,345 | June 16 | 3327 | 742 | 104 | 1851 |
| Dehoff, Leopold H., assignor to Badische Anilin & Soda Fabrik, Ludwigshafen-on-the-Rhine, Germany. Discharging with hydrosulfite paste | 744,501 | Nov. 17 | 3331 | ..... | 107 | 742 |
| Deibel, Charles G., St. Louis, Mo. Weight for use in pickling-vats | 746,041 | Dec. 8 | 1347 | 301 | 107 | 1405 |
| Deihl, Ralph I., Harrisburg, Pa. Match-box | 724,823 | Apr. 7 | 762 | 177 | 103 | 1333 |
| Deimel, Menning A., Herkimer, N. Y. Table or type-writer desk | 722,000 | Mar. 3 | 650 | 144 | 103 | 141 |
| Deindoerfer, John A. (See Walz, Michael J., assignor.) | | | | | | |
| Deininger, Heinrich, Bernau, and H. André, Buch, Germany. Apparatus for evaporating liquids | 735,348 | Aug. 4 | 586 | 121 | 105 | 1106 |
| Deisher, Arthur H., assignor of one-half to J. L. W. Peck, Frankton, Ind. Circuit-breaker for jump-spark coils | 736,703 | Aug. 18 | 3127 | 689 | 105 | 1681 |
| Deitsch Brothers. (See Slattery, William H., assignor.) | | | | | | |
| Del Grande, Nicholas, assignor to Virginia Fireworks Co., Petersburg, Va. Preparing pyrotechnics | 729,878 | May 26 | 3882 | ..... | 104 | 876 |
| Del Mar, Harry, New York, N. Y. Cutting device | 723,841 | Mar. 31 | 4053 | 915 | 103 | 910 |
| Del Mar, Harry, New York, N. Y. Fastening for mail-tubes | 744,176 | Nov. 17 | 2738 | 583 | 107 | 612 |
| Delafield, Joseph L. (See Sjorstrom, Jonas, assignor.) | | | | | | |
| Delamere, Henry S., Ferndale, Cal. Playing-cards | 744,502 | Nov. 17 | 3332 | 717 | 107 | 742 |

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| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Delane, John, Broken Bow, Nebr. Power-hammer | 722,087 | Mar. 3 | 790 | 176, 177 | 103 | 171 |
| Delane, John, Terre Haute, Ind. Automatic self-dropping trolley-pole | 743,378 | Nov. 3 | 1110 | 236 | 107 | 235 |
| Delaney, Daniel W., New York, N. Y. Cushion for billiard or pool tables | 717,737 | Jan. 6 | 402 | 94 | 102 | 88 |
| Delaney, James G. (See Lambert and Delaney.) | | | | | | |
| Delaney, James G., New York, N. Y. Reversible winch-head | 725,417 | Apr. 14 | 1839 | 412 | 103 | 1574 |
| Delaney, James G., New York, N. Y. Equalizing-draft hoisting-gear | 734,309 | July 21 | 2998 | 705, 706 | 105 | 667 |
| Delano, Charles E., Vallonia, Ind. Cotton chopper and cultivator | 723,444 | Mar. 24 | 3396 | 747, 748 | 103 | 744 |
| Delano, Frederic A., Chicago, Ill. Dump-car | 723,516 | Mar. 24 | 3484 | 779 | 103 | 773 |
| Delano, William E., Woburn, Mass. Shoe-tie fastener | 732,718 | July 7 | 42 | 10 | 105 | 12 |
| Delany, Patrick B., South Orange, N. J. Telegraphy | 720,004 | Feb. 10 | 1073 | 248 | 102 | 1066 |
| Delany, Patrick B., South Orange, N. J. Receiving-tape for chemical telegraphs | 720,233 | Feb. 10 | 1522 | 349 | 102 | 1161 |
| Delany, Patrick B., South Orange, N. J. Apparatus for removing ice from track or conductor rails of railways | 747,596 | Dec. 22 | 4200 | 945 | 107 | 2077 |
| Delattre, Jules, Dorignies-Flers, assignor to Société Anonyme d'Epuration des Eaux-Vannes et d'Extraction des Matieres Grasses par les Procédés Delattre, Roubaix, France. Apparatus for treating fish and fish refuse | 720,789 | Feb. 17 | 2552 | 588 | 102 | 1390 |
| Delavoye, William, Wilton, N. Y. Pocket | 738,168 | Sept. 8 | 1250 | 271 | 106 | 287 |
| Delery, Eugene F., New Orleans, La. Automatic weighing-machine | 733,462 | July 14 | 1375 | 325 | 105 | 307 |
| Delfs, George W. M., Olean, N. Y. Cooper's croze | 721,028 | Feb. 17 | 2998 | 689 | 102 | 1485 |
| Delgrande, Antonio, Jersey City, N. J. Toy gun | 733,946 | July 21 | 2263 | 532 | 105 | 511 |
| Delivouk, Louis, and F. J. George, Chicago, Ill. Machine for cutting and forming binding-strips | 739,841 | Sept. 29 | 4425 | 993 | 106 | 1015 |
| Delker, Frank H., Henderson, Ky. Shifting-rail fastener for vehicle-tops | 731,287 | June 16 | 3231 | 719 | 104 | 1831 |
| Dell, John. (See Mitchell and Dell.) | | | | | | |
| Dell, John C., Philadelphia, Pa. Gearing for grinding or other mills | 743,256 | Nov. 3 | 853 | 186 | 107 | 179 |
| Dellanna, Antonio, Salt Lake City, Utah. Pump | 731,288 | June 16 | 3233 | 720 | 104 | 1831 |
| Delmouly, Eloi, Paris, France. Apparatus for purifying water for steam-generators, &c. | 719,761 | Feb. 3 | 640 | 144 | 102 | 957 |
| Delmouly, Eloi, Paris, France. Water-purifier | 731,346 | June 16 | 3328 | 742, 743 | 104 | 1851 |
| Delp, Lewis W., Peoria, Ill. Hoisting-machine | 736,234 | Aug. 11 | 2240 | 483 | 105 | 1478 |
| Delphey, John P., Toledo, Ohio. Wire-pay-out reel | 718,194 | Jan. 13 | 1253 | 275 | 102 | 286 |
| Delphey, John P., Toledo, Ohio. Wire-pay-out reel | 732,835 | July 7 | 254 | 63 | 105 | 57 |
| Delphey, John P., Toledo, Ohio. Wire-pay-out reel | 742,296 | Oct. 27 | 3725 | 832 | 106 | 2082 |
| Delprat, Guillaume D., Broken Hill, New South Wales, Australia. Extraction of zinc, lead, and silver sulfids from their ores | 735,071 | Aug. 4 | 40 | 12 | 105 | 990 |
| Delzeit, Bertram J., and W. J. Saker, Philadelphia, Pa. Switch-operating mechanism | 738,606 | Sept. 8 | 2119 | 464 | 106 | 472 |
| Demarest, Charles S. (See Root and Demarest.) | | | | | | |
| Demarest, Dewitt C., Passaic, N. J. Stopper for bottles or the like | 723,370 | Mar. 24 | 3209 | 719 | 103 | 717 |
| Dement, Isaac S., East Orange, N. J., assignor, by mesne assignments, to American Mechanical Cashier Company. Register | 718,195 | Jan. 13 | 1255 | 275 | 102 | 286 |
| Dement, Isaac S., East Orange, N. J., and F. J. Hull, Brooklyn, N. Y., assignors, by mesne assignments, to American Mechanical Cashier Company. Mechanical cashier | 739,481 | Sept. 22 | 3766 | 841, 842 | 106 | 855 |
| Dement, Wallace E., assignor of two-thirds to J. Marcus and M. Aronson, Blaine, Wash. Can-salting machine | 718,987 | Jan. 27 | 2791 | 624, 625 | 102 | 637 |
| Dement, Wallace E., and D. N. Prendergast, Blaine, Wash. Cattle-guard | 746,685 | Dec. 15 | 2508 | 576 | 107 | 1680 |
| Deming, Ai, and J. T. Tully, Terre Haute, Ind. Automatic cut-off for cisterns | 722,214 | Mar. 10 | 1044 | 230 | 103 | 238 |
| Deming, Eugene W., New Orleans, La. Clarifying saccharine or other solutions | 739,400 | Sept. 22 | 3619 | 806 | 106 | 822 |
| Deming, William H. (See Rowland and Deming.) | | | | | | |
| Demmon, William A., New York, N. Y. Advertising device | 733,819 | July 14 | 2018 | 475 | 105 | 441 |
| Demmon, William A., New York, N. Y. Advertising novelty | 735,720 | Aug. 11 | 1314 | 283 | 105 | 1278 |
| Demmon, William A., New York, N. Y., assignor of one-half to C. W. Perkins, Hartford, Conn. Transformation scene | 729,553 | June 2 | 61 | 15 | 104 | 1139 |
| Demorest, Orin F. (See Asdell, Nelson D., assignor.) | | | | | | |
| Demory, Adam R., assignor to Kirk Manufacturing Co., Toledo, Ohio. Steering device for automobiles | 741,117 | Oct. 13 | 1353 | 310 | 106 | 1555 |
| Demory, Alexander F., assignor of one-half to W. G. Barron, Nacogdoches, Tex. Petroleum-oil burner | 719,762 | Feb. 3 | 643 | 145 | 102 | 958 |
| Dempsey, Edward R. (See Nettleton and Dempsey.) | | | | | | |
| Dempsey, Ellen, Albany, N. Y. Sanitary face-shield | 737,591 | Sept. 1 | 66 | 13 | 106 | 17 |
| Dempsey, Michael E. (See Rabbe, Harden, and Dempsey.) | | | | | | |
| Dempsey, William L., Fredericksburg, Va. Harrow | 725,418 | Apr. 14 | 1842 | 412, 413 | 103 | 1575 |
| Dempster Manufacturing Company. (See Christopher, John H., assignor.) | | | | | | |
| Dempster Mill Manufacturing Company. (See Smethers, James A., assignor.) | | | | | | |
| Dempster, Robert, Marietta, Ohio. Carbureter | 729,142 | May 26 | 4343 | 958, 959 | 104 | 970 |
| Dempster, Robert, Marietta, Ohio. Manufacturing gas | 743,468 | Nov. 10 | 1356 | 277, 278 | 107 | 305 |
| Denain, Edouard E., Paris, France. Hemostatic bandage | 721,162 | Feb. 24 | 3300 | 754, 755 | 102 | 1569 |
| Denayrouze, Louis, Neuilly, France. Incandescent vapor-burner | 727,535 | May 5 | 1320 | 294 | 104 | 284 |
| Denayrouze, Louis, Neuilly, France. Incandescent vapor-lamp | 741,772 | Oct. 20 | 2666 | 595 | 106 | 1848 |
| Denayrouze, Louis, Neuilly-sur-Seine, France. Incandescent lamp | 740,253 | Sept. 29 | 5211 | 1171, 1172 | 106 | 1179 |
| Denayrouze, Louis, Neuilly-sur-Seine, France, assignor to Central Lighting Company, New York, N. Y. Incandescent lamp | 736,943 | Aug. 25 | 3591 | 796 | 105 | 1799 |
| Deneal, Jackson, assignor of two-fifths to S. Brophy, Toledo, Ohio. Double-acting steam-engine | 717,822 | Jan. 6 | 580 | 130 | 102 | 125 |
| Deneal, Jackson, assignor of two-fifths to S. Brophy, Toledo, Ohio. Steam-generator | 717,823 | Jan. 6 | 585 | 130, 131 | 102 | 126 |
| Denegre, Edward, assignor to McCord & Company, Chicago, Ill. Car-axle box | 739,842 | Sept. 29 | 4428 | 994 | 106 | 1016 |
| Denegre, Edward, assignor to McCord & Company, Chicago, Ill. Spring-dampener | 746,043 | Dec. 8 | 1349 | 301 | 107 | 1405 |
| Denio, William L., assignor of one-half to H. F. Atkinson, Rochester, N. Y. Combined telephone and fire-alarm system | 728,161 | May 12 | 2509 | 558 | 104 | 551 |
| Denio, William L., assignor of one-half to H. F. Atkinson, Rochester, N. Y. Telephone | 728,162 | May 12 | 2512 | 558, 559 | 104 | 552 |
| Denison, Charles M. (See Maxson and Denison.) | | | | | | |
| Denison, Clarence, Roanoke, Va. Puzzle | 743,469 | Nov. 10 | 1358 | 278 | 107 | 305 |
| Denison, Samuel, Fort Plain, N. Y. Hydrocarbon-burner | 741,233 | Oct. 13 | 1586 | 356, 357 | 106 | 1605 |
| Denman, Frederick. (See Agnew and Denman.) | | | | | | |
| Denman, Ira O., Charleston, Ill. Storm-shield for vehicles | 727,598 | May 12 | 1445 | 324 | 104 | 329 |
| Denmead, John W. (See Palmer and Denmead.) | | | | | | |
| Denne, Mark T., London, England. Presser-foot mechanism for shoe-sewing machines | 737,716 | Sept. 1 | 288 | 60 | 106 | 65 |

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| Denne, Minnie W. (See Marsh, Howard E., assignor.) | | | | | | |
| Denning, Charles M. (See Denning, William M. and C. M.) | | | | | | |
| Denning, Frank B., Marblehead, Mass. Oil-burner | 735,219 | Aug. 4 | 363 | 69 | 105 | 1059 |
| Denning, William M. and C. M., Tollgate, W. Va. Drilling-machine | 737,911 | Sept. 1 | 706 | 153 | 106 | 155 |
| Dennis, Adolphus S., assignor to Bankers Adding & Recording Machine Company, Cleveland, Ohio. Adding and recording machine | 733,947 | July 21 | 2265 | 532<br>533<br>534<br>535 | 105 | 511 |
| Dennis, Alfred P. (See Sessions, Dennis, and Gallagher.) | | | | | | |
| Dennis, Edwin. (See Dennis, George B. and E.) | | | | | | |
| Dennis, Frederick W., Atlanta, Ga. System for handling and drying brick | 725,323 | Apr. 14 | 1673 | 377<br>378 | 103 | 1539 |
| Dennis, Frederick W., Atlanta, Ga. Double downdraft-kiln | 738,419 | Sept. 8 | 1762 | 383 | 106 | 394 |
| Dennis, George B. and E., Central Falls, R. I. Twisting-machine | 722,821 | Mar. 17 | 2198 | 490 | 103 | 499 |
| Dennis, J. S., *et al.* (See McBeth, Warren F., assignor.) | | | | | | |
| Dennis, John, Lowell, Mass. Press | 719,202 | Jan. 27 | 3196 | 713 | 102 | 720 |
| Dennis, John R., assignor to Providence Tipping Machine Company, Providence, R. I. Machine for tipping laces | 741,315 | Oct. 13 | 1754 | 390 | 106 | 1637 |
| Dennis, Samuel K., assignor to Plano Manufacturing Company, Chicago, Ill. Binding mechanism for grain-harvesters | 735,721 | Aug. 11 | 1316 | 283 | 105 | 1278 |
| Dennis, Samuel K., assignor to Plano Manufacturing Company, Chicago, Ill. Elevator-frame | 735,722 | Aug. 11 | 1317 | 283 | 105 | 1279 |
| Dennis, Urie E., Newcastle Pa. Doubling apparatus | 739,156 | Sept. 15 | 3152 | 696<br>697 | 106 | 705 |
| Dennison, Edwin B., Eureka, Cal. Saw | 746,686 | Dec. 15 | 2509 | 576 | 107 | 1680 |
| Dennison, Ezra D., Stockton, Cal. Petroleum-burner for furnaces | 733,463 | July 14 | 1377 | 326 | 105 | 308 |
| Dennison Manufacturing Company. (See Williams, Charles H., assignor.) | | | | | | |
| Denniston, Arthur C., Philadelphia, Pa. Lamp-burner | 721,358 | Feb. 24 | 3657 | 832 | 102 | 1643 |
| Denny, Charles W. (See Flichtner and Denny.) | | | | | | |
| Denny, David W., Graniteville, assignor of one-third to P. Parker, Vaucluse, S. C. Thin-place-detector mechanism for looms | 724,267 | Mar. 31 | 4937 | 1105 | 103 | 1088 |
| Denny, Elam M., and J. S. Maxwell, Greencastle, Ind. Steel railway-tie | 718,568 | Jan. 13 | 2004 | 436 | 102 | 445 |
| Denoyer, Thomas, assignor to P. Gagnon, Papineau, Ill. Automatic valve-operating mechanism | 732,927 | July 7 | 410 | 99 | 105 | 89 |
| Densler, Nat, Bowie, Tex. Projectile | 723,249 | Mar. 24 | 2968 | 666 | 103 | 672 |
| Densler, Nat, Bowie, Tex. Washing-machine | 724,446 | Apr. 7 | 45 | 12 | 103 | 1179 |
| Densmore, T. H., *et al.* (See Blackmon, Frank A., assignor.) | | | | | | |
| Densmore Typewriter Company. (See Barron, Walter J., assignor.) | | | | | | |
| Densmore Typewriter Company. (See Barron and Merritt, assignors.) | | | | | | |
| Denson, Claude S. (See Doane, Royal, assignor.) | | | | | | |
| Denson, William L., Elmira, N. Y. Lock-shoe | 733,543 | July 14 | 1511 | 360 | 105 | 336 |
| Densten, Ulysses G., Camden, N. J., assignor to Pennsylvania Globe Gas Light Company, Philadelphia, Pa. Gas-check | 748,486 | Dec. 29 | 5904 | 1341 | 107 | 2475 |
| Dent, Joseph. (See Weitzel, Oscar, assignor.) | | | | | | |
| Denton, John H., Columbus, Ohio. Heel-cushion and ventilator for shoes | 733,167 | July 7 | 828 | 201 | 105 | 174 |
| Denton, Robert W. (See Denton, William D. and R. W.) | | | | | | |
| Denton, Thomas B., assignor of two-thirds to C. W. Bennett and T. K. Wilson, Sebree, Ky. Automatic stove-damper | 737,086 | Aug. 25 | 3832 | 852 | 105 | 1849 |
| Denton, William D. and R. W., Wellesley, Mass. Mount for entomological, botanical, or natural-history specimens | 735,475 | Aug. 4 | 847 | 180 | 105 | 1160 |
| Dentsch, Gustav, Vienna, Austria-Hungary. Apparatus for introducing steam into centrifugal machines | 744,503 | Nov. 17 | 3333 | 718 | 107 | 742 |
| Denyes, Gaylard W., and O. Schutt, Cassopolis, Mich. Seeder | 726,880 | May 5 | 91 | 23 | 104 | 22 |
| Depew, George M., Canandaigua, N. Y., assignor to G. V. Willson, Pittsburg, Pa. Machine for forming twisted joints with wire | 717,551 | Jan. 6 | 56 | 14 | 102 | 15 |
| Depew, George M., Canandaigua, N. Y., assignor to G. V. Willson, Pittsburg, Pa. Wire-spiraling machine | 717,552 | Jan. 6 | 58 | 14 | 102 | 15 |
| Depew George M., Canandaigua, N. Y., and J. N. Parsons, Emsworth, assignors to G. V. Willson, Pittsburg, Pa. Wire-cutting machine | 717,553 | Jan. 6 | 59 | 14, 15 | 102 | 15 |
| Depp Otis J., and J. P. Hunter Dallas, Tex. Transformer | 721,289 | Feb. 24 | 3535 | 804 | 102 | 1617 |
| Deppert Johann N., and A. Seelig, Mannheim, Germany. Four-color platen-press | 727,307 | May 5 | 905 | 196 | 104 | 195 |
| Deprez, Marcel, and J. Verney, Paris, France. Furnace for steam-generators | 725,228 | Apr. 14 | 1511 | 344 | 103 | 1505 |
| Derby, William A., Aurora, Ill. Dust-collector | 735,954 | Aug. 11 | 1751 | 374 | 105 | 1373 |
| Derepas, Alexandre E. (See Derepas, Edmond H. and A. E.) | | | | | | |
| Derepas, Edmond H. and A. E., Paris, France. Mounting photographs, engravings, or the like | 729,143 | May 26 | 4345 | 959 | 104 | 970 |
| Deri, Max, Vienna, Austria-Hungary, assignor to Stanley Electric Manufacturing Company, Pittsfield, Mass. Continuous-current machine and apparatus | 741,234 | Oct. 13 | 1588 | 357 | 106 | 1605 |
| Derr, Albert J., Bellevue, Ohio. Metallic tie for railways | 741,773 | Oct. 20 | 2667 | 595 | 106 | 1849 |
| Derrer, Henry, Sault Ste. Marie, Canada. Lathe for turning irregular forms | 724,676 | Apr. 7 | 482 | 116 | 103 | 1272 |
| Derrig, Michael, Mapleton, N. D. Barrel-holder | 720,681 | Feb. 17 | 2376 | 544 | 102 | 1352 |
| Deruntz, Eugene, assignor of one-half to W. T. Donnelly and O. M. Munroe, Desoto, Mo. Valve | 723,445 | Mar. 24 | 3336 | 748 | 103 | 745 |
| Dery, Louie T., Montpelier N. D. Bundle-carrier and shock-former for harvester-binders | 723,250 | Mar. 24 | 2969 | 667<br>668 | 103 | 672 |
| Dery, Louie T., Montpelier, assignor of one-half to L. B. Niemeyer, Jamestown, N. D. Flush-valve | 746,044 | Dec. 8 | 1350 | 302 | 107 | 1406 |
| Des Isles, Leonard H., Cambridge, Mass. Thermostat | 740,254 | Sept. 29 | 5212 | 1172 | 106 | 1179 |
| Des Moineaux, Alfred V., assignor of three-fourths to H. Des Moineaux, Silverplume, Colo. Miner's tool | 725,420 | Apr. 14 | 1845 | 413 | 103 | 1575 |
| Des Moineaux, Helen. (See Des Moineaux, Alfred V., assignor.) | | | | | | |
| Deshler, Henry D., Belvidere, N. J. Track-brake | 720,005 | Feb. 10 | 1076 | 248<br>249 | 102 | 1068 |
| Desimone, Louis P. (See Borein and Desimone.) | | | | | | |
| Desmond, John, assignor to Wm. Powell Company, Cincinnati, Ohio. Steam-injector | 733,168 | July 7 | 829 | 201 | 105 | 174 |
| Detamore, Daniel F., assignor of one-third to W. Armstrong, Trimble, Va. Wrench | 732,677 | June 30 | 5896 | 1308 | 104 | 2418 |
| Determann, George B., Louisville, Ky. Window sash and frame | 730,005 | June 2 | 893 | 199 | 104 | 1310 |
| Detherage, Charles C. (See Charles and Detherage.) | | | | | | |
| Detmers, Henry E., Checotah, Ind. Ter. Coal-scuttle bottom | 738,300 | Sept. 8 | 1516 | 328 | 106 | 342 |
| Detroit Electric Signal Company. (See Fessenden, Howard A., assignor.) | | | | | | |
| Detroit Photographic Company. (See Hutton, William H. H., Jr., assignor.) | | | | | | |
| Detroit Trolley & Manufacturing Company. (See Norton, William B., assignor.) | | | | | | |
| Detroit Trust Co., trustee. (See Southgate, Louis W., assignor.) | | | | | | |
| Detroit Trust Co., trustee. (See Wood, Henry A. W., assignor.) | | | | | | |
| Detroit Ventilating Company. (See Drouillard, Albert, assignor.) | | | | | | |
| Detroit Ventilating Company. (See Drouillard and Teahen, assignors.) | | | | | | |
| Dettmar, Georg, assignor to Electricitäts Actien Gesellschaft, vorm. W. Lahmeyer & Co., Frankfort-on-the-Main, Germany. Velocity-meter | 744,909 | Nov. 24 | 4056 | 874 | 107 | 912 |

*Alphabetical list of patentees*—Continued.

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| Dettmer, Richard, Oakland, Cal. Meat-chopper | 724,824 | Apr. 7 | 763 | 177, 178 | 103 | 1333 |
| Detweiler, Frank, *et al.* (See Brackbill, Christian E., assignor.) | | | | | | |
| Detweiler, William D., *et al.* (See Brackbill, Christian E., assignor.) | | | | | | |
| Detwiler, George K. (See Bunnell and Nichols, assignors.) | | | | | | |
| Detwiler, William H., Norristown, Pa. Bill-file | 739,655 | Sept. 22 | 4086 | 910 | 106 | 923 |
| Deuther, Julius C. (See Daub, Carl, assignor.) | | | | | | |
| Deutsch, Isidor, Montreal, Canada. Power-transmitting device | 726,517 | Apr. 28 | 3907 | 884 | 103 | 2033 |
| Deutsche Heizungs-Industrie Meininghaus Bachrodt & Co. (See Meininghaus, Eduard, assignor.) | | | | | | |
| Deutsche Linoleum- & Wachstuch Co. (See Klic and Poppe, assignors.) | | | | | | |
| Deutsche Waffen Munitionsfabriken. (See Riebe, August, assignor.) | | | | | | |
| Dever, Frank R., and M. Gardner, Carbondale, Pa. Locking whip-socket | 722,088 | Mar. 3 | 795 | 177 | 103 | 172 |
| Devereux, Washington, *et al.* (See McDevitt, William, assignor.) | | | | | | |
| Devers Le Roy, Dayton, Ohio. Automatic street-car switch | 720,006 | Feb. 10 | 1079 | 249 | 102 | 1068 |
| Devers Le Roy, Dayton, Ohio. Street-car fender | 721,163 | Feb. 24 | 3301 | 755 | 102 | 1569 |
| Devers, Le Roy, and C. E. Dunn, Dayton, Ohio. Safety-valve | 745,002 | Nov. 24 | 4228 | 916 | 107 | 947 |
| Devilbiss, Charley O., Derrahs, Mo. Carpet-stretcher | 722,216 | Mar. 10 | 1048 | 230 | 103 | 239 |
| Devine James, Springfield, Mass. Oscillatory support for fans or other objects | 732,341 | June 30 | 3256 | 1166 | 104 | 2282 |
| Devine, John D. (See Dixon and Devine.) | | | | | | |
| Devine, Robert F., Ellwood City, Pa. Apparatus for handling forgings | 740,100 | Sept. 29 | 4931 | 1106 | 106 | 1121 |
| Devine, William P., Boston, Mass., assignor to Consolidated Fastener Company, Portland, Me. Feed mechanism | 738,103 | Sept. 1 | 1082 | 239 | 106 | 234 |
| Devlin, Charles J. I., San Francisco, Cal. Combined paper-cutter attachment and bookmark | 732,527 | June 30 | 5616 | 1245 | 104 | 2357 |
| Devlin, Edward, Paterson, N. J. Means for locking the steering mechanism of motor-vehicles | 718,324 | Jan. 13 | 1498 | 333 | 102 | 337 |
| Devonshire, Thomas E., Chislehurst, England. Construction of underground conduits | 719,763 | Feb. 3 | 645 | 145, 146, 147, 148 | 102 | 958 |
| Devonshire, Thomas E., Chislehurst, England. Trough or conduit for underground electric cables | 733,169 | July 7 | 832 | 202 | 105 | 175 |
| Devonshire, Thomas E., Chislehurst, England. Conduit and trough for electric conductors | 733,631 | July 14 | 1664 | 395 | 105 | 369 |
| Devore, Francis M., Thompson, Iowa. Vacuum-regulating device for milking-machines | 719,443 | Feb. 3 | 59 | 13 | 102 | 838 |
| Devorss, Frank N. (See Wood, George, assignor.) | | | | | | |
| Dew, Charles F., Minneapolis, Minn. Electric controller for pumps | 723,842 | Mar. 31 | 4054 | 915, 916 | 103 | 910 |
| Dew, John, assignor to L. S. M. Hood, trustee, Chicago, Ill. Railway | 747,342 | Dec. 15 | 3758 | 846 | 107 | 1961 |
| Dewald, Adolph J., Friend, Nebr. Shaft-tug | 741,235 | Oct. 13 | 1589 | 357 | 106 | 1605 |
| Dewar, William, Joliet, Ill. Wheel | 744,959 | Nov. 24 | 4158 | 899 | 107 | 932 |
| Dewees, William B., Salina, Kans. Body-brace | 719,311 | Jan. 27 | 3403 | 759 | 102 | 766 |
| Dewees, William B., Salina, Kans. Body-brace | 738,529 | Sept. 8 | 1989 | 433 | 106 | 443 |
| Dewerpe, Auguste, assignor of one-half to J. Mayeur, Sr., Converse, Ind. Glass-blowing tool | 747,049 | Dec. 15 | 3211 | 732 | 107 | 1841 |
| Dewey George E., Grand Rapids, Mich. Invalid's table | 737,365 | Aug. 25 | 4353 | 970 | 105 | 1960 |
| Dewey, Henry H., *et al.* (See Dyarman, George W., assignor.) | | | | | | |
| Dewhurst, John H., Sheffield, England. Ladle for carrying and tipping blast-furnace slag | 740,404 | Oct. 6 | 32 | 7 | 106 | 1251 |
| Dewhurst, John H., Sheffield, England. Carriage for ladles used for carrying and tipping blast-furnace slag | 740,405 | Oct. 6 | 33 | 8 | 106 | 1251 |
| Dewrance, John, Southwark, England. Water-level indicator | 727,599 | May 12 | 1447 | 324 | 104 | 329 |
| Dewrance, John, Southwark, England. Gland-packing | 739,995 | Sept. 29 | 4740 | 1066 | 106 | 1080 |
| Dewrance, John, and G. H. Wall, Southwark, England. Water-level indicator | 739,994 | Sept. 29 | 4738 | 1065, 1066 | 106 | 1079 |
| Dews, Julius N., Portsmouth, Va. Medicine-applicator | 738,009 | Sept. 1 | 912 | 200 | 106 | 199 |
| Dexter, Avelyn I., Birmingham, Ala. Concrete building-wall | 748,352 | Dec. 29 | 5641 | 1286 | 107 | 2417 |
| Dexter, Edwin G., Urbana, Ill. Tobacco cartridge | 720,007 | Feb. 10 | 1080 | 249 | 102 | 1068 |
| Dexter, Himan C., New York, N. Y. Pocket-protector | 721,359 | Feb. 24 | 3660 | 833 | 102 | 1643 |
| Dexter, Joseph D. (See Perry, George N., assignor.) | | | | | | |
| Dexter, Lambert & Company. (See Moresi, Peter, assignor.) | | | | | | |
| Dexter, Stephen B. (See Tures, William, assignor.) | | | | | | |
| Dexter, Talbot C., and H. Hallstream, Pearl River, N. Y.; said Hallstream assignor to said Dexter. Paper-feeding machine | 747,862 | Dec. 22 | 4706 | 1063, 1064 | 107 | 2192 |
| Dexter, Talbot C., and H. Hallstream, Pearl River, N. Y.; said Hallstream assignor to said Dexter. Paper-feeding machine | 747,863 | Dec. 22 | 4712 | 1064, 1065 | 107 | 2194 |
| Dexter, Talbot C., and H. Hallstream, Pearl River, N. Y.; said Hallstream assignor to said Dexter. Paper-feeding machine | 747,864 | Dec. 22 | 4719 | 1065, 1066 | 107 | 2195 |
| Dexter, Talbot C., and H. Hallstream, Pearl River, N. Y.; said Hallstream assignor to said Dexter. Paper-feeding machine | 747,865 | Dec. 22 | 4723 | 1066, 1067 | 107 | 2195 |
| Dexter, Thomas C., Pearl River, N. Y., and T. E. Breen, Colwyn, Pa. Means for dissipating electricity in sheets of paper | 720,898 | Feb. 17 | 2743 | 632 | 102 | 1430 |
| Deydier, Marie J. A., Nyons, France. Metal casing for books | 718,827 | Jan. 20 | 2475 | 550 | 102 | 555 |
| Deyerle, Charles A., Elliston, Va. Computing-scale | 737,212 | Aug. 25 | 4061 | 901, 902 | 105 | 1897 |
| Dial, Wilbur F. (See Dimond and Dial.) | | | | | | |
| Dial, Wilbur F. (See Dimond, Dial, and Abercrombie.) | | | | | | |
| Dial, Wilbur F., and G. H. Dimond, assignors to Wheeler & Wilson Manufacturing Company, Bridgeport, Conn. Loop-taker for sewing-machines | 723,371 | Mar. 24 | 3210 | 720 | 103 | 718 |
| Dial, Wilbur F., G. M. Eames, and G. H. Dimond, assignors to Wheeler & Wilson Manufacturing Company, Bridgeport, Conn. Sewing-machine feed-actuating mechanism | 718,988 | Jan. 27 | 2793 | 625, 626 | 102 | 638 |
| Diaman., Sigismondo, London, England, assignor of one-half to C. Crozzi, Triest, Austria-Hungary. Speed-gear | 726,410 | Apr. 28 | 3677 | 833 | 103 | 1990 |
| Diamond Electric Machinery Company. (See Lindenberger, Harry, assignor.) | | | | | | |
| Diamond Match Company. (See Donnelly, Joseph C., assignor.) | | | | | | |
| Diamond Match Company. (See Palmer and Denmead, assignors.) | | | | | | |
| Diamond Match Company. (See Williams, William E., assignor.) | | | | | | |
| Diamond Rubber Company. (See Marks, Arthur H., assignor.) | | | | | | |
| Diamond Rubber Company. (See Weigele, Theodore, assignor.) | | | | | | |
| Diamond Whip Company. (See Schmidt, August J., assignor.) | | | | | | |
| Diat dit Diaz, Antoine Brussels, Belgium. Means for glazing windows | 734,829 | July 28 | 3975 | 929 | 105 | 885 |
| Diatto, Alfredo, Turin, Italy. Magnetic contact-box for electric tramways | 748,268 | Dec. 29 | 5512 | 1256 | 107 | 2389 |
| Dibble, Delos B., Detroit, Mich. Car-fender | 734,830 | July 28 | 3976 | 930 | 105 | 885 |
| Dick, Albert B. (See Gilliland, James F., assignor.) | | | | | | |
| Dick, Albert B., assignor to A. B. Dick Company, Chicago, Ill. Stencil-printing machine | 729,045 | May 26 | 4184 | 925 | 104 | 389 |

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| Dick, Albert B., assignor to A. B. Dick Company, Chicago, Ill. Stencil-printing machine | 746,930 | Dec. 15 | 2978 | 685 | 107 | 1787 |
| Dick, Albert B., assignor to A. B. Dick Company, Chicago, Ill. Stencil-printing machine | 746,931 | Dec. 15 | 2980 | 685, 686 | 107 | 1787 |
| Dick, Alexander, London, England, assignor to American Brass Company, Waterbury, Conn. Uniting metals | 731,100 | June 16 | 2880 | 639 | 104 | 1762 |
| Dick, Charles J. A., Lysaker, Norway. Instrument for indicating and recording the aiming of naval guns and for testing the correctness of the aiming | 729,290 | May 26 | 4618 | 1021 | 104 | 1028 |
| Dick, Charles J. A., Lysaker, near Christiania, Norway. Instrument for indicating and recording the aiming of naval guns | 729,491 | May 26 | 4942 | 1096 | 104 | 1097 |
| Dick, Harry C., Philadelphia, Pa., and S. A. Ehrenzeller, Westville, N. J. Gas-meter | 718,826 | Jan. 20 | 2474 | 550 | 102 | 554 |
| Dick, Herman E. (See Stewart, Willis N., assignor.) | | | | | | |
| Dick, John H., *et al.* (See Anderson, James W. and R. M., assignors.) | | | | | | |
| Dick, William A., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Operating electric motors | 740,101 | Sept. 29 | 4933 | 1107 | 106 | 1121 |
| Dick, William J., Bayonne, N. J. Hat and coat rack for bedsteads | 746,301 | Dec. 8 | 1822 | 413 | 107 | 1508 |
| Dicke, Robert, Milspe, Germany. Wood-screw-cutting machine | 738,989 | Sept. 15 | 2849 | 632 | 106 | 643 |
| Dickerson, A. L., *et al.* (See Cox, Jefferson L., assignor.) | | | | | | |
| Dickerson, Edward N. (See Roberts, Isaiah L., assignor.) | | | | | | |
| Dickerson, Edward N., Stovall, N. C. Gas-engine | 743,064 | Nov. 3 | 474 | 103, 104 | 107 | 98 |
| Dickerson, Kate M., and M. T. Dunbar, Buffalo, N. Y. Skirt-supporter | 718,325 | Jan. 13 | 1501 | 333 | 102 | 338 |
| Dickerson, Norval W., Derwent, Ohio. Safety device for mine-shafts | 747,951 | Dec. 29 | 4904 | 1110 | 107 | 2256 |
| Dickerson, Warren C., New York, N. Y. Lock | 724,677 | Apr. 7 | 485 | 116, 117 | 103 | 1272 |
| Dickerson, Warren C., New York, N. Y. Tripod | 729,291 | May 26 | 4622 | 1022 | 104 | 1028 |
| Dickey, Andrew, Niagara Falls, N. Y. Making tap-hole plugs | 718,828 | Jan. 20 | 2476 | 550 | 102 | 555 |
| Dickey, Floyd G., Seattle, Wash. Sliding-door fastener | 740,821 | Oct. 6 | 824 | 185 | 106 | 1421 |
| Dickey, Johnathan A., assignor of one-half to D. B. Snyder, Columbus, Ind. Reversible transmission-gear | 740,822 | Oct. 6 | 825 | 185, 186 | 106 | 1421 |
| Dickey, Willis M., Manchester, N. H. Horseshoe | 720,409 | Feb. 10 | 1834 | 418 | 102 | 1228 |
| Dickie, James, *et al.* (See Harvey, Lewis P., assignor.) | | | | | | |
| Dickie, John, and A. F. Williams, Butte, Mont. Rotary suction-ventilator | 730,099 | June 2 | 1044 | 234 | 104 | 1340 |
| Dickinson, David A., Quitman, Ga. Vehicle-coupling | 726,146 | Apr. 21 | 3159 | 715 | 103 | 1868 |
| Dickinson, Fairleigh S., Bayonne, N. J. Hypodermic syringe | 723,588 | Mar. 24 | 3605 | 805 | 103 | 798 |
| Dickinson, Joseph H. (See Miller and Dickinson.) | | | | | | |
| Dickinson, Joseph H., New Orleans, La., assignor to Lidgerwood Manufacturing Company. Log-capper | 719,094 | Jan. 27 | 3016 | 671 | 102 | 683 |
| Dickinson, Joseph H., Atlanta, Ga., assignor to Lidgerwood Manufacturing Company. Hoisting and conveying apparatus | 729,292 | May 26 | 4624 | 1022 | 104 | 1029 |
| Dickinson, Joseph H., Garwood, N. J., assignor to Aeolian Company, New York, N. Y. Mechanism for accentuating one or more notes in mechanically-actuated musical apparatus | 743,065 | Nov. 3 | 478 | 104 | 107 | 100 |
| Dickinson, Laura I., Chicago, Ill. Wheeled toy | 746,045 | Dec. 8 | 1352 | 302 | 107 | 1406 |
| Dickinson, Paul, Chicago, Ill. Smoke-stack | 722,288 | Mar. 10 | 1182 | 261 | 103 | 267 |
| Dickinson, William A., assignor to Searls Manufacturing Company, Newark, N. J. Adjustable holder | 739,482 | Sept. 22 | 3768 | 842 | 106 | 856 |
| Dickson, Arthur G. (See Knowles and Dickson.) | | | | | | |
| Dickson, George F., Chicago, Ill., assignor to Confectioners and Bakers Supply Co. Confectioner's table and melter | 730,748 | June 9 | 2214 | 492, 493 | 104 | 1604 |
| Dickson, Henry L., Smithville, Tex. Steam-engine | 735,220 | Aug. 4 | 363 | 70 | 105 | 1059 |
| Dickson, John, Racine, Wis. Wire-fastener | 737,592 | Sept. 1 | 67 | 13 | 106 | 17 |
| Dickson, Robert, Chicago, Ill. Stand for toothpicks, matches, or like articles | 729,740 | June 2 | 398 | 90 | 104 | 1210 |
| Dickson, Samuel G. (See Stellner, William, assignor.) | | | | | | |
| Dickson, William K. L., London, England. Camera | 728,584 | May 19 | 3347 | 741, 742 | 104 | 749 |
| Dickson, William K. L., London, England. Stereoscopic apparatus | 731,405 | June 16 | 3449 | 771 | 104 | 1876 |
| Dickson, William K. L., London, England. Apparatus for exhibiting reflected images | 732,836 | July 7 | 255 | 63, 64 | 105 | 57 |
| Dickson, William K. L., London, England. Accumulator | 741,675 | Oct. 20 | 2466 | 552 | 106 | 1807 |
| Diebold, Charles J. (See Marty, John M., assignor.) | | | | | | |
| Diebold, Theodore A., Des Moines, Iowa. Rotary engine | 729,849 | June 2 | 605 | 133 | 104 | 1252 |
| Diederich, Charles J., Chicago, Ill. Valve device | 734,831 | July 28 | 3977 | 930 | 105 | 885 |
| Dieffenbach, Otto, and A. Schäfer, Griesheim-on-the-Main, assignors to Chemische Fabrik Griesheim Electron, Frankfort-on-the-Main, Germany. Igniting composition and making same | 727,758 | May 12 | 1768 | ------ | 104 | 397 |
| Diegel, Albert. (See McKinley and Diegel.) | | | | | | |
| Dieges, Charles J., New York, N. Y. Automatic catch for badge-pins, &c | 743,835 | Nov. 10 | 2029 | 431 | 107 | 448 |
| Diehl, George M. (See Diehl, Jacob, assignor.) | | | | | | |
| Diehl, Isadore S., Allentown, Pa. Gearing for washing-machines | 717,974 | Jan. 6 | 859 | 192 | 102 | 185 |
| Diehl, Jacob, Sheboygan, Wis. Storm-sash fastener | 747,866 | Dec. 22 | 4727 | 1068 | 107 | 2196 |
| Diehl, Jacob, assignor to Standard Sewing Machine Company, Cleveland, Ohio. Take-up mechanism for sewing-machines | 718,703 | Jan. 20 | 2256 | 496 | 102 | 511 |
| Diehl, Jacob, assignor to Standard Sewing Machine Company, Cleveland, Ohio. Slack-thread take-up for sewing-machines | 728,211 | May 19 | 2603 | 582 | 104 | 594 |
| Diehl, Jacob, assignor to Standard Sewing Machine Company, Cleveland, Ohio. Take-up for sewing-machines | 737,366 | Aug. 25 | 4354 | 970, 971 | 105 | 1960 |
| Diehl, Jacob, assignor to Standard Sewing Machine Company, Cleveland, Ohio. Thread-controller for sewing-machines | 745,580 | Dec. 1 | 493 | 115, 116 | 107 | 1203 |
| Diehl, Jacob, assignor of one-half to G. M. Diehl, Sheboygan, Wis. Suspension device for horse-weights | 739,483 | Sept. 22 | 3769 | 842, 843 | 106 | 856 |
| Diehl, Joseph H., and I. B. Taylor; said Taylor assignor, by mesne assignments, to A. D. White, Buffalo, N. Y. Gas-burner | 731,548 | June 23 | 3741 | 833 | 104 | 1954 |
| Diehl Manufacturing Company. (See Marx, Gustave C., assignor.) | | | | | | |
| Diehl, Philip, Elizabeth, N. J., assignor to Singer Manufacturing Company. Clutch device | 732,398 | June 30 | 5370 | 1189 | 104 | 2307 |
| Diehl, Philip, Elizabeth, N. J., assignor to Singer Manufacturing Company. Overseaming sewing-machine | 733,170 | July 7 | 834 | 203 | 105 | 175 |
| Diehl, Philip, Elizabeth, N. J., assignor to Singer Manufacturing Company. Presser-foot holder for sewing-machines | 734,257 | July 21 | 2886 | 675 | 105 | 645 |
| Diehl, Philip, and M. Hemleb, Elizabeth, N. J., assignors to Singer Manufacturing Company. Rotary take-up for sewing-machines | 739,157 | Sept. 15 | 3154 | 697 | 106 | 706 |
| Diehl, Philip, and M. Hemleb, Elizabeth, N. J., assignors to Singer Manufacturing Company. Take-up device for sewing-machines | 739,158 | Sept. 15 | 3156 | 697 | 106 | 706 |
| Diem, Ulrich, St. Gall, Switzerland. Kaleidoscope | 718,326 | Jan. 13 | 1502 | 333 | 102 | 338 |
| Diemar, Edmund. (See Sandhop and Diemar.) | | | | | | |
| Diemer, Allan, Cleveland, Ohio. Non-refillable bottle | 735,349 | Aug. 4 | 588 | 121 | 105 | 1107 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drgs. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Dierchs, William A. (See Kester, William A., assignor.) | | | | | | |
| Dierdorf, John, Indianapolis, Ind. Pedal-action for pianos | 724,555 | Apr. 7 | 250 | 61 | 103 | 1223 |
| Dierdorff, Henry B., assignor to J. A. Jeffrey, Columbus, Ohio. Mining-machine | 736,705 | Aug. 18 | 3133 | 690 | 105 | 1683 |
| Dieringer, Joseph H., Bridgeport, Conn., and C. L. Du Rocher, Baltimore, Md. Puzzle | 737,367 | Aug. 25 | 4355 | 971 | 105 | 1961 |
| Dieringer, Joseph H., Bridgeport, Conn., and C. L. Du Rocher, Baltimore, Md. Bottle-valve | 744,504 | Nov. 17 | 3336 | 718 | 107 | 743 |
| Diescher, Alfred J., Pittsburg, Pa. Mechanism for rabbling materials | 740,102 | Sept. 29 | 4936 | 1107 | 106 | 1122 |
| Diescher, Alfred J., Pittsburg, Pa. Mechanism for rabbling materials | 740,103 | Sept. 29 | 4937 | 1108 | 106 | 1122 |
| Diescher, Alfred J., assignor of one-half to S. E. Diescher, Pittsburg, Pa. Treating metal plates or sheets | 725,324 | Apr. 14 | 1676 | 378 | 103 | 1539 |
| Diescher, Samuel E. (See Diescher, Alfred J., assignor.) | | | | | | |
| Diesel, Rudolf, Munich, and H. Güldner, Augsburg, Germany. Internal-combustion engine | 736,944 | Aug. 25 | 3593 | 796, 797 | 105 | 1800 |
| Dieter, Alvin A., Winchester, Mass. Dress-protector | 731,759 | June 23 | 4126 | 920 | 104 | 2031 |
| Dieter, William, New York, N. Y. Steam-engine | 746,626 | Dec. 8 | 2377 | 545 | 107 | 1630 |
| Dieterich, Fred G., Washington, D. C., assignor to R. D. White, Conway, Ark. Combined quilting-frame, cot, and ironing-board holder | 728,684 | May 19 | 3521 | 783 | 104 | 787 |
| Diether, Charles F., St. Paul, Minn. Ventilating apparatus for railway-tunnels | 728,685 | May 19 | 3523 | 783 | 104 | 787 |
| Dietmeyer, Jacob J. (See Bradshaw, Ira J., assignor.) | | | | | | |
| Dietrich, Harry A. R., South Bethlehem, Pa. Liquid-temperature regulator | 732,054 | June 30 | 4681 | 1045, 1046 | 104 | 2164 |
| Dietrich, Julius. (See O'Brien, Frank P., assignor.) | | | | | | |
| Dietrich, Robert, Merseburg, Germany. Device for grinding broken paper | 730,617 | June 9 | 1994 | 443 | 104 | 1557 |
| Dietz, Christian, Munich, Germany. Line-tapping device for telegraph or telephone circuits | 719,095 | Jan. 27 | 3017 | 671 | 102 | 683 |
| Dietz, Edwin W., and H. W. Spalding, Akron, Ohio. Mold for building-blocks | 747,386 | Dec. 22 | 3837 | 863 | 107 | 1994 |
| Dievendorf, William B., Sprakers, N. Y. Gravity pin-lifter for car-couplings | 719,096 | Jan. 27 | 3019 | 672 | 102 | 684 |
| Diflo, Harry, Philadelphia, Pa. Attachment for rulers | 730,348 | June 9 | 1503 | 334 | 104 | 1451 |
| Digby, William P., Charing Cross, London, England. Rotary engine | 729,554 | June 2 | 62 | 15,16 | 104 | 1140 |
| Diggins, Alexander J., Harvard, Ill. End-gate | 718,196 | Jan. 13 | 1256 | 275 | 102 | 286 |
| Dignan, Edmund P., Wilmington, South Australia, Australia. Metal wheel-nave | 738,010 | Sept. 1 | 913 | 201 | 106 | 200 |
| Dikema, Haring H., Leipzig, Germany. Gas regulating and saving apparatus | 737,593 | Sept. 1 | 68 | 14 | 106 | 17 |
| Dikeman, Charles S. (See Dikeman, Joseph S., assignor.) | | | | | | |
| Dikeman, Joseph S., assignor of one-half to C. S. Dikeman, Torrington, Conn. Sparking mechanism | 730,519 | June 9 | 1825 | 406 | 104 | 1519 |
| Dilger, John E., Yankton, S. D. Portable truck | 722,569 | Mar. 10 | 1704 | 379 | 103 | 382 |
| Dilger, John E., Yankton, S. D. Combined truck and skid | 722,570 | Mar. 10 | 1705 | 379, 380 | 103 | 382 |
| Dillard, William J., Santa Rosa, Cal. Hen's nest | 724,825 | Apr. 7 | 765 | 178 | 103 | 1334 |
| Dillavon, Curtis C. and W. D., Clinton, Ill. Draft-evener | 744,177 | Nov. 17 | 2739 | 588 | 107 | 612 |
| Dillavon, William D. (See Dillavon, Curtis C. and W. D.) | | | | | | |
| Dille, Frank L. (See Miotke, Joseph, assignor.) | | | | | | |
| Dillig, George, *et al.* (See Burson, Amos, assignor.) | | | | | | |
| Dillin, George H., Watertown, N. Y. Garment-fastener | 717,660 | Jan. 6 | 237 | 60 | 102 | 52 |
| Dilling, William E. (See Fox, Richard W., assignor.) | | | | | | |
| Dillingham, George A., *et al.* (See Greene, Fred C., assignor.) | | | | | | |
| Dillingham, Ralph, Lattin, Mich. Mowing-machine | 746,687 | Dec. 15 | 2510 | 576 | 107 | 1680 |
| Dillman, Ira M., Oakland, Cal. Ironing-board | 740,104 | Sept. 29 | 4939 | 1109 | 106 | 1123 |
| Dillon, Frederick M., and W. G. Wilson, Denver, Colo. Mechanical movement | 743,379 | Nov. 3 | 1112 | 237 | 107 | 235 |
| Dillon, Harry C., Allegheny, Pa. Ironing-board | 747,952 | Dec. 29 | 4906 | 1110 | 107 | 2256 |
| Dillon, Herbert T., Henderson, Me. Level | 740,255 | Sept. 29 | 5216 | 1172 | 106 | 1180 |
| Dillon, Ivy H., Dallas, Tex. Rotary engine | 742,297 | Oct. 27 | 3728 | 833 | 106 | 2082 |
| Dillon, John, New York, N. Y. Horseshoe | 730,885 | June 16 | 2472 | 549 | 104 | 1678 |
| Dillon, John, Milwaukee, Wis. Elevator mechanism | 742,173 | Oct. 27 | 3482 | 778 | 106 | 2031 |
| Dillon, John L., Bloomsburg, Pa. Flower-bed | 728,088 | May 12 | 2387 | 531 | 104 | 525 |
| Dillon, John L., Bloomsburg, Pa. Valley-gutter for greenhouses | 728,089 | May 12 | 2388 | 531 | 104 | 526 |
| Dillon, Robert A. (See Henry and Dillon.) | | | | | | |
| Dillon, W. M. (See Frantz, Peter, assignor.) | | | | | | |
| Dillon, William C., Los Angeles, Cal. Weather-strip | 725,052 | Apr. 14 | 1173 | 265 | 103 | 1435 |
| Dillon, William C., assignor of one-half to E. Lloyd, Los Angeles, Cal. Gas-generator | 738,420 | Sept. 8 | 1764 | 383 | 106 | 395 |
| Dills, Henry S., Auburn, Ind. Decoy | 722,682 | Mar. 17 | 1940 | 432 | 103 | 447 |
| Dimant, Elias, Melbourne, Victoria, Australia. Sole for boots or shoes | 726,652 | Apr. 28 | 4160 | 938 | 103 | 2084 |
| Dimmick, Joseph O., assignor of one-half to A. J. Jarmuth, Denver, Colo. Means for operating railway-switches | 741,118 | Oct. 13 | 1354 | 310, 311 | 106 | 1555 |
| Dimock, Elwin H., Dorchester, Mass. Sash-lock | 723,843 | Mar. 31 | 4056 | 916 | 103 | 910 |
| Dimock, Elwin H., Dorchester, Mass. Lock and latch | 733,171 | July 7 | 838 | 203 | 105 | 176 |
| Dimock, Elwin H., Dorchester, Mass. Lock | 743,695 | Nov. 10 | 1771 | 375 | 107 | 394 |
| Dimond, George H. (See Dial and Dimond.) | | | | | | |
| Dimond, George H. (See Dial, Eames, and Dimond.) | | | | | | |
| Dimond, George H., assignor to Wheeler & Wilson Manufacturing Company, Bridgeport, Conn. Sewing-machine | 736,828 | Aug. 18 | 3372 | 744, 745, 746 | 105 | 1732 |
| Dimond, George H., and W. F. Dial, assignors to Wheeler & Wilson Manufacturing Company, Bridgeport, Conn. Sewing-machine | 722,496 | Mar. 10 | 1577 | 348 | 103 | 355 |
| Dimond, George H., W. F. Dial, and W. R. Abercrombie, assignors to Wheeler & Wilson Manufacturing Company, Bridgeport, Conn. Creasing means for sewing-machines | 722,497 | Mar. 10 | 1580 | 348, 349 | 103 | 355 |
| Dimond, John, *et al.* (See Lewis, Walter A., assignor.) | | | | | | |
| Dimond, John E., Boston, Mass., assignor to Reece Button Hole Machine Company, Portland, Me., and Boston, Mass. Buttonhole-sewing machine | 718,103 | Jan. 13 | 1094 | 242 | 102 | 251 |
| Dines, Henry B. (See Fogal, John E. W., assignor.) | | | | | | |
| Ding Cie Sui, assignor to G. S. Miner, Foochow, and W. N. Brewster, Hing-hua, China. Spinning-machine | 733,299 | July 7 | 1077 | 256, 257 | 105 | 227 |
| Dingee, William W., Racine, Wis. Threshing-machine | 747,906 | Dec. 22 | 4794 | 1084 | 107 | 2210 |
| Dingee, William W., assignor to J. I. Case Threshing Machine Company, Racine, Wis. Pump for portable engines or the like | 736,235 | Aug. 11 | 2241 | 484 | 105 | 1478 |
| Dinger, Louis, Jr., New York, N. Y. Railway-rail joint | 739,656 | Sept. 22 | 4087 | 910 | 106 | 923 |
| Dingman, Allen H., Dehaven, Pa. Gas-engine | 723,844 | Mar. 31 | 4059 | 916, 917 | 103 | 911 |
| Dinkel, George, Jersey City, N. J., assignor to American Sugar Refining Company. Apparatus for making lime sucrate | 734,164 | July 21 | 2704 | 637 | 105 | 605 |
| Dinkel, George, Jersey City, N. J., assignor to American Sugar Refining Company. Obtaining lime sucrate | 734,223 | July 21 | 2811 | 659 | 105 | 628 |
| Dinkins, George B., assignor of one-half to J. W. and E. C. Craig, Mattoon, Ill. Air-brake hose-coupling and valve mechanism | 725,421 | Apr. 14 | 1847 | 413 | 103 | 1575 |
| Dinkler, Joseph A., Anadarko, Okla. Ter. Druggist's dispensing oil-can | 732,620 | June 30 | 5788 | 1284 | 104 | 2397 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Dinneen, Daniel W., assignor of one-half to C. L. Cook, New York, N. Y. Three-way faucet | 726,653 | Apr. 28 | 4160 | 938 | 103 | 2084 |
| Dinneen, Daniel W., assignor of one-half to C. L. Cook, New York, N. Y. Needle and shower bath apparatus | 743,623 | Nov. 10 | 1662 | 349 | 107 | 371 |
| Dinsmore, Mary E., Waynesburg, Pa. Scholar's companion | 737,088 | Aug. 25 | 3834 | 852 | 105 | 1850 |
| Dinsmore, Thurman A., Cameron, W. Va. Permutation-padlock | 733,830 | July 14 | 2019 | 476 | 105 | 441 |
| Dion, Albert de, and G. Bouton, Puteaux, France. Change-gear for motor road-vehicles | 722,089 | Mar. 3 | 797 | 177, 178 | 103 | 172 |
| Dion, Albert de, and G. Bouton, Puteaux, France. Manufacture of electric igniters | 735,015 | July 28 | 4302 | 1000 | 105 | 953 |
| Dion, Joseph, and J. D. Belanger, Chicago, Ill. Oil-cake trimmer | 721,867 | Mar. 3 | 391 | 86, 87 | 103 | 86 |
| Dion, Léon, Boston, Mass., assignor to America Marine Company, New York, N. Y. Propelling apparatus for vessels | 737,213 | Aug. 25 | 4064 | 902 | 105 | 1898 |
| Dior, Réné. (See Beck and Dior.) | | | | | | |
| Dios Tejada, Juan de, Havana, Cuba. Acetylene-gas generator | 717,661 | Jan. 6 | 237 | 60 | 102 | 52 |
| Diplock, Bramah J., Westminster, England. Traction-engine | 747,387 | Dec. 22 | 3839 | 864 | 107 | 1995 |
| Disbro, Edward R. (See Caloun and Disbro.) | | | | | | |
| Disken, Martin B., New York, assignor of one-half to J. A. Lind, Buffalo, N. Y. Changeable sign | 736,236 | Aug. 11 | 2244 | 484, 485 | 105 | 1479 |
| Disney, William, Cincinnati, Ohio. Shade-hanger | 730,241 | June 9 | 1302 | 288 | 104 | 1407 |
| Display Machine Company. (See Leatherbarrow, Joseph B., assignor.) | | | | | | |
| Diss, Albert B., Brooklyn, N. Y. Caster | 720,790 | Feb. 17 | 2554 | 589 | 102 | 1391 |
| Diss, Albert B., Brooklyn, N. Y. Caster | 725,325 | Apr. 14 | 1677 | 378 | 103 | 1540 |
| Dissosway, Crowell M., assignor of one-half to J. Goodchild, trustee, New York, N. Y. Means for driving traction-vehicles | 745,161 | Nov. 24 | 4593 | 996 | 107 | 1021 |
| Distelhurst, George E., Pottsville, Pa. Tension attachment for bed-springs | 738,421 | Sept. 8 | 1765 | 384 | 106 | 395 |
| Distelman, Maurice, New York, N. Y. Skirt and waist holder | 718,327 | Jan. 13 | 1503 | 334 | 102 | 338 |
| Ditch, Elmer E., and F. M. Hawkins; said Ditch assignor to J. N. Patterson, Mansfield, Ohio. Separator-sieve | 735,016 | July 28 | 4302 | 1001 | 105 | 953 |
| Ditchburn, Henry, Gravenhurst, Canada. Stovepipe | 735,955 | Aug. 11 | 1753 | 375 | 105 | 1374 |
| Ditmars, Frederick R. S., assignor to Ditmars Johnson Automatic Switch Company, Kansas City, Mo. Automatic switch | 728,880 | May 26 | 3885 | 864 | 104 | 876 |
| Ditmars Johnson Automatic Switch Company. (See Ditmars, Frederick R. S., assignor.) | | | | | | |
| Ditson, John, Galena, Kans. Rolling and trimming machine | 728,379 | May 19 | 2943 | 649 | 104 | 664 |
| Dittbenner, Herman G., Minneapolis, Minn. Cushion for log-carriages | 745,582 | Dec. 1 | 498 | 117 | 107 | 1203 |
| Dittbenner, Hermann G., Minneapolis, Minn. Double-cutting band-saw mill | 717,738 | Jan. 6 | 403 | 95 | 102 | 88 |
| Dittbenner, Hermann G., Minneapolis, Minn. Upper saw-guide for band-saw mills | 745,581 | Dec. 1 | 496 | 116, 117 | 107 | 1203 |
| Dittbenner, Hermann G., assignor to H. H. Smith, Minneapolis, Minn. Bearing for steam-feed piston-rods | 736,367 | Aug. 18 | 2481 | 544 | 105 | 1548 |
| Dittmar, Charles. (See Weber, Benjamin, assignor.) | | | | | | |
| Divine, William P. (See Decker and Divine.) | | | | | | |
| Divinell-Wright Company. (See Warren, Herbert A., assignor.) | | | | | | |
| Dix, Ferdinand, Munich, Germany. Platform-gate for cars | 741,774 | Oct. 20 | 2668 | 596 | 106 | 1849 |
| Dix, William J., Milford, Mass. Pasting-machine | 743,470 | Nov. 10 | 1359 | 278, 279 | 107 | 306 |
| Dix, William J., and T. Quinn, Milford, Mass. Machine for marking shoe-linings | 746,470 | Dec. 8 | 2100 | 483, 484 | 107 | 1567 |
| Dixon, Albert S., assignor of one-half to J. P. Schneider, Austin, Tex. Hay-press | 730,437 | June 9 | 1670 | 374 | 104 | 1485 |
| Dixon, Albert S., assignor to Asphalt Paper Pipe Company, Los Angeles, Cal. Atomizer | 743,696 | Nov. 10 | 1773 | 375 | 107 | 394 |
| Dixon, Albert S., assignor to Asphalt Paper Pipe Company, Los Angeles, Cal. Atomizer | 743,697 | Nov. 10 | 1779 | 376 | 107 | 396 |
| Dixon, Ezra, Bristol, R. I. Top-roll saddle and stirrup | 733,703 | July 14 | 1780 | 422 | 105 | 392 |
| Dixon, Frank A., San Jose, Cal. Steam-cooker | 747,151 | Dec. 15 | 3390 | 769 | 107 | 1882 |
| Dixon, Frederic N., assignor to W. U. Griffiths and A. McGuckin, Philadelphia, Pa. Flushing apparatus | 736,504 | Aug. 18 | 2740 | 600 | 105 | 1603 |
| Dixon, George J. (See Sullivan, Dixon, and White.) | | | | | | |
| Dixon, George J., Carbondale, Pa. Bodkin | 742,606 | Oct. 27 | 4280 | 964 | 106 | 2196 |
| Dixon, Henry L., assignor to H. L. Dixon Company, Pittsburg, Pa. Glass-tank furnace | 748,169 | Dec. 29 | 5333 | 1212, 1213 | 107 | 2350 |
| Dixon, Hugh, Jr., Kearney, N. J. Automatic valve mechanism for flushing closets | 746,471 | Dec. 8 | 2107 | 484, 485 | 107 | 1569 |
| Dixon, Jesse G., Topeka, Kans. Flue-hole cutter | 733,821 | July 14 | 2021 | 476 | 105 | 442 |
| Dixon, John H., Pittsburg, Pa. Fire-signal | 740,823 | Oct. 6 | 828 | 186 | 106 | 1422 |
| Dixon, John R. (See Gove, Asa S., assignor.) | | | | | | |
| Dixon, Jonas F. (See Crawford and Dixon.) | | | | | | |
| Dixon, Jonas F. (See Ridgway and Dixon.) | | | | | | |
| Dixon, Joseph W., and J. D. Devine, Connellsville, Pa. Double-headed bolt and lock | 727,913 | May 12 | 2065 | 460 | 104 | 458 |
| Dixon, Mitchell, Brunswick, Ga. Band-saw machine | 742,607 | Oct. 27 | 4281 | 965 | 106 | 2196 |
| Dixon, Raymond M. (See Thompson, Robert A., assignor.) | | | | | | |
| Dixon, Robert M., East Orange, N. J. Gas-lamp | 732,928 | July 7 | 413 | 99 | 105 | 89 |
| Dixon, Robert M., East Orange, N. J. Lamp | 737,214 | Aug. 25 | 4065 | 902 | 105 | 1898 |
| Dixon, Robert M., East Orange, N. J., assignor to Safety Car Heating & Lighting Company. Gas-buoy | 741,119 | Oct. 13 | 1357 | 311 | 106 | 1556 |
| Dixon, Robert M., East Orange, N. J., assignor to Safety Car Heating & Lighting Company. Regulator for gas-supply systems | 742,775 | Oct. 27 | 4562 | 1034 | 106 | 2258 |
| Dixon, Robert M., East Orange, N. J., assignor to Safety Car Heating & Lighting Company. Coupling | 744,505 | Nov. 17 | 3338 | 718 | 107 | 743 |
| Dixon, Robert M., East Orange, N. J., assignor to Safety Car Heating and Lighting Company. Coupling | 744,506 | Nov. 17 | 3338 | 719 | 107 | 743 |
| Dixon, Robert M., East Orange, N. J., assignor to Safety Car Heating & Lighting Company. Lamp | 745,583 | Dec. 1 | 500 | 117 | 107 | 1204 |
| Dixon, Rowland E. (See Stewart, Turner, and Dixon.) | | | | | | |
| Dixon, Thomas, McKeesport, Pa. Ingot-mold | 728,552 | May 19 | 3270 | 724 | 104 | 731 |
| Dixon, Walter L., assignor to Reece Folding Machine Company, Boston, Mass. Registering mechanism | 718,104 | Jan. 13 | 1097 | 242 | 102 | 251 |
| Dixon, William W., Boston, Mass., assignor to Reece Button Hole Machine Company, Portland, Me. Clutch mechanism for buttonhole-sewing machines | 718,569 | Jan. 13 | 2005 | 437 | 102 | 446 |
| Djunkofsky, Nikolai P., Charkoff, Russia. Harvesting-machine | 725,943 | Apr. 21 | 2829 | 641 | 103 | 1800 |
| Doan, Walter J., assignor of one-half to R. Sedgwick, Richmond, Ind. Carpet-fastener | 717,554 | Jan. 6 | 63 | 16 | 102 | 16 |
| Doane, Henry L., Rushton, Mich. Tire-remover | 741,891 | Oct. 20 | 2874 | 642 | 106 | 1893 |
| Doane, James B., *et al.* (See Harty, William M., assignor.) | | | | | | |
| Doane, Royal, assignor of one-half to C. S. Denson, Elmira, N. Y. Truss | 742,608 | Oct. 27 | 4283 | 965 | 106 | 2197 |
| Dobbie, John C., Glasgow, Scotland. Navigational sounding apparatus | 728,553 | May 19 | 3271 | 724 | 104 | 731 |
| Dobblestein, Wilhelm. (See Graf, Dobblestein, and Unterbein.) | | | | | | |
| Dobbs, George F., Rossiter, Pa. Nut-lock | 721,676 | Mar. 3 | 51 | 11 | 103 | 13 |
| Dobert, Otto G., New York, N. Y. Electric pump | 743,836 | Nov. 10 | 2030 | 431 | 107 | 449 |
| Doble, Henrietta W. (See Scales, William S., assignor.) | | | | | | |
| Doble, William A., San Francisco, Cal. Nozzle for fluids | 724,678 | Apr. 7 | 488 | 117 | 103 | 1273 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| Doble, William H., Quincy, Mass., assignor to Pneumatic Scale Corporation, Portland, Me. Weighing or packaging machine | 720,008 | Feb. 10 | 1081 | 249, 250, 251, 252 | 102 | 1069 |
| Doble, William H., Quincy, assignor, by mesne assignments, to Pneumatic Scale Corporation, Boston, Mass. Machine for setting up and filling cartons or the like | 736,237 | Aug. 11 | 2247 | 485, 486, 487 | 105 | 1480 |
| Dobler, William, Sumner, Wash. Steam-boiler | 745,043 | Nov. 24 | 4331 | 936 | 107 | 969 |
| Dobson, Adam, Belfast, Ireland. Piston-valve ring | 732,837 | July 7 | 257 | 64 | 105 | 57 |
| Dobson, Alexander, Beaverton, Canada. Pressing peat-blocks | 735,476 | Aug. 4 | 849 | 180 | 105 | 1161 |
| Dobson, Frederick, Boscobel, Wis. Pump attachment | 739,298 | Sept. 22 | 3420 | 762 | 106 | 779 |
| Dobson, Warren J., Buford, Ga. Wax-thread sewing-machine | 738,011 | Sept. 1 | 914 | 201, 202 | 106 | 200 |
| Dobson, William J. M., Brooklyn, N. Y. Superheater | 738,530 | Sept. 8 | 1991 | 434 | 106 | 443 |
| Dockstader, Otis, Horseheads, N. Y. Power-transmitting gearing | 721,943 | Mar. 3 | 546 | 120 | 103 | 120 |
| Dockstader, Preston C., Colorado Springs, Colo. Transportation-ticket system | 746,046 | Dec. 8 | 1352 | 302 | 107 | 1406 |
| Dodd, Alvin H., Chicago, Ill. Carpet-sweeper | 733,904 | July 14 | 2180 | 513 | 105 | 474 |
| Dodd, John A., Fort Worth, Tex. Cotton and cane cultivator | 738,169 | Sept. 8 | 1251 | 272 | 106 | 287 |
| Dodd, Roscoe J., Cottage Place, Va. Alarm and annunciator | 723,845 | Mar. 31 | 4066 | 918 | 103 | 912 |
| Dodd, William A., Decatur, Nebr. Hay-rake | 737,717 | Sept. 1 | 289 | 60, 61 | 106 | 66 |
| Dodd, Willis G. (See Blanding, Forrest H., assignor.) | | | | | | |
| Dodd, Willis G., San Francisco, Cal. Crushing-rolls | 741,892 | Oct. 20 | 2875 | 642 | 106 | 1894 |
| Dodds, E. C., *et al.* (See McGuire, Peter J., assignor.) | | | | | | |
| Dodge, Albert N., assignor to H. R. Mueller, Chicago, Ill. Screening-separator | 746,302 | Dec. 8 | 1822 | 414 | 107 | 1508 |
| Dodge, Alfred C., Binghamton, N. Y. Machine for molding butter | 734,680 | July 28 | 3661 | 857, 858 | 105 | 821 |
| Dodge, Austin R., Schenectady, N. Y., assignor to General Electric Company. Packing | 730,349 | June 9 | 1504 | 334 | 104 | 1451 |
| Dodge, Austin R., Schenectady, N. Y., assignor to General Electric Company. Governor | 730,350 | June 9 | 1506 | 334, 335 | 104 | 1451 |
| Dodge, Austin R., Schenectady, N. Y., assignor to General Electric Company. Support for intermediate buckets in turbines | 741,775 | Oct. 20 | 2670 | 596 | 106 | 1850 |
| Dodge, Austin R., Schenectady, N. Y., assignor to General Electric Company. Means for improving the efficiency of turbines | 741,776 | Oct. 20 | 2672 | 596, 597 | 106 | 1850 |
| Dodge, Austin R., Schenectady, N. Y., assignor to General Electric Company. Automatic governor | 742,842 | Nov. 3 | 41 | 11 | 107 | 11 |
| Dodge, Austin R., Schenectady, N. Y., assignor to General Electric Company. Means for improving the efficiency of turbines | 744,727 | Nov. 24 | 3747 | 808 | 107 | 847 |
| Dodge, Austin R., Schenectady, N. Y., assignor to General Electric Company. Automatic regulator | 746,047 | Dec. 8 | 1355 | 303 | 107 | 1406 |
| Dodge, Avery B., and J. H. Rice, assignors to Leighton Machine Company, Manchester, N. H. Knitting-machine | 720,514 | Feb. 10 | 2018 | 465, 466 | 102 | 1265 |
| Dodge, Charles O., Houghton, Mich. Storm-window | 724,556 | Apr. 7 | 250 | 61 | 103 | 1223 |
| Dodge Coal Storage Company. (See Dodge, James M., assignor.) | | | | | | |
| Dodge Coal Storage Company. (See Johnston, Arthur C., assignor.) | | | | | | |
| Dodge Coal Storage Company. (See Piez, Charles, assignor.) | | | | | | |
| Dodge Coal Storage Company. (See Titcomb, George E., assignor.) | | | | | | |
| Dodge, Edgar C., Chicago, Ill. Flash-light apparatus | 747,388 | Dec. 22 | 3840 | 864 | 107 | 1995 |
| Dodge, Ernest C., *et al.* (See Brown, Frank S., assignor.) | | | | | | |
| Dodge, Frank, Boston, Mass. Belt-buckle | 726,654 | Apr. 28 | 4162 | 938 | 103 | 2084 |
| Dodge, Henry A., and W. Wilson, Boston, Mass., assignors to Campbell, Bosworth Machinery Company, Portland, Me. Awl mechanism for sewing-machines | 724,447 | Apr. 7 | 45 | 12 | 103 | 1179 |
| Dodge, James M., assignor to Link Belt Engineering Company, Philadelphia, Pa. Chain-link | 717,975 | Jan. 6 | 860 | 192 | 102 | 186 |
| Dodge, James M., assignor to Link Belt Engineering Company, Philadelphia, Pa. Sprocket-wheel for drive-chains | 717,976 | Jan. 6 | 860 | 192, 193 | 102 | 186 |
| Dodge, James M., assignor to Link Belt Engineering Company, Philadelphia, Pa. Detachable-link drive-chain | 722,001 | Mar. 3 | 652 | 145 | 103 | 141 |
| Dodge, James M., assignor to Link Belt Engineering Company, Philadelphia, Pa. Detachable open link for drive-chains | 722,002 | Mar. 3 | 653 | 145 | 103 | 141 |
| Dodge, James M., assignor to Link Belt Engineering Company, Philadelphia, Pa. Tooth for sprocket wheels or gears | 738,012 | Sept. 1 | 916 | 202 | 106 | 200 |
| Dodge, James M., Philadelphia, Pa., assignor to Stair Lift Company, Camden, N. J. Hand-rail for moving stair-lifts | 719,764 | Feb. 3 | 650 | 148 | 102 | 959 |
| Dodge, James M., Philadelphia, Pa., assignor to Stair Lift Company, Camden, N. J. Moving hand-rail | 719,765 | Feb. 3 | 651 | 149 | 102 | 959 |
| Dodge, James M., Philadelphia, Pa., assignor to Dodge Coal Storage Company, Naugatuck, Conn. Storage apparatus | 733,355 | July 7 | 1175 | 278 | 105 | 247 |
| Dodge, James M., Philadelphia, Pa., assignor to Dodge Coal Storage Company, Naugatuck, Conn. Apparatus for removing material from piles | 738,013 | Sept. 1 | 917 | 202, 203 | 106 | 200 |
| Dodge, Kern, Philadelphia, Pa. Support for coiled wire | 726,147 | Apr. 21 | 3160 | 715 | 103 | 1868 |
| Dodge, Miles W., Philadelphia, Pa. Latch | 723,846 | Mar. 31 | 4067 | 918 | 103 | 912 |
| Dodge Needle Company. (See Currier, Arthur, assignor.) | | | | | | |
| Dodge, Philip T., Washington, D. C. Type-writing machine | 730,520 | June 9 | 1827 | 407 | 104 | 1519 |
| Dodge, Philip T., New York, N. Y., assignor to Mergenthaler Linotype Company. Linotype-machine | 726,412 | Apr. 28 | 3680 | 834 | 103 | 1991 |
| Dodge, Philip T., New York, N. Y., assignor to Mergenthaler Linotype Company. Linotype-machine | 727,914 | May 12 | 2066 | 460 | 104 | 458 |
| Dodge, Philip T., New York, N. Y., assignor to Mergenthaler Linotype Company. Linotype-machine | 734,121 | July 21 | 2627 | 618, 619, 620, 621 | 105 | 589 |
| Dodge, Philip T., New York, N. Y., assignor to Mergenthaler Linotype Company. Linotype-machine | 741,957 | Oct. 20 | 3023 | 670, 671, 672, 673, 674 | 106 | 1925 |
| Dodge, Philip T., Washington, D. C., assignor to Mergenthaler Linotype Company. Linotype-machine | 739,996 | Sept. 29 | 4741 | 1066 | 106 | 1080 |
| Dodgson, Frank L., assignor, by mesne assignments, to Pneumatic Signal Company, Rochester, N. Y. Electropneumatic valve | 733,315 | July 7 | 1098 | 262 | 105 | 231 |
| Dodson, Joseph H., assignor to Illinois Safe and Lock Co., Chicago, Ill. Safe | 727,105 | May 5 | 546 | 117 | 104 | 119 |
| Dodson, Roy, Dallas, Tex. Hame-fastener | 745,485 | Dec. 1 | 334 | 78 | 107 | 1170 |
| Dodt, Julius. (See Ferriott, Charley L., assignor.) | | | | | | |
| Doebbel, Gustav A., Altona, Germany. Smoke-consuming apparatus | 727,106 | May 5 | 548 | 118 | 104 | 120 |
| Doebler, Charles F., assignor to J. G. Doebler, New York, N. Y. Wrench | 728,554 | May 19 | 3272 | 725 | 104 | 732 |
| Doebler, John G. (See Doebler, Charles F., assignor.) | | | | | | |
| Doeg, Issachar W., Newmarket, N. H. Pawl | 725,682 | Apr. 21 | 2356 | 533 | 103 | 169 |

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| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| Doering, Charles W. (See Tuggle and Doering.) | | | | | | |
| Doering, William, Syracuse, Ind. Shocking device for harvesting-machines | 733,375 | July 14 | 1218 | 289 | 105 | 273 |
| Doerr, Frederick W., *et al.* (See Keefer, William B., assignor.) | | | | | | |
| Doerr, John P., *et al.* (See Keefer, William B., assignor.) | | | | | | |
| Doerr, Lawrence, East Jordan, Mich. Gate | 722,358 | Mar. 10 | 1304 | 290 | 103 | 293 |
| Doggett, Reginald L. S., East Orange, N. J. Varnish or color cup | 718,436 | Jan. 13 | 1693 | 373 | 102 | 377 |
| Doggett, Reginald L. S., East Orange, N. J. Varnish or color cup | 748,052 | Dec. 29 | 5112 | 1155 | 107 | 2301 |
| Doherty, John E. (See Bacon, Nathan B., assignor.) | | | | | | |
| Doherty, Michael J. (See Hill and Brown, assignors.) | | | | | | |
| Doherty, Sabella G., New York, N. Y. Mirror decorating and illuminating device | 744,507 | Nov. 17 | 3339 | 719 | 107 | 743 |
| Dohoney, Priscilla W., Columbia, Ky. Lifter and conveyer for invalids | 723,847 | Mar. 31 | 4068 | 918 | 103 | 912 |
| Dohrmann, Samuel J., Louisville, Ky. Pencil holder and guard | 733,172 | July 7 | 840 | 204 | 105 | 177 |
| Dolan, James M., Livermore, Cal. Door-closer for hay-presses | 744,508 | Nov. 17 | 3341 | 719 | 107 | 744 |
| Dolan, John J., Jr., Baltimore, Md. Track-sanding apparatus | 747,539 | Dec. 22 | 4105 | 921 | 107 | 2055 |
| Dolbear, Clinton E., assignor to American Mining and Metal Extraction Company, Boston, Mass. Electrostatic separator | 724,679 | Apr. 7 | 489 | 117 | 103 | 1273 |
| Dolbey, William H., Auburn, N. Y. Elevator attachment | 743,258 | Nov. 3 | 856 | {186 / 187} | {107} | 179 |
| Dolid, Harris, New York, N. Y. Can or receptacle for ashes, &c | 730,100 | June 2 | 1046 | 234 | 104 | 1341 |
| Doll, Herbert J., San Francisco, Cal. Safety gas-cock | 748,487 | Dec. 29 | 5905 | 1342 | 107 | 2475 |
| Doll, Horace H., Philadelphia, Pa. Automatic switch | 733,822 | July 14 | 2023 | 476 | 105 | 442 |
| Doll & Porch. (See Doll, Theodore T., assignor.) | | | | | | |
| Doll, Theodore T., assignor to Doll & Porch, Chicago, Ill. Window-ventilator | 728,447 | May 19 | 3059 | 674 | 104 | 690 |
| Doll, William, and F. A. Brandstetter, Cincinnati, Ohio. Railway-switch | 739,401 | Sept. 22 | 3621 | 807 | 106 | 823 |
| Dolley, Charles J., Jackson, Mich. Horse-collar and hame-fastener | 743,624 | Nov. 10 | 1665 | 349 | 107 | 372 |
| Dolley, Charles S., Philadelphia, Pa. Siphon-bottle filler | 720,682 | Feb. 17 | 2377 | 544 | 102 | 1353 |
| Dollfus, Walter, and R. Hagenbach, assignors to Farbwerke, vorm. Meister, Lucius & Brüning, Höchst-on-the-Main, Germany. Yellow monoazo dyestuff and making same | 731,670 | June 23 | 3962 | ..... | 104 | 1998 |
| Dolly, Joseph N., *et al.* (See Isham, William S., assignor.) | | | | | | |
| Dolphin, Byron J. (See Woodard and Dolphin.) | | | | | | |
| Dolphin Paint Company. (See Cuthriell, Alonzo P., assignor.) | | | | | | |
| Dolsen, William B., Macon, Mo. Hermetic gaseous-liquid-compress cask | 738,531 | Sept. 8 | 1993 | 434 | 106 | 444 |
| Dolter, Henri, Paris, France. Bar for collecting electricity for sectional circuits | 748,053 | Dec. 29 | 5114 | {1155 / 1156} | {107} | 2302 |
| Dom, Alexander, Hartwell, assignor to Globe-Wernicke Company, Cincinnati, Ohio. Letter-file | 740,406 | Oct. 6 | 34 | 8 | 106 | 1251 |
| Domagola, John, Peru, Ill. Painter's brush wiper and holder | 731,289 | June 16 | 3235 | 720 | 104 | 1832 |
| Doman, Albert E., assignor to Elbridge Electrical Manufacturing Company, Elbridge, N. Y. System of electrical distribution | 740,973 | Oct. 6 | 1080 | 245 | 106 | 1477 |
| Doman, Lewis B., Elbridge, N. Y. Self-playing musical instrument | 746,472 | Dec. 8 | 2108 | 485 | 107 | 1570 |
| Doman, Lewis B., assignor to Maestro Company, Elbridge, N. Y. Device for trimming perforated music-sheets | 733,016 | July 7 | 557 | 136 | 105 | 119 |
| Domingue, John V., Pointe a la Hache, La. Dump-car | 730,886 | June 16 | 2473 | 549 | 104 | 1678 |
| Dominick, Ambiehl, New York, N. Y. Safety gas-burner | 748,170 | Dec. 29 | 5336 | 1214 | 107 | 2350 |
| Donaghy, Daniel, Duluth, Minn. Position-governing means for load-retaining stakes | 737,718 | Sept. 1 | 291 | 61 | 106 | 66 |
| Donahoe, William Y., Cascade, Iowa. Agricultural machine | 722,955 | Mar. 17 | 2422 | 541 | 103 | 544 |
| Donahoo, James T., Edgar, Nebr. Apparatus for forming cement water-tanks | 744,509 | Nov. 17 | 3342 | 720 | 107 | 744 |
| Donahue, Michael C., assignor of three-fourths to J. Skinner, F. G. Armbruster, and F. A. Neff, Colorado Springs, Colo. Hanger for electric lamps or the like | 742,398 | Oct. 27 | 3901 | 877 | 106 | 2117 |
| Donahue, Thomas F. (See Loucks, James C., assignor.) | | | | | | |
| Donaldson, Bertha, Yonkers, N. Y. Culinary scraper | 745,717 | Dec. 1 | 725 | 166 | 107 | 1253 |
| Donaldson, Edwin, Brooklyn, assignor of one-fifth to D. T. Worden, New York, N. Y., Blindstitching attachment for sewing-machines | 746,303 | Dec. 8 | 1824 | {414 / 415} | {107} | 1509 |
| Donaldson, Ellsworth E., Wellston, Ohio. Revolving bin | 727,107 | May 5 | 550 | 118 | 104 | 120 |
| Donaldson, James A., Greenville, Pa. Horse-detacher | 726,881 | May 5 | 92 | 23 | 104 | 22 |
| Donaldson, James A., Greenville, Pa. Holdback-hook for vehicle-shafts | 730,618 | June 9 | 1996 | 443 | 104 | 1558 |
| Donaldson, James H., Chicago, Ill. Cushion | 737,089 | Aug. 25 | 3836 | 853 | 105 | 1850 |
| Donaldson, John, Philadelphia, Pa. Pipe-wrench | 728,881 | May 26 | 3888 | 864 | 104 | 876 |
| Donaldson, John T., Liberty, Mo. Trousers pressing and holding device | 743,837 | Nov. 10 | 2031 | 432 | 107 | 449 |
| Donaldson, Robert S., Cleveland, Ohio. Junction-box | 724,383 | Mar. 31 | 5168 | 1158 | 103 | 1138 |
| Donaldson, William, Ludlow, Ky., assignor to Bradford Machine Tool Company, Cincinnati, Ohio. Variable-speed drive for machine or other tools | 736,238 | Aug. 11 | 2253 | 487 | 105 | 1481 |
| Donaldson, William R., *et al.* (See Worth, William O., assignor.) | | | | | | |
| Donaldson, William R. (See Worth and Donaldson.) | | | | | | |
| Donally, Melvin E., Brooklyn, assignor to A. M. Kinley, New York, N. Y. Locking-nut | 736,368 | Aug. 18 | 2482 | 544 | 105 | 1548 |
| Donaly, James L., Newark, N. J. Ring-throwing apparatus | 734,832 | July 28 | 3979 | 930 | 105 | 886 |
| Donard, Eugene, and H. Labbé, Paris, France. Making albuminoid substances from maize | 744,510 | Nov. 17 | 3343 | ..... | 107 | 744 |
| Donavan, Arthur, Mason City, Ill. Ratchet-wrench | 732,055 | June 30 | 4683 | 1046 | 104 | 2164 |
| Donavin, George B., Columbus, Ohio. Camp-sink | 732,342 | June 30 | 5258 | 1166 | 104 | 2283 |
| Donecker, Orin C., and J. A. Nagle, Allentown, Pa. Adjustable scaffold | 722,498 | Mar. 10 | 1583 | 349 | 103 | 356 |
| Donecker, Orin C., and J. A. Nagle, Allentown, Pa. Automatic fire-door | 726,034 | Apr. 21 | 2972 | 676 | 103 | 1829 |
| Donehower, William E., and S. Chilson, Omaha, Nebr. Flue-expander for expanding the flue-joints of boilers | 741,636 | Oct. 20 | 2397 | 538 | 106 | 1792 |
| Doner, Martin J., assignor of one-half to J. J. Dunnavant, St. Louis, Mo. Trolley and brake for aerial railways | 720,333 | Feb. 10 | 1706 | 388 | 102 | 1200 |
| Doner, Martin J., assignor of one-third to M. H. Alexander, St. Louis, Mo. Car-brake | 727,108 | May 5 | 551 | 118 | 104 | 120 |
| Doner, Martin J., assignor of one-half to A. Godron, St. Louis, Mo. Pleasure-tower | 730,521 | June 9 | 1828 | {407 / 408} | {104} | 1520 |
| Doney, Charles S., and O. A. Gordon, Lewiston, Idaho. Traction-engine | 744,728 | Nov. 24 | 3750 | 809 | 107 | 848 |
| Donham, Anne A., and I. D. Pearce, Kansas City, Mo.; said Pearce assignor to said Donham. Non-refillable bottle | 725,944 | Apr. 21 | 2830 | 642 | 103 | 1800 |
| Donnell, James A. (See Cunningham, John F., assignor.) | | | | | | |
| Donnell, Junius S., assignor of three-fourths to J. O. Smith and A. L. Carter, Fairfax, Mo. Disk-sharpener | 736,829 | Aug. 18 | 3374 | 746 | 105 | 1733 |
| Donnell, William J., South Amboy, N. Y. Wagon-standard | 735,350 | Aug. 4 | 589 | 121 | 105 | 1107 |
| Donnelley, William J., Victor, Colo. Oil-can | 727,309 | May 5 | 908 | 197 | 104 | 196 |
| Donnelly, Daniel B., Pittsburg, Pa. Refuse-burner | 722,289 | Mar. 10 | 1184 | 262 | 103 | 267 |
| Donnelly, Daniel W., Burlingame, Cal. Bit for horses | 722,683 | Mar. 17 | 1942 | 432 | 103 | 447 |
| Donnelly, Edward P., Manchester, N. H. Combined cleaver and knife | 745,162 | Nov. 24 | 4594 | 996 | 107 | 1021 |
| Donnelly, George, Diamond, Ind. Fan attachment | 748,353 | Dec. 29 | 5644 | 1286 | 107 | 2417 |
| Donnelly, James A., Brooklyn, N. Y. Supporting-rack | 717,739 | Jan. 6 | 405 | 95 | 102 | 89 |
| Donnelly, James J., Patton, Pa. Display-case | 720,119 | Feb. 10 | 1315 | {300 / 301} | {102} | 1119 |
| Donnelly, John, Jr. (See Waggaman, Bernard A., assignor.) | | | | | | |
| Donnelly, John C., *et al.* (See Calentine, George C., assignor.) | | | | | | |
| Donnelly, John R., Fairfield, Me. Oil-burner | 745,799 | Dec. 1 | 870 | 197 | 107 | 1286 |

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|---|---|---|---|---|---|---|
| Donnelly, Joseph C., Philadelphia, Pa., assignor to Diamond Match Company, New York, N. Y. Match-making machine | 727,308 | May 5 | 906 | 197 | 104 | 195 |
| Donnelly, Joseph C., Philadelphia, Pa., assignor to Diamond Match Company, New York, N. Y. Apparatus for boxing matches | 741,466 | Oct. 13 | 2048 | 455 | 106 | 1702 |
| Donnelly, Joseph C., Philadelphia, Pa., assignor to Diamond Match Company, New York, N. Y. Apparatus for boxing matches | 741,467 | Oct. 13 | 2057 | 455, 456, 457, 458, 459, 460 | 106 | 1705 |
| Donnelly, William T., *et al.* (See Deruntz, Eugene, assignor.) | | | | | | |
| Donning, George W., East Orange, assignor of one-half to H. T. Ambrose, Orange, N. J. Platen for type-writers | 742,609 | Oct. 27 | 4284 | 966 | 106 | 2197 |
| Donning, George W., East Orange, assignor of one-half to H. T. Ambrose, Orange, N. J. Carbon sheet or paper holder, lifter, and separator | 742,610 | Oct. 27 | 4286 | 966 | 106 | 2197 |
| Donning, George W., East Orange, assignor of one-half to H. T. Ambrose, Orange, N. J. Adjustable marginal stop device | 742,611 | Oct. 27 | 4287 | 966 | 106 | 2198 |
| Donning, George W., East Orange, assignor of one-half to H. T. Ambrose, Orange, N. J. Shifting device for printing mechanisms | 743,259 | Nov. 3 | 857 | 187, 188 | 107 | 180 |
| Donning, George W., East Orange, assignor of one-half to H. T. Ambrose, Orange, N. J. Type-writer actuating mechanism | 745,095 | Nov. 24 | 4446 | 961, 962, 963 | 107 | 991 |
| Donning, George W., East Orange, assignor of one-half to H. T. Ambrose, Orange, N. J. Type-writer | 745,163 | Nov. 24 | 4595 | 997 | 107 | 1022 |
| Donohoe, Henry C., Des Moines, Iowa. Incubator | 746,799 | Dec. 15 | 2703 | 623 | 107 | 1723 |
| Donohoe, Hugh, New York, N. Y. Safety appliance for dumb-waiters | 718,328 | Jan. 13 | 1505 | 334 | 102 | 339 |
| Donohoe, John P. (See Jones and Donohoe.) | | | | | | |
| Donohue, James S., assignor of one-half to P. L. Moran, Georgetown, D. C. Railway-track joint | 730,522 | June 9 | 1831 | 408 | 104 | 1520 |
| Donohue, Thaddeus, Memphis, Tenn. Book-support for chairs | 723,144 | Mar. 17 | 2757 | 620 | 103 | 614 |
| Donoughe, Francis J., Gallitzin, Pa. Pumping apparatus | 717,977 | Jan. 6 | 861 | 193 | 102 | 186 |
| Donovan, James J., Peekskill, N. Y. Water-closet bowl | 721,786 | Mar. 3 | 230 | 50 | 103 | 51 |
| Donovan, James J., Peeksville, N. Y. Closet ventilation | 728,448 | May 19 | 3060 | 674 | 104 | 690 |
| Donovan, John P., Westfield, Mass. Wheel-tire | 729,144 | May 26 | 4346 | 959, 960 | 104 | 970 |
| Donovan, William D., Newark, N. J. Manufacture of pyrographic burners | 737,719 | Sept. 1 | 292 | 61 | 106 | 66 |
| Donshea, Adeline M., New York, N. Y. Corset | 740,824 | Oct. 6 | 830 | 186 | 106 | 1423 |
| Dooley, Thomas B., assignor to J. Middleby, Jr., Malden, Mass. Mechanical movement | 727,310 | May 5 | 909 | 197, 198 | 104 | 196 |
| Doolittle, Elbridge C. (See Doolittle, James B. and E. C.) | | | | | | |
| Doolittle, Elbridge C., assignor of one-half to W. Hassett, Wallingford, Conn. Steam-engine | 725,945 | Apr. 21 | 2831 | 642 | 103 | 1800 |
| Doolittle, James B. and E. C., Wallingford, Conn. Steam-boiler | 720,899 | Feb. 17 | 2746 | 632 | 102 | 1430 |
| Doolittle, John F., Cleveland, Ohio. Shears for bars of structural shapes | 746,800 | Dec. 15 | 2704 | 623, 624 | 107 | 1723 |
| Doolittle, Lewis J. (See Field and Doolittle.) | | | | | | |
| Doolittle, William W., assignor to Crane Company, Chicago, Ill. Molding machinery | 718,829 | Jan. 20 | 2479 | 550, 551 | 102 | 555 |
| Doolittle, William W., assignor to Crane Company, Chicago, Ill. Pipe-truing mechanism | 718,830 | Jan. 20 | 2482 | 551, 552 | 102 | 555 |
| Doorenbos, John, Allegheny, Pa. Burner-tip | 741,316 | Oct. 13 | 1755 | 391 | 106 | 1637 |
| Doré, Elzear. (See Maloney and Doré.) | | | | | | |
| Doré, Joseph. (See Maloney and Doré.) | | | | | | |
| Doremus, Charles A., New York, N. Y. Metallurgical and chemical furnace | 723,251 | Mar. 24 | 2974 | 668 | 103 | 673 |
| Doremus, Charles A., New York, N. Y. Obtaining alumina | 725,683 | Apr. 21 | 2357 | ------ | 103 | 1699 |
| Dorenfeldt, Lauritz J. (See Drewsen and Dorenfeldt.) | | | | | | |
| Dorff, Conrad J., Chicago, Ill., assignor of forty-nine one-hundredths to P. J. Scharbach, San Francisco, Cal. Bearing for bicycles | 725,547 | Apr. 14 | 2092 | 474 | 103 | 1628 |
| Dorgan, William J., Chicago, Ill., assignor of one-half to A. Bielenberg, New York, N.Y. Canvas-stretcher | 725,422 | Apr. 14 | 1849 | 414 | 103 | 1576 |
| Doring, Joseph C. and R. A., Troy, N. Y. Collar stretching and measuring apparatus | 746,048 | Dec. 8 | 1359 | 303 | 107 | 1407 |
| Doring, Robert A. (See Doring, Joseph C. and R. A.) | | | | | | |
| Dorland, Frank N., Humboldt, Nebr. Fountain-inkstand | 730,006 | June 2 | 894 | 199 | 104 | 1310 |
| Dorland, William G., Chicago, Ill. Vehicle-body | 741,893 | Oct. 20 | 2877 | 642 | 106 | 1894 |
| Dorling, Mary A. and W., Middlesbrough, England. Tape needle or threader | 743,066 | Nov. 3 | 482 | 105 | 107 | 101 |
| Dorling, William. (See Dorling, Mary A. and W.) | | | | | | |
| Dorman, Albert B., Winthrop, Mass. Vaccine-shield | 729,293 | May 26 | 4626 | 1023 | 104 | 1030 |
| Dorman, Louis, Washington, D. C. Coherer for wireless telegraphic systems | 742,298 | Oct. 27 | 3730 | 833 | 106 | 2083 |
| Dorman, William S., Brooklyn, assignor to Interseal Company, New York, N. Y. Stopper or closure for bottles, jars, &c | 740,631 | Oct. 6 | 473 | 104 | 106 | 1348 |
| Dormandy, Garry J., assignor to United Shirt and Collar Company, Lansingburg, N. Y. Machine for folding collar-blanks, &c | 725,326 | Apr. 14 | 1679 | 378, 379, 380 | 103 | 1540 |
| Dormandy, Garry J., assignor to United Shirt and Collar Company, Troy, N. Y. Manufacturing collars | 742,400 | Oct. 27 | 3905 | 877, 878 | 106 | 2118 |
| Dormandy, Garry J., assignor to United Shirt and Collar Company, Troy, N. Y. Blank for collars | 744,511 | Nov. 17 | 3344 | 720 | 107 | 744 |
| Dorment, Frank C., assignor to National Vaporizer Company, Kalamazoo, Mich. Advertising-automaton | 721,787 | Mar. 3 | 231 | 50, 51, 52 | 103 | 51 |
| Dorment, Frank C., assignor to National Vaporizer Company, Kalamazoo, Mich. Advertising device | 721,788 | Mar. 3 | 237 | 52, 53 | 103 | 52 |
| Dorn, Christian, assignor of one-half to W. G. T. Marcellus, Philadelphia, Pa. Expansion-bolt | 737,555 | Aug. 25 | 4715 | 1058 | 105 | 2042 |
| Dorn, George. (See Bergren, Ernest Q., assignor.) | | | | | | |
| Dorn, George. (See Coffman and Dorn.) | | | | | | |
| Dorn, Rufus H., Los Angeles, Cal. Miter-box | 733,823 | July 14 | 2025 | 476, 477 | 105 | 443 |
| Dornan, Robert, *et al.* (See Shinn, Nathaniel M., assignor.) | | | | | | |
| Dornan, Thomas B., *et al.* (See Shinn, Nathaniel M., assignor.) | | | | | | |
| Dornan, Thomas B., Philadelphia, Pa. Pile-fabric loom | 730,438 | June 9 | 1671 | 374, 375 | 104 | 1485 |
| Dorney, Oliver C., Allentown, Pa. Table adjustable angularly and vertically | 722,003 | Mar. 3 | 654 | 145, 146 | 103 | 142 |
| Dorney, Oliver C., Allentown, Pa. Chair | 740,825 | Oct. 6 | 832 | 187 | 106 | 1423 |
| Dornfeld, Charles, New York, N. Y. Grounding-preventer for marine vessels | 721,677 | Mar. 3 | 52 | 11 | 103 | 13 |
| Dorr, George H., New Rochelle, N. Y. Focusing-hood | 720,900 | Feb. 17 | 2747 | 633 | 102 | 1430 |
| Dorr, Harry A., Providence, R. I. Carboy-holder | 742,399 | Oct. 27 | 3904 | 877 | 106 | 2118 |
| Dorr, John P., Gardiner, Me. Writing-tablet for roll-paper | 727,109 | May 5 | 553 | 119 | 104 | 120 |

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| Dorrer, August. (See Schleicher and Dorrer.) | | | | | | |
| Dorrestein, C. A., administrator. (See Allison, Samuel B.) | | | | | | |
| Dorris, George P., St. Louis, Mo. Gearing for automobiles | 724,557 | Apr. 7 | 251 | 61 | 103 | 1223 |
| Dorsey, Charles J., Baltimore, Md. Figure toy | 729,555 | June 2 | 63 | 16 | 104 | 1140 |
| Dorsey, Charles J., Baltimore, Md. Game-board | 730,351 | June 9 | 1510 | 335 | 104 | 1452 |
| Dorsey, Charles J., Baltimore, Md. Game-board | 730,749 | June 9 | 2217 | 493 | 104 | 1605 |
| Dorsey, Charles J., Baltimore, Md. Chance toy | 731,760 | June 23 | 4127 | 920 | 104 | 2031 |
| Dorsey, Charles J., Baltimore, Md. Roundabout toy | 734,681 | July 28 | 3666 | 858 | 105 | 822 |
| Dorsey, Charles J., assignor to H. S. Dulaney, Baltimore, Md. King-ring game-board | 725,684 | Apr. 21 | 2358 | 534 | 103 | 1699 |
| Dorsey, Charles J., assignor of one-half to R. Finnell, Baltimore, Md. Wicket game-board | 731,439 | June 23 | 3530 | 786 | 104 | 1912 |
| Dorsey, Mary E. C. (See Anderson, Frank C., assignor.) | | | | | | |
| Dorsey, Robert H., *et al.* (See Anderson, Frank C., assignor.) | | | | | | |
| Dorsey, Robert L., assignor to Tucker & Dorsey Manufacturing Company, Indianapolis, Ind. Caster | 725,423 | Apr. 14 | 1850 | 414 | 103 | 1576 |
| Dorsey, Robert L., assignor to Tucker & Dorsey Manufacturing Company, Indianapolis, Ind. Truck | 726,035 | Apr. 21 | 2974 | 676 | 103 | 1830 |
| Dorsey, Robert L., assignor to Tucker & Dorsey Manufacturing Company, Indianapolis, Ind. Lemon-squeezer | 735,728 | Aug. 11 | 1322 | 285 | 105 | 1280 |
| Dorticus Manufacturing Company. (See Schneider, Eugene W., assignor.) | | | | | | |
| Dosch, Peter, Yonkers, N. Y. Sash-pulley | 723,252 | Mar. 24 | 2975 | 669 | 103 | 674 |
| Doscher, William C., assignor of one-half to D. J. Campbell, New York, N. Y. Box | 727,600 | May 12 | 1448 | 325 | 104 | 330 |
| Doss, William H., Benton City, Mo. Razor-strop | 739,534 | Sept. 22 | 3847 | 861 | 106 | 872 |
| Doty, Ellsworth P., Fairhaven, N. Y. Insect-guard for windows | 722,499 | Mar. 10 | 1584 | 350 | 103 | 356 |
| Doty, Frank L., Calliope, Iowa. Hay loader and stacker | 748,171 | Dec. 29 | 5337 | 1214 | 107 | 2351 |
| Doty, Roy A., assignor to Storm Railway Signal Company, Waterloo, Iowa. Circuit-breaker for automatic electric railway-signals | 739,066 | Sept. 15 | 2992 | 663 | 106 | 673 |
| Doty, William J., Clifton, Kans. Line-holder | 741,468 | Oct. 13 | 2078 | 461 | 106 | 1710 |
| Doub, John H., Walnut, Kans. Metal-cutting machine | 736,505 | Aug. 18 | 2742 | 600, 601 | 105 | 1603 |
| Double, Edward, Santa Paula, Cal. Underreamer | 734,833 | July 28 | 3980 | 930, 931 | 105 | 886 |
| Double, Edward, Los Angeles, Cal. Underreamer | 748,054 | Dec. 29 | 5118 | 1156, 1157 | 107 | 2302 |
| Double, Edward, and F. J. Karten, Los Angeles, Cal. Wire-rope socket for well-drilling tools | 727,759 | May 12 | 1769 | 398 | 104 | 397 |
| Doucet, Felix, Melrose, Mass. Boot or shoe sewing machine | 731,761 | June 23 | 4128 | 920, 921 | 104 | 2032 |
| Douden, Edwin, and A. B. Robb, Brooklyn, N. Y. Weather-strip | 728,686 | May 19 | 3525 | 784 | 104 | 787 |
| Dougall, William G., assignor to W. W. Montague & Co., San Francisco, Cal. Mail-box | 733,704 | July 14 | 1780 | 423 | 105 | 393 |
| Dougherty, Hugh F., assignor of one-half to J. I. Ford, Wilmington, Del. Leather-working machine | 726,267 | Apr. 28 | 3395 | 771, 772 | 103 | 1932 |
| Dougherty, James M., *et al.* (See Noyes, Mayhew E., assignor.) | | | | | | |
| Dougherty, John C., Rockford, Ill. Tank-mold | 736,586 | Aug. 18 | 2885 | 630 | 105 | 1633 |
| Dougherty, Owen T. (See Gressom, James H., assignor.) | | | | | | |
| Dougherty, Owen T., Minneapolis, Minn. Weight-indicating sliding and spring support for vehicle-bodies | 745,718 | Dec. 1 | 726 | 166 | 107 | 1253 |
| Doughty, Alfred J, St. Louis, Mo., assignor, by mesne assignments, to Chicago Pneumatic Tool Company. Blank for hammer-handles | 730,887 | June 16 | 2475 | 549 | 104 | 1679 |
| Doughty, Fannie, Harpur Hill, Buxton, England. Device for use in carrying parcels, &c. | 732,956 | Mar. 17 | 2424 | 542 | 103 | 545 |
| Doughty, Henry J., Providence, R. I. Foxing for rubber boots or shoes | 722,823 | Mar. 17 | 2202 | 491 | 103 | 500 |
| Doughty, Henry J., Providence, R. I., assignor to Atlantic Rubber Shoe Company, Trenton, N. J. Mechanism for manufacturing rubber shoes | 722,822 | Mar. 17 | 2200 | 491 | 103 | 499 |
| Doughty, Herman W., and C. E. Beach, Binghamton, N. Y., assignors to Star Electric Company. Signal-recorder | 726,882 | May 5 | 95 | 23, 24 | 104 | 23 |
| Doughty, William L., Oshkosh, Wis. Adjustable mirror | 735,072 | Aug. 4 | 41 | 12 | 105 | 991 |
| Doughty, William L., Oshkosh, Wis. Means for bridging over fire-hose | 738,170 | Sept. 8 | 1253 | 272 | 106 | 287 |
| Douglas, Benjamin T. (See Fletcher, Davis, and Douglas.) | | | | | | |
| Douglas, Edwin R. (See Dunn and Douglas.) | | | | | | |
| Douglas, Edwin R., East Orange, assignor to Crocker-Wheeler Company, Ampere, N. J. Magnetic clutch | 721,678 | Mar. 3 | 53 | 12 | 103 | 13 |
| Douglas, Edwin R., East Orange, assignor to Crocker-Wheeler Company, Ampere, N. J. Magnetic clutch | 721,679 | Mar. 3 | 58 | 12 | 103 | 14 |
| Douglas, Edwin R., East Orange, assignor to Crocker-Wheeler Company, Ampere, N. J. Rotary motor | 735,956 | Aug. 11 | 1754 | 375, 376 | 105 | 1374 |
| Douglas, Elizabeth M., Tariffville, Conn. Anklet | 743,625 | Nov. 10 | 1667 | 350 | 107 | 372 |
| Douglas, John, Elizabeth, N. J., assignor to Singer Manufacturing Company. Sewing-machine hemmer | 732,399 | June 30 | 5372 | 1190 | 104 | 2307 |
| Douglas, John, Newark, N. J., assignor to Singer Manufacturing Company. Throat-plate for sewing-machines | 735,477 | Aug. 4 | 850 | 181 | 105 | 1161 |
| Douglas, John, Newark, N. J., assignor to Singer Manufacturing Company. Combined folding and ruffling device for sewing-machines | 740,632 | Oct. 6 | 474 | 104, 105 | 106 | 1348 |
| Douglas, John E. (See Hays and Douglas.) | | | | | | |
| Douglas, John E., Birmingham, and G. W. Hays, Avondale, Ala. Cylinder and piston packing | 727,311 | May 5 | 911 | 198 | 104 | 196 |
| Douglas Manufacturing Company. (See Thorne, Edward H., assignor.) | | | | | | |
| Douglas, Peyton, Columbus, Ohio. Combination table and desk | 742,843 | Nov. 3 | 44 | 11 | 107 | 12 |
| Douglas, Robert, Ravena, N. Y. Vinegar-generator | 726,883 | May 5 | 101 | 24 | 104 | 25 |
| Douglas, Thomas, New York, N. Y. Comb | 727,312 | May 5 | 912 | 198 | 104 | 197 |
| Douglas, William S., Emerson, Iowa. Mirror-bracket | 721,944 | Mar. 3 | 549 | 120 | 103 | 121 |
| Douglass, Benjamin F., St. Louis, Mo. Fly-killer stay | 720,334 | Feb. 10 | 1708 | 388 | 102 | 1201 |
| Douglass, Elias B., Cortland, assignor of forty-nine one-hundredths to E. Johnson, Seymour, Ind. Railway-frog | 719,571 | Feb. 3 | 296 | 68 | 102 | 884 |
| Douglass, Heman F. (See Slyder, William J., assignor.) | | | | | | |
| Douglass, Robert C. (See Bates and Douglass.) | | | | | | |
| Douhet, Edward J., Cleveland, Ohio. Dental disk-holder | 719,312 | Jan. 27 | 3404 | 759 | 102 | 766 |
| Douillet, Edouard. (See Pravicha and Douillet.) | | | | | | |
| Dousman, Hercules F. (See Lytle, Albert E., assignor.) | | | | | | |
| Dove, John M., Washington, D. C., assignor to Lanston Monotype Machine Company, New York, N. Y. Matrix-centering mechanism for type-machines | 745,800 | Dec. 1 | 872 | 197 | 107 | 1286 |
| Dover, George W. (See King, Frederick L., assignor.) | | | | | | |
| Dover, George W., Cranston, R. I. Pin-joint | 717,555 | Jan. 6 | 65 | 16 | 102 | 16 |
| Dover, George W., Cranston, R. I. Gem-setting | 717,824 | Jan. 6 | 588 | 131 | 102 | 127 |
| Dover, George W., Cranston, R. I. Gem-setting | 722,824 | Mar. 17 | 2203 | 492 | 103 | 500 |
| Dover, George W., Cranston, R. I. Pin-joint | 729,556 | June 2 | 64 | 16 | 104 | 1140 |
| Dover, George W., Cranston, R. I. Pin | 729,557 | June 2 | 65 | 17 | 104 | 1141 |
| Dover, George W., Cranston, R. I. Scarf-pin | 746,049 | Dec. 8 | 1361 | 303 | 107 | 1408 |
| Dover, George W., Providence, R. I. Pin | 742,401 | Oct. 27 | 3906 | 878 | 106 | 2118 |

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| Dow, Alonzo, Wooster, Ohio. Inhaler | 724,680 | Apr. 7 | 491 | 117 | 103 | 1274 |
| Dow Chemical Company. (See Dow, Herbert H., assignor.) | | | | | | |
| Dow Composing Machine Company. (See Grohmann, Carl L., assignor.) | | | | | | |
| Dow, David S., Seattle, Wash. Adjustable fixture for window-shades | 721,546 | Feb. 24 | 3993 | 909 | 102 | 1713 |
| Dow, Fred F., Fredericton, Canada. Burner | 738,779 | Sept. 15 | 2477 | 544 | 106 | 563 |
| Dow, Fred T., Schenectady, N. Y., assignor to General Electric Company. Synchronizing apparatus for alternators | 727,601 | May 12 | 1450 | 325 | 104 | 330 |
| Dow, Herbert H. (See Dow, Joseph H. and H. H.) | | | | | | |
| Dow, Herbert H., Midland, Mich. Manufacturing electrolytic or electric-light carbons | 718,437 | Jan. 13 | 1695 | ..... | 102 | 378 |
| Dow, Herbert H., Midland, Mich. Manufacturing electrolytic or electric-light carbons | 718,438 | Jan. 13 | 1696 | ..... | 102 | 378 |
| Dow, Herbert H., Midland, Mich. Means for preventing arcing in direct-current motors or generators | 730,523 | June 9 | 1832 | 408 | 104 | 1520 |
| Dow, Herbert H., Midland, Mich. Obtaining ammonia from ammonia-containing gases | 733,465 | July 14 | 1380 | 326 | 105 | 309 |
| Dow, Herbert H., Midland, Mich. Manufacturing bromin | 733,466 | July 14 | 1383 | 326 | 105 | 310 |
| Dow, Herbert H., Midland, Mich. Manufacturing bromids from bromin-containing solutions | 733,467 | July 14 | 1383 | 327 | 105 | 310 |
| Dow, Herbert H., assignor to Dow Chemical Company, Midland, Mich. Means for controlling the flow of gases | 733,464 | July 14 | 1378 | 326 | 105 | 308 |
| Dow, Herbert H., assignor to Dow Chemical Company, Midland, Mich. Extracting bromin from brine | 741,637 | Oct. 20 | 2398 | 538 | 106 | 1792 |
| Dow, Joseph H., deceased, (S. J. Dow, executrix,) and H. H. Dow, Midland, Mich. Speed-changing device | 718,922 | Jan. 20 | 2660 | 597 | 102 | 594 |
| Dow, Sarah J., executrix. (See Dow, Joseph H. and H. H.) | | | | | | |
| Dow, Wallace L. (See Miracle and Dow.) | | | | | | |
| Dow, Willard E., Braintree, Mass. Electrical ignition apparatus for gas-engines | 728,882 | May 26 | 3889 | 864 | 104 | 877 |
| Dowagiac Manufacturing Company. (See Bills, Wilmont, assignor.) | | | | | | |
| Dowagiac Manufacturing Company. (See Saltsman, David B., assignor.) | | | | | | |
| Dowd, Charles P., and J. H. Coleman, San Francisco, Cal. Bake-oven | 719,651 | Feb. 3 | 427 | 97 | 102 | 911 |
| Dowd, James W. (See Botkin, Murray R., assignor.) | | | | | | |
| Dowd, Jay, Madison, Conn. Preserving-basket | 738,301 | Sept. 8 | 1518 | 329 | 106 | 342 |
| Dowdall, Joseph P. (See Kenehan, Richard F., assignor.) | | | | | | |
| Dowell, John B., Bedford, Iowa. Stirrup | 745,332 | Dec. 1 | 31 | 7 | 107 | 1107 |
| Dowler, Joseph W., St. Louis, Mo. Milk product and making same | 730,888 | June 16 | 2476 | ..... | 104 | 1679 |
| Dowling, Charles J., Detroit, Kans. Shocker attachment for grain-binders | 746,473 | Dec. 8 | 2111 | 485, 486 | 107 | 1570 |
| Dowling, Charles W., Newark, Ohio. Trolley-restoring device | 740,105 | Sept. 29 | 4940 | 1109 | 106 | 1123 |
| Dowling, James, London, England. Paper folding or plaiting machine | 735,729 | Aug. 11 | 1323 | 285 | 105 | 1280 |
| Down, Ernest U., Haskins, assignor of one-fourth to W. Kern and B. A. Keeler, Waterville, Ohio. Feeder attachment for threshing-machines | 744,054 | Nov. 17 | 2489 | 534, 535 | 107 | 560 |
| Downard, James S., and B. A. Roloson, Lima, Ohio. Apparatus for treating rock-asphalt | 722,500 | Mar. 10 | 1586 | 350 | 103 | 357 |
| Downer, Hawes & Company. (See Hawes, George E., assignor.) | | | | | | |
| Downer, Huntington. Grants Pass, Oreg. Attachment for cultivating implements | 743,698 | Nov. 10 | 1783 | 376 | 107 | 397 |
| Downes, Andrew J., Philadelphia, Pa. Electrothermic instrument | 728,883 | May 26 | 3890 | 865 | 104 | 877 |
| Downes, Louis W., assignor to D. & W. Fuse Company, Providence, R. I. Circuit-terminal for fuses | 734,407 | July 21 | 3159 | 742 | 105 | 701 |
| Downes, Louis W., assignor to D. & W. Fuse Company, Providence, R. I. Electric safety-fuse or cut-out | 737,368 | Aug. 25 | 4356 | 971, 972 | 105 | 1961 |
| Downes, Louis W., assignor to D. & W. Fuse Company, Providence, R. I. Electric fuse or cut-out | 737,369 | Aug. 25 | 4359 | 972 | 105 | 1961 |
| Downes, Louis W., assignor to D. & W. Fuse Company, Providence, R. I. Fuse casing and switch | 743,471 | Nov. 10 | 1362 | 279 | 107 | 306 |
| Downes, Louis W., assignor to D. & W. Fuse Company, Providence, R. I. Electric fuse or cut-out | 746,050 | Dec. 8 | 1362 | 304 | 107 | 1408 |
| Downey, Maurice S., Chicago, Ill. Shipping-case | 733,632 | July 14 | 1666 | 396 | 105 | 369 |
| Downie, John D., Avonmore, assignor to Ontario Wind Engine and Pump Company, Limited, Toronto, Canada. Adjustable foot-gear for windmills | 730,524 | June 9 | 1833 | 408 | 104 | 1521 |
| Downing, Burton J., Antelope Springs, Colo. Lantern | 718,105 | Jan. 13 | 1098 | 243 | 102 | 252 |
| Downing, Jacob, Denver, Colo. Agricultural implement | 740,633 | Oct. 6 | 477 | 105 | 106 | 1349 |
| Downing, Wellington, Erie, Pa. Folding-machine | 742,299 | Oct. 27 | 3731 | 833, 834 | 106 | 2083 |
| Downing, William H., Parkersburg, W. Va. Machine for screwing or unscrewing well-casing sections | 719,766 | Feb. 3 | 653 | 149, 150 | 102 | 960 |
| Downing, William H., Parkersburg, W. Va., assignor of one-half to J. W. Solley. Tubing-tongs | 729,294 | May 26 | 4627 | 1023 | 104 | 1030 |
| Downman, Robert H. (See Shaw, Albert L., assignor.) | | | | | | |
| Downs, L. M. (See Tverdahl, Ole, assignor.) | | | | | | |
| Downs, Theodore, assignor of one-half to J. J. Lisch, Springfield, Ohio. Pump | 731,549 | June 23 | 3743 | 834 | 104 | 1954 |
| Downs, Wallace A. (See Cole, Henry W. N., assignor.) | | | | | | |
| Downs, William F., Jersey, City, N. J. Treating rebellious ores of the rare metals | 726,884 | May 5 | 102 | ..... | 104 | 25 |
| Dowsing, Herbert J., London, England. Radiant-heat and heat-light bath | 730,750 | June 9 | 2218 | 493, 494 | 104 | 1605 |
| Dowsley, Thomas B., assignor to T. C. Hatton, Owen Sound, Canada. Carriage-spring | 718,704 | Jan. 20 | 2257 | 496 | 102 | 511 |
| Doyle, Adolphus M., Leoti, Kans. Combined lock and latch | 740,826 | Oct. 6 | 833 | 187 | 106 | 1424 |
| Doyle, Francis J., Chicago, Ill. Furnace | 742,612 | Oct. 27 | 4289 | 966, 967 | 106 | 2198 |
| Doyle, Francis J., Chicago, Ill. Steam-boiler and furnace | 742,613 | Oct. 27 | 4294 | 967, 968 | 106 | 2199 |
| Doyle, Francis J., Chicago, Ill. Gas-stove | 742,844 | Nov. 3 | 45 | 11, 12 | 107 | 12 |
| Doyle, George B., Berkeley, Cal. Manifold-book and carbon-carrier therefor | 718,106 | Jan. 13 | 1100 | 243 | 102 | 252 |
| Doyle, John, Norwood, N. J. Telegraphic system | 720,901 | Feb. 17 | 2749 | 633 | 102 | 1431 |
| Doyle, John A., assignor of one-half to C. W. Nick, Erie, Pa. Toy | 732,056 | June 30 | 4685 | 1046 | 104 | 2165 |
| Doyle, John H., New Orleans, La. Means for flushing drain-pipes | 734,520 | July 28 | 3363 | 787 | 105 | 759 |
| Doyle, John H., New Orleans, La. Device for flushing drain-pipes | 734,682 | July 28 | 3668 | 859 | 105 | 823 |
| Doyle, Michael. (See Drum and Doyle.) | | | | | | |
| Dozer, David E. (See Fitch, Philip S., assignor.) | | | | | | |
| Drabble, George T., assignor of one-half to Needham, Veall and Tyzack, Limited, Sheffield, England. Cutlery and making same | 747,050 | Dec. 15 | 3212 | 732 | 107 | 1841 |
| Draeger, Franz, Dresden, Germany. Implement for clearing streets, roads, or footpaths | 731,762 | June 23 | 4130 | 922 | 104 | 2032 |
| Drain, William J., Jr., Philadelphia, Pa. Jewelry-display stand | 730,619 | June 9 | 1997 | 444 | 104 | 1558 |
| Drake, Chester T., Chicago, Ill. Apparatus for excavating rock | 747,867 | Dec. 22 | 4729 | 1068 | 107 | 2196 |
| Drake, Chester T., Chicago, Ill. Excavating-machine | 747,868 | Dec. 22 | 4730 | 1068, 1069 | 107 | 2197 |
| Drake, Chester T., Chicago, Ill. Excavating-machine | 747,869 | Dec. 22 | 4733 | 1069 | 107 | 2197 |
| Drake, Edwin R., De Land, Fla. Suspensory bandage | 744,512 | Nov. 17 | 3346 | 720 | 107 | 744 |
| Drake, Edwin R., De Land, Fla. Suspensory bandage | 746,474 | Dec. 8 | 2115 | 486 | 107 | 1571 |
| Drake, Ellis, and H. Folsom, Stoughton, assignors to J. G. McCarter, Boston, Mass. Folding-machine | 727,313 | May 5 | 913 | 198, 199 | 104 | 197 |

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| Drake, F. M., *et al.* (See Fogle, Archie B., assignor.) | | | | | | |
| Drake, Harvey F., Rochester, N. Y. Pocket cigar-shield | 717,556 | Jan. 6 | 65 | 16 | 102 | 16 |
| Drake, Homer C. (See Brown, Harry A. J., assignor.) | | | | | | |
| Drake, Irving L. (See Lindquist, Erick W., assignor.) | | | | | | |
| Drake, John A., Halifax, England. Construction of arches | 727,110 | May 5 | 555 | 119 | 104 | 121 |
| Drake, Joseph E., Blue Rapids, Kans. Grain-door | 740,407 | Oct. 6 | 35 | 8 | 106 | 1251 |
| Drake, Julian F., Tracy, Minn. Detachable boiler-flue | 718,609 | Jan. 20 | 2082 | 453 | 102 | 477 |
| Drake, Millie, *et al.* (See Miller, Dorr, assignor.) | | | | | | |
| Drake, Samuel M., Elma, Iowa. Fence-joining device | 747,051 | Dec. 15 | 3213 | 732 | 107 | 1842 |
| Drake, William. (See Driscoll and Drake.) | | | | | | |
| Drake, William G., Donora, Pa. Stovepipe-fastener | 745,003 | Nov. 24 | 4229 | 916 | 107 | 947 |
| Drane, H. J. (See Battle, Leander R., assignor.) | | | | | | |
| Drane, Herbert J. (See Stempel, Omar A., assignor.) | | | | | | |
| Draper, Arthur P., St. Louis, Mo. Skate | 748,172 | Dec. 29 | 5338 | 1214 | 107 | 2351 |
| Draper, Benjamin, Liverpool, England. Tube or rod clamp and coupling | 733,376 | July 14 | 1223 | 289 | 105 | 274 |
| Draper, Benjamin, and C. W. Carter, Liverpool, England. Rotary fluid-pressure engine | 732,280 | June 30 | 5144 | {1142 {1143 | 104 | 2260 |
| Draper, Clare H. (See Draper, William F. and C. H.) | | | | | | |
| Draper, Clare H., assignor to Draper Company, Hopedale, Mass. Warp-stop-motion mechanism | 724,448 | Apr. 7 | 47 | 12 | 103 | 1180 |
| Draper, Clare H., assignor to Draper Company, Hopedale, Mass. Selvage-motion for looms | 729,046 | May 26 | 4185 | 926 | 104 | 938 |
| Draper, Clare H., assignor to Draper Company, Hopedale, Mass. Shedding mechanism for looms | 734,834 | July 28 | 3983 | 931 | 105 | 886 |
| Draper, Clare H., assignor to Draper Company, Hopedale, Mass. Steel-harness motion for looms | 744,910 | Nov. 24 | 4057 | 875 | 107 | 913 |
| Draper Company. (See Ambler, George B., assignor.) | | | | | | |
| Draper Company. (See Anderson, John, assignor.) | | | | | | |
| Draper Company. (See Aumann, Louis A., assignor.) | | | | | | |
| Draper Company. (See Austin, Bingham F. S., assignor.) | | | | | | |
| Draper Company. (See Barber, William, assignor.) | | | | | | |
| Draper Company. (See Baxter, William, assignor.) | | | | | | |
| Draper Company. (See Benson, Arthur E., assignor.) | | | | | | |
| Draper Company. (See Bevill, Sidi H., assignor.) | | | | | | |
| Draper Company. (See Bracken, Howard W., assignor.) | | | | | | |
| Draper Company. (See Brooks, John C., assignor.) | | | | | | |
| Draper Company. (See Chandler, Alfred D., assignor.) | | | | | | |
| Draper Company. (See Collins, George A., assignor.) | | | | | | |
| Draper Company. (See Côté, Henry, assignor.) | | | | | | |
| Draper Company. (See Cunniff, Edward and J. V., assignors.) | | | | | | |
| Draper Company. (See Cunniff, John V., assignor.) | | | | | | |
| Draper Company. (See Cunniff, John V. and E., assignors.) | | | | | | |
| Draper Company. (See Day, Charles M., assignor.) | | | | | | |
| Draper Company. (See Day and Anderson, assignors.) | | | | | | |
| Draper Company. (See Draper, Clare H., assignor.) | | | | | | |
| Draper Company. (See Draper, George O., assignor.) | | | | | | |
| Draper Company. (See Draper, William F., assignor.) | | | | | | |
| Draper Company. (See Draper, William F. and C. H., assignors.) | | | | | | |
| Draper Company. (See Eaves, Arthur, assignor.) | | | | | | |
| Draper Company. (See Edwards, John C., assignor.) | | | | | | |
| Draper Company. (See Emery, Abram D., assignor.) | | | | | | |
| Draper Company. (See Fair, Richard, assignor.) | | | | | | |
| Draper Company. (See Fling, Elmer S., assignor.) | | | | | | |
| Draper Company. (See Fowler, William A., assignor.) | | | | | | |
| Draper Company. (See Hawley, Charles T., assignor.) | | | | | | |
| Draper Company. (See Haynes, William, assignor.) | | | | | | |
| Draper Company. (See Hebert, Henry, assignor.) | | | | | | |
| Draper Company. (See Hunnewell, Henry T., assignor.) | | | | | | |
| Draper Company. (See Jamieson, Robert, assignor.) | | | | | | |
| Draper Company. (See Johnson, Joshua P., assignor.) | | | | | | |
| Draper Company. (See Jordan, Humphreys W., assignor.) | | | | | | |
| Draper Company. (See Kelly, Roland R., assignor.) | | | | | | |
| Draper Company. (See Knox, Clarence I., assignor.) | | | | | | |
| Draper Company. (See Lee, Benjamin F., assignor.) | | | | | | |
| Draper Company. (See Littlefield, Charles A., assignor.) | | | | | | |
| Draper Company. (See Lovejoy, Charles E., assignor.) | | | | | | |
| Draper Company. (See Marcoux, Alida M., assignor.) | | | | | | |
| Draper Company. (See Metcalf, Clarence E., assignor.) | | | | | | |
| Draper Company. (See Muldowney and Tomlinson, assignors.) | | | | | | |
| Draper Company. (See Northrop, Jonas, assignor.) | | | | | | |
| Draper Company. (See O'Neil, John R., assignor.) | | | | | | |
| Draper Company. (See Owen and Kirk, assignors.) | | | | | | |
| Draper Company. (See Parker, George H., assignor.) | | | | | | |
| Draper Company. (See Pearce, Samuel, assignor.) | | | | | | |
| Draper Company. (See Peck, Ira F., assignor.) | | | | | | |
| Draper Company. (See Rhoades, Alonzo E., assignor.) | | | | | | |
| Draper Company. (See Robinson, David, assignor.) | | | | | | |
| Draper Company. (See Roper, Charles F., assignor.) | | | | | | |
| Draper Company. (See Russell, Charles W., assignor.) | | | | | | |
| Draper Company. (See Sawyer, Orren A., assignor.) | | | | | | |
| Draper Company. (See Snow, Isaac, assignor.) | | | | | | |
| Draper Company. (See Stafford, Alfred E., assignor.) | | | | | | |
| Draper Company. (See Stimpson, Edward S., assignor.) | | | | | | |
| Draper Company. (See Stimpson, Wallace L., assignor.) | | | | | | |
| Draper Company. (See Stimpson and Short, assignors.) | | | | | | |
| Draper Company. (See Sullivan, Michael E., assignor.) | | | | | | |
| Draper Company. (See Tichon, Joseph E., assignor.) | | | | | | |
| Draper Company. (See Tomlinson and Muldowney, assignors.) | | | | | | |
| Draper Company. (See Welch, William, assignor.) | | | | | | |
| Draper Company. (See Whiting, Charles D., assignor.) | | | | | | |
| Draper Company. (See Whitmore, Fred A., assignor.) | | | | | | |
| Draper Company. (See Wood, Everett S., assignor.) | | | | | | |
| Draper, Francis W., and J. Courville, assignors to Farrand & Votey Organ Company, Detroit, Mich. Self-playing attachment for keyboard musical instruments | 725,424 | Apr. 14 | 1851 | 414 | 103 | 1576 |
| Draper, George O. (See Marcy, Frank M., assignor.) | | | | | | |
| Draper, George O. (See Peck, Ira F., assignor.) | | | | | | |
| Draper, George O., Hopedale, Mass. Automobile | 730,352 | June 9 | 1511 | 335 | 104 | 1452 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|
| | | | Spec. | Dr'g. | Vol. | Page. |
| Draper, George O., Hopedale, Mass. Automobile | 730,353 | June 9 | 1512 | 335 | 104 | 1453 |
| Draper, George O., assignor to Draper Company, Hopedale, Mass. Ring-spinning apparatus | 741,777 | Oct. 20 | 2678 | 597 | 106 | 1851 |
| Draper Manufacturing Company. (See Draper, Thomas, assignor.) | | | | | | |
| Draper, Thomas, assignor to Draper Manufacturing Company, Port Huron, Mich. Combined universal-joint pipe coupling and plug | 747,152 | Dec. 15 | 3393 | 769 | 107 | 1882 |
| Draper, William F., assignor to Draper Company, Hopedale, Mass. Filling-replenishing loom | 726,518 | Apr. 28 | 3910 | 885 | 103 | 2034 |
| Draper, William F., assignor to Draper Company, Hopedale, Mass. Clamping device for heddle bars or supports | 729,047 | May 26 | 4189 | 926 | 104 | 939 |
| Draper, William F. and C. H., assignors to Draper Company, Hopedale, Mass. Automatic filling-replenishing loom | 725,229 | Apr. 14 | 1514 | 344<br>345 | 103 | 1505 |
| Draver, Emil R., Winchester, Ind. Dust-collector | 720,791 | Feb. 17 | 2556 | 589<br>590 | 102 | 1391 |
| Draver, Emil R., Richmond, Ind. Dust-collector | 721,360 | Feb. 24 | 3661 | 833<br>834 | 102 | 1643 |
| Draver, Emil R., Richmond, Ind. Undulatory bolting-machine | 735,730 | Aug. 11 | 1324 | 286 | 105 | 1280 |
| Draver, Emil R., Richmond, Ind. Dust-collector. (Reissue) | 12,174 | Nov. 24 | 4889 | 1066<br>1067<br>1068 | 107 | 1082 |
| Draver, Henery C., Richmond, Ind. Dust-proof joint-packing for dust-collectors, &c | 735,731 | Aug. 11 | 1328 | 287 | 105 | 1281 |
| Drawbaugh, Daniel, Eberlys Mill, Pa. Magneto-electric machine | 733,948 | July 21 | 2273 | 535 | 105 | 513 |
| Drawbaugh, Daniel, Eberlys Mill, Pa. Battery | 733,949 | July 21 | 2275 | 535 | 105 | 513 |
| Drawbaugh, Daniel, Eberlys Mill, Pa. Means for shaking milk in testing-bottles | 747,870 | Dec. 22 | 4735 | 1070 | 107 | 2198 |
| Drayer, Ulysses S., Altoona, Pa. Roping-iron for railway-cars | 728,212 | May 19 | 2605 | 582 | 104 | 594 |
| Drees, Albertine, Newark, N. J. Hair-waver | 731,763 | June 23 | 4132 | 922 | 104 | 2032 |
| Drees, William F., Schenectady, N. Y., assignor to General Electric Company. Form for winding armature-coils | 733,633 | July 14 | 1668 | 396 | 105 | 369 |
| Dreger, Max, and C. Pohlit, assignors to F. Krupp, Essen-on-the-Ruhr, Germany. Cartridge-shell | 735,351 | Aug. 4 | 590 | 122 | 105 | 1107 |
| Dreher, Clarence H., Stroudsburg, Pa. Compound tool | 724,268 | Mar. 31 | 4938 | 1105 | 103 | 1089 |
| Dreibelbis, Alfred S., Reading, Pa. Railway-tie | 746,304 | Dec. 8 | 1830 | 415 | 107 | 1510 |
| Dreis, Nicholas, Hastings, Minn. Scraper and grader | 732,621 | June 30 | 5790 | 1284 | 104 | 2397 |
| Dreiser, John, New York, N. Y. Fishing-reel | 726,655 | Apr. 28 | 4162 | 938<br>939 | 103 | 2084 |
| Dreses, Henry, Cincinnati, Ohio. Gearing for drill-presses | 728,213 | May 19 | 2606 | 582<br>583 | 104 | 594 |
| Dressel, Frederick W., assignor to Dressel Railway Lamp Works, New York, N. Y. Signal-lamp | 723,145 | Mar. 17 | 2758 | 620 | 103 | 614 |
| Dressel, Frederick W., assignor to Dressel Railway Lamp Works, New York, N. Y. Signal-lantern | 723,146 | Mar. 17 | 2760 | 620 | 103 | 615 |
| Dressel, Frederick W., New York, N. Y., assignor to Dressel Railway Lamp Works. Signal-lamp for railway-cars | 724,169 | Mar. 31 | 4726 | 1060 | 103 | 1048 |
| Dressel, Frederick W., New York, N. Y., assignor to Dressel Railway Lamp Works. Signal-lantern | 745,164 | Nov. 24 | 4599 | 997<br>998 | 107 | 1023 |
| Dressel, Frederick W., New York, N. Y., assignor to Dressel Railway Lamp Works. Signal-lantern | 745,165 | Nov. 24 | 4601 | 998 | 107 | 1023 |
| Dressel, Frederick W., and R. Black, assignors to Dressel Railway Lamp Works, New York, N. Y. Lantern | 740,974 | Oct. 6 | 1084 | 245<br>246 | 106 | 1477 |
| Dressel, Oscar. (See Israel and Dressel.) | | | | | | |
| Dressel, Oscar, Elberfeld, Germany, assignor to Farbenfabriken of Elberfeld Co., New York, N. Y. 1-acetylamido-3-4 diamidobenzene | 742,845 | Nov. 3 | 49 | ------ | 107 | 13 |
| Dressel Railway Lamp Works. (See Black, Robert, assignor.) | | | | | | |
| Dressel Railway Lamp Works. (See Dressel, Frederick W., assignor.) | | | | | | |
| Dressel Railway Lamp Works. (See Dressel and Black, assignors.) | | | | | | |
| Dresser, Charles A., assignor to G. A. E. and F. W. Kohler, Chicago, Ill. Controlling device for motors | 744,178 | Nov. 17 | 2740 | 584<br>585 | 107 | 612 |
| Dresser, Earl H., Litchfield, Mich. Artificial-stone post | 741,469 | Oct. 13 | 2079 | 461 | 106 | 1710 |
| Dresser, Solomon R., and A. B. Henry, Bradford, Pa.; said Henry assignor to said Dresser. Repair-sleeve for fluid-conducting pipes | 732,400 | June 30 | 5373 | 1190 | 104 | 2308 |
| Dressler, Oscar. (See Van Schott, Gerard J., assignor.) | | | | | | |
| Dressler, Robert T., Hastings, Nebr. Heating-furnace | 718,989 | Jan. 27 | 2796 | 626<br>627 | 102 | 638 |
| Dressler, Rudolph, New York, assignor of one-third to A. J. Holm, Brooklyn, N. Y. Cork-puller | 730,007 | June 2 | 895 | 199 | 104 | 1310 |
| Drew, Curtis G., Tiffin, Ohio. Manufacture of integral stems and bases for blown bowls | 735,732 | Aug. 11 | 1330 | 287 | 105 | 1281 |
| Drew, George W., San Francisco, Cal. Carpenter's vise | 729,741 | June 2 | 400 | 90 | 104 | 1210 |
| Drew, Herbert H., Waterloo, Wis. Elevated-track switch | 731,440 | June 23 | 3531 | 786 | 104 | 1912 |
| Drew, Herbert H., Waterloo, Wis. Elevated carrier | 741,236 | Oct. 13 | 1590 | 357<br>358 | 106 | 1605 |
| Drew, Willis A., *et al.* (See Waters, Frank J., assignor.) | | | | | | |
| Drewery, Harry, Soda Springs, Idaho. Condiment-holder | 734,165 | July 21 | 2708 | 637 | 105 | 606 |
| Drewsen, Viggo, New York, N. Y. Making wood-pulp | 730,439 | June 9 | 1673 | ------ | 104 | 1485 |
| Drewsen, Viggo, New York, N. Y. Manufacturing products from cornstalks, sugar-cane, &c | 731,290 | June 16 | 3236 | ------ | 104 | 1832 |
| Drewsen, Viggo, New York, N. Y., and L. J. Dorenfeldt, Trondhjem, Norway. Utilizing sulfite lyes | 726,036 | Apr. 21 | 2675 | ------ | 103 | 1830 |
| Dreyer, Harry H., Sentinel Butte, N. D. Trigger-tongue for traps | 718,750 | Jan. 20 | 2349 | 519 | 102 | 530 |
| Dreyer, Harry H., Medora, N. D. Vehicle-tongue | 732,622 | June 30 | 5791 | 1284 | 104 | 2397 |
| Dreyer, Hermann F. (See Haley and Dreyer.) | | | | | | |
| Dreyer, Wilhelm, Wesseling, near Cologne, Germany. Ventilating-window for roofs | 719,203 | Jan. 27 | 3197 | 713 | 102 | 720 |
| Dreyfus, Joseph, *et al.* (See Farmer, Julius M., assignor.) | | | | | | |
| Driehaus, Henry, Hendricks, Pa. Tool-holder | 723,848 | Mar. 31 | 4069 | 918 | 103 | 912 |
| Dring, John. (See Wilson, Bassett, and Dring.) | | | | | | |
| Dring, John, London, England. Mechanism for transmission of power | 731,671 | June 23 | 3962 | 881<br>882 | 104 | 1998 |
| Dring, John, London, England. Mechanism for the transmission of power | 732,057 | June 30 | 4686 | 1047 | 104 | 2165 |
| Drischel, George W. (See Fogarty, William J., assignor.) | | | | | | |
| Driscoll, Daniel W., and W. Drake, New York, N. Y. Shade or curtain holder | 738,888 | Sept. 15 | 2686 | 592 | 106 | 609 |
| Driscoll, James J., *et al.* (See Balsley, Charles H., assignor.) | | | | | | |
| Driscoll, Lawrence J., and J. W. Washburn, Minneapolis, Minn. Temporary shoe-lacing | 744,729 | Nov. 24 | 3752 | 810 | 107 | 848 |
| Driver, Augustus H. M., and G. Norman, Birmingham, England. Testing for or detecting and correcting faults or errors in tubular articles | 740,827 | Oct. 6 | 836 | 187 | 106 | 1424 |
| Driver, Augustus H. M., and G. Norman, Birmingham, England. Apparatus for testing and straightening gun-barrels or tubular articles | 740,975 | Oct. 6 | 1085 | 245 | 106 | 1477 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Driver, George H., Willesden Junction, and J. P. K. Clark, Sudbury, England. Apparatus for weighing tea, &c | 748,055 | Dec. 29 | 5121 | 1157, 1158, 1159 | 107 | 2304 |
| Driver, John A., Allegheny, Pa. Metallic car | 742,846 | Nov. 3 | 49 | 12 | 107 | 13 |
| Drohovith, Clemens, West Superior, Wis. Boat | 721,868 | Mar. 3 | 394 | 87 | 103 | 86 |
| Drolet, Charles, assignor to Fels & Co., Philadelphia, Pa. Soap-press | 736,706 | Aug. 18 | 3135 | 690, 691 | 105 | 1683 |
| Drösse, Hermann, Charlottenburg, near Berlin, Germany. Razor | 719,313 | Jan. 27 | 3405 | 759 | 102 | 766 |
| Drost, Adolf, Essen, Germany. Chain-link | 742,402 | Oct. 27 | 3907 | 878 | 106 | 2119 |
| Droste, Joseph T., St. Louis, Mo. Dumping-wagon | 728,687 | May 19 | 3526 | 784 | 104 | 788 |
| Drouillard, Albert, Windsor, Canada, assignor, by mesne assignments, of one-half to Detroit Ventilating Company, Limited, Detroit, Mich. Ventilating device for water-closets. | 747,389 | Dec. 22 | 3843 | 865 | 107 | 1995 |
| Drouillard, Albert, Windsor, Canada, and J. M. Teahen, assignors to Detroit Ventilating Company, Limited, Detroit, Mich. Water-closet ventilator | 725,425 | Apr. 14 | 1853 | 414 | 103 | 1577 |
| Drown, Merrill J., Madison, Wis. Cattle-stall | 737,370 | Aug. 25 | 4361 | 972 | 105 | 1962 |
| Drubech, Sam, assignor of two-thirds to J. Bamberger and M. Winer, Chicago, Ill. Folding swing-bed | 720,410 | Feb. 10 | 1835 | 418 | 102 | 1228 |
| Drucker & Company, N. (See Manning, William M., assignor.) | | | | | | |
| Drucker, Morris N., Cincinnati, Ohio. Trunk | 732,058 | June 30 | 4688 | 1047 | 104 | 2165 |
| Drucker, Morris N., and W. Haensler, Cincinnati, Ohio; said Haensler assignor to said Drucker. Automatic latch | 736,707 | Aug. 18 | 3140 | 691 | 105 | 1684 |
| Drucklieb, Charles A. (See Sticker, Francis, assignor.) | | | | | | |
| Druen, Bernard D., New Haven, Conn. Pole-socket | 725,685 | Apr. 21 | 2360 | 534 | 103 | 1699 |
| Druiding, Olive. (See Merkel, Sanders, and Hellman, assignors.) | | | | | | |
| Druley, Charles C. (See Hendricks, William H., assignor.) | | | | | | |
| Drum, James, and M. Doyle, Brazil, Ind. Safety device for elevators | 726,656 | Apr. 28 | 4165 | 939 | 103 | 2085 |
| Drummond, Isaac W., New York, N. Y. Device or means for exhibiting and advertising paints, colors, dyes, or similar goods | 731,550 | June 23 | 3744 | 834 | 104 | 1955 |
| Drummond, Thomas A. (See Leitch and Drummond.) | | | | | | |
| Drury, Michael, Houghton, Mich. Mill for crushing sand | 738,889 | Sept. 15 | 2688 | 593 | 106 | 609 |
| Dryden, George B., Chicago, Ill. Vehicle-wheel | 739,658 | Sept. 22 | 4089 | 911 | 106 | 924 |
| Dryden, George B., Chicago, Ill., assignor to Firestone Tire & Rubber Company, Charleston, W. Va., and Akron, Ohio. Rubber vehicle-tire | 724,681 | Apr. 7 | 492 | 118 | 103 | 1274 |
| Dryden, Isaac A. (See Kirkpatrick and Dryden.) | | | | | | |
| Drysdale, William A., Philadelphia, Pa. Music-box | 728,449 | May 19 | 3061 | 674, 675, 676, 677, 678 | 104 | 690 |
| Du Bois, Philip H., Waterloo, Nebr. Hame attachment | 729,742 | June 2 | 401 | 90 | 104 | 1210 |
| Du Bois-Reymond, Alard, Berlin, assignor to Norddeutscher Lloyd, Bremen, Germany. Means for operating bulkhead-doors | 718,973 | Jan. 27 | 2761 | 618 | 102 | 630 |
| Du Bois, William W., Newburgh, N. Y. Device for fastening the slats of shutters or blinds | 740,634 | Oct. 6 | 479 | 105 | 106 | 1349 |
| Du Boise, Alfonse R., Flint, Mich. Hat-display cabinet | 720,411 | Feb. 10 | 1837 | 419 | 102 | 1229 |
| Du Brau, Herman, Baltimore, Md. Apparatus for making relief-work | 720,902 | Feb. 17 | 2751 | 633 | 102 | 1431 |
| Du Four, Joseph L. M., South Boundbrook, N. J. Shingle | 742,614 | Oct. 27 | 4298 | 969 | 106 | 2200 |
| Du Frane, Charles W., Hoboken, N. J. Bag-fastener | 738,014 | Sept. 1 | 919 | 203 | 106 | 201 |
| Du Ket, John J., Toledo, Ohio. Folding jack-o'-lantern | 736,506 | Aug. 18 | 2745 | 601 | 105 | 1604 |
| Du Ket, John J., Toledo, Ohio. Jack-o'-lantern helmet | 737,371 | Aug. 25 | 4363 | 973 | 105 | 1962 |
| Du Pont, Alfred I., Wilmington, Del. Glazing powder | 733,741 | July 14 | 1845 | 435, 436 | 105 | 406 |
| Du Pont, Alfred I., Wilmington, Del. Apparatus for glazing powder | 733,742 | July 14 | 1847 | 436, 437 | 105 | 406 |
| Du Pont, Antoine, and G. J. Kobusch, St. Louis, Mo. Car construction | 734,409 | July 21 | 3161 | 743 | 105 | 701 |
| Du Pont, Francis I., Wilmington, Del. Pulping-machine | 720,379 | Feb. 10 | 1789 | 405, 406 | 102 | 1218 |
| Du Pont, Francis I., Wilmington, Del. Purifying nitrocellulose | 724,932 | Apr. 7 | 943 | 217 | 103 | 1371 |
| Du Pont, Francis I., Wilmington, Del. Apparatus for condensing and mixing acids | 736,625 | Aug. 18 | 2977 | 655 | 105 | 1650 |
| Du Pont, Francis I., Wilmington, Del. Apparatus for making mixtures of nitric and sulfuric acids | 743,922 | Nov. 10 | 2184 | 471 | 107 | 481 |
| Du Pont, Francis I., Wilmington, Del. Apparatus for molding smokeless powder | 746,375 | Dec. 8 | 1944 | 444 | 107 | 1533 |
| Du Pree, Lewis J., assignor of one-half to J. T. King, Griffin, Ga. Hen's nest | 718,197 | Jan. 13 | 1257 | 276 | 102 | 287 |
| Du Quesne, Joseph S. (See Clark, William K., assignor.) | | | | | | |
| Du Quesne, Joseph S. (See Clark and Du Quesne.) | | | | | | |
| Du Rocher, Charles L. (See Dieringer and Du Rocher.) | | | | | | |
| Du Vivier, Charles L., New York, N. Y. Bottle-capping machine | 720,570 | Feb. 17 | 2162 | 502 | 102 | 1309 |
| Dubé, Arthur, Fall River, Mass. Weft-fork mechanism | 731,868 | June 23 | 4307 | 961 | 104 | 2072 |
| Dubler, John G., St. Louis, Mo. Developer | 721,029 | Feb. 17 | 3000 | 689 | 102 | 1485 |
| Dubois, Alexander N., Philadelphia, Pa. Giving lisle-thread finish to vegetable fabrics | 723,147 | Mar. 17 | 2761 | ------ | 103 | 615 |
| Dubois, Eugene L., New Orleans, La. Mold-box for conduit-joints | 746,051 | Dec. 8 | 1365 | 304 | 107 | 1408 |
| Dubois, Octave. (See Montreuil, Eugene, assignor.) | | | | | | |
| Ducasble, Alfred, Asnières, France. Celiular rubber tire for vehicles | 718,439 | Jan. 13 | 1697 | 374 | 102 | 378 |
| Ducharme, John, Roseton, N. Y. Ice-cutter | 728,555 | May 19 | 3275 | 725 | 104 | 732 |
| Duchemin, Edmund H., Newark, N. J. Curtain | 730,440 | June 9 | 1673 | 375 | 104 | 1486 |
| Duchemin, Edmund H., Newark, N. J. Curtain | 730,441 | June 9 | 1674 | 375 | 104 | 1486 |
| Duchemin, Edmund H., Newark, N. J. Curtain | 730,442 | June 9 | 1675 | 375 | 104 | 1486 |
| Duchemin, Edmund H., Newark, N. J. Curtain | 730,443 | June 9 | 1677 | 376 | 104 | 1486 |
| Duchemin, Edmund H., Newark, N. J. Curtain-roller | 730,444 | June 9 | 1678 | 376 | 104 | 1486 |
| Ducker Automatic Gas Cut-Off Company. (See Ducker, Louis F., assignor.) | | | | | | |
| Ducker, Louis F., Boston, Mass., assignor to Ducker Automatic Gas Cut-Off Company, Augusta, Me. Automatic cut-off for gas-burners | 734,521 | July 28 | 3364 | 787 | 105 | 759 |
| Duckett, William, Lansing, Kans. Lawn-mower | 746,475 | Dec. 8 | 2115 | 486 | 107 | 1571 |
| Duckro, Joseph. (See Paschen and Duckro.) | | | | | | |
| Ducretet, Eugène, Paris, France. Transmitting and receiving apparatus for Hertzian waves | 726,413 | Apr. 28 | 3681 | 834 | 103 | 1991 |
| Dudley, Carl H. (See Heusner, Dudley, and Graves.) | | | | | | |
| Dudley, Charles F., *et al.* (See Greene, Fred C., assignor.) | | | | | | |
| Dudley, George W., Staunton, Va. Apparatus for cipher-writing | 727,915 | May 12 | 2067 | 460, 461 | 104 | 458 |
| Dudley, Walter J., Bangor, Me. Electric clock | 718,610 | Jan. 20 | 2083 | 453 | 102 | 477 |
| Dudley, Walter J., Bangor, Me. Automatic gas-burner | 747,244 | Dec. 15 | 3564 | 807 | 107 | 1916 |
| Dudley, William H. C., Jr., Americus, Ga. Developing-tray | 740,828 | Oct. 6 | 838 | 188 | 106 | 1424 |
| Dudley, William W., assignor to Trenton Watch Company, Trenton, N. J. Stem winding and setting watch | 728,090 | May 12 | 2390 | 531 | 104 | 526 |
| Duemler, John C., South Bethlehem, Pa., assignor to H. Brinton & Co. Knitting-machine | 744,311 | Nov. 17 | 2994 | 642 | 107 | 669 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| Duerden, Lawrence L., Brooklyn, N. Y., assignor to Thompson & Norris Company. Paper box | 729,850 | June 2 | 607 | 133<br>134 | 104 | 1252 |
| Dueringer, Charles F., Guthrie, Ill. Grain-elevator | 733,824 | July 14 | 2028 | 477 | 105 | 443 |
| Duesler, Francis H., Johnstown, N. Y. Sheet-music holder | 722,004 | Mar. 3 | 656 | 146 | 103 | 142 |
| Duff, John T., Allegheny, Pa. Bell | 731,551 | June 23 | 3746 | 834 | 104 | 1955 |
| Duff, John T., Allegheny, Pa. Pulley | 731,552 | June 23 | 3747 | 835 | 104 | 1955 |
| Duff, Robert P. (See MacDowell and Sperling, assignors.) | | | | | | |
| Duff, Samuel E., Bellevue, Pa. Railway construction. (Reissue) | 12,126 | June 23 | 4635 | 1036 | 104 | 2140 |
| Duff, Samuel E., Bellevue, Pa. Railway substructure | 740,106 | Sept. 29 | 4941 | 1109 | 106 | 1123 |
| Duffau, Pierre. (See Corne, Duffau, and Barathié.) | | | | | | |
| Duffek, Artur. (See Strenitz, Alexander, assignor.) | | | | | | |
| Duffie, John S., Washington, D. C. Distributer or salt and pepper shaker | 743,626 | Nov. 10 | 1668 | 350 | 107 | 372 |
| Duffield, Bethune, *et al.* (See La Flamboy, Harry C., assignor.) | | | | | | |
| Duffield, Thomas C., Bridgeton, N. J. Machine for producing glass insulators | 723,589 | Mar. 24 | 3606 | 805<br>806 | 103 | 798 |
| Duffield, Thomas C., Bridgeton, N. J. Machine for producing glass bottles | 736,708 | Aug. 18 | 3141 | 692<br>693 | 105 | 1685 |
| Duffing, George F. (See Davis, William W., assignor.) | | | | | | |
| Duffner, Matthew, Allegheny, Pa. Street-car fender | 743,699 | Nov. 10 | 1785 | 376<br>377 | 107 | 397 |
| Dufford, William N., Findlay, Ohio. Flange union | 735,221 | Aug. 4 | 365 | 70 | 105 | 1059 |
| Dufford, William N., Findlay, Ohio. Well-drilling machine | 735,222 | Aug. 4 | 367 | 70 | 105 | 1059 |
| Duffy, Anthony, San Francisco, Cal. Machinist's try-square | 738,422 | Sept. 8 | 1767 | 384 | 106 | 395 |
| Duffy, Jean H., assignor to H. C. Beitler, Chicago, Ill. Railway-spike | 727,111 | May 5 | 556 | 119 | 104 | 121 |
| Duffy, John A., Pomona, Cal. Nut-lock | 727,314 | May 5 | 916 | 199<br>200 | 104 | 197 |
| Duffy, John J., Washington, D. C. Temporary binder | 746,052 | Dec. 8 | 1366 | 305 | 107 | 1408 |
| Duffy, John W., *et al.* (See Pike, Daniel, assignor.) | | | | | | |
| Duffy, Joseph, Paterson, N. J. Brake-shoe for spinning, doubling, and twisting machines | 725,053 | Apr. 14 | 1174 | 265 | 103 | 1435 |
| Duffy, Peter, New York, N. Y. Piano | 738,890 | Sept. 15 | 2689 | 593<br>594 | 106 | 610 |
| Duffy, Peter, New York, N. Y. Key-bottom for pianos | 746,932 | Dec. 15 | 2982 | 686 | 107 | 1788 |
| Duffy, Thomas I., assignor to E. J. Hess, Chicago, Ill. Car-coupling | 724,087 | Mar. 31 | 4555 | 1025 | 103 | 1013 |
| Duffy, Thomas I., assignor to A. Crossman, trustee, Chicago, Ill. Carpet-sweeper | 743,838 | Nov. 10 | 2034 | 432<br>433 | 107 | 450 |
| Duffy, Thomas I., Austin, assignor to A. Crossman, trustee, Chicago, Ill. Bail-handle for carpet-sweepers | 744,312 | Nov. 17 | 2996 | 642 | 107 | 669 |
| Dufresne, Jere C., Trenton, N. J. Adjustable spanner-wrench | 738,015 | Sept. 1 | 920 | 203 | 106 | 201 |
| Dufresne, Peter, Springfield, Mass. Oil-burning heater | 721,164 | Feb. 24 | 3303 | 755 | 102 | 1570 |
| Dugan, Patrick J., Chestnuthill, Mass. Car-coupling | 748,173 | Dec. 29 | 5340 | 1215 | 107 | 2351 |
| Dugan, William J., Kansas City, Mo. Water-tube boiler | 742,847 | Nov. 3 | 51 | 12 | 107 | 13 |
| Duggan, Charles E., Detroit, Mich. Shield or protector for trunks, &c | 721,165 | Feb. 24 | 3304 | 755 | 102 | 1570 |
| Duggan, Charles E., Detroit, Mich., assignor to Stromberg, Kraus & Company, St. Louis, Mo. Lock | 741,778 | Oct. 20 | 2680 | 597 | 106 | 1851 |
| Duhachek, Joseph R., Emerick, Nebr. Corn-sheller | 744,313 | Nov. 17 | 2998 | 643 | 107 | 670 |
| Dühring, Emil, Berlin, Germany. Apparatus for forming tablets, &c | 728,091 | May 12 | 2391 | 532 | 104 | 526 |
| Dühring, Emil, Berlin, Germany. Packing-machine | 734,224 | July 21 | 2813 | 660<br>661 | 105 | 629 |
| Duiff, Thomas A., Rotterdam, Netherlands. Apparatus for regulating the speed of propeller-shafts | 731,869 | June 23 | 4307 | 961 | 104 | 2072 |
| Duke, Calvin F., and R. C. Berry, Indianapolis, Ind. Friction-clutch pulley | 717,557 | Jan. 6 | 66 | 16,17 | 102 | 17 |
| Duke, John F., London, England. Obtaining gold from sea-water | 734,683 | July 28 | 3669 | 859 | 105 | 823 |
| Dukes, Ella L., *et al.* (See Carlton and Harrell, assignors.) | | | | | | |
| Dukesmith, Frank H., Charlestown, W. Va. Combined table and desk | 723,148 | Mar. 17 | 2763 | 621 | 103 | 615 |
| Dulaney, Henry S. (See Dorsey, Charles J., assignor.) | | | | | | |
| Dulin, Charles E., Glens Falls, N. Y., assignor to Union Paper Bag Machine Company. Pasting device | 727,602 | May 12 | 1452 | 326 | 104 | 330 |
| Dulin, Robert C., McKeesport, Pa. Combined cane and chair | 731,291 | June 16 | 3237 | 720 | 104 | 1832 |
| Dulinsky, Henry A., Nottingham, Ind. Rod-coupling | 748,056 | Dec. 29 | 5128 | 1159 | 107 | 2305 |
| Dull, Raymond W., Chicago, Ill. Pulley | 727,916 | May 12 | 2078 | 461 | 104 | 461 |
| Dull, Robert F., Bridgewater, Va. Moth-trap | 723,446 | Mar. 24 | 3339 | 749 | 103 | 746 |
| Dulligan, Lawrence, Rochester, N. Y. Instep-supporter | 745,166 | Nov. 24 | 4603 | 998 | 107 | 1024 |
| Duluth Log Company. (See McLaughlin, David, assignor.) | | | | | | |
| Dumais, Jean B., assignor of two-thirds to J. C. Wolff, Chicago, Ill. Pipe cutting and threading machine | 722,090 | Mar. 3 | 798 | 178 | 103 | 173 |
| Dumaresq, William N., London, England. Variable-speed gear | 724,449 | Apr. 7 | 49 | 12,13 | 103 | 1180 |
| Dumaresq, William N., London, England. Variable-speed gear | 724,450 | Apr. 7 | 52 | 13<br>14<br>15 | 103 | 1181 |
| Dumaresq, William N., Acton, England. Variable-speed gearing | 740,829 | Oct. 6 | 839 | 188 | 106 | 1425 |
| Dumas, Henry T., South Hadley Falls, assignor to himself, and O. A. La Riviere, Indian Orchard, Mass. Automatic switch-operating mechanism | 744,513 | Nov. 17 | 3346 | 721 | 107 | 745 |
| Dumas, Henry T., South Hadley Falls, assignor to himself, and O. A. La Riviere, Indian Orchard, Mass. Automatic switch-operating mechanism | 745,096 | Nov. 24 | 4452 | 963 | 107 | 993 |
| Dumas, Maurice, Brussels, Belgium. Trussing arrangement for iron and cement constructions | 737,594 | Sept. 1 | 70 | 14 | 106 | 18 |
| Dumont, Maurice, Aurora, Ill. Buffer for picker-sticks of looms | 725,327 | Apr. 14 | 1685 | 380 | 103 | 1542 |
| Dun Lany, William P., Glenville, and J. A. Lannert, Cleveland, Ohio. Marking-machine | 725,328 | Apr. 14 | 1686 | 380 | 103 | 1542 |
| Dunagan, Thomas M., Jr., Noble, Oreg. Wood-sawing machine | 721,680 | Mar. 3 | 61 | 13 | 103 | 14 |
| Dunagan, William S., Everett, Wash. Rail-joint | 735,223 | Aug. 4 | 369 | 71 | 105 | 1060 |
| Dunaway, C. W., *et al.* (See Monahan, James, assignor.) | | | | | | |
| Dunbar, Charles A., Newark, N. J. Damper | 723,372 | Mar. 24 | 3212 | 720<br>721 | 103 | 718 |
| Dunbar, Francis W., assignor to Kellogg Switchboard and Supply Company, Chicago, Ill. Central-energy telephone system | 721,124 | Feb. 17 | 3208 | 735 | 102 | 1535 |
| Dunbar, Francis W., assignor to Kellogg Switchboard and Supply Company, Chicago, Ill. Annunciator | 733,468 | July 14 | 1385 | 327 | 105 | 310 |
| Dunbar, Francis W., and W. W. Dean, assignors to Kellogg Switchboard and Supply Company, Chicago, Ill. Signaling apparatus | 724,451 | Apr. 7 | 54 | 15 | 103 | 1181 |
| Dunbar, Mary T. (See Dickerson and Dunbar.) | | | | | | |
| Dunbar, Wallace R., Everett, Mass. Drum-tug | 730,008 | June 2 | 897 | 200 | 104 | 1310 |
| Dunbar, William P., assignor to Ichthyol-Gesellschaft Cordes, Hermanni & Co., Hamburg, Germany. Serum and preparing same | 745,333 | Dec. 1 | 32 | ------ | 107 | 1107 |
| Dunbrook, Frank, and W. W. Mead, Cleveland, Ohio. Hoisting apparatus | 733,469 | July 14 | 1389 | 327 | 105 | 311 |
| Duncan, Charles S. (See Johnson and Young, assignors.) | | | | | | |
| Duncan, Clark J., Windber, Pa. Burial-case | 729,921 | June 2 | 723 | 162 | 104 | 1276 |

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| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| Duncan, Emily C., Jennings, La. Calculator | 745,167 | Nov. 24 | 4604 | 998, 999 | 107 | 1024 |
| Duncan, Francis A. (See Duncan, Thomas B. and F. A.) | | | | | | |
| Duncan, Garnett, and G. W. Byars, Norwalk, Cal. Miter-finder | 725,230 | Apr. 14 | 1518 | 345 | 103 | 1506 |
| Duncan, Hugh, and R. R. Sheriff, Glasgow, Scotland. Apparatus for separating liquids from solids | 732,720 | July 7 | 46 | 11 | 105 | 13 |
| Duncan, James, Boston, Mass., assignor to American Telephone and Telegraph Company. Electromagnet | 737,720 | Sept. 1 | 293 | 61 | 106 | 66 |
| Duncan, John H., Oakhill, W. Va. Spike or nail puller | 728,884 | May 26 | 3892 | 865 | 104 | 877 |
| Duncan, Joseph S., assignor to Icecubator Company, Chicago, Ill. Machine for sawing ice into cubes or blocks | 721,789 | Mar. 3 | 240 | 53,54 | 103 | 53 |
| Duncan, Robert K., Pottstown, Pa., assignor to General Chemical Company, New York, N. Y. Apparatus for making phosphorus | 733,017 | July 7 | 559 | 136 | 105 | 119 |
| Duncan, Robert K., Washington, Pa., assignor to General Chemical Company, New York, N. Y. Making phosphorus | 733,316 | July 7 | 1101 | 262 | 105 | 232 |
| Duncan, Thomas B. and F. A., Newberg, Oreg. Thermal electric fire-alarm | 727,315 | May 5 | 918 | 200 | 104 | 198 |
| Duncan, William E., Macon, Ga. Telegraph-key | 723,253 | Mar. 24 | 2977 | 669 | 103 | 674 |
| Duncanson, William A., Brockton, Mass. Anchor | 730,009 | June 2 | 898 | 200 | 104 | 1311 |
| Dunder, Anna M., Crete, Nebr. Dish-washer | 718,107 | Jan. 13 | 1101 | 243 | 102 | 252 |
| Dundon, Patrick F., San Francisco, Cal. Clutch for hoisting-machines | 735,862 | Aug. 11 | 1595 | 340 | 105 | 1339 |
| Dundore, Charles S., Reading, Pa. Punch | 733,544 | July 14 | 1512 | 360 | 105 | 337 |
| Dundore, Jacob E., Lancaster, Pa. Device for ruling school-slates | 746,053 | Dec. 8 | 1367 | 305 | 107 | 1409 |
| Dunfee, James W., Fremont, Ohio. Bottle-filler | 747,052 | Dec. 15 | 3214 | 733 | 107 | 1842 |
| Dungan, Clarence E., and C. F. Stelle, Connersville, Ind. Roller cultivator and grader | 733,634 | July 14 | 1671 | 396, 397 | 105 | 370 |
| Dungan, Thomas A., Chicago, Ill. Coffer-dam | 732,401 | June 30 | 5375 | 1191 | 104 | 2308 |
| Dungee, Nathaniel R., near Oklahoma City, Okla. Ter. Water-velocipede | 738,171 | Sept. 8 | 1255 | 272 | 106 | 287 |
| Dunham, A. S. (See Mills, William A., assignor.) | | | | | | |
| Dunham, Andrew A., New York, N. Y., assignor to Casein Company of America. Food product and producing same | 732,929 | July 7 | 414 | ------ | 105 | 90 |
| Dunham, Andrew A., New York, N. Y., assignor to Casein Company of America. Sizing and producing same | 739,657 | Sept. 22 | 4088 | ------ | 106 | 924 |
| Dunham, Clayton A., Marshalltown, Iowa. Drain-valve | 735,733 | Aug. 11 | 1333 | 288 | 105 | 1281 |
| Dunham, Edgar, *et al.* (See Tures, William, assignor.) | | | | | | |
| Dunham, George, Unionville, Conn. Machine for finishing nuts | 728,214 | May 19 | 2610 | 583, 584 | 104 | 595 |
| Dunham, Henry V., New York, N. Y. Producing milk-powder | 723,254 | Mar. 24 | 2978 | ------ | 103 | 674 |
| Dunham, Herbert F., New York, N. Y. Tunnel-section | 736,507 | Aug. 18 | 2747 | 601 | 105 | 1604 |
| Dunham, William L., and F. H. Hough, Washington, D. C. Vapor-burner | 735,073 | Aug. 4 | 42 | 12 | 105 | 991 |
| Dunihue, William J., assignor of two-thirds to W. B. Curtis, Jamestown, and J. C. D. Curtiss, Rochester, N. Y. Vocal guard for telephones | 730,101 | June 2 | 1046 | 234 | 104 | 1341 |
| Dunkel, Wilber R., Pana, Ill. End-gate fastener | 726,148 | Apr. 21 | 3161 | 715 | 103 | 1868 |
| Dunkin, Reubin M., Los Angeles, Cal. Burglar-alarm | 726,149 | Apr. 21 | 3162 | 716 | 103 | 1869 |
| Dunkle, Samuel K., Sharon, Pa. Car-coupling | 734,835 | July 28 | 3985 | 931 | 105 | 887 |
| Dunkley Company. (See Dunkley, Samuel J., assignor.) | | | | | | |
| Dunkley, Samuel J., Kalamazoo, Mich. Fruit-basket | 724,170 | Mar. 31 | 4728 | 1060 | 103 | 1049 |
| Dunkley, Samuel J., assignor to Dunkley Company, Kalamazoo, Mich. Jar | 721,166 | Feb. 24 | 3305 | 756 | 102 | 1570 |
| Dunlap, Joseph B., Tonkawa, Okla. Ter. Brick | 721,080 | Feb. 17 | 3001 | ------ | 102 | 1485 |
| Dunlea, Gertrude, Chicago, Ill. Tape-measure | 748,174 | Dec. 29 | 5340 | 1215 | 107 | 2351 |
| Dunn, Beverly W., Philadelphia, Pa. Shrapnel | 735,658 | Aug. 4 | 1191 | 252 | 105 | 1234 |
| Dunn, Charles A., Wanganui, New Zealand. Milk-strainer | 731,553 | June 23 | 3747 | 835 | 104 | 1955 |
| Dunn, Charles E., Melrose Park, Ill. Corn-husking machine | 735,224 | Aug. 4 | 370 | 71,72 | 105 | 1060 |
| Dunn, Clarence E. (See Devers and Dunn.) | | | | | | |
| Dunn, Earl T., Lewis, Iowa. Straw-stacker | 744,514 | Nov. 17 | 3348 | 721 | 107 | 745 |
| Dunn, Eustace A. A., Ballarat, Victoria, Australia. Flexible ruler | 742,013 | Oct. 20 | 3142 | 701 | 106 | 1947 |
| Dunn, Frank P., assignor to J. H. Osborne and G. A. Lambert, Anderson, Ind. Computing-scale | 748,057 | Dec. 29 | 5129 | 1160 | 107 | 2306 |
| Dunn, Gano S., East Orange, assignor to Crocker-Wheeler Company, Ampere, N. J. System of electrical distribution | 735,352 | Aug. 4 | 591 | 122 | 105 | 1107 |
| Dunn, Gano S., and E. R. Douglas, East Orange, assignors to Crocker-Wheeler Company, Ampere, N. J. System of electric-motor control | 736,587 | Aug. 18 | 2887 | 630 | 105 | 1633 |
| Dunn, George F., Brockton, assignor of one-half to W. B. Arnold, North Abington, Mass. Innersole-cement machine | 728,793 | May 19 | 3716 | 829 | 104 | 825 |
| Dunn, Gordon, *et al.* (See Hunter, George E., assignor.) | | | | | | |
| Dunn, Hiram O., Marion, Ohio. Educational appliance | 746,305 | Dec. 8 | 1831 | 415 | 107 | 1510 |
| Dunn, Hugh T., New York, N. Y. Rotary engine | 723,656 | Mar. 24 | 3721 | 834 | 103 | 823 |
| Dunn, Hugh V., Pemberton, W. Va. Animal-shears | 742,615 | Oct. 27 | 4299 | 969 | 106 | 2200 |
| Dunn, Jesse A., Chicago, Ill. Device for containing and ejecting oil, &c | 747,153 | Dec. 15 | 3394 | 769 | 107 | 1882 |
| Dunn, John. (See Laernoes and Dunn.) | | | | | | |
| Dunn, John D., Los Angeles, Cal. Golf or other club | 726,885 | May 5 | 194 | 24 | 104 | 25 |
| Dunn, Louis, St. Paul, Minn. Track-laying indicator | 740,408 | Oct. 6 | 37 | 9 | 106 | 1252 |
| Dunn, Louis P., New Britain, Conn. Shower-bath apparatus | 733,635 | July 14 | 1674 | 397 | 105 | 370 |
| Dunn, Michael J., Pottsville, Pa. Washing-machine | 724,558 | Apr. 7 | 252 | 61,62 | 103 | 1224 |
| Dunn, Moses H., Fullerton, Cal. Underreamer for drilling oil-wells | 729,743 | June 2 | 402 | 91 | 104 | 1211 |
| Dunn, O. P. (See Lord, Allen P., assignor.) | | | | | | |
| Dunn, William, New York, N. Y., assignor to Arlington Company, Arlington, N. J. Golf-club | 745,044 | Nov. 24 | 4333 | 937 | 107 | 969 |
| Dunn, William H., Wallingford, Conn. Engine-stop | 720,683 | Feb. 17 | 2378 | 544, 545 | 102 | 1353 |
| Dunnavant, John J. (See Doner, Martin J., assignor.) | | | | | | |
| Dunne, Ralph, Dunedin, New Zealand. Miter-box | 748,175 | Dec. 29 | 5342 | 1215 | 107 | 2352 |
| Dunne, Vincent L., Brooklyn, N. Y. Pressure-plate for polishing and surfacing plastic material | 730,102 | June 2 | 1048 | 235 | 104 | 1341 |
| Dunnell, Frederick W., Springfield, Mass. Railway cross-tie | 722,501 | Mar. 10 | 1588 | 350 | 103 | 357 |
| Dunnell, Frederick W., assignor to F. W. Dunnell Composite Leather Company, Springfield, Mass. Railway cross-tie. (Reissue) | 12,091 | Mar. 3 | 1012 | 232 | 103 | 215 |
| Dünnemann, Heinrich C., Bremen, Germany. Argand lamp or burner | 732,930 | July 7 | 415 | 100, 101 | 105 | 90 |
| Dunning, David M., Jr. (See Treveal, Richard, assignor.) | | | | | | |
| Dunning, James L., Clayton, assignor of one-half to R. H. Stevens, Webster Groves, Mo. Drawer | 32,721 | July 7 | 47 | 12 | 105 | 13 |
| Dunning, Samuel H., Paterson, N. J. Stay-bolt | 721,869 | Mar. 3 | 395 | 87 | 103 | 87 |
| Dunston, Horace G., Santa Monica, Cal. Wrench | 734,408 | July 21 | 3160 | 743 | 105 | 701 |
| Dunwald, Peter, Rio, assignor of one-half to J. G. Gartleman, New York, N. Y. Railway construction | 731,292 | June 16 | 3239 | 721 | 104 | 1833 |
| Duplessis, Paul, Marlboro, assignor to S. H. Howe Shoe Company, Marlboro and Boston, Mass. Wheel for smoothing the edges of soles and the sides of heels of boots or shoes | 720,009 | Feb. 10 | 1096 | 252 | 102 | 1072 |

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| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Dupont-Franklin, Daniel H., New York, N. Y. Substance resembling india-rubber | 746,688 | Dec. 15 | 2511 | ..... | 107 | 1681 |
| Dupont-Franklin, Daniel H., New York, N. Y. Manufacturing a substance resembling india-rubber | 746,689 | Dec. 15 | 2512 | ..... | 107 | 1681 |
| Dupras, Frederick, Marquette, Mich. Runner attachment for bicycle-frames | 737,372 | Aug. 25 | 4365 | 973 | 105 | 1962 |
| Dupuis, Joseph, Woonsocket, R. I., assignor of one-half to J. O. Giguere. Apparatus for propelling and steering vessels | 743,700 | Nov. 10 | 1786 | 377 | 107 | 398 |
| Durand, John, assignor of one-half to W. H. C. Ivey, Unionpoint, Ga. Printing-press | 737,829 | Sept. 1 | 518 | 114 | 106 | 116 |
| Durand, Louis, Dumont, N. J., assignor to American Exchange National Bank of New York. Dough-kneading machinery | 747,154 | Dec. 15 | 3396 | 770 | 107 | 1883 |
| Durant, Edward G., Pasadena, Cal. Flask for molding building-blocks or the like | 738,423 | Sept. 8 | 1769 | 385 | 106 | 396 |
| Durant, Henry T., London, England. Apparatus for the treatment of ores with solvents | 736,078 | Aug. 11 | 1993 | 423 | 105 | 1426 |
| Durante, Aimé R., Marseilles, France. Automatic pearl-threading machine | 741,317 | Oct. 13 | 1756 | 391 | 106 | 1638 |
| Durboraw, Charles L., Baltimore, Md. Grip for shoe-polishing cloths | 726,886 | May 5 | 105 | 25 | 104 | 25 |
| Durboraw, Charles L., Baltimore, Md. Game | 732,281 | June 30 | 5147 | 1143 | 104 | 2260 |
| Durboraw, Charles L., Baltimore, Md., assignor of one-half to C. E. Bemis, Dryad, Wash. Nut-lock | 723,590 | Mar. 24 | 3608 | 806 | 103 | 799 |
| Durborow, Charles C. (See Bain and Durborow.) | | | | | | |
| Durfee, Joseph A., Chardon, Ohio. Regenerative furnace | 730,620 | June 9 | 1998 | 444 | 104 | 1558 |
| Durfey, Frank L. (See Luther, Justus P., assignor.) | | | | | | |
| Durgin, Frank, Lemars, Iowa. Lifting-jack | 743,260 | Nov. 3 | 863 | 188 | 107 | 181 |
| Durham, Frank M., and A. Peek, Aurora, Ill. Copy-holder | 741,894 | Oct. 20 | 2879 | 643 | 106 | 1894 |
| Durham, Thomas F., Philadelphia, Pa. Guide for inside tubes of blasting-cartridges | 721,431 | Feb. 24 | 3798 | 864 | 102 | 1671 |
| Durham, Thomas F., Philadelphia, Pa. Blasting-cartridge | 721,432 | Feb. 24 | 3799 | 864 | 102 | 1672 |
| Durham, Thomas F., Philadelphia, Pa. Safety blasting-cartridge | 734,684 | July 28 | 3671 | 859 | 105 | 823 |
| Durkee, Harry W., and W. L. Cosgrove, Cleveland, Ohio. Contact device for time-detectors | 717,558 | Jan. 6 | 68 | 17 | 102 | 17 |
| Durkin, John P. (See Barrett and Durkin.) | | | | | | |
| Durlin, Byron, assignor of one-half to C. D. Marsh, Eldred, Pa. Permutation-lock | 735,225 | Aug. 4 | 374 | 72 | 105 | 1061 |
| Durnbaugh, Joseph A., Washington, D. C., assignor to J. McLane, Milford, N. H. Lock for post-office lock-boxes | 744,858 | Nov. 24 | 3977 | 857 | 107 | 896 |
| Durning, Charles H., Swissvale, Pa. Automatic controller for electric pumps or the like | 748,354 | Dec. 29 | 5645 | 1287 | 107 | 2417 |
| Duryea, Charles E., Peoria, Ill. Sparking igniter for explosive-engines | 722,005 | Mar. 3 | 657 | 146 | 103 | 142 |
| Duryea, Charles E., Reading, Pa. Power-drum for vehicles | 725,616 | Apr. 14 | 2215 | 500, 501 | 103 | 1656 |
| Duryea, Chester B., Sioux City, Iowa. Producing maltose | 746,933 | Dec. 15 | 2984 | ..... | 107 | 1788 |
| Duryea, Otho C. (See White and Duryea.) | | | | | | |
| Duryea, Otho C., and M. C. White, Los Angeles, Cal. Hoist | 737,830 | Sept. 1 | 519 | 114 | 106 | 116 |
| Duryea, Otho C., and M. C. White, assignors to National Free Piston Engine Company, Limited, Los Angeles, Cal. Nut | 723,373 | Mar. 24 | 3217 | 721 | 103 | 719 |
| Duryea, Otho C., and M. C. White, assignors to National Free Piston Engine Company, Limited, Los Angeles, Cal. Controlling means for engines | 735,863 | Aug. 11 | 1596 | 340, 341 | 105 | 1340 |
| Duryee, E. (See Neu, Adolf, assignor.) | | | | | | |
| Dusang, John E., Larue, Ohio. Wire-clamp | 744,730 | Nov. 24 | 3754 | 810 | 107 | 849 |
| Dusedau, William, Denver, Colo. Cable-tramway | 729,558 | June 2 | 66 | 17 | 104 | 1141 |
| Dustin, John F., assignor to himself and Parkhill Manufacturing Company, Fitchburg, Mass. Warp stop-motion for looms | 741,577 | Oct. 13 | 2286 | 510, 511 | 106 | 1753 |
| Dutcher, Charles D., Mount Kisco, N. Y. Wrench | 744,515 | Nov. 17 | 3350 | 722 | 107 | 745 |
| Dutcher, Frank and W., West Newton, Pa. Signal-torch | 725,231 | Apr. 14 | 1519 | 345 | 103 | 1506 |
| Dutcher, Robert L., Stites, Idaho. Engine-valve mechanism | 746,934 | Dec. 15 | 2985 | 686 | 107 | 1788 |
| Dutcher, Warren. (See Dutcher, Frank and W.) | | | | | | |
| Dutchess Tool Company. (See Van Houten, Frank H., assignor.) | | | | | | |
| Duthie, Archibald, assignor of one-half to H. Lieber Company, Indianapolis, Ind. Flash-lamp | 733,705 | July 14 | 1782 | 423 | 105 | 393 |
| Dutton, George A., Streator, Ill. Chair | 736,709 | Aug. 18 | 3144 | 693 | 105 | 1685 |
| Dutton, George A., Streator, Ill. Chair | 745,334 | Dec. 1 | 33 | 7 | 107 | 1107 |
| Dutton, James E., Larue, Ohio. Rail-joint | 735,864 | Aug. 11 | 1598 | 341 | 105 | 1341 |
| Dutton & McLean. (See Purdy, Charles S., assignor.) | | | | | | |
| Duval, Southron R., New Orleans, La. Blade-sharpener | 747,688 | Dec. 22 | 4378 | 988 | 107 | 2117 |
| Duvall, George W., assignor to Lee Broom & Duster Co., Davenport, Iowa. Broom-corn cutter | 735,478 | Aug. 4 | 852 | 181 | 105 | 1161 |
| Duvall, Stanley A., Chicago, Ill. Telephone system | 738,780 | Sept. 15 | 2482 | 544 | 106 | 564 |
| Duvall, Stephen A., Penrith, W. Va. Boat | 730,889 | June 16 | 2478 | 550 | 104 | 1679 |
| Duvall, Victor R., Ashville, Ohio. Gate | 744,731 | Nov. 24 | 3756 | 810 | 107 | 849 |
| Duysens, Tossanus, Maastricht, and P. Klijnen, Breda, Netherlands. Rotary steam-engine | 740,544 | Oct. 6 | 309 | 63, 64 | 106 | 1310 |
| Dwigans, William W., Arkadelphia, Ark. Jack | 743,839 | Nov. 10 | 2040 | 433 | 107 | 451 |
| Dwiggins, John W., Kokomo, Ind. Wire-fence machine | 745,801 | Dec. 1 | 873 | 197, 198, 199 | 107 | 1286 |
| Dwight, Arthur S., New York, N. Y. Apparatus for forming blast-furnace charges | 721,505 | Feb. 24 | 3923 | 892, 893 | 102 | 1698 |
| Dwight, Charles F., Marcus, Iowa. Gold-annealing apparatus | 724,826 | Apr. 7 | 768 | 178 | 103 | 1334 |
| Dwight, Frances M., Willowpoint, Tex. Balancing device for cultivators or the like | 726,150 | Apr. 21 | 3163 | 716 | 103 | 1869 |
| Dwight, Frederick L. (See Hanson and Dwight.) | | | | | | |
| Dwork, Abraham I. (See Dwork, Joseph H. and A. I.) | | | | | | |
| Dwork, Joseph H. and A. I., New York, N. Y. Cuff-holder | 729,295 | May 26 | 4628 | 1023 | 104 | 1030 |
| Dworzek, Gustave H., San Francisco, Cal. Automatic roll-paper-printing device | 723,517 | Mar. 24 | 3486 | 779, 780 | 103 | 774 |
| Dworzek, Gustave H., San Francisco, Cal. Instrument-maker's tool-holder | 740,107 | Sept. 29 | 4943 | 1110 | 106 | 1124 |
| Dwyer, Daniel R., *et al.* (See Farnsworth, George, assignor.) | | | | | | |
| Dwyer, Thomas E. (See Harrington, George W., assignor.) | | | | | | |
| Dwyer, Thomas E., Wakefield, Mass. Apparatus for coating metal pipes or conduits | 737,595 | Sept. 1 | 71 | 14 | 106 | 18 |
| Dyarman, George W., Cleveland, assignor of two-thirds to C. E. Bright, Columbus, and H. H. Dewey, Cleveland, Ohio. Corner-stay for boxes or other receptacles | 728,688 | May 19 | 3528 | 785 | 104 | 788 |
| Dye, Thomas, *et al.* (See Hall, Joel B., assignor.) | | | | | | |
| Dyer, Charles V., and W. S. Willette, Conroe, Tex. Insect-destroying machine | 738,667 | Sept. 8 | 2246 | 492 | 106 | 497 |
| Dyer, Elbert, Bandon, Oreg. Sawmill | 742,848 | Nov. 3 | 52 | 13 | 107 | 14 |
| Dyer, Frank L. (See Anderson and Dyer.) | | | | | | |
| Dyer, Frank L., Montclair, N. J., assignor, by mesne assignments, to Central Trust Company of New York, trustee. Apparatus for weighing cotton, &c., in bulk | 719,446 | Feb. 3 | 62 | 14 | 102 | 839 |
| Dyer, Frank L., Montclair, N. J., assignor, by mesne assignments, to Central Trust Company of New York, trustee. Cotton-baling apparatus | 723,591 | Mar. 24 | 3609 | 806, 807 | 103 | 799 |
| Dyer, Guy S. (See Smith, Roy H., assignor.) | | | | | | |
| Dyer, Guy S., Cleveland, Ohio. Liquid-sampler | 732,059 | June 30 | 4689 | 1048 | 104 | 2166 |
| Dyer, Hugh, Neck City, Mo. Hoisting apparatus | 739,843 | Sept. 29 | 4429 | 994 | 106 | 1016 |
| Dyer, Richard N., East Orange, N. J. Formaldehyde-generator | 746,935 | Dec. 15 | 2987 | 687 | 107 | 1788 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| Dyer, Silas H., assignor of one-half to E. W. Orswell, Pawtucket, R. I. Rotary valve for gas-engines | 727,917 | May 12 | 2080 | 462 | 104 | 462 |
| Dyett, James H., Buffalo, N. Y. Bed-bottom-supporting frame | 727,112 | May 5 | 557 | 120 | 104 | 121 |
| Dykema, Frank L., Grand Rapids, Mich. Mold for making artificial stone | 746,476 | Dec. 8 | 2117 | 487 | 107 | 1572 |
| Dymond, Kate M., Moosic, Pa. Shade and curtain bracket | 730,187 | June 2 | 1185 | 265 | 104 | 1369 |
| Dynes, William, and J. M. Pierce, Owatonna, Minn.; said Pierce assignor to said Dynes. Double-disk drill | 736,369 | Aug. 18 | 2484 | 545 | 105 | 1549 |
| Dysert, Oliver W. (See Blossom and Dysert.) | | | | | | |
| Dysterud, Emil, Monterey, Mexico. Clutch | 723,196 | Mar. 17 | 2871 | 644 | 103 | 639 |
| E. Bement's Sons. (See Hendon, Walter P., assignor.) | | | | | | |
| E. Bement's Sons. (See Patton, Albert J., assignor.) | | | | | | |
| E. Kirstein Sons Company. (See Bader, Gustav A., assignor.) | | | | | | |
| E. & A. H. Batcheller Company. (See Woods, Calvin W., assignor.) | | | | | | |
| E. D. Taylor Company. (See Feval, Leon, assignor.) | | | | | | |
| E. J. Manville Machine Company. (See Campbell and Bronson, assignors.) | | | | | | |
| E. M. M. Curative Co. (See Fleetwood, Henry, assignor.) | | | | | | |
| E. R. Thomas Motor Company. (See Becker, Clarence E., assignor.) | | | | | | |
| E. R. Wagner Manufacturing Company. (See Wagner, Edward R., assignor.) | | | | | | |
| E. T. Burrowes Company. (See Peregrine, Seymour W., assignor.) | | | | | | |
| E. & T. Fairbanks & Company. (See Taylor and Sargent, assignors.) | | | | | | |
| E. T. Gilbert Manufacturing Company. (See Gilbert, Edgar T., assignor.) | | | | | | |
| E. W. Bliss Company. (See Beyer, Otto S., assignor.) | | | | | | |
| E. W. Bliss Company. (See Klocke, William, assignor.) | | | | | | |
| E. W. Bliss Company. (See Leavitt, Frank M., assignor.) | | | | | | |
| E. W. Bliss Company. (See Page, Frank C. B., assignor.) | | | | | | |
| E. W. Bliss Company. (See Pollard, Charles E., assignor.) | | | | | | |
| Eagan, Bernard P., *et al.* (See Cargill, Don F., assignor.) | | | | | | |
| Eagan, Daniel. (See Mitchell, Thomas, assignor.) | | | | | | |
| Eagen, Peter, Cartersville, Iowa. Grain-separator | 736,370 | Aug. 18 | 2485 | 545<br>546 | 105 | 1549 |
| Eagle, Charles, and F. Vogt, Jr., New York, N. Y. Fireman's helmet | 737,373 | Aug. 25 | 4366 | 973 | 105 | 1963 |
| Eagle Engine Co. (See Hitchcock, Charles F., assignor.) | | | | | | |
| Eagle Lock Co. (See Roche, James, assignor.) | | | | | | |
| Eagle Manufacturing Company. (See Sester and Feldt, assignors.) | | | | | | |
| Eagle Pencil Company. (See Mack, Ernest U., assignor.) | | | | | | |
| Eagle Pencil Company. (See McIntyre, Frank, assignor.) | | | | | | |
| Eagle Pencil Company. (See Oberbeck, George, assignor.) | | | | | | |
| Eagleson, Mark R. (See Atkin and Eagleson.) | | | | | | |
| Eames, George M. (See Dial, Eames, and Dimond.) | | | | | | |
| Eames, George M., and A. Laubscher, assignors to Wheeler & Wilson Manufacturing Company, Bridgeport, Conn. Sewing-machine base | 740,256 | Sept. 29 | 5217 | 1172<br>1173 | 106 | 1180 |
| Eames, John N., Medford, and A. W. Roberts, Reading, Mass. Support for drawer-bottoms | 734,122 | July 21 | 2635 | 622 | 105 | 590 |
| Earheart, Thomas M. D., Parkwood, Ala. Automatic air-coupling for cars | 746,801 | Dec. 15 | 2707 | 624 | 107 | 1724 |
| Earl, Bertram G. (See Earl, Charles M., assignor.) | | | | | | |
| Earl, Bruce, Hancock, Nebr. Colt or calf weaner | 726,657 | Apr. 28 | 4167 | 940 | 103 | 2085 |
| Earl, Charles M., assignor to W. J. Stapleton, Detroit, Mich. Siphon-filler | 721,547 | Feb. 24 | 3995 | 910 | 102 | 1713 |
| Earl, Charles M., assignor to W. J. Stapleton, Detroit, Mich. Siphon-filler | 721,548 | Feb. 24 | 3997 | 910 | 102 | 1714 |
| Earl, Charles M., Detroit, Mich., assignor of one-half to B. G. Earl, Chicago, Ill. Siphon-bottle filler | 736,945 | Aug. 25 | 3595 | 797 | 105 | 1800 |
| Earl, Harry A., assignor to W. F. Haffey and H. Earl, Cleveland, Ohio. Switch-tongue-operating mechanism | 740,356 | Sept. 29 | 5394 | 1215 | 106 | 1217 |
| Earl, Hazel, *et al.* (See Earl, Harry A., assignor.) | | | | | | |
| Earll, Charles I., New York, N. Y. Trolley mechanism | 743,153 | Nov. 3 | 645 | 139 | 107 | 135 |
| Earll, Charles I., New York, N. Y., assignor to Crocker-Wheeler Company, Ampere, N. J. Magnetic clutch | 741,895 | Oct. 20 | 2881 | 643 | 106 | 1895 |
| Early, Edward, Lathrop, Cal. Riddle for grain-cleaners | 744,516 | Nov. 17 | 3351 | 722 | 107 | 746 |
| Early, William H., Hays, Kans. Flooring-clamp | 721,681 | Mar. 3 | 63 | 13 | 103 | 15 |
| Earnest, David F., West Norfolk, Va. Brake | 748,355 | Dec. 29 | 5646 | 1288 | 107 | 2417 |
| Earnest, Samuel R., Colorado Springs, Colo. Twine holder and cutter | 725,232 | Apr. 14 | 1521 | 345 | 103 | 1507 |
| Earnshaw, John F. (See Schlosser, Henry W., assignor.) | | | | | | |
| Earthy, William A., Walthamstow, England. Pianoforte-action | 747,318 | Dec. 15 | 3713 | 837 | 107 | 1951 |
| Easker, John, Cedar Rapids, Iowa. Pail-ear | 733,470 | July 14 | 1391 | 327 | 105 | 311 |
| Easley, Emzy W., Pleasureville, Ky. Automatic opening, closing, and latching gate | 730,354 | June 9 | 1515 | 336 | 104 | 1453 |
| Eason, Samuel L., assignor of one-half to S. G. Kions, Scranton, Iowa. Fence-post | 723,657 | Mar. 24 | 3724 | 835 | 103 | 823 |
| East End Manufacturing Company. (See Felmlee, John H., assignor.) | | | | | | |
| East Hampton Bell Company. (See Brockett, Herbert W., assignor.) | | | | | | |
| East, James W., Tate Springs, Tenn. Steam-boiler | 741,779 | Oct. 20 | 2682 | 597 | 106 | 1852 |
| East Rockford Mantel Company. (See Person, William, assignor.) | | | | | | |
| Eastburn, Joseph E. (See Clawson, Aquiller, assignor.) | | | | | | |
| Easter, James E., and E. L. Robinson, Kokomo, Ind. Apparatus for tapping kegs | 742,403 | Oct. 27 | 3907 | 878 | 106 | 2119 |
| Easterling, James R., Barnwell, S. C. Plant-protector | 718,109 | Jan. 13 | 1103 | 244 | 102 | 253 |
| Easterling, John M. (See Harrison, Julian R., assignor.) | | | | | | |
| Eastern Telephone Manufacturing Company. (See Lattig and Goodrum, assignors.) | | | | | | |
| Eastman, Albert G. (See Eastman, Franklin C. and A. G.) | | | | | | |
| Eastman, Ambrose, *et al.* (See Cooley, John F., assignor.) | | | | | | |
| Eastman, Edgar D., Concord, N. H. Sprinkling-wagon | 748,058 | Dec. 29 | 5131 | 1160 | 107 | 2306 |
| Eastman, Franklin C., Cambridge, and A. G. Eastman, Brookline, Mass. Window-screen | 724,682 | Apr. 7 | 494 | 118 | 103 | 1274 |
| Eastman, Franklin C., Cambridge, and A. G. Eastman, Brookline, Mass. Window casing and screen | 724,683 | Apr. 7 | 496 | 118<br>119 | 103 | 1275 |
| Eastman, George N., assignor of one-half to E. Schildhauer, Chicago, Ill. Means for measuring electric currents | 720,335 | Feb. 10 | 1708 | 388 | 102 | 1201 |
| Eastman, Harry E. (See Trainham and Eastman.) | | | | | | |
| Eastman, John P., Chicago, Ill., and T. F. Hawley, Milwaukee, Wis. Ticket printing and issuing machine | 725,054 | Apr. 14 | 1175 | 266<br>267 | 103 | 1436 |
| Eastman, Joseph H., and G. L. Weaver, assignors to Automatic Time Switch Company, Boston, Mass. Circuit-controller for electric flash-signs | 740,357 | Sept. 29 | 5398 | 1216 | 106 | 1218 |
| Eastman Kodak Company. (See Brownell, Frank A., assignor.) | | | | | | |
| Eastman Kodak Company. (See Lenahan, John E., assignor.) | | | | | | |
| Eastman Kodak Company. (See Schober, Charles W., assignor.) | | | | | | |
| Eastman Machine Company. (See Wright, Ross P., assignor.) | | | | | | |
| Eastman, Tarleton B., South San Francisco, assignor of eleven-twentieths to G. H. Mott and F. M. Wright, San Francisco, Cal. Automatic stereoscope | 739,402 | Sept. 22 | 3623 | 807 | 106 | 823 |
| Eastwood, Arthur C., Cleveland, Ohio. Electric motor | 724,827 | Apr. 7 | 769 | 179 | 103 | 1335 |
| Eastwood, Arthur C., Cleveland, Ohio. Magnetic clutch | 730,621 | June 9 | 1999 | 444 | 104 | 1558 |

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| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| Eastwood, Arthur C., Cleveland, Ohio. Equalizing mechanism for reciprocating machines | 741,470 | Oct. 13 | 2080 | 461 | 106 | 1710 |
| Eastwood, Arthur C., Cleveland, Ohio. Power-translating system | 741,471 | Oct. 13 | 2083 | 462 | 106 | 1711 |
| Eastwood, Arthur C., Cleveland, Ohio. System for control of electric motors | 745,168 | Nov. 24 | 4606 | 999 | 107 | 1025 |
| Eastwood, Arthur C., Cleveland, Ohio. Controlling system for conveyers | 748,488 | Dec. 29 | 5906 | 1342 | 107 | 2475 |
| Eastwood, Thomas H., McMinnville, Tenn. Screw-propeller | 748,176 | Dec. 29 | 5343 | 1215 | 107 | 2352 |
| Eaton, Asahel K., New York, assignor to H. M. Eaton, Brooklyn, N. Y. Removing tin from the surface of other metals | 723,197 | Mar. 17 | 2873 | ------ | 103 | 639 |
| Eaton, Clarence L., Binghamton, N. Y. Welt-butting machine | 724,828 | Apr. 7 | 772 | 179 | 103 | 1335 |
| Eaton, Clarence L., Binghamton, N. Y. Welt-beating and inseam-trimming machine | 731,167 | June 16 | 3011 | 668 | 104 | 1787 |
| Eaton, Clarence L., Binghamton, N. Y. Heel-seat and counter beating machine | 731,168 | June 16 | 3013 | 669 | 104 | 1787 |
| Eaton, Clarence L., Binghamton, N. Y. Tack-pulling machine | 746,306 | Dec. 8 | 1832 | 415<br>416 | 107 | 1510 |
| Eaton, Cole & Burnham Company. (See White, Everett H., assignor.) | | | | | | |
| Eaton, Edmund, London, England. Apparatus for manufacturing bricks | 727,113 | May 5 | 558 | 120 | 104 | 121 |
| Eaton, Edmund, London, England. Apparatus for manufacturing bricks | 727,114 | May 5 | 560 | 121 | 104 | 122 |
| Eaton, Edward G. (See Bebb and Eaton.) | | | | | | |
| Eaton & Glover Company. (See Goodnow and Eaton, assignors.) | | | | | | |
| Eaton, Harrison H., Cleveland, Ohio, assignor to United Shoe Machinery Company, Paterson, N. J. Machine for fastening lacing-hooks in shoes | 719,314 | Jan. 27 | 3406 | 760<br>761 | 102 | 766 |
| Eaton, Hugh M. (See Eaton, Asahel K., assignor.) | | | | | | |
| Eaton, James B., Centerpoint, Tex., assignor of one-half to G. B. Blackman, Chattanooga, Tenn. Medicated salt brick | 721,633 | Feb. 24 | 4186 | ------ | 102 | 1757 |
| Eaton, Oliver N., New York, N. Y. Transom-lifter | 723,447 | Mar. 24 | 3340 | 749 | 103 | 746 |
| Eaton & Prince Company. (See Eaton, Thomas W., assignor.) | | | | | | |
| Eaton, Thomas W., assignor to Eaton & Prince Company, Chicago, Ill. Brake mechanism for electric elevators | 720,903 | Feb. 17 | 2752 | 634 | 102 | 1431 |
| Eaton, William S. (See Goodnow and Eaton.) | | | | | | |
| Eaton, William S., Sag Harbor, assignor to Engraving Company of America, New York, N. Y. Engraving-machine | 728,556 | May 19 | 3277 | 725<br>726<br>727 | 104 | 733 |
| Eaton, William W., Danvers, Mass. Autographic duplicate recorder | 740,108 | Sept. 29 | 4944 | 1110 | 106 | 1124 |
| Eaton, Willie G., Nashua, N. H., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Multiplier mechanism for looms | 742,404 | Oct. 27 | 3908 | 879 | 106 | 2119 |
| Eavenson, Francis V., St. Davids, Pa. Coaster-wagon | 733,019 | July 7 | 561 | 137 | 105 | 120 |
| Eaves, Arthur, Fall River, assignor to Draper Company, Hopedale, Mass. Picker-checking means for looms | 729,048 | May 26 | 4190 | 926 | 104 | 939 |
| Ebaugh, John L., New Orleans, La., assignor to Mergenthaler Linotype Company. Linotype-machine | 735,226 | Aug. 4 | 376 | 72 | 105 | 1061 |
| Ebaugh, John L., New Orleans, La., assignor to Mergenthaler Linotype Company. Linotype-machine | 739,591 | Sept. 22 | 3962 | 884 | 106 | 896 |
| Ebelhare, Frederick L., Philadelphia, Pa. Speed-indicator | 744,960 | Nov. 24 | 4159 | 899 | 107 | 932 |
| Ebeling, George H. (See Spring, Long, and Ebeling.) | | | | | | |
| Ebeling, Hans, assignor to Kalle and Company, Biebrich, Germany. Brown sulfur dye and making same | 723,448 | Mar. 24 | 3341 | ------ | 103 | 746 |
| Eberhard, Charles W., Chicago, Ill. Mechanism for electrotyping | 742,616 | Oct. 27 | 4301 | 969 | 106 | 2201 |
| Eberhard, George F. (See Bristol and Eberhard.) | | | | | | |
| Eberhard, George F., assignor to Geo. F. Eberhard Company, San Francisco, Cal. Animal-trap | 735,957 | Aug. 11 | 1757 | 376<br>377 | 105 | 1375 |
| Eberhard, Otto, Ludwigslust, Germany. Preparing fat-free casein | 745,097 | Nov. 24 | 4454 | ------ | 107 | 993 |
| Eberhardt, Fred L. (See Eberhardt, Henry E. and F. L.) | | | | | | |
| Eberhardt, Fred L., assignor to Gould & Eberhardt, Newark, N. J. Multiple-spindle horizontal boring or drilling machine | 744,859 | Nov. 24 | 3978 | 858 | 107 | 896 |
| Eberhardt, Fred L. and H. J., assignors to Gould & Eberhardt, Newark, N. J. Mechanical movement | 723,255 | Mar. 24 | 2979 | 669 | 103 | 674 |
| Eberhardt, Henry E., assignor to Gould & Eberhardt, Newark, N. J. Gear-cutting machine | 727,760 | May 12 | 1771 | 398<br>399 | 104 | 398 |
| Eberhardt, Henry E. and F. L., assignors to Gould & Eberhardt, Newark, N. J. Gear-cutting machine | 727,761 | May 12 | 1780 | 400 | 104 | 400 |
| Eberhardt, Henry J. (See Eberhardt, Fred L. and H. J.) | | | | | | |
| Eberhart, David C., Shrewsbury, Pa. Fruit-picker | 723,658 | Mar. 24 | 3725 | 835 | 103 | 824 |
| Eberle, John, St. Louis, Mo. Metallic window frame and sash | 746,477 | Dec. 8 | 2120 | 487 | 107 | 1572 |
| Eberle, John G., Jr., Lafayette, Ind. Wire-reeling tool | 739,403 | Sept. 22 | 3625 | 807 | 106 | 823 |
| Eberlein, Edwin S., assignor of one-half to C. Hoover, Allegheny, Pa. Steel freight-car | 731,672 | June 23 | 3964 | 882 | 104 | 1998 |
| Eberly, Oliver O. (See Moorhead, Walter C., assignor.) | | | | | | |
| Ebersole, John M., Alliance, Ohio, assignor of two-thirds to A. S. Mears, New Brighton, Pa. Land-roller | 735,479 | Aug. 4 | 853 | 181 | 105 | 1161 |
| Ebersole, Peter K. (See Hoffman and Ebersole.) | | | | | | |
| Eberstein, August, Boston, Mass. Fountain-pen | 721,549 | Feb. 24 | 3998 | 910 | 102 | 1714 |
| Eberstein, Fredrick A. von, Savannah, Ga. Pile-driver | 726,268 | Apr. 28 | 3399 | 772 | 103 | 1932 |
| Ebert, Charles B., Pittsburg, Pa. Metallic tie for railways | 725,055 | Apr. 14 | 1179 | 267 | 103 | 1436 |
| Ebert, Jacob. (See Jenkins and Ebert.) | | | | | | |
| Ebert, Theodore, Kansas City, Mo. Curtain-fixture | 745,426 | Dec. 1 | 215 | 48 | 107 | 1145 |
| Eberth, Charles A., St. Louis, Mo. Combined lime-squeezer and ice-tongs | 724,829 | Apr. 7 | 775 | 180 | 103 | 1336 |
| Ebner, Peter, assignor to M. A. Coulson, Columbus, Ohio. Window corner-post, transom-bar, or mullion | 728,885 | May 26 | 3893 | 865 | 104 | 878 |
| Ebner, Peter, assignor to Columbus Steel Rolling Shutter Company, Columbus, Ohio. Fire-shutter-releasing mechanism | 735,227 | Aug. 4 | 377 | 73 | 105 | 1061 |
| Ebner, Peter, Columbus, Ohio, assignor to Columbus Steel Rolling Shutter Company. Rolling shutter | 746,307 | Dec. 8 | 1834 | 416 | 107 | 1511 |
| Eby, Francis M., assignor to Pacific Timber Company, Cottagegrove, Oreg. Snatch-block | 743,840 | Nov. 10 | 2041 | 433 | 107 | 451 |
| Eby, Robert L., and J. W. Weaver, Lebanon, Pa.; said Weaver assignor to said Eby. Sausage-stuffer | 748,489 | Dec. 29 | 5913 | 1343 | 107 | 2477 |
| Eccles, Richard, Auburn, N. Y. Thill-coupling | 744,314 | Nov. 17 | 2999 | 643 | 107 | 670 |
| Eccles, William, and J. L. Robson, York, England. Window | 738,424 | Sept. 8 | 1771 | 385 | 106 | 396 |
| Eccleston, S. Spencer, Binghamton, assignor to L. Hotaling, Albany, N. Y. Support for paper-rolls | 725,426 | Apr. 14 | 1856 | 415 | 103 | 1578 |
| Echols, Francis G., assignor to Pratt and Whitney Company, Hartford, Conn. Machine for relieving tools | 730,445 | June 9 | 1678 | 376<br>377 | 104 | 1486 |
| Echols, Francis G., assignor to Pratt & Whitney Company, Hartford, Conn. Indexing mechanism | 731,870 | June 23 | 4309 | 961<br>962<br>963 | 104 | 2072 |
| Echols, Francis G., assignor to Pratt & Whitney Company, Hartford, Conn. Friction indexing mechanism | 731,871 | June 23 | 4317 | 963<br>964 | 104 | 2074 |

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| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Echols, Francis G., assignor to Pratt & Whitney Company, Hartford, Conn. Motor mechanism | 731,872 | June 23 | 4319 | 964 | 104 | 2075 |
| Echols, Francis G., assignor to Pratt & Whitney Company, Hartford, Conn. Machine for relieving fluted tools | 731,873 | June 23 | 4321 | 965<br>966 | 104 | 2075 |
| Echols, Francis G., assignor to Pratt & Whitney Company, Hartford, Conn. Reamer | 747,907 | Dec. 22 | 4795 | 1084 | 107 | 2211 |
| Echols, Thomas J., Little Rock, Ark. Overshoe-fastener | 747,390 | Dec. 22 | 3845 | 865 | 107 | 1996 |
| Echternach, Christian F., Painesville, Ohio. Advertising device | 725,830 | Apr. 21 | 2629 | 598 | 103 | 1758 |
| Eck, Charles A., Belleville, N. J. Fan | 723,994 | Mar. 31 | 4381 | 983 | 103 | 979 |
| Eck, Charles A., Belleville, N. J. Fan | 730,890 | June 16 | 2479 | 550 | 104 | 1679 |
| Eck, Charles A., Belleville, N. J. Brush-holder | 740,635 | Oct. 6 | 480 | 106 | 106 | 1349 |
| Eck, Charles A., Newark, N. J., assignor to Autoelectric Air Pump Company, New York, N. Y. Electric air-pump | 738,532 | Sept. 8 | 1994 | 434 | 106 | 444 |
| Eckart, Edmund, New Rochelle, N. Y. Combined writing-sheet and envelop | 738,891 | Sept. 15 | 2691 | 594 | 106 | 610 |
| Eckart, Edmund, New Rochelle, N. Y. Can | 738,892 | Sept. 15 | 2692 | 594 | 106 | 610 |
| Eckenwiler, George M., assignor of one-half to D. J. Morris, Canton, Ohio. Beer-keg tap | 729,145 | May 26 | 4349 | 960 | 104 | 971 |
| Ecker, Frank A., Middletown, Conn. Plate-rack | 744,315 | Nov. 17 | 3001 | 643 | 107 | 670 |
| Ecker, Lorenzo, Broadalbin, N. Y. Device for bending and shaping growing trees | 728,886 | May 26 | 3894 | 865 | 104 | 878 |
| Eckerson, David I., Worcester, N. Y. Printing-press | 732,528 | June 30 | 5617 | 1245<br>1246 | 104 | 2357 |
| Eckerson, Homer, Mechanicsville, N. Y. Mattress-filling machine | 727,115 | May 5 | 562 | 121<br>122 | 104 | 122 |
| Eckert, George. (See Schaeffer, Charles H., assignor.) | | | | | | |
| Eckert, Heinrich. (See Debes, Eduard, assignor.) | | | | | | |
| Eckert, Herman F., Cleveland, Ohio, assignor, by mesne assignments, to Elliott-Fisher Company. Card or sheet platen for type-writing machines | 737,721 | Sept. 1 | 295 | 62 | 106 | 67 |
| Eckert, Herman F., Cleveland, Ohio, assignor, by mesne assignments, to Elliott-Fisher Company. Work-guard for type-writing machines | 747,953 | Dec. 29 | 4906 | 1111 | 107 | 2257 |
| Eckhardt, Jacob, St. Louis, Mo. Grater | 743,472 | Nov. 10 | 1364 | 279 | 107 | 307 |
| Eckhaus, Philip. (See Baynes, Frederick W., assignor.) | | | | | | |
| Eckroad, Carrell J., Cleveland, Ohio. Safety mechanism for motor-cars | 737,596 | Sept. 1 | 73 | 15 | 106 | 18 |
| Eckstein, Albert, *et al.* (See Mundt, Wilhelm, assignor.) | | | | | | |
| Ecob, John R., Lawrence, Kans. Apparatus for use in mercerizing | 737,374 | Aug. 25 | 4367 | 973 | 105 | 1963 |
| Economic Asphalt Street Repairs Company. (See Nesmith, John W., assignor.) | | | | | | |
| Economic Hot Water Furnace Company. (See Cox, Henry G., assignor.) | | | | | | |
| Economic Machine Company. (See Williams, George R., assignor.) | | | | | | |
| Economic Machinery Co. (See Woodland, Frank O., assignor.) | | | | | | |
| Economic-Sanitary Company. (See Wheildon, William M., assignor.) | | | | | | |
| Economical Beer Bung Company. (See Schlangen, Simon, assignor.) | | | | | | |
| Economy Locomotive Sander Company. (See Ashton and Hooper, assignors.) | | | | | | |
| Economy Locomotive Sander Company. (See Hooper, John C., assignor.) | | | | | | |
| Economy Locomotive Sander Company. (See Stuart, William H., assignor.) | | | | | | |
| Eddins, Charles H., and C. Buddie, assignors of one-half to J. L. La Prelle, St. Louis, Mo. Smoke-consuming furnace | 720,571 | Feb. 17 | 2165 | 502 | 102 | 1310 |
| Eddins, Charles H., and C. Buddie, assignors of one-half to J. L. La Prelle, St. Louis, Mo. Air-feeding furnace-door | 732,957 | Mar. 17 | 2424 | 542 | 103 | 545 |
| Eddleman, Dudley E., assignor of seven-twelfths to E. A. Frantz and J. E. Armstrong, Weatherford, Tex. Cotton-tie buckle | 733,950 | July 21 | 2277 | 536 | 105 | 514 |
| Eddy, Abe L., Empire, Colo. Railway-switch | 741,896 | Oct. 20 | 2884 | 643 | 106 | 1896 |
| Eddy, Benjamin L. (See Freeman, Nicholas A., assignor.) | | | | | | |
| Eddy, Charles H., Schenectady, N. Y. Bicycle seat-support | 721,167 | Feb. 24 | 3306 | 756 | 102 | 1570 |
| Eddy, James A., *et al.* (See House, Harry A., assignor.) | | | | | | |
| Eddy, Samuel H., *et al.* (See Sandbo, Anton I., assignor.) | | | | | | |
| Eddy Valve Company. (See Knickerbacker, Thomas A., assignor.) | | | | | | |
| Eddy, Willard. (See Bailey and Eddy.) | | | | | | |
| Eddy, William H., assignor to N. A. Lombard Company, Worcester, Mass. Puppet for carding-engines | 743,261 | Nov. 3 | 863 | 188 | 107 | 181 |
| Ede-Clendinnen, William A., Glenferrie, Victoria, Australia. Nicotin-trap and smoke-cooling appliance for tobacco-pipes | 746,308 | Dec. 8 | 1835 | 416 | 107 | 1511 |
| Ede, George A., Cobden, Ill. Vaporizer for gasolene-engines | 720,336 | Feb. 10 | 1710 | 389 | 102 | 1201 |
| Ede, George A., Cobden, Ill. Clutch | 732,402 | June 30 | 5376 | 1191 | 104 | 2308 |
| Edeburn, Alfred N., assignor of one-half to H. H. Hodell, Cleveland, Ohio. Tie for cross-wires | 721,433 | Feb. 24 | 3801 | 865 | 102 | 1672 |
| Edeburn, Alfred N., assignor of one-half to H. H. Hodell, Cleveland, Ohio. Tool for fastening wire ties | 721,434 | Feb. 24 | 3802 | 865 | 102 | 1672 |
| Edeleanu, Lazar, and G. A. Filiti, Bukharest, Rumania. Nitro product | 745,802 | Dec. 1 | 881 | ------ | 107 | 1288 |
| Edeline, Henri, Paris, France. Storage-brake for vehicles | 721,031 | Feb. 17 | 3001 | 689<br>690 | 102 | 1485 |
| Edeline, Henri, Paris, France. Strut for two-wheeled vehicles | 745,803 | Dec. 1 | 882 | 199 | 107 | 1288 |
| Eden, Edgar M., London, England. Apparatus for controlling the passage of steam or water | 718,329 | Jan. 13 | 1506 | 334<br>335 | 102 | 339 |
| Edes, Benjamin F., Delavan, assignor of three-fourths to Colean Manufacturing Company, Peoria, Ill. Grading-machine | 728,163 | May 12 | 2513 | 559 | 104 | 552 |
| Edgar, Butler, Danville, Pa. Stovepipe-radiator | 745,004 | Nov. 24 | 4232 | 916 | 107 | 948 |
| Edgar, Ellis F., Woodbridge, N. J. Rocking grate | 732,722 | July 7 | 48 | 12 | 105 | 13 |
| Edgar, Ellis F., Woodbridge, N. J. Boiler-furnace | 732,723 | July 7 | 49 | 13 | 105 | 13 |
| Edgar, Ellis F., Woodbridge, N. J. Superheater | 732,724 | July 7 | 50 | 13, 14 | 105 | 14 |
| Edgar, Ellis F., Woodbridge, N. J. Steam-boiler | 732,725 | July 7 | 52 | 14, 15 | 105 | 14 |
| Edgar, Ellis F., Woodbridge, N. J. Mechanical stoker | 732,726 | July 7 | 54 | 15 | 105 | 15 |
| Edgar, Ellis F., Woodbridge, N. J. Superheater. (Reissue) | 12,155 | Sept. 8 | 2411 | 529 | 106 | 531 |
| Edgar, Ellis F., Woodbridge, N. J. Mechanical stoker | 742,975 | Nov. 3 | 272 | 61 | 107 | 59 |
| Edgar, George B., Lawrence, Kans. Windmill | 727,762 | May 12 | 1786 | 401 | 104 | 401 |
| Edgar, George B., Lawrence, Kans. Seal-lock | 729,922 | June 2 | 725 | 162 | 104 | 1276 |
| Edgar, Harry B., assignor of two-thirds to H. V. Enloe, Colecamp, Mo. Wagon-tongue support | 734,836 | July 28 | 3987 | 931 | 105 | 887 |
| Edgar, James, Wrexham, England. System of telegraphing or telephoning to or from railway-vehicles | 746,690 | Dec. 15 | 2512 | 577 | 107 | 1681 |
| Edgar, James F. (See Henderson and Edgar.) | | | | | | |
| Edgar, Jasper C., Pleasanthill, Mo. Dividers | 724,088 | Mar. 31 | 4557 | 1026 | 103 | 1013 |
| Edgar, John, Hydepark, Mass., assignor to Becker-Brainard Milling Machine Company, Portland, Me. Change-feed mechanism | 734,837 | July 28 | 3988 | 932 | 105 | 888 |
| Edgar, John, Hydepark, Mass., assignor to Becker-Brainard Milling Machine Company, Portland, Me. Change-feed mechanism | 734,838 | July 28 | 3991 | 932 | 105 | 888 |
| Edgar, Lambert H., Philadelphia, Pa. Apparatus for basting meats, &c. | 730,525 | June 9 | 1834 | 409 | 104 | 1521 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
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| Edgar, Robert A., and W. W. Tobey, Iola, Kans. Ticket-case | 733,825 | July 14 | 2029 | 478 | 105 | 443 |
| Edgar, Tea H., Sabetha, Kans. Device for loading or unloading live stock | 740,109 | Sept. 29 | 4946 | 1110 | 106 | 1124 |
| Edgarton, George M., Boston, Mass. Suspenders | 732,060 | June 30 | 4690 | 1048 | 104 | 2166 |
| Edgerton, Charles, Philadelphia, Pa. Rotary strainer | 726,658 | Apr. 28 | 4169 | 940 | 103 | 2086 |
| Edgerton, Charles, Philadelphia, Pa. Strainer-belt | 729,296 | May 26 | 4629 | {1023 {1024 | 104 | 1030 |
| Edgerton, Israel V., and R. V. Hursen, Chicago, Ill. Spring-reel | 727,370 | May 5 | 1022 | 221 | 104 | 220 |
| Edgerton, Joseph W., Grand Island, Nebr. Shoe-polisher | 718,990 | Jan. 27 | 2797 | 627 | 102 | 638 |
| Edgerton, Joseph W., Grand Island, Nebr. Hat-fastener | 726,887 | May 5 | 106 | 25 | 104 | 25 |
| Edgerton, Joseph W., Grand Island, Nebr. Hook and eye | 726,888 | May 5 | 108 | 25 | 104 | 26 |
| Edgerton, Joseph W., Grand Island, Nebr. Shoe-lacing hook | 743,627 | Nov. 10 | 1669 | 350 | 107 | 372 |
| Edgington, Thomas, Barboursville, W. Va. Propeller | 722,958 | Mar. 17 | 2427 | {542 {543 | 103 | 545 |
| Edison Storage Battery Company. (See Edison, Thomas A., assignor.) | | | | | | |
| Edison, Thomas A., Llewellyn Park, N. J. Reversible galvanic battery | 721,682 | Mar. 3 | 64 | ------ | 103 | 15 |
| Edison, Thomas A., Llewellyn Park, N. J. Funnel for filling storage-battery cans or analogous purposes | 721,870 | Mar. 3 | 397 | 87 | 103 | 87 |
| Edison, Thomas A., Llewellyn Park, N. J. Electrode for storage batteries | 723,449 | Mar. 24 | 3343 | {749 {750 | 103 | 746 |
| Edison, Thomas A., Llewellyn Park, N. J. Reversible galvanic battery | 723,450 | Mar. 24 | 3345 | ------ | 103 | 747 |
| Edison, Thomas A., Llewellyn Park, N. J. Means for operating motors in dust-laden atmospheres | 724,089 | Mar. 31 | 4558 | 1026 | 103 | 1013 |
| Edison, Thomas A., Llewellyn Park, N. J. Grinding-rolls | 727,116 | May 5 | 566 | {122 {123 | 104 | 123 |
| Edison, Thomas A., Llewellyn Park, N. J. Nickel-plating | 734,522 | July 28 | 3366 | ------ | 105 | 760 |
| Edison, Thomas A., Orange, N. J. Means for handling cable-drawn cars on inclines | 722,502 | Mar. 10 | 1589 | 351 | 103 | 357 |
| Edison, Thomas A., Llewellyn Park, assignor to Edison Storage Battery Company, Orange, N. J. Reversible galvanic battery | 727,117 | May 5 | 569 | ------ | 104 | 123 |
| Edison, Thomas A., Llewellyn Park, assignor to Edison Storage Battery Company, Orange, N. J. Manufacturing electrolytically-active finely-divided iron | 727,118 | May 5 | 572 | ------ | 104 | 124 |
| Edmiston, Alfred W., Sikeston, Mo. Nut-lock | 739,997 | Sept. 29 | 4742 | 1067 | 106 | 1080 |
| Edmiston, Samuel J., Greenwich, N. Y. Barrel or keg | 736,830 | Aug. 18 | 3376 | 746 | 105 | 1733 |
| Edmonds, Charles L., Clarksburg, W. Va. Window-sill | 736,588 | Aug. 18 | 2892 | 631 | 105 | 1634 |
| Edmonds, Frank M., assignor to Coburn Trolley Track Manufacturing Company, Holyoke, Mass. Thermal door-closing device | 738,714 | Sept. 8 | 2336 | 513 | 106 | 514 |
| Edmonds, Fredric C., Lindsay, Canada, assignor to Stereopticon and Film Exchange, Chicago, Ill. Single-lantern dissolver | 724,452 | Apr. 7 | 58 | 15 | 103 | 1182 |
| Edmonds-Metzel Manufacturing Company. (See Zimmer, John H., assignor.) | | | | | | |
| Edmonds, Walter D. (See Bloomfield and Hawes, assignors.) | | | | | | |
| Edmonds, William G. (See Higgins and Edmonds.) | | | | | | |
| Edmunds, Henry. (See Passow, Hermann, assignor.) | | | | | | |
| Edmunds, Milton L., Bandon, Oreg. Bicycle-balance | 730,622 | June 9 | 2001 | 444 | 104 | 1559 |
| Edmunds, Wilbraham, London, England. Pneumatic tire | 724,830 | Apr. 7 | 776 | 180 | 103 | 1336 |
| Edney, Arthur F., Brooklyn, N. Y., assignor to Mergenthaler Linotype Company. Microscope | 745,584 | Dec. 1 | 501 | 118 | 107 | 1204 |
| Edney, Cartwright J., assignor of one-half to G. H. Kerfoot and W. S. McMillen, Shawnee, Okla. Ter. Churn | 724,269 | Mar. 31 | 4940 | 1105 | 103 | 1089 |
| Edney, William T., Franklin, Va. Stake-holder for railway-cars | 730,242 | June 9 | 1304 | 288 | 104 | 1408 |
| Ednie, David G., Edinburgh, Scotland. Window | 730,243 | June 9 | 1309 | {288 {289 | 104 | 1409 |
| Edson, Eugene R., Cleveland, Ohio. Apparatus for separating naphtha from oil | 723,849 | Mar. 31 | 4070 | 919 | 103 | 913 |
| Edson, Eugene R., Cleveland, Ohio. Rendering-tank | 723,850 | Mar. 31 | 4073 | 919 | 103 | 913 |
| Edson, Eugene R., Cleveland, Ohio. Separating grease | 729,297 | May 26 | 4630 | 1024 | 104 | 1031 |
| Edson, Eugene R., Cleveland, Ohio. Apparatus for separating grease | 739,998 | Sept. 29 | 4743 | 1067 | 106 | 1080 |
| Edson, Eugene R., Cleveland, Ohio, assignor to Edson Reduction Machinery Company, Augusta, Me. Evaporator | 724,171 | Mar. 31 | 4730 | 1060 | 103 | 1049 |
| Edson, Eugene R., Cleveland, Ohio, assignor to Edson Reduction Machinery Company, Augusta, Me. Shaft-support | 736,508 | Aug. 18 | 2751 | 602 | 105 | 1606 |
| Edson, Eugene R., Cleveland, Ohio, assignor to Edson Reduction Machinery Company, Augusta, Me. Apparatus for disposing of foul gases | 736,946 | Aug. 25 | 3597 | 797 | 105 | 1801 |
| Edson, Eugene R., and B. F. Silliman, Cleveland, Ohio, assignors to Edson Reduction Machinery Company, Augusta, Me. Drier | 744,179 | Nov. 17 | 2748 | 585 | 107 | 614 |
| Edson, Eugene R., and B. F. Silliman, Cleveland, Ohio, assignors to Edson Reduction Machinery Company, Augusta, Me. Drier | 744,180 | Nov. 17 | 2751 | 586 | 107 | 614 |
| Edson, Eugene R., and B. F. Silliman, Cleveland, Ohio, assignors to Edson Reduction Machinery Company, Augusta, Me. Rendering-tank | 747,303 | Dec. 15 | 3681 | 830 | 107 | 1944 |
| Edson, Joseph R., *et al.* (See Whitall, Samuel R., assignor.) | | | | | | |
| Edson Reduction Machinery Company. (See Edson, Eugene R., assignor.) | | | | | | |
| Edson Reduction Machinery Company. (See Edson and Silliman, assignors.) | | | | | | |
| Edward Miller & Company. (See Pitel, Conrad M., assignor.) | | | | | | |
| Edwards Air Pump Syndicate. (See Edwards, Frederick, assignor.) | | | | | | |
| Edwards, Alonzo L., assignor to I. Paul, trustee, Wheeling, W. Va. Lantern-frame and blank for making same | 732,529 | June 30 | 5622 | {1246 {1247 | 104 | 2358 |
| Edwards, Charles B. (See Wellington and Edwards.) | | | | | | |
| Edwards, Charles B., East Braintree, and R. H. Allen, assignors to Fore River Ship & Engine Company, Quincy, Mass. Valve mechanism | 717,559 | Jan. 6 | 69 | { 17 { 18 { 19 | 102 | 17 |
| Edwards, Charles W., Washington, D. C. Rotary steam-engine | 738,016 | Sept. 1 | 921 | 203 | 106 | 202 |
| Edwards, Daniel R., Emporia, Tex. Nigger-bar | 747,391 | Dec. 22 | 3846 | 865 | 107 | 1996 |
| Edwards, Edgar A., Cincinnati, Ohio, assignor to Edwards Railroad Electric Light Company. Signal-light | 738,781 | Sept. 15 | 2484 | 545 | 106 | 564 |
| Edwards, Edgar A., Cincinnati, Ohio, assignor to Edwards Railroad Electric Light Company. Dynamo-electric machine | 738,782 | Sept. 15 | 2485 | 545 | 106 | 565 |
| Edwards, Evan A., assignor of two-thirds to R. H. and F. I. Herron, Los Angeles, Cal. Oil-burner | 748,177 | Dec. 29 | 5344 | 1216 | 107 | 2352 |
| Edwards, Francis M., New York, N. Y. Mail-deliverer | 721,550 | Feb. 24 | 4000 | {910 {911 | 102 | 1714 |
| Edwards, Francis M., New York, N. Y. Mail-catcher arm | 721,551 | Feb. 24 | 4004 | 911 | 102 | 1715 |
| Edwards, Frank H., assignor of one-half to H. R. Warnock, McKees Rocks, Pa. Fluid-operated sander | 738,172 | Sept. 8 | 1256 | 273 | 106 | 288 |
| Edwards, Frank W., Logansport, Ind., assignor to Chicago Lubricator Company, Chicago, Ill. Auxiliary hand oiling-cup for lubricators | 723,149 | Mar. 17 | 2765 | 621 | 103 | 615 |
| Edwards, Frank W., Logansport, Ind., assignor to Chicago Lubricator Company, Chicago, Ill. Automatic choke-valve | 726,414 | Apr. 28 | 3682 | 835 | 103 | 1991 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | Spec. | Dr'g. | Vol. | Page. |
| Edwards, Frank W., Logansport, Ind., assignor to Chicago Lubricator Company, Chicago, Ill. Automatic choke-valve | 726,415 | Apr. 28 | 3684 | 835 | 103 | 1992 |
| Edwards, Frank W., Logansport, Ind., assignor to Chicago Lubricator Company, Chicago, Ill. Automatic choke-valve | 735,074 | Aug. 4 | 44 | 13 | 105 | 991 |
| Edwards, Frederick, assignor to Edwards Air Pump Syndicate, Limited, London, England. Air-pump | 727,316 | May 5 | 920 | 200 | 104 | 198 |
| Edwards, Gordon C. (See Whyte and Edwards.) | | | | | | |
| Edwards, Harold, Boston, Mass. Electric railway | 723,592 | Mar. 24 | 3611 | 807 | 103 | 799 |
| Edwards, Henry W., Oakdale, Ga., assignor to Loder Pyritic Reduction Company, Boston, Mass. Combined hot-blast oven and dust-collector | 734,523 | July 28 | 3367 | 787, 788 | 105 | 760 |
| Edwards, John. (See King and Edwards.) | | | | | | |
| Edwards, John, Homestead, Pa. Nut-lock | 733,173 | July 7 | 841 | 204 | 105 | 177 |
| Edwards, John C., Brookline, assignor to Draper Company, Hopedale, Mass. Bobbin-holder | 731,554 | June 23 | 3748 | 835 | 104 | 1956 |
| Edwards, John C., Brookline, assignor to Draper Company, Hopedale, Mass. Spinning-spindle | 741,638 | Oct. 20 | 2401 | 538 | 106 | 1794 |
| Edwards, Joseph T., New Bedford, Mass. Artificial horizon | 718,330 | Jan. 13 | 1510 | 335 | 102 | 339 |
| Edwards, Lewis J. (See Wright and Edwards.) | | | | | | |
| Edwards, Louis C., assignor of one-third to W. O'Brien, Ellington, Conn. Non-refillable bottle | 726,519 | Apr. 28 | 3912 | 885 | 103 | 2034 |
| Edwards, Milo N., Glenwood Springs, Colo. Belt-fastener | 734,410 | July 21 | 3162 | 743 | 105 | 702 |
| Edwards, Nathaniel, assignor of one-half to N. Smith, Washington Court-House, Ohio. Corn-receiver | 732,838 | July 7 | 257 | 64 | 105 | 57 |
| Edwards, Nora C., Spooner, Wis. Skirt-supporter | 730,751 | June 9 | 2220 | 494 | 104 | 1605 |
| Edwards, O. Ellery, Jr. (See Randall, William G., assignor.) | | | | | | |
| Edwards, Oliver M., Syracuse, N. Y. Window | 739,404 | Sept. 22 | 3627 | 808 | 106 | 824 |
| Edwards, Oliver M., Syracuse, N. Y. Door-opening device | 748,178 | Dec. 29 | 5347 | 1216 | 107 | 2353 |
| Edwards, R. (See Lungen, Adam, assignor.) | | | | | | |
| Edwards Railroad Electric Light Company. (See Edwards, Edgar A., assignor.) | | | | | | |
| Edwards, Robert. (See Lungen, Adam, assignor.) | | | | | | |
| Edwards and Sloane Jewelry Company *et al.* (See Settle, Richard S., assignor.) | | | | | | |
| Edwards, Thomas, Ballarat, Victoria, Australia. Furnace for roasting ores | 725,056 | Apr. 14 | 1180 | 267, 268 | 103 | 1437 |
| Edwards, Thomas, Holyoke, Mass. Attached ash-sifter | 730,204 | June 2 | 1214 | 271 | 104 | 1375 |
| Edwards, Victor E., assignor to Morgan Construction Company, Worcester, Mass. Furnace for heating billets | 720,904 | Feb. 17 | 2757 | 634 | 102 | 1433 |
| Edwards, Victor E., assignor to Morgan Construction Company, Worcester, Mass. Feeding mechanism for billet-heating furnaces | 720,905 | Feb. 17 | 2759 | 635 | 102 | 1433 |
| Edwards, Victor E., assignor to Morgan Construction Company, Worcester, Mass. Coupling for rolling-mills | 724,684 | Apr. 7 | 497 | 119 | 103 | 1275 |
| Edwards, Victor E., assignor to Morgan Construction Company, Worcester, Mass. Rolling-mill | 729,559 | June 2 | 69 | 18 | 104 | 1142 |
| Edwards, Victor E., assignor to Morgan Construction Company, Worcester, Mass. Pinion-housing for rolling-mills | 730,205 | June 2 | 1216 | 272 | 104 | 1375 |
| Edwards, Victor E., assignor to Morgan Construction Company, Worcester, Mass. Guide for rolling-mills | 730,244 | June 9 | 1310 | 289 | 104 | 1409 |
| Edwards, Walter, Milford, England. Ventilator | 721,683 | Mar. 3 | 66 | 13 | 103 | 15 |
| Edwards, William, Easton, Pa. Alarm-lock | 732,282 | June 30 | 5148 | 1143, 1144 | 104 | 2260 |
| Edwards, William F., Covington, Ga. Seed-planter and fertilizer-distributer | 745,335 | Dec. 1 | 35 | 7 | 107 | 1108 |
| Edwards, William H., and J. B. Bryan, Leipsic, Ohio. Spring attachment for suspenders | 726,416 | Apr. 28 | 3686 | 835 | 103 | 1992 |
| Edwards, William R., Weybridge, England. Connector for electrical batteries | 728,092 | May 12 | 2392 | 532 | 104 | 527 |
| Edwards, William R., E. Wisch, and H. N. Breneman, Milwaukee, Wis. Metallic packing | 743,154 | Nov. 3 | 647 | 139, 140 | 107 | 135 |
| Edwards, William T., Elkhorn, Wis. Cattle-stanchion | 747,954 | Dec. 29 | 4909 | 1111 | 107 | 2257 |
| Edwin Harrington, Son & Company. (See Craig, Thomas, assignor.) | | | | | | |
| Edwin Harrington, Son and Company. (See Mullen, Peter, assignor.) | | | | | | |
| Egan, Charles E., assignor, by mesne assignments, to Western Telephone Manufacturing Company, Chicago, Ill. Telephone-switchboard | 732,931 | July 7 | 417 | 101, 102 | 105 | 90 |
| Egan, Joseph E., La Crosse, Wis. Potato-digger | 739,299 | Sept. 22 | 3421 | 762, 763 | 106 | 780 |
| Egan, Thomas F. (See Odell and Egan.) | | | | | | |
| Egan, William J., assignor to E. Burke, Milwaukee, Wis. Metallic belt | 725,686 | Apr. 21 | 2361 | 534 | 103 | 1699 |
| Egbert, Francis M., Bairdstown, assignor to G. C. Lefler, Marvel, Ohio. Sucker-rod connector | 736,371 | Aug. 18 | 2487 | 546 | 105 | 1549 |
| Egbert, Henry L. (See Hansell, William H., assignor.) | | | | | | |
| Egeland, Peter O., *et al.* (See Cargill, Don F., assignor.) | | | | | | |
| Egenas, Severin L., Chicago, Ill. Milk-bottle | 743,841 | Nov. 10 | 2042 | 433 | 107 | 452 |
| Egert, Frederick, Harrisburg, Pa. Puttying-tool | 721,168 | Feb. 24 | 3307 | 756 | 102 | 1570 |
| Eggers, Calvin C., New York, N. Y., assignor to A. T. Prescott, Arlington, Mass. Amusement apparatus | 737,375 | Aug. 25 | 4370 | 974 | 105 | 1963 |
| Eggers, Hermann, West Hoboken, N. J. Fuel-saving briquet | 748,356 | Dec. 29 | 5647 | ..... | 107 | 2418 |
| Eggers, Otto C., Atlantic, Iowa. Clock-key | 722,290 | Mar. 10 | 1185 | 262 | 103 | 268 |
| Eggert, Hermann, Berlin, Germany. Construction of ceilings or floors | 742,849 | Nov. 3 | 54 | 13, 14 | 107 | 14 |
| Eggert, Louis A., Milwaukee, Wis. Hydrocarbon-burner | 748,269 | Dec. 29 | 5513 | 1256 | 107 | 2389 |
| Eggleston, Lewis W., Appleton, Wis. Glass seat for ball-valves | 728,380 | May 19 | 2946 | 650 | 104 | 665 |
| Egly, Georg, Charlottenburg, Germany. Smelting metals and metal compounds | 733,578 | July 14 | 1581 | 377 | 105 | 352 |
| Eha, Clifford. (See Pape, Harry W., assignor.) | | | | | | |
| Ehbets, Carl J., assignor to Colts Patent Fire Arms Manufacturing Company, Hartford, Conn. Revolver | 734,524 | July 28 | 3369 | 788 | 105 | 760 |
| Ehler, Josef, Port Hudson, Mo. Riding-plow | 718,831 | Jan. 20 | 2483 | 552 | 102 | 556 |
| Ehlers, Otto H., Baltimore, Md. Floating dock | 741,958 | Oct. 20 | 3029 | 674, 675 | 106 | 1925 |
| Ehlman, O. F. (See Manger, Henry K. J., assignor.) | | | | | | |
| Ehmann, Charles P., Manchester, England. Bunsen tube for incandescent light, heating, or cooking apparatus | 729,298 | May 26 | 4633 | 1024 | 104 | 1031 |
| Ehrenrich, James J., *et al.* (See McIntyre, Frank, assignor.) | | | | | | |
| Ehrenzeller, Samuel A. (See Dick and Ehrenzeller.) | | | | | | |
| Ehret, Cornelius D., Rosemont, Pa. Wireless selective signaling system | 717,978 | Jan. 6 | 865 | 194 | 102 | 187 |
| Ehret, Cornelius D., Philadelphia, Pa. Alternating-current-circuit controller | 742,976 | Nov. 3 | 273 | 62 | 107 | 59 |
| Ehret, Cornelius D., Ardmore, assignor to Consolidated Wireless Telegraph and Telephone Company, Philadelphia, Pa. Wireless signaling system | 734,048 | July 21 | 2489 | 580 | 105 | 560 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | Spec. | Dr'g. | Vol. | Page. |
| Ehrhardt, Gustav, Eisenach, Germany. Locking device for gun-pivots | 731,874 | June 23 | 4327 | 966 | 104 | 2077 |
| Ehrhardt, Heinrich, Dusseldorf, Germany. Apparatus for producing tubular bodies | 724,270 | Mar. 31 | 4941 | 1106 | 103 | 1090 |
| Ehrhardt, Heinrich, Düsseldorf, Germany. Manufacturing wheels | 730,355 | June 9 | 1516 | 336 | 104 | 1453 |
| Ehrle, George F., Milwaukee, Wis. Artificial foot | 726,889 | May 5 | 109 | 25 | 104 | 26 |
| Ehrlich, Hermann, Altenburg, Germany. Fastening shanks to ivory buttons | 747,053 | Dec. 15 | 3216 | 733 | 107 | 1842 |
| Ehrlich, John B., Indianapolis, Ind. Hot blast for ranges, stoves, or furnaces | 719,767 | Feb. 3 | 655 | 150, 151 | 102 | 961 |
| Ehrlich, Leo. (See Fassett, Francis K., assignor.) | | | | | | |
| Ehrman C. P., *et al.* (See Gibbs, James E., assignor.) | | | | | | |
| Ehrmanntraut, William A., assignor of one-fourth to M. W. Burk, Norfolk, Va. Flexible ladder | 731,293 | June 16 | 3241 | 721 | 104 | 1833 |
| Ehrmanntraut, William A., assignor of one-fourth to M. W. Burk, Norfolk, Va. Machine for bending and twisting iron rods for making ladders, &c | 731,294 | June 16 | 3242 | 721, 722, 723 | 104 | 1834 |
| Eichellspiker, Charles, Cambridge, Mass. Measuring and registering tap for barrels | 732,839 | July 7 | 258 | 64 | 105 | 58 |
| Eichengrün, Arthur, and T. Becker, Elberfeld, Germany, assignors to Farbenfabriken of Elberfeld Co., New York, N. Y. Acetyl cellulose | 734,123 | July 21 | 2635 | ------ | 105 | 590 |
| Eichengrün, Arthur, and T. Becker, Elberfeld, Germany, assignors to Farbenfabriken of Elberfeld Co., New York, N. Y. Plastic composition | 738,533 | Sept. 8 | 1996 | ------ | 106 | 444 |
| Eichengrün, Arthur, Elberfeld, and J. Precht, Hanover, Germany, assignors to Farbenfabriken of Elberfeld Co., New York, N. Y. Photographic plate and making same | 742,405 | Oct. 27 | 3912 | ------ | 106 | 2119 |
| Eichers, William. (See Schlehr, Joseph A., assignor.) | | | | | | |
| Eichhorn, Charles J., assignor to Tea Tray Company, Newark, N. J. Fire-extinguisher | 735,480 | Aug. 4 | 854 | 181, 182 | 105 | 1162 |
| Eichler, Oscar H., Cincinnati, Ohio. Automatic register for printing-frames | 733,706 | July 14 | 1783 | 423 | 105 | 393 |
| Eichner, Wilhelm, Charkow, Russia. Gripping apparatus for aerial ropeways | 740,830 | Oct. 6 | 841 | 188 | 106 | 1425 |
| Eichorn, Frank G., assignor to H. J. Moore, Rochester, N. Y. Movable index-tag | 742,617 | Oct. 27 | 4303 | 969 | 106 | 2201 |
| Eick, Otto, Baltimore, Md. Bottle-washing apparatus | 743,155 | Nov. 3 | 649 | 140 | 107 | 136 |
| Eickelberg, Louis E., Waterloo, Iowa. Carom-gun | 727,603 | May 12 | 1453 | 326 | 104 | 331 |
| Eickemeyer, Carl, *et al.*, executors. (See Eickemeyer, Rudolf.) | | | | | | |
| Eickemeyer, Mary T., *et al.*, executors. (See Eickemeyer, Rudolf.) | | | | | | |
| Eickemeyer & Osterheld M'f'g. Co. (See Tarbell, Joseph H., assignor.) | | | | | | |
| Eickemeyer, Rudolf, deceased, Yonkers, N. Y.; Rudolf, Jr., and M. T. Eickemeyer, executors. Operating alternating-current electric motors | 731,996 | June 23 | 4547 | 1015, 1016 | 104 | 2123 |
| Eickemeyer, Rudolf, deceased; Rudolf, Jr., and M. T. Eickemeyer, Yonkers, N. Y., executors. Electric motor | 744,680 | Nov. 17 | 3617 | 780 | 107 | 802 |
| Eickemeyer, Rudolf, deceased, Yonkers, N. Y.; R., Jr., C., and M. T. Eickemeyer, executors. Means for operating alternating-current electric motors | 730,891 | June 16 | 2480 | 550, 551, 552 | 104 | 1680 |
| Eiden, Gustav, Hamburg, Germany. Wood-splitting device | 720,010 | Feb. 10 | 1097 | 252 | 102 | 1072 |
| Eidt, George M., Denver, Colo. Broom-holder | 736,831 | Aug. 18 | 3377 | 746 | 105 | 1734 |
| Eifert, Robert A., New York, N. Y. Egg-beater | 735,353 | Aug. 4 | 595 | 122 | 105 | 1108 |
| Eifler, Henry J., and G. A. Nauman, Oxnard, Cal. Draft and steering device | 731,875 | June 23 | 4328 | 966 | 104 | 2077 |
| Eigen, Benno von, assignor to A. Goertz & Co., Newark, N. J. Chatelaine-clasp | 737,912 | Sept. 1 | 709 | 153, 154 | 106 | 155 |
| Eighmie, George D., New York, N. Y. Shirt | 745,719 | Dec. 1 | 728 | 166 | 107 | 1253 |
| Eiler, Nicholas H., J. E. Watkins, and E. C. Cress, Pittsburg, Pa. Registering-faucet | 724,172 | Mar. 31 | 4732 | 1061 | 103 | 1049 |
| Eilrich, Charles, and D. Breckenridge, Chicago, Ill. Trench-filler | 720,906 | Feb. 17 | 2762 | 635 | 102 | 1434 |
| Eimbeck, William, *et al.* (See Pascoe, Francis A., assignor.) | | | | | | |
| Eimer, August, New York, N. Y. Electric furnace or oven | 736,509 | Aug. 18 | 2753 | 602 | 105 | 1606 |
| Eimer, August, New York, N. Y. Electric sectional furnace | 736,917 | Aug. 18 | 3527 | 784 | 105 | 1765 |
| Eimer, August, New York, N. Y. Rheostat | 740,831 | Oct. 6 | 843 | 189 | 106 | 1425 |
| Einfalt, John A., Elkhorn, Nebr. Sliding-door hanger | 736,510 | Aug. 18 | 2755 | 602 | 105 | 1606 |
| Einstein, Alfred C. (See Leckband, Theodor H. J., assignor.) | | | | | | |
| Einstein, Daniel, San Francisco, Cal. Smoke-flue | 719,652 | Feb. 3 | 428 | 98 | 102 | 911 |
| Eisaman, George A. (See Hervey, William M., assignor.) | | | | | | |
| Eisele, Hieronymus. (See Hoeschen, Marks, and Eisele.) | | | | | | |
| Eiseman, Moses H., assignor of one-half to F. W. France, Chicago, Ill. Hook and eye | 728,557 | May 19 | 3282 | 728 | 104 | 734 |
| Eisenbeis, Louis P., Ottumwa, Iowa, assignor, by mesne assignments, to Union Paper Bag Machine Company, Philadelphia, Pa. Paper-bag machine | 746,309 | Dec. 8 | 1836 | 416, 417 | 107 | 1511 |
| Eisenberg, Chaskel, Berlin, Germany. Lasting-machine | 725,233 | Apr. 14 | 1523 | 246 | 103 | 1507 |
| Eisenhart, Henry W., assignor to A. B. Farquhar Co., Ltd., York, Pa. Band-cutter and feeder for threshing-machines | 725,617 | Apr. 14 | 2319 | 501, 502 | 103 | 1657 |
| Eisenhutten und Emaillirwerk. (See Schyia, Arnold, assignor.) | | | | | | |
| Eisler, Isaac. (See Simon and Eisler.) | | | | | | |
| Eisner, Max F., New York, N. Y. Garment-fastener | 746,478 | Dec. 8 | 2122 | 487 | 107 | 1572 |
| Eitle, Christian, Stuttgart, Germany. Apparatus for charging furnaces | 744,316 | Nov. 17 | 3002 | 643 | 107 | 671 |
| Ek, Arvid, Portland, Me. Net-holder for ping-pong tables | 730,188 | June 2 | 1187 | 266 | 104 | 1369 |
| Ek, Arvid, Portland, Me. Hinge | 735,481 | Aug. 4 | 855 | 182 | 105 | 1162 |
| Ek, Arvid, Portland, Me. Water-closet | 742,014 | Oct. 20 | 3143 | 701, 702 | 106 | 1947 |
| Ek, John A., Phillips, Wis. Pump | 724,559 | Apr. 7 | 253 | 62 | 103 | 1224 |
| Ekenberg, Martin, assignor to Martin Ekenbergs Aktiebolag, Stockholm, Sweden. Drum for vacuum-pans | 727,317 | May 5 | 921 | 200 | 104 | 198 |
| Ekman, Carl D., Northfleet, England. Making adhesives | 742,174 | Oct. 27 | 3484 | ------ | 106 | 2032 |
| Ekman, Morrits, Chicago, Ill. Fire-escape | 736,947 | Aug. 25 | 3599 | 798 | 105 | 1801 |
| Ekstrand, Peter W., Cokato, Minn. Seed-drill | 734,049 | July 21 | 2490 | 580, 581 | 105 | 560 |
| Ekstrom, Adolph F. (See Davenport, Elmer E., assignor.) | | | | | | |
| Elbrecht, Oscar H., St. Louis, Mo. Sterilizing-case for pocket-thermometers | 720,234 | Feb. 10 | 1523 | 349 | 102 | 1161 |
| Elbridge Electrical Manufacturing Company. (See Doman, Albert E., assignor.) | | | | | | |
| Elder, Anselm A., Portsmouth, Iowa. Land-marker | 717,825 | Jan. 6 | 589 | 131 | 102 | 127 |
| Elder, Charles S., Westbrook, Me. Paper-mill engine | 732,530 | June 30 | 5623 | 1247 | 104 | 2358 |
| Elder, Frank B. (See Frederick, Edwin E., assignor.) | | | | | | |
| Elder, John R. (See Carlisle and Elder.) | | | | | | |
| Elder, Samuel S., Springfield, Ill. Scythe | 743,842 | Nov. 10 | 2044 | 434 | 107 | 452 |
| Elder, William K. (See Waters and Elder.) | | | | | | |
| Elderkin, Joseph G., Fox River, Canada. Raft | 734,050 | July 21 | 2492 | 581 | 105 | 560 |
| Eldred, Byron E., Brookline, Mass. Treating lime | 721,871 | Mar. 3 | 398 | ------ | 103 | 87 |
| Eldred, Howard M., Milwaukee, Wis. Safety pocket or pouch | 744,517 | Nov. 17 | 3352 | 722 | 107 | 746 |
| Eldredge, Earl C., Springfield, Mass. Electrical measuring instrument | 747,871 | Dec. 22 | 4738 | 1071 | 107 | 2199 |
| Eldridge, Claude E., Joliet, assignor of one-half to H. L. Thompson, Chicago, Ill. Gage | 728,558 | May 19 | 3285 | 728 | 104 | 735 |
| Eldridge, Henry, *et al.* (See Solomon, Emmett G., assignor.) | | | | | | |
| Eldridge, Hilliary, Jersey City, N. J., assignor to "Secretary," New York, N. Y. Gas-stove | 733,707 | July 14 | 1784 | 423, 424 | 105 | 393 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Eldridge, Wilson K. (See Hall and Eldridge.) | | | | | | |
| Electralene Manufacturing Company. (See Kuljis, Jacob, assignor.) | | | | | | |
| Electric Boat Company. (See Brady, Francis W., assignor.) | | | | | | |
| Electric Boat Company. (See Cable, Frank T., assignor.) | | | | | | |
| Electric Boat Company. (See Spear, Lawrence Y., assignor.) | | | | | | |
| Electric Compositor Company. (See Bellows, Benjamin F., assignor.) | | | | | | |
| Electric Contract Company. (See Gill, Edwin R., assignor.) | | | | | | |
| Electric Cushion Shoe Company. (See Worth, Elvin P., assignor.) | | | | | | |
| Electric Floor Finishing Company. (See Stephens and Goodale, assignors.) | | | | | | |
| Electric Furnace Company. (See Conley, Michael R., assignor.) | | | | | | |
| Electric Gas Lighting Company. (See Tucker, Frank S., assignor.) | | | | | | |
| Electric Gate and Signal Company. (See Hammel, Lewis R., assignor.) | | | | | | |
| Electric Gate and Signal Company. (See Karr, Burton A., assignor.) | | | | | | |
| Electric Motor and Generator Ventilating Company. (See Rowland, Horace B., assignor.) | | | | | | |
| Electric and Ordnance Accessories Company. (See Aron, Leonard J., assignor.) | | | | | | |
| Electric and Ordnance Accessories Company. (See Rivers, Edward G., assignor.) | | | | | | |
| Electric Self-Winding Clock Company. (See Fry, George H., assignor.) | | | | | | |
| Electric Sparking & Illuminating Company. (See Wilson, James M., assignor.) | | | | | | |
| Electric Specialty Co. (See Felt, Charles E., assignor.) | | | | | | |
| Electric Specialty Company. (See Felt and Kimbark, assignors.) | | | | | | |
| Electric Storage Battery Company. (See Appleton, Joseph, assignor.) | | | | | | |
| Electric Storage Battery Company. (See Entz, Justus B., assignor.) | | | | | | |
| Electric Storage Battery Company. (See Ford, Bruce, assignor.) | | | | | | |
| Electric Storage Battery Company. (See Rodman, Hugh, assignor.) | | | | | | |
| Electric Vehicle Company. (See Condict, George H., assignor.) | | | | | | |
| Electric Vehicle Company. (See Cuntz, Hermann F., assignor.) | | | | | | |
| Electric Vehicle Company. (See Day, George H., assignor.) | | | | | | |
| Electric Vehicle Company. (See Fiske, Henry G., assignor.) | | | | | | |
| Electric Vehicle Company. (See Law, Fred A., assignor.) | | | | | | |
| Electric Vehicle Company. (See Riker, Andrew L, assignor.) | | | | | | |
| Electric Vehicle Equipment Company. (See Clark, Absolam F., assignor.) | | | | | | |
| Electrical Ore Finding Company. (See Daft and Williams, assignors.) | | | | | | |
| Electricitäts Actien Gesellschaft, vorm. W. Lahmeyer & Co. (See Dettmar, Georg, assignor.) | | | | | | |
| Electricitäts Actien Gesellschaft, vorm. W. Lahmeyer & Co. (See Hertwig, Karl, assignor.) | | | | | | |
| Electrite Company. (See Rennerfelt, Gustav T., assignor.) | | | | | | |
| Electro Carbide Lamp Syndicate (See Voelker, William L., assignor.) | | | | | | |
| Electro Dental Manufacturing Company. (See Schramm, Adolph W., assignor.) | | | | | | |
| Electro-Mechanical Specialty Company. (See Fergusson, Alan R., assignor.) | | | | | | |
| Electro Surgical Instrument Co. (See Houghton, Thomas A., assignor.) | | | | | | |
| Electrolite Gas Lamp Company. (See Beck, Charles W., assignor.) | | | | | | |
| Electromechanical Improvement Company. (See Reeves, Frank N., assignor.) | | | | | | |
| Elektrizitäts-Aktiengesellschaft, vormals Schuckert & Co. (See Honsberg, Georg, assignor.) | | | | | | |
| Elektrogravüre Gesellschaft mit Beschränkter Haftung. (See Trentzsch, Robert, assignor.) | | | | | | |
| Elenius, John A., Calumet, Mich. Life-preserver | 727,318 | May 5 | 922 | 201 | 104 | 199 |
| Elevator Safety Device Co. (See Kirsch, Charles W., assignor.) | | | | | | |
| Elevator Securities Company. (See Hiss and MacKaye, assignors.) | | | | | | |
| Elevator Supply & Repair Company. (See Reiners, Charles A., assignor.) | | | | | | |
| Eley, Charles V. A., Birmingham, England Steam-condensing apparatus | 734,525 | July 28 | 3373 | 788 | 105 | 761 |
| Elgen, Magnus P., assignor of one-half to C. P. Anderson, Mass, Mich. Rotary engine | 718,198 | Jan. 13 | 1261 | 276 | 102 | 287 |
| Elger, William D. (See Schneider, Carl, assignor.) | | | | | | |
| Elger, Wm. D. (See Morong, Joseph H., assignor.) | | | | | | |
| Elges, Gottlieb D., Monticello, Iowa. Window-screen | 720,120 | Feb. 10 | 1316 | 301 | 102 | 1119 |
| Elias, Friedrich, Philadelphia, Pa., assignor to Biogen Company, New York, N. Y. Making peroxid of zinc | 740,832 | Oct. 6 | 847 | ..... | 106 | 1426 |
| Elias, Vincent. (See Farago and Elias.) | | | | | | |
| Eliel, Albert L., *et al.* (See La Burt, John, assignor.) | | | | | | |
| Eliel, Albert L., *et al.* (See La Burt and Campbell, assignors.) | | | | | | |
| Eliel, Oscar H., Lasalle, Ill. Apparatus for the manufacture of sulfuric acid | 725,427 | Apr. 14 | 1857 | 415 | 103 | 1578 |
| Eliel, Oscar H., Lasalle, Ill. Smelting-furnace | 742,406 | Oct. 27 | 3913 | 879<br>880 | 106 | 2120 |
| Elison, Oliver, Concord, Nebr. Mowing-machine | 737,913 | Sept. 1 | 712 | 154<br>155 | 106 | 156 |
| Elison, Robert B., assignor of one-half to J. M. Scarber, Morven, Ga. Stalk cutter and crusher | 732,623 | June 30 | 5792 | 1285 | 104 | 2398 |
| Elker, Joseph B., Pittsburg, Pa. Rail-joint | 740,110 | Sept. 29 | 4947 | 1110 | 106 | 1125 |
| Elle, Paul, *et al.* (See Navascuez, Santiago N., assignor.) | | | | | | |
| Ellery, Robert L., Portsmouth, N. H. Roller-bearing | 724,090 | Mar. 31 | 4559 | 1026 | 103 | 1014 |
| Ellery, Robert L., Portsmouth, N. H., assignor to Morley Button Manufacturing Company, Saco, Me., and Boston, Mass. Furniture-nail | 718,331 | Jan. 13 | 1511 | 335 | 102 | 340 |
| Ellery, Robert L., Portsmouth, N. H., assignor to Morley Button Manufacturing Company, South Berwick, Me., and Boston, Mass. Clench-button | 731,441 | June 23 | 3532 | 786 | 104 | 1913 |
| Ellery, Robert L., Portsmouth, N. H., assignor to S. N. Merrill, trustee, Boston, Mass. Radial car-truck | 724,271 | Mar. 31 | 4943 | 1106<br>1107 | 103 | 1090 |
| Ellery, Robert L., Portsmouth, N. H., assignor to S. M. Merrill, trustee, Boston, Mass. Radial car-truck | 727,918 | May 12 | 2081 | 462 | 104 | 462 |
| Ellery, Robert L., Portsmouth, N. H., assignor to S. M. Merrill, trustee, Boston, Mass. Radial car-truck | 727,919 | May 12 | 2085 | 463 | 104 | 463 |
| Ellicott, Charles E., and J. B. Norris, Baltimore, Md. Friction-clutch | 719,204 | Jan. 27 | 3198 | 714 | 102 | 720 |
| Ellicott, Charles E., and J. B. Norris, Baltimore, Md. Friction-clutch | 722,959 | Mar. 17 | 2428 | 543 | 103 | 546 |
| Ellicott, Edward B., *et al.* (See Sargent, Charles E., assignor.) | | | | | | |
| Ellicott, Edward B., Chicago, Ill. Electrical switchboard | 727,763 | May 12 | 1788 | 401 | 104 | 401 |
| Ellicott, Edward B., Chicago, Ill. Electrical protective device | 727,764 | May 12 | 1789 | 401 | 104 | 402 |
| Ellicott, Edward B., Chicago, Ill. Signal-transmitting system | 738,302 | Sept. 8 | 1519 | 329 | 106 | 342 |
| Ellinger, Clarence M., and L. Kopczynski, Baltimore, Md.; said Kopczynski assignor to said Ellinger. Fireproof building structure | 729,299 | May 26 | 4634 | 1024 | 104 | 1031 |
| Ellinger, Clarence M., and L. Kopczynski, Boston, Mass.; said Kopczynski assignor to said Ellinger. Building structure | 743,262 | Nov. 3 | 864 | 188<br>189 | 107 | 181 |
| Ellinger, Julian O., Philadelphia, Pa., assignor to Reinforced Cement Construction Company, New York, N. Y. Composite structure | 735,228 | Aug. 4 | 379 | 73 | 105 | 1061 |
| Ellingson, Richard, Radcliffe, Iowa. Screen or storm-window attachment | 728,093 | May 12 | 2393 | 532 | 104 | 527 |
| Ellinwood, Augustus E., assignor to Goodyear Tire & Rubber Company, Akron, Ohio. Device for smoothing rubber tires | 736,239 | Aug. 11 | 2255 | 488 | 105 | 1481 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|
| | | | Spec. | Dr'g. | Vol. | Page. |
| Elliott, Alexander, and M. Shaen, Washington, D. C. Machine for planing electrotype plates and molds | 718,245 | Jan. 13 | 1341 | 297 | 102 | 303 |
| Elliott, Arthur H. (See Ihart, John P., assignor.) | | | | | | |
| Elliott, Charles B., Riverside, Conn. Playing-ball | 731,026 | June 16 | 2742 | 611 | 104 | 1734 |
| Elliott, Edward E., Radley, Ind. Sack-holder | 731,442 | June 23 | 3533 | 787 | 104 | 1913 |
| Elliott, Edward M. (See Elliott, Lois S. and E. M.) | | | | | | |
| Elliott, Elias L., Yonkers, N. Y., assignor to Illuminating Engineering Company. Bulb for incandescent electric lamps | 730,852 | June 9 | 2387 | 527 | 104 | 1640 |
| Elliott-Fisher Company. (See Eckert, Herman F., assignor.) | | | | | | |
| Elliott-Fisher Company. (See Fisher, Robert J., assignor.) | | | | | | |
| Elliott-Fisher Company. (See Halle, Hiram J., assignor.) | | | | | | |
| Elliott-Fisher Company. (See Hillard, Frederic W., assignor.) | | | | | | |
| Elliott-Fisher Company. (See Hopkins, Clarence F., assignor.) | | | | | | |
| Elliott-Fisher Company. (See Smith, John A., assignor.) | | | | | | |
| Elliott-Fisher Company. (See Stackpole, Ralph D., assignor.) | | | | | | |
| Elliott, Frederick S. (See Romanze, Otto, assignor.) | | | | | | |
| Elliott, George L. (See Colleen, Ivar H. P., assignor.) | | | | | | |
| Elliott, Gettise M., Chicago, Ill., assignor to Federal Manufacturing Company, Cleveland, Ohio. Wheel-hub | 743,843 | Nov. 10 | 2045 | 434 | 107 | 452 |
| Elliott & Hatch Book Typewriter Company. (See Eylar, Matthew S., assignor.) | | | | | | |
| Elliott & Hatch Book Typewriter Company. (See Hillard, Frederic W., assignor.) | | | | | | |
| Elliott & Hatch Book Typewriter Company. (See Hopkins, Clarence F., assignor.) | | | | | | |
| Elliott & Hatch Book Typewriter Company. (See Slaughter, Robert K., assignor.) | | | | | | |
| Elliott & Hatch Book Typewriter Company. (See Stackpole, Ralph D., assignor.) | | | | | | |
| Elliott, Henry S., *et al.* (See Haines, John H. J., assignor.) | | | | | | |
| Elliott, Henry S., *et al.* (See Randall, Henry G., assignor.) | | | | | | |
| Elliott, J. T. (See Stukes, John M., assignor.) | | | | | | |
| Elliott, James A. R., Kansas City, Mo. Single-trigger firearm | 732,531 | June 30 | 5625 | 1247 | 104 | 2359 |
| Elliott, John B., San Francisco, Cal. Portable desk | 735,865 | Aug. 11 | 1600 | 341 | 105 | 1341 |
| Elliott, Lois S. and E. M., Syracuse, N. Y. Clothes-pounder | 744,518 | Nov. 17 | 3353 | 722 | 107 | 746 |
| Elliott, Loren M. (See Richardson, Millard F., assignor.) | | | | | | |
| Elliott, Lucius J. (See Reichert, John, assignor.) | | | | | | |
| Elliott, Milo A., assignor to C. McGee, Waterville, Me. Mop-wringer | 733,317 | July 7 | 1103 | 262 | 105 | 232 |
| Elliott, Nathaniel L., assignor of one-half to J. W. Smith, Hutchinson, Kans. Packing-press | 743,844 | Nov. 10 | 2045 | 434, 435 | 107 | 452 |
| Elliott, Richard P., Boston, Mass. Seat-back | 728,215 | May 19 | 2616 | 585 | 104 | 596 |
| Elliott, Richard P., Boston, Mass. Adjustable furniture | 728,887 | May 26 | 3894 | 866 | 104 | 878 |
| Elliott, Richard P., Boston, Mass. Adjustable furniture | 730,623 | June 9 | 2002 | 445 | 104 | 1559 |
| Elliott, Richard P., Boston, Mass. Automatic vending-machine | 730,624 | June 9 | 2004 | 445 | 104 | 1559 |
| Elliott, Thadious V., Brooklyn, N. Y. Furnace | 746,310 | Dec. 8 | 1839 | 418 | 107 | 1511 |
| Elliott, Thadious V., assignor of one-half to J. B. Hutchinson, Columbia, Pa. Draft device | 724,272 | Mar. 31 | 4945 | 1107 | 103 | 1091 |
| Elliott, Thadious V., assignor of one-half to J. B. Hutchinson, Columbia, Pa. Feed-water heater and purifier | 746,479 | Dec. 8 | 2123 | 488 | 107 | 1573 |
| Elliott, Thadious V., assignor of one-half to J. B. Hutchinson, Columbia, Pa. Gas-consumer | 746,936 | Dec. 15 | 2989 | 687 | 107 | 1788 |
| Elliott, William S. (See McComb, William, assignor.) | | | | | | |
| Elliott, William S. (See Pratt, Clayton A., assignor.) | | | | | | |
| Elliott, William S. (See Rawson and Atterbury, assignors.) | | | | | | |
| Ellis, Albert C. (See Johnston, James J., assignor.) | | | | | | |
| Ellis, Carleton, and O. J. Flanigan, Boston, Mass. Soldering-flux for aluminium | 746,802 | Dec. 15 | 2708 | | 107 | 1724 |
| Ellis, Charles W., Indianapolis, Ind. Packer | 717,826 | Jan. 6 | 590 | 131, 132 | 102 | 127 |
| Ellis, Charles Z. (See Mighels and Ellis.) | | | | | | |
| Ellis, Charles Z., assignor of one-half to R. C. Lane, Berkeley, Cal. Feed-regulator for ore-feeders | 745,169 | Nov. 24 | 4610 | 999, 1000 | 107 | 1026 |
| Ellis, Edwin. (See Arnold, David B., assignor.) | | | | | | |
| Ellis, Frank H., Chicago, Ill. Safety horse-detacher | 740,111 | Sept. 29 | 4949 | 1111 | 106 | 1125 |
| Ellis, George H., Chicago, Ill. Spinning-machine | 721,684 | Mar. 3 | 67 | 14 | 103 | 15 |
| Ellis, George H., assignor to Deering Harvester Company, Chicago, Ill. Twine | 722,960 | Mar. 17 | 2429 | 543 | 103 | 546 |
| Ellis, George H., Chicago, assignor to W. Deering, Evanston, Ill. Machine for treating flax | 738,668 | Sept. 8 | 2247 | 493, 494 | 106 | 497 |
| Ellis, George H., Chicago, assignor to W. Deering, Evanston, Ill. Treating flax-straw | 738,715 | Sept. 8 | 2337 | 513 | 106 | 515 |
| Ellis, George H., Chicago, assignor, by mesne assignments, to W. Deering, Evanston, Ill. Flax-straw-preparing machine | 738,783 | Sept. 15 | 2486 | 546, 547 | 106 | 565 |
| Ellis, George H., assignor to W. Deering, Chicago, Ill. Flax-breaking machine | 738,893 | Sept. 15 | 2693 | 594, 595 | 106 | 610 |
| Ellis & Goltermann. (See Waldman, Jacob, assignor.) | | | | | | |
| Ellis, Halcolm, St. Louis, Mo., assignor to American Arithmograph Company, New York, N. Y. Arithmograph | 744,004 | Nov. 10 | 2359 | 507, 508, 509 | 107 | 522 |
| Ellis, Henry R., Salt Lake City, Utah. Extracting copper from carbonate and oxid ores | 725,548 | Apr. 14 | 2094 | 474 | 103 | 1628 |
| Ellis, Henry R., Salt Lake City, Utah. Centrifugal lixiviating-machine | 725,549 | Apr. 14 | 2095 | 475 | 103 | 1629 |
| Ellis, John, Allegheny, Pa. Regulator-valve mechanism for explosion-engines | 743,845 | Nov. 10 | 2047 | 435 | 107 | 452 |
| Ellis, John F., Torrington, Conn. Apparatus for regulating fluid-pressure for the application of power | 723,995 | Mar. 31 | 4383 | 984, 985, 986, 987 | 103 | 980 |
| Ellis Lacer Company. (See Ellis, Warren E., assignor.) | | | | | | |
| Ellis, Lewis M., Connersville, Ind. Wind instrument | 745,804 | Dec. 1 | 884 | 199, 200 | 107 | 1288 |
| Ellis, Marvin. (See Kington and Ellis.) | | | | | | |
| Ellis, Oscar A., Eldorado Canyon, Nev. Apparatus for extracting metals from ores | 731,169 | June 16 | 3015 | 669 | 104 | 1787 |
| Ellis, Samuel E., Peoria, Ill. Hot-air pipe | 741,318 | Oct. 13 | 1757 | 391, 392 | 106 | 1638 |
| Ellis, Samuel J., and C. Neilsen, Memphis, Tenn. Stirrer for cooking-receptacles | 733,471 | July 14 | 1391 | 328 | 105 | 312 |
| Ellis, Thaddeus, and G. H. Purvis, Lester, Wash. Automatic track-gage | 747,872 | Dec. 22 | 4739 | 1071 | 107 | 2199 |
| Ellis, Warren E., Haverhill, Mass., assignor to Ellis Lacer Company. Fastener for shoe-uppers | 729,300 | May 26 | 4637 | 1025 | 104 | 1032 |
| Ellis, William, Blockton, assignor of one-half to N. T. Mattingly, Montour, Iowa. Wagon-box and end-gate | 727,920 | May 12 | 2087 | 463, 464 | 104 | 463 |
| Ellis, William J., Akron, Ohio. Rubber mat | 729,923 | June 2 | 726 | 162 | 104 | 1276 |
| Ellis, William T., Horton, Ark. Plow | 720,412 | Feb. 10 | 1838 | 419 | 102 | 1229 |
| Ellis, William T. G., assignor to T. A. Jebb, Glasgow, Scotland. Spring-tire for vehicle-wheels | 717,827 | Jan. 6 | 593 | 132 | 102 | 128 |
| Ellis, William T. G. Glasgow, assignor of one-half to J. Ingram, Rutherglen, and T. Hart, Glasgow, Scotland. Life-saving guard for tram-cars or the like | 737,914 | Sept. 1 | 717 | 155 | 106 | 157 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|
| | | | Spec. | Drg. | Vol. | Page. |
| Ellison, Benjamin W., Boyne Falls, Mich. Machine malt-turner | 726,890 | May 5 | 110 | 26 | 104 | 26 |
| Ellison and Company, W. T. (See Ellison, Emily, assignor.) | | | | | | |
| Ellison, Emily, assignor of one-half to W. T. Ellison and Company, Limited, Irlams-o'-th'-Height, near Manchester, England. Drawing-board and T-square | 723,518 | Mar. 24 | 3488 | 780 | 103 | 774 |
| Ellison, John, Spanish Fork, Utah. Apparatus for distilling water | 718,991 | Jan. 27 | 2799 | 627 | 102 | 639 |
| Ellison, Thomas R., Welllington, New Zealand. Attachment for cycles for use as a hand-rest or parcel-carrier | 717,662 | Jan. 6 | 241 | 61 | 102 | 52 |
| Elliston, Charles T., Clinton, Mo. Wheel-plow | 718,705 | Jan. 20 | 2259 | 497 | 102 | 512 |
| Ellithorp, Orren S., assignor to Deering Harvester Company, Chicago, Ill. Knot-tying device for corn-shocking machines | 720,572 | Feb. 17 | 2168 | 503 | 102 | 1310 |
| Ellithorp, Orren S., assignor to Deering Harvester Company, Chicago, Ill. Corn-shocker | 726,891 | May 5 | 112 | 26 | 104 | 26 |
| Ellithorp, Orren S., Chicago, Ill., assignor to International Harvester Company. Corn-shocker | 726,892 | May 5 | 113 | 27 | 104 | 27 |
| Ellmore, John, assignor of one-half to F. B. Byers, Altoona, Pa. Structural iron | 720,792 | Feb. 17 | 2562 | 590 | 102 | 1392 |
| Ellstrom, Gustaf, assignor to M. E. Johnson, Fitchburg, Mass. Hub for bicycle-wheels | 722,402 | Mar. 10 | 1379 | 305 | 103 | 309 |
| Ellsworth, Henry R., Boston, Mass. Smoke-consumer | 739,659 | Sept. 22 | 4090 | 911 | 106 | 924 |
| Ellsworth, John F., assignor of one-half to G. T. Chester, Buffalo, N. Y. Beam-compass | 718,923 | Jan. 20 | 2661 | 597 | 102 | 594 |
| Ellsworth, Jonathan F., Hyannis, Nebr. Snap-hook | 744,860 | Nov. 24 | 3981 | 858 | 107 | 896 |
| Elmblad, Hjalmar, Chicago, Ill. Printing or lettering machine | 720,573 | Feb. 17 | 2169 | 503 504 | 102 | 1311 |
| Elmendorf, John E., New York, N. Y. Window-screen | 739,592 | Sept. 22 | 3963 | 884 | 106 | 896 |
| Elmer, Ellison. (See Gibson, Frank H., assignor.) | | | | | | |
| Elmer, George H., Pleasant Valley, Oreg. Potato-planter | 744,181 | Nov. 17 | 2755 | 586 | 107 | 615 |
| Elmes, Charles F. (See Bisbee, Edgar C., assignor.) | | | | | | |
| Elmore, Francis E., London, England. Apparatus for the generation and direct electrolytic application of electric currents | 726,659 | Apr. 28 | 4171 | 941 | 103 | 2086 |
| Elmore, Francis E., London, England. Apparatus for the generation and application of electric currents for electrolysis | 736,331 | Aug. 11 | 2417 | 528 | 105 | 1518 |
| Elmquist, John. (See McGrath, Thomas J., assignor.) | | | | | | |
| Elrod, Thomas, Cool, assignor of one-half to D. L. Phillips, Hanford, Cal. Rail-joint chair | 725,057 | Apr. 14 | 1183 | 268 | 103 | 1437 |
| Elsenrath, Andrew, Allegheny, Pa. Nut-lock | 746,937 | Dec. 15 | 2990 | 687 | 107 | 1789 |
| Elsey, Grant E., Aurora, Mo. Vehicle-body | 735,688 | Aug. 4 | 1255 | 266 | 105 | 1248 |
| Elsey, Grant E., Aurora, Mo. Corner-iron for vehicle-bodies | 739,484 | Sept. 22 | 3770 | 843 | 106 | 856 |
| Elsner, Hans J., assignor to Kölner Accumulatoren-Werke Gottfried Hagen, Kalk, near Cologne, Germany. Steering apparatus for vehicles | 718,440 | Jan. 13 | 1698 | 374 | 102 | 378 |
| Elson, Louis E., New York, N. Y. Folding-machine | 726,660 | Apr. 28 | 4173 | 941 942 | 103 | 2087 |
| Elson, Louis E., New York, N. Y. Machine for fastening fan-sticks to fan-tops | 726,661 | Apr. 28 | 4174 | 942 | 103 | 2087 |
| Elstun, John W., Indianapolis, Ind. Holdback-anchor | 720,574 | Feb. 17 | 2173 | 504 | 102 | 1311 |
| Elton, Scott G., Akron, Ohio. Apparatus for turning pipe | 738,017 | Sept. 1 | 923 | 204 | 106 | 202 |
| Elvin, Albert G., Scranton, Pa. Lubricating device. (Reissue) | 12,134 | July 21 | 3322 | 778 | 105 | 734 |
| Elward, John H., Peoria, Ill. Cultivator | 741,780 | Oct. 20 | 2683 | 598 | 106 | 1852 |
| Elward, John H., Hutchinson, Kans. Railway gate | 741,781 | Oct. 20 | 2686 | 598 | 106 | 1853 |
| Elwell, Howard P., assignor to Fore River Ship and Engine Company, Quincy, Mass. Universal feed-table | 734,685 | July 28 | 3672 | 860 | 105 | 824 |
| Elwell, Lloyd E., Los Angeles, Cal. Trolley-switch | 747,155 | Dec. 15 | 3398 | 770 | 107 | 1883 |
| Elworthy, Herbert S., assignor of one-half to E. H. Williamson, London, England. Manufacturing gas | 738,303 | Sept. 8 | 1523 | 329 330 | 106 | 344 |
| Ely, Charles C., and A. Kobelt, Kansas City, Mo. Electric trip mechanism | 736,511 | Aug. 18 | 2756 | 603 | 105 | 1607 |
| Ely, William H., Middletown, Conn. Eyeglass-bridge | 744,317 | Nov. 17 | 3003 | 644 | 107 | 671 |
| Elyria Iron and Steel Company. (See Cairns, William, assignor.) | | | | | | |
| Embalmer's Supply Company. (See Hennessy, Thomas B., assignor.) | | | | | | |
| Embley, William. (See Shobe and Embley.) | | | | | | |
| Embley, William, and A. A. Shobe, Jerseyville, Ill. Electric-railway system | 744,055 | Nov. 17 | 2496 | 535 | 107 | 561 |
| Emergency Valve Company. (See Wiesebrock, Frederick W. A., assignor.) | | | | | | |
| Emerick, Frederick A., Oswego, N. Y., assignor to Great Bear Spring Company, Jersey City, N. J. Seal for bottles | 725,687 | Apr. 21 | 2362 | 534 | 103 | 1700 |
| Emerson, David W., and P. Keenan, Butternut, Wis. Cattle-guard | 727,765 | May 12 | 1792 | 401 | 104 | 402 |
| Emerson, Don C. (See Mabus, John, assignor.) | | | | | | |
| Emerson Electric Manufacturing Company. (See Meston, Charles R. and T. M., assignors.) | | | | | | |
| Emerson Manufacturing Company. (See Waterman, Lewis E., assignor.) | | | | | | |
| Emerson Manufacturing Company. (See Wilson, George, assignor.) | | | | | | |
| Emerson, Robert B., Jackson, Mich. Cement sign | 744,056 | Nov. 17 | 2497 | 535 | 107 | 562 |
| Emerson, Victor H., Newark, N. J., assignor to American Graphophone Company, Washington, D. C. Stylus or needle for sound-reproducers | 736,948 | Aug. 25 | 3600 | 798 | 105 | 1801 |
| Emerson, Victor H., Newark, N. J., and F. L. Capps, Bridgeport, Conn., assignors to American Graphophone Company. Automatic sound-recorder | 727,921 | May 12 | 2089 | 464 | 104 | 463 |
| Emert, Nils S., Omaha, Nebr. Permutation-lock for valises, &c | 741,639 | Oct. 20 | 2403 | 538 | 106 | 1794 |
| Emery, Abram D., deceased; W. T. Emery, Dedham, and E. M. Emery, Taunton, Mass., administrators, assignors to Draper Company, Portland, Me. Shedding mechanism for looms | 729,146 | May 26 | 4351 | 960 | 104 | 971 |
| Emery, Albert H., Stamford, Conn. Apparatus for tempering parts of guns or other tubular bodies | 720,337 | Feb. 10 | 1712 | 389 | 102 | 1201 |
| Emery, Albert H., Stamford, Conn. Shrapnel-shell | 723,256 | Mar. 24 | 2981 | 670 | 103 | 674 |
| Emery, Albert H., Stamford, Conn. Constructing guns | 726,520 | Apr. 28 | 3913 | 885 | 103 | 2035 |
| Emery, Albert H., Stamford, Conn. Constructing and assembling guns | 727,766 | May 12 | 1793 | 402 | 104 | 403 |
| Emery, Albert H., Stamford, Conn. Constructing and assembling parts of guns | 727,767 | May 12 | 1797 | 402 | 104 | 403 |
| Emery, Albert H., Stamford, Conn. Constructing and assembling the parts of heavy ordnance | 727,768 | May 12 | 1801 | 403 | 104 | 404 |
| Emery, Charles G. (See Shortt, Edward G., assignor.) | | | | | | |
| Emery, Charles H. (See Sejnoha and Perkins, assignors.) | | | | | | |
| Emery, Earle C., *et al.* (See Bouchard, John J., assignor.) | | | | | | |
| Emery, Earle C., *et al.* (See Bouchard and Ensor, assignors.) | | | | | | |
| Emery, Estelle M., *et al.*, administrators. (See Emery, Abram D.) | | | | | | |
| Emery, Leonard A., Detroit, Mich. Curtain-support | 744,318 | Nov. 17 | 3004 | 644 | 107 | 671 |
| Emery, Moses W., *et al.* (See Hall, Joel B., assignor.) | | | | | | |
| Emery, Ned H. (See Martin, Fred S., assignor.) | | | | | | |
| Emery, Ned H., assignor of one-half to H. H. Jarvis, Sioux City, Iowa. Hay-rack | 737,722 | Sept. 1 | 303 | 63 | 106 | 69 |
| Emery, Plato G., Chicago, Ill. Window-shade | 718,992 | Jan. 27 | 2801 | 627 628 | 102 | 639 |
| Emery, Plato G., Chicago, Ill. Window-shade | 727,560 | May 5 | 1378 | 311 | 104 | 297 |
| Emery, Plato G., Chicago, Ill. Curtain-fixture | 742,776 | Oct. 27 | 4563 | 1034 | 106 | 2259 |
| Emery, Victor J., Quincy, Mass. Vaporizer for hydrocarbon-engines | 741,959 | Oct. 20 | 3031 | 675 | 106 | 1926 |

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| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Emery, Walter T., *et al.*, administrators. (See Emery, Abram D.) | | | | | | |
| Emery, William O., Crawfordsville, Ind. Material for protecting ironwork and preparing same | 748,270 | Dec. 29 | 5515 | ..... | 107 | 2390 |
| Emett, George H. H., New Westminster, Canada, assignor to P. Barnes, Seattle, Wash. T-square-clamping device | 737,090 | Aug. 25 | 3838 | 853 | 105 | 1850 |
| Emigh, Aaron H., Santa Barbara, Cal. Cooling-board | 746,311 | Dec. 8 | 1840 | 418<br>419 | 107 | 1512 |
| Emison, John. (See Buswell, Arthur T., assignor.) | | | | | | |
| Emlenton Refining Co. (See Hatton, Charles H., assignor.) | | | | | | |
| Emmé, Mary, New York, N. Y., assignor of one-fourth to S. Ringhdahl, Chicago, Ill. Storage battery | 728,381 | May 19 | 2947 | 650 | 104 | 665 |
| Emmelmann, Fred G. and H. R., Indianapolis, Ind. Gasolene soldering-iron | 740,112 | Sept. 29 | 4950 | 1111 | 106 | 1125 |
| Emmelmann, Harry R. (See Emmelmann, Fred G. and H. R.) | | | | | | |
| Emmert, George F. (See McCaughey, Homer K., assignor.) | | | | | | |
| Emmert Manufacturing Company. (See Byer, Edgar H., assignor.) | | | | | | |
| Emmet, William L. R., Schenectady, N. Y., assignor to General Electric Company. Means for separating moisture from vapor in turbines | 745,045 | Nov. 24 | 4334 | 937 | 107 | 969 |
| Emmet, William L. R., Schenectady, N. Y., assignor to General Electric Company. Commutator-bar | 745,336 | Dec. 1 | 37 | 8 | 107 | 1108 |
| Emmet, William L. R., Schenectady, N. Y., assignor to General Electric Company. Elastic-fluid turbine | 746,938 | Dec. 15 | 2991 | 688<br>689 | 107 | 1789 |
| Emmet, William L. R., and O. Junggren, Schenectady, N. Y., assignors to General Electric Company. Electric governor for turbines | 742,300 | Oct. 27 | 3732 | 834<br>835 | 106 | 2083 |
| Emmitt, John V., Sterling, Ill. Checkrein-holder | 737,723 | Sept. 1 | 304 | 63 | 106 | 69 |
| Emmons, Charles W., assignor of one-half to J. L. McDonell, Detroit, Mich. Seat and back | 724,453 | Apr. 7 | 60 | 16 | 103 | 1183 |
| Emmons, Grosvenor B. (See Mills, Francis A., assignor.) | | | | | | |
| Emmons, Richard B., Galena, Kans., and N. Miller, Joplin, Mo. Ore-separator | 720,338 | Feb. 10 | 1715 | 389<br>390 | 102 | 1202 |
| Emond, Louis, Lowell, Mass. Pipe-trimming tool | 746,312 | Dec. 8 | 1841 | 419 | 107 | 1512 |
| Emond, Octave V. A. (See Emond, Vital A., assignor.) | | | | | | |
| Emond, Vital A., assignor to O. V. A. Emond, Quebec, Canada. Filter | 730,356 | June 9 | 1517 | 336 | 104 | 1453 |
| Emonds, Hubert, assignor to Brüssel-Aachener Glas-Manufactur Leymanns & Keim, Aix-la-Chapelle, Germany. Electric-arc lamp | 745,427 | Dec. 1 | 216 | 48 | 107 | 1146 |
| Empire Engine and Motor Company. (See Barrett, William F., assignor.) | | | | | | |
| Empire Engine and Motor Company. (See Galloway, Edwin F., Jr., assignor.) | | | | | | |
| Empire Pipe Bending and Supply Company. (See Layton, Richardson C., assignor.) | | | | | | |
| Empire Plow Company. (See Haiman and Murray, assignors.) | | | | | | |
| Empire Zinc Company. (See Wetherill, William C., assignor.) | | | | | | |
| Empson, John H., Longmont, Colo. Pea-shelling machine | 738,894 | Sept. 15 | 2697 | 595<br>596 | 106 | 611 |
| Emrich, Henry C., Washington, D. C. Closure for storing and dispensing vessels | 717,560 | Jan. 6 | 72 | 19 | 102 | 18 |
| Emrich, John G., Columbus, Ohio. Anchor for sand cores | 720,011 | Feb. 10 | 1097 | 252 | 102 | 1072 |
| Emrich, Nicholas A., and W. F. Krautter, assignors to themselves and J. Steinmiller, Chicago, Ill. Perforating attachment for printing-presses | 736,512 | Aug. 18 | 2758 | 603 | 105 | 1607 |
| Emy, Albert, Paris, France. Double furnace | 731,555 | June 23 | 3751 | 835 | 104 | 1956 |
| En Holm, Oscar A., New York, N. Y. Self-winding electric clock | 722,684 | Mar. 17 | 1943 | 433 | 103 | 447 |
| Enax, Heinrich, L.-Neuschönefeld, assignor of one-half to W. Geyer, Leipzig, Germany. Cold compress | 743,473 | Nov. 10 | 1365 | 280 | 107 | 307 |
| Enck, Henry S., *et al.* (See Smith, Clyde L., assignor.) | | | | | | |
| Ende, Max am, Westminster, England. Fastening device for wire ropes | 728,689 | May 19 | 3530 | 785 | 104 | 788 |
| Endean, John W., Devonport, England. Sand-box and mechanism for actuating same | 728,094 | May 12 | 2394 | 533 | 104 | 527 |
| Ender, Josef, Landeck, Germany. Shooting-spectacles | 737,376 | Aug. 25 | 4372 | 974 | 105 | 1964 |
| Enders, Mattie M., Paddock, Nebr. Domestic safe | 731,027 | June 16 | 2743 | 612 | 104 | 1734 |
| Engberg, Carl, assignor to Engberg Electric and Mechanical Works, St. Joseph, Mich. Basket-machine | 722,961 | Mar. 17 | 2431 | 543<br>544 | 103 | 546 |
| Engberg, Carl, assignor to Engberg's Electric and Mechanical Works, St. Joseph, Mich. Basket-making machine | 722,962 | Mar. 17 | 2434 | 545 | 103 | 547 |
| Engberg, Carl, and J. Erickson, St. Joseph, Mich. Electrohydraulic valve | 719,768 | Feb. 3 | 657 | 151 | 102 | 961 |
| Engberg Electric and Mechanical Works. (See Engberg, Carl, assignor.) | | | | | | |
| Engberg's Electric and Mechanical Works. (See Engberg, Carl, assignor.) | | | | | | |
| Engel, Godfrey, Baltimore, Md. Filter | 729,147 | May 26 | 4353 | 960 | 104 | 972 |
| Engel, Godfrey, Baltimore, Md. Sand filter | 733,174 | July 7 | 842 | 204 | 105 | 177 |
| Engel, Godfrey, Baltimore, Md. Flow-regulating device for solid material | 733,175 | July 7 | 844 | 204<br>205 | 105 | 177 |
| Engel, Godfrey, Baltimore, Md. Driving mechanism for centrifugal machines | 733,377 | July 14 | 1224 | 290 | 105 | 274 |
| Engel, Godfrey, Baltimore, Md. Driving mechanism for centrifugal machines | 733,378 | July 14 | 1228 | 290 | 105 | 275 |
| Engel, Henry, assignor of one-half to M. Brown, New York, N. Y. Non-refillable bottle | 746,313 | Dec. 8 | 1843 | 419 | 107 | 1512 |
| Engel, Stephen L., New York, N. Y. Copy-holder for type-writing machines | 719,205 | Jan. 27 | 3200 | 714 | 102 | 721 |
| Engelhardt, Friedrich R. (See Seifert and Engelhardt.) | | | | | | |
| Engelhardt, Hermann. (See Grünewald, Friedrich, assignor.) | | | | | | |
| Engelman, Harry, New York, N. Y. Buckle | 734,686 | July 28 | 3674 | 860 | 105 | 824 |
| Engelmann, Max, Elberfeld, Germany, assignor to Farbenfabriken of Elberfeld Co., New York, N. Y. Making the monoformyl derivative of 1-3 dimethyl 4-5 diamido 2-6 dioxypyrimidin | 740,636 | Oct. 6 | 481 | ..... | 106 | 1350 |
| Engelmann, Max, Elberfeld, Germany, assignor to Farbenfabriken of Elberfeld Co., New York, N. Y. Preparing dialkyl-barbituric acid | 744,732 | Nov. 24 | 3757 | ..... | 107 | 849 |
| Engels, Ernst W., Dusseldorf, Germany. Making bricks or bodies for refractory linings or other uses | 734,457 | July 21 | 3243 | ..... | 105 | 719 |
| Engels, Ernst W., Dusseldorf, Germany. Making bricks or bodies for refractory linings or other uses and the product thereof | 734,458 | July 21 | 3245 | ..... | 105 | 719 |
| Engisch, Gustav. (See Ackermann and Engisch.) | | | | | | |
| England, Alexander W., Columbia, Tenn. Harrow | 732,061 | June 30 | 4693 | 1048 | 104 | 2166 |
| England, Frank A. (See Miller and England.) | | | | | | |
| England, John E., Springfield, Mo. Adjustable scaffold | 737,377 | Aug. 25 | 4373 | 974<br>975 | 105 | 1964 |
| England, William A., Worcester, Mass. Tobacco-pipe-mouthpiece attachment | 746,480 | Dec. 8 | 2124 | 488 | 107 | 1573 |
| Englen, Frederick J., Omaha, assignor of one-half to W. J. Brennan, South Omaha, Nebr. Computing-scale | 723,659 | Mar. 24 | 3726 | 835 | 103 | 824 |
| Engle, Manfred, Schenectady, N. Y. Table | 739,999 | Sept. 29 | 4747 | 1067 | 106 | 1081 |
| Engle, Stephen D., Hazleton, Pa. Skirt-holder | 730,625 | June 9 | 2006 | 446 | 104 | 1560 |
| Englebright, Henry S., North Yamhill, Oreg. Cross-line buckle | 737,597 | Sept. 1 | 78 | 15 | 106 | 20 |
| Englehardt, Thomas, Nashville, Tenn. Band for cigars | 747,540 | Dec. 22 | 4107 | 922 | 107 | 2056 |
| Engler, George S., Philadelphia, Pa. Thill-coupling | 727,604 | May 12 | 1454 | 326 | 104 | 331 |
| Englerth, Anton, and H. Schuett, Chicago, Ill. Safety-buckle | 740,932 | Oct. 6 | 999 | 226 | 106 | 1459 |
| English, Clarence C., San Francisco, Cal. Wrench | 735,734 | Aug. 11 | 1335 | 288 | 105 | 1282 |

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| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| English, John C., New York, N. Y. Diaphragm for machines for recording or reproducing sound or speech | 728,382 | May 19 | 2948 | 650 | 104 | 666 |
| English & Mersick Co. (See Pfleghar, Frank P., assignor.) | | | | | | |
| Engraving Company of America. (See Eaton, William S., assignor.) | | | | | | |
| Engstrom, Nels A., Chicago, Ill., assignor to Stromberg-Carlson Telephone Manufacturing Company, Rochester, N. Y. Telephone switching apparatus | 746,314 | Dec. 8 | 1844 | 420 | 107 | 1512 |
| Engwall, Oscar F., assignor of two-thirds to C. D. Peacock, Jr., and A. Bonde, Chicago, Ill. Watch-regulator | 721,361 | Feb. 24 | 3665 | 834, 835 | 102 | 1644 |
| Enloe, Henry V. (See Edgar, Harry B., assignor.) | | | | | | |
| Ennes, Charles E., Chicago, Ill., assignor to Otis Elevator Company, New York, N. Y. Motor-controlling mechanism | 738,173 | Sept. 8 | 1258 | 273 | 106 | 288 |
| Ennis, George H., Troy, N. Y. Electric type-writer | 734,526 | July 28 | 3375 | 789, 790 | 105 | 761 |
| Ennis, George H., assignor to J. D. Ennis, Troy, N. Y., and H. R. Gardner, Boston, Mass. Electric motor | 745,805 | Dec. 1 | 888 | 200 | 107 | 1289 |
| Ennis, James W., Minneapolis, Minn. Mechanical movement | 735,075 | Aug. 4 | 46 | 13,14 | 105 | 991 |
| Ennis, Jessie D., *et al.* (See Ennis, George H., assignor.) | | | | | | |
| Ennis, Thomas A., Albread, Ark. Car-switching mechanism | 718,993 | Jan. 27 | 2803 | 628 | 102 | 640 |
| Eno, Charles G., *et al.* (See Renick, Frederick E., assignor.) | | | | | | |
| Enos, Alanson T. (See Hutchinson, Joseph, assignor.) | | | | | | |
| Enos, Charles W., assignor of one-half to J. Boettner, Jr., Peabody, Mass. Oil-pump | 720,121 | Feb. 10 | 1317 | 301 | 102 | 1120 |
| Enquist, Axel F., San Francisco, Cal. Spring-hinge | 745,428 | Dec. 1 | 218 | 49 | 107 | 1146 |
| Enquist, Axel F., San Francisco, Cal. Convertible hinge | 746,054 | Dec. 8 | 1368 | 305 | 107 | 1409 |
| Enright, Cornelius S., Tacoma, Wash. Car-coupling | 717,740 | Jan. 6 | 406 | 96 | 102 | 89 |
| Enright, George W., assignor to Norden-Bittner Electric Company, New York, N. Y. Electric advertising device | 742,407 | Oct. 27 | 3917 | 880 | 106 | 2120 |
| Enright, John, Cleveland, Ohio. Pneumatic safety appliance for street-cars, &c | 741,020 | Oct. 13 | 1173 | 265 | 106 | 1516 |
| Ensign, George A., assignor to Defiance Machine Works, Defiance, Ohio. Spoke-finishing machine | 719,769 | Feb. 3 | 659 | 151, 152 | 102 | 961 |
| Ensign, George A., assignor to Defiance Machine Works, Defiance, Ohio. Feed-roll. (Reissue) | 12,080 | Feb. 10 | 2112 | 487 | 102 | 1282 |
| Ensign, George A., assignor to Defiance Machine Works, Defiance, Ohio. Clutch mechanism | 723,593 | Mar. 24 | 3615 | 807 | 103 | 800 |
| Ensign, George A., assignor to Defiance Machine Works, Defiance, Ohio. Boring and reaming machine | 726,662 | Apr. 28 | 4176 | 943 | 103 | 2088 |
| Ensign, George A., assignor to Defiance Machine Works, Defiance, Ohio. Self-oiling journal-bearing | 727,319 | May 5 | 923 | 201 | 104 | 199 |
| Ensign, George A., assignor to Defiance Machine Works, Defiance, Ohio. Machine for producing apertured disks | 727,320 | May 5 | 925 | 201, 202 | 104 | 199 |
| Ensign, George A., assignor to Defiance Machine Works, Defiance, Ohio. Rimming-machine | 733,826 | July 14 | 2080 | 478, 479 | 105 | 444 |
| Ensign, George A., assignor to Defiance Machine Works, Defiance, Ohio. Spool-cutting lathe | 735,482 | Aug. 4 | 856 | 182, 183 | 105 | 1162 |
| Ensign, George A., assignor to Defiance Machine Works, Defiance, Ohio. Glue-applying machine | 739,159 | Sept. 15 | 3158 | 698 | 106 | 707 |
| Ensign, George A., assignor to Defiance Machine Works, Defiance, Ohio. Belt-pulley | 740,258 | Sept. 29 | 5218 | 1173 | 106 | 1180 |
| Ensign, George A., assignor to Defiance Machine Works, Defiance, Ohio. Felly compressing and boring machine | 742,015 | Oct. 20 | 3147 | 702, 703 | 106 | 1948 |
| Ensign, Harry. (See Kestel, Harry C., assignor.) | | | | | | |
| Ensminger, Peter R., Anaconda, Mont., assignor of one-fourth to J. L. Mauch, New York, N. Y. Washing-machine | 740,259 | Sept. 29 | 5219 | 1174 | 106 | 1180 |
| Ensor, John J. (See Bouchard and Ensor.) | | | | | | |
| Ensor, William F., *et al.* (See Bouchard, John J., assignor.) | | | | | | |
| Enterprise Gas Stove Manufacturing Company. (See Hutchins, Abner B., assignor.) | | | | | | |
| Enterprise Manufacturing Company. (See Leidy, Sylvester B., assignor.) | | | | | | |
| Enterprise Manufacturing Company of Pennsylvania. (See Baker, John G., assignor.) | | | | | | |
| Entriken, John C., and W. S. Everett, Malvern, assignors of one-fourth to S. M. Custer, Wayne, Pa. Lead-in wire for electric lamps | 740,260 | Sept. 29 | 5220 | 1174 | 106 | 1181 |
| Entwisle, Edward B., Johnstown, Pa., assignor to Lorain Steel Company. Railway-frog | 747,955 | Dec. 29 | 4911 | 1111 | 107 | 2258 |
| Entwisle, Edward B., and F. G. Wertz, Johnstown, Pa., assignors to Lorain Steel Company. Spring-switch | 747,956 | Dec. 29 | 4912 | 1112 | 107 | 2258 |
| Entz, Justus B., Philadelphia, Pa. Power transmission and control | 732,062 | June 30 | 4695 | 1049, 1050 | 104 | 2166 |
| Entz, Justus B., assignor to Electric Storage Battery Company, Philadelphia, Pa. Storage battery | 723,451 | Mar. 24 | 3347 | 750 | 103 | 747 |
| Enyart, James E., McFall, Mo. Hay-ricker | 735,229 | Aug. 4 | 380 | 73 | 105 | 1062 |
| Epling, William A., *et al.* (See Smith, Marshall S., assignor.) | | | | | | |
| Epperson, Willis F., Ladoga, Ind. Gluing-machine | 738,784 | Sept. 15 | 2492 | 547, 548 | 106 | 566 |
| Epperson, Willis F., Ladoga, Ind. Fire-escape | 738,785 | Sept. 15 | 2494 | 548 | 106 | 566 |
| Eppley, Geary B., Washington, D. C. Horse-stall | 745,170 | Nov. 24 | 4611 | 1000 | 107 | 1026 |
| Epstein, Aaron. (See Estes, Hubert R., assignor.) | | | | | | |
| Equitable Auto-Truck Power and Burner Company. (See Badger, George L., assignor.) | | | | | | |
| Erb, Benjamin F. (See Evans and Erb.) | | | | | | |
| Erb, Frederick H., Jr., Lafayette, Ind. Device for training dogs | 731,876 | June 23 | 4329 | 966 | 104 | 2077 |
| Erb, Fredrick H., Jr., Lafayette, Ind. Device for use in training dogs | 745,806 | Dec. 1 | 891 | 201 | 107 | 1289 |
| Erb, Louis M., *et al.* (See Dailey, Herbert M., assignor.) | | | | | | |
| Erb, Samuel, Lebanon, Pa. Display rack or stand | 746,315 | Dec. 8 | 1846 | 420 | 107 | 1513 |
| Erben, Hermann F. T., Schenectady, N. Y., assignor to General Electric Company. Anti-hunting device for dynamo-electric machines | 727,605 | May 12 | 1455 | 326 | 104 | 331 |
| Erben, Hermann F. T., Schenectady, N. Y., assignor to General Electric Company. Coil for dynamo-electric machines | 734,310 | July 21 | 3000 | 706 | 105 | 668 |
| Erben, Hermann F. T., Schenectady, N. Y., assignor to General Electric Company. Commutator | 747,873 | Dec. 22 | 4741 | 1071 | 107 | 2200 |
| Erben, Walter, and J. A. M. Wass, Philadelphia, Pa.; said Wass assignor to said Erben. Apparatus for separating volatile liquid from liquid containing same | 736,240 | Aug. 11 | 2257 | 488 | 105 | 1482 |
| Erbslöh, Carl A., Barmen, Germany. Friction driving mechanism for rolling-mills | 722,685 | Mar. 17 | 1946 | 433 | 103 | 448 |
| Erbslöh, Rudolph A. (See Wilke, Gustav, assignor.) | | | | | | |
| Ercanbrack, Hal E., Elgin, Ill. Wrench | 739,068 | Sept. 15 | 2994 | 663 | 106 | 674 |
| Ercanbrack, John E., Woodstock, Ill. Electric-fixture tripod-box | 746,316 | Dec. 8 | 1847 | 420 | 107 | 1513 |
| Erdman, Edward M., assignor of one-half to W. J. Matz, Pottsville, Pa. Straightway valve | 720,012 | Feb. 10 | 1099 | 253 | 102 | 1073 |
| Erdman, Edward M., assignor of one-half to W. J. Matz, Pottsville, Pa. Straightway valve | 733,905 | July 14 | 2184 | 514 | 105 | 475 |
| Ereckson, Martin, Galesburg, N. D. Traveling thresher | 737,598 | Sept. 1 | 80 | 16,17 | 106 | 20 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | Spec. | Drg. | Vol. | Page. |
| Ergo, Carl A., Terre Haute, Ind. Tool | 744,681 | Nov. 17 | 3619 | 780<br>781 | 107 | 802 |
| Erhart, Jacob B., Auburn, N. Y. Rub-iron for vehicles | 738,990 | Sept. 15 | 2850 | 632 | 106 | 644 |
| Erichsen, James. (See Ansorge, Carl, assignor.) | | | | | | |
| Ericksen, Emanuel. (See Monsen and Ericksen.) | | | | | | |
| Erickson, Charles, St. Louis, Mo. Journal-bearing | 741,021 | Oct. 13 | 1175 | 265 | 106 | 1517 |
| Erickson, Erick H., Minneapolis, Minn. Artificial limb | 733,472 | July 14 | 1393 | 328 | 105 | 312 |
| Erickson, John. (See Engberg and Erickson.) | | | | | | |
| Erickson, John A., Malden, and F. W. Young, Everett, Mass. Lubricator | 740,409 | Oct. 6 | 39 | 9 | 106 | 1252 |
| Erickson, John E., assignor of three-eighths to H. J. Lohrbauar, W. B. Kelly, and J. Lohrbauar, St. Paul, Minn. Dovetail-box-setting-up machine | 740,000 | Sept. 29 | 4749 | 1069 | 106 | 1083 |
| Erickson, John M., Duluth, Minn. Bill-file and paper-holder | 729,301 | May 26 | 4639 | 1025 | 104 | 1033 |
| Erickson, John M., Duluth, Minn. Belt-fastener | 729,302 | May 26 | 4640 | 1025 | 104 | 1033 |
| Erickson, Lewis A., Stromsburg, Nebr. Watch-barrel | 730,103 | June 2 | 1049 | 235 | 104 | 1341 |
| Erickson, Nels, Hanska, Minn. Latch | 745,720 | Dec. 1 | 729 | 167 | 107 | 1254 |
| Ericson, Charles J., Salt Lake City, Utah. Knob-attaching mechanism | 724,454 | Apr. 7 | 62 | 16 | 103 | 1183 |
| Ericson, Frithiof G., assignor to Aktiebolaget Svenska Motor-Och Naf-Fabriken, Stockholm, Sweden. Internal-combustion engine | 730,626 | June 9 | 2007 | 446 | 104 | 1560 |
| Ericson, Joseph. (See Schuler and Ericson.) | | | | | | |
| Ericsson, Lars M., assignor to Aktiebolaget L. M. Ericsson & Ce., Stockholm, Sweden. Signaling-jack for multiple-telephone exchanges | 729,560 | June 2 | 72 | 18, 19 | 104 | 1142 |
| Ericsson Telephone Company. (See Monroe, Charles E., assignor.) | | | | | | |
| Erie Exploration Company. (See Erie, James P., assignor.) | | | | | | |
| Erie, James P., assignor to Erie Exploration Company, New York, N. Y. Current-regulator | 733,951 | July 21 | 2278 | 536<br>537 | 105 | 514 |
| Erie, James P., assignor to Erie Exploration Company, New York, N. Y. Brush-support | 733,952 | July 21 | 2283 | 537 | 105 | 515 |
| Erikson, Gustaf, assignor to Vagnfabriks Aktiebolaget I Södertelge, Södertelge, Sweden. Internal-combustion engine | 745,098 | Nov. 24 | 4455 | 963 | 107 | 993 |
| Erikson, John, Providence, R. I. Hair-fastener | 720,515 | Feb. 10 | 2030 | 466 | 102 | 1266 |
| Erikson, John, Providence, R. I. Electric cut-out | 740,745 | Oct. 6 | 666 | 151 | 106 | 1390 |
| Erikson, Leonard, Malden, Mass. Lighting device | 729,303 | May 26 | 4641 | 1025 | 104 | 1033 |
| Erikson, Leonard, Malden, Mass. Lamp-socket | 738,717 | Sept. 8 | 2339 | 514 | 106 | 515 |
| Eriksson, Knut V. A., Falun, assignor to A. E. Salwén, Grängesberg, Sweden. Magnetic ore-separator | 731,443 | June 23 | 3534 | 787<br>788 | 104 | 1913 |
| Erlebach, Adolph, *et al.* (See Stone, Harry W., assignor.) | | | | | | |
| Erlwein, Georg. (See Uslar and Erlwein.) | | | | | | |
| Ermel, Oscar F., New Lebanon, Ohio. Cushioned gun-stock | 724,273 | Mar. 31 | 4947 | 1107 | 103 | 1091 |
| Ernst, Alfred. (See Wellman and Ernst.) | | | | | | |
| Ernst, Alfred. (See Wellman, Ernst, and Moyer.) | | | | | | |
| Ernst, Edward, Philadelphia, Pa. Fruit chopper and press | 744,519 | Nov. 17 | 3354 | 723 | 107 | 746 |
| Ernst, George F., assignor to A. Leschen & Sons Rope Company, St. Louis, Mo. Combined clamp and hanger-rod for bridge construction | 746,317 | Dec. 8 | 1849 | 420 | 107 | 1514 |
| Ernst, John C., Ansonia, assignor to Little River Manufacturing Company, Seymour, Conn. Finger-nail clipper | 725,946 | Apr. 21 | 2832 | 642 | 103 | 1801 |
| Ernst, Louis, assignor of one-third to J. Brinkmann, Reading, Ohio. Scoop | 741,640 | Oct. 20 | 2405 | 539 | 106 | 1795 |
| Ernst, Oliver H., Crestline, Ohio. Gas-stove | 739,780 | Sept. 22 | 4309 | 965 | 106 | 973 |
| Ernst, Otto, and F. Scholl, assignors to Farbwerke, vorm. Meister, Lucius & Brüning, Höchst-on-the-Main, Germany. Red mordant azo dye | 739,069 | Sept. 15 | 2995 | ------ | 106 | 674 |
| Erret, Joseph, Cleveland, Ohio. Side-board fastener | 729,851 | June 2 | 608 | 134 | 104 | 1252 |
| Ersha, Ingre, Painted Woods, N. D. Strainer | 727,321 | May 5 | 929 | 202 | 104 | 200 |
| Ertell, George B., assignor of one-half to F. E. Goodman, Buffalo, N. Y. Device for closing or fastening fruit cans or jars or the like | 739,593 | Sept. 22 | 3965 | 885 | 106 | 896 |
| Erter, David, assignor of one-half to J. B. Cartmell, Springfield, Ohio. Concrete-mixer | 734,687 | July 28 | 3675 | 861 | 105 | 824 |
| Ertheiler, Philip H., Philadelphia, Pa. Machine for preparing leaf-tobacco for manufacture into cigars, &c | 725,058 | Apr. 14 | 1184 | 268 | 103 | 1437 |
| Ertheiler, Philip H., Philadelphia, Pa. Machine for preparing tobacco-leaves for manufacture into cigars, &c | 725,059 | Apr. 14 | 1186 | 269 | 103 | 1438 |
| Ervin, George M., Johnstown, Pa., assignor to Lorain Steel Company. Railway-track structure | 729,049 | May 26 | 4191 | 927 | 104 | 939 |
| Ervin, George M., Johnstown, Pa., assignor to Lorain Steel Company. Railway-track structure | 729,050 | May 26 | 4193 | 927 | 104 | 940 |
| Erwin, James B. (See Fenelon and Erwin.) | | | | | | |
| Erwin, James B. (See Roesch, Alfred, assignor.) | | | | | | |
| Erwin, Robert H., Cleveland, Ohio. Bicycle-track | 738,174 | Sept. 8 | 1263 | 273<br>274 | 106 | 289 |
| Erwood, John, assignor of one-fourth to R. H. Walch, Chicago, Ill. Valve | 741,641 | Oct. 20 | 2406 | 539 | 106 | 1795 |
| Erzig, Nickolaus, Chicago, Ill. Earth-auger | 727,322 | May 5 | 930 | 202 | 104 | 201 |
| Erzig, Nickolaus, assignor of one-half to P. Huth, Chicago, Ill. Blast-furnace | 726,893 | May 5 | 115 | 27 | 104 | 27 |
| Esbiornson, Tuve, Philadelphia, Pa. Square | 745,171 | Nov. 24 | 4613 | 1000 | 107 | 1026 |
| Esbjörn, Sven H., assignor to Wadsworth, Howland and Company, Incorporated, Boston, Mass. Sketching-easel | 736,589 | Aug. 18 | 2893 | 631 | 105 | 1634 |
| Eschè, Robert, Arlon, Belgium. Manufacture of slow-burning wicks | 722,091 | Mar. 3 | 800 | ------ | 103 | 173 |
| Eschenbach, Paul, Cincinnati, Ohio. Fan-mask | 730,357 | June 9 | 1519 | 337 | 104 | 1454 |
| Escher Wyss & Cie. (See Weber, Rudolf, assignor.) | | | | | | |
| Eschwege, Hermann, Forest Hill, England. Apparatus for the manufacture of extract of coffee | 731,028 | June 16 | 2745 | 612 | 104 | 1734 |
| Escudé, Alphonse J., New Orleans, La. Race-starter | 731,347 | June 16 | 3331 | 743<br>744 | 104 | 1851 |
| Eshelman, Charles G., assignor of one-half to E. S. Youse, Reading, Pa. Hose-coupling for pneumatic tires | 731,348 | June 16 | 3333 | 744 | 104 | 1852 |
| Eshelman, Thomas A. (See Brocius and Eshelman.) | | | | | | |
| Eskelsen, Hans P., Port Clinton, Ohio. Car-fender | 734,411 | July 21 | 3163 | 743 | 105 | 702 |
| Eskholme, George C., Brooklyn, N. Y. Hydrocarbon mixer and regulator for engines | 735,483 | Aug. 4 | 861 | 183<br>184 | 105 | 1163 |
| Eskilsson, Theodor. (See Magnuson and Eskilsson.) | | | | | | |
| Esmond, Frederick J., assignor of one-third to F. T. Cope and C. Frey, Vancouver, Canada. Electrical contact-clamp | 740,358 | Sept. 29 | 5400 | 1216 | 106 | 1218 |
| Espey, Josiah B., Springfield, Ohio. Preparing cereal-food products | 720,122 | Feb. 10 | 1319 | 302 | 102 | 1120 |
| Esser, Daniel J., Mauchchunk, Pa. Carbureter | 730,627 | June 9 | 2008 | 446 | 104 | 1560 |
| Esser, Lawrence, Pilotgrove, Mo. Nut-lock | 732,178 | June 30 | 4938 | 1098 | 104 | 2217 |
| Essex, George B., assignor to G. B. Essex Brass Company, Detroit, Mich. Pump-lubricator | 720,516 | Feb. 10 | 2031 | 466 | 102 | 1266 |
| Essex, Henry, Buffalo, N. Y. Caloric engine | 723,660 | Mar. 24 | 3728 | 835 | 103 | 824 |
| Essig, Harry E., assignor to Essig Pivot Window Company, Canton, Ohio. Revolving window-strip | 728,690 | May 19 | 3531 | 785 | 104 | 789 |
| Essig, Ozia A., Canton, Ohio. Window-curtain attachment | 728,216 | May 19 | 2618 | 585 | 104 | 596 |

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|---|---|---|---|---|---|---|
| Essig, Ozia A., Canton, Ohio. Pivoted window | 744,733 | Nov. 24 | 3758 | 810, 811 | 107 | 849 |
| Essig, Ozia A., Canton, assignor to Essig Pivot Window Company, Stark, Ohio. Transom-lock | 739,300 | Sept. 22 | 3425 | 763 | 106 | 780 |
| Essig Pivot Window Company. (See Essig, Harry E., assignor.) | | | | | | |
| Essig Pivot Window Company. (See Essig, Ozia A., assignor.) | | | | | | |
| Essig, Rudolf, Leipzig-Gohlis, Germany. Reed-organ | 731,444 | June 23 | 3536 | 788 | 104 | 1914 |
| Essington, Henry C., Philadelphia, Pa. Rotary engine | 727,769 | May 12 | 1808 | 404 | 104 | 404 |
| Essington, Henry C., Philadelphia, Pa. Rotary engine | 747,319 | Dec. 15 | 3714 | 837 | 107 | 1951 |
| Establie, Emile, Paris, France. Vertical steam-generator | 727,770 | May 12 | 1812 | 404 | 104 | 405 |
| Estabrook, Fred W. (See Cousins, Judson T., assignor.) | | | | | | |
| Estell, Daniel B., assignor to S. J. Osborn, Jr., Cincinnati, Ohio. Mechanism for making sidewalks, curbs, and gutters | 729,852 | June 2 | 609 | 134 | 104 | 1252 |
| Estell, Samuel F., Chicago, Ill. Car-seal | 733,708 | July 14 | 1786 | 424 | 105 | 394 |
| Estep, Blair A. (See Burley, Harry S., assignor.) | | | | | | |
| Estep, Edwin R., assignor of one-half to S. A. Miles, Chicago, Ill. Velocipede | 719,770 | Feb. 3 | 663 | 152, 153 | 102 | 962 |
| Estep, Samuel R., Denison, Tex. Insect-trap | 723,996 | Mar. 31 | 4391 | 987 | 103 | 980 |
| Ester, William J., Rochester, N. Y. Combination ice-spud and shovel | 722,825 | Mar. 17 | 2204 | 492 | 103 | 500 |
| Esterly, Willis M. (See Mannen and Esterly.) | | | | | | |
| Esterly, Willis M., and J. E. Mannen, Cleveland, Ohio. Laundry clothes-drier | 731,445 | June 23 | 3536 | 788 | 104 | 1914 |
| Estes, George L., Rochester, N. Y. Shaft-coupling | 743,628 | Nov. 10 | 1670 | 350 | 107 | 373 |
| Estes, George L., Chicago, Ill. Safety-pocket | 748,271 | Dec. 29 | 5516 | 1257 | 107 | 2390 |
| Estes, Hubert R., assignor of one-tenth to A. Epstein, St. Louis, Mo. Popcorn-popper | 741,897 | Oct. 20 | 2886 | 644 | 106 | 1896 |
| Estes, James H., Fairburn, Ga. Back-band and trace-carrier | 738,895 | Sept. 15 | 2699 | 596 | 106 | 612 |
| Estes, John W., Electra, Tex. Penholder | 741,120 | Oct. 13 | 1359 | 311 | 106 | 1556 |
| Estes, John W., Elwood, Mo., assignor of one-half to H. C. Vrooman, Rosedale, Kans. Nail | 723,452 | Mar. 24 | 3348 | 750 | 103 | 747 |
| Esty, William, Laconia, N. H. Automatic stationary fire-extinguisher | 720,013 | Feb. 10 | 1100 | 253 | 102 | 1073 |
| Esty, William, Laconia, N. H. Vehicle-tire | 730,628 | June 9 | 2009 | 447 | 104 | 1561 |
| Esty, William, Laconia, N. H. Automatic stationary fire-extinguisher | 744,057 | Nov. 17 | 2498 | 536 | 107 | 562 |
| Etches, Charles, Muskegon, Mich. Lamp-burner | 742,175 | Oct. 27 | 3487 | 779 | 106 | 2032 |
| Etheridge, Ernest L., Brooklyn, N. Y. Electric-light switch | 744,911 | Nov. 24 | 4062 | 875 | 107 | 913 |
| Etheridge, Ernest L., Brooklyn, N. Y., assignor to General Electric Company. Moisture-proof switch-casing | 729,304 | May 26 | 4642 | 1026 | 104 | 1033 |
| Etherton, Emmie C., and G. E. Powell, Atlantic, Iowa. Picture-holder | 728,559 | May 19 | 3287 | 728 | 104 | 735 |
| Etienne, Eugénie D., Villemouble, France. Metal clasp for corset-busks | 741,237 | Oct. 13 | 1592 | 358 | 106 | 1606 |
| Etrich, Ignaz. (See Folkmar, Eugen, assignor.) | | | | | | |
| Etter, Henry M., Marion, Pa. Pump-head | 721,169 | Feb. 24 | 3308 | 757 | 102 | 1571 |
| Ettinger, Joel, Chester, assignor to S. J. Shimer & Sons, Milton, Pa. Rotary cutter | 723,374 | Mar. 24 | 3218 | 721 | 103 | 720 |
| Eubank, John S. (See Cornelius and Eubank.) | | | | | | |
| Euchenhofer, Edward E. (See Bonner and Euchenhofer.) | | | | | | |
| Eugster, John J., Tiffin, Ohio. Book support and container | 747,392 | Dec. 22 | 3847 | 866 | 107 | 1997 |
| Euker, George W., assignor to E. O. Meyer, Richmond, Va. System of producing electrical sparks for igniting the charges of explosive-engines | 722,176 | Mar. 3 | 951 | 211 | 103 | 201 |
| Eureka Mining, Smelting and Power Company. (See Johnson and Howard, assignors.) | | | | | | |
| Eureka Silk Manufacturing Company. (See King, Theophilus, assignor.) | | | | | | |
| Eustice, Daniel L., Galena, Ill. Cut-off and means for operating same | 720,907 | Feb. 17 | 2763 | 635 | 102 | 1435 |
| Eutsler, James, Ozark, Mo. Hay-press | 731,556 | June 23 | 3751 | 836 | 104 | 1956 |
| Evans Almirall & Company. (See Evans, Quimby N., assignor.) | | | | | | |
| Evans, Arthur F., Cambridge, England. Internal-combustion engine | 732,343 | June 30 | 5260 | 1167 | 104 | 2283 |
| Evans, Charles A., Haverhill, Mass. Leaf-turner | 746,803 | Dec. 15 | 2709 | 624 | 107 | 1724 |
| Evans, Charles E., Paducah, Ky. Log-loader | 724,831 | Apr. 7 | 781 | 181 | 103 | 1336 |
| Evans, Clarence A., Upland, Pa. Index-card file | 724,173 | Mar. 31 | 4733 | 1061 | 103 | 1050 |
| Evans, Daniel A., Ashley, Pa. Dental cabinet | 723,661 | Mar. 24 | 3729 | 836 | 103 | 825 |
| Evans, David G. (See Thomas, William S., assignor.) | | | | | | |
| Evans, Edward, Elizabeth, W. Va. Washing-machine | 746,481 | Dec. 8 | 2125 | 488 | 107 | 1573 |
| Evans, Edwin W., assignor to E. H. Godshalk, Philadelphia, Pa. Governor | 748,357 | Dec. 29 | 5648 | 1288 | 107 | 2418 |
| Evans, Elizabeth P. H., administratrix. (See Evans, Thomas D.) | | | | | | |
| Evans, Elmer O., assignor to M. S. Evans, J. W. Wever, Media, C. W. Layman, Lomax, A. Mueller, Dallas, Ill., and D. Arthaud, Washington, Iowa. Car-coupling | 718,706 | Jan. 20 | 2261 | 497 | 102 | 512 |
| Evans, Emma M. (See Evans, Richard W., assignor.) | | | | | | |
| Evans, Evan. (See Isaacson and Evans.) | | | | | | |
| Evans, Frederick C., Chicago, Ill. Fastening for garments | 727,771 | May 12 | 1813 | 404 | 104 | 405 |
| Evans, Frederick W., Columbia, Tenn. Means for promoting the growth of hair | 739,844 | Sept. 29 | 4432 | 994 | 106 | 1016 |
| Evans, George E., assignor to Kingman Plow Company, Peoria, Ill. Combined lister and plow and planter | 718,994 | Jan. 27 | 2805 | 628, 629 | 102 | 640 |
| Evans, George F., Newton, Mass. Device for transmitting motion | 742,977 | Nov. 3 | 275 | 62 | 107 | 60 |
| Evans, George F., Newton, Mass. Reducing and backing gearing | 743,067 | Nov. 3 | 482 | 105 | 107 | 101 |
| Evans, George H., Breckenridge, Colo., assignor to American Hoist & Derrick Co., St. Paul, Minn. Derrick-cableway | 718,611 | Jan. 20 | 2086 | 453 | 102 | 478 |
| Evans, George W., Coldspring, Md. Milk-wagon | 733,176 | July 7 | 846 | 205 | 105 | 178 |
| Evans, Harry C., Bristol, Pa. Fastening for laces | 729,305 | May 26 | 4643 | 1026 | 104 | 1033 |
| Evans, Henry O., assignor to National Specialty Manufacturing Company, Philadelphia, Pa. Rotary pump | 746,482 | Dec. 8 | 2126 | 489 | 107 | 1574 |
| Evans, Horace J., Wausau, and T. B. Hatch, Menomonie, Wis. Electrodynamic equipment for schools | 742,408 | Oct. 27 | 3919 | 881 | 106 | 2121 |
| Evans, Jesse C., Greensboro, N. C. Sizing compound | 744,734 | Nov. 24 | 3761 | ------ | 107 | 850 |
| Evans, John H., Oak Lane, assignor to J. Evans' Sons, Philadelphia, Pa. End clip or bearing-plate for semi-elliptic springs | 737,599 | Sept. 1 | 82 | 17 | 106 | 20 |
| Evans, John J. (See White and Evans.) | | | | | | |
| Evans, John W., Beatrice, Nebr. Harvester or mower sickle-knife | 741,642 | Oct. 20 | 2407 | 539 | 106 | 1795 |
| Evans, Joseph G., Baker City, Oreg. Draft-equalizing clevis | 741,319 | Oct. 13 | 1759 | 392 | 106 | 1638 |
| Evans, Louis O. (See Cushman, Evans, and Cushman.) | | | | | | |
| Evans, Lyman H., and B. F. Erb, Des Moines, Iowa. Fence-post | 747,156 | Dec. 15 | 3399 | 770 | 107 | 1884 |
| Evans, Morris S., *et al.* (See Evans, Elmer O., assignor.) | | | | | | |
| Evans, Powell, assignor, by mesne assignments, to International Sprinkler Company, Philadelphia, Pa. Reservoir construction | 728,691 | May 19 | 3532 | 785 | 104 | 789 |
| Evans, Powell, assignor, by mesne assignments, to International Sprinkler Company, Philadelphia, Pa. Sprinkler-head | 729,306 | May 26 | 4644 | 1026 | 104 | 1034 |
| Evans, Powell, assignor to International Sprinkler Company, Philadelphia, Pa. Dry-pipe valve | 731,877 | June 23 | 4330 | 967 | 104 | 2077 |
| Evans, Quimby N., Brooklyn, assignor to Evans Almirall & Company, New York, N. Y. Nozzle for humidifiers or the like | 724,685 | Apr. 7 | 499 | 119 | 103 | 1276 |
| Evans, Richard, and I. E. Fraser, Mitchell, S. D. Saw-filing device | 740,833 | Oct. 6 | 848 | 189 | 106 | 1426 |
| Evans, Richard E., New Hartford, N. Y. Machine for opening and cleaning cotton | 735,076 | Aug. 4 | 49 | 14 | 105 | 992 |

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| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | Spec. | Drg. | Vol. | Page. |
| Evans, Richard J., assignor to Franklin Mfg. Co., Franklin, Pa. Dust-guard | 729,307 | May 26 | 4646 | 1026 | 104 | 1034 |
| Evans, Richard W., assignor to E. M. Evans, Camden, N. J. Insole | 724,174 | Mar. 31 | 4735 | 1061 | 103 | 1050 |
| Evans, Robert C. T., London, England. Optical device for advertising or other purposes | 719,771 | Feb. 3 | 664 | 153 | 102 | 963 |
| Evans, Samuel, Oakpark, Ill. Illuminated sign | 739,845 | Sept. 29 | 4433 | 994<br>995 | 106 | 1016 |
| Evans' Sons, John. (See Evans, John H., assignor.) | | | | | | |
| Evans, Sylvester J., Jeddo, N. Y. Self-feeder for fruit or vegetable slicers | 731,349 | June 16 | 3334 | 744 | 104 | 1852 |
| Evans, Thomas D., deceased, Toledo, Ohio; E. P. H. Evans, administratrix. Heating stove or furnace | 746,939 | Dec. 15 | 2997 | 689 | 107 | 1791 |
| Evans, Thomas J., Newport, Ky., assignor of three-fourths to M. D. Osgood, Cincinnati, Ohio. Fishing-tackle | 725,428 | Apr. 14 | 1859 | 415 | 103 | 1578 |
| Evans, William L., Jr., Washington, Ind. Spring-hinge | 732,063 | June 30 | 4702 | 1050 | 104 | 2167 |
| Evans, William R., Eagleville, Mo. Animal-poke | 721,552 | Feb. 24 | 4006 | 911 | 102 | 1715 |
| Eveland, Samuel S., Philadelphia, Pa. Antifriction end-thrust device | 718,110 | Jan. 13 | 1104 | 244 | 102 | 253 |
| Eveland, Samuel S., Philadelphia, Pa. Antifriction end-thrust device | 718,111 | Jan. 13 | 1105 | 244 | 102 | 253 |
| Eveland, Samuel S., Philadelphia, Pa. Holder for use in making isodiametric bodies | 747,541 | Dec. 22 | 4108 | 922 | 107 | 2056 |
| Eveland, Samuel S., Philadelphia, Pa. Machine for making isodiametric bodies | 747,542 | Dec. 22 | 4109 | 922<br>923 | 107 | 2056 |
| Evenden, Robert E., Manchester, England. Gear-wheel | 719,572 | Feb. 3 | 297 | 68, 69 | 102 | 884 |
| Evens, Edward L., Malvern, South Australia, Australia. Fire-escape appliance | 735,484 | Aug. 4 | 864 | 184 | 105 | 1164 |
| Evensen, Anton, Chicago, Ill., assignor of one-half to C. R. Hannan, Council Bluffs, Iowa. Explosive-engine | 721,872 | Mar. 3 | 399 | 88 | 103 | 88 |
| Evensen, Anton, Chicago, Ill., assignor of one-half to C. R. Hannan, Council Bluffs, Iowa. Sparking igniter for explosive-engines | 721,873 | Mar. 3 | 403 | 89 | 103 | 88 |
| Evensen, William, assignor to Goss Printing Press Company, Chicago, Ill. Delivery apparatus for printing-presses | 730,892 | June 16 | 2490 | 552 | 104 | 1681 |
| Everence, Robert P., *et al.* (See Full, George C., assignor.) | | | | | | |
| Everest, Augustine R., Lynn, Mass., assignor to General Electric Company. Current-transformer for high-voltage circuits | 729,308 | May 26 | 4646 | 1027 | 104 | 1034 |
| Everest, Augustine R., Lynn, Mass., assignor to General Electric Company. Electrical transformer | 730,893 | June 16 | 2492 | 552 | 104 | 1681 |
| Everest, Augustine R., Lynn, Mass., assignor to General Electric Company. Starting-switch for electric motors | 735,077 | Aug. 4 | 50 | 14 | 105 | 992 |
| Everett, Charles J. (See Herrman and Everett.) | | | | | | |
| Everett, Charles J., New York, N. Y. Photographic-printing machine | 739,535 | Sept. 22 | 3848 | 861<br>862 | 106 | 872 |
| Everett, Claude H., Atlanta, Ga. Storage battery | 719,315 | Jan. 27 | 3415 | 761<br>762 | 102 | 768 |
| Everett, Edward A., Detroit, Mich. Electric track-circuit and insulating same | 726,269 | Apr. 28 | 3401 | 773 | 103 | 1933 |
| Everett, George C., Brooklyn, N. Y. Artist's holding and separating clamp | 728,450 | May 19 | 3071 | 679 | 104 | 691 |
| Everett, Laban T. (See Lee, Thomas B., assignor.) | | | | | | |
| Everett, Looney N., Everett, assignor of two-thirds to D. B. Pate, Hornbeck, and S. J. Huffman, Everett, La. Nut-lock | 745,429 | Dec. 1 | 219 | 49 | 107 | 1146 |
| Everett, William M., Tenafly, assignor of one-fourth to M. C. Jacobus, Englewood, N. J. Rotary gas-engine | 719,653 | Feb. 3 | 429 | 98 | 102 | 911 |
| Everett, William S. (See Entriken and Everett.) | | | | | | |
| Everhard, Henry H., Massillon, Ohio. Well-drilling machine | 718,112 | Jan. 13 | 1106 | 244 | 102 | 254 |
| Everhart, Lay H., U. S. Navy. Apparatus for handling ammunition | 718,832 | Jan. 20 | 2485 | 553 | 102 | 556 |
| Everingham, Edward B., assignor to Warsaw Elevator Company, Warsaw, N. Y. Dumb-waiter | 745,807 | Dec. 1 | 892 | 201 | 107 | 1289 |
| Evert, William D., Mount Carmel, Pa. Egg-separator | 743,474 | Nov. 10 | 1366 | 280 | 107 | 307 |
| Everte, Paul, Paris, France. Clarinet | 729,309 | May 26 | 4648 | 1027 | 104 | 1035 |
| Evslin, Leo E., and G. Ott, Paris, France. Means for fixing artificial teeth to dental plates | 746,804 | Dec. 15 | 2710 | 625 | 107 | 1724 |
| Ewald, William E., Chicago, Ill., assignor to J. D. Lamb, Clinton, Iowa. Fluid-motor | 739,405 | Sept. 22 | 3637 | 808<br>809 | 106 | 826 |
| Ewan, Thomas, Glasgow, assignor to Cassel Gold Extracting Company, Limited, Maryhill, Glasgow, Scotland. Manufacture of sodium | 745,958 | Dec. 1 | 1188 | 266 | 107 | 1353 |
| Ewart, George H. (See Ewart, John W. and G. H.) | | | | | | |
| Ewart, John W., Wendover, England. Electric water-heater | 738,607 | Sept. 8 | 2121 | 464<br>465 | 106 | 472 |
| Ewart, John W., Wendover, and G. H. Ewart, London, England. Gas and water regulating valve for water-heaters | 743,846 | Nov. 10 | 2048 | 435 | 107 | 453 |
| Ewart, Myra V. (See Ewart, Philo C.) | | | | | | |
| Ewart, Philo C., deceased, Cincinnati, Ohio; M. V. Ewart, executrix. Car-coupling | 728,888 | May 26 | 3897 | 866 | 104 | 879 |
| Ewell Plastic Post Co. (See Robertson, Alonzo P., assignor.) | | | | | | |
| Ewen, Alexander, *et al.* (See Kellington, John, assignor.) | | | | | | |
| Ewen, John M., Chicago, Ill. Making substructures for buildings | 718,441 | Jan. 13 | 1699 | 374<br>375 | 102 | 379 |
| Ewer, Joseph B., Crowley, La. Motor-vehicle | 732,283 | June 30 | 5152 | 1144 | 104 | 2261 |
| Ewer, William. (See Schott and Ewer.) | | | | | | |
| Ewing, Charles, Madras, India. Steering device | 742,978 | Nov. 3 | 278 | 62 | 107 | 60 |
| Ewing, Charles C., Wellsville, Ohio. Flush-tank feeder and cleaner | 721,685 | Mar. 3 | 70 | 15 | 103 | 16 |
| Ewing, Elizabeth L., Chicago, Ill. Bandage | 725,688 | Apr. 21 | 2363 | 535 | 103 | 1700 |
| Ewing, James A. (See Walter and Ewing.) | | | | | | |
| Ewing, John, Jr., Richmond, Canada. Inflating device for life-belts | 719,316 | Jan. 27 | 3416 | 762 | 102 | 768 |
| Ewing, John, Jr., Richmond, Canada. Marine life-preserver | 719,654 | Feb. 3 | 431 | 99 | 102 | 912 |
| Ewing, John, Jr., Richmond, Canada. Calcium-carbid package | 728,889 | May 26 | 3900 | 867 | 104 | 880 |
| Ewing, John, Jr., Richmond, Canada. Collapsible part for boats | 746,940 | Dec. 15 | 3000 | 689 | 107 | 1791 |
| Excelsior Kneading Machine Company. (See Allen and Moore, assignors.) | | | | | | |
| Excelsior Slugger & Tacker Machine Company. (See Sandahl, Victor, assignor.) | | | | | | |
| Excelsior Steel Furnace Company. (See Scherer, Albert G., assignor.) | | | | | | |
| Exe, Mathias S., Hayfield, Minn. Mail-box | 742,850 | Nov. 3 | 57 | 14 | 107 | 14 |
| Exley, Charles S., Clarke County, Iowa. Telephone-exchange | 744,735 | Nov. 24 | 3761 | 811 | 107 | 856 |
| Exline, Frank, assignor to Vertical Propeller Company, Geddes, S. D. Paddle-wheel | 735,958 | Aug. 11 | 1758 | 377 | 105 | 1375 |
| Exline, Marcus P., Dallas, Tex. Check-book | 736,832 | Aug. 18 | 3378 | 747 | 105 | 1734 |
| Eyermann, Peter, Benrath, near Dusseldorf, Germany. Producing steel | 723,594 | Mar. 24 | 3616 | 808<br>809 | 103 | 800 |
| Eyermann, Peter, Philadelphia, Pa. Ship-building | 747,393 | Dec. 22 | 3848 | 866 | 107 | 1997 |
| Eylar, Matthew S., New York, N. Y., assignor to Elliott & Hatch Book Typewriter Co. Type-writer table and cabinet | 727,922 | May 12 | 2090 | 464<br>465 | 104 | 464 |
| Eylar, Matthew S., New York, N. Y., assignor to Elliott & Hatch Book Typewriter Company. Type-writing machine | 732,840 | July 7 | 261 | 65 | 105 | 58 |
| Eyles, Anton G., Chicago, Ill. Tufting-machine | 744,961 | Nov. 24 | 4161 | 899 | 107 | 933 |
| Eynon-Evans Manufacturing Company. (See Eynon, Thomas M., assignor.) | | | | | | |
| Eynon, Thomas M., Philadelphia, Pa., assignor to Eynon-Evans Manufacturing Company. Condenser | 720,908 | Feb. 17 | 2765 | 636 | 102 | 1435 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Eynon, Thomas M., Philadelphia, Pa., assignor to Eynon-Evans Manufacturing Company. Blower | 742,618 | Oct. 27 | 4305 | 970 | 106 | 2201 |
| Eyssen-Packer Defibrator Company. (See Belding, Warren S., assignor.) | | | | | | |
| F. A. Neider Company. (See Garis, Cornelius W., assignor.) | | | | | | |
| F. G. Johnson Company. (See Johnson, Frederick G., assignor.) | | | | | | |
| F. M. Watkins Company. (See Klein and Hecker, assignors.) | | | | | | |
| F. S. Webster Company *et al.* (See Bedworth, Arthur H., assignor.) | | | | | | |
| F. S. Webster Company. (See Bedworth, John A., assignor.) | | | | | | |
| F. S. Webster Company. (See Bedworth, John A. and A. H., assignors.) | | | | | | |
| F. W. Braun and Company. (See Hyde, James M., assignor.) | | | | | | |
| F. W. De Voe and C. T. Raynolds Company. (See Shaw, Henry W., assignor.) | | | | | | |
| F. W. Dunnell Composite Leather Company. (See Dunnell, Frederick W., assignor.) (Reissue.) | | | | | | |
| Faas, Gustav A., Topeka, Kans. Pin-holder | 724,832 | Apr. 7 | 782 | 181 | 103 | 1337 |
| Faben, Charles R., Jr., Toledo, Ohio. Dip-pipe for gas apparatus | 731,673 | June 23 | 3966 | 883 | 104 | 1998 |
| Faber, Charles A., Toledo, Ohio. Self-filling fountain-pen | 733,827 | July 14 | 2035 | 479 | 105 | 445 |
| Faber du Faur, Adolph, Jr. (See Bechtold and Faber du Faur.) | | | | | | |
| Faber, Eberhard. (See Fornander, Alfred, assignor.) | | | | | | |
| Faber, Frank M., Pittsburg, Pa. Water-tube boiler | 724,560 | Apr. 7 | 254 | 62 | 103 | 1224 |
| Faber, Frank M., Pittsburg, Pa. Steam-generator | 732,344 | June 30 | 5261 | 1167, 1168 | 104 | 2283 |
| Faber, Lothar W., New York, N. Y. Case for the reception and display of salable articles | 721,874 | Mar. 3 | 404 | 89 | 103 | 88 |
| Fabian, Edwin, and F. Widmark, St. Paul, Minn. Car-coupling | 717,663 | Jan. 6 | 242 | 61 | 102 | 52 |
| Fabian, Edwin, and F. Widmark, St. Paul, Minn. Car-coupling | 717,664 | Jan. 6 | 244 | 61 | 102 | 53 |
| Fabian, Edwin, and F. Widmark, St. Paul, Minn. Car-coupling | 717,665 | Jan. 6 | 245 | 62 | 102 | 53 |
| Fabian, Oscar J., Philadelphia, Pa. High-pressure ball-cock | 719,447 | Feb. 3 | 64 | 15 | 102 | 839 |
| Fabric Coloring Company. (See Horack, Charles L., assignor.) | | | | | | |
| Fabrik für Spezialnähmaschinen A. G., (Patente Julius Gutmann.) (See Gutmann, Julius, assignor.) | | | | | | |
| "Fabriques de Produits Chimiques de Thann et de Mulhouse." (See Bourcart, Edmond, assignor.) | | | | | | |
| Fabry, Edouard, Brussels, Belgium. Means for securing glass in window or other frames | 729,148 | May 26 | 4354 | 961 | 104 | 972 |
| Facer, James, and T. G. Stevens, Bedford, England; said Facer assignor to said Stevens. Vehicle-spring | 746,941 | Dec. 15 | 3003 | 690 | 107 | 1792 |
| Fadden, Thomas, West Nashville, Tenn. Shoe-sole | 748,490 | Dec. 29 | 5914 | 1343 | 107 | 2477 |
| Faessler, John W., Moberly, Mo. Flue-expander | 739,160 | Sept. 15 | 3160 | 698 | 106 | 707 |
| Fagalde, Daniel W., Douglas, Oreg. Pitman connection | 747,054 | Dec. 15 | 3217 | 733 | 107 | 1842 |
| Fagan, Lillian, Columbia Falls, Mont. Girdle for supporting garments | 738,175 | Sept. 8 | 1265 | 274 | 106 | 290 |
| Fagan, Thomas B., Vanwert, assignor, by mesne assignments, to Side Delivery Buncher Company, Toledo, Ohio. Mowing-machine attachment. (Reissue) | 12,182 | Dec. 8 | 2437 | 557 | 107 | 1645 |
| Fageol, Rollie B., assignor of one-half to J. C. Tate, Des Moines, Iowa Crude-petroleum burner | 719,573 | Feb. 3 | 298 | 69 | 102 | 885 |
| Fageol, Rollie B., assignor of one-half to J. C. Tate, Des Moines, Iowa. Gas-burner | 725,234 | Apr. 14 | 1524 | 346 | 103 | 1507 |
| Fagerström, Ernst E. F., Sundbyberg, Sweden. Reversing-gear | 745,337 | Dec. 1 | 38 | 8 | 107 | 1108 |
| Fahlbeck, Pontus E. (See Franzén, Frans A., assignor.) | | | | | | |
| Fahldiek, Henry, North Tonawanda, N. Y. Fire-escape | 717,666 | Jan. 6 | 246 | 62 | 102 | 53 |
| Fahnestock, Ernest B., New York, N. Y. Telephone-transmitter | 732,284 | June 30 | 5154 | 1145 | 104 | 2261 |
| Fahnestock, Ernest B., New York, N. Y. Telephone-transmitter | 732,285 | June 30 | 5156 | 1145 | 104 | 2261 |
| Fahnestock, Ernest B., New York, N. Y. Telephone-transmitter base | 732,286 | June 30 | 5158 | 1145 | 104 | 2262 |
| Fahnestock, Ernest B., New York, N. Y. Telephone-hook switch | 732,287 | June 30 | 5158 | 1145 | 104 | 2262 |
| Fahnestock, Ernest B., New York, N. Y. Telephone wall set | 747,394 | Dec. 22 | 3849 | 866 | 107 | 1997 |
| Fahrenholz, Frederick L., St. Paul, Minn. Vegetable-grater | 741,898 | Oct. 20 | 2887 | 644 | 106 | 1896 |
| Fahrney, William H., Chicago, Ill. Sphygmograph | 747,157 | Dec. 15 | 3400 | 770, 771 | 107 | 1884 |
| Failing, A. B. (See Flagg, David, assignor.) | | | | | | |
| Fain, Eliza J., Whitewright, Tex. Sewing-machine attachment | 730,446 | June 9 | 1685 | 377 | 104 | 1488 |
| Fair, George, deceased, Salem, (L. L. Fair, administratrix,) assignor of one-half to E. W. Gay, deceased, Newton, Mass.; G. M. Weed administrator of said Gay. Self-threading loom-shuttle | 728,383 | May 19 | 2949 | 651 | 104 | 666 |
| Fair, George, deceased, Salem, (L. L. Fair, administratrix,) assignor of one-half to E. W. Gay, deceased, Newton, Mass.; G. M. Weed administrator of said Gay. Self-threading loom-shuttle | 728,384 | May 19 | 2950 | 651 | 104 | 666 |
| Fair, Joseph M., Jr., O. E. Taylor, T. Mills, and R. E. L. Snodgrass, New Martinsville, W. Va. Hitching device | 745,808 | Dec. 1 | 894 | 202 | 107 | 1290 |
| Fair, Lydia L., administratrix. (See Fair, George.) | | | | | | |
| Fair, Otis, Dundee, Ohio. Photographic copying apparatus | 737,600 | Sept. 1 | 83 | 17 | 106 | 20 |
| Fair, Richard, Moosup, Conn., assignor to Draper Company, Hopedale, Mass. Spinning-spindle | 732,179 | June 30 | 4939 | 1098 | 104 | 2217 |
| Fairbanks, Henry, St. Johnsbury, Vt. Suction-box for paper-machines | 723,257 | Mar. 24 | 2985 | 670, 671 | 103 | 675 |
| Fairbanks, James G., and G. L. Sauer, Marion, Ohio. Reversing-gear for engines | 722,217 | Mar. 10 | 1049 | 231 | 103 | 239 |
| Fairbanks, Mary E., Jacksonville, and S. J. Hilley, Tallahassee, Fla. Tailor's measure | 730,894 | June 16 | 2493 | 553 | 104 | 1681 |
| Fairbanks, Morse & Company. (See Garrett, Warren H., assignor.) | | | | | | |
| Fairbanks, Morse & Company. (See Hobart, Franklin G., assignor.) | | | | | | |
| Fairfax, Joseph S., London, England. Variable-speed gear | 740,545 | Oct. 6 | 311 | 64 | 106 | 1310 |
| Fairfax, Joseph S., Chiswick, England. Variable-speed gear | 740,546 | Oct. 6 | 313 | 65 | 106 | 1311 |
| Fairhurst, Isaac J. D., Cabb, Wis. Washing-machine | 744,962 | Nov. 24 | 4163 | 900 | 107 | 933 |
| Fairhurst, William S., assignor of one-half to J. J. Riley, Brooklyn, N. Y. Unloading device for air or gas compressors | 726,220 | Apr. 21 | 3296 | 748 | 103 | 1896 |
| Fairweather, Charles B., assignor to J. S. and W. P. Worth, Coatesville, Pa. Cover-plate for boilers | 722,571 | Mar. 10 | 1708 | 380 | 103 | 383 |
| Fajen, Gustav, Milwaukee, Wis. Rotary meter | 726,270 | Apr. 28 | 3402 | 773 | 103 | 1933 |
| Falbe, Edward. (See Silbenhaar, Otto W., assignor.) | | | | | | |
| Fales, Lewis F., Walpole, Mass. Bag-forming machine | 717,828 | Jan. 6 | 595 | 133, 134 | 102 | 128 |
| Fales, Lewis F., Walpole, Mass. Paper-slitting machine | 723,375 | Mar. 24 | 3220 | 721, 722, 723 | 103 | 720 |
| Fales, Lewis F., Walpole, Mass. Fastening device for connecting collars and shafts | 728,692 | May 19 | 3533 | 786 | 104 | 789 |
| Fales, Lewis F., Walpole, Mass. Feeder | 747,395 | Dec. 22 | 3850 | 866, 867 | 107 | 1998 |
| Fales, Lewis F., Walpole, Mass. Forming coils | 747,598 | Dec. 22 | 4203 | 946 | 107 | 2078 |
| Falk Company. (See Falk, Herman W., assignor.) | | | | | | |
| Falk, Herman W., assignor to Falk Company, Milwaukee, Wis. Steel casting with hardened portions and making same | 728,217 | May 19 | 2619 | 585 | 104 | 596 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | Spec. | Drg. | Vol. | Page. |
| Falk, Isidor. (See Daniel, Leon, assignor.) | | | | | | |
| Falk, Louis A. (See Barrett, Falk, and Shreeve.) | | | | | | |
| Falk, Louis A. (See Bullard and Falk.) | | | | | | |
| Falk, Marcus, Hartford, Conn. Step-ladder | 729,561 | June 2 | 74 | 19 | 104 | 1143 |
| Falkenau, Arthur, assignor to Falkenau-Sinclair Machine Company, Philadelphia, Pa. Boring-machine | 734,051 | July 21 | 2493 | 581<br>582 | 105 | 561 |
| Falkenau-Sinclair Machine Company. (See Bramwell, Joseph W., assignor.) | | | | | | |
| Falkenau-Sinclair Machine Company. (See Falkenau, Arthur, assignor.) | | | | | | |
| Falkenberg, Emma, New York, N. Y. Placket-closer | 718,751 | Jan. 20 | 2350 | 519 | 102 | 530 |
| Falkenwalde, Oscar, Baltimore, Md. Gaseous-fuel burner | 733,828 | July 14 | 2036 | 479<br>480 | 105 | 445 |
| Falkenwalde, Oscar, assignor of one-half to C. F. Stauffen, Baltimore, Md. Hydrocarbon-burner | 742,777 | Oct. 27 | 4566 | 1034 | 106 | 2259 |
| Fallek, Joseph, New York, N. Y. Ring-guard | 732,532 | June 30 | 5628 | 1248 | 104 | 2360 |
| Faller, Ernest A., assignor of one-half to J. W. Chisholm, New York, N. Y. Mechanical movement | 744,520 | Nov. 17 | 3355 | 723 | 107 | 747 |
| Fallon, Bernard J., Summit, N. J. Petrifaction of clay | 729,562 | June 2 | 76 | 19 | 104 | 1143 |
| Fambrough, Andrew C., assignor of one-half to A. J. Swearingen, Sonora, Tex. Valve | 745,099 | Nov. 24 | 4456 | 964 | 107 | 994 |
| Fancher, Eugene M., Chicago, Ill. Sectional boiler | 730,895 | June 16 | 2495 | 553<br>554 | 104 | 1682 |
| Fanner, George J., Cleveland, Ohio. Fruit-press | 731,557 | June 23 | 3753 | 837 | 104 | 1957 |
| Fanta, Ferdinand, London, England. System for production of vacuum | 719,772 | Feb. 3 | 666 | 153<br>154 | 102 | 968 |
| Fanta, Ferdinand, London, England. Apparatus for reinforcing and standardizing filaments of glow-lamps | 720,793 | Feb. 17 | 2564 | 590<br>591 | 102 | 1392 |
| Fantoni, Giovanni, Atlantic City, N. J. Souvenir | 740,834 | Oct. 6 | 849 | 190 | 106 | 1426 |
| Farago, Luigi, and V. Elias, Marblehead, Ohio. Pedal-guitar | 738,018 | Sept. 1 | 925 | 204<br>205 | 106 | 202 |
| Farbenfabriken of Elberfeld Co. (See Berendes, Rudolf, assignor.) | | | | | | |
| Farbenfabriken of Elberfeld Co. (See Callsen, Jüngen, assignor.) | | | | | | |
| Farbenfabriken of Elberfeld Co. (See Dressel, Oscar, assignor.) | | | | | | |
| Farbenfabriken of Elberfeld Co. (See Eichengrün and Becker, assignors.) | | | | | | |
| Farbenfabriken of Elberfeld Co. (See Eichengrün and Precht, assignors.) | | | | | | |
| Farbenfabriken of Elberfeld Co. (See Engelmann, Max, assignor.) | | | | | | |
| Farbenfabriken of Elberfeld Co. (See Fischer and Guntrum, assignors.) | | | | | | |
| Farbenfabriken of Elberfeld Co. (See Hofmann, Fritz, assignor.) | | | | | | |
| Farbenfabriken of Elberfeld Co. (See Hofmann and Bonhoeffer, assignors.) | | | | | | |
| Farbenfabriken of Elberfeld Co. (See Israel and Dressel, assignors.) | | | | | | |
| Farbenfabriken of Elberfeld Co. (See Israel and Kothe, assignors.) | | | | | | |
| Farbenfabriken of Elberfeld Co. (See Jaeck, Oscar, assignor.) | | | | | | |
| Farbenfabriken of Elberfeld Co. (See Kahn, Myrtil, assignor.) | | | | | | |
| Farbenfabriken of Elberfeld Co. (See Kugel, Max, assignor.) | | | | | | |
| Farbenfabriken of Elberfeld Co. (See Nastvogel, Oscar, assignor.) | | | | | | |
| Farbenfabriken of Elberfeld Co. (See Runkel, Friedrich, assignor.) | | | | | | |
| Farbenfabriken of Elberfeld Co. (See Schmidt, Robert E., assignor.) | | | | | | |
| Farbenfabriken of Elberfeld Co. (See Thun, Karl, assignor.) | | | | | | |
| Farbwerke, vorm. Meister, Lucius & Brüning. (See Dollfus and Hagenbach, assignors.) | | | | | | |
| Farbwerke, vorm. Meister, Lucius & Brüning. (See Ernst & Scholl, assignors.) | | | | | | |
| Farbwerke, vorm. Meister, Lucius & Brüning. (See Hepp and Hartmann, assignors.) | | | | | | |
| Farbwerke, vorm. Meister, Lucius & Brüning. (See Hess, Otto, assignor.) | | | | | | |
| Farbwerke, vorm. Meister, Lucius & Brüning. (See Hoffmann, Carl, assignor.) | | | | | | |
| Farbwerke, vorm. Meister, Lucius & Brüning. (See Homolka, Benno, assignor.) | | | | | | |
| Farbwerke, vorm. Meister, Lucius & Brüning. (See Laubmann, Heinrich, assignor.) | | | | | | |
| Farbwerke, vorm. Meister, Lucius & Brüning. (See Le Blanc and Krauss, assignors.) | | | | | | |
| Farbwerke, vorm. Meister, Lucius & Brüning. (See Merling and Welde, assignors.) | | | | | | |
| Farbwerke, vorm. Meister, Lucius & Brüning. (See Moest, Martin, assignor.) | | | | | | |
| Farbwerke, vorm. Meister, Lucius & Brüning. (See Moest, Hertlein, and Appermann, assignors.) | | | | | | |
| Farbwerke, vorm. Meister, Lucius & Brüning. (See Müller and Schwab, assignors.) | | | | | | |
| Farbwerke, vorm. Meister, Lucius & Brüning. (See Schirmacher, Carl, assignor.) | | | | | | |
| Farbwerke, vorm. Meister, Lucius & Brüning. (See Schirmacher, Karl, assignor.) | | | | | | |
| Farbwerke, vorm. Meister, Lucius & Brüning. (See Schmidt, Albrecht, assignor.) | | | | | | |
| Farbwerke, vorm. Meister, Lucius & Brüning. (See Schmidt, Friedrich, assignor.) | | | | | | |
| Farbwerke, vorm. Meister, Lucius & Brüning. (See Schmidt and Bethmann, assignors.) | | | | | | |
| Farbwerke, vorm. Meister, Lucius & Brüning. (See Scholl, Franz, assignor.) | | | | | | |
| Farbwerke, vorm. Meister, Lucius & Brüning. (See Sohst, Otto, assignor.) | | | | | | |
| Farbwerke, vorm. Meister, Lucius & Brüning. (See Ullrich and Fussgänger, assignors.) | | | | | | |
| Farbwerke, vormals Meister, Lucius & Brüning. (See Krauss and Berneck, assignors.) | | | | | | |
| Fargue, John J., and R. W. Smith, San Francisco, Cal.; said Fargue assignor to said Smith. Stamp-affixing device | 743,263 | Nov. 3 | 867 | 189 | 107 | 182 |
| Farish, Edward A., St. Louis, Mo. Chair | 727,119 | May 5 | 573 | 123 | 104 | 124 |
| Farkas, Armand, Paris, France. Incandescent gas-burner | 733,473 | July 14 | 1394 | 328 | 105 | 312 |
| Farland, Alexander, Manchaug, Mass. Curtain-fixture | 732,932 | July 7 | 418 | 102 | 105 | 90 |
| Farley, James L., Philadelphia, Pa. Lock for milk-receptacles | 726,271 | Apr. 28 | 3403 | 773 | 103 | 1933 |
| Farley, John W., and G. F. Ballasch, Cleveland, Ohio. Cigar-cutter and mirror | 734,688 | July 28 | 3677 | 861 | 105 | 825 |
| Farley, Michael. (See Carnes and Farley.) | | | | | | |
| Farlow, John H. (See Wright and Farlow.) | | | | | | |
| Farlow, John H. (See Wright, Stem, and Farlow.) | | | | | | |
| Farmer, Elmer, Braddock, Pa., assignor to American Steel & Wire Company. Crosshead and pitman connection | 743,701 | Nov. 10 | 1787 | 377 | 107 | 398 |
| Farmer, Elward, *et al.* (See Farmer, Julius M., assignor.) | | | | | | |
| Farmer, Frank, Richmond, Ind. Electromedical belt | 721,032 | Feb. 17 | 3004 | 690 | 102 | 1486 |
| Farmer, Frank H., *et al.* (See Strom, Victor A., assignor.) | | | | | | |
| Farmer, John. (See Haviland and Farmer.) | | | | | | |
| Farmer, John T., Orange, N. J. Apparatus for heating air | 746,805 | Dec. 15 | 2711 | 625<br>626 | 107 | 1725 |
| Farmer, Julius M., assignor of part to J. Derfus, V. A. Gudex, F. X. Boden, C. S. and J. E. Matteson, E. L. Terrell, W. D. Machleith, A. J. Gudex, J. Vierthaler, H. G. Decker, E., R. J., and W. J. Farmer, C. H. Bardenwerper, D. P. Redd, A. P. Jensen, J. J. Jordan, D. Baroni, P. T. Murphy, W. J. McLaughlin, Milwaukee, Wis.; A. B. Hallett, Sharon, Pa.; E. White, Kenosha, M. A. Bauman, Rice Lake, Wis., and E. A. Titus, Hartford City, Ind. Rotary engine | 739,274 | Sept. 15 | 3372 | 748<br>749 | 106 | 753 |
| Farmer, Matthew S., Washington, D. C. Hook | 725,235 | Apr. 14 | 1525 | 346 | 103 | 1508 |
| Farmer, Rolland J., *et al.* (See Farmer, Julius M., assignor.) | | | | | | |
| Farmer, Samuel, assignor to A. F. Flegel, Portland, Oreg. Stamp-affixing machine | 746,627 | Dec. 8 | 2383 | 546<br>547 | 107 | 1632 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| Farmer, Willard J., *et al.* (See Farmer, Julius M., assignor.) | | | | | | |
| Farmer, William B., New York, N. Y. Banjo | 724,833 | Apr. 7 | 783 | 181 | 103 | 1337 |
| Farmers Compress Company. (See Crowell, Pearl K., assignor.) | | | | | | |
| Farnham, Arthur C., *et al.* (See Waters, Frank J., assignor.) | | | | | | |
| Farnham, Frank E., *et al.* (See Waters, Frank J., assignor.) | | | | | | |
| Farnham, Frank G., Honesdale, Pa. Rotary brush | 741,643 | Oct. 20 | 2409 | 539 | 106 | 1795 |
| Farnham, Neal, Chicago, Ill. Sand-blast apparatus | 747,396 | Dec. 22 | 3855 | 867 | 107 | 1999 |
| Farnham, Stephen H. (See Briggs and Farnham.) | | | | | | |
| Farnsworth, George. (See Flora, Ellsworth E., assignor.) | | | | | | |
| Farnsworth, George, trustee. (See Flora, Ellsworth E., assignor.) | | | | | | |
| Farnsworth, George, assignor to D. R. Dwyer and T. F. Graham, East Pepperell, Mass. Sharpener for lawn-mower knives | 722,177 | Mar. 3 | 952 | 211 | 103 | 202 |
| Farnsworth, Henry T., Glade Spring, assignor of one-half to G. N. Wertz, Abingdon, Va. Pneumatic signal system | 739,660 | Sept. 22 | 4091 | 911<br>912 | 106 | 924 |
| Farnsworth, Hiland R. (See Clark and Farnsworth.) | | | | | | |
| Farnsworth, Hiland R. (See Farnsworth, William R. and H. R.) | | | | | | |
| Farnsworth, Hiland R. (See Shattuck and Farnsworth.) | | | | | | |
| Farnsworth, William R. and H. R., Turners Falls, Mass. Paper-pulp screen | 721,875 | Mar. 3 | 405 | 89 | 103 | 89 |
| Farnsworth, Willis S., Healdsburg, Cal. Butter-mold | 740,746 | Oct. 6 | 667 | 151 | 106 | 1390 |
| Farnum, William C., Arlington, Vt. Game apparatus | 719,448 | Feb. 3 | 65 | 15 | 102 | 839 |
| Farnum, William C., Arlington, Vt., assignor to Union Typewriter Company, Jersey City, N. J. Type-writing machine | 732,533 | June 30 | 5629 | 1248 | 104 | 2360 |
| Farquhar, Charles S., *et al.* (See Cooley, John F., assignor.) | | | | | | |
| Farquhar Co., A. B. (See Eisenhart, Henry W., assignor.) | | | | | | |
| Farquhar, David, and A. W. Aitken, Buffalo, N. Y., assignors to Buffalo Pitts Company. Stoker for threshing or other engines | 741,472 | Oct. 13 | 2085 | 462 | 106 | 1711 |
| Farquhar, John F. C., Vaucluse, near Sydney, New South Wales, Australia. Oil-lamp | 730,447 | June 9 | 1686 | 378 | 104 | 1488 |
| Farquharson, Charles W., and O. F. Adelman, Chicago, Ill. Mounting for the coils of voltmeters or similar instruments | 745,046 | Nov. 24 | 4339 | 937<br>938 | 107 | 970 |
| Farr Alpaca Company. (See Lynn, Joseph, assignor.) | | | | | | |
| Farr, Benjamin G. (See Pervier, George L., assignor.) | | | | | | |
| Farr, Charles H. (See Morgan, Charles N., assignor.) | | | | | | |
| Farr, Edmund J., Boston, Mass. Ball-bearing | 724,834 | Apr. 7 | 784 | 181 | 103 | 1337 |
| Farr, Hiram G., Winchester, Mass. Device for decreasing noise resulting from vibration in railway-cars | 719,098 | Jan. 27 | 3022 | 672 | 102 | 684 |
| Farr, John W., assignor of one-half to S. H. Davis, Marion, Ind. Shingling-bracket | 718,963 | Jan. 20 | 2744 | 614 | 102 | 613 |
| Farrand, Dudley, receiver. (See Hanchett, George T., assignor.) | | | | | | |
| Farrand Organ Company. (See Courville, Joseph, assignor.) | | | | | | |
| Farrand Organ Company. (See Hintz, Otto F., assignor.) | | | | | | |
| Farrand Organ Company. (See Wood, William D., assignor.) | | | | | | |
| Farrand & Votey Organ Company. (See Draper and Courville, assignors.) | | | | | | |
| Farrar, George C., Hurricane Island, Me. Ribbon or roll holder | 741,473 | Oct. 13 | 2087 | 462 | 106 | 1712 |
| Farrar, Joseph, Montreal, Canada. Air-brake | 722,403 | Mar. 10 | 1380 | 306 | 103 | 310 |
| Farrell, Austin, Gladstone, Mich., assignor of one-half to W. G. Mather, Cleveland, Ohio. Support for cooling plates or coils in blast-furnaces | 744,319 | Nov. 17 | 3005 | 644<br>645 | 107 | 671 |
| Farrell, Austin, Gladstone, Mich., assignor of one-half to W. G. Mather, Cleveland, Ohio. Support-jacket or frame for cooling plates or coils in blast-furnaces | 745,430 | Dec. 1 | 220 | 49 | 107 | 1147 |
| Farrell Foundry and Machine Company. (See Baker, Albert A., assignor.) | | | | | | |
| Farrell, Frank J., London, England. Apparatus for cleaning carpets, &c | 725,689 | Apr. 21 | 2365 | 535 | 103 | 1700 |
| Farrell, George R., Cambridge, assignor to M. W. Carr & Co., Somerville, Mass. Frame for bags, &c | 747,158 | Dec. 15 | 3404 | 771 | 107 | 1885 |
| Farrell, John, Newton, N. J. Silo | 735,485 | Aug. 4 | 866 | 184<br>185 | 105 | 1165 |
| Farrell, Martin P., C. R. Heath, and W. I. Tay, assignors to Farrell-Tay Paper Box Co., Binghamton, N. Y. Cigar-box | 719,097 | Jan. 27 | 3020 | 672 | 102 | 684 |
| Farrell-Tay Paper Box Co. (See Farrell, Heath, and Tay, assignors.) | | | | | | |
| Farrell, William A., assignor of one-half to J. Rauber, Wellsville, N. Y. Visible-signal telegraph | 718,332 | Jan. 13 | 1512 | 335<br>336 | 102 | 340 |
| Farrell, William R., Jr., New York, N. Y. Combined door knob and bell | 721,945 | Mar. 3 | 550 | 121 | 103 | 121 |
| Farrington, Harvey E. (See Coburn, Joseph A., assignor.) | | | | | | |
| Farrington, Henry A. (See Marsh, Joseph G., assignor.) | | | | | | |
| Farrington, Wilber E. (See Nevelson, Julius, assignor.) | | | | | | |
| Farris, Emory L., assignor of one-fourth to M. Bowling, London, Ky. Vehicle running-gear | 723,519 | Mar. 24 | 3489 | 780 | 103 | 774 |
| Farris, Henry C., Andrews, Tex. Combined cultivator and harrow | 732,624 | June 30 | 5794 | 1285 | 104 | 2398 |
| Farwell, Alfred A., Toronto, Canada. Voting-machine | 728,218 | May 19 | 2621 | 586 | 104 | 596 |
| Farwell, Fay O., assignor of one-half to Adams Company, Dubuque, Iowa. Controlling mechanism for motor-vehicles | 727,923 | May 12 | 2092 | 465 | 104 | 464 |
| Farwell, Fay O., assignor of one-half to Adams Company, Dubuque, Iowa. Variable-speed and reversing mechanism | 743,156 | Nov. 3 | 652 | 141 | 107 | 136 |
| Farwell, Fay O., assignor of one-half to Adams Company, Dubuque, Iowa. Vehicle-spring | 745,809 | Dec. 1 | 895 | 202 | 107 | 1290 |
| Farwell, Hart F., assignor to Country Home Telephone Manufacturing Company, Chicago, Ill. Telephone-substation apparatus | 741,899 | Oct. 20 | 2888 | 644 | 106 | 1896 |
| Farwell, Otis M., assignor to Thilmany Pulp & Paper Company, Kaukauna, Wis. Paper-making machine | 733,709 | July 14 | 1788 | 424 | 105 | 394 |
| Fasenmeyer, Andy, assignor of one-half to W. Bayliss, Titusville, Pa. Pipe-wrench | 736,372 | Aug. 18 | 2488 | 546 | 105 | 1549 |
| Fassett, Francis K., St. Louis, Mo. Car-seat | 747,957 | Dec. 29 | 4914 | 1112 | 107 | 2258 |
| Fassett, Francis K., assignor to L. Ehrlich, St. Louis, Mo. Operating mechanism for elevator-doors or the like | 730,896 | June 16 | 2498 | 554<br>555 | 104 | 1682 |
| Fassett, Francis K., St. Louis, Mo., assignor to Otis Elevator Company, New York, N. Y. Operating mechanism for elevator-doors | 738,176 | Sept. 8 | 1266 | 274<br>275 | 106 | 290 |
| Fassett, James H., Nashua, and J. E. Warren, Greenfield, N. H. Pencil-sharpener | 722,826 | Mar. 17 | 2205 | 492 | 103 | 500 |
| Fassett, James H., Nashua, and J. E. Warren, Greenfield, assignors of one-half to W. H. Cheever, Nashua, N. H. Car | 726,663 | Apr. 28 | 4179 | 944 | 103 | 2088 |
| Fatic, Henry, Middletown, Ind. Automatic damper-regulator | 734,052 | July 21 | 2495 | 582 | 105 | 561 |
| Faubion, Rufus O., C. W. and C. G. Workman, Evant, Tex. Attachment for cultivators | 737,378 | Aug. 25 | 4374 | 975 | 105 | 1965 |
| Faubion, Thomas D. A., Bronte, Tex. Manual motor for churns | 730,752 | June 9 | 2221 | 494 | 104 | 1606 |
| Faucett, Whitfield A., Raleigh, N. C. Printer's galley | 727,924 | May 12 | 2095 | 466 | 104 | 464 |
| Faulkner, Clay, Faulkner, Tenn. Revolving axle | 722,218 | Mar. 10 | 1051 | 231 | 103 | 240 |
| Faulkner, Clay, McMinnville, Tenn. Rotary axle | 742,851 | Nov. 3 | 58 | 14 | 107 | 15 |
| Faulkner, Edward J. (See Rust and Faulkner.) | | | | | | |
| Faulkner, Elisha J., Kimball, W. Va. Automatic feed-box for horses or cattle | 727,925 | May 12 | 2097 | 466 | 104 | 465 |
| Faulkner, James J., Memphis, Tenn. Cotton-harvester | 723,997 | Mar. 31 | 4392 | 987<br>988 | 103 | 981 |
| Faulkner, Sarah, New York, N. Y. Obstetrical sheet | 719,206 | Jan. 27 | 3202 | 714 | 102 | 721 |

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| Faust, Casper, Rhinelander, Wis. Heating-stove | 738,304 | Sept. 8 | 1528 | 330 | 106 | 344 |
| Faust, Casper, Rhinelander, Wis. Smoke and air flue | 740,835 | Oct. 6 | 850 | 190 | 106 | 1427 |
| Faust, Levin, Rockford, Ill. Lock | 743,475 | Nov. 10 | 1367 | 280 | 107 | 307 |
| Fauvre, Frank M., *et al.* (See Gaynor, John J., assignor.) (Reissue.) | | | | | | |
| Favreau, Edward, Worcester, Mass. Blind-fastener | 736,949 | Aug. 25 | 3603 | 799 | 105 | 1802 |
| Fawcett, David L. (See Kennington and Fawcett.) | | | | | | |
| Fawcett, William M., Erie, Pa., assignor to J. Scholl & Company, New York, N. Y. Road-scarifier | 719,099 | Jan. 27 | 3023 | 672, 673 | 102 | 685 |
| Fawcett, William M., and C. L. Heisler, Erie, Pa., assignors to J. Scholl and Company, New York, N. Y. Road-roller | 728,451 | May 19 | 3074 | 679, 680 | 104 | 691 |
| Fawell, Joseph, Pittsburg, Pa. Gearing for rolling-mills | 738,991 | Sept. 15 | 2852 | 633 | 106 | 644 |
| Fawkes, Wilbert C., North Chicago, Ill. Ice-cream freezer | 729,310 | May 26 | 4649 | 1027, 1028 | 104 | 1035 |
| Fawkes, Wilbert C., Waukegan, Ill. Sad-iron handle | 740,410 | Oct. 6 | 40 | 10 | 106 | 1253 |
| Faxon, William H., *et al.* (See Chandler, Frank M., assignor.) | | | | | | |
| Fay, Frederick L., assignor to S. M. Green, Holyoke, Mass. Automobile | 721,876 | Mar. 3 | 407 | 89 | 103 | 89 |
| Fay, Henry R., Boston, Mass. Sash-fastener | 722,963 | Mar. 17 | 2438 | 546 | 103 | 548 |
| Fayol, Amédée, Bordeaux, France. Trolley for electric railways having overhead wires for supply of current | 738,305 | Sept. 8 | 1531 | 331 | 106 | 345 |
| Fazakerly, William B., Buntyn, Tenn. Railway-switch | 734,527 | July 28 | 3387 | 790 | 105 | 765 |
| Feagan, John H., Spartanburg, S. C. Dental flask | 723,998 | Mar. 31 | 4395 | 988 | 103 | 981 |
| Fearis, James H., Connersville, Ind. Covered box | 739,406 | Sept. 22 | 3640 | 809 | 106 | 827 |
| Fearon, Merrill G., *et al.* (See Stitts, Sylvester, assignor.) | | | | | | |
| Fearon, Robert N., *et al.* (See Stitts, Sylvester, assignor.) | | | | | | |
| Feathers, Joseph W., and G. Mills, Albion, N. Y. Harvesting implement | 743,264 | Nov. 3 | 870 | 189 | 107 | 183 |
| Feathers, Sarah L., Prairie City, Iowa. Cuspidor | 718,612 | Jan. 20 | 2087 | 454 | 102 | 478 |
| Feathers, Sarah L., Prairie City, Iowa. Waist-fastener and skirt-supporter | 735,230 | Aug. 4 | 381 | 74 | 105 | 1062 |
| Feazell, William M., Ferrum, Va. Umbrella-support | 736,373 | Aug. 18 | 2489 | 547 | 105 | 1550 |
| Fecker, Gottlieb, assignor to Warner and Swasey Company, Cleveland, Ohio. Telescope | 731,101 | June 16 | 2883 | 640 | 104 | 1762 |
| Fedeler, John H., Schenectady, N. Y. Railway-motor-ventilating system | 721,877 | Mar. 3 | 409 | 90 | 103 | 89 |
| Fedeler, John H., Schenectady, N. Y. Talking-machine record | 746,806 | Dec. 15 | 2713 | 626 | 107 | 1725 |
| Feder, Harry, New York, N. Y. Dress-stay blank | 727,323 | May 5 | 932 | 203 | 104 | 201 |
| Federal Electric Company. (See Goehst, John H., assignor.) | | | | | | |
| Federal Manufacturing Company. (See Elliott, Gettise M., assignor.) | | | | | | |
| Federal Manufacturing Company. (See Smith, Charles S., assignor.) | | | | | | |
| Federal Sugar Refining Company. (See Spreckels and Kern, assignors.) | | | | | | |
| Fedor, Andrew V., Wilkesbarre, Pa. Carpet sweeper and beater | 738,019 | Sept. 1 | 926 | 205 | 106 | 203 |
| Feeley, John J., Manton, R. I. Braiding-machine | 727,926 | May 12 | 2098 | 466 | 104 | 465 |
| Feely, John J., Whiteplains, assignor of one-half to J. O'Connell, New York, N. Y. Treating lime | 747,689 | Dec. 22 | 4380 | ------ | 107 | 2117 |
| Feely, William C., New York, N. Y. Invalid-bed and commode attachment | 730,010 | June 2 | 899 | 200 | 104 | 1311 |
| Feely, William C., New York, N. Y. Head and back rest for beds | 730,011 | June 2 | 901 | 201 | 104 | 1311 |
| Fehlman, John A., Crownpoint, Ind. Screw-propeller | 722,572 | Mar. 10 | 1708 | 380 | 103 | 383 |
| Fehr, William, assignor to Steel Heddle Manufacturing Company, Philadelphia, Pa. Harness-frame for looms | 726,417 | Apr. 28 | 3687 | 835 | 103 | 1992 |
| Fehring, George F., Antigo, Wis. Harness attachment | 734,528 | July 28 | 3388 | 791 | 105 | 765 |
| Fehrmann, Herman C., Jefferson, Wis. Carpet-stretcher | 717,829 | Jan. 6 | 605 | 134 | 102 | 130 |
| Feiber, Samuel L., New York, N. Y. Cigarette-box or the like | 742,301 | Oct. 27 | 3737 | 835 | 106 | 2084 |
| Feidler, Forrest F., Erie, Pa. Suppository | 725,831 | Apr. 21 | 2630 | 598 | 103 | 1758 |
| Feigel, John J., *et al.* (See McGuire, Peter J., assignor.) | | | | | | |
| Feilbach, Andrew. (See Crozier and Feilbach.) | | | | | | |
| Feild, Alexander J., Raleigh, N. C. Tobacco box or caddy | 734,839 | July 28 | 3996 | 933 | 105 | 889 |
| Feineman, Frederick J., St. Louis, Mo. Burial-casket | 735,354 | Aug. 4 | 597 | 123 | 105 | 1109 |
| Feiner, Eugene J. (See Hamann, Richard W., assignor.) | | | | | | |
| Feinmaschinenbau G. Calberla, G. M. B. H. (See Paul, Josef, assignor.) | | | | | | |
| Feister, Henry P., Philadelphia, Pa. Compressible tire for vehicles | 729,311 | May 26 | 4651 | 1028 | 104 | 1035 |
| Feiten, Philip, assignor of two-thirds to F. J. Schweitzer, Cleveland, Ohio. Fat-separating machine | 734,840 | July 28 | 3997 | 933 | 105 | 889 |
| Feix, Hermann, Gablong, Austria-Hungary. Nicotin-catcher | 732,841 | July 7 | 263 | 65 | 105 | 58 |
| Feix, Otto F., Gloversville, N. Y. Hide-fleshing machine | 719,773 | Feb. 3 | 668 | 154 | 102 | 963 |
| Felbel, Jacob, New York, N. Y., assignor to Union Typewriter Company, Jersey City, N. J. Type-writing machine | 740,836 | Oct. 6 | 851 | 190, 191 | 106 | 1427 |
| Feldhaus, Fred, Akron, Ohio. Valve-gear | 721,790 | Mar. 3 | 243 | 54 | 103 | 54 |
| Feldkamp, Fritz A., Newark, N. J. Storage battery | 726,272 | Apr. 28 | 3404 | 773, 774 | 103 | 1933 |
| Feldmann, Hugo A., Holyoke, Mass. Comb-foundation for beehives | 747,055 | Dec. 15 | 3218 | 733 | 107 | 1843 |
| Feldmann, Louis, Jr., and C. A. Haas, St. Louis, Mo. Display-rack | 728,219 | May 19 | 2624 | 586 | 104 | 597 |
| Feldmann, Wilhelm, Elberfeld, Germany. Mountain rope-lift | 720,909 | Feb. 17 | 2766 | 636 | 102 | 1435 |
| Feldmann, William, Chicago, Ill. Bookbinder | 737,556 | Aug. 25 | 4716 | 1058 | 105 | 2042 |
| Feldmeier, Harvey, assignor to D. H. Burrell & Company, Littlefalls, N. Y. Driving mechanism for centrifugal machines | 725,832 | Apr. 21 | 2631 | 599 | 103 | 1758 |
| Feldmeier, Harvey, assignor to D. H. Burrell & Company, Littlefalls, N. Y. Check-controlled liquid-delivery apparatus | 737,091 | Aug. 25 | 3838 | 853, 854 | 105 | 1851 |
| Feldt, Ferdinand J. (See Sester and Feldt.) | | | | | | |
| Felgar, David, Newton, Kans. Mechanical movement | 733,177 | July 7 | 847 | 205, 206 | 105 | 178 |
| Felker, Melancthon O., Chicora, Pa. Means for uniting parts of whips | 721,686 | Mar. 3 | 71 | 15 | 103 | 16 |
| Felker, Melancthon O., Chicora, Pa. Whip | 743,847 | Nov. 10 | 2050 | 436 | 107 | 453 |
| Felkin, Mario L. (See Lundin, Efraim, assignor.) | | | | | | |
| Feller, Nicholas. (See Muskopf, Jacob, assignor.) | | | | | | |
| Fellows, Olin S., Middletown, N. Y. Means for removing superfluous solder from sheet-metal cans | 725,429 | Apr. 14 | 1861 | 416, 417 | 103 | 1578 |
| Fellows, Olin S., Middletown, N. Y. Means for removing superfluous solder from sheet-metal cans | 725,430 | Apr. 14 | 1866 | 417, 418 | 103 | 1580 |
| Fellows, Olin S., Middletown, N. Y. Means for removing superfluous solder from sheet-metal cans | 727,324 | May 5 | 933 | 203, 204 | 104 | 201 |
| Fellows, Ozro S., Battlecreek, Mich. Weeding-machine | 732,180 | June 30 | 4940 | 1098 | 104 | 2217 |
| Felmlee, John H., assignor to East End Manufacturing Company, Pittsburg, Pa. Wrapping-machine | 727,927 | May 12 | 2099 | 466, 467, 468 | 104 | 465 |
| Felmlee, John H., assignor to East End Manufacturing Company, Pittsburg, Pa. Wrapping-machine | 745,810 | Dec. 1 | 897 | 202, 203 | 107 | 1291 |
| Fels & Co. (See Drolet, Charles, assignor.) | | | | | | |
| Fels, Samuel S., Philadelphia, Pa. Advertising device | 735,486 | Aug. 4 | 868 | 185 | 105 | 1165 |
| Felsberg, Edward, Montgomery, Pa. Horse-tail fastener | 737,601 | Sept 1 | 85 | 18 | 106 | 21 |

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| Felsch, Kuno, Elberfeld, Germany. Dental forceps | 732,288 | June 30 | 5160 | 1146 | 104 | 2262 |
| Felsing, Conrad, Jr., Köpenick, near Berlin, Germany. Reversing-gear | 747,056 | Dec. 15 | 3219 | 734 | 107 | 1843 |
| Felsing, Edward F., and J. A. Andersen, Minneapolis, Minn. Puncture-plug | 735,078 | Aug. 4 | 53 | 15 | 105 | 993 |
| Felsing, Samuel D., Crookston, Minn. Pneumatic straw-stacker | 747,397 | Dec. 22 | 3857 | 868 | 107 | 1999 |
| Felt, Charles E. (See Felt, Frank B. and C. E.) | | | | | | |
| Felt, Charles E., Pullman, assignor to Electric Specialty Co., Chicago, Ill. Electric switch | 744,736 | Nov. 24 | 3763 | 811 | 107 | 850 |
| Felt, Charles E., and D. A. Kimbark, Pullman, assignors to Electric Specialty Company, Chicago, Ill. Draw-gear and buffing apparatus for railway-cars | 717,667 | Jan. 6 | 248 | 62,63 | 102 | 54 |
| Felt, Dorr E., Chicago, Ill. Casing for key-operated machines | 733,379 | July 14 | 1229 | 290, 291 | 105 | 276 |
| Felt, Frank B. and C. E., Chicago, Ill., assignors to Oxygen Light and Fuel Company. Retort | 725,060 | Apr. 14 | 1188 | 269, 270 | 103 | 1438 |
| Felt, Jesse S., Portland, Me. Plow | 745,172 | Nov. 24 | 4614 | 1001 | 107 | 1027 |
| Felton, Frank B., Bridgeport, Conn. Golf-club | 723,258 | Mar. 24 | 2987 | 672 | 103 | 675 |
| Felton, Samuel K., Jr., Philadelphia, Pa. Treating hides or skins | 721,553 | Feb. 24 | 4007 | ..... | 102 | 1716 |
| Feltwell, Peter M. (See Mohn and Feltwell.) | | | | | | |
| Fender, John B., San Antonio, assignor to S. Levy, Fort Worth, W. J. Hefley, Waco, R. McBride and W. A. Windsor, San Antonio, Tex. Coin-operated vending-machine | 741,022 | Oct. 13 | 1176 | 266 | 106 | 1517 |
| Fendrich, John H., Evansville, Ind. Treating tobacco | 729,312 | May 26 | 4652 | ..... | 104 | 1035 |
| Fenelon, Charles D., Phillips, and J. B. Erwin, Milwaukee, Wis. Steam-controlling valve for rotary engines | 744,182 | Nov. 17 | 2758 | 587 | 107 | 616 |
| Fenn, Frank L., Schenectady, N. Y., assignor to General Electric Company. Snap-switch | 729,744 | June 2 | 404 | 91 | 104 | 1211 |
| Fenn, George M., Charlotte, Mich. Machine for making artificial-fuel briquets | 723,150 | Mar. 17 | 2766 | 622 | 103 | 616 |
| Fenn, George M., Charlotte, Mich. Machine for bending scythe-snaths | 728,890 | May 26 | 3901 | 867 | 104 | 880 |
| Fenn, George M., Charlotte, Mich. Machine for making artificial-fuel briquets | 729,149 | May 26 | 4355 | 962 | 104 | 972 |
| Fennell, John, *et al.* (See Reenstierna, Gustaf L., assignor.) | | | | | | |
| Fenner, George P., New London, Conn. Sheet-delivery | 719,317 | Jan. 27 | 3418 | 762, 763 | 102 | 769 |
| Fenner, N. Paul, Jr. (See Anderson, Frank C., assignor.) | | | | | | |
| Fenner, N. Paul, Jr., *et al.* (See Anderson, Frank C., assignor.) | | | | | | |
| Fenner, William H., Chicago, Ill. Furnace | 722,827 | Mar. 17 | 2207 | 492, 493, 494 | 103 | 501 |
| Fennessy, Alberta A., Newcomb, N. Y. Toy | 726,151 | Apr. 21 | 3165 | 716 | 103 | 1869 |
| Fenno Cloth Cutting Machine Company. (See Howe, Patrick, assignor.) | | | | | | |
| Fenstermaker, James, St. Paul, Minn. Hopple | 735,866 | Aug. 11 | 1600 | 341 | 105 | 1341 |
| Fenton, H. M., *et al.* (See Louis, Herman H., assignor.) | | | | | | |
| Fenton, Joseph T., Philadelphia, Pa. Valve mechanism | 727,772 | May 12 | 1814 | 405 | 104 | 405 |
| Fenton, Joseph T., Philadelphia, Pa. Valve-gear | 729,313 | May 26 | 4653 | 1028 | 104 | 1035 |
| Fenwick, Alfred, Sunderland, England. Rowlock for boats | 743,265 | Nov. 3 | 872 | 189 | 107 | 183 |
| Feran, John P., Jr., *et al.* (See Sloan and Robinson, assignors.) | | | | | | |
| Feraud, Frank H., Granite, Ill. Detachable trowel-handle | 737,831 | Sept. 1 | 522 | 115 | 106 | 117 |
| Ferdon, Guy W., assignor to Silver & Co., Brooklyn, N. Y. Blue-flame oil-stove | 720,123 | Feb. 10 | 1320 | 302 | 102 | 1121 |
| Ferell, J. W. (See Beakley, Edward J., assignor.) | | | | | | |
| Ferge, Henry. (See Wittig, Charles J., assignor.) | | | | | | |
| Ferguson, Alonzo, Indianapolis, Ind. Concrete-mold | 745,585 | Dec. 1 | 502 | 118 | 107 | 1204 |
| Ferguson, Arthur C., Brooklyn, N. Y. Shifting-keyboard type-writer | 718,333 | Jan. 13 | 1515 | 336, 337 | 102 | 340 |
| Ferguson, Arthur C., Brooklyn, N. Y. Type-writer | 722,291 | Mar. 10 | 1186 | 262 | 103 | 268 |
| Ferguson, Daniel K., Simcoe, Canada. Display or exhibiting box | 724,996 | Apr. 7 | 1071 | 245 | 103 | 1357 |
| Ferguson, David, Pittsburg, Pa. Coke-drawer | 746,055 | Dec. 8 | 1369 | 305 | 107 | 1409 |
| Ferguson, Francis J., Toronto, Canada. Dough-dividing machine | 730,104 | June 2 | 1050 | 235 | 104 | 1341 |
| Ferguson, George W. (See Ferguson, Joseph W. and G. W.) | | | | | | |
| Ferguson, J. B. (See Rollins, John O., assignor.) | | | | | | |
| Ferguson, James H., Brooklyn, N. Y. Hydraulic press | 748,358 | Dec. 29 | 5650 | 1288 | 107 | 2418 |
| Ferguson, John A. (See Ferguson, William H., assignor.) | | | | | | |
| Ferguson, John A. (See Kidder, Frank E., assignor.) | | | | | | |
| Ferguson, John A., Denver, Colo. Building-block and wall | 733,928 | July 14 | 2225 | 522 | 105 | 483 |
| Ferguson, John H., Zimmerman, Ohio. Vehicle running-gear | 745,338 | Dec. 1 | 39 | 8 | 107 | 1108 |
| Ferguson, John N., Woodlake, Nebr. Protector for windows or like openings | 720,124 | Feb. 10 | 1322 | 302 | 102 | 1121 |
| Ferguson, Joseph W. and G. W., Wangaratta, Victoria, Australia. Brick or briquet making machine | 725,690 | Apr. 21 | 2366 | 535 | 103 | 1700 |
| Ferguson, Leta M., Washington, D. C. Dress-shield | 717,830 | Jan. 6 | 607 | 135 | 102 | 130 |
| Ferguson, Lyman, Ithaca, assignor of one-half to H. C. Heermans, Corning, N. Y. Automatic extension-ladder hook | 719,449 | Feb. 3 | 67 | 15 | 102 | 839 |
| Ferguson, Lyman, Ithaca, assignor of one-half to H. C. Heermans, Corning, N. Y. Extension step-ladder | 719,450 | Feb. 3 | 68 | 15 | 102 | 840 |
| Ferguson, Michal, Munising, Mich. Snow-plow and road-icer | 717,561 | Jan. 6 | 74 | 19 | 102 | 18 |
| Ferguson, Richard H., assignor of one-half to G. W. Ruch, Philadelphia, Pa. Signal or calling device | 742,619 | Oct. 27 | 4306 | 970 | 106 | 2202 |
| Ferguson, Thomas B., Washington, D. C. Copy-pad | 719,774 | Feb. 3 | 672 | 154, 155 | 102 | 964 |
| Ferguson, Thomas B., Washington, D. C. Coffee-pot | 748,491 | Dec. 29 | 5916 | 1343 | 107 | 2477 |
| Ferguson, Thomas B., Washington, D. C. Copy-pad | 748,555 | Dec. 29 | 6048 | 1369 | 107 | 2508 |
| Ferguson, Thomas M., Hattiesburg, Miss. Warranty deed | 747,057 | Dec. 15 | 3221 | 734 | 107 | 1843 |
| Ferguson, Walter L., Marquette, Kans. Lantern-holder | 740,113 | Sept. 29 | 4952 | 1111 | 106 | 1126 |
| Ferguson, William, Cass City, Mich. Combined cream-separator and churn | 723,851 | Mar. 31 | 4076 | 919, 920 | 103 | 914 |
| Ferguson, William C. (See Cook and Ferguson.) | | | | | | |
| Ferguson, William C., Flushing, assignor to General Chemical Company, New York, N. Y. Apparatus for making sulfuric anhydrid | 723,595 | Mar. 24 | 3618 | 809 | 103 | 801 |
| Ferguson, William C., Flushing, assignor to General Chemical Company, New York, N. Y. Making sulfuric anhydrid | 723,596 | Mar. 24 | 3620 | 809 | 103 | 801 |
| Ferguson, William H., assignor of one-half to J. A. Ferguson, Denver, Colo. Combined curb and gutter | 728,693 | May 19 | 3535 | 786 | 104 | 790 |
| Fergusson, Alan R. (See Kirschbaum, John, assignor.) | | | | | | |
| Fergusson, Alan R., New York, N. Y. Desk-lock | 739,407 | Sept. 22 | 3641 | 809 | 106 | 827 |
| Fergusson, Alan R., Mount Vernon, assignor to Electro-Mechanical Specialty Company, New York, N. Y. Portable bracket | 719,574 | Feb. 3 | 299 | 69 | 102 | 885 |
| Fergusson, Alan R., Mount Vernon, assignor to Electro-Mechanical Specialty Company, New York, N. Y. Desk-clamp | 722,828 | Mar. 17 | 2211 | 494 | 103 | 501 |
| Fergusson, Henry A., St. Paul, Minn. Tube-welding machine | 724,561 | Apr. 7 | 258 | 63 | 103 | 1225 |
| Fern, John, Scranton, Pa. Conveyer | 730,448 | June 9 | 1688 | 378 | 104 | 1489 |
| Fern, Patrick R., Latrobe, Pa. Stop-cock | 722,092 | Mar. 3 | 801 | 178 | 103 | 173 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Desig. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Fernald, George H., Northeast, Pa. Thill-coupling | 747,874 | Dec. 22 | 4743 | 1072 | 107 | 2200 |
| Fernandez, Francisco M., *et al.* (See Navascuez, Santiago N., assignor.) | | | | | | |
| Fernandez y Fernandez, Antonio, Havana, Cuba. Cigarette-making machine | 722,829 | Mar. 17 | 2213 | 495, 496, 497 | 103 | 502 |
| Ferner, Charles L. (See Pohlmann, Frederick L., assignor.) | | | | | | |
| Fernside, George W., Hartford, Conn. Mechanism for operating railway-switches | 741,644 | Oct. 20 | 2410 | 540 | 106 | 1795 |
| Ferrahian, Matthew G., New York, N. Y. Paper-cutting machine | 738,534 | Sept. 8 | 1996 | 435 | 106 | 444 |
| Ferrand, Dudley, receiver. (See Hanchett, George T., assignor.) | | | | | | |
| Ferraris, Erminio, Monteponi, Italy, assignor of one-fourth to W. R. Ingalls, Lynn, Mass. Apparatus for crushing or crushing and sorting ores, &c. | 726,521 | Apr. 28 | 3916 | 885 | 103 | 2035 |
| Ferré, Henry, Paris, France. Tubular inhaler | 726,037 | Apr. 21 | 2976 | 676 | 103 | 1830 |
| Ferreira, Eduardo G., Rio Janeiro, Brazil. Shuttle for weavers' looms | 728,694 | May 19 | 3536 | 786 | 104 | 790 |
| Ferreira, Eduardo G., Rio Janeiro, Brazil. Shuttle for weavers' looms | 736,079 | Aug. 11 | 1993 | 423 | 105 | 1426 |
| Ferreira, Lucio, Paauhau, Hawaii. Aerial tramway for conveying crops or merchandise | 745,486 | Dec. 1 | 335 | 78 | 107 | 1170 |
| Ferrell, Albert T., Saginaw, Mich. Feed-regulator for hoppers | 748,059 | Dec. 29 | 5132 | 1161 | 107 | 2306 |
| Ferrell, Harry J. (See Willmarth and Barnes, assignors.) | | | | | | |
| Ferrell, Joseph L., Philadelphia, Pa. Apparatus for impregnating wood | 727,928 | May 12 | 2103 | 468 | 104 | 466 |
| Ferrell, Joseph L., Philadelphia, Pa. Fireproof wood, &c., and making same | 728,452 | May 19 | 3078 | | 104 | 693 |
| Ferrell, Lena F., Lamonte, Mo. Comb holder and cleaner | 719,775 | Feb. 3 | 675 | 155 | 102 | 965 |
| Ferres, Ainslie W., assignor to J. W. Sefton Manufacturing Company, Anderson, Ind. Paper mailing-tube | 726,894 | May 5 | 117 | 27 | 104 | 28 |
| Ferres, Jeffrey T., Anderson, Ind. Shipping-package | 724,384 | Mar. 31 | 5170 | 1159 | 103 | 1138 |
| Ferres, Jeffrey T., Anderson, Ind. Machine for making and cutting double-faced corrugated paper | 746,807 | Dec. 15 | 2714 | 626, 627 | 107 | 1725 |
| Ferricup Metal Company. (See Fletcher, Charles R., assignor.) | | | | | | |
| Ferriott, Charles L., Bartlett, Tex. Seed-planter | 719,575 | Feb. 3 | 300 | 69 | 102 | 885 |
| Ferriott, Charles L., Bartlett, Tex. Seed-planter | 735,231 | Aug. 4 | 382 | 74 | 105 | 1062 |
| Ferriott, Charley L., assignor of one-half to J. Dodt, Bartlett, Tex. Insect-collecting machine | 733,020 | July 7 | 562 | 137 | 105 | 120 |
| Ferris, Emma B., Columbus, Ohio. Carpet-cleaner | 734,841 | July 28 | 4000 | 934 | 105 | 890 |
| Ferris, Henry L., assignor to Hunt, Helm, Ferris & Co., Harvard, Ill. Weldless link | 717,562 | Jan. 6 | 75 | 19 | 102 | 18 |
| Ferris, Henry L., assignor to Hunt, Helm, Ferris & Co., Harvard, Ill. Hay-carrier | 731,558 | June 23 | 3755 | 837 | 104 | 1957 |
| Ferris, Henry L., assignor to Hunt, Helm, Ferris & Company, Harvard, Ill. Hay-rack construction | 731,351 | June 16 | 3337 | 745 | 104 | 1853 |
| Ferris, Henry L., assignor, by mesne assignments, to Hunt, Helm, Ferris & Company, Harvard, Ill. Snapping-rolls | 740,637 | Oct. 6 | 482 | 106 | 106 | 1350 |
| Ferris, Henry L. and H. J., assignors to Hunt, Helm, Ferris & Company, Harvard, Ill. Door-hanger | 731,350 | June 16 | 3336 | 745 | 104 | 1852 |
| Ferris, Howard J. (See Ferris, Henry L. and H. J.) | | | | | | |
| Ferris, Walter. (See Knox and Ferris.) | | | | | | |
| Ferris, William I., Stamford, Conn., assignor to L. E. Waterman Company, New York, N. Y. Fountain-pen | 735,659 | Aug. 4 | 1192 | 252 | 105 | 1234 |
| Ferris, William I., Stamford, Conn., assignor to L. E. Waterman Company, New York, N. Y. Fountain-pen | 736,710 | Aug. 18 | 3146 | 693 | 105 | 1686 |
| Ferroussat, Henry P., London, England. Attachment for umbrellas | 734,311 | July 21 | 3001 | 706, 707 | 105 | 668 |
| Ferry, James F., assignor of one-half to F. Lomeister, Leadville, Colo. Oven-ventilator | 741,474 | Oct. 13 | 2088 | 463 | 106 | 1712 |
| Ferry, John J., Meriden, Conn. Candelabrum | 729,745 | June 2 | 405 | 91, 92 | 104 | 1211 |
| Ferry, Thomas, Cleveland, Ohio. Nut-press | 737,724 | Sept. 1 | 305 | 63, 64 | 106 | 69 |
| Ferry, William M. (See Decker, Rudolph J., assignor.) | | | | | | |
| Fersenheim, Rudolph L., New York, N. Y. Prepayment attachment for gas-meters | 743,068 | Nov. 3 | 484 | 105, 106 | 107 | 101 |
| Fesenfeld, Herman, Hoquiam, Wash. Bicycle mud-guard | 737,725 | Sept. 1 | 306 | 64 | 106 | 69 |
| Fesenmeier, Michael L., Cumberland, Md. Apparatus for pasteurizing beer | 740,837 | Oct. 6 | 855 | 191 | 106 | 1428 |
| Fesperman, Richard H., Tulsa, Ind. Ter. Hinge for barrel-covers | 744,737 | Nov. 24 | 3766 | 811 | 107 | 851 |
| Fessenden, Edward H. (See Macklin, Athol B., assignor.) | | | | | | |
| Fessenden, Harry M. (See Lewis and Fessenden.) | | | | | | |
| Fessenden, Howard A., assignor to Detroit Electric Signal Company, Detroit, Mich. Signaling apparatus | 724,274 | Mar. 31 | 4949 | 1107, 1108 | 103 | 1091 |
| Fessenden, Howard A., assignor to Detroit Electric Signal Company, Detroit, Mich. Electric signal | 740,261 | Sept. 29 | 5221 | 1174 | 106 | 1181 |
| Fessenden, Reginald A., Allegheny, Pa. Transmission and receipt of signals | 727,325 | May 5 | 939 | 205 | 104 | 203 |
| Fessenden, Reginald A., Manteo, N. C. Selective signaling by electromagnetic waves | 727,326 | May 5 | 944 | 205, 206 | 104 | 204 |
| Fessenden, Reginald A., Pittsburg, Pa. Receiver for electromagnetic waves | 727,327 | May 5 | 947 | 206 | 104 | 205 |
| Fessenden, Reginald A., Pittsburg, Pa. Signaling by electromagnetic waves | 727,329 | May 5 | 949 | 206, 207 | 104 | 205 |
| Fessenden, Reginald A., Pittsburg, Pa. Receiver for electromagnetic waves | 727,331 | May 5 | 956 | 207, 208 | 104 | 206 |
| Fessenden, Reginald A., Pittsburg, Pa. Receiver for electromagnetic waves. (Reissue) | 12,115 | May 26 | 4994 | 1109 | 104 | 1108 |
| Fessenden, Reginald A., Pittsburg, Pa. Signaling by electromagnetic waves | 730,753 | June 9 | 2222 | 494 | 104 | 1606 |
| Fessenden, Reginald A., Pittsburg, Pa. Utilizing the energy of waves | 731,029 | June 16 | 2747 | 612 | 104 | 1734 |
| Fessenden, Reginald A., Fort Monroe, Va. Receiver for signaling | 727,328 | May 5 | 948 | 206 | 104 | 205 |
| Fessenden, Reginald A., Fort Monroe, Va. Signaling by electromagnetic waves | 727,330 | May 5 | 951 | 207 | 104 | 206 |
| Fessenden, Reginald A., Fort Monroe, Va. Signaling by electromagnetic waves | 742,779 | Oct. 27 | 4567 | 1035 | 106 | 2260 |
| Fessenden, Reginald A., Fort Monroe, Va. Signaling by electromagnetic waves | 742,780 | Oct. 27 | 4569 | 1035 | 106 | 2260 |
| Fessenden, Reginald A., Washington, D. C., assignor of one-third to D. S. Wolcott, Sewickley, Pa. Wireless telegraphy. (Reissue) | 12,168 | Nov. 10 | 2408 | 517 | 107 | 529 |
| Fessenden, Reginald A., Washington, D. C., assignor of one-third to D. S. Wolcott, Sewickley, Pa. Wireless telegraphy. (Reissue) | 12,169 | Nov. 10 | 2414 | 517 | 107 | 530 |
| Fester, Charles, Allegheny, Pa. Manifolding sales-book | 742,176 | Oct. 27 | 3489 | 779 | 106 | 2032 |
| Fetrow, Robert T., Philadelphia, Pa. Cork-extractor | 726,273 | Apr. 28 | 3413 | 774 | 103 | 1936 |
| Fette, Fredrick C., Wheeling, W. Va. Washing-machine | 727,120 | May 5 | 574 | 123, 124 | 104 | 125 |
| Fetters, Robert L., Helena, Mo. Vehicle-seat | 738,020 | Sept. 1 | 928 | 206 | 106 | 203 |
| Fetters, Wilbur J. H., Philadelphia, Pa. Glass-shearing device | 734,258 | July 21 | 2888 | 675 | 105 | 645 |
| Fetzer, Melancthon H., Greenville, Pa. Thin-rim sweat-pad | 725,643 | Apr. 14 | 2282 | 516 | 103 | 1669 |
| Fetzer, William, Middletown, Ohio. Fertilizer-distributer | 721,554 | Feb. 24 | 4008 | 911 | 102 | 1716 |
| Fetzer, William, Middletown, Ohio. Truck mechanism for drills | 723,662 | Mar. 24 | 3731 | 836 | 103 | 825 |
| Fetzer, William, Middletown, Ohio. Stub-runner and subsoil attachment therefor | 724,835 | Apr. 7 | 785 | 182 | 103 | 1338 |
| Fetzer, William, Middletown, Ohio. Scraper for disk drills | 735,487 | Aug. 4 | 870 | 185 | 105 | 1166 |
| Fetzer, William, Middletown, Ohio. Discharge-tube for grain-drills | 737,879 | Aug. 25 | 4376 | 975 | 105 | 1965 |
| Fetzer, William, Middletown, Ohio. Seed-stirring mechanism | 742,016 | Oct. 20 | 3150 | 703 | 106 | 1949 |
| Fetzer, William, Middletown, Ohio. Bevel-gear connection for seeders | 745,721 | Dec. 1 | 730 | 167 | 107 | 1254 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|
| | | | Spec. | Drgs. | Vol. | Page. |
| Feurt, William A., and H. H. Martin, Maryville, Mo. Acetylene-gas generator | 734,412 | July 21 | 3165 | 744 | 105 | 702 |
| Feust, Sigmund, and B. L. Wright, New York, N. Y. Air-brake connection | 735,735 | Aug. 11 | 1336 | 288 | 105 | 1282 |
| Feval, Leon, New Brunswick, N. J. Formaldehyde-fumigator | 735,660 | Aug. 4 | 1194 | 252 | 105 | 1235 |
| Feval, Leon, assignor to E. D. Taylor Company, New Brunswick, N. J. Fumigator | 746,942 | Dec. 15 | 3004 | 690 | 107 | 1792 |
| Ficke, George A., *et al.* (See Schulz, Adolph C., assignor.) | | | | | | |
| Fickenscher, Alfred A., Munich, Germany. Double-acting pneumatic brake | 727,773 | May 12 | 1815 | 405 | 104 | 406 |
| Fiddes, James W., Tacoma, Wash. Bag-holder | 743,848 | Nov. 10 | 2052 | 436 | 107 | 453 |
| Fiebeger, Frank, Akron, Ohio. Convertible furnace | 721,506 | Feb. 24 | 3926 | 894 | 102 | 1698 |
| Fiebig, Paul. (See Schwitalla and Fiebig.) | | | | | | |
| Fiedler, Carl A. (See Weissbach, Karl F., assignor.) | | | | | | |
| Fiedler, Georg E., Sommerda, Germany. Projectile-fuse | 720,339 | Feb. 10 | 1716 | 390 | 102 | 1202 |
| Fiedler, Josef, Vienna, Austria-Hungary. Ruling or draftsman's pen | 732,534 | June 30 | 3631 | 1248 | 104 | 2361 |
| Fiedler, Lothar, London, assignor of one-half to G. Pearson, Pitfour, Ilford, England. Galvanic cell | 738,718 | Sept. 8 | 2340 | 514 | 106 | 515 |
| Fiedler, Lothar, London, assignor of one-half to G. Pearson, Pitfour, Ilford, England. Galvanic cell | 738,719 | Sept. 8 | 2341 | ..... | 106 | 516 |
| Field, Asa H., *et al.* (See Mitchell, William H., assignor.) | | | | | | |
| Field, Charles C. (See Clevenger and Field.) | | | | | | |
| Field, Charles H., Providence, R. I. Machine for making watchcase-centers or similar articles | 718,613 | Jan. 20 | 2088 | 454<br>455 | 102 | 478 |
| Field, Claude E., Slater, Mo. Wind-motor | 733,710 | July 14 | 1789 | 424<br>425 | 105 | 894 |
| Field, Clifton L., executor. (See Clapp, Edward.) | | | | | | |
| Field, Cornelius J., and L. J. Doolittle, Brooklyn, N. Y.; said Doolittle assignor to said Field. Dowel-pin for conduit-sections | 746,628 | Dec. 8 | 2387 | 547 | 107 | 1633 |
| Field, Delue M., Danvers, Ill. Bolt-anchor | 731,560 | June 23 | 3758 | 838 | 104 | 1958 |
| Field, Edward A., and J. Lynn, Detroit, Mich.; said Field assignor to said Lynn. Furnace | 723,663 | Mar. 24 | 3733 | 837 | 103 | 825 |
| Field, Henry P., Jr., and I. A. Randel, Berwick, Pa., assignors to American Car & Foundry Company, St. Louis, Mo. Car-frame | 717,668 | Jan. 6 | 249 | 63 | 102 | 54 |
| Field, Jacob W., Chicago, assignor to International Novelty Manufacturing Company, Peoria, Ill. Cigar-cutter | 730,818 | June 9 | 2332 | 517 | 104 | 1629 |
| Field, James. (See Field, Joseph and J.) | | | | | | |
| Field, Jennie E. (See Burlingame, Joseph P., assignor.) | | | | | | |
| Field, Jesse A., Dunkirk, N. Y. Molding-machine | 718,442 | Jan. 13 | 1704 | 375<br>376<br>377<br>378<br>379<br>380<br>381<br>382 | 102 | 380 |
| Field, Jesse A., Dunkirk, N. Y. Spring-brake | 723,852 | Mar. 31 | 4077 | 920<br>921<br>922 | 103 | 914 |
| Field, John E., Milwaukee, Wis. Rail-joint connection | 740,262 | Sept. 29 | 5225 | 1175 | 106 | 1181 |
| Field, John F., *et al.* (See Hurd, George H., assignor.) | | | | | | |
| Field, John F. (See Richardson and Field.) | | | | | | |
| Field, Joseph and J., Newton Reigny, near Penrith, England. Steering-gear for vehicles | 724,836 | Apr. 7 | 787 | 182 | 103 | 1338 |
| Field, Lovasso. (See Bennett, William H., assignor.) | | | | | | |
| Field, Marcellus S., Boston, Mass. Assorting case and table for post-offices | 732,345 | June 30 | 5267 | 1168 | 104 | 2285 |
| Field, Marcellus S., Boston, Mass. Reversible package-tie | 735,232 | Aug. 4 | 384 | 74 | 105 | 1062 |
| Field, Samuel B., *et al.* (See Mitchell, William H., assignor.) | | | | | | |
| Field, Samuel E., Victoria, Canada. Machine for hulling oats | 727,332 | May 5 | 959 | 208 | 104 | 207 |
| Field, Sjonne, assignor to H. T. Story, Chicago, Ill. Draw-cut sawing-machine | 729,051 | May 26 | 4194 | 927<br>928 | 104 | 940 |
| Field, Stephen D., Stockbridge, Mass. Vibratory telegraphy | 734,689 | July 28 | 3678 | 862 | 105 | 825 |
| Field, Thomas R., Philadelphia, Pa. Apparatus for exhibiting merchandise | 729,563 | June 2 | 77 | 19, 20 | 104 | 1143 |
| Field, Webster B., Morris, Ill. Portable fire-escape | 731,352 | June 16 | 3338 | 745 | 104 | 1853 |
| Fielden, Barton P., Germantown, Pa. Stuffing-box | 722,219 | Mar. 10 | 1052 | 231 | 103 | 240 |
| Fielder, Squire, Elizabethtown, Ind. Fence-post | 734,690 | July 28 | 3680 | 862 | 105 | 825 |
| Fieldhouse, William, Jr., Paterson, N. J. Shade-roller bracket | 727,333 | May 5 | 961 | 208 | 104 | 207 |
| Fielding, Cornelius E. (See Peterson and Fielding.) | | | | | | |
| Fielding, John S., Sydney, Canada. Pig-casting machine | 721,878 | Mar. 3 | 410 | 90 | 103 | 90 |
| Fielding, Philip H., New York, N. Y. Incandescent-lamp socket and fixtures | 721,435 | Feb. 24 | 3804 | 866 | 102 | 1672 |
| Fielding, Philip H., New York, N. Y. Electrical receptacle | 745,173 | Nov. 24 | 4615 | 1001 | 107 | 1027 |
| Fielding, Philip H., New York, N. Y. Electrical receptacle | 746,483 | Dec. 8 | 2127 | 489 | 107 | 1574 |
| Fielding, William, Lewiston, Me. Bobbin-holder | 718,995 | Jan. 27 | 2807 | 629 | 102 | 641 |
| Fields, Ashbel L., St. Louis, Mo. Hanger for hats, coats, &c | 747,398 | Dec. 22 | 3859 | 868 | 107 | 2000 |
| Fields, Charles C., Baltimore, Md. Letter-carrier's routing-table and filing-case | 731,559 | June 23 | 3757 | 837 | 104 | 1958 |
| Fields, Joseph F., Statesboro, Ga. Lid-fastener | 741,645 | Oct. 20 | 2413 | 540 | 106 | 1796 |
| Fierbaugh, Samuel, assignor of nine-twentieths to L. V. Waugh, Huntington, W. Va. Trolley-head | 725,618 | Apr. 14 | 2222 | 502 | 103 | 1657 |
| Fieser, Louis F. (See Bentley, Linn, assignor.) | | | | | | |
| Figuccia, Pietro, assignor to L. M. Rossi, Boston, Mass. Secondary battery | 726,274 | Apr. 28 | 3415 | 774<br>775 | 103 | 1936 |
| Filbey, Frank, West Milton, Ohio. Hopple | 741,023 | Oct. 13 | 1178 | 266 | 106 | 1517 |
| Filer, Albert, Altoona, Pa. Attachment for winding-shafts for dumping-doors for cars | 729,746 | June 2 | 407 | 92 | 104 | 1212 |
| Filer and Stowell Co. (See Niedermeyer, Arthur, assignor.) | | | | | | |
| Filiti, Grigore A. (See Edeleanu and Filiti.) | | | | | | |
| Filson, Charles L., Lebanon, Pa. Fuel-feeding mechanism | 726,664 | Apr. 28 | 4180 | 944 | 103 | 2088 |
| Filter- & Brau-Technische Maschinen-Fabrik Actien Gesellschaft, formerly L. A. Enzinger. (See Sommer, Wilhelm, assignor.) | | | | | | |
| Filter & Brautechnische Maschinen Fabrik Akt. Ges., vormals L. A. Enzinger. (See Hoffmann, Emil, assignor.) | | | | | | |
| Filzer, Christian, Erie, Pa. Hydrocarbon-torch | 717,831 | Jan. 6 | 608 | 135 | 102 | 130 |
| Finberg, Frank R., Clinton, Minn. Grain-car door | 729,052 | May 26 | 4199 | 928<br>929 | 104 | 941 |
| Finbow, Alfred W. C. (See Proulx, Joseph A., assignor.) | | | | | | |
| Finch, Alfred W. A., assignor to R. Fulton and B. M. Finch, Detroit, Mich. Pin-ticket-marking device | 739,408 | Sept. 22 | 3643 | 810 | 106 | 827 |
| Finch, Bell M., *et al.* (See Finch, Alfred W. A., assignor.) | | | | | | |
| Finch, Frank F., and I. E. Weil, Cleveland, Ohio. Eyeglasses | 741,475 | Oct. 13 | 2089 | 463 | 106 | 1712 |
| Finch, Robert B., assignor of one-half to E. T. Jones, Denver, Colo. Nose-guard for eyeglasses | 724,407 | Mar. 31 | 5213 | 1169 | 103 | 1147 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| Finch, Robert C. (See McAllister, James A., assignor.) | | | | | | |
| Finch, Stanley W., Washington, D. C. Bank-check or the like | 741,900 | Oct. 20 | 2889 | 644<br>645 | 106 | 1897 |
| Finch, Stanley W., Washington, D. C. Severing-rule for checks, &c | 741,901 | Oct. 20 | 2891 | 645<br>646 | 106 | 1897 |
| Finch, William M., Willow, Cal. Perpetual calendar | 725,431 | Apr. 14 | 1872 | 419 | 103 | 1581 |
| Finck, August, Jr. (See Peer, Richard W., assignor.) | | | | | | |
| Finck, Julius, and H. Herbstritt, assignors to Will & Finck Company, San Francisco, Cal. Mouthpiece for speaking-tubes | 729,853 | June 2 | 611 | 134<br>135 | 104 | 1253 |
| Findlay, John H., Ogdensburg, N. Y. Incandescent gas-burner | 725,947 | Apr. 21 | 2833 | 643 | 103 | 1801 |
| Findley, Charles V., Lansing, Mich. Display-cabinet | 718,752 | Jan. 20 | 2351 | 519<br>520 | 102 | 530 |
| Finegan, John W., Lowell, Mass. Machine for scouring and dyeing skeins | 724,562 | Apr. 7 | 261 | 64 | 103 | 1225 |
| Finger, Emil, Vienna, Austria-Hungary. Bed-lounge | 747,399 | Dec. 22 | 3860 | 868 | 107 | 2000 |
| Finigan, John A. (See Bouvier, Alexander, assignor.) | | | | | | |
| Finigan, Thomas, Paterson, N. J. Machine for cleaning vegetable fiber | 746,056 | Dec. 8 | 1371 | 306 | 107 | 1409 |
| Finigan, Thomas, and E. F. W. Wieda, Paterson, N. J. Calculating device | 745,586 | Dec. 1 | 503 | 119 | 107 | 1205 |
| Fink, Andrew J., Jr., Reading, Pa. Gage-cock | 743,702 | Nov. 10 | 1788 | 377 | 107 | 398 |
| Fink, Karl. (See Wieser, Joseph, assignor.) | | | | | | |
| Fink, William C. (See Gruner and Fink.) | | | | | | |
| Finkbeiner, William A., Toledo, Ohio. Extension-table leaf | 739,409 | Sept. 22 | 3644 | 810 | 106 | 828 |
| Finkler, Dittmar, Bonn, Germany. Making albumose | 728,385 | May 19 | 2952 | ..... | 104 | 666 |
| Finlay, Alexander K., New Orleans, La. System of coaling ships at sea | 727,774 | May 12 | 1817 | 405<br>406 | 104 | 406 |
| Finlayson, Christopher T., Denver, Colo. Aerial wire-rope tramway | 738,306 | Sept. 8 | 1533 | 332<br>333 | 106 | 345 |
| Finlayson, Christopher T., Denver, Colo. Friction-grip for wire-rope tramways | 738,307 | Sept. 8 | 1540 | 333<br>334<br>335 | 106 | 347 |
| Finlayson, Christopher T., Denver, Colo. Dumping device for aerial tramways | 738,308 | Sept. 8 | 1547 | 335<br>336 | 106 | 349 |
| Finlayson, Christopher T., Denver, Colo. Automatic bucket-loader for aerial wire-rope tramways | 738,309 | Sept. 8 | 1553 | 336<br>337 | 106 | 350 |
| Finlayson, Christopher T., Denver, Colo. Lock-clip for connecting buckets to traction-ropes of aerial wire-rope tramways | 738,310 | Sept. 8 | 1560 | 338 | 106 | 351 |
| Finley, John G., Decatur, Ala. Clod-crusher | 721,170 | Feb. 24 | 3310 | 757 | 102 | 1571 |
| Finley, William F., Denison, Tex. Ant-trap | 729,053 | May 26 | 4200 | 929 | 104 | 941 |
| Finn, Daniel J. (See Barr, Robert, assignor.) | | | | | | |
| Finn, Edwin, Elkhart, Ind., assignor, by mesne assignments, to W. F. Stimpson, Detroit, Mich. Scale | 721,879 | Mar. 3 | 412 | 91 | 103 | 90 |
| Finn, Joseph F., *et al.* (See Schoenthaler, Edward F., assignor.) | | | | | | |
| Finn, William, Cedar Rapids, Iowa. Dental-flask press | 731,030 | June 16 | 2750 | 613 | 104 | 1735 |
| Finne, Henrik, Jr., Stavanger, Norway. Packing for bonbons, &c | 728,386 | May 19 | 2954 | 651 | 104 | 666 |
| Finne, Henrik, Jr., Stavanger, Norway. Machine for soldering the covers or bottoms to the bodies of tin boxes | 744,738 | Nov. 24 | 3767 | 812 | 107 | 851 |
| Finnegan, Charles, Fairhaven, Wash. Combined resaw and bevel-siding machine | 737,832 | Sept. 1 | 523 | 115 | 106 | 117 |
| Finnegan, John F., Igerna, Cal. Swage for insertible saw-teeth | 740,747 | Oct. 6 | 670 | 152 | 106 | 1390 |
| Finnell, Harry L., Peoria, Ill. Dental plate and making same | 731,674 | June 23 | 3969 | 883 | 104 | 1999 |
| Finnell, Reuben. (See Dorsey, Charles J., assignor.) | | | | | | |
| Finney, Charles L., assignor of one-half to L. R. Lantz, Wyalusing, Pa. Target | 722,220 | Mar. 10 | 1055 | 232 | 103 | 240 |
| Finney, Henry E., Chicago, Ill. Garment-fastening device | 718,113 | Jan. 13 | 1108 | 245 | 102 | 254 |
| Finney, Henry E., Chicago, Ill. Receptacle for strings for musical instruments | 718,114 | Jan. 13 | 1110 | 245 | 102 | 254 |
| Finnigan, George P., Greene, N. Y. Nut-lock | 739,594 | Sept. 22 | 3966 | 885 | 106 | 897 |
| Firebaugh, Benton, Bushnell, Ill. Draft-evener | 741,646 | Oct. 20 | 2414 | 540 | 106 | 1796 |
| Firestone, Adrian A., New Pittsburg, Ohio. Concrete structure | 732,535 | June 30 | 5632 | 1248 | 104 | 2361 |
| Firestone Tire & Rubber Company. (See Dryden, George B., assignor.) | | | | | | |
| Firm, Joseph L., assignor to Goss Printing Press Company, Chicago, Ill. Printing-press | 724,455 | Apr. 7 | 64 | 16,17 | 103 | 1183 |
| Firm, Joseph L., assignor to Goss Printing Press Company, Chicago, Ill. Web-perfecting press | 724,456 | Apr. 7 | 68 | 17 | 103 | 1184 |
| Firm, Joseph L., assignor to Goss Printing Press Company, Chicago, Ill. Printing-press | 724,457 | Apr. 7 | 71 | 18 | 103 | 1184 |
| Firm, Joseph L., assignor to Goss Printing Press Company, Chicago, Ill. Folding and delivery device for printing-presses | 724,458 | Apr. 7 | 74 | 18,19 | 103 | 1185 |
| Firm, Joseph L., assignor to Goss Printing Press Company, Chicago, Ill. Printing-press | 724,459 | Apr. 7 | 77 | 19 | 103 | 1185 |
| Firsching, Joseph, Utica, N. Y. Nether garment | 721,687 | Mar. 3 | 72 | 15 | 103 | 16 |
| Firth Stirling Steel Company. (See Wheeler and McKenna, assignors.) | | | | | | |
| Fischer, Abraham. (See Stutzman, Frank, assignor.) | | | | | | |
| Fischer, Adolph, McKeesport, assignor of one-half to M. Selkovits, Braddock, Pa. Filter | 731,878 | June 23 | 4333 | 967 | 104 | 2078 |
| Fischer, Alexander T. (See Hoodless, Richard, assignor.) | | | | | | |
| Fischer, Christian G. (See Sturgis, Edwin M., assignor.) | | | | | | |
| Fischer, Frank J., Millersville, Ohio. Belt-adjuster | 724,837 | Apr. 7 | 788 | 182 | 103 | 1338 |
| Fischer, Friedrich, and H. Guntrum, Elberfeld, Germany, assignors to Farbenfabriken of Elberfeld Co., New York, N. Y. Amido-oxybenzyl sulfonic acid | 729,054 | May 26 | 4202 | ..... | 104 | 942 |
| Fischer, Friedrich, and H. Guntrum, Elberfeld, Germany, assignors to Farbenfabriken of Elberfeld Co., New York, N. Y. Developing photographic pictures | 736,374 | Aug. 18 | 2490 | ..... | 105 | 1550 |
| Fischer, Fritz. (See Lacour, Fischer, and Lindenberg.) | | | | | | |
| Fischer, George F., Rochester, N. Y. Shoe-heel | 737,915 | Sept. 1 | 719 | 155 | 106 | 157 |
| Fischer, Henry, Paterson, N. J. Fire-protecting door for air or elevator shafts | 736,711 | Aug. 18 | 3148 | 694 | 105 | 1686 |
| Fischer, Herman, New York, N. Y. Shoe | 729,314 | May 26 | 4655 | 1029 | 104 | 1036 |
| Fischer, Herrman. (See Kraut and Fischer.) | | | | | | |
| Fischer, John M., Washington, D. C. Baker's oven | 723,664 | Mar. 24 | 3734 | 837 | 103 | 826 |
| Fischer, Joseph. (See Koch and Fischer.) | | | | | | |
| Fischer, Joseph, Budapest, Austria-Hungary. Horse-detacher for vehicles | 727,334 | May 5 | 962 | 209 | 104 | 208 |
| Fischer, Ludwig. (See Huck, Fischer, Ahrle, and Schmieder.) | | | | | | |
| Fischer, Torquato T., New York, N. Y. Grand-piano action | 738,786 | Sept. 15 | 2495 | 548 | 106 | 567 |
| Fischer, Wilhelm, Halle-on-the-Saale, Germany. Apparatus for loading manure or other materials | 744,320 | Nov. 17 | 3008 | 645 | 107 | 672 |
| Fischhaber, Manfred, New York, N. Y. Torpedo | 726,796 | Apr. 28 | 4433 | 998<br>999 | 103 | 2140 |
| Fischler, Joseph, Silverton, Colo. Fuse-splitter and cap-crimper | 723,520 | Mar. 24 | 3490 | 780 | 103 | 775 |
| Fischman, Benjamin, New York, N. Y. Apparel-belt | 732,289 | June 30 | 5160 | 1146 | 104 | 2262 |
| Fiscus, Adam, Fiscus, Iowa. Vehicle end-gate | 718,115 | Jan. 13 | 1111 | 245 | 102 | 254 |
| Fish, Charles H., Dover, N. H. Drying-cylinder | 720,794 | Feb. 17 | 2567 | 591 | 102 | 1393 |
| Fish, Edwin I., *et al.* (See Sullivan, David J., assignor.) | | | | | | |
| Fish, Harry P., Youngstown, Ohio. Vapor-burner | 746,808 | Dec. 15 | 2725 | 628 | 107 | 1729 |
| Fish, John, South Bend, Ind. Combined lock and latch | 723,376 | Mar. 24 | 3225 | 723 | 103 | 720 |
| Fish, Philmer C., assignor of one-half to L. A. Cool, St. Louis, Mo. Coin-holder | 736,080 | Aug. 11 | 1994 | 424 | 105 | 1426 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Fish, Sidell E., Greenport, N. Y. Dental appliance | 724,838 | Apr. 7 | 789 | 183 | 103 | 1338 |
| Fish, Walter C., Lynn, Mass., assignor to General Electric Company. Meter | 727,606 | May 12 | 1457 | 327 | 104 | 332 |
| Fish, Walter C., Lynn, Mass., assignor to General Electric Company. Electric-arc light | 729,315 | May 26 | 4656 | 1029 | 104 | 1036 |
| Fish, Walter C., Lynn, Mass., assignor to General Electric Company. Arc-lamp | 738,896 | Sept. 15 | 2701 | 597 | 106 | 612 |
| Fishbough, Harry E., Bucyrus, Ohio. Lubricator | 747,875 | Dec. 22 | 4744 | 1072 | 107 | 2200 |
| Fishburn, William H., Denver, Colo. Window-screen hanger | 721,125 | Feb. 17 | 3215 | 735 | 102 | 1537 |
| Fishell, Eugene M., and M. H. Moffett, assignors to National Carbon Company, Cleveland, Ohio. Dry battery | 733,178 | July 7 | 848 | 206 | 105 | 178 |
| Fishell, Peter H., Marion, Iowa. Oiler for vehicle-hubs | 718,443 | Jan. 13 | 1720 | 382 | 102 | 382 |
| Fisher, A. Bryant, *et al.* (See Murphy, Edward J., assignor.) | | | | | | |
| Fisher, Allan M., East Liverpool, Ohio. Gas-regulator | 731,997 | June 23 | 4553 | 1016 | 104 | 2123 |
| Fisher, Benjamin K. (See Fuchs and Fisher.) | | | | | | |
| Fisher Book Typewriter Company. (See Fisher, Robert J., assignor.) | | | | | | |
| Fisher Book Typewriter Company. (See Halle, Hiram J., assignor.) | | | | | | |
| Fisher Book Typewriter Company. (See Laganke and Smith, assignors.) | | | | | | |
| Fisher Book Typewriter Company. (See Lanphear, Hiram L., assignor.) | | | | | | |
| Fisher Book Typewriter Company. (See Smith, John A., assignor.) | | | | | | |
| Fisher, Carl G., Indianapolis, Ind. Chain-boot for automobiles | 732,536 | June 30 | 5634 | 1249 | 104 | 2361 |
| Fisher, Charles A., Chicago, Ill. Machine for filling bags | 726,275 | Apr. 28 | 3416 | 775, 776, 777, 778 | 103 | 1926 |
| Fisher, Charles A., Chicago, Ill. Mattress, cushion, &c | 737,916 | Sept. 1 | 721 | 156 | 106 | 158 |
| Fisher, Charles E., and M. Young, Frederick, Md., assignors to Palmetto Fibre Company. Tuft-fastener guide for brush-machines | 746,943 | Dec. 15 | 3005 | 690, 691 | 107 | 1793 |
| Fisher, Christian F., Philadelphia, Pa. Metallic railway-tie | 721,555 | Feb. 24 | 4011 | 912 | 102 | 1716 |
| Fisher, Cyrus. (See Altmyer, John W., assignor.) | | | | | | |
| Fisher, Daniel. (See Fisher, John and D.) | | | | | | |
| Fisher, Daniel C., Dorchester, Mass. Work-clamp | 724,091 | Mar. 31 | 4561 | 1026 | 103 | 1014 |
| Fisher, Daniel C., Boston, Mass. Hydro-electrotherapeutic apparatus | 738,897 | Sept. 15 | 2703 | 597 | 106 | 612 |
| Fisher, David V. (See Lyon and Fisher.) | | | | | | |
| Fisher, Edwin A. (See Macarthy, Fred, assignor.) | | | | | | |
| Fisher, Elijah H., Grand Rapids, Mich. Reclining-chair | 741,121 | Oct. 13 | 1360 | 312 | 106 | 1556 |
| Fisher, Francis, Greeley, Nebr. Wagon-box | 717,979 | Jan. 6 | 870 | 194 | 102 | 187 |
| Fisher, Frank, Brooklyn, N. Y. Ink-reducer and making same | 730,897 | June 16 | 2503 | ------ | 104 | 1683 |
| Fisher, Frank L., Cumberland, Md. Machine for trimming wall-paper | 722,093 | Mar. 3 | 802 | 179 | 103 | 173 |
| Fisher, George A., Providence, R. I. Steam-boiler furnace | 737,726 | Sept. 1 | 308 | 64, 65 | 106 | 70 |
| Fisher, Greevz, and V. Krosli, Leeds, England. Lubricator | 733,179 | July 7 | 850 | 206 | 105 | 178 |
| Fisher, Hayden W., Council Grove, Kans. Wire-stretching device | 742,302 | Oct. 27 | 3738 | 836 | 106 | 2084 |
| Fisher, Henry, *et al.* (See Wendling, Theobald, assignor.) | | | | | | |
| Fisher, Henry J., London, England. Steam-generator | 737,727 | Sept. 1 | 312 | 65 | 106 | 71 |
| Fisher, Henry W., assignor of one-half to G. McCargo, Pittsburg, Pa. Lubricator | 743,849 | Nov. 10 | 2053 | 436 | 107 | 453 |
| Fisher, Henry W., assignor to Standard Underground Cable Company, Pittsburg, Pa. Insulating wire | 747,876 | Dec. 22 | 4745 | 1072 | 107 | 2200 |
| Fisher, Herbert H. (See Spencer and Fisher.) | | | | | | |
| Fisher, James, *et al.* (See Lewis and Luckey, assignors.) | | | | | | |
| Fisher, James, New Orleans, La. Apparatus for feeding bagasse to furnaces | 739,161 | Sept. 15 | 3161 | 699 | 106 | 707 |
| Fisher, Jason A., Chicago, Ill. Sandpapering-machine | 740,263 | Sept. 29 | 5227 | 1175, 1176 | 106 | 1182 |
| Fisher, Jay S., East Liverpool, Ohio. Potter's wheel | 735,355 | Aug. 4 | 598 | 123 | 105 | 1109 |
| Fisher, Jerry C., Shelbyville, assignor of one-half to H. G. Pollock, Madison, Ind. Clock winding-reminder | 741,647 | Oct. 20 | 2415 | 540 | 106 | 1797 |
| Fisher, John, St. Paul, Minn. Trace-buckle | 729,854 | June 2 | 613 | 135 | 104 | 1253 |
| Fisher, John and D., Kinsman, Ill. Portable elevator and dump | 736,833 | Aug. 18 | 3380 | 747 | 105 | 1734 |
| Fisher, Lewis C., Columbus, Ohio. Post | 727,335 | May 5 | 963 | 209 | 104 | 208 |
| Fisher, Mary L., Kansas City, Mo. Removable coloring-matter for washable fabrics | 721,290 | Feb. 24 | 3535 | ------ | 102 | 1618 |
| Fisher, Richard M., *et al.* (See Miller, Martin H., assignor.) | | | | | | |
| Fisher, Robert C. (See Avis, Walter H., assignor.) | | | | | | |
| Fisher, Robert J., Athens, Tenn., assignor to Fisher Book Typewriter Company, Cleveland, Ohio. Key-action for type-writing machines | 727,607 | May 12 | 1458 | 327, 328 | 104 | 332 |
| Fisher, Robert J., Athens, Tenn, assignor, by mesne assignments, to Elliott-Fisher Company. Work clamp or guard for type-writing machines | 747,958 | Dec. 29 | 4916 | 1112, 1113 | 107 | 2259 |
| Fisher, Robert R., *et al.* (See Lewis and Luckey, assignors.) | | | | | | |
| Fisher, Samuel, Butler, Pa. Flooring, table-top, &c | 735,079 | Aug. 4 | 55 | 15 | 105 | 993 |
| Fisher, Samuel, assignor of one-half to J. E. Hindman, Butler, Pa. Cuspidor | 747,877 | Dec. 22 | 4746 | 1073 | 107 | 2200 |
| Fisher, Thomas M., Montgomery, Ind. Mining-tool | 735,356 | Aug. 4 | 598 | 123 | 105 | 1109 |
| Fisher, Walter C. (See Thorpe, Willard G., assignor.) | | | | | | |
| Fisher, Willard, *et al.* (See Murphy, Edward J., assignor.) | | | | | | |
| Fisher, William. (See Lee and Fisher.) | | | | | | |
| Fisher, William H. (See Pickerill, Bert K., assignor.) | | | | | | |
| Fisher, Willis H., Kansas City, Mo. Wall construction | 736,375 | Aug. 18 | 2491 | 547, 548 | 105 | 1550 |
| Fisk, Charles D. B., and W. W. C. Spencer, Boston, Mass., assignors to Spencer Elevator Safety Guard Company, Portland, Me. Elevator-guard | 728,453 | May 19 | 3078 | 680 | 104 | 693 |
| Fisk, Charles D. B., and W. W. C. Spencer, Boston, Mass., assignors to Spencer Elevator Safety Guard Company, Portland, Me. Elevator-guard | 734,225 | July 21 | 2817 | 661 | 105 | 630 |
| Fisk, Eugene B., West Nashville, Tenn. Mowing-machine | 726,152 | Apr. 21 | 3166 | 716 | 103 | 1869 |
| Fisk, Lyman, Woodcliff, N. J. Device for filling fountain-pens | 744,521 | Nov. 17 | 3360 | 724 | 107 | 748 |
| Fisk Rubber Company. (See Woodward, Charles E. W., assignor.) | | | | | | |
| Fiske, Bradley A., U. S. Navy. Apparatus for handling automobile torpedoes | 717,563 | Jan. 6 | 76 | 20 | 102 | 18 |
| Fiske, Bradley A., U. S. Navy, assignor to Western Electric Company, Chicago, Ill. Speed and direction indicator | 740,547 | Oct. 6 | 315 | 65 | 106 | 1312 |
| Fiske, George I., Providence, assignor to Howard and Bullough American Machine Company, Limited, Pawtucket, R. I. Stop-motion for twisting-machines | 740,638 | Oct. 6 | 483 | 106 | 106 | 1350 |
| Fiske, Henry G., New York, N. Y., assignor, by mesne assignments, to Electric Vehicle Company, Jersey City, N. J., and New York, N. Y. Elastic vehicle-tire | 734,529 | July 28 | 3389 | 791 | 105 | 765 |
| Fiske, Henry P., assignor to New York Spring Motor Company, New York, N. Y. Spring-motor | 740,114 | Sept. 29 | 4953 | 1111, 1112 | 106 | 1126 |
| Fitch, Charles L., Grand Rapids, Mich. Contact device for trolleys | 727,608 | May 12 | 1464 | 328 | 104 | 333 |
| Fitch, Eugene, New York, N. Y. Clock | 724,460 | Apr. 7 | 79 | 19, 20 | 103 | 1186 |
| Fitch, Eugene, New York, N. Y. Clock | 726,276 | Apr. 28 | 3422 | 778, 779 | 103 | 1938 |
| Fitch, Eugene, New York, N. Y. Clock | 733,180 | July 7 | 851 | 206 | 105 | 179 |
| Fitch, Ezra C., Newton, and C. J. Olney, Jr., assignors to American Waltham Watch Company, Waltham, Mass. Merchandise-package | 721,880 | Mar. 3 | 413 | 91 | 103 | 91 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | Spec. | Des. | Vol. | Page. |
| Fitch, Fred W. (See Conroy, Burson, and Fitch.) | | | | | | |
| Fitch, Horace L. (See Miner and Fitch.) | | | | | | |
| Fitch, John H., Ludington, Mich. Switch-actuating mechanism | 721,688 | Mar. 3 | 73 | 15 | 103 | 17 |
| Fitch, John H., Ludington, Mich. Switch-actuating mechanism | 734,259 | July 21 | 2890 | 675 | 105 | 646 |
| Fitch, Philip S., Belmore, assignor of one-half to D. E. Dozer, Defiance, Ohio. Device for cutting tubes and flues from boilers | 747,320 | Dec. 15 | 3716 | 838 | 107 | 1951 |
| Fitch, William E., Louisville, Ky. Burner for gas-heaters | 717,832 | Jan. 6 | 609 | 135 | 102 | 131 |
| Fitting, Jakob. (See Walker and Fitting.) | | | | | | |
| Fitton, Joseph, Buffalo, N. Y. Hydrocarbon-burner | 733,579 | July 14 | 1582 | 377 | 105 | 352 |
| Fitz, Amos G., Auburn, Me. Last | 719,318 | Jan. 27 | 3420 | 763 | 102 | 769 |
| Fitz Maurice, Ulysses A., Chicago, Ill. Seed-planting machine | 740,748 | Oct. 6 | 671 | 152 | 106 | 1391 |
| Fitzgerald, Harrington, Philadelphia, Pa. Soap-holder | 740,264 | Sept. 29 | 5230 | 1176 | 106 | 1182 |
| Fitzgerald, James, Point Pleasant, Mo. Combined stool and quilting-frame | 728,695 | May 19 | 3538 | 786<br>787 | 104 | 790 |
| Fitzgerald, John H., Boston, Mass. Bath-tub trap | 740,639 | Oct. 6 | 484 | 106 | 106 | 1350 |
| Fitzgerald, Michael J., Salt Lake City, Utah. Wrench | 729,316 | May 26 | 4657 | 1030 | 104 | 1036 |
| Fitzgerald, Richard. (See Hibbard, Maury W., assignor.) | | | | | | |
| Fitzgibbon, Tom, Chicago, assignor of one-half to T. Cogan, Geneseo, Ill. Rail-joint chair | 740,115 | Sept. 29 | 4955 | 1112 | 106 | 1126 |
| Fitzgibbons Boiler Company. (See Fitzgibbons, David, assignor.) | | | | | | |
| Fitzgibbons, David, assignor to Fitzgibbons Boiler Company, Oswego, N. Y. Steam-generator | 742,620 | Oct. 27 | 4308 | 970 | 106 | 2202 |
| Fitzhugh, Cameron S., Waco, Tex. Churn | 742,017 | Oct. 20 | 3152 | 703 | 106 | 1949 |
| Fitzpatrick, Frank J., Frederick, Md. Corn-husking machine | 722,448 | Mar. 10 | 1481 | 327 | 103 | 332 |
| Fitzpatrick, John T., Corinth, Tex. Device for lifting kettles from stoves, &c | 746,809 | Dec. 15 | 2726 | 628 | 107 | 1729 |
| Fitzpatrick, William B., Pittsburg, assignor of one-half to E. Meyer, Spring Garden Borough, Allegheny county, Pa. Compound for the removal and prevention of incrustation in steam-boilers | 743,380 | Nov. 3 | 1114 | ..... | 107 | 236 |
| Fitzsimmons, John F., Hillsdale, Mich., assignor of one-half to P. & J. Arnold, London, England. Fitting and case for ink or like bottles or vessels | 726,038 | Apr. 21 | 2977 | 676 | 103 | 1830 |
| Fitzsimmons, John F., Hillsdale, Mich., assignor of one-half to P. & J. Arnold, London, England. Stopper and fitting for bottles | 726,039 | Apr. 21 | 2979 | 677 | 103 | 1831 |
| Fitzsimmons, Thomas F., Brooklyn, N. Y. Beet-digger | 735,736 | Aug. 11 | 1342 | 289 | 105 | 1284 |
| Fjellman, Peter P., Duluth, Minn. Sack-holder | 729,564 | June 2 | 81 | 20 | 104 | 1144 |
| Flack, William R., Toledo, Ohio. Steam-cooker | 722,964 | Mar. 17 | 2440 | 546 | 103 | 548 |
| Flad, John F., Philadelphia, Pa. Umbrella | 742,177 | Oct. 27 | 3490 | 779 | 106 | 2032 |
| Fladby, John B., Rutland, N. D. Harness-peg | 730,358 | June 9 | 1520 | 337 | 104 | 1454 |
| Fladby, John B., Rutland, N. D. Lamp-chimney cleaner | 730,359 | June 9 | 1521 | 337 | 104 | 1454 |
| Flagendorf, Alfred, Pittsburg, Pa. Apparatus for manufacturing soap | 746,484 | Dec. 8 | 2128 | 489 | 107 | 1574 |
| Flagg, David, assignor of one-fourth to M. Hanson, Grayling, Mich. Car broom or brush holder | 730,206 | June 2 | 1217 | 272 | 104 | 1375 |
| Flagg, David, assignor of one-half to A. B. Failing, Grayling, Mich. Thread-cutter | 733,318 | July 7 | 1103 | 262 | 105 | 233 |
| Flagg, Eli W., assignor to Nichols and Shepard Company, Battlecreek, Mich. Threshing-machine | 730,754 | June 9 | 2227 | 495 | 104 | 1608 |
| Flagg, Eli W., assignor to Nichols and Shepard Company, Battlecreek, Mich. Threshing-machine | 743,703 | Nov. 10 | 1788 | 378 | 107 | 398 |
| Flagg, James R., Frewsburg, N. Y. Lamp-reflector | 719,576 | Feb. 3 | 302 | 70 | 102 | 886 |
| Flagler, Claude, Bay City, assignor to Quaker Shade Roller Company, Saginaw, Mich. Bearing for shade-rollers | 734,530 | July 28 | 3391 | 791 | 105 | 766 |
| Flagstad, Peter J., Sacred Heart, Minn. Combination nippers and clencher for horse-shoe-nails | 747,159 | Dec. 15 | 3406 | 772 | 107 | 1885 |
| Flaherty, John, New York, N. Y. Mechanical toy | 725,432 | Apr. 14 | 1874 | 419 | 103 | 1582 |
| Flaherty, John T., Washington, D. C. Liquid-measure | 739,536 | Sept. 22 | 3850 | 862 | 106 | 872 |
| Flaherty, Thomas E., assignor to American Fuel Oil Burner Manufacturing Company, St. Louis, Mo. Fuel-oil burner | 732,181 | June 30 | 4943 | 1099 | 104 | 2218 |
| Flaig, Joseph P. F., St. Louis, Mo. Windmill | 722,686 | Mar. 17 | 1947 | 433<br>434<br>435 | 103 | 448 |
| Flameless Gas Light Company. (See Hooker, William, assignor.) | | | | | | |
| Flanagan, Roland A., San Angelo, Tex. Family-record keeper | 742,979 | Nov. 3 | 279 | 62 | 107 | 61 |
| Flanagin, Herschel H., Bellaire, Mich. Store-cabinet | 740,001 | Sept. 29 | 4753 | 1069 | 106 | 1082 |
| Flander, John H. (See Amsden, Margaret J., assignor.) | | | | | | |
| Flanegin, Francis, *et al.* (See McGuire, Peter J., assignor.) | | | | | | |
| Flanigan, Joseph H., assignor to G. T. M'Gregor, W. S. White, and A. L. Chitty, Sheffield, Ala. Wrench | 729,747 | June 2 | 409 | 92 | 104 | 1212 |
| Flanigan, Owen J. (See Ellis and Flanigan.) | | | | | | |
| Flanigan, Owen J., Boston, Mass. Composition for making soldering-sticks | 717,833 | Jan. 6 | 611 | ..... | 102 | 131 |
| Flannery, J. J., *et al.* (See Daellenbach, Charles R., assignor.) | | | | | | |
| Flannery, John J., East Cambridge, and M. B. Plunkett, Roxbury, Mass. Combination folding chair | 728,454 | May 19 | 3080 | 680<br>681 | 104 | 693 |
| Flannery, John L. (See Schmidt, Joseph, Jr., assignor.) | | | | | | |
| Flannery, Joseph M., *et al.* (See Daellenbach, Charles R., assignor.) | | | | | | |
| Flannery, Michael, Newport, Ky., assignor to E. H. Huenefeld, Cincinnati, Ohio. Deflector for ovens | 733,474 | July 14 | 1395 | 329 | 105 | 313 |
| Flannery, Michael, Newport, Ky., assignor to E. H. Huenefeld, Cincinnati, Ohio. Knock-down oven | 735,488 | Aug. 4 | 871 | 185<br>186 | 105 | 1166 |
| Flannigan, Vincent, and J. R. Partridge, Houtzdale, Pa. Rail-joint | 740,411 | Oct. 6 | 42 | 10 | 106 | 1253 |
| Flaskamp, Gertrude, Hoboken, N. J., assignor, by mesne assignments, to A. Hollander, New York, N. Y. Reinforced necktie-shield | 732,537 | June 30 | 5635 | 1249 | 104 | 2361 |
| Flatau, Louis S., St. Louis, Mo. Rotary engine | 741,476 | Oct. 13 | 2090 | 463<br>464 | 106 | 1713 |
| Flatau, Louis S., assignor of one-half to E. S. Marshall, St. Louis, Mo. Car-roof | 740,838 | Oct. 6 | 857 | 191 | 106 | 1429 |
| Flather, Herbert L., Nashua, N. H. Change-speed gearing for lathes, &c | 734,691 | July 28 | 3080 | 862<br>863 | 105 | 826 |
| Flatten, William, and J. C. Ahrens, Nyack, N. Y. Non-refillable bottle | 719,451 | Feb. 3 | 69 | 16 | 102 | 840 |
| Flavitsky, Flavian, Kazan, Russia. Pocket-laboratory | 719,776 | Feb. 3 | 676 | 155 | 102 | 965 |
| Flechtheim, Alfred, Dusseldorf, Germany. Street-sweeper | 726,040 | Apr. 21 | 2981 | 677 | 103 | 1831 |
| Fleck, Frank X., Brooklyn, N. Y., assignor to Mergenthaler Linotype Company. Linotype-machine | 720,795 | Feb. 17 | 2568 | 591 | 102 | 1393 |
| Fleck, Henry H. (See Savill, Joseph H., assignor.) | | | | | | |
| Fleckenstein, Leonard S., Easton, Md. Crane | 728,095 | May 12 | 2396 | 533<br>534 | 104 | 527 |
| Fleece, James O., Wildwood, Fla. Seal for envelops, packages, or the like | 724,839 | Apr. 7 | 791 | 183 | 103 | 1339 |
| Fleeger, Austin, Chicora, Pa. Hat-fastener | 723,853 | Mar. 31 | 4086 | 922 | 103 | 917 |
| Fleeger, Austin, Chicora, Pa. Door-securer | 724,686 | Apr. 7 | 501 | 120 | 103 | 1276 |
| Fleetwood, Henry, Los Angeles, Cal., assignor to E. M. M. Curative Co. Means for treating nervous diseases by electromusical vibrations | 729,317 | May 26 | 4660 | 1030 | 104 | 1037 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page |
|---|---|---|---|---|---|---|
| Flegel, A. F. (See Farmer, Samuel, assignor.) | | | | | | |
| Fleischer, George. (See Schuette, Fleischer, and Thellman.) | | | | | | |
| Fleischhauer, Charles, Strang, Nebr. Burglar-proof express-car | 722,830 | Mar. 17 | 2220 | 498 | 103 | 503 |
| Fleischmann, Charles R., Chicago, Ill. Door-securer | 743,978 | Nov. 10 | 2308 | 493 | 107 | 512 |
| Fleischmann, Daniel J. (See Flitsch and Fleischmann.) | | | | | | |
| Fleischmann, Julius. (See Keilwerth, Franz, assignor.) | | | | | | |
| Fleming, Augustus. (See Fleming, Edward and A.) | | | | | | |
| Fleming, Charles F. (See Anderson and Fleming.) | | | | | | |
| Fleming, Edward and A., Chicago, Ill. Bend or pipe connection for water-closets | 718,444 | Jan. 13 | 1721 | 382 | 102 | 382 |
| Fleming, James H., Newark, and O. Anderson, Kearney, N. J., assignors to National Dairy Machine Co. Spring neck-bearing for centrifugal machines | 742,178 | Oct. 27 | 3492 | 779 | 106 | 2033 |
| Fleming, James J., Elk Garden, W. Va. Cigar-lighter | 725,061 | Apr. 14 | 1190 | 270 | 103 | 1439 |
| Fleming, Matthew, Greenock, Scotland. Rotary engine | 734,226 | July 21 | 2818 | 661, 662 | 105 | 630 |
| Fleming, Richard, Swampscott, Mass., assignor to General Electric Company. Constant-current rotary converter | 730,629 | June 9 | 2012 | 447 | 104 | 1561 |
| Fleming, Richard, Swampscott, Mass., assignor to General Electric Company. Electric-arc lamp | 732,182 | June 30 | 4945 | 1099, 1100 | 104 | 2218 |
| Fleming, Richard, Lynn, Mass., assignor to General Electric Company. Electric-arc lamp | 730,898 | June 16 | 2504 | 555 | 104 | 1684 |
| Fleming, Richard, Lynn, Mass., assignor to General Electric Company. Multiphase arc-lamp | 730,899 | June 16 | 2506 | 556 | 104 | 1684 |
| Fleming, Robert J. (See Davis, Frank, assignor.) | | | | | | |
| Fleming, Robert S., assignor to Landis Machine Company, St. Louis, Mo. Treadle mechanism | 744,321 | Nov. 17 | 3009 | 645 | 107 | 672 |
| Fleming, Samuel B., Chicago, Ill. Thrust-fork | 745,339 | Dec. 1 | 41 | 8, 9 | 107 | 1109 |
| Fleming, Samuel B., Chicago, Ill. Digging-machine | 747,400 | Dec. 22 | 3861 | 869 | 107 | 2000 |
| Fleming, Thomas, Cleveland, Ohio. Switch-operating mechanism | 737,380 | Aug. 25 | 4377 | 975 | 105 | 1965 |
| Fleming, Thomas V. (See Craig and Fleming.) | | | | | | |
| Flemming, Carl E., Schönheide, Germany. Machine for drilling and filling brush-backs | 735,737 | Aug. 11 | 1345 | 289 | 105 | 1285 |
| Flesher, Andrew G., Taylorville, Ill. Loading or unloading apparatus | 729,150 | May 26 | 4358 | 962, 963 | 104 | 973 |
| Fletcher, Charles R., Boston, Mass., assignor to Ferricup Metal Company, East Greenwich, R. I. Electrodepositing metals | 740,359 | Sept. 29 | 5401 | 1216, 1217 | 106 | 1219 |
| Fletcher, Edward W., assignor to E. M. Bond, Worcester, Mass. Iceman's apron | 729,565 | June 2 | 82 | 20 | 104 | 1144 |
| Fletcher, Francis J., London, England. Apparatus for aerating or carbonating liquids | 723,453 | Mar. 24 | 3349 | 750 | 103 | 748 |
| Fletcher, Fred S., assignor to Fletcher, Terry & Company, Bristol, Conn. Glass-cutter | 742,179 | Oct. 27 | 3493 | 780 | 106 | 2033 |
| Fletcher, George, C. E. Davis, and B. T. Douglas, St. Clair, Nev. Amalgamator | 745,047 | Nov. 24 | 4340 | 938 | 107 | 970 |
| Fletcher, George W., Mendon, Ill. Safety-envelop | 720,413 | Feb. 10 | 1839 | 419 | 102 | 1229 |
| Fletcher, Joseph, London, England. Apparatus for drawing off or dispensing aerated or other liquids | 735,867 | Aug. 11 | 1602 | 342 | 105 | 1341 |
| Fletcher, Kimball B., Lancaster, N. H., assignor to Thompson Manufacturing Company. Pulp-separator | 735,080 | Aug. 4 | 56 | 15, 16 | 105 | 993 |
| Fletcher, Louis S., Anaheim, Cal. Bicycle-handle | 725,691 | Apr. 21 | 2368 | 536 | 103 | 1701 |
| Fletcher, Morris M., and E. R. Bradley, Chicago, assignors to A. Pederson, Aurora, Ill. Extensible display device | 744,702 | Nov. 17 | 3697 | 797 | 107 | 831 |
| Fletcher, Nathan W., Batavia, Ill., assignor of one-half to M. E. Dayton, Washington, D. C. Pneumatic tool | 741,320 | Oct. 13 | 1760 | 392 | 106 | 1638 |
| Fletcher, Robert, Toronto, Canada. Charcoal cooking attachment for stoves | 736,241 | Aug. 11 | 2259 | 489 | 105 | 1482 |
| Fletcher, Robert J., New York, N. Y. Burglar-alarm | 732,727 | July 7 | 55 | 15 | 105 | 15 |
| Fletcher, Terry & Company. (See Fletcher, Fred S., assignor.) | | | | | | |
| Fletcher, William B., Cameron, W. Va. Shifting-rail for vehicles | 736,081 | Aug. 11 | 1995 | 424 | 105 | 1426 |
| Fletcher, William B., Cameron, W. Va. Fifth-wheel | 747,878 | Dec. 22 | 4747 | 1073 | 107 | 2201 |
| Fletcher, William H., Paterson, N. J. Skein-dyeing machine | 727,775 | May 12 | 1819 | 406 | 104 | 406 |
| Fletcher, William H., Capitola, Cal. Burglar-alarm | 741,122 | Oct. 13 | 1361 | 312 | 106 | 1556 |
| Fletcher, William N., Claude, Tex. Sod-turning plow | 721,291 | Feb. 24 | 3536 | 804 | 102 | 1618 |
| Fleuss, Henry A., Staines, England. Apparatus for controlling level of water in steam-boilers | 737,728 | Sept. 1 | 315 | 66 | 106 | 71 |
| Fleuss, Henry A., Staines, assignor to Fleuss Patent Automatic Boiler Feed and Motor Car Syndicate, Limited, London, England. Apparatus for controlling the supply of feed-water to steam-boilers | 747,908 | Dec. 22 | 4797 | 1084, 1085, 1086 | 107 | 2211 |
| Fleuss Patent Automatic Boiler Feed and Motor Car Syndicate. (See Fleuss, Henry A., assignor.) | | | | | | |
| Flexible Armored Hose Company. (See Frankenberg and Miller, assignors.) | | | | | | |
| Flichtner, Stanwood E., Englewood, N. J., assignor, by mesne assignments, to Cooper Hewitt Electric Company. Means for protecting gas or vapor electric lamps | 721,689 | Mar. 3 | 75 | 16 | 103 | 17 |
| Flichtner, Stanwood E., Englewood, N. J., assignor, by mesne assignments, to Cooper Hewitt Electric Company. Starting device for gas or vapor electric lamps | 733,380 | July 14 | 1232 | 291 | 105 | 276 |
| Flichtner, Stanwood E., Englewood, N. J., assignor, by mesne assignments, to Cooper Hewitt Electric Company. Series resistance for gas or vapor electric lamps | 733,381 | July 14 | 1233 | 291 | 105 | 277 |
| Flichtner, Stanwood E., Englewood, N. J., and C. W. Denny, New York, N. Y., assignors to G. Westinghouse, Pittsburg, Pa. Starting means for vapor electric lamps | 728,891 | May 26 | 3903 | 867 | 104 | 880 |
| Flieger, Sterling N., Denver, Colo. Envelop | 729,318 | May 26 | 4662 | 1030 | 104 | 1037 |
| Fliehmann, William H., Moberly, Mo. Adjusting-head for tripods | 718,445 | Jan. 13 | 1723 | 383 | 102 | 383 |
| Fliess, Robert A., East Orange, N. J. Electrically-heated handle | 744,739 | Nov. 24 | 3769 | 812 | 107 | 852 |
| Flinder, Charles E., Washington, D. C. Delivery-case and cooler for liquids | 736,916 | Aug. 18 | 3526 | 783, 784 | 105 | 1765 |
| Fling, Elmer S., Lowell, assignor to Draper Company, Hopedale, Mass. Loom-temple | 747,879 | Dec. 22 | 4749 | 1073 | 107 | 2201 |
| Flinn, Christopher, Allegheny, assignor to Pressed Steel Car Company, Pittsburg, Pa. Bending-machine | 736,834 | Aug. 18 | 3383 | 747, 748 | 105 | 1734 |
| Flinn, Christopher, Allegheny, assignor to Pressed Steel Car Company, Pittsburg, Pa. Bending-machine | 736,835 | Aug. 18 | 3384 | 748 | 105 | 1735 |
| Flinn, John R., Johnstown, Pa. Curb box and cock support | 741,477 | Oct. 13 | 2091 | 464 | 106 | 1713 |
| Flinn, Patrick T. (See Norton, James A., assignor.) | | | | | | |
| Flinn, Richard J., and G. P. Aborn, Boston, Mass. Controller for boilers | 746,485 | Dec. 8 | 2129 | 489, 490 | 107 | 1574 |
| Flint, Alonzo T., and I. Whitney, Oskaloosa, Iowa. Mine-car-operated door | 719,577 | Feb. 3 | 303 | 70 | 102 | 886 |
| Flint, Charles. (See Muskett and Flint.) | | | | | | |
| Flint, James J., Denver, Colo. Gasolene-lamp | 732,686 | June 30 | 5917 | 1312 | 104 | 2422 |
| Flint, Lafayette W., Auburn, N. Y. Bow-facing ore | 717,980 | Jan. 6 | 872 | 194 | 102 | 187 |
| Flint, Samuel E., St. Louis, Mo. Feed-water heater | 742,303 | Oct. 27 | 3739 | 836, 837 | 106 | 2084 |
| Flint, William P., Pittsburg, Pa., assignor to Westinghouse Machine Company. Igniter apparatus for gas-engines | 718,334 | Jan. 13 | 1518 | 337 | 102 | 341 |
| Flippen, James T., Wier, Tenn. Hinge | 725,433 | Apr. 14 | 1875 | 419 | 103 | 1582 |

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| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Flippen, John T. (See Morrison and Flippen.) | | | | | | |
| Flitsch, George, and D. J. Fleischmann, Ferney, S. D. Scoop | 722,965 | Mar. 17 | 2441 | 546 | 103 | 548 |
| Flock, Samuel E., Joplin, Mo. Elevator-bucket | 746,486 | Dec. 8 | 2132 | 490 | 107 | 1575 |
| Flood, Benton, Los Angeles, Cal. Hydraulic elevator for dredging purposes | 743,979 | Nov. 10 | 2308 | 493 | 107 | 513 |
| Flood, Harry J., Chicago, Ill. Mold for brick-machines | 725,619 | Apr. 14 | 2224 | 503 | 103 | 1657 |
| Flood, Harry J., Chicago, Ill. Machine for compressing material into form | 734,531 | July 28 | 3392 | 792 | 105 | 766 |
| Flood, John R., W. E. Sayer, and A. D. Campbell, Spokane, Wash. Electrical water-level indicator, recorder, and alarm | 733,711 | July 14 | 1795 | 425 | 105 | 395 |
| Floquet, Victor, and L. Bonnet, Reims, France, assignors to J. W. W. Shaw, Rochdale, England. Apparatus for bleaching fabrics | 721,436 | Feb. 24 | 3805 | 866 | 102 | 1673 |
| Flor, Franz, and E. Murmann, Vienna, Austria-Hungary. Wrapping material for preventing tarnishing of metal articles | 721,171 | Feb. 24 | 3310 | | 102 | 1571 |
| Flora, Ellsworth E., assignor, by mesne assignments, to G. Farnsworth, trustee, Chicago, Ill. Machine for ruling screens or plates for photographic purposes | 717,669 | Jan. 6 | 251 | 63, 64, 65, 66 | 102 | 54 |
| Flora, Ellsworth E., assignor, by mesne assignments, to G. Farnsworth, Chicago, Ill. Printing-press | 724,997 | Apr. 7 | 1072 | 245 | 103 | 1397 |
| Flora, Ellsworth E., assignor to C. S. Higgins, Chicago, Ill. Ticket stamping and vending machine | 748,272 | Dec. 29 | 5518 | 1256, 1257, 1258 | 107 | 2390 |
| Flora, Ellsworth E., Chicago, Ill., and J. L. Clough, assignors to Keyless Lock Company, Indianapolis, Ind. Door-knob lock | 729,151 | May 26 | 4361 | 963, 964 | 104 | 974 |
| Floren, Siegwart A., Lakota, N. D. Ruling-pen | 724,687 | Apr. 7 | 502 | 120 | 103 | 1276 |
| Florence, John H., and J. E. Misner, Wichita, Kans. Band-cutter and feeder | 719,777 | Feb. 3 | 677 | 156 | 102 | 966 |
| Florence Manufacturing Company. (See Schwartz, Herman M., assignor.) | | | | | | |
| Flory, Llewellyn H., Ashley, Pa. Pipe-union | 731,031 | June 16 | 2751 | 613 | 104 | 1735 |
| Flory, Llewellyn H., Ashley, Pa. Skirt-supporter | 738,021 | Sept. 1 | 930 | 206 | 106 | 203 |
| Floss, John. (See Floss, William and J.) | | | | | | |
| Floss, John, Meadow Lands, Pa. Automatic signaling device | 747,880 | Dec. 22 | 4750 | 1073 | 107 | 2201 |
| Floss, William and J., Meadow Lands, Pa. Elevator safety device | 742,621 | Oct. 27 | 4309 | 971 | 106 | 2203 |
| Flow, Jacob W., Matthews, N. C. Spraying device | 728,892 | May 26 | 3904 | 867 | 104 | 880 |
| Flower, Elizabeth, Denver, Colo. Thread-holding and thread-cutting device | 726,797 | Apr. 28 | 4435 | 999 | 103 | 2141 |
| Flower, George K., Pittsburg, Pa. Mowing-machine | 724,275 | Mar. 31 | 4952 | 1108 | 103 | 1092 |
| Flower, Theodore B., Oxford, Ohio. Brush-cover | 741,321 | Oct. 13 | 1762 | 392 | 106 | 1639 |
| Flowerree, Victor W., *et al.* (See Quaas, Edward E., assignor.) | | | | | | |
| Floyd, Alva G., Fairbluff, N. C. Tobacco-flue screen | 738,425 | Sept. 8 | 1772 | 386 | 106 | 396 |
| Floyd, George G. (See Player and Floyd.) | | | | | | |
| Floyd, George G., St. Louis, Mo. Car-axle box | 720,796 | Feb. 17 | 2569 | 592 | 102 | 1393 |
| Floyd, George G., assignor to American Steel Foundries, St. Louis, Mo. Car-truck bolster and bolster-frame | 723,521 | Mar. 24 | 3491 | 781 | 103 | 775 |
| Floyd, George G., assignor to American Steel Foundries, St. Louis, Mo. Bolster | 732,403 | June 30 | 5378 | 1191 | 104 | 2309 |
| Floyd, George G., assignor to United States Railway Equipment Company, St. Louis, Mo. Car-truck | 725,329 | Apr. 14 | 1688 | 380 | 103 | 1542 |
| Flügge, Hugo, Floersgehofen, Germany. Cooling apparatus for liquids | 739,595 | Sept. 22 | 3967 | 885 | 106 | 897 |
| Flugstad, John M. and P. M., Corvallis, Mont. Acetylene-gas generator | 736,836 | Aug. 18 | 3385 | 748, 749 | 105 | 1735 |
| Flugstad, Peter M. (See Flugstad, John M. and P. M.) | | | | | | |
| Flynn, James D., Washington, D. C. Head-stall for horses | 743,704 | Nov. 10 | 1790 | 378 | 107 | 398 |
| Flynn, Margaret C., Hartford, Conn. Horseshoe | 740,116 | Sept. 29 | 4956 | 1112 | 106 | 1126 |
| Flynn, Mary, Washington, D. C. Domestic boiler | 725,948 | Apr. 21 | 2835 | 643 | 103 | 1801 |
| Flynn, Philip J., West Pullman, Ill. Drip-cup for umbrellas | 722,573 | Mar. 10 | 1709 | 380 | 103 | 383 |
| Flynn, William, Cambridge, Mass. Propelling means for vehicles | 747,959 | Dec. 29 | 4922 | 1113 | 107 | 2260 |
| Foard, Charles R., Elkton, Md. Potato-dropper | 718,707 | Jan. 20 | 2264 | 498 | 102 | 513 |
| Foden, William, Rock Ferry, assignor to United Kingdom Self-Adjusting Anti-Friction Metallic Packing Syndicate, Limited, Liverpool, England. Metallic packing for piston-rods | 746,810 | Dec. 15 | 2727 | 628 | 107 | 1729 |
| Fogal, John E. W., Chicago, assignor to Quincy Elevator Gate Company, Quincy, Ill. Elevator-gate-operating mechanism | 724,385 | Mar. 31 | 5173 | 1159, 1160 | 103 | 1139 |
| Fogal, John E. W., assignor of one-half to H. B. Dines, Quincy, Ill. Elevator-gate-operating mechanism | 725,236 | Apr. 14 | 1526 | 346, 347 | 103 | 1508 |
| Fogarty, William J., St. Louis, Mo., assignor to G. W. Drischel, Cambridge City, Ind. Direct-acting steam shearing-machine | 738,787 | Sept. 15 | 2496 | 549, 550 | 106 | 567 |
| Fogel, Taylor T., Allentown, Pa. Electrical track instrument | 741,123 | Oct. 13 | 1363 | 312, 313 | 106 | 1557 |
| Fogg, Adna J., Boston, Mass. Pail-forming machine | 735,233 | Aug. 4 | 386 | 75 | 105 | 1063 |
| Fogg, Arthur, Shelton, Stoke-upon-Trent, England. Air-tight box, tin, or canister | 721,507 | Feb. 24 | 3928 | 894 | 102 | 1699 |
| Fogg, John, assignor to M. Fogg, Milwaukee, Wis. Siphon | 725,949 | Apr. 21 | 2836 | 643 | 103 | 1801 |
| Fogg, Margaret. (See Fogg, John, assignor.) | | | | | | |
| Foggin, Francis D., Neame, La. Device for side-filing saw-teeth | 717,981 | Jan. 6 | 873 | 195 | 102 | 188 |
| Fogh, Christian P., Wadsworth, Nev. Piston-rod packing | 743,705 | Nov. 10 | 1791 | 378 | 107 | 399 |
| Fogle, Archie B., Otego, assignor of one-fourth to A. Teeple and F. M. Drake, Mankato, Kans. Draft-evener | 741,124 | Oct. 13 | 1366 | 313 | 106 | 1558 |
| Fogle, Oscar L., Columbus, Ohio. Umbrella | 748,359 | Dec. 29 | 5652 | 1289 | 107 | 2419 |
| Foglesong, Washington, Dayton, Ohio. Mining coal | 729,566 | June 2 | 83 | 21 | 104 | 1144 |
| Foisy, Hyacinthe, Lynn, assignor to C. H. Bradshaw, Somerville, Mass. Machine for softening hides or skins | 719,100 | Jan. 27 | 3025 | 673, 674 | 102 | 685 |
| Folant, William C., Newark, N. J. Washer for vehicle-axles | 719,101 | Jan. 27 | 3027 | 674 | 102 | 685 |
| Folda, Jaroslav. (See Olsen and Folda.) | | | | | | |
| Foley, Daniel P., *et al.* (See Bennett, George S., assignor.) | | | | | | |
| Foley, Dennis G., Hartford, Conn. Pneumatic tool | 730,207 | June 2 | 1218 | 272 | 104 | 1375 |
| Foley, James E., assignor of three-fourths to A. M. Kerr, H. Brodie, and J. C. McGregor, Detroit, Mich. Separator | 742,622 | Oct. 27 | 4310 | 971 | 106 | 2203 |
| Foley, John W., Omaha, Nebr. Saw-filing machine | 728,893 | May 26 | 3906 | 868 | 104 | 881 |
| Foley, Maurice A., New Berlin, N. Y. Vehicle-pole tip | 747,881 | Dec. 22 | 4751 | 1074 | 107 | 2201 |
| Foley, Patrick F., New York, N. Y. Operating device for elevator-cars | 742,623 | Oct. 27 | 4312 | 971 | 106 | 2203 |
| Foley, Philip J. (See Johnston and Foley.) | | | | | | |
| Foley, Thomas F., Washington, D. C. Trap | 733,475 | July 14 | 1396 | 329 | 105 | 313 |
| Foley, William J., Burnside, Conn. Calendering-machine | 745,340 | Dec. 1 | 42 | 9 | 107 | 1109 |
| Folger, Harry S., Chicago, Ill. Type-holder | 723,665 | Mar. 24 | 3735 | 838 | 103 | 826 |
| Folger, Henry C., Somerville, Mass. Sparking plug | 738,992 | Sept. 15 | 2853 | 633 | 106 | 644 |
| Folkers, George A. W. and J. H. L., San Francisco, Cal. Device for sharpening saws | 733,636 | July 14 | 1675 | 398 | 105 | 371 |
| Folkers, George A. W. and J. H. L., San Francisco, Cal. Device for sharpening saws | 735,868 | Aug. 11 | 1604 | 342 | 105 | 1342 |
| Folkers, John H. L. (See Folkers, George A. W. and J. H. L.) | | | | | | |
| Folkmar, Eugen, Charlottenberg, near Berlin, Germany, assignor to I. Etrich, Ober-Altstadt, near Trautenau, Bohemia, Austria-Hungary. Respirator | 735,959 | Aug. 11 | 1760 | 377 | 105 | 1375 |

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|---|---|---|---|---|---|---|
| Folks, Thomas, Brooklyn, N. Y. Amusement apparatus | 720,014 | Feb. 10 | 1105 | 253, 254 | 102 | 1074 |
| Folks, Thomas, Toledo, Ohio. Amusement apparatus | 728,894 | May 26 | 3907 | 868 | 104 | 881 |
| Follett, Edward P., assignor to Zenith Manufacturing Company, Rochester, N. Y. Device for drafting patterns for garments | 735,738 | Aug. 11 | 1346 | 289 | 105 | 1285 |
| Follett, Joseph L., assignor to Spheropolar Engineering Company, New York, N. Y. Transmission of power | 732,933 | July 7 | 420 | 102, 103 | 105 | 90 |
| Follows, George H., Pittsburg, Pa., assignor to Lodge & Shipley Machine Tool Company, Cincinnati, Ohio. Variable-speed mechanism | 719,102 | Jan. 27 | 3028 | 674 | 102 | 686 |
| Follows, George H., Pittsburg, Pa., assignor to Lodge & Shipley Machine Tool Company, Cincinnati, Ohio. Variable-speed mechanism | 719,103 | Jan. 27 | 3032 | 675 | 102 | 687 |
| Folmer, William F., New York, N. Y. Tripod | 731,879 | June 23 | 4334 | 968 | 104 | 2078 |
| Folsom, Charles F., Stoneham, Mass. Wrench | 731,880 | June 23 | 4337 | 968 | 104 | 2079 |
| Folsom, Hannibal. (See Drake and Folsom.) | | | | | | |
| Foltz, Silas M., Rawson, Ohio. Hoisting-machine | 747,401 | Dec. 22 | 3862 | 869 | 107 | 2000 |
| Fontain, Samuel. (See Warren and Fontain.) | | | | | | |
| Fontaine, Camille A., Iola, Kans. Ore-roasting furnace | 739,485 | Sept. 22 | 3771 | 843, 844 | 106 | 856 |
| Foos, Florence C., and T. G. Muir, Washington, D. C. Ventilator | 728,387 | May 19 | 2955 | 651 | 104 | 667 |
| Fooshe, John C., Ninetysix, S. C. Harrow attachment for plows | 731,881 | June 23 | 4337 | 968 | 104 | 2079 |
| Foote, Arthur D., Grass Valley, Cal. Preparing concentrating-surfaces | 744,322 | Nov. 17 | 3010 | 646 | 107 | 673 |
| Foote and Company, James B. (See Walter, Charles R., assignor.) | | | | | | |
| Foote, Frank D., Erie, Pa. Stool | 738,993 | Sept. 15 | 2854 | 633 | 106 | 644 |
| Foote, Frederick H., and T. W. Robinson, Chicago, Ill. Furnace apparatus | 720,125 | Feb. 10 | 1324 | 303 | 102 | 1121 |
| Foote, James B., Jackson, Mich., assignor to General Electric Company. Regulator | 725,692 | Apr. 21 | 2370 | 536 | 103 | 1701 |
| Foote, John B., Oakpark, assignor to James & Foote, Chicago, Ill. Milling-machine | 745,431 | Dec. 1 | 222 | 50, 51, 52 | 107 | 1147 |
| Foote, Lewis A., assignor to Chicago Car Seal and Manufacturing Company, Chicago, Ill. Seal | 745,587 | Dec. 1 | 504 | 119 | 107 | 1205 |
| Foote, Samuel S., and J. C. McKee, Caldwell, Idaho. Debranning apparatus | 738,669 | Sept. 8 | 2251 | 495 | 106 | 498 |
| Foque, Theodore A. (See Huntington and Foque.) | | | | | | |
| Forbes, Alexander, Glasgow, Scotland. Pantograph | 743,980 | Nov. 10 | 2309 | 493 | 107 | 513 |
| Forbes, Armitage S. C., *et al.* (See Maybury, William, assignor.) | | | | | | |
| Forbes, George, Westminster, England. Telescope | 727,776 | May 12 | 1821 | 406 | 104 | 406 |
| Forbes, Joseph C., and N. Weber, Chicago, Ill. Water purifier and heater | 719,319 | Jan. 27 | 3421 | 764 | 102 | 769 |
| Forbes, Walter T., Collegepark, Ga. Apparatus for continuously tanning, bleaching, scouring, and oiling leather | 742,115 | Oct. 20 | 3375 | 753, 754 | 106 | 1993 |
| Forbes, William C., Elsternwick, Victoria, Australia. Distance and course recorder for ships | 747,690 | Dec. 22 | 4381 | 988 | 107 | 2117 |
| Forbush, Horace, Boston, Mass. Training device for penmanship practice | 745,100 | Nov. 24 | 4458 | 964 | 107 | 994 |
| Force, John W., New Britain, Conn. Button | 739,070 | Sept. 15 | 2996 | 664 | 106 | 674 |
| Force, John W., New Britain, Conn. Shoestring-retaining device | 741,238 | Oct. 13 | 1592 | 358 | 106 | 1606 |
| Ford Auger Bit Company. (See Smith, Ivan W., assignor.) | | | | | | |
| Ford, Bruce, assignor to Electric Storage Battery Company, Philadelphia, Pa. Storage-battery tank | 719,778 | Feb. 3 | 678 | 156 | 102 | 966 |
| Ford, Bruce, assignor to Electric Storage Battery Company, Philadelphia, Pa. Storage battery | 719,937 | Feb. 3 | 932 | 217 | 102 | 1021 |
| Ford, Charles G., Roseville, Ohio. Rail-joint | 746,487 | Dec. 8 | 2133 | 490 | 107 | 1575 |
| Ford, David, Albion, Mich. Railway cross-tie | 732,094 | Mar. 3 | 807 | 180 | 103 | 174 |
| Ford, Earle, Brownwood, Tex. Bank-ledger | 720,414 | Feb. 10 | 1840 | 419, 420 | 102 | 1229 |
| Ford, Edna H., Waupun, Wis. Spectacle-holder | 721,881 | Mar. 3 | 414 | 91 | 103 | 91 |
| Ford, Eliot E., Rahway, N. J. Bottling apparatus | 732,678 | June 30 | 5897 | 1308, 1309 | 104 | 2419 |
| Ford, Fowler S., Lower Cabot, Vt. Greenhouse | 733,829 | July 14 | 2039 | 480 | 105 | 445 |
| Ford, George H. (See Shailor, Frank E., assignor.) | | | | | | |
| Ford, Henry, Detroit, Mich. Motor-vehicle | 747,909 | Dec. 22 | 4801 | 1086 | 107 | 2212 |
| Ford, Henry B., New York, N. Y., assignor to Swan Electric Manufacturing Company. Electrolytic apparatus | 745,588 | Dec. 1 | 506 | 119 | 107 | 1205 |
| Ford, James I. (See Dougherty, Hugh F., assignor.) | | | | | | |
| Ford, Lewis P., Gresford, England. Apparatus for preparing composition for artificial stone, bricks, &c | 725,693 | Apr. 21 | 2373 | 536, 537 | 103 | 1702 |
| Ford, Lewis P., Gresford, England. Mold for the manufacture of blocks of artificial stone | 726,665 | Apr. 28 | 4184 | 944, 945 | 103 | 2089 |
| Ford, Lewis R., *et al.* (See Pagenhart, Charles L., assignor.) | | | | | | |
| Ford, Samuel R., Mount Sterling, Ind. Sleigh-runner | 717,564 | Jan. 6 | 77 | 20 | 102 | 19 |
| Ford, Thomas. (See Gleason, Dora, assignor.) | | | | | | |
| Ford, Thomas H., Farnworth, near Bolton, and R. Walmsley, Bolton, England. Machine for stamping nuts or other small articles | 743,266 | Nov. 3 | 872 | 190 | 107 | 184 |
| Ford, Thomas W., Chattanooga, Tenn. Umbrella | 743,476 | Nov. 10 | 1368 | 280 | 107 | 307 |
| Ford, Warwick, New York, N. Y. Attachment for basins, sinks, or like fixtures | 739,162 | Sept. 15 | 3163 | 699, 700 | 106 | 707 |
| Ford, William H., Lowell, assignor to Ringset Company, Boston, Mass. Ring-stamping apparatus | 730,245 | June 9 | 1312 | 289 | 104 | 1410 |
| Ford, William H., Lowell, Mass., assignor to Ringset Company, Portland, Me. Mold for casting rings | 746,944 | Dec. 15 | 3007 | 691 | 107 | 1793 |
| Ford, William H., Lowell, Mass., assignor to Ringset Company, Portland, Me. Finger-ring mold | 747,058 | Dec. 15 | 3222 | 734 | 107 | 1844 |
| Ford, William H., Lowell, Mass., assignor to Ringset Company, Portland, Me. Finger-ring mold | 747,059 | Dec. 15 | 3224 | 734 | 107 | 1844 |
| Fordyce, Edmond A., Chicago, Ill. Selective device for pneumatic-despatch-tube systems | 747,599 | Dec. 22 | 4205 | 946, 947 | 107 | 2079 |
| Fordyce, Edmond A., assignor, by mesne assignments, to Bostedo Pneumatic Tube Company, Chicago, Ill. Pneumatic-tube terminal | 724,688 | Apr. 7 | 503 | 120 | 103 | 1277 |
| Fordyce, John R., Pine Bluff, Ark. Bat feeding and forming apparatus for cotton-presses | 731,764 | June 23 | 4134 | 922 | 104 | 2033 |
| Fordyce, John R., Little Rock, Ark. Cotton-baling apparatus | 731,882 | June 23 | 4339 | 968, 969 | 104 | 2080 |
| Fordyce, John R., Little Rock, Ark. Machinery for handling cotton | 732,625 | June 30 | 5795 | 1285, 1286 | 104 | 2398 |
| Fore, Charles P., *et al.* (See Crawford, Francis M., assignor.) | | | | | | |
| Fore River Ship & Engine Company. (See Edwards and Allen, assignors.) | | | | | | |
| Fore River Ship and Engine Company. (See Elwell, Howard P., assignor.) | | | | | | |
| Fore River Ship and Engine Company. (See Wellington and Edwards, assignors.) | | | | | | |
| Forell, Carl von, Hamburg, Germany. Manufacture of cement | 747,882 | Dec. 22 | 4752 | ..... | 107 | 2202 |
| Foreman, Thomas J., Specht, Ohio. Animal-trap | 734,413 | July 21 | 3169 | 744 | 105 | 703 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | Spec. | Drg. | Vol. | Page. |
| Foreman, William, and G. R. Conger, Taylorstown, Pa. Attachment for rubber shoes or the like | 736,082 | Aug. 11 | 1996 | 424 | 105 | 1427 |
| Forester, Herbert C. B., Sketty, England. Manufacturing artificial fuel | 736,083 | Aug. 11 | 1997 | 424, 425 | 105 | 1427 |
| Forger, William, New York, N. Y. Washing apparatus | 729,055 | May 26 | 4202 | 929 | 104 | 942 |
| Forgy, Arthur, Middletown, Mo. Corn harvester and husker | 724,276 | Mar. 31 | 4954 | 1108, 1109 | 103 | 1092 |
| Forker, William, Glenwood Springs, Colo. Dehorning implement | 737,215 | Aug. 25 | 4067 | 902 | 105 | 1898 |
| Fornander, Alfred, assignor to E. Faber, New York, N. Y. Pencil | 717,834 | Jan. 6 | 612 | 136 | 102 | 131 |
| Fornander, Alfred, New York, N. Y., assignor to Carpet Yarn Printing Company. Mechanism for propelling color-carriages | 737,917 | Sept. 1 | 722 | 156 | 106 | 158 |
| Forman Belt Company. (See Forman, Joseph, assignor.) | | | | | | |
| Forman, Joseph, assignor to Forman Belt Company, Baltimore, Md. Waist-belt | 731,295 | June 16 | 3248 | 723 | 104 | 1834 |
| Forman, Joseph, assignor to Forman Belt Company, Baltimore, Md. Waist-belt | 747,060 | Dec. 15 | 3225 | 735 | 107 | 1844 |
| Forney, John H., Burlington, Iowa. Mail-box | 724,092 | Mar. 31 | 4562 | 1027 | 103 | 1014 |
| Forney, Matthias N., New York, N. Y. Fluid-pressure engine | 735,739 | Aug. 11 | 1348 | 290 | 105 | 1286 |
| Forney, Matthias N., New York, N. Y. Fluid-pressure engine | 735,740 | Aug. 11 | 1350 | 290 | 105 | 1286 |
| Forney, Matthias N., New York, N. Y. Fluid-pressure engine | 735,741 | Aug. 11 | 1353 | 291 | 105 | 1287 |
| Forney, Matthias N., New York, N. Y. Valve mechanism for fluid-pressure engines | 735,742 | Aug. 11 | 1355 | 291, 292 | 105 | 1287 |
| Forney, Matthias N., New York, N. Y. Fluid-pressure engine | 741,782 | Oct. 20 | 2687 | 599 | 106 | 1853 |
| Forrer, Joseph D., Johnstown, assignor, by mesne assignments, to Westinghouse Electric and Manufacturing Company, Pittsburg, Pa. Lubricating device for bearings | 736,376 | Aug. 18 | 2493 | 548 | 105 | 1550 |
| Forrer, Joseph D., Johnstown, assignor, by mesne assignments, to Westinghouse Electric and Manufacturing Company, Pittsburg, Pa. Circuit-breaker | 741,239 | Oct. 13 | 1593 | 358 | 106 | 1606 |
| Forrest, Rolland, Philadelphia, Pa. Life-boat | 721,690 | Mar. 3 | 76 | 16 | 103 | 17 |
| Forry, Charles E., San Francisco, Cal. Can-header | 737,216 | Aug. 25 | 4068 | 903, 904 | 105 | 1899 |
| Forsbach, Otto, and E. Clerc, Mülheim-on-the-Rhine, Germany. Crucible smelting-furnace | 722,831 | Mar. 17 | 2222 | 498 | 103 | 503 |
| Forsberg, Charles A., Rockford, Ill. Wire-fence machine | 725,694 | Apr. 21 | 2374 | 587 | 103 | 1702 |
| Forsberg, John C., and O. Rogan, La Crosse, Wis. Adjustable shade-hanger | 746,057 | Dec. 8 | 1374 | 307 | 107 | 1410 |
| Forse, William H., Jr. (See Kelly, Clarence E., assignor.) | | | | | | |
| Forsgren, Abraham E., Falun, assignor to A. E. Salwén, Grängesberg, Sweden. Magnetic separator | 731,446 | June 23 | 3588 | 788, 789 | 104 | 1914 |
| Forsling, Andrew P., Sioux City, Iowa. Miter-box | 736,837 | Aug. 18 | 3387 | 749 | 105 | 1735 |
| Förste, Friedrich, Leipzig-Lindenau, Germany. Means for turning the sheets fed to lining or other machines | 743,477 | Nov. 10 | 1370 | 281 | 107 | 307 |
| Forster, Ferdinand E., New York, N. Y. Shoal-water indicator | 720,015 | Feb. 10 | 1108 | 254 | 102 | 1075 |
| Forster, Frank L., assignor of one-half to J. A. and M. Conrey, Shelbyville, Ind. Furniture-coupling | 721,292 | Feb. 24 | 3537 | 804 | 102 | 1618 |
| Forster, Frank L., assignor of one-half to J. A. and M. Conrey, Shelbyville, Ind. Cutter-guard | 727,336 | May 5 | 964 | 209 | 104 | 208 |
| Forster, Frank L., assignor of one-half to J. A. and M. Conrey, Shelbyville, Ind. Guide for woodworking-machines | 727,337 | May 5 | 965 | 209 | 104 | 208 |
| Forster, Frank L., assignor of one-half to J. A. and M. Conrey, Shelbyville, Ind. Cutter-guard for woodworking-machines | 727,536 | May 5 | 1321 | 294 | 104 | 284 |
| Forster, James W., Chicago, Ill., assignor to Modern Electric Light Co. Incandescent electric lamp | 736,950 | Aug. 25 | 3604 | 799 | 105 | 1802 |
| Forster, John C., Pittsburg, Pa. Die | 721,172 | Feb. 24 | 3311 | 757 | 102 | 1571 |
| Forster, John J., assignor of one-half to R. L. Murdock, Avalon, Pa. Manufacture of cakes from polygonal blanks | 721,173 | Feb. 24 | 3314 | 757 | 102 | 1572 |
| Forster, John J., assignor of one-half to R. L. Murdock, Avalon, Pa. Mold for presses | 721,174 | Feb. 24 | 3315 | 758 | 102 | 1572 |
| Förster, Oskar, London, England, assignor, by mesne assignments, to Universal Chromephoto Engraving Company, New York, N. Y. Producing printing-surfaces | 723,198 | Mar. 17 | 2874 | ------ | 103 | 639 |
| Forster, William E., Lynn, Mass. Self-sealing bottle | 747,402 | Dec. 22 | 3864 | 869 | 107 | 2001 |
| Forster, William J., Milwaukee, Wis. Demagnetizer | 733,637 | July 14 | 1677 | 398 | 105 | 371 |
| Forsting, L. W., *et al.* (See Robertson, Le Roy, assignor.) | | | | | | |
| Forstner, Thomas, New Ulm, Minn. Snap-hook | 739,661 | Sept. 22 | 4097 | 513 | 106 | 925 |
| Forsyth Brothers Company. (See Chaffee, Edward F., assignor.) | | | | | | |
| Forsyth, George, St. Davids, Canada. Horse taming or training device | 730,360 | June 9 | 1522 | 337 | 104 | 1455 |
| Forsyth, George H., Chicago, Ill. Spring-actuated take-up | 742,781 | Oct. 27 | 4570 | 1035, 1036 | 106 | 2260 |
| Forsyth, Henry H., Chicago, Ill. Shade-holding mechanism | 725,062 | Apr. 14 | 1191 | 270 | 103 | 1439 |
| Forsyth, Henry H., Chicago, Ill. Shade-holding mechanism | 725,063 | Apr. 14 | 1193 | 270, 271 | 103 | 1439 |
| Forsyth, Henry H., Chicago, Ill. Coupling-centering device | 727,929 | May 12 | 2105 | 468 | 104 | 466 |
| Forsyth, Henry H., Chicago, Ill. Coupling-centering device | 727,930 | May 12 | 2107 | 468 | 104 | 467 |
| Forsyth, Henry H., assignor to Curtain Supply Company, Chicago, Ill. Curtain-fixture | 725,950 | Apr. 21 | 2837 | 643 | 103 | 1802 |
| Forsyth, Henry H., assignor to Curtain Supply Company, Chicago, Ill. Curtain-fixture | 744,861 | Nov. 24 | 3982 | 858 | 107 | 896 |
| Forsyth, James A., Atlanta, Ga. Garbage-crematory | 731,032 | June 16 | 2752 | 613, 614 | 104 | 1735 |
| Forsyth, James B., Boston, Mass. Rubber roll | 732,728 | July 7 | 57 | 16 | 105 | 15 |
| Forsyth, Joseph E., Chicago, Ill. Train-pipe coupling | 740,749 | Oct. 6 | 672 | 153, 154 | 106 | 1391 |
| Forsyth Manufacturing Company. (See Whittington, Joseph H., assignor.) | | | | | | |
| Forsyth, Samuel L. (See Young, William A., assignor.) | | | | | | |
| Forsyth, Wilber D., Pittsburg, Pa. Flexible shafting | 733,181 | July 7 | 853 | 207 | 105 | 179 |
| Forsyth, William D. (See Zeh and Forsyth.) | | | | | | |
| Forsythe, Andrew J., Kokomo, Ind. Stovepipe-fastener | 741,648 | Oct. 20 | 2416 | 541 | 106 | 1797 |
| Fort, William A., Columbia, S. C. Hinged switch-joint | 740,839 | Oct. 6 | 858 | 191 | 106 | 1429 |
| Fortier, Edmond, Kankakee, Ill. Automatic horse-power and pressure indicator and recorder | 717,982 | Jan. 6 | 875 | 195 | 102 | 188 |
| Fortin, Benjamin P., Providence, R. I. Overflow-alarm for fluid-receptacles | 721,508 | Feb. 24 | 3929 | 894 | 102 | 1699 |
| Fortin, Jules E., assignor, by mesne assignments, to E. Gervais, Montreal, Canada. Thermostatic alarm | 734,053 | July 21 | 2496 | 582 | 105 | 561 |
| Fortun, Ricardo, and E. Semprun, Madrid, Spain. Solder for aluminium | 736,712 | Aug. 18 | 3150 | ------ | 105 | 1687 |
| Forty, William H. (See Bullock and Forty.) | | | | | | |
| Forward, John F. (See Byers, John Y., assignor.) | | | | | | |
| Forward, John F., San Diego, Cal. Quartz-mill | 735,234 | Aug. 4 | 387 | 75,76 | 105 | 1063 |
| Forwerg, Paul, and B. Larsen, assignors of one-third to E. Johnson, Chicago, Ill. Rotary blower | 735,357 | Aug. 4 | 599 | 123 | 105 | 1109 |
| Fosburgh, Calvin E., Brooklyn, N. Y. Lacing for garments | 743,069 | Nov. 3 | 487 | 106 | 107 | 102 |
| Fosby, Charles, Rutherford, N. J. Proportional dividers | 730,105 | June 2 | 1052 | 235 | 104 | 1342 |
| Fosdick, Lucian J. (See Lovejoy, Alfred A., assignor.) | | | | | | |
| Fosgate, Daniel O., Chicago, Ill. Halter | 723,999 | Mar. 31 | 4397 | 988 | 103 | 981 |

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| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| Fosnaugh, Harrison W., McKees Rocks, assignor of one-half to J. H. and H. W. Stevenson, Pittsburg, Pa. Curtain-fixture | 741,649 | Oct. 20 | 2417 | 541 | 106 | 1797 |
| Foss, Benjamin F., Albion, Me. Painter's hook | 718,753 | Jan. 20 | 2353 | 520 | 102 | 530 |
| Foss, Frank L., Pittsburg, Pa. Carpet-stretcher | 743,629 | Nov. 10 | 1671 | 351 | 107 | 373 |
| Foss, Leland L., Manassas, Ga. Roller-gin | 730,449 | June 9 | 1690 | 379 | 104 | 1489 |
| Foss, Leland L., Manassas, Ga. Roller-gin | 731,561 | June 23 | 3759 | 838<br>839 | 104 | 1958 |
| Foss, Samuel C., *et al.* (See Wolger, James H., assignor.) | | | | | | |
| Foss, Walter O., assignor to C. H. and W. C. Tappan, Attleboro, Mass. Ball-cock for flush-tanks for water-closets | 748,492 | Dec. 29 | 5017 | 1344 | 107 | 2478 |
| Foster, Adam R., and G. W. Cook, Kansas City, Mo. Track-wheel axle | 747,691 | Dec. 22 | 4382 | 988 | 107 | 2118 |
| Foster, Charles A., Lewiston, Me. Cuff-holder | 723,454 | Mar. 24 | 3350 | 751 | 103 | 748 |
| Foster, Charles E., Streatham, England. Electric-arc lamp | 738,426 | Sept. 8 | 1773 | 386 | 106 | 396 |
| Foster, Charles H., Omaha, Nebr. Hot-air register | 718,446 | Jan. 13 | 1724 | 383 | 102 | 383 |
| Foster, David B., assignor to W. G. Crosthwaite, Leeds, England. Seat for use on tram-cars or other outside places | 727,338 | May 5 | 966 | 210 | 104 | 209 |
| Foster, Edith, Chicago, Ill. Window-lock | 747,403 | Dec. 22 | 3866 | 870 | 107 | 2001 |
| Foster, Ephraim J. and J. M., Steubenville, Ohio. Pea or bean shelling machine | 727,339 | May 5 | 968 | 210 | 104 | 209 |
| Foster, Ernest H. (See Foster, Pell W. and E. H.) | | | | | | |
| Foster, Ernest H., New York, N. Y. Valve | 724,000 | Mar. 31 | 4399 | 988 | 103 | 982 |
| Foster, Ernest H., New York, N. Y. Tube for superheaters | 744,323 | Nov. 17 | 3011 | 646 | 107 | 673 |
| Foster, Frank, Kansas City, Mo. Knife-sharpener | 740,840 | Oct. 6 | 860 | 192 | 106 | 1429 |
| Foster, Frank, assignor of one-half to C. R. Gardner, Columbus, Ohio. Rail-fastening for railway-ties | 719,779 | Feb. 3 | 679 | 157 | 102 | 966 |
| Foster, Frank M., *et al.* (See Anderson, Frank C., assignor.) | | | | | | |
| Foster, Frederick, *et al.* (See Westley, James, assignor.) | | | | | | |
| Foster, George B. (See McPherson and Laing, assignors.) | | | | | | |
| Foster, George D., Preston, Iowa. Corn-harvester | 736,590 | Aug. 18 | 2894 | 631<br>632 | 105 | 1634 |
| Foster, George D., Preston, Iowa. Corn-harvester | 736,591 | Aug. 18 | 2901 | 632<br>633 | 105 | 1636 |
| Foster, George S., St. Louis, and S. A. D. Stringer, St. Clair, assignors to Ore Reduction and Smelting Company, St. Louis, Mo. Metal-extracting and ore-lixiviating apparatus. | 735,960 | Aug. 11 | 1761 | 377 | 105 | 1375 |
| Foster, George W., *et al.* (See Woolley, Theodore W., assignor.) | | | | | | |
| Foster, George W., Westfield, Mass. Thread-winding machine | 747,404 | Dec. 22 | 3867 | 870<br>871 | 107 | 2002 |
| Foster, George W., Pawtucket, R. I. Cone-arbor | 747,406 | Dec. 22 | 3871 | 871 | 107 | 2003 |
| Foster, Henry S. (See Tichon and Foster.) | | | | | | |
| Foster, Jacob, Altoona, Pa. Sash-balance | 733,953 | July 21 | 2284 | 537 | 105 | 516 |
| Foster, James D., Chattanooga, Tenn. Permutation-lock | 743,850 | Nov. 10 | 2055 | 437 | 107 | 454 |
| Foster, James H., Tuskaloosa, Ala. School desk and seat attachment | 726,153 | Apr. 21 | 3167 | 717 | 103 | 1870 |
| Foster, James M. (See Foster, Ephraim J. and J. M.) | | | | | | |
| Foster, John, Rochester, N. Y. Cattle-stanchion | 734,532 | July 28 | 3396 | 793 | 105 | 767 |
| Foster, John C., assignor of one-half to T. C. Whitney, Cleveland, Ohio. Nut-lock | 728,560 | May 19 | 3288 | 728 | 104 | 735 |
| Foster, John C., assignor of two-thirds to L. A. Bartlett, Cleveland, Ohio. Latch | 742,782 | Oct. 27 | 4572 | 1036 | 106 | 2261 |
| Foster, John H., Fall River, Mass. Weft-fork | 724,563 | Apr. 7 | 264 | 64 | 103 | 1226 |
| Foster, Julian A., Salem, Wis. Wire-stretcher | 721,946 | Mar. 3 | 552 | 121 | 103 | 121 |
| Foster, Lucian M., Boston, Mass., assignor to United States Construction and Engine Company. Explosion-engine | 727,777 | May 12 | 1821 | 407 | 104 | 407 |
| Foster Machine Company. (See McKean, John O., assignor.) | | | | | | |
| Foster, Pell W. and E. H., New York, N. Y. Hydraulic ram | 724,001 | Mar. 31 | 4400 | 989 | 103 | 982 |
| Foster, Richard, Newcastle, Pa. Rotary engine | 732,404 | June 30 | 5379 | 1191<br>1192 | 104 | 2309 |
| Foster, Thomas J. (See Nelson, Stewart, and Foster.) | | | | | | |
| Foster, Wilbert T. (See Boone and Staples, assignors.) | | | | | | |
| Foster, William J., Darlaston, England. Introducing carbon, fluxes, &c., into blast-furnaces | 719,320 | Jan. 27 | 3424 | 764 | 102 | 770 |
| Foster, William S., Utica, N. Y. Corner-fastener for bedsteads | 725,330 | Apr. 14 | 1689 | 381 | 103 | 1543 |
| Foster, William S., assignor to Racine Machinery Manufacturing Company, Racine, Wis. Dipping-machine | 725,064 | Apr. 14 | 1195 | 271 | 103 | 1440 |
| Fouché, Edmond, Paris, France, assignor to E. C. Benedict, J. S. Seymour, and E. Bournonville, New York, N. Y. Apparatus for storage of gases | 727,609 | May 12 | 1466 | 328 | 104 | 333 |
| Fougeirol, Edouard, Ollières, France. High-speed reel for silk | 731,765 | June 23 | 4136 | 923 | 104 | 2033 |
| Fouillaron, Gustave, Cholet, France. Driving-band | 720,340 | Feb. 10 | 1718 | 390 | 102 | 1202 |
| Foulds, Andrew, Passaic, N. J. Form for gloves | 726,666 | Apr. 28 | 4186 | 945 | 105 | 2089 |
| Foulis, David, Berlin, assignor to Firm of Biernatzki & Co., Hamburg, Germany. Goal. | 718,924 | Jan. 20 | 2663 | 597 | 102 | 595 |
| Fountain City Drill Company. (See Marsh, Frank E., assignor.) | | | | | | |
| Fountain Comb & Novelty Company. (See Harrison, Julian R., assignor.) | | | | | | |
| Fountain, Frank, Charlevoix, Mich. Trap-door lifter | 739,301 | Sept. 22 | 3426 | 763 | 106 | 780 |
| Fourneaux, Emile A., New York, assignor to H. A. Metz, Brooklyn, N. Y. Blue basic dye and making same | 726,667 | Apr. 28 | 4187 | ..... | 103 | 2090 |
| Fourneaux, Emile A., New York, assignor to H. A. Metz, Brooklyn, N. Y. Azo dye and making same | 728,388 | May 19 | 2956 | ..... | 104 | 667 |
| Fourneaux, Emile A., New York, assignor to H. A. Metz, Brooklyn, N. Y. Azo dye and making same | 728,455 | May 19 | 3082 | ..... | 104 | 693 |
| Fourneaux, Emile A., assignor to H. A. Metz, New York, N. Y. Dyeing brown | 739,071 | Sept. 15 | 2996 | ..... | 106 | 674 |
| Fournier, Charles, Geneva, Switzerland. Apparatus for the electrolytic decomposition of alkali chlorids | 734,312 | July 21 | 3002 | 707 | 105 | 668 |
| Fournier, Eugène, Paris, France. Disinfecting apparatus | 722,503 | Mar. 10 | 1591 | 351 | 103 | 358 |
| Fournier, Eugène, Paris, France. Disinfecting apparatus | 728,220 | May 19 | 2627 | 586<br>587 | 104 | 598 |
| Fournier, Eugène, Paris, France. Disinfecting apparatus | 728,221 | May 19 | 2629 | 587 | 104 | 598 |
| Fournival et Lacaille, A. (See Ivon, Alexandre, assignor.) | | | | | | |
| Foust, William W., Barnegat, N. J. Fishing-cork | 735,235 | Aug. 4 | 390 | 76 | 105 | 1064 |
| Fouts, Clarence L., Eureka, Cal. Steam-engine | 734,533 | July 28 | 3397 | 793 | 105 | 767 |
| Fouts, George H. (See Reynolds, William C., assignor.) | | | | | | |
| Fowler, Alfred B., Central Falls, R. I. Shoe-sewing machine | 718,199 | Jan. 13 | 1262 | 277<br>278 | 102 | 288 |
| Fowler, Benjamin F., assignor of three-eighths to E. W. Bingenheimer, Minneapolis, and J. Aspden, Excelsior, Minn. Lamp-burner | 735,236 | Aug. 4 | 391 | 76 | 105 | 1064 |
| Fowler, Charles A., assignor of one-half to J. C. Fowler, Philadelphia, Pa. Game apparatus | 722,359 | Mar. 10 | 1305 | 290 | 103 | 294 |
| Fowler, Charles E., Seattle, Wash. Spud or vertical anchor | 724,386 | Mar. 31 | 5175 | 1160 | 103 | 1139 |
| Fowler, Charles E., Seattle, Wash. Pipe-line valve | 736,513 | Aug. 18 | 2760 | 603<br>604 | 105 | 1608 |
| Fowler, Edwin H., and D. N. Hoover, Washington, D. C. Paper and making same | 748,179 | Dec. 29 | 5353 | ..... | 107 | 2354 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | Spec. | Dr'g. | Vol. | Page. |
| Fowler, George L., New York, N. Y., assignor to Central Electric Construction Company. Electric railway | 720,684 | Feb. 17 | 2381 | 545 | 102 | 1353 |
| Fowler, Herman H., Oakland, Cal. Marine propulsion | 736,951 | Aug. 25 | 3605 | 799 | 105 | 1802 |
| Fowler, Hervey W., Chicago, Ill. Side bearing for railway-car trucks | 735,743 | Aug. 11 | 1358 | 292<br>293 | 105 | 1288 |
| Fowler, John C. (See Fowler, Charles A., assignor.) | | | | | | |
| Fowler, John H., Huntingdon, Pa. Rail-joint | 725,833 | Apr. 21 | 2632 | 599 | 103 | 1758 |
| Fowler, John H., assignor of one-half to J. H. Waddle, Somerset, Ky. Car-replacer | 724,277 | Mar. 31 | 4957 | 1109 | 103 | 1092 |
| Fowler, John W., Brooklyn, N. Y. Fare-register | 723,377 | Mar. 24 | 3226 | 723<br>724 | 103 | 721 |
| Fowler, Jonathan O., Jr., New York, N. Y. Bridle-bit and horse-controlling device | 739,163 | Sept. 15 | 3166 | 700 | 106 | 708 |
| Fowler Nail Co. (See Weaver, Lloyd, assignor.) | | | | | | |
| Fowler, Robert H., and G. S. Tuer, Leeds, England. Road-locomotive | 743,851 | Nov. 10 | 2057 | 437 | 107 | 454 |
| Fowler, Samuel B., Morristown, N. J. Telephone system | 721,882 | Mar. 3 | 415 | 91 | 103 | 91 |
| Fowler, Walter B., Lawrence, Mass. Tool-holding device | 729,319 | May 26 | 4664 | 1031 | 104 | 1038 |
| Fowler, William A., Salisbury, N. C., assignor to Draper Company, Portland, Me. Protective mechanism for looms | 744,324 | Nov. 17 | 3012 | 646 | 107 | 673 |
| Fowler, William A., Salisbury, N. C., assignor to Draper Company, Hopedale, Mass. Filling stop-motion for looms | 746,058 | Dec. 8 | 1375 | 307 | 107 | 1410 |
| Fox, Adam H., Wissahickon, Pa. Manufacture of bolts or rivets | 744,183 | Nov. 17 | 2760 | 587 | 107 | 617 |
| Fox, Albert T., Duluth, Minn. Feed-water heater for locomotives | 718,200 | Jan. 13 | 1270 | 278 | 102 | 288 |
| Fox, Albert T., Duluth, Minn. Car-ventilator | 721,556 | Feb. 24 | 4012 | 912 | 102 | 1716 |
| Fox, Benjamin C., Chester, Pa. Cap for type-writer keys | 722,006 | Mar. 3 | 660 | 146 | 103 | 143 |
| Fox, Benjamin O., Milwaukee, Wis. Combined telephone, signal, burglar, and fire alarm | 724,093 | Mar. 31 | 4563 | 1027 | 103 | 1015 |
| Fox, Benjamin O., Milwaukee, Wis. Telephone | 733,021 | July 7 | 565 | 137 | 105 | 121 |
| Fox, Charles, and J. A. Waters, Stamford, Conn. Automatic shut-off for gas or oil | 726,522 | Apr. 28 | 3918 | 886 | 103 | 2036 |
| Fox, Charles H., Cincinnati, Ohio. Steam-generator | 724,564 | Apr. 7 | 265 | 64 | 103 | 1226 |
| Fox, Charles H., assignor to Stanley Rule & Level Company, New Britain, Conn. Plane | 735,744 | Aug. 11 | 1360 | 293 | 105 | 1288 |
| Fox, Charles J., Leavenworth, Kans. Wire-stretcher | 726,668 | Apr. 28 | 4188 | 945 | 103 | 2090 |
| Fox, Edward, Brooklyn, N. Y., assignor of one-half to W. Logan, Arlington, N. J. Screw-propeller | 736,952 | Aug. 25 | 3607 | 799 | 105 | 1803 |
| Fox, Edward P., Lake Arthur, La. Well-tube | 726,418 | Apr. 28 | 3688 | 836 | 103 | 1992 |
| Fox, Ernest C. (See Sanborn and Fox.) | | | | | | |
| Fox, Frank A. (See Graham and Fox.) | | | | | | |
| Fox, George A. (See Guese, William E., assignor.) | | | | | | |
| Fox, Harry J., trustee. (See Roberts, John G., assignor.) | | | | | | |
| Fox, Harvey R., Cut Bank, Mont. Horseshoe-calk | 741,783 | Oct. 20 | 2690 | 599 | 106 | 1854 |
| Fox, Helen M., Cambridgeport, assignor of one-half to W. Campbell, Cambridge, Mass. Skirt-supporter | 725,434 | Apr. 14 | 1876 | 419 | 103 | 1582 |
| Fox, Henry J., Denver, Colo. Secret-ballot box | 742,783 | Oct. 27 | 4573 | 1036<br>1037 | 106 | 2261 |
| Fox, Herbert W. (See Hawkins and Fox.) | | | | | | |
| Fox, Ivan, Lansdowne, Pa. Spectacle or eyeglass mounting | 729,152 | May 26 | 4367 | 964 | 104 | 975 |
| Fox, Ivan, Lansdowne, Pa. Bow-spring for eyeglasses | 730,450 | June 9 | 1695 | 380 | 104 | 1490 |
| Fox, James R., Chicago, Ill. Automatic delivery device for platens of printing-presses | 742,980 | Nov. 3 | 280 | 63 | 107 | 61 |
| Fox, James S., Jackson, Mich. Trolley system for electric railways | 719,452 | Feb. 3 | 71 | 16, 17 | 102 | 840 |
| Fox, James S., Jackson, Mich. Railway-rail | 719,453 | Feb. 3 | 73 | 17 | 102 | 841 |
| Fox, John A., Covington, Ind. Ditching-machine | 726,041 | Apr. 21 | 2981 | 677<br>678 | 103 | 1831 |
| Fox, John H., New York, N. Y. Muffler cooking attachment | 748,493 | Dec. 29 | 5918 | 1344 | 107 | 2478 |
| Fox, John P., Audubon, Pa. Check-row corn-planter | 722,966 | Mar. 17 | 2442 | 546<br>547 | 103 | 549 |
| Fox, Joseph M., Peekskill, N. Y. Roll-paper printer | 720,910 | Feb. 17 | 2768 | 636 | 102 | 1436 |
| Fox Machine Company. (See Fox and Barrett, assignors.) | | | | | | |
| Fox, Nat, assignor of two-thirds to L. S. and C. A. Little, Springfield, Ohio. Friction-clutch | 745,959 | Dec. 1 | 1189 | 266 | 107 | 1353 |
| Fox, Ralph and R. W., Parkersburg, W. Va. Trolley-wheel | 735,237 | Aug. 4 | 393 | 76 | 105 | 1064 |
| Fox, Richard W. (See Fox, Ralph and R. W.) | | | | | | |
| Fox, Richard W., assignor of one-half to W. E. Dilling, Altoona, Pa. Draw-bar rigging | 725,550 | Apr. 14 | 2098 | 475 | 103 | 1629 |
| Fox River Valley Knitting Company. (See Steinborg, John, assignor.) | | | | | | |
| Fox, William H., Gilroy, Cal. Combination adjustable plow and cultivator | 732,626 | June 30 | 5803 | 1287 | 104 | 2400 |
| Fox, William R., and G. J. Barrett, assignors to Fox Machine Company, Grand Rapids, Mich. Escapement mechanism for type-writers | 727,340 | May 5 | 969 | 211 | 104 | 209 |
| Fox, William T., Rochester, N. Y. Tubular boiler | 738,311 | Sept. 8 | 1568 | 339 | 106 | 353 |
| Fox, William T., assignor to Rochester Steam Motor Works, Rochester, N. Y. Engine | 743,478 | Nov. 10 | 1371 | 281<br>282 | 107 | 308 |
| Foxenberger, Frederick T. (See Bossert and Foxenberger.) | | | | | | |
| Foy, Alphonse L., Brooklyn, N. Y. Curtain-fixture | 748,180 | Dec. 29 | 5855 | 1216<br>1217 | 107 | 2354 |
| Foy, Edward E., *et al.* (See Cartin, Ransom G., assignor.) | | | | | | |
| Foy, James E., Troy, N. Y. Valve for paper-machine vats | 733,022 | July 7 | 566 | 138 | 105 | 121 |
| Foy, John E., *et al.* (See Cartin, Ransom G., assignor.) | | | | | | |
| Foye, George F., *et al.* (See Buckingham, Albert E., assignor.) | | | | | | |
| Fraim, Edward T., Lancaster, Pa. Padlock | 746,945 | Dec. 15 | 3010 | 691 | 107 | 1793 |
| Fraley, Gassner F., New York, N. Y., assignor to P. H. Bettman, Chicago, Ill. Air-check for photographic shutters | 729,056 | May 26 | 4204 | 929 | 104 | 942 |
| Fraley, Gassner F., New York, N. Y., assignor to P. H. Bettman, Chicago, Ill. Photographic-printing frame | 731,102 | June 16 | 2884 | 640 | 104 | 1763 |
| Fraley, Gassner F., New York, N. Y., assignor to P. H. Bettman, Chicago, Ill. Photographic curtain-shutter | 734,692 | July 28 | 3682 | 863 | 105 | 826 |
| Fraley, Gassner F., New York, N. Y., assignor to P. H. Bettman, Chicago, Ill. Photographic-plate-developing machine | 734,693 | July 28 | 3685 | 863<br>864 | 105 | 826 |
| Fraley, George B., assignor to E. S. Galbraith, Philadelphia, Pa. Apparatus for producing motive power from liquid gas | 724,278 | Mar. 31 | 4958 | 1109 | 103 | 1093 |
| Fraley, George B., assignor to E. S. Galbraith, Philadelphia, Pa. Motor | 740,117 | Sept. 29 | 4957 | 1112<br>1113 | 106 | 1127 |
| Fraley, George B., assignor to E. S. Galbraith, Philadelphia, Pa. Piston-packing | 742,784 | Oct. 27 | 4575 | 1037 | 106 | 2261 |
| Fraley, Joseph C., Philadelphia, Pa. Developing and utilizing fluid-pressure | 745,589 | Dec. 1 | 508 | 119<br>120 | 107 | 1205 |
| Fraley, Joseph C., Philadelphia, Pa. Developing and utilizing fluid-pressure | 746,318 | Dec. 8 | 1849 | 421 | 107 | 1514 |
| Fraley, Joseph C., Philadelphia, Pa. Apparatus for developing and utilizing fluid-pressure | 746,488 | Dec. 8 | 2134 | 490<br>491 | 107 | 1575 |
| Frame, Thomas A., Carlisle, England. Ventilator | 732,290 | June 30 | 5161 | 1146 | 104 | 2262 |
| Frampton, George M., Pendleton, Ind. Catch-pulley for curtain-cords | 718,447 | Jan. 13 | 1725 | 384 | 102 | 383 |
| Franc, Jacques, assignor of one-half to G. A. Swerdfiger, Pasadena, Cal. Check-book | 735,081 | Aug. 4 | 57 | 16 | 105 | 994 |

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| France, David, assignor of one-half to Ole Olson, Hawley, Minn. Safe | 733,712 | July 14 | 1796 | 425, 426 | 105 | 396 |
| France, Frederick W. (See Bartlett, Henry E., assignor.) | | | | | | |
| France, Frederick W. (See Eiseman, Moses H., assignor.) | | | | | | |
| France, James E., Watervalley, Miss. Hand-power hay-press | 737,729 | Sept. 1 | 319 | 67 | 106 | 72 |
| France, James E., and W. Tatum, Watervalley, Miss. Hay-press | 731,353 | June 16 | 3339 | 745, 746 | 104 | 1853 |
| Francfort, Alfred H., Grandview-on-Hudson, N. Y., assignor to J. B. Colt Company. Acetylene-gas generator | 746,811 | Dec. 15 | 2728 | 629 | 107 | 1730 |
| Francies, Harvey H. (See Burgum, William C., assignor.) | | | | | | |
| Francis, Allan E., Cleveland, Ohio. Monogram-type for engraving-machines | 735,358 | Aug. 4 | 602 | 124 | 105 | 1110 |
| Francis, Allan E., Cleveland, Ohio. Tool-holder for engraving-machines | 739,537 | Sept. 22 | 3852 | 862 | 106 | 873 |
| Francis, Allan E., Cleveland, Ohio. Cipher-type for engraving-machines | 742,180 | Oct. 27 | 3495 | 780 | 106 | 2033 |
| Francis, Arthur. (See Jones and Francis.) | | | | | | |
| Francis Eyre Company. (See Pearse and Ievers, assignors.) | | | | | | |
| Francis, Frederic W., London, England. Switching apparatus for telephonic or other switchboards | 745,341 | Dec. 1 | 43 | 10 | 107 | 1109 |
| Francis, John C. (See Liebreich and Francis.) | | | | | | |
| Francis, Joseph A., Norwood, South Australia, Australia. Fly or insect trap | 742,304 | Oct. 27 | 3742 | 837 | 106 | 2085 |
| Francis, William H., Wilmington, Del. Clamp for pages of type | 719,321 | Jan. 27 | 3425 | 764 | 102 | 770 |
| Francis, William H., assignor of one-third to J. F. Grant, Washington, D. C. Binder-frame for type-pages | 734,166 | July 21 | 2709 | 638 | 105 | 607 |
| Francisco, Israel H., Rutland, Vt. Block-signal system | 743,852 | Nov. 10 | 2058 | 437, 438 | 107 | 454 |
| Francisco, Mary E., and J. F. Martin, San Diego, Cal. Exhibiting-box | 739,662 | Sept. 22 | 4098 | 913 | 106 | 925 |
| Franck, Carl, Reinbeck, Germany. Furniture-fixture | 735,961 | Aug. 11 | 1763 | 378 | 105 | 1376 |
| Francke, Oskar, Mühlhausen, assignor to M. Heberlein, Eisenach, Germany. Preparing fuel composition | 729,321 | May 26 | 4667 | ------ | 104 | 1038 |
| Francke, William J., New Brunswick, N. J. Rotary cut-off valve | 726,419 | Apr. 28 | 3689 | 836, 837 | 103 | 1993 |
| Francke, William J., assignor to Brunswick Refrigerating Company, New Brunswick, N. J. Compressor | 719,454 | Feb. 3 | 74 | 18 | 102 | 841 |
| François, Felix, St. Etienne, France. Movable sluice-box | 747,692 | Dec. 22 | 4384 | 989 | 107 | 2118 |
| François, Nicolas, Jemeppe-sur-Meuse, Belgium. Steam-engine | 729,567 | June 2 | 84 | 21 | 104 | 1145 |
| Frank, Adolph, Charlottenburg, Germany. Process of cementation | 718,335 | Jan. 13 | 1520 | ------ | 102 | 342 |
| Frank, Albert, Charlottenburg, and H. Freudenberg, Frankfort-on-the-Main, Germany, assignors to Cyanid-Gesellschaft, M. B. H. Fertilizer | 724,565 | Apr. 7 | 267 | ------ | 103 | 1226 |
| Frank, David, *et al.* (See Brand, George, assignor.) | | | | | | |
| Frank, David, Brooklyn, assignor of one-half to J. Trounstine, New York, N. Y. Couch-bed | 729,320 | May 26 | 4665 | 1031 | 104 | 1038 |
| Frank & Dugan. (See Benz, Frederick, Jr., assignor.) | | | | | | |
| Frank & Dugan. (See Frank and Benz, assignors.) | | | | | | |
| Frank, Emil, New York, N. Y. Dinner-pail | 723,854 | Mar. 31 | 4087 | 922 | 103 | 917 |
| Frank, Emil, assignor to Frank Tea & Spice Company, Cincinnati, Ohio. Combined shelf-guard and advertising medium | 738,788 | Sept. 15 | 2501 | 550 | 106 | 568 |
| Frank, Harry S., Providence, R. I. Wool-washing machine | 735,359 | Aug. 4 | 603 | 124 | 105 | 1110 |
| Frank, Henry, New York, N. Y. Game-board | 734,313 | July 21 | 3006 | 707 | 105 | 669 |
| Frank, Henry C., New York, N. Y. Clasp | 731,103 | June 16 | 2886 | 640 | 104 | 1763 |
| Frank, Isaac, Turtle Creek, Minn. Attachment for hames | 727,587 | May 5 | 1322 | 295 | 104 | 285 |
| Frank, Isaac, and J. Hutchinson, New York, N. Y.; said Hutchinson assignor to said Frank. Guarding apparatus for vehicles or movable structures | 734,227 | July 21 | 2821 | 662, 663 | 105 | 630 |
| Frank, John H. (See King and Frank.) | | | | | | |
| Frank, John J., Schenectady, N. Y., assignor to General Electric Company. Alternating-current transformer | 729,748 | June 2 | 410 | 93 | 104 | 1212 |
| Frank, Joseph, New York, N. Y., and F. Benz, Jr., Haledon, assignors to Frank & Dugan, Paterson, N. J. Loom shuttle-motion | 748,273 | Dec. 29 | 5523 | 1258 | 107 | 2391 |
| Frank, Joseph, New York, N. Y., and F. Benz, Jr., Haledon, assignors to Frank & Dugan, Paterson, N. J. Web supporting or guiding means for narrow-ware looms | 748,274 | Dec. 29 | 5524 | 1259 | 107 | 2392 |
| Frank & Lambert. (See Loomis, Harry T., assignor.) | | | | | | |
| Frank, Lee. (See Shearer and Frank.) | | | | | | |
| Frank, Morris, *et al.* (See Loomis, Harry T., assignor.) | | | | | | |
| Frank, Samuel. (See Goldstein, Albert, assignor.) | | | | | | |
| Frank Tea & Spice Company. (See Frank, Emil, assignor.) | | | | | | |
| Franke, Gottlieb K. F., New York, N. Y. Sash-light securer | 733,830 | July 14 | 2040 | 480 | 105 | 446 |
| Franke, Paul R., Leipzig, Germany. Machine for making pralines | 725,065 | Apr. 14 | 1197 | 272 | 103 | 1440 |
| Franke, Paul R., Leipzig-Plagwitz, Germany. Machine for molding blocks or tablets of chocolate | 725,237 | Apr. 14 | 1528 | 347 | 103 | 1508 |
| Frankel, Harry, New York, N. Y. Universal mark and display-stand | 721,791 | Mar. 3 | 246 | 54 | 103 | 55 |
| Franken, Isak, Frankfort-on-the-Main, Germany. Collapsible protecting device for closet-seats | 747,960 | Dec. 29 | 4923 | 1114 | 107 | 2260 |
| Frankenberg, Carl V. and M. R., Jacksonville, Ill. Skirt | 734,842 | July 28 | 4001 | 934 | 105 | 890 |
| Frankenberg, Frederick G., and A. P. Miller, assignors to Flexible Armored Hose Company, Chicago, Ill. Hose-coupling | 728,696 | May 19 | 3540 | 787 | 104 | 791 |
| Frankenberg, Herman, New York, N. Y. Thermometer | 744,325 | Nov. 17 | 3013 | 646 | 107 | 673 |
| Frankenberg, Mary R. (See Frankenberg, Carl V. and M. R.) | | | | | | |
| Frankenberg, Solomon. (See Katz and Romme, assignors.) | | | | | | |
| Frankenfield, Budd. (See Burgess and Frankenfield.) | | | | | | |
| Frankenstein, Arthur, New York, N. Y. Garment-supporter | 743,630 | Nov. 10 | 1672 | 351 | 107 | 373 |
| Frankinson, Cline D., Meridian, Miss. Candy-pulling machine | 748,060 | Dec. 29 | 5133 | 1161 | 107 | 2307 |
| Franklin, Anthony V. (See Masterson and Franklin.) | | | | | | |
| Franklin, Arthur W. (See Morden, Robert B., assignor.) | | | | | | |
| Franklin, C. L. (See Robertson, Chastine C., assignor.) | | | | | | |
| Franklin, Daniel D., New York, N. Y. Fixing compound liquids | 747,600 | Dec. 22 | 4209 | 947 | 107 | 2079 |
| Franklin, De Witt C., Maysville, Ky. Dental mouth-mirror attachment | 726,895 | May 5 | 119 | 28 | 104 | 28 |
| Franklin, Edward A., Austin, Tex. Churn-dasher | 743,479 | Nov. 10 | 1376 | 282 | 107 | 309 |
| Franklin, Herbert H., Syracuse, N. Y. Casting | 748,061 | Dec. 29 | 5134 | 1161 | 107 | 2307 |
| Franklin Mfg. Co. (See Evans, Richard J., assignor.) | | | | | | |
| Franklin, William S., South Bethlehem, assignor of one-half to F. Conlin, Bethlehem, Pa. Electric furnace | 742,852 | Nov. 3 | 60 | 14, 15 | 107 | 15 |
| Franks, Joseph P., Wainwright, Ga. Switch-stand | 745,590 | Dec. 1 | 512 | 120 | 107 | 1206 |
| Franquist, Gustave E., New York, N. Y., assignor to J. B. Colt Company. Feeding mechanism for acetylene-gas generators | 746,812 | Dec. 15 | 2729 | 629 | 107 | 1730 |
| Frantz, Charles T., assignor of one-half to C. H. Joy, Chicago, Ill. Machinist's protractor | 744,963 | Nov. 24 | 4164 | 900 | 107 | 933 |
| Frantz, Christian, Niagara Falls, N. Y. Vise | 734,534 | July 28 | 3400 | 794 | 105 | 767 |
| Frantz, Ezra A., *et al.* (See Eddleman, Dudley E., assignor.) | | | | | | |
| Frantz, Hiram A., Cherryville, Pa. Liquid-fuel burner | 737,602 | Sept. 1 | 86 | 18 | 106 | 21 |

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| Frantz, Peter, assignor to W. M. Dillon, Sterling, Ill. Wire-fence machine | 739,846 | Sept. 29 | 4435 | 995, 996, 997, 998 | 106 | 1017 |
| Frantz, Thomas U. (See McCaulley, Eli S., assignor.) | | | | | | |
| Frantz, Willis W., Waynesboro, Pa. Shipper's type-writer | 723,855 | Mar. 31 | 4089 | 922, 923 | 103 | 917 |
| Frantzen, Arthur, and W. H. Rattenbury, Chicago, Ill. Switch-light | 723,856 | Mar. 31 | 4091 | 923 | 103 | 918 |
| Frantzius, Bernhard von, Berlin, Germany. Hat-fastener | 741,024 | Oct. 13 | 1179 | 266 | 106 | 1517 |
| Franz, John A., St. Louis, Mo. Bench | 726,042 | Apr. 21 | 2983 | 678 | 103 | 1832 |
| Franz, William, Allegheny, assignor of one-half to W. Maxwell, Pittsburg, Pa. Rivet-cutter | 718,996 | Jan. 27 | 2808 | 629 | 102 | 641 |
| Franz, William, Allegheny, assignor of one-half to W. Maxwell, Pittsburg, Pa. Circular-broom-filling machine | 737,381 | Aug. 25 | 4378 | 976 | 105 | 1966 |
| Franzén, Frans A., assignor of one-half to P. E. Fahlbeck, Lund, Sweden. Rotary engine | 726,896 | May 5 | 120 | 28, 29 | 104 | 29 |
| Franzen, John E., Newark, N. J. Placket-fastener and skirt-supporter | 718,116 | Jan. 13 | 1112 | 245, 246 | 102 | 254 |
| Franzen, Nicklas, Port Allegheny, Pa. Manufacturing wire-glass | 741,125 | Oct. 13 | 1367 | 313, 314 | 106 | 1558 |
| Franzke, Arthur, *et al.* (See Laube, Joseph M., assignor.) | | | | | | |
| Franzke, Oswold A., *et al.* (See Laube, Joseph M., assignor.) | | | | | | |
| Franzmeier, Louis, Newton, Wis. Harvester attachment | 728,561 | May 19 | 3289 | 729 | 104 | 735 |
| Frasch, Hans A., Hamilton, Canada. Recovering and separating metals from their ores | 720,235 | Feb. 10 | 1524 | 349 | 102 | 1161 |
| Fraser, Arthur C. (See Cutten and Fraser.) | | | | | | |
| Fraser, Ethelbert M., Yonkers, N. Y., assignor to Otis Elevator Company, East Orange, N. J. Traveling stairway | 746,059 | Dec. 8 | 1377 | 307, 308 | 107 | 1411 |
| Fraser, George, Topeka, Kans. Washer-manufacturing machine | 727,931 | May 12 | 2109 | 469 | 104 | 467 |
| Fraser, George H. (See Cutten and Fraser, assignors.) | | | | | | |
| Fraser, George H., Brooklyn, N. Y., and J. N. Weikly, Jersey City, N. J.; said Weikly assignor to said Fraser. Equalizing-discharge brake-valve | 729,153 | May 26 | 4370 | 964 | 104 | 975 |
| Fraser, Ira E. (See Evans and Fraser.) | | | | | | |
| Fraser, John, California, Pa. Metallic tie and rail-fastener | 731,766 | June 23 | 4139 | 923 | 104 | 2033 |
| Fraser, Peter, assignor to J. Sinclair, New York, N. Y. Safety kerosene-oil lamp or heater | 724,840 | Apr. 7 | 792 | 183 | 103 | 1339 |
| Fraser, Robert G., New York, N. Y. Cigar-protector | 724,689 | Apr. 7 | 506 | 120 | 103 | 1277 |
| Fraser, Robert H., Boston, Mass. Feed-water heater | 740,841 | Oct. 6 | 860 | 192 | 106 | 1430 |
| Fraser, William, Dobbs Ferry, N. Y. Vehicle wheel-brake | 719,578 | Feb. 3 | 307 | 71 | 102 | 886 |
| Fraser, William, New London, Conn. Electric signaling device | 723,259 | Mar. 24 | 2987 | 672 | 103 | 676 |
| Frauenfelder, Lena R. E., executrix. (See Frauenfelder, Paul G.) | | | | | | |
| Frauenfelder, Paul G., New York, N. Y., assignor to American Lithographic Company. Multicolor-printing | 745,174 | Nov. 24 | 4616 | | 107 | 1027 |
| Frauenfelder, Paul G., deceased, New York, N. Y.; L. R. E. Frauenfelder, executrix. Making photographic images | 747,961 | Dec. 29 | 4924 | 1114 | 107 | 2261 |
| Frauenheim, Joseph A., *et al.* (See Averill, George F., assignor.) | | | | | | |
| Frawley, Daniel M. (See Adams, Joseph W., assignor.) | | | | | | |
| Frayer, Lee A., assignor to Columbus Machine Co., Columbus, Ohio. Speed-regulator for explosive-engines | 720,126 | Feb. 10 | 1326 | 303, 304 | 102 | 1122 |
| Frazee, Frank D., assignor of one-half to L. A. Daus, Evansville, Ind. Combined roller and swinging awning-frame | 743,706 | Nov. 10 | 1792 | 378 | 107 | 399 |
| Frazer, Anne E. W., Washington, D. C. Amusement-railway | 738,022 | Sept. 1 | 931 | 206 | 106 | 204 |
| Frazer, William G., *et al.* (See Stone, Harry W., assignor.) | | | | | | |
| Frazier, George W., Allegheny, Pa. Electrolytic water-purifier | 741,322 | Oct. 13 | 1763 | 393 | 106 | 1639 |
| Frazier, Schuyler, Argentine, Kans. Connecting device for shafts and arms | 747,405 | Dec. 22 | 3870 | 871 | 107 | 2002 |
| Frazier, William A., Clarinda, Iowa. Truck | 726,420 | Apr. 28 | 3692 | 837 | 103 | 1993 |
| Frechette, Hermine. (See Frechette, Leopold, assignor.) | | | | | | |
| Frechette, Leopold, assignor to H. Frechette, Holyoke, Mass. Mechanical instrument | 734,694 | July 28 | 3686 | 864 | 105 | 827 |
| Fred H. Knapp Company. (See Knapp and Blackstone, assignors.) | | | | | | |
| Fred M. Prescott Steam Pump Company. (See Worden, Euclid P., assignor.) | | | | | | |
| Fred Macey Company. (See Barrett, Glenn J., assignor.) | | | | | | |
| Fred Macey Company. (See Macey, Frank, assignor.) | | | | | | |
| Fredenburgh, George A., Pawtucket, R. I. Sizing | 728,697 | May 19 | 3542 | | 104 | 791 |
| Fredenburgh, George A., Pawtucket, R. I. Twisting-head for thread-dressing machines | 731,883 | June 23 | 4344 | 969 | 104 | 2081 |
| Fredenburgh, George A., Pawtucket, R. I. Thread-dressing machine | 735,745 | Aug. 11 | 1361 | 293 | 105 | 1288 |
| Fredenburgh, George A., Pawtucket, R. I. Tension-regulating device for thread-dressing machines | 739,663 | Sept. 22 | 4099 | 913 | 106 | 926 |
| Fredenburgh, George A., Pawtucket, R. I. Spindle-driving device for thread-dressing machines | 741,323 | Oct. 13 | 1765 | 393 | 106 | 1640 |
| Fredenburgh, George A., Pawtucket, R. I. Twisting-head for thread-dressing machines. | 743,707 | Nov. 10 | 1794 | 379 | 107 | 399 |
| Fredenburgh, George A., Pawtucket, R. I. Brush-cylinder for thread-dressing machines. | 746,946 | Dec. 15 | 3012 | 692 | 107 | 1794 |
| Frederick, Alonzo D. (See Frederick, John C. and A. D.) | | | | | | |
| Frederick, Alonzo D., Marshalltown, Iowa. Cream-separator and churn | 733,545 | July 14 | 1513 | 361 | 105 | 337 |
| Frederick, Edwin E. (See Adams and Frederick.) | | | | | | |
| Frederick, Edwin E., Avalon, Pa. Gas-stove | 725,834 | Apr. 21 | 2633 | 600 | 103 | 1759 |
| Frederick, Edwin E., Avalon, assignor of one-fourth to F. B. Elder, Bellevue, Pa. Gas-regulating means | 733,954 | July 21 | 2285 | 538 | 105 | 516 |
| Frederick, Elmer E., Easton, Pa. Trolley | 739,164 | Sept. 15 | 3168 | 700 | 106 | 709 |
| Frederick, Jeremiah G., Stoker, Tex. Churn | 734,535 | July 28 | 3401 | 794 | 105 | 768 |
| Frederick, John C. and A. D., Sioux Falls, S. D. Tubular cream-separator | 727,121 | May 5 | 575 | 124 | 104 | 125 |
| Frederick, Julien V., Marshallville, Ga. Stove-grate | 737,382 | Aug. 25 | 4380 | 977 | 105 | 1966 |
| Frederick, Julien V., Marshallville, Ga. Feed-cutter | 738,535 | Sept. 8 | 1998 | 435 | 106 | 444 |
| Frederick Rumpf's Sons. (See Rumpf, William, assignor.) | | | | | | |
| Frederick Stearns & Company. (See Lorgion, Charles C., assignor.) | | | | | | |
| Fredericks, Frank E., Bays, Ohio. Stuffing-box | 732,291 | June 30 | 5162 | 1146 | 104 | 2263 |
| Frederickson, Charles R. (See Chesney, Oliver M., assignor.) | | | | | | |
| Frederiksen, Anton, Copenhagen, Denmark. Check-controlled lock | 735,082 | Aug. 4 | 59 | 16 | 105 | 994 |
| Frederiksen, Anton, Copenhagen, Denmark. Bottle-stopper | 745,175 | Nov. 24 | 4617 | 1001 | 107 | 1027 |
| Fredrikson, Andrew J., Smalands, Taberg, Sweden, assignor to London Wax Vesta Company, Limited, London, England. Wax match | 741,025 | Oct. 13 | 1180 | 267 | 106 | 1518 |
| Fredson, Axel W., Everett, Mass. Tide-motor | 739,538 | Sept. 22 | 3852 | 863 | 106 | 873 |
| Free, William T., Chattanooga, Tenn. Acetylene-gas burner | 740,750 | Oct. 6 | 677 | 154 | 106 | 1392 |
| Freeburg, Frank M., assignor of one-half to R. H. MacClernan, Philadelphia, Pa. Fifth-wheel | 726,043 | Apr. 21 | 2984 | 678 | 103 | 1832 |
| Freed, Frank F., Fishersville, Va. Manure-spreader | 744,184 | Nov. 17 | 2761 | 588 | 107 | 617 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| Freed, Hoover W., and A. S. Clegg, Yeagertown, Pa. Motor-cycle frame | 739,664 | Sept. 22 | 4100 | 914 | 106 | 926 |
| Freeman, Albert A., Philadelphia, Pa., assignor to Standard Automatic Lubricator Company. Automatic lubricator | 733,382 | July 14 | 1235 | 292 | 105 | 277 |
| Freeman, Alfred H., Mount Vernon, N. Y. Cameo glass | 727,932 | May 12 | 2110 | 470 | 104 | 468 |
| Freeman, Alfred H., Catasauqua, Pa. Automatic air-brake-operating device | 737,092 | Aug. 25 | 3842 | 854 | 105 | 1851 |
| Freeman, Alonzo O., Ionia, Mich. Hand-sprayer | 731,033 | June 16 | 2755 | 614 | 104 | 1736 |
| Freeman, August, Newhall, Iowa. Hose-coupling | 734,414 | July 21 | 3170 | 744 | 105 | 703 |
| Freeman, Charles. (See Kiefer and Freeman.) | | | | | | |
| Freeman, Chester M., Baltimore, Md. Dental tool | 745,722 | Dec. 1 | 731 | 167 | 107 | 1254 |
| Freeman, Clarence E., assignor to M. C. Krueger and McGuire Manufacturing Company, Chicago, Ill. Automatic release device for rheostats and heaters | 723,261 | Mar. 24 | 2990 | 673 | 103 | 676 |
| Freeman, H. (See Lohmann, August, assignor.) | | | | | | |
| Freeman, Isaac S., Lykens, Wis. Traction-carriage | 726,897 | May 5 | 123 | 29,30 | 104 | 29 |
| Freeman, Merrill P., *et al.* (See Kemp, William, assignor.) | | | | | | |
| Freeman, Nicholas A., assignor of one-half to B. L. Eddy, Tillamook, Oreg. Plow | 725,835 | Apr. 21 | 2635 | 600 | 103 | 1759 |
| Freeman, Sarah S., Lincoln, Nebr. Dressmaker's ruler | 722,221 | Mar. 10 | 1057 | 232 | 103 | 241 |
| Freeman, Stuart E., St. Louis, Mo. Motor-vehicle | 748,275 | Dec. 29 | 5525 | 1259<br>1260 | 107 | 2392 |
| Freeman, William, assignor to Harris Suspender Company, New York, N. Y. Combined suspenders and belt | 740,265 | Sept. 29 | 5231 | 1176 | 106 | 1182 |
| Freeman, William, assignor to Harris Suspender Company, New York, N. Y. Buckle | 740,266 | Sept. 29 | 5232 | 1177 | 106 | 1183 |
| Freeman, Zenas P. (See Sullivan and Freeman.) | | | | | | |
| Freeport Spring Company. (See Hoefer, Emil A., assignor.) | | | | | | |
| Freericks, Robert, Elberfeld, Germany. Artificial hair | 729,749 | June 2 | 412 | | 104 | 1212 |
| Frees, Chancy A., New York, N. Y. Artificial leg | 742,853 | Nov. 3 | 62 | 15 | 107 | 16 |
| Frees, Charles D., Hoboken, N. J. Tubing | 746,319 | Dec. 8 | 1852 | 421 | 107 | 1514 |
| Frees, Herman E., assignor to Wahl & Henius, Chicago, Ill. Brewing | 746,320 | Dec. 8 | 1853 | | 107 | 1515 |
| Frees, James H., West Milton, Ohio. Tongueless buckle | 721,947 | Mar. 3 | 554 | 121 | 103 | 122 |
| Freese, Carl J. (See Freese, Theodore D. and C. J.) | | | | | | |
| Freese, George W., Clinton, Mich. Exhibitor | 719,322 | Jan. 27 | 3426 | 764 | 102 | 770 |
| Freese, Gustav J., Odebolt, Iowa. Straw-baling machine | 736,084 | Aug. 11 | 2000 | 426 | 105 | 1428 |
| Freese, Theodore D. and C. J., Elyria, Ohio. Answering and recording telephone | 745,342 | Dec. 1 | 45 | 10 | 107 | 1110 |
| Freh, Wilhelm, Vienna, Austria-Hungary. Stick adapted for self-defense | 723,260 | Mar. 24 | 2988 | 672 | 103 | 676 |
| Frei, Zölestin, St. Louis, Mo. Railway-crossing | 719,412 | Jan. 27 | 3603 | 806 | 102 | 807 |
| Freidinger, John E., Hastings, Nebr. Knotter | 743,853 | Nov. 10 | 2062 | 438 | 107 | 455 |
| Freihofer, Charles, and F. Hanson, Philadelphia, Pa. Label-moistening machine | 727,341 | May 5 | 972 | 211 | 104 | 210 |
| Fremont, Charles, Paris, France. Apparatus for testing and measuring the strength or resistance of materials | 720,575 | Feb. 17 | 2174 | 504 | 102 | 1312 |
| French, Alfred W., Piqua, Ohio. Apparatus for packing oil-cakes | 723,455 | Mar. 24 | 3351 | 751 | 103 | 748 |
| French, Alfred W., Piqua, Ohio. Machine for trimming oil-cakes. (Reissue) | 12,118 | June 9 | 2397 | 529 | 104 | 1642 |
| French, Alfred W., Piqua, Ohio. Bag-holder | 737,730 | Sept. 1 | 321 | 67 | 106 | 73 |
| French, Arthur G., Elmira, N. Y. Nose-guard for eyeglasses | 719,780 | Feb. 3 | 680 | 157 | 102 | 967 |
| French, Carrie A., Fort Worth, Tex. Toy figure or doll | 729,750 | June 2 | 413 | 93 | 104 | 1213 |
| French, Charles S., *et al.* (See Lewinski, William, assignor.) | | | | | | |
| French, Earl B., Washington, D. C. Feed-trough for animals | 747,543 | Dec. 22 | 4111 | 923 | 107 | 2057 |
| French, Garrie S. (See Weimar and Smurr, assignors.) | | | | | | |
| French, George B., *et al.* (See Coleman, Clyde, assignor.) | | | | | | |
| French, Ira G., assignor of one-half to B. H. Lee, C. W. Collier, and C. A. Pike, Orange, Mass. Permutation-lock | 743,480 | Nov. 10 | 1377 | 282<br>283 | 107 | 309 |
| French, John E., Elkland, Pa., assignor of one-half to C. W. Kjelgaard, Keuka Park, N. Y. Combination shade and curtain bracket | 736,085 | Aug. 11 | 2002 | 426 | 105 | 1428 |
| French, Joseph, Woonsocket, R. I. Postmarking and canceling machine | 741,902 | Oct. 20 | 2895 | 646<br>647<br>648<br>649<br>650 | 106 | 1898 |
| French, Theodore B. (See Tebo and French.) | | | | | | |
| French, Warrin W., Vanderbilt, Mich. Well-rod extractor | 743,854 | Nov. 10 | 2062 | 439 | 107 | 455 |
| French, Zachary T., and W. C. Meyer, Boston, Mass. Thread-waxing device for sewing-machines | 732,729 | July 7 | 59 | 16 | 105 | 16 |
| Frenier, Albert B., Davenport, Iowa. Corn-planter | 732,687 | June 30 | 5919 | 1313 | 104 | 2423 |
| Frenzel, Franz A., Chemnitz, Germany. Adjustable curtain for windows | 747,407 | Dec. 22 | 3872 | 872 | 107 | 2003 |
| Freschl, Alfred, Chicago, Ill. Plaiting attachment for tufting-boards | 737,918 | Sept. 1 | 724 | 157 | 106 | 158 |
| Fresenius, Carl, Offenbach-on-the-Main, Germany. Purifying fats | 722,832 | Mar. 17 | 2224 | 498 | 103 | 503 |
| Fresh, Henry, Cumberland, Md. Emergency car-brake | 718,448 | Jan. 13 | 1727 | 384 | 102 | 384 |
| Fretwell, John R., Cedar Rapids, Utah. Combined can-opener and fruit-jar clamp | 731,034 | June 16 | 2758 | 615 | 104 | 1736 |
| Fretwell, Joseph P., and J. T. Brown, Panasoffkee, Fla. Bow-facing oar | 739,302 | Sept. 22 | 3427 | 764 | 106 | 781 |
| Freudenberg, Herman. (See Frank and Freudenberg.) | | | | | | |
| Freuler, Kaspar, Zürich, Switzerland. Collapsible stretcher | 740,002 | Sept. 29 | 4754 | 1069 | 106 | 1083 |
| Freund, Louis. (See Benzinger and Freund.) | | | | | | |
| Freund, Siegfried, Chicago, Ill. Nut-lock | 718,336 | Jan. 13 | 1521 | 337 | 102 | 342 |
| Frey, Charles, *et al.* (See Esmond, Frederick J., assignor.) | | | | | | |
| Frey, Frank C. (See Weber and Frey.) | | | | | | |
| Frey, Gustave. (See Frey, Rudolph and G.) | | | | | | |
| Frey, Hugo, Leonard, N. D. Fence | 741,650 | Oct. 20 | 2418 | 541<br>542 | 106 | 1797 |
| Frey, John S., Glendale Station, assignor to Silver & Company, Brooklyn, N. Y. Oil-stove burner-cup | 739,486 | Sept. 22 | 3775 | 844 | 106 | 857 |
| Frey, Rudolph and G., New York, N. Y. Removable drip-pan for refrigerators | 719,104 | Jan. 27 | 3034 | 675 | 102 | 687 |
| Frey, William, Canton, Ohio. Brick-cut-off table | 720,797 | Feb. 17 | 2570 | 592 | 102 | 1394 |
| Frey, William, Canton, Ohio. Brick-edge-smoothing blade. (Reissue) | 12,101 | Mar. 17 | 2921 | 654 | 103 | 649 |
| Frey, William, Canton, Ohio. Brick-cut-off table | 734,124 | July 21 | 2636 | 622 | 105 | 590 |
| Frey, William J. (See Kerrigan, Michael F., assignor.) | | | | | | |
| Freytag, Hermann, Stuttgart, Germany. Poker or branding-tool for use in pyrography | 724,002 | Mar. 31 | 4401 | 989 | 103 | 982 |
| Friar, C. H. (See McNiel, Benjamin, assignor.) | | | | | | |
| Friberg, Holsten, deceased; J. T. Winborg, executor, assignor to Aktiebolaget Stockholms Vapenfabrik, Stockholm, Sweden. Automatic firearm | 738,140 | Sept. 1 | 1170 | 258 | 106 | 252 |
| Frick, C. C., *et al.* (See Raby, Richard, assignor.) | | | | | | |
| Frick Company. (See Clark, Charles S., assignor.) | | | | | | |
| Frick Company. (See Hutchinson, Arthur H., assignor.) | | | | | | |
| Frick, John, Philadelphia, Pa. Petroleum-burner | 731,170 | June 16 | 3019 | 670 | 104 | 1788 |
| Fricke, H. C., *et al.* (See Daellenbach, Charles R., assignor.) | | | | | | |
| Fricker, Guy C. (See Mordey and Fricker.) | | | | | | |
| Frictionless Roller Bearing Company. (See Toms, George N., assignor.) | | | | | | |
| Friderichsen, Hans W. (See Briede and Friderichsen.) | | | | | | |
| Friedenthal, Hans, Berlin, Germany. Steam-generator | 730,248 | June 9 | 1326 | 291 | 104 | 1412 |

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| Friedland & Cie., H. (See Friedland, Hermann, assignor.) | | | | | | |
| Friedland, Hermann, assignor to Firm of H. Friedland & Cie., Mayence, Germany. Artificial tooth-crown | 718,614 | Jan. 20 | 2090 | 455 | 102 | 479 |
| Friedlander, Robert, Chicago, Ill. Shield for X-ray tubes | 731,767 | June 23 | 4140 | 923 | 104 | 2033 |
| Friedlander, Robert, Chicago, Ill. X-ray tube | 736,086 | Aug. 11 | 2003 | 426 | 105 | 1429 |
| Friedlander, Theodor, Chicago, Ill., assignor to R. Friedlander & Co. X-ray tube | 725,331 | Apr. 14 | 1690 | 381 | 103 | 1543 |
| Friedlander, Theodor, Chicago, Ill., assignor to R. Friedlander & Co. X-ray tube | 726,044 | Apr. 21 | 2985 | 678 | 103 | 1832 |
| Friedlander, Walter J. (See Loaring, Thomas W., assignor.) | | | | | | |
| Friedley, Albert, assignor of one-half to H. F. Voshardt, Chicago, Ill. Metal roofing tile or shingle | 740,842 | Oct. 6 | 862 | 192 | 106 | 1430 |
| Friedley, Albert, assignor of one-half to H. F. Voshardt, Chicago, Ill. Metal ceiling | 740,843 | Oct. 6 | 863 | 193 | 106 | 1430 |
| Friedman, Goste, Jamestown, N. Y. Cake-beater | 740,751 | Oct. 6 | 680 | 154 | 106 | 1392 |
| Friedman, Paul, Curtice, assignor of one-third to L. Aberl, Oregon Township, Ohio. Merry-go-round | 727,778 | May 12 | 1823 | 407 | 104 | 407 |
| Friedmann, Louis, Vienna, Austria-Hungary. Lubricating apparatus | 741,478 | Oct. 13 | 2092 | 464<br>465 | 106 | 1713 |
| Friend, Howard, Lexington, Okla. Ter. Road-bridge | 725,695 | Apr. 21 | 2375 | 538 | 103 | 1702 |
| Friend, Joseph, Dayton, Ohio. Apparatus for making confections | 734,536 | July 28 | 3402 | 794 | 105 | 768 |
| Friend, Joseph, and W. W. Price, Dayton, Ohio. Machine for making candy | 718,997 | Jan. 27 | 2809 | 629<br>630 | 102 | 641 |
| Friend, Roger B., Oakland, Cal. Pad or blank holding and feeding device | 730,451 | June 9 | 1696 | 380 | 104 | 1491 |
| Friend, Roger B., Oakland, Cal. Toilet-paper holder | 730,452 | June 9 | 1698 | 380 | 104 | 1491 |
| Friend, Roger B., Oakland, Cal. Card-display device | 744,326 | Nov. 17 | 3014 | 647 | 107 | 674 |
| Frier, George W. (See Johnson, Henry, assignor.) | | | | | | |
| Fries, Theodore, assignor of one-half to A. H. Towar, Lyons, N. Y. Hat-fastener | 726,154 | Apr. 21 | 3168 | 717 | 103 | 1870 |
| Friese, Frank J., and J. E. Gilbert, assignors of two-thirds to E. A. More, St. Louis, Mo. Mold for brass journal-bearings | 726,523 | Apr. 28 | 3919 | 886 | 103 | 2036 |
| Friese, Frank J., and J. E. Gilbert, assignors of two-thirds to E. A. More, St. Louis, Mo. Mold for making brass castings | 745,005 | Nov. 24 | 4233 | 916 | 107 | 948 |
| Friese, Josef. (See Behnke and Friese.) | | | | | | |
| Friese, Otto, Breslau, Germany. Composing-board in form of a galley for storing up composing columns | 730,526 | June 9 | 1835 | 409 | 104 | 1521 |
| Frieseke, Albert C., Floralbluff, Fla. Hydraulic oil-tank | 727,779 | May 12 | 1824 | 407<br>408 | 104 | 407 |
| Friesen, Diedrich J., Moundridge, Kans. Twitch | 719,579 | Feb. 3 | 308 | 71 | 102 | 887 |
| Friesland, Charles M., Troy, Ill. Steam-separator | 739,596 | Sept. 22 | 3968 | 886 | 106 | 897 |
| Friestedt, Luther P., Chicago, Ill. Sheet-piling | 730,755 | June 9 | 2229 | 495 | 104 | 1608 |
| Friestedt, Luther P., Chicago, Ill. Sheet-piling | 733,713 | July 14 | 1799 | 426 | 105 | 396 |
| Friestedt, Luther P., Chicago, Ill. Sheet-piling | 734,314 | July 21 | 3007 | 708 | 105 | 669 |
| Friestedt, Luther P., Chicago, Ill. Sheet-piling | 734,843 | July 28 | 4002 | 934 | 105 | 890 |
| Friestedt, Luther P., Chicago, Ill. Sheet-piling | 735,489 | Aug. 4 | 872 | 186 | 105 | 1166 |
| Friestedt, Luther P., Chicago, Ill. Pile-driver buffer | 738,312 | Sept. 8 | 1569 | 339 | 106 | 353 |
| Friestedt, Luther P., Chicago, Ill. Sheet-piling | 739,072 | Sept. 15 | 2998 | 664 | 106 | 674 |
| Friesz, George W., South Omaha, Nebr. Draft-rigging | 718,615 | Jan. 20 | 2091 | 455 | 102 | 479 |
| Friis, Niels M., assignor to E. Loring, Brockton, Mass. Heel-lift-cutting machine | 741,960 | Oct. 20 | 3033 | 675 | 106 | 1926 |
| Frings, Heinrich, Jr., Aix-la-Chapelle, Germany. Automatic feeder for vinegar-generators | 728,895 | May 26 | 3909 | 869 | 104 | 882 |
| Frink, E. P. (See Runkle, John F., assignor.) | | | | | | |
| Frink, Robert L., and W. D. Lee, Cleveland, Ohio, assignors to themselves, H. R. Sanborn, J. N. Clarke, and T. McGowan. Apparatus for making sheet-glass | 720,517 | Feb. 10 | 2032 | 467 | 102 | 1267 |
| Frink, Robert L., and W. D. Lee, assignors to themselves, H. R. Sanborn, J. N. Clarke, and J. A. Lannert, Cleveland, Ohio. Machine for making sheet-glass | 722,687 | Mar. 17 | 1952 | 435<br>436 | 103 | 449 |
| Frink, Robert L., and W. D. Lee, assignors to themselves, H. R. Sanborn, J. N. Clarke, and J. A. Lannert, Cleveland, Ohio. Flattening-table for sheet-glass | 722,688 | Mar. 17 | 1954 | 436 | 103 | 449 |
| Frink, Robert L., and W. D. Lee, assignors to themselves, H. R. Sanborn, J. N. Clarke, and J. A. Lannert, Cleveland, Ohio. Sheet-glass carrier for leers | 722,689 | Mar. 17 | 1956 | 436 | 103 | 450 |
| Frink, Robert L., and W. D. Lee, assignors to themselves, H. R. Sanborn, J. N. Clarke, and J. A. Lannert, Cleveland, Ohio. Endless carrier for sheet-glass | 745,487 | Dec. 1 | 336 | 79 | 107 | 1171 |
| Frisbie, George A., Utica, N. Y. Undergarment | 746,060 | Dec. 8 | 1379 | 308<br>309 | 107 | 1412 |
| Frissell, Frank H., assignor to Russell Manufacturing Company, Middletown, Conn. Thread-winding loom | 721,792 | Mar. 3 | 247 | 55 | 103 | 55 |
| Frist, Samuel H., Chattanooga, Tenn. Work-holder for enameling | 733,831 | July 14 | 2041 | 481 | 105 | 446 |
| Friswell, Richard J., assignor of one-half to British Uralite Company, Limited, London, England. Manufacture of flexible fire-resisting material | 737,537 | Aug. 25 | 4717 | ..... | 105 | 2042 |
| Fritchle, Oliver P., Denver, Colo. Producing active material and electrodes for storage batteries and products thereof | 738,313 | Sept. 8 | 1570 | 339 | 106 | 354 |
| Fritchle, Oliver P., Denver, Colo. Apparatus for producing active material and electrodes for storage batteries | 738,314 | Sept. 8 | 1573 | 340 | 106 | 354 |
| Fritchle, Oliver P., Denver, Colo. Producing active material and electrodes for storage batteries and product thereof | 738,427 | Sept. 8 | 1775 | 386 | 106 | 397 |
| Fritsch, Charles J., Brooklyn, N. Y. Clinical thermometer | 719,781 | Feb. 3 | 681 | 157 | 102 | 967 |
| Fritsche, John, assignor of one-half to F. Hardart and J. V. Horn, Philadelphia, Pa. Measuring device | 745,811 | Dec. 1 | 905 | 204 | 107 | 1292 |
| Fritts, Atwood D., Hoboken, N. J. Refrigerator | 741,784 | Oct. 20 | 2691 | 600 | 106 | 1854 |
| Fritz, Jacob S., Zanesville, Ohio. Crank-arm connection | 737,603 | Sept. 1 | 87 | 18 | 106 | 21 |
| Fritz, William A., Zanesville, Ohio. Concrete-mixer | 746,947 | Dec. 15 | 3013 | 692 | 107 | 1794 |
| Fritze, Henry L., Jersey City, N. J., assignor of three-fourths to C. J. Harrington, New York, N. Y. Non-arcing clamp | 741,785 | Oct. 20 | 2693 | 600 | 106 | 1854 |
| Friz, Otto, Nuremberg, Germany. Manufacture of white cement | 730,630 | June 9 | 2013 | ..... | 104 | 1561 |
| Frodsham, John, Bouldin Island, assignor of one-half to R. Hickmott, Ross Valley, Cal. Oil-burner | 743,267 | Nov. 3 | 874 | 190 | 107 | 184 |
| Froelich, Henry C., assignor to Baird Manufacturing Company, Chicago, Ill. Electric time-switch | 722,292 | Mar. 10 | 1189 | 263 | 103 | 269 |
| Froggatt, Edwin L., Spearfish, S. D. Fence | 733,906 | July 14 | 2185 | 514 | 105 | 475 |
| Froggatt, George H., Chicago, Ill. Rotary automatic weighing-machine | 744,740 | Nov. 24 | 3771 | 812 | 107 | 852 |
| Frohne, William, St. Louis, Mo. Bake-oven | 725,066 | Apr. 14 | 1198 | 272 | 103 | 1440 |
| Fromm, John F., Rochester, N. Y. Paper-slitting device | 747,544 | Dec. 22 | 4112 | 923 | 107 | 2057 |
| Frost, Alice A., Hiram, Ohio. Domestic boiler | 734,054 | July 21 | 2500 | 583 | 105 | 562 |
| Frost, Harrison C., and G. M. Stadelman, Akron, Ohio. Vulcanizer | 744,327 | Nov. 17 | 3015 | 647 | 107 | 674 |
| Frost, Harry W., Detroit, Mich., assignor to Chicago Railway Equipment Company, Chicago, Ill. Brake-beam | 729,924 | June 2 | 727 | 162 | 104 | 1276 |
| Frost, Leonard L., Highland, Kans. Tally device | 718,449 | Jan. 13 | 1729 | 384<br>385 | 102 | 384 |
| Frost, Leonard L., Highland, Kans. Tally device | 744,058 | Nov. 17 | 2500 | 536 | 107 | 562 |
| Frost, Samuel H., and G. W. Southwick, Franklin, Mass. Vehicle-spring | 721,175 | Feb. 24 | 3316 | 758 | 102 | 1572 |

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| Frost, William, Tallulo, Ill. Baling-press | 730,106 | June 2 | 1054 | 236 | 104 | 1342 |
| Frosts Veneer Seating Company. (See Calhoun and Meyer, assignors.) | | | | | | |
| Frothingham, Daniel D., Salem, Mass. Machine for making tracker-nuts | 718,117 | Jan. 13 | 1114 | 246<br>247 | 102 | 255 |
| Frowe, William, Lawrence, Kans. Toy cannon | 725,332 | Apr. 14 | 1692 | 381 | 103 | 1543 |
| Frownfelter, George C., Joshua, Tex. Cattle-guard | 739,165 | Sept. 15 | 3169 | 701 | 106 | 709 |
| Frtschek, Thomas, Dodge, Nebr. Hay or straw cutter | 744,328 | Nov. 17 | 3017 | 647 | 107 | 674 |
| Fruin, John L., New York, N. Y. Waste and vent system | 740,412 | Oct. 6 | 45 | 10 | 106 | 1254 |
| Fruin, John L., New York, N. Y. Plumber's sanitary cross | 740,413 | Oct. 6 | 46 | 10, 11 | 106 | 1254 |
| Fry, Ernest T., Mount Jackson, and S. A. Wine, Quicksburg, Va. Attachment for corn-planters | 723,857 | Mar. 31 | 4093 | 923 | 103 | 918 |
| Fry, Florien C. (See Bray and Fry.) | | | | | | |
| Fry, George E., Allegheny, Pa. Switch-operating device | 735,083 | Aug. 4 | 61 | 17 | 105 | 995 |
| Fry, George H., Forestville, Conn., assignor to Electric Self-Winding Clock Company, New York, N. Y. Driving mechanism | 744,741 | Nov. 24 | 3773 | 813 | 107 | 853 |
| Fry, Henry O., Cosmopolis, Wash., assignor of one-half to E. A. Slover, Portland, Oreg. Gaging and counting attachment for woodworking-machines | 741,479 | Oct. 13 | 2093 | 465<br>466 | 106 | 1713 |
| Fry, John D., *et al.* (See Reed, William S., assignor.) | | | | | | |
| Fry, John H., Grand Rapids, assignor to Shaw-Walker Company, Muskegon, Mich. Hinge | 736,953 | Aug. 25 | 3608 | 800 | 105 | 1803 |
| Fry, Stephen D., assignor to T. Davies, Indianapolis, Ind. Support for buggy-tops | 737,731 | Sept. 1 | 323 | 68 | 106 | 73 |
| Fry, William C., *et al.* (See Le Sueur, Philip, assignor.) | | | | | | |
| Fry, William J., Chicago, Ill. Fire-extinguisher | 744,061 | Nov. 17 | 2504 | 537 | 107 | 563 |
| Fry, William W., Philadelphia, Pa. Device for teaching penmanship | 726,898 | May 5 | 124 | 30 | 104 | 29 |
| Frydmane, Jules, assignor to Société Anonyme des Appareils de Contrôle et de Comptabilite Automatique, Paris, France. Apparatus for registering monetary transactions | 738,670 | Sept. 8 | 2252 | 495<br>496<br>497 | 106 | 498 |
| Frye, Cyrus E., Indianapolis, Ind., assignor of one-half to H. L. Kutter, Hamilton, Ohio. Board-machine | 727,538 | May 5 | 1323 | 295 | 104 | 285 |
| Frye, James, Toronto, Canada. Flap-fastener for button-shoes | 739,848 | Sept. 29 | 4445 | 998 | 106 | 1018 |
| Frye, James, Toronto, Canada. Collapsible hat-box | 739,849 | Sept. 29 | 4446 | 999 | 106 | 1019 |
| Frye, James, Toronto, Canada. Eyelet for boots or shoes | 744,059 | Nov. 17 | 2503 | 536 | 107 | 563 |
| Frye, James, Toronto, Canada. Sieve or strainer | 744,060 | Nov. 17 | 2504 | 536 | 107 | 563 |
| Frysinger, Harry J., Baltimore, Md. Game apparatus | 724,841 | Apr. 7 | 794 | 183 | 103 | 1339 |
| Fuchs, Eugene J. (See Müller, Otto P., assignor.) | | | | | | |
| Fuchs, Ferdinand, Breslau, Germany. Plate-shears | 743,355 | Nov. 10 | 2063 | 439 | 107 | 455 |
| Fuchs, Fredrich, Elizabeth, N. J. Rotary engine | 742,181 | Oct. 27 | 3496 | 780<br>781 | 106 | 2033 |
| Fuchs & Lang Manufacturing Company. (See Buncke, Richard D., assignor.) | | | | | | |
| Fuchs, Louis F., and B. K. Fisher, St. Louis, Mo. Paper-feeding machine | 720,546 | Feb. 10 | 2094 | 483<br>484 | 102 | 1279 |
| Fuchs, Louis F., and B. K. Fisher, St. Louis, Mo. Sheet separating and feeding mechanism for printing or other machines | 720,547 | Feb. 10 | 2102 | 484<br>485<br>486 | 102 | 1280 |
| Fuchs, Maximilian J., Stamford, Conn., assignor to Baer Brothers, New York, N. Y. Apparatus for the disintegration of metal | 721,293 | Feb. 24 | 3538 | 805 | 102 | 1618 |
| Fuehr, Frank, *et al.* (See Stark, Benjamin F., assignor.) | | | | | | |
| Fuel Economizer Company of America. (See Burpee, George H., assignor.) | | | | | | |
| Fuel and Gas Manufacturing Company. (See Browne, William F., assignor.) | | | | | | |
| Fuel Oil Power Company. (See Ostergren, Oscar P., assignor.) | | | | | | |
| Fugatt, William D., *et al.* (See Hartell, Frederick G., assignor.) | | | | | | |
| Fuhrer, Adolph, Treorchy, England. Clock-chimes | 747,408 | Dec. 22 | 3873 | 872 | 107 | 2003 |
| Fuhrer, John E., Pittsburg, Pa. Combined drill and reamer | 745,048 | Nov. 24 | 4342 | 938 | 107 | 971 |
| Führer, Josef. (See Dahmer, Hans von, assignor.) | | | | | | |
| Fuhrman, Isaac, Elroy, Wis. Suspenders | 730,249 | June 9 | 1327 | 291 | 104 | 1412 |
| Fuhrman, William S. (See Staaff, Charles, assignor.) | | | | | | |
| Fuhrmann, John T., St. Paul, Minn. Valve-dressing tool | 722,222 | Mar. 10 | 1058 | 232 | 103 | 721 |
| Fulcher, William H., Oakland, assignor of one-half to H. Murphy, San Francisco, Cal. Excavator | 717,835 | Jan. 6 | 613 | 136 | 102 | 131 |
| Fulcher, William H., Oakland, assignor of one-half to H. Murphy, San Francisco, Cal. Dredger | 732,538 | June 30 | 5636 | 1249 | 104 | 2361 |
| Fulenwider, Henry L., Wilmington, Del. Steam-boiler | 736,713 | Aug. 18 | 3151 | 694 | 105 | 1687 |
| Fulenwider, Henry L., Wilmington, Del., and A. C. Wood, Philadelphia, Pa. Consumption or prevention of smoke | 745,006 | Nov. 24 | 4234 | 917<br>918 | 107 | 948 |
| Fulford, Peter, *et al.* (See Stecher, Charles, assignor.) | | | | | | |
| Fulford, Peter. (See Stecher and Fulford.) | | | | | | |
| Fulhaber, Jerome. (See Riedel and Fulhaber.) | | | | | | |
| Fulkerson, James F., Oxnard, Cal. Harrow | 738,671 | Sept. 8 | 2262 | 498 | 106 | 500 |
| Full, George C., assignor of two-thirds to W. H. Miller and R. P. Everence, Champaign, Ill. Lubricator for steam-engines | 728,698 | May 19 | 3542 | 787 | 104 | 791 |
| Fullagar, Hugh F., Newcastle-upon-Tyne, England. Compound steam-turbine | 720,415 | Feb. 10 | 1842 | 420<br>421 | 102 | 1229 |
| Fullagar, Hugh F., Newcastle-upon-Tyne, England. Fluid-pressure turbine | 746,061 | Dec. 8 | 1379 | 309 | 107 | 1412 |
| Fuller, Albert M., St. Paul, Minn. Paste | 735,084 | Aug. 4 | 64 | ------ | 105 | 995 |
| Fuller, Charles E. (See Scott, James A., assignor.) | | | | | | |
| Fuller, Charles E. (See Scott, James A., assignor.) (Reissue.) | | | | | | |
| Fuller, Charles H., Telluride, Colo. Mechanical movement | 721,294 | Feb. 24 | 3540 | 805 | 102 | 1619 |
| Fuller, Charles W. B. (See Chadbourne, Craig, and Fuller.) | | | | | | |
| Fuller, Clarence W., Walton, N. Y. Game | 723,378 | Mar. 24 | 3229 | 724 | 103 | 1938 |
| Fuller Company, E. C. (See Williams, George R., assignor.) | | | | | | |
| Fuller Cotton Gin Company. (See Fuller, James T., assignor.) | | | | | | |
| Fuller, Daniel J., Oxford, Ind. Gate | 729,925 | June 2 | 728 | 163 | 104 | 1276 |
| Fuller, David S., assignor of one-half to W. De Golyer, Chicago, Ill. Goose-call | 726,277 | Apr. 28 | 3424 | 779 | 103 | 241 |
| Fuller, Eben E., Littlefalls, Minn. Rotary engine | 727,122 | May 5 | 576 | 124 | 104 | 125 |
| Fuller, Emory A., Elsie, Mich. Cooling-board attachment | 729,751 | June 2 | 414 | 93 | 104 | 1213 |
| Fuller Farm Tool Manufacturing Company. (See Fuller, Solomon, assignor.) | | | | | | |
| Fuller, Frederick P., New York, and J. J. Walsh, Yonkers, N. Y. Wire-connector | 741,480 | Oct. 13 | 2097 | 466 | 106 | 1714 |
| Fuller, Gaius C., Owosso, Mich. Magazine hammer or tool | 742,624 | Oct. 27 | 4314 | 972 | 106 | 2204 |
| Fuller, George F., assignor to Wyman & Gordon, Worcester, Mass. Drop-hammer | 729,855 | June 2 | 614 | 135 | 104 | 1254 |
| Fuller, Granville H., Danbury, Conn. Device for carrying caskets over the boxes | 736,377 | Aug. 18 | 2494 | 548 | 105 | 1550 |
| Fuller, Harnett J., Winchester, Mass. Block system for railways | 718,925 | Jan. 20 | 2663 | 598 | 102 | 595 |
| Fuller, James T., Calvert, Tex., assignor to J. F. Workum, Englewood, N. J. Cotton-press | 734,695 | July 28 | 3688 | 864<br>865 | 105 | 827 |
| Fuller, James T., Calvert, Tex., assignor to Fuller Cotton Gin Company. Ginning apparatus | 734,696 | July 28 | 3693 | 865 | 105 | 828 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | Spec. | Drg. | Vol. | Page. |
| Fuller, James W., Catasauqua, Pa. Tumbling mill or barrel | 730,900 | June 16 | 2508 | 557 | 104 | 1685 |
| Fuller, John J., Westfield, Mass. Coat-hanger | 727,342 | May 5 | 974 | 211 | 104 | 210 |
| Fuller Manufacturing Company. (See Hardy, Clement A., assignor.) | | | | | | |
| Fuller, Samuel D., assignor to Acme Supply Co., Chicago, Ill. Car-vestibule diaphragm | 746,062 | Dec. 8 | 1382 | 309 | 107 | 1413 |
| Fuller, Solomon, assignor to Fuller Farm Tool Manufacturing Company, Danvers, Mass. Wheel-weeder | 724,175 | Mar. 31 | 4736 | 1061 | 103 | 1050 |
| Fuller & Warren Company. (See Bailey, Charles H., assignor.) | | | | | | |
| Fuller, William A., Rock Island, Ill. Electric heater | 731,768 | June 23 | 4141 | 924 | 104 | 2034 |
| Fuller, William J. (See Kadletz and Fuller.) | | | | | | |
| Fullerton, William H., Scott, Ark. Sawing-machine | 719,455 | Feb. 3 | 76 | 18 | 102 | 841 |
| Fullington, John C., Pinehurst, Ga. Stump-extractor | 741,026 | Oct. 13 | 1181 | 267 | 106 | 1518 |
| Fulton Brass & Manufacturing Company. (See Brabson, Tom, assignor.) | | | | | | |
| Fulton, De Witt C., and D. Lawson, New Market, N. J. Puzzle | 738,023 | Sept. 1 | 933 | 207 | 106 | 204 |
| Fulton, Edwin W., Watertown, N. Y. Vise | 727,343 | May 5 | 975 | 211 | 104 | 211 |
| Fulton, Joseph H., West Lebanon, Pa. Match-box | 717,983 | Jan. 6 | 877 | 196 | 102 | 189 |
| Fulton, Louis B., assignor to Chaplin-Fulton Manufacturing Company, Pittsburg, Pa. Steam-trap | 726,155 | Apr. 21 | 3170 | 717 | 103 | 1870 |
| Fulton, Louis B., assignor to Chaplin-Fulton Manufacturing Company, Pittsburg, Pa. Steam-reducing valve | 738,608 | Sept. 8 | 2122 | 465 | 106 | 472 |
| Fulton, Robert, *et al.* (See Finch, Alfred W. A., assignor.) | | | | | | |
| Fulton, Weston M., Knoxville, Tenn. Collapsible vessel for atmospheric motors | 729,926 | June 2 | 729 | 163 | 104 | 1276 |
| Fulton, Weston M., Knoxville, Tenn. Collapsible vessel for atmospheric motors | 729,927 | June 2 | 732 | 163 | 104 | 1277 |
| Fulton, Weston M., Knoxville, Tenn. Collapsible vessel for atmospheric motors | 731,354 | June 16 | 3341 | 746 | 104 | 1854 |
| Fulton, Weston M., Knoxville, Tenn. Collapsible vessel for atmospheric motors | 732,627 | June 30 | 5805 | 1287 | 104 | 2400 |
| Fulton, Weston M., Knoxville, Tenn. Automatic clock-winding mechanism | 737,093 | Aug. 25 | 3843 | 854 | 105 | 1852 |
| Fulton, Weston M., Knoxville, Tenn. Buffer | 747,409 | Dec. 22 | 3874 | 872 | 107 | 2003 |
| Fulton, William H., Davenport, Iowa. Car-door lock | 722,007 | Mar. 3 | 661 | 147 | 103 | 143 |
| Fultz, Winfield S., assignor of one-half to L. B. Keiffer, New Orleans, La. Machine for cutting articles from the inside of shoes | 721,509 | Feb. 24 | 3931 | 895 | 102 | 1699 |
| Fulwider, Walter S., Diamond, Ind. Safety device for elevators | 741,481 | Oct. 13 | 2098 | 466 | 106 | 1714 |
| Funk, Charles G., New York, N. Y. Skeleton vest | 739,166 | Sept. 15 | 3170 | 701 | 106 | 709 |
| Funk, Charles L., Buffalo, N. Y. Governor | 746,948 | Dec. 15 | 3015 | 692 | 107 | 1795 |
| Funk, Edgar M., Wytheville, Va. Fishing-reel | 743,856 | Nov. 10 | 2064 | 439<br>440 | 107 | 455 |
| Funk, Edward. (See Smith and Funk.) | | | | | | |
| Funk, Samuel W., Santa Ana, Cal. Removable threshold or door-sill and storm-protector | 721,510 | Feb. 24 | 3932 | 895 | 102 | 1699 |
| Funke, Edward, Newark, N. J. Sanitary corner-plate | 721,176 | Feb. 24 | 3317 | 758 | 102 | 1572 |
| Funsch, Boyd J., Jackpine, Mich. Rail-joint | 738,024 | Sept. 1 | 934 | 207 | 106 | 204 |
| Fuqua, David P., Sr., assignor of one-half to F. Buehler, Jr., Kansas City, Mo. Rotary steam explosive-engine | 731,104 | June 16 | 2887 | 640<br>641 | 104 | 1763 |
| Fuqua, David P., Sr., and F. C. Buehler, Jr., Kansas City, Mo. Rotary steam-engine | 746,489 | Dec. 8 | 2137 | 491<br>492 | 107 | 1575 |
| Fuqua, Owen C. (See Graham, Elias, assignor.) | | | | | | |
| Fuqua, William Y., Houston, Tex. Press for ribbons, &c. | 743,631 | Nov. 10 | 1673 | 351 | 107 | 373 |
| Furber, Frederick M., Haverhill, Mass. Sole-splitting machine | 745,591 | Dec. 1 | 513 | 120 | 107 | 1206 |
| Furbish, Zachry T., assignor to North Brothers Manufacturing Company, Philadelphia, Pa. Pliers | 719,782 | Feb. 3 | 682 | 157<br>158 | 102 | 967 |
| Furbish, Zachry T., assignor to North Brothers Manufacturing Company, Philadelphia, Pa. Calipers | 719,783 | Feb. 3 | 684 | 158 | 102 | 967 |
| Furbish, Zachry T., assignor to North Brothers Manufacturing Company, Philadelphia, Pa. Drive-chain | 726,669 | Apr. 28 | 4189 | 946 | 103 | 2090 |
| Furgeson, John. (See Stemme, Alwin H., assignor.) | | | | | | |
| Furlong, James E., Providence, R. I. Combined paint-can and paint-mixer | 722,833 | Mar. 17 | 2225 | 498 | 103 | 504 |
| Furman, Richard S., Chattanooga, Tenn. Reversing-valve for engines | 744,062 | Nov. 17 | 2506 | 537 | 107 | 563 |
| Furrow, Annie M., Washington, D. C. Green-corn husker and silker | 725,951 | Apr. 21 | 2838 | 644 | 103 | 1802 |
| Furrow, Annie M., Washington, D. C. Corn-carver | 726,524 | Apr. 28 | 3920 | 886 | 103 | 2036 |
| Furrow, Annie M., assignor of one-fourth to A. Ports, Washington, D. C. Dust-pan | 735,360 | Aug. 4 | 605 | 125 | 105 | 1111 |
| Fusmer, Clinton C., McKinley, N. Y. Grinding-mill | 730,631 | June 9 | 2014 | 447 | 104 | 1562 |
| Fussgänger, Victor. (See Ullrich and Fussgänger.) | | | | | | |
| Fusz, Paul A., *et al.* (See Klein, John, assignor.) | | | | | | |
| Fyfe, George B., assignor of one-half to W. N. Green, Chicago, Ill. Coffee-percolator | 746,063 | Dec. 8 | 1384 | 309 | 107 | 1413 |
| Fyfe, John C., and V. Odquist, Chicago, Ill. Shutter for cameras | 731,296 | June 16 | 3250 | 723 | 104 | 1835 |
| Fyfe, John C., and V. Odquist, Chicago, Ill. Feeding device for magazine-cameras | 735,746 | Aug. 11 | 1364 | 294 | 105 | 1289 |
| Fyfe, Paul P. I., Concord, assignor of one-third to Standard Right Company, Charlotte, N. C. Station-indicator | 741,651 | Oct. 20 | 2419 | 542 | 106 | 1797 |
| Fyfe, Paul P. I., Concord, assignor of one-third to Standard Right Company, Charlotte, N. C. Station-indicator | 741,652 | Oct. 20 | 2422 | 543 | 106 | 1798 |
| Fyfe, Robert, St. Louis, Mo. Reflector | 730,361 | June 9 | 1523 | 338 | 104 | 1455 |
| Fyfe, Samuel, Birmingham, England. Filling, corking, and labeling bottles | 732,539 | June 30 | 5639 | 1250<br>1251 | 104 | 2362 |
| Fyfe, William W., Wood Green, England. Apparatus for producing and depositing fumes from ores | 734,844 | July 28 | 4004 | 934<br>935 | 105 | 891 |
| Fyfe, William W., London, England. Reducing-furnace | 742,018 | Oct. 20 | 3153 | 704 | 106 | 1949 |
| Fyrberg, Andrew, Worcester, Mass. Revolver | 728,896 | May 26 | 3911 | 869 | 104 | 882 |
| Fyrberg, Andrew, Worcester, Mass. Top snap and cylinder-catch for revolving firearms | 735,490 | Aug. 4 | 873 | 186 | 105 | 1166 |
| G. Cramer Dry Plate Company. (See Savaria, Napoleon, assignor.) | | | | | | |
| G. B. Essex Brass Company. (See Essex, George B., assignor.) | | | | | | |
| Gabel, Henry F., Pittsburg, Pa. Water-heater | 730,756 | June 9 | 2230 | 495 | 104 | 1608 |
| Gabel, John, Chicago, Ill. Coin-controlled vending-machine | 737,217 | Aug. 25 | 4072 | 904<br>905 | 105 | 1900 |
| Gabel, John C., Jr., Onarga, Ill. Soap-feeding attachment for brushes | 727,780 | May 12 | 1826 | 408 | 104 | 408 |
| Gable, Samuel S., York, Pa. Combination window shade and ventilator | 736,242 | Aug. 11 | 2260 | 489 | 105 | 1482 |
| Gabriel, Charles, assignor to John Mohr & Sons, Chicago, Ill. Dishing and flanging machine | 738,428 | Sept. 8 | 1777 | 386<br>387<br>388<br>389 | 106 | 397 |
| Gabriel, Charles R., assignor to Brown & Sharpe Manufacturing Company, Providence, R. I. Friction-clutch | 717,836 | Jan. 6 | 617 | 136 | 102 | 132 |
| Gabriel, Charles R., assignor to Brown & Sharpe Manufacturing Company, Providence, R. I. Mechanism for driving and adjusting rotary cutters | 736,243 | Aug. 11 | 2262 | 489 | 105 | 1483 |
| Gabriel, Charles R., assignor to Gorham Manufacturing Company, Providence, R. I. Screw-threading tool | 748,276 | Dec. 29 | 5529 | 1260 | 107 | 2392 |
| Gabrielson, Carl, Springfield, Mass., assignor to Union Typewriter Company, Jersey City, N. J. Type-writing machine | 717,741 | Jan. 6 | 408 | 96 | 102 | 89 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| Gabrielson, Carl, Springfield, Mass., assignor to Union Typewriter Company, Jersey City, N. J. Type-writing machine | 717,837 | Jan. 6 | 619 | 137 | 102 | 133 |
| Gabrielson, Carl, Springfield, Mass., assignor to Union Typewriter Company, Jersey City, N. J. Type-writing machine | 748,062 | Dec. 29 | 5136 | 1161 | 107 | 2307 |
| Gabrielson, Carl, assignor to L. C. Smith and Bros. Typewriter Company, Syracuse, N. Y. Type-writing machine | 747,545 | Dec. 22 | 4115 | 924 | 107 | 2058 |
| Gabrielson, William, Waldron, assignor of one-half to E. Larson, Kansas City, Mo. Animal-trap | 720,911 | Feb. 17 | 2769 | 637 | 102 | 1436 |
| Gaertner, John P., Wayne, Nebr. Folding table | 740,844 | Oct. 6 | 864 | 193 | 106 | 1430 |
| Gaeth, Paul, and A. Griebel, Cleveland, Ohio. Fuel-mixing and charge-controlling device for explosive-engines | 734,415 | July 21 | 3171 | 745 | 105 | 703 |
| Gaff, Thomas T. (See Gent, Joseph F., assignor.) | | | | | | |
| Gaff, Thomas T., Barnstable, Mass., and J. F. Gent, Mount Clemens, Mich.; said Gent assignor of one-sixth to said Gaff. Purifying brine | 731,105 | June 16 | 2890 | 642 | 104 | 1763 |
| Gaff, Thomas T., Barnstable, Mass., and J. F. Gent, Mount Clemens, Mich.; said Gent assignor of one-sixth to said Gaff. Apparatus for purifying brine | 731,106 | June 16 | 2891 | 642 | 104 | 1764 |
| Gaffney, John J. (See Hebendahl and Gaffney.) | | | | | | |
| Gage, Charles H., Denver, Colo., assignor to J. E. Krepps, Pittsburg, Pa. Treating argillaceous and alkaline ores | 719,207 | Jan. 27 | 3203 | 714 | 102 | 721 |
| Gage, Harry A., St. Louis, Mo., assignor to X-Ray Novelty Co., Phoenix, Ariz. Ter. Device for producing optical illusions | 747,910 | Dec. 22 | 4804 | 1086 | 107 | 2213 |
| Gagné, William G., Portland, Me. Ventilator | 746,064 | Dec. 8 | 1385 | 310 | 107 | 1413 |
| Gagnon, Amos, Stafford Springs, Conn. Selective telephone system | 746,065 | Dec. 8 | 1386 | 310 | 107 | 1414 |
| Gagnon, Peter, Florence, Mass. Centering and holding tool | 729,322 | May 26 | 4669 | 1031 | 104 | 1039 |
| Gagnon, Prim. (See Denoyer, Thomas, assignor.) | | | | | | |
| Gahagan, Arthur B., assignor of one-half to J. A. Hughes, Glade Mills, Pa. Agitator for oil-wells | 726,899 | May 5 | 125 | 30 | 104 | 30 |
| Gahagan, Michael J., Saxonville, Mass. Carding-machine | 733,383 | July 14 | 1236 | 292, 293 | 105 | 277 |
| Gahviller, Eugene. (See Oliver, Ellis S., assignor.) | | | | | | |
| Gaige, Oram J. S. (See Schwechler, John, assignor.) | | | | | | |
| Gailer, Ferdinand. (See Kalaba and Gailer.) | | | | | | |
| Gailey, Daniel, Philadelphia, Pa. Game apparatus | 719,456 | Feb. 3 | 77 | 18, 19 | 102 | 842 |
| Gaillard, Zénaïde, St. Gervais les Bains, France. Washing-machine | 734,845 | July 28 | 4004 | 935 | 105 | 891 |
| Gailor, William H., Saratoga Springs, N. Y. Hame-strap | 739,167 | Sept. 15 | 3171 | 701 | 106 | 709 |
| Gaines, Edward P., assignor of one-half to O. E. Smith, Young, Tenn. Fifth-wheel | 738,789 | Sept. 15 | 2503 | 550 | 106 | 568 |
| Gaines, John A., *et al.* (See Andrews, Thomas M., assignor.) | | | | | | |
| Gaines, Micajah D., Colorado Springs, Colo. Ink-well for school-desks | 744,522 | Nov. 17 | 3361 | 724 | 107 | 749 |
| Gaines, Thomas K., Burnet, Tex. Artificial stone | 726,278 | Apr. 28 | 3425 | ..... | 103 | 1938 |
| Gaines, William T., Newcastle, Ky. Wire-fence machine | 723,262 | Mar. 24 | 2993 | 673 | 103 | 677 |
| Gair, Hugh, Oakpark, Ill. Match | 746,321 | Dec. 8 | 1854 | 422 | 107 | 1515 |
| Gair, Mark, assignor of one-third to C. Wattleworth, Akron, Ohio. Grindstone-dresser | 747,883 | Dec. 22 | 4753 | 1074 | 107 | 2202 |
| Gair, Robert, New York, N. Y. Packing for incandescent-lamp bulbs or like articles | 723,522 | Mar. 24 | 3492 | 781 | 103 | 775 |
| Gair, Robert, Brooklyn, N. Y., assignor to Union Metallic Cartridge Company, Bridgeport, Conn. Packing-strip for primers and cartridges | 739,487 | Sept. 22 | 3776 | 844 | 106 | 858 |
| Gaiser, August, Oberndorf, Germany. Device for lifting sick people in beds and removing them from same | 738,104 | Sept. 1 | 1083 | 240 | 106 | 234 |
| Gaisman, Henry J., New York, N. Y. Pocket-book | 722,293 | Mar. 10 | 1194 | 263, 264 | 103 | 270 |
| Gaisman, Henry J., New York, N. Y. Pocket-book | 722,294 | Mar. 10 | 1196 | 264 | 103 | 271 |
| Gaisman, Henry J., New York, N. Y. Pocket-book | 722,295 | Mar. 10 | 1198 | 264 | 103 | 271 |
| Gaisman, Henry J., New York, N. Y. Waist-belt | 729,856 | June 2 | 617 | 136 | 104 | 1254 |
| Gaisman, Henry J., New York, N. Y. Waist-belt | 734,167 | July 21 | 2711 | 638 | 105 | 607 |
| Gaisman, Henry J., New York, N. Y. Frame or ring | 739,597 | Sept. 22 | 3969 | 886 | 106 | 897 |
| Gaither, John C., Washington, D. C. Sliding receptacle or drawer | 742,854 | Nov. 3 | 64 | 15, 16 | 107 | 16 |
| Galatius, Louis M., and N. R. Minor, New York, N. Y.; said Minor assignor to said Galatius. Egg-beater | 739,488 | Sept. 22 | 3777 | 844 | 106 | 858 |
| Galbraith, Elizabeth S. (See Fraley, George B., assignor.) | | | | | | |
| Galbreath, Charles E., assignor of one-half to J. A. Brogan, St. Paul, Kans. Rake attachment for harvester-reels | 730,632 | June 9 | 2016 | 448 | 104 | 1562 |
| Galbreath, Israel B., assignor of two-thirds to F. B. Purdy and J. A. Shouldier, Battle-creek, Mich. Roasting-oven | 730,757 | June 9 | 2232 | 496 | 104 | 1609 |
| Gale, Burton L., Warren, Pa. Box or case | 718,616 | Jan. 20 | 2093 | 456 | 102 | 479 |
| Gale, Charles E., Utica, assignor of one-half to M. G. Whitney, Watertown, N. Y. Plastic compound | 743,632 | Nov. 10 | 1674 | ..... | 107 | 373 |
| Gale, Charles E., Utica, assignor of one-half to M. G. Whitney, Watertown, N. Y. Car-window | 743,633 | Nov. 10 | 1675 | 351 | 107 | 373 |
| Gale, Frederick, assignor of one-half to J. Hemphill, Lancefield, Victoria, Australia. Attachment for plows | 734,846 | July 28 | 4006 | 935, 936 | 105 | 891 |
| Gale, Frederick, assignor of one-half to J. Hemphill, Lancefield, Victoria, Australia. Attachment for plows | 738,105 | Sept. 1 | 1084 | 240 | 106 | 234 |
| Gale, George H., Detroit, Mich. Constructing storage-battery plates | 731,447 | June 23 | 3539 | 789 | 104 | 1914 |
| Gale, Knight W. (See Berry and Gale.) | | | | | | |
| Gale Manufacturing Company. (See Beall, William L., assignor.) | | | | | | |
| Galer, Herbert. (See Swaney, Fletcher D., assignor.) | | | | | | |
| Galer, Herbert, Kansas City, Kans. Cream-separator | 727,781 | May 12 | 1827 | 408 | 104 | 408 |
| Galey, John M., Fort Worth, Tex. Cylinder-cock | 737,383 | Aug. 25 | 4381 | 977 | 105 | 1966 |
| Gall, Henry L., and E. L. Annan, Emmitsburg, Md. Garment-supporter | 740,414 | Oct. 6 | 47 | 11 | 106 | 1254 |
| Gall and Lembke. (See Lembke, Emil L., assignor.) | | | | | | |
| Gallagher, Archer P., *et al.* (See Norris, Frank W., assignor.) | | | | | | |
| Gallagher, Bernard, Lynn, Mass. Machine for washing bottles or similar articles | 717,670 | Jan. 6 | 363 | 66 | 102 | 56 |
| Gallagher, Bernard, Lynn, Mass. Bottle-washing machine | 717,671 | Jan. 6 | 366 | 67 | 102 | 57 |
| Gallagher, Edward J., Philadelphia, Pa. Repair-spindle for cocks | 728,699 | May 19 | 3544 | 788 | 104 | 792 |
| Gallagher, Frank J., Sheldon, Iowa. Dripless jug | 725,238 | Apr. 14 | 1530 | 347 | 103 | 1508 |
| Gallagher, George F., New York, N. Y. Steam-boiler furnace | 731,171 | June 16 | 3020 | 670, 671 | 104 | 1788 |
| Gallagher, George S., *et al.* (See Norris, Frank W., assignor.) | | | | | | |
| Gallagher, George S., *et al.* (See Tone, Joseph C., assignor.) | | | | | | |
| Gallagher, Henry, *et al.* (See Norris, Frank W., assignor.) | | | | | | |
| Gallagher, Henry, *et al.* (See Tone, Joseph C., assignor.) | | | | | | |
| Gallagher, James K., *et al.* (See McConnell, Edward E., assignor.) | | | | | | |
| Gallagher, John H., Bridgewater, Pa. Metallic tie and rail fastener | 726,818 | Apr. 28 | 4474 | 1010 | 103 | 2150 |
| Gallagher, John J., Chicago, Ill. Swimming apparatus | 732,405 | June 30 | 5380 | 1192 | 104 | 2309 |
| Gallagher, Joseph D. (See Streeter, Alfred L., assignor.) | | | | | | |
| Gallagher, Joseph D., Glenridge, N. J. Brake-shoe | 747,912 | Dec. 22 | 4807 | 1087 | 107 | 2213 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Gallagher, Joseph P., assignor to Lorimer & Gallagher Co., Chicago, Ill. Cantaliver for dumps | 725,696 | Apr. 21 | 2378 | 538<br>539 | 103 | 1703 |
| Gallagher, Michael J., Hazleton, Pa. Signaling device for block systems | 743,857 | Nov. 10 | 2067 | 440 | 107 | 456 |
| Gallagher, Micheal H., assignor to himself and A. L. Taft, Spencer, Mass. Feed-roll attachment for carding-machines | 746,322 | Dec. 8 | 1856 | 422 | 107 | 1515 |
| Gallagher, Richard D., Jr. (See Sessions, Dennis, and Gallagher.) | | | | | | |
| Gallagher, Richard D., Jr., assignor to Standard Coupler Company, New York, N. Y. Draft and buffing rigging | 746,813 | Dec. 15 | 2732 | 629<br>630 | 107 | 1730 |
| Gallagher, Thomas, Falconer, N. Y. Stone-dressing machine | 731,297 | June 16 | 3255 | 723 | 104 | 1837 |
| Gallagher, Thomas H., Carnegie, Pa. Pump for Artesian wells | 735,661 | Aug. 4 | 1197 | 253 | 105 | 1235 |
| Gallagher, Thomas M. (See Scott and Gallagher.) | | | | | | |
| Gallaher, Edward B., assignor, by mesne assignments, to Searchmont Motor Company, Philadelphia, Pa. Exhaust-coupling for double-cylinder engines | 742,409 | Oct. 27 | 3923 | 882 | 106 | 2122 |
| Gallaher, James M., Marseilles, Ill. Corn-picker | 718,337 | Jan. 13 | 1522 | 337<br>338 | 102 | 342 |
| Gallaher, Mary E., Marseilles, Ill. Strainer | 725,952 | Apr. 21 | 2839 | 644 | 103 | 1802 |
| Gallatin, Oliver A., Wahoo, Nebr. Combined roller, harrow, and cultivator | 746,066 | Dec. 8 | 1387 | 310<br>311 | 107 | 1414 |
| Gallinowsky, Hugo, Philadelphia, Pa., assignor of one-half to W. Maguire, Toronto, Canada. Composition for an acid-proof cement | 723,263 | Mar. 24 | 2995 | ------ | 103 | 677 |
| Gallo, Adolfo, Turin, Italy. Box | 736,244 | Aug. 11 | 2265 | 490 | 105 | 1483 |
| Gallo fu Giuseppe, Enrico, Busalla, Italy. Self-acting liquid-meter | 730,250 | June 9 | 1328 | 291<br>292 | 104 | 1413 |
| Gallogly, Elmer E. (See Newbro and Gallogly.) | | | | | | |
| Galloway, Edwin F., Newark, N. J. Printing-frame | 743,708 | Nov. 10 | 1796 | 379<br>380 | 107 | 400 |
| Galloway, Edwin F., Jr., Newark, N. J., assignor to Empire Engine and Motor Company. Rivet-cutter | 727,610 | May 12 | 1467 | 328 | 104 | 333 |
| Galloway, Fred J., *et al.* (See Wright, William J., assignor.) | | | | | | |
| Galloway, Samuel J., Hillsboro, Oreg. Saw-filing gage | 728,562 | May 19 | 3290 | 729 | 104 | 735 |
| Gallup, William. (See Brown, William H., assignor.) | | | | | | |
| Gally, Merritt, Brooklyn, N. Y. Inking apparatus for printing-presses | 733,023 | July 7 | 567 | 138<br>139 | 105 | 121 |
| Gally, Merritt, and J. Hren, Brooklyn, N. Y. Adjustable ink-roller truck | 733,955 | July 21 | 2287 | 538 | 105 | 516 |
| Gally, Robert A., Brooklyn, N. Y. Music record, diagram, or pattern | 722,574 | Mar. 10 | 1710 | 381 | 103 | 383 |
| Galt, Thomas A. (See Berry, Ira G., assignor.) | | | | | | |
| Galusha, Reuben G., *et al.* (See Hanson, John H., assignor.) | | | | | | |
| Gamache, Auguste, East Clifton, Canada. Telephone-transmitter support | 745,049 | Nov. 24 | 4344 | 938 | 107 | 971 |
| Gamache, Joseph, Van Nest, assignor of one-half to P. Guillotte, New York, N. Y. Hinge | 725,435 | Apr. 14 | 1878 | 420 | 103 | 1583 |
| Gamalielson, Johan E., Kaumana, Hawaii. Cane-cart | 730,901 | June 16 | 2509 | 557 | 104 | 1685 |
| Gambee, William Y., New York, N. Y. Dumping-scow | 721,883 | Mar. 3 | 417 | 92 | 103 | 92 |
| Gambee, William Y., and M. A. McCarthy, New York, N. Y., assignors to Balsa Transportation Company. Deck-scow | 744,523 | Nov. 17 | 3363 | 724 | 107 | 749 |
| Gamber, Emanuel S., Ellwood, Pa. Bicycle-rest | 721,511 | Feb. 24 | 3933 | 895 | 102 | 1700 |
| Gamble, Austin A., *et al.* (See Strain, Robert, assignor.) | | | | | | |
| Gamble, Fannie, Barry, Ill. Caster | 740,267 | Sept. 29 | 5234 | 1177 | 106 | 1183 |
| Gamble, John, Philadelphia, Pa. Striking-bag | 732,024 | July 7 | 572 | 139 | 105 | 122 |
| Gamble, John, assignor to G. A. Reach, Philadelphia, Pa. Body-protector | 745,007 | Nov. 24 | 4236 | 918 | 107 | 948 |
| Gamble, Joseph W., Omaha, Nebr. Four-horse equalizer | 733,832 | July 14 | 2042 | 481 | 105 | 446 |
| Gamble, William M., Chicago, Ill. Leaf-hinge | 721,177 | Feb. 24 | 3319 | 759 | 102 | 1573 |
| Gamble, William M., Chicago, Ill. Leaf-hinge | 747,962 | Dec. 29 | 4928 | 1114 | 107 | 2261 |
| Gamer, Charles L., Chicago, Ill. Folding bed | 740,845 | Oct. 6 | 865 | 194 | 106 | 1431 |
| Gamewell Fire Alarm Telegraph Co. (See King, George E., assignor.) | | | | | | |
| Gamlen, Robert L., Bromley, England. Incrustation preventive | 724,094 | Mar. 31 | 4565 | ------ | 103 | 1015 |
| Gamlen, Robert L., Bromley, England. Prevention and removal of incrustation in steam-boilers | 734,168 | July 21 | 2712 | ------ | 105 | 607 |
| Gammell, George C., Stamford, Conn. Chuck | 733,546 | July 14 | 1514 | 361 | 105 | 337 |
| Gammeter, Harry C., assignor to American Multigraph Company, Cleveland, Ohio. Duplicating-machine | 722,404 | Mar. 10 | 1382 | 306 | 103 | 310 |
| Gammons, Welcome P., Jr., assignor of one-half to F. W. Cole, New York, N. Y. Machine for sewing sweat-bands into hats | 747,963 | Dec. 29 | 4929 | 1115 | 107 | 2262 |
| Gamwell, George M., Greenwich, Mass. Screw-driver attachment | 721,884 | Mar. 3 | 418 | 92 | 103 | 92 |
| Ganaway, Francis J., Framingham, Mass. Mailing-tube clip | 738,898 | Sept. 15 | 2704 | 597 | 105 | 613 |
| Gander, Harry W., Rudy, Pa. Wood-preservative | 736,838 | Aug. 18 | 3388 | ------ | 105 | 1736 |
| Gander, Harry W., Rudy, Pa. Tea or coffee pot | 744,524 | Nov. 17 | 3364 | 724 | 107 | 749 |
| Gander, Harry W., Rudy, Pa. Ball-bearing fifth-wheel and king-bolt | 744,742 | Nov. 24 | 3774 | 813 | 107 | 853 |
| Ganelin, Solomon, Berlin, Germany. Treating lead, silver, or zinc ores | 741,653 | Oct. 20 | 2424 | ------ | 106 | 1798 |
| Gang, William E., Cincinnati, and G. W. Hart, Fernbank, assignors to William E. Gang Company, Cincinnati, Ohio. Device for transmitting motion | 745,812 | Dec. 1 | 910 | 204 | 107 | 1293 |
| Ganim, Beshara, New York, N. Y. Smoking-pipe | 722,405 | Mar. 10 | 1391 | 307 | 103 | 312 |
| Gannett, Lewis E., Bellevue, Idaho. Brush-cutter | 719,784 | Feb. 3 | 685 | 158 | 102 | 968 |
| Gannett, William H. (See Gilman, Willard H., assignor.) | | | | | | |
| Gannett, William H., *et al.* (See Regan, Michael C., assignor.) | | | | | | |
| Ganoe, George W., Philipsburg, Pa. Support for telephone-receivers | 742,182 | Oct. 27 | 3498 | 781 | 106 | 2033 |
| Gansen, William Q., Marion, Wis. Dispenser for powdered material | 748,494 | Dec. 29 | 5920 | 1344 | 107 | 2478 |
| Gantert, Charles, Rock Island, Ill. Revoluble show-case | 726,900 | May 5 | 128 | 30 | 104 | 30 |
| Gantt, Henry L. (See Taylor and Gantt.) | | | | | | |
| Gantt, Henry L., and F. W. Taylor, South Bethlehem, Pa., assignors, by mesne assignments, to Morse Thermo-Gage Co., Trumansburg, N. Y. Determining and regulating the temperature of heated articles or receptacles | 735,361 | Aug. 4 | 606 | 125 | 105 | 1111 |
| Ganz, Albert F., Hoboken, N. J., assignor to Auto-Igniter Company, New York, N. Y. Electric igniter | 732,346 | June 30 | 5269 | 1168 | 104 | 2285 |
| Garcia, Virgilio L., Buenos Aires, Argentina. Vibratory membrane for phonographs | 720,127 | Feb. 10 | 1328 | 304 | 102 | 1122 |
| Garda, Giovanni, Turin, Italy. Knife and fork | 719,208 | Jan. 27 | 3204 | 715 | 102 | 722 |
| Garda, Giovanni, Turin, Italy. Table-knife | 719,785 | Feb. 3 | 686 | 158 | 102 | 968 |
| Garde, Ada H., New Haven, Conn. Tray | 729,568 | June 2 | 85 | 22 | 104 | 1145 |
| Gardella, Albert B., Newburg, Ohio. Journal-box | 743,709 | Nov. 10 | 1802 | 380 | 107 | 401 |
| Garden City Sand Company. (See Curtiss, Samuel W., assignor.) | | | | | | |
| Gardenhire, Samuel M., *et al.* (See Place, James F., assignor.) | | | | | | |
| Gardin, Theodor, assignor to F. Krupp, Essen-on-the-Ruhr, Germany. Connection for the meeting ends of rails | 741,482 | Oct. 13 | 2100 | 466<br>467 | 106 | 1715 |
| Gardiner, David R., Neepawa, Canada. Traction-engine platform | 734,055 | July 21 | 2501 | 583 | 105 | 562 |
| Gardiner, T. H. (See Russell, Francis E., assignor.) | | | | | | |
| Gardiner, William, Chicago, Ill., assignor, by mesne assignments, to H. T. Clarke, Jr., trustee. Producing storage-battery plates | 724,387 | Mar. 31 | 5176 | ------ | 103 | 1140 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|
| | | | Spec. | Drg. | Vol. | Page. |
| Gardiner, William, Chicago, Ill., assignor to Northwestern Storage Battery Company. Secondary battery | 732,842 | July 7 | 263 | 65,66 | 105 | 59 |
| Gardiner, William, Chicago, Ill., assignor to Northwestern Storage Battery Company. Preparing electrolytes | 732,843 | July 7 | 265 | ..... | 105 | 59 |
| Gardiner, William, Chicago, Ill., and J. R. Macmillan, Menominee, Wis., assignors to Northwestern Storage Battery Company. Storage battery | 725,067 | Apr. 14 | 1199 | 273 | 103 | 1440 |
| Gardner, Alphons G., Los Angeles, Cal. Upright piano | 722,967 | Mar. 17 | 2445 | 547 | 103 | 549 |
| Gardner, Charles R. (See Foster, Frank, assignor.) | | | | | | |
| Gardner, Eugene S., Ozona, Tex. Fastener | 745,813 | Dec. 1 | 914 | 204 | 107 | 1294 |
| Gardner, Frederick N., Beloit, Wis., assignor to C. H. Besly, Chicago, Ill. Compression grease-cup | 737,218 | Aug. 25 | 4075 | 905 | 105 | 1900 |
| Gardner, Frederick N., Beloit, Wis., assignor to C. H. Besly, Chicago, Ill. Making tap-blanks | 737,833 | Sept. 1 | 524 | 115 | 106 | 117 |
| Gardner, George W., Denver, Colo. Antifriction-bearing for wagon-reaches | 743,481 | Nov. 10 | 1381 | 283 | 107 | 310 |
| Gardner, Henry R., *et al.* (See Ennis, George H., assignor.) | | | | | | |
| Gardner, Howard D., New York, N. Y. Cesspool | 746,949 | Dec. 15 | 3019 | 693 | 107 | 1795 |
| Gardner, J. P. (See Spear, Arthur, assignor.) | | | | | | |
| Gardner, John, assignor to Winchester Repeating Arms Co., New Haven, Conn. Primer for cartridges | 733,638 | July 14 | 1678 | 398 | 105 | 371 |
| Gardner, John G. (See Scott and Gardner.) | | | | | | |
| Gardner, John H., Dalton, Ga. Threshing-machine | 742,183 | Oct. 27 | 3500 | 781 | 106 | 2034 |
| Gardner, Joshua G., Savannah, Ga. Collecting gums from trees | 735,869 | Aug. 11 | 1605 | 342 | 105 | 1342 |
| Gardner, Louis A., Providence, R. I. Sanding device | 746,691 | Dec. 15 | 2513 | 577 | 107 | 1681 |
| Gardner, Milo. (See Dever and Gardner.) | | | | | | |
| Gardner, Roland, Cleveland, Ohio. Abrading material and mounting therefor | 730,527 | June 9 | 1836 | 410 | 104 | 1521 |
| Gardner, William, Brooklyn, N. Y. Igniting device | 748,360 | Dec. 29 | 5654 | 1289 | 107 | 2419 |
| Gardner, William A., *et al.* (See Stone, Albert L., assignor.) | | | | | | |
| Gardy, Henry D., Philadelphia, Pa. Combined pan-lifter, can-opener, and corkscrew | 719,105 | Jan. 27 | 3035 | 675 | 102 | 687 |
| Gareau, Noah J. (See Keogh, Lucius R., assignor.) | | | | | | |
| Garey, Henry F., Baltimore, Md. Apparatus for treating the eye | 723,456 | Mar. 24 | 3355 | 752 | 103 | 749 |
| Garhart Dental Manufacturing Company. (See Garhart, Nathan K., assignor.) | | | | | | |
| Garhart, Nathan K., assignor to Garhart Dental Manufacturing Company, Indianapolis, Ind. Blast-controlling device for dental or other uses | 742,305 | Oct. 27 | 3743 | 837 | 106 | 2085 |
| Garis, Cornelius W., Easton, Pa., assignor, by mesne assignments, to F. A. Neider Company, Augusta, Ky. Button | 736,954 | Aug. 25 | 3611 | 800 | 105 | 1804 |
| Garland, Harrison W. (See Tromble, Fremont J., assignor.) | | | | | | |
| Garland, J. J. (See Newton, William N., assignor.) | | | | | | |
| Garland, John W., Pittsburg, and A. P. Aiken, Port Perry, Pa., assignors to said Garland. Lifting-jack | 719,457 | Feb. 3 | 79 | 19,20 | 102 | 842 |
| Garland, Michael, Bay City, Mich. Cable conveyer | 747,160 | Dec. 15 | 3407 | 772 | 107 | 1885 |
| Garland, Michael, assignor to M. Garland Company, Bay City, Mich. Conveyer-chain | 743,070 | Nov. 3 | 488 | 106 | 107 | 102 |
| Garland, Thomas H., Cleveland, Ohio. Excavating-machine | 734,315 | July 21 | 3008 | 708 | 105 | 669 |
| Garlick, Joseph E. and W. J., Paterson, N. J. Jacquard-machine for looms | 721,885 | Mar. 3 | 420 | 92 | 103 | 92 |
| Garlick, Walter J. (See Garlick, Joseph E. and W. J.) | | | | | | |
| Garllus, Bernt, Madison, Wis. Gas or gasolene engine | 722,223 | Mar. 10 | 1059 | 233 | 103 | 241 |
| Garman, John H., Bristol, Ind. Folding box | 736,955 | Aug. 25 | 3612 | 800 | 105 | 1804 |
| Garner, Frank E., Long Meadow, Mass. Thread guide and cleaner | 718,617 | Jan. 20 | 2094 | 456 | 102 | 479 |
| Garner, John S., assignor of one-half to T. J. Cannon, Effingham, S. C. Gin-saw sharpener | 720,416 | Feb. 10 | 1848 | 421 | 102 | 1231 |
| Garratt, John C., Birmingham, and T. Brown, Olton, England. Meat-hanger | 741,397 | Oct. 13 | 1933 | 427 | 106 | 1679 |
| Garrecht, Frederick, Idaho City, Idaho. Toy | 739,168 | Sept. 15 | 3172 | 701<br>702 | 106 | 709 |
| Garretson Furnace Company. (See Baggaley and Garretson, assignors.) | | | | | | |
| Garretson Furnace Company. (See Garretson, Oliver S., assignor.) | | | | | | |
| Garretson, Homer V., Worthington, Minn. Water-meter and boxing | 721,295 | Feb. 24 | 3542 | 805 | 102 | 1619 |
| Garretson, Oliver S. (See Baggaley and Garretson.) | | | | | | |
| Garretson, Oliver S., Buffalo, N. Y. Twyer for blast-furnaces | 726,422 | Apr. 28 | 3696 | 838 | 103 | 1994 |
| Garretson, Oliver S., Buffalo, N. Y. Slag-furnace | 728,794 | May 19 | 3719 | 829<br>830 | 104 | 826 |
| Garretson, Oliver S., Buffalo, N. Y. Slag-furnace | 728,795 | May 19 | 3721 | 830<br>831 | 104 | 827 |
| Garretson, Oliver S., Buffalo, N. Y. Boiler | 742,306 | Oct. 27 | 3745 | 837<br>838<br>839 | 106 | 2085 |
| Garretson, Oliver S., Buffalo, N. Y., assignor to Garretson Furnace Company, Pittsburg, Pa. Blast-furnace | 728,700 | May 19 | 3545 | 788 | 104 | 792 |
| Garretson, Oliver S., Buffalo, N. Y., assignor to Garretson Furnace Company, Pittsburg, Pa. Matte or pyritic smelting | 728,701 | May 19 | 3548 | 788 | 104 | 793 |
| Garrett, Charles B., assignor of one-half to E. G. Garrett, Minneapolis, Minn., and M. C. Garrett, East Downingtown, Pa. Dry-pipe valve | 723,264 | Mar. 24 | 2995 | 673 | 103 | 677 |
| Garrett-Cromwell Engineering Company. (See Cromwell, John C., assignor.) | | | | | | |
| Garrett-Cromwell Engineering Company. (See Cromwell and Koelkebeck, assignors.) | | | | | | |
| Garrett, D. E., *et al.* (See Lewars, Lincoln H., assignor.) | | | | | | |
| Garrett, Emma G., *et al.* (See Garrett, Charles B., assignor.) | | | | | | |
| Garrett, Fred A. (See Wilkins and Garrett.) | | | | | | |
| Garrett, Henry, Dallas, Tex. Circuit-breaker for storage batteries | 729,323 | May 26 | 4670 | 1032 | 104 | 1039 |
| Garrett, Henry, Dallas, Tex. Circuit-breaker for storage batteries | 746,490 | Dec. 8 | 2141 | 493 | 107 | 1577 |
| Garrett, Irvin H., assignor to J. W. Watson & Co., McDade, Tex. Stump-puller | 726,421 | Apr. 28 | 3695 | 838 | 103 | 1994 |
| Garrett, James C., San Francisco, Cal. Hose-support | 742,855 | Nov. 3 | 66 | 16 | 107 | 16 |
| Garrett, John N., *et al.* (See Pulsifer, James P., assignor.) | | | | | | |
| Garrett, John W., New York, N. Y. Motor | 735,491 | Aug. 4 | 874 | 186<br>187 | 105 | 1166 |
| Garrett, Lee, Forestburg, Tex. Cattle-stanchion | 722,360 | Mar. 10 | 1307 | 290 | 103 | 294 |
| Garrett, Margaret C., *et al.* (See Garrett, Charles B., assignor.) | | | | | | |
| Garrett, Warren H., Lagrange, assignor to Fairbanks, Morse & Company, Chicago, Ill. Conveyer | 747,546 | Dec. 22 | 4116 | 924 | 107 | 2058 |
| Garrettson, Franklin W., Baltimore, Md. Construction of concrete buildings and nail-plug therefor | 724,461 | Apr. 7 | 82 | 20 | 103 | 1187 |
| Garrettson, Franklin W., Baltimore, Md. Construction of concrete buildings | 724,462 | Apr. 7 | 83 | 20 | 103 | 1187 |
| Garrick, Joseph W., Binghamton, N. Y. Raising dough | 734,847 | July 28 | 4008 | ..... | 105 | 891 |
| Garrigus, Clarence G., and A. A. Warner, assignors to C. F. Smith and G. M. Landers, New Britain, Conn. Dough-mixer | 736,956 | Aug. 25 | 3613 | 801 | 105 | 1804 |
| Garrison, Clarence B., Cincinnati, Ohio. Hat-pin and fastener | 721,512 | Feb. 24 | 3935 | 896 | 102 | 1700 |
| Garrison, Furman M., and D. W. Brackett, Vineland, N. J. Ladder | 745,343 | Dec. 1 | 50 | 11 | 107 | 1111 |
| Garrison, George H., Rockford, Ill. Subcaliber firearm | 732,540 | June 30 | 5643 | 1251 | 104 | 2363 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|
| | | | Spec. | Dr'g. | Vol. | Page. |
| Garrison, Harry H., assignor of one-half to H. G. Shupp, Wilkesbarre, Pa. Show-card | 731,884 | June 23 | 4347 | 970 | 104 | 2081 |
| Garrison, Homer. (See Johnson, Nellie E., assignor.) | | | | | | |
| Garrison, Perry J., Three Rivers, Mich. Walking-beam for hand-cars | 737,604 | Sept. 1 | 88 | 18 | 106 | 21 |
| Garrity, Patrick H., Waterbury, Conn. Screw-driver or kindred tool | 723,525 | Mar. 24 | 3493 | 781 | 103 | 775 |
| Garroway, David C. (See Junggren and Garroway.) | | | | | | |
| Garsed, Samuel, and J. Carter, Elland, England. Scribbling and carding machine | 725,836 | Apr. 21 | 2636 | 600 | 103 | 1760 |
| Garst, Dudley. (See Garst, Stephen H. and D.) | | | | | | |
| Garst, Stephen H. and D., assignors to American Harrow Company, Detroit, Mich. Cultivator | 722,690 | Mar. 17 | 1958 | 437 | 103 | 450 |
| Garten, John N. M. (See Boyd, Jesse C., assignor.) | | | | | | |
| Gartland, Francis X., Philadelphia, Pa. Eyeglasses | 733,639 | July 14 | 1679 | 399 | 105 | 371 |
| Gartleman, John G. (See Dunwald, Peter, assignor.) | | | | | | |
| Gartner, August, Reserve Township, Pa. Hod-elevator | 717,672 | Jan. 6 | 270 | 67 | 102 | 58 |
| Gartshore, Alexander, and W. Maxwell, Pittsburg, Pa. Spike-puller | 740,415 | Oct. 6 | 49 | 11 | 106 | 1255 |
| Gartside, William N., Richmond, Ind. Trimmer | 724,176 | Mar. 31 | 4737 | 1062 | 103 | 1050 |
| Gartz, Mary L., *et al.* (See Gartz, William H., assignor.) | | | | | | |
| Gartz, William H., assignor to A. Wright and M. L. Gartz, Bernardsville, N. J. Locking attachment for doors | 735,962 | Aug. 11 | 1764 | 378 | 105 | 1376 |
| Garuti, Pompeo, and R. Pompili, Tivoli, Italy. Voltameter for the electrolysis of water | 724,842 | Apr. 7 | 795 | 184 | 103 | 1339 |
| Garver, Charles, Fort Wayne, Ind. Washing-machine | 725,333 | Apr. 14 | 1693 | 381, 382 | 103 | 1544 |
| Garver, Charles, Fort Wayne, Ind. Washing-machine | 733,182 | July 7 | 854 | 207 | 105 | 179 |
| Garver, Charles, assignor of one-half to S. F. Swayne, Fort Wayne, Ind. Automatic wagon-brake | 728,897 | May 26 | 3912 | 869 | 104 | 882 |
| Garvey Company. (See Hauser, Theodore, assignor.) | | | | | | |
| Garvey, Edgar L., Asheville, N. C. Spring-motor | 741,483 | Oct. 13 | 2101 | 467 | 106 | 1715 |
| Garvey, Herbert A. (See White, Burdette J., assignor.) | | | | | | |
| Garvey, John C., Hartwell, Ohio. Hose-holder | 731,172 | June 16 | 3021 | 671 | 104 | 1788 |
| Garvey, Michael, New York, N. Y. Building-wall construction | 744,185 | Nov. 17 | 2763 | 588 | 107 | 617 |
| Garvin, Samuel S., Austin, assignor to M. Phillips, Chicago, Ill. Incandescent-electric-lamp holder | 729,857 | June 2 | 619 | 136 | 104 | 1254 |
| Gary, Charles H. (See Hough and Gary.) | | | | | | |
| Gary, Charles H., Erving, assignor of one-half to W. N. Washburn, Greenfield, Mass. Straining attachment for injector-pipes or other purposes | 723,858 | Mar. 31 | 4094 | 924 | 103 | 918 |
| Gary, George W., and B. O. Ostrom, Saginaw, Mich. Beet-digger | 746,067 | Dec. 8 | 1391 | 311 | 107 | 1414 |
| Gary, Jefferson, assignor of six-sevenths to G. W. Boldrew, P. Smith, W. Barnett, H. H. Jones, H. Smith, and G. W. Brown, St. Louis, Mo. Rotary engine | 748,495 | Dec. 29 | 5921 | 1344, 1345 | 107 | 2479 |
| Gas-Tip and Self-Lighter Company. (See Kramer, William, assignor.) | | | | | | |
| Gaskill, Marion L., assignor of one-half to I. I. Caskey, Columbus, Ohio. Car-coupling | 737,605 | Sept. 1 | 89 | 19 | 106 | 22 |
| Gaskill, Roland R., assignor of one-half to L. F. Bishoff, Hennessy, Okla. Ter. Gasolene-engine | 742,184 | Oct. 27 | 3502 | 782 | 106 | 2034 |
| Gass, Claude S. (See Tucker, Holling G., assignor.) | | | | | | |
| Gass, William G., Bolton, England. Machine-gun | 729,858 | June 2 | 620 | 136, 137 | 104 | 1255 |
| Gassard, Louis, assignor to T. G. Mason, Toronto, Canada. Tilting-table polishing-truck | 722,296 | Mar. 10 | 1200 | 264, 265 | 103 | 272 |
| Gasser, Sanford, Sherman, Mich. Trousers-stretcher | 741,654 | Oct. 20 | 2425 | 543 | 106 | 1799 |
| Gasser, William, Niles, Ohio. Rail-tie | 743,157 | Nov. 3 | 654 | 141 | 107 | 137 |
| Gastal, Benjamin, Pelotas, Brazil. Air-compressor | 722,968 | Mar. 17 | 2446 | 547, 548 | 103 | 549 |
| Gastaldi, Bernard, Norwalk, assignor of one-half to J. Reilly, Bridgeport, Conn. Self-feeding stapling-pliers | 728,898 | May 26 | 3914 | 870 | 104 | 883 |
| Gaston, Alanson D., Washington, D. C. Animal-trap | 730,528 | June 9 | 1837 | 410 | 104 | 1522 |
| Gaston, Josiah B., Rock Springs, Wyo. Brake | 747,410 | Dec. 22 | 3875 | 872 | 107 | 2004 |
| Gaston, William C. (See Walter, Edward, assignor.) | | | | | | |
| Gates, C. C., *et al.* (See Blackmon, Frank A., assignor.) | | | | | | |
| Gates, C. Robert. (See Gates, Frederic P., assignor.) | | | | | | |
| Gates, Edward W. (See McDonald, James C., assignor.) | | | | | | |
| Gates, Elmer, Chevy Chase, Md. Educational toy or game apparatus | 741,903 | Oct. 20 | 2913 | 650 | 106 | 1900 |
| Gates, Elmer, Chevy Chase, Md. Means for electric separation | 743,710 | Nov. 10 | 1802 | 380 | 107 | 401 |
| Gates, Elmer, Chevy Chase, Md., assignor to T. J. Mayer, Washington, D. C. Production of alloys | 729,752 | June 2 | 415 | 93, 94, 95 | 104 | 1213 |
| Gates, Elmer, Chevy Chase, Md., assignor to T. J. Mayer, Washington, D. C. Subaqueous magnetic separator | 729,753 | June 2 | 421 | 95, 96 | 104 | 1214 |
| Gates, Elmer, Chevy Chase, Md., assignor to T. J. Mayer, Washington, D. C. Casting alloys | 729,754 | June 2 | 423 | 96 | 104 | 1215 |
| Gates, Elmer, Chevy Chase, Md., assignor to T. J. Mayer, Washington, D. C. Apparatus for casting alloys | 729,755 | June 2 | 426 | 97 | 104 | 1215 |
| Gates, Elmer, Chevy Chase, Md., assignor to T. J. Mayer, Washington, D. C. Alloy casting | 729,756 | June 2 | 429 | 97 | 104 | 1216 |
| Gates, Elmer, Chevy Chase, Md., assignor to T. J. Mayer, Washington, D. C. Diamagnetic separator | 731,035 | June 16 | 2760 | 615 | 104 | 1737 |
| Gates, Elmer, Chevy Chase, Md., assignor to T. J. Mayer, Washington, D. C. Diamagnetic separation | 731,036 | June 16 | 2761 | 615 | 104 | 1737 |
| Gates, Elmer, Chevy Chase, Md., assignor to T. J. Mayer, Washington, D. C. Diamagnetic separator | 731,037 | June 16 | 2763 | 616 | 104 | 1737 |
| Gates, Elmer, Chevy Chase, Md., assignor to T. J. Mayer, Washington, D. C. Diamagnetic separator | 731,038 | June 16 | 2764 | 616 | 104 | 1738 |
| Gates, Elmer, Chevy Chase, Md., assignor to T. J. Mayer, Washington, D. C. Diamagnetic separator | 731,039 | June 16 | 2765 | 616 | 104 | 1738 |
| Gates, Elmer, Chevy Chase, Md., assignor to T. J. Mayer, Washington, D. C. Diamagnetic separation | 731,040 | June 16 | 2767 | 617 | 104 | 1738 |
| Gates, Elmer, Chevy Chase, Md., assignor to T. J. Mayer, Washington, D. C. Diamagnetic separator | 731,041 | June 16 | 2768 | 617 | 104 | 1739 |
| Gates, Elmer, Chevy Chase, Md., assignor to T. J. Mayer, Washington, D. C. Diamagnetic separation | 731,042 | June 16 | 2770 | 617, 618 | 104 | 1739 |
| Gates, Elmer, Chevy Chase, Md., assignor to T. J. Mayer, Washington, D. C. Separating diamagnetic metal from sands, &c | 731,043 | June 16 | 2771 | 618 | 104 | 1739 |
| Gates, Elmer, Chevy Chase, Md., assignor to T. J. Mayer, Washington, D. C. Diamagnetic separation | 731,044 | June 16 | 2774 | 618 | 104 | 1740 |
| Gates, Elmer, Chevy Chase, Md., assignor to T. J. Mayer, Washington, D. C. Diamagnetic separator | 731,045 | June 16 | 2774 | 618 | 104 | 1740 |
| Gates, Eugene H. (See Gates, Parker J. and E. H.) | | | | | | |
| Gates, Frederic P., assignor of one-half to C. R. Gates, New London, Conn. Drill-chuck | 722,575 | Mar. 10 | 1712 | 381 | 103 | 383 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Gates, Louis W., Westhaven, Conn. Yielding cutting-tool | 745,101 | Nov. 24 | 4459 | 964 | 107 | 994 |
| Gates, Louis W., Westhaven, assignor of one-half to C. Scholl, New Haven, Conn. Tapping-valve | 747,547 | Dec. 22 | 4117 | 924, 925 | 107 | 2058 |
| Gates, Parker J., West New Brighton, and E. H. Gates, Flushing, N. Y. Cooking utensil | 719,786 | Feb. 3 | 687 | 159 | 102 | 968 |
| Gates, Samuel A. (See Davidson, William J., assignor.) | | | | | | |
| Gates, Samuel A. (See House, Samuel M. J., assignor.) | | | | | | |
| Gates, William H. (See Gilman, Isaac H., assignor.) | | | | | | |
| Gatewood, James B., Huntington, W. Va. Tobacco-harvesting knife | 742,981 | Nov. 3 | 282 | 63 | 107 | 61 |
| Gathmann, Emil. (See Meigs and Gathmann.) | | | | | | |
| Gathmann, Emil, Washington, D. C., assignor to G. W. McMullen, Picton, Ontario, Canada. Machine for making incisions in powder rods | 728,899 | May 26 | 3917 | 870 | 104 | 883 |
| Gathmann, Emil, assignor to Bethlehem Steel Company, South Bethlehem, Pa. Percussion-fuse | 735,238 | Aug. 4 | 394 | 77 | 105 | 1065 |
| Gathmann, Louis, Chicago, Ill. Safety-fuse for high-explosive shells | 734,697 | July 28 | 3695 | 866 | 105 | 829 |
| Gathmann, Louis, Chicago, Ill., assignor to G. W. McMullen, Picton, Canada. Explosive charge | 726,901 | May 5 | 129 | 31 | 104 | 31 |
| Gathright, Josiah B., Louisville, Ky. Hame and trace hook | 736,839 | Aug. 18 | 3388 | 749 | 105 | 1736 |
| Gatter, Rudolph E., New York, N. Y. Coin-operated bowling-game apparatus | 718,338 | Jan. 13 | 1525 | 338 | 102 | 343 |
| Gatter, Rudolph E., New York, N. Y. Protector for milk-jars | 720,341 | Feb 10 | 1719 | 391 | 102 | 1203 |
| Gaucher, George C., New York, N. Y. Adjustable support for drills or the like | 731,173 | June 16 | 3022 | 672 | 104 | 1788 |
| Gauchet, Edward A., Saugatuck, Conn. Car-door fastening | 730,758 | June 9 | 2234 | 496 | 104 | 1609 |
| Gaud, Eugène, Asnières, France. Brush-holder for dynamos | 725,239 | Apr. 14 | 1530 | 348 | 103 | 1509 |
| Gaudet, Frederick M., Quebec, Canada. Target for miniature ranges | 738,790 | Sept. 15 | 2504 | 551 | 106 | 568 |
| Gault, Charles A. (See O'Brien, Alexander J., assignor.) | | | | | | |
| Gault, John H., assignor to Hero Fruit Jar Company, Philadelphia, Pa. Insulating handle connection | 744,743 | Nov. 24 | 3775 | 813 | 107 | 853 |
| Gaum, William G., Panther, W. Va. Reversible and variable friction-gear | 725,953 | Apr. 21 | 2840 | 644 | 103 | 1802 |
| Gaumer, Max. (See Kaltwasser and Gaumer.) | | | | | | |
| Gaunt, Charles H., assignor of one-half to O. C. Greene, St. Paul, Minn. Combined telegraph and telephone system | 719,458 | Feb. 3 | 80 | 20 | 102 | 842 |
| Gaunt, Joseph S. (See Ashworth, Thomas, assignor.) | | | | | | |
| Gauron, Alphonse. (See Gauron, Edmond, assignor.) | | | | | | |
| Gauron, Edmond, assignor of one-half to A. Gauron, Haverhill, Mass. Weather-strip | 718,926 | Jan. 20 | 2666 | 598 | 102 | 596 |
| Gausden, Frank L., Chicago, Ill. Patch for band-saws | 729,154 | May 26 | 4374 | 965 | 104 | 976 |
| Gaut, Joseph, Sydney, New South Wales, Australia. Adjustable head-rest for fire-arms | 737,732 | Sept. 1 | 324 | 68 | 106 | 74 |
| Gautier, Georges, Paris, France. Manufacture of artificial leather | 736,957 | Aug. 25 | 3615 | ------ | 105 | 1804 |
| Gautschi, Henry A., Philadelphia, Pa. Phonographic attachment for music-boxes | 743,858 | Nov. 10 | 2069 | 440 | 107 | 456 |
| Gauvreau, Louis C., Allegheny, Pa. Composition | 745,050 | Nov. 24 | 4345 | ------ | 107 | 971 |
| Gavelek, Julius, Chicago, Ill. Elevator-brake | 742,185 | Oct. 27 | 3504 | 782 | 106 | 2034 |
| Gavin, John E., New York, N. Y. Closure for receptacles | 746,491 | Dec. 8 | 2143 | 493 | 107 | 1577 |
| Gavin, Peter, Erin Prairie, Wis. Antispreading means for railways | 747,964 | Dec. 29 | 4932 | 1115 | 107 | 2262 |
| Gavitt, Harry E., Topeka, Kans. Card game | 746,492 | Dec. 8 | 2144 | 493 | 107 | 1577 |
| Gavitt, James A., Pendleton, Oreg. Snap-hook | 737,384 | Aug. 25 | 4382 | 977 | 105 | 1966 |
| Gavitt, James A., Pendleton, Oreg. Buckle | 747,693 | Dec. 22 | 4385 | 989 | 107 | 2118 |
| Gaworzewski, Johannes, assignor of one-half to P. Kloster, Frankfort-on-the-Main, Germany. Spoke-fastening device | 718,964 | Jan. 20 | 2746 | 614 | 102 | 614 |
| Gay, Bessie L., *et al.* (See Comins, John R., assignor.) | | | | | | |
| Gay, Charles. (See Sault, Thomas, assignor.) | | | | | | |
| Gay, Chauncey W., West Springfield, Mass. Paper-box machine | 721,557 | Feb. 24 | 4014 | 912, 913, 914 | 102 | 1717 |
| Gay, Chauncey W., West Springfield, Mass. Feeding mechanism | 726,819 | Apr. 28 | 4475 | 1011 | 103 | 2150 |
| Gay, Chauncey W., West Springfield, Mass. Paper-box machine | 741,324 | Oct. 13 | 1767 | 393, 394, 395 | 106 | 1640 |
| Gay, Chauncey W., West Springfield, Mass. Printing-machine | 747,694 | Dec. 22 | 4386 | 989, 990 | 107 | 2119 |
| Gay, Chauncey W., West Springfield, Mass. Machine for feeding and preparing blanks of paper or analogous material | 747,695 | Dec. 22 | 4390 | 990, 991 | 107 | 2120 |
| Gay, Chauncey W., West Springfield, assignor to J. Pomeroy, Springfield, Mass. Machine for splitting ratan | 723,859 | Mar. 31 | 4096 | 924 | 103 | 919 |
| Gay, Elisha G., Oneida, N. Y. Automatic fire-extinguisher | 736,514 | Aug. 18 | 2763 | 604 | 105 | 1608 |
| Gay, Eugene J. (See Neelings and Gay.) | | | | | | |
| Gay, George E., Pittsburg, Pa. Flexible shafting | 736,378 | Aug. 18 | 2495 | 549 | 105 | 1551 |
| Gay, Hugh L., Monticello, Fla. Addressing-machine | 722,969 | Mar. 17 | 2418 | 548 | 103 | 550 |
| Gay, John W., Sodaville, Oreg. Railway-rail joint | 734,056 | July 21 | 2503 | 583 | 105 | 563 |
| Gay, Joseph H. (See Quigley and Gay.) | | | | | | |
| Gay, Joseph H., and W. D. Quigley, Newark, N. J. Stripping-plate for leather-splitting machines | 747,411 | Dec. 22 | 3877 | 873 | 107 | 2004 |
| Gay, William A., Terryville, Conn. Doll | 721,948 | Mar. 3 | 555 | 122 | 103 | 122 |
| Gayley, James, Braddock, Pa. Extracting moisture from air for blast-furnaces and converters | 746,814 | Dec. 15 | 2735 | 630, 631 | 107 | 1731 |
| Gaylor, Leonard B., Newton Center, Mass. Automobile | 722,224 | Mar. 10 | 1062 | 233 | 103 | 242 |
| Gaylord, Charles L., Bridgeport, Conn. Awning | 743,711 | Nov. 10 | 1803 | 380, 381 | 107 | 402 |
| Gaylord, John B. (See Gaylord, Robert L., assignor.) | | | | | | |
| Gaylord, Lot E., St. Paul, Minn. Screen | 743,634 | Nov. 10 | 1676 | 352 | 107 | 374 |
| Gaylord, Lot E., St. Paul, Minn. Means for transmitting and equalizing variable power | 746,323 | Dec. 8 | 1857 | 422, 423 | 107 | 1515 |
| Gaylord, Robert L., assignor of one-third to J. B. Gaylord, Clyo, Ga. Turpentine-box | 730,759 | June 9 | 2235 | 497 | 104 | 1610 |
| Gayner, John W., Salem, N. J., assignor to American Producer-Gas Furnace Company. Gas-producer | 735,492 | Aug. 4 | 876 | 187 | 105 | 1167 |
| Gayner, John W., Salem, N. J., assignor to American Producer-Gas Furnace Company. Gas-producer | 735,493 | Aug. 4 | 877 | 187 | 105 | 1167 |
| Gayner, John W., Salem, N. J., assignor to American Producer-Gas Furnace Company. Gas-producer | 735,494 | Aug. 4 | 878 | 187 | 105 | 1168 |
| Gayner, John W., Salem, N. J., assignor to American Producer-Gas Furnace Company. Gas-producer | 735,495 | Aug. 4 | 879 | 188 | 105 | 1168 |
| Gayner, John W., Salem, N. J., assignor to American Producer-Gas Furnace Co. Gas-producer system | 748,361 | Dec. 29 | 5656 | 1290 | 107 | 2419 |
| Gaynon, Edward J., Woonsocket, R. I. Rail-joint | 733,833 | July 14 | 2044 | 481, 482 | 105 | 446 |
| Gaynor, Arthur C., Bridgeport, Conn. Automatic stropper | 720,417 | Feb. 10 | 1851 | 422 | 102 | 1231 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|
| | | | Spec. | Dig. | Vol. | Page. |
| Gaynor, John J., assignor of two-thirds to F. M. Fauvre and A. Harmon, Indianapolis, Ind. Soap cutter and spreader. (Reissue) | 12,100 | Mar. 17 | 2917 | 654 | 103 | 648 |
| Gaynor, Lee R., Coon Rapids, Iowa. Advertising device | 738,177 | Sept. 8 | 1271 | 275 | 106 | 291 |
| Gearhart, Grafton G., Cazenovia, Ill. Combination-tool | 745,008 | Nov. 24 | 4237 | 918 | 107 | 949 |
| Gearing, Ernest, Harrowgate, England. Steam-boiler furnace and flue | 720,418 | Feb. 10 | 1854 | 422 | 102 | 1232 |
| Geary, Hobart S., *et al.* (See Madas, Louis, assignor.) | | | | | | |
| Geary, John W., Bradford, Pa. Device for heating air-brake systems | 736,840 | Aug. 18 | 3390 | 750 | 105 | 1736 |
| Geary, Warren C., Philadelphia, Pa., assignor to National Federation of American Homing Pigeon Fanciers, Jersey City, N. J. Timing device for homing pigeons | 730,208 | June 2 | 1220 | 272 | 104 | 1376 |
| Gebauer, Oscar, assignor to A. Mallon, Berlin, Germany. Sliding-jaw wrench | 729,155 | May 26 | 4375 | 965 | 104 | 976 |
| Gebers, Carl, Wandsbeck, Germany. Railway-wagon coupling | 723,265 | Mar. 24 | 2998 | 674 | 103 | 678 |
| Gebhardt, Henry J., Chicago, Ill. Feed-water heater | 744,525 | Nov. 17 | 3364 | 725 | 107 | 749 |
| Gebhardt, Victor, St. Louis, Mo. Bait-holder | 740,416 | Oct. 6 | 50 | 11 | 106 | 1255 |
| Geddes, George S., Sydney, New South Wales, Australia, assignor to W. J. Geddes, Brooklyn, N. Y. Buckle | 740,417 | Oct. 6 | 50 | 12 | 106 | 1255 |
| Geddes, William J. (See Geddes, George S., assignor.) | | | | | | |
| Gedge, Burton H., Anderson, Ind. Eaves-trough | 741,027 | Oct. 13 | 1182 | 267 | 106 | 1518 |
| Gedge, Burton H., Anderson, Ind. Eaves-trough hanger | 741,028 | Oct. 13 | 1183 | 268 | 106 | 1518 |
| Gee, Charles R. (See Pearce and Gee.) | | | | | | |
| Gee, James, *et al.* (See Waters, Frank J., assignor.) | | | | | | |
| Geekie, Charles W., Baltimore, Md. Means for preventing meddling with the flow of fluids. | 741,240 | Oct. 13 | 1595 | 359 | 106 | 1607 |
| Geer, George, Richmond, Va. Mechanical movement | 722,095 | Mar. 3 | 808 | 180 | 103 | 175 |
| Geer, George, assignor of one-half to C. E. Buek, Richmond, Va. Churn | 724,998 | Apr. 7 | 1075 | 246 | 103 | 1398 |
| Geer, George, assignor of one-half to C. E. Buek, Richmond, Va. Churn | 746,629 | Dec. 8 | 2388 | 547 | 107 | 1633 |
| Gegenheimer, John F., Glassboro, N. J. Machine for manufacturing glassware | 731,885 | June 23 | 4348 | 970 | 104 | 2082 |
| Gehman, Leidy S., Abbeville, Ga. Baling-press | 724,843 | Apr. 7 | 797 | 184 | 103 | 1340 |
| Gehre, Max, Rath, Germany. Water-level-indicating apparatus | 738,315 | Sept. 8 | 1575 | 340 | 106 | 355 |
| Gehricke, Friedrich, and F. Bollmann, Berlin, Germany. Safety device for railway-vehicles in case of derailment | 735,239 | Aug. 4 | 395 | 77 | 105 | 1065 |
| Gehring, Gustave P., *et al.* (See Shoemaker, Harry, assignor.) | | | | | | |
| Gehring, Gustave P., *et al.* (See Shoemaker and Pickard, assignors.) | | | | | | |
| Gehring, Marie V. (See Saliger, Alois B., assignor.) | | | | | | |
| Gehring, Marie V., *et al.* (See Shoemaker, Harry, assignor.) | | | | | | |
| Gehring, Marie V. (See Shoemaker and Snook, assignors.) | | | | | | |
| Geiger, Albert A., D. C. Bauer, Newark, N. J., and J. Pejchar, New York, N. Y. Ear ornament | 718,708 | Jan. 20 | 2265 | 498 | 102 | 513 |
| Geiger, Albert A., D. C. Bauer, Newark, N. J., and J. Pejchar, New York, N. Y. Cuttlebone mold | 722,361 | Mar. 10 | 1308 | 291 | 103 | 294 |
| Geiger, Artemus G., Congaree Township, Lexington county, S. C. Turpentine-pocket | 742,625 | Oct. 27 | 4317 | 972 | 106 | 2205 |
| Geiger & Bauer. (See Pejchar, Josef, assignor.) | | | | | | |
| Geiger, Charles W., Kirkersville, Ohio. Flour-packer | 737,385 | Aug. 25 | 4383 | 978 | 105 | 1967 |
| Geiger, Fred. E. (See Gunther and Geiger.) | | | | | | |
| Geiger, Gottlieb, Cleveland, Ohio. Life-guard for tram-cars | 722,691 | Mar. 17 | 1959 | 437<br>438 | 103 | 451 |
| Geiger, Gottlieb, Cleveland, Ohio. Life-guard for railway-cars | 746,692 | Dec. 15 | 2514 | 577<br>578 | 107 | 1681 |
| Geiger, Gustav, Munich, Germany. Handle for photographic stick-stands | 744,526 | Nov. 17 | 3369 | 726 | 107 | 750 |
| Geiger, John, Minden, Iowa. Device for lining cutter-bars | 741,655 | Oct. 20 | 2426 | 543 | 106 | 1799 |
| Geiger, Kreamer S., Birdsboro, Pa. Pump | 729,156 | May 26 | 4376 | 965 | 104 | 977 |
| Geis, Jean L., Paris, France. Automatic filtering-lubricator for the bushings of spinning-spindles | 728,563 | May 19 | 3291 | 729 | 104 | 736 |
| Geisel, Otto E., Philadelphia, Pa. Joining the ends of woven belts | 726,670 | Apr. 28 | 4190 | 946 | 103 | 2090 |
| Geisenhöner, Henry, Schenectady, N. Y., assignor to General Electric Company. Trolley-wire clamp | 725,436 | Apr. 14 | 1880 | 420 | 103 | 1583 |
| Geisenhöner, Henry, Schenectady, N. Y., assignor to General Electric Company. Brush-holder | 728,222 | May 19 | 2632 | 587 | 104 | 599 |
| Geisenhöner, Henry, Schenectady, N. Y., assignor to General Electric Company. Brush-holder | 728,565 | May 19 | 3294 | 730 | 104 | 736 |
| Geisenhöner, Henry, Schenectady, N. Y., assignor to General Electric Company. Turbine-bucket-cutting tool | 730,362 | June 9 | 1524 | 338 | 104 | 1455 |
| Geisenhöner, Henry, Schenectady, N. Y., assignor to General Electric Company. Detachable turbine-bucket | 730,363 | June 9 | 1526 | 338 | 104 | 1455 |
| Geisenhöner, Henry, Schenectady, N. Y., assignor to General Electric Company. Metal-bending machine | 734,316 | July 21 | 3009 | 708 | 105 | 669 |
| Geisenhöner, Henry, Schenectady, N. Y., assignor to General Electric Company. Oil-carrying ring for journal-bearings | 734,317 | July 21 | 3012 | 709 | 105 | 670 |
| Geisenhöner, Henry, Schenectady, N. Y., assignor to General Electric Company. End-play device | 739,598 | Sept. 22 | 3971 | 886 | 106 | 897 |
| Geisenhöner, Henry, Schenectady, N. Y., assignor to General Electric Company. Brush-holder | 747,696 | Dec. 22 | 4395 | 991 | 107 | 2121 |
| Geisenhöner, Henry, Schenectady, N. Y., assignor to General Electric Company. Electric fuse | 747,697 | Dec. 22 | 4397 | 991 | 107 | 2122 |
| Geisenhöner, Henry, Schenectady, N. Y., assignor to General Electric Company. Dynamo-electric machine | 747,698 | Dec. 22 | 4399 | 992 | 107 | 2122 |
| Geisenhöner, Henry, and T. Van Aller, Schenectady, N. Y., assignors to General Electric Company. Electric resistance structure | 728,564 | May 19 | 3292 | 729<br>730 | 104 | 736 |
| Geisler, Gerhard C., West Kensington, London, and A. T. M. Thomson, Epsom, England. Pencil-sheath adapted to operate as a cigarette-maker | 739,850 | Sept. 29 | 4447 | 999 | 106 | 1019 |
| Geissel, Jacob H. (See Miller, John C., assignor.) | | | | | | |
| Geisslinger, Johann, Nuremberg, Germany. Sparking plug for explosion-motors | 745,102 | Nov. 24 | 4461 | 965 | 107 | 995 |
| Geistert, Rudolph H. A., Camden, N. J. Wrench | 743,482 | Nov. 10 | 1382 | 283 | 107 | 310 |
| Gellatly, Burt. (See Stevens and Gellatly.) | | | | | | |
| Gellér, Michael, New York, N. Y. Control and guest's pay-check for hotels, restaurants, &c | 719,209 | Jan. 27 | 3206 | 715 | 102 | 722 |
| Gelpke, Victor. (See Kugel and Gelpke.) | | | | | | |
| Gem City Stove Manufacturing Co. (See Wewers, William, assignor.) | | | | | | |
| Gemmer, George A., Marion, Ind. Pump for combustion-engines | 722,008 | Mar. 3 | 662 | 147 | 103 | 143 |
| Gemmer, George A., Marion, Ind. Vaporizer for explosive-engines | 726,671 | Apr. 28 | 4192 | 946 | 103 | 2091 |
| Gemmer, George A., Marion, Ind. Pump-operating mechanism | 732,628 | June 30 | 5806 | 1287<br>1288 | 104 | 2401 |
| Gemmill, James A., Carleton Place, Canada. Curtain-display rack | 736,379 | Aug. 18 | 2497 | 549 | 105 | 1551 |
| Gemmill, James I., Cleveland, Ohio. Telephone-ringing device | 732,730 | July 7 | 60 | 16 | 105 | 16 |
| Gendron, Henry T. (See Gendron, Jeffry D., assignor.) | | | | | | |
| Gendron, Jeffry D., assignor to himself and H. T. Gendron, Gentilly, Minn. Door opener and holder | 736,714 | Aug. 18 | 3153 | 695 | 105 | 1687 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | Spec. | Drg. | Vol. | Page. |
| General Artificial Silk Company. (See Ryon and Waite, assignors.) | | | | | | |
| General Automatic Delivery Company. (See Moser, Leslie J., assignor.) | | | | | | |
| General Chemical Company. (See Duncan, Robert K., assignor.) | | | | | | |
| General Chemical Company. (See Ferguson, William C., assignor.) | | | | | | |
| General Chemical Company. (See Grosvenor, William M., assignor.) | | | | | | |
| General Chemical Company. (See Herreshoff, John B. F., assignor.) | | | | | | |
| General Electric Company. (See Aiken, Edward L., assignor.) | | | | | | |
| General Electric Company. (See Alexander, Magnus W., assignor.) | | | | | | |
| General Electric Company. (See Alton, George H., assignor.) | | | | | | |
| General Electric Company. (See Andrews, William S., assignor.) | | | | | | |
| General Electric Company. (See Armstrong, Albert H., assignor.) | | | | | | |
| General Electric Company. (See Armstrong and Woodbridge, assignors.) | | | | | | |
| General Electric Company. (See Ashley, Frank M., assignor.) | | | | | | |
| General Electric Company. (See Averrett, Andrew E., assignor.) | | | | | | |
| General Electric Company. (See Badeau, Charles C., assignor.) | | | | | | |
| General Electric Company. (See Baker, George O., assignor.) | | | | | | |
| General Electric Company. (See Baldwin, Henry S., assignor.) | | | | | | |
| General Electric Company. (See Ball, Augustus A., Jr., assignor.) | | | | | | |
| General Electric Company. (See Barry, Charles E., assignor.) | | | | | | |
| General Electric Company. (See Barry and Mundy, assignors.) | | | | | | |
| General Electric Company. (See Bassett, Norman C., assignor.) | | | | | | |
| General Electric Company. (See Batchelder, Asa F., assignor.) | | | | | | |
| General Electric Company. (See Bayer, Henry, assignor.) | | | | | | |
| General Electric Company. (See Bell, Louis, assignor.) | | | | | | |
| General Electric Company. (See Bentley, Oliver D. H., assignor.) | | | | | | |
| General Electric Company. (See Berg, Ernst J., assignor.) | | | | | | |
| General Electric Company. (See Bradley, Charles S., assignor.) | | | | | | |
| General Electric Company. (See Branin, Mark H., assignor.) | | | | | | |
| General Electric Company. (See Bray and Fry, assignors.) | | | | | | |
| General Electric Company. (See Brock, Charles W., assignor.) | | | | | | |
| General Electric Company. (See Buck, Harold W., assignor.) | | | | | | |
| General Electric Company. (See Burrows, William R., assignor.) | | | | | | |
| General Electric Company. (See Caldwell, Frederick W., assignor.) | | | | | | |
| General Electric Company. (See Case, Frank E., assignor.) | | | | | | |
| General Electric Company. (See Chapman, Lewis S., assignor.) | | | | | | |
| General Electric Company. (See Churchward, Alexander, assignor.) | | | | | | |
| General Electric Company. (See Clark, Paul L., assignor.) | | | | | | |
| General Electric Company. (See Clark, Wallace S., assignor.) | | | | | | |
| General Electric Company. (See Connett, Albert N., assignor.) | | | | | | |
| General Electric Company. (See Corey, Fred B., assignor.) | | | | | | |
| General Electric Company. (See Cox, Frank P., assignor.) | | | | | | |
| General Electric Company. (See Dahlander and Lindström, assignors.) | | | | | | |
| General Electric Company. (See Davis, Albert G., assignor.) | | | | | | |
| General Electric Company. (See Davis, Joseph L., assignor.) | | | | | | |
| General Electric Company. (See Dawson, William F., assignor.) | | | | | | |
| General Electric Company. (See Dean, William T., assignor.) | | | | | | |
| General Electric Company. (See Dodge, Austin R., assignor.) | | | | | | |
| General Electric Company. (See Dow, Fred T., assignor.) | | | | | | |
| General Electric Company. (See Drees, William F., assignor.) | | | | | | |
| General Electric Company. (See Emmet, William L. R., assignor.) | | | | | | |
| General Electric Company. (See Emmet and Junggren, assignors.) | | | | | | |
| General Electric Company. (See Erben, Hermann F. T., assignor.) | | | | | | |
| General Electric Company. (See Etheridge, Ernest L., assignor.) | | | | | | |
| General Electric Company. (See Everest, Augustine R., assignor.) | | | | | | |
| General Electric Company. (See Fenn, Frank L., assignor.) | | | | | | |
| General Electric Company. (See Fish, Walter C., assignor.) | | | | | | |
| General Electric Company. (See Fleming, Richard, assignor.) | | | | | | |
| General Electric Company. (See Foote, James B., assignor.) | | | | | | |
| General Electric Company. (See Frank, John J., assignor.) | | | | | | |
| General Electric Company. (See Geisenhöner, Henry, assignor.) | | | | | | |
| General Electric Company. (See Geisenhöner and Van Aller, assignors.) | | | | | | |
| General Electric Company. (See Gilbert and Lundin, assignors.) | | | | | | |
| General Electric Company. (See Hall, John L., assignor.) | | | | | | |
| General Electric Company. (See Harthan, Charles E., assignor.) | | | | | | |
| General Electric Company. (See Haskins, Caryl D., assignor.) | | | | | | |
| General Electric Company. (See Hewlett, Edward M., assignor.) | | | | | | |
| General Electric Company. (See Hewlett and Badeau, assignors.) | | | | | | |
| General Electric Company. (See Hild, Frederic W., assignor.) | | | | | | |
| General Electric Company. (See Hill, George H., assignor.) | | | | | | |
| General Electric Company. (See Holden, Frank, assignor.) | | | | | | |
| General Electric Company. (See Holz, Otto, assignor.) | | | | | | |
| General Electric Company. (See Howell, John W., assignor.) | | | | | | |
| General Electric Company. (See Ingalls, Charles H., assignor.) | | | | | | |
| General Electric Company. (See Jeannin, Frank H., assignor.) | | | | | | |
| General Electric Company. (See Johnston, Thomas J., assignor.) | | | | | | |
| General Electric Company. (See Junggren, Oscar, assignor.) | | | | | | |
| General Electric Company. (See Junggren and Garroway, assignors.) | | | | | | |
| General Electric Company. (See Kastenhuber, Edwin G., assignor.) | | | | | | |
| General Electric Company. (See Kellogg, James W., assignor.) | | | | | | |
| General Electric Company. (See King, Elton J., assignor.) | | | | | | |
| General Electric Company. (See Knowlton, Edgar, assignor.) | | | | | | |
| General Electric Company. (See Krohn, Sigvald, assignor.) | | | | | | |
| General Electric Company. (See Larson, Carl W., assignor.) | | | | | | |
| General Electric Company. (See Lemp, Hermann, assignor.) | | | | | | |
| General Electric Company. (See Lemp and Persson, assignors.) | | | | | | |
| General Electric Company. (See Linn, John B., assignor.) | | | | | | |
| General Electric Company. (See Litchfield, Walter D., assignor.) | | | | | | |
| General Electric Company. (See Lundskog, Julius W., assignor.) | | | | | | |
| General Electric Company. (See Lunt, Alexander D., assignor.) | | | | | | |
| General Electric Company. (See MacHaffie, John, assignor.) | | | | | | |
| General Electric Company. (See Macloskie, George, assignor.) | | | | | | |
| General Electric Company. (See Merrill, Wilbur L., assignor.) | | | | | | |
| General Electric Company. (See Meyer, Hans S., assignor.) | | | | | | |
| General Electric Company. (See Mix, Edgar W., assignor.) | | | | | | |
| General Electric Company. (See Moody, Walter S., assignor.) | | | | | | |
| General Electric Company. (See Mundy, William O., assignor.) | | | | | | |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | Spec. | Drgs. | Vol. | Page. |
| General Electric Company. (See Murphy, Edwin J., assignor.) | | | | | | |
| General Electric Company. (See Painter, George B., assignor.) | | | | | | |
| General Electric Company. (See Pevear, Jesse S., assignor.) | | | | | | |
| General Electric Company. (See Potter, William B., assignor.) | | | | | | |
| General Electric Company. (See Potter and Clark, assignors.) | | | | | | |
| General Electric Company. (See Pratt, William H., assignor.) | | | | | | |
| General Electric Company. (See Priest, Edward D., assignor.) | | | | | | |
| General Electric Company. (See Raymond, Henry E., assignor.) | | | | | | |
| General Electric Company. (See Read, Robert H., assignor.) | | | | | | |
| General Electric Company. (See Reist, Henry G., assignor.) | | | | | | |
| General Electric Company. (See Rice, Edwin W., Jr., assignor.) | | | | | | |
| General Electric Company. (See Rice and Berg, assignors.) | | | | | | |
| General Electric Company. (See Rypinski, Maurice C., assignor.) | | | | | | |
| General Electric Company. (See Rypinski and Davis, assignors.) | | | | | | |
| General Electric Company. (See Sargent, Howard R., assignor.) | | | | | | |
| General Electric Company. (See Sperry, Elmer A., assignor.) | | | | | | |
| General Electric Company. (See Spurrier, Harry, assignor.) | | | | | | |
| General Electric Company. (See Stanley, William, assignor.) | | | | | | |
| General Electric Company. (See Steinmetz, Charles P., assignor.) | | | | | | |
| General Electric Company. (See Stern, George, assignor.) | | | | | | |
| General Electric Company. (See Stern and Lotz, assignors.) | | | | | | |
| General Electric Company. (See Stevens, George E., assignor.) | | | | | | |
| General Electric Company. (See Stewart, Samuel B., Jr., assignor.) | | | | | | |
| General Electric Company. (See Stone, Charles W., assignor.) | | | | | | |
| General Electric Company. (See Swan, Alfred, assignor.) | | | | | | |
| General Electric Company. (See Thomson, Elihu, assignor.) | | | | | | |
| General Electric Company. (See Thomson and Cox, assignors.) | | | | | | |
| General Electric Company. (See Tirrill, Allen A., assignor.) | | | | | | |
| General Electric Company. (See Tournier, Julius C., assignor.) | | | | | | |
| General Electric Company. (See Troy, Matthew O., assignor.) | | | | | | |
| General Electric Company. (See Underwood, Louis E., assignor.) | | | | | | |
| General Electric Company. (See Van Aller, Tycho, assignor.) | | | | | | |
| General Electric Company. (See Waddell, Montgomery, assignor.) (Reissue.) | | | | | | |
| General Electric Company. (See Whitney, Eddy R., assignor.) | | | | | | |
| General Electric Company. (See Whitney, Willis R., assignor.) | | | | | | |
| General Electric Company. (See Wiard, John B., assignor.) | | | | | | |
| General Electric Company. (See Wightman, Merle J., assignor.) | | | | | | |
| General Electric Company. (See Willard, Ben, assignor.) | | | | | | |
| General Electric Company. (See Wilson, Howard B., assignor.) | | | | | | |
| General Electric Company. (See Wirt, Herbert C., assignor.) | | | | | | |
| General Electric Company. (See Wood, James J., assignor.) | | | | | | |
| General Electric Company. (See Wood, Montraville M., assignor.) | | | | | | |
| General Electric Company. (See Woodbridge, Jonathan E., assignor.) | | | | | | |
| General Electric Company. (See Woods, Granville T., assignor.) | | | | | | |
| General Electric Company. (See Woods, Granville T. and L., assignors.) | | | | | | |
| General Electric Company. (See Yates, William C., assignor.) | | | | | | |
| General Electric Company. (See Zani, Arnaldo P., assignor.) | | | | | | |
| General Fire Extinguisher Company. (See Newton, Robert W., assignor.) | | | | | | |
| General Fireproofing Company. (See Wege, Peter M., assignor.) | | | | | | |
| General Fireproofing Company. (See White, Herbert E., assignor.) | | | | | | |
| General Incandescent Arc Light Company. (See Ball, Henry P., assignor.) | | | | | | |
| General Incandescent Arc Light Company. (See Hallberg, Josef H., assignor.) | | | | | | |
| General Metals Refining Company. (See Schwarz, Alfred, assignor.) | | | | | | |
| Genese, David, Baltimore, Md. Covered suppository and making same | 727,344 | May 5 | 976 | 212 | 104 | 211 |
| Geneva Automobile and Manufacturing Company. (See Bucknam, Worthy C., assignor.) | | | | | | |
| Genisio, James, Duquoin, Ill. Safety-catch for elevators | 734,318 | July 21 | 3013 | 709 | 105 | 670 |
| Gensmer, Theodore F., Lewiston, Minn. Resilient rest for vehicle-tops | 738,609 | Sept. 8 | 2123 | 465 | 106 | 473 |
| Gent, Joseph F. (See Gaff and Gent.) | | | | | | |
| Gent, Joseph F., Mount Clemens, Mich., assignor of two-thirds to T. T. Gaff, Barnstable, Mass. Settling device | 727,345 | May 5 | 977 | 212 | 104 | 211 |
| Gent, Joseph F., Mount Clemens, Mich., assignor of two-thirds to T. T. Gaff, Barnstable, Mass. Machine for splitting kernels of Indian corn | 735,662 | Aug. 4 | 1198 | 253, 254 | 105 | 1236 |
| Gent, Joseph F., Mount Clemens, Mich., assignor of two-thirds to T. T. Gaff, Barnstable, Mass. Bolting-reel | 735,663 | Aug. 4 | 1200 | 254 | 105 | 1236 |
| Gent, Joseph F., Mount Clemens, Mich., assignor of two-thirds to T. T. Gaff, Barnstable, Mass. Apparatus for degermination and decortication of Indian corn | 735,664 | Aug. 4 | 1203 | 254, 255 | 105 | 1236 |
| Gentry Brothers Shows. (See Gentry, Henry B., assignor.) | | | | | | |
| Gentry, Henry B., assignor to Gentry Brothers Shows, Incorporated, Bloomington, Ind. Pleasure-railway | 739,169 | Sept. 15 | 3176 | 702 | 106 | 710 |
| Gentry, James W., and A. H. Stroemer, Peoria, Ill. Corn-planter | 739,851 | Sept. 29 | 4448 | 999 | 106 | 1019 |
| Gentry, Oliver H., Brooklyn, N. Y. Foot-power | 725,551 | Apr. 14 | 2099 | 475 | 103 | 1629 |
| Gentry, Wiley, Watauga Falls, N. C. Tellurian | 743,483 | Nov. 10 | 1383 | 284 | 107 | 310 |
| Gentsch, Henry R., Chicago, Ill. Separable letter or bill file | 720,576 | Feb. 17 | 2176 | 504 | 102 | 1312 |
| Gentsch, Henry R., Chicago, Ill. Detachable letter and bill file | 739,073 | Sept. 15 | 2999 | 664 | 106 | 674 |
| Genty, Lucien, Marseilles, assignor to himself, and La Société Générale des Industries Economiques, Paris, France. Gas-producer | 721,513 | Feb. 24 | 3936 | 896 | 102 | 1700 |
| Gentzel, Gustav H., assignor to John Mehl & Company, Jersey City, N. J. Handle for bags | 721,362 | Feb. 24 | 3668 | 835 | 102 | 1644 |
| Gentzen, Wilhelm R. (See Roth, Leonhard, assignor.) | | | | | | |
| Genung, Charles A., Waterloo, N. Y. Supplemental bottom for transportation-caskets | 744,186 | Nov. 17 | 2764 | 588, 589 | 107 | 617 |
| Geo. F. Blake Mfg. Co. (See De Laval and Aborn, assignors.) | | | | | | |
| Geo. F. Blake Manufacturing Company. (See Hall, Albert F., assignor.) | | | | | | |
| Geo. F. Eberhard Company. (See Bristol and Eberhard, assignors.) | | | | | | |
| Geo. F. Eberhard Company. (See Eberhard, George F., assignor.) | | | | | | |
| George, Ambrose F., and F. Rademacher, Los Angeles, Cal. Refrigerating means | 728,702 | May 19 | 3549 | 789 | 104 | 793 |
| George, Arthur L., Johnstown, Pa., assignor to Lorain Steel Company. Railway-track structure | 729,057 | May 26 | 4205 | 930 | 104 | 942 |
| George, Arthur L., Johnstown, Pa., assignor to Lorain Steel Company. Railway-track structure | 729,058 | May 26 | 4206 | 930 | 104 | 942 |
| George, Arthur L., Johnstown, Pa., assignor to Lorain Steel Company. Railway-track structure | 729,059 | May 26 | 4208 | 930 | 104 | 943 |
| George, Arthur L., Johnstown, Pa., assignor to Lorain Steel Company. Railway-track structure | 729,060 | May 26 | 4209 | 930 | 104 | 943 |
| George, Arthur L., Johnstown, Pa., assignor to Lorain Steel Company. Railway-track structure | 729,061 | May 26 | 4211 | 931 | 104 | 943 |

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| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drgs. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| George B. Donavin & Company. (See Witman, Arthur C., assignor.) | | | | | | |
| George Banta Printing Co. (See Bach, Niels, assignor.) | | | | | | |
| George, Benjamin F., assignor, by mesne assignments, of one-half to C. F. Marple, Potomac, Ill. Horse-collar shield | 735,747 | Aug. 11 | 1366 | 294 | 105 | 1289 |
| George Borgfeldt & Company. (See Sollmann, Ekko, assignor.) | | | | | | |
| George Borgfeldt & Company. (See Sollman and Issmayer, assignors.) | | | | | | |
| George C. Batcheller & Company. (See Schottlander, Theodore, assignor.) | | | | | | |
| George, Charles H., Yoakum, Tex. Hydrocarbon-burner | 738,178 | Sept. 8 | 1272 | 275 | 106 | 292 |
| George, Cortis K., and J. Burnett, Milford, N. H. Stone-saw | 726,902 | May 5 | 135 | 31 | 104 | 31 |
| George D. Whitcomb Co. (See Lippitt, Elihu, assignor.) | | | | | | |
| George D. Whitcomb Company. (See Lippitt and Whitcomb, assignors.) | | | | | | |
| George D. Whitcomb Company. (See Whitcomb, William C., assignor.) | | | | | | |
| George, Edwin R., assignor of one-fourth to C. Albanesius, Pittsburg, Pa. Toy | 743,635 | Nov. 10 | 1677 | 352 | 107 | 374 |
| George F. Blake Manufacturing Company. (See De Laval and Chisholm, assignors.) | | | | | | |
| George, Frederick J. (See Delivouk and George.) | | | | | | |
| George, Ira P. (See Palmer, Byron G., assignor.) | | | | | | |
| George, Jerome R., assignor to Morgan Construction Company, Worcester, Mass. Rolling-mill | 717,673 | Jan. 6 | 271 | 67 | 102 | 58 |
| George, Jerome R., assignor to Morgan Construction Company, Worcester, Mass. Carrier for the top rolls of rolling-mills | 729,569 | June 2 | 86 | 22 | 104 | 1145 |
| George, Jerome R., assignor to Morgan Construction Company, Worcester, Mass. Reducing rods or bars | 729,570 | June 2 | 88 | 22 | 104 | 1145 |
| George, Jerome R., assignor to Morgan Construction Company, Worcester, Mass. Feeding mechanism for rolling-mills | 740,418 | Oct. 6 | 51 | 12 | 106 | 1255 |
| George, Jerome R., assignor to Morgan Construction Company, Worcester, Mass. Gas-producer | 745,176 | Nov. 24 | 4618 | 1001 | 107 | 1027 |
| George, Jerome R., assignor to Morgan Construction Company, Worcester, Mass. Gas-producer | 747,965 | Dec. 29 | 4933 | 1116 | 107 | 2262 |
| George, Margaret, Chicago, Ill. Means for supporting collars, stocks, &c | 744,329 | Nov. 17 | 3019 | 648 | 107 | 675 |
| George N. Pierce Company. (See Somerby, Lorenzo B., assignor.) | | | | | | |
| George, Oscar W. (See Huddleston, Roy, assignor.) | | | | | | |
| George R. Rich Manufacturing Company. (See Rich, George R., assignor.) | | | | | | |
| George, S., Jr., *et al.* (See Kersey, James M., assignor.) | | | | | | |
| George, Samuel E., and J. R. Norris, New York, N. Y. Bottle | 735,240 | Aug. 4 | 396 | 77 | 105 | 1065 |
| George Schneider Manufacturing Company of Baltimore City. (See Schneider, George, assignor.) | | | | | | |
| George V. Cresson Company. (See Cresson, Emlen V., assignor.) | | | | | | |
| George, William H., Dexter, Iowa. Roller-ratchet cylinder-wrench | 728,900 | May 26 | 3920 | 870 | 104 | 884 |
| George, William H., Dexter, Iowa. Belt-guide for traction-engines | 730,902 | June 16 | 2510 | 557 | 104 | 1685 |
| George, William H., Dexter, Iowa. Wrench for cylinder-teeth | 731,886 | June 23 | 4350 | 971 | 104 | 2082 |
| Georgiewitz-Weitzer, Isidor D., and M. Pozzo, Graz, Austria-Hungary. Device for deadening or minimizing shocks to wagons or cars | 745,592 | Dec. 1 | 516 | 121 | 107 | 1206 |
| Gerald, Amos F., Fairfield, Me. Doorway | 725,552 | Apr. 14 | 2101 | 476 | 103 | 1630 |
| Gerard, Mary C., Norfolk, Va. Shoe-heater | 728,703 | May 19 | 3551 | 789 | 104 | 793 |
| Gerber, Frank, New York, N. Y. Fan attachment for sewing-machines | 738,429 | Sept. 8 | 1785 | 389 | 106 | 398 |
| Gerber, Nicholas, Zurich, Switzerland. Vacuum-pan | 734,228 | July 21 | 2826 | 663 | 105 | 632 |
| Gerber, Thomas, Deer Creek, Okla. Ter. Try-square and miter | 718,618 | Jan. 20 | 2095 | 456 | 102 | 480 |
| Gerbereux, Edward, Yonkers, N. Y. Box | 732,844 | July 7 | 266 | 66 | 105 | 59 |
| Gerbing, Max P., Wentworth, Mo. Car axle and wheel | 740,976 | Oct. 6 | 1088 | 246 | 106 | 1478 |
| Gerder, William. (See Casper and Gerder.) | | | | | | |
| Gerdes, Heinrich, Berlin, Germany. Power-transmission device | 743,484 | Nov. 10 | 1386 | 284 | 107 | 311 |
| Gerdes, Heinrich, assignor to J. Pintsch, Berlin, Germany. Gas plant | 739,665 | Sept. 22 | 4102 | 914 | 106 | 926 |
| Gerding, Fred F., Groesbeck, Tex. Cotton-chopper | 732,934 | July 7 | 423 | 104 | 105 | 91 |
| Gerdom, Gregory, Watervliet, assignor of two-fifths to J. H. Reynolds, Troy, N. Y. Firing attachment for ordnance | 731,403 | June 16 | 3446 | 770 | 104 | 1876 |
| Gerdom, Gregory, Watervliet, N. Y., assignor to Ordnance Improvement Company. Gas-check pad for breech-loading ordnance | 732,541 | June 30 | 5645 | 1251 | 104 | 2363 |
| Gerken, Fred A. (See Gracey, James G., assignor.) | | | | | | |
| Gerlach, Fred, trustee, *et al.* (See Coomber, James, assignor.) | | | | | | |
| Gerlach, Oscar, and M. H. Hammond, Iola, Kans. Railway-tie | 742,307 | Oct. 27 | 3749 | 839 | 106 | 2086 |
| Gerland, Fredrick J. M., East Orange, N. J. Vignetting-tool | 719,106 | Jan. 27 | 3036 | 675 | 102 | 687 |
| Gerling, Charles H., assignor to Gerling Manufacturing Company, Edwardsville, Ill. Seed or potato planter | 732,731 | July 7 | 61 | 17 | 105 | 16 |
| Gerling Manufacturing Company. (See Gerling, Charles H., assignor.) | | | | | | |
| Germann, Emil. (See Buckingham and Germann.) | | | | | | |
| Germanson, Julius M., Milwaukee, Wis. Tilting-chair iron | 729,571 | June 2 | 89 | 22 | 104 | 1146 |
| Germicide Gas Company. (See Morris, Seth M., assignor.) | | | | | | |
| Germiner, Henry W., New Boston, Ohio. Valve for steam-engines | 732,970 | Mar. 17 | 2449 | 548 / 549 | 103 | 550 |
| Germiner, Henry W., assignor of one-half to J. Skelton, New Boston, Ohio. Thermostat | 725,334 | Apr. 14 | 1694 | 382 | 103 | 1544 |
| Gernet, Adolf von, London, England. Extracting copper from its ores | 717,565 | Jan. 6 | 78 | 20 | 102 | 19 |
| Gero, Henry E., Somerville, Mass. Eraser-shield | 729,062 | May 26 | 4212 | 931 | 104 | 943 |
| Gerould, George, Jr., and M., Brady, Mich. Shaft-holder | 725,240 | Apr. 14 | 1532 | 348 | 103 | 1509 |
| Gerould, Manfred. (See Gerould, George, Jr., and M.) | | | | | | |
| Gerrard, Edward, Indianapolis, Ind. Rail-clamp | 738,179 | Sept. 8 | 1274 | 276 | 106 | 292 |
| Gerrard, Edward, assignor to National Dry Kiln Company, Indianapolis, Ind. Steam-trap | 742,308 | Oct. 27 | 3750 | 840 | 106 | 2086 |
| Gerrer, John H., Elreno, Okla. Ter. Hygrometer | 730,633 | June 9 | 2018 | 448 | 104 | 1562 |
| Gerstbacher, Charles A., Washington, D. C. Hat and cloak rack | 739,852 | Sept. 29 | 4451 | 1000 | 106 | 1020 |
| Gerth, Joseph P., Toluca, Ill. Shade-hanger | 738,720 | Sept. 8 | 2342 | 514 | 106 | 516 |
| Gervais, Exaré. (See Fortin, Jules E., assignor.) | | | | | | |
| Gervais, Paul, Seeburg, Germany. Direct-acting gas-engine | 736,715 | Aug. 18 | 3154 | 695 / 696 | 105 | 1688 |
| Gervais, Wainwright B., Chicago, Ill., assignor to Chas. Mulvey Mfg. Co. Building-stirrup | 744,527 | Nov. 17 | 3370 | 726 | 107 | 751 |
| Gerwig, Frederick H. N., Wilkinsburg, Pa. Steam-trap | 738,672 | Sept. 8 | 2264 | 498 | 106 | 500 |
| Gesellschaft für Huberpressung Gesellschaft mit Beschränkter Haftung of Karlsruhe. (See Huber, Carl, assignor.) | | | | | | |
| Gesellschaft für Patentverwertung der Distanzbremse für Eisenbahnen. (See Graber, Jakob, assignor.) | | | | | | |
| Gesellschaft für Patentverwertung mit Beschränkter Haftung. (See Wenigmann, Carl, assignor.) | | | | | | |
| Geske, Edward J., Wykoff, Minn. Grain-car door | 738,791 | Sept. 15 | 2506 | 551 | 106 | 569 |
| Gessert, Charles F., Brooklyn, N. Y., assignor to C. F. Gessert Company. Connection for radiator-sections | 733,183 | July 7 | 855 | 207 | 105 | 179 |
| Gessner, David. (See Sarfert, Alexander T., assignor.) | | | | | | |
| Gessner, David, Worcester, Mass. Cloth-treating machine | 744,744 | Nov. 24 | 3776 | 814 | 107 | 853 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Gessner, Walter. (See Victor, Albert E., assignor.) | | | | | | |
| Gest, Guy M., Cincinnati, Ohio. Manhole-terminal for conduit-sections | 738,792 | Sept. 15 | 2507 | 551 | 106 | 569 |
| Gest, Guy M., Cincinnati, Ohio. Conduit-section for manhole-terminals | 739,853 | Sept. 29 | 4453 | 1000 | 106 | 1020 |
| Gest, Guy M., Cincinnati, Ohio. Combined curb and gutter | 739,854 | Sept. 29 | 4454 | 1000 | 106 | 1020 |
| Gestetner, David, London, England. Stencil-printing apparatus | 732,542 | June 30 | 5646 | 1252 | 104 | 2363 |
| Gestetner, David, London, England. Stencil-printing apparatus | 746,950 | Dec. 15 | 3020 | 693 | 107 | 1796 |
| Gethen, George S., assignor to National Leather Mat and Belt Company, Philadelphia, Pa. Mat | 741,656 | Oct. 20 | 2427 | 544 | 106 | 1799 |
| Getty, George A., and L. H. Lemley, Waterbury, Conn. Lace-tip | 718,052 | Jan. 6 | 992 | 222 | 102 | 214 |
| Getz, August H., Washington, D. C. Hose-coupling | 747,412 | Dec. 22 | 3877 | 873 | 107 | 2004 |
| Getz, Phares E., assignor of one-half to F. S. Briggs, Neosho, Mo. Stovepipe-holder | 721,691 | Mar. 3 | 78 | 17 | 103 | 18 |
| Getzman, Filip H. (See Hultgren, Johan P., assignor.) | | | | | | |
| Getzoff, David. (See Rifkin and Getzoff.) | | | | | | |
| Gevers, Maurice, Antwerp, Belgium. Apparatus for refining loaf-sugar | 717,838 | Jan. 6 | 622 | 137 | 102 | 133 |
| Geyer, George H., Pittsburg, Pa. Machine for straightening T-bars, angle-bars, &c | 731,675 | June 23 | 3970 | 884 | 104 | 1999 |
| Geyer, Hobart W., *et al.* (See Stone, Harry W., assignor.) | | | | | | |
| Geyer, Willy. (See Enax, Heinrich, assignor.) | | | | | | |
| Gheen, John W., Astoria, Oreg. Automatic salting-machine | 720,128 | Feb. 10 | 1330 | 304, 305 | 102 | 1125 |
| Ghenea, Toma, Bukharest, Rumania. Sighting attachment for ordnance | 745,177 | Nov. 24 | 4621 | 1002 | 107 | 1028 |
| Ghiglieri, William, assignor of one-half to J. J. Smith, Stockton, Cal. Petroleum-gas burner | 744,528 | Nov. 17 | 3370 | 726 | 107 | 751 |
| Ghirardelli, Domingo, San Francisco, Cal. Sheet-metal can | 746,815 | Dec. 15 | 2737 | 631 | 107 | 1732 |
| Ghirelli, Angelo, Paris, France. Apparatus for disinfection | 734,698 | July 28 | 3699 | 866 | 105 | 829 |
| Gholson, Marquis C., Cincinnati, Ohio. Valve mechanism for water-closets | 747,413 | Dec. 22 | 3880 | 873 | 107 | 2005 |
| Giacomini, Luigi, Florence, Italy. Roasting coffee | 726,279 | Apr. 28 | 3426 | 779 | 103 | 1938 |
| Giacomini, Luigi, Florence, Italy. Apparatus for roasting coffee | 726,280 | Apr. 28 | 3427 | 780 | 103 | 1939 |
| Gibbins, William G., Leytonstone, England. Washing-machine | 718,754 | Jan. 20 | 2354 | 520, 521 | 102 | 531 |
| Gibbons, Benjamin T., Buffalo, N. D. Traction-engine | 722,096 | Mar. 3 | 810 | 180 | 103 | 175 |
| Gibbons, John A., Elizabeth, N. J. Lubricating device | 748,362 | Dec. 29 | 5659 | 1290 | 107 | 2420 |
| Gibbons, Pierce F., Chicago, Ill. Butter-packing machine | 743,485 | Nov. 10 | 1387 | 285 | 107 | 311 |
| Gibbons, Robert P., Kopu, near Thames, New Zealand. Auxiliary screw-propeller | 737,386 | Aug. 25 | 4384 | 978 | 105 | 1967 |
| Gibbs, Daniel, Sardis, Ala. Toy | 740,419 | Oct. 6 | 53 | 12 | 106 | 1256 |
| Gibbs Engineering and Manufacturing Company. (See Gibbs, Lucius T., assignor.) | | | | | | |
| Gibbs Engineering and Manufacturing Company. (See Howe, Frank D., assignor.) | | | | | | |
| Gibbs Engineering and Manufacturing Company. (See Howe and Gibbs, assignors.) | | | | | | |
| Gibbs, George. (See Howard and Gibbs.) | | | | | | |
| Gibbs, George, New York, N. Y. Controlling system for railway vehicles or trains | 724,690 | Apr. 7 | 507 | 121 | 103 | 1277 |
| Gibbs, George, New York, N. Y. Signal-controlling system for electric railways | 728,164 | May 12 | 2515 | 559, 560 | 104 | 552 |
| Gibbs, George, New York, N. Y. Electric-motor car and system of mounting and wiring electrical apparatus thereon | 730,251 | June 9 | 1330 | 292 | 104 | 1413 |
| Gibbs, George, New York, N. Y. Controlling system for railway-signals | 737,094 | Aug. 25 | 3846 | 854, 855 | 105 | 1852 |
| Gibbs, George, New York, N. Y. Railway-vehicle | 739,074 | Sept. 15 | 3000 | 664, 665, 666 | 106 | 674 |
| Gibbs, George, New York, N. Y., and H. Pearson, Springfield, Mass. Car-platform vestibule | 722,097 | Mar. 3 | 811 | 181 | 103 | 175 |
| Gibbs, George, New York, N. Y., and H. Pearson, Springfield, Mass., assignors to Interborough Rapid Transit Company. Door operating and locking mechanism | 731,676 | June 23 | 3972 | 885 | 104 | 1999 |
| Gibbs, James E., Bridgewater, assignor to C. P. Ehrman and A. D. R. Hancher, Staunton, Va. End-gate | 719,107 | Jan. 27 | 3037 | 676 | 102 | 688 |
| Gibbs, James E., assignor to W. A. Byerly and E. X. Miller, Bridgewater, Va. Sash-fastener | 733,640 | July 14 | 1680 | 399 | 105 | 372 |
| Gibbs, John W., New York, N. Y. Electric shoe | 740,548 | Oct. 6 | 318 | 66 | 106 | 1312 |
| Gibbs, Lucius T. (See Howe and Gibbs.) | | | | | | |
| Gibbs, Lucius T., assignor to Gibbs Engineering and Manufacturing Company, New York, N. Y. System of electric traction | 744,187 | Nov. 17 | 2766 | 589 | 107 | 618 |
| Gibbs, Sabin A., Tacoma, Wash. Motor | 741,325 | Oct. 13 | 1777 | 395, 396 | 106 | 1643 |
| Gibbs, William E., Fanwood, assignor of one-half to H. Berg, Orange Valley, N. J. Reversible driving-gear | 745,814 | Dec. 1 | 915 | 205 | 107 | 1294 |
| Gibbs, William H., Clinton, Mass. Heddle-machine | 746,951 | Dec. 15 | 3022 | 693 | 107 | 1796 |
| Gibon, Theodor, Clarksville, Tenn. Aeroplane | 730,107 | June 2 | 1055 | 236 | 104 | 1343 |
| Gibson, Anna L., Philadelphia, Pa. Gas-stove | 735,963 | Aug. 11 | 1766 | 378 | 105 | 1376 |
| Gibson, Arthur H., near Krugersdorp, Transvaal. Electrical rock-drill or rock-drilling machine | 744,912 | Nov. 24 | 4063 | 876 | 107 | 914 |
| Gibson, Clayton, *et al.* (See Beardsley, Chauncey H., assignor.) | | | | | | |
| Gibson, Clinton R., Hummer, S. D. Milk-cooler | 736,332 | Aug. 11 | 2419 | 528 | 105 | 1519 |
| Gibson, Edward, Jersey City, N. J. Steam-blower | 717,566 | Jan. 6 | 79 | 20 | 102 | 19 |
| Gibson, Edward, Jersey City, N. J. Steam-boiler furnace | 717,567 | Jan. 6 | 81 | 21 | 102 | 20 |
| Gibson, Edward, Jersey City, N. J. Steam-boiler setting | 723,860 | Mar. 31 | 4100 | 925 | 103 | 920 |
| Gibson, Frank H., Bridgeton, N. J. Glass-molding machine | 739,666 | Sept. 22 | 4103 | 914, 915 | 106 | 926 |
| Gibson, Frank H., assignor to Gibson Jar Company, Bridgeton, N. J. Jar | 730,903 | June 16 | 2512 | 558 | 104 | 1685 |
| Gibson, Frank H., assignor of one-half to E. Elmer, Bridgeton, N. J. Glass-molding machine | 743,268 | Nov. 3 | 876 | 191 | 107 | 184 |
| Gibson, Frederick. (See Simpson, John H., assignor.) | | | | | | |
| Gibson, George H., Hydepark, Mass., assignor to Westinghouse Electric & Manufacturing Company. Magneto-frictional gearing | 745,593 | Dec. 1 | 517 | 121 | 107 | 1207 |
| Gibson, George H., Hydepark, Mass., assignor to Westinghouse Electric & Manufacturing Company. Multivoltage electric generator | 745,594 | Dec. 1 | 519 | 121 | 107 | 1207 |
| Gibson, Henry C. W., *et al.* (See Castle, Edward, assignor.) | | | | | | |
| Gibson Jar Company. (See Gibson, Frank H., assignor.) | | | | | | |
| Gibson, John W. (See Mead and Gibson.) | | | | | | |
| Gibson, Robert L. (See Jones and Gibson.) | | | | | | |
| Gibson, Robert S., New York, N. Y. Chair head-rest | 729,324 | May 26 | 4671 | 1032 | 104 | 1039 |
| Gibson, Walter P., Philadelphia, Pa. Wagon-discharging apparatus | 726,903 | May 5 | 136 | 32 | 104 | 31 |
| Gibson, William A., *et al.* (See Philips, James J. E., assignor.) | | | | | | |
| Gibson, William W., Fallston, Pa. Hose-coupling | 745,815 | Dec. 1 | 917 | 206 | 107 | 1295 |
| Giddings, Solomon P., Sterling, Ill. Frame for tables | 740,846 | Oct. 6 | 867 | 194 | 106 | 1431 |
| Gideon, Francis M., Ballston, Va. Turpentine-still | 718,246 | Jan. 13 | 1343 | 298 | 102 | 304 |
| Giesel, Martin, Columbus, Ohio, assignor to Hallwood Cash Register Company, Jersey City, N. J. Cash-register | 745,595 | Dec. 1 | 521 | 122 | 107 | 1208 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Giesler, Franklin B. (See Schurek and Giesler.) | | | | | | |
| Giesler, Franklin B., Milwaukee, Wis. Malting apparatus | 723,266 | Mar. 24 | 3000 | 674, 675 | 103 | 678 |
| Giffin, George H., Topeka, Kans. Trap-door hinge for railway-coach vestibules | 727,933 | May 12 | 2112 | 470 | 104 | 468 |
| Gifford, Charles H., Haddonfield, N. J. Apparatus for injecting pulverized fuel into combustion-chambers | 746,493 | Dec. 8 | 2146 | 493, 494 | 107 | 1578 |
| Gifford, Harry E., New Bedford, Mass. Paper-clip | 744,529 | Nov. 17 | 3372 | 726 | 107 | 751 |
| Gifford, James N., assignor of one-half to C. D. Hunt, Fairhaven, Mass. Knife for machines for making tacks or nails | 725,068 | Apr. 14 | 1200 | 273 | 103 | 1441 |
| Gifford, Robert L., *et al.* (See Nistle, George W., assignor.) | | | | | | |
| Giger, Benjamin H., Independence, Kans. Stirring-plow | 745,816 | Dec. 1 | 918 | 206 | 107 | 1295 |
| Giguere, Joseph O. (See Dupuis, Joseph, assignor.) | | | | | | |
| Giguere, Thomas, assignor to Daggett & Clap Company, Attleboro, Mass. Locket or similar article | 720,798 | Feb. 17 | 2573 | 592 | 102 | 1394 |
| Giguere, Thomas, assignor to Daggett & Clap Company, Attleboro, Mass. Fastener | 748,277 | Dec. 29 | 5530 | 1260 | 107 | 2393 |
| Gihon, William, Chicopee, Mass. Spinning-spindle | 733,641 | July 14 | 1682 | 399 | 105 | 372 |
| Gilbert, Abel H., *et al.* (See Kent, Henry E., assignor.) | | | | | | |
| Gilbert & Barker Manufacturing Company. (See Barker, John F., assignor.) | | | | | | |
| Gilbert & Bennett Manufacturing Company. (See Rady, John, assignor.) | | | | | | |
| Gilbert & Bennett Manufacturing Company. (See Widerstrom, Charles W., assignor.) | | | | | | |
| Gilbert, Bradford L., *et al.* (See Pierce, Arthur M., assignor.) | | | | | | |
| Gilbert, Edgar T., assignor to E. T. Gilbert Manufacturing Company, Rochester, N. Y. Polisher | 730,012 | June 2 | 903 | 201 | 104 | 1312 |
| Gilbert, Edward F., Lyons, N. Y. Corner-strap for crates | 722,692 | Mar. 17 | 1964 | 438 | 103 | 452 |
| Gilbert, Edward M., Byron, Minn. Bag-holder for bagging grain | 719,210 | Jan. 27 | 3207 | 715 | 102 | 722 |
| Gilbert, Edward W., Philadelphia, Pa. Silo | 720,419 | Feb. 10 | 1855 | 422, 423 | 102 | 1232 |
| Gilbert, Elam, Portland, Oreg. Attachment for phonographs | 738,316 | Sept. 8 | 1575 | 340 | 106 | 355 |
| Gilbert, Elam, Portland, Oreg. Starting and stopping mechanism for phonographs | 738,317 | Sept. 8 | 1578 | 341 | 106 | 355 |
| Gilbert, Frank H., Springfield, Wis. Belt-tightener | 735,241 | Aug. 4 | 398 | 78 | 105 | 1066 |
| Gilbert, Frederick A., Brookline, and E. O. Lundin, Beachmont Mass., assignors to General Electric Company. Apparatus for maintaining uniform resistance in electric circuits | 727,611 | May 12 | 1468 | 329 | 104 | 334 |
| Gilbert, Frederick M. (See Ostenberg, John A., assignor.) | | | | | | |
| Gilbert, Henry K., Niagara Falls, N. Y., assignor of one-third to F. J. Robinson, Hyattsville, Md. Gasket for water-gages | 740,640 | Oct. 6 | 485 | 107 | 106 | 1350 |
| Gilbert, John, Rydal, Pa. Shaper for caps for bottles | 730,634 | June 9 | 2019 | 448 | 104 | 1563 |
| Gilbert, John E. (See Friese and Gilbert.) | | | | | | |
| Gilbert, John W., Hilliard, assignor to Gilbert Manufacturing Company, Columbus, Ohio. Mail catcher and deliverer | 733,025 | July 7 | 573 | 139 | 105 | 122 |
| Gilbert, Jules P., Toul, France. Pipe-joint | 747,061 | Dec. 15 | 3227 | 735 | 107 | 1844 |
| Gilbert Manufacturing Company. (See Gilbert, John W., assignor.) | | | | | | |
| Gilbert, Theodore M. (See Gilbert and Nash.) | | | | | | |
| Gilbert, Truman H. (See Bradley and Gilbert.) | | | | | | |
| Gilbert, Virgil W., assignor to S. S. White Dental Manufacturing Company, Philadelphia, Pa. Dental pliers | 740,549 | Oct. 6 | 319 | 66 | 106 | 1312 |
| Gilbert, Wallace H., Worcester, Mass. Hand device for holding emery-wheel dressers | 746,068 | Dec. 8 | 1391 | 311 | 107 | 1414 |
| Gilbert, Wallace M. (See Robinson, Smethurst, and Gilbert.) | | | | | | |
| Gilbert, Walter C., Derby, assignor to Griffin Button Co., Incorporated, Shelton, Conn. Automatic feeding device for sheets of stock | 735,085 | Aug. 4 | 64 | 17, 18 | 105 | 995 |
| Gilbert, William H., Orange County, Cal. Beet pulling and lifting plow | 718,833 | Jan. 20 | 2486 | 553 | 102 | 556 |
| Gilbert, William H., Toledo, Ohio. Rod or pipe coupling | 735,242 | Aug. 4 | 399 | 78 | 105 | 1066 |
| Gilbert, William M. and T. M., and W. C. Nash, Neenah, Wis. Wire or felt guide for paper-making machines | 735,362 | Aug. 4 | 609 | 125, 126 | 105 | 1111 |
| Gilbertson, Ole O., Kasson, Minn. Corn harvester and husker | 746,952 | Dec. 15 | 3023 | 693, 694 | 107 | 1796 |
| Gilborne, George A., Aberdeen, S. D. Well-drilling machinery | 736,716 | Aug. 18 | 3155 | 696 | 105 | 1688 |
| Gilby, Charles H., Christchurch, New Zealand. Siphon | 739,489 | Sept. 22 | 3778 | 845 | 106 | 858 |
| Gilchrist, Harry, Pittsburg, Pa. Motor-vehicle | 726,672 | Apr. 28 | 4193 | 946, 947 | 103 | 2091 |
| Gildard, Christopher G. (See Coldwell and Gildard.) | | | | | | |
| Gile, Fred H., assignor of one-half to F. E. Wells, Greenfield, Mass. Internal-combustion engine | 735,964 | Aug. 11 | 1767 | 879 | 105 | 1377 |
| Giles, Carl C., and G. H. Gray, Upland, Ind., assignors to J. S. Giles, Chicago, Ill. Vacuum preserving-jar | 720,129 | Feb. 10 | 1332 | 305 | 102 | 1123 |
| Giles, Edwin L., London, England, assignor to Lamson Consolidated Store Service Company, Newark, N. J., and Boston, Mass. Pneumatic-service system | 742,410 | Oct. 27 | 3925 | 882 | 106 | 2122 |
| Giles, Edwin S., assignor to A. J. Phillips Co., Fenton, Mich. Adjustable window-screen | 724,691 | Apr. 7 | 510 | 121 | 103 | 1278 |
| Giles, Edwin S., Fenton, assignor to A. M. Bentley, Owosso, Mich. Window-screen | 738,899 | Sept. 15 | 2705 | 597 | 106 | 613 |
| Giles, Frederick T., Bristol, England. Horseshoe | 726,904 | May 5 | 137 | 32 | 104 | 32 |
| Giles, Harvey. (See Smith and Giles.) | | | | | | |
| Giles, Harvey, South Boundbrook, assignor to Ideal Cash Register Company, New Boundbrook, N. J. Cash-register | 731,448 | June 23 | 3540 | 790, 791, 792, 793 | 104 | 1915 |
| Giles, Herbert C., New York, N. Y. Electrical signaling device | 746,069 | Dec. 8 | 1393 | 311, 312 | 107 | 1415 |
| Giles, Isaac W., New Bedford, assignor to Atlas Tack Company, Fairhaven, Mass. Eyelet-machine | 719,788 | Feb. 3 | 690 | 159 | 102 | 969 |
| Giles, John S. (See Giles and Gray, assignors.) | | | | | | |
| Giles, Joseph L., Joplin, Mo. Register | 727,782 | May 12 | 1828 | 408 | 104 | 408 |
| Giles, Joseph L., Joplin, Mo. Endless conveyer or elevator | 727,783 | May 12 | 1829 | 409 | 104 | 408 |
| Giletti, Secondo, San Francisco, Cal. Apparatus for making hollow artificial-stone blocks | 719,655 | Feb. 3 | 433 | 99 | 102 | 912 |
| Gilgen, Adolph C., assignor to Central Telephone & Electric Company, St. Louis, Mo. Electrical diverter | 742,626 | Oct. 27 | 4318 | 972 | 106 | 2205 |
| Gill, Charles E., St. Joseph, Mo. Body-attachable sunshade | 725,069 | Apr. 14 | 1203 | 273 | 103 | 1441 |
| Gill, Daniel W., Cheyenne, Wyo. Cleaning soda | 725,553 | Apr. 14 | 2102 | ------ | 103 | 1630 |
| Gill, Edwin R., New York, N. Y., assignor to Invention Developing Company. Electric battery | 720,577 | Feb. 17 | 2177 | 505 | 102 | 1312 |
| Gill, Edwin R., New York, N. Y., assignor to Invention Developing Company. Means for operating reversing-switches on electric cars | 728,901 | May 26 | 3921 | 871 | 104 | 884 |
| Gill, Edwin R., New York, N. Y., assignor to Electric Contract Company. Dry-cell battery | 738,025 | Sept. 1 | 935 | 207 | 106 | 204 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|
| | | | Spec. | Dr'g. | Vol. | Page. |
| Gill, Edwin R., New York, N. Y., assignor to Electric Contract Company. Portable electric-lighting apparatus | 744,530 | Nov. 17 | 3373 | 727 | 107 | 751 |
| Gill, Henry J., Clonskeagh, Ireland. Book shelf or case | 747,062 | Dec. 15 | 3228 | 735 | 107 | 1845 |
| Gill, Jesse C., Arnold, Ohio. Tree-spraying mechanism | 746,953 | Dec. 15 | 3025 | 694 | 107 | 1797 |
| Gill, John. (See Ross and MacKenzie, assignors.) | | | | | | |
| Gill, John J., Worcester, Mass. Street-car sign | 738,430 | Sept. 8 | 1787 | 389 | 106 | 399 |
| Gill, Roy N., Denver, Colo. Hopper-closet valve | 738,026 | Sept. 1 | 935 | 207 | 106 | 204 |
| Gill, Thomas. (See McCord and Gill.) | | | | | | |
| Gill, Thomas M., Mexico, Mo. Combined broom-head holder and shaper | 734,428 | July 21 | 3194 | 752 | 105 | 708 |
| Gill, William A., Portland, Oreg. Carbureter for explosive-engines | 734,848 | July 28 | 4009 | 936 | 105 | 892 |
| Gillam, Manly M., trustee. (See White, George, assignor.) | | | | | | |
| Gillard, Frederick W., Brooklyn, N. Y. Combined railway fare and transfer ticket | 717,984 | Jan. 6 | 878 | 196 | 102 | 189 |
| Gillard, Joseph A., Minneapolis, Minn. Actuating device for bridging-levers of saw-mills | 747,161 | Dec. 15 | 3409 | 772, 773 | 107 | 1885 |
| Gillen, William S., Allegheny, and W. G. Anderson, Emsworth, assignors to J. A. Harper, Pittsburg, Pa. Rolling-press | 731,769 | June 23 | 4143 | 924, 925 | 104 | 2034 |
| Gillespie, Arthur H., *et al.* (See Mount, Rolla, assignor.) | | | | | | |
| Gillespie, Charles W. (See Hollicott, John, assignor.) | | | | | | |
| Gillespie, David A., Stamford, Tex. Vehicle-tongue attachment | 747,601 | Dec. 22 | 4211 | 948 | 107 | 2080 |
| Gillespie, John, Winnipeg, Canada. Bed | 740,550 | Oct. 6 | 319 | 66 | 106 | 1312 |
| Gillespie, Le Roy C., Brownsville, Tenn. Combined fertilizer-distributer and corn-planter | 720,420 | Feb. 10 | 1857 | 423 | 102 | 1232 |
| Gillespie Manufacturing Company. (See Gillespie, Robert A., assignor.) | | | | | | |
| Gillespie, Robert A., Allegheny, assignor to Gillespie Manufacturing Company, Pittsburg, Pa. Tube-coupling | 740,003 | Sept. 29 | 4755 | 1069 | 106 | 1083 |
| Gillespie, Robert A., Allegheny, assignor to Gillespie Manufacturing Company, Pittsburg, Pa. Tube-coupling | 740,004 | Sept. 29 | 4756 | 1070 | 106 | 1083 |
| Gillespie, Robert T., Rochester, Pa. Shifting mechanism for type-writer carriages | 735,243 | Aug. 4 | 400 | 78, 79 | 105 | 1066 |
| Gillespie, Thomas A., West Orange, N. J. Steam-boiler | 729,757 | June 2 | 431 | 97, 98 | 104 | 1216 |
| Gillespie, William C., assignor to N. C. Leonard, Nashville, Tenn. Dental cutting-tool | 740,551 | Oct. 6 | 320 | 66 | 106 | 1312 |
| Gillett, David P. (See Gillett and Wood.) | | | | | | |
| Gillett, Edward H. J. C., Hounslow, England. Burner and automatic valve | 739,667 | Sept. 22 | 4105 | 915 | 106 | 927 |
| Gillett, William A. and D. P., and F. B. Wood, Warrens, Wis. Thill or pole clip | 732,629 | June 30 | 5808 | 1288 | 104 | 2401 |
| Gillett, William W. (See Baltz, Henry W., assignor.) | | | | | | |
| Gillette, Clarence B., Winsted, Conn. Submarine boat | 718,450 | Jan. 13 | 1733 | 385 | 102 | 384 |
| Gillette, George H., New York, N. Y., assignor to Aluminum Bottle Cap Company. Bottle-sealing device | 734,459 | July 21 | 3246 | 763 | 105 | 719 |
| Gillette, Halbert P., assignor to J. S. Gillette, Rochester, N. Y. Coin-controlled apparatus | 727,123 | May 5 | 578 | 125 | 104 | 125 |
| Gillette, Harleigh, Chicago, Ill. Motor | 727,124 | May 5 | 581 | 125 | 104 | 126 |
| Gillette, Herbert B., Benton Harbor, Mich. Dry-kiln truck | 734,057 | July 21 | 2504 | 584 | 105 | 563 |
| Gillette, Herbert B., Benton Harbor, Mich. Bicycle-bearing | 738,180 | Sept. 8 | 1274 | 276 | 106 | 292 |
| Gillette, Julia S. (See Gillette, Halbert P., assignor.) | | | | | | |
| Gillette, Osborn, Woburn, Mass. Eyeglasses | 726,281 | Apr. 28 | 3430 | 780 | 103 | 1939 |
| Gillfoy, George, Whatcheer, Iowa. Coal-hoist | 735,965 | Aug. 11 | 1769 | 379 | 105 | 1377 |
| Gilliam, John A., trustee. (See Anderson, Edward L., assignor.) | | | | | | |
| Gilliam Manufacturing Company. (See Miller, Charles W., assignor.) | | | | | | |
| Gilliam Manufacturing Company. (See Sell, William E., assignor.) | | | | | | |
| Gillies, Alexander, Terang, Victoria, Australia. Pneumatic milking apparatus | 744,188 | Nov. 17 | 2768 | 590 | 107 | 618 |
| Gillies, Alexander, Terang, Victoria, Australia. Teat-cup for pneumatic milking apparatus | 744,189 | Nov. 17 | 2769 | 590 | 107 | 618 |
| Gillies, Donald B., Butte, Mont., assignor to R. Baggaley, Pittsburg, Pa. Device for protecting blasting-caps | 746,262 | Dec. 8 | 1745 | 396 | 107 | 1491 |
| Gillies, James H. (See Payne, Gillies, and Gondolf.) | | | | | | |
| Gilligan, Edward J. (See Bland and Gilligan.) | | | | | | |
| Gilliland, James F., Adrian, Mich., assignor to A. B. Dick, Chicago, Ill. Insulator-bracket | 740,005 | Sept. 29 | 4758 | 1070 | 106 | 1084 |
| Gilliland, Lee O., assignor of one-half to R. Reichardt, Chicago, Ill. Heating-stove | 734,460 | July 21 | 3247 | 764 | 105 | 719 |
| Gilliland, Mort. (See Mossholder, George, assignor.) | | | | | | |
| Gillin, Robert F., New York, N. Y. Flushing apparatus | 731,107 | June 16 | 2893 | 642 | 104 | 1764 |
| Gillin, Robert F., New York, N. Y. Flushing apparatus | 746,324 | Dec. 8 | 1859 | 423, 424 | 107 | 1515 |
| Gillis, Cyrus W., Andalusia, Ala. Animal-trap | 742,627 | Oct. 27 | 4320 | 972 | 106 | 2205 |
| Gillner, John C., and J. L. White, Willoughby, Ohio. Center square | 746,070 | Dec. 8 | 1395 | 312 | 107 | 1415 |
| Gillum, John L., Philadelphia, Pa. Comb | 732,543 | June 30 | 5648 | 1252 | 104 | 2364 |
| Gilman, Edward, New Haven, Conn. Repeating-action for phonographs | 721,363 | Feb. 24 | 3669 | 835 | 102 | 1644 |
| Gilman, George H. (See Richards and Gilman.) | | | | | | |
| Gilman, George H. (See Warner and Gilman.) | | | | | | |
| Gilman, George S. (See Upton and Gilman.) | | | | | | |
| Gilman, Herbert A., assignor to C. D. Lougee, Laconia, N. H. Speed-regulator for explosive-engines | 733,384 | July 14 | 1237 | 293 | 105 | 278 |
| Gilman, Isaac H., assignor of one-third to W. H. Gates, Worcester, Mass. Ball-bearing center for lathes | 725,697 | Apr. 21 | 2380 | 540 | 103 | 1703 |
| Gilman, Willard H., *et al.* (See Regan, Michael C., assignor.) | | | | | | |
| Gilman, Willard H., Boston, Mass., assignor of one-half to W. H. Gannett, Augusta, Me. Race-track amusement apparatus | 726,282 | Apr. 28 | 3431 | 780, 781 | 103 | 1939 |
| Gilman, Willard H., Medford, Mass., assignor of one-half to W. H. Gannett, Augusta, Me. Index | 732,679 | June 30 | 5902 | 1309 | 104 | 2419 |
| Gilman, William D., Baltimore, Md. Making lithophone and Glauber salt | 732,732 | July 7 | 63 | ------ | 105 | 17 |
| Gilman, William D., Roland Park, Md. Obtaining sulfate of barium and chlorid of zinc. | 746,954 | Dec. 15 | 3027 | ------ | 107 | 1797 |
| Gilmer, Ludwell H., Howardsville, Va. Belting | 723,379 | Mar. 24 | 3231 | 724 | 103 | 721 |
| Gilmore, Benjamin B., Holman, Ind. Vehicle axle and wheel | 745,009 | Nov. 24 | 4238 | 919 | 107 | 949 |
| Gilmore, Charles T., Sault St. Marie, Mich. Mangle | 744,063 | Nov. 17 | 3508 | 537 | 107 | 564 |
| Gilmore, Edwin M., New York, N. Y. Bottle-closure | 720,016 | Feb. 10 | 1111 | 254 | 102 | 1075 |
| Gilmore, Elbert J., Lowell, Mass. Lamp attachment | 726,525 | Apr. 28 | 3921 | 886 | 103 | 2036 |
| Gilmore, George H., Murray, Nebr. Surgical pad | 743,486 | Nov. 10 | 1389 | 285 | 107 | 312 |
| Gilmore, George W., and D. Kendall, assignors to Alliance Machine Company, Alliance, Ohio. Electric controller | 731,298 | June 16 | 3256 | 724 | 104 | 1837 |
| Gilmore, Howard, Boston, Mass. Electric switch | 735,363 | Aug. 4 | 613 | 126 | 105 | 1112 |
| Gilmore, Ira F., Bloomington, Ill. Wireless piano | 747,966 | Dec. 29 | 4935 | 1116, 1117 | 107 | 2263 |
| Gilmore, Willis B., Idaho Springs, Colo. Ore sizer or classifier | 738,743 | Sept. 8 | 2394 | 526, 527 | 106 | 528 |
| Gilmour, Alexander J., Newmarket, Canada, assignor to Yawman & Erbe Mfg. Co., Rochester, N. Y. Sectional bookcase | 734,537 | July 28 | 3404 | 795 | 105 | 768 |
| Gilpatrick, Luville A., Gorham, Me. Placket-fastener | 722,009 | Mar. 3 | 663 | 147 | 103 | 143 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | Spec. | Drg. | Vol. | Page. |
| Gilpin, Albert D., Lincoln, Kans. Adding-machine | 728,223 | May 19 | 2634 | 587, 588 | 104 | 599 |
| Gilson, Jewett C., and D. H. Rowe, Oakland, Cal. School-desk frame and attachment therefor | 724,844 | Apr. 7 | 800 | 184 | 103 | 1340 |
| Giltner, Oliver, Portland, Oreg. Bolt or spike puller | 728,096 | May 12 | 2398 | 534 | 104 | 528 |
| Gimber, Harry. (See Benzing and Gimber.) | | | | | | |
| Gimenez, Fidel D., Boston, Mass. Curtain-fixture | 742,712 | Nov. 10 | 1805 | 381 | 107 | 402 |
| Gimson, John E. (See Wood and Gimson.) | | | | | | |
| Gin, Gustave, Paris, France. Making sulfuric acid | 734,849 | July 28 | 4011 | 936 | 105 | 892 |
| Gindra, Conrad C. (See Sullivan, Michael H., assignor.) | | | | | | |
| Gindt, Peter, Lomira, Wis. Steam-engine | 722,225 | Mar. 10 | 1063 | 233 | 103 | 242 |
| Gingins, Albert de, Chateau de Gingins, Canton de Vaud, Switzerland. Inflating device for pneumatic tires | 724,845 | Apr. 7 | 801 | 185 | 103 | 1341 |
| Gingras, Timothy, Buffalo, N. Y. Belt-lacing tool | 734,169 | July 21 | 2713 | 638 | 105 | 607 |
| Ginner, Samuel G., Williamsport, Pa. Garment-supporter | 732,183 | June 30 | 4947 | 1100 | 104 | 2218 |
| Giovannoni, Egisto U. (See Wohl and Giovannoni.) | | | | | | |
| Gipe, Emanuel C., Chicago, Ill. Pneumatic-despatch receptacle | 723,457 | Mar. 24 | 3358 | 752 | 103 | 749 |
| Girard, Peter J., Fallriver, Wis. Draft-equalizer | 724,463 | Apr. 7 | 84 | 21 | 103 | 1187 |
| Girardot, Léonce. (See Charron and Girardot.) | | | | | | |
| Girault, Paul J. M., Paris, France. Means for starting electromotors with rotating fields | 730,013 | June 2 | 904 | 201 | 104 | 1312 |
| Girault, Paul J. M., Paris, France. Starting and regulating the speed of induction-motors | 730,108 | June 2 | 1057 | 237, 238 | 104 | 1343 |
| Girault, Paul J. M., Paris, France. Controlling alternating-current motors | 731,887 | June 23 | 4351 | 971 | 104 | 2082 |
| Girdany, Morris L. J., Boston, Mass. Fastening for settings for precious stones | 721,692 | Mar. 3 | 79 | 17 | 103 | 18 |
| Girdlestone, John O., and C. F. G. Thorkelin, London, England. Electric-arc lamp | 728,902 | May 26 | 3923 | 871, 872 | 104 | 884 |
| Girod, Ernest, Hounslow, England. Pneumatic clock | 736,958 | Aug. 25 | 3617 | 801, 802 | 105 | 1895 |
| Giroud, Louis. (See Weiss and Giroud.) | | | | | | |
| Giroux, Joseph L., Jerome, Ariz. Ter. Air-heater for smelting-furnaces | 718,755 | Jan. 20 | 2356 | 522 | 102 | 531 |
| Giroux, Joseph L., Jerome, Ariz. Ter. Steam-generating furnace | 718,756 | Jan. 20 | 2357 | 522 | 102 | 532 |
| Giroux, Joseph L., Jerome, Ariz. Ter. Steam-generating furnace | 727,346 | May 5 | 979 | 212 | 104 | 211 |
| Giswold, Martin. (See Pederson and Giswold.) | | | | | | |
| Gitterman, John M., New York, N. Y. Belt-strap | 732,064 | June 30 | 4703 | 1050 | 104 | 2168 |
| Gittings, William G., Racine, Wis. Collapsible bath-tub | 744,745 | Nov. 24 | 3779 | 814 | 107 | 854 |
| Givan, Sallie J., Newport, Ky. Dining-room cabinet | 740,420 | Oct. 6 | 54 | 13 | 106 | 1256 |
| Given, William K., Pittsburg, Pa. Automatic car-fender with brake attachment | 738,900 | Sept. 15 | 2706 | 598 | 106 | 613 |
| Givens, William A., Pittsburg, Pa. Compound for use in steel-making | 735,748 | Aug. 11 | 1367 | ..... | 105 | 1289 |
| Glab, Nicholas, Dubuque, Iowa, assignor to F. C. H. Strasburger, Chicago, Ill. Bottle-filling machine | 732,065 | June 30 | 4704 | 1050, 1051 | 104 | 2168 |
| Glab, Nicholas, Dubuque, Iowa, assignor, by mesne assignments, to Bottlers' Special Machinery Company, Chicago, Ill. Bottle-washing machine | 741,241 | Oct. 13 | 1596 | 359 | 106 | 1607 |
| Glackin, Edward J., Chicago, Ill. Ventilator | 733,956 | July 21 | 2289 | 538, 539 | 105 | 516 |
| Gladding, Samuel E., Jersey City, N. J. Dumping truck or car | 732,544 | June 30 | 5649 | 1253 | 104 | 2364 |
| Gladstone, James W., West Orange, N. J. Primary battery | 730,014 | June 2 | 907 | 202 | 104 | 1312 |
| Gladstone, James W., West Orange, N. J. Battery | 742,856 | Nov. 3 | 67 | 16 | 107 | 16 |
| Gladstone, James W., West Orange, N. J. Battery | 742,857 | Nov. 3 | 68 | 16 | 107 | 17 |
| Gladwin, James, Omaha, Nebr. Washing-machine | 721,793 | Mar. 3 | 248 | 55 | 103 | 55 |
| Glaessner, Arthur F., Meriden, Conn. Lamp-stove | 735,335 | Apr. 14 | 1695 | 382 | 103 | 1544 |
| Glahn, John E., Quincy, Ill. Necktie-fastener | 745,817 | Dec. 1 | 919 | 206 | 107 | 1295 |
| Glaholm, John W., and G. T. Kent, Nanaimo, Canada. Parallel-ruler | 746,494 | Dec. 8 | 2147 | 494 | 107 | 1578 |
| Glamorgan Pipe and Foundry Company. (See Jones, Charles E., assignor.) | | | | | | |
| Glander, Carl W. F. (See Preuitt and Glander.) | | | | | | |
| Glantz, Jacob, assignor of one-half to W. C. Klein, Philadelphia, Pa. Ash-sifter | 740,268 | Sept. 29 | 5235 | 1177 | 106 | 1183 |
| Glanville, Richard C., Grand Island, Nebr. Finger-moistener | 727,612 | May 12 | 1470 | 329 | 104 | 334 |
| Glasel, Charles J., Boston, Mass. Tanning apparatus | 742,186 | Oct. 27 | 3505 | 782, 783 | 106 | 2035 |
| Glaser, Adam, and W. H. McIntire, Jersey City, N. J. Heating system | 725,554 | Apr. 14 | 2103 | 476 | 103 | 1630 |
| Glaser, William H., Bradford, England. Slide-rule | 732,935 | July 7 | 425 | 104 | 105 | 91 |
| Glasgow, Francis M. (See Brown, Charles A. F. G., assignor.) | | | | | | |
| Glass, Benjamin W., Belfast, New Zealand. Non-refillable bottle | 744,746 | Nov. 24 | 3780 | 814 | 107 | 854 |
| Glass, Charles A., Goddard, Kans. Attachment for wheels of sulky-plows | 725,241 | Apr. 14 | 1533 | 348 | 103 | 1509 |
| Glass, Charles H., assignor of one-half to J. D. Jones, New York, N. Y. Note-book copy-holder | 722,010 | Mar. 3 | 664 | 148 | 103 | 144 |
| Glass, Marie, Milwaukee, Wis. Steam washing device | 744,531 | Nov. 17 | 3375 | 727 | 107 | 752 |
| Glassburn, John H., Sedalia, Mo. Transom-regulator | 746,495 | Dec. 8 | 2149 | 494 | 107 | 1578 |
| Glaubitz, Hugo J., Allegheny, Pa. Apparatus for handling slag | 735,086 | Aug. 4 | 68 | 18, 19 | 105 | 996 |
| Glaum, Conrad, Audubon, Minn. Horseshoe | 720,130 | Feb. 10 | 1384 | 305 | 102 | 1124 |
| Glazier, C. R. (See Reeves, Mary G., assignor.) | | | | | | |
| Glazier, Peter F., Indianapolis, Ind. Controller for gas-burners | 745,818 | Dec. 1 | 920 | 207 | 107 | 1295 |
| Glazier, Willis, Newark, N. J. Pan for shaping hat-brims | 717,839 | Jan. 6 | 624 | 137 | 102 | 134 |
| Gleason, Charles E., New York, N. Y. Necktie-fastener | 728,903 | May 26 | 3926 | 872 | 104 | 885 |
| Gleason, Dora, Cincinnati, Ohio, assignor of one-half to T. Ford, Highlands, Ky. Abdominal supporter | 720,342 | Feb. 10 | 1720 | 391 | 102 | 1203 |
| Gleason, Edward D., assignor to Hawthorne & Sheble Manufacturing Company, Philadelphia, Pa. Needle-grinding machine | 727,613 | May 12 | 1473 | 329 | 104 | 335 |
| Gleason, Edward D., assignor to J. Wellner, Philadelphia, Pa. Sound-reproducing machine | 732,292 | June 30 | 5163 | 1147 | 104 | 2263 |
| Gleason, Edward D., assignor to H. Sheble, Philadelphia, Pa. Mechanical movement | 732,845 | July 7 | 267 | 66 | 105 | 59 |
| Gleason, Edward D., Philadelphia, Pa., assignor to Regina Music Box Company, New York, N. Y. Sound-box for talking-machines | 737,733 | Sept. 1 | 325 | 68 | 106 | 74 |
| Gleason, Edward D., Philadelphia, Pa., assignor to Victor Talking Machine Company. Needle-feeding device for talking-machines | 739,303 | Sept. 22 | 3428 | 764 | 106 | 781 |
| Gleason, Edward D., assignor to E. A. Hawthorne and H. Sheble, Philadelphia, Pa. Sound box for talking-machines | 728,704 | May 19 | 3552 | 789 | 104 | 794 |
| Gleason, Edward D., assignor to E. A. Hawthorne and H. Sheble, Philadelphia, Pa. Sound-box for talking-machines | 730,109 | June 2 | 1061 | 238 | 104 | 1343 |
| Gleason, Edward D., assignor to E. A. Hawthorne and H. Sheble, Philadelphia, Pa. Sound-box for talking-machines | 730,110 | June 2 | 1062 | 239 | 104 | 1343 |
| Gleason, Eli H., Putnam, Conn. Picker-stick check for looms | 737,219 | Aug. 25 | 4077 | 905 | 105 | 1901 |
| Gleason, Ira L., Hutchinson, Minn. Drying-rack | 726,905 | May 5 | 138 | 32 | 104 | 32 |
| Gleason, Ira L., Hutchinson, Minn. Combined cot and tent | 732,733 | July 7 | 64 | 18 | 105 | 17 |
| Gleason, James E., assignor to Gleason Works, Rochester, N. Y. Gear-planer | 722,098 | Mar. 3 | 813 | 181, 182 | 103 | 176 |

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| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Gleason Works. (See Gleason, James E., assignor.) | | | | | | |
| Glebsattel, August, Steglitz, near Berlin, assignor to P. Dames, Berlin, Germany. Device for cooling purposes | 740,847 | Oct. 6 | 869 | 194 | 106 | 1431 |
| Gleeson, Michael F., Worcester, Mass. Hinged last | 747,162 | Dec. 15 | 3410 | 773 | 107 | 1886 |
| Glen, Henry M., Seneca Falls, N. Y. Running-gear for vehicles | 731,174 | June 16 | 3023 | 672 | 104 | 1788 |
| Glen Manufacturing Company. (See Bedient, Emory A., assignor.) | | | | | | |
| Glenn, Austin H., assignor of two-thirds to H. V. Sharp and A. Aydt, Dahlgren, Ill. Instrument for determining the gage level and elevation of railway-tracks | 735,496 | Aug. 4 | 880 | 188 | 105 | 1168 |
| Glenn, Harry S. (See Nettles and Glenn.) | | | | | | |
| Glenn, John C. (See Skinner and Glenn.) | | | | | | |
| Glenn, William W. (See Justice, William A., assignor.) | | | | | | |
| Glessner, A. W. (See Scherer, Albert G., assignor.) | | | | | | |
| Gley, Richard, assignor to Actien Gesellschaft für Anilin Fabrikation, Berlin, Germany. Blue sulfur dye and making same | 736,380 | Aug. 18 | 2500 | ..... | 105 | 1552 |
| Gley, Richard, assignor to Actien Gesellschaft für Anilin Fabrikation, Berlin, Germany. Yellow sulfur dye and making same | 738,027 | Sept. 1 | 937 | ..... | 106 | 204 |
| Gley, Richard, assignor to Actien-Gesellschaft für Anilin Fabrikation, Berlin, Germany. Green sulfur dye and making same | 741,030 | Oct. 13 | 1184 | ..... | 106 | 1519 |
| Gley, Richard, and O. Siebert, assignors to Actien-Gesellschaft für Anilin Fabrikation, Berlin, Germany. Red azo lake | 741,029 | Oct. 13 | 1183 | ..... | 106 | 1519 |
| Gley, Richard, and O. Siebert, assignors to Actien Gesellschaft für Anilin Fabrikation, Berlin, Germany. Monoazo dye and making same | 743,071 | Nov. 3 | 489 | ..... | 107 | 102 |
| Glickman, Pincus. (See Goldin and Glickman.) | | | | | | |
| Glidden, Frederick A., Cleveland, Ohio. Tally-board | 733,834 | July 14 | 2045 | 482 | 105 | 446 |
| Glidden, Frederick A., assignor to Glidden Varnish Company, Cleveland, Ohio. Combined demonstration and instruction strip | 735,749 | Aug. 11 | 1368 | 294 | 105 | 1289 |
| Glidden Varnish Company. (See Glidden, Frederick A., assignor.) | | | | | | |
| Gliem, Christian P., Washington, D. C. Wine-cooler | 747,548 | Dec. 22 | 4121 | 925 | 107 | 2060 |
| Glines, Edward C. (See Savoie, Joseph, assignor.) | | | | | | |
| Glinsky, Herman and W. A., New Kensington, Pa. Rail-joint | 725,555 | Apr. 14 | 2104 | 476 | 103 | 1630 |
| Glinsky, William A. (See Glinsky, Herman and W. A.) | | | | | | |
| Globe Automatic Telephone Company. (See Brownrigg and Norstrom, assignors.) | | | | | | |
| Globe Electric Company. (See Little, John A., assignor.) | | | | | | |
| Globe Iron Works. (See White, Clarence O., assignor.) | | | | | | |
| Globe Register Company. (See Konerman, Harry, assignor.) | | | | | | |
| Globe-Wernicke Company. (See Dom, Alexander, assignor.) | | | | | | |
| Globe-Wernicke Company. (See Keck, Christian, assignor.) | | | | | | |
| Globe-Wernicke Company. (See Tobey, Fred W., assignor.) | | | | | | |
| Globe-Wernicke Company. (See Wernicke, Alfred F., assignor.) | | | | | | |
| Globe-Wernicke Company. (See Yeiser, Henry C., assignor.) | | | | | | |
| Glock, Gustav, Berlin, Germany. Obtaining pure pyroligneous acid | 736,959 | Aug. 25 | 3620 | ..... | 105 | 1805 |
| Glocker, Carl F., Albany, N. Y. Gas-burner | 722,226 | Mar. 10 | 1064 | 234 | 103 | 242 |
| Glogner, Moritz F. R., Freiburg, Germany. Purifying graphite | 736,381 | Aug. 18 | 2501 | 549 | 105 | 1552 |
| Glor, Alvin J. (See West and Glor.) | | | | | | |
| Glover, Arthur W. (See Thompson and Glover.) | | | | | | |
| Glover, Charles, New Britain, Conn. Coaster-brake | 721,437 | Feb. 24 | 3807 | 866 | 102 | 1673 |
| Glover, Charles, New Britain, Conn. Coaster-brake | 721,438 | Feb. 24 | 3809 | 866 | 102 | 1673 |
| Glover, Charles, New Britain, Conn. Paper-clip | 727,347 | May 5 | 980 | 213 | 104 | 212 |
| Glover, Charles, New Britain, Conn. Coaster-brake | 735,087 | Aug. 4 | 70 | 19 | 105 | 996 |
| Glover, Charles, assignor, by mesne assignments, to Corbin Screw Corporation, New Britain, Conn. Lathe | 740,641 | Oct. 6 | 486 | 107 | 106 | 1351 |
| Glover, Charles A., Ardsley, N. Y. Freight-car for shipping musical instruments | 721,886 | Mar. 3 | 422 | 93 | 103 | 93 |
| Glover, Clarence. (See Glover and Crowther.) | | | | | | |
| Glover, Herschel, assignor of one-half to W. E. Brooks, Toledo, Mo. Railway-rail joint | 722,971 | Mar. 17 | 2451 | 549 | 103 | 550 |
| Glover, James B., Redlands, Cal. Oil-distributer | 724,692 | Apr. 7 | 511 | 121 | 103 | 1278 |
| Glover, Leonard and C., and D. Crowther, Leeds, England. Fire-box for locomotive-boilers | 730,904 | June 16 | 2513 | 558 | 104 | 1686 |
| Glover, Leonard and C., and D. Crowther, Leeds, England. Fire-box | 730,905 | June 16 | 2514 | 559 | 104 | 1686 |
| Glover, William S., Mount Braddock, Pa. Railway-car | 736,515 | Aug. 18 | 2764 | 604 | 105 | 1608 |
| Gluckauf, Morris, New York, N. Y. Suspenders | 725,437 | Apr. 14 | 1881 | 420 | 103 | 1583 |
| Glynn, Thomas E., *et al.* (See Berg, Joseph, assignor.) | | | | | | |
| Glynn, Thomas J., Coal Center, Pa. Steel caboose-car | 739,304 | Sept. 22 | 3429 | 764 | 106 | 781 |
| Glynn, Thomas J., Coal Center, Pa. Car-fender | 744,913 | Nov. 24 | 4067 | 876 | 107 | 914 |
| Gmeiner, William, assignor of one-half to W. J. Kaemerling, Pittsburg, Kans. Hose-clamp | 725,837 | Apr. 21 | 2637 | 600 | 103 | 1760 |
| Gmelin, Jacob H., West Bay City, Mich. Coal screener and bagger | 741,398 | Oct. 13 | 1934 | 427 | 106 | 1679 |
| Gmelin, Jacob H., West Bay City, Mich. Bag-holder | 741,484 | Oct. 13 | 2103 | 468 | 106 | 1715 |
| "Gnu" Pen (and Patentees) Company. (See Blake and Platt, assignors.) | | | | | | |
| Goacher, Robert H., Woodsetts, England. Separator for steam-boilers | 725,698 | Apr. 21 | 2381 | 540 | 103 | 1703 |
| Goddard, Charles A., Seattle, Wash. Dry-kiln truck | 746,816 | Dec. 15 | 2738 | 631 | 107 | 1732 |
| Goddard, George W. (See Tucker and Goddard.) | | | | | | |
| Goddu, William, Winchester, Mass., assignor to United Shoe Machinery Company. Sewing-machine for boots or shoes | 745,819 | Dec. 1 | 923 | 207<br>208 | 107 | 1296 |
| Godefroid, Armand, Aix-la-Chapelle, Germany. Cash-register | 733,476 | July 14 | 1397 | 329 | 105 | 313 |
| Godefroy, Alexandre F., St. Louis, Mo. Means for propelling vessels | 730,529 | June 9 | 1838 | 410 | 104 | 1522 |
| Godfrey, Alfred, London, England. Machine for packing cigarettes or like goods | 736,592 | Aug. 18 | 2907 | 634<br>635<br>636 | 105 | 1637 |
| Godfrey, Clinton, *et al.* (See Van Gilder and Post, assignors.) | | | | | | |
| Godfrey, Edward A., Bridgeport, Conn. Dumping-wagon | 728,705 | May 19 | 3554 | 790 | 104 | 794 |
| Godfrey, Guy T., Eldon, Mo. Trap for catching fleas | 718,834 | Jan. 20 | 2487 | 553 | 102 | 557 |
| Godfrey, Harold, *et al.* (See Van Gilder and Post, assignors.) | | | | | | |
| Godfrey, Leroy W. (See Briggs, Richmond B., assignor.) | | | | | | |
| Godfrey, R. W. A. (See Martin, Joseph H., assignor.) | | | | | | |
| Godfrey, Walter D. (See Graham, Andrew W., assignor.) | | | | | | |
| Godfrey, William D., *et al.* (See Rawles, John, assignor.) | | | | | | |
| Godfrey, William L., Brooklyn, and C. N. Rivers, New York, assignors to G. H. Bowers, Brooklyn, N. Y. Grinding and polishing machine | 737,220 | Aug. 25 | 4078 | 906 | 105 | 1901 |
| Godin, Joseph A., St. Johns, Canada. Attachment for soil-pipes | 743,269 | Nov. 3 | 880 | 191 | 107 | 185 |
| Godron, Alexander. (See Doner, Martin J., assignor.) | | | | | | |
| Godsell, George, Hereford, England. Rail-joint | 723,861 | Mar. 31 | 4103 | 925 | 103 | 920 |
| Godshalk, Edward H. (See Evans, Edwin W., assignor.) | | | | | | |
| Goeb, Rudolph W., assignor to Controller Company of America, St. Louis, Mo. Locking mechanism | 739,075 | Sept. 15 | 3002 | 666 | 106 | 675 |
| Goebel, Fritz. (See Cramer, Anthony F., assignor.) | | | | | | |
| Goebel, Fritz. (See Parker and Goebel.) | | | | | | |
| Goebel, William, St. Louis, Mo. Measuring-faucet | 722,972 | Mar. 17 | 2453 | 549 | 103 | 551 |

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| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Goehring, Charles L., and W. Troche, Akron, Ohio; said Troche assignor to said Goehring. Apparatus for beveling glass | 737,387 | Aug. 25 | 4385 | 978, 979, 980, 981 | 105 | 1967 |
| Goehring, Charles L., and W. Troche, Akron, Ohio; said Troche assignor to said Goehring. Beveling-machine | 737,388 | Aug. 25 | 4393 | 981 | 105 | 1969 |
| Goehring, Charles L., and W. Troche, Akron, Ohio; said Troche assignor to said Goehring. Glass-beveling machine | 737,389 | Aug. 25 | 4395 | 982, 983 | 105 | 1969 |
| Goehring, Charles L., and W. Troche, Akron, Ohio; said Troche assignor to said Goehring. Glass-grinding machine | 737,390 | Aug. 25 | 4400 | 983, 984 | 105 | 1970 |
| Goehring, Charles L., and W. Troche, Akron, Ohio; said Troche assignor to said Goehring. Glass-beveling machine | 737,391 | Aug. 25 | 4404 | 984, 985 | 105 | 1971 |
| Goehring, Charles L., and W. Troche, Akron, Ohio; said Troche assignor to said Goehring. Glass-grinding machine | 737,392 | Aug. 25 | 4408 | 985, 986 | 105 | 1972 |
| Goehring, Charles L., and W. Troche, Akron, Ohio; said Troche assignor to said Goehring. Glass-grinding machine | 737,393 | Aug. 25 | 4412 | 986, 987 | 105 | 1973 |
| Goehring, Charles L., and W. Troche, Akron, Ohio; said Troche assignor to said Goehring. Machine for grinding glass | 737,394 | Aug. 25 | 4415 | 987 | 105 | 1974 |
| Goehring, Charles L., and W. Troche, Akron, Ohio; said Troche assignor to said Goehring. Glass-grinding machine | 737,395 | Aug. 25 | 4417 | 988 | 105 | 1974 |
| Goehring, Charles L., and W. Troche, Akron, Ohio; said Troche assignor to said Goehring. Machine for grinding curved work | 737,396 | Aug. 25 | 4420 | 989 | 105 | 1975 |
| Goehring, Henry, Philadelphia, Pa. Branding-machine | 724,177 | Mar. 31 | 4739 | 1062 | 103 | 1051 |
| Goehst, John H., assignor to Federal Electric Company, Chicago, Ill. Electrically-illuminated sign | 742,309 | Oct. 27 | 3751 | 840 | 106 | 2087 |
| Goehst, John H., assignor to Federal Electric Company, Chicago, Ill. Electric-lamp socket | 744,330 | Nov. 17 | 3020 | 648 | 107 | 675 |
| Goehst, John H., assignor to Federal Electric Company, Chicago, Ill. Electrically-illuminated sign | 744,331 | Nov. 17 | 3022 | 648 | 107 | 675 |
| Goepper, Emil A., assignor of one-half to V. A. Lloyd, Louisville, Ky. Molding-machine. | 736,841 | Aug. 18 | 3393 | 750 | 105 | 1737 |
| Goeres, Louis B., Randolph, Mass. Attachment for raceways for sewing-machine shuttles | 744,747 | Nov. 24 | 3781 | 814 | 107 | 854 |
| Goerk, Gustav, Newark, N. J., assignor to R. Neumann Hardware Company. Trunk-lock. | 744,532 | Nov. 17 | 3376 | 727 | 107 | 752 |
| Goerk, Gustav, Newark, and J. Goerk, Irvington, N. J. Sash-fastener | 739,410 | Sept. 22 | 3645 | 810 | 106 | 828 |
| Goerk, Jacob. (See Goerk, Gustav and J.) | | | | | | |
| Goers, William. (See Kehl and Goers.) | | | | | | |
| Goertz & Co., Aug. (See Eigen, Benno von, assignor.) | | | | | | |
| Goerz, Firm of C. P. (See Brauburger, Ernst, assignor.) | | | | | | |
| Goerz, Firm of C. P. (See Zschokke and Urban, assignors.) | | | | | | |
| Goessmann, Charles I., assignor to Vellumoid Paper Company, Amherst, Mass. Waterproof material and preparing same | 721,558 | Feb. 24 | 4018 | ..... | 102 | 1718 |
| Goessmann, Charles I., Worcester, Mass., assignor to Vellumoid Paper Co. Preparing paraffin or waxed paper | 721,693 | Mar. 3 | 80 | ..... | 103 | 18 |
| Goessmann, Charles I., Worcester, Mass., assignor to Vellumoid Paper Co. Treating paper for toughening and rendering it impervious | 740,006 | Sept. 29 | 4759 | ..... | 106 | 1084 |
| Goessmann, Charles I., Worcester, Mass., assignor to Vellumoid Paper Co. Treating-tank | 748,181 | Dec. 29 | 5357 | 1217 | 107 | 2355 |
| Goethe, Walter, St. Louis, Mo. Sawing-machine | 726,673 | Apr. 28 | 4195 | 947, 948 | 103 | 2091 |
| Goettel, John, Boston, Mass. Car-door hanger | 741,031 | Oct. 13 | 1185 | 268 | 106 | 1519 |
| Goettler, Fred H., *et al.* (See McGuire, Peter J., assignor.) | | | | | | |
| Goetz, George B. (See Weller, Michael S., assignor.) | | | | | | |
| Goetze, Henry, and L. M. Sanford, Lockland, Ohio. Coin-counting device | 719,459 | Feb. 3 | 83 | 20 | 102 | 843 |
| Goff, John B. (See Bolin and Goff.) | | | | | | |
| Goff, Samuel B., Camden, N. J. Bottle-filler | 745,051 | Nov. 24 | 4346 | 939 | 107 | 971 |
| Goffe, Theodore N., Springfield, Mo. Vending-machine | 747,414 | Dec. 22 | 3881 | 873, 874 | 107 | 2005 |
| Goforth, Charles F., Wichita, Kans. Thill-coupling | 745,596 | Dec. 1 | 522 | 122 | 107 | 1208 |
| Goggan, John, *et al.* (See Goggan, Michael, assignor.) | | | | | | |
| Goggan, Michael, San Antonio, assignor of one-half to T. and J. Goggan, Galveston, Tex. Touch-regulator for pianos | 727,348 | May 5 | 982 | 213 | 104 | 212 |
| Goggan, Thomas, *et al.* (See Goggan, Michael, assignor.) | | | | | | |
| Gohn, Alford A., Gladerun, Pa. Barrel-heater | 745,432 | Dec. 1 | 226 | 52 | 107 | 1148 |
| Gohy, Jean, Ensival, near Verviers, Belgium. Heddle-making machine | 729,572 | June 2 | 91 | 23, 24, 25 | 104 | 1146 |
| Gohy, Jean, Ensival, near Verviers, Belgium. Machine for soldering healds for weaving-looms | 736,593 | Aug. 18 | 2917 | 637, 638 | 105 | 1639 |
| Goings, Elisha R., Clay City, Ill. Fruit, vegetable, or cereal evaporator | 722,693 | Mar. 17 | 1965 | 438, 439 | 103 | 452 |
| Golcher, John T., Philadelphia, Pa. Lamp-holder | 743,270 | Nov. 3 | 882 | 191 | 107 | 186 |
| Gold, Edward E., New York, N. Y. Electric heating system | 718,619 | Jan. 20 | 2097 | 456 | 102 | 480 |
| Gold, Edward E., New York, N. Y. Electric cooker | 730,252 | June 9 | 1332 | 292, 293 | 104 | 1414 |
| Gold, Edward E., New York, N. Y. Electric car-heater | 742,310 | Oct. 27 | 3754 | 840, 841 | 106 | 2087 |
| Gold, Henry J., Leeds, assignor to United Kingdom Self-Adjusting Anti-Friction Metallic Packing Syndicate, Limited, Liverpool, England. Metallic packing for stuffing-boxes | 735,364 | Aug. 4 | 614 | 126 | 105 | 1112 |
| Gold, Reginald E., Mumbles, near Swansea, England. Can attachment | 735,088 | Aug. 4 | 73 | 19 | 105 | 997 |
| Gold, William D., Carthage, Tenn. Stove | 746,817 | Dec. 15 | 2740 | 631, 632 | 107 | 1732 |
| Goldan, Sydney O., assignor to F. Tagliavia-Tanini, New York, N. Y. Inhaler | 733,026 | July 7 | 575 | 140 | 105 | 123 |
| Goldan, Sydney O., assignor to F. Tagliavia-Tanini, New York, N. Y. Inhaler | 733,027 | July 7 | 577 | 140, 141 | 105 | 123 |
| Goldberg, Abraham, *et al.* (See Bois, Nathaniel, assignor.) | | | | | | |
| Goldberg, Emanuel, Moscow, Russia. Electrolytically coating iron with zinc | 733,028 | July 7 | 579 | ..... | 105 | 124 |
| Goldberg, Hyman E., Chicago, Ill. Register | 741,126 | Oct. 13 | 1369 | 314 | 106 | 1558 |
| Goldberg, Hyman E., Chicago, Ill. Calculating-machine | 741,961 | Oct. 20 | 3034 | 675, 676, 677, 678, 679 | 106 | 1927 |
| Goldberg, John S., Chicago, Ill., assignor to Stromberg-Carlson Telephone Manufacturing Company, Rochester, N. Y. Telephone-receiver | 732,734 | July 7 | 66 | 19 | 105 | 17 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Goldberg, John S., assignor to Stromberg-Carlson Telephone Manufacturing Company, Chicago, Ill. Bulldozer | 740,421 | Oct. 6 | 55 | 13, 14 | 106 | 1256 |
| Goldberg, John S., assignor to Stromberg-Carlson Telephone Manufacturing Company, Chicago, Ill. Spool-making machinery | 740,422 | Oct. 6 | 61 | 14, 15, 16 | 106 | 1258 |
| Goldberg, John S., assignor to Stromberg-Carlson Telephone Manufacturing Company, Chicago, Ill. Battery-transmitter | 747,602 | Dec. 22 | 4212 | 948 | 107 | 2080 |
| Goldberg, Joseph, New York, N. Y. Clasp | 737,834 | Sept. 1 | 526 | 116 | 106 | 117 |
| Goldberg, Meyer, *et al.* (See Bois, Nathaniel, assignor.) | | | | | | |
| Goldberg, Samuel, assignor to L. Schlesinger, New York, N. Y. Reed-horn | 738,181 | Sept. 8 | 1276 | 277 | 106 | 292 |
| Goldberg, Solomon H., Danville, Ill. Hair-pin | 748,278 | Dec. 29 | 5531 | 1261 | 107 | 2393 |
| Golden, Daniel J., Randolph, Mass. Sporting-shoe | 737,920 | Sept. 1 | 726 | 157 | 106 | 159 |
| Golden, Ephraim P., assignor of one-half to N. J. Johnson, Chicago, Ill. Scraping-tool | 721,178 | Feb. 24 | 3320 | 759 | 102 | 1573 |
| Golden Gate Novelty Manufacturing Co. (See Handy and Hosford, assignors.) | | | | | | |
| Goldfarb, Nathan, New York, N. Y. Calculating-machine | 725,242 | Apr. 14 | 1534 | 349 | 103 | 1509 |
| Goldfield, Abraham T., New York, N. Y. Waist-belt attachment | 744,533 | Nov. 17 | 3378 | 728 | 107 | 752 |
| Goldie, William, Wilkinsburg, Pa. Railway-track | 739,539 | Sept. 22 | 3853 | 863 | 106 | 873 |
| Goldin, Horace, New York, N. Y. Pocket-knife | 744,064 | Nov. 17 | 2511 | 538 | 107 | 564 |
| Goldin, Mayer, and P. Glickman, New York, N. Y. Coupling for suspender-belts | 727,784 | May 12 | 1830 | 409 | 104 | 409 |
| Golding, John F., London, England. Construction of walls and partitions | 719,580 | Feb. 3 | 309 | 71 | 102 | 887 |
| Goldman & Co., E. (See Birkholz, Richard, assignor.) | | | | | | |
| Goldman, Davis. (See Tenenbom, Benjamin, assignor.) | | | | | | |
| Goldman, Moses, Pittsfield, Mass. Atomizer | 725,954 | Apr. 21 | 2842 | 645 | 103 | 1803 |
| Goldmark and Wallace. (See Wallace, William J., assignor.) | | | | | | |
| Goldsborough, John A., *et al.* (See Haley, John C., assignor.) | | | | | | |
| Goldschmidt, Hans, Essen-on-the-Ruhr, assignor to C. B. Schultz, Berlin, Germany. Joining metal pieces | 717,840 | Jan. 6 | 626 | 138 | 102 | 134 |
| Goldschmidt, Hans, Essen-on-the-Ruhr, assignor to C. B. Schultz, Berlin, Germany. Uniting metals | 729,573 | June 2 | 99 | 25 | 104 | 1147 |
| Goldschmidt, Hans, Essen-on-the-Ruhr, assignor to C. B. Schultz, Berlin, Prussia, Germany. Metal-welding | 735,244 | Aug. 4 | 403 | 79 | 105 | 1067 |
| Goldschmidt, Hans, and W. Mathesius, Essen-on-the-Ruhr, Germany. Manufacturing homogeneous metal castings | 733,957 | July 21 | 2291 | ------ | 105 | 517 |
| Goldsmith, Berthold. (See Bennett and Goldsmith.) | | | | | | |
| Goldsmith, Berthold, and C. W. Bennett, Elwood, Ind., assignors to American Tin Plate Co., New York, N. Y. Machine for piling metal sheets | 733,385 | July 14 | 1240 | 293, 294 | 105 | 278 |
| Goldsmith, Byron B., New York, N. Y. Pen-ejecting penholder | 720,236 | Feb. 10 | 1528 | 350 | 102 | 1162 |
| Goldsmith, Charles B., Waterbury, Conn. Buttonhole-shears | 726,156 | Apr. 21 | 3172 | 718 | 103 | 1871 |
| Goldsmith, Daniel, New York, N. Y. Jeweler's tray | 743,859 | Nov. 10 | 2071 | 441 | 107 | 457 |
| Goldsmith, Edgar J. and H., assignors to P. Goldsmith's Sons, Cincinnati, Ohio. Supporting mechanism for punching-bags | 735,750 | Aug. 11 | 1369 | 294 | 105 | 1289 |
| Goldsmith, Hugo. (See Goldsmith, Edgar J. and H.) | | | | | | |
| Goldsmith's Sons, P. (See Goldsmith, Edgar J. and H., assignors.) | | | | | | |
| Goldstein, Abraham and B., Patton, Pa. Envelop moistening and sealing device | 734,850 | July 28 | 4012 | 937 | 105 | 892 |
| Goldstein, Albert, New York, N. Y., assignor to S. Frank, Baltimore, Md. Alarm telegraph system | 723,199 | Mar. 17 | 2875 | 644 | 103 | 639 |
| Goldstein, Barnett. (See Goldstein, Abraham and B.) | | | | | | |
| Goldstein, Benjamin, Atlantic City, N. J. Life-preserver | 724,279 | Mar. 31 | 4959 | 1110 | 103 | 1093 |
| Goldstein, Isral. (See Smith, Charles A., assignor.) | | | | | | |
| Goldstein, Robert. (See Slade and Goldstein.) | | | | | | |
| Goldstein, Robert, and W. S. Benson, New York, N. Y. Photographic apparatus | 742,187 | Oct. 27 | 3507 | 783 | 106 | 2035 |
| Goldstuecker, Carl, Constantinople, Turkey. Gas-reservoir for railway-cars | 720,237 | Feb. 10 | 1529 | 350 | 102 | 1162 |
| Goldsworthy, John, Indianapolis, Ind. Automatic signaling apparatus for railways | 731,108 | June 16 | 2896 | 643 | 104 | 1764 |
| Golland, Henry S., Worsley, and J. D. Whyte, Manchester, England. Spinning-mule | 722,973 | Mar. 17 | 2454 | 549 | 103 | 551 |
| Golland, Henry S., Worsley, and J. D. Whyte, Manchester, England. Spinning-mule | 727,349 | May 5 | 983 | 213, 214 | 104 | 212 |
| Golliek, Stanley. (See Wilmoth, Smith, and Golliek.) | | | | | | |
| Gölsdorf, Karl, Vienna, Austria-Hungary. Tender and tank-locomotive | 723,666 | Mar. 24 | 3736 | 838 | 103 | 826 |
| Goltstein, Ewald, Cologne, Germany. Means for sealing bottles | 743,636 | Nov. 10 | 1677 | 352 | 107 | 374 |
| Goltstein, Ewald, Cologne, Germany, assignor to J. A. Landsberger, Alameda, Cal. Jar-closure | 730,760 | June 9 | 2237 | 497 | 104 | 1610 |
| Goltz, William, Chicago, Ill. Means for operating electric signs | 745,488 | Dec. 1 | 337 | 79 | 107 | 1171 |
| Golze, Rudolf, Dessau, Germany. Forge | 730,761 | June 9 | 2238 | 497 | 104 | 1610 |
| Gomes, John M. (See Ketcheson, John H., assignor.) | | | | | | |
| Gommon, Charles, Sebewaing, Mich. Rail-joint | 717,985 | Jan. 6 | 881 | 196, 197 | 102 | 189 |
| Gomprecht, Jacob. (See Graf, Robert R., assignor.) | | | | | | |
| Gondolf, August. (See Payne, Gillies, and Gondolf.) | | | | | | |
| Gonon, Antoine, Paris, France. Machine for automatically grinding knife-blades | 727,614 | May 12 | 1475 | 330 | 104 | 335 |
| Gooch, Benjamin F. (See Westbrook, Nancy A., assignor.) | | | | | | |
| Gooch, Orrel A., East Machias, Me. Lathe attachment | 738,182 | Sept. 8 | 1277 | 277 | 106 | 292 |
| Good Form Manufacturing Company. (See Davies, Charles W. T., assignor.) | | | | | | |
| Good, Israel F., Allentown, assignor of one-half to G. F. Pettinos, Bethlehem, and J. H. Harris, Allentown, Pa. Apparatus for separating graphite or other materials from associated impurities | 745,960 | Dec. 1 | 1191 | 267 | 107 | 1354 |
| Good, John, Far Rockaway, assignor to himself, P. F. O'Hare, Brooklyn, N. Y., and J. M. Reiner, Radnor, Pa. Winding-machine for balls or cops | 730,635 | June 9 | 2019 | 449 | 104 | 1563 |
| Good, John, Far Rockaway, assignor to himself, P. F. O'Hare, Brooklyn, N. Y., and J. M. Reiner, Radnor, Pa. Ball or cop of twine or cord | 731,888 | June 23 | 4353 | 971 | 104 | 2083 |
| Good, Oliver F., Dayton, Ohio. Combined gas or vapor generator and motor | 738,183 | Sept. 8 | 1279 | 277, 278 | 106 | 293 |
| Good, Robert J., and J. H. Schlafly, assignors to Berger Manufacturing Company, Canton, Ohio. Can-forming machine | 725,070 | Apr. 14 | 1204 | 273, 274, 275 | 103 | 1441 |
| Goodale, Charles A. (See Stephens and Goodale.) | | | | | | |
| Goodale, George P. (See Burns, James S., assignor.) | | | | | | |
| Goodale, John C., Jr., Kalamazoo, Mich. Register for gas-meters | 744,332 | Nov. 17 | 3025 | 649 | 107 | 676 |
| Goodall Worsted Company. (See Spence, Fred, assignor.) | | | | | | |
| Goodchild, John, trustee. (See Dissosway, Crowell M., assignor.) | | | | | | |
| Goode, Frank R., assignor to E. J. Strader, Decatur, and E. M. Hybarger, Pana, Ill. Foldable support | 747,884 | Dec. 22 | 4754 | 1074 | 107 | 2202 |
| Goodell Co. (See Martin, Ernest C., assignor.) | | | | | | |
| Goodell Company. (See Yeomans, Lucien I., assignor.) | | | | | | |
| Goodell, George H., Belleme, assignor to Standard Steel Car Company, Pittsburg, Pa. Car-bolster | 720,238 | Feb. 10 | 1530 | 350 | 102 | 1162 |

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| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|
| | | | Spec. | Drgs. | Vol. | Page. |
| Goodell, George H., assignor to Standard Steel Car Company, Pittsburg, Pa. Truck-bolster | 720,239 | Feb. 10 | 1531 | 350 | 102 | 1163 |
| Goodenow, Orville O., Portis, Kans. Disk-sharpening machine | 738,901 | Sept. 15 | 2707 | 598 | 106 | 613 |
| Goodfellow, Frank, G., and R., Hyde, England. Compound expansion-fluid engine | 720,343 | Feb. 10 | 1721 | 391 | 102 | 1203 |
| Goodfellow, George. (See Goodfellow, Frank, G., and R.) | | | | | | |
| Goodfellow, John H., Buffalo, N. Y., and J. W. Piper, Lowell, Mass.; said Goodfellow assignor to said Piper. Grate for stoves or furnaces | 718,998 | Jan. 27 | 2812 | 630 | 102 | 641 |
| Goodfellow, Norman P., Chicago, Ill. Shear-sharpening device | 740,118 | Sept. 29 | 4959 | 1113 | 106 | 1127 |
| Goodfellow, Robert. (See Goodfellow, Frank, G., and R.) | | | | | | |
| Goodfellow, Thomas G., Chicago, Ill. Scissors-sharpener | 736,245 | Aug. 11 | 2267 | 490 | 105 | 1484 |
| Goodfield, Charles H. (See Brown, David, assignor.) | | | | | | |
| Goodhart, Jacob P. (See Wilson, Thatcher P., assignor.) | | | | | | |
| Goodhue, James E., St. Charles, Ill. Corn-husking machine | 739,540 | Sept. 22 | 3855 | {863 864 | {106 | 873 |
| Gooding, Charles S. (See Beauregard and Gooding.) | | | | | | |
| Gooding, Reginald L., Bridgetown, British West Indies. Scarf-retainer | 739,668 | Sept. 22 | 4108 | 915 | 106 | 928 |
| Goodlake, Frederick D., Chattanooga, Tenn. Horseshoe | 741,326 | Oct. 13 | 1782 | 396 | 106 | 1644 |
| Goodline, George, Paterson, N. J. Shuttle-box-operating mechanism for looms | 744,333 | Nov. 17 | 3027 | 649 | 107 | 676 |
| Goodline, George, Philadelphia, Pa. Box-motion for looms | 744,682 | Nov. 17 | 3621 | 781 | 107 | 802 |
| Goodline, George, Philadelphia, Pa. Shuttle-box-operating mechanism for looms | 744,683 | Nov. 17 | 3623 | {781 782 | {107 | 803 |
| Goodman, Charles F., Petersburg, Ill. Stovepipe-holder | 748,063 | Dec. 29 | 5139 | 1162 | 107 | 2308 |
| Goodman, David T., Altoona, Pa. Hook | 723,524 | Mar. 24 | 3494 | 781 | 103 | 775 |
| Goodman, David T., Altoona, Pa. Hook | 735,245 | Aug. 4 | 404 | 79 | 105 | 1067 |
| Goodman, Forest E., Waco, Tex. Hame and trace connector | 747,415 | Dec. 22 | 3883 | 874 | 107 | 2005 |
| Goodman, Fred E. (See Ertell, George B., assignor.) | | | | | | |
| Goodman, Joseph T., Alameda, Cal. Educational device | 731,175 | June 16 | 3025 | 672 | 104 | 1789 |
| Goodman-Leavitt-Yatter Co. (See Turner, John, assignor.) | | | | | | |
| Goodman, Max, New York, N. Y. Boy's suspenders | 726,045 | Apr. 21 | 2987 | 679 | 103 | 1832 |
| Goodman, William R., assignor to Chicago Fuse Wire & Manufacturing Company, Chicago, Ill. Fuse-terminal | 730,906 | June 16 | 2515 | 559 | 104 | 1686 |
| Goodnow, William T., Sayre, Pa., and W. S. Eaton, Sag Harbor, assignors to Eaton & Glover Company, New York, N. Y. Engraving-machine | 729,758 | June 2 | 432 | 98,99 | 104 | 1216 |
| Goodrich, Charles, Bethune, Colo. Valve-extractor | 722,694 | Mar. 17 | 1966 | 439 | 103 | 452 |
| Goodrich, Clarence L., assignor to Pratt & Whitney Company, Hartford, Conn. Tool-holder for screw-machines | 726,674 | Apr. 28 | 4198 | 948 | 103 | 2092 |
| Goodrich, Eugene B. (See Revoir, Battese, assignor.) | | | | | | |
| Goodrich, John J., Methuen, and J. H. McPherson, Haverhill, assignors of one-third to W. R. Pedrick, Lawrence, Mass. Trolley-stand | 741,786 | Oct. 20 | 2694 | 600 | 106 | 1854 |
| Goodrich, Marion B., St. Paul, Minn. Culinary strainer | 718,247 | Jan. 13 | 1344 | 298 | 102 | 304 |
| Goodrick, Edward W. (See Jerrems, Thomas W., assignor.) | | | | | | |
| Goodridge, Gilbert W., assignor to Bryant Electric Company, Bridgeport, Conn. Binding-screw for electrical connections | 721,559 | Feb. 24 | 4021 | 914 | 102 | 1718 |
| Goodrum, Charles L. (See Lattig and Goodrum.) | | | | | | |
| Goodrum, Charles L. (See Lattig and Goodrum.) (Reissue.) | | | | | | |
| Goodrum, Charles L., and J. W. Lattig, Philadelphia, Pa. Lock-out party-line telephone system | 722,362 | Mar. 10 | 1311 | 291 | 103 | 295 |
| Goodsell, Arthur, *et al.* (See Goodsell, Frank, assignor.) | | | | | | |
| Goodsell, Clayton A., Harvard, Ill. Sash-lock | 718,118 | Jan. 13 | 1116 | 247 | 102 | 255 |
| Goodsell, Frank, assignor to A. Goodsell and W. Wyman, Jasper, Mich. Hay or stock rack | 744,748 | Nov. 24 | 3782 | 815 | 107 | 854 |
| Goodson, George A., Minneapolis, Minn. Electric igniter for explosive-engines | 725,556 | Apr. 14 | 2105 | {476 477 | {103 | 1630 |
| Goodson, George A., Minneapolis, Minn. Electric igniter for explosive-engines | 734,851 | July 28 | 4014 | 937 | 105 | 892 |
| Goodson, George A., Providence, R. I. Electric igniter for explosive-engines | 725,644 | Apr. 14 | 2283 | 516 | 103 | 1669 |
| Goodson, George A., Providence, R. I. Electric igniter for explosion-engines | 734,852 | July 28 | 4018 | {937 938 | {105 | 893 |
| Goodspeed, Charles B., Columbus, Ohio. Pneumatic clutch | 725,243 | Apr. 14 | 1538 | 349 | 103 | 1510 |
| Goodspeed, John, Brookpark, Minn. Apparatus for seeding cherries | 743,860 | Nov. 10 | 2074 | 441 | 107 | 457 |
| Goodstone, M. A., *et al.* (See Bryson, David K., assignor.) | | | | | | |
| Goodwin, Alphonso M., Saco, Me. Railway repair and defect card holder | 745,597 | Dec. 1 | 524 | 122 | 107 | 1209 |
| Goodwin, Alphonso M., Saco, Me. Railway repair and defect card holder | 745,598 | Dec. 1 | 525 | 123 | 107 | 1209 |
| Goodwin, Charles, East Providence, R. I. Eyeglass-mounting | 739,855 | Sept. 29 | 4456 | 1001 | 106 | 1021 |
| Goodwin, Charles H., Waterbury, Conn., assignor, by mesne assignments, to United States Fastener Company, Portland, Me., and Boston, Mass. Fastener | 725,699 | Apr. 21 | 2382 | 540 | 103 | 1703 |
| Goodwin, Clarkson H., Westchester, Pa. Shoe | 724,846 | Apr. 7 | 803 | 185 | 103 | 1341 |
| Goodwin, Edward C. (See Curtis, George L., assignor.) | | | | | | |
| Goodwin, Hannibal, deceased, Newark, N. J.; R. Goodwin, executrix. Camera | 729,325 | May 26 | 4672 | {1032 1033 | {104 | 1039 |
| Goodwin, Harry E., Indianapolis, Ind. Burial-vault | 719,323 | Jan. 27 | 3427 | 765 | 102 | 770 |
| Goodwin, Harry E., Indianapolis, Ind. Building-block | 735,870 | Aug. 11 | 1606 | 342 | 105 | 1342 |
| Goodwin, Harry L., assignor to B. M. Pevey, Worcester, Mass. Picker-motion for looms | 744,862 | Nov. 24 | 3984 | 859 | 107 | 897 |
| Goodwin, Henry L., Summit, N. J. Insect-trap | 738,184 | Sept. 8 | 1283 | 278 | 106 | 293 |
| Goodwin, Howard G., Akron, Ohio. Device for making artificial-stone blocks | 742,019 | Oct. 20 | 3155 | 704 | 106 | 1949 |
| Goodwin, Jesse R., and W. C. Browne, Savannah, Ga. Watering apparatus | 725,557 | Apr. 14 | 2108 | {477 478 | {103 | 1631 |
| Goodwin, Julius C., assignor of one-half to M. H. Darrow and F. Chase, Philadelphia, Pa. Gas-heater | 735,751 | Aug. 11 | 1372 | 295 | 105 | 1290 |
| Goodwin, Julius C., assignor of one-half to M. H. Darrow and F. Chase, Philadelphia, Pa. Gas-heater | 735,752 | Aug. 11 | 1373 | 295 | 105 | 1291 |
| Goodwin, Lyman O., assignor of one-half to G. L. Wright, North Andover, Mass. Valve | 746,955 | Dec. 15 | 3027 | 694 | 107 | 1797 |
| Goodwin, Major, Jr., Wareham, Mass. Cop carrier or spindle for loom-shuttles | 733,386 | July 14 | 1243 | 295 | 105 | 279 |
| Goodwin, Millard H., Topeka, Kans. Stovepipe-fastener | 718,119 | Jan. 13 | 1118 | 247 | 102 | 256 |
| Goodwin, Rebecca, executrix. (See Goodwin, Hannibal.) | | | | | | |
| Goodwin, Timothy, *et al.* (See Gross, Frederick D., assignor.) | | | | | | |
| Goodwin, William F. (See Deering and Goodwin.) | | | | | | |
| Goodwin, William M. (See Sjöstedt and Goodwin.) | | | | | | |
| Goodyear, Charles, New York, N. Y., assignor to J. B. Colt Company. Acetylene-gas generator | 738,431 | Sept. 8 | 1788 | 389 | 106 | 399 |
| Goodyear, F. H. & C. W., *et al.* (See Kidder, Wellington P., assignor.) | | | | | | |
| Goodyear, Frank H., *et al.* (See Kidder, Wellington P., assignor.) | | | | | | |
| Goodyear, Frank H., *et al.*, trustees. (See Kidder, Wellington P., assignor.) | | | | | | |
| Goodyear, Nelson, Flushing, N. Y., assignor to J. B. Colt Company. Acetylene-gas generator | 724,280 | Mar. 31 | 4960 | 1110 | 103 | 1094 |
| Goodyear, Nelson, Flushing, N. Y., assignor to J. B. Colt Company. Acetylene-gas generator | 724,281 | Mar. 31 | 4963 | 1110 | 103 | 1094 |

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| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Goodyear, Nelson, Flushing, N. Y., assignor to J. B. Colt Company. Acetylene-gas generator | 738,432 | Sept. 8 | 1789 | 390 | 106 | 399 |
| Goodyear, Nelson, Flushing, N. Y., assignor to J. B. Colt Co. Gasometer | 739,258 | Sept. 15 | 3342 | 742 | 106 | 747 |
| Goodyear, Nelson, Flushing, N. Y., assignor to J. B. Colt Company. Gas-generator | 746,818 | Dec. 15 | 2744 | 632 633 | 107 | 1733 |
| Goodyear, Nelson, Flushing, N. Y., assignor to J. B. Colt Company. Acetylene-gas generator | 746,819 | Dec. 15 | 2746 | 633 | 107 | 1734 |
| Goodyear, Nelson, Flushing, N. Y., assignor to J. B. Colt Co. Acetylene-gas generator | 746,820 | Dec. 15 | 2749 | 633 634 | 107 | 1734 |
| Goodyear, Nelson, Flushing, assignor to J. B. Colt Company, New York, N. Y. Acetylene-gas generator | 746,821 | Dec. 15 | 2752 | 634 635 | 107 | 1735 |
| Goodyear Tire & Rubber Company. (See Ellinwood, Augustus E., assignor.) | | | | | | |
| Goodyear Tire & Rubber Company. (See Holland, Joseph, assignor.) | | | | | | |
| Goodyear Tire & Rubber Company. (See Kimberlin, Winfield M., assignor.) | | | | | | |
| Goodyear Tire and Rubber Company. (See Litchfield, Paul W., assignor.) | | | | | | |
| Goodyear, William H., assignor of one-fourth to D. Karcher, Wilkinsburg, Pa. Trolley | 721,794 | Mar. 3 | 250 | 55 | 103 | 55 |
| Goodykoontz, Edward L. (See Hardy and Goodykoontz.) | | | | | | |
| Goold, Cassius M., assignor to L. C. Goold, Morris, Ill. Can or container for volatile oils, liquids, &c. | 730,530 | June 9 | 1839 | 411 | 104 | 1522 |
| Goold, Laura C. (See Goold, Cassius M., assignor.) | | | | | | |
| Goolden, William. (See Lanier, Timuel B., assignor.) | | | | | | |
| Gooley, Michael S., South Bend, Ind. Variable-throw device | 724,566 | Apr. 7 | 268 | 65 | 103 | 1226 |
| Gooley, Michael S., South Bend, Ind. Rubbing or polishing machine | 724,567 | Apr. 7 | 269 | 65, 66 | 103 | 1227 |
| Goosmann, Justus C., Chicago, Ill. Refrigerating-machine | 719,460 | Feb. 3 | 85 | 21 | 102 | 843 |
| Goossen, John, Jr., Marion, N. Y. Machine for dividing pumpkins | 740,119 | Sept 29 | 4960 | 1113 | 106 | 1127 |
| Gorby, Benjamin S., Salem, Ohio. Book-leaf holder and marker | 726,675 | Apr. 28 | 4200 | 949 | 103 | 2092 |
| Gordejeff, Grigory, St. Petersburg, Russia. Spraying device for liquids | 745,178 | Nov. 24 | 4624 | 1002 | 107 | 1029 |
| Gordon, Arthur R. (See Bradford and Gordon.) | | | | | | |
| Gordon, Benjamin F., Deodate, Pa. Corn-planter attachment | 726,423 | Apr. 28 | 3698 | 838 | 103 | 1994 |
| Gordon, Charles. (See Johnson and Gordon.) | | | | | | |
| Gordon, Charles B., assignor to Carter's Ink Company, Boston, Mass. Paste-jar | 727,785 | May 12 | 1832 | 409 | 104 | 409 |
| Gordon, Charles B., Newton, assignor to Carter's Ink Company, Boston, Mass. Pot of paste | 740,848 | Oct. 6 | 870 | 194 | 106 | 1432 |
| Gordon, Edwin G., Paterson, N. J. Mail or letter drop | 719,581 | Feb. 3 | 310 | 72 | 102 | 887 |
| Gordon, Elonso J., Greenville, Mich. Wind-box for bridge-walks | 723,597 | Mar. 24 | 3621 | 809 | 103 | 802 |
| Gordon & Ferguson. (See Hollenbeck, Sidney, assignor.) | | | | | | |
| Gordon, Frank W. (See Broderick and Gordon.) | | | | | | |
| Gordon, J. Bennett. (See Crowder, Charles F., assignor.) | | | | | | |
| Gordon, John P., Columbus, Ohio. Combined storm apron and hood | 726,906 | May 5 | 139 | 33 | 104 | 32 |
| Gordon, John W., Springfield, Ill. Carpet-carrier for sewing-machines | 739,856 | Sept. 29 | 4457 | 1001 | 106 | 1021 |
| Gordon, Olliver A. (See Doney and Gordon.) | | | | | | |
| Gordon, R. B. (See Berryman, Warren, assignor.) | | | | | | |
| Gordon, Robert L., Matteawan, N. Y. Uniting bats to hat-bodies | 741,327 | Oct. 13 | 1783 | 397 | 106 | 1644 |
| Gordon, Thomas, Philadelphia, Pa. Incandescent-gas-lighting apparatus | 730,364 | June 9 | 1528 | 338 | 104 | 1455 |
| Gordon, Thomas, assignor of one-half to J. J. Sleeper, Philadelphia, Pa. Gas-lamp | 748,363 | Dec. 29 | 5660 | 1291 | 107 | 2420 |
| Gordon, Thomas, assignor of one-half to J. J. Sleeper, Philadelphia, Pa. Incandescent gas-burner | 748,364 | Dec. 29 | 5661 | 1291 | 107 | 2421 |
| Gordon, Thomas G., Camden, N. C. Pea-harvester | 729,063 | May 26 | 4213 | 931 | 104 | 943 |
| Gordon, William C. (See McDowell, James L., assignor.) | | | | | | |
| Gore, Frederic E., Yarmouth, Me., assignor to S. D. Warren & Company, Boston, Mass. Cooking cellulose fiber | 725,071 | Apr. 14 | 1211 | 275 | 103 | 1442 |
| Gore, Frederic E., Yarmouth, Me., assignor to S. D. Warren & Company, Boston, Mass. Fiber manufacturing apparatus | 725,072 | Apr. 14 | 1215 | 275 | 103 | 1443 |
| Gore, Frederick W., Dorchester, Mass. Electric-arc lamp | 734,699 | July 28 | 3700 | 866 867 | 105 | 829 |
| Gorham, Edwin T., assignor to J. W. Oliver, Grand Rapids, Mich. Saw-table | 744,190 | Nov. 17 | 2770 | 590 591 | 107 | 618 |
| Gorham, George E., Albany, N. Y. Surgical fracture apparatus | 730,253 | June 9 | 1336 | 293 | 104 | 1414 |
| Gorham, George R., Chicago, Ill. Drying apparatus | 746,822 | Dec. 15 | 2757 | 635 636 | 107 | 1736 |
| Gorham Manufacturing Company. (See Gabriel, Charles R., assignor.) | | | | | | |
| Gorham, Wm. J. (See Harris, Howard, assignor.) | | | | | | |
| Gorman, Edward J., assignor to W. W. Curtis and G. B. M. Seager, Adrian, Mich. Cover for receptacles | 733,580 | July 14 | 1583 | 377 | 105 | 352 |
| Gorman Furnace & Mfg. Company. (See Gorman, William, assignor.) | | | | | | |
| Gorman, Mary C. (See Lawson, Robert R., assignor.) | | | | | | |
| Gorman, Michael, Braddock, assignor to American Steel and Wire Company, Pittsburg, Pa. Cam | 743,713 | Nov. 10 | 1806 | 381 | 107 | 402 |
| Gorman, Patrick H., Chicago, Ill. Cell-grating | 728,456 | May 19 | 3084 | 681 | 104 | 693 |
| Gorman, Thomas J. (See Lawson, Robert R., assignor.) | | | | | | |
| Gorman, Thomas J., New York, N. Y. Carriage-call | 734,538 | July 28 | 3406 | 795 | 105 | 769 |
| Gorman, William, Pittsburg, assignor to Gorman Furnace & Mfg. Company, Blairsville, Pa. Milk-can lid or the like | 720,421 | Feb. 10 | 1859 | 423 | 102 | 1233 |
| Gormly, Robert W., Troy, N. Y. Feed-circle for circular-knitting machines | 742,628 | Oct. 27 | 4321 | 973 | 106 | 2205 |
| Gorrell, Hiram V. (See Gorrell, John B. and H. V.) | | | | | | |
| Gorrell, John B. and H. V., assignors of one-third to W. Gorrell, Laotto, Ind. Hydrocarbon-burner | 742,629 | Oct. 27 | 4323 | 973 | 106 | 2206 |
| Gorrell, William R., assignor of two-thirds to R. H. Webster and S. M. Hanway, Havre de Grace, Md. Bucket for can-soldering machines | 719,938 | Feb. 3 | 933 | 218 | 102 | 1022 |
| Gorrell, Winfield. (See Gorrell, John B. and H. V., assignors.) | | | | | | |
| Gorter, Henry H., San Francisco, Cal. Automatic pneumatic balance for water-towers or the like | 731,889 | June 23 | 4354 | 972 | 104 | 2083 |
| Gorter, Henry H., assignor to M. E. Gorter, San Francisco, Cal. Portable water-tower and fire-escape | 718,965 | Jan. 20 | 2747 | 614 | 102 | 614 |
| Gorter, Mary E. (See Gorter, Henry H., assignor.) | | | | | | |
| Gorton, George, Racine, Wis. Flat-surface grinding-machine | 720,912 | Feb. 17 | 2770 | 637 638 | 102 | 1436 |
| Gorton, John C. (See Carney and Gorton.) | | | | | | |
| Gorton, Robert, Newton, Mass. Hose-supporter | 738,185 | Sept. 8 | 1285 | 278 | 106 | 294 |
| Gorton, William E., Corning, N. Y. Brake-shoe | 725,336 | Apr. 14 | 1696 | 382 | 103 | 1544 |
| Goslee, George S., Mason City, Iowa. Carbureter | 745,489 | Dec. 1 | 339 | 79 | 107 | 1172 |
| Gosling, Charles, Brooklyn, assignor to J. Bulova, New York, N. Y. Finger-ring | 733,029 | July 7 | 580 | 141 | 105 | 124 |
| Gosling, Henry J., Cleveland, Ohio. Portable drilling or tapping machine | 723,267 | Mar. 24 | 3002 | 675 | 103 | 679 |
| Goss, Daniel S. (See Goss, Harry T., assignor.) | | | | | | |
| Goss, Daniel S., Chicago, Ill. Mixing device | 740,752 | Oct. 6 | 681 | 154 | 106 | 1392 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | Spec. | Drg. | Vol. | Page. |
| Goss, George F., Wallaceton, Pa. Pool-table rack and tally | 728,706 | May 19 | 3555 | 790<br>791 | 104 | 794 |
| Goss, Harry T., Rutherford, N. J., assignor to D. S. Goss, Chicago, Ill. Grain-drier | 733,030 | July 7 | 581 | 141 | 105 | 124 |
| Goss, John H. (See Stites, Goss, and Wolff.) | | | | | | |
| Goss, Matt, Duluth, Minn. Firearm | 732,406 | June 30 | 5381 | 1193 | 104 | 2309 |
| Goss Printing Press Company. (See Evensen, William, assignor.) | | | | | | |
| Goss Printing Press Company. (See Firm, Joseph L., assignor.) | | | | | | |
| Goss Printing Press Company. (See Goss, Samuel G., assignor.) | | | | | | |
| Goss, Samuel G., assignor to Goss Printing Press Company, Chicago, Ill. Printing-machine | 719,824 | Jan. 27 | 3428 | 765 | 102 | 771 |
| Goss, Samuel G., assignor to Goss Printing Press Company, Chicago, Ill. Printing-press | 732,066 | June 30 | 4707 | 1051<br>1052 | 104 | 2169 |
| Goss, Samuel G., assignor to Goss Printing Press Company, Chicago, Ill. Attachment for printing-presses | 740,552 | Oct. 6 | 321 | 67 | 106 | 1313 |
| Gossack, Thomas, Belt, Mont. Miner's lamp | 730,907 | June 16 | 2516 | 559 | 104 | 1686 |
| Gossack, Thomas, Belt, Mont. Scrubbing-machine | 741,787 | Oct. 20 | 2697 | 601 | 106 | 1855 |
| Gossard, Alvin H. (See Hahn, Edmund, assignor.) | | | | | | |
| Gossett, Richard C., Moscow, Idaho. Sawing-machine | 718,201 | Jan. 13 | 1271 | 279 | 102 | 288 |
| Goth, Gustav A., and A. Williams, Baltimore, Md. Railway-tie | 738,028 | Sept. 1 | 938 | 208 | 106 | 205 |
| Gothberg, Ernest, Jersey City, N. J. Combined socket-cover and shade-holder | 727,934 | May 12 | 2113 | 470 | 104 | 468 |
| Gotshall, William C. (See Mailloux and Gotshall.) | | | | | | |
| Gottfield, Isadore, Detroit, Mich. Machine for polishing stovepipes | 722,297 | Mar. 10 | 1201 | 265 | 103 | 272 |
| Gottlander, John, Denver, assignor of one-half to T. Stark, Colorado Springs, Colo., Grader | 720,685 | Feb. 17 | 2384 | 546<br>547 | 102 | 1354 |
| Gottwald, Christian, Barberton, Ohio. Superheater for boilers | 735,871 | Aug. 11 | 1607 | 343 | 105 | 1342 |
| Gottwals, William O., Washington, D. C. Document-file | 733,547 | July 14 | 1516 | 361 | 105 | 337 |
| Gottwals, William O., Washington, D. C. Letter or bill file | 747,416 | Dec. 22 | 3884 | 874 | 107 | 2006 |
| Gough, Achilles C., Benton, Ky. Universal sanding-machine | 747,699 | Dec. 22 | 4400 | 992 | 107 | 2122 |
| Gough, M. Le Roy, *et al.* (See Wren, Harry B., assignor.) | | | | | | |
| Gould, Charles M. (See Hubbard, Albert S., assignor.) | | | | | | |
| Gould, Charles M. (See Turbayne, William A., assignor.) | | | | | | |
| Gould, Charles M. (See Turbayne and Hubbard, assignors.) | | | | | | |
| Gould, Cornelius C., assignor of sixteen twenty-seventhsto M. Sommerville, L. B. Mathias, Philadelphia, W. C. Timm, Jr., D. Worrell, Morton, Pa., and W. W. Morton, Camden, N. J. Electric switch | 735,966 | Aug. 11 | 1771 | 380 | 105 | 1378 |
| Gould Coupler Company. (See Richards, Willard F., assignor.) | | | | | | |
| Gould & Eberhardt. (See Eberhardt, Fred L., assignor.) | | | | | | |
| Gould & Eberhardt. (See Eberhardt, Fred L. and H. J., assignors.) | | | | | | |
| Gould & Eberhardt. (See Eberhardt, Henry E., assignor.) | | | | | | |
| Gould & Eberhardt. (See Eberhardt, Henry E. and F. L., assignors.) | | | | | | |
| Gould, Holman, Auburn, Me. Dispensing-can | 722,099 | Mar. 3 | 817 | 182 | 103 | 176 |
| Gould, Howard W., Boston, Mass., assignor to United Shoe Machinery Company, Paterson, N. J. Heel-beading machine | 739,857 | Sept. 29 | 4459 | 1001 | 106 | 1021 |
| Gould, John D., New York, N. Y. Thermostat | 733,184 | July 7 | 857 | 208 | 105 | 180 |
| Gould, Olin R., Marion, Iowa. Tire-tightener | 721,033 | Feb. 17 | 3005 | 690 | 102 | 1486 |
| Gould, Robert H., Surbiton, assignor to C. G. Luis, London, England. Recovering tin from tin-scrap | 718,927 | Jan. 20 | 2667 | 598 | 102 | 596 |
| Gould Storage Battery Company. (See Chamberlain, Rufus N., assignor.) | | | | | | |
| Gould Storage Battery Company. (See Hubbard, Albert S., assignor.) | | | | | | |
| Gould Storage Battery Company. (See Rabenalt, Gustav H., assignor.) | | | | | | |
| Gould, William F., Des Moines, Iowa. Wearing device for car-couplings | 720,686 | Feb. 17 | 2387 | 547 | 102 | 1355 |
| Goulette, Ensibe, Pittsfield, Mass. Floor-scraper | 736,594 | Aug. 18 | 2920 | 638 | 105 | 1640 |
| Gourley, William N., Columbus, Ohio. Die for welding links | 734,568 | Apr. 7 | 272 | 66 | 103 | 1227 |
| Gouyard, Gustave M., Denver, Colo. Surveying instrument | 735,073 | Apr. 14 | 1218 | 276 | 103 | 1443 |
| Govan, Alexander, Glasgow, Scotland. Brake for autocars | 732,846 | July 7 | 269 | 67 | 105 | 60 |
| Govan, James, Radnor, Pa. Golf-club | 722,011 | Mar. 3 | 666 | 148 | 103 | 144 |
| Gove, Asa S., assignor of one-half to J. R. Dixon, Perrypark, Colo. Corn-harvester | 722,227 | Mar. 10 | 1066 | 234<br>235 | 103 | 243 |
| Gove, Henry H., Biddeford, Me. Device for patching rubber boots, &c | 735,753 | Aug. 11 | 1375 | 296 | 105 | 1291 |
| Gow, Alexander M., Pittsburg, Pa., assignor, by mesne assignments, of one-half to St. Louis Plate Glass Company, Valleypark, Mo. Manufacture of plate-glass | 734,125 | July 21 | 2638 | 622 | 105 | 590 |
| Gow, Alexander M., Edgewood, assignor to G. Westinghouse, Pittsburg, Pa. Gas-producer | 739,305 | Sept. 22 | 3431 | 764<br>765 | 106 | 782 |
| Gow, Alexander M., assignor to G. Westinghouse, Pittsburg, Pa. Apparatus for manufacturing gas | 742,411 | Oct. 27 | 3927 | 882<br>883 | 106 | 2123 |
| Gow, Alexander M., assignor to G. Westinghouse, Pittsburg, Pa. Manufacturing gas | 742,412 | Oct. 27 | 3931 | 883<br>884 | 106 | 2123 |
| Gow, George, Carnegie, Pa. Rail-joint | 731,176 | June 16 | 3026 | 672 | 104 | 1789 |
| Gowanda Novelty Company. (See Barkowsky, Gustav A. W., assignor.) | | | | | | |
| Graack, Henry H., Omaha, Nebr. Ironing-machine | 717,568 | Jan. 6 | 83 | 21 | 102 | 20 |
| Graber, Jakob, Zurich, assignor to Gesellschaft für Patentverwertung der Distanzbremse für Eisenbahnen, Basle, Switzerland. Reversing apparatus for use on railway-vehicles | 736,382 | Aug. 18 | 2502 | 550 | 105 | 1552 |
| Graber, Jonathan P., Pretty Prairie, Kans. Wheel-gage | 747,603 | Dec. 22 | 4215 | 948 | 107 | 2081 |
| Grabler, Peter, Cleveland, Ohio. Pen-extractor | 738,318 | Sept. 8 | 1579 | 341 | 106 | 356 |
| Grabowenski, George J., Mankato, Minn. Dehorner | 737,606 | Sept. 1 | 90 | 19 | 106 | 22 |
| Grabs, Virgil T., King, N. C. Bed-slat | 726,046 | Apr. 21 | 2988 | 679 | 103 | 1833 |
| Grace, Peirce J. (See Bacon, Herbert, assignor.) | | | | | | |
| Grace, Thomas. (See Hamel, Joseph L., assignor.) | | | | | | |
| Grace, Thomas H., Hawthorne, Conn. Mailing-tube | 727,786 | May 12 | 1883 | 409 | 104 | 409 |
| Grace, Thomas J., Mobile, Ala. Steam-trap | 736,842 | Aug. 18 | 3396 | 751 | 105 | 1738 |
| Gracey, Charles B., assignor of one-half to W. T. Tredway, Coraopolis, Pa. Ratchet-wrench | 722,695 | Mar. 17 | 1967 | 439 | 103 | 453 |
| Gracey, James G., assignor of one-half to F. A. Gerken, St. Louis, Mo. Rotary-cylinder engine | 733,477 | July 14 | 1398 | 330 | 105 | 313 |
| Graden, Samuel H., Parkville, Mo. Car-brake | 735,246 | Aug. 4 | 405 | 80 | 105 | 1067 |
| Grady, James, New York, assignor to Columbia Machine Works and Malleable Iron Company, Brooklyn, N. Y. Brake-handle | 733,185 | July 7 | 858 | 208 | 105 | 180 |
| Grady, Patrick J., Turtle River, Minn. Draft-equalizer | 721,034 | Feb. 17 | 3006 | 691 | 102 | 1486 |
| Grady, Seymour, Buenavista, Va. Window-sash | 742,020 | Oct. 20 | 3157 | 705 | 106 | 1950 |
| Graef, Anton, Chicago, Ill. Candle-holder | 745,599 | Dec. 1 | 526 | 123 | 107 | 1209 |
| Graef, Ernest W., assignor of one-half to G. A. Kay, Brooklyn, N. Y. Hydrocarbon oil or gas engine | 725,700 | Apr. 21 | 2383 | 540 | 103 | 1704 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| Graef, Frédéric, Paris, France. Vehicle-shaft | 738,673 | Sept. 8 | 2269 | 498 | 106 | 501 |
| Graefe, Adolph, Brooklyn, N. Y. Adjustable stand for flower-pots | 740,120 | Sept. 29 | 4964 | 1114 | 106 | 1128 |
| Graefenhan, Ernest C., Louisville, Ky. Music-leaf turner | 737,397 | Aug. 25 | 4424 | 990 | 105 | 1976 |
| Graeme, Joseph W., Washington, D. C. Condiment-holder | 737,350 | May 5 | 985 | 215 | 104 | 212 |
| Graeme, Joseph W., Wilkesbarre, Pa. Bottle holder and protector | 732,936 | July 7 | 425 | 104 | 105 | 91 |
| Graessle, George G., Seymour, Ind. Calendar | 728,904 | May 26 | 3927 | 872 | 104 | 885 |
| Graetz, Max, Berlin, Germany. Burner for incandescent gas-lamps | 744,191 | Nov. 17 | 2772 | 591 | 107 | 619 |
| Graf, Daniel, Demarest, N. J. Film-camera | 731,046 | June 16 | 2775 | 619 | 104 | 1740 |
| Graf, Daniel, Demarest, N. J. Lens-board guide and holder for cameras | 731,047 | June 16 | 2778 | 619 | 104 | 1740 |
| Graf, Mathias, W. Dobblestein, and F. Unterbein, Haaren, Germany. Apparatus for mechanically greasing ropes | 737,221 | Aug. 25 | 4081 | 906<br>907 | 105 | 1901 |
| Graf, Robert R., assignor of one-half to J. Gomprecht, Baltimore, Md. Refrigerator | 733,186 | July 7 | 859 | 208<br>209 | 105 | 180 |
| Grafflin, John L. (See Mattocks and Grafflin.) | | | | | | |
| Gragert, Elmer W., Whiterock, S. D. Relay-pump | 724,569 | Apr. 7 | 273 | 66 | 103 | 1227 |
| Graham, Andrew W., assignor of one-half to W. D. Godfrey, Bradford, Pa. Surgical splint | 718,339 | Jan. 13 | 1527 | 339 | 102 | 343 |
| Graham, Cargill, Tarkio, Mo. Car-window lock | 748,064 | Dec. 29 | 5139 | 1162 | 107 | 2308 |
| Graham, Charles B., South Haven, Mich. Refining oil | 732,937 | July 7 | 426 | 105 | 105 | 92 |
| Graham, Charles E., Boston, Mass., assignor to United Shoe Machinery Company, Paterson, N. J., and Boston, Mass. Brush | 718,999 | Jan. 27 | 2814 | 681 | 102 | 642 |
| Graham, Charles H., *et al.* (See Scott, Gordon J., assignor.) | | | | | | |
| Graham, Charles W., Chicago, Ill., assignor, by mesne assignments, to International Time Recording Co. Recording attachment for time-stamps | 748,365 | Dec. 29 | 5662 | 1291 | 107 | 2421 |
| Graham, Clarence A., Columbus, Ohio. Device for truing musical strings | 729,326 | May 26 | 4676 | 1033 | 104 | 1040 |
| Graham, David F., Springfield, Mass., and F. A. Fox, assignors, by mesne assignments, to Graham-Fox Motor Company, New York, N. Y. Foot-starter mechanism for automobile-engines | 725,955 | Apr. 21 | 2843 | 645 | 103 | 1803 |
| Graham, David F., and F. A. Fox, Stamford, Conn., assignors to Graham-Fox Motor Company, New York, N. Y. Starting device for gas-engines | 743,637 | Nov. 10 | 1678 | 353 | 107 | 374 |
| Graham, Edward L. (See Hatch, Francis E. J., assignor.) | | | | | | |
| Graham, Edwin R., Bakersfield, Cal. Relief-valve attachment for oil-well pumps | 723,458 | Mar. 24 | 3359 | 752 | 103 | 749 |
| Graham, Elias, assignor of one-half to O. C. Fuqua, Casey, Ill. Farm-gate | 730,365 | June 9 | 1529 | 339 | 104 | 1456 |
| Graham-Fox Motor Company. (See Graham and Fox, assignors.) | | | | | | |
| Graham, Fred A., and J. R. Neely, Muncie, Ind. Switch-throwing device | 734,260 | July 21 | 2891 | 676 | 105 | 646 |
| Graham, Fred A., F. F. Carmiencke, and J. R. Neely, Muncie, Ind. Trolley-finder | 742,311 | Oct. 27 | 3755 | 841 | 106 | 2087 |
| Graham, G. M., *et al.* (See McGuire, Peter J., assignor.) | | | | | | |
| Graham, George, St. Louis, Mo. Shaft-coupling | 726,047 | Apr. 21 | 2989 | 679 | 103 | 1833 |
| Graham, George, Rounthwaite, Canada. Device for shifting threshing-machine bodies | 744,334 | Nov. 17 | 3030 | 650 | 107 | 677 |
| Graham, Henry, assignor to D. J. Seaman, New York, N. Y. Washing device | 721,179 | Feb. 24 | 3321 | 759 | 102 | 1573 |
| Graham, James L., Allegheny, Pa. Gas-burner | 738,433 | Sept. 8 | 1791 | 390 | 106 | 400 |
| Graham, James N., *et al.* (See Higginson, George, assignor.) | | | | | | |
| Graham, John G., Bramhall, Stockport, England. Apparatus for making sulfuric or other acids | 736,087 | Aug. 11 | 2004 | 427 | 105 | 1429 |
| Graham, John H., Boston, Mass. Freight-car truck | 735,754 | Aug. 11 | 1376 | 296 | 105 | 1291 |
| Graham, Levi P., Decatur, Ill. Corn-planter | 726,157 | Apr. 21 | 3173 | 718 | 103 | 1871 |
| Graham, Levi P., Decatur, Ill. Corn-planter | 727,539 | May 5 | 1325 | 295<br>296 | 104 | 285 |
| Graham, Levi P., Decatur, Ill. Seed-corn sorter | 742,785 | Oct. 27 | 4576 | 1037 | 106 | 2262 |
| Graham, Maurice, Leeds, England. Retort-discharging apparatus | 728,389 | May 19 | 2957 | 652 | 104 | 667 |
| Graham, Maurice, Leeds, England. Hot-coke conveyer | 728,390 | May 19 | 2958 | 652 | 104 | 667 |
| Graham, Maurice, Leeds, England. Hot-coke conveyer | 732,545 | June 30 | 5650 | 1253 | 104 | 2364 |
| Graham, Maurice, Leeds, England. Hot-coke conveyer | 741,657 | Oct. 20 | 2428 | 544<br>545 | 106 | 1799 |
| Graham, Muckersie G., assignor of one-half to W. M. Black, Des Moines, Iowa. Cultivator | 725,074 | Apr. 14 | 1222 | 276<br>277 | 103 | 1445 |
| Graham, Robert, Springfield, Scotland. Malted bread and making same | 726,283 | Apr. 28 | 3432 | ------ | 103 | 1940 |
| Graham, Robert S., assignor of one-fourth to W. M. Perkins, New York, N. Y. Wheel-tire | 724,693 | Apr. 7 | 512 | 122 | 103 | 1278 |
| Graham, Robert S., New York, assignor of one-fourth to W. M. Perkins, Brooklyn, N. Y. Wheel-tire | 724,694 | Apr. 7 | 514 | 122 | 103 | 1279 |
| Graham, Thomas F., *et al.* (See Farnsworth, George, assignor.) | | | | | | |
| Graham, William S., assignor to Parlin & Orendorff Company, Canton, Ill. Clamp | 718,757 | Jan. 20 | 2359 | 522 | 102 | 532 |
| Graham, William S., assignor to Parlin & Orendorff Company, Canton, Ill. Corn-planter | 721,795 | Mar. 3 | 251 | 56 | 103 | 56 |
| Graham, William S., assignor to Parlin & Orendorff Company, Canton, Ill. Device for exhibiting the operation of corn-planters | 727,125 | May 5 | 585 | 126 | 104 | 127 |
| Graham, William S., assignor to Parlin & Orendorff Company, Canton, Ill. Corn-planter | 731,355 | June 16 | 3342 | 746<br>747 | 104 | 1854 |
| Graham, Wilson T. (See Heaton, William S., assignor.) | | | | | | |
| Grahn, John, Madison, Wis. Painting-machine | 734,319 | July 21 | 3014 | 709 | 105 | 671 |
| Grainger, Arthur I., Aberdeen, Scotland. Bracket for supporting rods or tubes | 734,059 | July 21 | 2507 | 584 | 105 | 564 |
| Gram, Evan P., Lincoln, Ill. Tellurian | 730,017 | Feb. 10 | 1112 | 254<br>255 | 102 | 1076 |
| Gramelspacher, John, Jasper, Ind. Combined desk and type-writer cabinet | 727,126 | May 5 | 587 | 126 | 104 | 127 |
| Gramkow, Gustav, Meservey, Iowa. Animal-poke | 724,003 | Mar. 31 | 4402 | 989 | 103 | 983 |
| Gramkow, Gustav, Meservey, Iowa. Animal-poke | 740,007 | Sept. 29 | 4760 | 1070 | 106 | 1084 |
| Gramlich, Henry, New York, N. Y. Bottle-stopper | 723,598 | Mar. 24 | 3623 | 810 | 103 | 802 |
| Grammer, Elijah S., Kanaskat, Wash. Snatch-block | 737,222 | Aug. 25 | 4082 | 907 | 105 | 1902 |
| Gran, Albert, Chicago, Ill. Wind-motor | 744,065 | Nov. 17 | 2511 | 538 | 107 | 564 |
| Granbery, Dee T., Memphis, Tenn. Car-coupling and train-pipe coupling combined | 724,004 | Mar. 31 | 4403 | 990<br>991 | 103 | 983 |
| Grand Rapids Brass Co. (See Tower, Daniel W., assignor.) | | | | | | |
| Grand Rapids Brush Company. (See Page, David P., assignor.) | | | | | | |
| Grand, Samuel, Fulton, N. Y. Viscosimeter | 722,576 | Mar. 10 | 1713 | 381 | 103 | 384 |
| Grandchamp, Ferdinand P. de, Philadelphia, Pa. Game apparatus | 718,709 | Jan. 20 | 2267 | 498 | 102 | 513 |
| Grandchamp, Napoleon, and J. A. Schlehr, Frazee, Minn.; said Grandchamp assignor to said Schlehr. Bolt-holder | 740,553 | Oct. 6 | 323 | 67 | 106 | 1313 |
| Grange, William. (See Aldrich and Grange.) | | | | | | |
| Granger, Charles B., Zanesville, Ohio. Clamp-buckle | 718,835 | Jan. 20 | 2488 | 553 | 102 | 557 |
| Granger, Charles F., assignor of one-half to E. L. Alderman, Holyoke, Mass. Railway-switch | 725,956 | Apr. 21 | 2846 | 645<br>646 | 103 | 1809 |
| Granger, Clarence A., *et al.* (See Sandy, Edward M., assignor.) | | | | | | |
| Granger, John, assignor to himself and J. Southerland, Springer, N. Mex. Ter. Gate | 726,048 | Apr. 21 | 2991 | 679<br>680 | 103 | 1833 |
| Granger, John W., Philadelphia, Pa. Carrier for machines for carding hooks and eyes | 736,717 | Aug. 18 | 3158 | 697 | 105 | 1688 |

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| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Granger, William R. (See Saunders, William W., assignor.) | | | | | | |
| Grannis, Charles S., assignor to New Process Rawhide Company, Syracuse, N. Y. Rawhide pinion | 737,223 | Aug. 25 | 4083 | 907 | 105 | 1902 |
| Grant, Benjamin D., and W. C. Middlebrook, Princeton, Minn. Car-heating stove | 741,658 | Oct. 20 | 2429 | 545 | 106 | 1800 |
| Grant, Catherine, Chicago, Ill. Safety-shears | 738,994 | Sept. 15 | 2855 | 634 | 106 | 644 |
| Grant, Charles R. (See Hilton, Frank M., J. S., and W. W., assignors.) | | | | | | |
| Grant, Daniel D., Pittsfield, Mass. Sleigh-runner | 719,211 | Jan. 27 | 3208 | 716 | 102 | 722 |
| Grant, Earl V., and N. W. Shears, Los Angeles, Cal. Excavator | 728,391 | May 19 | 2959 | 652 | 104 | 668 |
| Grant, Francis J., Chicago, Ill. Axle-nut lock | 744,335 | Nov. 17 | 3031 | 650 | 107 | 677 |
| Grant, Gilbert S., Centuria, Wis. Folding car-body | 732,847 | July 7 | 269 | 67, 68 | 105 | 60 |
| Grant, Horace E., Pittsburg, Pa. Metallic bond for brickwork | 733,187 | July 7 | 861 | 209 | 105 | 181 |
| Grant, James A., Monongahela, Pa. Hair-drying apparatus | 724,178 | Mar. 31 | 4741 | 1062 | 103 | 1051 |
| Grant, Jesse F. (See Francis, William H., assignor.) | | | | | | |
| Grant, Percy, Banfield, assignor to W. Johnson, Buenos Aires, Argentina. Construction of underframes for railway-wagons, &c | 726,049 | Apr. 21 | 2993 | 680 | 103 | 1834 |
| Grant, Thomas W. (See Moran and Grant.) | | | | | | |
| Grantham, Isaac P., Darlington, Mo. Lantern-rest for wagon-poles | 746,956 | Dec. 15 | 3028 | 695 | 107 | 1797 |
| Gräntzdörffer, August, Magdeburg, Germany. Boiling sugar solutions | 730,111 | June 2 | 1063 | ..... | 104 | 1344 |
| Granzow, Frank J., assignor to G. P. Bent, Chicago, Ill. Piano-action | 746,823 | Dec. 15 | 2759 | 636 | 107 | 1736 |
| Grassing, Carl H., Rochelle Park, N. J. Cultivator | 733,031 | July 7 | 582 | 142 | 105 | 124 |
| Grath, Walter P. (See Mitchell, Walter C., assignor.) | | | | | | |
| Grath, Walter P., St. Louis, Mo. Continuous kiln | 730,820 | June 9 | 2337 | 518 | 104 | 1630 |
| Grattan, David, Anaconda, Mont. Nozzle-tip for locomotives | 717,986 | Jan. 6 | 883 | 197 | 102 | 189 |
| Grattan, Delina, Boston, Mass. Sheet for beds | 738,674 | Sept. 8 | 2269 | 499 | 106 | 501 |
| Grattan, William, Melbourne, Victoria, Australia. Wire fencing | 736,088 | Aug. 11 | 2006 | 428 | 105 | 1429 |
| Grau, John M., Philadelphia, Pa. Preserving-jar | 746,496 | Dec. 8 | 2150 | 494 | 107 | 1578 |
| Grau, Philip J., Tyrone, Pa. Furnace for steam-boilers | 746,957 | Dec. 15 | 3029 | 695 | 107 | 1798 |
| Graul, Otto J., assignor to Badische Anilin & Soda Fabrik, Ludwigshafen-on-the-Rhine, Germany. Making cyan-methyl derivatives of aromatic amids | 718,340 | Jan. 13 | 1528 | ..... | 102 | 343 |
| Graun, Charles F. W., assignor of one-half to F. J. Siekert, Milwaukee, Wis. Loose-leaf binder or file | 744,749 | Nov. 24 | 3784 | 815 | 107 | 855 |
| Graupner, Wilhelm, Jarmen, Germany. Car-coupling | 720,687 | Feb. 17 | 2389 | 547 | 102 | 1355 |
| Gravé, Carl P. P., *et al.* (See Gravé, Sophia O., assignor.) | | | | | | |
| Gravé, Carl P. P., and J. Schaible, Easton, Pa. Flour-sifting machine | 748,366 | Dec. 29 | 5664 | 1291, 1292 | 107 | 2422 |
| Gravé, Sophia O., assignor of three-fourths to H. D. and C. Merwarth and C. P. P. Gravé, Easton, Pa. Shirt-sleeve shortener and cuff-fastener | 727,935 | May 12 | 2114 | 470 | 104 | 468 |
| Graven, Garret, Oostburg, Wis. Mail-box | 730,762 | June 9 | 2239 | 498 | 104 | 1610 |
| Graves, Boydell, *et al.* (See Joly, Céleste, assignor.) | | | | | | |
| Graves, David E. (See Heusner, Dudley, and Graves.) | | | | | | |
| Graves, James R., Fuller, Miss. Cultivator | 723,380 | Mar. 24 | 3232 | 725 | 103 | 722 |
| Graves, Joseph, Knobnoster, Mo. Rotary engine | 736,383 | Aug. 18 | 2504 | 550 | 105 | 1552 |
| Graves, Martin M., Louisville, Ky., assignor to Kentucky Distilleries & Warehouse Company, New York, N. Y. Feeding apparatus for driers | 732,735 | July 7 | 68 | 19 | 105 | 18 |
| Graves, Martin M., Louisville, assignor to Kentucky Distilleries & Warehouse Company, Incorporated, Frankfort, Ky. Apparatus for drying | 742,021 | Oct. 20 | 3158 | 705 | 106 | 950 |
| Graves, Orley B., Coffeyville, Kans. Holder for plowshares | 733,387 | July 14 | 1245 | 295 | 105 | 280 |
| Graves, Willard B., *et al.* (See Benns, George B., assignor.) | | | | | | |
| Graviet, George W. (See Howard, John G., assignor.) | | | | | | |
| Gray, Alfred, Passaic, N. J. Combination-rule | 734,539 | July 28 | 3408 | 795, 796 | 105 | 769 |
| Gray, Benjamin B., Pinebloom, Ga. Lumber-seasoning apparatus | 733,835 | July 14 | 2046 | 482, 483 | 105 | 447 |
| Gray, Charles A., Kansas City, Kans., assignor to Gray Pneumatic Carrier Co., Kansas City, Mo. Pneumatic-despatch-tube system | 734,540 | July 28 | 3410 | 796 | 105 | 769 |
| Gray, Charles W., assignor of one-half to J. E. Chambers and L. V. Buford, Virginia City, Mont. Door-securer | 746,824 | Dec. 15 | 2761 | 636 | 107 | 1737 |
| Gray, Christian N. E., assignor to himself and Chambers, Bering Quinlan Company, Decatur, Ill. Seeding-machine | 730,908 | June 16 | 2517 | 560 | 104 | 1686 |
| Gray, Christian N. E., assignor to himself and Chambers, Bering Quinlan Company, Decatur, Ill. Broadcast seeding-machine | 731,404 | June 16 | 3447 | 770 | 104 | 1876 |
| Gray, Elisha, Highland Park, Ill., assignor, by mesne assignments, to Gray Telephone Company, Waterville, Me., and Boston, Mass. Electromechanical governor | 719,325 | Jan. 27 | 3430 | 765 | 102 | 771 |
| Gray, Elisha, Highland Park, Ill., assignor, by mesne assignments, to Submarine Signal Company. Electrical ringing of bells for submarine signaling | 744,336 | Nov. 17 | 3032 | 650, 651 | 107 | 678 |
| Gray, Fred L., Minneapolis, Minn. Traveler's draft | 735,665 | Aug. 4 | 1206 | 255, 256 | 105 | 1237 |
| Gray, G. W., *et al.* (See Bryant, William P., assignor.) | | | | | | |
| Gray, George H., Coraopolis, Pa. Rail-joint | 726,050 | Apr. 21 | 2995 | 681 | 103 | 1834 |
| Gray, George H., Denver, Colo. Variable exhaust-nozzle | 736,246 | Aug. 11 | 2268 | 490 | 105 | 1484 |
| Gray, Granville H. (See Giles and Gray.) | | | | | | |
| Gray, James A., San Francisco, Cal. Can-heading machine | 740,008 | Sept. 29 | 4762 | 1071, 1072 | 106 | 1085 |
| Gray, James H., San Francisco, Cal. Gold-separating apparatus for dredging-machines | 719,582 | Feb. 3 | 312 | 72 | 102 | 887 |
| Gray, James H., San Francisco, Cal. Gold-saving apparatus for dredging-machines. (Reissue) | 12,160 | Oct. 13 | 2342 | 524, 525 | 106 | 1766 |
| Gray, James H., St. Albans, W. Va. Folding crate | 721,296 | Feb. 24 | 3543 | 805 | 102 | 1619 |
| Gray, John, Belle Vernon, Pa. Ironing-table | 727,351 | May 5 | 986 | 215 | 104 | 213 |
| Gray, John, Belle Vernon, Pa. Combined step-ladder, clothes-rack, and table-frame | 727,352 | May 5 | 988 | 215, 216 | 104 | 213 |
| Gray, John W., Summit, N. J. Wheel for vehicles | 746,071 | Dec. 8 | 1395 | 312 | 107 | 1415 |
| Gray, John W., assignor to H. E. Pyburn, San Francisco, Cal. Electric cigar-lighting device | 745,600 | Dec. 1 | 527 | 123 | 107 | 1209 |
| Gray, Joseph A., Norwalk, Conn. Feed-bag | 733,032 | July 7 | 584 | 142 | 105 | 125 |
| Gray, Lida V., Tarboro, N. C. Portable bathing apparatus | 736,089 | Aug. 11 | 2006 | 428 | 105 | 1429 |
| Gray National Telautograph Company. (See Tiffany, George S., assignor.) | | | | | | |
| Gray, Nelson, Louisville, Ky. Folding car-step | 728,097 | May 12 | 2399 | 534 | 104 | 528 |
| Gray, Niel, Jr., Oswego, N. Y. Paper-cutting machine | 744,534 | Nov. 17 | 3379 | 728, 729 | 107 | 752 |
| Gray Pneumatic Carrier Co. (See Gray, Charles A., assignor.) | | | | | | |
| Gray, Robert H., Lexington, Ky. Conveyer | 727,127 | May 5 | 591 | 127 | 104 | 128 |
| Gray Telephone Company. (See Gray, Elisha, assignor.) | | | | | | |
| Gray Telephone Pay Station Company. (See Gray, William, assignor.) | | | | | | |
| Gray Telephone Pay Station Company. (See Long, George A., assignor.) | | | | | | |
| Gray, Thomas, Katie, Ind. Ter. Washing-machine | 731,356 | June 16 | 3345 | 747 | 104 | 1855 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|
| | | | Spec. | Drg. | Vol. | Page. |
| Gray, Thomas E., Chicago, Ill. Punch | 733,319 | July 7 | 1105 | 263 | 105 | 233 |
| Gray, Thomas J., assignor to F. C. Austin, Chicago, Ill. Grading and ditching machine | 737,224 | Aug. 25 | 4085 | 907, 908, 909, 910 | 105 | 1902 |
| Gray, Thomas J., assignor to National Drill and Manufacturing Company, Chicago, Ill. Grading and ditching machine | 743,487 | Nov. 10 | 1390 | 285, 286, 287, 288 | 107 | 312 |
| Gray, Watson S., Philadelphia, Pa. Metallic pole | 731,177 | June 16 | 3028 | 673 | 104 | 1789 |
| Gray, Willard A., Milwaukee, Wis. Spacing-machine | 745,723 | Dec. 1 | 733 | 167, 168 | 107 | 1254 |
| Gray, William, assignor to Gray Telephone Pay Station Company, Hartford, Conn. Telephone-call register | 725,244 | Apr. 14 | 1539 | 349 | 103 | 1510 |
| Graybill, Henry C., Altoona, Pa. Hitching or releasing device for horses | 731,770 | June 23 | 4146 | 925 | 104 | 2035 |
| Graybill, Henry C., Altoona, Pa. Electric-lighting device | 733,188 | July 7 | 862 | 209 | 105 | 181 |
| Graydon, James W., Stockwell, England. Turbine actuated by steam | 737,734 | Sept. 1 | 326 | 69 | 106 | 74 |
| Grayson, Lawrence W., assignor of one-half to C. S. Cunningham, Melbourne, Victoria, Australia. Rowing-machine | 731,998 | June 23 | 4554 | 1016 | 104 | 2124 |
| Grayson, Pauline, Westminster, England. Fire-blower and fire-screen | 728,905 | May 26 | 3929 | 872 | 104 | 885 |
| Great Bear Spring Company. (See Emerick, Frederick A., assignor.) | | | | | | |
| Greater New York Security Company. (See De Forest, Lee, assignor.) | | | | | | |
| Greater New York Security Company. (See Hogg, William S., assignor.) | | | | | | |
| Greaven, Louis, Puebla, Mexico. Fire-box | 731,449 | June 23 | 3558 | 793 | 104 | 1918 |
| Grebner, Henry E., Beverly, Mass. Triple supporter and adjuster for garments | 733,388 | July 14 | 1246 | 295 | 105 | 280 |
| Green, Albert L., Buford, Ga. Hame and trace connection | 721,796 | Mar. 3 | 253 | 56 | 103 | 56 |
| Green, Alfred. (See Wetzler and Green.) | | | | | | |
| Green, Alfred, Rochester, N. Y. Electromagnet | 735,755 | Aug. 11 | 1378 | 296 | 105 | 1291 |
| Green, Almond B., Fulton, Ohio. Wrench | 739,490 | Sept. 22 | 3779 | 845 | 106 | 858 |
| Green, Buel H., Los Angeles, Cal. Steam-boiler | 741,485 | Oct. 13 | 2104 | 468 | 106 | 1715 |
| Green, Carl A., Katrineholm, and H. E. Larsson, Stockholm, Sweden. Machine for cutting up ice in streets, &c | 721,364 | Feb. 24 | 3671 | 836 | 102 | 1645 |
| Green, Charles, Brooklyn, N. Y. Hand and power steering-gear | 738,793 | Sept. 15 | 2509 | 552 | 106 | 569 |
| Green, David J., Wilmont, Minn. Shock-loader | 743,489 | Nov. 10 | 1398 | 289 | 107 | 314 |
| Green, Edward, York, England. Soot-cleaner | 735,967 | Aug. 11 | 1775 | 380 | 105 | 1379 |
| Green, Elisha K., Los Angeles, Cal. Means for lubricating the rails of street-cars | 742,786 | Oct. 27 | 4578 | 1038 | 106 | 2262 |
| Green, Elmer, Northeast, Pa. Dust-pan | 721,365 | Feb. 24 | 3672 | 836 | 102 | 1645 |
| Green, Francis J., assignor to American Engineering Company, Detroit, Mich. Apparatus for polarization of Hertzian waves | 739,271 | Sept. 15 | 3366 | 747, 748 | 106 | 752 |
| Green, Francis W., Brooklyn, N. Y. Flower-holder | 720,132 | Feb. 10 | 1336 | 306 | 102 | 1124 |
| Green, Frank D., Philadelphia, Pa. Barbed-wire fence-top | 731,890 | June 23 | 4355 | 972 | 104 | 2083 |
| Green, Fred E., assignor of forty-nine one-hundredths to H. R. Perkins, Newburyport, Mass. Signaling apparatus for telephone-lines | 728,165 | May 12 | 2520 | 560, 561 | 104 | 553 |
| Green, Fred P., assignor of two-thirds to S. S. Aldrich and D. Underhill, Jr., East Aurora, N. Y. Train controlling and signaling system | 747,967 | Dec. 29 | 4940 | 1117, 1118 | 107 | 2265 |
| Green, George L., Newark, Ark. Cotton-thinner | 718,451 | Jan. 13 | 1735 | 385, 386 | 102 | 385 |
| Green, Guy M., O'Neill, Nebr. Transferable job-bank | 721,560 | Feb. 24 | 4022 | 914 | 102 | 1719 |
| Green, Henry, Pekin, assignor to Acme Harvester Company, Peoria, Ill. Flax attachment for harvesting-machines | 728,906 | May 26 | 3930 | 873 | 104 | 885 |
| Green, Hiram E., Lowell, Mass. Edge-unfolder for fabric-printing or other machines | 739,781 | Sept. 22 | 4311 | 965 | 106 | 973 |
| Green, Homer V., assignor of one-half to I. B. Bates, Flint, Mich. Combination level and plumb | 721,694 | Mar. 3 | 82 | 17 | 103 | 18 |
| Green, James F., Ivesgrove, Wis. Hoe | 730,636 | June 9 | 2023 | 449 | 104 | 1563 |
| Green, James W., St. Louis, Mo. Dust-guard | 718,452 | Jan. 13 | 1737 | 386 | 102 | 385 |
| Green, James W., Portland, Oreg. Preserving eggs | 744,750 | Nov. 24 | 3785 | 815 | 107 | 855 |
| Green, Jerome M., deceased, Rochester, N. Y.; P. S. Darrohn, administrator, assignor to R. H. Thurston, Elmira, N. Y. Acetylene-generator | 738,794 | Sept. 15 | 2511 | 552 | 106 | 570 |
| Green, John D., Toledo, Ohio, assignor to W. J. Willits and E. B. Linsley, Three Rivers, Mich. Car-replacer | 741,127 | Oct. 13 | 1372 | 314 | 106 | 1559 |
| Green, John H., assignor to H. Meyercord, Chicago, Ill. Motor | 721,561 | Feb. 24 | 4023 | 914, 915 | 102 | 1719 |
| Green, John H., assignor of one-half to H. A. Meyercord, Chicago, Ill. Safety-pin | 740,121 | Sept. 29 | 4965 | 1114 | 106 | 1128 |
| Green, John H., assignor, by mesne assignments, to National Light, Heat and Power Company, St. Louis, Mo. Gas-holder | 722,834 | Mar. 17 | 2226 | 499 | 103 | 504 |
| Green, John J., Boonton, N. J. Carriage mechanism | 729,327 | May 26 | 4677 | 1033 | 104 | 1040 |
| Green, John J., Boonton, N. J. Ribbon mechanism | 735,089 | Aug. 4 | 73 | 20 | 105 | 997 |
| Green, John J., Boonton, N. J. Type-writing machine | 735,090 | Aug. 4 | 76 | 20 | 105 | 998 |
| Green, John J., Boonton, N. J. Type-writing machine | 735,091 | Aug. 4 | 80 | 20 | 105 | 999 |
| Green, John J., Boonton, N. J. Lever connection | 735,092 | Aug. 4 | 84 | 20 | 105 | 1000 |
| Green, John J., Boonton, N. J. Type-bar for type writers | 735,247 | Aug. 4 | 407 | 80 | 105 | 1067 |
| Green, John K., New York, N. Y. Safety supporting apparatus | 718,948 | Jan. 20 | 2717 | 607, 608 | 102 | 607 |
| Green, Lorin. (See Green and Stobbs.) | | | | | | |
| Green, Lundy, W. H. Stobbs, L. Green, and F. L. Stobbs, Harvey, Ill. Railway frog and switch mechanism | 719,461 | Feb. 3 | 87 | 21 | 102 | 844 |
| Green, Milton H., Glen, Nebr. Stirrup | 739,170 | Sept. 15 | 3177 | 702 | 106 | 711 |
| Green, Oliver H., and P. D. Carpenter, Orion, Mich. Lock | 734,541 | July 28 | 3412 | 797 | 105 | 770 |
| Green, Robert M., Philadelphia, Pa. Fire-extinguisher truck | 720,422 | Feb. 10 | 1860 | 424 | 102 | 1233 |
| Green, Roland P. B., Brooklyn, N. Y. Variable-speed gear | 741,904 | Oct. 20 | 2916 | 650 | 106 | 1901 |
| Green, Romain M., Duluth, Minn., assignor to Vending Machine Company. Vending-machine | 748,065 | Dec. 29 | 5140 | 1162, 1163 | 107 | 2308 |
| Green, Samuel M. (See Fay, Frederick L., assignor.) | | | | | | |
| Green, Saunders T., Dyersburg, Tenn. Bale-tie | 720,133 | Feb. 10 | 1337 | 306 | 102 | 1124 |
| Green, Stanley K., Baltimore, Md. Machine for making julep-tubes | 733,714 | July 14 | 1800 | 426, 427 | 105 | 396 |
| Green, Thomas W. (See Knobel, Charles C., assignor.) | | | | | | |
| Green, W. N. (See Fyfe, George B., assignor.) | | | | | | |
| Green, Walter W., Wing, Ill. Boiler-feed attachment | 722,696 | Mar. 17 | 1968 | 439 | 103 | 453 |
| Green, Walter W. W., Staverton, England. Box | 740,009 | Sept. 29 | 4767 | 1072, 1073 | 106 | 1086 |
| Green, Weston, Dayton, Ohio. Opener for paper receptacles | 730,821 | June 9 | 2339 | 518 | 104 | 1631 |
| Green, Willard R., Denver, Colo. Gearing | 729,157 | May 26 | 4377 | 965, 966 | 104 | 977 |
| Green, Willard R., Denver, Colo. Bottle-stoppering device | 742,312 | Oct. 27 | 3758 | 841 | 106 | 2088 |
| Green, Willard R., Denver, Colo. Bottle-stoppering device | 743,638 | Nov. 10 | 1680 | 353 | 107 | 375 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page |
|---|---|---|---|---|---|---|
| Greenaway, Arthur J., Detroit, Mich. Centripetal trap | 724,847 | Apr. 7 | 805 | 185 | 103 | 1341 |
| Greenaway, Joseph R. (See Searles and Greenaway.) | | | | | | |
| Greenaway, Joseph R., assignor to J. Arzonia, Columbus, Ohio. Bottle-stopper | 730,254 | June 9 | 1338 | 294 | 104 | 1414 |
| Greenbaum, Oscar, New York, N. Y., and C. W. F. Kroll, Jersey City, N. J., assignors to Raudnitz & Pollitz, New York, N. Y. Chatelaine-bag or the like | 720,131 | Feb. 10 | 1335 | 306 | 102 | 1124 |
| Greenblatt, Isaac, *et al.* (See Minck, Hermann G., assignor.) | | | | | | |
| Greenburg, George G., Chicago, Ill. Holder for memorandum-calendars | 741,128 | Oct. 13 | 1373 | 315 | 106 | 1559 |
| Greene, Flemon R., Humboldt, Tenn. Hay-press | 746,825 | Dec. 15 | 2762 | 637 | 107 | 1737 |
| Greene, Fred C., Lynn, assignor of one-half to G. A. Dillingham, Cambridge, and C. F. Dudley, Lynn, Mass. Screw-driver | 717,569 | Jan. 6 | 85 | 21 | 102 | 20 |
| Greene, George W., Woonsocket, R. I. Napping-machine | 717,841 | Jan. 6 | 628 | 138<br>139 | 102 | 134 |
| Greene, Harry S., assignor to Woonsocket Napping Machinery Company, Woonsocket, R. I. Napping-machine | 720,018 | Feb. 10 | 1114 | 255 | 102 | 1076 |
| Greene, James G., Elizabeth, N. J., assignor to Singer Manufacturing Company. Tension releasing and restoring device for sewing-machines | 732,407 | June 30 | 5385 | 1193 | 104 | 2310 |
| Greene, John A., assignor of one-half to P. W. Kempster, Prophetstown, Ill. Hot and cold water faucet | 733,958 | July 21 | 2295 | 539 | 105 | 517 |
| Greene, Oscar C. (See Gaunt, Charles H., assignor.) | | | | | | |
| Greene, Tweed & Company. (See Allen and Carver, assignors.) | | | | | | |
| Greene, William H., St. John's, Newfoundland. Rotary engine | 745,820 | Dec. 1 | 926 | 208<br>209 | 107 | 1296 |
| Greenerd, Robert C., Winthrop, Mass. Tool-grinder | 736,843 | Aug. 18 | 3398 | 751 | 105 | 1738 |
| Greenfield, Edwin T., Monticello, N. Y. Pipe-coupling | 720,578 | Feb. 17 | 2178 | 505 | 102 | 1312 |
| Greenfield, Edwin T., Monticello, N. Y. Constructing screw-threaded pipes, tubes, or rods | 720,579 | Feb. 17 | 2179 | 505 | 102 | 1313 |
| Greenfield, Edwin T., Monticello, N. Y. Screw-threaded pipe, tube, or rod | 720,580 | Feb. 17 | 2181 | 506 | 102 | 1313 |
| Greenfield, Edwin T., Monticello, N. Y. Manufacturing armored electric cables | 724,570 | Apr. 7 | 274 | 66, 67 | 103 | 1228 |
| Greenfield, Edwin T., Monticello, N. Y. Machine for making armored electric cables | 724,571 | Apr. 7 | 277 | 68, 69 | 103 | 1228 |
| Greenfield, Edwin T., Monticello, N. Y. Machine for manufacturing screw-threaded pipes | 727,128 | May 5 | 592 | 127<br>128 | 104 | 128 |
| Greenfield, Edwin T., Monticello, N. Y. Coupling for armored hose | 746,497 | Dec. 8 | 2151 | 495 | 107 | 1579 |
| Greenfield, Edwin T., Monticello, N. Y. Armored hose and making same | 746,630 | Dec. 8 | 2391 | 548 | 107 | 1633 |
| Greenhill, William P. (See Schmid, Charles, assignor.) | | | | | | |
| Greenlaw, Charles W. (See Winchester and Greenlaw.) | | | | | | |
| Greenley, Charles J., and J. Day, Wolverhampton, England. Imprinting and fixing colored pictures or designs upon enameled metal, &c | 726,526 | Apr. 28 | 3922 | ..... | 103 | 2036 |
| Greenough, Grafton. (See Vauclain and Greenough.) | | | | | | |
| Greensmith, James E. (See Meats and Greensmith.) | | | | | | |
| Greenstreet, Jason H., Indianapolis, Ind. Box or package and material therefor | 722,423 | Mar. 10 | 1422 | 314 | 103 | 319 |
| Greenstreet, Milfred L., Owensville, Mo. Flue-stopper | 729,328 | May 26 | 4682 | 1033 | 104 | 1042 |
| Greenwald, Oscar, Milwaukee, Wis. Elevator-cable guard | 735,093 | Aug. 4 | 85 | 21 | 105 | 1001 |
| Greenwood, Charles T., and A. N. Marvin, Tarantum, Pa. Rail-joint | 734,853 | July 28 | 4020 | 938 | 105 | 894 |
| Greenwood, Edwin N., assignor to National Metal Bung Company, Chicago, Ill. Bung-pulling implement | 740,122 | Sept. 29 | 4966 | 1114 | 106 | 1128 |
| Greenwood, George W., Cleveland, Ohio. Pressure-exerting machine | 727,353 | May 5 | 990 | 216 | 104 | 213 |
| Greenwood, George W., Cleveland, Ohio. Laterally-adjustable side bearing | 728,224 | May 19 | 2640 | 589 | 104 | 600 |
| Greenwood, Guyon F., Middletown, N. J. Conveyer | 745,821 | Dec. 1 | 931 | 209<br>210 | 107 | 1297 |
| Greenwood, Herbert M. (See Bennett, Fredrick R., assignor.) | | | | | | |
| Greenwood, John C., *et al.* (See Brown, Abner L., assignor.) | | | | | | |
| Greenwood Process Machine Co. (See Jennings, John, assignor.) | | | | | | |
| Greenwood, Thomas F., Providence, R. I. Joint for pin-tongues | 724,695 | Apr. 7 | 515 | 122 | 103 | 1279 |
| Greenwood, William H., Everett, Mass. Lamp-protector | 741,129 | Oct. 13 | 1375 | 315 | 106 | 1560 |
| Greenwood, William J., Tarentum, Pa. Manufacture of hollow glass articles | 724,179 | Mar. 31 | 4742 | 1063 | 103 | 1051 |
| Greer, Fitzhugh L., Norfolk, Va. Car-door | 718,248 | Jan. 13 | 1345 | 298 | 102 | 304 |
| Greer, Fredric. (See Hoffmann, Otto C., assignor.) | | | | | | |
| Greer, Howard, Jr., Chicago, Ill. Ore or coal chute | 745,433 | Dec. 1 | 229 | 52 | 107 | 1148 |
| Greer, John, assignor of one-half to W. W. Walter, Baltimore, Md. Hydrocarbon-furnace | 728,098 | May 12 | 2401 | 534 | 104 | 529 |
| Greer, John S. (See Carson, Arthur, assignor.) | | | | | | |
| Greer, Lily, Allegheny, Pa. Safety-pin | 737,225 | Aug. 25 | 4097 | 911 | 105 | 1905 |
| Greer, Sherman, Lincoln, Nebr. Collapsible crate | 740,753 | Oct. 6 | 683 | 155 | 106 | 1393 |
| Greer, William N., assignor to R. Rogers, Greeley, Nebr. Door-lock and alarm device | 732,067 | June 30 | 4710 | 1052 | 104 | 2169 |
| Greer, William N., assignor of one-half to J. Crockett, Greeley, Nebr. Head-rest | 736,844 | Aug. 18 | 3400 | 751 | 105 | 1739 |
| Greer, Wilson, Bangor, Pa. Stone tub | 724,464 | Apr. 7 | 85 | 21 | 103 | 1187 |
| Grefenkamp, Bernard H., *et al.* (See Perry, Algie, assignor.) | | | | | | |
| Gregg, Luther B., Wauwatosa, Wis. Dish-washing machine | 740,642 | Oct. 6 | 489 | 108 | 106 | 1351 |
| Gregg, Niles W., Des Moines, Iowa. Automatic apparatus for making ice and refrigerating cars | 729,759 | June 2 | 438 | 99 | 104 | 1217 |
| Gregg, Wilks B., Chicago, Ill. Steam-boiler | 743,488 | Nov. 10 | 1396 | 288<br>289 | 107 | 313 |
| Gregoire, Rene. (See Broux and Gregoire.) | | | | | | |
| Gregor, Ernest B. and M. F., Detroit, Mich. Perforator for music-rolls | 726,676 | Apr. 28 | 4201 | 949 | 103 | 2092 |
| Gregor, Maximillian F. (See Gregor, Ernest B. and M. F.) | | | | | | |
| Gregory, Charles A. (See Middleditch and Gregory.) | | | | | | |
| Gregory, Edward B., assignor to M. M. Gregory, Detroit, Mich. Extensible round-top table | 722,577 | Mar. 10 | 1715 | 381<br>382 | 103 | 384 |
| Gregory, Ferdinand W., New York, N. Y. Insulator | 724,848 | Apr. 7 | 805 | 185 | 103 | 1341 |
| Gregory, Frank E., Defiance, Ohio. Fence-post | 719,789 | Feb. 3 | 691 | 159 | 102 | 969 |
| Gregory, Frank E., Defiance, Ohio. Pavement | 719,790 | Feb. 3 | 692 | 160 | 102 | 969 |
| Gregory, Joseph, Jersey City, N. J., assignor to Standard Oil Company of New York, New York, N. Y. Stove and grate therefor | 743,861 | Nov. 10 | 2075 | 442 | 107 | 458 |
| Gregory, Mabel M. (See Gregory, Edward B., assignor.) | | | | | | |
| Gregory, Thomas, assignor of one-half to T. W. Miller, Akron, Ohio. Water-bag | 718,053 | Jan. 6 | 993 | 222 | 102 | 214 |
| Gregson, Samuel. (See Cronin, William D., assignor.) | | | | | | |
| Greilsammer, Alphonse, Paris, France. Cigarette-machine | 741,242 | Oct. 13 | 1600 | 360 | 106 | 1608 |
| Greimer, Karl, Plauen, assignor to K. A. Lingner, Dresden, Germany. Inhaler | 723,268 | Mar. 24 | 3003 | 675 | 103 | 679 |
| Greiner-Voigt, Louis, Winterthur, Switzerland. Stamp for receipting bills | 745,822 | Dec. 1 | 936 | 210 | 107 | 1298 |
| Greis, William H., Syracuse, N. Y. Auricular confessionary instrument | 739,541 | Sept. 22 | 3859 | 865 | 106 | 874 |
| Greist, John M., New Haven, Conn. Tuck-folding guide for sewing-machines | 740,643 | Oct. 6 | 490 | 108 | 106 | 1352 |
| Greist, John M., New Haven, Conn. Attachment-holder for sewing-machines | 740,644 | Oct. 6 | 492 | 108 | 106 | 1352 |
| Greist, John M., New Haven, Conn. Sewing-machine presser-foot holder | 747,163 | Dec. 15 | 3412 | 773 | 107 | 1886 |
| Greist, John M., New Haven, Conn. Sewing-machine presser-foot holder | 747,164 | Dec. 15 | 3413 | 773 | 107 | 1886 |
| Greist, John M., New Haven, Conn. Sewing-machine presser-foot holder | 747,165 | Dec. 15 | 3414 | 774 | 107 | 1886 |
| Grendon, Robert W., Tiffin, Ohio. Measuring-vest | 720,019 | Feb. 10 | 1116 | 255 | 102 | 1076 |
| Grenthe, Louis, Pontoise, France. Boiler | 737,095 | Aug. 25 | 3849 | 855 | 105 | 1853 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Grenzstein, Theodor. (See Welter and Grenzstein.) | | | | | | |
| Gresham, George H., New York, N. Y., assignor to Boorum and Pease Company. Temporary binder | 724,849 | Apr. 7 | 806 | 186 | 103 | 1341 |
| Gressom, James H., assignor to O. T. Dougherty, Minneapolis, Minn. Wagon-stake standard | 739,542 | Sept. 22 | 3860 | 865 | 106 | 874 |
| Greuter, Charles R., Holyoke, Mass. Friction-clutch | 722,697 | Mar. 17 | 1970 | 440 | 103 | 453 |
| Grever, Albert R., Pensauken, N. J., and C. Stone, Philadelphia, Pa. Grinding attachment for lathes | 727,129 | May 5 | 597 | 128 | 104 | 129 |
| Grey, Charles M., assignor to American Universal Mill Company, New York, N. Y. Rolling-mill | 744,535 | Nov. 17 | 3382 | 729, 730 | 107 | 753 |
| Grey, Frederick W., Los Angeles, Cal. Weighing-scale | 744,192 | Nov. 17 | 2773 | 592 | 107 | 619 |
| Grey, Sylvester P., assignor of one-half to J. M. Miller, Indianapolis, Ind. Hollow blast-grate | 739,491 | Sept. 22 | 3779 | 845 | 106 | 858 |
| Gribble, William A., Aubrey, Tex. Acetylene-gas generator | 738,319 | Sept. 8 | 1580 | 341, 342 | 106 | 356 |
| Gridley, Charles C., Columbus, Ohio. Collar turning and dampening device | 734,542 | July 28 | 3415 | 797 | 105 | 771 |
| Gridley, George O., Windsor, Vt. Bar-working machine | 725,438 | Apr. 14 | 1884 | 421, 422, 423 | 103 | 1583 |
| Griebel, Andrew. (See Gaeth and Griebel.) | | | | | | |
| Griebling, John H. (See Riches, Arthur W., assignor.) | | | | | | |
| Grier, Harry G., East Orange, N. J. Vehicle-wheel | 746,693 | Dec. 15 | 2516 | 578 | 107 | 1682 |
| Grier, Thomas J., Lead, S. D. Extracting precious metals | 745,490 | Dec. 1 | 341 | 79 | 107 | 1172 |
| Grierson, Thomas C. (See McCain and Grierson.) | | | | | | |
| Griesheimer, John C., *et al.* (See Herrick, Bissett, and Merrick, assignors.) | | | | | | |
| Griesser, Wilhelm, New York, N. Y. Brewing apparatus | 733,189 | July 7 | 863 | 209, 210 | 105 | 181 |
| Griesser, Wilhelm, New York, N. Y. Brick-package | 733,190 | July 7 | 864 | 210 | 105 | 181 |
| Griesser, Wilhelm, New York, N. Y. Vat | 733,191 | July 7 | 866 | 210 | 105 | 182 |
| Grieve, James. (See Summersby and Grieve.) | | | | | | |
| Griffin, Brainard S., *et al.* (See Hachmann, Frederick, assignor.) | | | | | | |
| Griffin Button Co. (See Gilbert, Walter C., assignor.) | | | | | | |
| Griffin, Chelsea B. (See Griffin, George L., R. A., C. B., and H. E.) | | | | | | |
| Griffin, Edwin C., Newton, Mass. Shaft-coupling | 721,035 | Feb. 17 | 3007 | 691 | 102 | 1486 |
| Griffin, Edwin C., Newton, Mass. Crushing and pulverizing mill | 742,982 | Nov. 3 | 282 | 63 | 107 | 61 |
| Griffin, Ernest A. and H. M., Altoona, Pa.; said H. M. Griffin assignor to said Ernest A. Griffin. Washing-machine | 740,269 | Sept. 29 | 5236 | 1178 | 106 | 1183 |
| Griffin, Fred B. (See Case, Walter D., assignor.) | | | | | | |
| Griffin, George A. (See White, Frank, assignor.) | | | | | | |
| Griffin, George L., R. A., C. B., and H. E., Houston, Tex. Mechanism for converting motion | 740,423 | Oct. 6 | 73 | 16 | 106 | 1262 |
| Griffin, Gerald E. (See Levin, Samuel, assignor.) | | | | | | |
| Griffin, Herbert E. (See Griffin, George L., R. A., C. B., and H. E.) | | | | | | |
| Griffin, Hester M. (See Griffin, Ernest A. and H. M.) | | | | | | |
| Griffin, James C., Erie, Pa. Hinge-pin | 739,306 | Sept. 22 | 3432 | 765 | 106 | 782 |
| Griffin, John, Yonkers, N. Y. Horseshoe | 721,514 | Feb. 24 | 3939 | 896, 897 | 102 | 1701 |
| Griffin, John, Greenville, Miss. Cotton-picker | 732,546 | June 30 | 5653 | 1254 | 104 | 2365 |
| Griffin, John C., Ninetysix, S. C. Cotton-seed dropper and fertilizer-distributer | 718,620 | Jan. 20 | 2100 | 457 | 102 | 481 |
| Griffin, John L., Wellsville, Ohio. Pick | 730,637 | June 9 | 2023 | 449 | 104 | 1563 |
| Griffin, Judson M., Detroit, Mich. Abrading-shoe | 738,029 | Sept. 1 | 939 | 208 | 106 | 205 |
| Griffin, Judson M., and O. P. Allen, Detroit, Mich. Instrument for truing up cylindrical surfaces | 729,329 | May 26 | 4683 | 1034 | 104 | 1042 |
| Griffin, Maurice, S. Sanker, and B. Keith, Riverside, Cal. Means for disinfecting telephone-transmitter mouthpieces | 744,337 | Nov. 17 | 3035 | 651 | 107 | 678 |
| Griffin, Nathaniel A., Coolidge, Ga. Plow | 746,826 | Dec. 15 | 2763 | 637 | 107 | 1737 |
| Griffin, P. B., *et al.* (See Decker, Lucious E., assignor.) | | | | | | |
| Griffin, Patrick J., Dorchester, assignor of one-half to A. Rosenthal, Boston, Mass. Footgear for use in swimming | 719,583 | Feb. 3 | 314 | 72,73 | 102 | 888 |
| Griffin, Robert A. (See Griffin, George L., R. A., C. B., and H. E.) | | | | | | |
| Griffin, Samuel, Bath, England. Friction-clutch | 730,112 | June 2 | 1064 | 239 | 104 | 1344 |
| Griffin, Thomas A., Chicago, Ill. Rail-brace | 721,180 | Feb. 24 | 3323 | 760 | 102 | 1574 |
| Griffin, Thomas M., Lenderman, S. C. Planter | 733,033 | July 7 | 585 | 142 | 105 | 125 |
| Griffin, Tom, Gurley, assignor of one-half to L. Howell, Perry Falls, Tex. Plow | 744,751 | Nov. 24 | 3787 | 816 | 107 | 856 |
| Griffin, William, Kansas City, Mo. Bounding top | 742,858 | Nov. 3 | 69 | 17 | 107 | 17 |
| Griffith, Charles E., McCook, S. D. Cattle-pump | 721,297 | Feb. 24 | 3544 | 806 | 102 | 1620 |
| Griffith, E. T., *et al.* (See Mendenhall, Amos, assignor.) | | | | | | |
| Griffith, Edward A. (See Crain and Gwinn, assignors.) | | | | | | |
| Griffith, Edward T., Muncie, Ind. Non-refillable bottle | 731,357 | June 16 | 3346 | 747 | 104 | 1855 |
| Griffith, Frederick E., Cranston, R. I. Supporter | 743,862 | Nov. 10 | 2078 | 442 | 107 | 459 |
| Griffith, Graves, San Francisco, Cal. Range-finder | 735,497 | Aug. 4 | 881 | 188 | 105 | 1169 |
| Griffith, John W., San Francisco, Cal. Ellipse or circle compasses | 743,490 | Nov. 10 | 1399 | 290 | 107 | 314 |
| Griffith, Lawrence, Yonkers, N. Y. Pneumatic switch apparatus and valve therefor | 724,180 | Mar. 31 | 4743 | 1063, 1064, 1065, 1066 | 103 | 1051 |
| Griffith, Lew H., Moores Hill, Ind. Lamp attachment | 747,063 | Dec. 15 | 3229 | 736 | 107 | 1845 |
| Griffith, Rha P., Tallman, Mich. Nut-lock | 725,245 | Apr. 14 | 1540 | 350 | 103 | 1511 |
| Griffith, Stanton, Seneca Falls, assignor of one-half to Z. Taylor, Brooklyn, N. Y. Molder's flask and gate | 723,151 | Mar. 17 | 2770 | 623 | 103 | 616 |
| Griffiths, Daniel E., assignor to J. B. Corey, Pittsburg, Pa. Wheel-tire | 730,638 | June 9 | 2024 | 450 | 104 | 1564 |
| Griffiths, George J. (See Cross and Griffiths.) | | | | | | |
| Griffiths, Leonard L., Brooklyn, N. Y. Steam-boiler | 743,271 | Nov. 3 | 883 | 192 | 107 | 186 |
| Griffiths, William. (See Bedell, Benjamin H., assignor.) | | | | | | |
| Griffiths, William, assignor of one-half to G. J. Wheeler, Buffalo, N. Y. Nipple-holder | 745,344 | Dec. 1 | 50 | 11 | 107 | 1111 |
| Griffiths, William U., *et al.* (See Dixon, Frederic N., assignor.) | | | | | | |
| Griffiths, William U., Philadelphia, Pa. Flushing-tank for water-closets or other structures | 736,516 | Aug. 18 | 2766 | 605 | 105 | 1609 |
| Griffiths, William U., Philadelphia, Pa. Flushing apparatus for water-closets | 745,724 | Dec. 1 | 735 | 168 | 107 | 1255 |
| Griffiths, William U., Philadelphia, Pa. Flushing apparatus for water-closets | 745,823 | Dec. 1 | 937 | 211 | 107 | 1298 |
| Griffiths, William U., Philadelphia, Pa. Apparatus for expelling water from cellars | 745,824 | Dec. 1 | 940 | 211 | 107 | 1299 |
| Griggs, David C. (See Lamb and Griggs.) | | | | | | |
| Grigsby, Redman W. W., Chrisney, Ind. Thermostatic circuit-closer | 747,166 | Dec. 15 | 3415 | 774 | 107 | 1886 |
| Grika, Joseph F., Lenexa, Kans. Folding car-step | 734,320 | July 21 | 3016 | 710 | 105 | 671 |
| Grim, Charles G. (See Morrice and Grim.) | | | | | | |
| Grim, John T. T., Cumberland, Md. Dovetailing-machine | 724,850 | Apr. 7 | 807 | 186, 187 | 103 | 1342 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | Spec. | Dr'g. | Vol. | Page. |
| Grimes, Cephus O. (See Hammack, Martin V., assignor.) | | | | | | |
| Grimes, Cephus O., Portsmouth, Va. Bill-file | 717,842 | Jan. 6 | 630 | 139 | 102 | 135 |
| Grimm, Asmus H., Rock Island, Ill. Disk-sharpener | 718,966 | Jan. 20 | 2748 | 615 | 102 | 614 |
| Grimm, August. (See Grimm, Henry, assignor.) | | | | | | |
| Grimm, George, Baltimore, Md. Bowl-holder | 722,228 | Mar. 10 | 1068 | 235 | 103 | 243 |
| Grimm, Gerhardt E., Woodbury, N. J. Knockdown toy house | 739,669 | Sept. 22 | 4109 | 916<br>917 | 106 | 928 |
| Grimm, Gustav H., Rutland, Vt. Sap-spout | 729,330 | May 26 | 4684 | 1034 | 104 | 1042 |
| Grimm, Henry, assignor of one-half to A. Grimm, Jersey City, N. J. Cruller-frying frame | 747,700 | Dec. 22 | 4402 | 992 | 107 | 2123 |
| Grimm, Ignaz, Cincinnati, Ohio. Combined split and bar-cutting power-shears | 723,599 | Mar. 24 | 3624 | 810 | 103 | 802 |
| Grimm, Miller D., Wellsville, Ohio. Annealing metal plates | 727,787 | May 12 | 1835 | 410 | 104 | 409 |
| Grimm, Miller D., Wellsville, Ohio. Annealing-box | 727,788 | May 12 | 1836 | 410 | 104 | 410 |
| Grimm, Rudolf, Vienna, Austria-Hungary. Concrete and iron girder, &c | 736,718 | Aug. 18 | 3160 | 697 | 105 | 1689 |
| Grimme, Georg L., Buenos Aires, Argentina. Head-rest | 730,531 | June 9 | 1840 | 411 | 104 | 1523 |
| Grimshaw, Fred, Northeast, Pa. Medicinal battery | 720,020 | Feb. 10 | 1118 | 256 | 102 | 1077 |
| Grimsley, Joseph G., Leicester, England. Automatic sprinkler for extinguishing fires | 735,756 | Aug. 11 | 1379 | 296 | 105 | 1292 |
| Grindell, Charles S., Claiborne, Ohio. Automatic cut-off for cisterns | 731,771 | June 23 | 4147 | 925 | 104 | 2035 |
| Grinden, William J., New York, assignor to J. H. Williams and Company, Brooklyn, N. Y. Pipe-vise | 743,072 | Nov. 3 | 489 | 106<br>107 | 107 | 102 |
| Grinder, Joseph E., Washington, D. C. Machine for handling brick-molds | 746,827 | Dec. 15 | 2765 | 637 | 107 | 1738 |
| Grinsell, John W. (See Speer, Robert G., assignor.) | | | | | | |
| Griscom, Alfred C. (See Collings and Griscom.) | | | | | | |
| Griscom and McFeely. (See Dawson, John H., assignor.) | | | | | | |
| Griscom & McFeely. (See Griscom and Loutzenhiser, assignors.) | | | | | | |
| Griscom, Walter, and C. H. Loutzenhiser, assignors to Griscom & McFeely, Philadelphia, Pa. Sieve-cleaner for bolting-machines | 743,863 | Nov. 10 | 2079 | 442 | 107 | 459 |
| Grisson, Robert, Hamburg, Germany. Electrolytic cell | 719,791 | Feb. 3 | 693 | 160 | 102 | 969 |
| Grist, Benjamin W., assignor to F. A. Riehle, Philadelphia, Pa. Lever-actuated interlocking clutch mechanism | 742,630 | Oct. 27 | 4324 | 973 | 106 | 2206 |
| Griswold, John H., Oakland, Cal. Skirt-supporter | 719,656 | Feb. 3 | 434 | 99 | 102 | 912 |
| Griswold, Joseph M., Detroit, Mich. Device for increasing the vertical and lateral stiffness at the point of juncture of the ends of railway-rails | 746,072 | Dec. 8 | 1397 | 312 | 107 | 1416 |
| Griswold, Matthew, Jr., Erie, Pa. Food-chopper | 727,130 | May 5 | 599 | 128 | 104 | 130 |
| Griswold, William E., New York, N. Y. Dental securing device | 733,320 | July 7 | 1106 | 263 | 105 | 233 |
| Griswold, William E., New York, N. Y. Dental jig | 733,321 | July 7 | 1108 | 263 | 105 | 233 |
| Grobe, Julius J., assignor to Victor Electric Company, Chicago, Ill. Massaging implement | 735,968 | Aug. 11 | 1776 | 381 | 105 | 1379 |
| Groble, Jacob C., Elwood, Ind. Flue-cutter | 733,642 | July 14 | 1684 | 399 | 105 | 372 |
| Grocers' Specialty Manufacturing Company. (See Rhoades, Charles E., assignor.) | | | | | | |
| Groeben, Erich von der, Berlin, Germany. Bookcase | 729,859 | June 2 | 628 | 137 | 104 | 1562 |
| Groebli, Joseph A., assignor to Kursheedt Manufacturing Company, New York, N. Y. Embroidering-machine | 717,843 | Jan. 6 | 632 | 139<br>140 | 102 | 135 |
| Groebli, Joseph A., assignor to Kursheedt Manufacturing Company, New York, N. Y. Machine for making trimmings | 736,595 | Aug. 18 | 2921 | 638<br>639 | 105 | 1640 |
| Groene, Theodore, *et al.* (See Hoff, Charles, assignor.) | | | | | | |
| Groene, William F. (See Le Blond and Groene.) | | | | | | |
| Groff, Aaron, Oakbottom, Pa. Running-gear | 746,694 | Dec. 15 | 2518 | 578<br>579 | 107 | 1682 |
| Groff, Diller B. (See Groff, Samuel A., assignor.) | | | | | | |
| Groff, Samuel A., assignor of one-half to D. B. Groff, Washington, D. C. Projectile | 740,849 | Oct. 6 | 871 | 195 | 106 | 1432 |
| Groff, Samuel A., assignor of one-half to D. B. Groff, Washington, D. C. Projectile | 741,328 | Oct. 13 | 1785 | 397 | 106 | 1645 |
| Grogan, James J., *et al.* (See Rieske, Otto G., assignor.) | | | | | | |
| Grohmann, Carl L., New York, N. Y., assignor to Dow Composing Machine Company. Clutch | 736,517 | Aug. 18 | 2768 | 605 | 105 | 1609 |
| Grondahl, Gudbrand L., Red Wing, Minn. Stove-controller | 739,076 | Sept. 15 | 3005 | 666 | 106 | 675 |
| Gröndahl, Johannes, Bægna, near Hönefas, Norway. Paper-making machine | 736,596 | Aug. 18 | 2924 | 639 | 105 | 1641 |
| Gronde, Charles W. and L. J., Chicago, Ill. Necktie-fastener | 737,096 | Aug. 25 | 3851 | 855 | 105 | 1853 |
| Gronde, Louis J. (See Gronde, Charles W. and L. J.) | | | | | | |
| Gronlund, Gustof. (See Weimar, Fred, assignor.) | | | | | | |
| Grooms, Richard M., Marfa, Tex. Spectacle-holder | 732,547 | June 30 | 5655 | 1254 | 104 | 2366 |
| Groppler, Robert G., Berlin, Germany. Producing compounds for disinfecting purposes | 740,424 | Oct. 6 | 76 | ------ | 106 | 1263 |
| Grosbetty, Peter, assignor of one-half to E. Weber, Monroeville, Ind. Corn-planter | 725,075 | Apr. 14 | 1225 | 277 | 103 | 1445 |
| Groscop, John. (See Borst and Groscop.) | | | | | | |
| Grose, Frederic. (See Jinkens, Thomas W., assignor.) | | | | | | |
| Groshon, John A., New York, N. Y. Turbine-engine | 725,439 | Apr. 14 | 1891 | 423<br>424 | 103 | 1585 |
| Grosland, Ole H., Kensett, Iowa. Clothes-line clamp | 732,293 | June 30 | 5164 | 1147 | 104 | 2263 |
| Grosland, Ole H., assignor of one-half to O. A. Nubson, Kensett, Iowa. Incubator | 730,639 | June 9 | 2025 | 450 | 104 | 1564 |
| Grosland, Ole H., assignor of one-half to O. A. Nubson, Kensett, Iowa. Brooder | 730,640 | June 9 | 2027 | 450 | 104 | 1564 |
| Gross, August, assignor to Manhattan Brass Company, New York, N. Y. Coin-receptacle | 721,887 | Mar. 3 | 424 | 93 | 103 | 93 |
| Gross, Frederick D., assignor of two-thirds to T. Goodwin and Colorado Iron Works Company, Denver, Colo. Means for treating ores | 728,908 | May 26 | 3933 | 873<br>874 | 104 | 886 |
| Gross, Harry A. (See Hills and Gross.) | | | | | | |
| Gross, Herman, Lafayette, Ind. Cooling means for explosive-engines | 719,326 | Jan. 27 | 3433 | 766 | 102 | 772 |
| Gross, Jacob H., Niantic, Ill. Rural-route mail conveyance | 730,909 | June 16 | 2520 | 560 | 104 | 1687 |
| Gross, John. (See Cohen and Gross.) | | | | | | |
| Gross, John, Carroll, Iowa. Hay-loader | 730,453 | June 9 | 1701 | 381 | 104 | 1491 |
| Gross, Louis A., San Francisco, Cal. Aerial-railway system | 725,838 | Apr. 21 | 2639 | 601 | 103 | 1760 |
| Gross, Ludwig L., Petaluma, Cal. Sterilizing and drying apparatus | 745,601 | Dec. 1 | 529 | 123 | 107 | 1210 |
| Gross, Max, assignor of one-half to I. Steinwitz, New York, N. Y. Baby-carriage | 740,123 | Sept. 29 | 4967 | 1114<br>1115 | 106 | 1129 |
| Gross, Paul H., and A. Peterson, Minneapolis, Minn. Dust-pan | 742,859 | Nov. 3 | 70 | 17 | 107 | 17 |
| Gross, Robert, Rastenberg, Germany. Stopping device for bottles | 723,459 | Mar. 24 | 3360 | 752 | 103 | 750 |
| Grosse, Eduard, Reudnitz, near Leipzig, Germany. Machine for feeding books and cutting the edges thereof | 729,331 | May 26 | 4685 | 1034<br>1035 | 104 | 1042 |
| Grosse, Eduard, Leipzig-Volkmarsdorf, Germany. Machine for cutting the edges of books | 741,002 | Oct. 6 | 1138 | 256<br>257<br>258 | 106 | 1487 |
| Grosse, Eduard, Leipzig-Volkmarsdorf, Germany. Machine for cutting the edges of books | 741,003 | Oct. 6 | 1141 | 258<br>259 | 106 | 1488 |
| Grossman, Henry A., Kansas City, Mo. Mounting for rimless eyeglasses or spectacles | 742,860 | Nov. 3 | 71 | 17 | 107 | 17 |
| Grossmann, Alfred, Leipzig, Germany. Incandescent gas-burner | 723,667 | Mar. 24 | 3737 | 839 | 103 | 826 |
| Grosvenor, William M., Edgewater Heights, N. J., assignor to General Chemical Company, New York, N. Y. Making acetate of soda | 741,243 | Oct. 13 | 1601 | ------ | 106 | 1608 |
| Grote Bottle Machine Company. (See Grote, Ludwig, assignor.) | | | | | | |
| Grote, Herman G., Bremen, Germany. Suspension-seat | 737,398 | Aug. 25 | 4426 | 990 | 105 | 1976 |

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| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | Spec. | Dr'g. | Vol. | Page. |
| Grote, Ludwig, London, England, assignor to Grote Bottle Machine Company, Jersey City, N. J. Machine for making glass bottles | 724,388 | Mar. 31 | 5179 | 1160, 1161, 1162 | 103 | 1140 |
| Grotewohl, Arthur L., Burlington, Iowa. Faucet for washbasins | 722,835 | Mar. 17 | 2227 | 499 | 103 | 504 |
| Grotta, David, Newark, N. J., assignor to Weingarten Brothers, New York, N. Y. Machine for threading tape into edging | 730,255 | June 9 | 1339 | 294 | 104 | 1414 |
| Grotz, Albert R., Wellsburg, W. Va. Apparatus for fire-finishing articles of glassware | 746,498 | Dec. 8 | 2153 | 495 | 107 | 1579 |
| Grotz, Christian, Akron, Ohio. Rubber tire | 731,677 | June 23 | 3974 | 886 | 104 | 2000 |
| Ground Hog Plow & Foundry Company. (See Rossetter, James R., assignor.) | | | | | | |
| Grout, A. P. (See Taylor, Charles A., assignor.) | | | | | | |
| Grout, Charles B., Orange, Mass. Controlling device for automobiles | 737,399 | Aug. 25 | 4427 | 991 | 105 | 1976 |
| Grouvelle, Jules, and H. Arquembourg, Paris, France. Regulator for carbureters for explosive-engines | 741,962 | Oct. 20 | 3045 | 679 | 106 | 1928 |
| Grove, Claude D., Colorado Springs, Colo. Recovering bromin | 728,566 | May 19 | 3296 | | 104 | 737 |
| Grove, Claude D., Colorado Springs, Colo. Barrel-filter | 736,597 | Aug. 18 | 2925 | 639, 640 | 105 | 1641 |
| Grove, Harry C., *et al.* (See Taylor, Santley M., assignor.) | | | | | | |
| Grove, Ralph M., Brooklyn, assignor to Acme Ball Bearing Caster Company, New York, N. Y. Ball-caster | 725,076 | Apr. 14 | 1226 | 277 | 103 | 1446 |
| Grove, Ray W., Lewistown, Mont. Means for feeding fuel to furnaces | 737,921 | Sept. 1 | 727 | 157, 158 | 106 | 159 |
| Grove, Robert K., Buffalo, N. Y. Vision-testing apparatus | 739,670 | Sept. 22 | 4112 | 917 | 106 | 929 |
| Grover, George B., Lynn, Mass. Heel | 724,095 | Mar. 31 | 4566 | 1027 | 103 | 1015 |
| Grover, John D., Syracuse, and G. M. Armstrong, Lakeland, N. Y. Weather-strip | 719,657 | Feb. 3 | 435 | 99 | 102 | 913 |
| Grover, Samuel K., Providence, R. I. Purse-locket | 723,600 | Mar. 24 | 3625 | 810 | 103 | 802 |
| Grover, Thomas E., and A. A. Bowe, Philadelphia, Pa. Heater | 726,158 | Apr. 21 | 3176 | 718 | 103 | 1871 |
| Groves, Hiram C., Woodward, Okla. Ter. Mill | 732,294 | June 30 | 5165 | 1147 | 104 | 2263 |
| Groves, Hiram C., Woodward, Okla. Ter. Grinding-mill | 739,492 | Sept. 22 | 3781 | 845, 846 | 106 | 858 |
| Groves, Roscoe J. (See King, Charles, assignor.) | | | | | | |
| Grow, Daniel F. (See Lewis, Grow, and Wolf.) | | | | | | |
| Grow, William H., Winfield, Kans. Protecting surfaces | 722,836 | Mar. 17 | 2228 | 499 | 103 | 504 |
| Grower, William F. (See Brown, Charles T., assignor.) | | | | | | |
| Grözinger, Otto, Ludwigsburg, Germany. Bottle-stopper | 728,907 | May 26 | 3932 | 873 | 104 | 886 |
| Grubb, Eugene H., Carbondale, assignor to G. W. Bowen, Pueblo, Colo. Combined land roller and corrugator | 739,307 | Sept. 22 | 3433 | 765 | 106 | 782 |
| Grubb, George R. (See Reynolds and Grubb.) | | | | | | |
| Grubb, Howard, Dublin, Ireland. Apparatus for facilitating the sighting of distant objects from submarine boats, barbettes, &c | 725,839 | Apr. 21 | 2641 | 601, 602 | 103 | 1761 |
| Grubb, Howard, Dublin, Ireland. Sight-mounting for guns | 734,060 | July 21 | 2508 | 585, 586 | 105 | 564 |
| Grubb, William E., Adams, Nebr. Wall-paper pasting and cutting machine | 740,010 | Sept. 29 | 4768 | 1073 | 106 | 1086 |
| Grubbs, John W., Latrobe, Pa. Motor-vehicle | 742,413 | Oct. 27 | 3935 | 884 | 106 | 2124 |
| Grubbs, Joseph W., assignor of one-half to B. F. Mosier and B. Cooper, Carterville, Mo. Receptacle for caps or cartridges | 735,757 | Aug. 11 | 1380 | 297 | 105 | 1292 |
| Grube, Cord E. J., Alt-Rahlstedt, near Hamburg, Germany. Lamp-burner | 740,425 | Oct. 6 | 77 | 16 | 106 | 1263 |
| Gruber, Marion E. (See Holley, James, assignor.) | | | | | | |
| Gruendike, P. S., *et al.* (See Bryant, William P., assignor.) | | | | | | |
| Gruenwald, August, Salem, Oreg. Chair | 732,736 | July 7 | 70 | 19 | 105 | 18 |
| Grüll, Hermann K., Vienna, Austria-Hungary. Electrically-driven centrifugal blast-fan | 725,558 | Apr. 14 | 2109 | 478 | 103 | 1631 |
| Grunauer, Georg, Berlin, Germany. Manufacture of cast-iron alloys | 723,601 | Mar. 24 | 3626 | | 103 | 802 |
| Grundell, Charles L. (See Tucker and Grundell.) | | | | | | |
| Grundig, Carl, Sorau, Germany. Holder for rolls of tickets, labels, or the like | 736,247 | Aug. 11 | 2270 | 491 | 105 | 1484 |
| Grundler, Joseph, Jersey City, N. J. Dumping mechanism for wagons | 726,051 | Apr. 21 | 2996 | 681 | 103 | 1834 |
| Grundy, John R., Philadelphia, Pa. Brush | 718,341 | Jan. 13 | 1530 | 339 | 102 | 343 |
| Grundy, John R., Philadelphia, Pa. Brush | 727,354 | May 5 | 993 | 216 | 104 | 214 |
| Gruner, William M., and W. C. Fink, Springdale, Pa. Safety trolley-alarm | 743,272 | Nov. 3 | 885 | 193 | 107 | 187 |
| Grünewald, Friedrich, assignor to H. Engelhardt, Berlin, Germany. Steam-generator | 743,491 | Nov. 10 | 1401 | 290 | 107 | 315 |
| Grünewald, Paul, Duisburg, Germany. Marine boiler | 740,270 | Sept. 29 | 5238 | 1178, 1179 | 106 | 1184 |
| Grunhagen, Henry, St. Paul, Minn. Starching-machine | 735,758 | Aug. 11 | 1382 | 297 | 105 | 1292 |
| Grunhut, James, *et al.* (See Horváth, Josef, assignor.) | | | | | | |
| Grupe, Durbin, Davenport, Iowa. Rotary drier | 738,106 | Sept. 1 | 1087 | 240, 241 | 106 | 235 |
| Grutt, Charles, *et al.* (See Redfield, John H., assignor.) | | | | | | |
| Grutt, Emil, *et al.* (See Redfield, John H., assignor.) | | | | | | |
| Grutt, Fred, *et al.* (See Redfield, John H., assignor.) | | | | | | |
| Grymes, John R., Danville, Va. Penholder | 722,698 | Mar. 17 | 1972 | 440 | 103 | 453 |
| Gual y S. Juan. (See Nieto y Abeillé and Gual y S. Juan.) | | | | | | |
| Guber, Frederick H., assignor to J. F. Manter, Kansas City, Mo. Rubber-tire-joint-closing machine | 741,788 | Oct. 20 | 2699 | 601 | 106 | 1855 |
| Gudex, Arthur J., *et al.* (See Farmer, Julius M., assignor.) | | | | | | |
| Gudex, V. A., *et al.* (See Farmer, Julius M., assignor.) | | | | | | |
| Guenther, Eduard, West New York, N. J. Mechanism for exerting pressure | 718,621 | Jan. 20 | 2101 | 457 | 102 | 481 |
| Guenther, Henry L., Chinook, Wash. Machine for flanging can-bodies | 723,602 | Mar. 24 | 3627 | 810, 811, 812, 813 | 103 | 803 |
| Guerin, Jules A., St. Maurice, France. Automatic system for stopping or slowing down trains | 746,499 | Dec. 8 | 2155 | 496 | 107 | 1579 |
| Guernsey, Charles C., Nashville, Tenn., assignor to American Non-Refillable Bottle Company. Non-refillable bottle | 741,578 | Oct. 13 | 2288 | 511 | 106 | 1753 |
| Guese, William E., assignor of one-half to G. A. Fox, Toledo, Ohio. Convertible gas-mixer | 720,134 | Feb. 10 | 1338 | 306 | 102 | 1124 |
| Guese, William E., assignor of one-half to G. A. Fox, Toledo, Ohio. Billiard-cue chalker | 737,226 | Aug. 25 | 4098 | 911 | 105 | 1906 |
| Guese, William E., assignor of one-half to G. A. Fox, Toledo, Ohio. Valve for vapor-stoves | 743,714 | Nov. 10 | 1807 | 381 | 107 | 403 |
| Guese, William E., assignor of one-half to G. A. Fox, Toledo, Ohio. Adjustable gas-burner | 748,066 | Dec. 29 | 5145 | 1163 | 107 | 2309 |
| Guest, Thomas, Union, Canada. Husking-rollers | 719,658 | Feb. 3 | 436 | 100 | 102 | 913 |
| Guest, William W., St. Louis, Mo. Steel-concrete construction | 735,759 | Aug. 11 | 1383 | 298 | 105 | 1292 |
| Guethler, William, Philadelphia, Pa. Gage-cock | 733,548 | July 14 | 1518 | 361 | 105 | 338 |
| Guett, Monroe, assignor to Hart & Hegeman Manufacturing Company, Hartford, Conn. Indicator for rotary snap-switches | 745,010 | Nov. 24 | 4239 | 919 | 107 | 949 |
| Guett, Monroe, assignor to Hart & Hegeman Manufacturing Company, Hartford, Conn. Handle for electric snap-switches | 745,011 | Nov. 24 | 4240 | 919 | 107 | 949 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page |
|---|---|---|---|---|---|---|
| Gugler, Godfrey W., Glenwood, Wis. Cinch-buckle | 730,256 | June 9 | 1342 | 294 | 104 | 1416 |
| Guichard, Emile V. S., Cassadaga, N. Y. Hame-tug | 743,492 | Nov. 10 | 1402 | 290 | 107 | 315 |
| Guidinger, John J., Newton, Wis. Hay-rack | 737,097 | Aug. 25 | 3852 | 856 | 105 | 1853 |
| Guilbert, Georges, New York, N. Y. Manifolding book or tablet | 744,536 | Nov. 17 | 3389 | 730 | 107 | 754 |
| Guild, George M., assignor to L. A. Guild, Cambridge, Mass. Piano-action flange | 736,384 | Aug. 18 | 2505 | 550, 551 | 105 | 1553 |
| Guild, Henry M., Erie, Pa., assignor to Tyrrell's Hygienic Institute, New York, N. Y. Rectal syringe | 730,822 | June 9 | 2341 | 519 | 104 | 1631 |
| Guild, Louise A. (See Guild, George M., assignor.) | | | | | | |
| Guild, Reuben, Washington, Kans. Lamp-wick | 733,581 | July 14 | 1585 | 377 | 105 | 353 |
| Guiley, Jacob H., Saginaw, J. H. Pierce and J. E. Wright, West Bay City, Mich. Spring-frame bicycle | 740,554 | Oct. 6 | 324 | 67, 68 | 106 | 1313 |
| Guilford, William C. J., Hallowell, Me. Acetylene-gas generator | 747,417 | Dec. 22 | 3886 | 875 | 107 | 2006 |
| Guilhou, Paul B., Paris, France. Separable flooring, boarded ceiling, or the like | 735,969 | Aug. 11 | 1778 | 381 | 105 | 1380 |
| Guillaume, Emile, Paris, France. Column for column-stills | 732,548 | June 30 | 5657 | 1255 | 104 | 2366 |
| Guillemet, François L., San Francisco, Cal. Air-brake | 722,837 | Mar. 17 | 2229 | 499, 500 | 103 | 505 |
| Guillette, Frederick A. and H. A., Taunton, assignors to Crompton & Knowles Loom Works, Worcester, Mass. Box-pattern mechanism for looms | 742,817 | Oct. 27 | 4645 | 1052 | 106 | 2276 |
| Guillette, Henri A. (See Guillette, Frederick A. and H. A.) | | | | | | |
| Guillon, Henri, Paris, France. Ignition device for explosion-engines | 741,329 | Oct. 13 | 1786 | 397 | 106 | 1645 |
| Guillotte, Philias. (See Gamache, Joseph, assignor.) | | | | | | |
| Guimaraës, Henrique D. (See D'Almeida and Guimaraës.) | | | | | | |
| Guimarães, Jose F., Bois-Colombes, France. Flash-light apparatus for photographic purposes | 745,052 | Nov. 24 | 4348 | 939 | 107 | 972 |
| Guimarães, Julio, Hamburg, Germany. Gas-burner | 740,645 | Oct. 6 | 493 | 108 | 106 | 1352 |
| Guimarães, Julio, Hamburg, Germany. Magazine photographic camera | 741,399 | Oct. 13 | 1935 | 428 | 106 | 1680 |
| Guinan, John, Jamaica, N. Y. Safety-razor | 740,555 | Oct. 6 | 325 | 68 | 106 | 1314 |
| Guinan, John, Jamaica, N. Y. Safety attachment for razors | 740,556 | Oct. 6 | 327 | 68 | 106 | 1314 |
| Guindon, Arthur, Montreal, Canada. Rotary engine. (Reissue) | 12,183 | Dec. 8 | 2438 | 557, 558 | 107 | 1645 |
| Guinet, Eugène, Fures-Tullins, France. Machine for manufacturing metallic leashes used in weaving | 730,113 | June 2 | 1065 | 239 | 104 | 1344 |
| Guinzburg, Victor, New York, N. Y. Button for hose-supporters | 734,170 | July 21 | 2715 | 639 | 105 | 608 |
| Guinzburg, Victor, assignor to I. B. Kleinert Rubber Company, New York, N. Y. Dress-shield attachment | 721,366 | Feb. 24 | 3673 | 836 | 102 | 1645 |
| Guinzburg, Victor, assignor to I. B. Kleinert Rubber Company, New York, N. Y. Hose-supporter | 739,411 | Sept. 22 | 3647 | 810 | 106 | 828 |
| Guion, Louis I. (See Wrigley, Lees J., assignor.) | | | | | | |
| Guldlin, Olaf N., Fort Wayne, Ind. Device for feeding air and steam to furnaces | 721,695 | Mar. 3 | 84 | 17, 18 | 103 | 19 |
| Guldlin, Olaf N., Fort Wayne, Ind. Treating gas | 731,412 | June 16 | 3462 | 774 | 104 | 1879 |
| Güldner, Hugo. (See Diesel and Güldner.) | | | | | | |
| Gulentz, Joseph M., assignor to G. Westinghouse, Pittsburg, Pa. Apparatus for applying terminal wires to electric-lamp glowers | 728,567 | May 19 | 3298 | 730 | 104 | 737 |
| Gulentz, Joseph M., assignor to G. Westinghouse, Pittsburg, Pa. Applying terminal wires to electric-lamp glowers | 728,568 | May 19 | 3299 | 730 | 104 | 738 |
| Guleser, James T., Ludlow, Ky. Dust and air guard for windows | 727,936 | May 12 | 2115 | 471 | 104 | 469 |
| Gulich, Edward N., West Hampstead, London, England. Rotary pump or motor applicable also as a fluid-meter | 726,907 | May 5 | 140 | 33 | 104 | 32 |
| Gulick, John F., *et al.* (See Best, William N., assignor.) | | | | | | |
| Gull, Rudolf. (See Busch, Gull, and Barry.) | | | | | | |
| Gulland, Charles, Pittsburg, Pa. Controller mechanism | 745,491 | Dec. 1 | 343 | 80 | 107 | 1173 |
| Gulliford, George L., assignor of one-half to C. J. Davisson, Bloomington, Ill. Drop-switch for telephones | 737,922 | Sept. 1 | 729 | 158 | 106 | 159 |
| Gulliver, Arthur H. (See Tallant, William, assignor.) | | | | | | |
| Gummer, August M., Dayton, Ohio. Gas-regulating cock | 746,500 | Dec. 8 | 2157 | 496 | 107 | 1579 |
| Gumnitz, Walther, Dresden-Briesnitz, and M. J. Seydel, Dresden-Cotta, Germany. Leaf-turner for books | 739,308 | Sept. 22 | 3434 | 765 | 106 | 782 |
| Gumphert, George A., Philadelphia, Pa. Shaking-grate | 742,631 | Oct. 27 | 4326 | 973, 974 | 106 | 2206 |
| Gunby, Joseph H., Chico, assignor of one-half to T. H. Morgan, Butte County, Cal. Fruit-tray | 737,607 | Sept. 1 | 91 | 20 | 106 | 22 |
| Gunckel, Winfield O., Terre Haute, Ind. Cable-grip | 743,381 | Nov. 3 | 1115 | 237 | 107 | 236 |
| Gunckel, Winfield O., assignor of twelve twenty-fifths to J. C. Casto, Terre Haute, Ind. Traction-railway | 718,570 | Jan. 13 | 2007 | 437 | 102 | 446 |
| Gunderson, Thomas, McIntosh, Minn. Snow or ice automobile | 747,064 | Dec. 15 | 3230 | 736 | 107 | 1845 |
| Gundlach, Diedrich W., Altona, Germany. Apparatus for fire-polishing | 737,400 | Aug. 25 | 4430 | 991 | 105 | 1977 |
| Gundlach Optical Company. (See Brehm, Frederick W., assignor.) | | | | | | |
| Gunn, Alan P., Baltimore, Md. Folding car-step | 741,486 | Oct. 13 | 2105 | 468 | 106 | 1716 |
| Gunn, Charles H., Denver, Colo. Tenpin centering and leveling device | 732,024 | June 23 | 4624 | 1033 | 104 | 2138 |
| Gunn, Charles H., Salt Lake City, Utah. Wagon-brake | 737,098 | Aug. 25 | 3853 | 856 | 105 | 1853 |
| Gunn, Hugh F. (See Heron, Christopher, assignor.) | | | | | | |
| Gunn, John J., Ypsilanti, Mich. Insulated rail-joint | 739,077 | Sept. 15 | 3006 | 666 | 106 | 676 |
| Gunnell, Elias, assignor of one-half to W. I. Babcock, Chicago, Ill. Pneumatic rivet-holder | 731,772 | June 23 | 4149 | 925 | 104 | 2036 |
| Gunnell, William. (See Craig and Gunnell.) | | | | | | |
| Gunning, James F. J., Toronto, Canada. Cap or cover for bottles or other closures | 724,851 | Apr. 7 | 814 | 187, 188 | 103 | 1343 |
| Gunning, James F. J., Toronto, Canada. Garment-fastening or other holding device | 728,796 | May 19 | 3724 | 831 | 104 | 827 |
| Günster, Heinrich. (See Profitlich and Günster.) | | | | | | |
| Gunter, Andrew J., Norwood, Ohio. Bellows | 721,367 | Feb. 24 | 3674 | 837 | 102 | 1646 |
| Gunther, James J., Boston, Mass. Convertible pipe and bolt wrench and cutter | 722,012 | Mar. 3 | 666 | 148 | 103 | 144 |
| Gunther, John J., and F. E. Geiger, Chicago, Ill. Heating-drum | 738,320 | Sept. 8 | 1583 | 342 | 106 | 356 |
| Gunthorp, Percy J. M., London, England. Support for weak or deformed feet | 730,366 | June 9 | 1530 | 339 | 104 | 1456 |
| Guntrum, Carl. (See Selg and Guntrum.) | | | | | | |
| Guntrum, Hugo. (See Fischer and Guntrum.) | | | | | | |
| Gürber, August, Würzburg, Germany. Concentrating solutions | 723,152 | Mar. 17 | 2773 | 623 | 103 | 617 |
| Gurney, Albert J., Streator, Ill. Portable forge | 724,852 | Apr. 7 | 819 | 188 | 103 | 1344 |
| Gurney, Caleb S., Portsmouth, N. H. Umbrella | 722,229 | Mar. 10 | 1070 | 235 | 103 | 243 |
| Gurney, Frederick W., Chattanooga, Tenn. Ball-bearing | 717,987 | Jan. 6 | 884 | 197 | 102 | 190 |
| Gurtner, Adolf A., Bern, Switzerland. Producing colored photographs | 730,454 | June 9 | 1704 | 381 | 104 | 1492 |
| Gurwitsch, Leo, Kiew, Russia. Electrolytic apparatus | 733,643 | July 14 | 1685 | 400 | 105 | 373 |
| Gury, John B., St. Louis, Mo. Chalk-holder | 720,240 | Feb. 10 | 1533 | 351 | 102 | 1163 |
| Gus. V. Brecht Butcher Supply Company. (See Cramer and Schraudner, assignors.) | | | | | | |
| Gusinde, Alois, Berlin, Germany. Device for teaching music and singing | 736,960 | Aug. 25 | 3622 | 802 | 105 | 1806 |
| Guss, Frank C., St. Louis, Mo. Animal catching and holding device | 729,332 | May 26 | 4689 | 1036 | 104 | 1043 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|
| | | | Spec. | Dr'g. | Vol. | Page. |
| Guss, Samuel M., Reading, Pa. Feeding water to steam-boilers | 722,838 | Mar. 17 | 2232 | 500 | 103 | 505 |
| Gusswein, Henry M. (See Mahan, William B., assignor.) | | | | | | |
| Gustafsen, Oscar, New York, N. Y. Portable drill-press | 721,797 | Mar. 3 | 254 | 56, 57 | 103 | 56 |
| Gustafson, Charles J., Sequatchie, Tenn. Self-locking loose wheel for cars, &c | 717,742 | Jan. 6 | 413 | 96 | 102 | 91 |
| Gustafson, Gideon L., Philadelphia, Pa. Folding ladder | 732,295 | June 30 | 5167 | 1148 | 104 | 2264 |
| Gustaveson, Charles J., Salt Lake City, Utah. Bottle-closure | 728,909 | May 26 | 3936 | 874 | 104 | 887 |
| Gustaveson, Charles J., Salt Lake City, Utah. Non-refillable bottle | 731,773 | June 23 | 4151 | 926 | 104 | 2036 |
| Gustaveson, Joseph C., Providence, Utah. Non-refillable bottle | 728,099 | May 12 | 2402 | 535 | 104 | 529 |
| Gustin, Mahlon R., assignor of one-half to G. Bond, Sullivan, Ind. Axle | 744,066 | Nov. 17 | 2514 | 539 | 107 | 565 |
| Gutenkunst, William, Milwaukee, Wis. Corn husker and shredder | 736,961 | Aug. 25 | 3623 | 802 | 105 | 1806 |
| Gutenkunst, William, Milwaukee, Wis. Corn-separating device for corn-huskers | 738,321 | Sept. 8 | 1584 | 342 | 106 | 357 |
| Guth, Henry J., Evansville, Ind. Device for operating elevator-gates | 736,090 | Aug. 11 | 2008 | 428 | 105 | 1429 |
| Guth, Samuel, Washington, Ill. Reversing-gear | 735,094 | Aug. 4 | 86 | 21 | 105 | 1001 |
| Guthrie, James, Chicago, Ill. Stopper device for non-refillable bottles, &c | 731,048 | June 16 | 2779 | 619 | 104 | 1741 |
| Guthrie, James D., Shelbyville, Ky. Drying-reel | 745,825 | Dec. 1 | 942 | 211<br>212 | 107 | 1300 |
| Guthrie, Patrick F. (See Van Riper and Guthrie.) | | | | | | |
| Guthrie, William S., Terrell, Tex. Automatic electric switch | 746,695 | Dec. 15 | 2519 | 579 | 107 | 1682 |
| Gutmann, Emil, New York, N. Y. Garter | 717,844 | Jan. 6 | 635 | 140 | 102 | 136 |
| Gutmann, Julius, Berlin, Germany, assignor to Fabrik für Spezialnähmaschinen A. G., (Patente Julius Gutmann,) Zurich, Switzerland. Buttonhole-machine | 723,460 | Mar. 24 | 3361 | 753<br>754 | 103 | 750 |
| Gutmann, Ludwig, Peoria, assignor to Sangamo Electric Company, Springfield, Ill. Electric meter | 747,968 | Dec. 29 | 4947 | 1118 | 107 | 2266 |
| Gutmann, Ludwig, Peoria, and R. C. Lanphier, assignors to Sangamo Electric Company, Springfield, Ill. Electric meter | 738,902 | Sept. 15 | 2708 | 598<br>599 | 106 | 614 |
| Gutner, Charles R., Brooklyn, N. Y. Soldering-iron | 724,853 | Apr. 7 | 820 | 188 | 103 | 1344 |
| Gutsch, Axel. (See Bernard, Harry R., assignor.) | | | | | | |
| Guttenberg, Frederick, Brooklyn, N. Y. Cooler | 719,212 | Jan. 27 | 3209 | 716 | 102 | 723 |
| Güttner, Max, Chemnitz, and R. Baeger, Ehrenberg, Germany. Centrifugal machine | 730,114 | June 2 | 1068 | 240 | 104 | 1344 |
| Güttner, Max, Chemnitz, and R. Baeger, Ehrenberg, near Altenburg, Germany. Centrifugal machine | 747,604 | Dec. 22 | 4218 | 948<br>949 | 107 | 2082 |
| Guttridge, Homer C., Cullison, Kans. Cross-line buckle | 745,602 | Dec. 1 | 530 | 124 | 107 | 1210 |
| Guy, George G., assignor to United States Wind Engine & Pump Company, Batavia, Ill. Tower | 722,839 | Mar. 17 | 2233 | 500 | 103 | 505 |
| Guyer, Clinton, assignor of one-half to W. C. Crawford, Muncy, Pa. Rotary engine | 746,501 | Dec. 8 | 2158 | 496<br>497 | 107 | 1580 |
| Guyer, Clinton, assignor of one-half to W. C. Crawford, Muncy, Pa. Joint for water-pipes or the like | 746,828 | Dec. 15 | 2767 | 638 | 107 | 1738 |
| Guyton, Henry P., Chicago, Ill. Box | 732,848 | July 7 | 271 | 68 | 105 | 60 |
| Guzman, Gerardo V., Sucre, Bolivia. Reducing and separating silver | 729,760 | June 2 | 439 | 99 | 104 | 1217 |
| Gwinn, George W. (See Crain and Gwinn.) | | | | | | |
| Gwinn, George W., and H. C. Smith, Baltimore, Md., assignors to Raymond Button Company of Baltimore City. Button-setting machine | 719,939 | Feb. 3 | 935 | 218 | 102 | 1022 |
| Gwynn, Emmer F., Pittsburg, Pa. Gas-burner | 738,536 | Sept. 8 | 1999 | 436 | 106 | 445 |
| Gwynn, Emmer F., Pittsburg, Pa. Fuel-burner | 738,537 | Sept. 8 | 2000 | 436 | 106 | 445 |
| Gwynne, John, and E. W. Sargeant, Hammersmith, England. Apparatus for aerating liquids | 721,036 | Feb. 17 | 3011 | 691 | 102 | 1487 |
| Gyldenborg, Jonas J., Hillhouse, Miss. Wheeled scraper | 745,826 | Dec. 1 | 944 | 212 | 107 | 1300 |
| Gysling, Emanuel H., West Hoboken, N. J. Garment-clasp | 719,462 | Feb. 3 | 88 | 21 | 102 | 844 |
| H. Channon Company. (See Wilson, Edward F., assignor.) | | | | | | |
| H. Krantz Manufacturing Company. (See Simpson, Alexander B., assignor.) | | | | | | |
| H. Lieber Company. (See Duthie, Archibald, assignor.) | | | | | | |
| H. B. Sherman Manufacturing Company. (See Sherman, Howard B., assignor.) | | | | | | |
| H. C. White Co. (See White and Mallison, assignors.) | | | | | | |
| H. C. White Company. (See White, Hawley C., assignor.) | | | | | | |
| H. D. Smith and Company. (See Ward, William S., assignor.) | | | | | | |
| H. H. Franklin Manufacturing Company. (See Noxon, Charles P. L., assignor.) | | | | | | |
| H. L. Dixon Company. (See Dixon, Henry L., assignor.) | | | | | | |
| H. W. Butterworth & Sons Company. (See Lownsbury, Jehu H., assignor.) | | | | | | |
| Haack, Frank, Racine, Minn. Anchor for check-row wires | 727,131 | May 5 | 600 | 129 | 104 | 130 |
| Haas, Abraham, and E. Baruch, San Francisco, Cal. Raw-wool-washing apparatus | 729,333 | May 26 | 4691 | 1036 | 104 | 1043 |
| Haas, Charles, Austin, Tex. Casing water-packer | 730,257 | June 9 | 1344 | 295 | 104 | 1416 |
| Haas, Cyrus A. (See Feldmann and Haas.) | | | | | | |
| Haas, Cyrus A., St. Louis, Mo. Gas arc-lamp | 729,158 | May 26 | 4378 | 966 | 104 | 977 |
| Haas, Cyrus A., St. Louis, Mo. Automatic gas-burner | 732,068 | June 30 | 4711 | 1052 | 104 | 2169 |
| Haas, Cyrus A., St. Louis, Mo. Incandescent gas-lamp | 733,192 | July 7 | 867 | 211 | 105 | 182 |
| Haas, Cyrus A., W. B. Knight, and B. Kochs, assignors to Schoenthaler Manufacturing Company, St. Louis, Mo. Machine for making folding partition-packing for shipping-boxes | 746,325 | Dec. 8 | 1862 | 424<br>425 | 107 | 1516 |
| Haas, Edward, San Antonio, Tex. Plow | 724,854 | Apr. 7 | 822 | 189 | 103 | 1345 |
| Haas, Franz, Prague, Austria-Hungary. Orthopedic corset | 738,995 | Sept. 15 | 2856 | 634 | 106 | 645 |
| Haas, Isaac H., and J. W. Crow, Atlanta, Ga. Spring-bed | 745,345 | Dec. 1 | 52 | 11 | 107 | 1112 |
| Haas, Louis, Mannheim, assignor to Badische Anilin & Soda Fabrik, Ludwigshafen-on-the-Rhine, Germany. Sulfurized cotton-dye and making same | 718,342 | Jan. 13 | 1531 | ------ | 102 | 344 |
| Haas, Max, Aue, Germany. Electrolytic apparatus | 718,249 | Jan. 13 | 1347 | 299 | 102 | 305 |
| Haas, Max, Aue, Germany. Apparatus for bleaching textile fabrics, &c | 729,574 | June 2 | 101 | 25, 26 | 104 | 1147 |
| Haas, Max, assignor of one-half to H. Schulhoff, Chicago, Ill. Dust-protector for bottle-mouths | 736,719 | Aug. 18 | 3161 | 697 | 105 | 1689 |
| Haas, Philip, Dayton, Ohio. Water-closet | 720,021 | Feb. 10 | 1119 | 256 | 102 | 1077 |
| Haas, Philip, Dayton, Ohio. Antifreezing compression-valve | 720,022 | Feb. 10 | 1122 | 256<br>257 | 102 | 1078 |
| Haas, Walter G., Dayton, Ohio. Fishing-reel | 724,465 | Apr. 7 | 87 | 21 | 103 | 1187 |
| Haas, Walter G., Dayton, Ohio. Machine for attaching metallic strips to the edges of vessels | 732,849 | July 7 | 273 | 68, 69 | 105 | 61 |
| Haas, Walter G., assignor of one-half to Dayton Paper Novelty Co., Dayton, Ohio. Paper-bag holder | 745,179 | Nov. 24 | 4626 | 1003 | 107 | 1029 |
| Haase, Albert, assignor to F. Krupp, Essen-on-the-Ruhr, Germany. Charging-shot for shrapnel | 727,132 | May 5 | 601 | ------ | 104 | 130 |
| Haase, Charles L., Jr., assignor to Northwestern Furniture Company, Milwaukee, Wis. Motor-vehicle | 720,241 | Feb. 10 | 1534 | 351 | 102 | 1163 |
| Haase, Charles L., Jr., assignor to Northwestern Furniture Company, Milwaukee, Wis. Piston | 727,937 | May 12 | 2117 | 471 | 104 | 469 |
| Haase, Charles L., Jr., assignor to Northwestern Furniture Company, Milwaukee, Wis. Gearing | 741,659 | Oct. 20 | 2430 | 545<br>546 | 106 | 1800 |
| Haase, Leo G., Oakpark, Ill. Cement-molding apparatus | 734,854 | July 28 | 4021 | 938<br>939 | 105 | 894 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drgs. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Haase, Leo G., Oakpark, Ill. Concrete-mixer | 735,970 | Aug. 11 | 1779 | 381, 382 | 105 | 1380 |
| Haase, Otto, Elberfeld, Germany. Railway-rail track-bridge | 732,069 | June 30 | 4713 | 1052 | 104 | 2170 |
| Habbert, Enno H. A., and J. L. Allen, Troy, N. Y., assignors to Wheeler & Wilson Manufacturing Company, Bridgeport, Conn. Thread-cutter for sewing-machines | 724,282 | Mar. 31 | 4965 | 1111 | 103 | 1095 |
| Hachenberg, Louis, New York, N. Y. Weighing-machine | 728,569 | May 19 | 3300 | 731, 732 | 104 | 738 |
| Hachenberg, Louis, New York, N. Y. Weighing-machine | 744,067 | Nov. 17 | 2515 | 539 | 107 | 565 |
| Hachmann, Frederick, assignor to B. S. Griffin and B. F. Simon, St. Paul, Minn. Grain-door for railway-cars | 742,983 | Nov. 3 | 286 | 64 | 107 | 62 |
| Hachmann, Frederick, assignor of three-fourths to E. R. Wiswell, B. F. Simon, St. Paul, and L. H. Stiles, Redwing, Minn. Magnetic-power mechanism | 748,182 | Dec. 29 | 5359 | 1217 | 107 | 2355 |
| Hachmann, Frederick, assignor to A. P. Lothrop, H. S. Johnson, C. L. Wells, and A. D. Ward, St. Paul, Minn. Connecting and strain-equalizing device | 733,322 | July 7 | 1109 | 263, 264 | 105 | 233 |
| Hack, Ernest B., assignor to American Filter Press Extraction Company, Denver, Colo. Valve | 745,827 | Dec. 1 | 946 | 212 | 107 | 1301 |
| Hack, Ernest B., assignor to American Filter Press Extraction Company, Denver, Colo. Extracting metals from ores | 745,828 | Dec. 1 | 946 | 213 | 107 | 1301 |
| Hacker, Ludwig M. F., Malchin, Germany. Means for ascertaining the load on wagons | 748,067 | Dec. 29 | 5147 | 1163, 1164 | 107 | 2310 |
| Hackett, Alvin J. (See Lucas, Charles E., assignor.) | | | | | | |
| Hackett, Charles H. (See Marsh and Hackett.) | | | | | | |
| Hackett & Dailey Creamery Supply Company. (See Marsh and Hackett, assignors.) | | | | | | |
| Hackett, Edward J., *et al.* (See Ogden, Otto G., assignor.) | | | | | | |
| Hackett, William J., Gloucester, Mass. Torch | 731,891 | June 23 | 4356 | 972 | 104 | 2083 |
| Hadaway, John B., Brockton, Mass. Stitch-separating machine | 719,584 | Feb. 3 | 316 | 73 | 102 | 888 |
| Hadaway, John B., Brockton, Mass. Welting for welt-shoes | 725,077 | Apr. 14 | 1229 | 278 | 103 | 1446 |
| Hadaway, John B., Brockton Mass. Welting for welt-shoes | 744,752 | Nov. 24 | 3787 | 816 | 107 | 856 |
| Hadaway, William S., Jr., East Orange, N. J. Electric heater | 737,227 | Aug. 25 | 4100 | 911 | 105 | 1906 |
| Hadden, William A., New York, N. Y. Scenic apparatus | 742,632 | Oct. 27 | 4329 | 974 | 106 | 2207 |
| Haddock, Henry E. (See Brill and Haddock.) | | | | | | |
| Haddock, Henry E., assignor to J. A. Brill, Philadelphia, Pa. Sand-box for railway-cars or the like | 739,803 | Sept. 22 | 4356 | 977 | 106 | 985 |
| Haddock, William J., Iowa City, Iowa. Downdraft water-heater | 742,633 | Oct. 27 | 4330 | 974 | 106 | 2208 |
| Haddorff, Charles A., assignor to Haddorff Piano Company, Rockford, Ill. Plate for pianos | 745,103 | Nov. 24 | 4462 | 965 | 107 | 995 |
| Haddorff Piano Company. (See Haddorff, Charles A., assignor.) | | | | | | |
| Haden, John. (See Howarth and Haden.) (Reissue.) | | | | | | |
| Hadfield, Robert A., Sheffield, England. Armor-piercing projectile | 720,242 | Feb. 10 | 1535 | 351 | 102 | 1163 |
| Hadfield, Robert A., Sheffield, England. Toughening manganese steel | 731,450 | June 23 | 3560 | ..... | 104 | 1918 |
| Hadfield, Robert A., Sheffield, England. Steel | 735,365 | Aug. 4 | 615 | ..... | 105 | 1113 |
| Hadfield, Robert A., Sheffield, England. Chromium-nickel steel | 735,666 | Aug. 4 | 1208 | ..... | 105 | 1237 |
| Hadfield, Robert A., Sheffield, England. Manufacture of steel | 743,715 | Nov. 10 | 1809 | ..... | 107 | 403 |
| Hadfield, Robert A., Sheffield, England. Magnetic composition and making same | 745,829 | Dec. 1 | 948 | ..... | 107 | 1301 |
| Hadka, Joseph, Chicago, Ill. Latch | 743,716 | Nov. 10 | 1810 | 382 | 107 | 403 |
| Hadley, Charles E., Chicopee, Mass., assignor to W. C. Oastler, New York, N. Y. Push-wagon for street-cleaning or other purposes | 734,543 | July 28 | 3417 | 798 | 105 | 771 |
| Hadley, Edward W., New Britain, assignor to R. A. Moore, Sr. and Jr., Kensington, Conn. Buckle | 717,743 | Jan. 6 | 415 | 97 | 102 | 91 |
| Hadley, William A. M. (See Alke and Hadley.) | | | | | | |
| Haensler, William. (See Drucker and Haensler.) | | | | | | |
| Haenze, Emil. (See Kumber and Haenze.) | | | | | | |
| Haenze, Henry. (See Kumber and Haenze.) | | | | | | |
| Haertlein, Albrecht, Marquette, Kans. Harvester threshing-machine | 724,855 | Apr. 7 | 823 | 189 | 103 | 1345 |
| Haeseler, Charles H., Easton, Pa., assignor to Haeseler-Ingersoll Pneumatic Tool Company, New York, N. Y. Pneumatic tool | 725,337 | Apr. 14 | 1697 | 383 | 103 | 1544 |
| Haeseler, Charles H., Easton, Pa., assignor to Haeseler-Ingersoll Pneumatic Tool Company, New York, N. Y. Pneumatic tool | 726,221 | Apr. 21 | 3297 | 748, 749 | 103 | 1897 |
| Haeseler, Charles H., Easton, Pa., assignor to Haeseler-Ingersoll Pneumatic Tool Company, New York, N. Y. Throttle-valve lock for pneumatic hammers | 734,700 | July 28 | 3703 | 867 | 105 | 830 |
| Haeseler, Charles H., and A. H. Taylor, Philadelphia, Pa. Rotary drill | 721,037 | Feb. 17 | 3012 | 692 | 102 | 1487 |
| Haeseler-Ingersoll Pneumatic Tool Company. (See Haeseler, Charles H., assignor.) | | | | | | |
| Hafer, Edward, Cincinnati, Ohio. Tobacco-pouch | 717,674 | Jan. 6 | 273 | 68 | 102 | 58 |
| Haffey, William F., *et al.* (See Earl, Harry A., assignor.) | | | | | | |
| Hafften, Hans, Woodside, assignor of one-third to F. Knecht, New York, N. Y. Non-refillable bottle | 722,974 | Mar. 17 | 2455 | 550 | 103 | 551 |
| Hafner, Richard P., Passaic, N. J. Holder for marking or erasive material | 745,053 | Nov. 24 | 4350 | 940 | 107 | 972 |
| Hagan, Charles. (See Hagan, Louis T., assignor.) | | | | | | |
| Hagan, George H., Philadelphia, Pa. Marble or ball projector | 730,258 | June 9 | 1345 | 295 | 104 | 1416 |
| Hagan, George W., Guiderock, Nebr. Mail-bundling device | 723,381 | Mar. 24 | 3233 | 725 | 103 | 722 |
| Hagan, Ira B., North Lamoine, Me. Measuring instrument | 726,677 | Apr. 28 | 4204 | 950 | 103 | 2093 |
| Hagan, Joseph A., Janesville, Wis. Adjustable staging | 734,321 | July 21 | 3017 | 710 | 105 | 671 |
| Hagan, Louis T., assignor of one-half to C. Hagan, Winchester, Ky. Carbureter and governor for hydrocarbon-engines | 731,999 | June 23 | 4555 | 1016, 1017 | 104 | 2124 |
| Hagedorn, Henry F., assignor to Cleveland Twist Drill Company, Cleveland, Ohio. Chuck for drills or other tools | 720,688 | Feb. 17 | 2389 | 547 | 102 | 1355 |
| Hagedorn, John H., Cleveland, Ohio. Canvas-covered knockdown house | 720,344 | Feb. 10 | 1724 | 392 | 102 | 1204 |
| Hagel, Louis W., Jacksonville, Ill. Sash-lock, lift, and sash-supporter | 734,855 | July 28 | 4024 | 939 | 105 | 894 |
| Hagemeister, Amos, Absaraka, N. D. Hay-rack attachment for wagon-bolsters | 721,696 | Mar. 3 | 86 | 18 | 103 | 19 |
| Hagen, Arthur T., and D. M. Cooper, assignors to A. T. Hagen Company, Rochester, N. Y. Drier | 735,366 | Aug. 4 | 617 | 127 | 105 | 1113 |
| Hagen, Arthur T., D. M. Cooper, and J. Kane, assignors to A. T. Hagen Company, Rochester, N. Y. Mangle | 729,928 | June 2 | 733 | 164 | 104 | 1277 |
| Hagen, Claude L., New York, N. Y. Centrifugal amusement-way | 723,525 | Mar. 24 | 3495 | 782 | 103 | 775 |
| Hagen, Claude L., New York, N. Y. Aerial centrifugal way | 738,434 | Sept. 8 | 1792 | 390, 391 | 106 | 400 |
| Hagen, Ferdinand J., New York, N. Y. Wave-motor | 738,996 | Sept. 15 | 2856 | 634 | 106 | 645 |
| Hagen, Fredrick, Belvidere, Ill. Snapping-rolls for corn-husking machines | 721,798 | Apr. 21 | 2998 | 57 | 103 | 56 |
| Hagen, Julius E., Santa Monica, Cal. Adjustable land-marker | 743,981 | Nov. 10 | 2311 | 493 | 107 | 513 |
| Hagen, William, *et al.* (See Murray, Michael R., assignor.) | | | | | | |
| Hagenbach, Rudolf. (See Dollfus and Hagenbach.) | | | | | | |
| Hagenmüller, Christian, Erfurt, Germany. Apparatus for the treatment of yeast | 726,052 | Mar. 3 | 255 | 681 | 103 | 1835 |
| Hager, George C., Danbury, Conn. Hat-rack | 726,527 | Apr. 28 | 3923 | 887 | 103 | 2037 |
| Hager, Otto F., Buffalo, N. Y. Beer-cooler | 748,496 | Dec. 29 | 5923 | 1345 | 107 | 2479 |
| Hagerman, George F., Chelmsford, Mass. Double wall-block | 739,858 | Sept. 29 | 4461 | 1001 | 106 | 1021 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Hagerty, L. D. (See Carlisle and Elder, assignors.) | | | | | | |
| Hagey, James C. (See Arno and Hagey.) | | | | | | |
| Hagey, James C., and O. H. Arno, Boston, Mass. Organ | 746,829 | Dec. 15 | 2768 | 638, 639, 640 | 107 | 1738 |
| Haggard, John D., assignor to Haggard & Marcusson Company, Chicago, Ill. Wire mattress | 739,171 | Sept. 15 | 3178 | 703 | 106 | 711 |
| Haggard & Marcusson Company. (See Haggard, John D., assignor.) | | | | | | |
| Haggerty, Charles H., New York, N. Y. Shutter-latch | 745,492 | Dec. 1 | 344 | 80 | 107 | 1173 |
| Haggerty, Henry D., New York, N. Y. Car and line indicator for street-railways | 744,068 | Nov. 17 | 2520 | 539 | 107 | 566 |
| Haggerty, Hugh, *et al.* (See Perkins, George C., assignor.) | | | | | | |
| Haggstrom, Charles J., Warren, Pa. Vise | 740,271 | Sept. 29 | 5241 | 1179 | 106 | 1185 |
| Hagle, Mark, Wausaukee, Wis. Ball-caster | 718,343 | Jan. 13 | 1532 | 339 | 102 | 344 |
| Hagner, Alexander R., Hagerstown, Md. Window-shade | 731,774 | June 23 | 4152 | 926 | 104 | 2036 |
| Hagner, Gustave A., Meriden, Conn. Photographic-plate-developing apparatus | 733,034 | July 7 | 587 | 143 | 105 | 125 |
| Hagner, Gustave A., Meriden, Conn. Photographic-plate holder | 740,850 | Oct. 6 | 872 | 195 | 106 | 1432 |
| Hagspiel, Wilhelm, assignor to Apparatebauanstalt Ludwigsburg G. M. B. H., Ludwigsburg, Germany. Device for dressing valve-seats | 742,313 | Oct. 27 | 3759 | 842 | 106 | 2088 |
| Hague, Frank O., Canisteo, N. Y. Cream cooler and aerator | 728,392 | May 19 | 2963 | 653 | 104 | 668 |
| Hahmann, Josef, Berlin, Germany. Secondary-battery electrode | 724,856 | Apr. 7 | 825 | 190 | 103 | 1345 |
| Hahn, Edmund, assignor of one-half to A. H. Gassard, Kansas City, Mo. Sausage-stuffing machine | 736,720 | Aug. 18 | 3162 | 698 | 105 | 1689 |
| Hahn, Frank. (See Salaman, Frederick A., assignor.) | | | | | | |
| Hahn, Frank. (See Wahl, Chris, assignor.) | | | | | | |
| Hahn, John, Los Angeles, Cal. Pump-piston | 735,248 | Aug. 4 | 409 | 80 | 105 | 1068 |
| Hahn, John N. (See Kundmueller, George, assignor.) | | | | | | |
| Hahn, John N., Cleveland, Ohio. Packing-case | 734,856 | July 28 | 4025 | 940 | 105 | 895 |
| Hahn, John N., Cleveland, Ohio. Packing-case for tumblers, bottles, &c | 742,022 | Oct. 20 | 3161 | 706 | 106 | 1951 |
| Hahn, John N., Cleveland, Ohio. Means for packing fragile vessels | 747,167 | Dec. 15 | 3417 | 774 | 107 | 1887 |
| Hahn, Martin, Munich, Germany. Production of fermented beverages | 717,744 | Jan. 6 | 416 | ------ | 102 | 91 |
| Hahn, Max F., Charlottenburg, Germany. Tobacco-pipe | 727,789 | May 12 | 1837 | 410 | 104 | 410 |
| Hahn, Otto R., Leipzig, Germany. Device for the preservation of coffins | 724,696 | Apr. 7 | 516 | 122 | 103 | 1279 |
| Haigh, Henry S., and T. Taylor, Manchester, England. Tram-seat | 719,940 | Feb. 3 | 938 | 219 | 102 | 1022 |
| Haigh, Mason, Cincinnati, Ohio. Paper-bag machine | 726,528 | Apr. 28 | 3924 | 887 | 103 | 2037 |
| Haigh, Samuel, Vancouver, Canada. Gas-burner cut-off | 738,030 | Sept. 1 | 940 | 208 | 106 | 205 |
| Haight, A. C., *et al.* (See Thompson, William P., assignor.) | | | | | | |
| Haight, Charlotte H., Oswego, Ill. Griddle-greaser | 748,367 | Dec. 29 | 5666 | 1292 | 107 | 2422 |
| Haight, J. N., *et al.* (See Thompson, William P., assignor.) | | | | | | |
| Haight, William E., deceased; N. Olds-Haight, McMinnville, Oreg., administratrix. Combination-tool | 727,421 | May 5 | 1105 | 242 | 104 | 239 |
| Haight, William H., assignor of one-half to A. Campbell, Minneapolis, Minn. Railway-rail | 717,845 | Jan. 6 | 635 | 141 | 102 | 136 |
| Hail, Edward L., *et al.* (See Kinnecom, Fred O., assignor.) | | | | | | |
| Hail, Edward L. and G., Providence, R. I. Alarm-signal for elevators | 732,737 | July 7 | 72 | 20 | 105 | 18 |
| Hail, Edward L. and G., Providence, R. I. Electric elevator safety appliance | 733,715 | July 14 | 1804 | 427 | 105 | 397 |
| Hail, Edward L. and G., Providence, R. I. Alarm-signal for elevators | 743,493 | Nov. 10 | 1403 | 290 | 107 | 315 |
| Hail, George. (See Hail, Edward L. and G.) | | | | | | |
| Hail, George, *et al.* (See Kinnecom, Fred O., assignor.) | | | | | | |
| Hail, George, Providence, R. I. Electric system for elevator safety appliances | 719,463 | Feb. 3 | 89 | 21, 22 | 102 | 844 |
| Hail, George, Providence, R. I. Elevator safety device | 729,575 | June 2 | 103 | 26 | 104 | 1148 |
| Hail, George, Providence, R. I. Electric switch | 735,249 | Aug. 4 | 411 | 80 | 105 | |
| Hail, George, Providence, R. I. Threshold-illuminating device | 737,608 | Sept. 1 | 92 | 20 | 106 | 22 |
| Hail, George, Providence, R. I. Elevator safety device | 739,078 | Sept. 15 | 3007 | 667 | 106 | 676 |
| Hail, George, Providence, R. I. Elevator safety device | 739,782 | Sept. 22 | 4313 | 966 | 106 | 974 |
| Hailey, Herbert, Great Wymondley, England. Harrow | 741,487 | Oct. 13 | 2106 | 469 | 106 | 1716 |
| Haiman, Elias, and G. N. Murray, assignors to Empire Plow Company, Cleveland, Ohio. Cultivator | 720,135 | Feb. 10 | 1340 | 307 | 102 | 1125 |
| Hain, Edward O., Cleveland, Ohio. Jar-closure | 743,494 | Nov. 10 | 1405 | 291 | 107 | 316 |
| Hain, Henry J., Chicago, Ill., assignor of one-half to Sherwin-Williams Company, Cleveland, Ohio. Apparatus for filling cans | 746,326 | Dec. 8 | 1867 | 425 | 107 | 1517 |
| Hain, Ralph B., assignor to Auto Vehicle Company, Los Angeles, Cal. Transmission-gear mechanism | 719,327 | Jan. 27 | 3434 | 766 | 102 | 772 |
| Hain, Ralph B., assignor to Auto Vehicle Company, Los Angeles, Cal. Governor and throttle-valve-controlling mechanism | 719,328 | Jan. 27 | 3436 | 766 | 102 | 772 |
| Hain, Ralph B., assignor to Auto Vehicle Company, Los Angeles, Cal. Variable-speed and reversing mechanism | 733,193 | July 7 | 871 | 211 | 105 | 1068 183 |
| Haines, Chester, *et al.* (See Haines, Jacques C., assignor.) | | | | | | |
| Haines, Jacques C., assignor of two-thirds to W. E. Huber and C. Haines, Chicago, Ill. Vehicle-tire fastener | 719,329 | Jan. 27 | 3438 | 767 | 102 | 773 |
| Haines, John H. J., assignor to W. A. Sweetser and H. S. Elliott, New York, N. Y. Ice-making machine or apparatus | 729,929 | June 2 | 736 | 164 | 104 | 1278 |
| Haines, William L., *et al.* (See Roberts, Henry P., assignor.) | | | | | | |
| Hains, Peter C., Jr. (See Weaver, Charles R., assignor.) | | | | | | |
| Hakes, Curtis, and F. P. Carter, assignors to Carter & Hakes Machine Company, Winsted, Conn. Automatic return-feed for milling-machines | 731,678 | June 23 | 3975 | 886 | 104 | 2000 |
| Halbekann, Franz J., Solingen, assignor to C. F. Kratz & Co. of Wald, Solingen, Germany. Shaving apparatus | 731,562 | June 23 | 3762 | 839 | 104 | 1958 |
| Halcomb, Charles H., New York, N. Y. Steel | 722,504 | Mar. 10 | 1593 | ------ | 103 | 358 |
| Hald, Charles, Omaha, Nebr. Measuring device | 747,701 | Dec. 22 | 4403 | 992, 993 | 107 | 2123 |
| Haldeman, Horace P. (See Spiller, Philip S., assignor.) | | | | | | |
| Hale, Edward S., Philadelphia, Pa. Toy | 741,963 | Oct. 20 | 3047 | 679 | 106 | 1928 |
| Hale, Frank W., Boston, Mass. Dumb-bell | 729,064 | May 26 | 4215 | 932 | 104 | 944 |
| Hale, Henry S., Philadelphia, Pa. Seat-cushion | 734,701 | July 28 | 3706 | 867 | 105 | 831 |
| Hale, Henry S., Philadelphia, Pa. Car-seat | 741,032 | Oct. 13 | 1186 | 268 | 106 | 1519 |
| Hale, Henry S., Philadelphia, Pa. Car-seat | 741,033 | Oct. 13 | 1189 | 269 | 106 | 1520 |
| Hale, Henry S., Philadelphia, Pa. Machine for supplying food to fish or land animals | 742,414 | Oct. 27 | 3937 | 884 | 106 | 2124 |
| Hale, Henry S., Philadelphia, Pa. Apparatus for supplying food to fish or land animals | 742,415 | Oct. 27 | 3939 | 884 | 106 | 2124 |
| Hale, Henry S., Philadelphia, Pa., assignor to Hale and Kilburn Manufacturing Company. Beading-strip | 744,537 | Nov. 17 | 3391 | 730 | 107 | 754 |
| Hale, Henry W., Greenfield, Mass. Awning-hinge | 734,702 | July 28 | 3708 | 867, 868 | 105 | 831 |
| Hale, John C., Alexandria, Scotland, assignor to R. M. Howison, London, England. Heel for boots or shoes | 740,124 | Sept. 29 | 4970 | 1115 | 106 | 1129 |
| Hale and Kilburn Manufacturing Company (See Hale, Henry S., assignor.) | | | | | | |
| Hale and Kilburn Manufacturing Company. (See Johnston, John S., assignor.) | | | | | | |
| Hale, Oscar F., assignor to himself and L. E. Streater, Pocahontas, Iowa. Toy | 731,299 | June 16 | 3259 | 724 | 104 | 1838 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | Spec. | Drg. | Vol. | Page. |
| Hale, Robert M., Chicago, Ill. Molding apparatus | 741,488 | Oct. 13 | 2107 | 469, 470 | 106 | 1716 |
| Hale, Wilbur F., Macksburg, and B. L. Wigton, Caldwell, Ohio. Elevating device for well-casings | 748,188 | Dec. 29 | 5361 | 1217 | 107 | 2356 |
| Hales, Henry W., Ridgewood, N. J. Photographic camera | 746,327 | Dec. 8 | 1868 | 426 | 107 | 1517 |
| Halesworth, Edwin R., San Bernardino, Cal. Adjustable locomotive-pilot and draw-bar | 743,864 | Nov. 10 | 2081 | 443 | 107 | 459 |
| Haley, George P., Mexico, Mo. Staple-puller | 722,975 | Mar. 17 | 2457 | 550 | 103 | 551 |
| Haley, James F., and H. F. Dreyer, Brooklyn, N. Y. Water-heater | 730,532 | June 9 | 1841 | 411 | 104 | 1523 |
| Haley, John C., assignor of one-half to J. C. Pennie, J. A. Goldsborough, and C. J. O'Neill, Washington, D. C. Soluble cocoa and making same | 731,563 | June 23 | 3762 | ..... | 104 | 1959 |
| Halfpenny, Martin, assignor to Cannon Metal Wheel Works, Limited, Pontiac, Mich. Shaft-coupling | 725,957 | Apr. 21 | 2847 | 646 | 103 | 1804 |
| Halfpenny, Martin, assignor to Cannon Metal Wheel Works, Limited, Pontiac, Mich. Cushion-tired wheel | 726,908 | May 5 | 141 | 33 | 104 | 32 |
| Halin, John, assignor of one-fourth to J. A. Nelson, Kansas City, Mo. Combined cane and camp-stool | 723,382 | Mar. 24 | 3234 | 725, 726 | 103 | 722 |
| Hall, Albert, New York, N. Y. Button-attaching machine | 738,435 | Sept. 8 | 1797 | 391 | 106 | 402 |
| Hall, Albert F., Boston, Mass., assignor to Geo. F. Blake Manufacturing Company, New York, N. Y. Engine | 737,609 | Sept 1 | 94 | 20, 21 | 106 | 23 |
| Hall, Albert F., Boston, Mass., assignor to Geo. F. Blake Manufacturing Company, New York, N. Y. Engine | 737,610 | Sept. 1 | 98 | 21, 22 | 106 | 24 |
| Hall, Allen E., and W. G. Smith, Philadelphia, Pa. Fishing-rod | 733,836 | July 14 | 2048 | 483, 484 | 105 | 447 |
| Hall, Arthur W., Hayneville, Ala. Fireplace | 748,497 | Dec. 29 | 5925 | 1346 | 107 | 2479 |
| Hall, Benjamin J., Barnes, England. Thermo-electric battery | 724,572 | Apr. 7 | 280 | 69 | 103 | 1228 |
| Hall, Cassius L., Ypsilanti, assignor to Phillips and Harmon, Northville, Mich. Gasolene-burner | 725,078 | Apr. 14 | 1231 | 278 | 103 | 1446 |
| Hall, Charles C., Alexandria, Ind., assignor to American Insulating Material Manufacturing Company, St. Louis, Mo. Making mineral-wool felt | 737,099 | Aug. 25 | 3855 | 856 | 105 | 1854 |
| Hall, Charles F., Chicago, Ill., assignor to Hall Rail Joint Company. Rail-joint | 729,576 | June 2 | 104 | 26, 27 | 104 | 1148 |
| Hall, Charles L., *et al.* (See Willard, James A., assignor.) | | | | | | |
| Hall, Charles M., Niagara Falls, N. Y. Removing silica from coke | 733,389 | July 14 | 1247 | 295 | 105 | 280 |
| Hall, Dickson, Meadville, Pa. Clothes-wringer | 731,049 | June 16 | 2781 | 619 | 104 | 1741 |
| Hall, Dupree M., Memphis, Tenn. Ruling-pen | 743,865 | Nov. 10 | 2083 | 443 | 107 | 460 |
| Hall, Ed F., Hayes, Tex. Wire-fence-building implement | 730,641 | June 9 | 2028 | 450, 451 | 104 | 1564 |
| Hall, Edgar, Cambridge, Mass. Printer's galley | 727,615 | May 12 | 1476 | 330 | 104 | 335 |
| Hall, Edward, assignor of forty one-hundredths to C. F. Peace and J. R. Townsend, Whitestone, N. Y. Trolley | 736,721 | Aug. 18 | 3164 | 698 | 105 | 1689 |
| Hall, Edward A. (See Hall, George S. and E. A.) | | | | | | |
| Hall, Edward G. (See Haynie and Hall.) | | | | | | |
| Hall, Edward W., Rutherford, N. J., assignor to New Era Company, New York, N. Y. Invisible-impression printing | 730,823 | June 9 | 2342 | 519 | 104 | 1631 |
| Hall, Edwin, assignor to Leroy Plow Company, Leroy, N. Y. Plow-beam attachment | 724,005 | Mar. 31 | 4405 | 991 | 103 | 983 |
| Hall, Edwin A., Hydepark, Mass. Sectional gas-burner | 741,130 | Oct. 13 | 1376 | 315 | 106 | 1560 |
| Hall, Francis A., *et al.* (See Parker, Alfred, assignor.) | | | | | | |
| Hall, Frank. (See Traylor, Robert W., assignor.) | | | | | | |
| Hall, Frank A., Jr., Montclair, N. J. Spring-frame | 729,334 | May 26 | 4692 | 1036 | 104 | 1044 |
| Hall, Frank L., *et al.* (See Coleman, Clyde, assignor.) | | | | | | |
| Hall, Frank P., W. E. Olds, and M. A. Buck, Pleasanton, Kans. Bit | 720,689 | Feb. 17 | 2390 | 548 | 102 | 1355 |
| Hall, Frank W., Ingleside, Ga. Bath and fever machine | 722,976 | Mar. 17 | 2458 | 550 | 103 | 552 |
| Hall, Frederick W., Camden, N. J. Machine for making molds | 720,913 | Feb. 17 | 2780 | 638, 639 | 102 | 1438 |
| Hall, George A., assignor to Lock Lamp Burner Company, Buffalo, N. Y. Lamp-burner | 728,166 | May 12 | 2525 | 561 | 104 | 554 |
| Hall, George F., assignor to Premo-Hall Manufacturing Company, Newark, N. J. Can-opener | 733,194 | July 7 | 873 | 211 | 105 | 183 |
| Hall, George H., Philadelphia, Pa. Sound recording and reproducing machine | 722,977 | Mar. 17 | 2460 | 551 | 103 | 552 |
| Hall, George P., Newton, Mass. Game | 742,416 | Oct. 27 | 3941 | 885 | 106 | 2124 |
| Hall, George S. and E. A., Birmingham, England. Cleat for theatrical or other portable properties | 731,451 | June 23 | 3561 | 793 | 104 | 1918 |
| Hall, H. E. (See Hedenstrom, Ernest, assignor.) | | | | | | |
| Hall, Henry J. S., New York, N. Y. Screw-cap closure | 730,367 | June 9 | 1531 | 340 | 104 | 1456 |
| Hall, Henry L., assignor of one-half to A. B. Rennolds, Mexia, Tex. Trace-fastener | 726,159 | Apr. 21 | 3177 | 719 | 103 | 1872 |
| Hall, Hugh A., Lawrence, Mass. Pulp-guard for beating-engines | 726,424 | Apr. 28 | 3699 | 838, 839 | 103 | 1995 |
| Hall, Iphus H., Jr., Lyndon, Vt. Calf-feeder | 732,630 | June 30 | 5809 | 1288 | 104 | 2401 |
| Hall, James B., Cleveland, Ohio. Trimming for fishing-rods | 734,544 | July 28 | 3419 | 798 | 105 | 771 |
| Hall, James M., Wadley, assignor to C. T. Belt, Herndon, Ga. Hand hay-press | 723,461 | Mar. 24 | 3366 | 754 | 103 | 751 |
| Hall, James T. (See Conkle and Hall.) | | | | | | |
| Hall, James T., Chicago, Ill. Road-grader | 737,612 | Sept. 1 | 103 | 22 | 106 | 25 |
| Hall, James T., Chicago, Ill., and W. H. Hitchcock, Holland Patent, N. Y. Road-grader | 737,611 | Sept. 1 | 101 | 22 | 106 | 24 |
| Hall, Joel B., Harriman, assignor to J. B. Ransdell, Gideon Hill, M. W. Emery, Harriman, Tenn., and T. Dye, Logan, Kans. Hay-press | 746,073 | Dec. 8 | 1398 | 313 | 107 | 1416 |
| Hall, John B. (See Martin, James F., assignor.) | | | | | | |
| Hall, John L., Schenectady, N. Y., assignor to General Electric Company. Search-light | 726,529 | Apr. 28 | 3926 | 888 | 103 | 2037 |
| Hall, John L., Schenectady, N. Y., assignor to General Electric Company. Telltale for ships' running-lights | 729,159 | May 26 | 4381 | 966 | 104 | 978 |
| Hall, John L., Schenectady, N. Y., assignor to General Electric Company. Shutter for search-lights | 735,498 | Aug. 4 | 884 | 189 | 105 | 1169 |
| Hall, John L., Schenectady, N. Y., assignor to General Electric Company. Search-light projector | 739,599 | Sept. 22 | 3973 | 886, 887 | 106 | 898 |
| Hall, Joseph R., Indianapolis, Ind. Corn-husker and fodder-shredder | 731,178 | June 16 | 3029 | 673 | 104 | 1789 |
| Hall, Julius C., Wallingford, Conn. Food-chopper | 746,696 | Dec. 15 | 2521 | 579 | 107 | 1683 |
| Hall, La Forest W., East Boston, Mass. Locking-latch | 731,775 | June 23 | 4153 | 926 | 104 | 2036 |
| Hall, Miles E., Plainfield, N. J. Bag filler and holder | 744,338 | Nov. 17 | 3036 | 651, 652 | 107 | 678 |
| Hall, Percy, *et al.* (See Parker, Alfred, assignor.) | | | | | | |
| Hall, Peter C., Saybrook, Ill. Watchmaker's cabinet | 727,938 | May 12 | 2118 | 471 | 104 | 469 |
| Hall, Peter P. G., Jr., Philadelphia, Pa. Igniter for gas-engines | 737,923 | Sept. 1 | 731 | 158 | 106 | 160 |
| Hall Rail Joint Company. (See Hall, Charles F., assignor.) | | | | | | |
| Hall, Robert A., assignor to American Tobacco Company, New York, N. Y. Machine for making and inserting gaskets | 725,701 | Apr. 21 | 2385 | 541, 542 | 103 | 1704 |
| Hall, Robert A., assignor to Crown Cork and Seal Company, Baltimore, Md. Bottle-closure | 734,545 | July 28 | 3421 | 798 | 105 | 772 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | Spec. | Dr'g. | Vol. | Page. |
| Hall, Robert F., Moseley, near Birmingham, England. Car-lighting system | 745,830 | Dec. 1 | 949 | 213, 214, 215 | 107 | 1301 |
| Hall, Roderic F., New York, N. Y., assignor to Western Electric Company, Chicago, Ill. Electric cable | 720,023 | Feb. 10 | 1126 | 257 | 102 | 1078 |
| Hall, Samuel N., Hollygrove, Ark., assignor of one-half to J. Lawlor, Houston, Tex. Pump | 731,892 | June 23 | 4357 | 972 | 104 | 2084 |
| Hall, Samuel N., assignor of one-half to J. Lawlor, Houston, Tex. Double-acting pump | 731,893 | June 23 | 4360 | 973 | 104 | 2084 |
| Hall Signal Company. (See Breese, Charles P., assignor.) | | | | | | |
| Hall Signal Company. (See Coleman, Clyde J., assignor.) | | | | | | |
| Hall Signal Company. (See Wilson, Adoniram J., assignor.) | | | | | | |
| Hall, Thomas E., Chicago, Ill. Medicament-injector | 742,634 | Oct. 27 | 4332 | 975 | 106 | 2208 |
| Hall, Thomas E., Chicago, Ill. Medicament-injector | 742,635 | Oct. 27 | 4333 | 975 | 106 | 2208 |
| Hall, Thomas J., Blue Rapids, Kans. Carpet-stretcher | 733,716 | July 14 | 1807 | 428 | 105 | 398 |
| Hall, Thomas R., *et al.* (See Beard and Stephens, assignors.) | | | | | | |
| Hall, William A., Bellows Falls, Vt. Synthetic milk compound and producing same | 746,502 | Dec. 8 | 2160 | ------ | 107 | 1580 |
| Hall, William C., Baltimore County, Md. Sock | 719,108 | Jan. 27 | 3039 | 676 | 102 | 688 |
| Hall, William D., Chicago, Ill. Bed-rail | 743,073 | Nov. 3 | 492 | 107 | 107 | 103 |
| Hall, William F., Newton, Mass. Lacing for shoes, &c | 733,837 | July 14 | 2050 | 484 | 105 | 448 |
| Hall, William G., and W. A. Ramsay, assignors to themselves and W. L. Hopper, Honolulu, Hawaii. Centrifugal machine | 725,440 | Apr. 14 | 1896 | 424, 425 | 103 | 1586 |
| Hall, William H., New York, N. Y. Tooth-powder box | 722,699 | Mar. 17 | 1973 | 440 | 103 | 454 |
| Hall, William L. (See Chamberlain and Hall.) | | | | | | |
| Hall, William M., Cleveland, Ohio. Illuminated sign | 736,722 | Aug. 18 | 3165 | 699 | 105 | 1690 |
| Hall, Willis M., and W. K. Eldridge, Waterbury, Conn. Cut-out | 736,598 | Aug. 18 | 2926 | 640 | 105 | 1641 |
| Halladay, Lewis P., Marion, Ind. Music-stand | 730,015 | June 2 | 909 | 202 | 104 | 1315 |
| Halladay, William E., Chicago, Ill. Metallic money-belt | 733,478 | July 14 | 1400 | 330 | 105 | 314 |
| Hallam, Carl B., Pomona, Kans. Combined gang-plank and loading-chute | 733,959 | July 21 | 2296 | 539 | 105 | 517 |
| Hallaron, George E., Chicago, Ill. Shipping-crate | 746,075 | Dec. 8 | 1401 | 313 | 107 | 1417 |
| Hallberg, Ernst J., Stockholm, Sweden. Paper-feeding apparatus | 720,243 | Feb. 10 | 1536 | 351 | 102 | 1163 |
| Hallberg, Ernst J., Stockholm, Sweden. Separating and feeding device for paper-feeding machines | 748,279 | Dec. 29 | 5532 | 1261 | 107 | 2393 |
| Hallberg, Josef H., New York, N. Y. Electric heater | 740,125 | Sept. 29 | 4971 | 1115 | 106 | 1129 |
| Hallberg, Josef H., New York, N. Y. System of electrical distribution | 742,861 | Nov. 3 | 73 | 17 | 107 | 18 |
| Hallberg, Josef H., New York, N. Y. System of electrical distribution | 746,074 | Dec. 8 | 1399 | 313 | 107 | 1416 |
| Hallberg, Josef H., New York, N. Y. System of electrical distribution | 746,697 | Dec. 15 | 2523 | 580 | 107 | 1683 |
| Hallberg, Josef H., assignor to General Incandescent Arc Light Company, New York, N. Y. Regulator for alternating series arc-light systems | 728,570 | May 19 | 3309 | 732 | 104 | 740 |
| Hallé, Clifford R. S. J., London, England. Frame, bridge, and soundboard for pianofortes | 725,559 | Apr. 14 | 2110 | 478 | 103 | 1631 |
| Halle, Hiram J., assignor to Fisher Book Typewriter Company, Cleveland, Ohio. Type-writing machine | 731,564 | June 23 | 3764 | 839, 840 | 104 | 1959 |
| Halle, Hiram J., Cleveland, Ohio, assignor, by mesne assignments, to Elliott-Fisher Company. Card or sheet holder for type-writing machines | 737,735 | Sept. 1 | 329 | 69, 70, 71 | 106 | 75 |
| Halle, Hiram J., Cleveland, Ohio, assignor, by mesne assignments, to Elliott-Fisher Company. Card or sheet holder for type-writing machines | 737,835 | Sept. 1 | 528 | 116, 117 | 106 | 118 |
| Halle, Hiram J., Cleveland, Ohio, assignor, by mesne assignments, to Elliott-Fisher Company. Extensible platen for type-writing machines | 740,426 | Oct. 6 | 78 | 17, 18 | 106 | 1263 |
| Hallenbeck, George M., *et al.* (See Steele, Elijah F., assignor.) | | | | | | |
| Hallensleben, Otto, Hilden, Germany. Automatic color-printing machine for printing yarns, &c | 728,225 | May 19 | 2644 | 589, 590, 591 | 104 | 602 |
| Hallensleben, Otto, Lucerne, Switzerland. Device for cutting double-pile fabrics | 732,347 | June 30 | 5271 | 1168 | 104 | 2285 |
| Hallensleben, Otto, Lucerne, Switzerland. Automatic color-printing machine | 747,168 | Dec. 15 | 3418 | 774, 775 | 107 | 1887 |
| Haller, Samuel P., Pittsburg, Pa. Filter | 737,401 | Aug. 25 | 4431 | 991 | 105 | 1977 |
| Hallett, Albert B., *et al.* (See Farmer, Julius M., assignor.) | | | | | | |
| Hallett, John E., *et al.* (See Mackenzie, Herbert, assignor.) | | | | | | |
| Hallett, Thomas E., Chicago, Ill. Guy-clamp | 723,862 | Mar. 31 | 4104 | 926 | 103 | 920 |
| Halley, Magor. (See Loper and Halley.) | | | | | | |
| Halliran, John, Grand Rapids, Mich. Fish-hook releaser | 720,136 | Feb. 10 | 1341 | 307 | 102 | 1125 |
| Halliwell, Henry V., assignor of one-half to W. R. Smith, New York, N. Y. Hair-drier | 738,186 | Sept. 8 | 1286 | 278, 279 | 106 | 294 |
| Hallock, Clarence F. (See Bilfinger and Hallock.) | | | | | | |
| Hallock, Edgar B., Columbus, Ohio. Glove | 747,169 | Dec. 15 | 3421 | 775 | 107 | 1887 |
| Hallot, Paul, Vincennes, France. Railway-brake | 730,115 | June 2 | 1071 | 240, 241 | 104 | 1345 |
| Hallot, Paul, Vincennes, France. Railway-brake | 731,894 | June 23 | 4363 | 973 | 104 | 2084 |
| Hallot, Paul, Vincennes, France. Railway-brake | 733,195 | July 7 | 875 | 212 | 105 | 184 |
| Hallot, Paul, Vincennes, near Paris, France. Railway-brake | 733,838 | July 14 | 2051 | 484, 485 | 105 | 448 |
| Hallot, Paul, Vincennes, France. Railway-brake | 736,091 | Aug. 11 | 2010 | 429 | 105 | 1430 |
| Hallowell, Howard T., Philadelphia, Pa. Shaft-hanger | 719,213 | Jan. 27 | 3211 | 716, 717 | 102 | 723 |
| Hallowell, Howard T., Philadelphia, Pa. Pulley | 732,549 | June 30 | 5658 | 1255, 1256 | 104 | 2366 |
| Hallowell, Howard T., Davisgrove, Pa. Shaft-hanger | 719,214 | Jan. 27 | 3213 | 717 | 102 | 724 |
| Hallstream, Henry. (See Dexter and Hallstream.) | | | | | | |
| Hallstrom, John G., Jamestown, N. Y. Chair | 732,550 | June 30 | 5662 | 1256 | 104 | 2367 |
| Hallwood Cash Register Company. (See De Vilbiss and Hansen, assignors.) | | | | | | |
| Hallwood Cash Register Company. (See Giesel, Martin, assignor.) | | | | | | |
| Hallwood Cash Register Company. (See Kelly, John E., assignor.) | | | | | | |
| Hallwood Cash Register Company. (See Simpson, Robert D., assignor.) | | | | | | |
| Halman, Jacob, Heizer, Kans. Plow-point | 736,845 | Aug. 18 | 3401 | 752 | 105 | 1739 |
| Halpern, Morris. (See Ritter and Halpern.) | | | | | | |
| Halsall, Charles B., *et al.* (See Conde, Joseph, assignor.) | | | | | | |
| Halsey Electric Generator Company. (See Halsey, Henry, assignor.) | | | | | | |
| Halsey, Henry, New York, N. Y. Galvanic battery | 719,659 | Feb. 3 | 437 | 100 | 102 | 913 |
| Halsey, Henry, New York, N. Y., assignor, by mesne assignments, to Halsey Electric Generator Company, Jersey City, N. J. Electric battery | 719,660 | Feb. 3 | 440 | 100 | 102 | 914 |
| Halsey, Henry, New York, N. Y., assignor, by mesne assignments, to Halsey Electric Generator Company, Jersey City, N. J. Electric battery | 719,661 | Feb. 3 | 442 | 101 | 102 | 914 |
| Halsey, Henry, New York, N. Y., assignor, by mesne assignments, to Halsey Electric Generator Company, Jersey City, N. J. Galvanic battery | 734,546 | July 28 | 3422 | 799 | 105 | 772 |

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| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Halsey, Henry, New York, N. Y., assignor, by mesne assignments, to Halsey Electric Generator Company, Jersey City, N. J. Electric battery | 734,547 | July 28 | 3424 | 799 | 105 | 772 |
| Halsey, Henry, New York, N. Y., assignor, by mesne assignments, to Halsey Electric Generator Company, Jersey City, N. J. Electric battery | 734,548 | July 28 | 3426 | 799 | 105 | 773 |
| Halsey, Henry, New York, N. Y., assignor, by mesne assignments, to Halsey Electric Generator Company, Jersey City, N. J. Electric battery | 734,549 | July 28 | 3427 | 799 | 105 | 773 |
| Halsey, Henry, New York, N. Y., assignor, by mesne assignments, to Halsey Electric Generator Company, Jersey City, N. J. Electric battery | 734,857 | July 28 | 4027 | 940 | 105 | 895 |
| Halsey, Henry, New York, N. Y., assignor, by mesne assignments, to Halsey Electric Generator Company, Jersey City, N. J. Electric battery | 734,858 | July 28 | 4028 | 940 | 105 | 895 |
| Halsey, Henry, New York, N. Y., assignor, by mesne assignments, to Halsey Electric Generator Company, Jersey City, N. J. Electric battery | 735,971 | Aug. 11 | 1783 | 382 | 105 | 1381 |
| Halsey, Henry, New York, N. Y., assignor, by mesne assignments, to Halsey Electric Generator Company, Jersey City, N. J. Electric battery | 736,248 | Aug. 11 | 2271 | 491 | 105 | 1485 |
| Halsey, Henry, New York, N. Y., assignor, by mesne assignments, to Halsey Electric Generator Company, Jersey City, N. J. Electric battery | 737,613 | Sept. 1 | 105 | 23 | 106 | 25 |
| Halsey, Henry, New York, N. Y., assignor, by mesne assignments, to Halsey Electric Generator Company, Jersey City, N. J. Electric battery | 737,614 | Sept. 1 | 106 | 23 | 106 | 25 |
| Halsey, Henry, New York, N. Y., assignor, by mesne assignments, to Halsey Electric Generator Company, Jersey City, N. J. Electric battery | 743,273 | Nov. 3 | 886 | 193 | 107 | 187 |
| Halsey, Henry, New York, N. Y., assignor to Halsey Electric Generator Company. Electric battery | 743,274 | Nov. 3 | 888 | 193 | 107 | 188 |
| Halsey, Henry, New York, N. Y., assignor to Halsey Electric Generator Company. Electric battery | 743,275 | Nov. 3 | 890 | 194 | 107 | 188 |
| Halsey, William S., Pittsburg, Pa. Means for transmitting fluid under pressure | 718,250 | Jan. 13 | 1349 | 299 / 300 | 102 | 305 |
| Halsey, William S., Pittsburg, Pa. Metallic packing for pistons, rods, &c | 739,859 | Sept. 29 | 4462 | 1002 | 106 | 1022 |
| Halstead, Edwin R., Carlisle, England. Omnibus, tram-car, garden, or other seat | 730,189 | June 2 | 1187 | 266 | 104 | 1369 |
| Halstead, Marshal, *et al.* (See Chandler, James, assignor.) | | | | | | |
| Halstrick, Adolf, Cologne, Germany. Tabulating device for type-writers | 735,367 | Aug. 4 | 620 | 127 | 105 | 1113 |
| Halstrick, Adolf, Cologne, Germany. Type-writer | 740,126 | Sept. 29 | 4972 | 1115 | 106 | 1130 |
| Halvorsen, Carl H. (See Wide, Ivan, assignor.) | | | | | | |
| Halvorsen, Nels, Stoughton, Wis. Bolster-spring | 719,000 | Jan. 27 | 2815 | 631 | 102 | 642 |
| Halvorson, Severin, assignor to Barnhart Brothers & Spindler, Chicago, Ill. Gripping device for printing-presses | 744,538 | Nov. 17 | 3393 | 731 | 107 | 755 |
| Halyburton, John P. L., Camden, N. J., assignor to Warren Webster and Company. Rotary engine | 743,074 | Nov. 3 | 493 | 107 | 107 | 103 |
| Ham, Edwin W., Worcester, Mass. Push-button | 741,905 | Oct. 20 | 2918 | 651 | 106 | 1901 |
| Ham, Elijah B., Jennings, Okla. Ter. Cotton-cleaner | 730,763 | June 9 | 2241 | 498 | 104 | 1611 |
| Ham, Henry C., assignor to Rude Brothers Manufacturing Company, Liberty, Ind. Fertilizer attachment for grain-drills | 736,962 | Aug. 25 | 3625 | 803 | 105 | 1806 |
| Ham, Henry C., assignor to Rude Brothers Manufacturing Company, Liberty, Ind. Double-disk furrow-opener | 736,963 | Aug. 25 | 3627 | 803 | 105 | 1807 |
| Ham, Henry C., assignor to Rude Brothers Manufacturing Company, Liberty, Ind. Grain-drill | 739,172 | Sept. 15 | 3179 | 703 | 106 | 711 |
| Ham, James T., Mineralwells, Tex. Elevator | 728,100 | May 12 | 2404 | 535 | 104 | 529 |
| Ham, James T., Monahans, Tex. Windmill | 738,675 | Sept. 8 | 2270 | 499 | 106 | 501 |
| Ham, Richard H., Stockport, N. Y. Trolley-retractor | 738,676 | Sept. 8 | 2271 | 500 | 106 | 501 |
| Ham, William F., Washington, D. C. Railway transfer-ticket | 730,764 | June 9 | 2243 | 498 | 104 | 1611 |
| Ham, William H. (See Watson and Ham.) | | | | | | |
| Hamann, Carl H. O., Bergedorf, Germany. Propeller-wheel for vehicles | 724,857 | Apr. 7 | 826 | 190 | 103 | 1345 |
| Hamann, Frank M., Dunkirk, N. Y. Grapple | 747,065 | Dec. 15 | 3231 | 737 | 107 | 1845 |
| Hamann, Richard W., assignor to E. J. Feiner, St. Louis, Mo. Blast apparatus for down-draft-furnaces | 718,453 | Jan. 13 | 1738 | 386 / 387 | 102 | 386 |
| Hambay, James T., New York, N. Y. Detector-bar | 732,296 | June 30 | 5168 | 1148 | 104 | 2264 |
| Hambay, James T., New York, N. Y. Signal-compensator | 740,127 | Sept. 29 | 4974 | 1116 | 106 | 1130 |
| Hamblet, Bayard, New York, N. Y., assignor to himself and W. A. Livingston. Cutting device for butter, lard, &c | 727,939 | May 12 | 2119 | 471 | 104 | 469 |
| Hambuechen, Carl. (See Burgess and Hambuechen.) | | | | | | |
| Hambuechen, Carl, Madison, Wis. Asymmetric conductor | 732,631 | June 30 | 5811 | 1288 | 104 | 2402 |
| Hamburg-Amerikanische Uhrenfabrik. (See Bauknecht, Carl, assignor.) | | | | | | |
| Hamburg-Amerikanische Uhrenfabrik. (See Hauser, Jakob, assignor.) | | | | | | |
| Hamburger & Co. (See Hamburger, Simon, assignor.) | | | | | | |
| Hamburger, Simon, assignor to Hamburger & Co., New York, N. Y. Magic lantern | 736,092 | Aug. 11 | 2012 | 429 | 105 | 1430 |
| Hamburger, Simon, assignor to Hamburger & Co., New York, N. Y. Magic lantern | 736,093 | Aug. 11 | 2013 | 429 | 105 | 1430 |
| Hamel, Eugene, Lynn, Mass., assignor of one-third to B. O. Beland, Montreal, Canada. Shoe-pegging machine | 735,499 | Aug. 4 | 886 | 190 | 105 | 1670 |
| Hamel, Joseph L., Grafton, N. D. Grain-car door | 722,578 | Mar. 10 | 1717 | 382 | 103 | 384 |
| Hamel, Joseph L., assignor of one-half to T. Grace, Grafton, N. D. Dumping-car | 722,100 | Mar. 3 | 820 | 182 | 103 | 177 |
| Hamel, Louis C., Stevens Point, Wis. Windmill | 741,660 | Oct. 20 | 2433 | 546 | 106 | 1800 |
| Hamelback, Jacob A., Zanesville, Ohio. Hat-pin | 720,423 | Feb. 10 | 1861 | 424 | 102 | 1233 |
| Hamer, John. (See Walker and Hamer.) | | | | | | |
| Hamer, Peter, Caddo, Ind. Ter. Stove | 739,543 | Sept. 22 | 3861 | 865 | 106 | 874 |
| Hames, William J. M., Marietta, Ga. Wrench | 733,582 | July 14 | 1585 | 378 | 105 | 353 |
| Hamfeldt, George K., Munhall, Pa. Air-valve for hot-blast stoves | 731,452 | June 23 | 3562 | 794 | 104 | 1918 |
| Hamfeldt, George K., Munhall, and T. A. Tesch, Swissvale, Pa. Blast-furnace top | 733,196 | July 7 | 878 | 212 | 105 | 184 |
| Hamilton-Adams, Thomas, London, England. Electric-arc lamp | 746,830 | Dec. 15 | 2778 | 640 | 107 | 1740 |
| Hamilton, Alexander K., Buffalo, N. Y. Washer for journal-bearings | 734,171 | July 21 | 2716 | 639 | 105 | 608 |
| Hamilton, Alpheus A., Philadelphia, Pa. Tangled-grain separator | 734,322 | July 21 | 3018 | 711 | 105 | 672 |
| Hamilton, Andrew, Chicago, Ill. Tank-heater | 731,368 | Feb. 24 | 3675 | 837 | 102 | 1646 |
| Hamilton, Burnett, Lawrence, Kans. Telephone selecting device | 736,249 | Aug. 11 | 2272 | 491 | 105 | 1485 |
| Hamilton, C. H. (See Carr, Cassius M., assignor.) | | | | | | |
| Hamilton, Cassius M., Chicago, Ill. Stenciling or printing machine | 734,172 | July 21 | 2719 | 640 | 105 | 608 |
| Hamilton, Charles L. (See Kitsee, Isidor, assignor.) | | | | | | |
| Hamilton, Charles R., Huntsville, Ala. Ice-cream freezer | 736,723 | Aug. 18 | 3167 | 699 | 105 | 1690 |
| Hamilton, Coello, Plymouth, Mich. Firearm | 739,412 | Sept. 22 | 3648 | 811 | 106 | 828 |
| Hamilton, Gail W., Council Bluffs, Iowa. Cultivator | 744,753 | Nov. 24 | 3789 | 816 | 107 | 856 |
| Hamilton, George W., assignor to Burnham, Williams & Company, Philadelphia, Pa. Trolley-pole | 730,116 | June 2 | 1073 | 241 | 104 | 1346 |
| Hamilton, Henry P., assignor to Hamilton Manufacturing Company, Two Rivers, Wis. Printer's case | 742,862 | Nov. 3 | 75 | 18 | 107 | 18 |
| Hamilton, Isaac N., assignor to Carpenter Steel Company, Reading, Pa. Projectile | 740,977 | Oct. 6 | 1088 | 246 | 106 | 1478 |
| Hamilton, John F., Wolcott, Ind. Exhaust-nozzle | 730,533 | June 9 | 1843 | 411 | 104 | 1523 |
| Hamilton, John S. (See Paskell, Albert E., assignor.) | | | | | | |
| Hamilton, John S., Kyana, Ind. Curtain-hanger | 732,632 | June 30 | 5813 | 1289 | 104 | 2403 |
| Hamilton, John S., Kyana, Ind. Fruit-picker | 733,479 | July 14 | 1401 | 331 | 105 | 314 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | Spec. | Dr g. | Vol. | Page. |
| Hamilton, John W., Cameron, Tex. Baling-press | 726,284 | Apr. 28 | 3433 | 781 | 103 | 1940 |
| Hamilton, Joseph P., *et al.* (See Louis, Herman H., assignor.) | | | | | | |
| Hamilton Manufacturing Company. (See Hamilton, Henry P., assignor.) | | | | | | |
| Hamilton, Morrison C., Hartford, Conn. Push-car | 733,390 | July 14 | 1249 | 296 | 105 | 280 |
| Hamilton, Robert, Commerce, Tex. Hay or cotton press | 730,642 | June 9 | 2030 | 451 | 104 | [illegible] |
| Hamilton, Robert A., *et al.* (See Lyman, Chauncey O., assignor.) | | | | | | |
| Hamilton, Robert A., Brooklyn, N. Y. Fountain-pen | 722,013 | Mar. 3 | 668 | 148 | 103 | 144 |
| Hamilton, Robert A., Brooklyn, N. Y. Fountain-pen | 730,117 | June 2 | 1074 | 241 | 104 | 1346 |
| Hamilton, Simeon V. N., Winchester, Va. Horseshoe | 721,888 | Mar. 3 | 426 | 93 | 103 | 94 |
| Hamilton, Thomas, and C. Van Riper, Clayton, Mich. Rural mail-box | 741,489 | Oct. 13 | 2111 | 470 | 106 | 1717 |
| Hamilton, Thomas S., Louisville, Ky. Steam-heating system | 731,776 | June 23 | 4154 | 926<br>927 | 104 | 2037 |
| Hamilton, William, Dayton, Ohio. Elevator | 743,717 | Nov. 10 | 1812 | 382 | 107 | 403 |
| Hamilton, William, Stratford, and W. Holmes, Montreal, Canada. Automatic driver-brake retainer | 734,859 | July 28 | 4029 | 941 | 105 | 895 |
| Hamilton, William E., Zanesville, Ohio. Loading device | 736,385 | Aug. 18 | 2506 | 551<br>552 | 105 | 1553 |
| Hamilton, William E., Zanesville, Ohio. Loading-machine | 736,846 | Aug. 18 | 3402 | 752<br>753 | 105 | 1739 |
| Hamilton, William E., Zanesville, Ohio. Shovel-nose | 740,557 | Oct. 6 | 329 | 68 | 106 | 1314 |
| Hamilton, William E., Zanesville, Ohio. Adjustable truck-wheel | 740,558 | Oct. 6 | 330 | 69 | 106 | 1315 |
| Hamilton, William E., Zanesville, Ohio. Flexible connection for drive shafts and wheels | 740,559 | Oct. 6 | 331 | 69 | 106 | 1315 |
| Hamilton, William E., Zanesville, Ohio. Gathering-scoop | 740,560 | Oct. 6 | 332 | 69 | 106 | 1315 |
| Hamilton, William H., McKeesport, Pa. Shirt-waist | 728,571 | May 19 | 3310 | 733 | 104 | 740 |
| Hamlet, Oscar C., *et al.* (See Bennett, George S., assignor.) | | | | | | |
| Hamlin, Charles F., Pasadena, Cal. Grass-receptacle for lawn-mowers | 737,100 | Aug. 25 | 3857 | 857 | 105 | 1854 |
| Hamling, George L., Farmington, Del. Paddle-wheel | 744,539 | Nov. 17 | 3394 | 731 | 107 | 755 |
| Hamlink, Lazenby C., assignor to Laclede Fire Brick Manufacturing Company, St. Louis, Mo. Recuperative gas-furnace | 723,668 | Mar. 24 | 3739 | 839 | 103 | 827 |
| Hamm, Adolph G., Akron, Ohio. Means for manufacturing sheet-glass | 726,530 | Apr. 28 | 3927 | 888 | 103 | 2037 |
| Hamm, William R., Simsbury, Conn. Cooling-jacket | 745,054 | Nov. 24 | 4352 | 940 | 107 | 972 |
| Hamm, William S., Chicago, Ill., assignor to Adams and Westlake Company of Illinois. Signal-lantern | 735,500 | Aug. 4 | 895 | 190<br>191 | 105 | 1172 |
| Hamm, William S., Chicago, Ill., assignor to Adams and Westlake Company, of Illinois. Convertible signal-lamp | 742,636 | Oct. 27 | 4335 | 975 | 106 | 2208 |
| Hamm, William S., Chicago, Ill., assignor to Adams and Westlake Company, of Illinois. Lamp-burner | 742,637 | Oct. 27 | 4338 | 976 | 106 | 2209 |
| Hammack, Cicero T., Knoxville, Tenn. Fence | 746,503 | Dec. 8 | 2162 | 497 | 107 | 1581 |
| Hammack, Martin V., Jacksondale, Va. Device for displaying and stretching gloves | 743,276 | Nov. 3 | 892 | 194 | 107 | 189 |
| Hammack, Martin V., Thalia, assignor of one-half to C. O. Grimes, Portsmouth, Va. Self-waiting table | 723,269 | Mar. 24 | 3004 | 676 | 103 | 679 |
| Hammack, Martin V., Thalia, assignor of one-half to C. O. Grimes, Portsmouth, Va. Bed | 732,070 | June 30 | 4715 | 1053 | 104 | 2170 |
| Hammann, William, Milwaukee, Wis. Anchor for railing-posts | 723,669 | Mar. 24 | 3740 | 839 | 103 | 827 |
| Hammar, Sigard A. S. (See Meigs and Hammar.) | | | | | | |
| Hammar, Sigard A. S. (See Meigs, Hammar, and Mixsell.) | | | | | | |
| Hammarstrom, John, Bridgeport, Conn. Painter's hook | 742,417 | Oct. 27 | 3941 | 885 | 106 | 2125 |
| Hamme, Annie J., Wilmington, N. C. Pedal attachment | 731,358 | June 16 | 3347 | 748 | 104 | 1855 |
| Hammel, Riglander & Company. (See Kinsey, Ernest U., assignor.) | | | | | | |
| Hammen, Charles, Chicago, Ill. Keys and key-seats for shafting | 732,738 | July 7 | 73 | 20 | 105 | 19 |
| Hammer, Alfred E., Branford, Conn. Mold-forming machine | 720,690 | Feb. 17 | 2392 | 548 | 102 | 1355 |
| Hammer, John H., Medford, Oreg. Machine for pricking prunes or like fruits | 722,840 | Mar. 17 | 2235 | 501 | 103 | 506 |
| Hammer, John H., Marquette, Mich. Flash-light attachment for cameras | 744,540 | Nov. 17 | 3395 | 731 | 107 | 755 |
| Hammerstein, Oscar, New York, N. Y. Smoothing apparatus for silk hats | 719,001 | Jan. 27 | 2816 | 631 | 102 | 642 |
| Hammond, Albert, and E. R. Waddell, Paragould, Ark. Heating or cooling apparatus | 718,928 | Jan. 20 | 2669 | 598 | 102 | 596 |
| Hammond, Charles, Woodcliff, N. J. Barrack-jack | 721,515 | Feb. 24 | 3939 | 897 | 102 | 1701 |
| Hammond, Frank S., Malden, Mass. Apparatus for the purification of water | 744,193 | Nov. 17 | 2775 | 592 | 107 | 619 |
| Hammond, Isaac B., Portland, Oreg. Hoop or band for cylindrical casings | 743,075 | Nov. 3 | 496 | 108 | 107 | 103 |
| Hammond, James H., and W. Bridgewater, Leicester, England. Crutch | 748,068 | Dec. 29 | 5149 | 1165 | 107 | 2310 |
| Hammond, John F., New York, N. Y. Electric furnace | 720,024 | Feb. 10 | 1127 | 257<br>258 | 102 | 1079 |
| Hammond, Leander W., assignor of one-half to F. N. Longwell, North Plainfield, N. J. Trousers | 738,677 | Sept. 8 | 2273 | 500 | 106 | 502 |
| Hammond, Myram H. (See Gerlach and Hammond.) | | | | | | |
| Hammond, Myron B., Bridgeport, Conn. Hose-supporter clamp | 720,244 | Feb. 10 | 1538 | 352 | 102 | 1164 |
| Hammond, Myron B., Bridgeport, Conn. Skirt-hook attachment for corsets | 742,188 | Oct. 27 | 3512 | 784 | 106 | 2036 |
| Hammond, Robert A. (See Thurston, Charles H., assignor.) | | | | | | |
| Hammond, Robert O., assignor to H. M. Pease, Buffalo, N. Y. Dust-beater | 745,434 | Dec. 1 | 231 | 53 | 107 | 1148 |
| Hammond, Robert O., assignor of two-thirds to W. D. Scott and R. B. Rope, Buffalo, N. Y. Can-opener | 742,418 | Oct. 27 | 3942 | 885 | 106 | 2125 |
| Hammond, Royal M., Portis, Kans. Kafir-corn header | 744,684 | Nov. 17 | 3626 | 782 | 107 | 803 |
| Hammond, William A., Oil City, Pa. Sad-iron | 738,678 | Sept. 8 | 2274 | 500 | 106 | 502 |
| Hamper, Walter R., Detroit, Mich. Combined match-safe, paper-holder, and cigarette-machine | 723,863 | Mar. 31 | 4105 | 926 | 103 | 921 |
| Hampl, Franz, Elbe Teinitz, Austria-Hungary. Centrifugal machine | 725,560 | Apr. 14 | 2111 | 478<br>479 | 103 | 1632 |
| Hampp, Julius H., New York, N. Y. Photographic mounting-roller | 730,368 | June 9 | 1533 | 340 | 104 | 1457 |
| Hampton, Edward J. (See Bowers, William P., assignor.) | | | | | | |
| Hampton, John A., Handsworth, and J. Roberts, West Bromwich, England. Ingot-manipulating mechanism for rolling-mills | 742,314 | Oct. 27 | 3761 | 842<br>843 | 106 | 2088 |
| Hampton, Thomas, Wednesbury, England. Lifting-jack | 745,180 | Nov. 24 | 4628 | 1003 | 107 | 1030 |
| Hampton, Thomas V., Bowling Green, Ky. Compound bevel and square | 718,344 | Jan. 13 | 1533 | 339 | 102 | 344 |
| Hanauer, Darwin, assignor to Daimler Manufacturing Company, Long Island City, N. Y. Electric sparker | 730,259 | June 9 | 1346 | 295 | 104 | 1416 |
| Hanavan, John H., San Francisco, Cal. Window-cleaning chair | 737,924 | Sept. 1 | 733 | 158 | 106 | 160 |
| Hanby, Edward, assignor of one-half to R. A. and R. G. Cross, Waynesville, Ohio. Fodder-binder | 721,181 | Feb. 24 | 3324 | 760 | 102 | 1574 |
| Hance, Anthony M., Philadelphia, Pa. Medicinal capsule and making same | 730,643 | June 9 | 2032 | 452 | 104 | 1565 |
| Hancher, A. D. R., *et al.* (See Gibbs, James E., assignor.) | | | | | | |
| Hanchett, George T., Hackensack, assignor to D. Ferrand, receiver, Newark, N. J. Solenoid-magnet | 732,851 | July 7 | 279 | 69,70 | 105 | 62 |
| Hanchett, George T., Hackensack, assignor to D. Ferrand, receiver, Newark, N. J. Electric-railway system | 735,250 | Aug. 4 | 414 | 81 | 105 | 1069 |
| Hancock, Charles E., assignor of two-thirds to J. M. and A. C. Barnard, Marion, Ind. Molding apparatus | 724,283 | Mar. 31 | 4967 | 1111<br>1112 | 103 | 1095 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Hancock, Edwin B., *et al.* (See Yeiser, John C., assignor.) | | | | | | |
| Hancock, George A., *et al.* (See Hughes and Roche, assignors.) | | | | | | |
| Hancock, George W., Lynchburg, Va. Flour-sifter | 731,895 | June 23 | 4365 | 974 | 104 | 2085 |
| Hancock, John, Alton, Ill. Fluid-pressure regulator | 744,964 | Nov. 24 | 4165 | 900 | 107 | 934 |
| Hancock, Randolph B., and G. Sipple, Baltimore, Md. Screen | 729,577 | June 2 | 107 | 27 | 104 | 1149 |
| Hancock, Walter. (See McCabe and Hancock.) | | | | | | |
| Hand, Charles E., Montreal, Canada. Compasses or dividers | 724,697 | Apr. 7 | 517 | 123 | 103 | 1279 |
| Handel, John, Savanna, Ill. Wind or water wheel | 739,413 | Sept. 22 | 3650 | 811 | 106 | 829 |
| Handiboe, John A., Washington, D. C. Clamp for holding type | 718,622 | Jan. 20 | 2103 | 457 | 102 | 481 |
| Handiges, Philip T., St. Louis, Mo. Draft and buffing mechanism | 736,724 | Aug. 18 | 3168 | 699 | 105 | 1690 |
| Handiges, Philip T., assignor of one-half to A. Waycott, St. Louis, Mo. Car-coupling | 719,792 | Feb. 3 | 694 | 160 | 102 | 969 |
| Handiges, Philip T., assignor, by mesne assignments, of one-half to A. Waycott, St. Louis, Mo. Car-coupling | 727,133 | May 5 | 602 | 129 | 104 | 130 |
| Handiges, Philip T., East St. Louis, Ill., assignor of one-half to Damascus Brake Beam Company, St Louis, Mo. Brake-beam | 733,839 | July 14 | 2054 | 485 | 105 | 448 |
| Handley, Arbelia A., Henderson, Ky. Gage | 738,903 | Sept. 15 | 2711 | 599 | 106 | 614 |
| Handley, Harry B., Baltimore, Md. Door-check | 725,702 | Apr. 21 | 2394 | 542 | 103 | 1707 |
| Handy, Arthur E., assignor to Rhode Island Elevator and Machine Company, Providence, R. I. Electrical switch | 741,490 | Oct. 13 | 2112 | 470 | 106 | 1717 |
| Handy, Lucien H., San Francisco, and C. S. Hosford, Berkeley, assignors to Golden Gate Novelty Manufacturing Co., San Francisco, Cal. Door-lock and burglar-alarm | 718,454 | Jan. 13 | 1739 | 387 | 102 | 386 |
| Handy, Lucien H., San Francisco, and C. S. Hosford, Berkeley, assignors to Golden Gate Novelty Manufacturing Co., San Francisco, Cal. Burglar-alarm and sash-lock | 735,872 | Aug. 11 | 1609 | 343 | 105 | 1343 |
| Haneke, Louis. (See Robertson, Thomas J., assignor.) | | | | | | |
| Haneman, John F. (See King, Frank, assignor.) | | | | | | |
| Haney, George M., Grand Rapids, Mich. Door-equalizer | 730,118 | June 2 | 1076 | 242 | 104 | 1346 |
| Haney, Walter R., Benton Harbor, Mich. Engine | 731,565 | June 23 | 3767 | 840 | 104 | 1959 |
| Hanford, Cornelius H., Seattle, Wash. Machine for operating on cans or other receptacles | 748,368 | Dec. 29 | 5668 | 1292, 1293, 1294 | 107 | 2422 |
| Hanhart, Louis J., Cincinnati, Ohio Sawmill set-works | 721,182 | Feb. 24 | 3326 | 760 | 102 | 1574 |
| Hankey, James E. (See Paul and Hankey.) | | | | | | |
| Hankins, Howard F., Pine, Colo. Water-heater and coffee-urn | 738,187 | Sept. 8 | 1288 | 279 | 106 | 294 |
| Hanks, Marshall W., assignor to G. Westinghouse, Pittsburg, Pa. Treating glowers for direct-current electric lamps | 718,455 | Jan. 13 | 1742 | 387 | 102 | 387 |
| Hanks, Marshall W., assignor to G. Westinghouse, Pittsburg, Pa. Treating glowers for electric lamps | 722,701 | Mar. 17 | 1975 | 441 | 103 | 454 |
| Hanks, Marshall W., assignor to G. Westinghouse, Pittsburg, Pa. Making electric-lamp glowers | 722,702 | Mar. 17 | 1977 | 441 | 103 | 455 |
| Hanks, Marshall W., assignor to G. Westinghouse, Pittsburg, Pa. Electric-lamp glower and attaching terminal wires thereto | 725,703 | Apr. 21 | 2395 | 542 | 103 | 1707 |
| Hanks, Marshall W., assignor to G. Westinghouse, Pittsburg, Pa. Making electric-lamp glowers | 735,760 | Aug. 11 | 1384 | 298 | 105 | 1292 |
| Hanks, Marshall W., assignor to G. Westinghouse, Pittsburg, Pa. Apparatus for treating electric-lamp glowers | 735,761 | Aug. 11 | 1386 | 298 | 105 | 1293 |
| Hanley, Timothy, Boston, Mass. Combined crib, sofa, and lounge | 743,495 | Nov. 10 | 1407 | 291 | 107 | 316 |
| Hanlon, John H., Somerville, assignor of one-half to W. J. Hanlon, Fitchburg, Mass. Track-sanding device | 737,228 | Aug. 25 | 4101 | 911, 912 | 105 | 1906 |
| Hanlon, Joseph P. A., Somerville, Mass. Railway-rail | 726,798 | Apr. 28 | 4436 | 999 | 103 | 2141 |
| Hanlon, Marquis D., Wilkinsburg, assignor to Union Switch and Signal Company, Swissvale, Pa. Railway-signal | 729,065 | May 26 | 4216 | 932 | 104 | 944 |
| Hanlon, Marquis D., Wilkinsburg, assignor to Union Switch and Signal Company, Swissvale, Pa. Railway-signal | 744,069 | Nov. 17 | 2521 | 540 | 107 | 566 |
| Hanlon, William J. (See Hanlon, John H., assignor.) | | | | | | |
| Hanmer, Erwin E., Richmond, Va. Ice-freezing can | 739,173 | Sept. 15 | 3182 | 704 | 106 | 712 |
| Hanmore, Hiram M., Los Angeles, Cal. Composition for plaster for walls, ceilings, &c. | 720,799 | Feb. 17 | 2573 | | 102 | 1394 |
| Hann, Edmund L., Denton, Tex. Shoe-holder for boot-blacking stands | 734,173 | July 21 | 2723 | 641 | 105 | 609 |
| Hanna, David V. (See Dedman, Webb, and Hanna.) | | | | | | |
| Hanna, Elmer E., Chicago, Ill. Vise | 718,120 | Jan. 13 | 1119 | 247, 248 | 102 | 256 |
| Hanna, Elmer E., Chicago, Ill. Cotton-press | 735,368 | Aug. 4 | 622 | 127, 128, 129 | 105 | 1114 |
| Hanna, Nelson G. (See Middleton and Pearson, assignors.) | | | | | | |
| Hanna, William G. (See Tomson and Hanna.) | | | | | | |
| Hannam, Edward T., Cincinnati, Ohio. Steam-boiler | 718,836 | Jan. 20 | 2489 | 554 | 102 | 557 |
| Hannan, Charles A., New York, N. Y. Support for electric fixtures | 739,671 | Sept. 22 | 4114 | 917 | 106 | 929 |
| Hannan, Charles R. (See Evensen, Anton, assignor.) | | | | | | |
| Hannan, George B., and F. N. Lucas, Jonesboro, Ind. Window-lock | 724,466 | Apr. 7 | 87 | 22 | 103 | 1188 |
| Hannan, George W., and C. A. Robinson, Wheeling, W. Va. Automatic packing apparatus | 723,200 | Mar. 17 | 2878 | 644 | 103 | 640 |
| Hannan, John B. (See Cavanagh, Hannan, and Clarke.) | | | | | | |
| Hannas, La Fayette. (See Arey, Allen C., Jr., assignor.) | | | | | | |
| Hannay, James B., Loch Long, Scotland. Apparatus for manufacturing white pigment | 729,492 | May 26 | 4946 | 1096 | 104 | 1098 |
| Hannay, James B., Loch Long, Scotland. Apparatus for manufacturing white pigment | 729,493 | May 26 | 4947 | 1097 | 104 | 1098 |
| Hanneborg, Odilon B. H., Christiania, Norway. Snow-excavator for railways or the like | 721,697 | Mar. 3 | 87 | 18 | 103 | 19 |
| Hannemann, Nikolaus E., Charlottenburg, near Berlin, Germany. Feed-water regulator | 722,700 | Mar. 17 | 1974 | 441 | 103 | 454 |
| Hannes, William F., Deming, N. Mex. Ter., assignor of one-half to W. J. Browning, Conception del Oro, Mexico. Metallurgical furnace | 740,360 | Sept. 29 | 5403 | 1217 | 106 | 1219 |
| Hannon, Edouard, Brussels, Belgium, assignor to Solvay Process Company, Syracuse, N. Y. Electrolytic apparatus | 742,863 | Nov. 3 | 76 | 18 | 107 | 18 |
| Hannon, Edouard, Brussels, Belgium, assignor to Solvay Process Company, Syracuse, N. Y. Electrolytic process | 742,864 | Nov. 3 | 79 | 18 | 107 | 19 |
| Hannon, Edouard, Brussels, Belgium, assignor to Solvay Process Company, Syracuse, N. Y. Electrolytic process | 742,865 | Nov. 3 | 80 | 18 | 107 | 19 |
| Hannum, Henry A., Cazenovia, N. Y. Grain-bin ventilator | 740,754 | Oct. 6 | 684 | 155 | 106 | 1393 |
| Hano, Philip. (See Turck, Frederick M., assignor.) | | | | | | |
| Hanrahan, Francis J., Catawissa, Pa. Box-car door | 724,858 | Apr. 7 | 827 | 190 | 103 | 1346 |
| Hanrahan, Timothy, Ivesgrove, Wis. Wagon attachment | 746,638 | Dec. 15 | 2525 | 580 | 107 | 1683 |
| Hansard, Arnold G. (See Mordey and Hansard.) | | | | | | |
| Hanscom, John B., assignor to F. W. Bird and Son, East Walpole, Mass. Paper-machine | 726,909 | May 5 | 142 | 34 | 104 | 33 |
| Hansel, Charles, Westfield, N. J. Automatic locomotive-controlling device | 738,538 | Sept. 8 | 2002 | 436 | 106 | 445 |
| Hansell, William H., Philadelphia, Pa., assignor to H. L. Egbert, New York, N. Y. Paper-cutting machine | 744,754 | Nov. 24 | 3791 | 817 | 107 | 856 |
| Hansen, Charles H., Racine, Wis. Awning | 732,739 | July 7 | 76 | 20 | 105 | 19 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Desig. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Hansen, Christian, Chicago, Ill. Hand-stamp | 732,551 | June 30 | 5663 | 1256, 1257 | 104 | 2367 |
| Hansen, Ebbe J., Exira, Iowa. Sad-iron | 720,518 | Feb. 10 | 2034 | 467 | 102 | 1267 |
| Hansen, George, New York, N. Y. Ratchet-wrench | 747,419 | Dec. 22 | 3891 | 876 | 107 | 2008 |
| Hansen, Gunder, San Francisco, Cal. Water-tube boiler | 730,765 | June 9 | 2246 | 498 | 104 | 1612 |
| Hansen, Hans C., Newton, Mass. Machine for mitering printers' rules | 718,837 | Jan. 20 | 2490 | 554, 555 | 102 | 557 |
| Hansen, Hans C., Newton, Mass. Matrix-truing apparatus | 727,355 | May 5 | 994 | 216 | 104 | 214 |
| Hansen, Hans C., Newton, Mass. Depth-gage | 740,646 | Oct. 6 | 494 | 109 | 106 | 1352 |
| Hansen, Hans C., Newton, Mass. Rule-planing apparatus | 745,725 | Dec. 1 | 737 | 168, 169 | 107 | 1255 |
| Hansen, Hans M., Quincy, Mass. Exercising apparatus | 732,740 | July 7 | 77 | 21 | 105 | 19 |
| Hansen, Henry A., assignor of one-half to P. Olsen, New York, N. Y. Water-vehicle | 738,436 | Sept. 8 | 1800 | 391 | 106 | 402 |
| Hansen, James, Chicago, Ill. Closet-seat | 724,181 | Mar. 31 | 4753 | 1066 | 103 | 1053 |
| Hansen, Jens, *et al.* (See Hetfield, John M., assignor.) | | | | | | |
| Hansen, John M., Pittsburg, Pa. Bolster for hopper-cars | 719,464 | Feb. 3 | 93 | 22, 23 | 102 | 845 |
| Hansen, John M., Pittsburg, Pa. Flat-bottom car with flush door | 720,245 | Feb. 10 | 1539 | 352 | 102 | 1164 |
| Hansen, John M., Pittsburg, Pa. Bolster for hopper-cars | 720,246 | Feb. 10 | 1541 | 352, 353 | 102 | 1164 |
| Hansen, John M., Pittsburg, Pa. Truck-frame for railway-cars | 722,298 | Mar. 10 | 1203 | 265 | 103 | 273 |
| Hansen, John M., Pittsburg, Pa. Hopper-bottom car | 722,299 | Mar. 10 | 1205 | 266 | 103 | 273 |
| Hansen, John M., Pittsburg, Pa. Hopper-car | 727,616 | May 12 | 1477 | 330, 331, 332 | 104 | 335 |
| Hansen, John M., Pittsburg, Pa. Car with truss-rods | 727,617 | May 12 | 1482 | 332, 333 | 104 | 337 |
| Hansen, John M., Pittsburg, Pa. Truck | 727,618 | May 12 | 1484 | 333 | 104 | 337 |
| Hansen, John M., Pittsburg, Pa. Low-side gondola car | 727,619 | May 12 | 1485 | 334 | 104 | 337 |
| Hansen, John M., Pittsburg, Pa. Box or produce car | 727,620 | May 12 | 1488 | 334, 335 | 104 | 338 |
| Hansen, John M., Pittsburg, Pa. Hopper-car with flush doors | 727,621 | May 12 | 1489 | 335, 336 | 104 | 338 |
| Hansen, John M., Pittsburg, Pa. Gondola car | 727,622 | May 12 | 1492 | 336, 337 | 104 | 339 |
| Hansen, John M., Pittsburg, Pa. Stock-car | 727,623 | May 12 | 1494 | 337, 338 | 104 | 339 |
| Hansen, John M., Pittsburg, Pa. Swing-motion truck-frame for railway-cars | 729,160 | May 26 | 4382 | 967 | 104 | 978 |
| Hansen, John M., Pittsburg, Pa. Truck-bolster for railway-cars | 736,094 | Aug. 11 | 2014 | 430 | 105 | 1431 |
| Hansen, John M., Pittsburg, Pa. Car with metallic underframing | 743,496 | Nov. 10 | 1408 | 291, 292 | 107 | 317 |
| Hansen, John M., Pittsburg, Pa. Gondola car | 743,497 | Nov. 10 | 1410 | 292, 293 | 107 | 317 |
| Hansen, John M., Pittsburg, Pa. Brake-beam | 743,498 | Nov. 10 | 1413 | 294 | 107 | 318 |
| Hansen, John M., Pittsburg, Pa. Flat-car | 743,499 | Nov. 10 | 1415 | 294 | 107 | 319 |
| Hansen, John M., Pittsburg, Pa. Gondola car with drop-doors | 743,500 | Nov. 10 | 1416 | 295 | 107 | 319 |
| Hansen, John M., Pittsburg, Pa. Ore-car | 743,501 | Nov. 10 | 1418 | 296, 297 | 107 | 319 |
| Hansen, John M., Pittsburg, Pa. Railway-car stake and making same | 743,502 | Nov. 10 | 1421 | 297 | 107 | 320 |
| Hansen, Ludvig, Angola, N. Y. Gill-net | 724,467 | Apr. 7 | 88 | 22 | 103 | 1188 |
| Hansen, Morten B., assignor of one-half to M. D. Clausen, Copenhagen, Denmark. Lubricating apparatus | 719,941 | Feb. 3 | 939 | 219 | 102 | 1023 |
| Hansen, Neils M. (See De Vilbiss and Hansen.) | | | | | | |
| Hansen, Sigurd S., Christiania, Norway. Snow-boat | 736,386 | Aug. 18 | 2512 | 552 | 105 | 1554 |
| Hansen, Thomas P. (See Jensen, Jens P., assignor.) | | | | | | |
| Hansen, Thorvald, Everett, Mass. Thread-winding machine | 719,330 | Jan. 27 | 3439 | 767 | 102 | 773 |
| Hansler, John B., Newburgh, N. Y. Roadway and vehicle for traveling thereon | 734,061 | July 21 | 2512 | 586 | 105 | 565 |
| Hanson, A. (See Davis, Samuel, assignor.) | | | | | | |
| Hanson, Bengt M. W., Hartford, Conn. Lubricator | 745,435 | Dec. 1 | 232 | 54 | 107 | 1149 |
| Hanson, Bengt M. W., assignor to Pratt & Whitney Company, Hartford, Conn. Fluid-pressure-operated device | 719,109 | Jan. 27 | 3040 | 676, 677 | 102 | 688 |
| Hanson, Bengt M. W., assignor to Pratt & Whitney Company, Hartford, Conn. Tool-carriage mechanism | 719,110 | Jan. 27 | 3046 | 677 | 102 | 689 |
| Hanson, Bengt M. W., assignor to Pratt & Whitney Company, Hartford, Conn. Machine for relieving fluted tools | 721,516 | Feb. 24 | 3941 | 897, 898 | 102 | 1702 |
| Hanson, Bengt M. W., assignor to Pratt & Whitney Company, Hartford, Conn. Lathe | 726,678 | Apr. 28 | 4205 | 950, 951 | 103 | 2093 |
| Hanson, Bengt M. W., assignor to Pratt and Whitney Company, Hartford, Conn. Stopping and reversing mechanism | 726,679 | Apr. 28 | 4208 | 951 | 103 | 2094 |
| Hanson, Bengt M. W., assignor to Pratt & Whitney Company, Hartford, Conn. Indexing apparatus | 728,457 | May 19 | 3086 | 682, 683 | 104 | 694 |
| Hanson, Bengt M. W., assignor to Pratt & Whitney Company, Hartford, Conn. Fluid-pressure-operated chuck | 728,458 | May 19 | 3094 | 683, 684 | 104 | 696 |
| Hanson, Bengt M. W., assignor to Pratt & Whitney Company, Hartford, Conn. Fluid-pressure-operated chuck | 728,572 | May 19 | 3311 | 733 | 104 | 740 |
| Hanson, Bengt M. W., assignor to Pratt & Whitney Company, Hartford, Conn. Fluid-pressure-operated indexing apparatus | 728,573 | May 19 | 3315 | 733, 734, 735 | 104 | 741 |
| Hanson, Bengt M. W., assignor to Pratt & Whitney Company, Hartford, Conn. Machine for grinding cutters | 730,455 | June 9 | 1705 | 381, 382, 383 | 104 | 1492 |
| Hanson, Bengt M. W., assignor to Pratt & Whitney Company, Hartford, Conn. Dimensioning apparatus | 732,184 | June 30 | 4948 | 1100, 1101 | 104 | 2219 |
| Hanson, Bengt M. W., assignor to Pratt & Whitney Company, Hartford, Conn. Adjustable tool-post | 733,391 | July 14 | 1251 | 296 | 105 | 281 |
| Hanson, Charles, and J. H. Adams, Baltimore, Md. Hose-spanner | 730,119 | June 2 | 1077 | 242 | 104 | 1346 |
| Hanson, Charles H. L., assignor to J. Bromley & Sons, Philadelphia, Pa. Woven fabric | 729,161 | May 26 | 4384 | 967 | 104 | 978 |
| Hanson, Embrik, Fairfax, Minn. Cannon-pinion remover | 736,964 | Aug. 25 | 3628 | 803 | 105 | 1807 |
| Hanson, Frederick. (See Freihofer and Hanson.) | | | | | | |
| Hanson, Fredrick P. (See Rogers and Hanson.) | | | | | | |
| Hanson, Freeman, Hollis Center, assignor of one-half to C. B. Harmon, Biddeford, Me. Harrow | 729,066 | May 26 | 4218 | 932 | 104 | 944 |
| Hanson, Freeman, Hollis Center, assignor of one-half to C. B. Harmon, Biddeford, Me. Rotary harrow | 743,382 | Nov. 3 | 1116 | 237 | 107 | 236 |
| Hanson, Hans, Holbrook, Nebr. Rail-joint | 720,581 | Feb. 17 | 2182 | 506 | 102 | 1313 |
| Hanson, Harry, Los Angeles, Cal., and F. L. Dwight, Bisbee, Ariz. Ter. Safety-chair for mining-cages | 733,907 | July 14 | 2187 | 514, 515 | 105 | 475 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|
| | | | Spec. | Drg. | Vol. | Page. |
| Hanson, John H., assignor to S. H. Loughman and R. G. Galusha, Chicago, Ill. Plug-fuse | 745,493 | Dec. 1 | 346 | 80 | 107 | 1173 |
| Hanson, Louis. (See Hornung, Anton N., Jr., assignor.) | | | | | | |
| Hanson, Louis, Wilmington, N. C. Apparatus for preserving and creosoting wood | 722,505 | Mar. 10 | 1594 | 351 | 103 | 358 |
| Hanson, Marius. (See Flagg, David, assignor.) | | | | | | |
| Hanson, Ole, Dalton, Minn. Target | 741,131 | Oct. 13 | 1377 | 315 | 106 | 1560 |
| Hanson, Paul, Chicago, Ill. Flag or wind-break for harvesting-machines | 745,831 | Dec. 1 | 956 | 215<br>216 | 107 | 1302 |
| Hanson, Paul, St. Paul, Minn. Twine-can for harvesting-machines | 745,832 | Dec. 1 | 958 | 216 | 107 | 1303 |
| Hanson, Paul, St. Paul, Minn. Twine-can for harvesting-machines | 745,833 | Dec. 1 | 961 | 216 | 107 | 1303 |
| Hanson, Paul, St. Paul, Minn. Twine-can for grain-binders | 745,834 | Dec. 1 | 963 | 216<br>217 | 107 | 1304 |
| Hanson, Paul, St. Paul, Minn. Twine-can for grain-binders | 745,835 | Dec. 1 | 966 | 217 | 107 | 1304 |
| Hanson, Paul, St. Paul, Minn. Weed attachment for mowing-machines | 747,969 | Dec. 29 | 4952 | 1118 | 107 | 2267 |
| Hanson, Tom, Denmark, near Danville, Ill. Cultivator | 720,247 | Feb. 10 | 1542 | 353<br>354 | 102 | 1165 |
| Hanson & Van Winkle Company. (See Starrett, Harry E., assignor.) | | | | | | |
| Hanson, William F., Lynn, Mass. Machine for molding crayons | 732,408 | June 30 | 5387 | 1194 | 104 | 2311 |
| Hanssen, Friedrich, Altona-on-the-Elbe, Germany. Making hemoglobin preparations | 736,250 | Aug. 11 | 2275 | ..... | 105 | 1485 |
| Hanssen, Iver A., *et al.* (See Udstadt, Sivert, assignor.) | | | | | | |
| Hanssler, Emil H., Webster City, Iowa. Portable sawmill | 719,585 | Feb. 3 | 318 | 74 | 102 | 888 |
| Hansson, Henrik F., Baltimore, Md. Floating dock | 736,725 | Aug. 18 | 3170 | 700 | 105 | 1691 |
| Hanway, Stanley M., *et al.* (See Gorrell, William R., assignor.) | | | | | | |
| Hapgood Plow Company. (See Anderson, Tobias M., assignor.) | | | | | | |
| Harbaugh, Harrison K., Pittsburg, Pa. Combination-tool | 727,356 | May 5 | 996 | 217 | 104 | 215 |
| Harben, Thomas J., Hoopeston, Ill., assignor to American Can Company, New York, N. Y. Can-body-blank-feed mechanism for can-body-making machines | 723,383 | Mar. 24 | 3237 | 726 | 103 | 723 |
| Harbold, John H., Marshall, Mo. Brace and anchor for posts | 720,025 | Feb. 10 | 1131 | 258<br>259 | 102 | 1079 |
| Harcourt, Stillwell R. (See Hosley and Harcourt.) | | | | | | |
| Hard, Dora J., *et al.* (See Pace, Edgar J., assignor.) | | | | | | |
| Hard, William G., *et al.* (See Pace, Edgar J., assignor.) | | | | | | |
| Hardart, Frank, *et al.* (See Fritsche, John, assignor.) | | | | | | |
| Hardaway, Benjamin H., Columbus, Ga. Cableway for hoisting and conveying | 728,574 | May 19 | 3323 | 735 | 104 | 743 |
| Harden, Edward W. (See Rabbe, Harden, and Dempsey.) | | | | | | |
| Harden, William I. F., Hartford, Kans. Chimney-protector | 726,160 | Apr. 21 | 3179 | 719 | 103 | 1872 |
| Hardenburgh, M. Julius, *et al.* (See Davis, Nathan, assignor.) | | | | | | |
| Harder, George A., and J. La Riviere, Greenriver, Wyo. Piston-rod packing | 724,698 | Apr. 7 | 519 | 123 | 103 | 1280 |
| Harder, Walter C., assignor of one-half to C. W. Andrews, Chicago, Ill. Pouch or bag holder | 739,783 | Sept. 22 | 4315 | 966 | 106 | 974 |
| Harder, William A. (See Trimble and Harder.) | | | | | | |
| Hardie, Charles E., Chico, Cal. Baling-press | 725,958 | Apr. 21 | 2848 | 646 | 103 | 1804 |
| Hardie, Thomas, assignor to Philadelphia Steel & Iron Company, Philadelphia, Pa. Muffle-furnace | 739,174 | Sept. 15 | 3184 | 704 | 106 | 712 |
| Hardill, Joseph, Mitchell, Canada, assignor of one-half to R. Benson, Buffalo, N. Y. Engine-governor | 728,707 | May 19 | 3560 | 791 | 104 | 795 |
| Hardill, Joseph, Mitchell, Canada, assignor of one-half to R. Benson, Buffalo, N. Y. Compound tandem engine | 728,708 | May 19 | 3561 | 791 | 104 | 795 |
| Hardill, Joseph, Mitchell, Canada, assignor of one-half to R. Benson, Buffalo, N. Y. Compound steam-engine | 728,709 | May 19 | 3562 | 792 | 104 | 795 |
| Hardin, George W., and J. D. Mead, Pecan Gap, Tex. Cotton-stalk puller | 738,795 | Sept. 15 | 2515 | 553 | 106 | 571 |
| Hardin, Louise L., Denver, Colo. Ditching and ridging machine | 717,846 | Jan. 6 | 637 | 141 | 102 | 136 |
| Hardin, Patrick K., Chicago, Ill. Water-closet | 742,866 | Nov. 3 | 81 | 19 | 107 | 19 |
| Harding, Henry M., Englewood, N. J. Cable or wire shield for suspended cable-track roads | 717,570 | Jan. 6 | 88 | 21, 22 | 102 | 21 |
| Harding, Henry M., New York, N. Y. Means for handling merchandise | 724,859 | Apr. 7 | 828 | 191 | 103 | 1346 |
| Harding, Henry M., New York, N. Y. Attachment for overhead electric carriers | 724,860 | Apr. 7 | 829 | 191 | 103 | 1346 |
| Harding, Henry M., New York, N. Y. Telpher | 729,578 | June 2 | 108 | 27 | 104 | 1149 |
| Harding, Henry M., New York, N. Y. Means for varying the speed of overhead electric carriers | 733,035 | July 7 | 589 | 144 | 105 | 125 |
| Harding, Henry M., New York, N. Y. Telpher | 734,126 | July 21 | 2639 | 623 | 105 | 591 |
| Harding, Mathew A., *et al.* (See Bryar, George, assignor.) | | | | | | |
| Harding, Paul, Long Island City, N. Y. Ratchet-wrench | 742,638 | Oct. 27 | 4339 | 976 | 106 | 2209 |
| Harding, Simon J., Harrisburg, Pa. Washing-machine | 724,930 | June 2 | 737 | 165 | 104 | 1278 |
| Hardinge, George F., Vineland, N. J. Bottle-stopper | 722,978 | Mar. 17 | 2462 | 551 | 103 | 553 |
| Hardinge, George F., assignor of one-half to F. Wanser and A. M. Pierson, Vineland, N. J. Fumigating and disinfecting device | 734,229 | July 21 | 2828 | 663 | 105 | 632 |
| Hardison, Lewis A., Santa Paula, Cal. Drill attachment | 743,639 | Nov. 10 | 1682 | 353 | 107 | 375 |
| Hardman, James, Jr., Belleville, N. J., assignor to Hardman Rubber Company. Fountain-syringe | 718,202 | Jan. 13 | 1272 | 279 | 102 | 289 |
| Hardman, John E. (See Reid, John K., assignor.) | | | | | | |
| Hardman Rubber Company. (See Hardman, James, Jr., assignor.) | | | | | | |
| Hardman Rubber Company. (See Schwerin, Silas, assignor.) | | | | | | |
| Hardsocg, Martin, *et al.* (See Nicholls, Moses, assignor.) | | | | | | |
| Hardsocg, Martin. (See Nicholls and Smith, assignors.) | | | | | | |
| Hardt, Firm of Julius. (See Sieverts, Richard C. H., assignor.) | | | | | | |
| Hardtmann, Julius R., assignor of one-half to Olive & Myers Mfg. Co., Dallas, Tex. Couch | 748,184 | Dec. 29 | 5362 | 1218 | 107 | 2356 |
| Hardwick, Catherine, assignor to Hardwick Manufacturing Company, New York, N. Y. Washboard | 726,680 | Apr. 28 | 4212 | 952 | 103 | 2095 |
| Hardwick, Harry, Philadelphia, Pa. Pile-wire retainer for looms | 738,031 | Sept. 1 | 942 | 209 | 106 | 205 |
| Hardwick, Harry, assignor to Ivins, Dietz and Metzger Company, Philadelphia, Pa. Jacquard mechanism for looms | 723,153 | Mar. 17 | 2775 | 623<br>624<br>625<br>626<br>627 | 103 | 617 |
| Hardwick Manufacturing Company. (See Hardwick, Catherine, assignor.) | | | | | | |
| Hardy, Albert, and D. Voss, New Brighton, England. Life-guard for vehicles | 728,910 | May 26 | 3938 | 875 | 104 | 887 |
| Hardy, Clement A., Moline, assignor to Fuller Manufacturing Company, East Moline, Ill. Disk attachment for grain-drills | 728,167 | May 12 | 2526 | 561 | 104 | 554 |
| Hardy, Clement A., Moline, assignor to Fuller Manufacturing Company, East Moline, Ill. Grain-drill | 732,633 | June 30 | 5814 | 1289 | 104 | 2403 |
| Hardy, John A., and E. L. Goodykoontz, Iaeger, W. Va. Wrench | 746,504 | Dec. 8 | 2164 | 497 | 107 | 1581 |
| Hardy, Ralph P., Oelwein, Iowa. Oil-can | 720,424 | Feb. 10 | 1862 | 424 | 102 | 1233 |
| Hardy, Roy E. (See Watt, Frank J., assignor.) | | | | | | |
| Hardy, William H., *et al.* (See Buchanan, William R., assignor.) | | | | | | |
| Hare, Alice, *et al.* (See Hare, William J. and J. P., assignors.) | | | | | | |
| Hare, James P. (See Hare, William J. and J. P.) | | | | | | |
| Hare, John R., Baltimore, Md. Knife-sharpener | 748,369 | Dec. 29 | 5676 | 1294 | 107 | 2425 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volumes. Spec. | Monthly volumes. Drgs. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Hare, Thomas, *et al.* (See Hare, William J. and J. P., assignors.) | | | | | | |
| Hare, William, Danville, Ill. Dental mouth-prop, mirror, and tongue-protector | 735,762 | Aug. 11 | 1388 | 298 | 105 | 1293 |
| Hare, William J. and J. P., assignors of forty-five one-hundredths to H. and E. Williams, A. and T. Hare, Toronto, Canada. Electric train-signal | 745,277 | Nov. 24 | 4794 | 1046<br>1047 | 107 | 1064 |
| Hargan, William B., San Francisco, Cal. Non-refillable bottle | 729,162 | May 26 | 4386 | 967 | 104 | 979 |
| Harger, Charles H., San Francisco, Cal. Hotel-register | 735,972 | Aug. 11 | 1784 | 382 | 105 | 1381 |
| Harger, John S., and R. B. Baldwin, Chicago, Ill. Acetylene-gas generator | 745,603 | Dec. 1 | 531 | 124<br>125 | 107 | 1210 |
| Hargrave, Fredrick W. (See Wheeler and Hargrave.) | | | | | | |
| Hargraves, Robert F., Providence, R. I. Mechanical movement | 728,226 | May 19 | 2649 | 592 | 104 | 602 |
| Hargreaves, George, Jr., Detroit, Mich. Rolling-mill | 739,493 | Sept. 22 | 3783 | 846<br>847 | 106 | 859 |
| Hargreaves, James, J. W. Stubbs, and J. Kearsley, Middlewich, England. Electrode | 731,453 | June 23 | 3563 | 794 | 104 | 1918 |
| Haring, Charles E., New York, N. Y. Window-lift | 737,402 | Aug. 25 | 4433 | 992 | 105 | 1978 |
| Haring, William N., Nyack, N. Y. Wheel | 721,038 | Feb. 17 | 3018 | 692<br>693 | 102 | 1490 |
| Haring, William N., Nyack, N. Y. Railway-rail fastener | 726,681 | Apr. 28 | 4213 | 952 | 103 | 2095 |
| Harisberger, John, Seattle, Wash. Electric switch | 739,672 | Sept. 22 | 4116 | 918 | 106 | 930 |
| Harker, Charles O., Sioux City, Iowa. Receptacle | 736,387 | Aug. 18 | 2513 | 552 | 105 | 1555 |
| Harkins, Harry, *et al.* (See McGuire, Peter J., assignor.) | | | | | | |
| Harkins, James E., and J. B. Willis, Ann Arbor, Mich. Toaster | 735,369 | Aug. 4 | 627 | 129 | 105 | 1114 |
| Harlan, Frederic T., Chesterfield, assignor of one-half to G. P. Parker, Hagaman, Ill. Amusement-wheel | 741,964 | Oct. 20 | 3048 | 679<br>680 | 106 | 1928 |
| Harlan, Harry E., Toledo, Ohio. Toilet article | 742,639 | Oct. 27 | 4340 | 976 | 106 | 2209 |
| Harlan, Joseph M., Ardmore, Pa. Sod-cutter | 743,277 | Nov. 3 | 893 | 194 | 107 | 189 |
| Harland, George H., Goderich, Canada. Counter-support | 729,761 | June 2 | 442 | 100 | 104 | 1218 |
| Harleman, Peter J., Boston, Mass. Mechanical stoker | 727,940 | May 12 | 2122 | 472<br>473 | 104 | 470 |
| Harley, Henry M. (See Lundgren, Jakob, assignor.) | | | | | | |
| Harlin, George C., Seattle, Wash. Car-coupling | 730,910 | June 16 | 2521 | 561 | 104 | 1687 |
| Harling, Walter, Blaine, Wash. Adjustable strap for eccentrics | 736,847 | Aug. 18 | 3407 | 753 | 105 | 1740 |
| Harlow, Augustus D. (See Davison, Fred, assignor.) | | | | | | |
| Harlow, Charles T. (See Lewis, Quimby, Harlow, and Shields.) | | | | | | |
| Harlow, Cushing C., and A. Lindgren, assignors to C. S. Pierce, Brockton, Mass. Brush-machine | 717,988 | Jan. 6 | 885 | 197 | 102 | 190 |
| Harlow, Franklin W., Eureka, Colo. Ore-concentrator | 723,865 | Mar. 31 | 4107 | 927 | 103 | 921 |
| Harlow, John R., Auburn, N. Y. Spoon-bait | 734,703 | July 28 | 3709 | 868 | 105 | 832 |
| Harman, Joseph, assignor of one-half to G. W. Holland, Brainerd, Minn. Surveying instrument | 735,763 | Aug. 11 | 1389 | 299 | 105 | 1294 |
| Harman, Warren, Cedar Rapids, Iowa. Folding bed | 741,132 | Oct. 13 | 1378 | 316 | 106 | 1560 |
| Harmes, Helen A., Washington, Mo. Adjustable embroidery-hoop | 744,070 | Nov. 17 | 2525 | 540 | 107 | 567 |
| Harmet, Henri, St. Etienne, France. Speed-governor for hydraulic presses | 726,425 | Apr. 28 | 3700 | 839 | 103 | 1995 |
| Harmet, Henri, St. Etienne, France. Electric furnace | 742,315 | Oct. 27 | 3763 | 843 | 106 | 2089 |
| Harmet, Henri, St. Etienne, France. Electrometallurgy of iron and steel | 742,316 | Oct. 27 | 3765 | 843 | 106 | 2089 |
| Harmet, Henri, St. Etienne, France. Electric furnace | 742,419 | Oct. 27 | 3944 | 885<br>886 | 106 | 2125 |
| Harmon, Albert H., Scio, Ohio. Pipe-tongs | 747,170 | Dec. 15 | 3422 | 775 | 107 | 1887 |
| Harmon, Anthony, *et al.* (See Gaynor, John J., assignor.) (Reissue.) | | | | | | |
| Harmon, Charles B. (See Hanson, Freeman, assignor.) | | | | | | |
| Harmon, Charles S. (See Porter, Charles H., assignor.) | | | | | | |
| Harmon, Charles W., Springfield, Mo. Bale-tie | 720,582 | Feb. 17 | 2183 | 506 | 102 | 1313 |
| Harmon, Daniel A., Ingraham, Ill. Well-boring machine | 739,860 | Sept. 29 | 4463 | 1002 | 106 | 1022 |
| Harmon, Elmer L., Allegheny, Pa. Swinging ladder | 721,298 | Feb. 24 | 3545 | 806 | 102 | 1620 |
| Harmon, Elmer L., Sheridan, Pa. Combined step and extension ladder | 739,309 | Sept. 22 | 3435 | 766 | 106 | 782 |
| Harmon, Elmer L., Sheridan, Pa. Knockdown ladder | 743,640 | Nov. 10 | 1683 | 354 | 107 | 375 |
| Harmon, Frank L., Beverly, Mass. Buttonhole-finishing machine | 724,468 | Apr. 7 | 90 | 22 | 103 | 1188 |
| Harmon, Frank L., Beverly, Mass. Skiving-machine | 726,285 | Apr. 28 | 3436 | 781<br>782 | 103 | 1940 |
| Harmon, Frank L., Beverly, Mass. Machine for skiving and folding leather | 731,566 | June 23 | 3769 | 840<br>841 | 104 | 1960 |
| Harmon, Frank L., Beverly, Mass. Pianoforte-keyboard | 732,688 | June 30 | 5920 | 1313 | 104 | 2423 |
| Harmon, Frank L., Beverly, Mass. Machine for sewing buttonholes | 740,755 | Oct. 6 | 685 | 155<br>156<br>157<br>158<br>159 | 106 | 1393 |
| Harmon, John, Chicago, Ill. Conveyer | 726,286 | Apr. 28 | 3441 | 782 | 103 | 1941 |
| Harmon, Orville S., Brooklyn, N. Y. Feeding device for sewing-machines | 722,014 | Mar. 3 | 670 | 149 | 103 | 145 |
| Harmon, Orville S., Brooklyn, N. Y. Hemmer for sewing-machines | 722,015 | Mar. 3 | 673 | 149<br>150 | 103 | 145 |
| Harmon S. Palmer Hollow Concrete Building Block Company. (See Palmer, Harmon S., assignor.) | | | | | | |
| Harmon, William A., Skagway, Alaska. Single-delivery match-safe | 737,736 | Sept. 1 | 337 | 71 | 106 | 77 |
| Harmon, William S., Freeport, Nebr. Gate | 733,197 | July 7 | 879 | 213 | 105 | 185 |
| Harms, George H. (See Sherman and Harms.) | | | | | | |
| Harmstead, Martin E., Burlington, N. J., assignor of one-half to J. J. Sleeper, Philadelphia, Pa. Air-pump | 748,498 | Dec. 29 | 5927 | 1346 | 107 | 2480 |
| Harn, George U., Jr. (See Smith and Harn.) | | | | | | |
| Harnden, Frank. (See Coburn and Harnden.) | | | | | | |
| Harned, William D., assignor to Meriden Curtain Fixture Co., Meriden, Conn. Spring mechanism for shade-rollers | 721,699 | Mar. 3 | 91 | 19 | 103 | 20 |
| Harner, Joseph G. (See Coleman and Harner.) | | | | | | |
| Harness, Homer K. (See Stout, Stephen, assignor.) | | | | | | |
| Harold, James A., Cowen, W. Va. Tool-handle | 742,640 | Oct. 27 | 4341 | 976 | 106 | 2209 |
| Harp, Charles A., and J. F. Starkweather, Sr., Stockton, assignors of one-half to G. Marks, Sacramento, B. Davis, W. A. Morris, and J. F. Starkweather, Jr., Stockton, Cal. Extracting gold and silver from ores | 735,501 | Aug. 4 | 897 | ..... | 105 | 1173 |
| Harp, James D., Modesto, Cal. Motor-vehicle | 729,579 | June 2 | 109 | 28 | 104 | 1149 |
| Harper, Fred H., *et al.* (See Sullivan, David J., assignor.) | | | | | | |
| Harper, John A. (See Gillen and Anderson, assignors.) | | | | | | |
| Harper, John C., Lincoln, Nebr. Work-guide for sewing-machines | 742,867 | Nov. 3 | 82 | 19,20 | 107 | 19 |
| Harper, Lee. (See Seed and Harper.) | | | | | | |
| Harper, Stephen, Leeds, England. Clothes-pounder | 734,860 | July 28 | 4031 | 941 | 105 | 896 |
| Harpham, G. E. (See Jackson, Ralph M., assignor.) | | | | | | |
| Harpold, Christopher, Santa Paula, Cal. Fruit-cutter | 737,615 | Sept. 1 | 107 | 23 | 106 | 25 |
| Harpold, James H. (See Darst, Peter M., assignor.) | | | | | | |
| Harpole, Andrew J., Union City, Tenn. Copy-holder | 736,848 | Aug. 18 | 3408 | 754 | 105 | 1741 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Harrar, Henry C., Colmar, Pa. Car-replacing frog | 719,215 | Jan. 27 | 3215 | 717 | 102 | 724 |
| Harrass, Max, Böhlen, Germany. Producing ornamentations for and upon veneer plates or the like | 739,861 | Sept. 29 | 4465 | 1002 | 106 | 1022 |
| Harrell, Hardy B., Gainesville, Tex. Dental instrument | 737,616 | Sept. 1 | 108 | 24 | 106 | 26 |
| Harrell, Hezekiah L. (See Carlton and Harrell.) | | | | | | |
| Harries, Howard H. (See Johnson, George A., assignor.) | | | | | | |
| Harrigan, John F., Detroit, Mich. Journal-bearing | 727,941 | May 12 | 2125 | 473, 474 | 104 | 471 |
| Harrigan, Michael T., Wollaston, Mass., assignor to Peerless Machinery Company, Charleston, W. Va.; New York, N. Y., and Boston, Mass. Channel-laying machine | 737,617 | Sept. 1 | 109 | 24 | 106 | 26 |
| Harriman, George B. (See Hood, John, assignor.) | | | | | | |
| Harriman, Orlando, New York, N. Y. Paper-holder | 733,480 | July 14 | 1403 | 331 | 105 | 314 |
| Harrington, C. J. (See Fritze, Henry L., assignor.) | | | | | | |
| Harrington, Daniel, New Brunswick, N. J. Window-shade bracket | 747,702 | Dec. 22 | 4406 | 993 | 107 | 2124 |
| Harrington, David, Worcester, Mass. Spinning-ring | 743,503 | Nov. 10 | 1422 | 297 | 107 | 320 |
| Harrington, George W., assignor to T. E. Dwyer, Wakefield, Mass. Apparatus for coating metal pipes or conduits | 737,618 | Sept. 1 | 111 | 24 | 106 | 26 |
| Harrington, Samuel H., New York, N. Y. Tool for bonding rails | 723,270 | Mar. 24 | 3005 | 676 | 103 | 679 |
| Harrington, William W., Akron, Ohio. Combined music-roll and book-carrier | 741,400 | Oct. 13 | 1936 | 428, 429 | 106 | 1680 |
| Harris, Abraham B., Etter, Va. Nut-lock | 720,691 | Feb. 17 | 2395 | 548 | 102 | 1356 |
| Harris, Alexander B. B., Georgetown, S. C. Automatic cistern cut-off and self-cleaning filter | 736,388 | Aug. 18 | 2515 | 553 | 105 | 1555 |
| Harris Automatic Press Company. (See Harris, Charles G., assignor.) | | | | | | |
| Harris, Barnett W., Waveland, Ind. Automatic gas-lighting apparatus | 742,024 | Oct. 20 | 3164 | 707 | 106 | 1952 |
| Harris, Bert H., Reed City, Mich. Means for raising sunken logs | 720,137 | Feb. 10 | 1342 | 307 | 102 | 1125 |
| Harris, Beverly J., New Orleans, La. Apparatus for loading or unloading vessels | 742,023 | Oct. 20 | 3162 | 706 | 106 | 1951 |
| Harris, Charles C., Ukiah, Cal. Lathe-chuck | 745,346 | Dec. 1 | 53 | 12 | 107 | 1112 |
| Harris, Charles E., Valley, Nebr. Water-elevator | 730,260 | June 9 | 1347 | 295, 296 | 104 | 1417 |
| Harris, Charles G., assignor to Harris Automatic Press Company, Niles, Ohio. Delivery mechanism for printing-presses | 726,161 | Apr. 21 | 3180 | 719 | 103 | 1872 |
| Harris, Charles G., assignor to Harris Automatic Press Company, Niles, Ohio. Blank or stock register for printing-presses | 742,641 | Oct. 27 | 4342 | 977 | 106 | 2209 |
| Harris, Charles M. (See Craun and Harris.) | | | | | | |
| Harris, Charles R., Williamsport, Pa., assignor of one-half to J. E. Austrian, New York, N. Y. Suspenders | 717,989 | Jan. 6 | 886 | 198 | 102 | 190 |
| Harris, Charles R., Williamsport, Pa., assignor of one-half to J. E. Austrian, New York, N. Y. Cast-off | 734,861 | July 28 | 4031 | 941 | 105 | 896 |
| Harris, Charles W., Madison, Me. Carpet-fastening device | 728,911 | May 26 | 3939 | 875 | 104 | 887 |
| Harris, Clayton, Providence, R. I. Sheet-metal window-frame | 722,101 | Mar. 3 | 820 | 182 | 103 | 177 |
| Harris, D. F., *et al.* (See Wilder, Robert E., assignor.) | | | | | | |
| Harris, David, assignor, by mesne assignments, to Rubber Balloon Company of America, Brooklyn, N. Y. Seamless rubber balloon | 718,121 | Jan. 13 | 1122 | 248 | 102 | 257 |
| Harris, Edwin A. (See Clark and Harris.) | | | | | | |
| Harris, Elmo G., Philadelphia, Pa. Centrifugal pump | 745,181 | Nov. 24 | 4629 | 1003, 1004 | 107 | 1030 |
| Harris, Florence. (See Reed, Albert S., assignor.) | | | | | | |
| Harris, Frederick, Toledo, Ohio. Dumb-bell | 734,062 | July 21 | 2513 | 587 | 105 | 565 |
| Harris, Frederick C., Sackville, Canada. Snow-clearing machine | 724,469 | Apr. 7 | 94 | 23 | 103 | 1189 |
| Harris, Gordon D., assignor to J. H. Pennington, New York, N. Y. Evaporating apparatus | 743,383 | Nov. 3 | 1117 | 238 | 107 | 236 |
| Harris, Harry, assignor of two-thirds to S. F. Nixon and E. Rood, Westfield, N. Y. Air-pump | 736,965 | Aug. 25 | 3629 | 803, 804 | 105 | 1807 |
| Harris, Harry, assignor of two-thirds to S. F. Nixon and E. Rood, Westfield, N. Y. Vaporizer | 743,866 | Nov. 10 | 2084 | 443 | 107 | 460 |
| Harris, Harry L., New York, N. Y. Nasal dish | 722,102 | Mar. 3 | 822 | 183 | 103 | 177 |
| Harris, Harry L., New York, N. Y. Whisk-broom | 748,370 | Dec. 29 | 5677 | 1295 | 107 | 2425 |
| Harris, Henry, Congleton, assignor to Harris Rifle Magazine, Limited, London, England. Magazine for repeating firearms | 723,864 | Mar. 31 | 4106 | 926, 927 | 103 | 921 |
| Harris, Hermen. (See Burt and Harris.) | | | | | | |
| Harris, Howard, assignor of one-half to W. J. Gorham, San Francisco, Cal. Vehicle-wheel rim | 741,401 | Oct. 13 | 1938 | 429 | 106 | 1680 |
| Harris, Isaac L., Jacksonville, Fla. Acetylene-gas generator | 735,502 | Aug. 4 | 899 | 191 | 105 | 1173 |
| Harris, James B., assignor to L. C. Chase & Company, Boston, Mass. Fastener or clasp | 739,673 | Sept. 22 | 4119 | 918 | 106 | 930 |
| Harris, John, Cleveland, assignor, by mesne assignments, to S. H. Smart, Willoughby, Ohio. Gas-burner | 742,642 | Oct. 27 | 4343 | 977 | 106 | 2210 |
| Harris, John, Cleveland, assignor, by mesne assignments, to S. H. Smart, Willoughby, Ohio. Heating and cooking stove | 742,643 | Oct. 27 | 4347 | 977 | 106 | 2211 |
| Harris, John B., Nashville, Tenn. Smoke-consuming furnace | 721,698 | Mar. 3 | 89 | 18, 19 | 103 | 20 |
| Harris, John H., *et al.* (See Good, Israel F., assignor.) | | | | | | |
| Harris, John L., and J. W. Shields, Hancock, Mich. Discharge for stamp-machines | 747,703 | Dec. 22 | 4406 | 993 | 107 | 2124 |
| Harris, Jonathan, Cleveland, Ohio. Wire-fence machine | 724,699 | Apr. 7 | 520 | 123, 124, 125 | 103 | 1280 |
| Harris, Julius, New York, N. Y. Dental mandrel | 723,384 | Mar. 24 | 3238 | 726 | 103 | 723 |
| Harris, Louie J., New York, N. Y. Railway-car | 737,403 | Aug. 25 | 4434 | 992, 993, 994 | 105 | 1978 |
| Harris, Marshall C., San Francisco, Cal. Friction-clutch | 721,799 | Mar. 3 | 256 | 57 | 103 | 57 |
| Harris, Marshall C., San Francisco, Cal. Cutter-head for suction-dredgers | 744,703 | Nov. 17 | 3699 | 798 | 107 | 821 |
| Harris, Ralph, Kansas City, Mo. Explosive-engine | 745,055 | Nov. 24 | 4353 | 940, 941 | 107 | 973 |
| Harris, Ralph, Kansas City, Mo. Governor | 745,056 | Nov. 24 | 4357 | 941 | 107 | 974 |
| Harris Rifle Magazine. (See Harris, Henry, assignor.) | | | | | | |
| Harris, Robert A., Tucson, Ariz. Ter. Pneumatic tire | 733,198 | July 7 | 881 | 213 | 105 | 185 |
| Harris, Robert W., and J. R. Holmes, Pleasanton, Kans. Game apparatus | 718,623 | Jan. 20 | 2105 | 458 | 102 | 481 |
| Harris, Samuel L., Proctor, Vt. Wire-stretcher | 724,284 | Mar. 31 | 4969 | 1112 | 103 | 1096 |
| Harris, Sanger. (See Ward and Harris.) | | | | | | |
| Harris, Sara S. (See Wood, William S., assignor.) | | | | | | |
| Harris Suspender Company. (See Freeman, William, assignor.) | | | | | | |
| Harris, Thomas H., Fredericksburg, Va. Plow | 731,359 | June 16 | 3349 | 748, 749 | 104 | 1856 |
| Harris, Warner S. G., assignor of one-half to J. Leavitt, San Luis Obispo, Cal. Boiler-alarm | 747,420 | Dec. 22 | 3893 | 876 | 107 | 2008 |
| Harris, Willard G., Oconto, Wis. Combination-tool | 743,076 | Nov. 3 | 497 | 108 | 107 | 104 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|
| | | | Spec. | Drg. | Vol. | Page. |
| Harris, William F., Gloucester, Mass. Pursing-seine | 721,517 | Feb. 24 | 3947 | 898<br>899 | 102 | 1703 |
| Harris, William J., and H. Case; said Case assignor to C. L. Jordan, Gloversville, N. Y. Reel for fishing-rods | 739,784 | Sept. 22 | 4316 | 966<br>967 | 106 | 975 |
| Harris, William W., assignor to P. Pfleiderer, Gray's Inn Road, county of Middlesex, England. Refrigerating apparatus | 738,107 | Sept. 1 | 1089 | 241<br>242 | 106 | 235 |
| Harrison, Albert D., Detroit, Mich. Dumping-car | 732,348 | June 30 | 5272 | 1169 | 104 | 2285 |
| Harrison, Alfred, *et al.* (See Waters, Frank J., assignor.) | | | | | | |
| Harrison, Alfred M., assignor to King Machine Tool Company, Cincinnati, Ohio. Shaft-connecting device for change-gears | 737,619 | Sept. 1 | 113 | 25 | 106 | 27 |
| Harrison, Alfred M., assignor to King Machine Tool Company, Cincinnati, Ohio. Shaft-connecting device for change-gear | 741,789 | Oct. 20 | 2700 | 601 | 106 | 1856 |
| Harrison Bros. & Co. (See Jahn, Fredrik, assignor.) | | | | | | |
| Harrison, Carrie D. (See Harrison, James P., assignor.) | | | | | | |
| Harrison, Charles B., and F. R. Wetzell, Coleta, Ill. Cultivator attachment | 731,679 | June 23 | 3978 | 886 | 104 | 2000 |
| Harrison, Dwight. (See Cockrell, Wyvle B., assignor.) | | | | | | |
| Harrison, Elizabeth. (See Woodson, Eliza B., assignor.) | | | | | | |
| Harrison, Frank B., and L. Y. Williams, Toledo, Ohio. Lubricating device for car-axle journals | 720,026 | Feb. 10 | 1133 | 259 | 102 | 1080 |
| Harrison, Haydn T., assignor to Improved Electric Glow Lamp Company, Limited, London, England. Electric-arc lamp | 736,966 | Aug. 25 | 3631 | 804 | 105 | 1807 |
| Harrison, J. Harvey. (See Harvey, George H., assignor.) | | | | | | |
| Harrison, Jackson, and G. Hinch, St. Mary's, Canada. Disk plow | 731,179 | June 16 | 3031 | 674 | 104 | 1790 |
| Harrison, James P., assignor to C. D. Harrison, Danville, Va. Bottle | 738,032 | Sept. 1 | 943 | 209 | 106 | 205 |
| Harrison, James R., Racine, Wis., assignor, by mesne assignments, to Hart Grain Weigher Company, Peoria, Ill. Automatic weigher | 720,248 | Feb. 10 | 1546 | 355 | 102 | 1166 |
| Harrison, James R., Racine, Wis., assignor to Hart Grain Weigher Company, Peoria, Ill. Conveyer for threshing-machines | 720,249 | Feb. 10 | 1550 | 355<br>356 | 102 | 1167 |
| Harrison, James R., Racine, Wis., assignor, by mesne assignments, to Brush Lubricating System, Chicago, Ill. Holder for journal-box lubricators | 738,796 | Sept. 15 | 2517 | 553<br>554 | 106 | 571 |
| Harrison, John, Lincoln, Nebr. System of shelving | 726,053 | Apr. 21 | 2999 | 682 | 103 | 1835 |
| Harrison, John S., Savannah, Ga., assignor to Prendergast Electric Typewriter Company. Electrically-operated type-writing machine | 718,758 | Jan. 20 | 2360 | 523 | 102 | 532 |
| Harrison, John S., and H. Hill, Savannah, Ga., assignors to Prendergast Electric Type-writer Company. Type-writing machine | 718,929 | Jan. 20 | 2670 | 599<br>600 | 102 | 596 |
| Harrison, Julian R., Barnwell, S. C., assignor to Fountain Comb & Novelty Company, New York, N. Y. Fountain-comb | 734,704 | July 28 | 3711 | 868 | 105 | 832 |
| Harrison, Julian R., assignor of one-half to J. M. Easterling, Barnwell, S. C. Bolt-holding implement | 735,251 | Aug. 4 | 419 | 81 | 105 | 1070 |
| Harrison, Louis, S. V. Lyon, and J. J. Lackey, Bradford, Pa.; said Lackey assignor to said Lyon and Harrison. Barber's cabinet | 727,166 | May 5 | 658 | 141 | 104 | 142 |
| Harrison, Nicholas, and J. Wharton, assignors of one-third to S. R. Wightman, Monongahela, Pa. Making sheet-glass | 747,913 | Dec. 22 | 4809 | 1087 | 107 | 2214 |
| Harrison, Nicholas, and J. Wharton, assignors of one-third to S. R. Wightman, Monongahela, Pa. Machine for rolling glass | 747,914 | Dec. 22 | 4810 | 1087<br>1088 | 107 | 2214 |
| Harrison, Philip B., Chicago, Ill. Furnace | 728,459 | May 19 | 3098 | 684 | 104 | 697 |
| Harrison, Philip B., assignor to Chicago Railway Equipment Company, Chicago, Ill. Slotting-machine | 718,930 | Jan. 20 | 2684 | 600 | 102 | 600 |
| Harrison Safety Boiler Works. (See Cochrane, David, assignor.) | | | | | | |
| Harrison, William, Redhouse, W. Va. Guard-rail for freight-cars | 732,409 | June 30 | 5389 | 1194 | 104 | 2311 |
| Harrison, William, Redhouse, W. Va. Bottle-closure | 734,323 | July 21 | 3020 | 711 | 105 | 672 |
| Harrison, William, Grand Rapids, Mich. Knockdown scaffolding | 744,194 | Nov. 17 | 2776 | 592 | 107 | 620 |
| Harrison, William D., assignor of one-half to L. O. Knox, Pine Bluff, Ark. Show-box lid | 740,647 | Oct. 6 | 496 | 109 | 106 | 1353 |
| Harrison, William T., Woodlawn, Ala. Clamp | 737,404 | Aug. 25 | 4437 | 994 | 105 | 1979 |
| Harrod, Corbin V., assignor of one-half to A. J. Johnson, Toledo, Ohio. Folding and adjustable copy-holder | 735,252 | Aug. 4 | 420 | 82 | 105 | 1070 |
| Harrod, Elmer H., Belle Center, Ohio. Folding table | 739,862 | Sept. 29 | 4467 | 1003 | 106 | 1023 |
| Harrod, George W., *et al.* (See Miller, Dorr, assignor.) | | | | | | |
| Harrold, Elmer, and C. G. Wilderson, Leetonia, Ohio. Molding-flask | 735,503 | Aug. 4 | 903 | 192 | 105 | 1174 |
| Harsha, James W., Columbus, Ohio. Temporary binder | 735,973 | Aug. 11 | 1785 | 382 | 105 | 1381 |
| Harshman, Jonathan S. (See Kyle, Joseph D., assignor.) | | | | | | |
| Harshman, Jonathan S. (See Kyle and Baum, assignors.) | | | | | | |
| Hart, Albert, Philadelphia, Pa., assignor of one-half to Smith, Kline & French Company. Brush | 723,462 | Mar. 24 | 3368 | 754 | 103 | 751 |
| Hart, Alfred, assignor, by mesne assignments, to himself, F. E. Hart, Chicago, Ill., R. W. Hart, San Francisco, Cal., and J. L. Jackson, River Forest, Ill. Mower | 740,561 | Oct. 6 | 333 | 70,71 | 106 | 1316 |
| Hart, Alfred, assignor, by mesne assignments, to himself, F. E. Hart, Chicago, Ill., R. W. Hart, San Francisco, Cal., and J. L. Jackson, River Forest, Ill. Mower | 740,562 | Oct. 6 | 340 | 71,72 | 106 | 1317 |
| Hart, Charles W., Charles City, Iowa. Connecting-rod | 746,699 | Dec. 15 | 2526 | 580 | 107 | 1684 |
| Hart, Edward S., *et al.* (See Hart, Matthew H., assignor.) | | | | | | |
| Hart, Eli S., Chicago, Ill. Dumping-car | 719,793 | Feb. 3 | 695 | 160<br>161 | 102 | 969 |
| Hart, Eli S., Chicago, Ill. Dumping-car | 743,504 | Nov. 10 | 1424 | 298 | 107 | 321 |
| Hart, Frank B., *et al.* (See Harty, William M., assignor.) | | | | | | |
| Hart, Frederick E., *et al.* (See Hart, Alfred, assignor.) | | | | | | |
| Hart, George W. (See Gang and Hart.) | | | | | | |
| Hart, Gerald W., assignor to Hart Manufacturing Company, Hartford, Conn. Switch-terminal | 717,675 | Jan. 6 | 274 | 68 | 102 | 59 |
| Hart, Gerald W., West Hartford, assignor to Hart Manufacturing Company, Hartford, Conn. Electric switch | 723,866 | Mar. 31 | 4110 | 928 | 103 | 922 |
| Hart Grain Weigher Company. (See Harrison, James R., assignor.) | | | | | | |
| Hart Grain Weigher Company. (See Hart, Stacy B., assignor.) | | | | | | |
| Hart, Harry S., Chicago, Ill., assignor to National Coal Dump Car Company, Rapid City, S. D. Dump-car | 719,794 | Feb. 3 | 697 | 162<br>163 | 102 | 970 |
| Hart, Harry S., Chicago, Ill., assignor to National Coal Dump Car Company, Rapid City, S. D. Dump-car | 719,795 | Feb. 3 | 699 | 163<br>164 | 102 | 971 |
| Hart, Harry S., Chicago, Ill., assignor to National Coal Dump Car Company, Rapid City, S. D. Convertible dump-car | 719,796 | Feb. 3 | 702 | 164<br>165 | 102 | 971 |
| Hart, Harry S., Chicago, Ill., assignor to National Coal Dump Car Company, Rapid City, S. D. Dump-car | 744,195 | Nov. 17 | 2778 | 593 | 107 | 620 |
| Hart, Harry S., Chicago, Ill., assignor to Rodger Ballast Car Company. Dump-car | 739,863 | Sept. 29 | 4468 | 1003 | 106 | 1023 |
| Hart, Harry S., assignor to Rodger Ballast Car Company, Chicago, Ill. Dump-car | 743,278 | Nov. 3 | 894 | 195 | 107 | 189 |
| Hart, Harry S., and O. W. Meissner, Chicago, Ill. Dump-car | 739,864 | Sept. 29 | 4470 | 1004 | 106 | 1023 |
| Hart & Hegeman Manufacturing Company. (See Guett, Monroe, assignor.) | | | | | | |
| Hart, Howard S. (See Darnstaedt, Frederick W., assignor.) | | | | | | |
| Hart, James, Johnstown, Pa., assignor to Lorain Steel Company. Railway-track structure | 729,067 | May 26 | 4219 | 932 | 104 | 944 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Hart, Loren D., Nora Springs, Iowa. Mop-wringer and brush | 731,680 | June 23 | 3980 | 887 | 104 | 2001 |
| Hart Manufacturing Company. (See Hart, Gerald W., assignor.) | | | | | | |
| Hart, Matthew H., assignor of three-fourths to C. F. Birch, Sr., E. S. Hart, Dunkirk, and T. F. Hart, Muncie, Ind. Apparatus for making glassware | 735,764 | Aug. 11 | 1391 | 299, 300 | 105 | 1294 |
| Hart, Ralph W., *et al.* (See Hart, Alfred, assignor.) | | | | | | |
| Hart, Richard E., Pittsburg, Pa. Coat and hat rack | 735,441 | Apr. 14 | 1900 | 425 | 103 | 1587 |
| Hart, Richard P., Branford, Conn. Wrench | 735,561 | Aug. 4 | 904 | 192 | 105 | 1174 |
| Hart, Stacy B., assignor to Hart Grain Weigher Company, Peoria, Ill. Cross-conveyer for separators, &c. | 728,460 | May 19 | 3099 | 684, 685 | 104 | 697 |
| Hart, Thomas, *et al.* (See Ellis, William T. G., assignor.) | | | | | | |
| Hart, Thomas F., *et al.* (See Hart, Matthew H., assignor.) | | | | | | |
| Hart, Thomas F., Lynn, Mass. Shoe-tying machine | 745,182 | Nov. 24 | 4632 | 1004, 1005, 1006 | 107 | 1031 |
| Hart, Thomas J., assignor to Sherwood Manufacturing Company, Buffalo, N. Y. Tube-cleaner | 742,644 | Oct. 27 | 4350 | 978 | 106 | 2211 |
| Hart, William, Kirksville, Mo. Graphophone-reproducer | 727,357 | May 5 | 997 | 217 | 104 | 215 |
| Hart, William H., and S. N. Olsen, Milwaukee, Wis. Hand-truck | 729,931 | June 2 | 741 | 165 | 104 | 1279 |
| Hartel, Albert E., Philadelphia, Pa., assignor, by mesne assignments, to Hartel Light Company. Gas-burner | 726,910 | May 5 | 145 | 34,35 | 104 | 33 |
| Hartel Light Company. (See Hartel, Albert E., assignor.) | | | | | | |
| Hartell, Frederick G., assignor of two-thirds to W. D. Fugatt, J. R. and A. Jacobs, Shawnee, Okla. Ter. Coin-controlled vending-machine | 740,563 | Oct. 6 | 343 | 72 | 106 | 1319 |
| Harter, Charles, South Pasadena, Cal. Trolley-pole controller | 740,272 | Sept. 29 | 5242 | 1179, 1180 | 106 | 1185 |
| Harter, Noah S., Cherokee, Iowa. Apparatus for changing character of electric currents. | 738,437 | Sept. 8 | 1802 | 392 | 106 | 403 |
| Harter, Virgil O., and W. H. Brown, Riverside, Cal.; said Brown assignor to said Harter. Animal-trap | 723,773 | Mar. 24 | 3922 | 885 | 103 | 866 |
| Hartford, Edward V. (See Truffault, Jules M. M., assignor.) | | | | | | |
| Hartford, Isaac J., Bloomington, Ill. Human-treatment apparatus | 726,054 | Apr. 21 | 3000 | 682 | 103 | 1835 |
| Hartford, Isaac J., Bloomington, Ill. Human-treatment apparatus | 726,055 | Apr. 21 | 3000 | 682 | 103 | 1836 |
| Hartford Machine Screw Company. (See Seward, Ernest R., assignor.) | | | | | | |
| Hartford Motor Machine Company. (See Collins, John T., assignor.) | | | | | | |
| Harthan, Charles E., Lynn, Mass., assignor to General Electric Company. Globe-holder for arc-lamps | 725,442 | Apr. 14 | 1902 | 425 | 103 | 1587 |
| Harthan, Charles E., Lynn, Mass., assignor to General Electric Company. Starting-rheostat | 729,762 | June 2 | 443 | 100 | 104 | 1218 |
| Harthan, Charles E., Lynn, Mass., assignor to General Electric Company. Electric-arc lamp | 730,369 | June 9 | 1536 | 340, 341 | 104 | 1457 |
| Harthan, Charles E., Lynn, Mass., assignor to General Electric Company. Rheostat | 730,644 | June 9 | 2035 | 452, 453 | 104 | 1565 |
| Hartig, Anton. (See Myers, John T., assignor.) | | | | | | |
| Hartigan, William P., Lexington, Va. Extension-ladder | 726,682 | Apr. 28 | 4214 | 952, 953 | 103 | 2096 |
| Hartigan, William R., Collinsville, Conn. Egg-opener | 747,549 | Dec. 22 | 4122 | 925 | 107 | 2060 |
| Hartley, Belle H. (See Wenzell, Samuel S., assignor.) | | | | | | |
| Hartley, Isaac S., *et al.* (See Tubbs, Nelson J., assignor.) | | | | | | |
| Hartley, Joseph, Waterloo, near Liverpool, England. Photographic or like frame or other support | 730,261 | June 9 | 1348 | 296 | 104 | 1417 |
| Hartley, Robert H., Pittsburg, Pa. Coin-controlled amusement device | 739,865 | Sept. 29 | 4473 | 1005 | 106 | 1024 |
| Hartley, William J. (See Burton, Charles V., assignor.) | | | | | | |
| Hartly, William. (See Chowen and Hartly.) | | | | | | |
| Hartman, Charles E. (See Lyford and Hartman.) | | | | | | |
| Hartman, Homer C. (See Hartman, Michael F. and H. C.) | | | | | | |
| Hartman Mfg. Co. (See Schmidt, William L., assignor.) | | | | | | |
| Hartman, Michael F. and H. C., Henrietta, Pa. Vehicle-brake | 735,253 | Aug. 4 | 421 | 82 | 105 | 1070 |
| Hartman, William E., Norfolk, Va. Gas-retort | 748,499 | Dec. 29 | 5929 | 1347 | 107 | 2480 |
| Hartmann, B. G. (See Richter, Philipp G., assignor.) | | | | | | |
| Hartmann, Charles A., Washington, D. C. Temporary binder | 729,763 | June 2 | 444 | 101 | 104 | 1218 |
| Hartmann, Christoph. (See Hepp and Hartmann.) | | | | | | |
| Hartmann, Ernest L. (See Collins and Hartmann.) | | | | | | |
| Hartmann, Eugen, Frankfort-on-the-Main, Germany. Electric meter | 730,262 | June 9 | 1350 | 296 | 104 | 1417 |
| Hartmann, Friedrich, Bergisch-Gladbach, Germany. Apparatus for the lateral delivery of goods, &c. | 729,580 | June 2 | 111 | 28 | 104 | 1149 |
| Hartmann, Mathias, Mannheim, Germany. Trap | 741,330 | Oct. 13 | 1787 | 397 | 106 | 1645 |
| Hartmann, Oscar, assignor to F. Krupp, Essen-on-the-Ruhr, Germany. Combination-fuse | 737,229 | Aug. 25 | 4104 | 912 | 105 | 1907 |
| Hartmann, Sophus, Berlin, Germany. Adding-machine | 726,056 | Apr. 21 | 3001 | 683 | 103 | 1836 |
| Hartmann, William C., assignor to Standard Separator Company, Ltd., Elyria, Ohio. Centrifugal cream-separator | 729,163 | May 26 | 4387 | 968 | 104 | 979 |
| Hartness, James, Springfield, Vt. Metal-working machine | 735,254 | Aug. 4 | 423 | 82, 83 | 105 | 1071 |
| Hartness, James, Springfield, Vt. Turret-lathe | 739,866 | Sept. 29 | 4475 | 1005, 1006, 1007, 1008, 1009, 1010, 1011, 1012 | 106 | 1025 |
| Hartney, John J., Collinsville, Conn. Ball-bearing axle | 721,700 | Mar. 3 | 92 | 19 | 103 | 20 |
| Hartog, Max, Paterson, N. J. Bottle-stopper | 721,299 | Feb. 24 | 3546 | 806 | 102 | 1620 |
| Hartough, Edward W., Thayer, Mo. Draft-rigging for railway-cars | 728,227 | May 19 | 2650 | 592, 593 | 104 | 603 |
| Hartrampf, Gustav A., Atlanta, Ga. Folding paper box | 732,071 | June 30 | 4716 | 1053, 1054 | 104 | 2170 |
| Hartsock, Luther C., Springvalley, Ohio. Bread and kneading board | 738,322 | Sept. 8 | 1584 | 343 | 106 | 357 |
| Hartt, Henry, Chicago, Ill. Bed-motion for printing-presses | 738,797 | Sept. 15 | 2519 | 553, 554 | 106 | 571 |
| Hartung, Charles C., assignor to E. Walsh, Jr., St. Louis, Mo. Curvilinear prismatic glass | 720,138 | Feb. 10 | 1343 | 307 | 102 | 1126 |
| Hartung, Charles C., assignor to E. Walsh, Jr., St. Louis, Mo. Curvilinear corrugated prismatic glass | 720,139 | Feb. 10 | 1345 | 308 | 102 | 1126 |
| Hartung, Edward. (See Van Tuyl, Andrew P., assignor.) | | | | | | |
| Hartung, Gustave K., assignor to J. Knobloch, New York, N. Y. Secondary battery | 745,604 | Dec. 1 | 537 | 125 | 107 | 1211 |
| Hartung, Otto E. C., and J. Bauer, Seattle, Wash. Piling | 724,573 | Apr. 7 | 281 | 69 | 103 | 1229 |
| Hartung, Theodore A., Bluffsprings, Tex. Crude-oil burner | 727,134 | May 5 | 603 | 129 | 104 | 131 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dsg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Hartwig, William J., Detroit, Mich. Combined lamp guard and shade | 718,624 | Jan. 20 | 2106 | 458 | 102 | 481 |
| Harty, William M., assignor of one-half to J. P. Doane and F. B. Hart, Detroit, Mich. Separable band for leaf-springs | 720,914 | Feb. 17 | 2785 | 639 | 102 | 1439 |
| Hartzell, Albert P., Hudson, S. D. Wrench | 741,906 | Oct. 20 | 2920 | 651 | 106 | 1902 |
| Hartzell, Robert H., assignor of one-half to F. O. Rumley, Rockfalls, Ill. Riding-harrow | 745,836 | Dec. 1 | 969 | 217 | 107 | 1305 |
| Harvester King Company. (See Appleby, John F., assignor.) | | | | | | |
| Harvey, Arthur W., Altoona, Iowa. Potato-digger | 735,255 | Aug. 4 | 426 | 83,84 | 105 | 1071 |
| Harvey, Arthur W., Altoona, Iowa. Potato-planter | 740,011 | Sept. 29 | 4769 | 1074 | 106 | 1086 |
| Harvey, Charles W., assignor to National Water Tube Boiler Company, New Brunswick, N. J. Header | 721,183 | Feb. 24 | 3328 | 761 | 102 | 1575 |
| Harvey, Charles W., assignor to National Water Tube Boiler Company, New Brunswick, N. J. Header | 740,427 | Oct. 6 | 87 | 18 | 106 | 1265 |
| Harvey, Edward C., London, England. Means for aerating beer or other fluids | 721,184 | Feb. 24 | 3330 | 761 | 102 | 1575 |
| Harvey, Francis M., and H. C., Penzance, England. Automatic coupling | 742,317 | Oct. 27 | 3767 | 844 | 106 | 2089 |
| Harvey, George H., Glenfield, assignor to J. H. Harrison, Pittsburg Pa. Glass-drawing machine | 742,420 | Oct. 27 | 3945 | 886 | 106 | 2125 |
| Harvey, George L., Chicago, Ill. Side bearing | 734,862 | July 28 | 4032 | 941, 942 | 105 | 896 |
| Harvey, Harold C. (See Harvey, Francis M. and H. C.) | | | | | | |
| Harvey, Harry D. (See Steele, David R., assignor.) | | | | | | |
| Harvey, Harry F. (See Bones, Clifton W., assignor.) | | | | | | |
| Harvey, John L., Philadelphia, Pa. Apparatus for making tapers | 725,704 | Apr. 21 | 2397 | 543, 544 | 103 | 1707 |
| Harvey, Lewis P., assignor of three-fourths to W. Leach and E. S. Hough, Oakland, and J. Dickie, San Francisco, Cal. Freight-barge | 733,583 | July 14 | 1587 | 378 | 105 | 353 |
| Harvey, Lucinda, Canon City, Colo. Milk-can | 746,328 | Dec. 8 | 1872 | 427 | 107 | 1518 |
| Harvey, Paul S., assignor to Acme Gas Co., Chicago, Ill. Gas-furnace | 735,765 | Aug. 11 | 1395 | 300 | 105 | 1295 |
| Harvey, Samuel B., Chicago, Ill. Flue construction of gas-burning stoves or heaters | 717,847 | Jan. 6 | 638 | 141 | 102 | 136 |
| Harvey, Walter A., Battlecreek, Mich. Power-transmission device | 740,128 | Sept. 29 | 4975 | 1116 | 106 | 1130 |
| Harvey, William, Denver, Colo. Roasting or drying apparatus | 727,540 | May 5 | 1327 | 296 | 104 | 286 |
| Harvey, William, Denver, Colo. Drill-bit or other tool | 735,667 | Aug. 4 | 1210 | 256 | 105 | 1237 |
| Harvey, William A., Scranton, Pa. Mechanism for operating snap or rotary switches | 729,335 | May 26 | 4693 | 1037 | 104 | 1044 |
| Harvey, William J. (See Coffield, Jesse M., assignor.) | | | | | | |
| Harvey, Winfred M., Denver, Colo. Valve-seat for explosive-engines | 717,990 | Jan. 6 | 887 | 198 | 102 | 191 |
| Hasbrouck, Philip B., Pittsburg, Pa. Coke-oven-operating apparatus | 733,036 | July 7 | 590 | 144 | 105 | 125 |
| Hasbrouck, Sayer, Providence, R. I. Insufflator | 719,586 | Feb. 3 | 320 | 74 | 102 | 889 |
| Hasbrouck, Sayer, Providence, R. I. Atomizer | 719,587 | Feb. 3 | 321 | 75 | 102 | 889 |
| Hasbrouck, Sayer, Providence, R. I. Spraying device | 719,588 | Feb. 3 | 323 | 75 | 102 | 889 |
| Hasemeyer, William H., Essex, Ill. Tension | 724,285 | Mar. 31 | 4970 | 1112 | 103 | 1096 |
| Hasenbach, Wilhelm. (See Clemm and Hasenbach.) | | | | | | |
| Hasenbach, Wilhelm, assignor to Verein Chemischer Fabriken in Mannheim, Mannheim, Germany. Calcining and decomposing furnace | 726,911 | May 5 | 147 | 35 | 104 | 34 |
| Hasenpflug, Ezra W., East Cleveland, assignor to Champion Safety Lock Company, Geneva, Ohio. Filter | 740,381 | Sept. 29 | 5446 | 1225 | 106 | 1227 |
| Hasenpflug, Ezra W., East Cleveland, assignor to Champion Safety Lock Company, Geneva, Ohio. Sash-fastener | 744,755 | Nov. 24 | 3794 | 817 | 107 | 857 |
| Haskell, Abram T., Assonet, Mass. Machine for molding and pressing into shape moldable material | 737,620 | Sept. 1 | 114 | 25 | 106 | 27 |
| Haskell, Broderick. (See Maltby, George B., assignor.) | | | | | | |
| Haskell, Henry L., Ludington, Mich. Pool or other like ball | 724,470 | Apr. 7 | 97 | 23 | 103 | 1190 |
| Haskell, Henry L., Ludington, Mich. Game-board | 733,644 | July 14 | 1687 | 400 | 105 | 373 |
| Haskell, Henry L., Ludington, Mich. Polishing-machine | 737,621 | Sept. 1 | 117 | 25, 26 | 106 | 28 |
| Haskell, Henry L., Ludington, Mich. Convertible billiard and pool table | 740,012 | Sept. 29 | 4772 | 1074 | 106 | 1087 |
| Haskell, Henry L., and J. A. Mitchell, Ludington, Mich. Combined ruler and adding device | 732,072 | June 30 | 4720 | 1054 | 104 | 2171 |
| Haskell, William E., Philadelphia, Pa. Organ | 734,261 | July 21 | 2893 | 676, 677 | 105 | 647 |
| Haskell, William E., Philadelphia, Pa. Musical instrument | 734,262 | July 21 | 2895 | 677 | 105 | 647 |
| Haskell, William N. (See Bryant, Arthur H., assignor.) | | | | | | |
| Haskin, John T., McKees Rocks, Pa. Lifting-jack | 721,439 | Feb. 24 | 3810 | 867 | 102 | 1674 |
| Haskins, Caryl D., Schenectady, N. Y., assignor to General Electric Company. Time-limit circuit-controller | 727,624 | May 12 | 1496 | 339 | 104 | 340 |
| Haskins, Caryl D., Schenectady, N. Y., assignor to General Electric Company. Periodic circuit-closer | 727,625 | May 12 | 1498 | 339 | 104 | 340 |
| Haskins, Caryl D., Schenectady, N. Y., assignor to General Electric Company. Indicating instrument | 729,164 | May 26 | 4388 | 968 | 104 | 979 |
| Haskins, Caryl D., Schenectady, N. Y., assignor to General Electric Company. Charging device for electromobiles | 735,505 | Aug. 4 | 905 | 192, 193 | 105 | 1174 |
| Haskins, Charles D. (See Loveridge and Haskins.) | | | | | | |
| Haskins, George H. (See Purdin and Haskins.) | | | | | | |
| Haskins, James H., assignor of one-half to McCormick Harvesting Machine Company, Chicago, Ill. Machine for finishing the ends of blanks | 722,300 | Mar. 10 | 1208 | 266, 267, 268 | 103 | 274 |
| Haskins, James H., assignor to McCormick Harvesting Machine Company, Chicago, Ill. Metallic wheel | 733,717 | July 14 | 1808 | 428 | 105 | 398 |
| Haskins, John, Boston, Mass. Fender for cars | 740,129 | Sept. 29 | 4977 | 1117 | 106 | 1131 |
| Haskins, Thomas, Lasalle, Ill. Mixing and washing machine | 736,389 | Aug. 18 | 2521 | 553 | 105 | 1557 |
| Haslam, George J., Fremont, Nebr. Guide and regulating device for egg-cutters | 746,505 | Dec. 8 | 2165 | 497 | 107 | 1581 |
| Haslop, George H., assignor of one-half to H. E. Whitcomb, Worcester, Mass. Envelop-machine | 721,701 | Mar. 3 | 93 | 20 | 103 | 21 |
| Hass, Caesar, London, England. Nail, spike, or other driven holdfast device | 729,336 | May 26 | 4694 | 1037 | 104 | 1044 |
| Hass, Caesar, London, England. Nail, spike, &c | 731,896 | June 23 | 4367 | 974 | 104 | 2085 |
| Hass, Caesar, London, England. Nail, spike, or other driven holdfast | 747,171 | Dec. 15 | 3423 | 776 | 107 | 1888 |
| Hasselquist, Per J., Rhinelander, Wis. Window | 727,135 | May 5 | 605 | 130 | 104 | 131 |
| Hassett, William. (See Doolittle, Elbridge C., assignor.) | | | | | | |
| Hassler, Herman F., Hecla, S. D. Governor for centrifugal separators | 745,057 | Nov. 24 | 4359 | 941 | 107 | 974 |
| Hassler, Robert H., Indianapolis, Ind. Motor-vehicle | 735,370 | Aug. 4 | 628 | 130 | 105 | 1114 |
| Hassler, Robert H., Indianapolis, Ind. Motor-car | 740,273 | Sept. 29 | 5245 | 1180, 1181, 1182 | 106 | 1186 |
| Haste, Frederick C., London, and J. A. Wilding, Old Charlton, assignors to themselves, C. W. Milne, Bayswater, and W. J. Davy, London, England. Speed-gear for rear-driven bicycles | 720,800 | Feb. 17 | 2574 | 593 | 102 | 1394 |
| Hastings, Fred W., assignor to National Sewing Machine Company, Belvidere, Ill. Molding-machine | 726,426 | Apr. 28 | 3702 | 839, 840 | 103 | 1995 |
| Hastings, Fred W., assignor to National Sewing Machine Company, Belvidere, Ill. Molding-machine | 731,360 | June 16 | 3351 | 749, 750 | 104 | 1856 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|
| | | | Spec. | Dr'g. | Vol. | Page. |
| Hastings, George S., assignor to J. A. Brill, Philadelphia, Pa. Body-bolster for railway-cars | 734,324 | July 21 | 3022 | 712 | 105 | 673 |
| Hastings, Guy T. (See Avey and Hastings.) | | | | | | |
| Hastings, Harold, assignor to Callender's Cable & Construction Company, Limited, London, England. Apparatus for breaking electric arcs | 743,384 | Nov. 3 | 1119 | 238 / 239 | 107 | 237 |
| Hastings, Henry M., Geyserville, Cal. Acetylene-gas street-lamp | 728,912 | May 26 | 3940 | 876 | 104 | 888 |
| Hastings, Herbert. (See Smyth and Hastings.) | | | | | | |
| Hastings, Herbert, assignor to Smyth Machine Company, Hartford, Conn. Stitch-forming mechanism for book-sewing machines | 741,331 | Oct. 13 | 1788 | 398 | 106 | 1645 |
| Hastings, James G., Aspinwall, Pa. Heater | 718,931 | Jan. 20 | 2687 | 601 | 102 | 601 |
| Hastings, Seth P., Wellington, Ohio. Hand-roller for cutting and tendering beefsteak | 725,840 | Apr. 21 | 2645 | 602 | 103 | 1762 |
| Hastings, W. G., Sandusky, Ohio. Tobacco-pipe | 726,162 | Apr. 21 | 3183 | 720 | 103 | 1873 |
| Hasty, Joseph P., Superior, Nebr. Railway-switch | 717,991 | Jan. 6 | 889 | 198 | 102 | 191 |
| Haswell, James, London, England. Life-saving apparatus for use in connection with fire-escapes | 720,519 | Feb. 10 | 2035 | 468 | 102 | 1268 |
| Hatch Accumulator Company. (See Hatch, George E., assignor.) | | | | | | |
| Hatch Accumulator Company. (See Middleby, Joseph, Jr., assignor.) | | | | | | |
| Hatch, Azel F. (See Köneman, William A., assignor.) | | | | | | |
| Hatch, Edward P., Lagrange, Ill. Needle-actuating mechanism for sewing-machines | 717,848 | Jan. 6 | 640 | 142 | 102 | 136 |
| Hatch, Edward P., Lagrange, Ill. Barrel-head | 741,332 | Oct. 13 | 1793 | 398 | 106 | 1646 |
| Hatch, Francis E. J., Greenbay, Wis., assignor of one-fourth to E. L. Graham, Sagola, Mich. Electric furnace | 741,333 | Oct. 13 | 1794 | 399 | 106 | 1647 |
| Hatch, Frank A., Hanson, assignor to W. E. Trufant, Whitman, Mass. Calipers | 726,287 | Apr. 28 | 3441 | 782 | 103 | 1942 |
| Hatch, George E., Quincy, Mass., assignor, by mesne assignments, to Hatch Accumulator Company, Kittery, Me., and Boston, Mass. Secondary battery | 736,390 | Aug. 18 | 2523 | 554 | 105 | 1557 |
| Hatch, George E., Quincy, Mass., assignor, by mesne assignments, to Hatch Accumulator Company, Kittery, Me., and Boston, Mass. Secondary battery | 738,188 | Sept. 8 | 1289 | 279 | 106 | 295 |
| Hatch, Hart, and J. O. Cricks, Tarentum, Pa. Bottle-closure | 738,679 | Sept. 8 | 2275 | 500 | 106 | 502 |
| Hatch, James C., Grand Rapids, Mich. Box-lid support | 739,544 | Sept. 22 | 3862 | 865 | 106 | 874 |
| Hatch, Reuben, Grand Rapids, Mich. Sectional bookcase | 729,494 | May 26 | 4948 | 1097 | 104 | 1098 |
| Hatch, Ryland F., Bristol, Vt. Display-rack | 745,012 | Nov. 24 | 4241 | 919 | 107 | 950 |
| Hatch, Tracy B. (See Evans and Hatch.) | | | | | | |
| Hatcher, Judson N., Mokane, Mo. Plow | 735,506 | Aug. 4 | 909 | 193 | 105 | 1175 |
| Hatcher, William A. (See Packard and Hatcher.) | | | | | | |
| Hately, Charles, Rialto, Cal. Non-refillable bottle | 722,016 | Mar. 3 | 677 | 150 | 103 | 146 |
| Hatfield, Albert H., Brockport, N. Y. Automatic grinding or polishing machine | 741,907 | Oct. 20 | 2921 | 651 / 652 | 106 | 1902 |
| Hatfield, Charles. (See Rettig, John K., assignor.) | | | | | | |
| Hatfield, Charles. (See Snell and Hatfield.) | | | | | | |
| Hatfield, Charles B., Philadelphia, Pa. Instrument for measuring lasts or feet | 746,958 | Dec. 15 | 3031 | 695 | 107 | 1798 |
| Hatfield, Charles N., near Fountain City, Ind. Seed cleaner and separator | 732,073 | June 30 | 4721 | 1054 | 104 | 2171 |
| Hatfield, J. S., *et al.* (See Coleman, Lucius E., assignor.) | | | | | | |
| Hathaway, Charles F. (See Hathaway, George M. and C. F.) | | | | | | |
| Hathaway, Eugene H., Washington, D. C. Odometer | 745,726 | Dec. 1 | 739 | 169 | 107 | 1256 |
| Hathaway, George M., Wellsboro, Pa., and C. F. Hathaway, New York, N. Y., assignors to Pennsylvania Fuse and Arms Company, York, Pa. Fuse for shells | 729,932 | June 2 | 742 | 165 | 104 | 1279 |
| Hatmaker, James R. (See Hennig, Charles T., assignor.) | | | | | | |
| Hatschek, Ernest P., *et al.* (See Jenks, Robert L., assignor.) | | | | | | |
| Hatt, Erik J., Vejle, Denmark. Lock | 739,867 | Sept. 29 | 4503 | 1012 | 106 | 1029 |
| Hatt, Joel W. (See Lent and Hatt.) | | | | | | |
| Hatton, Charles H., assignor to Emlenton Refining Co., Emlenton, Pa. Paraffin direct-cooling device | 735,873 | Aug. 11 | 1612 | 344 | 105 | 1344 |
| Hatton, Thomas F., Fort Wayne, Ind. Beveling-machine | 737,230 | Aug. 25 | 4105 | 912 | 105 | 1907 |
| Hatton, Timothy C. (See Dowsley, Thomas B., assignor.) | | | | | | |
| Hattrem, Andrew, Chicago, Ill. Device for exhibiting photographs | 745,605 | Dec. 1 | 538 | 126 | 107 | 1211 |
| Hauck, John G., Columbus, Ohio. Bottle-washing machine | 734,063 | July 21 | 2514 | 587 / 588 | 105 | 565 |
| Hauck, John H. R., and J. L. Warden, Pleasanthill, Mo. Harness-loop | 732,000 | June 23 | 4558 | 1017 | 104 | 2125 |
| Hauenstein, Godfried, Olds, Iowa. Rake attachment for reapers or mowers | 731,897 | June 23 | 4368 | 974 | 104 | 2085 |
| Haug, Andrew, West Orange, N. J., assignor of one-half to E. F. Leeds, New York, N. Y. Apparatus for the manufacture of phonograph-cylinders | 744,339 | Nov. 17 | 3037 | 652 | 107 | 679 |
| Haug, Andrew, and R. Brown, San Francisco, Cal. Water-heater | 722,703 | Mar. 17 | 1978 | 441 | 103 | 455 |
| Haug, John, Philadelphia, Pa. Apparatus for compressing and charging coal into coke-ovens | 747,172 | Dec. 15 | 3424 | 776 | 107 | 1888 |
| Haukvik, Ole S., Saude, Norway. Spade-handle | 744,756 | Nov. 24 | 3796 | 817 | 107 | 857 |
| Hauptman, David J., Chicago, Ill. Skirt-fastener | 720,250 | Feb. 10 | 1551 | 356 | 102 | 1168 |
| Hauptman, Joseph, Jersey City, N. J. Combined skirt-fastener and waist-holder | 746,700 | Dec. 15 | 2527 | 581 | 107 | 1684 |
| Hauptmann, Alexis, assignor of one-half to F. Sievert, Beaumont, Tex. Rail-joint | 726,057 | Apr. 21 | 3002 | 683 | 103 | 1836 |
| Hausam, Jacob G. (See Shanklin and Hausam.) | | | | | | |
| Hause, George W. (See Brown and Hause.) | | | | | | |
| Hause, James B., Clinton, Mich. Ice-harvesting machine | 723,774 | Mar. 24 | 3923 | 885 / 886 | 103 | 867 |
| Hause, Joseph H. (See Brown and Hause.) | | | | | | |
| Hauser, Horace L., Des Moines, Iowa. Oil-can and lamp-filler | 735,507 | Aug. 4 | 910 | 194 | 105 | 1175 |
| Hauser, Jakob, assignor to Hamburg-Amerikanische Uhrenfabrik, Schramberg, Germany. Alarm-clock | 720,801 | Feb. 17 | 2576 | 593 | 102 | 1395 |
| Hauser, S. M. (See Castle, Arthur H., assignor.) | | | | | | |
| Hauser, Theodore, assignor to Garvy Company, Chicago, Ill. Folding bed | 729,860 | June 2 | 629 | 137 / 138 | 104 | 1257 |
| Hausfeld, Joseph E., assignor to E. H. Huenefeld, Cincinnati, Ohio. Mechanical movement | 720,140 | Feb. 10 | 1346 | 308 | 102 | 1126 |
| Hausfeld, Joseph E., assignor to E. H. Huenefeld, Cincinnati, Ohio. Alternating rotary gearing | 722,704 | Mar. 17 | 1980 | 442 | 103 | 455 |
| Hauslehner, Leopold, assignor to I. Landauer and F. Block, Vienna, Austria-Hungary. Packing for stuffing-boxes | 718,345 | Jan. 13 | 1534 | 340 | 102 | 344 |
| Hausold, Alvin. (See Schweitzer and Hausold.) | | | | | | |
| Hauss, Albert F., Baltimore, Md. Electric socket and receptacle attachment | 722,979 | Mar. 17 | 2463 | 551 | 103 | 553 |
| Haussermann, William, Crookston, Minn. Beer-filter | 726,427 | Apr. 28 | 3705 | 841 | 103 | 1096 |
| Haussermann, William, Crookston, Minn. Candlestick | 730,645 | June 9 | 2036 | 453 | 104 | 1566 |
| Haussner, Konrad, Eisenach, Germany. Device for regulating the recoil and counter-recoil of guns | 726,531 | Apr. 28 | 3928 | 888 | 103 | 2038 |
| Hautmann, Henry, Phillipsburg, N. J. Warp-tension mechanism for looms | 724,471 | Apr. 7 | 98 | 24 | 103 | 1190 |
| Havekotte, Frederick H., assignor to himself and F. Kyrlach, Cincinnati, Ohio. Faucet | 730,646 | June 9 | 2037 | 454 | 104 | 1566 |
| Haven, Egbert D., assignor of one-half to J. H. Crosett, San Jose, Cal. Dump-car | 721,300 | Feb. 24 | 3547 | 806 / 807 | 102 | 1020 |
| Havens, Charles E., Zanesville, Ohio. Side bearing for railway-cars, &c | 719,589 | Feb. 3 | 324 | 75 | 102 | 889 |

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| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| Havens, Joseph G., Morrisville, Pa., assignor to Underwood Stemming Machine Company, New York, N. Y. Tobacco-stemming machine | 720,802 | Feb. 17 | 2577 | 594 | 102 | 1395 |
| Havens, Mary F., New York, N. Y. Plaiting-machine | 747,704 | Dec. 22 | 4409 | 994 | 107 | 2124 |
| Haver, Abigail G. (See Kimball and Haver.) | | | | | | |
| Haviland, David J., and C. S. Sicklesteel, Boulder, Colo. Curtain-exhibitor | 746,506 | Dec. 8 | 2166 | 498 | 107 | 1582 |
| Haviland, Frederick H. (See Haviland and Farmer.) | | | | | | |
| Haviland, John, Northampton, F. H. Haviland, Bournemouth, England, and J. Farmer, Glasgow, Scotland. Appliance for elevating and discharging grain or the like | 738,798 | Sept. 15 | 2521 | 554<br>555 | 106 | 572 |
| Haviland, Phillip F., Weymouth, Mass. Belt | 723,271 | Mar. 24 | 3007 | 676 | 103 | 680 |
| Havlin, John L., New York, N. Y. Cuff-holder | 729,337 | May 26 | 4695 | 1037 | 104 | 1044 |
| Havre, William W. (See Murray and Havre.) | | | | | | |
| Hawcridge, Robert, West Harbour, Dunedin, New Zealand. Clothes-peg | 721,702 | Mar. 3 | 95 | 20 | 103 | 21 |
| Hawes, Arthur J. (See Sander, Edgar J., assignor.) | | | | | | |
| Hawes, Benjamin N., New York, N. Y. Hydrocarbon-burner. (Reissue) | 12,114 | May 19 | 3782 | 843 | 104 | 842 |
| Hawes, George E., assignor to Downer, Hawes & Company, Bridgeport, Conn. Garment-clasp | 730,534 | June 9 | 1844 | 412 | 104 | 1523 |
| Hawes, George W., Milbank, S. D. Fountain | 735,017 | July 28 | 4305 | 1001 | 105 | 954 |
| Hawes, Herbert E. (See Bloomfield and Hawes.) | | | | | | |
| Hawes, Ivy. (See Maynard, Harold B., assignor.) | | | | | | |
| Hawes, William L. (See Craft, Reel, and Hawes.) | | | | | | |
| Hawkes, Charles E., Chicago, Ill. Garment-supporter | 748,069 | Dec. 29 | 5150 | 1165 | 107 | 2310 |
| Hawkes, Francis B. (See Williamson, Edward I., assignor.) | | | | | | |
| Hawkes, Thomas, Chicago, Ill. Self heating and extinguishing sad-iron | 739,079 | Sept. 15 | 3010 | 667 | 106 | 676 |
| Hawkins, Charles R., Cincinnati, Ohio. Mail-bag catcher and deliverer | 731,180 | June 16 | 3033 | 674 | 104 | 1790 |
| Hawkins, Deane W., Cleveland, Mo. Harness-tug reinforcement | 728,913 | May 26 | 3942 | 876 | 104 | 888 |
| Hawkins, Edward S., Syracuse, N. Y. Nut-lock | 718,838 | Jan. 20 | 2492 | 555 | 102 | 557 |
| Hawkins, Fletcher M., Fairlie, Tex. Stump-puller | 737,925 | Sept. 1 | 733 | 159 | 106 | 160 |
| Hawkins, Frank F., Troy, N. Y. Plaster-package | 730,911 | June 16 | 2523 | 561 | 104 | 1687 |
| Hawkins, Frank M. (See Ditch and Hawkins.) | | | | | | |
| Hawkins, Fred L., Gardner, Mass. Lubricating device | 718,456 | Jan. 13 | 1743 | 388 | 102 | 387 |
| Hawkins, Gardner C., Boston, Mass. Revolving twin chairs | 720,692 | Feb. 17 | 2396 | 549 | 102 | 1356 |
| Hawkins, Gardner C., Boston, Mass. Electric car | 725,079 | Apr. 14 | 1233 | 278 | 103 | 1447 |
| Hawkins, Gardner C., Boston, Mass. Electric heater | 732,349 | June 30 | 5273 | 1169 | 104 | 2286 |
| Hawkins, Gardner C., Boston, assignor of one-half to W. G. Webber, Bedford, Mass. Car-seat | 731,361 | June 16 | 3354 | 750 | 104 | 1856 |
| Hawkins, Henry and S. H., Upton Park, England. Acetylene-gas generator | 736,967 | Aug. 25 | 3633 | 804 | 105 | 1808 |
| Hawkins, John D., and H. W. Fox, Colorado Springs, Colo. Chlorinating and brominating ores | 727,626 | May 12 | 1499 | ------ | 104 | 340 |
| Hawkins, Laurence A., assignor to Stanley Electric Manufacturing Company, Pittsfield, Mass. Alternating-current compensating system | 738,799 | Sept. 15 | 2524 | 555 | 106 | 572 |
| Hawkins, Rollyn, Indianapolis, Ind. Sheet-metal seam | 747,970 | Dec. 29 | 4954 | 1119 | 107 | 2267 |
| Hawkins, Samuel H. (See Hawkins, Henry and S. H.) | | | | | | |
| Hawkins, Theodore J., Jamesville, Mo. Spark-arrester | 731,898 | June 23 | 4369 | 974 | 104 | 2085 |
| Hawkins, Theodore L., Lincoln, Nebr. Holder for brushes | 729,338 | May 26 | 4697 | 1037<br>1038 | 104 | 1044 |
| Hawkins, William E., New York, N. Y. Gas-cock | 720,027 | Feb. 10 | 1135 | 259 | 102 | 1080 |
| Hawks, Moses L., New York, N. Y. Combination knife and scissors or shears sharpener | 724,096 | Mar. 31 | 4567 | 1027 | 103 | 1015 |
| Hawks, Moses L., New York, N. Y. Cuff-holder | 742,421 | Oct. 27 | 3950 | 886 | 106 | 2126 |
| Hawks, Moses L., New York, N. Y. Can-opener | 744,914 | Nov. 24 | 4068 | 877 | 107 | 914 |
| Hawley, Charles A. (See Bush, Alden, assignor.) | | | | | | |
| Hawley, Charles T., assignor to Draper Company, Hopedale, Mass. Stop-motion for machines for preparing fibrous material | 724,574 | Apr. 7 | 282 | 69,70 | 103 | 1229 |
| Hawley, Charles T., Gardner, assignor to Draper Company, Hopedale, Mass. Stop-motion for machines for preparing fibrous material | 724,575 | Apr. 7 | 288 | 71 | 103 | 1230 |
| Hawley, Charles T., Gardner, assignor to Draper Company, Hopedale, Mass. Roving-clamp | 735,974 | Aug. 11 | 1786 | 383 | 105 | 1381 |
| Hawley, Charles T., Gardner, assignor to Draper Company, Hopedale, Mass. Roving-clamp | 735,975 | Aug. 11 | 1788 | 383 | 105 | 1382 |
| Hawley, De Witt, assignor of one-half to G. P. Bortle, Rochester, N. Y. Washing-machine | 725,443 | Apr. 14 | 1903 | 426 | 103 | 1587 |
| Hawley Down Draft Furnace Company. (See Schwartz, Edward H., assignor.) | | | | | | |
| Hawley, Tracy F. (See Eastman and Hawley.) | | | | | | |
| Hawley, William G., New York, N. Y. Soap-flaker | 739,175 | Sept. 15 | 3185 | 704 | 106 | 712 |
| Hawn, Edd L. (See Breed and Hawn.) | | | | | | |
| Haworth, Charles F. (See Riggs and Haworth, assignors.) | | | | | | |
| Haworth, Thomas J. (See Riggs and Haworth.) | | | | | | |
| Haws, Isaac, Hannibal, N. Y. Road-bed | 724,286 | Mar. 31 | 4972 | 1112 | 103 | 1096 |
| Haws, Isaac, Hannibal, N. Y. Fence-post | 745,606 | Dec. 1 | 540 | 126 | 107 | 1212 |
| Hawthorne, Ellsworth A., *et al.* (See Gleason, Edward D., assignor.) | | | | | | |
| Hawthorne, Ellsworth A., Montclair, N. J. Support for phonographs, graphophones, &c. | 719,662 | Feb. 3 | 444 | 101 | 102 | 915 |
| Hawthorne & Sheble Manufacturing Company. (See Gleason, Edward D., assignor.) | | | | | | |
| Hawthorne and Sheble Manufacturing Company. (See Merrill, George W., Jr., assignor.) | | | | | | |
| Hawtree, Arthur, Chicago, Ill. Animal-clipper | 720,915 | Feb. 17 | 2786 | 639 | 102 | 1439 |
| Hay, Frank L. (See Mabus and Hay.) | | | | | | |
| Hay, Howard M., Brooklyn, N. Y. Manifold-sheet | 728,461 | May 19 | 3102 | 686 | 104 | 698 |
| Hay, Hugh, Woodstock, Canada. Device for exhibiting curtains for sale | 718,839 | Jan. 20 | 2493 | 555 | 102 | 558 |
| Hay, Soren P., *et al.* (See Brammer, James H., assignor.) | | | | | | |
| Haycock, Albert C., Sparkhill, near Birmingham, assignor to Hoskins and Sewell, Limited, Bordesley, Birmingham, England. Hinge | 743,279 | Nov. 3 | 896 | 195 | 107 | 190 |
| Hayden, Amos S., *et al.* (See Packard, William F., assignor.) | | | | | | |
| Hayden, Amos S., Avon, and W. F. Packard, Brockton, assignors of two-thirds to F. Bartlett and L. G. Littlefield, Avon, Mass. Ironing device for shoemakers | 737,926 | Sept. 1 | 734 | 159 | 106 | 161 |
| Hayden, Austin B., assignor to Hayden Manufacturing Company, Chicago, Ill. Time-recording lock | 734,174 | July 21 | 2725 | 641 | 105 | 609 |
| Hayden, Austin B., assignor to Hayden Manufacturing Company, Chicago, Ill. Time-recording lock | 734,175 | July 21 | 2727 | 641 | 105 | 610 |
| Hayden, Frank, Acornridge, Mo. Wagon-brake | 746,831 | Dec. 15 | 2779 | 640 | 107 | 1741 |
| Hayden, George R., Allegheny, Pa. Packing material | 721,440 | Feb. 24 | 3812 | 867 | 102 | 1674 |
| Hayden, John J., and J. P. Powers, Ossining, N. Y. Manufacture of brushes | 722,017 | Mar. 3 | 679 | 150 | 103 | 146 |
| Hayden Manufacturing Company. (See Hayden, Austin B., assignor.) | | | | | | |
| Hayden, Norman L. (See Wildman, Andrew, assignor.) | | | | | | |
| Hayden, Randolph, Haddam, assignor to Peck, Stow & Wilcox Company, Southington, Conn. Hand-punch | 732,850 | July 7 | 277 | 69 | 105 | 62 |
| Hayden, William S., Pueblo, Colo. Device for sifting flour, meal, or the like | 747,605 | Dec. 22 | 4222 | 949 | 107 | 2083 |
| Hayes, Albert, assignor to N. Auth. Washington, D. C. Branding apparatus | 728,710 | May 19 | 3564 | 792 | 104 | 796 |

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| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Hayes, Charles G. (See Lindsey, Charles E., assignor.) | | | | | | |
| Hayes, Charles W., Washington, D. C. Bottle | 734,999 | Apr. 7 | 1077 | 246 | 103 | 1398 |
| Hayes, Edwin P., Tower, Mich. Belt-shifter | 732,074 | June 30 | 4723 | 1055 | 104 | 2171 |
| Hayes, Eli B., Oshkosh, and J. M. Kuebler, Wausaw, Wis. Tenoning-machine | 722,230 | Mar. 10 | 1071 | 236, 237, 238 | 103 | 243 |
| Hayes, Frank H., Hamilton, Ohio. Feed-trough for animals | 734,550 | July 28 | 3429 | 800 | 105 | 774 |
| Hayes, George, Mount Vernon, N. Y. Fire-resisting window | 742,868 | Nov. 3 | 85 | 20 | 107 | 20 |
| Hayes, George, Mount Vernon, N. Y. Sliding and swinging sash-window | 742,869 | Nov. 3 | 86 | 20, 21 | 107 | 20 |
| Hayes, George D. (See Mansfield and Hayes.) | | | | | | |
| Hayes, George H., London, England, assignor to Chicago Pneumatic Tool Company. Pneumatic drill or like machine | 733,960 | July 21 | 2297 | 539, 540 | 105 | 517 |
| Hayes, Jerome C. (See Pitkethly and Hayes.) | | | | | | |
| Hayes, Mary V., Newark, N. J. Evaporator for hot-air registers | 738,438 | Sept. 8 | 1805 | 392 | 106 | 403 |
| Hayes, Matthew, assignor of one-half to A. McPartland, New York, N. Y. Shoe-tree | 720,916 | Feb. 17 | 2788 | 639 | 102 | 1440 |
| Hayes, Ralph W. E., Galva, Ill. Cultivator-coupling | 722,231 | Mar. 10 | 1080 | 238 | 103 | 246 |
| Hayes, Salvador, Macon, Nebr. Mechanical power | 724,861 | Apr. 7 | 830 | 191 | 103 | 1346 |
| Hayes, Sanford, Ellensburg, Wash. Washing-machine | 717,849 | Jan. 6 | 644 | 142, 143 | 102 | 137 |
| Hayes, Walter A., Somerville, Mass. Ribbon-winder | 720,141 | Feb. 10 | 1347 | 308 | 102 | 1126 |
| Hayes, William. (See Batten and Hayes.) | | | | | | |
| Hayes, William J., Tariffville, assignor to Indian Head Plantations, Incorporated, East Granby, Conn. Shade structure | 727,541 | May 5 | 1329 | 296 | 104 | 286 |
| Hayhow, William, Delaware County, Ind. Adhesive brick | 721,441 | Feb. 24 | 3812 | 867 | 102 | 1674 |
| Hayling, Henry S. (See Mansfield, Alexander, assignor.) | | | | | | |
| Haymaker, Edward M., Centerview, Mo. Milk-pail cover and strainer | 739,080 | Sept. 15 | 3013 | 668 | 106 | 677 |
| Hayman, Josiah J., Crisfield, Md. Dredge-chuck | 741,334 | Oct. 13 | 1796 | 399 | 106 | 1647 |
| Haymond, Frank U., assignor of one-half to S. I. Bean, Asheville, N. C. Metallic railway-tie | 730,535 | June 9 | 1846 | 412 | 104 | 1524 |
| Haymond, Frank U., and S. I. Bean, Asheville, N. C. Metallic railway-tie | 742,318 | Oct. 27 | 3768 | 844 | 106 | 2089 |
| Hayne, Edward G., Ottawa, Ill. Tap-borer | 737,231 | Aug. 25 | 4106 | 912 | 105 | 1907 |
| Hayne, Roger. (See Beard and Hayne.) | | | | | | |
| Hayne, William P. (See Zoder and Hayne.) | | | | | | |
| Hayner, George M. (See Coulter, Thomas H., assignor.) | | | | | | |
| Hayner, William, Jacksonville, Fla. Surface condenser | 725,841 | Apr. 21 | 2646 | 602, 603 | 103 | 1762 |
| Haynes, Alva T., Wheatland, Cal. Mowing-machine | 738,033 | Sept. 1 | 944 | 209 | 106 | 206 |
| Haynes, Amanda G., Buffalo, N. Y. Sleeve-protector | 741,133 | Oct. 13 | 1380 | 316 | 106 | 1560 |
| Haynes-Apperson Company. (See Haynes, Wiley, and Murden, assignors.) | | | | | | |
| Haynes, Clarence E., Genesee, Idaho. Puzzle | 736,251 | Aug. 11 | 2276 | 492 | 105 | 1486 |
| Haynes, Courtland, Hawesville, Ky. Smoke-bell | 724,006 | Mar. 31 | 4106 | 991 | 103 | 983 |
| Haynes, Elwood, R. Wiley, and H. Murden, assignors to Haynes-Apperson Company, Kokomo, Ind. Steering mechanism for motor-driven vehicles | 738,997 | Sept. 15 | 2858 | 635 | 106 | 645 |
| Haynes, William, Atlanta, Ga., assignor to Draper Company, Hopedale, Mass. Let-off mechanism for looms | 741,661 | Oct. 20 | 2436 | 547 | 106 | 1801 |
| Haynie, Thomas W., Tibitha, and E. G. Hall, Lynhams, Va. Fish-trap | 730,647 | June 9 | 2038 | 454 | 104 | 1566 |
| Hays, George W. (See Douglas and Hays.) | | | | | | |
| Hays, George W., and J. E. Douglas, Birmingham, Ala. Drill | 717,992 | Jan. 6 | 890 | 199 | 102 | 191 |
| Haythorn, William, Chicago, Ill. Die-stock | 743,982 | Nov. 10 | 2312 | 494 | 107 | 513 |
| Hayward Company. (See Hayward, John H., assignor.) | | | | | | |
| Hayward Company. (See Marrder, Charles A., assignor.) | | | | | | |
| Hayward Company. (See Reynolds, Henry L., assignor.) | | | | | | |
| Hayward, John H., assignor to Hayward Company, New York, N. Y. Bucket-suspension device | 748,371 | Dec. 29 | 5678 | 1295 | 107 | 2425 |
| Hayward, Judson, New York, N. Y. Hoisting device | 744,071 | Nov. 17 | 2526 | 541 | 107 | 567 |
| Hayward, Martin A., Elmwood, assignor of one-half to A. P. Poole, Brockton, Mass. Handling-horse for shoe-uppers | 722,018 | Mar. 3 | 680 | 150 | 103 | 146 |
| Hayward, Martin A., Elmwood, assignor of one-half to A. P. Poole, Brockton, Mass. System of handling and storing shoe-uppers | 722,103 | Mar. 3 | 822 | 183 | 103 | 178 |
| Hayward, Melville P., Quincy, Mass. Ladder-brace | 735,371 | Aug. 4 | 629 | 130 | 105 | 1115 |
| Hayward, Nathan, Brockton, Mass. Leather-snipping machine | 732,185 | June 30 | 4955 | 1101, 1102 | 104 | 2220 |
| Hayward, Richard D., assignor of one-half to J. Stoneburner, Warsaw, Ind. Composite fence-post | 741,579 | Oct. 13 | 2289 | 511 | 106 | 1754 |
| Haywood, Anthony J., *et al.* (See Calentine, George C., assignor.) | | | | | | |
| Haywood, Daniel H., New York, N. Y. Combined sheet and roller | 718,347 | Jan. 13 | 1537 | 340 | 102 | 345 |
| Haywood, Daniel H., New York, N. Y., assignor to Aeolian Company. Scale for musical instruments | 718,346 | Jan. 13 | 1535 | 340 | 102 | 344 |
| Haywood, George W., assignor to Wilcox & White Company, Meriden, Conn. Autopneumatic music-playing instrument | 747,551 | Dec. 22 | 4125 | 926 | 107 | 2061 |
| Hazard, Daniel A., and C. M. Huntington, East Randolph, N. Y. Paper-clip | 743,641 | Nov. 10 | 1683 | 354 | 107 | 375 |
| Hazard, Howard D., Yakima, Wash. Wire-grip | 740,130 | Sept. 29 | 4978 | 1117 | 106 | 1131 |
| Hazeltine, Paul R., Los Angeles, Cal. Display-package | 720,345 | Feb. 10 | 1726 | 392 | 102 | 1204 |
| Hazeltine, Robert H., Greenville, S. C. Pen-rack | 747,066 | Dec. 15 | 3234 | 737 | 107 | 1846 |
| Hazelton & Donald. (See Hazelton, Frederick D., assignor.) | | | | | | |
| Hazelton, Elias, Lansing, Mich. Pulp-machine | 721,039 | Feb. 17 | 3019 | 693 | 102 | 1490 |
| Hazleton, Francis M., Sierraville, Cal. Stacking lumber | 719,663 | Feb. 3 | 444 | 101 | 102 | 915 |
| Hazelton, Frederick D., assignor to Hazelton & Donald, Philadelphia, Pa. Saw-table | 741,034 | Oct. 13 | 1192 | 269 | 106 | 1520 |
| Hazen, Nathan T., assignor of one-fifth to J. W. Coffin, Newburyport, Mass. Trolley-wheel | 723,385 | Mar. 24 | 3239 | 727 | 103 | 723 |
| Hazen, Sedgwick R., *et al.* (See Rawles, John, assignor.) | | | | | | |
| Hazlehurst, Edward, assignor to Toy Gun Manufacturing Company, Chicago, Ill. Toy gun | 723,603 | Mar. 24 | 3632 | 813 | 103 | 804 |
| Hazlett, Romeo B., assignor to C. E. Wilson, Philadelphia, Pa. Electrical indicator for telephonic toll-collecting devices | 731,899 | June 23 | 4370 | 975 | 104 | 2086 |
| Hazlett, Romeo B., assignor to C. E. Wilson, Philadelphia, Pa. Electrical coin-indicating device | 734,127 | July 21 | 2640 | 622, 623, 624 | 105 | 591 |
| Hazlett, Romeo B., assignor to C. E. Wilson, Philadelphia, Pa. Electrical coin-indicating device | 734,176 | July 21 | 2729 | 642 | 105 | 610 |
| Hazlett, Romeo B., assignor to C. E. Wilson, Philadelphia, Pa. Electrical coin-indicating device | 734,461 | July 21 | 3248 | 764 | 105 | 719 |
| Hazlewood, John W., Martin, Tenn. Back-band hook | 742,984 | Nov. 3 | 287 | 64 | 107 | 63 |
| Hazy, Adolf, New York, N. Y. Lock | 735,095 | Aug. 4 | 88 | 21 | 105 | 1001 |
| Hazzard, Frank M., Caywood, N. Y. Window-shelf bracket | 720,583 | Feb. 17 | 2184 | 506 | 102 | 1313 |
| Head, Francis, Philadelphia, Pa. Dumping-conveyer | 745,183 | Nov. 24 | 4635 | 1006 | 107 | 1031 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|
| | | | Spec. | Drg. | Vol. | Page. |
| Head, James E., St. Louis, Mo. Comb | 718,054 | Jan. 6 | 994 | 222 | 102 | 214 |
| Head, James E., assignor to Controller Company of America, St Louis, Mo. Coin-actuated lock for telephone-hooks | 725,338 | Apr. 14 | 1698 | 383 | 103 | 1545 |
| Head, Reuben M., Allegheny, Pa. Reversibly-changed-speed driving mechanism | 743,867 | Nov. 10 | 2085 | 444 | 107 | 460 |
| Head, Robert T., assignor of one-fourth to F. M. Stoker, Violet, Okla. Ter. Road-making machine | 748,372 | Dec. 29 | 5679 | 1295<br>1296 | 107 | 2426 |
| Headland, Michael E., Butler, Pa. Sanitary cuspidor | 738,680 | Sept. 8 | 2277 | 501 | 106 | 503 |
| Headley, Charles T., Brunswick, Ga. Rotary cutter | 746,959 | Dec. 15 | 3033 | 696 | 107 | 1798 |
| Headson, Frank A., assignor of two-thirds to L. H., J., and M. Pottlitzer, Lafayette, Ind. Pipe-cutting tool | 746,076 | Dec. 8 | 1402 | 313<br>314 | 107 | 1417 |
| Heal, William E., Marion, Ind. Electric water-heater | 739,176 | Sept. 15 | 3186 | 704 | 106 | 713 |
| Heald, Daniel M., Milford, N. H. Routing-table | 721,949 | Mar. 3 | 557 | 122 | 103 | 122 |
| Heald, Daniel M., Milford, N. H. Routing-table | 721,950 | Mar. 3 | 559 | 123 | 103 | 123 |
| Heald, James N. (See Heald, Leander S. and J. N.) | | | | | | |
| Heald, James N., Barre, Mass. Grinding attachment for lathes | 744,340 | Nov. 17 | 3038 | 652 | 107 | 679 |
| Heald, Leander S. and J. N., Barre, Mass. Sash-trimming machine | 734,863 | July 28 | 4034 | 942 | 105 | 896 |
| Healy, Archer C., Norwood, N. Y. Toy folding bed | 738,189 | Sept. 8 | 1291 | 279 | 106 | 295 |
| Healy, Henry, Buffalo, N. Y. Means for guiding boats propelled by electric or other power | 738,190 | Sept. 8 | 1292 | 280 | 106 | 295 |
| Healy, James F., Florence, Mass. Coin-registering bank | 734,705 | July 28 | 3713 | 868<br>869 | 105 | 832 |
| Heany, John A., Philadelphia, Pa., assignor to Teter-Heany Developing Company, Charleston, W. Va., and Philadelphia, Pa. Producing insulated electric conductors | 740,131 | Sept. 29 | 4979 | 1117 | 106 | 1131 |
| Heany, John A., Philadelphia, Pa., assignor to Teter-Heany Developing Company, Charleston, W. Va., and Philadelphia, Pa. Electric-arc lamp | 740,132 | Sept. 29 | 4980 | 1117<br>1118 | 106 | 1132 |
| Heard, Sallie C., assignor to R. H., L., C. N., and G. R. Neel, Thomasville, Ga. Husk hat | 717,571 | Jan. 6 | 89 | 22 | 102 | 21 |
| Hearn, Robert H., Dyer, Tenn. Wrench | 719,590 | Feb. 3 | 325 | 75 | 102 | 890 |
| Hearns, Robert, St. Paul, Minn. Non-refillable bottle | 742,985 | Nov. 3 | 288 | 65 | 107 | 63 |
| Hearst, William R. (See Palmer, George, assignor.) | | | | | | |
| Heartfield, Charles H., New York, N. Y. Transparent decoration | 723,604 | Mar. 24 | 3634 | 813 | 103 | 804 |
| Heaslet, Harvey B. (See Moon, Herman, assignor.) | | | | | | |
| Heaslet, James G., Philadelphia, assignor to Autocar Company, Ardmore, Pa. Muffler | 734,864 | July 28 | 4035 | 942<br>943 | 105 | 897 |
| Heater, Uriah, Lorimor, Iowa. Animal salt-box | 730,912 | June 16 | 2524 | 562 | 104 | 1688 |
| Heath, Amasa C., South Easton, assignor of one-half to F. E. Shaw, Brockton, Mass. Machine for making heel-rands | 724,700 | Apr. 7 | 525 | 125<br>126 | 103 | 1281 |
| Heath, Charles H., Franklin Falls, N. H. Variable-speed gearing | 739,545 | Sept. 22 | 3863 | 866 | 106 | 875 |
| Heath, Charles R. (See Farrell, Heath, and Tay.) | | | | | | |
| Heath, Delia, New York, N. Y. Fire-escape | 738,998 | Sept. 15 | 2861 | 635 | 106 | 646 |
| Heath, Frank. (See Trenchard and Heath.) | | | | | | |
| Heath, George S. (See Severy and Heath.) | | | | | | |
| Heath, James S., and E. Baseman, assignors to Bickford and Huffman Company, Macedon, N. Y. Speed mechanism | 725,959 | Apr. 21 | 2849 | 647 | 103 | 1805 |
| Heath, John W., assignor to L. Riley, Des Moines, Iowa. Push-cart protector | 721,301 | Feb. 24 | 3550 | 807 | 102 | 1621 |
| Heath, William E., Baltimore, Md. Sealing device | 741,607 | Oct. 13 | 2338 | 524 | 106 | 1765 |
| Heating, Ventilating and Foundry Company. (See Badger, Oliver L., assignor.) | | | | | | |
| Heatley, George S., Morpeth, England. Bedstead and mattress | 722,705 | Mar. 17 | 1982 | 442 | 103 | 455 |
| Heatley, Thomas W., Cleveland, Ohio. Switch-turner for traction-railway cars | 723,867 | Mar. 31 | 4113 | 928 | 103 | 922 |
| Heatly, Clarence, *et al.* (See Lomasney, William F., assignor.) | | | | | | |
| Heatly, John A., Schenectady, N. Y. Height-measuring device | 721,800 | Mar. 3 | 258 | 58 | 103 | 57 |
| Heaton, Charles D., Providence, R. I. Safety-catch | 740,648 | Oct. 6 | 497 | 109 | 106 | 1353 |
| Heaton, John, Cadiz, Ohio. Stirrup | 745,607 | Dec. 1 | 541 | 126 | 107 | 1212 |
| Heaton, John S., Philadelphia, Pa. Garment-hanger | 730,263 | June 9 | 1352 | 297 | 104 | 1418 |
| Heaton, John T. D., assignor of one-half to J. Heaton, Auburn, Me. Acetylene-gas generator | 738,191 | Sept. 8 | 1293 | 280 | 106 | 295 |
| Heaton, John W., assignor of one-half to A. Boice, Indianapolis, Ind. Flooring | 732,741 | July 7 | 79 | 21 | 105 | 20 |
| Heaton, John W., assignor of one-half to I. E. Holmes, Indianapolis, Ind. Stacker | 743,868 | Nov. 10 | 2087 | 444<br>445 | 107 | 460 |
| Heaton, Joseph. (See Heaton, John T. D., assignor.) | | | | | | |
| Heaton, Joseph. (See Worthley and Heaton.) (Reissue.) | | | | | | |
| Heaton, William S., assignor of one-half to W. T. Graham, Omaha, Nebr. Adjustable shade-bracket | 721,040 | Feb. 17 | 3021 | 693 | 102 | 1491 |
| Hebb Coke Drawer Company. (See Hebb, John A., assignor.) | | | | | | |
| Hebb, John A., Smock, assignor to Hebb Coke Drawer Company, Uniontown, Pa. Coke-drawing machine | 727,790 | May 12 | 1839 | 410<br>411 | 104 | 410 |
| Hebb, John A., assignor to Hebb Coke Drawer Company, Uniontown, Pa. Coke-drawing machine | 727,942 | May 12 | 2126 | 474<br>475 | 104 | 471 |
| Hebb, John A., assignor to Hebb Coke Drawer Company, Uniontown, Pa. Coke-drawing machine | 727,943 | May 12 | 2132 | 475<br>476 | 104 | 473 |
| Hebb, John A., assignor to Hebb Coke Drawer Co., Uniontown, Pa. Coke-drawing machine | 728,101 | May 12 | 2405 | 535<br>536 | 104 | 530 |
| Hebb, John A., assignor to Hebb Coke Drawer Co., Uniontown, Pa. Coke-drawing machine | 728,102 | May 12 | 2407 | 536<br>537 | 104 | 530 |
| Hebb, John A., assignor to Hebb Coke Drawer Co., Uniontown, Pa. Conveying mechanism for coke-drawing machines | 728,168 | May 12 | 2528 | 562 | 104 | 555 |
| Hebendahl, John P., Elizabeth, and J. J. Gaffney, Newark, N. J. Electric-light hanger | 726,912 | May 5 | 148 | 36 | 104 | 34 |
| Heberle, John J., Olean, N. Y. Station-indicator | 730,648 | June 9 | 2040 | 454<br>455 | 104 | 1567 |
| Heberlein, Martin. (See Francke, Oskar, assignor.) | | | | | | |
| Heberling, John, Rochester, N. Y. Rotary take-up for sewing-machines | 724,576 | Apr. 7 | 294 | 72 | 103 | 1231 |
| Hebert, Adam O. (See Babin and Hebert.) | | | | | | |
| Hebert, Henry, Fall River, assignor to Draper Company, Hopedale, Mass. Measuring mechanism for warpers | 737,405 | Aug. 25 | 4437 | 995 | 105 | 1979 |
| Hebert, Joseph E., *et al.* (See Hebert, Louis H., assignor.) | | | | | | |
| Hebert, Louis H., Chambly Basin, assignor of two-thirds to N. Lord, St. Johns, and J. E. Hebert, St. Henry, Montreal, Canada. Fire-escape | 723,868 | Mar. 31 | 4114 | 928 | 103 | 923 |
| Hebert, Peter, Hazeldell, Oreg. Equalizing-brace for spring-vehicles | 737,622 | Sept. 1 | 119 | 26 | 106 | 28 |
| Hecht, Berthold, Brooklyn, N. Y. Collar for shafts | 736,095 | Aug. 11 | 2016 | 430 | 105 | 1431 |
| Hecht, Nathan I., Baltimore, Md. Buckle | 741,244 | Oct. 13 | 1604 | 360 | 106 | 1609 |
| Hecht, Simon, Stuttgart, Germany. Hat-holder | 731,567 | June 23 | 3781 | 841 | 104 | 1962 |
| Heck, Adam T., Fairmont, assignor of two-thirds to A. E. Heck, Farmington, and J. D. Heck, Tennile, W. Va. Feed-cutter | 723,869 | Mar. 31 | 4116 | 929 | 103 | 923 |
| Heck, Alfred E., *et al.* (See Heck, Adam T., assignor.) | | | | | | |
| Heck, Jerome D., *et al.* (See Heck, Adam T., assignor.) | | | | | | |
| Heckard, William A., assignor to B. D. Miner, Indianapolis, Ind. Apparatus for administering anesthetics | 721,185 | Feb. 24 | 3332 | 761 | 102 | 1576 |
| Hecker, Fred H., Chicago, Ill. Sanitary syrup-receptacle for soda-water fountains | 746,832 | Dec. 15 | 2781 | 641 | 107 | 1741 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Hecker, Hugo A. (See Klein and Hecker.) | | | | | | |
| Hecking, Max, Dortmund, Germany, assignor to A. Busch, St. Louis, Mo. Drying apparatus | 738,800 | Sept. 15 | 2526 | 556 | 106 | 573 |
| Heckman, Jesse M., *et al.* (See Sutton, Charles R., assignor.) | | | | | | |
| Hedberg, Peter L., Chicago, Ill. Weather-strip for windows, doors, or other structures | 732,852 | July 7 | 280 | 70 | 105 | 62 |
| Hedden, Morris M., Buffalo, N. Y. Curtain-stretcher | 725,339 | Apr. 14 | 1700 | 383 | 103 | 1545 |
| Hedderich, Edward F. and L. J., Flora, Ind. Centrifugal cream-separator | 721,186 | Feb. 24 | 3333 | 762 | 102 | 1576 |
| Hedderich, Leander J. (See Hedderich, Edward F. and L. J.) | | | | | | |
| Hedenstrom, Ernest, Vancouver, Canada, assignor to H. E. Hall, Libby, Mont. Recording-compass | 734,064 | July 21 | 2517 | 588 | 105 | 566 |
| Hedgeland, Frederick W., Chicago, Ill. Governor for wind-motors | 728,462 | May 19 | 3103 | 686 | 104 | 698 |
| Hedgeland, Frederick W., assignor to W. W. Kimball Company, Chicago, Ill. Pneumatic-action for musical instruments | 726,913 | May 5 | 150 | 36 | 104 | 34 |
| Hedgepeth, John W., Ripley, Tenn. Perforating-machine | 720,425 | Feb. 10 | 1863 | 424, 425 | 102 | 1234 |
| Hedges, Fabian. (See Anderson, William O., assignor.) | | | | | | |
| Hedley, Edward M., Depew, N. Y. Track-sanding mechanism | 730,536 | June 9 | 1847 | 412 | 104 | 1524 |
| Hedley, Edward M., Depew, N. Y. Metallic packing | 735,372 | Aug. 4 | 631 | 131 | 105 | 1115 |
| Hedlund, Johan, Stockholm, Sweden. Shaft-shield for centrifugal pumps | 737,623 | Sept. 1 | 121 | 26 | 106 | 29 |
| Hedlund, Per J., Stockholm, Sweden. Steam-turbine | 741,491 | Oct. 13 | 2114 | 471 | 106 | 1717 |
| Hedlund, Per J., Stockholm, Sweden. Regulator for steam-turbines | 742,422 | Oct. 27 | 3952 | 886 | 106 | 2126 |
| Hedlund, Per J., Stockholm, Sweden. Steam-turbine | 742,423 | Oct. 27 | 3953 | 887 | 106 | 2127 |
| Hedlund, Per J., Stockholm, Sweden. Elastic-fluid turbine-wheel | 743,869 | Nov. 10 | 2088 | 445 | 107 | 461 |
| Hedman, Carl M., Chicago, Ill., assignor, by mesne assignments, to Stromberg-Carlson Telephone Manufacturing Company, Rochester, N. Y. Electromagnet | 738,801 | Sept. 15 | 2528 | 556 | 106 | 573 |
| Hedman, Carl M., Chicago, Ill., assignor, by mesne assignments, to Stromberg-Carlson Telephone Manufacturing Company, Rochester, N. Y. Multiple switchboard | 747,421 | Dec. 22 | 3894 | 877 | 107 | 2008 |
| Hedrick, Ira G. (See Waddell and Hedrick.) | | | | | | |
| Hedrick, John M., Flourtown, Pa. Emergency car-brake | 737,624 | Sept. 1 | 122 | 26 | 106 | 29 |
| Hedstrom, Carl O., Portland, Conn. Carbureter for explosive-engines | 730,649 | June 9 | 2046 | 456 | 104 | 1568 |
| Hedstrom, Carl O., Portland, Conn., assignor to G. M. Hendee, Springfield, Mass. Controlling mechanism for internal-combustion engines | 727,944 | May 12 | 2134 | 476 | 104 | 473 |
| Hedstrom, Wilbur F., Los Angeles, Cal. Electrical massage apparatus | 722,841 | Mar. 17 | 2237 | 501 | 103 | 506 |
| Heeg, Charles W., and C. A. Klise, St. Louis, Mo. Combined cane and stool | 725,960 | Apr. 21 | 2851 | 647 | 103 | 1805 |
| Heeley, Charles H., East Orange, A. D. Page and A. G. Macandrew, Newark, N. J. Index memorandum-book | 737,232 | Aug. 25 | 4107 | 913 | 105 | 1907 |
| Heenan, John, Portland, Oreg. Paving | 744,541 | Nov. 17 | 3399 | 732 | 107 | 755 |
| Heer, David, assignor to Hero Fruit Jar Company, Philadelphia, Pa. Insulating handle connection | 740,649 | Oct. 6 | 498 | 109 | 106 | 1353 |
| Heer, Otto, Dusseldorf, Germany. Rolling-mill | 742,645 | Oct. 27 | 4352 | 978, 979 | 106 | 2212 |
| Heeren, Oscar, Biarritz, France. Golf-club | 734,065 | July 21 | 2519 | 588 | 105 | 566 |
| Heermans, Harry C. (See Ferguson, Lyman, assignor.) | | | | | | |
| Heermans, Thaddeus W., Chicago, Ill. Elevator hoisting mechanism | 727,136 | May 5 | 606 | 130, 131 | 104 | 131 |
| Heermans, Thaddeus W., Chicago, Ill. Controlling mechanism for elevators | 728,228 | May 19 | 2654 | 593 | 104 | 603 |
| Heermans, Thaddeus W., assignor to Winslow Bros. Co., Chicago, Ill. Device for opening laterally-moving doors | 717,745 | Jan. 6 | 417 | 97, 98 | 102 | 91 |
| Heermans, William S. H., Towanda, Pa. Snow-plow | 745,608 | Dec. 1 | 542 | 126 | 107 | 1212 |
| Heeter, Charles M., Butler, Pa. Sand-pump | 722,424 | Mar. 10 | 1424 | 314 | 103 | 319 |
| Heeter, Charles M. and C. C., Butler, Pa.; said C. C. Heeter assignor to said Charles M. Heeter. Packer for deep wells | 747,321 | Dec. 15 | 3717 | 838 | 107 | 1952 |
| Heeter, Colonel C. (See Heeter, Charles M. and C. C.) | | | | | | |
| Heffernan, James B., Colorado Springs, Colo. Chlorination-barrel | 719,664 | Feb. 3 | 445 | 101 | 102 | 915 |
| Heffilfinger, John A. (See Walley, James J., assignor.) | | | | | | |
| Heffner, John H., and S. L. Ball, Thornton, Tex. Crude-oil burner | 720,584 | Feb. 17 | 2185 | 507 | 102 | 1314 |
| Heffner, John L., Peoria, Ill. Upholstering device | 743,505 | Nov. 10 | 1425 | 298 | 107 | 321 |
| Hefley, W. J., *et al.* (See Fender, John B., assignor.) | | | | | | |
| Heftler, Victor R., and C. B. Weeks, Paris, France; said Heftler assignor to said Weeks. Ticket printing, issuing, and recording machine | 740,274 | Sept. 29 | 5246 | 1182, 1183, 1184 | 166 | 1186 |
| Hegbom, Marselius, assignor to F. Voss, Chicago, Ill. Hatchway-door | 724,472 | Apr. 7 | 99 | 24 | 103 | 1190 |
| Hegeman, Benjamin A., Jr. (See Ames, John M. and J. H., assignors.) | | | | | | |
| Hegg, Thomas O., Beloit, Wis. Garment-fastener | 733,199 | July 7 | 883 | 213 | 105 | 185 |
| Heidel, Frank W., *et al.* (See Wakefield, Nathen S., assignor.) | | | | | | |
| Heidelberg, Cecil F. (See Reid and Heidelberg.) | | | | | | |
| Heider, Henry J., Templeton, Iowa. Draft-equalizer | 731,568 | June 23 | 3782 | 842 | 104 | 1962 |
| Heidman, Ernest, New York, N. Y. Lock | 722,406 | Mar. 10 | 1392 | 307 | 103 | 313 |
| Heieren, Necolai E., Baxter, Minn. Threshing-machine | 727,358 | May 5 | 999 | 217 | 104 | 215 |
| Heiland, George W., New York, N. Y. Smoke-machine | 740,650 | Oct. 6 | 499 | 110 | 106 | 1353 |
| Heilbron, Edward E., assignor, by mesne assignments, to Louisville Novelty Company, Incorporated, Louisville, Ky. Safety garment-supporter | 729,165 | May 26 | 4391 | 968 | 104 | 980 |
| Heilig, Harris J., assignor to A. B. Andrews, Jr., Raleigh, N. C. Mail-bag closure | 738,439 | Sept. 8 | 1807 | 392 | 106 | 404 |
| Heilig, Harris J., assignor to A. B. Andrews, Jr., Raleigh, N. C. Mail-bag fastener | 738,440 | Sept. 8 | 1808 | 392 | 106 | 404 |
| Heiliger, Fritz (See Timar, Ignaz, assignor.) | | | | | | |
| Heilman-Taylor, Louisa, Paris, France. Machine for the production of coated alimentary products | 729,933 | June 2 | 743 | 165, 166 | 104 | 1279 |
| Heilmann, Jean J., Paris, France, assignor, by mesne assignments, to M. L. de la Bonniniére and J. Holder. Manufacture of electrodes | 724,287 | Mar. 31 | 4973 | 1113 | 103 | 1097 |
| Heimann, Emanuel, Brunswick, Germany. Extracting apparatus | 733,200 | July 7 | 884 | 214 | 105 | 185 |
| Heimann, Julius, New York, N. Y. Reeded trimming or braid | 725,561 | Apr. 14 | 2113 | 479 | 103 | 1632 |
| Heimann, Morris A., St. Louis, Mo. Adjustable shelf-bracket | 733,037 | July 7 | 591 | 145 | 105 | 126 |
| Heimlich, Samuel. (See Bitner, John R., assignor.) | | | | | | |
| Heimrich, John. (See Heimrich, John G., assignor.) | | | | | | |
| Heimrich, John G., assignor of one-half to J. Heimrich, Seattle, Wash. Rock-drilling machine | 731,569 | June 23 | 3783 | 842 | 104 | 1962 |
| Hein, August F., Postville, Iowa. Fence-post | 744,072 | Nov. 17 | 2528 | 541 | 107 | 568 |
| Hein, Karl, Hanover, Germany. Leveling-staff | 723,526 | Mar. 24 | 3498 | 782 | 103 | 777 |
| Hein, Karl, Hanover, Germany. Cross-wire for optical measuring instruments | 730,016 | June 2 | 910 | 202, 203 | 104 | 1313 |
| Heina, Paul E., Paris, France. Multiplex telegraphy | 735,508 | Aug. 4 | 911 | 194 | 105 | 1176 |
| Heincke, Hans, Waltershausen, Germany. Mold | 746,960 | Dec. 15 | 3035 | 696 | 107 | 1799 |
| Heine, August J., Wahpeton, N. D. Knife-sharpener for band-cutters | 738,192 | Sept. 8 | 1294 | 280, 281 | 106 | 295 |
| Heine, August J., assignor to Heine Manufacturing Company, Wahpeton, N. D. Band-cutter and feeder | 746,961 | Dec. 15 | 3036 | 696, 697 | 107 | 1799 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | Spec. | Drg. | Vol. | Page. |
| Heine, August J., assignor to Heine Manufacturing Company, Wahpeton, N. D. Band-cutter and feeder | 747,067 | Dec. 15 | 3235 | 737<br>738 | 107 | 1847 |
| Heine, John A. F. (See Schmidt and Heine.) | | | | | | |
| Heine Manufacturing Company. (See Heine, August J., assignor.) | | | | | | |
| Heine, T. G. (See Puerner, Arthur D., assignor.) | | | | | | |
| Heine, Thompson G. (See Puerner and Heine.) | | | | | | |
| Heineke, Charles, *et al.* (See Heineke, John, assignor.) | | | | | | |
| Heineke, John, assignor of two-thirds to M. and C. Heineke, Springfield, Ill. Straw-stacker | 724,097 | Mar. 31 | 4568 | 1028 | 103 | 1015 |
| Heineke, John, assignor of two-thirds to M. and C. Heineke, Springfield, Ill. Straw-stacker for threshing-machines | 724,098 | Mar. 31 | 4570 | 1028 | 103 | 1016 |
| Heineke, Martin, *et al.* (See Heineke, John, assignor.) | | | | | | |
| Heineke, Martin, Springfield, Ill., assignor to Sattley Stacker Company, Indianapolis, Ind. Straw-stacker | 742,116 | Oct. 20 | 3377 | 754 | 106 | 1993 |
| Heineke, Martin, Springfield, Ill., assignor, by mesne assignments, to Sattley Stacker Company, Indianapolis, Ind. Straw-stacker. (Reissue) | 12,177 | Nov. 24 | 4898 | 1069 | 107 | 1084 |
| Heinemann & Company, George H. (See Wefel, William C., assignor.) | | | | | | |
| Heinig, Frederick E., assignor to Louisville Tin and Stove Company, Louisville, Ky. Stovepipe | 739,600 | Sept. 22 | 3977 | 887 | 106 | 898 |
| Heinold, John B., Kearney, N. J. Buckle | 730,120 | June 2 | 1078 | 242 | 104 | 1347 |
| Heinrich, Charles E., Cincinnati, Ohio. Window-curtain fixture | 736,391 | Aug. 18 | 2525 | 554 | 105 | 1558 |
| Heinrich, Ferdinand L., High Hill, Tex. Baling-press | 719,591 | Feb. 3 | 326 | 76 | 102 | 890 |
| Heinrich, Frederick, Rush City, Minn. Potato-digger | 726,428 | Apr. 28 | 3707 | 841 | 103 | 1996 |
| Heinrich, John, and F. Probst, Kansas City, Mo. Bag-filler | 748,500 | Dec. 29 | 5931 | 1347 | 107 | 2481 |
| Heinrichs, Joseph, New York, N. Y. Coffee-pot | 747,705 | Dec. 22 | 4412 | 994 | 107 | 2125 |
| Heinsfurter, Jacob. (See Burnam, Clarence M., assignor.) | | | | | | |
| Heinsfurter, Jacob. (See Warman and Winter, assignors.) | | | | | | |
| Heintz, John A., Menomonie, Wis. Brick-mold | 727,945 | May 12 | 2136 | 476 | 104 | 473 |
| Heintz, Otto L., Buffalo, N. Y. Jewelry | 734,066 | July 21 | 2520 | 588 | 105 | 567 |
| Heinz, Nicholas L., Lasalle, Ill. Apparatus for making sulfuric acid | 728,914 | May 26 | 3943 | 876<br>877 | 104 | 888 |
| Heinze, John O., Jr., Chelsea, Mass. X-ray tube | 729,166 | May 26 | 4392 | 969 | 104 | 980 |
| Heinze, John O., Jr., Lowell, Mass. Spark-gap | 740,428 | Oct. 6 | 88 | 18 | 106 | 1266 |
| Heinze, John O., Jr., Lowell, Mass. X-ray tube | 743,718 | Nov. 10 | 1814 | 382 | 107 | 404 |
| Heinzelman Bros. Carriage Co. (See Heinzelman, Reginald, assignor.) | | | | | | |
| Heinzelman, Reginald, Belleville, Ill., assignor to Heinzelman Bros. Carriage Co. Storm-buggy | 742,319 | Oct. 27 | 3770 | 844<br>845 | 106 | 2090 |
| Heinzmann, John G. (See Mell, James A., assignor.) | | | | | | |
| Heise, Charles J. A., Newark, N. J. Apparatus for testing the balance of wheels | 736,096 | Aug. 11 | 2017 | 430 | 105 | 1431 |
| Heisey, John H., Monticello, Iowa. Wire-stretcher | 745,013 | Nov. 24 | 4242 | 920 | 107 | 950 |
| Heisler, Charles L. (See Fawcett and Heisler.) | | | | | | |
| Heisler, Fred. (See Schlicker, Christian, assignor.) | | | | | | |
| Heissenberger, John, New York, N. Y. Registering mechanism | 738,441 | Sept. 8 | 1810 | 393 | 106 | 404 |
| Heist, George K., Winchester, Va. Dental crown-slitter | 734,865 | July 28 | 4038 | 943 | 105 | 897 |
| Heitkamp, William C., Pleasantridge, Ohio. Boiler-alarm | 738,442 | Sept. 8 | 1811 | 393 | 106 | 405 |
| Heitmann, Anna, St. Paul, Minn. Baby-jumper | 735,668 | Aug. 4 | 1212 | 257 | 105 | 1238 |
| Helberg, Hjalmar J., New York, N. Y. Scarf-fastener | 730,017 | June 2 | 911 | 203 | 104 | 1313 |
| Helbig, August. (See Liebreich and Francis, assignors.) | | | | | | |
| Helbig, Carl E. B., Dresden, Germany. Fender or safety device for vehicles | 732,579 | Mar. 10 | 1718 | 382 | 103 | 385 |
| Helbing, Heinrich, London, England. Cork | 734,551 | July 28 | 3430 | ------ | 105 | 774 |
| Held, August S., Freeport, Ill. Mop-head | 727,627 | May 12 | 1500 | 339 | 104 | 340 |
| Held, August S., Freeport, Ill. Combined mop and scrub-brush | 729,581 | June 2 | 112 | 28 | 104 | 1150 |
| Held, August S., Freeport, Ill. Combined mop and scrub-brush | 732,742 | July 7 | 80 | 22 | 106 | 20 |
| Held, August S., Freeport, Ill. Combined mop and scrub-brush | 732,743 | July 7 | 81 | 22 | 105 | 20 |
| Held, August S., Freeport, Ill. Combined mop and scrub-brush | 732,744 | July 7 | 82 | 22, 23 | 105 | 21 |
| Held, Charles F., St. Louis, Mo. Base-ball bat | 727,359 | May 5 | 1001 | 218 | 104 | 216 |
| Held, Johann G. (See Schubert, Franz, assignor.) | | | | | | |
| Helfenstein, William. (See Stockton and Helfenstein.) | | | | | | |
| Helferich, Louis. (See Burri and Helferich.) | | | | | | |
| Helios-Upton Company. (See Morrison, William, assignor.) | | | | | | |
| Helios-Upton Company. (See Spencer, Thomas, assignor.) | | | | | | |
| Helix Gear Company. (See Johnson, Moses C., assignor.) | | | | | | |
| Heller Brothers Company. (See Heller, Paul E., assignor.) | | | | | | |
| Heller, Daniel, *et al.* (See Miller, Benjamin F. D., assignor.) | | | | | | |
| Heller, Max. (See Stanley, Frank J., assignor.) | | | | | | |
| Heller, Paul E., assignor to Heller Brothers Company, Newark, N. J. Farrier's knife | 719,797 | Feb. 3 | 705 | 165 | 102 | 972 |
| Heller, Robley E., Abingdon, Ill. Railway-tie | 738,681 | Sept. 8 | 2278 | 501 | 106 | 503 |
| Hellmann, Meta. (See Merkel, Sanders, and Hellmann.) | | | | | | |
| Hellums, Robert W., and L. S. Boydston, Watervalley, Miss. Water-pipe renovator | 717,572 | Jan. 6 | 91 | 22 | 102 | 22 |
| Hellwig, Julius, Philadelphia, Pa. Mechanical movement | 727,137 | May 5 | 612 | 131 | 104 | 132 |
| Helm, Clinton B., assignor to America Company, Rockford, Ill. Cartridge-loading device | 747,422 | Dec. 22 | 3896 | 877 | 107 | 2009 |
| Helm, E. M., *et al.* (See Schmucker, Alfred P., assignor.) | | | | | | |
| Helm, Gustave A., *et al.* (See Witzel, Charles J., assignor.) | | | | | | |
| Helm, Gustave A. (See Witzel, Helm, and Smith.) | | | | | | |
| Helme & McIlhenny. (See Nichols, George S., assignor.) | | | | | | |
| Helmers, Ludwig O., assignor to Ichthyol Gesellschaft Cordes, Hermanni & Co., Hamburg, Germany. Sulfonic-acid salt and making same | 722,506 | Mar. 10 | 1596 | ------ | 103 | 358 |
| Helmers, Ludwig O., assignor to Ichthyol Gesellschaft Cordes, Hermanni & Co., Hamburg, Germany. Sulfonic-acid salts of alkaline earthy metals and metals proper and making same | 722,507 | Mar. 10 | 1597 | ------ | 103 | 359 |
| Helmond, William F., Hartford, Conn., assignor to Underwood Typewriter Company, New York, N. Y. Ribbon-reversing mechanism for type-writers | 740,651 | Oct. 6 | 501 | 110 | 106 | 1354 |
| Helmond, William F., and O. C. Kavle, Hartford, Conn., assignors, by mesne assignments, to Underwood Typewriter Company, New York, N. Y. Silent-key mechanism for type-writers | 730,456 | June 9 | 1711 | 383 | 104 | 1494 |
| Hem, Halvor O., Kansas City, Kans. Balancing and recording mechanism for weighing-scales | 741,908 | Oct. 20 | 2923 | 652<br>653 | 106 | 1902 |
| Hemann, Bennard, Belleville, Ill. Track-sweeper | 740,851 | Oct. 6 | 873 | 195 | 106 | 1432 |
| Hemenway, Cleveland, North Adams, Mass. Thimble | 743,280 | Nov. 3 | 897 | 195 | 107 | 190 |
| Hemenway, George. (See Chase, James L., assignor.) | | | | | | |
| Hemenway, Justin S., River Falls, Wis. Apparatus for demonstrating the laws of gravity | 720,426 | Feb. 10 | 1866 | 425 | 102 | 1234 |
| Hemleb, Martin. (See Diehl and Hemleb.) | | | | | | |
| Hemleb, Martin, Elizabeth, N. J., assignor to Singer Manufacturing Company. Sewing-machine | 741,035 | Oct. 13 | 1192 | 270 | 106 | 1520 |
| Hemmer, Leopold P., Aix-la-Chapelle, Germany. Fulling-machine | 722,363 | Mar. 10 | 1315 | 291 | 103 | 296 |

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| Hemming, Richard B., New Haven, Conn. Alarm-receptacle for watches | 711,036 | Oct. 13 | 1193 | 270 | 106 | 1521 |
| Hemp and Company. (See Mohr, Gustave C., assignor.) | | | | | | |
| Hemphill, Eli, Avalon, assignor of one-third to W. Jones, Bellevue, Pa. Electric time-switch | 725,444 | Apr. 14 | 1904 | 426 | 103 | 1588 |
| Hemphill, Eli M., Avalon, and E. Beiber, Pittsburg, Pa. Automatic paralleling device | 729,934 | June 2 | 745 | 166 | 104 | 1280 |
| Hemphill, Henry B., assignor of one-half to W. Robinett, Eldorado, Ill. Boiler | 726,683 | Apr. 28 | 4218 | 953 | 103 | 2096 |
| Hemphill, Johnston. (See Gale, Frederick, assignor.) | | | | | | |
| Hemptinne, Paul de, Ghent, Belgium. Apparatus for casting hollow metal bodies | 743,077 | Nov. 3 | 498 | 108 | 107 | 104 |
| Hemsing, Charles. (See Seely and Hemsing.) | | | | | | |
| Hemstram, Edward, Greatfalls, Mont. Vegetable grater and masher | 731,362 | June 16 | 3355 | 750 | 104 | 1857 |
| Hemstrom, Edward, Greatfalls, Mont. Reversible rotary engine | 744,542 | Nov. 17 | 3399 | 732 | 107 | 756 |
| Henault, Joseph W. (See Booco and Henault.) | | | | | | |
| Hendee, George M. (See Hedstrom, Carl O., assignor.) | | | | | | |
| Hendel, Charles A., Pittsburg, Pa. Device for operating railway-switches | 732,552 | June 30 | 5664 | 1257 | 104 | 2367 |
| Hendershot, Daniel H., Baldwinsville, N. Y. Shaft-coupling | 748,373 | Dec. 29 | 5681 | 1296 | 107 | 2426 |
| Henderson, Albert E., Toronto, Canada. Ball-bearing | 725,246 | Apr 14 | 1542 | 350 | 103 | 1511 |
| Henderson, Albert E., assignor to Toronto Roller Bearing Company, Limited, Toronto, Canada. Roller-bearing | 718,122 | Jan. 13 | 1123 | 248 | 102 | 257 |
| Henderson, Albert E., assignor to Toronto Roller Bearing Company, Limited, Toronto, Canada. Roller-bearing | 725,247 | Apr. 14 | 1544 | 350 / 351 | 103 | 1512 |
| Henderson, Albert E., assignor to Toronto Roller Bearing Company, Limited, Toronto, Canada. Antifriction-bearing | 725,620 | Apr. 14 | 2225 | 503 | 103 | 1658 |
| Henderson, Albert E., assignor to Toronto Roller Bearing Company, Limited, Toronto, Canada. Antifriction-bearing | 726,914 | May 5 | 152 | 37 | 104 | 35 |
| Henderson, Andrew J. (See Campbell and Henderson.) | | | | | | |
| Henderson, Archibald C., New York, N. Y. Desk and seat | 739,868 | Sept. 29 | 4504 | 1013 | 106 | 1029 |
| Henderson, Benjamin H., Somerville, Mass., assignor to Thompson & Norris Company, Paper box | 729,167 | May 26 | 4393 | 969 | 104 | 980 |
| Henderson, Charles L., Berlin, Canada. Vehicle-tire | 735,373 | Aug. 4 | 633 | 131 | 105 | 1116 |
| Henderson, Elmer O., and J. B. Thompson, Okoboji, Iowa. Furnace-door opener | 721,302 | Feb. 24 | 3552 | 807 | 102 | 1621 |
| Henderson, Elmer O., and J. B. Thompson, Okoboji, Iowa. Boiler-flue cleaner | 721,889 | Mar. 3 | 427 | 94 | 103 | 94 |
| Henderson, Frederick, Johannesburg, Transvaal. Chuck for rock-drilling machines | 747,423 | Dec. 22 | 3898 | 878 | 107 | 2009 |
| Henderson, Henry T., Keokuk, Iowa. Ball-coupling | 729,168 | May 26 | 4394 | 969 | 104 | 980 |
| Henderson, James E. (See Wiggs, Zeph, assignor.) | | | | | | |
| Henderson, James E., Denton, Tex. Trace-fastener | 728,229 | May 19 | 2656 | 593 | 104 | 604 |
| Henderson, John, Millgrove, Mo. Windmill | 720,427 | Feb. 10 | 1869 | 425 | 102 | 1235 |
| Henderson, John, Glasgow, Scotland. Work-holding attachment for embroidering-machines | 721,126 | Feb. 17 | 3216 | 736 | 102 | 1537 |
| Henderson, John H., and E. D. Jerome, Allegheny, Pa. Rein-supporter | 732,853 | July 7 | 281 | 70 | 105 | 63 |
| Henderson, John N., assignor to E. Cunningham, New Orleans, La. Compound for removing scale from steam-boilers | 719,002 | Jan. 27 | 2816 | ..... | 102 | 642 |
| Henderson, John S., and A. H. Lewis, Denver, Colo. Means for keeping frost from windows | 738,034 | Sept. 1 | 945 | 210 | 106 | 206 |
| Henderson, John T., and J. F. Edgar, Council Bluffs, Iowa. Fish-hook | 742,093 | Oct. 20 | 3340 | 745 | 106 | 1986 |
| Henderson, John W., Tunica, Miss. Self-closing gate | 722,104 | Mar. 3 | 825 | 183 | 103 | 178 |
| Henderson, Merle E., Fort Valley, Ga. Hose-coupling | 744,073 | Nov. 17 | 2528 | 541 | 107 | 568 |
| Henderson, Ralph I., Cairo, W. Va. Well-casing spear | 737,101 | Aug. 25 | 3858 | 857 | 105 | 1854 |
| Henderson, Robert H., Newark, N. J., assignor to Westinghouse Electric and Manufacturing Company. Electric-arc lamp for multiple or parallel circuits | 748,185 | Dec. 29 | 5363 | 1218 | 107 | 2356 |
| Henderson, Thomas M., Portsmouth, Va. Automatic self-balancing valve | 731,363 | June 16 | 3357 | 751 | 104 | 1857 |
| Henderson, Thomas M., Portsmouth, Va., assignor of two-thirds to C. P. Storrs, Wilmington, Del., and R. R. Hicks, Norfolk, Va. Dust-arrester for air-brakes | 730,824 | June 9 | 2344 | 519 | 104 | 1632 |
| Henderson, William, Jr., New York, N. Y. Envelop moistening and sealing apparatus | 733,392 | July 14 | 1252 | 296 | 105 | 281 |
| Henderson, William H., assignor of one-half to J. W. Howell, Hillsboro, Tex. Heating device | 733,840 | July 14 | 2056 | 486 | 105 | 449 |
| Hendler, John J., Kansas City, Mo. Apparatus for generating acetylene gas | 719,665 | Feb. 3 | 446 | 102 | 102 | 915 |
| Hendler, John J., Kansas City, Mo. Acetylene-gas apparatus | 729,339 | May 26 | 4698 | 1038 | 104 | 1045 |
| Hendler, John J., Chicago, Ill. Acetylene-gas generator | 745,837 | Dec. 1 | 970 | 217 / 218 | 107 | 1305 |
| Hendon, Walter P., Dallas, Tex., assignor to E. Bement's Sons, Lansing, Mich. Disk-bearing for disk plows or similar implements | 721,951 | Mar. 3 | 561 | 123 | 103 | 123 |
| Hendrick, Eli E. (See Culver, Willard B., assignor.) | | | | | | |
| Hendrick, Eli E. (See Ramsay, Allan, assignor.) | | | | | | |
| Hendrick, Eli E., Carbondale, Pa. Tool-handle | 726,288 | Apr. 28 | 3443 | 782 | 103 | 1942 |
| Hendricks, Adam C., Waynesboro, Pa. Window | 747,173 | Dec. 15 | 3426 | 776 / 777 | 107 | 1888 |
| Hendricks, Clarence E., Denver, Colo. Brick-machine | 718,123 | Jan. 13 | 1124 | 248 / 249 | 102 | 257 |
| Hendricks, John J. (See Richardson, Hendricks, and Markey.) | | | | | | |
| Hendricks, Kearney J. (See Shrum, Peter J., assignor.) | | | | | | |
| Hendricks, William H., assignor of one-half to C. C. Druley, Middletown, Ind. Wheel | 729,068 | May 26 | 4220 | 933 | 104 | 945 |
| Hendrickson, Abram A., St. Albans, N. Y. Exercising device and striking-bag support | 724,473 | Apr. 7 | 101 | 24 | 103 | 1191 |
| Hendrickson, Isaac B., assignor to H. J. Moore, Rochester, N. Y. System of reference for account or other memorandum books | 730,650 | June 9 | 2050 | 456 | 104 | 1568 |
| Hendrickson, James and T. M., Lees Summit, Mo. Replanting attachment for cultivators | 717,573 | Jan. 6 | 92 | 23 | 102 | 22 |
| Hendrickson, James G., Bayonne, N. J., assignor to New York Labelling Machine Company. Labeling-machine | 733,038 | July 7 | 592 | 145 / 146 | 105 | 126 |
| Hendrickson, James G., Bayonne, N. J., assignor to New York Labelling Machine Company. Labeling-machine | 733,039 | July 7 | 600 | 146 / 147 | 105 | 128 |
| Hendrickson, John H., Baybridge, Ohio. Friction-clutch | 740,564 | Oct. 6 | 349 | 73 | 106 | 1320 |
| Hendrickson, Thomas M. (See Hendrickson, James and T. M.) | | | | | | |
| Hendrickson, Thomas M., Lees Summit, Mo. Check-row corn-planter | 738,035 | Sept. 1 | 947 | 210 / 211 | 106 | 206 |
| Hendrickson, Thomas M., Lees Summit, Mo. Land-marker | 738,036 | Sept. 1 | 951 | 211 | 106 | 207 |
| Hendrickx, Frans, assignor to H. M. Mitchell, Chicago, Ill. Display-cabinet | 730,209 | June 2 | 1223 | 273 | 104 | 1376 |
| Hendrix, John D., assignor to Hendrix Manufacturing Company, Montgomery, Ala. Beer-cooler | 718,759 | Jan. 20 | 2365 | 523 | 102 | 533 |
| Hendrix Manufacturing Company. (See Hendrix, John D., assignor.) | | | | | | |
| Hendrix, William H., Seattle, Wash. Lifter | 730,370 | June 9 | 1538 | 342 | 104 | 1458 |
| Hendy, John H., San Francisco, Cal. Battery-stamp-stem guide | 729,169 | May 26 | 4395 | 970 | 104 | 981 |
| Hendy, John H., San Francisco, Cal. Stamp-mill mortar | 735,374 | Aug. 4 | 634 | 131 | 105 | 1116 |
| Hengen, Jacob, assignor of one-half to A. Baker, North Amherst, Ohio. Trolley-wheel | 724,099 | Mar. 31 | 4571 | 1028 / 1029 | 103 | 1016 |
| Henggi, Lewis O., and E. Woodings, Oakmont, Pa. Lifting-jack | 721,518 | Feb. 24 | 3949 | 899 | 102 | 1703 |
| Henigan, Edward P., Dunmore, Pa. Lamp-chimney or bottle carrier | 746,077 | Dec. 8 | 1404 | 314 | 107 | 1418 |

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| Henius, Max, Chicago, Ill. Convertible mash-tun and wort-separator | 721,890 | Mar. 3 | 429 | 94 | 103 | 94 |
| Henius, Max, Chicago, Ill. Wort-separator | 724,100 | Mar. 31 | 4572 | 1029 | 103 | 1017 |
| Henius, Max, Chicago, Ill. Brew-house-apparatus equipment | 732,350 | June 30 | 5275 | 1170 | 104 | 2286 |
| Henkel, George H., assignor of one-fourth to J. G. Stout, Nashville, Tenn. Window-screen | 738,108 | Sept. 1 | 1092 | 242 | 106 | 236 |
| Henkle, Edward A., Philadelphia, Pa. Sales-check book | 726,058 | Apr. 21 | 3004 | 683 | 103 | 1836 |
| Henkle, George W., Vancouver, Wash. Fruit-drier | 736,849 | Aug. 18 | 3412 | 755 | 105 | 1741 |
| Henkle, Milton, Baltimore, Md. Water-heater | 743,719 | Nov. 10 | 1815 | 383 | 107 | 404 |
| Henley, Milton C., New York, N. Y. Oil-burner | 726,059 | Apr. 21 | 3005 | 684 | 103 | 1837 |
| Henn, Edwin C., assignor to National Acme Manufacturing Company, Cleveland, Ohio. Clutch | 743,078 | Nov. 3 | 500 | 108 | 107 | 105 |
| Henn, Wilhelm, Jr., Bretten, Germany. Bicycle-brush | 725,843 | Apr. 21 | 2649 | 603 | 103 | 1763 |
| Hennefer Maschinenfabrik, C. Reuther & Reisert mit Beschränkter Haftung. (See Reisert, Michael E., assignor.) | | | | | | |
| Hennegin, Herbert H., Chicago, Ill. Fuel-regulator for gasolene-motors | 746,833 | Dec. 15 | 2782 | 641 | 107 | 1741 |
| Henner, Joseph F., Haines, Oreg. Feeder for threshing-machines | 746,507 | Dec. 8 | 2168 | 498 | 107 | 1582 |
| Henness, Isaac N., Ilwaco, Wash. Propelling device for ice-vehicles | 729,935 | June 2 | 747 | 166 | 104 | 1280 |
| Henness, Isaac N., Ilwaco, Wash. Ice-vehicle | 734,552 | July 28 | 3430 | 800 | 105 | 774 |
| Hennessey, James, assignor to J. Rowan, Marion, Ind. Shoe-lace fastener | 724,389 | Mar. 31 | 5183 | 1162 | 103 | 1141 |
| Hennessey, James, assignor of one-half to J. Rowan, Marion, Ind. Shoe-lace fastener | 726,289 | Apr. 28 | 3444 | 783 | 103 | 1942 |
| Hennessey, James, assignor of one-half to J. Rowan, Marion, Ind. Shoe-lace fastener | 726,820 | Apr. 28 | 4478 | 1011 | 103 | 2150 |
| Hennessey, John J., Milwaukee, Wis. Friction draft-rigging for railway-cars | 717,676 | Jan. 6 | 275 | 68 | 102 | 59 |
| Hennessey, John J., Milwaukee, Wis. Friction draft-rigging for railway-cars | 717,677 | Jan. 6 | 277 | 69 | 102 | 59 |
| Hennessey, John J., Milwaukee, Wis. Combined friction and direct-acting draft-rigging | 717,678 | Jan. 6 | 278 | 69, 70 | 102 | 60 |
| Hennessey, John J., Milwaukee, Wis. Combined friction and direct-acting draft-rigging | 717,679 | Jan. 6 | 281 | 70 | 102 | 61 |
| Hennessey, John J., Milwaukee, Wis. Friction draft-rigging for railway-cars | 733,961 | July 21 | 2301 | 541 | 105 | 518 |
| Hennessey, John J., Milwaukee, Wis. Sliding door | 735,766 | Aug. 11 | 1398 | 300 | 105 | 1296 |
| Hennessy, Thomas B., Chicago, Ill., assignor, by mesne assignments, to Embalmer's Supply Company, Westport, Conn. Embalmer's table | 723,605 | Mar. 24 | 3635 | 814 | 103 | 804 |
| Hennicke, Charles A., assignor to Pratt & Letchworth Company, Buffalo, N. Y. Fifth-wheel | 732,297 | June 30 | 5170 | 1148, 1149 | 104 | 2264 |
| Hennig, Charles T., assignor to J. R. Hatmaker, London, England. Calcining-furnace | 726,915 | May 5 | 153 | 37 | 104 | 35 |
| Henning, Eduard, Crete, Ill. Hay-rake | 743,720 | Nov. 10 | 1817 | 383 | 107 | 405 |
| Henning, Frank, *et al.* (See Miller, Emil F., assignor.) | | | | | | |
| Henninger, Frederick W., Detroit, Mich. Machine for cleaning, straightening, and reinsulating old wire | 717,574 | Jan. 6 | 93 | 23 | 102 | 22 |
| Hennings, Marius, San Francisco, Cal. Bake-oven | 742,424 | Oct. 27 | 3954 | 887 | 106 | 2127 |
| Hennl, Johann, assignor to Firm of A. Osmanek, Schönbach, Austria-Hungary. Drum | 725,842 | Apr. 21 | 2648 | 603 | 103 | 1762 |
| Henoch, Milton, Laporte, Ind. Bicycle-support | 744,543 | Nov. 17 | 3401 | 733 | 107 | 756 |
| Henrich, John G., London, England. Siphon-bottle | 741,965 | Oct. 20 | 3049 | 680 | 106 | 1928 |
| Henrichsen, Olaf, New York, N. Y. Toy for expanding the lungs | 741,492 | Oct. 13 | 2115 | 471 | 106 | 1717 |
| Henricks, Garrett W., assignor to Henricks Novelty Company, Indianapolis, Ind. Safety speed-limiting means. (Reissue) | 12,165 | Nov. 3 | 1201 | 248, 249 | 107 | 257 |
| Henricks Novelty Company. (See Henricks, Garrett W., assignor.) (Reissue.) | | | | | | |
| Henrikson, Kristofer, Springfield, Mass. Mangle | 733,645 | July 14 | 1688 | 400 | 105 | 373 |
| Henry, Andrew L., Indianapolis, Ind. Mail-box | 725,080 | Apr. 14 | 1235 | 278 | 103 | 1447 |
| Henry, Arthur B. (See Dresser and Henry.) | | | | | | |
| Henry, Charles J., Perth Amboy, N. J. Cathode | 724,862 | Apr. 7 | 831 | 191 | 103 | 1346 |
| Henry, Clay, and R. A. Dillon, Cincinnati, Ohio. Boiler-furnace | 748,374 | Dec. 29 | 5683 | 1296 | 107 | 2426 |
| Henry, Frederick, assignor of one-half to H. M. McKee, Columbus, Ohio. Box-wrapping machine | 740,852 | Oct. 6 | 874 | 195 | 106 | 1432 |
| Henry, George J., Jr., San Francisco, Cal. Water-wheel bucket | 728,230 | May 19 | 2658 | 594 | 104 | 604 |
| Henry, George J., Jr., assignor of one-half to Pelton Water Wheel Company, San Francisco, Cal. Water-nozzle for impact water-wheels | 731,570 | June 23 | 3785 | 842, 843 | 104 | 1963 |
| Henry, George J., Jr., assignor of one-half to Pelton Water Wheel Company, San Francisco, Cal. Testing apparatus | 731,571 | June 23 | 3786 | 843 | 104 | 1963 |
| Henry, John, Grand Forks, N. D. Pneumatic stacker | 723,870 | Mar. 31 | 4117 | 929 | 103 | 924 |
| Henry, John, Grand Forks, N. D. Pneumatic stacker | 739,869 | Sept. 29 | 4505 | 1013 | 106 | 1029 |
| Henry, John, Grand Forks, N. D. Pneumatic stacker | 748,070 | Dec. 29 | 5151 | 1165 | 107 | 2311 |
| Henry, John C., deceased, Denver, Colo.; S. A. Henry, executrix, assignor to Stanley Electric Manufacturing Company. Electric brake | 720,917 | Feb. 17 | 2789 | 640 | 102 | 1440 |
| Henry, John W., Crawfordsville, Ind. Weather-strip | 736,392 | Aug. 18 | 2526 | 554 | 105 | 1558 |
| Henry, Lorenzo, London, England. Single-trigger mechanism | 719,331 | Jan. 27 | 3443 | 767 | 102 | 774 |
| Henry R. Worthington. (See Brown, William C., assignor.) | | | | | | |
| Henry, Susie A., executrix. (See Henry, John C.) | | | | | | |
| Henry, Thomas, assignor, by mesne assignments, to Bourne-Henry Engineering Company, Limited, London, England. Washing-machine | 725,248 | Apr. 14 | 1546 | 351 | 103 | 1512 |
| Henry, William, *et al.* (See Hughes and Roche, assignors.) | | | | | | |
| Henry, William, Superior, Wis. Steam-generator | 730,766 | June 9 | 2247 | 499 | 104 | 1612 |
| Henry, William E., San Francisco, Cal. Candy-pulling machine | 731,681 | June 23 | 3981 | 887 | 104 | 2001 |
| Henry, William K., New Britain, Conn. Food-chopper | 745,609 | Dec. 1 | 542 | 127 | 107 | 1212 |
| Henry, William M., Kesley, Iowa. Envelop-sealer | 738,610 | Sept. 8 | 2125 | 465, 466 | 106 | 473 |
| Hensel-Colladay Company. (See Hensel, George S., assignor.) | | | | | | |
| Hensel, George S., Philadelphia, Pa., assignor to Hensel-Colladay Company. Woven skirt-protector | 744,544 | Nov. 17 | 3403 | 733 | 107 | 756 |
| Hensey & Gough. (See Wren, Harry B., assignor.) | | | | | | |
| Hensey, Walter R., *et al.* (See Wren, Harry B., assignor.) | | | | | | |
| Henshaw, Frank W. (See Davis and Henshaw.) | | | | | | |
| Henshaw, James T., Washington, D. C. Display-frame | 738,443 | Sept. 8 | 1812 | 393 | 106 | 405 |
| Hensler, Fred G., *et al.* (See Bender, Albert N., assignor.) | | | | | | |
| Hensler, William, Kokomo, Ind. Corn-planter attachment | 726,916 | May 5 | 154 | 37 | 104 | 35 |
| Hensley, William N., Columbus, Nebr. Car-coupling | 740,013 | Sept. 29 | 4773 | 1075 | 106 | 1087 |
| Henthorn, Isaac P. (See Hill, William A., assignor.) | | | | | | |
| Hentschel, Ernst, Muskegon, Mich. Composition for digester-linings | 719,216 | Jan. 27 | 3217 | 718 | 102 | 724 |
| Hentschel, Willibald, assignor to Chemische Fabrik von Heyden Actiengesellschaft, Radebeul, Germany. Making indoxyl and indigo preparations | 737,836 | Sept. 1 | 539 | ------ | 106 | 120 |
| Hentz, Jacob, Jr., Philadelphia, Pa. Automatic cut-off for gas-burners | 738,037 | Sept. 1 | 952 | 212 | 106 | 207 |
| Henzie, Jacob J., Deepriver, Iowa. Loading or unloading device | 735,509 | Aug. 4 | 914 | 194, 195 | 105 | 1176 |
| Hepburn, Lewis L., assignor to Marlin Firearms Company, New Haven, Conn. Sight for firearms | 732,075 | June 30 | 4724 | 1055 | 104 | 2172 |
| Hepburn, Martin E., Chicago, Ill. Switch | 743,281 | Nov. 3 | 898 | 196 | 107 | 191 |
| Hepner, Adolph, St. Louis, Mo. Combined shoe-horn and shoe-remover | 732,854 | July 7 | 282 | 70 | 105 | 63 |
| Hepola, Adolph, Hibbing, Minn. Switch-operating device | 722,980 | Mar. 17 | 2464 | 551, 552 | 103 | 553 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|
| | | | Spec. | Dr'g. | Vol. | Page. |
| Hepp, Daniel, Chicago, Ill. Workman's time-recorder | 721,187 | Feb. 24 | 3337 | 762, 763 | 102 | 1577 |
| Hepp, Daniel, Chicago, Ill. Workman's time-recorder | 745,058 | Nov. 24 | 4360 | 941, 942 | 107 | 974 |
| Hepp, Eduard, Frankfort-on-the-Main, and C. Hartmann, assignors to Farbwerke, vorm. Meister, Lucius & Brüning, Höchst-on-the-Main, Germany. Blue anthraquinone dye and making same | 734,866 | July 28 | 4039 | ..... | 105 | 897 |
| Hepp, Eduard, Frankfort-on-the-Main, and C. Hartmann, assignors to Farbwerke, vorm. Meister, Lucius & Brüning, Höchst-on-the-Main, Germany. Blue anthraquinone dye and making same | 748,375 | Dec. 29 | 5685 | ..... | 107 | 2427 |
| Heppe & Son, C. J. (See Wuest, Philip, Jr., assignor.) | | | | | | |
| Heptonstall, Myron M. (See Williams and Heptonstall.) | | | | | | |
| Hepworth, John W. (See Keyser, George, assignor.) | | | | | | |
| Hepworth, John W. (See Keyser and Weber, assignors.) | | | | | | |
| Herald, Charles A., Hamilton, Canada. Loom | 737,837 | Sept. 1 | 540 | 117 | 106 | 120 |
| Herbage, Elijah. (See St. Legier and Herbage.) | | | | | | |
| Herbeck, Frank, Orange, Mass. Floor-planer | 744,757 | Nov. 24 | 3797 | 818 | 107 | 858 |
| Herbert, Alfred, Kenilworth, and P. V. Vernon, Coventry, England. Variable-speed driving mechanism | 742,025 | Oct. 20 | 3167 | 707 | 106 | 1952 |
| Herbert, Arthur W., and W. F. Washburn, New York, N. Y. Hook and eye | 737,927 | Sept. 1 | 735 | 159 | 106 | 161 |
| Herbert, Frederick D. (See Schreuder, Andrew M., assignor.) | | | | | | |
| Herbert, Frederick J., deceased, Chicago, Ill.; J. Courtney, executrix. Clamp | 734,553 | July 28 | 3432 | 800 | 105 | 774 |
| Herbert, Frederick J., deceased, Chicago, Ill.; J. Courtney, executrix. Clamp | 734,554 | July 28 | 3433 | 800 | 105 | 775 |
| Herbert, George, Jr., Glasgow, Scotland. Apparatus for cooling biscuits | 739,310 | Sept. 22 | 3435 | 766 | 106 | 783 |
| Herbert, Samuel, assignor to C. B. Hutchins & Sons, Detroit, Mich. Car-roof | 743,158 | Nov. 3 | 655 | 141 | 107 | 137 |
| Herbert, Stockton C., assignor of one-half to S. Cassady, Des Moines, Iowa. Package-tie | 735,874 | Aug. 11 | 1614 | 344 | 105 | 1344 |
| Herbstritt, Hermann. (See Finck and Herbstritt.) | | | | | | |
| Hereford, Edward L., Peoria, assignor of one-half to J. Johnson, Galesburg, Ill. Fly-escape for window-screens | 732,634 | June 30 | 5816 | 1289 | 104 | 2403 |
| Hergenhan, John C., and C. C. Von der Ahe, New York, N. Y. Wave-motor | 735,510 | Aug. 4 | 915 | 195 | 105 | 1177 |
| Herig, Adam, Cleveland, Ohio. Heat-distributer | 720,346 | Feb. 10 | 1728 | 392 | 102 | 1205 |
| Hering, Charles, assignor of one-half to C. W. Hering, Bushnell, Ill. Transplanter | 736,252 | Aug. 11 | 2277 | 492 | 105 | 1486 |
| Hering, Clyde W. (See Hering, Charles, assignor.) | | | | | | |
| Hering, George, New Rochelle, N. Y. Brick | 724,288 | Mar. 31 | 4976 | 1114 | 103 | 1097 |
| Hering, Leonard, Isle St. George, Ohio. Pessary | 726,532 | Apr. 28 | 3930 | 888 | 103 | 2038 |
| Hering, Max, Zittau, Germany. Water-gage | 736,518 | Aug. 18 | 2771 | 606 | 105 | 1610 |
| Herisson, Albert, Nimes, France. Friction-clutch | 730,767 | June 9 | 2248 | 499 | 104 | 1612 |
| Heritage, Joseph, Somerville, Mass. Wagon-jack | 738,682 | Sept. 8 | 2280 | 501 | 106 | 503 |
| Herkner, Paul. (See Kubierschky and Herkner.) | | | | | | |
| Herman, John, Lincoln, Nebr. Treating ores | 740,014 | Sept. 29 | 4774 | ..... | 106 | 1087 |
| Herman, Reinhold, *et al.* (See McAdams, Sylvester L., assignor.) | | | | | | |
| Herman, Reinhold, Crafton, Pa. Printing apparatus | 721,041 | Feb. 17 | 3021 | 694, 695 | 102 | 1491 |
| Herman, Reinhold, Crafton, Pa. Framework for supporting signal mechanism | 743,159 | Nov. 3 | 657 | 141, 142 | 107 | 137 |
| Herman, Reinhold, Crafton, Pa. Printing apparatus | 743,160 | Nov. 3 | 659 | 142 | 107 | 138 |
| Hermance Machine Company. (See Marsh, Calvin D., assignor.) | | | | | | |
| Hermann, Frederick, Victor, Colo. Apparatus for screening, washing, and assorting ores | 719,942 | Feb. 3 | 941 | 219, 220 | 102 | 1023 |
| Hermann-Vaughan Manufacturing Company. (See Vaughan, Thomas M., assignor.) | | | | | | |
| Hermanson, Gustaf A., Chicago, assignor to J. Munton, Maywood, Ill. Automatic car-coupling | 717,746 | Jan. 6 | 420 | 98 | 102 | 92 |
| Hermanson, Gustaf A., Chicago, assignor to J. Munton, Maywood, Ill. Automatic coupling | 721,891 | Mar. 3 | 431 | 95 | 103 | 95 |
| Hermanson, Gustaf A., Chicago, assignor to J. Munton, Maywood, Ill. Car-coupling | 747,971 | Dec. 29 | 4955 | 1119 | 107 | 2267 |
| Hermanson, James S., West Superior, Wis. Rope-clamp | 727,946 | May 12 | 2137 | 477 | 104 | 474 |
| Hermany, Horace D., Mahanoy City, Pa. Cabinet | 742,646 | Oct. 27 | 4354 | 979 | 106 | 2212 |
| Herndon, Beverly P., Florence, Ariz. Ter. Safety-pin | 748,071 | Dec. 29 | 5153 | 1166 | 107 | 2311 |
| Hernfeld, Harris, Philadelphia, Pa. Cooking-stove | 729,861 | June 2 | 632 | 138 | 104 | 1258 |
| Hernsheim, Charles, New York, N. Y. Exercising device | 741,966 | Oct. 20 | 3050 | 680 | 106 | 1929 |
| Hero Fruit Jar Company. (See Gault, John H., assignor.) | | | | | | |
| Hero Fruit Jar Company. (See Heer, David, assignor.) | | | | | | |
| Heron, Christopher, assignor of one-half to H. F. Gunn, Galena, Ill. Belting | 733,393 | July 14 | 1254 | 297 | 105 | 281 |
| Héroult, Paul L. T., La Praz, France. Electric furnace | 733,040 | July 7 | 603 | 147 | 105 | 129 |
| Héroult, Paul L. T., La Praz, assignor to Sté Electro Metallurgique Francaise, Froges, Isère, France. Electric furnace | 721,703 | Mar. 3 | 95 | 21 | 103 | 21 |
| Herpolsheimer, Adolph, Seward, Nebr. Train-pipe coupling | 738,904 | Sept. 15 | 2712 | 599 | 106 | 614 |
| Herr, Christian A., Osborn, Ohio. Coin-wrapper | 723,871 | Mar. 31 | 4119 | 929 | 103 | 924 |
| Herr, Edward A., Washington, D. C. Combined collar-button and necktie-fastener | 739,582 | June 2 | 112 | 28 | 104 | 1150 |
| Herr, Edwin M., assignor to Westinghouse Air Brake Company, Pittsburg, Pa. Draw-gear and buffing apparatus | 740,429 | Oct. 6 | 90 | 19 | 106 | 1266 |
| Herr, Edwin M., assignor to Westinghouse Air Brake Company, Pittsburg, Pa. Electric heater for cars | 741,662 | Oct. 20 | 2438 | 547 | 106 | 1801 |
| Herrell Espey Company. (See Wilson, David J., assignor.) | | | | | | |
| Herrendeen, Henry H., Muskegon, Mich. Marine life-pail | 743,721 | Nov. 10 | 1818 | 383 | 107 | 405 |
| Herrenkind, Oscar C. (See Cain, Francis C., assignor.) | | | | | | |
| Herreshoff, John B. F., Brooklyn, N. Y. Making sulfuric anhydrid | 719,332 | Jan. 27 | 3446 | 768 | 102 | 774 |
| Herreshoff, John B. F., Brooklyn, N. Y. Apparatus for the manufacture of sulfuric anhydrid | 719,333 | Jan. 27 | 3448 | 768 | 102 | 775 |
| Herreshoff, John B. F., New York, N. Y. Ore-roasting furnace | 729,170 | May 26 | 4396 | 970 | 104 | 981 |
| Herreshoff, John B. F., assignor to General Chemical Company, New York, N. Y. Making sulfuric acid | 722,981 | Mar. 17 | 2465 | 552, 553 | 103 | 553 |
| Herreshoff, John B. F., assignor to General Chemical Company, New York, N. Y. Absorber for the manufacture of sulfuric acid | 737,233 | Aug. 25 | 4108 | 913 | 105 | 1907 |
| Herreshoff, John B. F., assignor to General Chemical Company, New York, N. Y. Making sulfuric acid | 737,625 | Sept. 1 | 123 | 27 | 106 | 29 |
| Herreshoff, John B. F., assignor to General Chemical Company, New York, N. Y. Apparatus for manufacturing sulfuric acid | 737,626 | Sept. 1 | 125 | 27 | 106 | 30 |
| Herrgott, Joseph M. C., Valdoie, France. Electric heating fabric | 729,171 | May 26 | 4398 | 970 | 104 | 981 |
| Herrick, Chubb E. (See Westgate and Herrick.) | | | | | | |
| Herrick, George S., and W. H. Landers, Syracuse, N. Y. Metallic stay | 743,161 | Nov. 3 | 663 | 143 | 107 | 138 |
| Herrick, George S., and F. S. Rogers, assignors of one-third to J. D. Smith, Syracuse, N. Y. Device for regulating the motion of rotary shafts | 737,627 | Sept. 1 | 127 | 27, 28 | 106 | 31 |
| Herrick, H. F. (See Rasmussen, Andrew, assignor.) | | | | | | |
| Herrick, Harrison E., Merrimac, N. H. Wire stretcher and cutter | 721,442 | Feb. 24 | 3814 | 867 | 102 | 1674 |

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| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Herrick, James A., Jenkintown, Pa. Reversing-valve for regenerative furnaces | 727,791 | May 12 | 1841 | 411 412 | 104 | 411 |
| Herrick, James A., Jenkintown, Pa. Heating-furnace | 732,938 | July 7 | 427 | 105 106 | 105 | 92 |
| Herrick, James A., Philadelphia, Pa. Regenerative apparatus | 732,939 | July 7 | 430 | 106 107 | 105 | 93 |
| Herrick, Thomas S., Muncie, J. H. Bissett and F. M. Merrick, Anderson, assignors to J. C. Griesheimer, E. Tuhey, and T. S. Herrick, Muncie, Ind. Trolley-wire finder | 726,917 | May 5 | 156 | 37 | 104 | 36 |
| Herrick, William H., Cleveland, Ohio. Annunciator for street-cars | 731,900 | June 23 | 4372 | 975 | 104 | 2086 |
| Herriman, Charles A. (See Cook, Edmond R., assignor.) | | | | | | |
| Herriman, Charles A., Chicago, Ill. Quick-acting vise | 742,647 | Oct. 27 | 4355 | 979 | 106 | 2212 |
| Herring, Walter R., Edinburgh, Scotland. Apparatus for charging inclined retorts | 717,575 | Jan. 6 | 95 | 23, 24 | 102 | 22 |
| Herring, Walter R., Edinburgh, Scotland. Gas-retort discharging apparatus | 721,952 | Mar. 3 | 563 | 124 | 103 | 124 |
| Herring, Walter R., Edinburgh, Scotland. Apparatus for manipulating slide-valves | 745,278 | Nov. 24 | 4796 | 1047 | 107 | 1064 |
| Herrington, Alexander P., *et al.* (See Lester, James S., assignor.) | | | | | | |
| Herrington, William, Olive, Tex. Boiler-feeder | 744,965 | Nov. 24 | 4166 | 901 | 107 | 934 |
| Herrman, Henry W., and C. J. Everett, New York, N. Y. Photographic-printing apparatus | 721,369 | Feb. 24 | 3676 | 837 | 102 | 1646 |
| Herrman, Henry W., and C. J. Everett, New York, N. Y. Photographic-printing frame | 721,370 | Feb. 24 | 3678 | 838 | 102 | 1646 |
| Herrmann, Charles, *et al.* (See Ward, Stephen S., assignor.) | | | | | | |
| Herrmann, Ernest. (See Krefting, Axel, assignor.) | | | | | | |
| Herrmann, Florian S., Tacony, Pa. Metaphone | 726,918 | May 5 | 157 | 38 | 104 | 36 |
| Herrmann, Frank X. (See Nelson and Herrmann.) | | | | | | |
| Herrmann, Julius C., Allegheny, Pa. Friction draft-rigging | 742,320 | Oct. 27 | 3771 | 845 | 106 | 2090 |
| Herrmann, Rudolf, assignor to Huppe & Bender, Offenbach-on-the-Main, Germany. Handle for trunks, &c | 720,803 | Feb. 17 | 2580 | 595 | 102 | 1395 |
| Herrold, Edward C., and J. L. Orr, Pittsburg, Pa. Metallic tie and rail-fastener combined | 745,838 | Dec. 1 | 973 | 218 | 107 | 1306 |
| Herron & Bury Manufacturing Company. (See Herron, James H., assignor.) | | | | | | |
| Herron, F. Irwin, *et al.* (See Edwards, Evan A., assignor.) | | | | | | |
| Herron, James B., Chicago, Ill. Soda-fountain | 719,334 | Jan. 27 | 3451 | 768 | 102 | 775 |
| Herron, James H., assignor to Herron & Bury Manufacturing Company, Erie, Pa. Air-compressor governor | 736,253 | Aug. 11 | 2278 | 492 493 | 105 | 1486 |
| Herron, James H., assignor to Herron & Bury Manufacturing Company, Erie, Pa. Air-compressor-cylinder water-jacket | 736,254 | Aug. 11 | 2280 | 493 | 105 | 1486 |
| Herron, Rufus H., *et al.* (See Edwards, Evan A., assignor.) | | | | | | |
| Herschmann. Arthur, New York, N. Y. Collapsible horse-stall | 718,840 | Jan. 20 | 2495 | 555 556 | 102 | 558 |
| Herschmann. Arthur, New York, N. Y. Draft device for steam-boiler furnaces | 740,361 | Sept. 29 | 5405 | 1217 | 106 | 1219 |
| Hersey, George H., Hartford, Conn. Chair | 745,104 | Nov. 24 | 4462 | 965 | 107 | 995 |
| Hersey Manufacturing Company. (See Crosby, Joseph B., assignor.) | | | | | | |
| Hersey Manufacturing Company. (See Tilden, James A., assignor.) | | | | | | |
| Hersey Manufacturing Company. (See Winton, Henry D., assignor.) | | | | | | |
| Hersh, Grier. (See Ivery, John W., assignor.) | | | | | | |
| Hert, Henry J., Indianapolis, Ind. Switch-fitting for pneumatic-despatch-tube systems | 727,138 | May 5 | 613 | 132 | 104 | 132 |
| Hert, Henry J., assignor of part to T. Bemis, Indianapolis, and M. Collins, Brazil, Ind. Pneumatic-despatch-tube system | 720,804 | Feb. 17 | 2581 | 595 | 102 | 1396 |
| Hertenstein, Michael, Columbus, Ohio. Stove | 741,790 | Oct. 20 | 2702 | 602 | 106 | 1856 |
| Hertlein, Christopher E. (See Seidel and Dahlhaus, assignors.) | | | | | | |
| Hertlein, Hans. (See Moest, Hertlein, and Oppermann.) | | | | | | |
| Hertwig, Karl, assignor to Electricitäts Actien Gesellschaft, vorm. W. Lahmeyer & Co., Frankfort-on-the-Main, Germany. Means for controlling electric operating apparatus. | 736,393 | Aug. 18 | 2527 | 554 555 | 105 | 1558 |
| Herty, Charles H., Ocilla, Ga. Apparatus for collecting crude turpentine | 719,798 | Feb. 3 | 707 | 165 | 102 | 973 |
| Hertzler, Daniel E., and C. F. Smith, Burlington, Iowa. Foot-measuring device | 745,184 | Nov. 24 | 4637 | 1006 1007 | 107 | 1032 |
| Hertzler, John. (See Pendergast, Thomas, assignor.) | | | | | | |
| Hervey, Ben E., Ritzville, Wash. Needle-awl | 722,105 | Mar. 3 | 826 | 184 | 103 | 178 |
| Hervey, William M., Homestead, assignor of one-half to G. A. Eisaman, Pittsburg, Pa. Novelty device | 744,545 | Nov. 17 | 3404 | 733 | 107 | 756 |
| Herz, Hugo, Chicago, Ill. Gas-light | 720,805 | Feb. 17 | 2582 | 595 | 102 | 1396 |
| Herz, Ludwig. (See Wachtl, Siegfried, assignor.) | | | | | | |
| Herz, Richard, assignor to L. Cassella & Co., Frankfort-on-the-Main, Germany. Blue sulfur dye and making same | 723,154 | Mar. 17 | 2780 | ..... | 103 | 618 |
| Herz, Richard, assignor to L. Cassella & Co., Frankfort-on-the-Main, Germany. Blue sulfur dye and making same | 742,189 | Oct. 27 | 3513 | ..... | 106 | 2036 |
| Herzberg, Aaron. (See Boemper, Willie J., assignor.) | | | | | | |
| Herzig, Eduard, Union Hill, N. J. Needle-loom | 719,666 | Feb. 3 | 447 | 102 103 | 102 | 916 |
| Herzog, Felix B., and S. S. Wheeler, New York, N. Y.; said Wheeler assignor to said Herzog. Electric signaling apparatus | 748,501 | Dec. 29 | 5932 | 1347 | 107 | 2481 |
| Herzog, Felix B., and S. S. Wheeler, New York, N. Y.; said Wheeler assignor to said Herzog. Electric signaling apparatus | 748,502 | Dec. 29 | 5934 | 1348 | 107 | 2481 |
| Herzog, Fritz, Washington, D. C. Horseshoe | 726,060 | Apr. 21 | 3006 | 684 | 103 | 1837 |
| Hesketh, Samuel, Auckland, New Zealand. Disinfectant-distributing device | 720,918 | Feb. 17 | 2791 | 640 | 102 | 1440 |
| Hess, Alexander W., assignor of one-half to A. S. Williams, San Jose, Cal. Feed for oil-burners | 742,648 | Oct. 27 | 4357 | 980 | 106 | 2213 |
| Hess, Edwin J. (See Duffy, Thomas I., assignor.) | | | | | | |
| Hess, Frank W., Chicago, Ill. Device for cleaning, scouring, and cooling grain | 746,508 | Dec. 8 | 2169 | 499 | 107 | 1582 |
| Hess, Henry A., Linden, Iowa. Device for sharpening and calking horseshoes | 742,190 | Oct. 27 | 3514 | 784 | 106 | 2036 |
| Hess, Herbert C., Brooklyn, N. Y., assignor, by mesne assignments, to Visible Writing Machine Company, Jersey City, N. J. Writing-machine | 726,222 | Apr. 21 | 3301 | 749 | 103 | 1898 |
| Hess, John A., Philadelphia, Pa. Mandrel-press | 747,174 | Dec. 15 | 3428 | 777 | 107 | 1889 |
| Hess, Martin H., Muscatine, Iowa. Button-cutting machine | 743,506 | Nov. 10 | 1427 | 298 299 | 107 | 321 |
| Hess, Meyer S., Baltimore, Md. Shoe-tree | 721,443 | Feb. 24 | 3815 | 868 | 102 | 1675 |
| Hess, Otto, assignor to Farbwerke, vorm. Meister, Lucius & Brüning, Höchst-on-the-Main, Germany. Green anthraquinone dye and making same | 734,325 | July 21 | 3024 | ..... | 105 | 674 |
| Hess, Richard E., Milwaukee, Wis. Incandescent-light holder | 733,356 | July 7 | 1177 | 279 | 105 | 248 |
| Hess, Silas M., Bloomsburg, Pa. Torch for destroying insects | 727,628 | May 12 | 1501 | 339 | 104 | 341 |
| Hess, Wendell, Jr., assignor to International Machinery Company, Troy, N. Y. Starching-machine | 731,050 | June 16 | 2782 | 620 | 104 | 1741 |
| Hess, Wendell, Jr., assignor to International Shirt & Collar Co., Troy, N. Y. Fold-collar | 746,078 | Dec. 8 | 1405 | 314 315 | 107 | 1418 |
| Hesse, Carl, assignor to Concern Schiedmayer Pianofortefabrik, Stuttgart, Germany. Stop-key mechanism for harmoniums | 736,255 | Aug. 11 | 2281 | 493 | 105 | 1487 |

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| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Hesse, Carl, assignor to Concern Schiedmayer Pianofortefabrik, Stuttgart, Germany. Harmonium | 739,414 | Sept. 22 | 3651 | 811, 812 | 106 | 829 |
| Hessel, Amelia, *et al.* (See Klemm, Hermann A., assignor.) | | | | | | |
| Hessel, Robert M. (See Steinbrecker, John, assignor.) | | | | | | |
| Hessel, Sophie, *et al.* (See Klemm, Hermann A., assignor.) | | | | | | |
| Hesser, Frederick. (See Reagan, Dominick A., assignor.) | | | | | | |
| Heston, Dewitt C., Greenville, Ill. Gate-latch | 727,139 | May 5 | 615 | 132 | 104 | 133 |
| Hetfield, John M., assignor of three-fourths to J. Hansen, J. D. Loizeaux, and W. R. Codington, Plainfield, N. J. Railway-car | 745,839 | Dec. 1 | 974 | 218, 219 | 107 | 1306 |
| Hetherington, Charles, *et al.* (See Dailey, Herbert M., assignor.) | | | | | | |
| Hetrich, Nellie M., administratrix. (See Mason, John L.) | | | | | | |
| Hetzel, Frederic V., assignor to Link Belt Engineering Company, Philadelphia, Pa. Undercut gate | 720,428 | Feb. 10 | 1871 | 425, 426 | 102 | 1235 |
| Hetzel, Frederic V., assignor to Link Belt Engineering Company, Philadelphia, Pa. Drive-chain and sprocket-wheel therefor | 736,256 | Aug. 11 | 2282 | 493 | 105 | 1487 |
| Heuber, Friedrich, Charlottenburg, Germany. Manufacturing artificial stones for lithographic or other purposes | 720,142 | Feb. 10 | 1348 | ..... | 102 | 1127 |
| Heuer, Engelina, *et al.* (See Davis, Charles L., assignor.) | | | | | | |
| Heuer, John P., Pittsburg, Pa. Rail-joint | 731,181 | June 16 | 3037 | 675 | 104 | 1790 |
| Heuer, William H., *et al.* (See Davis, Charles L., assignor.) | | | | | | |
| Heuermann, William, Sedalia, Mo. Stove | 739,177 | Sept. 15 | 3188 | 705 | 106 | 713 |
| Heuning, William T., Chicago, and C. S. Burton, Oakpark, assignors to Paul J. Daemicke Co., Chicago, Ill. Store-service ladder | 725,705 | Apr. 21 | 2400 | 544 | 103 | 1708 |
| Heupel, Herman A. (See Schnelbach and Heupel.) | | | | | | |
| Heurteur, Joseph F. (See Lischtiak, Ferdinand, assignor.) | | | | | | |
| Heusler, Adolphe, Fernandina, Fla. Bottle | 729,583 | June 2 | 114 | 29 | 104 | 1150 |
| Heusner, George F. (See Cook, Edmond R., assignor.) | | | | | | |
| Heusner, William A., C. H. Dudley, and D. E. Graves, assignors to Shuart Grader Company, Oberlin, Ohio. Road-machine | 740,430 | Oct. 6 | 94 | 19, 20 | 106 | 1267 |
| Hewett, William. (See Howard and Hewett.) | | | | | | |
| Hewish, Edgar M., Philadelphia, Pa. Pessary | 732,855 | July 7 | 283 | 71 | 105 | 63 |
| Hewit, Henry, Jr., *et al.* (See Calentine, George C., assignor.) | | | | | | |
| Hewitt, Adelaide I. (See Imlay, Edward H., assignor.) | | | | | | |
| Hewitt, Edward G., New York, N. Y. Altitude instrument | 728,915 | May 26 | 3944 | 877 | 104 | 888 |
| Hewitt, Edward G., New York, N. Y. Astronomical instrument | 728,916 | May 26 | 3945 | 877 | 104 | 889 |
| Hewitt, Edward G., New York, N. Y. Sun-dial | 740,978 | Oct. 6 | 1090 | 246 | 106 | 1478 |
| Hewitt, Franklin B., Fort Myers, Fla. Track-laying and spike-driving machine | 719,217 | Jan. 27 | 3218 | 718, 719, 720 | 102 | 724 |
| Hewitt, Herbert H. (See Kerr, Alexander M., assignor.) | | | | | | |
| Hewitt, Horace L., Indianapolis, Ind. Grain-cradle | 724,182 | Mar. 31 | 4754 | 1066 | 103 | 1053 |
| Hewitt, Joseph F., and C. W. Spatig, Allegheny, Pa. Electric heater | 729,862 | June 2 | 634 | 139 | 104 | 1258 |
| Hewitt, Peter C., New York, N. Y., assignor, by mesne assignments, to Cooper Hewitt Electric Company. Horizontal gas or vapor electric lamp | 738,323 | Sept. 8 | 1586 | 343 | 106 | 357 |
| Hewitt, Peter C., New York, N. Y., assignor, by mesne assignments, to Cooper Hewitt Electric Company. Electric translating apparatus | 738,802 | Sept. 15 | 2529 | 556 | 106 | 574 |
| Hewitt, William C., *et al.* (See Ward, Stephen S., assignor.) | | | | | | |
| Hewlett, Alfred M. (See Hewlett, Maddra J., assignor.) | | | | | | |
| Hewlett, Edward M., Schenectady, N. Y., assignor to General Electric Company. Surface-contact structure | 719,003 | Jan. 27 | 2817 | 631 | 102 | 642 |
| Hewlett, Edward M., Schenectady, N. Y., assignor to General Electric Company. Circuit-breaker or switch for high potentials | 728,797 | May 19 | 3737 | 831 | 104 | 828 |
| Hewlett, Edward M., Schenectady, N. Y., assignor to General Electric Company. High-potential line-switch | 729,172 | May 26 | 4400 | 971 | 104 | 981 |
| Hewlett, Edward M., Schenectady, N. Y., assignor to General Electric Company. Contact device for electric railways | 729,173 | May 26 | 4401 | 971 | 104 | 982 |
| Hewlett, Edward M., Schenectady, N. Y., assignor to General Electric Company. Reverse-current relay | 730,371 | June 9 | 1539 | 342 | 104 | 1458 |
| Hewlett, Edward M., Schenectady, N. Y., assignor to General Electric Company. Annunciator | 735,511 | Aug. 4 | 917 | 195 | 105 | 1177 |
| Hewlett, Edward M., Schenectady, N. Y., assignor to General Electric Company. Automatic circuit-breaker | 745,347 | Dec. 1 | 55 | 12 | 107 | 1112 |
| Hewlett, Edward M., Schenectady, N. Y., assignor to General Electric Company. Engine-governor | 745,349 | Dec. 1 | 59 | 13 | 107 | 1113 |
| Hewlett, Edward M., Schenectady, N. Y., assignor to General Electric Company. Magnetic clutch | 747,706 | Dec. 22 | 4414 | 994 | 107 | 2125 |
| Hewlett, Edward M., and C. C. Badeau, Schenectady, N. Y., assignors to General Electric Company. Laminated-lever switch | 728,331 | May 19 | 2659 | 594 | 104 | 604 |
| Hewlett, Edward M., and C. C. Badeau, Schenectady, N. Y., assignors to General Electric Company. Circuit-breaker | 745,348 | Dec. 1 | 58 | 12, 13 | 107 | 1113 |
| Hewlett, Maddra J., assignor of one-half to A. M. Hewlett, Kewanee, Ill. Rotary engine | 728,232 | May 19 | 2660 | 594, 595 | 104 | 604 |
| Hewson, James J., assignor of one-half to W. F. Cochrane, Macleod, Canada. Single-trigger mechanism | 722,706 | Mar. 17 | 1983 | 442, 443 | 103 | 455 |
| Hexom, John C., Decorah, and C. G. Houx, Cedar Rapids, Iowa. Display-stand | 741,663 | Oct. 20 | 2439 | 547 | 106 | 1802 |
| Hey, Ernest, Worcester, Mass. Delivery attachment for fluid-receptacles | 738,324 | Sept. 8 | 1587 | 343 | 106 | 357 |
| Hey, Harold E., and H. B. Crozier, Leyland, Preston, England. Stirrup | 717,850 | Jan. 6 | 645 | 143 | 102 | 137 |
| Hey, Ishmael, Lower Laithe, England. Combing-machine | 742,425 | Oct. 27 | 3956 | 887, 888 | 106 | 2127 |
| Heybeck, William H., Pittsburg, assignor of two-thirds to F. B. Dawson, McKeesport, and J. L. B. Dawson, Beaverfalls, Pa. Drumhead | 729,936 | June 2 | 748 | 167 | 104 | 1281 |
| Heydebrand und der Lasa, Ferdinand C. von, New York, N. Y. Artificial fuel | 728,103 | May 12 | 2409 | ..... | 104 | 531 |
| Heydebrand und der Lasa, Ferdinand C. von, Brooklyn, N. Y. Artificial fuel | 741,493 | Oct. 13 | 2116 | ..... | 106 | 1718 |
| Heydemann, Otto H., Rostock, Germany. Spark-catcher for locomotives | 724,863 | Apr. 7 | 832 | 192 | 103 | 1347 |
| Heydt, John B., St. Louis, Mo. Loaf-forming device | 718,124 | Jan. 13 | 1128 | 249 | 102 | 258 |
| Heyes, Lancelot O. (See Heyes, William A. and L. O.) | | | | | | |
| Heyes, William A. and L. O., Wigan, England. Safety device for automatically preventing accidents from trolley-wires | 726,061 | Apr. 21 | 3007 | 684 | 103 | 1837 |
| Heyl and Patterson. (See Acklin, Alfred M., assignor.) | | | | | | |
| Heyl and Patterson. (See Patterson, William J., assignor.) | | | | | | |
| Heylman, Edward M., assignor to Janesville Machine Company, Janesville, Wis. Corn-planter | 723,201 | Mar. 17 | 2879 | 645 | 103 | 640 |
| Heylman, Edward M., assignor to Janesville Machine Company, Janesville, Wis. Planter | 736,257 | Aug. 11 | 2283 | 494 | 105 | 1487 |
| Heym, Wilhelm, Berlin, Germany. Pocket-battery | 744,758 | Nov. 24 | 3798 | 818 | 107 | 858 |
| Heyman, Nils A., Los Angeles, Cal. Deep-well pump | 737,928 | Sept. 1 | 736 | 160 | 106 | 161 |
| Heynemann, Carl G., Leipzig, Germany. Indicator for dilators | 747,068 | Dec. 15 | 3239 | 738 | 107 | 1848 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | Spec. | Dr'g. | Vol. | Page. |
| Heys, John J., assignor of one-half to M. V. Bresnahan, Lynn, Mass. Lock for jacks | 725,961 | Apr. 21 | 2852 | 647 | 103 | 1806 |
| Heys, John J., assignor of one-half to M. V. Bresnahan, Lynn, Mass. Stamping-press | 728,463 | May 19 | 3105 | 686, 687 | 104 | 699 |
| Heys, John J., assignor of one-half to M. V. Bresnahan, Lynn, Mass. Shoe-stamping machine | 728,464 | May 19 | 3109 | 687 | 104 | 700 |
| Heysinger, Isaac W., Philadelphia, Pa. Machine for simultaneously cutting and branding cigars | 730,264 | June 9 | 1354 | 297 | 104 | 1418 |
| Heywood, Cecil, Maida Vale, London, England. Means for cleaning knives | 723,463 | Mar. 24 | 3368 | 754, 755 | 103 | 751 |
| Hibbard, Charles. (See Hibbard, Warren, C., and S.) | | | | | | |
| Hibbard, Charles. (See Hibbard, Sumner, W., O. E., C., and H.) | | | | | | |
| Hibbard, George E., Chicago, Ill. Sprinkler-head for automatic fire-extinguishers | 733,646 | July 14 | 1690 | 401 | 105 | 374 |
| Hibbard, George E., Chicago, Ill. Automatic fire-extinguisher | 733,962 | July 21 | 2303 | 541, 542 | 105 | 518 |
| Hibbard, Henry D., Plainfield, N. J. Furnace for treating metals | 718,760 | Jan. 20 | 2366 | 523, 524 | 102 | 534 |
| Hibbard, Henry D., Plainfield, N. J., assignor to Manganese Steel Safe Company, New York, N. Y. Grinding-machine | 741,335 | Oct. 13 | 1797 | 399, 400 | 106 | 1647 |
| Hibbard, Henry D., Plainfield, N. J., assignor to Manganese Steel Safe Company, New York, N. Y. Grinding-machine | 741,336 | Oct. 13 | 1810 | 401 | 106 | 1652 |
| Hibbard, Henry D., Plainfield, N. J., assignor to Manganese Steel Safe Company, New York, N. Y. Grinding-machine | 741,337 | Oct. 13 | 1817 | 401, 402 | 106 | 1654 |
| Hibbard, Herbert. (See Hibbard, Sumner, W., O. E., C., and H.) | | | | | | |
| Hibbard, Maury W., Chicago, Ill., assignor to Pettibone, Mulliken & Company. Switch-stand | 718,348 | Jan. 13 | 1538 | 340, 341 | 102 | 345 |
| Hibbard, Maury W., assignor to R. Fitzgerald, Chicago, Ill. Fluid-pressure brake | 723,386 | Mar. 24 | 3240 | 727 | 103 | 723 |
| Hibbard, Maury W., and W. S. Barrows, Chicago, Ill. Engine-valve | 726,919 | May 5 | 157 | 38 | 104 | 36 |
| Hibbard, Orville E. (See Hibbard, Sumner, W., O. E., C., and H.) | | | | | | |
| Hibbard, Sumner. (See Hibbard, Warren, C., and S.) | | | | | | |
| Hibbard, Sumner, W., O. E., C., and H., Sandyhill, N. Y. Controlling device for hydraulic cylinders | 721,562 | Feb. 24 | 4025 | 915 | 102 | 1719 |
| Hibbard, Warren. (See Hibbard, Sumner, W., O. E., C., and H.) | | | | | | |
| Hibbard, Warren, C., and S., Sandyhill, N. Y. Explosive-engine | 746,701 | Dec. 15 | 2529 | 581 | 107 | 1685 |
| Hibner, Delos E. (See Albright, Ralph D., assignor.) | | | | | | |
| Hibshman, Henry E., Newark, N. J., assignor to C. J. McCuaig, Montreal, Canada. Musical instrument | 744,546 | Nov. 17 | 3406 | 733 | 107 | 757 |
| Hickerson, William V., Jersey City, N. J. Glazed structure | 736,968 | Aug. 25 | 3634 | 805 | 105 | 1808 |
| Hickey, John E., Lamson, N. Y. Hoeing-machine | 745,610 | Dec. 1 | 544 | 127 | 107 | 1213 |
| Hickman, Edgar M. (See Buchanan and Hickman.) | | | | | | |
| Hickman, Edgar M., Chattanooga, Tenn., assignor to Chattanooga Plow Company. Wheel-plow | 735,096 | Aug. 4 | 89 | 21 | 105 | 1002 |
| Hickmann, Wilhelm, assignor to Society Chemische Fabrik Griesheim Electron, Frankfort-on-the-Main, Germany. Production of permanganates | 727,792 | May 12 | 1843 | ..... | 104 | 411 |
| Hickmott, Robert. (See Frodsham, John, assignor.) | | | | | | |
| Hickok, Franklin K., New Haven, Conn. Garment-supporter | 734,263 | July 21 | 2899 | 678 | 105 | 648 |
| Hickok, Lester E., Mechanicsburg, Pa., and C. T. McCue, Hartford, Conn.; said Hickok assignor of one-half to F. E. Wilcox, Mechanicsburg, Pa. Vehicle-gear | 734,706 | July 28 | 3718 | 870 | 105 | 833 |
| Hickok, Lester E., Mechanicsburg, Pa., and C. T. McCue, Hartford, Conn.; said Hickok assignor of one-half to F. E. Wilcox, Mechanicsburg, Pa. Vehicle-gear | 734,707 | July 28 | 3719 | 870 | 105 | 833 |
| Hickox, William C., Sayre, Pa. Fire-extinguisher | 746,702 | Dec. 15 | 2530 | 581 | 107 | 1685 |
| Hicks, Cordelia S. (See Hicks, Simeon J., assignor.) | | | | | | |
| Hicks, Edgar J., Indianapolis, Ind. Saw-jointer | 731,901 | June 23 | 4374 | 975 | 104 | 2086 |
| Hicks, George F. H., Chicago, Ill. Combined track gage and bridle | 736,097 | Aug. 11 | 2018 | 430 | 105 | 1432 |
| Hicks Gold and Silver Extraction Company. (See Hicks, Thomas H., assignor.) | | | | | | |
| Hicks, James M. (See Low and Hicks.) | | | | | | |
| Hicks, James M., Summit, N. J., assignor of one-half to A. A. Low, Horseshoe, N. Y. Sealing means for vessels | 727,947 | May 12 | 2138 | 477 | 104 | 474 |
| Hicks, James M., Summit, N. J., assignor of one-half to A. A. Low, Horseshoe, N. Y. Vessel-neck and sealing-cap for same | 746,329 | Dec. 8 | 1873 | 427 | 107 | 1518 |
| Hicks, James M., Summit, N. J., assignor of one-half to A. A. Low, Horseshoe, N. Y. Means for sealing vessels | 746,330 | Dec. 8 | 1874 | 427 | 107 | 1519 |
| Hicks, James M., Summit, N. J., assignor of one-half to A. A. Low, Horseshoe, N. Y. Means for securing caps on vessels | 746,331 | Dec. 8 | 1875 | 427 | 107 | 1519 |
| Hicks, James M., Summit, N. J., assignor of one-half to A. A. Low, Horseshoe, N. Y. Sealing-cap for vessels under pressure | 746,332 | Dec. 8 | 1876 | 428 | 107 | 1519 |
| Hicks, Jeremiah H., Central City, S. D. Drill-sharpener | 734,708 | July 28 | 3721 | 870, 871 | 105 | 834 |
| Hicks, John W., Shreveport, La. Pneumatic elevator for cotton | 728,917 | May 26 | 3947 | 878 | 104 | 889 |
| Hicks, Louis, Batavia, Ohio. Steam-engine | 739,311 | Sept. 22 | 3438 | 767 | 106 | 837 |
| Hicks, Louis, Batavia, Ohio. Steam-engine | 743,282 | Nov. 3 | 898 | 196 | 107 | 191 |
| Hicks, Richard R., *et al.* (See Knell, William F., assignor.) | | | | | | |
| Hicks, Robert R., *et al.* (See Henderson, Thomas M., assignor.) | | | | | | |
| Hicks, Samuel F., Chillicothe, Ill. Draft-regulator | 718,125 | Jan. 13 | 1129 | 250 | 102 | 258 |
| Hicks, Shelby, Providence, Ky. Steam-engine | 726,429 | Apr. 28 | 3708 | 842 | 103 | 1996 |
| Hicks, Simeon J., assignor to C. S. Hicks, Chicago, Ill. Wrapping-machine | 719,410 | Jan. 27 | 3594 | 803, 804, 805, 806 | 102 | 805 |
| Hicks, Thomas H., Fort Wayne, Ind., assignor to Hicks Gold and Silver Extraction Company. Amalgamator | 734,867 | July 28 | 4040 | 943 | 105 | 897 |
| Hicks, Thomas H., Fort Wayne, Ind., assignor to Hicks Gold and Silver Extraction Company. Concentrating-machine | 739,081 | Sept. 15 | 3015 | 668 | 106 | 678 |
| Hicks, Thomas H., Fort Wayne, Ind., assignor to Hicks Gold and Silver Extraction Company. Ore dearsenicating and amalgamating apparatus | 741,338 | Oct. 13 | 1819 | 402, 403 | 106 | 1655 |
| Hicks, Thomas H., Fort Wayne, Ind., assignor to Hicks Gold and Silver Extraction Company. Machine for recovering mercury and amalgam from ores | 744,759 | Nov. 24 | 3799 | 818, 819 | 107 | 858 |
| Hicks, Thomas P., New York, N. Y. Device for fastening metal, &c., to stone | 734,326 | July 21 | 3024 | 712 | 105 | 674 |
| Hicks, William B., assignor of one-half to E. R. Burt, Biscoe, N. C. Wood-bending machine | 734,327 | July 21 | 3025 | 712 | 105 | 674 |
| Hider, Charles A., Baldwin, Ind. Motor-vehicle | 732,553 | June 30 | 5665 | 1257, 1258 | 104 | 2368 |
| Hieb, John H. (See Hoffman and Hieb.) | | | | | | |
| Hieber, John G. F., Spokane, Wash. Self-closing vent and indicator for storage-casks | 718,761 | Jan. 20 | 2370 | 524 | 102 | 534 |
| Hien, Phillip, assignor to D. S. Wegg, Chicago, Ill. Car-coupling | 746,079 | Dec. 8 | 1407 | 315, 316 | 107 | 1418 |
| Hiering, Christian, Newark, N. J., assignor to J. E. Mergott Company. Holding-catch for purse or bag frames | 719,218 | Jan. 27 | 3225 | 720 | 102 | 726 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | Spec. | Dr'g. | Vol. | Page. |
| Hiering, Christian, Newark, N. J., assignor to J. E. Mergott Company. Match-box | 744,074 | Nov. 17 | 2529 | 541<br>542 | 107 | 568 |
| Hiering, William C., Newark, N. J. Window-screen | 735,976 | Aug. 11 | 1791 | 383<br>384 | 105 | 1382 |
| Hiett, De Kerniea J. T., Chicago, Ill. Sealing device | 720,806 | Feb. 17 | 2583 | 595<br>596 | 102 | 1396 |
| Hiett, De Kerniea J. T., St. Louis, Mo. Calculating-machine | 724,007 | Mar. 31 | 4407 | 991<br>992<br>993 | 103 | 983 |
| Higgin, Henry, Newport, Ky. Automatic railway gate and signal | 718,126 | Jan. 13 | 1131 | 250<br>251 | 102 | 359 |
| Higgins, Albert H., Haverhill, Mass. Sandal-strap-turning machine | 731,182 | June 16 | 3038 | 675 | 104 | 1790 |
| Higgins, Albert L., Boston, Mass. Lamp-chimney holder | 738,999 | Sept. 15 | 2862 | 635 | 106 | 646 |
| Higgins, Campbell P., Roselle, N. J. Milling-machine | 736,726 | Aug. 18 | 3172 | 700<br>701 | 105 | 1691 |
| Higgins, Charles D., Aberdeen, S. D. Building construction | 721,188 | Feb. 24 | 3339 | 763 | 102 | 1577 |
| Higgins, Charles H., Cincinnati, Ohio. Oil-burner for stoves | 721,371 | Feb. 24 | 3679 | 838 | 102 | 1647 |
| Higgins, Charles L., *et al.* (See Oakley, James O., assignor.) | | | | | | |
| Higgins, Charles S. (See Flora, Ellsworth E., assignor.) | | | | | | |
| Higgins, Frederick H. W., assignor of one-half to R. Davies, London, England. Type-printing telegraph | 745,279 | Nov. 24 | 4799 | 1048 | 107 | 1064 |
| Higgins, George M., Cleveland, assignor of one-half to W. A. Woland, Fremont, Ohio. Moving-picture apparatus | 727,948 | May 12 | 2139 | 477<br>478 | 104 | 474 |
| Higgins, Harold W., Montreal, Canada. Coffee-pot | 731,454 | June 23 | 3564 | 794 | 104 | 1919 |
| Higgins, Harry J., Denver, Colo. Head for marble or granite polishing machines | 741,664 | Oct. 20 | 2440 | 547 | 106 | 1802 |
| Higgins, James F., Corsicana, Tex. Hydrocarbon-burner | 724,008 | Mar. 31 | 4422 | 993 | 103 | 985 |
| Higgins, Joseph V., Bayou Chene, La. Device for controlling horses | 746,080 | Dec. 8 | 1410 | 316 | 107 | 1419 |
| Higgins, Mary E., Port Huron, Mich. Safety-hook for suspending drapery or analogous purposes | 718,203 | Jan. 13 | 1274 | 279 | 102 | 289 |
| Higgins, Mary E., Port Huron, Mich. Child's bonnet | 727,793 | May 12 | 1845 | 412 | 104 | 411 |
| Higgins, Oliver, Napoleon, Ohio. Direct and alternating current reverse mechanism for electric generators | 741,665 | Oct. 20 | 2443 | 548 | 106 | 1802 |
| Higgins, Pattillo, Beaumont, Tex. Rock-drill | 735,767 | Aug. 11 | 1399 | 301 | 105 | 1296 |
| Higgins, Pattillo, Beaumont, Tex. Hydraulic drill | 735,768 | Aug. 11 | 1401 | 301 | 105 | 1297 |
| Higgins, Pattillo, Beaumont, Tex. Hydraulic drill | 735,769 | Aug. 11 | 1402 | 301 | 105 | 1297 |
| Higgins, Pattillo, Beaumont, Tex. Reamer for deep wells | 735,770 | Aug. 11 | 1402 | 301<br>302 | 105 | 1297 |
| Higgins, Pattillo, Beaumont, Tex. Reamer for oil or Artesian wells | 738,325 | Sept. 8 | 1588 | 343 | 106 | 358 |
| Higgins, Pattillo, Beaumont, Tex. Mining sulfur | 738,326 | Sept. 8 | 1589 | 344 | 106 | 358 |
| Higgins, Pattillo, Beaumont, Tex. Drill and reamer for deep wells | 738,327 | Sept. 8 | 1591 | 344<br>345 | 106 | 358 |
| Higgins, Pattillo, Beaumont, Tex. Spudding and pipe-driving machine | 747,322 | Dec. 15 | 3719 | 838<br>839 | 107 | 1952 |
| Higgins, Sylvester W., Detroit, Mich. Minnow-net | 725,962 | Apr 21 | 2854 | 647 | 103 | 1806 |
| Higgins, Thomas, assignor of two-thirds to G. C. Kurtz and A. Mauthey, Johnstown, Pa. Railway-rail joint | 727,794 | May 12 | 1846 | 413 | 104 | 411 |
| Higgins, William, Corbally, and W. G. Edmonds, Dublin, Ireland. Machine or apparatus for corking and labeling bottles or the like | 745,840 | Dec. 1 | 976 | 219 | 107 | 1307 |
| Higginson, George, London, England, assignor to J. N. Graham, Glasgow, Scotland, and E. Croft, Doddington, Kent, England. Die and press-stamping tool | 735,097 | Aug. 4 | 90 | 22 | 105 | 1002 |
| High, Frank G., Los Angeles, Cal. Sash-fastener | 742,787 | Oct. 27 | 4579 | 1038 | 106 | 2262 |
| Highers, Charles, assignor to C. Wiggins, Vicksburg, Ky. Whiffletree | 718,457 | Jan. 13 | 1744 | 388 | 102 | 387 |
| Highland, Harry. (See Whiteside, George E., assignor.) | | | | | | |
| Highland Machine Company. (See De Costa, Benjamin F., assignor.) | | | | | | |
| Highleyman, Israel D., and J. L. Lamb, Chetopa, Kans.; said Lamb assignor to said Highleyman. Corn harvester and shocker | 723,775 | Mar. 24 | 3930 | 886 | 103 | 868 |
| Hight, Albert W., Ballard, Wash., assignor to Washington Pulley Company. Pulley-fastening | 738,611 | Sept. 8 | 2126 | 466 | 106 | 473 |
| Highton, Lalla S., administratrix. (See Howden, James.) | | | | | | |
| Hightower, Charles G., San Francisco, Cal. Apparatus for calking seams of vessels | 725,340 | Apr. 14 | 1701 | 384 | 103 | 1545 |
| Hightower, Charles G., San Mateo, Cal. Bicycle attachment | 745,185 | Nov. 24 | 4639 | 1007 | 107 | 1032 |
| Hignette, Jean J., Paris, France. Defecating saccharine juices | 738,328 | Sept. 8 | 1592 | 345 | 106 | 359 |
| Hihn, Harriet. (See White, Martha M., assignor.) | | | | | | |
| Hild, Frederic W., Schenectady, N. Y., assignor to General Electric Company. Electric-railway system | 745,436 | Dec. 1 | 234 | 54 | 107 | 1149 |
| Hildebrand, Henry C., Chicago, Ill. Curtain-drying apparatus | 733,718 | July 14 | 1809 | 428 | 105 | 398 |
| Hildebrand, Victor, Conemaugh, Pa. Window-shade and curtain-pole bracket | 740,431 | Oct. 6 | 97 | 20 | 106 | 1267 |
| Hildebrand, Wilhelm K. M., Gross-Lichterfelde, near Berlin, Germany. Direct-acting compressed-air brake | 732,856 | July 7 | 284 | 71 | 105 | 63 |
| Hildebrand, Wilhelm K. M., Gross-Lichterfelde, near Berlin, Germany. Compressor for air-brake systems | 740,133 | Sept. 29 | 4983 | 1118<br>1119 | 106 | 1132 |
| Hildebrand, William C., Glenrock, Pa. Window-screen | 719,111 | Jan. 27 | 3048 | 678 | 102 | 690 |
| Hildebrandt, Adolph, New York, N. Y. Poultry-hanger | 747,606 | Dec. 22 | 4223 | 949 | 107 | 2083 |
| Hildebrandt, Albert A. C., and N. W. Johnston, Chappaqua, N. Y. Instrument for removing blackheads | 722,019 | Mar. 3 | 682 | 151 | 103 | 147 |
| Hilder, Henry W., Brighton, England. Appliance for taking measurements for garments | 745,841 | Dec. 1 | 978 | 220 | 107 | 1308 |
| Hildreth, Charles L., assignor to Lowell Machine Shop, Lowell, Mass. Coiler-head. (Reissue) | 12,109 | May 12 | 2560 | 570 | 104 | 563 |
| Hildreth, Charles L., assignor to Lowell Machine Shop, Lowell, Mass. Coiler-head. (Reissue) | 12,110 | May 12 | 2561 | 570 | 104 | 563 |
| Hildreth, Charles L., assignor to Lowell Machine Shop, Lowell, Mass. Coiler-head | 737,406 | Aug. 25 | 4439 | 995 | 105 | 1979 |
| Hildreth, Henry L., Saginaw, Mich. Salt-grainer | 720,143 | Feb. 10 | 1348 | 309 | 102 | 1127 |
| Hileman-James Company. (See James, Edward, assignor.) | | | | | | |
| Hilger, Eduard, Aix-la-Chapelle, Germany. Device for closing pedal-openings in pianos, pianofortes, &c | 740,853 | Oct. 6 | 876 | 196 | 106 | 1433 |
| Hilger, George M., Chicago, Ill. Steam-trap | 740,854 | Oct. 6 | 877 | 196 | 106 | 1433 |
| Hilker, Edward, Chicago, Ill. Wall-cleaner | 740,756 | Oct. 6 | 708 | 159 | 106 | 1397 |
| Hilker, Edward, Chicago, Ill. Combined mop and wringer therefor | 744,196 | Nov. 17 | 2780 | 593 | 107 | 621 |
| Hill, Alexander S., Bovine, assignor of one-half to L. Underwood, Yankton, S. D. Corn-planter | 724,864 | Apr. 7 | 833 | 192 | 103 | 1347 |
| Hill, Alfred B., Ironwood, Mich. Metal-working tool | 727,629 | May 12 | 1502 | 340 | 104 | 341 |
| Hill, Alfred H., assignor of one-half to H. W. Rugg, Sterling, Mass. Nutmeg-grater | 739,312 | Sept. 22 | 3440 | 767 | 106 | 784 |
| Hill, Alfred H., assignor of one-half to H. W. Rugg, Sterling, Mass. Cheese-cutter | 746,081 | Dec. 8 | 1412 | 316 | 107 | 1420 |
| Hill, Amos D., St. Joseph, Mich. Heating system | 744,915 | Nov. 24 | 4069 | 877 | 107 | 915 |
| Hill, Arthur A., New York, N. Y. Paper-feeding device for type-writing machines | 746,631 | Dec. 8 | 2393 | 548 | 107 | 1634 |
| Hill, Barton B., St. Petersburg, Russia. Apparatus for the demonstration and study of military or naval problems | 742,870 | Nov. 3 | 88 | 21 | 107 | 20 |

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| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| Hill, Benjamin B., Philadelphia, Pa. Hand-stamp | 722,707 | Mar. 17 | 1987 | 443 | 103 | 456 |
| Hill, Benjamin B., assignor to B. B. Hill Manufacturing Company, Philadelphia, Pa. Hand-stamp | 718,251 | Jan. 13 | 1352 | 300 | 102 | 306 |
| Hill, Benjamin B., assignor to B. B. Hill Manufacturing Company, Philadelphia, Pa. Hand-stamp | 742,649 | Oct. 27 | 4359 | 980 | 106 | 2213 |
| Hill-Chamberlin Manufacturing Company. (See Hill and Chamberlin, assignors.) | | | | | | |
| Hill, Charles E., Goodison, Mich. Stove | 732,186 | June 30 | 4956 | 1102 | 104 | 2220 |
| Hill, Charles E., Millington, Mich. Heating-stove | 744,075 | Nov. 17 | 2533 | 542 | 107 | 569 |
| Hill, Charles H., Jr., assignor of one-half to F. C. Bostwick, Canaan Four Corners, N. Y. Guard for safety-razors | 747,069 | Dec. 15 | 3240 | 738 | 107 | 1848 |
| Hill, Charles W., Forest City, Ill. Rail-clamp | 734,869 | July 28 | 4044 | 944 | 105 | 899 |
| Hill, Christian C., Chicago, Ill. Exhaust-muffler | 734,868 | July 28 | 4042 | 944 | 105 | 898 |
| Hill, Christian C., Chicago, Ill. Compound engine | 740,565 | Oct. 6 | 350 | 73, 74, 75 | 106 | 1321 |
| Hill, Dan L., Keene, N. H. Box-hinge | 747,175 | Dec. 15 | 3431 | 777, 778 | 107 | 1890 |
| Hill, Ebenezer, South Norwalk, Conn. Trolley-wire support | 719,112 | Jan. 27 | 3049 | 678 | 102 | 690 |
| Hill, Ebenezer, South Norwalk, Conn. Pumping-engine | 723,387 | Mar. 24 | 3243 | 727 | 103 | 724 |
| Hill, Ebenezer, South Norwalk, Conn. Combined steam and compressed-air locomotive | 724,183 | Mar. 31 | 4755 | 1067 | 103 | 1053 |
| Hill, Ebenezer, Norwalk, Conn. Apparatus for drying hat-bodies | 719,667 | Feb. 3 | 450 | 103 | 102 | 916 |
| Hill, Ebenezer, Norwalk, Conn. Unloading means for air-compressors | 730,121 | June 2 | 1079 | 242, 243 | 104 | 1347 |
| Hill, Ebenezer, Norwalk, Conn. Pumping-engine | 744,547 | Nov. 17 | 3407 | 734 | 107 | 757 |
| Hill, Edward A., assignor to Chicago Grain-Door Company, Chicago, Ill. Attachment for car-doors | 724,474 | Apr. 7 | 102 | 25 | 103 | 1191 |
| Hill Electrical Manufacturing Company. (See Hill, Harry M., assignor.) | | | | | | |
| Hill, Elizabeth M. (See Jones, Florentine A., assignor.) | | | | | | |
| Hill, Ernest R., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Electric brake | 731,455 | June 23 | 3565 | 794 | 104 | 1919 |
| Hill, Frank, Providence, R. I. Tile curb | 722,580 | Mar. 10 | 1720 | 383 | 103 | 385 |
| Hill, George, assignor of one-half to A. Moore, Tucapau, S. C. Spindle and bearing | 718,349 | Jan. 13 | 1540 | 341 | 102 | 345 |
| Hill, George H., Schenectady, N. Y., assignor to General Electric Company. System of motor control | 732,351 | June 30 | 5278 | 1170 | 104 | 2287 |
| Hill, George H., and S. G. Brown, assignors to M. J. Doherty, Montreal, Canada. Transformer | 728,575 | May 19 | 3327 | 736 | 104 | 744 |
| Hill, George L., Chula, Mo. Mortising-chisel | 729,584 | June 2 | 116 | 29 | 104 | 1150 |
| Hill, George R., Bartold, Mo. Hinge | 730,265 | June 9 | 1356 | 298 | 104 | 1419 |
| Hill, George S. (See Dahl and Hill.) | | | | | | |
| Hill, Harry M., assignor to Hill Electrical Manufacturing Company, St. Louis, Mo. Electrical water-heater | 727,360 | May 5 | 1002 | 218 | 104 | 216 |
| Hill, Harry M., assignor to Hill Electrical Manufacturing Company, St. Louis, Mo. Electrical water-heater | 727,361 | May 5 | 1004 | 218 | 104 | 217 |
| Hill, Henry A., Lawrence, Mass. Pruning implement | 719,799 | Feb. 3 | 708 | 166 | 102 | 973 |
| Hill, Henry H., Richmond Hill, N. Y. Music-leaf turner | 732,554 | June 30 | 5667 | 1258 | 104 | 2368 |
| Hill, Herbert A. (See Johns and Hill.) | | | | | | |
| Hill, Hermann. (See Harrison and Hill.) | | | | | | |
| Hill, Hermann, Savannah, Ga., assignor to Prendergast Electric Typewriter Company. Type carrier and selecting mechanism | 728,711 | May 19 | 3566 | 792, 793 | 104 | 796 |
| Hill, Hermann, Savannah, Ga., assignor to Prendergast Electric Typewriter Company. Carriage mechanism for type-writing machines | 732,555 | June 30 | 5670 | 1258 | 104 | 2369 |
| Hill, Hermann, Savannah, Ga., assignor to Prendergast Electric Typewriter Company. Driving mechanism for type-writing machines | 732,556 | June 30 | 5672 | 1259 | 104 | 2370 |
| Hill, James B. (See Wherry and Hill.) | | | | | | |
| Hill, James F. (See Rawstron, Donald, assignor.) | | | | | | |
| Hill, James F. (See Rawstron, Donald and H., assignors.) | | | | | | |
| Hill, James H., assignor to Defiance Lantern & Stamping Company, Rochester, N. Y. Lantern | 717,680 | Jan. 6 | 284 | 70,71 | 102 | 62 |
| Hill, Jeremiah C., assignor of one-half to P. B. Shaw, Williamsport, Pa. Pencil-sharpener | 748,186 | Dec. 29 | 5365 | 1218 | 107 | 2356 |
| Hill, John E., Center Harbor, N. H. Fish-trap | 725,706 | Apr. 21 | 2402 | 544 | 103 | 1709 |
| Hill, John J., Rose Mills, Va. Electric carrying apparatus | 742,426 | Oct. 27 | 3957 | 888 | 106 | 2128 |
| Hill, Leroy, Chicago, Ill. Hanger | 737,234 | Aug. 25 | 4109 | 913 | 105 | 1908 |
| Hill, Nathaniel P., Colorado Springs, Colo., and J. R. Chamberlin, New York, N. Y., assignors to Hill-Chamberlin Manufacturing Company. Mine model or exhibit | 727,140 | May 5 | 616 | 132 | 104 | 133 |
| Hill, Nels P., Eaglegrove, Iowa. Manure-spreader | 721,189 | Feb. 24 | 3340 | 763 | 102 | 1577 |
| Hill, Richard C., Haddonfield, N. J. Puzzle | 729,174 | May 26 | 4402 | 971 | 104 | 982 |
| Hill, Robert J., assignor to James Smith Woolen Machinery Company, Philadelphia, Pa. Lapping-machine | 723,272 | Mar. 24 | 3008 | 676, 677 | 103 | 680 |
| Hill, Rolla M., Brasher Falls, N. Y. Shade-holder | 721,704 | Mar. 3 | 97 | 21 | 103 | 21 |
| Hill, Terelius A., Maryville, Tenn. Gate | 739,870 | Sept. 29 | 4507 | 1013, 1014 | 106 | 1030 |
| Hill, Thomas, Jersey City, N. J. Axle-box for vehicle-wheels | 739,415 | Sept. 22 | 3653 | 812 | 106 | 830 |
| Hill, Thomas, Jersey City, N. J. Dumping-vehicle | 742,427 | Oct. 27 | 3960 | 889 | 106 | 2128 |
| Hill, Thomas, Jersey City, N. J. Cart or other vehicle | 742,428 | Oct. 27 | 3961 | 889 | 106 | 2128 |
| Hill, Thomas, and P. Pearson, Nottingham, England. Apparatus applicable to jacquard-card-punching machines | 729,340 | May 26 | 4701 | 1038 | 104 | 1045 |
| Hill, Thomas L. (See Hughes, John W., assignor.) | | | | | | |
| Hill, Warren S., Hydepark, Mass. Window attachment | 739,871 | Sept. 29 | 4510 | 1014 | 106 | 1030 |
| Hill, Warren W., Texas, assignor of one-half to G. L. Shipman, Kalamazoo, Mich. Metallic anchor for poles or posts | 718,841 | Jan. 20 | 2496 | 556 | 102 | 558 |
| Hill, William A., assignor of one-half to I. P. Henthorn, Coyle, Okla. Ter. Embryo-tractor | 742,026 | Oct. 20 | 3170 | 708 | 106 | 1953 |
| Hill, William L. (See Sheets and Hill.) | | | | | | |
| Hill, William T. (See Ricke, George H., assignor.) | | | | | | |
| Hillard, Charles W., trustee, *et al.* (See Sargent, Charles E., assignor.) | | | | | | |
| Hillard, Frederic W., Tottenville, assignor to Elliott & Hatch Book Typewriter Company, New York, N. Y. Type-writing machine | 720,520 | Feb. 10 | 2036 | 468 | 102 | 1268 |
| Hillard, Frederic W., Tottenville, assignor to Elliott & Hatch Book Typewriter Company, New York, N. Y. Book-type-writer table | 726,921 | May 5 | 164 | 39 | 104 | 38 |
| Hillard, Frederic W., Tottenville, assignor to Elliott & Hatch Book Typewriter Company, New York, N. Y. Book-type-writer table | 726,922 | May 5 | 166 | 40 | 104 | 39 |
| Hillard, Frederic W., Tottenville, assignor to Elliott & Hatch Book Typewriter Company, New York, N. Y. Type-writing machine | 732,557 | June 30 | 5676 | 1259, 1260, 1261 | 104 | 2371 |
| Hillard, Frederic W., Tottenville, assignor, by mesne assignments, to Elliott-Fisher Company, New York, N. Y. Type-writing machine | 747,915 | Dec. 22 | 4812 | 1088 | 107 | 2214 |

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| Hillard, Frederic W., Tottenville, assignor, by mesne assignments, to Elliott-Fisher Company, New York, N. Y. Paper-clamp for type-writing machines | 747,916 | Dec. 22 | 4814 | 1088, 1089 | 107 | 2215 |
| Hillard, Frederic W., Tottenville, assignor to Elliott-Fisher Company, New York, N. Y. Ribbon-movement for type-writing machines | 747,917 | Dec. 22 | 4818 | 1090, 1091 | 107 | 2216 |
| Hillard, Frederic W., assignor to Elliott & Hatch Book Typewriter Company, New York, N. Y. Type-writer table | 726,920 | May 5 | 163 | 38, 39 | 104 | 38 |
| Hille, Charles L., Boston, Mass. Pocket-book | 741,339 | Oct. 13 | 1823 | 403 | 106 | 1656 |
| Hille & Müller. (See Müller, Josef, assignor.) | | | | | | |
| Hiller, Louis C., assignor of one-half to J. A. Cook, Wallingford, Conn. Check-hook | 740,432 | Oct. 6 | 99 | 20 | 106 | 1268 |
| Hiller, Nicolai H., Carbondale, Pa. Distilling apparatus. (Reissue) | 12,092 | Mar. 3 | 1013 | 222 | 103 | 215 |
| Hilley, John S. (See Fairbanks and Hilley.) | | | | | | |
| Hillier, Fredrick, Woollahra, New South Wales, Australia. Fire-escape apparatus | 734,230 | July 21 | 2829 | 663, 664 | 105 | 633 |
| Hillig, Otto M., Berlin, Germany. Drying or cooling apparatus | 731,682 | June 23 | 3982 | 887, 888 | 104 | 2001 |
| Hillman, Charles, *et al.* (See Clark, Oliver, assignor.) | | | | | | |
| Hillman, George, *et al.* (See Bell, George, assignor.) | | | | | | |
| Hillman, Thomas, *et al.* (See Bell, George, assignor.) | | | | | | |
| Hillmann, Otto, St. Louis, Mo. Garment-drafting chart | 739,178 | Sept. 15 | 3189 | 705 | 106 | 713 |
| Hills, Annie F., *et al.* (See Taylor, Santley M., assignor.) | | | | | | |
| Hills, Horace G. (See Schill and Hills.) | | | | | | |
| Hills, Irad W., and H. B. Ross, Medina, Wis.; said Ross assignor to said Hills. Pump | 739,082 | Sept. 15 | 3016 | 668 | 106 | 678 |
| Hills, James E., New York, N. Y. Toothpick | 725,081 | Apr. 14 | 1237 | 279 | 103 | 1448 |
| Hills, Osmer C., Durango, Colo. Toy | 731,051 | June 16 | 2785 | 620 | 104 | 1742 |
| Hills, Richard C., assignor of one-half to C. H. Stevenson, Denver, Colo. Friction-clutch | 730,372 | June 9 | 1541 | 342, 343 | 104 | 1458 |
| Hills, Richard C., Denver, and H. A. Gross, Walsenburg, Colo. Combined door check and closer | 736,850 | Aug. 18 | 3414 | 755 | 105 | 1742 |
| Hills, Sidney C., assignor to Turner & Seymour Mfg. Co., Torrington, Conn. Lathe | 732,558 | June 30 | 5682 | 1261, 1262 | 104 | 2372 |
| Hillyard, Newton S., St. Joseph, Mo. Adjustable burglar-proof window-fastener | 743,283 | Nov. 3 | 903 | 196 | 107 | 192 |
| Hillyer, William H., Atlanta, Ga. Trolley alarm and indicator | 739,179 | Sept. 15 | 3192 | 706 | 106 | 714 |
| Hilmo, Alfred, Waukon, Iowa. Tool-handle | 724,475 | Apr. 7 | 103 | 25 | 103 | 1191 |
| Hilsinger, Alburtis C., assignor to Child Acme Cutter and Press Co., Boston, Mass. Clutch and brake operating mechanism | 731,683 | June 23 | 3984 | 889 | 104 | 2001 |
| Hilsinger, Alburtis C., assignor to Child Acme Cutter and Press Co., Boston, Mass. Paper-cutting machine | 741,134 | Oct. 13 | 1381 | 316 | 106 | 1561 |
| Hilton, Frank M., J. S., and W. W., assignors of one-half to C. R. Grant, Akron, Ohio. Rubber heel | 736,394 | Aug. 18 | 2532 | 556 | 105 | 1559 |
| Hilton, George F., St. Augustine, Ill. Electric signal | 732,559 | June 30 | 5683 | 1262 | 104 | 2373 |
| Hilton, John H., New York, assignor of one-half to T. F. Curley, Brooklyn, N. Y. Razor and guard | 742,650 | Oct. 27 | 4360 | 980 | 106 | 2214 |
| Hilton, John S. (See Hilton, Frank M., J. S., and W. W.) | | | | | | |
| Hilton, Roland C., New Bedford, assignor to L. A. Wyman, Lynn, Mass. Cushion-wheel and hub therefor | 747,304 | Dec. 15 | 3685 | 830 | 107 | 1945 |
| Hilton, William, Oldham, England. Stop-motion for preparing spinning and doubling machines | 719,668 | Feb. 3 | 452 | 103 | 102 | 917 |
| Hilton, William W. (See Hilton, Frank M., J. S., and W. W.) | | | | | | |
| Hilyard, James S., Columbus, Ohio. Folding crate | 738,109 | Sept. 1 | 1094 | 242 | 106 | 237 |
| Himes, Wrightsman D., assignor of one-half to H. E. Kattman, Indianapolis, Ind. Multiplying attachment for photographic cameras | 728,104 | May 12 | 2409 | 537 | 104 | 531 |
| Himmer, Vitalis, Jr., Bayonne, N. J., assignor to United States Electric Clock Company. Electric clock | 747,305 | Dec. 15 | 3686 | 831 | 107 | 1946 |
| Himmer, Vitalis and Vitalis, Jr., Bayonne, N. J.; said Vitalis Himmer, Jr., assignor to said Vitalis Himmer. Electric clock | 719,465 | Feb. 3 | 94 | 23 | 102 | 846 |
| Himmighoefer, Otto E. F., St. Louis, Mo. Electric alarm-lock | 739,272 | Sept. 15 | 3370 | 748 | 106 | 753 |
| Himoff, Max, New York, N. Y. Tobacco-cutting machine | 731,183 | June 16 | 3039 | 675, 676 | 104 | 1791 |
| Hinch, George. (See Harrison and Hinch.) | | | | | | |
| Hinchcliff, Henry C., New York, N. Y. Coat-hanger | 725,082 | Apr. 14 | 1239 | 279 | 103 | 1448 |
| Hinchcliff, Henry C., New York, N. Y. Copy-holder | 740,652 | Oct. 6 | 502 | 111 | 106 | 1354 |
| Hinchman, James B., Denver, Colo. Tension-rod for fireproof construction | 729,937 | June 2 | 749 | 167 | 104 | 1281 |
| Hinchman, Mortimer L., Rutland, Vt. Envelop | 717,993 | Jan. 6 | 892 | 199 | 102 | 192 |
| Hinckley, Hermon, Williamsport, Pa. Bearing | 731,052 | June 16 | 2783 | 621 | 104 | 1742 |
| Hinckley, Howard N., Hartford, Conn. Drill-press attachment | 736,395 | Aug. 18 | 2533 | 556 | 105 | 1550 |
| Hinde, Henry J., Toledo, Ohio. Automatic release-clutch | 744,548 | Nov. 17 | 3409 | 734 | 107 | 757 |
| Hinde, Thomas W., Cherokee, Iowa. Flue-cutter | 723,273 | Mar. 24 | 3011 | 678 | 103 | 681 |
| Hinderliter, Henry J., McWilliams, Pa. Ironing-board | 723,527 | Mar. 24 | 3499 | 782 | 103 | 777 |
| Hindman, John E. (See Fisher, Samuel, assignor.) | | | | | | |
| Hine, Henry C., New Britain, Conn. Suspenders | 720,521 | Feb. 10 | 2038 | 468 | 102 | 1268 |
| Hine, Henry C., New Britain, Conn. Suspenders | 720,522 | Feb. 10 | 2039 | 468 | 102 | 1269 |
| Hine, Henry C., New Britain, Conn. Suspenders | 721,563 | Feb. 24 | 4028 | 915 | 102 | 1720 |
| Hine, Henry C., New Britain, Conn. Suspenders | 721,634 | Feb. 24 | 4187 | 953 | 102 | 1757 |
| Hine, Henry C., New Britain, Conn. Suspenders | 723,202 | Mar. 17 | 2881 | 645 | 103 | 641 |
| Hine, Henry C., New Britain, Conn. Suspenders | 725,249 | Apr. 14 | 1547 | 351 | 103 | 1512 |
| Hine, Henry C., New Britain, Conn. Suspenders | 725,562 | Apr. 14 | 2113 | 479 | 103 | 1632 |
| Hine, Henry C., New Britain, Conn. Garment-supporter | 727,795 | May 12 | 1847 | 413 | 104 | 412 |
| Hine, Henry C., New Britain, Conn. Suspenders | 727,796 | May 12 | 1849 | 413 | 104 | 412 |
| Hine, Henry C., New Britain, Conn. Suspenders | 728,712 | May 19 | 3570 | 793 | 104 | 797 |
| Hine, Henry C., New Britain, Conn., assignor to Traut and Hine Manufacturing Company. Hose-supporter | 725,563 | Apr. 14 | 2115 | 479 | 103 | 1633 |
| Hine, James W., assignor to Art Metal Construction Company, Jamestown, N. Y. Card or check file | 726,430 | Apr. 28 | 3710 | 842 | 103 | 1996 |
| Hines, Albert L., Burton, Ohio. Snap-hook | 720,429 | Feb. 10 | 1872 | 426 | 102 | 1235 |
| Hines, Charles H., Buffalo, N. Y. Commutator-brush holder | 735,375 | Aug. 4 | 635 | 132 | 105 | 1116 |
| Hines, Edwin G. (See Santee and Hines.) | | | | | | |
| Hines, Paul, *et al.* (See Shaffer, Richard M., assignor.) | | | | | | |
| Hines, W. A., *et al.* (See Monahan, James, assignor.) | | | | | | |
| Hingelberg, George R., assignor of one-half to J. Brown and Company, Limited, Sheffield, England. Steam-generator | 734,328 | July 21 | 3028 | 713 | 105 | 674 |
| Hinkel, Firm of E. Ph. (See Hinkel, Jacob, assignor.) | | | | | | |
| Hinkel, Jacob, assignor to Firm of E. Ph. Hinkel, Offenbach-on-the-Main, Germany. Receptacle for liquid or semiliquid substances | 718,625 | Jan. 20 | 2107 | 458 | 102 | 482 |
| Hinkley, George M. (See Trout and Hinkley.) | | | | | | |
| Hinman, Charles W., Boston, Mass. Gas lighting and heating apparatus | 726,923 | May 5 | 167 | 40, 41 | 104 | 39 |
| Hinman, Charles W., Boston, Mass. Gas lighting and heating apparatus | 726,924 | May 5 | 172 | 41 | 104 | 39 |
| Hinman, Charles W., Boston, Mass. Gas lighting and heating apparatus | 726,925 | May 5 | 175 | 41, 42 | 104 | 40 |

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| Hinman, George D., Binghamton, N. Y. Umbrella-stand | 733,963 | July 21 | 2306 | 542 | 105 | 519 |
| Hinners, William A., Chicago, Ill. Making relief-effect printing-plates | 718,842 | Jan. 20 | 2497 | 556 | 102 | 558 |
| Hinrichs, John F., and T. R. Tammen, Parkersburg, Iowa. Horse-releasing device for vehicles | 724,476 | Apr. 7 | 104 | 25,26 | 103 | 1191 |
| Hinthorn, J. B., *et al.* (See Richards, Frank R., assignor.) | | | | | | |
| Hinton, Rogger B., North Birmingham, Ala. Coupling | 743,870 | Nov. 10 | 2089 | 445 | 107 | 461 |
| Hintz, Otto F., assignor to Farrand Organ Company, Detroit, Mich. Key-striker for piano-players | 723,274 | Mar. 24 | 3015 | 678 | 103 | 682 |
| Hinz, Carl, New York, N. Y. Blind-wiring machine | 737,929 | Sept. 1 | 738 | 160<br>161 | 106 | 162 |
| Hinze, Frederic, Minneapolis, and F. J. Wagner, St. Louis Park, Minn. Circulating apparatus for diffusing-cells | 746,962 | Dec. 15 | 3039 | 697 | 107 | 1800 |
| Hipkins, Stephen, Martins Ferry, Ohio. Joint for article of glassware | 729,863 | June 2 | 635 | 139 | 104 | 1258 |
| Hipolito, Espiridion, Los Angeles, Cal. Adjustable tongue-and-groove member for window or screen sashes or the like | 725,621 | Apr. 14 | 2229 | 504 | 103 | 1659 |
| Hipolito, Espiridion, Los Angeles, Cal. Tongued sash | 732,298 | June 30 | 5172 | 1149 | 104 | 2265 |
| Hipolito, Espiridion, Los Angeles, Cal. Pivoted window | 740,015 | Sept. 29 | 4777 | 1075 | 106 | 1087 |
| Hipolito, Espiridion, assignor to Hipolito Screen and Sash Company, Los Angeles, Cal. Screen | 733,323 | July 7 | 1111 | 264 | 105 | 234 |
| Hipolito, Espiridion, assignor to Hipolito Screen and Sash Company, Los Angeles, Cal. Boring-machine | 738,612 | Sept. 8 | 2126 | 466 | 106 | 473 |
| Hipolito, Esperidion, assignor to Hipolito Screen and Sash Campany, Los Angeles, Cal. Rule for measuring openings | 740,653 | Oct. 6 | 504 | 111 | 106 | 1355 |
| Hipolito Screen and Sash Company. (See Hipolito, Espiridion, assignor.) | | | | | | |
| Hipolito Screen and Sash Company. (See Parker, Herbert C., assignor.) | | | | | | |
| Hipp, George E., Buffalo, N. Y. Manufacturing muriatic acid | 726,533 | Apr. 28 | 3931 | ------ | 103 | 2038 |
| Hippard, Emanuel, Youngstown, Ohio. Steam-trap | 743,983 | Nov. 10 | 2313 | 494 | 107 | 513 |
| Hippe, Ernst E., Copenhagen, Denmark. Decorating stone | 722,708 | Mar. 17 | 1989 | 443 | 103 | 456 |
| Hipple, Frank E., and H. T. Ratcliffe, Hutchinson, Kans. Muffler | 728,105 | May 12 | 2411 | 537 | 104 | 531 |
| Hipwell, James W. M., Brooklyn, N. Y. Ash-can | 736,396 | Aug. 18 | 2534 | 557 | 105 | 1559 |
| Hipwell, John B., Philadelphia, assignor to Windsor Machine Company, Reading, Pa. Attachment for knitting-machines | 733,964 | July 21 | 2309 | 542<br>543 | 105 | 520 |
| Hipwood, George, Laconia, N. H. Fender for cars or other vehicles | 730,913 | June 16 | 2526 | 562<br>563 | 104 | 1688 |
| Hirner, Emil A., Allentown, Pa. Manufacture of split-foot hosiery | 721,190 | Feb. 24 | 3342 | 764 | 102 | 1578 |
| Hirner, Emil A., Allentown, Pa. Needle for knitting-machines | 726,163 | Apr. 21 | 3184 | 720 | 103 | 1873 |
| Hirsch, Charles, assignor to W. A. Case & Son, Buffalo, N. Y. Oil-pump | 720,251 | Feb. 10 | 1553 | 356 | 102 | 1168 |
| Hirsch, Charles, assignor to W. A. Case & Son Manufacturing Company, Buffalo, N. Y. Convertible stop-cock | 731,684 | June 23 | 3986 | 889 | 104 | 2002 |
| Hirsch, Feodor C., New York, assignor to A. A. Low, Horseshoe, N. Y. Starting mechanism for oil or gasolene engines | 735,256 | Aug. 4 | 429 | 84 | 105 | 1072 |
| Hirsch, Feodor C., New York, assignor to A. A. Low, Horseshoe, N. Y. Speed-regulator for kerosene-oil engines | 741,791 | Oct. 20 | 2704 | 602 | 106 | 1856 |
| Hirsch, Feodor C., New York, assignor to A. A. Low, Horseshoe, N. Y. Speed-regulator for kerosene-oil engines | 742,651 | Oct. 27 | 4361 | 981 | 106 | 2214 |
| Hirsch, Frank E., *et al.* (See Decker, Carl W., assignor.) | | | | | | |
| Hirsch, Hiram H., Philadelphia, Pa. Metal-finishing brush | 717,851 | Jan. 6 | 647 | 143 | 102 | 138 |
| Hirsch, Montefiore L., Atlanta, Ga. Bushing for rolls of paper | 737,407 | Aug. 25 | 4441 | 995 | 105 | 1980 |
| Hirsch, Morris, New York, N. Y. Folding box | 736,727 | Aug. 18 | 3173 | 701 | 105 | 1691 |
| Hirsch, Morris, Newark, N. J. Foldable paper box | 748,376 | Dec. 29 | 5686 | 1297 | 107 | 2427 |
| Hirschberg, S. Charles. (See Stevens, William E., assignor.) | | | | | | |
| Hirschberg, Solomon C., New York, N. Y. Shielded clinical thermometer and making same | 737,838 | Sept. 1 | 541 | 117 | 106 | 120 |
| Hirschell, George, Pittsburg, Pa. Hose-coupling | 724,390 | Mar. 31 | 5184 | 1162 | 103 | 1141 |
| Hirschell, George, Pittsburg, Pa. Shoe-fastener | 724,391 | Mar. 31 | 5186 | 1162 | 103 | 1141 |
| Hirsching, Henry, San Francisco, Cal. Apparatus for treating ores | 727,362 | May 5 | 1007 | 218<br>219 | 104 | 217 |
| Hirsching, Henry, San Francisco, Cal. Treatment of ores containing gold, silver, copper, nickel, and zinc | 735,512 | Aug. 4 | 918 | ------ | 105 | 1177 |
| Hirsh, Arthur, Chicago, Ill. Upholstery-spring support | 748,072 | Dec. 29 | 5154 | 1166 | 107 | 2311 |
| Hirsh, Arthur, Chicago, Ill. Upholstery-spring support | 748,073 | Dec. 29 | 5156 | 1166 | 107 | 2312 |
| Hirsh, Fred, New Haven, Conn. Garment-supporter | 720,919 | Feb. 17 | 2793 | 641 | 102 | 1441 |
| Hirst, Charles S. (See Belknap, Henry H., assignor.) | | | | | | |
| Hirst, Elisha F., Richmond, Ind. Adjustable wrench | 734,329 | July 21 | 3029 | 713 | 105 | 675 |
| Hirst, James, Vineland, N. J. Manufacturing glass | 742,027 | Oct. 20 | 3171 | 708 | 106 | 1953 |
| Hirst, James, Vineland, N. J. Apparatus for manufacturing glass | 742,028 | Oct. 20 | 3172 | 708 | 106 | 1953 |
| Hirst, James, Vineland, N. J. Jar or bottle closure | 742,652 | Oct. 27 | 4362 | 981 | 106 | 2214 |
| Hirt, Louis J., Brookline, Mass. Coking-oven | 722,982 | Mar. 17 | 2468 | 553 | 103 | 554 |
| Hirt, Ludwig, Grevenbroich, Germany. Electric driving apparatus for centrifugal machines | 736,397 | Aug. 18 | 2535 | 557 | 105 | 1559 |
| Hirt, Ludwig, Grevenbroich, Germany. Bearing for freely-oscillating centrifugal machines | 745,611 | Dec. 1 | 546 | 127 | 107 | 1213 |
| Hirt, Ludwig, assignor to Maschinenfabrik, Grevenbroich, Grevenbroich, Germany. Making white sugar from beets | 719,113 | Jan. 27 | 3051 | 678 | 102 | 690 |
| Hirt, Walter, Breslau, Germany. Life-guard for trams | 740,134 | Sept. 29 | 4984 | 1119<br>1120 | 106 | 1133 |
| Hirth, Friedrich, New York, N. Y. Night-light | 740,433 | Oct. 6 | 100 | 21 | 106 | 1268 |
| Hise, Luther J., Waldron, Ark. Fish-hook | 745,437 | Dec. 1 | 237 | 54 | 107 | 1150 |
| Hiss, John D., Omaha, Nebr. Wringer attachment | 748,074 | Dec. 29 | 5158 | 1267 | 107 | 2312 |
| Hiss, Nelson, New York, N. Y. Traction apparatus | 718,762 | Jan. 20 | 2371 | 524<br>525 | 102 | 535 |
| Hiss, Nelson, New York, N. Y. Elevator | 719,114 | Jan. 27 | 3053 | 678<br>679 | 102 | 690 |
| Hiss, Nelson, New York, N. Y. Traction apparatus | 719,466 | Feb. 3 | 98 | 23, 24 | 102 | 846 |
| Hiss, Nelson, New York, and H. S. MacKaye, Yonkers, N. Y., assignors to Elevator Securities Company. Elevator | 747,707 | Dec. 22 | 4415 | 995 | 107 | 2126 |
| Hissong, Joseph H., Albert Lea, Minn. Conveyer attachment for threshing-machines | 735,875 | Aug. 11 | 1615 | 344<br>345 | 105 | 1344 |
| Histed, Thadeus C., Pittsburg, Kans. Gun boring and burnishing machine | 727,363 | May 5 | 1012 | 219 | 104 | 218 |
| Hitchcock, Charles F., Oakland, assignor, by mesne assignments, to Eagle Engine Co., San Francisco, Cal. Cooling means for gas-engines | 737,737 | Sept. 1 | 339 | 72 | 106 | 77 |
| Hitchcock, Charles F., Oakland, assignor, by mesne assignments, to Eagle Engine Co., San Francisco, Cal. Vapor-generator | 737,738 | Sept. 1 | 340 | 72 | 106 | 77 |
| Hitchcock, Halbert K., Walton, Pa. Annealing glass sheets or plates | 741,494 | Oct. 13 | 2117 | 471 | 106 | 1718 |
| Hitchcock, William H. (See Hall and Hitchcock.) | | | | | | |
| Hitchman, Thomas B., Walthamston, England. Screw-nail | 736,851 | Aug. 18 | 3416 | 756 | 105 | 1742 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Hite, Charles E., Philadelphia, Pa., assignor to Chemical Power Company. Rotary-piston engine | 740,979 | Oct. 6 | 1091 | 247 | 106 | 1479 |
| Hite, Robert R., Wichita, Kans. Treating trees or plants | 735,018 | July 28 | 4305 | ..... | 105 | 954 |
| Hitzl, Carl, Brooklyn, assignor to S. Hochstadter, New York, N. Y. Crystallization | 724,477 | Apr. 7 | 105 | 26 | 103 | 1191 |
| Hix, Howard L. (See Brooks, Emerson S., assignor.) | | | | | | |
| Hixson Adjustable Sieve Co. (See Martien, Benjamin F., assignor.) | | | | | | |
| Hixson, Charles T. (See Hixson, Clarence B. and C. T.) | | | | | | |
| Hixson, Clarence B. and C. T., Holt, Okla. Ter. Grain-separator | 723,670 | Mar. 24 | 3741 | 839, 840 | 103 | 827 |
| Hixson, Lew H., Des Moines, Iowa. Screen door or window | 720,144 | Feb. 10 | 1351 | 309 | 102 | 1127 |
| Hjermestad, Hans M., and E. O. Sohn, Hader, Minn. Rotary engine | 726,684 | Apr. 28 | 4219 | 953, 954 | 103 | 2096 |
| Hjorth, Arthur W., assignor to W. Hjorth & Company, Jamestown, N. Y. Combined pipe and nut wrench | 738,444 | Sept. 8 | 1813 | 394 | 106 | 405 |
| Hjorth & Company, William. (See Hjorth, Arthur W., assignor.) | | | | | | |
| Hjorth and Company, William. (See Peterson, Karl, assignor.) | | | | | | |
| Hjorth, Henrick J., Cambridge, Mass. Screw-cutting die | 718,252 | Jan. 13 | 1353 | 300 | 102 | 306 |
| Hlavacek, John, assignor of one-half to R. Prehoda, Cliff Mine, Pa. Tap-hole closer | 733,908 | July 14 | 2190 | 515 | 105 | 476 |
| Hoadley, Rodney P., Threeoaks, Mich. Saw-repairing device | 720,585 | Feb. 17 | 2186 | 507 | 102 | 1314 |
| Hoadley, Selden B., Springfield, Ohio. Rotary sweeper | 734,555 | July 28 | 3434 | 801 | 105 | 775 |
| Hoagland, Charles W., Gates, Nebr. Fence-wire stretcher | 728,393 | May 19 | 2965 | 653 | 104 | 669 |
| Hoagland, Harry A., Chicago, Ill. Fixture for terminal-boxes | 745,494 | Dec. 1 | 347 | 80 | 107 | 1173 |
| Hoagland, W. V. (See Cunningham and Spear, assignors.) | | | | | | |
| Hobart, Franklin G., Beloit, Wis., assignor to Fairbanks, Morse & Company, Chicago, Ill. Crude-oil vaporizer | 735,376 | Aug. 4 | 637 | 132 | 105 | 1117 |
| Hobart, Henry M., Berlin, Germany. Dynamo-electric machinery | 729,175 | May 26 | 4403 | 971 | 104 | 982 |
| Hobbs, Clarence W. (See Morgan, Thomas, assignor.) | | | | | | |
| Hobbs, Clarence W., Worcester, Mass. Box-ending machine | 743,642 | Nov. 10 | 1685 | 354, 355 | 107 | 376 |
| Hobbs, George P., New Orleans, La., assignor to National Enameling & Stamping Company, New York, N. Y. Well-bucket | 734,330 | July 21 | 3031 | 714 | 105 | 675 |
| Hobbs, John U., Whiting, Ind. Machine for the firing of furnaces | 732,635 | June 30 | 5816 | 1290 | 104 | 2403 |
| Hobbs, Samuel H., *et al.* (See Mannooch, Charles W., assignor.) | | | | | | |
| Hobby, William H., Gardner, Mass. Machine for making saddle-seats for chairs | 737,235 | Aug. 25 | 4110 | 913, 914 | 105 | 1908 |
| Hoberecht, Charles, Sedalia, Mo. Harness-saddle | 730,122 | June 2 | 1081 | 243 | 104 | 1347 |
| Hoberg, Frank H. (See Hoberg, John, Sr., and F. H.) | | | | | | |
| Hoberg, Frank H., Greenbay, Wis. Rolled paper package | 745,612 | Dec. 1 | 547 | 127, 128 | 107 | 1214 |
| Hoberg, John, Sr., and F. H., Greenbay, Wis. Adjustable reel for printing-presses | 742,788 | Oct. 27 | 4580 | 1038 | 106 | 2262 |
| Hobson, Herbert A., assignor to Concentrated Beer Company, Limited, London, England. Concentrated hopped wort and producing same | 718,253 | Jan. 13 | 1354 | ..... | 102 | 306 |
| Hobson, Herbert A., London, assignor to Concentrated Beer Company, Limited, Acton, London, England. Brewing | 730,651 | June 9 | 2051 | 456 | 104 | 1569 |
| Hobson, John H., Mattoon, Ill. Wrench | 721,444 | Feb. 24 | 3816 | 868 | 102 | 1675 |
| Hobson, John S., Edgewood, assignor to Union Switch & Signal Company, Swissvale, Pa. Circuit-controller | 722,301 | Mar. 10 | 1211 | 268, 269 | 103 | 274 |
| Hoch, Charles W., Brooklyn, N. Y. Shoe-brake | 734,556 | July 28 | 3435 | 801 | 105 | 775 |
| Hoch, Garrick B., Freeland, Pa. Hame-fastener | 747,708 | Dec. 22 | 4419 | 995 | 107 | 2127 |
| Hochheimer, Philip, Newark, N. J. Protector-ring or bushing for barrels | 735,377 | Aug. 4 | 639 | 133 | 105 | 1117 |
| Hochstadter, Sigmund. (See Hitzl, Carl, assignor.) | | | | | | |
| Hochstrasser, Arnold, Elizabeth, N. J., assignor to Singer Manufacturing Company. Embroidering attachment for sewing-machines | 740,654 | Oct. 6 | 506 | 111 | 106 | 1355 |
| Hochwald, Moritz. (See Neuhaus and Hochwald.) | | | | | | |
| Hochwalt, Albert F. (See Patton and Hochwalt.) | | | | | | |
| Hock, Fred W., Pittsburg, Pa. Eraser-holder | 739,259 | Sept. 15 | 3344 | 742 | 106 | 747 |
| Hock, Henry W. (See Hock, John A. and H. W.) | | | | | | |
| Hock, Henry W. and J. A., Youngstown, Ohio. Pipe-socket expander | 734,264 | July 21 | 2900 | 678 | 105 | 648 |
| Hock, John A. (See Hock, Henry W. and J. A.) | | | | | | |
| Hock, John A. and H. W., Youngstown, Ohio, assignors to National Tube Company, Pittsburg, Pa. Drive-pipe | 745,842 | Dec. 1 | 979 | 220 | 107 | 1308 |
| Hocker, Elias, Brooklyn, N. Y. Puzzle | 718,843 | Jan. 20 | 2500 | 556 | 102 | 559 |
| Hockman, Anthony W., Clarksburg, W. Va. Resilient tire | 728,106 | May 12 | 2412 | 537 | 104 | 532 |
| Hockman, Levi, Marion, Ind. Kitchen-cabinet | 736,728 | Aug. 18 | 3175 | 701, 702 | 105 | 1691 |
| Hodell, H. H. (See Edeburn, Alfred N., assignor.) | | | | | | |
| Hodes, Frank, New York, N. Y. Foot-support for bootblacks' stands | 729,585 | June 2 | 117 | 29 | 104 | 1151 |
| Hodge, Charles J., Houghton, Mich. Quartz-mill | 736,519 | Aug. 18 | 2772 | 606 | 105 | 1610 |
| Hodge, Richard H., Centralpoint, Oreg. Stovepipe-fastener | 738,038 | Sept. 1 | 954 | 212 | 106 | 208 |
| Hodge, Robert B., Buffalo, N. Y. Steam-boiler cleaner | 720,252 | Feb. 10 | 1555 | 356 | 102 | 1168 |
| Hodge, Robert B., Buffalo, N. Y. Draft device for steam-boilers | 741,037 | Oct. 13 | 1195 | 271 | 106 | 1521 |
| Hodge, Robert B., Buffalo, N. Y. Feed-water heater and circulator | 744,341 | Nov. 17 | 3041 | 653 | 107 | 680 |
| Hodge, Thomas B., Providence, R. I. Odorized fishing implement | 717,681 | Jan. 6 | 285 | 71 | 102 | 62 |
| Hodge, William G. (See Phillips, Hodge, and White.) | | | | | | |
| Hodgens, James, Savannah, Mo. Gate | 718,626 | Jan. 20 | 2108 | 458, 459 | 102 | 482 |
| Hodges, Emery C., Farmer City, Ill. Monument | 729,176 | May 26 | 4404 | 972 | 104 | 982 |
| Hodges, Emery C., Farmer City, Ill. Grave-vault | 747,424 | Dec. 22 | 3900 | 878 | 107 | 2010 |
| Hodges, Emery C., Farmer City, Ill. Foundation | 747,425 | Dec. 22 | 3900 | 878 | 107 | 2010 |
| Hodges, Frank C., Syracuse, N. Y. Reclining-chair | 731,456 | June 23 | 3566 | 795 | 104 | 1919 |
| Hodges, John A., Grand Rapids, Mich. Desk | 718,627 | Jan. 20 | 2109 | 459 | 102 | 482 |
| Hodges, William B., Medway, Mass. Can-filling apparatus | 741,792 | Oct. 20 | 2705 | 603 | 106 | 1856 |
| Hodgins, Joseph P., Tacoma, Wash. Scraper | 735,257 | Aug. 4 | 431 | 84 | 105 | 1072 |
| Hodgins, Ray W., Grand Rapids, Mich. Level | 720,145 | Feb. 10 | 1353 | 309 | 102 | 1127 |
| Hodgkin, Philip E., Reading, and R. Pemberton, Northfleet, assignors to Pulsometer Engineering Company, Limited, Reading, England. Grinding-mill | 742,191 | Oct. 27 | 3516 | 784, 785 | 106 | 2037 |
| Hodgkin, Stanley H., London, England. Water purifying and softening apparatus | 731,902 | June 23 | 4376 | 975, 976 | 104 | 2087 |
| Hodgman, Willis K., assignor to Huber-Hodgman Printing Press Company, Taunton, Mass. Printing-machine | 735,977 | Aug. 11 | 1795 | 384 | 105 | 1383 |
| Hodgson, Edgar J., assignor of one-half to H. Johnson, Minneapolis, Minn. Speed-indicator | 738,683 | Sept. 8 | 2282 | 502 | 106 | 504 |
| Hodgson, Harry H., New Orleans, La. Type-writing machine for the blind | 727,141 | May 5 | 618 | 133 | 104 | 134 |
| Hodgson, John G. (See Norton and Hodgson.) | | | | | | |
| Hodgson, John G., Maywood, Ill., assignor to American Can Company, Jersey City, N. J. Can-soldering machine | 723,388 | Mar. 24 | 3245 | 727, 728 | 103 | 725 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | Spec. | Drg. | Vol. | Page. |
| Hodgson, John G., Maywood, assignor to Automatic Vacuum Canning Company, Chicago, Ill. Automatic double-seaming machine | 727,630 | May 12 | 1504 | 340<br>341 | 104 | 342 |
| Hodgson, John G., Maywood, assignor to Automatic Vacuum Canning Company, Chicago, Ill. Automatic vacuum can-sealing machine | 735,978 | Aug. 11 | 1798 | 384<br>385 | 105 | 1384 |
| Hodgson, Walter W., assignor of two-thirds to W. E. Beatty and F. Sutcliffe, Philadelphia, Pa. Jacquard-card-punching machine | 729,495 | May 26 | 4949 | 1097 | 104 | 1098 |
| Hodgson, Walter W., assignor of two-thirds to W. E. Beatty and F. Sutcliffe, Philadelphia, Pa. Card punching or stamping machine | 742,789 | Oct. 27 | 4582 | 1039 | 106 | 2263 |
| Hodgson, Walter W., assignor of two-thirds to W. E. Beatty and F. Sutcliffe, Philadelphia, Pa. Jacquard-machine | 744,685 | Nov. 17 | 3628 | 782 | 107 | 804 |
| Hodgson, Walter W., assignor of two-thirds to W. E. Beatty and F. Sutcliffe, Philadelphia, Pa. Jacquard-card-stamping machine | 747,918 | Dec. 22 | 4825 | 1091 | 107 | 2218 |
| Hodkinson, George F., Chicago, Ill., assignor to New York Continental Jewell Filtration Company. Filter | 722,581 | Mar. 10 | 1721 | 383<br>384 | 103 | 385 |
| Hodshon, William H., Danbury, Conn. Filter | 737,839 | Sept. 1 | 546 | 118 | 106 | 121 |
| Hoe and Company, R. (See North, Thomas M., assignor.) | | | | | | |
| Hoe, Robert. (See Annand, Robert C., assignor.) | | | | | | |
| Hoe, Robert. (See Balze, John C. F., assignor.) | | | | | | |
| Hoe, Robert. (See Cruse, Amandus H., assignor.) | | | | | | |
| Hoe, Robert, *et al.* (See Read, George F., assignor.) | | | | | | |
| Hoe, Robert. (See Roesen, Oscar, assignor.) | | | | | | |
| Hoe, Robert. (See Spalckhaver, William, assignor.) | | | | | | |
| Hoe, Robert. (See Tucker, Edwin D., assignor.) | | | | | | |
| Hoe, Robert. (See White, Joseph, assignor.) | | | | | | |
| Hoefer, August G. (See Hoefer, Frederick W., A. G., and E. A.) | | | | | | |
| Hoefer, Emil A. (See Hoefer, Frederick W., A. G., and E. A.) | | | | | | |
| Hoefer, Emil A., assignor to Freeport Spring Company, Freeport, Ill. Spring structure | 742,117 | Oct. 20 | 3379 | 754 | 106 | 1994 |
| Hoefer, Frederick W., A. G., and E. A., assignors to Hoefer Manufacturing Company, Freeport, Ill. Wire gaging and cutting machine | 729,864 | June 2 | 636 | 139<br>140 | 104 | 1258 |
| Hoefer Manufacturing Company. (See Hoefer, Frederick W., A. G., and E. A., assignors.) | | | | | | |
| Hoefers, John W., Chicago, Ill. Extensible mold-flask | 726,290 | Apr. 28 | 3445 | 783 | 103 | 1942 |
| Hoeffer, Albert, *et al.* (See Brigham, Isaac N., assignor.) | | | | | | |
| Hoefle, Francis I., assignor to Cincinnati Coffin Company, Cincinnati, Ohio. Casket-fastener | 729,865 | June 2 | 639 | 140 | 104 | 1259 |
| Hoeglauer, Heinrich, Munich, Germany. Bath-tub | 722,232 | Mar. 10 | 1083 | 238<br>239 | 103 | 247 |
| Hoegren, Anders G., Chicago, Ill. Glove | 731,572 | June 23 | 3789 | 843<br>844 | 104 | 1964 |
| Hoekstra, William, Harrison, S. D. Floor-clamp | 719,335 | Jan. 27 | 3452 | 769 | 102 | 776 |
| Hoelscher, Christian, Warren, Ohio. Incandescent lamp | 730,768 | June 9 | 2250 | 500 | 104 | 1612 |
| Hoepfinger, Carl F. L., Kansas City, Mo. Garment-hanger | 745,961 | Dec. 1 | 1193 | 267 | 107 | 1354 |
| Hoepfner, Carl, Frankfort-on-the-Main, Germany. Obtaining lead or other metals from ores or mattes | 735,098 | Aug. 4 | 92 | ..... | 105 | 1003 |
| Hoepner, George, assignor to Union Scale and Manufacturing Company, San Francisco, Cal. Automatic weighing-machine | 735,979 | Aug. 11 | 1802 | 385<br>386 | 105 | 1385 |
| Hoerbiger, Hans. (See Rogler, Fredrick W., assignor.) | | | | | | |
| Hoerichs, Edward, assignor of two-thirds to T. A. Bryan and C. H. Boone, Baltimore, Md. Non-refillable bottle | 726,223 | Apr. 21 | 3304 | 749 | 103 | 1899 |
| Hoermle, Albert, assignor to Leo Canda Mfg. Co., Cincinnati, Ohio. Picture-exhibiting device | 718,763 | Jan. 20 | 2374 | 526 | 102 | 535 |
| Hoerr, Louis A., St. Louis, Mo. Draft-rigging | 730,914 | June 16 | 2530 | 563 | 104 | 1689 |
| Hoerr, Louis A., St. Louis, Mo. Tie-plate | 746,082 | Dec. 8 | 1414 | 317 | 107 | 1420 |
| Hoeschen, Henry, G. Marks, and H. Eisele, Omaha, Nebr. Amalgamator | 743,871 | Nov. 10 | 2090 | 446 | 107 | 461 |
| Hoessle, Carl H. von, assignor to Chemische Fabrik von Heyden Actiengesellschaft, Radebeul, near Dresden, Saxony, Germany. Mercurous chlorid | 740,855 | Oct. 6 | 879 | ..... | 106 | 1433 |
| Hoessle, Carl H. von, assignor to Chemische Fabrik von Heyden Actiengesellschaft, Radebeul, near Dresden, Germany. Soluble mercurous iodide | 742,429 | Oct. 27 | 3963 | ..... | 106 | 2129 |
| Hoessle, Carl H. von, assignor to Chemische Fabrik von Heyden Actiengesellschaft, Radebeul, near Dresden, Germany. Chromate of silver | 745,843 | Dec. 1 | 981 | ..... | 107 | 1308 |
| Hoey, John, San Francisco, Cal. Bed or couch mattress | 731,777 | June 23 | 4156 | 927 | 104 | 2037 |
| Hoey, John, San Francisco, Cal. Bed or couch bottom | 747,176 | Dec. 15 | 3432 | 778 | 107 | 1890 |
| Hofe, Julius vom, New York, N. Y. Fishing-reel | 741,909 | Oct. 20 | 2928 | 653 | 106 | 1904 |
| Hoff, Charles, assignor of one-half to J. L. Rombach and T. Groene, Cincinnati, Ohio. Rotary gas-motor | 729,069 | May 26 | 4222 | 933 | 104 | 945 |
| Hoff, Christopher, St. Paul, Minn. Fluid-actuated elevator brake and governor | 721,303 | Feb. 24 | 3554 | 808 | 102 | 1622 |
| Hoff, John, Owings Mills, Md. Culinary utensil | 735,513 | Aug. 4 | 924 | 195 | 105 | 1178 |
| Hoffert, William, Arlington, Ill. Cultivator attachment | 718,350 | Jan. 13 | 1542 | 341 | 102 | 346 |
| Hoffman, Ahlers & Company. (See Ahlers, George F., assignor.) | | | | | | |
| Hoffman, Alvah A., Pleasantville, Pa. Porch-swing | 735,378 | Aug. 4 | 642 | 133 | 105 | 1118 |
| Hoffman, Auguste F., New York, N. Y. Calendar | 722,020 | Mar. 3 | 683 | 151 | 103 | 147 |
| Hoffman, Augustus L., *et al.* trustees. (See Steiger, Andrew W., assignor.) | | | | | | |
| Hoffman, Casper F. (See Weaver and Hoffman.) | | | | | | |
| Hoffman, Edward C., Cleveland, Ohio. Hinge | 738,039 | Sept. 1 | 955 | 212 | 106 | 208 |
| Hoffman, Edward J., Rockford, Ill. Glass-polishing machine | 721,191 | Feb. 24 | 3346 | 764<br>765 | 102 | 1578 |
| Hoffman, Frank B., Chicago, Ill. Coin-slot device | 720,028 | Feb. 10 | 1136 | 259 | 102 | 1080 |
| Hoffman, George, Buffalo, N. Y. Flushing apparatus for closets | 738,446 | Sept. 8 | 1815 | 394<br>395 | 106 | 406 |
| Hoffman, Isaac W., and P. K. Ebersole, Elizabethtown, Pa. Nut-lock | 738,539 | Sept. 8 | 2006 | 436 | 106 | 446 |
| Hoffman, Jacob, Turtlecreek, Pa. Wrench | 724,865 | Apr. 7 | 836 | 192 | 103 | 1347 |
| Hoffman, Jacob, West Philadelphia, Pa. Desk attachment | 741,495 | Oct. 13 | 2118 | 472 | 106 | 1718 |
| Hoffman, John G., Frazee, Minn. Bundle-shocker | 728,713 | May 19 | 3573 | 793 | 104 | 798 |
| Hoffman, Joseph, New York, N. Y. Engraver's clutch | 723,671 | Mar. 24 | 3743 | 840 | 103 | 828 |
| Hoffman, Joseph E., New York, N. Y. Overshoe for horses | 744,549 | Nov. 17 | 3411 | 735 | 107 | 758 |
| Hoffman, Lena M., Philadelphia, Pa. Bed-pan | 727,949 | May 12 | 2142 | 478 | 104 | 475 |
| Hoffman, Louis E. (See Raymond and Hoffman.) | | | | | | |
| Hoffman, Louis E., Cleveland, Ohio. Boiler-feeder | 725,707 | Apr. 21 | 2403 | 545 | 103 | 1709 |
| Hoffman, Louis E., Cleveland, Ohio. Air-pump | 736,398 | Aug. 18 | 2537 | 557 | 105 | 1560 |
| Hoffman, Ludwik L., New York, N. Y. Brake for automobiles | 725,250 | Apr. 14 | 1549 | 351 | 103 | 1513 |
| Hoffman, Martin G., Merrill, and J. H. Hieb, Grand Rapids, Wis. Automatic fire-kindler | 728,107 | May 12 | 2413 | 538 | 104 | 532 |
| Hoffman, Martin G., Merrill, and J. H. Hieb, Grand Rapids, Wis. Automatic fire-kindler | 728,108 | May 12 | 2414 | 538 | 104 | 532 |
| Hoffman, Nathaniel B. K. (See Voorhees, Jeremiah F., assignor.) | | | | | | |
| Hoffman, Olin H., Thomas, W. Va. Sterilizing apparatus | 726,926 | May 5 | 179 | 42 | 104 | 40 |
| Hoffman, Roy J., Reno, Ohio. Oil-well cleaner | 719,004 | Jan. 27 | 2818 | 632 | 102 | 643 |
| Hoffman, Tillie, Pittsburg, Pa. Window-curtain pole | 720,430 | Feb. 10 | 1873 | 426 | 102 | 1236 |

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| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Hoffman, William, Salt Lake City, Utah. Classifier | 727,797 | May 12 | 1851 | 413, 414 | 104 | 413 |
| Hoffman, William D., Newton, Mass., assignor to Power and Speed Controller Company. Speed-varying mechanism | 744,550 | Nov. 17 | 3411 | 735 | 107 | 758 |
| Hoffmann, Adolf, Constance, Germany. Garment-form | 722,983 | Mar. 17 | 2469 | 554 | 103 | 554 |
| Hoffmann, Albert, Milwaukee, Wis. Postal card | 725,963 | Apr. 21 | 2856 | 648 | 103 | 1806 |
| Hoffmann, August, *et al.* (See Nowák, Emil, assignor.) | | | | | | |
| Hoffmann, August, St. Louis, Mo. Stave-press | 733,387 | July 7 | 1178 | 279 | 105 | 248 |
| Hoffmann, Carl, Schweidnitz, Germany. Curtain-protector | 747,709 | Dec. 22 | 4421 | 995, 996 | 107 | 2127 |
| Hoffmann, Carl, assignor to Farbwerke, vorm Meister, Lucius & Brüning, Höchst-on-the-Main, Germany. Alkylated auramins and making same | 720,920 | Feb. 17 | 2795 | ..... | 102 | 1441 |
| Hoffmann, Charles G., Needy, Oreg. Combined lifting-jack and stump-puller | 733,155 | Mar. 17 | 2781 | 627 | 103 | 618 |
| Hoffmann, Emil, assignor to Filter & Brautechnische Maschinen Fabrik Akt. Ges., vormals L. A. Enzinger, Pfeddersheim, near Worms, Germany. Turn-table more especially suitable for transferring casks from one chute or rolling-track to another | 733,584 | July 14 | 1588 | 378 | 105 | 353 |
| Hoffmann, Ernst G., West Hampstead, England. Road-vehicle | 729,586 | June 2 | 118 | 30 | 104 | 1151 |
| Hoffmann, Ernst G., Chelmsford, England. Device for securing parts to shafts | 738,445 | Sept. 8 | 1814 | 394 | 106 | 406 |
| Hoffmann, Ernst G., Chelmsford, England. Motor-vehicle | 746,834 | Dec. 15 | 2785 | 642 | 107 | 1742 |
| Hoffmann, Leberecht, Salzuflen, Germany. Starching-machine | 720,146 | Feb. 10 | 1354 | 310 | 102 | 1128 |
| Hoffmann, Otto C., assignor to F. Greer, Chicago, Ill. Thermal circuit-protector | 744,197 | Nov. 17 | 2783 | 593 | 107 | 621 |
| Hoffmayr, Harry J., Ventura, Cal. Bleaching nuts | 726,927 | May 5 | 182 | ..... | 104 | 41 |
| Höffner, Emil. (See Marquardt and Höffner.) | | | | | | |
| Hofland, Andreas E., assignor of one-half to F. J. McLean, Menominie, Wis. Grain-hulling machine | 720,921 | Feb. 17 | 2795 | 641, 642 | 102 | 1441 |
| Hofmann, Clifford L., assignor of one-half to S. S. Klein, Cincinnati, Ohio. Lubricator | 740,856 | Oct. 6 | 886 | 196 | 106 | 1433 |
| Hofmann, Federico, Turin, Italy. Shuttle-box motion for looms | 746,333 | Dec. 8 | 1877 | 428 | 107 | 1519 |
| Hofmann, Fritz, Elberfeld, Germany, assignor to Farbenfabriken of Elberfeld Co., New York, N. Y. Geraniol derivative | 746,703 | Dec. 15 | 2532 | ..... | 107 | 1685 |
| Hofmann, Fritz, and O. Bonhoeffer, Elberfeld, Germany, assignors to Farbenfabriken of Elberfeld Co., New York, N. Y. Making trichloroisopropyl alcohol | 742,430 | Oct. 27 | 3963 | ..... | 106 | 2129 |
| Hofmann, Johann, West Covington, Ky., assignor to E. H. Huenefeld, Cincinnati, Ohio. Mechanical movement | 724,101 | Mar. 31 | 4575 | 1030 | 103 | 1017 |
| Hofmann, Johann, West Covington, Ky., assignor to E. H. Huenefeld, Cincinnati, Ohio. Mechanical movement | 730,537 | June 9 | 1849 | 412 | 104 | 1524 |
| Hofmann, Johann, West Covington, Ky., assignor to E. H. Huenefeld, Cincinnati, Ohio. Washing-machine | 730,538 | June 9 | 1850 | 413 | 104 | 1525 |
| Hofmann, Justus, Witkowitz, and F. von Stach, Kladno, Austria-Hungary. Apparatus for preventing escape of gas from gas-generators during the stoking operation | 740,757 | Oct. 6 | 709 | 159 | 106 | 1397 |
| Hofstatter, William J., Toledo, Ohio. Fire and police alarm call system | 720,347 | Feb. 10 | 1729 | 393 | 102 | 1205 |
| Hofstetter, Clements J. (See Wagner, Hofstetter, and Ostendorf.) | | | | | | |
| Hogan, Cornelius. (See Krough and Hogan.) | | | | | | |
| Hogan, Daniel, New York, N. Y., and C. W. Meinecke, Jersey City, N. J., assignors to Meinecke & Co., New York, N. Y. Cushion | 726,164 | Apr. 21 | 3185 | 720 | 103 | 1873 |
| Hogan, George L., New York, N. Y. Appliance for curling or waving the hair | 729,587 | June 2 | 118 | 30 | 104 | 1151 |
| Hogan, George L., London, England. Carbureter | 742,321 | Oct. 27 | 3774 | 845 | 106 | 2091 |
| Hogan, James T., Jersey City, N. J., assignor to National Machine Company, Troy, N. Y. Buttonhole-sewing machine | 741,340 | Oct. 13 | 1824 | 403, 404 | 106 | 1656 |
| Hogan, James T., Jersey City, N. J., assignor to National Machine Company, Troy, N. Y. Mechanical movement | 741,341 | Oct. 13 | 1830 | 404, 405 | 106 | 1658 |
| Hogan, James T., Jersey City, N. J., assignor to National Machine Company, Troy, N. Y. Sewing-machine | 745,438 | Dec. 1 | 238 | 55 | 107 | 1151 |
| Hogan, John E. (See Krough and Hogan.) | | | | | | |
| Hogan, John K., Placerville, Cal. Mining-pump | 717,852 | Jan. 6 | 647 | 143 | 102 | 138 |
| Hogan, John W. (See McAuliffe and Hogan.) | | | | | | |
| Hogan Manufacturing Company. (See Hogan, Matthew, assignor.) | | | | | | |
| Hogan, Matthew, assignor to Hogan Manufacturing Company, Hartford, Conn. Flush-valve for water-closets | 722,106 | Mar. 3 | 826 | 184 | 103 | 178 |
| Hogan, Sidney J., Chattanooga, Tenn. Hinge | 746,509 | Dec. 8 | 2171 | 499 | 107 | 1583 |
| Hogan, William F., assignor of one-half to W. Matson, San Francisco, Cal. Oil-burner | 739,546 | Sept. 22 | 3864 | 866 | 106 | 875 |
| Hogeland, Israel, assignor, by mesne assignments, of one-half to A. P. Campbell, Indianapolis, Ind. Pneumatic fire-escape | 725,964 | Apr. 21 | 2857 | 648 | 103 | 1807 |
| Hogg, Robert T. (See Daffin, Thomas, assignor.) | | | | | | |
| Hogg, William B., Houston, Tex. Cleaning mechanism for tanks | 728,714 | May 19 | 3574 | 794 | 104 | 798 |
| Hogg, William S., U. S. Navy, assignor of one-half to Greater New York Security Company, New York, N. Y. Fusing device for wireless telegraphy | 719,005 | Jan. 27 | 2820 | 632 | 102 | 643 |
| Hogle, Martin, Tifton, Ga. Post-hole digger | 719,800 | Feb. 3 | 710 | 166 | 102 | 973 |
| Hoglund, Charles, Chicago, Ill. Fish-pole | 734,870 | July 28 | 4045 | 944 | 105 | 899 |
| Hoglund, Gustavus E., Chicago, Ill., assignor, by mesne assignments, to Stromberg-Carlson Telephone Manufacturing Company, Rochester, N. Y. Thermal cut-out or circuit-changer | 738,803 | Sept. 15 | 2531 | 557 | 106 | 574 |
| Hohmann, Richard K., and A. Rosenfeld, San Diego, Cal. Watch-holder | 742,029 | Oct. 20 | 3175 | 709 | 106 | 1954 |
| Höhne, Wilhelm, Schöneberg, Germany. Telephone system | 719,219 | Jan. 27 | 3227 | 721 | 102 | 726 |
| Holbein, Joseph E., assignor to E. Dambach, Evans City, Pa. Mantel | 728,169 | May 12 | 2530 | 562 | 104 | 555 |
| Holberg, Henry, *et al.* (See Prante, Joseph E., assignor.) | | | | | | |
| Holbourns, John G., and H. A. Longhurst, London, England Linotype-machine | 743,234 | Nov. 3 | 904 | 197 | 107 | 192 |
| Holbrook, Elliot, Kansas City, Mo. Apparatus for loading vessels | 726,685 | Apr. 28 | 4221 | 954 | 103 | 2097 |
| Holbrook, Elliot, Oklahoma, Okla. Ter. Machine for raising, regrading, and ballasting railway-tracks | 748,503 | Dec. 29 | 5940 | 1348 | 107 | 2483 |
| Holbrook, Francis D., Chicago, Ill. Claw-bar | 746,083 | Dec. 8 | 1415 | 317 | 107 | 1420 |
| Holbrook, Percy, New York, N. Y. Rail-joint | 725,965 | Apr. 21 | 2859 | 648 | 103 | 1807 |
| Holcomb, Bruce, and S. Austin, Garden City, Kans. Water or grain elevator | 745,439 | Dec. 1 | 241 | 56 | 107 | 1151 |
| Holcombe, Burton J., Detroit, Mich. Photographic developing-machine | 746,632 | Dec. 8 | 2397 | 548 | 107 | 1635 |
| Holcroft, William, Chester, Pa. Whip-roll motion for looms | 743,722 | Nov. 10 | 1819 | 383 | 107 | 405 |
| Holcroft, William, Chester, Pa. Loom | 743,723 | Nov. 10 | 1820 | 384 | 107 | 405 |
| Holden, Aaron C., Pittston, Pa. Storm-apron | 745,613 | Dec. 1 | 549 | 128 | 107 | 1214 |
| Holden, Daniel L., Philadelphia, Pa. Freezing-cylinder for ice-machines | 730,018 | June 2 | 912 | 204 | 104 | 1313 |
| Holden, Frank, London, England, assignor to General Electric Company. Electric meter | 725,708 | Apr. 21 | 2404 | 545 | 103 | 1709 |
| Holden, Franklin R., Evanston, Ill. Root-extractor | 725,083 | Apr. 14 | 1240 | 279 | 103 | 1448 |
| Holden, George B., Lowell, Mass. Lubricant for wool and making same | 720,922 | Feb. 17 | 2799 | ..... | 102 | 1442 |
| Holden, James, Wanstead, England. Injector or apparatus for burning liquid fuel | 719,801 | Feb. 3 | 711 | 166, 167 | 102 | 973 |
| Holden, James, Wanstead, and F. V. Russell, Stratford, England. Locomotive-engine | 742,653 | Oct. 27 | 4363 | 981, 982 | 106 | 2214 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Holden, James, Wanstead, and F. V. Russell, Stratford, England. Apparatus for distributing sand beneath the driving-wheels of locomotive-engines, &c | 742,654 | Oct. 27 | 4364 | 982, 983, 984 | 106 | 2215 |
| Holden, Reuben, North Kingsville, Ohio. Jacket for steam or air pipes | 732,299 | June 30 | 5174 | 1149 | 104 | 2265 |
| Holden, Samuel S. (See Murch, William W., assignor.) | | | | | | |
| Holder, Franklin B., Lansing, Mich. Potato-masher | 719,467 | Feb. 3 | 100 | 24 | 102 | 846 |
| Holder, Jonathan, *et al.* (See Heilmann, Jean J., assignor.) | | | | | | |
| Holder, Thomas, Edinburgh, Scotland. Needle-threader | 734,709 | July 28 | 3724 | 871 | 105 | 835 |
| Holderer, Otto H. (See Rohde, William and W. M., assignors.) | | | | | | |
| Holderman, William E., Marysvale, Utah. Device for treating slimes | 738,329 | Sept. 8 | 1594 | 345 | 106 | 359 |
| Holderman, William E., Marysvale, Utah. Leaching-tank | 741,402 | Oct. 13 | 1939 | 429 | 106 | 1680 |
| Holdrege Company. (See Smith, Friend W., Jr., assignor.) | | | | | | |
| Holdsworth, Fred D., Claremont, N. H., assignor to Sullivan Machine Company, Chicago, Ill. Fluid-compressor valve | 744,916 | Nov. 24 | 4071 | 877 | 107 | 915 |
| Holdsworth, William, Halifax, England. Gill-drawing frame | 722,984 | Mar. 17 | 2470 | 554, 555 | 103 | 554 |
| Holets, Joseph, Fairfax, assignor of one-half to A. O. Latimer, Cedar Rapids, Iowa. Harness-buckle | 745,495 | Dec. 1 | 349 | 81 | 107 | 1174 |
| Holfert, Paul, Seitenhain, Liebstadt, Germany. Grass-mowing machine | 718,458 | Jan. 13 | 1745 | 388 | 102 | 387 |
| Holger, Gustaf, Chicago, Ill. Safety appliance or attachment for elevators | 740,566 | Oct. 6 | 363 | 75 | 106 | 1324 |
| Holl, Gustav J., Cleveland, Ohio. Expanded-metal structure | 734,866 | Apr. 7 | 837 | 193 | 103 | 1348 |
| Holl, Gustav J., Cleveland, Ohio. Elevating-truck | 740,275 | Sept. 29 | 5255 | 1185 | 106 | 1187 |
| Holl, Gustav J., Cleveland, assignor to W. G. Hurlbert and E. J. Job, Niles, Ohio. Metal-expanding machine | 737,930 | Sept. 1 | 742 | 162, 163 | 106 | 162 |
| Holl, Gustav J., Cleveland, assignor to W. G. Hurlbert and E. J. Job, Niles, Ohio. Metal-expanding machine | 737,931 | Sept. 1 | 746 | 163, 164 | 106 | 163 |
| Holl, Wilhelm, Winterthur, Switzerland. Lock for umbrella-stands | 73 ,180 | Sept. 15 | 3193 | 706 | 106 | 714 |
| Hollaman, Richard G. (See Cannock, Frank B., assignor.) | | | | | | |
| Holland, Albert H., Buffalo, N. Y. Garment-hanger | 738,447 | Sept. 8 | 1818 | 395 | 106 | 406 |
| Holland Company. (See Martin, Jesse C., Jr., assignor.) | | | | | | |
| Holland, Frank, Porterville, Cal. Tobacco-smoking pipe | 723,672 | Mar. 24 | 3745 | 840 | 103 | 828 |
| Holland, George N., assignor to J. F. O'Shaughnessy, New York, N. Y. Hair-brush | 719,336 | Jan. 27 | 3453 | 769 | 102 | 776 |
| Holland, George W. (See Harman, Joseph, assignor.) | | | | | | |
| Holland, Harris F., assignor, by mesne assignments, to Holland Palace Car Company, Indianapolis, Ind. Compartment sleeping-car | 719,802 | Feb. 3 | 714 | 167 | 102 | 974 |
| Holland, Harris F., and A. L. Wheeler, assignors to Holland Palace Car Company, Indianapolis, Ind. Chair and berth for sleeping-cars | 743,872 | Nov. 10 | 2092 | 446, 447 | 107 | 462 |
| Holland, Henry, Detroit, Mich. Trolley | 745,614 | Dec. 1 | 549 | 128 | 107 | 1214 |
| Holland, Henry F., Boston, Mass. Socket extension-tap | 721,042 | Feb. 17 | 3030 | 695 | 102 | 1492 |
| Holland Horse Shoe Company. (See Holland, Joseph R., assignor.) | | | | | | |
| Holland, John H., assignor to Case Manufacturing Company, Columbus, Ohio. Electric crane | 717,994 | Jan. 6 | 894 | 199, 200, 201, 202 | 102 | 192 |
| Holland, John H., assignor to Case Manufacturing Company, Columbus, Ohio. Electric controller | 721,372 | Feb. 24 | 3680 | 838, 839 | 102 | 1647 |
| Holland, Joseph, Akron, Ohio. Rubber mattress | 721,192 | Feb. 24 | 3347 | 765 | 102 | 1579 |
| Holland, Joseph, assignor to Goodyear Tire & Rubber Company, Akron, Ohio. Hot-water bottle | 735,876 | Aug. 11 | 1616 | 345 | 105 | 1345 |
| Holland, Joseph R., assignor to Holland Horse Shoe Company, Binghamton, N. Y. Horseshoe | 745,844 | Dec. 1 | 981 | 220 | 107 | 1308 |
| Holland-Letz, Louis, assignor to Plano Manufacturing Company, Chicago, Ill. Pneumatic stacker | 734,067 | July 21 | 2521 | 589 | 105 | 567 |
| Holland Palace Car Company. (See Holland, Harris F., assignor.) | | | | | | |
| Holland Palace Car Company. (See Holland and Wheeler, assignors.) | | | | | | |
| Holland, Timothy, New York, N. Y. Cupola | 731,300 | June 16 | 3260 | 725 | 104 | 1838 |
| Holland, William A., assignor of one-half to S. P. Wilson, London, Ohio. Target-trap | 738,804 | Sept. 15 | 2534 | 557 | 106 | 575 |
| Hollander, Adolph. (See Flaskamp, Gertrude, assignor.) | | | | | | |
| Hollar, William H., Philadelphia, Pa. Electric lock | 737,840 | Sept. 1 | 547 | 118, 119 | 106 | 121 |
| Hollar, William L., Humboldt, Iowa. Feed-trough | 722,107 | Mar. 3 | 829 | 184 | 103 | 179 |
| Hollearn, James J. (See Lightner and Hollearn.) | | | | | | |
| Hollenbeck, Almerion. (See McDole and Hollenbeck.) | | | | | | |
| Hollenbeck, J. E. (See Caughey, Albert E., assignor.) | | | | | | |
| Hollenbeck, Sidney, assignor to Gordon & Ferguson, St. Paul, Minn. Glove or mitten | 748,187 | Dec. 29 | 5366 | 1219 | 107 | 2357 |
| Hollenberger, John A., Hagerstown, Md. Umbrella | 728,715 | May 19 | 3575 | 794 | 104 | 799 |
| Hollender, Hugo H., New York, N. Y. Sinew-extractor | 732,300 | June 30 | 5175 | 1149 | 104 | 2265 |
| Holley, Clarence M., and M. H. Rix, Ann Arbor, assignors to Holley Heat Regulator Company, Detroit, Mich. Automatic gas-regulating valve | 722,302 | Mar. 10 | 1214 | 269, 270 | 103 | 275 |
| Holley Heat Regulator Company. (See Holley and Rix, assignors.) | | | | | | |
| Holley, James, assignor of one-half to M. E. Gruber, West Palmbeach, Fla. Brace | 745,059 | Nov. 24 | 4363 | 942 | 107 | 975 |
| Holley, Joseph W., Portsmouth, Va. Seal-press | 732,940 | July 7 | 431 | 107 | 105 | 93 |
| Hollicott, John, assignor of one-half to C. W. Gillespie, Tascosa, Tex. Stirrup | 726,534 | Apr. 28 | 3932 | 889 | 103 | 2038 |
| Holliday, Gavin, Saugus, Mass. Mechanical movement | 730,915 | June 16 | 2531 | 563 | 104 | 1689 |
| Holliday, Lancelot B., Maybeury, W. Va. Power appliance | 729,341 | May 26 | 4701 | 1039 | 104 | 1045 |
| Hollifield, Horatio B., Sandersville, Ga. Target | 747,710 | Dec. 22 | 4422 | 996 | 107 | 2127 |
| Hollinger, Isaac C. (See Buckley and Hollinger.) | | | | | | |
| Hollingsworth, Clarence M. (See Anderson and Hollingsworth.) | | | | | | |
| Hollingsworth, Isaac N., Lauderdale, Miss. Clothes-pounder | 746,835 | Dec. 15 | 2786 | 642 | 107 | 1742 |
| Hollingsworth, Landon M., Fresno, Cal. Educational appliance | 747,711 | Dec. 22 | 4424 | 996 | 107 | 2128 |
| Hollingsworth, William T. P. (See Barlet, Frédéric, assignor.) (Reissue.) | | | | | | |
| Hollingsworth, William W., *et al.* (See McDevitt, William, assignor.) | | | | | | |
| Hollingworth, Edward, Dobcross, England, assignor to Crompton & Knowles Loom Works, Worcester, Mass. Wiring-motion for looms | 731,903 | June 23 | 4379 | 976 | 104 | 2088 |
| Hollis, Harry, Wilmington, Del. Combined track-switch and block-signal | 731,301 | June 16 | 3261 | 725 | 104 | 1838 |
| Hollis, James F., Pittsburg, Pa. Rail-joint | 724,867 | Apr. 7 | 838 | 193 | 103 | 1348 |
| Hollis, Jonah R., Brockton, Mass. Trolley-pole | 747,607 | Dec. 22 | 4224 | 950 | 107 | 2083 |
| Hollopeter, Russell, Fostoria, Ohio. Elevating and dumping apparatus | 739,000 | Sept. 15 | 2864 | 636 | 106 | 646 |
| Holloway, Clarence, Lincoln, Ill. Bottle and stopper | 737,739 | Sept. 1 | 343 | 72 | 106 | 78 |
| Holloway, Willis L., Westbranch, Iowa. Vending-machine | 738,613 | Sept. 8 | 2130 | 467 | 106 | 474 |
| Holly, George W., assignor of one-half to J. F. Parkinson, Paloalto, Cal. Door-hanger | 733,041 | July 7 | 605 | 147, 148 | 105 | 129 |
| Holm, Andrew J. (See Dressler, Rudolph, assignor.) | | | | | | |
| Holm, George A., Mansfield, Ohio. Manifold account and sales book | 733,841 | July 14 | 2057 | 486 | 105 | 449 |
| Holman, Frank H., and E. F. Shawver, Elizabeth, Ill. Boltless rail chair and coupling | 736,258 | Aug. 11 | 2287 | 494 | 105 | 1488 |
| Holman, George W., Alliance, Ohio. Case for dried meats | 745,845 | Dec. 1 | 983 | 220 | 107 | 1308 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Holman, Maria, Waukomis, Okla. Ter. Washing-machine | 733,481 | July 14 | 1404 | 331 | 105 | 314 |
| Holman, Maria, Waukomis, Okla. Ter. Mechanical movement | 733,482 | July 14 | 1406 | 331 | 105 | 315 |
| Holman, Martha B., and W. L. Cowles; said Cowles assignor to D. F. Holman Railway Track-Layer Company, Chicago, Ill. Track-laying machine | 724,577 | Apr. 7 | 297 | 72, 73 | 103 | 1232 |
| Holman, William L., San Francisco, Cal. Elevator | 722,364 | Mar. 10 | 1316 | 292 | 103 | 296 |
| Holmblad, Lauritz P., Chicago, Ill. Projectile | 726,291 | Apr. 28 | 3448 | 783 | 103 | 1943 |
| Holmboe, Jens A., Louisville, Ky. Fireproof construction | 727,364 | May 5 | 1013 | 220 | 104 | 218 |
| Holmes, Albert W. (See Redmon, Frederick A., assignor.) | | | | | | |
| Holmes, Alexius, Sacramento, assignor of one-half to F. Werner, Sutter Creek, Cal. Photographic-printing frame | 717,853 | Jan. 6 | 649 | 144 | 102 | 138 |
| Holmes, Byron B., Ella, Nebr. Calculator | 732,301 | June 30 | 5176 | 1150 | 104 | 2266 |
| Holmes, Charles N., London, England. Fibrous or filamentary material | 737,236 | Aug. 25 | 4112 | ..... | 105 | 1908 |
| Holmes, Clarence A., Seattle, Wash. Making dental dies | 745,615 | Dec. 1 | 551 | 128 | 107 | 1215 |
| Holmes, Edwin, Canning, Canada. Lamp-chimney holder | 737,628 | Sept. 1 | 128 | 28 | 106 | 31 |
| Holmes, Edwin T., New York, N. Y. Burglar-alarm system | 726,292 | Apr. 28 | 3450 | 783, 784 | 103 | 1944 |
| Holmes, Fred L., Waverly, Mass. Tilting frame for cooking-stoves | 739,872 | Sept. 29 | 4513 | 1014, 1015 | 106 | 1031 |
| Holmes, George L., Chicago, Ill. Self-contained back-geared headstall for elevator-bucket dredges | 724,868 | Apr. 7 | 839 | 193, 194 | 103 | 1348 |
| Holmes, Horace, Sterling, Kans. Salt-brine evaporator | 730,210 | June 2 | 1224 | 273, 274 | 104 | 1377 |
| Holmes, Irwin E. (See Heaton, John W., assignor.) | | | | | | |
| Holmes, Isaac V., Chicago, Ill. Purifier for boiler-water | 743,385 | Nov. 3 | 1120 | 239 | 107 | 237 |
| Holmes, Isaac V., Chicago, Ill. Steam-generating apparatus | 743,386 | Nov. 3 | 1123 | 239 | 107 | 238 |
| Holmes, Isaac V., Chicago, Ill. Purifying boiler feed-water | 743,387 | Nov. 3 | 1127 | 240 | 107 | 238 |
| Holmes, James, Jamestown, N. Y. Knockdown desk | 723,464 | Mar. 24 | 3371 | 755 | 103 | 751 |
| Holmes, James R. (See Harris and Holmes.) | | | | | | |
| Holmes, Roy N., Minneapolis, Minn. Combined flour tank and sifter | 719,337 | Jan. 27 | 3455 | 769 | 102 | 776 |
| Holmes, Welles E. (See Cole, William H., assignor.) | | | | | | |
| Holmes, William. (See Hamilton and Holmes.) | | | | | | |
| Holmes, William K., New York, N. Y. Camera-shutter | 730,916 | June 16 | 2532 | 564 | 104 | 1689 |
| Holmes, William K., New York, N. Y. Cigar-perforator | 745,846 | Dec. 1 | 984 | 221 | 107 | 1309 |
| Holmgren, Gus, Frazee, Minn. Meat-tenderer | 718,127 | Jan. 13 | 1134 | 251 | 102 | 259 |
| Holmok, Charles, assignor of one-half to W. Kroelling, Cleveland, Ohio. Telephone-transmitter | 722,021 | Mar. 3 | 684 | 151 | 103 | 147 |
| Holmok, Charles, assignor of one-half to W. Kroelling, Cleveland, Ohio. Switch mechanism for telephone-transmitters | 724,478 | Apr. 7 | 108 | 27 | 103 | 1192 |
| Holmström, Carl, and A. E. Mascall, Glasgow, Scotland. Breech mechanism for ordnance | 734,416 | July 21 | 3172 | 745, 746 | 105 | 704 |
| Holmström, Carl, and A. Bremberg, Glasgow, Scotland; said Bremberg assignor to said Holmström. Gun mounting or carriage | 729,342 | May 26 | 4703 | 1039, 1040 | 104 | 1046 |
| Holmström, John A., Rome, Italy. Etching apparatus | 721,445 | Feb. 24 | 3817 | 868 | 102 | 1675 |
| Holmstrom, John L., New York, N. Y. Game device | 721,953 | Mar. 3 | 564 | 125 | 103 | 124 |
| Holritz, Andrew, Noel, N. D. Spring attachment for doubletrees | 745,014 | Nov. 24 | 4243 | 920 | 107 | 950 |
| Holson, Albert B., Chicago, Ill. Speed-gear for motors | 737,237 | Aug. 25 | 4114 | 914 | 105 | 1909 |
| Holson, Albert B., assignor of three-fourths to Orr and Lockett Hardware Company, Chicago, Ill. Fire-escape | 725,251 | Apr. 14 | 1550 | 352 | 103 | 1513 |
| Holson, John C., Ord, Nebr. Attachment for dental engines | 731,302 | June 16 | 3265 | 726 | 104 | 1839 |
| Holson, John C., Ord, Nebr. Dental spraying apparatus | 739,674 | Sept. 22 | 4121 | 918 | 106 | 930 |
| Holst, Carl, Brooklyn, N. Y. Bicycle-gearing | 717,576 | Jan. 6 | 95 | 24 | 102 | 23 |
| Holst, Lodewyk J. R., Brooklyn, N. Y., assignor of two-thirds to L. Borsum, Plainfield, N. J. Photographic camera | 720,586 | Feb. 17 | 2188 | 507 | 102 | 1314 |
| Holst, Lodewyk J. R., Brooklyn, N. Y., assignor of two-thirds to L. Borsum, Plainfield, N. J. Photographic camera | 720,693 | Feb. 17 | 2398 | 549 | 102 | 1357 |
| Holst, Lodewyk J. R., Brooklyn, N. Y., assignor of two-thirds to L. Borsum, Plainfield, N. J. Photographic camera | 720,694 | Feb. 17 | 2401 | 549, 550 | 102 | 1357 |
| Holst, Lodewyk J. R., Brooklyn, N. Y., assignor of two-thirds to L. Borsum, Plainfield, N. J. Photographic shutter | 722,449 | Mar. 10 | 1482 | 327 | 103 | 332 |
| Holston, Eugene A., Duluth, Minn. Garment | 717,854 | Jan. 6 | 650 | 144 | 102 | 139 |
| Holston, William H. (See Smith, Craigie, and Holston.) | | | | | | |
| Holt, Amos G., *et al.* (See Stone, Albert L., assignor.) | | | | | | |
| Holt, Crawford D., Murray, Ky. Rotary engine | 726,686 | Apr. 28 | 4224 | 955 | 103 | 2098 |
| Holt, Henry S. A. (See Knietsch and Holt.) | | | | | | |
| Holt, John H., Washington, D. C. Hot-water bag | 724,289 | Mar. 31 | 4977 | 1114 | 103 | 1098 |
| Holt, Joshua S. (See Searles, Walter E., assignor.) | | | | | | |
| Holt, Lena, Minneapolis, Minn. Dressmaker's marking-pliers | 737,102 | Aug. 25 | 3860 | 857 | 105 | 1855 |
| Holt Manufacturing Company. (See Matteson, Walter C., assignor.) | | | | | | |
| Holtgen, August, San Francisco, Cal. Tank | 736,520 | Aug. 18 | 2773 | 607 | 105 | 1610 |
| Holthaus, Bernard, Dinklage, Germany. Mowing-machine | 748,556 | Dec. 29 | 6049 | 1369, 1370 | 107 | 2508 |
| Holthaus, Joseph A., Syracuse, N. Y. Smoke-consuming apparatus | 726,535 | Apr. 28 | 3934 | 889 | 103 | 2039 |
| Holtmann, Charles, W. H. Lindewirth, and J. Schunk; said Holtmann assignor of one-third his right to N. Schmidt, Pittsburg, Pa. Foot-guard for railway-frogs | 723,156 | Mar. 17 | 2782 | 628 | 103 | 618 |
| Holton, Abner L., Norfolk, Va. Temporary binder | 735,379 | Aug. 4 | 643 | 133 | 105 | 1118 |
| Holton, Abner L., assignor of one-half to M. L. T. Davis, Norfolk, Va. Packaging apparatus | 745,847 | Dec. 1 | 986 | 221, 222 | 107 | 1309 |
| Holton, Edward C., assignor of one-half to Sherwin-Williams Company, Cleveland, Ohio. Producing paint-oil | 728,918 | May 26 | 3948 | ..... | 104 | 889 |
| Holton, William T., Riverside, Cal. Bottle holder or support | 717,995 | Jan. 6 | 899 | 202 | 102 | 193 |
| Holtvoigt, Henry B. (See Brown and Holtvoigt.) | | | | | | |
| Holtz, Albert, assignor of one-half to A. D. McCullough, Fairbury, Nebr. Two-row disk cultivator | 728,798 | May 19 | 3730 | 832 | 104 | 820 |
| Holtz, George, Jersey City, N. J. Folding carriage | 729,177 | May 26 | 4405 | 972 | 104 | 983 |
| Holtz, George W. (See Parks, William, assignor.) | | | | | | |
| Holtzer-Cabot Electric Company. (See Bliss, Donald M., assignor.) | | | | | | |
| Holtzer, Charles W., Brookline, Mass. Magneto | 726,687 | Apr. 28 | 4226 | 955 | 103 | 2098 |
| Holtzmuller, John W., and W. Osborn, assignors to J. Manufacturing Company, West Manchester, Ohio. Seat for agricultural implements | 731,778 | June 23 | 4157 | 927 | 104 | 2037 |
| Holybee, Charles F., Paonia, Colo. Pruning-shears | 734,557 | July 28 | 3436 | 801 | 105 | 775 |
| Holyoke Machine Company. (See Reid, James, Jr., assignor.) | | | | | | |
| Holz, Bernhard, Jr., Paterson, N. J. Sad-iron | 746,510 | Dec. 8 | 2172 | 499 | 107 | 1583 |
| Holz, Bernhard, Jr., assignor to D. J. Cadotte, Buffalo, N. Y. Coin-controlled machine | 724,184 | Mar. 31 | 4757 | 1067 | 103 | 1053 |
| Holz, Bernhard G., Buffalo, N. Y. Explosive-engine | 744,342 | Nov. 17 | 3043 | 653 | 107 | 680 |
| Holz, Otto, Schenectady, N. Y., assignor to General Electric Company. Controller for electric motors | 720,029 | Feb. 10 | 1138 | 260 | 102 | 1081 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | Spec. | Dr'g. | Vol. | Page. |
| Holz, Otto, Schenectady, N. Y., assignor to General Electric Company. Mechanism for driving shafts at variable speed by means of alternating-current motors | 726,536 | Apr. 28 | 3937 | 889 | 103 | 2039 |
| Holz, Otto, Schenectady, N. Y., assignor to General Electric Company. Power-factor meter | 729,343 | May 26 | 4706 | 1040 | 104 | 1046 |
| Holz, Otto, Schenectady, N. Y., assignor to General Electric Company. Phase-indicator | 730,652 | June 9 | 2053 | 456<br>457 | 104 | 1569 |
| Holzach, Fritz. (See Kottusch, Emanuel, assignor.) | | | | | | |
| Holzer, Alice. (See Holzer, William, assignor.) | | | | | | |
| Holzer, William, assignor to A. Holzer, New York, N. Y. Compressing metals or other materials | 720,348 | Feb. 10 | 1733 | 393 | 102 | 1205 |
| Holzman Bros. (See Cormany, Walter, assignor.) | | | | | | |
| Holzman, Isaac B. (See Lasher, George F., assignor.) | | | | | | |
| Holzmark, Fanny, St. Louis, Mo. Fan attachment for sewing-machines | 727,365 | May 5 | 1014 | 220 | 104 | 219 |
| Holzwarth, Hans, assignor to Hooven-Owens-Rentschler Company, Hamilton, Ohio. Turbine | 745,496 | Dec. 1 | 350 | 81 | 107 | 1174 |
| Holzwarth, Hans, assignor to Hooven-Owens-Rentschler Company, Hamilton, Ohio. Governing mechanism for fluid-actuated motors | 746,836 | Dec. 15 | 2787 | 643 | 107 | 1742 |
| Homan, Christian H., Christiania, Norway. Manufacture of silicon and aluminium from silicates of alumina | 732,410 | June 30 | 5390 | 1194 | 104 | 2311 |
| Homan Silver Plate Company. (See Leavenworth, Seth H., assignor.) | | | | | | |
| Homann, Willy, Dusseldorf, Germany. Dental handpiece | 723,872 | Mar. 31 | 4119 | 929 | 103 | 924 |
| Homard, Albert D., Massillon, Ohio. Lubricator for flaked graphite | 746,837 | Dec. 15 | 2789 | 643 | 107 | 1743 |
| Homeier, George P., Akron, Ohio. Shower-bath tub | 735,514 | Aug. 4 | 925 | 196 | 105 | 1178 |
| Homer D. Bronson Company. (See Bronson, George S., assignor.) | | | | | | |
| Hommel, Carl R. F. and R. J., Frederiksberg, near Copenhagen, Denmark. Trolley-pole of electric tram-cars or the like | 738,193 | Sept. 8 | 1297 | 281 | 106 | 296 |
| Hommel, George. (See Bausch and Hommel.) | | | | | | |
| Hommel, Jacob, Los Angeles, Cal. Temperature-retaining device | 719,220 | Jan. 27 | 3229 | 721 | 102 | 726 |
| Hommel, Joseph M., Detroit, Mich. Package for storing and shipping | 719,803 | Feb. 3 | 716 | 168 | 102 | 975 |
| Hommel, Reinholdt J. (See Hommel, Carl R. F. and R. J.) | | | | | | |
| Homola, John, Allegheny, Pa. Hose-coupling | 742,655 | Oct. 27 | 4369 | 984 | 106 | 2216 |
| Homolka, Benno, Frankfort-on-the-Main, assignor to Farbwerke, vorm. Meister, Lucius & Brüning, Höchst-on-the-Main, Germany. Indigo mixture and making same | 726,688 | Apr. 28 | 4227 | ------ | 103 | 2098 |
| Hone, Augustus C., Louisville, Ky. Mechanism for coupling or uncoupling cars or locomotives | 746,838 | Dec. 15 | 2790 | 643 | 107 | 1743 |
| Honeck, Frank, and R. H. Hopkins, Seattle, Wash. Device for loading vessels | 717,682 | Jan. 6 | 286 | 71, 72 | 102 | 62 |
| Honeck, Frank, and R. H. Hopkins, Seattle, Wash. Buoyant safe | 717,683 | Jan. 6 | 290 | 72 | 102 | 63 |
| Honeck, Frank F., Chicago, Ill. Game apparatus | 726,062 | Apr. 21 | 3009 | 684 | 103 | 1837 |
| Honess, Edwin, Cleveland, Ohio. Device for securing more perfect combustion | 720,695 | Feb. 17 | 2404 | 550 | 102 | 1358 |
| Honey, Albert A., Tacoma, Wash., assignor, by mesne assignments, to Magnetic Equipment Company, Chicago, Ill. Electromagnetic-traction-increasing apparatus | 731,364 | June 16 | 3359 | 751 | 104 | 1857 |
| Honey, Albert A., Tacoma, Wash., assignor, by mesne assignments, to Magnetic Equipment Company, Chicago, Ill. Electromagnetic-traction-increasing apparatus | 731,365 | June 16 | 3360 | 751 | 104 | 1857 |
| Honeycut, Anderson D. (See Parks, Leonard D., assignor.) | | | | | | |
| Honeywood, David, London, England. Machinery for crushing or grinding ore, rock, cement, &c | 719,804 | Feb. 3 | 717 | 168 | 102 | 975 |
| Hönig, Max, Brünn, Austria-Hungary. Making tanning extracts | 727,798 | May 12 | 1860 | ------ | 104 | 414 |
| Hönig, Max, Brünn, Austria-Hungary. Extracting tannin | 738,905 | Sept. 15 | 2713 | ------ | 106 | 614 |
| Honiss, William H., *et al.* (See Lorenz, William A., assignor.) | | | | | | |
| Honiss, William H., *et al.* (See Millett, Charles W., assignor.) | | | | | | |
| Honiss, William H., Hartford, Conn., assignor of three-fourths to Beech-Nut Packing Company, Canajoharie, N. Y., and W. A. Loreuz, Hartford, Conn. Jar-sealing apparatus | 727,631 | May 12 | 1507 | 341 | 104 | 342 |
| Honsberg, Georg, assignor to Elektrizitäts-Aktiengesellschaft, vormals Schuckert & Co., Nuremberg, Germany. Lightning-arrester for electrical plants | 730,211 | June 2 | 1227 | 274 | 104 | 1377 |
| Hood, Alexander J., Muscoda, Wis. Milk-aerator | 723,389 | Mar. 24 | 3248 | 728 | 103 | 726 |
| Hood, Arthur M., Indianapolis, Ind. Straw-stacker | 736,599 | Aug. 18 | 2928 | 640<br>641 | 105 | 1641 |
| Hood, Arthur M., and C. Bradford, Indianapolis, Ind. Straw-stacker | 730,825 | June 9 | 2345 | 519 | 104 | 1632 |
| Hood, Cyrus S., Corning, N. Y. Soft-coal furnace | 746,084 | Dec. 8 | 1416 | 317 | 107 | 1420 |
| Hood, Edward O., Hingham, Mass. Signaling device for telephone party-lines | 747,070 | Dec. 15 | 3242 | 738<br>739 | 107 | 1848 |
| Hood, Hiram Q., assignor of three-fourths to J. P. McAndrews, Carthage, Mo. Filter | 745,497 | Dec. 1 | 351 | 81 | 107 | 1174 |
| Hood, John, Hydepark, assignor of one-half to G. B. Harrimah, Boston, Mass. Dental flask | 723,275 | Mar. 24 | 3016 | 678<br>679 | 103 | 682 |
| Hood, John J. (See Spence, Craig, and Hood.) | | | | | | |
| Hood, Joseph T., St. Joseph, Mo. Vote-recording and voter's-number-registering machine | 737,238 | Aug. 25 | 4119 | 914<br>915 | 105 | 1910 |
| Hood, L. S. M. (See Dew, John, assignor.) | | | | | | |
| Hood, William H. (See Cook and Hood.) | | | | | | |
| Hoodless, Richard, Chicago, Ill., assignor to A. T. Fischer, Detroit, Mich. Weeding implement | 718,571 | Jan. 13 | 2009 | 437 | 102 | 446 |
| Hoogstraeten, Manfred, Dusseldorf, Germany. Railway-wagon | 738,360 | Sept. 8 | 1661 | 360 | 106 | 374 |
| Hook, Charles H., Baltimore, Md. Sash-fastener | 727,950 | May 12 | 2143 | 478 | 104 | 475 |
| Hooker & Co. (See Schenck, George A., assignor.) | | | | | | |
| Hooker, Frederik, Baltimore, Md. Ball-bearing in swivel-joints for hoist-blocks | 721,801 | Mar. 3 | 259 | 58 | 103 | 58 |
| Hooker, Fredrik, Baltimore, Md. Clothes-wringer | 746,963 | Dec. 15 | 3040 | 698 | 107 | 1800 |
| Hooker, Henry, Chadron, Nebr. Foot-guard for railway-frogs | 737,103 | Aug. 25 | 3860 | 857 | 105 | 1855 |
| Hooker, William, assignor to Flameless Gas Light Company, Limited, London, England. Apparatus for incandescent gas or vapor lighting | 740,857 | Oct. 6 | 881 | 197 | 106 | 1434 |
| Hooker, William C., Abingdon, Ill. Mouse-trap | 722,842 | Mar. 17 | 2238 | 501 | 103 | 506 |
| Hooker, William C., Abingdon, Ill. Animal-trap | 744,343 | Nov. 17 | 3045 | 654 | 107 | 681 |
| Hooper, Daniel H. B., Biddeford, Me. Tree-protector | 742,431 | Oct. 27 | 3964 | 889 | 106 | 2129 |
| Hooper, Horace B., and J. I. Myles, Colorado Springs, Colo. Blank book | 735,258 | Aug. 4 | 432 | 85 | 105 | 1072 |
| Hooper, John C. (See Ashton and Hooper.) | | | | | | |
| Hooper, John C., assignor to Economy Locomotive Sander Company, Baltimore, Md. Locomotive sanding device | 732,076 | June 30 | 4725 | 1055 | 104 | 2172 |
| Hooper, John C., assignor to Economy Locomotive Sander Company, Baltimore, Md. Track-sanding apparatus | 732,636 | June 30 | 5818 | 1290 | 104 | 2403 |
| Hooper, John H., Boyne, Mich. Valve-stem packing | 743,507 | Nov. 10 | 1430 | 299 | 107 | 322 |
| Hooper, Louis M. (See Reid and Hooper.) | | | | | | |
| Hooper, William J. (See Scheele, Walter T., assignor.) | | | | | | |
| Hoopes, Harlan A., Harrisburg, Pa. Garment-supporter | 723,390 | Mar. 24 | 3249 | 728 | 103 | 726 |
| Hoopes, Maurice, New York, N. Y. Electric railway | 747,177 | Dec. 15 | 3433 | 778 | 107 | 1890 |
| Hoopes, William, Pittsburg, assignor to Leeds and Northrup Company, Philadelphia, Pa. Conductivity-bridge | 739,001 | Sept. 15 | 2865 | 636 | 106 | 647 |

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| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Hoops, John P., Halstead, Kans. Adjustable clod cutter and pulverizer | 720,587 | Feb. 17 | 2190 | 508 | 102 | 1315 |
| Hoops, John P., Halstead, Kans. Combined corn picker and husker | 740,135 | Sept. 29 | 4986 | 1120, 1121 | 106 | 1133 |
| Hoosier Drill Company. (See Jones, Sylvester H., assignor.) | | | | | | |
| Hooton, Isaac P., *et al.* (See Misner, Perry, assignor.) | | | | | | |
| Hooven-Owens-Rentschler Company. (See Holzwarth, Hans, assignor.) | | | | | | |
| Hoover, C. V., *et al.* (See Decker, Lucious E., assignor.) | | | | | | |
| Hoover, Charles. (See Eberlein, Edwin S., assignor.) | | | | | | |
| Hoover, Dickerson N. (See Fowler and Hoover.) | | | | | | |
| Hoover, Felix E., Tolu, Ky. Washing-machine | 733,201 | July 7 | 886 | 214 | 105 | 186 |
| Hoover, Frank K. (See Mason, Arthur J., assignor.) | | | | | | |
| Hoover, Frank K., *et al.* (See Stolp, Frank H., assignor.) | | | | | | |
| Hoover, Frank K., and A. J. Mason, Kansas City, Mo. Apparatus for handling ores, &c. | 733,647 | July 14 | 1692 | 401, 402 | 105 | 374 |
| Hoover, Frank K., and A. J. Mason, Kansas City, Mo. Scraper | 735,380 | Aug. 4 | 644 | 134 | 105 | 1119 |
| Hoover, Henry S., Silvercreek, Nebr. Signaling apparatus | 721,043 | Feb. 17 | 3031 | 695 | 102 | 1493 |
| Hope, Edward, Christchurch, New Zealand. Apparatus for preventing the racing of marine engines | 728,576 | May 19 | 3329 | 736 | 104 | 745 |
| Hope, John T., Kansas City, Mo. Dumping-wagon | 748,075 | Dec. 29 | 5158 | 1167 | 107 | 2312 |
| Hopfelt, Robert, Berlin, Germany. Electric resistance apparatus | 739,181 | Sept. 15 | 3194 | 706 | 106 | 714 |
| Höpflinger, Wilhelm, Schweinfurt, Germany. Machine for cutting iron bars or tubes | 722,843 | Mar. 17 | 2239 | 502 | 103 | 506 |
| Hopkins, Arthur J., Amherst, Mass. Heat-regulator | 725,341 | Apr. 14 | 1708 | 385 | 103 | 1547 |
| Hopkins Brake Company. (See Hopkins, William W., assignor.) | | | | | | |
| Hopkins, Carrie W., Washington, D. C. Dust-pan | 719,943 | Feb. 3 | 943 | 220 | 102 | 1023 |
| Hopkins, Charles E., Worcester, Mass. Machine for casting and trimming stereotype-plates | 733,202 | July 7 | 887 | 214, 215, 216, 217 | 105 | 186 |
| Hopkins, Charles L., Albany, N. Y. Shade-holding device | 721,193 | Feb. 24 | 3348 | 765 | 102 | 1579 |
| Hopkins, Clarence F., New York, N. Y. Ribbon-reversing mechanism for writing-machines or the like | 743,162 | Nov. 3 | 664 | 143 | 107 | 138 |
| Hopkins, Clarence F., Brooklyn, N. Y., assignor to Elliott & Hatch Book Typewriter Co. Type-writing machine | 727,951 | May 12 | 2144 | 478 | 104 | 475 |
| Hopkins, Clarence F., Brooklyn, N. Y., assignor to Elliott & Hatch Book Typewriter Company. Type-writer | 733,042 | July 7 | 606 | 148 | 105 | 129 |
| Hopkins, Clarence F., New York, N. Y., assignor, by mesne assignments, to Elliott-Fisher Company. Type-writing machine | 747,712 | Dec. 22 | 4425 | 996 | 107 | 2128 |
| Hopkins, Evan H., London, England. Obtaining zinc | 731,184 | June 16 | 3042 | 676 | 104 | 1791 |
| Hopkins, George W., assignor to Terry Heater Company, Cleveland, Ohio. Nebulizer | 742,986 | Nov. 3 | 289 | 65,66 | 107 | 63 |
| Hopkins, Harvey L., assignor to Hopkins Patent Company, Chicago, Ill. Cutting apparatus for mowers, &c | 718,351 | Jan. 13 | 1543 | 341 | 102 | 346 |
| Hopkins, Heber A., Cambridge, Mass., assignor to American Soda Fountain Company, Jersey City, N. J. Carbonating apparatus | 736,521 | Aug. 18 | 2774 | 607 | 105 | 1610 |
| Hopkins, Heber A., Cambridge, Mass., assignor to American Soda Fountain Company, Jersey City, N. J. Ice-cream cabinet | 736,522 | Aug. 18 | 2776 | 607 | 105 | 1611 |
| Hopkins, Heber A., Cambridge, Mass., assignor to American Soda Fountain Company, Jersey City, N. J. Carbonating apparatus | 736,523 | Aug. 18 | 2777 | 608 | 105 | 1611 |
| Hopkins, Heber A., West Roxbury, Mass., assignor to American Soda Fountain Company, Jersey City, N. J. Apparatus for dispensing hot beverages | 747,713 | Dec. 22 | 4426 | 997 | 107 | 2128 |
| Hopkins, Henry S., Bainbridge, N. Y., assignor to Casein Company of America. Dry condensed milk and making same | 742,322 | Oct. 27 | 3775 | 846 | 106 | 2091 |
| Hopkins, Henry W. (See Smith, Charles E., assignor.) | | | | | | |
| Hopkins, Jackson, Pearidge, assignor of one-half to F. E. Johnson, Brightwater, Ark. Fruit-gatherer | 742,432 | Oct. 27 | 3965 | 889 | 106 | 2129 |
| Hopkins, James M., Chicago, Ill. Car-journal bearing | 730,769 | June 9 | 2251 | 500 | 104 | 1613 |
| Hopkins, John H. (See North and Hopkins.) | | | | | | |
| Hopkins, John J., St. Louis, Mo. Last-distributer | 742,433 | Oct. 27 | 3966 | 890 | 106 | 2130 |
| Hopkins, Louis J., Torrington, Conn. Cigar-punch | 738,540 | Sept. 8 | 2008 | 437 | 106 | 447 |
| Hopkins, Nevil M., Washington, D. C., assignor to Anti-Bursting Pipe Company, Pittsburg, Pa. Means for protecting water-pipes against bursting by freezing | 745,060 | Nov. 24 | 4365 | 943 | 107 | 976 |
| Hopkins Patent Company. (See Hopkins, Harvey L., assignor.) | | | | | | |
| Hopkins, Robert H. (See Honeck and Hopkins.) | | | | | | |
| Hopkins, William W., St. Louis, assignor of one-half to W. P. H. Turner, Normandy, Mo. Car-brake | 745,848 | Dec. 1 | 989 | 222, 223 | 107 | 1310 |
| Hopkins, William W., St. Louis, Mo., assignor to Hopkins Brake Company. Car-brake | 745,849 | Dec. 1 | 992 | 223 | 107 | 1310 |
| Hopkinson, Harry. (See Allen and McElney, assignors.) | | | | | | |
| Hoppe, Paul, Berlin, assignor to Norddeutscher Lloyd, Bremen, Germany. Means for operating bulkhead-doors | 719,669 | Feb. 3 | 456 | 104 | 102 | 917 |
| Hopper, Ceburn E., Winnsboro, Tex. Step for carriages | 744,863 | Nov. 24 | 3985 | 859 | 107 | 897 |
| Hopper, William L. (See Hall and Ramsay, assignors.) | | | | | | |
| Hoppock, Benjamin K., Somerville, N. J. Cash-register | 720,431 | Feb. 10 | 1873 | 427 | 102 | 1236 |
| Hopson, Jesse, and H. H. Priest, Brisbane, Queensland, Australia. Hand signal-lamp | 732,941 | July 7 | 432 | 107 | 105 | 93 |
| Hopton, Lemuel R., assignor to Oxley Enos Company, New York, N. Y. Incandescent gas-burner | 747,550 | Dec. 22 | 4123 | 925 | 107 | 2060 |
| Hopwood, Clarence M., and J. G. Murdock, Jr., Cincinnati, Ohio. Steam-generator | 734,871 | July 28 | 4046 | 945 | 105 | 899 |
| Horack, Charles L., assignor to Fabric Coloring Company, New York, N. Y. Apparatus for printing yarns | 732,001 | June 23 | 4559 | 1017 | 104 | 2125 |
| Horan, Charles A., Stockton, Cal. Device for extracting drills, &c | 725,844 | Apr. 21 | 2650 | 604 | 103 | 1763 |
| Horan, James H., and E. N. Winston, assignors to Roller Stencil Company, Louisville, Ky. Adjustable printing-wheel | 719,592 | Feb. 3 | 329 | 76 | 102 | 891 |
| Hord, Willis, Jennings, Mo. Attachment for mowing-machines | 728,233 | May 19 | 2664 | 595 | 104 | 605 |
| Horgan, Arthur J., New York, N. Y., assignor to Yale & Towne Manufacturing Company, Stamford, Conn. Gang locking mechanism for cell-doors | 733,203 | July 7 | 900 | 217 | 105 | 188 |
| Hörig, Gottlieb, Lawrence, Mass. Mangle | 738,448 | Sept. 8 | 1820 | 395 | 106 | 406 |
| Horinko, Leonard, New York, N. Y. Switch device | 720,523 | Feb. 10 | 2041 | 469 | 102 | 1269 |
| Horlacher, Adam S., Indianapolis, Ind. Fringing-machine | 718,459 | Jan. 13 | 1746 | 388, 389 | 102 | 387 |
| Horlacher, John, Cliff Mines, Pa. Wrench | 734,872 | July 28 | 4049 | 945 | 105 | 900 |
| Hormby, John, Woonsocket, R. I. Apparatus for sawing ivory nuts | 735,099 | Aug. 4 | 95 | 22,23 | 105 | 1003 |
| Hormby, John, Woonsocket, R. I. Apparatus for sharpening saws | 735,100 | Aug. 4 | 97 | 23 | 105 | 1003 |
| Hormby, John, Woonsocket, R. I. Buffer-wheel | 747,426 | Dec. 22 | 3901 | 878 | 107 | 2010 |
| Horn, Albert. (See Horn, Alfred W., assignor.) | | | | | | |
| Horn, Alfred W., assignor of one-half to A. Horn, Buffalo, N. Y. Electric switch | 721,194 | Feb. 24 | 3350 | 766 | 102 | 1579 |
| Horn, Henry G., Spurger, Tex. Corn-thinner | 720,807 | Feb. 17 | 2586 | 596 | 102 | 1397 |
| Horn, Herman K. (See Schuehle and Horn.) | | | | | | |
| Horn, Joseph V., *et al.* (See Fritsche, John, assignor.) | | | | | | |
| Horn, Kate T., New York, N. Y. Balustrade | 736,399 | Aug. 18 | 2538 | 558 | 105 | 1560 |

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| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| Horn, May T., Jersey City, N. J. Reservoir-fountain-pen filler | 722,508 | Mar. 10 | 1598 | 351 | 103 | 359 |
| Horn, Samuel. (See Baker and Horn.) | | | | | | |
| Horn, William, Chicago, Ill. Ceiling or wall construction for fireproof buildings | 728,919 | May 26 | 3950 | 878 | 104 | 890 |
| Hornaday, Edson, assignor of one-half to G. W. Shanafelt, Colfax, Iowa. Device for elevating and supporting weights | 726,928 | May 5 | 183 | 42 | 104 | 41 |
| Hornaday, Edson, and W. J. Corner, Colfax, Iowa. Collapsible folding and adjustable crate | 734,493 | July 21 | 3312 | 777 | 105 | 731 |
| Hornbeck, Henry, Elizabeth, N. J. Wrest-plate for stringed musical instruments | 745,350 | Dec. 1 | 61 | 14 | 107 | 1113 |
| Hornbostel, Charles, New York, N. Y. Treating mineral liquid hydrocarbons | 734,710 | July 28 | 3724 | 871 | 105 | 835 |
| Hornbrook, Raymond H. (See Woodcock and Hornbrook.) | | | | | | |
| Hornbrook, Raymond H., Canton, Ohio. Center-dumping car | 721,892 | Mar. 3 | 434 | 95 | 103 | 96 |
| Hornbrook, Raymond H., Canton, Ohio. Brake-beam | 725,709 | Apr. 21 | 2405 | 545 | 103 | 1709 |
| Hornbrook, Raymond H., Canton, Ohio. Bottom-dumping car | 725,710 | Apr. 21 | 2406 | 546 | 103 | 1710 |
| Hornbrook, Raymond H., Canton, Ohio. Steam-condenser | 729,070 | May 26 | 4224 | 933 | 104 | 946 |
| Hornbrook, Raymond H., Canton, Ohio. Feed-water heater | 732,077 | June 30 | 4727 | 1056 | 104 | 2172 |
| Hornbrook, Raymond H., Canton, Ohio. Steam-condenser | 737,104 | Aug. 25 | 3862 | 858 | 105 | 1855 |
| Hornbrook, Raymond H., Canton, Ohio. Feed-water heater | 740,655 | Oct. 6 | 508 | 112 | 106 | 1356 |
| Hornbrook, Raymond H., Canton, Ohio. Steam-condenser | 745,186 | Nov. 24 | 4640 | {1007 {1008 | {107 | 1033 |
| Hornbrook, Raymond H., Canton, Ohio. Side-dumping car | 748,188 | Dec. 29 | 5367 | 1219 | 107 | 2357 |
| Hornbrook, Raymond H., assignor to Structural Steel Car Company, Canton, Ohio. Center-dumping car | 725,564 | Apr. 14 | 2117 | 480 | 103 | 1633 |
| Horne, Edward G., assignor of two-fifths to D. W. Rankin, Durant, Ind. Ter. Fence-brace | 734,873 | July 28 | 4050 | 945 | 105 | 900 |
| Horne, Fred, North Manchester, Ind. Land-roller | 725,445 | Apr. 14 | 1906 | {426 {427 | {103 | 1588 |
| Horne, George A., assignor to Syracuse Arms Company, Syracuse, N. Y. Ejector for breech-loading guns | 731,904 | June 23 | 4381 | 977 | 104 | 2088 |
| Horne, James. (See Dawson and Horne.) | | | | | | |
| Horne, Joseph A., assignor to Yale & Towne Manufacturing Company, Stamford, Conn. Cylinder-lock | 721,802 | Mar. 3 | 260 | 58 | 103 | 58 |
| Horner, E. B. (See Morrow, Isaac, assignor.) | | | | | | |
| Hornich, William, Jr. (See Beetchenow, William D., assignor.) | | | | | | |
| Horning, William, Johnstown, N. Y. Harness | 745,440 | Dec. 1 | 243 | 56 | 107 | 1151 |
| Hornish, John P., *et al.* (See Bunch, John W., assignor.) | | | | | | |
| Hornsby, Harry H., and E. W. Anger, Jr., Chicago, Ill. Combined switch and protecting device | 718,460 | Jan. 13 | 1751 | 390 | 102 | 388 |
| Hornsey, John W., Cleveland, Ohio. Hot-air furnace | 730,653 | June 9 | 2055 | 457 | 104 | 1569 |
| Hornsey, John W., Cleveland, Ohio. Hot-air furnace | 730,654 | June 9 | 2058 | {457 {458 | {104 | 1570 |
| Hornsey, John W., Cleveland, Ohio. Hot-air furnace | 730,655 | June 9 | 2060 | 458 | 104 | 1570 |
| Hornsey, John W., assignor to Crown Dryer Company, Cleveland, Ohio. Hot-air furnace | 735,515 | Aug. 4 | 926 | 196 | 105 | 1178 |
| Hornung, Anton N., Jr., assignor to L. Hanson, Chicago, Ill. Chair | 723,465 | Mar. 24 | 3372 | 755 | 103 | 752 |
| Hornung, Anton N., Jr., assignor to L. Hanson, Chicago, Ill. Fluid-operated chair | 743,508 | Nov. 10 | 1431 | {299 {300 | {107 | 322 |
| Hornung, Charles W., assignor of one-half to N. H. Sanborn, Jersey City, N. J. Guard for third rails | 725,622 | Apr. 14 | 2232 | 504 | 103 | 1659 |
| Horrocks, William, Herkimer, N. Y. Slicing-machine | 730,656 | June 9 | 2062 | 459 | 104 | 1570 |
| Horsey, Edwin, Kingston, Canada. Hose cut-off compressor | 742,656 | Oct. 27 | 4370 | 984 | 106 | 2216 |
| Horsey, John O., Baltimore, Md. Sample-trunk for salesmen | 730,657 | June 9 | 2063 | 459 | 104 | 1570 |
| Horsfield, John, Chicago, Ill. Window | 727,366 | May 5 | 1015 | 220 | 104 | 219 |
| Horst, Elam, Wooster, Ohio. Mail-carrier | 724,290 | Mar. 31 | 4978 | 1114 | 103 | 1098 |
| Horst, George C., assignor to J. A. Jeffrey, Columbus, Ohio. Conveyer | 733,965 | July 21 | 2311 | 543 | 105 | 520 |
| Horst, Harry W., and C. J. Weber, Middletown, Pa. Window-operating device | 731,185 | June 16 | 3043 | 676 | 104 | 1791 |
| Horstman, John H., Cincinnati, Ohio. Tufting-frame | 729,588 | June 2 | 120 | 30, 31 | 104 | 1151 |
| Horstmann, Henry C., Chicago, Ill. Electric flasher and circuit therefor | 724,102 | Mar. 31 | 4578 | {1030 {1031 | {103 | 1018 |
| Horton, David M., Fishkill, N. Y. Heating apparatus | 736,099 | Aug. 11 | 2023 | 431 | 105 | 1432 |
| Horton, George, Austin, Pa. Nail-holding device | 735,877 | Aug. 11 | 1617 | 345 | 105 | 1345 |
| Horton, James A., Providence, R. I., assignor to Iroquois Machine Company, New York, N. Y. Wire-drawing machine | 742,987 | Nov. 3 | 294 | 66, 67 | 107 | 64 |
| Horton, James D., Seattle, Wash. Portable house | 724,408 | Mar. 31 | 5214 | 1169 | 103 | 1148 |
| Horton, James L., and D. A. Bennett, Cego, Tex. Plow-bar and regulating-lever | 731,457 | June 23 | 3567 | 795 | 104 | 1919 |
| Horton, John R., Worksop, England. Kiln or apparatus for calcining purposes | 723,528 | Mar. 24 | 3500 | 783 | 103 | 777 |
| Horton, Joseph M., Crescent City, Cal. Handle | 735,516 | Aug. 4 | 929 | 196 | 105 | 1179 |
| Horton Manufacturing Company. (See Tredwell, Charles A., assignor.) | | | | | | |
| Horton, Paul S., *et al.* (See Barber, Cyrus, assignor.) | | | | | | |
| Horton, Peter D., Newark, assignor to M. L. Killits, Buffalo, N. Y. Bubble-blower | 721,373 | Feb. 24 | 3683 | 839 | 102 | 1647 |
| Horton, Peter D., assignor of three-fourths to H. C. Blair, F. E. Steele, and D. M. Hough, Albion, Mich. Bubble-blower | 727,952 | May 12 | 2145 | 479 | 104 | 476 |
| Horton, Robert M., *et al.* (See Lewis, Walter A., assignor.) | | | | | | |
| Horváth, Josef, Székesfehérvar, Austria-Hungary, assignor of three-fourths to J. Grunhut, London, England, and F. Tóth, Székesfehérvar, Austria-Hungary. Furnace-door | 737,105 | Aug. 25 | 3863 | 858 | 105 | 1855 |
| Horwart, Félix, Long Island, Kans. Stock-waterer | 733,966 | July 21 | 2312 | 544 | 105 | 520 |
| Horwinski, Edward, *et al.* (See Königstein, Gábor, assignor.) | | | | | | |
| Horwinski, Max, Jr., *et al.* (See Königstein, Gábor, assignor.) | | | | | | |
| Horwood, Edward H., Hoboken, N. J. Underwaist | 727,367 | May 5 | 1016 | 221 | 104 | 219 |
| Hosfeld, Samuel, Philadelphia, Pa. Street-cleaning machine | 742,657 | Oct. 27 | 4371 | 985 | 106 | 2216 |
| Hosford, Charles S. (See Handy and Hosford.) | | | | | | |
| Hosford, Rezin, Lebanon, Ind. Gravel or sand dredge | 727,632 | May 12 | 1510 | 341 | 104 | 343 |
| Hoshock, Wesley G., Defiance, Ohio. Washbasin | 743,873 | Nov. 10 | 2094 | 447 | 107 | 462 |
| Hoshor, Joseph C., Paterson, N. J. Automatic swing-wheel car-truck | 731,053 | June 16 | 2790 | {621 {622 | {104 | 1743 |
| Hosking, Ebenezer. (See Rogers and Hosking.) | | | | | | |
| Hoskins, John W., Clinton, Tenn. Plow | 745,850 | Dec. 1 | 993 | 223 | 107 | 1311 |
| Hoskins and Sewell. (See Haycock, Albert C., assignor.) | | | | | | |
| Hoskins and Sewell. (See Lawrence, Joseph W., assignor.) | | | | | | |
| Hoskins & Son. (See Chamberlain and Hall, assignors.) | | | | | | |
| Hoskyns, Charles, Bradford, England. Sash-lock for windows | 742,658 | Oct. 27 | 4373 | 985 | 106 | 2216 |
| Hosler, Joseph, assignor of one-third to L. L. Hosler, Canton, Ohio. Elevator safety device | 729,344 | May 26 | 4708 | {1040 {1041 | {104 | 1047 |
| Hosler, Louisa L. (See Hosler, Joseph, assignor.) | | | | | | |
| Hosley, Nelson D., and S. R. Harcourt, assignors to Wilcox & White Company, Meriden, Conn. Accentuation mechanism for autopneumatic music-playing instruments | 736,600 | Aug. 18 | 2930 | 641 | 105 | 1642 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | Spec. | Drg. | Vol. | Page. |
| Hosmer, George H., Everett, Mass. Bread | 740,858 | Oct. 6 | 882 | 197 | 106 | 1434 |
| Hospitalier, Edouard, Paris, France. Motor-car | 745,441 | Dec. 1 | 245 | 56,57 | 107 | 1152 |
| Hossenlopp, Léon R. (See Kett and Hossenlopp.) | | | | | | |
| Hostetter, Andrew D., Canton, Ohio. Combined slug and foot-stick | 742,323 | Oct. 27 | 3776 | 846 | 106 | 2091 |
| Hostetter, Clayton N. (See Morrow, Isaac, assignor.) | | | | | | |
| Hostettler, Nicholas, Eugene, Oreg. Locator for use in plant-setting | 736,100 | Aug. 11 | 2024 | 431 | 105 | 1432 |
| Hot Blast Smokeless Stoker Company. (See Weaver, William W., assignor.) | | | | | | |
| Hotaling, Lansing. (See Eccleston, S. Spencer, assignor.) | | | | | | |
| Hotchkiss, Florence E. (See Hotchkiss, Robert J., assignor.) | | | | | | |
| Hotchkiss, Henry S. (See Pearce, John H., assignor.) | | | | | | |
| Hotchkiss, Hiram G., Lyons, N. Y. Machine for pulling beets | 728,920 | May 26 | 3951 | 878 | 104 | 890 |
| Hotchkiss, Robert J., assignor to F. E. Hotchkiss, Pepacton, N. Y. Hame and horse-collar | 743,874 | Nov. 10 | 2095 | 447 | 107 | 462 |
| Hotsapillar, Jacob, assignor to Computing Scale Company, Dayton, Ohio. Scale | 728,577 | May 19 | 3331 | 736, 737 | 104 | 745 |
| Hotson, John H., New York, N. Y. Type-writing machine | 738,194 | Sept. 8 | 1298 | 281, 282 | 106 | 296 |
| Hottman, John F., Jr., Dubuque, Iowa. Water-tube boiler | 745,616 | Dec. 1 | 553 | 129 | 107 | 1215 |
| Hottman, John F., Jr., Dubuque, Iowa. Boiler-brace | 746,511 | Dec. 8 | 2173 | 499 | 107 | 1583 |
| Hottman, John F., Sr., and John F., Jr., Dubuque, Iowa. Water-tube boiler | 745,851 | Dec. 1 | 994 | 224 | 107 | 1311 |
| Hotz, Hermann, Basle, Switzerland. Hinge | 748,377 | Dec. 29 | 5687 | 1297, 1298 | 107 | 2427 |
| Houchin, Ernest A., and A. Huber, Brooklyn, N. Y. Soap-frame | 740,438 | Oct. 6 | 106 | 22 | 106 | 1269 |
| Houdlette, F. A. (See Smith, William R., assignor.) | | | | | | |
| Houdyshell, Aaron C., Tama, Iowa. Grappling-fork | 743,875 | Nov. 10 | 2097 | 448 | 107 | 462 |
| Houget, Fernand, Verviers, and A. Becker, Stembert, Belgium. Self-acting mule | 736,259 | Aug. 11 | 2288 | 495 | 105 | 1488 |
| Hough, Arthur H., *et al.* (See Miller, Martin H., assignor.) | | | | | | |
| Hough, Azel C., Worcester, Mass. Weft-handling mechanism for looms | 740,276 | Sept. 29 | 5256 | 1185, 1186 | 106 | 1188 |
| Hough, Azel C., Worcester, Mass. Loom-shuttle-operating mechanism | 740,362 | Sept. 29 | 5406 | 1218 | 106 | 1220 |
| Hough, David L., assignor to United Engineering and Contracting Company, New York, N. Y. Tunnel construction | 727,799 | May 12 | 1861 | 414 | 104 | 414 |
| Hough, David L., assignor to United Engineering & Contracting Company, New York, N. Y. Tunnel construction | 734,265 | July 21 | 2901 | 678, 679 | 105 | 649 |
| Hough, David M., *et al.* (See Horton, Peter D., assignor.) | | | | | | |
| Hough, Edward B., Providence, R. I. Brooch | 728,921 | May 26 | 3953 | 879 | 104 | 890 |
| Hough, Edward S., *et al.* (See Harvey, Lewis P., assignor.) | | | | | | |
| Hough, Franklin H. (See Dunham and Hough.) | | | | | | |
| Hough, Gershom B., Somerset, Pa. Dental tool | 736,101 | Aug. 11 | 2026 | 431 | 105 | 1433 |
| Hough, Horace G., *et al.* (See Scudder, Charles, assignor.) | | | | | | |
| Hough, James M., Woodbine, Iowa. Mail-crane | 747,714 | Dec. 22 | 4428 | 997 | 107 | 2129 |
| Hough, John B., Erving, Mass. Cuff-holder | 735,381 | Aug. 4 | 646 | 134 | 105 | 1119 |
| Hough, John B., and C. H. Gary, Erving, assignors to themselves, and W. N. Washburn, Greenfield, Mass. Revolving press | 722,582 | Mar. 10 | 1725 | 384 | 103 | 386 |
| Hough, Thomas, Anderton, near Chorley, England. Ventilator | 747,427 | Dec. 22 | 3902 | 879 | 107 | 2010 |
| Houghtaling, Paul A., Riverton, N. J. Clutch | 731,303 | June 16 | 3267 | 726 | 104 | 1839 |
| Houghtaling, Paul A., Riverton, N. J., assignor to C. Bond, Philadelphia, Pa. Window-sash-operating mechanism | 719,221 | Jan. 27 | 3233 | 722 | 102 | 727 |
| Houghton, Alanson B., assignor to Corning Glass Works, Corning, N. Y. Manufacture of lantern-globes | 738,449 | Sept. 8 | 1821 | 395, 396 | 106 | 407 |
| Houghton, George N., Minneapolis, Minn. Ash-sifter | 747,715 | Dec. 22 | 4430 | 997 | 107 | 2129 |
| Houghton, Henry S., Woonsocket, R. I. Grid for cotton-openers | 744,864 | Nov. 24 | 3987 | 859 | 107 | 898 |
| Houghton, Lewis T., Worcester, Mass. Thread-guide for spooling-machines | 741,666 | Oct. 20 | 2446 | 548 | 106 | 1803 |
| Houghton, Philip S., trustee. (See Clough, Victor W., assignor.) | | | | | | |
| Houghton, Philip S., Grand Forks, N. D. Means for propelling and guiding threshing-machines | 739,675 | Sept. 22 | 4121 | 919 | 106 | 931 |
| Houghton, Stephen C., San Francisco, Cal. Lock | 717,855 | Jan. 6 | 652 | 144 | 102 | 139 |
| Houghton, Thomas A., assignor to Electro Surgical Instrument Co., Rochester, N. Y. Current-interrupter | 745,280 | Nov. 24 | 4801 | 1048 | 107 | 1065 |
| Houghton, Willard, Snohomish, Wash. Harness-buckle | 718,710 | Jan. 20 | 2269 | 498 | 102 | 514 |
| Houkowsky, Arkadius, Berlin, Germany. Superheating the driving mediums of cold-vapor engines | 740,859 | Oct. 6 | 883 | 197 | 106 | 1434 |
| Houldsworth, William, Manchester, England. Roller-bearing | 744,917 | Nov. 24 | 4073 | 878 | 107 | 915 |
| Houle, Altheod J., Manchester, N. H. Bag conveying and supporting truck | 729,866 | June 2 | 641 | 141 | 104 | 1259 |
| Houlehan, John, assignor of two-thirds to W. E. Porter and G. Pence, El Paso, Tex. Rail-joint connection | 738,805 | Sept. 15 | 2536 | 557 | 106 | 575 |
| Houplain, Georges, Paris, France. Railway-brake | 717,996 | Jan. 6 | 900 | 202 | 102 | 193 |
| House, Edward P., Greeley, Colo. Water-elevator | 743,163 | Nov. 3 | 665 | 144 | 107 | 139 |
| House, Harry A., assignor of five-twelfths to R. E. Smith and J. A. Eddy, Aspen, Colo. Nut-lock | 731,366 | June 16 | 3361 | 751 | 104 | 1858 |
| House, Henry A., Jr., Hampstead, England. Steam-boiler | 719,670 | Feb. 3 | 457 | 104 | 102 | 918 |
| House, Louis, Syracuse, N. Y. Vehicle-brake | 721,446 | Feb. 24 | 3818 | 869 | 102 | 1675 |
| House, Samuel M. J., assignor of one-half to S. A. Gates, Gapland, Md. Cooler for kegs or casks | 722,509 | Mar. 10 | 1599 | 352 | 103 | 359 |
| House, Sidney B., Saticoy, Cal. Steam-engine | 737,239 | Aug. 25 | 4122 | 915, 916 | 105 | 1910 |
| Houston, Caleb, Benson, Ariz. Ter. Parallel rod for locomotives | 744,551 | Nov. 17 | 3414 | 735 | 107 | 758 |
| Houston, Charles E., Hutchinson, Kans. Adjustable shade-holder | 740,277 | Sept. 29 | 5262 | 1186 | 106 | 1189 |
| Houston, David H. (See Dahl, Jacob, assignor.) | | | | | | |
| Houts, Wallace A., Oakland, Cal. Tile-making machine | 737,841 | Sept. 1 | 551 | 119, 120 | 106 | 122 |
| Houts, Wallace A., Oakland, Cal. Brick-making machine | 737,842 | Sept. 1 | 553 | 120 | 106 | 123 |
| Houts, Wallace A., Oakland, Cal. Tile-making machine | 737,843 | Sept. 1 | 555 | 121 | 106 | 123 |
| Houx, Cambridge G. (See Hexom and Houx.) | | | | | | |
| Hove, Ole, Ellsworth, Wis. Engine-governor | 720,432 | Feb. 10 | 1875 | 427 | 102 | 1236 |
| Hovey, Charles C. (See Lees, George, assignor.) | | | | | | |
| Hovey, John J. (See Ainsworth, Frederick L., assignor.) | | | | | | |
| Hovey, Joseph, Florida, Ohio. Corn-husker | 746,704 | Dec. 15 | 2532 | 581, 582 | 107 | 1686 |
| Hovis, John T., Clintonville, Pa. Vehicle-brake | 728,394 | May 19 | 2966 | 653 | 104 | 669 |
| How, Fred B., Winthrop, Mass., assignor to Crown Paper Company, Kittery, Me., and Boston, Mass. Machine for making carbon-paper | 739,313 | Sept. 22 | 3441 | 767, 768 | 106 | 784 |
| How, Thomas L., and E. T. Winkler, Kansas City, Mo. Door opener or closer | 744,552 | Nov. 17 | 3415 | 736 | 107 | 759 |
| How, Woodbury S., Philadelphia, Pa. Game apparatus | 747,716 | Dec. 22 | 4431 | 998, 999 | 107 | 2129 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| Howard, Abner. (See Jackson, George K., assignor.) | | | | | | |
| Howard and Bullough American Machine Company. (See Fiske, George I., assignor.) | | | | | | |
| Howard, Charles E., and J. C. M. Ungeheur, Jersey City, N. J. Benzin-pan | 736,729 | Aug. 18 | 3178 | 702 | 105 | 1692 |
| Howard, Charles P., Hartford, Conn. Sash-lift | 724,701 | Apr. 7 | 528 | 126 | 103 | 1282 |
| Howard, Charles P. and F. E., Hartford, Conn. Door-latch | 720,349 | Feb. 10 | 1733 | 394 | 102 | 1206 |
| Howard, Charles P. and F. E., Hartford, Conn. Folding barrier and door-holder | 743,079 | Nov. 3 | 504 | 109 | 107 | 105 |
| Howard, Edward J., assignor to himself, J. Simon, and J. G. Miller, New York, N. Y. Soap-handle | 727,368 | May 5 | 1018 | 221 | 104 | 219 |
| Howard Elastic Wheel Company. (See Rix, Benjamin F., assignor.) | | | | | | |
| Howard, Elmer G., and F. M. Williams, Brandon, Iowa. Ice-saw | 743,509 | Nov. 10 | 1433 | 300 | 107 | 322 |
| Howard, Frank B., assignor to Laflin & Rand Powder Company, New York, N. Y. Apparatus for making pulp vessels | 725,966 | Apr. 21 | 2860 | 649 | 103 | 1807 |
| Howard, Frank E. (See Howard, Charles P. and F. E.) | | | | | | |
| Howard, Frank S. (See Stanley and Howard.) | | | | | | |
| Howard, Frederick K., Chicago, Ill. Slack-adjuster | 720,147 | Feb. 10 | 1355 | 310 | 102 | 1128 |
| Howard, Geoffrey, and G. Gibbs, Bedford, England. Valve-gear | 724,291 | Mar. 31 | 4979 | 1115 | 103 | 1098 |
| Howard, Harlan S., Madison, Wis. Disk harrow | 742,988 | Nov. 3 | 298 | 67, 68 | 107 | 65 |
| Howard, Henry, Brookline, Mass. Draft apparatus for portable vapor-generators | 721,195 | Feb. 24 | 3352 | 766 | 102 | 1580 |
| Howard, Henry, Brookline, Mass. Evaporating apparatus | 728,395 | May 19 | 2967 | 653, 654 | 104 | 669 |
| Howard, Henry G. M., Kalamazoo, Mich. Sled | 728,922 | May 26 | 3954 | 879 | 104 | 891 |
| Howard, Henry G. M., Kalamazoo, Mich. Hand bob-sled | 738,450 | Sept. 8 | 1822 | 396 | 106 | 407 |
| Howard, Henry G. M., Kalamazoo, Mich. Folding chair | 746,085 | Dec. 8 | 1417 | 317 | 107 | 1421 |
| Howard, James L., Topeka, Kans. Hand-planter | 742,659 | Oct. 27 | 4374 | 985, 986 | 106 | 2217 |
| Howard, John G., assignor of one-half to G. W. Graviet, Pleasant View, Utah. Clothes-pin | 745,617 | Dec. 1 | 555 | 129 | 107 | 1216 |
| Howard, John L., *et al.* (See Day, William C., assignor.) | | | | | | |
| Howard, John P., assignor of three-fourths to O. H. and L. Mannes, New York, N. Y., and R. W. Irwin, Grand Rapids, Mich. Fastening device for furniture members | 722,178 | Mar. 3 | 954 | 212 | 103 | 202 |
| Howard, Monroe S. (See Johnson and Howard.) | | | | | | |
| Howard, Robert R. (See Davis, David W., assignor.) | | | | | | |
| Howard, Samuel M., Washington, D. C. Bicycle-track | 726,224 | Apr. 21 | 3305 | 750 | 103 | 1899 |
| Howard, Stanley R., and W. Hewett, Philadelphia, Pa. Camera-support | 747,178 | Dec. 15 | 3435 | 778 | 107 | 1890 |
| Howard, William C., New York, N. Y. Frame for hand-mirrors | 735,382 | Aug. 4 | 647 | 134 | 105 | 1119 |
| Howard, William H., Stoughton, Mass. Cloth-folding machine | 731,905 | June 23 | 4383 | 977 | 104 | 2089 |
| Howard, William H., Pueblo, Colo. Press for squeezing mushy, zinky, or coppery lead drosses | 739,003 | Sept. 15 | 2869 | 637 | 106 | 647 |
| Howden, William N., assignor to Coronation Embroidery Hoop Company, Denver, Colo. Means for holding embroidery goods | 730,826 | June 9 | 2348 | 520 | 104 | 1633 |
| Howden, William N., assignor to Coronation Embroidery Hoop Company, Denver, Colo. Holder for embroidery goods | 730,827 | June 9 | 2349 | 520 | 104 | 1633 |
| Howard, William R., assignor of one-half to P. W. James, Louisville, Ky. Feed-box | 719,468 | Feb. 3 | 101 | 24 | 102 | 847 |
| Howarth, Richard, and J. Haden, assignors of one-third to W. Bamford, Paterson, N. J. Stopping device for looms. (Reissue) | 12,071 | Jan. 6 | 1018 | 227 | 102 | 220 |
| Howden, James, deceased; L. S. Highton, San Francisco, Cal., administratrix. Purifying alcoholic liquors | 736,098 | Aug. 11 | 2020 | | 105 | 1432 |
| Howe, Andrew F., Granite City, Ill. Molding car-wheels | 736,102 | Aug. 11 | 2027 | 431 | 105 | 1433 |
| Howe, Andrew F., Granite City, Ill. Wheel-tempering apparatus | 736,103 | Aug. 11 | 2028 | 432 | 105 | 1433 |
| Howe and Davidson Company. (See Carrier, Roy J., assignor.) | | | | | | |
| Howe and Davidson Company. (See Davidson, Frank B., assignor.) | | | | | | |
| Howe, Elbridge G., Millbury, Mass. Apparatus for closing vessels in vacuum | 725,967 | Apr. 21 | 2862 | 649 | 103 | 1808 |
| Howe, Elbridge G., Millbury, Mass. Crate for carboys, &c | 745,015 | Nov. 24 | 4244 | 920 | 107 | 950 |
| Howe, Frank D., Brooklyn, N. Y. Transmitting-gear | 741,038 | Oct. 13 | 1196 | 271 | 106 | 1521 |
| Howe, Frank D., Bayside, assignor to Gibbs Engineering and Manufacturing Company, New York, N. Y. Driving mechanism for motor-vehicles | 740,656 | Oct. 6 | 510 | 112 | 106 | 1356 |
| Howe, Frank D., Bayside, and L. T. Gibbs, assignors to Gibbs Engineering and Manufacturing Company, New York, N. Y. Inertia-governor | 744,198 | Nov. 17 | 2785 | 594 | 107 | 622 |
| Howe, Frank H., Curtice, Ohio. Type-writer desk | 740,434 | Oct. 6 | 100 | 21 | 106 | 1268 |
| Howe, George M. (See Shafer and Howe.) | | | | | | |
| Howe, Glen G., Indianapolis, Ind. Sand-molding machine | 717,577 | Jan. 6 | 96 | 24, 25 | 102 | 23 |
| Howe, Henry A., Providence, R. I., assignor to C. A. Daniel, Philadelphia, Pa. Rod-packing | 731,304 | June 16 | 3269 | 726 | 104 | 1840 |
| Howe, Henry W., Mexico, Mexico. Fishing-reel drag | 730,457 | June 9 | 1713 | 383 | 104 | 1495 |
| Howe, Henry W., Mexico, Mexico. Camera-support | 730,458 | June 9 | 1716 | 383 | 104 | 1495 |
| Howe, James, Detroit, Mich. Die for drawing wire | 723,873 | Mar. 31 | 4120 | 930 | 103 | 924 |
| Howe, John B., and R. J. Vaughan, Danbury, Conn. Fire-escape | 737,106 | Aug. 25 | 3867 | 858, 859 | 105 | 1856 |
| Howe, Lewis A., assignor of one-half to H. Allen, Barre, Mass. Self-opening die | 739,873 | Sept. 29 | 4514 | 1015 | 106 | 1031 |
| Howe, Lewis A., assignor of one-half to H. Allen, Barre, Mass. Self-opening die | 740,016 | Sept. 29 | 4780 | 1075 | 106 | 1088 |
| Howe Manufacturing Company. (See Howe, Thomas B., assignor.) | | | | | | |
| Howe, Patrick, assignor of five-eighths to Fenno Cloth Cutting Machine Company, Boston, Mass. Electrical cloth-cutting machine | 724,869 | Apr. 7 | 843 | 194 | 103 | 1349 |
| Howe, Thomas B., assignor to Howe Manufacturing Company, Scranton, Pa. Drier | 739,547 | Sept. 22 | 3866 | 866, 867 | 106 | 875 |
| Howe, William H., Talladega, Ala. Rocking-chair attachment | 740,278 | Sept. 29 | 5263 | 1186 | 106 | 1189 |
| Howell, George A., Jr. (See Webb and Howell.) | | | | | | |
| Howell, George H., Sioux City, Iowa. Spring | 723,874 | Mar. 31 | 4122 | 930 | 103 | 925 |
| Howell, J. W. (See Henderson, William H., assignor.) | | | | | | |
| Howell, John E., Spearfish, S. D. Wire-stretcher | 733,842 | July 14 | 2058 | 486 | 105 | 449 |
| Howell, John M. C., Mascot, Tenn. Railway-track-laying apparatus | 739,874 | Sept. 29 | 4517 | 1015 | 106 | 1032 |
| Howell, John M. C., Mascot, Tenn. Railway-track-laying apparatus | 739,875 | Sept. 29 | 4519 | 1016 | 106 | 1032 |
| Howell, John M. C., Mascot, Tenn. Mail-bag crane | 739,876 | Sept. 29 | 4522 | 1016 | 106 | 1033 |
| Howell, John S., Oscaloosa, Ill. Cultivator | 717,578 | Jan. 6 | 99 | 26 | 102 | 24 |
| Howell, John W., Newark, N. J., assignor to General Electric Company. Exhausting lamps | 726,293 | Apr. 28 | 3453 | 784 | 103 | 1944 |
| Howell, John W., Newark, N. J., assignor to General Electric Company. Incandescent lamp | 726,929 | May 5 | 184 | 43 | 104 | 41 |
| Howell, John W., Newark, N. J., assignor to General Electric Company. Device for cleaning filaments | 744,076 | Nov. 17 | 2536 | 542 | 107 | 569 |
| Howell, Lloyd D., Waynesfield, Ohio. Hog-catcher | 747,717 | Dec. 22 | 4484 | 999 | 107 | 2130 |
| Howell, Louis. (See Griffin, Tom, assignor.) | | | | | | |
| Howell, Nelson S., Cumming, Iowa. Suburban mail-delivery apparatus | 745,498 | Dec. 1 | 352 | 81, 82 | 107 | 1174 |
| Howell, Samuel J. H. (See Cudd, Simeon S., assignor.) | | | | | | |
| Howell, Thomas L., Smithfield, Pa. Railway-track gage | 742,660 | Oct. 27 | 4376 | 986 | 106 | 2217 |

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| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Howells, Henry C., Jr., and F. A. Johnson, New York, N. Y., assignors, by mesne assignments, to W. E. Watkins, trustee, Montclair, N. J. Regulator for needle-valves | 721,447 | Feb. 24 | 3821 | 869 | 102 | 1676 |
| Hower, Clemuel T. (See Ruggles and Hower.) | | | | | | |
| Howery, Albert M., Eastbank, W. Va. Sand-discharging spout | 734,331 | July 21 | 3032 | 714 | 105 | 675 |
| Howes, Agnes P., Philadelphia, Pa. Collar-supporter | 744,344 | Nov. 17 | 3046 | 654 | 107 | 681 |
| Howes, Albinus E., West Pullman, Ill. Two-part hoisting-bucket | 737,408 | Aug. 25 | 4442 | 996 | 105 | 1980 |
| Howes, Carson F., Hudson, Mass. Ticket-holder | 725,711 | Apr. 21 | 2408 | 546 | 103 | 1710 |
| Howse, Claud A., Enloe, Tex. Bed-brace | 725,845 | Apr. 21 | 2651 | 604 | 103 | 1763 |
| Howes, Claude L., Boston, Mass. Hydrant | 733,483 | July 14 | 1408 | 332 | 105 | 315 |
| Howey, Frank, Valley City, N. D. Advertising-envelop | 745,187 | Nov. 24 | 4641 | 1008 | 107 | 1033 |
| Howgate, James R., *et al.* (See Lomasney, William F., assignor.) | | | | | | |
| Howison, Rudolph M. (See Hale, John C., assignor.) | | | | | | |
| Howland, Chauncey W. (See Long and Howland.) | | | | | | |
| Howland, William S., Old Saybrook, Conn. Brake mechanism for cars | 740,860 | Oct. 6 | 884 | 198 | 106 | 1435 |
| Howlett, Edwin J., assignor to Union Paper Bag Machine Company, Philadelphia, Pa. Paper-bag machine | 735,383 | Aug. 4 | 647 | 135, 136, 137, 138 | 105 | 1119 |
| Howlett, Payton L., Giddings, Tex. Cotton-tie buckle | 717,856 | Jan. 6 | 653 | 145 | 102 | 139 |
| Howley, James C., and D. W. McFadyen, Paterson, N. J. Tool for removing tin roofing | 742,324 | Oct. 27 | 3777 | 846 | 106 | 2092 |
| Howley, John M., Bayonne, N. J. Double safety-pin | 733,204 | July 7 | 902 | 218 | 105 | 189 |
| Howry, Wilber E., Wahpeton, N. D. Display-cabinet | 717,997 | Jan. 6 | 902 | 203 | 102 | 193 |
| Howson, Frank W., Washington, D. C. Gas-check | 735,101 | Aug. 4 | 98 | 23 | 105 | 1004 |
| Hoxie, Vernon, and W. F. Truman, assignors to Lamb Wire Fence Co., Adrian, Mich. Wire fabric | 741,580 | Oct. 13 | 2290 | 512 | 106 | 1754 |
| Hoxsie, Irvin. (See Amstalden, William, assignor.) | | | | | | |
| Hoy, Charles B., assignor of one-half to C. Kobmann, Cincinnati, Ohio. Garment-clasp | 748,189 | Dec. 29 | 5369 | 1220 | 107 | 2357 |
| Hoy, Henry S., Chicago, Ill. Dump-wagon | 736,260 | Aug. 11 | 2291 | 495 | 105 | 1489 |
| Hoyer, Albert M., Nashville, Ohio. Attachment for bedsteads | 730,770 | June 9 | 2251 | 500 | 104 | 1613 |
| Hoyer, Rudolph C., Vicksburg, Miss. Surgical operating-frame | 747,972 | Dec. 29 | 4956 | 1119 | 107 | 2268 |
| Hoyermann, Gerhard, Hanover, Germany. Rendering the phosphoric acid in natural phosphates soluble in citric acid | 736,730 | Aug. 18 | 3179 | ..... | 105 | 1692 |
| Hoyle, Herbert, and E. Scarborough, Halifax, England. Combing-machine | 733,043 | July 7 | 608 | 149 | 105 | 130 |
| Hoyle, Samuel C., Bryan, Tex. Copy-holder | 727,369 | May 5 | 1019 | 221 | 104 | 220 |
| Hoyle, William H., and T. Barker, Bolton, England. Mechanical movement | 739,877 | Sept. 29 | 4525 | 1016 | 106 | 1033 |
| Hoyt, Ada A., New York, N. Y. Portable feed apparatus | 728,923 | May 26 | 3956 | 879 | 104 | 891 |
| Hoyt, Asa A., assignor to Hoyt's Tree Support Co., Watsonville, Cal. Tree-support | 739,676 | Sept. 22 | 4124 | 919 | 106 | 931 |
| Hoyt, Charles C., Brookline, Mass. Paraffin fabric | 728,234 | May 19 | 2665 | ..... | 104 | 606 |
| Hoyt, Charles C., Brookline, Mass. Shoe | 728,235 | May 19 | 2666 | 595 | 104 | 606 |
| Hoyt, Charles H., New York, N. Y. Spring-motor | 724,009 | Mar. 31 | 4424 | 993 | 103 | 985 |
| Hoyt, Daniel, South Norwalk, Conn., assignor of one-half to National Lock Washer Company, Newark, N. J. Window-shade fixture | 742,989 | Nov. 3 | 301 | 68 | 107 | 65 |
| Hoyt, Edward W., Aurora, Ill. Burial-vault | 734,711 | July 28 | 3726 | 871, 872 | 105 | 835 |
| Hoyt, Enoch R. R., Philadelphia, Pa. Steam-boiler furnace | 729,589 | June 2 | 121 | 31 | 104 | 1152 |
| Hoyt, Ernest C. (See Hoyt, Richard S., H. P., and E. C.) | | | | | | |
| Hoyt, Frank C. (See Culmer and Hoyt.) | | | | | | |
| Hoyt, Frank C. (See Swihart and Hoyt.) | | | | | | |
| Hoyt, Frederick J., Chicago, Ill. Extracting gold from ores | 726,294 | Apr. 28 | 3454 | 784 | 103 | 1944 |
| Hoyt, Frederick J., Chicago, Ill. Sash-lock | 730,266 | June 9 | 1357 | 298 | 104 | 1419 |
| Hoyt, Guy L. (See Wich and Hoyt.) | | | | | | |
| Hoyt, Henry P. (See Hoyt, Richard S., H. P., and E. C.) | | | | | | |
| Hoyt, James M. (See Jewell, Cornelius, assignor.) | | | | | | |
| Hoyt, James T., New York, N. Y. Box, cabinet, &c | 729,345 | May 26 | 4710 | 1041 | 104 | 1047 |
| Hoyt, Matthew L., assignor to D. H. Burrell & Company, Littlefalls, N. Y. Driving mechanism for spindles of centrifugal separators | 724,103 | Mar. 31 | 4582 | 1032 | 103 | 1019 |
| Hoyt, Matthew L., assignor to D. H. Burrell & Company, Littlefalls, N. Y. Journal-bearing | 731,054 | June 16 | 2794 | 622 | 104 | 1744 |
| Hoyt, Matthew L., assignor to D. H. Burrell & Company, Littlefalls, N. Y. Centrifugal liquid-separator | 741,342 | Oct. 13 | 1835 | 405 | 106 | 1659 |
| Hoyt, Matthew L., assignor to D. H. Burrell & Company, Littlefalls, N. Y. Driving mechanism for centrifugal separators | 744,966 | Nov. 24 | 4167 | 901 | 107 | 934 |
| Hoyt Metal Company. (See Allen, George F., assignor.) | | | | | | |
| Hoyt, Oliver A., Akron, Ohio. Machine for making artificial-stone building-blocks | 742,192 | Oct. 27 | 3518 | 785 | 106 | 2037 |
| Hoyt, Richard S., H. P., and E. C., Fort Fairfield, Me. Handle-fastener | 746,086 | Dec. 8 | 1418 | 318 | 107 | 1421 |
| Hoyt, William A., assignor of one-half to R. G. Salomon, Newark, N. J. Bearing for shafts or journals | 726,295 | Apr. 28 | 3456 | 784, 785 | 103 | 1944 |
| Hoyt's Tree Support Co. (See Hoyt, Asa A., assignor.) | | | | | | |
| Hoz, Adolf, Rorschach, Switzerland. Printing | 746,087 | Dec. 8 | 1419 | 318 | 107 | 1421 |
| Hrbacek, Joseph. (See McDonner, Charley, assignor.) | | | | | | |
| Hren, Josef. (See Gally and Hren.) | | | | | | |
| Hriss, Engelbert, Frankfort-on-the-Main, Germany. Syringe | 742,434 | Oct. 27 | 3968 | 890 | 106 | 2130 |
| Hrncjar, Andres, Roanoke, Ill. Reversing-gearing | 733,205 | July 7 | 903 | 218 | 105 | 189 |
| Hrubecky, Joseph A., Neenah, Wis. Gluing-machine | 741,135 | Oct. 13 | 1384 | 317 | 106 | 1561 |
| Hubartt, William, Plainfield, N. J. Combined fire ladder and escape means | 736,104 | Aug. 11 | 2030 | 432 | 105 | 1434 |
| Hubartt, William, North Platte, Nebr. Water-hoisting apparatus | 743,285 | Nov. 3 | 912 | 198 | 107 | 195 |
| Hubbard, Albert S. (See Turbayne and Hubbard.) | | | | | | |
| Hubbard, Albert S., Greenwich, Conn., assignor to C. M. Gould, Bayside, Long Island, N. Y. System of distribution | 720,350 | Feb. 10 | 1736 | 394 | 102 | 1206 |
| Hubbard, Albert S., Greenwich, Conn., assignor to C. M. Gould, Bayside, Long Island, N. Y. System of distribution | 720,351 | Feb. 10 | 1739 | 395 | 102 | 1207 |
| Hubbard, Albert S., Greenwich, Conn., assignor to Gould Storage Battery Company, New York, N. Y. Self-regulating system of electrical distribution | 720,352 | Feb. 10 | 1742 | 395 | 102 | 1208 |
| Hubbard, Arthur O., Minneapolis, Minn. Silo | 741,403 | Oct. 13 | 1940 | 429, 430 | 106 | 1681 |
| Hubbard, Charles H. (See Waggoner, James G., assignor.) | | | | | | |
| Hubbard, Eber, Chicago, Ill., assignor to American Thread Company. Press for making spools from fibrous pulp | 717,857 | Jan. 6 | 654 | 145 | 102 | 139 |
| Hubbard, Eber, Chicago, Ill., assignor, by mesne assignments, to American Thread Company. Machine for making fiber vessels | 719,115 | Jan. 27 | 3055 | 679 | 102 | 691 |
| Hubbard, Edward L., Baltimore, Md. Optical instrument | 737,844 | Sept. 1 | 557 | 121 | 106 | 124 |
| Hubbard, Elmer W., and S. C. Vestal, U. S. Army. Sight for guns | 728,716 | May 19 | 3576 | 794 | 104 | 799 |
| Hubbard, Frederick A. (See Hughes, John H., assignor.) | | | | | | |
| Hubbard, George M., assignor to W. & E. T. Fitch Co., New Haven, Conn. Clasp | 743,286 | Nov. 3 | 914 | 198 | 107 | 196 |
| Hubbard, John G., Woods Hole, Mass. Sight for firearms | 722,844 | Mar. 17 | 2239 | 502 | 103 | 506 |
| Hubbard, Joseph R., Trimble, Mo. Railway-rail joint | 744,553 | Nov. 17 | 3417 | 736 | 107 | 759 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|
| | | | Spec. | Dr'g. | Vol. | Page. |
| Hubbard, Omar H. (See Adams, William H., Jr., assignor.) | | | | | | |
| Hubbard, Richard W., Ashtabula, Ohio. Snap-hook | 723,875 | Mar. 31 | 4123 | 930 | 103 | 925 |
| Hubbard, Richard W., Ashtabula, Ohio. Hinge | 725,712 | Apr. 21 | 2408 | 546 | 103 | 1710 |
| Hubbell, Andrew P. (See Hubbell, Henry S. and A. P.) | | | | | | |
| Hubbell, Frank J. and G. W., St. Charles, Iowa. Cave | 744,199 | Nov. 17 | 2786 | 594 | 107 | 623 |
| Hubbell, George W. (See Hubbell, Frank J. and G. W.) | | | | | | |
| Hubbell, Harvey, Bridgeport, Conn. Incandescent-lamp socket | 720,808 | Feb. 17 | 2586 | 596 | 102 | 1397 |
| Hubbell, Harvey, Bridgeport, Conn. Shade-holder | 734,874 | July 28 | 4051 | 945 | 105 | 900 |
| Hubbell, Harvey, Bridgeport, Conn. Cluster-center for incandescent lamps | 734,875 | July 28 | 4052 | 946 | 105 | 900 |
| Hubbell, Harvey, Bridgeport, Conn. Cluster-switch | 734,876 | July 28 | 4053 | 946 | 105 | 901 |
| Hubbell, Henry S. and A. P., Chicago, Ill. Screen or storm-window | 743,080 | Nov. 3 | 505 | 109 | 107 | 106 |
| Hubbell, Joseph H., assignor to Buckeye Iron and Brass Works, Dayton, Ohio. Balancing device for revolving bodies | 734,417 | July 21 | 3176 | 746 | 105 | 705 |
| Hubbell, Thomas J., assignor of three-elevenths to H. C. Norris and C. E. Norton, Los Angeles, Cal. Reversible plow-point | 741,793 | Oct. 20 | 2706 | 603 | 106 | 1857 |
| Hubbell, Thomas J., assignor of three-elevenths to H. C. Norris and C. E. Norton, Los Angeles, Cal. Sulky beet-root cutter | 741,794 | Oct. 20 | 2707 | 603 | 106 | 1857 |
| Hubbs, Charlie E., Greenville, Mich. Stovepipe or chimney thimble | 745,618 | Dec. 1 | 556 | 130 | 107 | 1216 |
| Hubbuch, Franz A., Strassburg, Germany, assignor to Automatic Glass Cutting Machine Syndicate, London, England. Glass-cutting machine | 747,428 | Dec. 22 | 3904 | 879 | 107 | 2010 |
| Huber, Anthony. (See Houchin and Huber.) | | | | | | |
| Huber, Carl, Karlsruhe, assignor to Gesellschaft für Huberpressung Gesellschaft mit Beschränkter Haftung of Karlsruhe, Baden, Germany. Means and apparatus for molding hollow articles | 731,367 | June 16 | 3363 | 752 | 104 | 1858 |
| Huber, Carl, J. Müller, and M. Weidmann, Zurich, Switzerland. Let-off motion for looms | 747,179 | Dec. 15 | 3436 | 779 | 107 | 1891 |
| Huber, Charles J., Tampa, Fla. Discount-card | 723,673 | Mar. 24 | 3746 | 840 | 103 | 828 |
| Huber, Conrad, Frauenfeld, Switzerland. Sight for firearms | 735,771 | Aug. 11 | 1403 | 302 | 105 | 1297 |
| Huber, David T., Des Moines, Iowa, assignor to E. Huber, Evanston, Ill. Dental bite-taker | 730,658 | June 9 | 2064 | 460 | 104 | 1571 |
| Huber, Edward, Marion, Ohio. Compensating gearing | 726,930 | May 5 | 185 | 43 | 104 | 42 |
| Huber, Edward, Marion, Ohio. Grain-sieve | 736,261 | Aug. 11 | 2294 | 496 | 105 | 1489 |
| Huber, Edward, and J. W. Miller, Marion, Ohio. Riddle for threshing-machines | 738,541 | Sept. 8 | 2008 | 437 | 106 | 447 |
| Huber, Emma. (See Huber, David T., assignor.) | | | | | | |
| Huber, Ernest, New York, N. Y., assignor of four-fifths to M. C. Wick, Youngstown, Ohio, and S. V. Huber, Pittsburg, Pa. Motor | 729,178 | May 26 | 4408 | 972<br>973 | 104 | 983 |
| Huber, Ernest, Brooklyn, N. Y., assignor of four-fifths to M. C. Wick, Youngstown, Ohio, and S. V. Huber, Pittsburg, Pa. Still | 729,179 | May 26 | 4413 | 973 | 104 | 985 |
| Huber, Frank, Brooklyn, N. Y. Baby-carriage | 745,619 | Dec. 1 | 557 | 130 | 107 | 1216 |
| Huber, George, Jersey City, N. J. Zither | 732,078 | June 30 | 4729 | 1056 | 104 | 2173 |
| Huber-Hodgman Printing Press Company. (See Hodgman, Willis K., assignor.) | | | | | | |
| Huber, Rudolf A. E., Zurich, Switzerland. Means for supplying current to electric vehicles | 737,240 | Aug. 25 | 4125 | 916<br>917 | 105 | 1911 |
| Huber, S. V., *et al.* (See Huber, Ernest, assignor.) | | | | | | |
| Huber, Sigmund V., Pittsburg, Pa. Feed mechanism for rolling-mills | 720,353 | Feb. 10 | 1744 | 396 | 102 | 1209 |
| Huber, Sigmund V., Pittsburg, Pa. Shearing-machine | 724,010 | Mar. 31 | 4425 | 993<br>994<br>995 | 103 | 985 |
| Huber, Sigmund V., Pittsburg, Pa. Shearing mechanism | 726,296 | Apr. 28 | 3459 | 785 | 103 | 1945 |
| Huber, William E., *et al.* (See Haines, Jacques C., assignor.) | | | | | | |
| Hubert, Conrad, New York, N. Y. Incandescent lamp-burner | 726,297 | Apr. 28 | 3460 | 785<br>786 | 103 | 1946 |
| Hubert, Conrad, New York, N. Y. Electric lamp or candle | 741,245 | Oct. 13 | 1604 | 360 | 106 | 1609 |
| Hubert, Conrad, New York, N. Y. Electric lighter | 742,661 | Oct. 27 | 4377 | 986 | 106 | 2217 |
| Hubert, Conrad, New York, N. Y. Electric lighter | 743,724 | Nov. 10 | 1821 | 384 | 107 | 406 |
| Hubert, Conrad, Spuyten Duyvil, N. Y. Electric-circuit closer | 737,107 | Aug. 25 | 3868 | 859 | 105 | 1857 |
| Huberty, August, Canton, Ohio. Watchman's clock | 747,608 | Dec. 22 | 4225 | 950 | 107 | 2083 |
| Hübner, Johannes, Hermsdorf, Germany. Vise | 733,044 | July 7 | 609 | 150 | 105 | 130 |
| Hübner, Josef. (See Mayer and Hübner.) | | | | | | |
| Hübner, Robert, New York, N. Y. Electric railway | 746,512 | Dec. 8 | 2174 | 500 | 107 | 1583 |
| Hubsch, Hermann, Brooklyn, N. Y. Window-lock | 719,593 | Feb. 3 | 330 | 77 | 102 | 891 |
| Huck, August, L. Fischer, H. Ahrle, and E. Schmieder, assignors to Metalline-Platten-Gesellschaft M. B. H., Frankfort-on-the-Main, Prussia, Germany. Producing metalline films | 731,906 | June 23 | 4384 | 977 | 104 | 2089 |
| Huck, Joseph H. A., Salisbury, Mo. Grain-car door | 722,108 | Mar. 3 | 830 | 185 | 103 | 179 |
| Huckins, Noah, Oberlin, Ohio. Knee-rest for milk-pails | 737,629 | Sept. 1 | 130 | 28 | 106 | 31 |
| Huddleston, Roy, assignor of one-half to O. W. George, Dublin, Ind. Office-desk | 742,118 | Oct. 20 | 3380 | 754<br>755 | 106 | 1994 |
| Huddlestone, Thomas N., Russell, Canada. Band-cutter | 719,594 | Feb. 3 | 331 | 77 | 102 | 891 |
| Hudson, Arthur, Gorton, Manchester, England. Life-guard for road-vehicles | 720,809 | Feb. 17 | 2587 | 596<br>597 | 102 | 1397 |
| Hudson, Arthur, and J. Bowring, Manchester, England. Vehicle life-guard or obstruction-remover | 737,630 | Sept. 1 | 131 | 28, 29 | 106 | 31 |
| Hudson, Benjamin F., Rockport, Tex., assignor of one-half to T. F. Cook, Oklahoma, Okla. Ter. Stock-watering pool | 718,932 | Jan. 20 | 2688 | 601 | 102 | 601 |
| Hudson, Charles. (See Smith, Jackson, and Hudson.) | | | | | | |
| Hudson, Frank H., Lynn, assignor of one-half to H. O. Russ, Swampscott, Mass. Portable device for centering shafting | 730,123 | June 2 | 1083 | 243 | 104 | 1348 |
| Hudson, Frank W., East St. Louis, Ill., assignor, by mesne assignments, to American Steel Foundries. Sand-molding machine | 723,529 | Mar. 24 | 3503 | 783<br>784 | 103 | 778 |
| Hudson, George J., Dallas, Tex. Garment | 724,011 | Mar. 31 | 4427 | 995 | 103 | 986 |
| Hudson, James S., Highbridge, Ky. Churn | 737,241 | Aug. 25 | 4128 | 917<br>918 | 105 | 1911 |
| Hudson, Jesse Y. (See Richards, Charles L., assignor.) | | | | | | |
| Hudson, Richard W., assignor of two-thirds to L. I. Plummer, Toledo, Ohio. Cash-register | 738,330 | Sept. 8 | 1595 | 346<br>347 | 106 | 359 |
| Hudson River Foundry Company. (See Clapp and Sague, assignors.) | | | | | | |
| Hudson, Walter B, *et al.* (See Treese, Albert L., assignor.) | | | | | | |
| Hudson, William, Stoke Newington, London, England. Holder for piled slips or sheets of paper, bags, or the like | 732,352 | June 30 | 5282 | 1170<br>1171 | 104 | 2287 |
| Huebner, Ernst H. J., Newark, N. J. Means for attaching face-plates to knife-blade casings | 724,702 | Apr. 7 | 530 | 126 | 103 | 1282 |
| Huebner, Harry, Philadelphia, Pa. Ice-pick | 717,998 | Jan. 6 | 905 | 203 | 102 | 194 |
| Huebsch, Joseph, Eau Claire, Wis. Starching-machine | 736,601 | Aug. 18 | 2934 | 642 | 105 | 1643 |
| Hueg, Herman F. W., New York, N. Y. Dough dividing and shaping machine | 719,116 | Jan. 27 | 3059 | 679<br>680 | 102 | 691 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Huenefeld, Ernst H. (See Carter, John R., assignor.) | | | | | | |
| Huenefeld, Ernst H. (See Flannery, Michael, assignor.) | | | | | | |
| Huenefeld, Ernst H. (See Hausfeld, Joseph E., assignor.) | | | | | | |
| Huenefeld, Ernst H. (See Hofmann, Johann, assignor.) | | | | | | |
| Huenefeld, Ernst H. (See Listerman, Frank, assignor.) | | | | | | |
| Huenefeld, Ernst H., Cincinnati, Ohio. Ash or garbage can | 729,590 | June 2 | 123 | 31 | 104 | 1152 |
| Huestis, Frederick W., Boston, Mass., assignor to Universal Safety-Tread Company, Jersey City, N. J. Stair-tread, &c | 743,164 | Nov. 3 | 666 | 144 | 107 | 139 |
| Huet, Henry L., and A. Daubresse, Paris, France. Apparatus for taking pictures and viewing or reproducing animated scenes therefrom | 721,954 | Mar. 3 | 565 | 125, 126 | 103 | 124 |
| Huether, David, *et al.* (See Miller, Martin H., assignor.) | | | | | | |
| Huettel, Albin G., New York, N. Y. Pocket cash-register | 733,045 | July 7 | 610 | 150 | 105 | 130 |
| Hufeland, Philip, New York, N. Y. Holder for hats, coats, and umbrellas | 736,731 | Aug. 18 | 3181 | 702 | 105 | 1692 |
| Huff, Charles E., Chicago, Ill. Curling-iron heater | 729,346 | May 26 | 4712 | 1041 | 104 | 1047 |
| Huff, George R., St. Croix Falls, Wis. Railway-rail | 741,795 | Oct. 20 | 2708 | 603 | 106 | 1857 |
| Huff, Henry H., Boston, Mass., assignor to Huff Locomotive Appliance Company, Kittery, Me. Furnace | 726,298 | Apr. 28 | 3464 | 786 | 103 | 1946 |
| Huff, Henry H., Boston, Mass., assignor to Huff Locomotive Appliance Company, Kittery, Me. Furnace | 747,718 | Dec. 22 | 4434 | 1000 | 107 | 2130 |
| Huff, James B. (See Snider, Charles A., assignor.) | | | | | | |
| Huff Locomotive Appliance Company. (See Huff, Henry H., assignor.) | | | | | | |
| Huffington, George B., St. Louis, Mo. Printer's quoin | 743,165 | Nov. 3 | 667 | 144 | 107 | 140 |
| Huffman, John O., assignor to White Sewing Machine Company, Cleveland, Ohio. Sewing-machine shuttle | 743,876 | Nov. 10 | 2098 | 448 | 107 | 463 |
| Huffman, Oscar M. (See Huffman, Wiliam A. and O. M.) | | | | | | |
| Huffman, S. J., *et al.* (See Everett, Looney N., assignor.) | | | | | | |
| Huffman, Wiliam A. and O. M., Ector, Tex. Washing apparatus | 745,620 | Dec. 1 | 559 | 130 | 107 | 1217 |
| Huffstickler, Noah G., assignor of one-half to E. C. Boyte, Mount Holly, N. C. Tool for straightening teeth on carding-rolls | 733,394 | July 14 | 1255 | 297 | 105 | 282 |
| Hughart, William O., Jr., *et al.* (See Warner, Isaac M., assignor.) | | | | | | |
| Hughes, Albert T., Mitcham, England. Locking-nut | 732,411 | June 30 | 5391 | 1194 | 104 | 2312 |
| Hughes, Charles W. (See Beam, Jacob B., assignor.) | | | | | | |
| Hughes, Edgar M., Ashland, Ky. Organ-pedal | 748,378 | Dec. 29 | 5689 | 1298 | 107 | 2427 |
| Hughes, Frederick G. (See Stout and Hughes.) | | | | | | |
| Hughes, Frederick G., Bethlehem, assignor to Bethlehem Steel Company, South Bethlehem, Pa. Coupling device | 721,304 | Feb. 24 | 3556 | 809 | 102 | 1622 |
| Hughes, Frederick G., Bethlehem, assignor to Bethlehem Steel Company, South Bethlehem, Pa. Coupling for wheels and axles | 745,852 | Dec. 1 | 997 | 224, 225 | 107 | 1311 |
| Hughes, George A., Lincoln, Nebr. Automatic mail-bag catcher | 717,999 | Jan. 6 | 906 | 203, 204 | 102 | 194 |
| Hughes, George M., Buffalo, N. Y. Tightening attachment for jar-closures | 742,135 | Oct. 27 | 3969 | 890 | 106 | 2130 |
| Hughes, George W. H., New Haven, Conn. Clamping-collar for use in cutting holes in stovepipes | 724,185 | Mar. 31 | 4760 | 1068 | 103 | 1054 |
| Hughes, Harry. (See Stewart and Hughes.) | | | | | | |
| Hughes, Hiram. (See Scott, Shipley, and Hughes.) | | | | | | |
| Hughes, Hugh T., assignor of two-thirds to B. Miller and D. L. Chapin, Edmeston, N. Y. Colter and plow | 728,236 | May 19 | 2668 | 596 | 104 | 606 |
| Hughes, John A. (See Gahagan, Arthur B., assignor.) | | | | | | |
| Hughes, John H., assignor of one-half to F. A. Hubbard, Greenwich, Conn. Third-rail system | 738,721 | Sept. 8 | 2343 | 514 | 106 | 516 |
| Hughes, John W., assignor of one-half to T. L. Hill, San Francisco, Cal. Puzzle-game device | 740,980 | Oct. 6 | 1099 | 247 | 106 | 1480 |
| Hughes, Johnson, Philadelphia, Pa. Annealing system | 723,276 | Mar. 24 | 3017 | 679 | 103 | 682 |
| Hughes, Levi P., Holyoke, Mass. Bookbinding | 735,259 | Aug. 4 | 433 | 85 | 105 | 1073 |
| Hughes, Louis F., Sicily Island, La. Whiffletree-hook | 748,280 | Dec. 29 | 5533 | 1261 | 107 | 2393 |
| Hughes, Oliver, New Cambria, Mo. Railway-tie | 733,843 | July 14 | 2060 | 486 | 105 | 450 |
| Hughes, Robert C. (See Wall, Osborne, assignor.) | | | | | | |
| Hughes, Samuel, Summerville, and W. F. Taylor, Charleston, S. C. Packing | 731,458 | June 23 | 3568 | 795 | 104 | 1920 |
| Hughes, Thomas W., Blackford, Ky. Rail-fastening and cross-tie | 741,496 | Oct. 13 | 2120 | 472 | 106 | 1719 |
| Hughes, Will J., St. Louis, Mo. Account-sheet | 722,303 | Mar. 10 | 1215 | 270 | 103 | 275 |
| Hughes, William B., Wissahickon, Pa. Rolling-mill | 739,416 | Sept. 22 | 3655 | 812 | 106 | 830 |
| Hughes, William B., Tunbridge Wells, England. Kiln for burning bricks, tiles, or pottery | 744,200 | Nov. 17 | 2787 | 594, 595 | 107 | 623 |
| Hughes, William B., Brooklyn, N. Y. Carrier for glassware or like articles | 745,621 | Dec. 1 | 560 | 131 | 107 | 1217 |
| Hughes, William H., and J. Roche, Sapulpa, Ind. Ter., assignors of one-half to W. Henry, Monette, and G. A. Hancock, Springfield, Mo. Automatic safety-stop for air-brakes | 736,262 | Aug. 11 | 2296 | 496 | 105 | 1490 |
| Hughlett, Thomas Y., Kilmarnock, Va. Washing-machine | 737,631 | Sept. 1 | 132 | 29 | 106 | 31 |
| Huguley, Adam E., Henry, Okla. Ter. Recording-board | 735,102 | Aug. 4 | 102 | 23 | 105 | 1005 |
| Hugunin, Mary L. (See Hugunin and Lane.) | | | | | | |
| Hugunin, Robert B. and M. L., and W. A. Lane, North Haven, Conn.; said Robert B. Hugunin assignor to said M. L. Hugunin and W. A. Lane. Kneading-roller and retiring handles therefor | 730,124 | June 2 | 1084 | 243 | 104 | 1348 |
| Huhn, Gustav, Berlin, Germany. Automatic lubricating packing-ring for stuffing-boxes | 735,260 | Aug. 4 | 435 | 85, 86 | 105 | 1073 |
| Hulett, George H., Cleveland, Ohio. Plant for handling ores | 722,425 | Mar. 10 | 1425 | 314 | 103 | 319 |
| Hulett, George H., Cleveland, Ohio. Supporting and conveying apparatus for ore-scrapers | 742,436 | Oct. 27 | 3970 | 891 | 106 | 2130 |
| Hulett, George H., Cleveland, assignor of one-half to Webster Camp and Lane Company, Akron, Ohio. Trolley-wagon | 722,426 | Mar. 10 | 1427 | 315 | 103 | 320 |
| Hulin, William A., Saratoga Springs, N. Y. Refrigerator | 718,628 | Jan. 20 | 2110 | 459 | 102 | 482 |
| Hulings, James H. (See Stehley and Hulings.) | | | | | | |
| Hulings, James H., Parsons, assignor to W. O. McNeeley, Hendricks, W. G. Conley and J. Lipscomb, Parsons, W. Va. Car-fender | 725,446 | Apr. 14 | 1908 | 427 | 103 | 1589 |
| Hull, Daniel O., St. Louis, Mo. Constant-current transformer | 735,103 | Aug. 4 | 103 | 24 | 105 | 1005 |
| Hull, Ennis F., Atkinsville, W. Va. Wheelbarrow | 726,931 | May 5 | 187 | 43 | 104 | 42 |
| Hull, Foster J. (See Dement and Hull.) | | | | | | |
| Hull, Foster J., Brooklyn, N. Y., assignor, by mesne assignments, to American Mechanical Cashier Company. Cash-register | 722,510 | Mar. 10 | 1600 | 352, 353 | 103 | 359 |
| Hull, Galen D. (See Rowland and Hull.) | | | | | | |
| Hull, Herbert H., assignor to Hull Key Can Company, Cleveland, Ohio. Friction-top can | 742,325 | Oct. 27 | 3778 | 846 | 106 | 2092 |
| Hull, James S., New York, N. Y. Necktie-form | 744,345 | Nov. 17 | 3048 | 654 | 107 | 681 |
| Hull, Joseph P., Newark, Del. Door | 744,918 | Nov. 24 | 4074 | 878 | 107 | 916 |
| Hull, Joseph V., Brooklyn, assignor to H. C. Blye, New York, N. Y. Safety-closure for bottles or jars | 734,177 | July 21 | 2732 | 642 | 105 | 611 |
| Hull Key Can Company. (See Hull, Herbert H., assignor.) | | | | | | |
| Hull, Scott H., Oskaloosa, Iowa. Horse-collar fastener | 722,304 | Mar. 10 | 1217 | 270 | 103 | 275 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | Spec. | Dr'g. | Vol. | Page. |
| Hullhorst, William G., Toledo, Ohio. Cabinet | 724,870 | Apr. 7 | 845 | 194 | 103 | 1349 |
| Hulsart, Randolph, Brooklyn, N. Y., assignor to Interstate Electric and Manufacturing Company. Electric-arc lamp | 745,622 | Dec. 1 | 563 | 131 | 107 | 1218 |
| Hult, Carl A. and O. W., Stockholm, Sweden. Centrifugal liquid-separator | 718,461 | Jan. 13 | 1755 | 390 | 102 | 389 |
| Hult, Carl A. and O. W., Stockholm, Sweden. Centrifugal liquid-separator | 733,585 | July 14 | 1589 | 378 | 105 | 354 |
| Hult, Oscar W. (See Hult, Carl A. and O. W.) | | | | | | |
| Hultgren, Charles F., Chicago, Ill. Chain tongs | 733,648 | July 14 | 1695 | 402 | 105 | 375 |
| Hultgren, Johan P., assignor of one-half to F. H. Getzman, Stockholm, Sweden. Centrifugal separator | 720,810 | Feb. 17 | 2588 | 597 | 102 | 1397 |
| Hultgren, William H., Philadelphia, Pa., assignor to Otis Elevator Company. Automatic elevator | 737,108 | Aug. 25 | 3869 | 859 | 105 | 1857 |
| Hultgren, William H., Philadelphia, Pa., assignor to Otis Elevator Company. Elevator | 744,346 | Nov. 17 | 3049 | 655 | 107 | 681 |
| Hultgren, William H., Philadelphia, Pa., assignor to Otis Elevator Company. Automatic dumping-elevator | 747,071 | Dec. 15 | 3245 | 739 | 107 | 1849 |
| Hultmark, Peter O., assignor to J. T. Leonard, New York, N. Y. Revolving metallic window | 722,305 | Mar. 10 | 1218 | 270 | 103 | 275 |
| Hultmark, Peter O., assignor to J. T. Leonard, New York, N. Y. Window | 723,530 | Mar. 24 | 3505 | 784 | 103 | 778 |
| Hultmark, Peter O., assignor to J. T. Leonard, New York, N. Y. Window | 725,000 | Apr. 7 | 1078 | 246 | 103 | 1398 |
| Human, Samuel H., New York, N. Y. Apparatus for heating water | 747,072 | Dec. 15 | 3247 | 739 | 107 | 1849 |
| Hume, John T., Newton, Iowa. Wrench for threshing-machine cylinders | 745,281 | Nov. 24 | 4804 | {1048 {1049 | {107 | 1065 |
| Hummel, Albert P., Indianapolis, Ind. Automatic cistern-water controller | 726,063 | Apr. 21 | 3010 | 685 | 103 | 1838 |
| Hummel, Annas, Huntingdon, Pa. Artificial tree | 742,871 | Nov. 3 | 91 | 21 | 107 | 21 |
| Hummel, Charles C., Espy, Pa. Plumb or level | 729,347 | May 26 | 4714 | {1041 {1042 | {104 | 1048 |
| Hummel, Lewis R., Omaha, Nebr., assignor, by mesne assignments, to Electric Gate and Signal Company. Track instrument for railway signaling | 738,906 | Sept. 15 | 2714 | 599 | 106 | 614 |
| Hummel, Philip J., *et al.* (See Le Sueur, Philip, assignor.) | | | | | | |
| Hummell, George, *et al.* (See Sloan and Robinson, assignors.) | | | | | | |
| Humphrey, Alexander F., Allegheny, Pa. Torpedo | 747,323 | Dec. 15 | 3721 | 839 | 107 | 1952 |
| Humphrey, Alexander F., Allegheny, assignor of one-half to C. R. Buchheit, Pittsburg, Pa. Miniature or toy submarine boat | 741,581 | Oct. 13 | 2291 | 512 | 106 | 1754 |
| Humphrey, Alexander F., Allegheny, assignor of one-half to C. R. Buchheit, Pittsburg, Pa. Miniature or toy submarine boat | 742,326 | Oct. 27 | 3779 | 847 | 106 | 2092 |
| Humphrey, Alexander F., Allegheny, assignor of one-half to C. R. Buchheit, Pittsburg, Pa. Mine or submarine-boat destroyer | 743,081 | Nov. 3 | 507 | 110 | 107 | 106 |
| Humphrey, Alfred H., Kalamazoo, Mich. Gas-burner | 717,747 | Jan. 6 | 422 | 99 | 102 | 92 |
| Humphrey, Alfred H., Kalamazoo, Mich. Gas-lamp | 722,306 | Mar. 10 | 1219 | 271 | 103 | 276 |
| Humphrey, Alfred H., Kalamazoo, Mich. Burner | 740,017 | Sept. 29 | 4782 | 1076 | 106 | 1088 |
| Humphrey, Alfred H., Kalamazoo, Mich. Gas-lamp | 740,018 | Sept. 29 | 4785 | 1076 | 106 | 1089 |
| Humphrey, Alfred H., Kalamazoo, Mich. Bunsen burner | 742,990 | Nov. 3 | 303 | 68 | 107 | 66 |
| Humphrey, Ernest N., New Britain, Conn., assignor to Traut & Hine Manufacturing Company. Hose-supporter | 725,565 | Apr. 14 | 2119 | 480 | 103 | 1634 |
| Humphrey, Eugene, Boston, Mass. Kerosene-oil burner for lamps | 726,431 | Apr. 28 | 3713 | 842 | 103 | 1997 |
| Humphrey, Frederick J., Kalamazoo, Mich. Water-motor | 738,806 | Sept. 15 | 2537 | 558 | 106 | 576 |
| Humphrey, Harry B., Joliet, Ill. Clover-cutter | 741,246 | Oct. 13 | 1606 | 361 | 106 | 1609 |
| Humphrey, Henry H., assignor to Wright Manufacturing Company, Detroit, Mich. Steam-trap | 740,435 | Oct. 6 | 102 | 21 | 106 | 1268 |
| Humphrey, Henry H., assignor to Austin Separator Company, Detroit, Mich. Separator | 743,388 | Nov. 3 | 1130 | 240 | 107 | 239 |
| Humphrey, Henry L., Detroit, Mich. Rotary engine | 738,907 | Sept. 15 | 2715 | {600 {601 | {106 | 615 |
| Humphrey, Herbert A., Westminster, London, England. Centrifugal gas-purifier | 733,206 | July 7 | 905 | {218 {219 | {105 | 189 |
| Humphrey, Herbert A., Westminster, England. Centrifugal apparatus for purifying gases | 737,932 | Sept. 1 | 748 | 164 | 106 | 164 |
| Humphrey, James D., and H. G. Storz, Philadelphia, Pa., assignors to C. S. Luitweiler, Newton, Mass. Inking mechanism for printing, stamping, numbering, or similar machines | 740,136 | Sept. 29 | 4989 | 1121 | 106 | 1133 |
| Humphrey, Robert K. (See Rogers, Humphrey, and Nesmith.) | | | | | | |
| Humphrey, Virginia R., Scranton, Pa. Lady's belt | 747,180 | Dec. 15 | 3436 | 779 | 107 | 1891 |
| Humphrey, William H. (See Balzer, Stephen M., assignor.) | | | | | | |
| Humphreys, George E., assignor to Remington Arms Company, Ilion, N. Y. Ejector for firearms | 732,187 | June 30 | 4957 | 1102 | 104 | 2221 |
| Humphreys, James W., Iroquois, Ill. Dredging-machine | 724,703 | Apr. 7 | 533 | {126 {127 | {103 | 1283 |
| Humphreys, John, Chemainus, Canada. Tube-splicing | 717,684 | Jan. 6 | 292 | 72 | 102 | 63 |
| Humphreys, John M., Trenton, Canada. Electric base-ball register | 727,633 | May 12 | 1511 | 342 | 104 | 343 |
| Humphreys, Otho F. (See Patton and Humphreys.) | | | | | | |
| Humphries and Sons, James. (See Baulk, Charles, assignor.) | | | | | | |
| Humpidge, Frederick A., Dutton, Canada. Music-demonstrator | 740,137 | Sept. 29 | 4992 | 1122 | 106 | 1133 |
| Huncker, Frank, Sherman County, Nebr. Device for use in destroying insects | 745,016 | Nov. 24 | 4245 | 920 | 107 | 950 |
| Hundhausen, Rudolf, Wilmersdorf, Germany, assignor to Siemens & Halske Electric Company of America, Chicago, Ill. Non-interchangeable contact parts | 731,779 | June 23 | 4158 | 927 | 104 | 2037 |
| Hundhausen, Rudolf, Wilmersdorf, near Berlin, Germany, assignor to Siemens & Halske Electric Company of America, Chicago, Ill. Thermal cut-out or fuse for electric circuits | 738,908 | Sept. 15 | 2718 | 601 | 106 | 616 |
| Hundhausen, Rudolf, Wilmersdorf, near Berlin, Germany, assignor to Siemens & Halske Electric Company of America, Chicago, Ill. Non-interchangeable contact parts | 738,909 | Sept. 15 | 2720 | 601 | 106 | 616 |
| Hungerford, Henry H., assignor to F. M. Peters, Chicago, Ill. Machine for cutting wafers or the like | 724,578 | Apr. 7 | 209 | 73 | 103 | 1232 |
| Hungerford, Oliver T., Brooklyn, N. Y. Plastic compound | 725,968 | Apr. 21 | 2863 | ------ | 103 | 1808 |
| Hungerford, Oliver T., New York, N. Y. Water-supply system | 745,351 | Dec. 1 | 62 | 14 | 107 | 1114 |
| Hunker, John, *et al.* (See Joseph, Sheldon, assignor.) | | | | | | |
| Hunker, Martin L., Canton, Ohio, assignor, by mesne assignments, to Pipe Machine and Manufacturing Company, Philadelphia, Pa. Sheet-metal-pipe former and groover | 732,857 | July 7 | 286 | 71, 72 | 105 | 63 |
| Hunker, Martin L., Canton, Ohio, assignor, by mesne assignments, to Pipe Machine and Manufacturing Company, Philadelphia, Pa. Sheet-metal-pipe corrugator | 743,287 | Nov. 3 | 915 | {198 {199 | {107 | 196 |
| Hunkin, W. J., *et al.* (See Schmucker, Alfred P., assignor.) | | | | | | |
| Hunkins, Adelbert B., Winona, Minn. Addressing-machine | 744,347 | Nov. 17 | 3052 | {655 {656 | {107 | 682 |
| Hunkins, William S., Merriam Park, Minn. Garment-supporter | 721,305 | Feb. 24 | 3557 | 809 | 102 | 1622 |
| Hunkins, William S., Minneapolis, Minn. Anchor for safety-pin attachments | 738,542 | Sept. 8 | 2010 | 437 | 106 | 447 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| Hunnewell, Henry T. (See Shelters and Hunnewell.) | | | | | | |
| Hunnewell, Henry T., Lowell, assignor to Draper Company, Hopedale, Mass. Filling-replenishing loom | 724,292 | Mar. 31 | 4983 | 1115<br>1116 | 103 | 1099 |
| Hunsalz, Paul. (See Nicolaier and Hunsalz.) | | | | | | |
| Hunt, Albert C., assignor to B. J. O'Reilly, Naco, Ariz. Ter. Gate | 726,689 | Apr. 28 | 4228 | 955 | 103 | 2098 |
| Hunt, Alva, and J. D. Baughman, Pulaski, Iowa. Acetylene-gas generator | 728,237 | May 19 | 2668 | 596 | 104 | 606 |
| Hunt, Charles W., West New Brighton, N. Y. Vehicle | 721,705 | Mar. 3 | 99 | 21 | 103 | 22 |
| Hunt, Charles W., West New Brighton, N. Y. Motor-vehicle | 725,713 | Apr. 21 | 2410 | 546<br>547 | 103 | 1710 |
| Hunt, Charles W., West New Brighton, N. Y. Hoisting apparatus | 729,867 | June 2 | 642 | 141 | 104 | 1260 |
| Hunt, Charles W., West New Brighton, N. Y. Hoisting apparatus | 729,868 | June 2 | 644 | 141<br>142 | 104 | 1260 |
| Hunt, Charles W., West New Brighton, N. Y. Hoisting apparatus | 729,869 | June 2 | 646 | 142 | 104 | 1260 |
| Hunt, Charles W., West New Brighton, N. Y. Power-transmitting device | 732,079 | June 30 | 4730 | 1056 | 104 | 2173 |
| Hunt, Charles W., West New Brighton, N. Y. Friction-clutch | 735,517 | Aug. 4 | 930 | 197 | 105 | 1179 |
| Hunt, Charles W., West New Brighton, N. Y. Drum for hoisting or other purposes | 742,193 | Oct. 27 | 3519 | 785 | 106 | 2037 |
| Hunt, Cyrus D. (See Gifford, James N., assignor.) | | | | | | |
| Hunt, Edward J., assignor to Yost Electric Manufacturing Company, Toledo, Ohio. Rosette | 747,609 | Dec. 22 | 4227 | 950 | 107 | 2084 |
| Hunt, Frank Z., and H. J. Reiling, Elizabethtown, N. Mex. Ter. Dredge-bucket | 747,719 | Dec. 22 | 4436 | 1000 | 107 | 2130 |
| Hunt, Frederick E., Buckley, Wash. Game apparatus | 734,877 | July 28 | 4056 | 946 | 105 | 901 |
| Hunt, George W., assignor to G. W. Lockwood and H. W. Hunt, New York, N. Y. Dish-washer | 745,352 | Dec. 1 | 63 | 15 | 107 | 1114 |
| Hunt, Harriet W., *et al.* (See Hunt, George W., assignor.) | | | | | | |
| Hunt, Helm, Ferris & Company. (See Ferris, Henry L., assignor.) | | | | | | |
| Hunt, Helm, Ferris & Company. (See Ferris, Henry L. and H. J., assignors.) | | | | | | |
| Hunt, Henry M., Indianapolis, Ind. Striking-clock | 735,261 | Aug. 4 | 437 | 86, 87 | 105 | 1073 |
| Hunt, Henry S., assignor of one-half to W. F. Hunt, Newark, N. Y. Cream-separator | 738,807 | Sept. 15 | 2541 | 558 | 106 | 577 |
| Hunt, Homer L., Atlanta, Ga. Threshing-machine | 723,157 | Mar. 17 | 2783 | 628 | 103 | 619 |
| Hunt, James P., Maitland, Mo. Buckle | 722,511 | Mar. 10 | 1602 | 353 | 103 | 360 |
| Hunt, Josephine M. (See Prior, Matthew, assignor.) | | | | | | |
| Hunt, Lillian M., *et al.* (See Wheelock, Etta W., assignor.) | | | | | | |
| Hunt, Marion D., Roundgrove, Mo. Baling-press | 720,148 | Feb. 10 | 1357 | 310 | 102 | 1128 |
| Hunt, Olin E., Eureka, Kans. Automatic attachment for eaves-trough cut-offs | 740,436 | Oct. 6 | 103 | 22 | 106 | 1269 |
| Hunt, Oliver D., Columbus, Ohio. Switch-operating mechanism | 740,279 | Sept. 29 | 5264 | 1186 | 106 | 1189 |
| Hunt, Oliver D., Columbus, Ohio. Switch-operating mechanism | 747,885 | Dec. 22 | 4755 | 1075 | 107 | 2202 |
| Hunt, Oliver D., Columbus, Ohio. Switch-operating mechanism | 747,886 | Dec. 22 | 4757 | 1075 | 107 | 2203 |
| Hunt, Ozello R., assignor to Simmons Manufacturing Company, Kenosha, Wis. Leaf-support for articles of furniture | 733,046 | July 7 | 612 | 150 | 105 | 130 |
| Hunt, Ozello R., assignor to Simmons Manufacturing Company, Kenosha, Wis. Leaf-support for sofa-beds, &c. | 740,567 | Oct. 6 | 365 | 75 | 106 | 1325 |
| Hunt, Samuel M., Minneapolis, Minn. Folding egg-crate | 732,412 | June 30 | 5392 | 1195 | 104 | 2312 |
| Hunt, Samuel M., Minneapolis, Minn. Fire-escape | 747,720 | Dec. 22 | 4437 | 1001 | 107 | 2131 |
| Hunt, Sylvia W., *et al.* (See Wheelock, Etta W., assignor.) | | | | | | |
| Hunt, Warder D., Cincinnati, Ohio. Bed-bottom | 726,064 | Apr. 21 | 3012 | 685 | 103 | 1838 |
| Hunt, Warder D., Cincinnati, Ohio. Spring-bottom | 733,649 | July 14 | 1696 | 402 | 105 | 375 |
| Hunt, Warder D., Cincinnati, Ohio. Bed-bottom | 733,650 | July 14 | 1698 | 403 | 105 | 375 |
| Hunt, Wilbur L., Audubon, Minn. Portable sawmill | 726,165 | Apr. 21 | 3186 | 720<br>721 | 103 | 1874 |
| Hunt, William, Dayton, Ohio. Machine for sizing or assorting tobacco-leaves | 718,352 | Jan. 13 | 1546 | 342 | 102 | 346 |
| Hunt, William A., and R. W. Russell, Noblestown, Pa. Curtain-pole | 720,354 | Feb. 10 | 1746 | 396 | 102 | 1209 |
| Hunt, William F. (See Hunt, Henry S., assignor.) | | | | | | |
| Hunt, William S., Owosso, Mich. Steam-cooker | 718,629 | Jan. 20 | 2111 | 459 | 102 | 482 |
| Hunte, Joseph J. H., Charlton, assignor to Accumulator Industries, Limited, Woking, England. Making electric accumulator-plates | 724,012 | Mar. 31 | 4429 | | 103 | 986 |
| Hunter, David E., Cambridge, assignor to Library Bureau, Boston, Mass. Expansible filing system | 722,709 | Mar. 17 | 1991 | 443<br>444 | 103 | 456 |
| Hunter, David E., Cambridge, assignor to Library Bureau, Boston, Mass. Extension-drawer | 729,180 | May 26 | 4415 | 973 | 104 | 985 |
| Hunter, Frank F., Adrian, Mich. Mail-box | 733,651 | July 14 | 1700 | 403 | 105 | 376 |
| Hunter, George C., Chicago, Ill. Hoist | 723,277 | Mar. 24 | 3019 | 680 | 103 | 683 |
| Hunter, George E., Newark, N. J., assignor of one-half to M. S. Cornell and G. Dunn, New York, N. Y. Machine for paring curls of hat-brims | 737,933 | Sept. 1 | 751 | 164<br>165 | 106 | 165 |
| Hunter, George M. and R. M., Youngstown, Ohio. Spacing appliance for punching or analogous machines | 741,039 | Oct. 13 | 1199 | 271<br>272 | 106 | 1522 |
| Hunter, James, assignor of one-half to B. G. Major, Detroit, Mich. Spring-frame for bicycles | 724,871 | Apr. 7 | 846 | 195 | 103 | 1350 |
| Hunter, James P. (See Depp and Hunter.) | | | | | | |
| Hunter, John A., Bradford, Pa. Converting cast-iron into steel or malleable iron and the product so obtained | 719,117 | Jan. 27 | 3061 | | 102 | 692 |
| Hunter, John K., Owensboro, Ky. Foot-scraper attachment for vehicles | 721,044 | Feb. 17 | 3035 | 696 | 102 | 1494 |
| Hunter, John R., Wilkesbarre, Pa. Mine-timbering apparatus | 742,437 | Oct. 27 | 3972 | 891 | 106 | 2131 |
| Hunter, Laura G., Ewing, Ill. Plant-protector | 740,437 | Oct. 6 | 104 | 22 | 106 | 1269 |
| Hunter, Mark E., Allegheny, Pa. Handsaw-handle | 733,484 | July 14 | 1409 | 332 | 105 | 316 |
| Hunter, Mark E., Allegheny, Pa. Clamp for holding plate-glass | 737,109 | Aug. 25 | 3872 | 859 | 105 | 1858 |
| Hunter, Robert L., Cleveland, Ohio. Card-index | 718,630 | Jan. 20 | 2113 | 460 | 102 | 483 |
| Hunter, Robert L., assignor to American Signal and Power Co., Minneapolis, Minn. Fishing-reel | 728,717 | May 19 | 3579 | 795 | 104 | 799 |
| Hunter, Robert M. (See Hunter, George M. and R. M.) | | | | | | |
| Hunter, William C., Baltimore, Md. Combined index and indicator for account-books | 733,844 | July 14 | 2060 | 487 | 105 | 450 |
| Hunter, William J. (See Taylor and Hunter.) | | | | | | |
| Hunting, Arthur G. (See Bennett and Hunting.) | | | | | | |
| Huntington, Charles M. (See Hazard and Huntington.) | | | | | | |
| Huntington, Frank A. (See Nichols, Emory I., assignor.) | | | | | | |
| Huntington, George H., New York, N. Y. Adjustable indicating-dial for letter-boxes | 740,861 | Oct. 6 | 889 | 198<br>199 | 106 | 1435 |
| Huntington, George R., and T. A. Foque, Minneapolis, Minn. Rail-loader | 725,084 | Apr. 14 | 1241 | 279<br>280 | 103 | 1448 |
| Huntington, James H. (See Miller, John C., assignor.) | | | | | | |
| Huntington, John T. (See Page, Huntington, and Walls.) | | | | | | |
| Huntley Manufacturing Company. (See Carnochan, John W., assignor.) | | | | | | |
| Huntley, Stephen A., Sioux City, Iowa, assignor to E. and J. Spatz, J. G. and A. B. Conly. Automatic firearm | 747,073 | Dec. 15 | 3248 | 740 | 107 | 1850 |
| Hunton, Robert W., Newton, Mass. Knotter | 745,623 | Dec. 1 | 565 | 131<br>132 | 107 | 1218 |

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| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Huntoon, Charles F., assignor to Chicago Railway Equipment Company, Chicago, Ill. Bolster | 743,288 | Nov. 3 | 917 | 199 | 107 | 196 |
| Huntoon, Charles F., Chicago, Ill., and H. B. Robischung, Kalamazoo, Mich., assignors to Chicago Railway Equipment Company, Chicago, Ill. Trussed brake-beam | 721,564 | Feb. 24 | 4031 | 916 | 102 | 1721 |
| Huot, Emma M., Lewiston, Me. Powder-puff | 745,624 | Dec. 1 | 566 | 132 | 107 | 1218 |
| Hupchen, William, assignor of fifty one-hundredths to S. Mundheim, New York, N. Y. Heating, straining or filtering, and circulating liquids | 747,429 | Dec. 22 | 3906 | 879<br>880 | 107 | 2011 |
| Huppe & Bender. (See Herrmann, Rudolf, assignor.) | | | | | | |
| Hurck, John, St. Louis, Mo. Coaster bicycle-brake | 719,118 | Jan. 27 | 3062 | 680<br>681 | 102 | 692 |
| Hurd, Benjamin, Nutley, N. J. Game apparatus | 730,659 | June 9 | 2066 | 460 | 104 | 1571 |
| Hurd, Charles L., assignor of one-half to N. F. Smith, Chelsea, Mass. Coin-drawer for vending-machines | 723,776 | Mar. 24 | 3931 | 886<br>887 | 103 | 868 |
| Hurd, Charles L., assignor of one-half to N. F. Smith, Chelsea, Mass. Fortune-telling attachment | 724,392 | Mar. 31 | 5187 | 1163 | 103 | 1142 |
| Hurd, George H., Cleveland, Ohio, assignor to F. M. Richardson and J. F. Field, Chicago, Ill. Apparatus for administering anesthetics | 743,409 | Nov. 3 | 1199 | 248 | 107 | 256 |
| Hurd, Harvey C., Montevista, Colo. Trace-carrier | 746,839 | Dec. 15 | 2793 | 644 | 107 | 1744 |
| Hurd, Hobert J., assignor to Acme Oil Engine Co., Bridgeport, Conn. Explosive-engine | 718,933 | Jan. 20 | 2690 | 601<br>602 | 102 | 601 |
| Hurd, Hobert J., assignor to Acme Oil Engine Co., Bridgeport, Conn. Explosive-engine | 746,840 | Dec. 15 | 2794 | 644 | 107 | 1744 |
| Hurd, Judson B., Washington, D. C. Vending apparatus | 739,417 | Sept. 22 | 3656 | 813 | 106 | 830 |
| Hurd, Judson B., Brookland, D. C. Vending apparatus | 739,418 | Sept. 22 | 3658 | 813<br>814 | 106 | 830 |
| Hurd, Judson B., Brookland, D. C. Vending-machine | 741,667 | Oct. 20 | 2448 | 548<br>549 | 106 | 1803 |
| Hurd, Ralph W., Mason City, Iowa. Egg-case | 732,413 | June 30 | 5394 | 1195 | 104 | 2312 |
| Hurdel, Nellie F., New York, N. Y. Apparel | 726,299 | Apr. 28 | 3467 | 787 | 103 | 1947 |
| Hurdel, Nellie F., New York, N. Y. Hosiery | 726,300 | Apr. 28 | 3468 | 787 | 103 | 1947 |
| Hurlbert, Wm. G., *et al.* (See Holl, Gustav J., assignor.) | | | | | | |
| Hurlbut, Daniel N. (See Shore, Albert F., assignor.) | | | | | | |
| Hurley, John, Littlefalls, N. Y. Leather-stretching hook | 747,430 | Dec. 22 | 3909 | 880 | 107 | 2011 |
| Hurley, Robert E., Scranton, Pa. Track-laying apparatus | 732,080 | June 30 | 4731 | 1056<br>1057 | 104 | 2173 |
| Hurley, Timothy E., Butte, Mont. Crusher | 734,332 | July 21 | 3033 | 714 | 105 | 676 |
| Hurm, William H. (See Conboy, Philip J., assignor.) | | | | | | |
| Huron, Richard A., Cripplecreek, Colo. Railway-tie | 723,674 | Mar. 24 | 3747 | 841 | 103 | 828 |
| Hurrell, Albert C., Richmond, Ind. Corn-shelling implement | 740,657 | Oct. 6 | 511 | 112 | 106 | 1356 |
| Hurry, Edward H., Bethlehem, and H. J. Seaman, Catasauqua, Pa. Apparatus for handling stored pulverized or granular materials | 719,119 | Jan. 27 | 3065 | 681 | 102 | 693 |
| Hursen, Roy V. (See Edgerton and Hursen.) | | | | | | |
| Hurst, Carrie F., assignor of one-half to E. Whitlatch, Creston, Iowa. Garment-hanger | 736,969 | Aug. 25 | 3636 | 805 | 105 | 1809 |
| Hurst, David, Mansfield, Ohio. Mechanical stoker | 724,872 | Apr. 7 | 848 | 195 | 103 | 1356 |
| Hurst, Eugene D., Wahoo, Nebr. Threshing-machine | 741,136 | Oct. 13 | 1388 | 317 | 106 | 1562 |
| Hurst, Minola M., New York, N. Y. Illuminated Indian club | 744,348 | Nov. 17 | 3057 | 656 | 107 | 683 |
| Hurt, Isaac K. (See Ogle and Hurt.) | | | | | | |
| Hurwitz, Hermann, and A. Schapiro, Berlin, Germany. Petroleum blue burner | 731,459 | June 23 | 3569 | 795<br>796 | 104 | 1920 |
| Hurwitz, Joseph M. (See Seebold and Hurwitz.) | | | | | | |
| Huse, Leon C., *et al.* (See Huse, Warren D., assignor.) | | | | | | |
| Huse, Leon C., assignor of two-thirds to W. D. and W. L. Huse, Laconia, N. H. Knitting-machine | 728,465 | May 19 | 3110 | 688 | 104 | 700 |
| Huse, Walter L., *et al.* (See Huse, Leon C., assignor.) | | | | | | |
| Huse, Walter L., *et al.* (See Huse, Warren D., assignor.) | | | | | | |
| Huse, Warren D., *et al.* (See Huse, Leon C., assignor.) | | | | | | |
| Huse, Warren D., assignor of two-thirds to L. C. and W. L. Huse, Laconia, N. H. Friction pulley or wheel | 728,466 | May 19 | 3114 | 688 | 104 | 700 |
| Huseby, Albert A., Chicago, Ill. Piano | 721,706 | Mar. 3 | 100 | 21, 22 | 103 | 22 |
| Huskisson, Arthur R., Manchester, England. Casement | 718,844 | Jan. 20 | 2501 | 557 | 102 | 560 |
| Huson, John D., Plymouth, Wis. Windmill | 721,565 | Feb. 24 | 4035 | 916 | 102 | 1723 |
| Huson, Winfield S., assignor to Whitlock Printing Press Mfg. Co., Derby, Conn. Sheet-delivery mechanism for printing-presses | 720,355 | Feb. 10 | 1747 | 397 | 102 | 1209 |
| Huson, Winfield S., assignor to Whitlock Printing Press Mfg. Co., Derby, Conn. Bed-movement for printing-presses | 725,714 | Apr. 21 | 2411 | 547 | 103 | 1711 |
| Huss, Jacob. (See Miller, Emil F., assignor.) | | | | | | |
| Huss, Jacob B., Springvalley, Ill. Bicycle driving mechanism | 719,595 | Feb. 3 | 332 | 77 | 102 | 891 |
| Huss, Joseph C., and G. W. Schilling, Philadelphia, Pa. Electric recording system | 726,301 | Apr. 28 | 3470 | 787 | 103 | 1947 |
| Huss, Rudolph W., Chicago, Ill. Machine for filling bottles or the like | 718,711 | Jan. 20 | 2269 | 499 | 102 | 514 |
| Huss, Rudolph W., Chicago, Ill. Filling-machine | 720,588 | Feb. 17 | 2191 | 508 | 102 | 1315 |
| Huss, Rudolph W., Chicago, Ill. Incandescent gas-lamp | 739,314 | Sept. 22 | 3445 | 769 | 106 | 785 |
| Huss, William C., Cincinnati, Ohio. Show-case | 734,558 | July 28 | 3438 | 802 | 105 | 776 |
| Hussel, Andrew. (See Norcutt and Hussel.) | | | | | | |
| Hussey, Frank, Rochester, N. H. Garment-fastener | 747,721 | Dec. 22 | 4439 | 1001 | 107 | 2131 |
| Hussey, James H., Spokane, Wash. Mechanical movement | 735,518 | Aug. 4 | 931 | 197 | 105 | 1179 |
| Hussey, William P., Indianapolis, Ind. Steam-heater | 748,379 | Dec. 29 | 5690 | 1298 | 107 | 2428 |
| Hussey, William P., assignor to Standard Dry Kiln Company, Indianapolis, Ind. Lumber dry-kiln | 747,722 | Dec. 22 | 4440 | 1001<br>1002 | 107 | 2131 |
| Hussey, William P., assignor to Standard Dry Kiln Company, Indianapolis, Ind. Railway chair or stand | 748,504 | Dec. 29 | 5944 | 1348 | 107 | 2484 |
| Husson, Lawrence J., Norway, Mich. Miner's lamp | 744,686 | Nov. 17 | 3629 | 783 | 107 | 804 |
| Huston, Charles L., Coatesville, Pa. Rolling-mill | 722,022 | Mar. 3 | 685 | 151<br>152 | 103 | 148 |
| Huston, Howard, Smith Center, Kans. Attachment for baby-carriages | 723,777 | Mar. 24 | 3933 | 887 | 103 | 869 |
| Huston, Thurman R., Omaha, Nebr. Mop-wringer | 730,125 | June 2 | 1085 | 244 | 104 | 1348 |
| Huston, William J., and C. W. Smith, assignors to Keystone Type Foundry, Philadelphia, Pa. Type-finishing machine | 732,560 | June 30 | 5684 | 1262<br>1263 | 104 | 2373 |
| Hutcherson, James H., Brownwood, Tex. Planting attachment for cultivators | 721,306 | Feb. 24 | 3558 | 810 | 102 | 1623 |
| Hutcheson, Herman D., Newark, N. Y. Apparatus for blanching peas | 740,758 | Oct. 6 | 710 | 160 | 106 | 1398 |
| Hutchings, Charles E. (See Carlton and Hutchings.) | | | | | | |
| Hutchings, Charles E., assignor, by mesne assignments, to Rochester Optical Company, Rochester, N. Y. Camera-back | 741,668 | Oct. 20 | 2453 | 549 | 106 | 1805 |
| Hutchings, Charles E., and J. A. Robertson, assignors to Rochester Optical & Camera Co., Rochester, N. Y. Flat-form photographic-film package | 728,718 | May 19 | 3584 | 795<br>796 | 104 | 800 |
| Hutchings, Charles E., and J. A. Robertson, assignors to Rochester Optical & Camera Co., Rochester, N. Y. Adapter for containing a flat package of films | 728,719 | May 19 | 3587 | 796 | 104 | 800 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Hutchings, Charles H., assignor of two-thirds to P. W. Stanhope, Toronto, Canada. Machine for molding building-blocks or artificial stone | 730,212 | June 2 | 1228 | 274, 275 | 104 | 1377 |
| Hutchings, George B., Galveston, Tex. Dropper for medicines | 718,764 | Jan. 20 | 2378 | 526 | 102 | 536 |
| Hutchins, Abner B., assignor, by mesne assignments, to Enterprise Gas Stove Manufacturing Company, New York, N. Y. Oil-stove | 721,707 | Mar. 3 | 105 | 22 | 103 | 23 |
| Hutchins, Bion S. (See Tuttle, Josiah S., assignor.) | | | | | | |
| Hutchins, Charles N., Brookshire, Tex. Well-auger | 742,991 | Nov. 3 | 305 | 68 | 107 | 66 |
| Hutchins, Charles N., Brookshire, Tex. Pipe wrench or clamp | 746,705 | Dec. 15 | 2535 | 583 | 107 | 1686 |
| Hutchins, Francis E., Warren, Ohio. Instrument for measuring angles | 746,513 | Dec. 8 | 2176 | 500 | 107 | 1584 |
| Hutchins, George F., Worcester, Mass., assignor to Universal Safety Tread Company, Jersey City, N. J., and Providence, R. I. Rolling-machine for forming lips on treads, &c | 730,019 | June 2 | 913 | 204 | 104 | 1313 |
| Hutchins, George F., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Stop mechanism for needle-motions of looms | 733,207 | July 7 | 906 | 219 | 105 | 190 |
| Hutchins, George F., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Needle-motion for looms | 733,586 | July 14 | 1591 | 379 | 105 | 354 |
| Hutchins, George F., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Weft-detecting mechanism for looms | 743,166 | Nov. 3 | 668 | 145 | 107 | 140 |
| Hutchins, George F., Worcester, Mass., and J. B. Losey, Groton, N. Y., assignors to Universal Safety Tread Company, Jersey City, N. J. Bending-machine and die therefor | 733,967 | July 21 | 2313 | 544 | 105 | 520 |
| Hutchinson, Albert A., Winchester, Mass. Hide-working machine | 745,353 | Dec. 1 | 65 | 15, 16, 17 | 107 | 1114 |
| Hutchinson, Arthur H., assignor to Frick Company, Waynesboro, Pa. Skimming-regulator for ice-machines | 729,348 | May 26 | 4715 | 1042 | 104 | 1048 |
| Hutchinson, Arthur H., assignor to Frick Company, Waynesboro, Pa. Skimming-regulator for ice-machines | 729,349 | May 26 | 4717 | 1043 | 104 | 1049 |
| Hutchinson, Arthur H., assignor to Frick Company, Waynesboro, Pa. Brine-cooler | 736,852 | Aug. 18 | 3417 | 756 | 105 | 1742 |
| Hutchinson, Frank C., New York, N. Y. Automatic vending-machine | 733,395 | July 14 | 1256 | 297, 298 | 105 | 282 |
| Hutchinson, John B. (See Elliott, Thadious V., assignor.) | | | | | | |
| Hutchinson, Joseph. (See Frank and Hutchinson.) | | | | | | |
| Hutchinson, Joseph, New York, N. Y. Incandescent-gas-fixture fitting | 741,967 | Oct. 20 | 3051 | 681 | 106 | 1929 |
| Hutchinson, Joseph, New York, N. Y. Incandescent gas-burner | 743,510 | Nov. 10 | 1434 | 300 | 107 | 323 |
| Hutchinson, Joseph, New York, N. Y. Gas-burner | 744,919 | Nov. 24 | 4077 | 879 | 107 | 916 |
| Hutchinson, Joseph, assignor of one-half to A. T. Enos, New York, N. Y. Fixture for incandescent gas-lights | 720,433 | Feb. 10 | 1876 | 427 | 102 | 1236 |
| Hutchinson, Marvin J., *et al.* (See Wakefield, Nathen S., assignor.) | | | | | | |
| Hutchinson, Robert. (See Philpott and Hutchinson.) | | | | | | |
| Hutchinson, Robert M., Adrian, Mich. Piano-action | 732,188 | June 30 | 4958 | 1102, 1103 | 104 | 2221 |
| Hutchinson, Searcy T., and F. W. McNeir, San Antonio, Tex. Music-leaf turner | 731,186 | June 16 | 3045 | 677 | 104 | 1792 |
| Hutchinson, William F., Nyack, N. Y., assignor to J. E. Shaw, Finderne, N. J. Bottle | 729,071 | May 26 | 4225 | 934 | 104 | 946 |
| Hutchinson, William F., Nyack, assignor, by mesne assignments, to Security Match Company, Hudson, N. Y. Match-machine | 736,970 | Aug. 25 | 3637 | 805, 806 | 105 | 1809 |
| Hutchison Acoustic Company. (See Hutchison, Miller R., assignor.) | | | | | | |
| Hutchison, E. S., *et al.* (See McGuire, Peter J., assignor.) | | | | | | |
| Hutchison, G. H., *et al.* (See McGuire, Peter J., assignor.) | | | | | | |
| Hutchison, George H., East Las Vegas, N. Mex. Ter. Harness | 728,924 | May 26 | 3958 | 879, 880 | 104 | 891 |
| Hutchison, John, Jackson, Mich. Roller-bearing | 738,808 | Sept. 15 | 2542 | 559 | 106 | 577 |
| Hutchison, John, Jackson, Mich. Compression-coupling | 738,809 | Sept. 15 | 2543 | 559 | 106 | 577 |
| Hutchison, John W. (See Bumpus, Delos H., assignor.) | | | | | | |
| Hutchison, Joseph C. (See Williams, David S., assignor.) | | | | | | |
| Hutchison, Miller R., Norwood, N. J. Speed-indicator | 731,368 | June 16 | 3364 | 752 | 104 | 1858 |
| Hutchison, Miller R., New York, N. Y., assignor, by mesne assignments, to Hutchison Acoustic Company. Telephone | 718,204 | Jan. 13 | 1275 | 280 | 102 | 289 |
| Hutchison, Miller R., New York, N. Y., assignor, by mesne assignments, to Hutchison Acoustic Company. Telephone | 727,634 | May 12 | 1518 | 342 | 104 | 345 |
| Hutchison, Miller R., Upper Montclair, N. J., assignor, by mesne assignments, to Hutchison Acoustic Company. Electric battery | 718,205 | Jan. 13 | 1276 | 280 | 102 | 289 |
| Hutchison, Miller R., Upper Montclair, N. J., assignor, by mesne assignments, to Hutchison Acoustic Company. Telephonic apparatus | 737,242 | Aug. 25 | 4130 | 918 | 105 | 1912 |
| Hutchison, Miller R., Norwood, N. J., assignor to Hutchison Acoustic Company. Charging-switch | 735,384 | Aug. 4 | 652 | 138 | 105 | 1120 |
| Hutchison, Miller R., Norwood, N. J., assignor to Hutchison Acoustic Company. Electric battery | 746,514 | Dec. 8 | 2179 | 500 | 107 | 1584 |
| Hutchison, Robert, Prestwick, Scotland. Manufacturing composition for golf-balls, &c. | 730,126 | June 2 | 1087 | ------ | 104 | 1348 |
| Hutchison, Robert, Prestwick, Scotland. Golf-ball | 730,127 | June 2 | 1088 | ------ | 104 | 1349 |
| Hutchison, Robert W., Marcellus, Mich. Sash-lock | 742,030 | Oct. 20 | 3175 | 709 | 106 | 1954 |
| Hutchison, Vatchel A. (See Lee, Charles C., assignor.) | | | | | | |
| Huth, Georg, Delta, Ohio. Metallic roofing | 720,030 | Feb. 10 | 1139 | 260 | 102 | 1081 |
| Huth, Karl, Barnsdorf, assignor to Bronzefarbenwarke Aktiengesellschaft vormals Carl Schlenk, Roth, near Nuremberg, Bavaria, Germany. Manufacturing bronze-powder | 726,932 | May 5 | 188 | 44 | 104 | 42 |
| Huth, Peter. (See Orzig, Nickolaus, assignor.) | | | | | | |
| Hutsell, Ernest O., Athens, Tenn. Uncoupling device for cars | 735,262 | Aug. 4 | 446 | 88 | 105 | 1076 |
| Hutt, James W., *et al.* (See Moe, Theodore M., assignor.) | | | | | | |
| Huttinger, Henry A., Defiance, Ohio. Mold for troughs | 735,385 | Aug. 4 | 653 | 138 | 105 | 1120 |
| Hutton, Edward S., assignor of one-half to A. Woodward, Lapel, Ind. Glass-blowing machine | 742,662 | Oct. 27 | 4380 | 986, 987, 988 | 106 | 2218 |
| Hutton, James C., Jr., Waterloo, Oreg. Horseshoeing-stand | 740,019 | Sept. 29 | 4787 | 1076 | 106 | 1089 |
| Hutton, Romaine E., Sioux City, Iowa. Wheat steamer and heater | 735,878 | Aug. 11 | 1619 | 345 | 105 | 1345 |
| Hutton, Samuel T., Chicago, Ill. Circuit-breaker | 724,704 | Apr. 7 | 535 | 127 | 103 | 1283 |
| Hutton, William H. H., Jr., assignor to Detroit Photographic Company, Detroit, Mich. Card or picture mount | 739,315 | Sept. 22 | 3447 | 769 | 106 | 785 |
| Huxley, Charles E., Quincy, Ill. Valve | 743,511 | Nov. 10 | 1437 | 301 | 107 | 323 |
| Huxley, Charles I., assignor to American Cement Post Company, Athens, Mich. Fence-fastener | 735,263 | Aug. 4 | 448 | 88 | 105 | 1076 |
| Huxley, Floyde E., Rochester, N. Y. Vending-machine | 718,765 | Jan. 20 | 2379 | 527 | 102 | 536 |
| Huxley, John, Washington, Pa. Furnace-bottom | 728,578 | May 19 | 3334 | 737 | 104 | 747 |
| Huxley, Samuel, Pontypool, England. Annealing-furnace | 735,264 | Aug. 4 | 449 | 88, 89 | 105 | 1076 |
| Huyck, Francis P., Swanton, assignor of one-half to J. D. R. Lamson, Toledo, Ohio. Balanced rotary engine | 719,222 | Jan. 27 | 3235 | 722, 723 | 102 | 728 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|
| | | | Spec. | Dr'g. | Vol. | Page. |
| Huye, Joseph G., New Orleans, La. Faucet | 742,327 | Oct. 27 | 3780 | 847 | 106 | 2093 |
| Hyatt, John W., assignor of one-half to D. Blake, Newark, N. J. Massage instrument | 739,083 | Sept. 15 | 3019 | 669 | 106 | 678 |
| Hybarger, E. M., *et al.* (See Goode, Frank R., assignor.) | | | | | | |
| Hybinette, Noah V., Bayonne, N. J., assignor to International Nickel Company. Making nickel-iron alloys directly from ores | 736,400 | Aug. 18 | 2539 | ..... | 105 | 1560 |
| Hyde, Benjamin T. B. (See Paine, George H., assignor.) | | | | | | |
| Hyde, George T., Princeton, Canada. Neck-yoke | 720,696 | Feb. 17 | 2408 | 550 | 102 | 1359 |
| Hyde, James M., San Francisco, assignor to F. W. Braun and Company, Los Angeles, Cal. Scorifier-tongs | 739,419 | Sept. 22 | 3662 | 814 | 106 | 831 |
| Hyde, Jerome W. (See Davis, Isaac P., assignor.) | | | | | | |
| Hyde Manufacturing Company. (See La Croix, Joseph, assignor.) | | | | | | |
| Hyde, Sidney H., *et al.* (See Collins, Henry and C. W., assignors.) | | | | | | |
| Hyde, Theophilus R., Jr., assignor to Scovill Manufacturing Company, Waterbury, Conn. Stud | 739,677 | Sept. 22 | 4124 | 920 | 106 | 931 |
| Hydén, Sven, and K. A. Simonsson, Stockholm, Sweden. Apparatus for simultaneously filling a number of bottles | 718,206 | Jan. 13 | 1278 | 280<br>281 | 102 | 290 |
| Hydén, Sven, and K. A. Simonsson, Stockholm, Sweden. Apparatus for simultaneously corking a number of bottles | 721,803 | Mar. 3 | 262 | 58, 59 | 103 | 58 |
| Hydraulic Joint Syndicate. (See Pettit, Edward A., assignor.) | | | | | | |
| Hydraulic Valve and Regulator Company. (See Kuhlewind, Cornelius, assignor.) | | | | | | |
| Hydro-Carbon Smelting Company. (See Boss, Martin P., assignor.) | | | | | | |
| Hyer, Lincoln H., Warrensburg, assignor to J. W. Baker and N. S. Hyer, St. Louis, Mo. Lace-fastener | 742,992 | Nov. 3 | 306 | 69 | 107 | 66 |
| Hyer, Martin C. (See Bever, Alexander, assignor.) | | | | | | |
| Hyer, Nellie S., *et al.* (See Hyer, Lincoln H., assignor.) | | | | | | |
| Hygeia Vibratory Company. (See Casper, Louis, assignor.) | | | | | | |
| Hygienic Wheel Company. (See Travis, Charles L., assignor.) | | | | | | |
| Hyke, Jeread N., Sherman, N. Y. Automatic railway-crossing-gate mechanism | 722,845 | Mar. 17 | 2241 | 502 | 103 | 506 |
| Hyland, Edwin C., Milwaukee, Wis. Trousers-hanger | 739,260 | Sept. 15 | 3345 | 742 | 106 | 747 |
| Hylander, Hjalmar, Baltimore, Md. Floating dock | 736,732 | Aug. 18 | 3182 | 702<br>703 | 105 | 1692 |
| Hylard, John, St. Kilda, Victoria, Australia, assignor of five-eighths to E. G. H. Bingham, Broomwood, Seven Oaks, county of Kent, England. Magazine-gun | 718,055 | Jan. 6 | 996 | 222<br>223 | 102 | 215 |
| Hyle, Jacob A., assignor of one-half to G. F. Arney, Altoona, Pa. Combination-tray for holding cigars | 721,566 | Feb. 24 | 4036 | 917 | 102 | 1723 |
| Hylton-Bravo, Stephen J., Hawthorne, Victoria, Australia. Electrical rotary portable machine for cutting sugar-cane, &c | 733,587 | July 14 | 1594 | 379 | 105 | 355 |
| Hyman, David W., and C. D. Orcutt, assignors to Orient Mfg. Co., Dayton, Ohio. Upholstering-machine | 721,804 | Mar. 3 | 265 | 59 | 103 | 59 |
| Hynding, Jesse J., Ferndale, Cal. Gate-latch | 733,208 | July 7 | 907 | 219 | 105 | 190 |
| Hynes, William J., Utica, N. Y. Switch-operating mechanism | 738,195 | Sept. 8 | 1301 | 282 | 106 | 297 |
| Hysore, Alphenas V., Philadelphia, Pa. Hoisting apparatus | 724,579 | Apr. 7 | 301 | 74 | 103 | 1233 |
| I. B. Kleinert Rubber Company. (See Guinzburg, Victor, assignor.) | | | | | | |
| Icecubator Company. (See Duncan, Joseph S., assignor.) | | | | | | |
| Ichthyol-Gesellschaft Cordes, Hermanni & Co. (See Dunbar, William P., assignor.) | | | | | | |
| Ichthyol Gesellschaft Cordes, Hermanni & Co. (See Helmers, Ludwig O., assignor.) | | | | | | |
| Ickes, Walter N., Center, Colo. Tea-kettle cover | 717,685 | Jan. 6 | 293 | 73 | 102 | 63 |
| Ide & Co., George P. (See Ide, James M., assignor.) | | | | | | |
| Ide, James M., assignor to G. P. Ide & Co., Troy, N. Y. Shirt-waist | 731,369 | June 16 | 3365 | 752 | 104 | 1859 |
| Ideal Cash Register Company. (See Giles, Harvey, assignor.) | | | | | | |
| Ideal Cash Register Company. (See Pfaff, Albert, assignor.) | | | | | | |
| Ideal Cash Register Company. (See Smith and Giles, assignors.) | | | | | | |
| Ideal Fuel Feeder Company. (See Baldwin, Van Zandt, and Day, assignors.) | | | | | | |
| Ideal Holster Company. (See Phillips, Ross M. G., assignor.) | | | | | | |
| Ideal Journal Lubricator Company. (See Smith, James G., assignor.) | | | | | | |
| Ideal Manufacturing Company. (See Taylor, William, assignor.) | | | | | | |
| Ideal Opening Die Company. (See Mullaney, John J., assignor.) | | | | | | |
| Ielfield, Fred C., Silvercreek, N. Y. Corn-husking machine | 718,462 | Jan. 13 | 1757 | 390<br>391 | 102 | 390 |
| Ievers, Eyre F. (See Pearse and Ievers.) | | | | | | |
| Igel, Henry, Newcastle-upon-Tyne, England. Rotary engine | 722,710 | Mar. 17 | 1993 | 444<br>445 | 103 | 457 |
| Igelmann, Charles F., Indianapolis, Ind. Baker's oven | 717,858 | Jan. 6 | 659 | 146 | 102 | 140 |
| Igelmann, Charles F., Indianapolis, Ind. Baker's oven | 742,663 | Oct. 27 | 4385 | 988<br>989 | 106 | 2220 |
| Igelmann, Charles F., Indianapolis, Ind. Baker's reel-oven | 742,664 | Oct. 27 | 4388 | 989<br>990 | 106 | 2220 |
| Igelmann, Charles F., Indianapolis, Ind. Baker's oven | 747,887 | Dec. 22 | 4759 | 1075<br>1076 | 107 | 2204 |
| Igou, Albert L., Cleveland, Ohio. Car-fender | 727,953 | May 12 | 2147 | 479 | 104 | 476 |
| Ihart, John P., assignor of one-half to A. H. Elliott, New York, N. Y. Water-heater | 733,209 | July 7 | 909 | 219 | 105 | 190 |
| Ihlder, John D., Yonkers, N. Y., assignor to Otis Elevator Company, East Orange, N. J. Electrical control of elevators | 726,302 | Apr. 28 | 3472 | 787<br>788 | 103 | 1948 |
| Ihlder, John D., Yonkers, N. Y., assignor to Otis Elevator Company, East Orange, N. J. Motor-controlling apparatus | 726,303 | Apr. 28 | 3478 | 788 | 103 | 1949 |
| Ihlder, John D., Yonkers, N. Y., assignor to Otis Elevator Company, East Orange, N. J. Electric switch | 732,745 | July 7 | 83 | 23, 24 | 105 | 21 |
| Ihlder, John D., Yonkers, N. Y., assignor to Otis Elevator Company, East Orange, N. J. Motor control | 734,178 | July 21 | 2735 | 643 | 105 | 611 |
| Ihlder, John D., Yonkers, N. Y., assignor to Otis Elevator Company, East Orange, N. J. Motor control | 741,796 | Oct. 20 | 2709 | 604 | 106 | 1858 |
| Ihlder, John D., Yonkers, N. Y., assignor to Otis Elevator Company, East Orange, N. J. Electrical controlling apparatus | 742,031 | Oct. 20 | 3177 | 709 | 106 | 1954 |
| Ihlder, John D., Yonkers, N. Y., assignor to Otis Elevator Company, Orange, N. J. Means for controlling electric motors | 735,386 | Aug. 4 | 654 | 139<br>140 | 105 | 1120 |
| Ihrig, Ernest C., *et al.* (See Kurtis and Miller, assignors.) | | | | | | |
| Ihrig, George J., *et al.* (See Kurtis and Miller, assignors.) | | | | | | |
| Ikemori, Tetsutaro, New York, N. Y. Illuminated map | 740,280 | Sept. 29 | 5267 | 1187 | 106 | 1190 |
| Iler, Franklin M., Marion, Ohio. Pneumatic hammer | 727,954 | May 12 | 2149 | 479 | 104 | 476 |
| Ilg, Emile, Brooklyn, N. Y. Sewing-machine | 723,278 | Mar. 24 | 3022 | 680 | 103 | 683 |
| Ilgner, Carl, Breslau, Germany. Means for the control of electrical driving of reversible rolling-mills | 733,485 | July 14 | 1410 | 332 | 105 | 316 |
| Illés, Francis, Budapest, Austria-Hungary. Stopper for bottles for aerated waters or other liquids under pressure | 746,841 | Dec. 15 | 2796 | 644 | 107 | 1745 |

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| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page |
|---|---|---|---|---|---|---|
| Illingworth, Albert H., Bradford, England. Apparatus for doffing in cap-spinning machines | 745,188 | Nov. 24 | 4642 | 1008, 1009, 1010, 1011 | 107 | 1033 |
| Illinois Electric Specialty Company. (See Rugh, Harry O., assignor.) | | | | | | |
| Illinois Malleable Iron Company. (See Colton, Arthur D., assignor.) | | | | | | |
| Illinois Malleable Iron Company. (See Nelson, John, assignor.) | | | | | | |
| Illinois Safe and Lock Co. (See Dodson, Joseph H., assignor.) | | | | | | |
| Illinois Steel Company. (See Sheldon, Samuel B., assignor.) | | | | | | |
| Illuminating Engineering Company. (See Elliott, Elias L., assignor.) | | | | | | |
| Imhoff, Paul, assignor to United Alkali Company, Limited, Liverpool, England. Secondary electrode for electrolytic apparatus | 722,583 | Mar. 10 | 1727 | 384 | 103 | 386 |
| Imlay, Edward H., assignor of one-half to A. I. Hewitt, Minneapolis, Minn. Nail | 718,934 | Jan. 20 | 2692 | 602 | 102 | 602 |
| Immell, Omer F., Blair, Wis. Shutter-fastener | 724,013 | Mar. 31 | 4430 | 995 | 103 | 986 |
| Immell, Omer F., Blair, Wis. Latch | 745,189 | Nov. 24 | 4646 | 1011 | 107 | 1033 |
| Imperial Bottle Cap and Machine Company. (See Abbott and Marks, assignors.) | | | | | | |
| Imperial Pneumatic Tool Company. (See Peck, Caid H., assignor.) | | | | | | |
| Imperial Pneumatic Tool Company. (See Peck, Clarence W., assignor.) | | | | | | |
| Imperial Press Company. (See Prouty, George W., assignor.) | | | | | | |
| Imperial Skirt Company. (See Camp, Samuel H., assignor.) | | | | | | |
| Imperial Stand Company. (See Widmer, Charles J., assignor.) | | | | | | |
| Implement Manufacturing Company. (See Tinsman, Samuel H., assignor.) | | | | | | |
| Improved Electric Glow Lamp Company. (See Harrison, Haydn T., assignor.) | | | | | | |
| Improved Paper Machinery Company. (See Parker, Howard, assignor.) | | | | | | |
| Improvements Manufacturing Company. (See Allen, Frederick E., assignor.) | | | | | | |
| Imrie, John. (See Burnett, George M., assignor.) | | | | | | |
| Inden, Francis W. and G. N., St. Paul, Minn. Barrel-filler | 734,231 | July 21 | 2831 | 664 | 105 | 633 |
| Inden, Gottfried N. (See Inden, Francis W. and G. N.) | | | | | | |
| Independent Manufacturing Company. (See Boss, Thomas H., assignor.) | | | | | | |
| Independent Manufacturing Company. (See Comstock, Asa M., assignor.) | | | | | | |
| Indian Head Plantations. (See Hayes, William J., assignor.) | | | | | | |
| Indiana Burial Vault Company. (See Van Camp, Benjamin F., assignor.) | | | | | | |
| Indiana Development Company. (See Steel, Harry L., assignor.) | | | | | | |
| Indiana Manufacturing Company. (See Leonard, Charles N., assignor.) | | | | | | |
| Indiana Manufacturing Company. (See Robby and Rumely, assignors.) | | | | | | |
| Indiana Manufacturing Company. (See Sharpe, Joseph K., Jr., assignor.) | | | | | | |
| Indiana Manufacturing Company. (See Smith, Harry W. and M. F., assignors.) | | | | | | |
| Indiana Manufacturing Company. (See Stallard, Francis L., assignor.) | | | | | | |
| Indianapolis Galvinized Wash Board Manufacturing Company. (See Zemelman, Meyer, assignor.) | | | | | | |
| Industrial Manufacturing Company. (See Malsch, Frank, assignor.) | | | | | | |
| Ingalls, Allen G., Montreal, Canada. Attachment for furnaces, &c | 735,772 | Aug. 11 | 1404 | 302 | 105 | 1297 |
| Ingalls, Allen G., Montreal, Canada. Device for producing and consuming hydrogenic fuel | 740,759 | Oct. 6 | 714 | 161 | 106 | 1398 |
| Ingalls, Charles H., Danvers, Mass., assignor to General Electric Company. Commutator | 744,077 | Nov. 17 | 2537 | 543 | 107 | 570 |
| Ingalls, Walter R. (See Ferraris, Erminio, assignor.) | | | | | | |
| Ingals, Chauncey E., and A. V. Jackson, West Berkeley, Cal. Machine for making tubular shells | 724,104 | Mar. 31 | 4585 | 1032, 1033 | 103 | 1019 |
| Ingard, Christian J., Port Townsend, Wash. Apparatus for loading vessels | 743,167 | Nov. 3 | 672 | 145, 146 | 107 | 140 |
| Ingersoll-Sergeant Drill Company. (See Sergeant, Henry C., assignor.) | | | | | | |
| Ingersoll-Sergeant Drill Company. (See Sergeant and Raymond, assignors.) | | | | | | |
| Inggoldsby, James H., Council Bluffs, Iowa. Driving apparatus | 722,985 | Mar. 17 | 2471 | 555, 556 | 103 | 554 |
| Ingham, James, J. Poulson, and J. W. Moore, assignors to Warren Foundry and Machine Company, Phillipsburg, N. J. Machine for making pipe-molds | 718,254 | Jan. 13 | 1356 | 301 | 102 | 307 |
| Ingle, George S., Indianapolis, Ind. Shaking-screen | 719,805 | Feb. 3 | 719 | 169 | 102 | 975 |
| Ingle, George S., deceased, Indianapolis, Ind.; H. Wells, administrator. Driving-cable | 734,068 | July 21 | 2525 | 589 | 105 | 568 |
| Ingle, George S., deceased, Indianapolis, Ind.; H. Wells, administrator. Driving-belt | 738,684 | Sept. 8 | 2284 | 502, 503 | 106 | 504 |
| Ingle, John W., Mattoon, Ill. Disk harrow | 745,727 | Dec. 1 | 742 | 170 | 107 | 1256 |
| Ingleby, John, Leeds, England. Continuous traveling table | 720,149 | Feb. 10 | 1358 | 310, 311 | 102 | 1128 |
| Ingleby, John, Leeds, England. Continuous press | 720,150 | Feb. 10 | 1360 | 311 | 102 | 1129 |
| Inglis, Maxwell S., *et al.* (See Maloney, William, assignor.) | | | | | | |
| Inglis, Maxwell S., *et al.* (See Maloney and Doré, assignors.) | | | | | | |
| Inglis, Maxwell S., *et al.*, trustees. (See Maloney and Doré, assignors.) | | | | | | |
| Ingold, Carl F., New Haven, Conn. Eyeglasses | 730,459 | June 9 | 1717 | 384 | 104 | 1495 |
| Ingoldsby Automatic Car Company. (See Bowling, Joseph R., assignor.) | | | | | | |
| Ingoldsby Automatic Car Company. (See Ingoldsby, Frank S., assignor.) | | | | | | |
| Ingoldsby Automatic Car Company. (See Ingoldsby and Bowling, assignors.) | | | | | | |
| Ingoldsby Automatic Car Company. (See Lombard and Bowling, assignors.) | | | | | | |
| Ingoldsby, Frank S., St. Louis, Mo. Extension-top for car-bodies | 720,923 | Feb. 17 | 2800 | 642 | 102 | 1442 |
| Ingoldsby, Frank S., assignor to Ingoldsby Automatic Car Company, St. Louis, Mo. Dump-car | 720,031 | Feb. 10 | 1140 | 260, 261, 262 | 102 | 1081 |
| Ingoldsby, Frank S., assignor to Ingoldsby Automatic Car Company, St. Louis, Mo. Dump-car | 728,467 | May 19 | 3116 | 689 | 104 | 701 |
| Ingoldsby, Frank S., and J. R. Bowling, assignors to Ingoldsby Automatic Car Company, St. Louis, Mo. Dump-car | 744,201 | Nov. 17 | 2789 | 595, 556 | 107 | 623 |
| Ingoldsby, Frank S., and J. R. Bowling, assignors to Ingoldsby Automatic Car Company, St. Louis, Mo. Dump-car | 747,431 | Dec. 22 | 3910 | 880, 881 | 107 | 2012 |
| Ingraham, Henry C., New Haven, Conn. Propeller | 745,853 | Dec. 1 | 998 | 225 | 107 | 1312 |
| Ingram, Frederick F., Detroit, Mich. Machine for printing collapsible tubes | 744,554 | Nov. 17 | 3418 | 736 | 107 | 759 |
| Ingram, Frederick W. (See Rofe, John C. W., assignor.) | | | | | | |
| Ingram, James J., Bracken County, assignor of one-half to S. D. Rigdon, Germantown, Ky. Animal-yoke | 744,349 | Nov. 17 | 3059 | 657 | 107 | 683 |
| Ingram, John, *et al.* (See Ellis, William T. G., assignor.) | | | | | | |
| Ingram, John, Chicago, Ill. Roof | 720,811 | Feb. 17 | 2589 | 597 | 102 | 1397 |
| Ingram, Nathan D., New York, and F. H. Wyant, Brooklyn, N. Y. Puzzle | 727,800 | May 12 | 1862 | 414 | 104 | 415 |
| Ingram, Thomas D., Washington, D. C. Massage-machine | 718,766 | Jan. 20 | 2380 | 527, 528 | 102 | 536 |
| Ingram, Thomas D., Washington, D. C. Massage-machine | 732,414 | June 30 | 5395 | 1195, 1196 | 104 | 2312 |
| Inman, Edward R. (See James and Inman.) | | | | | | |
| Inman, Ham, Keokuk, Iowa. Refrigerator | 718,767 | Jan. 20 | 2383 | 528 | 102 | 537 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | Spec. | Dr'g. | Vol. | Page. |
| Innes, Robert W., Omaha, Nebr. Coasting shoe attachment | 745,442 | Dec. 1 | 246 | 57 | 107 | 1152 |
| Insley, John W. P., Bivalve, Md. Apparatus for cleansing crab-shells | 732,637 | June 30 | 5821 | 1290 | 104 | 2404 |
| Insull, Samuel. (See Ball, Henry P., assignor.) | | | | | | |
| Insull, Samuel. (See Utley and Clements, assignors.) | | | | | | |
| Interborough Rapid Transit Company. (See Gibbs and Pearson, assignors.) | | | | | | |
| Interlocking Fence Company. (See Claudin, John L., assignor.) | | | | | | |
| International Air Brake Company. (See Shortt, Edward G., assignor.) | | | | | | |
| International Air Brake Company. (See Shortt, Edward G. and H. G., assignors.) | | | | | | |
| International Burglar Immunity Company. (See Weatherby, Joseph, Jr., assignor.) | | | | | | |
| International Burglar Proof Sash Balance and Lock Company. (See Rathbun and Lonergan, assignors.) | | | | | | |
| International Cement Company. (See Wuth, William A. O., assignor.) | | | | | | |
| International Contracting Company. (See Coffey, Barton H., assignor.) | | | | | | |
| International Cooling Company. (See Starr, John E., assignor.) | | | | | | |
| International Electric Controller Company. (See Cardwell, George A., assignor.) | | | | | | |
| International Fire Engine Company. (See Steck, Ernst F., assignor.) | | | | | | |
| International Fuel Company. (See Köneman, William A., assignor.) | | | | | | |
| International Harvester Co. (See Birkett, Edward J., assignor.) | | | | | | |
| International Harvester Co. (See Crandall, Henry F., assignor.) | | | | | | |
| International Harvester Company. (See Appleby, John F., assignor.) | | | | | | |
| International Harvester Company. (See Barker and Corl, assignors.) | | | | | | |
| International Harvester Company. (See Benjamin, Bert R., assignor.) | | | | | | |
| International Harvester Company. (See Burgess, Edward W., assignor.) | | | | | | |
| International Harvester Company. (See Curtiss, Charles E., assignor.) | | | | | | |
| International Harvester Company. (See Ellithorp, Orren S., assignor.) | | | | | | |
| International Harvester Company. (See Johnston, Edward A., assignor.) | | | | | | |
| International Harvester Company. (See Latimer, John W., assignor.) | | | | | | |
| International Harvester Company. (See Macphail, James, assignor.) | | | | | | |
| International Harvester Company. (See Nilson, Nils, assignor.) | | | | | | |
| International Harvester Company. (See Phillips, Darius T., assignor.) | | | | | | |
| International Harvester Company. (See Pridmore, John W., assignor.) | | | | | | |
| International Harvester Company. (See Pridmore and Barker, assignors.) | | | | | | |
| International Harvester Company. (See Pridmore and Benjamin, assignors.) | | | | | | |
| International Harvester Company. (See Rand, Charles A. A., assignor.) | | | | | | |
| International Harvester Company. (See Steward, John F., assignor.) | | | | | | |
| International Harvester Company. (See Webber, William, assignor.) | | | | | | |
| International Harvester Company. (See Witte, Gustav W., assignor.) | | | | | | |
| International Machinery Company. (See Hess, Wendell, Jr., assignor.) | | | | | | |
| International Manufacturing Co. (See Martin, James W., assignor.) | | | | | | |
| International Manufacturing Company. (See Loree, Perry E., assignor.) | | | | | | |
| International Motor Company. (See Loker, Edwin, assignor.) | | | | | | |
| International Motor Company. (See Mulherin, Herbert H., assignor.) | | | | | | |
| International Nickel Company. (See Hybinette, Noah V., assignor.) | | | | | | |
| International Novelty Manufacturing Company. (See Field, Jacob W., assignor.) | | | | | | |
| International Oxy-Generator Syndicate. (See Rosenberg, Augustus, assignor.) | | | | | | |
| International Phonograph and Indestructible Record Company. (See Petit, Ademor N., assignor.) | | | | | | |
| International Power Vehicle Company. (See Remington, Wolcott, assignor.) | | | | | | |
| International Power Vehicle Company. (See Underwood, Herbert G., assignor.) | | | | | | |
| International Shirt & Collar Co. (See Hess, Wendell, Jr., assignor.) | | | | | | |
| International Silver Co. (See Decherd, Constant K., assignor.) | | | | | | |
| International Sprinkler Company. (See Evans, Powell, assignor.) | | | | | | |
| International Telephone Manufacturing Company. (See McCormick, William E., assignor.) | | | | | | |
| International Text Book Company. (See Petri-Palmedo, David, assignor.) | | | | | | |
| International Tide Power Company. (See Smetana, Henry, assignor.) | | | | | | |
| International Time Recording Co. (See Graham, Charles W., assignor.) | | | | | | |
| International Time Recording Company. (See Peterson, Eric, assignor.) | | | | | | |
| International Trolley Controller Company. (See Kynoch, James, assignor.) | | | | | | |
| Interseal Company. (See Dorman, William S., assignor.) | | | | | | |
| Interstate Drainage and Investment Company. (See Rood, Edwin O. and C. W., assignors.) | | | | | | |
| Interstate Electric and Manufacturing Company. (See Hulsart, Randolph, assignor.) | | | | | | |
| Interstate Electric and Manufacturing Company. (See Lane, George M., assignor.) | | | | | | |
| Intze, Otto, Aix-la-Chapelle, Germany. Annular tank for liquids | 720,924 | Feb. 17 | 2801 | 642 | 102 | 1442 |
| Invention Developing Company. (See Gill, Edwin R., assignor.) | | | | | | |
| Invention Promotion Company. (See Ostrander, Willis H., assignor.) | | | | | | |
| Invisible Suspender Company. (See Clarke, Richard T., assignor.) | | | | | | |
| Ireland, Robert, New York, N. Y. Game apparatus | 718,353 | Jan. 13 | 1548 | 342 | 102 | 347 |
| Irens, Louis. (See Levy and Irens.) | | | | | | |
| Irish, James W., Richland Center, Wis. Carbon copying apparatus | 731,187 | June 16 | 3048 | 677 | 104 | 1792 |
| Irish, William F., East Orange, N. J. Hanger or support for pipes or other articles | 738,196 | Sept. 8 | 1302 | 282 | 106 | 297 |
| Irland, David H., Chicago, Ill. Wrench | 732,858 | July 7 | 290 | 73 | 105 | 64 |
| Irland, David H., Chicago, Ill. Pipe-wrench | 739,316 | Sept. 22 | 3448 | 769 | 106 | 785 |
| Irlbacher, Michael J., Pittsburg, Pa. Attachment for oil-cans | 735,519 | Aug. 4 | 933 | 198 | 105 | 1179 |
| Iron Clad Manufacturing Company. (See Seaman, Elizabeth C., assignor.) | | | | | | |
| Irons, Annie, Attleboro, Mass. Purse or the like | 726,166 | Apr. 21 | 3188 | 721 | 103 | 1874 |
| Iroquois Machine Company. (See Horton, James A., assignor.) | | | | | | |
| Iroquois Machine Company. (See Reid, Marcellus, assignor.) | | | | | | |
| Irvin, Archibald L., Meadville, Pa. Device for delivering articles to moving trains | 746,515 | Dec. 8 | 2181 | 500 | 107 | 1584 |
| Irvin, Edwin S., and F. B. Jackson, Oakland, assignors to Reliable Non-Refillable Bottle Company, San Francisco, Cal. Non-refillable bottle | 746,842 | Dec. 15 | 2797 | 644 | 107 | 1745 |
| Irvin, Walter J. (See Moore and Irvin.) | | | | | | |
| Irvine, Frank C., assignor of one-half to Coffin's Box & Lumber Company, Minneapolis, Minn. Machine for making box-shooks | 738,197 | Sept. 8 | 1304 | 282<br>283<br>284 | 106 | 298 |
| Irvine, Frederick G., and J. B. Braden, Salem, W. Va. Apparatus for removing drill-tools from wells | 730,460 | June 9 | 1718 | 384 | 104 | 1496 |
| Irvine, John J., assignor of one-fourth to C. Boxter, Pittsburg, Pa. Manhole-cover | 737,934 | Sept. 1 | 754 | 165 | 106 | 166 |
| Irving, Ernest C., assignor of one-half to J. P. O'Donnell, Westminster, England. Pneumatic railway signaling apparatus | 747,432 | Dec. 22 | 3913 | 881 | 107 | 2013 |
| Irving, Joseph M., assignor of one-half to W. A. Knipe, Haverhill, Mass. Cementing attachment for heeling-machines | 737,243 | Aug. 25 | 4131 | 918<br>919 | 105 | 1912 |
| Irving, William, Chicago, Ill. Steam-condenser | 719,671 | Feb. 3 | 458 | 104 | 102 | 918 |
| Irving, William, Chicago, Ill. Feed-water heater | 730,660 | June 9 | 2067 | 460 | 104 | 1571 |
| Irwin, Herbert E., Galesburg, assignor to Irwin Rubber Company, Chicago, Ill. Detachable tire | 735,265 | Aug. 4 | 450 | 89 | 105 | 1077 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | Spec. | Drgs. | Vol. | Page. |
| Irwin, Herbert E., Galesburg, assignor to Irwin Rubber Company, Chicago, Ill. Detachable tire | 745,443 | Dec. 1 | 247 | 57 | 107 | 1152 |
| Irwin, Robert W., *et al.* (See Howard, John P., assignor.) | | | | | | |
| Irwin Rubber Company. (See Irwin, Herbert E., assignor.) | | | | | | |
| Irwin, Samuel C., and A. M. Bowman, Bellevue, Pa. Movable dam | 735,387 | Aug. 4 | 660 | 140<br>141 | 105 | 1121 |
| Isaacson, John, and E. Evans, Topeka, Kans. Grain-door | 730,461 | June 9 | 1722 | 384<br>385 | 104 | 1497 |
| Isbell, George A. (See Andrews, Isbell, and Martin.) | | | | | | |
| Isbell, John F., assignor of one-half to O. Q. Beckworth and J. N. Isgrig, Denver, Colo. Hydraulic classifier or sizer | 729,764 | June 2 | 446 | 101 | 104 | 1218 |
| Ische, August L. (See Ische, Hubert A. and A. L.) | | | | | | |
| Ische, Hubert A. and A. L., Milwaukee, Wis. Catamenial appliance | 743,877 | Nov. 10 | 2099 | 448 | 107 | 463 |
| Iscovesco, Henri, Paris, assignor to Société Francaise pour la Conservation des Beurres, Boulogne, Seine, France. Refining and preserving butter | 726,065 | Apr. 21 | 3015 | 685 | 103 | 1838 |
| Isgrig, John N., *et al.* (See Isbell, John F., assignor.) | | | | | | |
| Isham, Francis N., Avon, N. Y. Grain and fertilizer drill | 722,407 | Mar. 10 | 1394 | 307<br>308 | 103 | 313 |
| Isham, William S., assignor of two-thirds to J. N. Dolly and H. R. Williams, Maplehill, Kans. Mail-delivery box | 734,266 | July 21 | 2902 | 679 | 105 | 649 |
| Isherwood, Oswald, near Manchester, England. Metallic packing mechanism | 734,559 | July 28 | 3438 | 802 | 105 | 776 |
| Isidor, Joseph S., Newark, N. J. Trunk-fastener | 745,061 | Nov. 24 | 4366 | 943 | 107 | 976 |
| Isler, Herman R., Hamilton, Ohio. Reversing mechanism for drill-presses | 727,142 | May 5 | 619 | 133 | 104 | 134 |
| Isler, Max H., Mannheim, assignor to Badische Anilin & Soda Fabrik, Ludwigshafen-on-the-Rhine, Bavaria, Germany. Anthracene dye and making same | 738,614 | Sept. 8 | 2132 | ..... | 106 | 474 |
| Israel, Adolf, and O. Dressel, Elberfeld, Germany, assignors to Farbenfabriken of Elberfeld Co., New York, N. Y. Bluish-violet azo dye | 731,460 | June 23 | 3570 | ..... | 104 | 1920 |
| Israel, Adolf, and R. Kothe, Elberfeld, Germany, assignors to Farbenfabriken of Elberfeld Co., New York, N. Y. Trisazo dye | 748,076 | Dec. 29 | 5162 | ..... | 107 | 2313 |
| Israel, William, Wilkesbarre, Pa. Lamp bracket or holder for miners' lamps | 740,862 | Oct. 6 | 891 | 199 | 106 | 1436 |
| Issmayer, Johann A. (See Sollmann and Issmayer.) | | | | | | |
| Ivanoff, Alexandre, Charkoff, Russia. Wedge or splitting-tool for coal-mining or other purposes | 735,520 | Aug. 4 | 934 | 198 | 105 | 1180 |
| Ivery, John W., Dillsbury, assignor to G. Hersh, York, Pa. Reflector-brick | 741,497 | Oct. 13 | 2121 | 473 | 106 | 1719 |
| Ives, Baron E., Owatonna, Minn. Support for nursing-bottles | 747,973 | Dec. 29 | 4957 | 1119 | 107 | 2268 |
| Ives, Elizabeth H., Meadville, Pa. Instructive game | 739,678 | Sept. 22 | 4125 | 920 | 106 | 931 |
| Ives, Frederic E., Philadelphia, Pa. Trichromatic-process transparency | 725,566 | Apr. 14 | 2120 | 480 | 103 | 1634 |
| Ives, Frederic E., Philadelphia, Pa. Parallax stereogram and making same | 725,567 | Apr. 14 | 2121 | 481 | 103 | 1634 |
| Ives, Frederic E., Philadelphia, Pa. Binocular microscope | 739,182 | Sept. 15 | 3195 | 707 | 106 | 714 |
| Ives, Harry C., assignor to Ives Manufacturing Corporation, Bridgeport, Conn. Toy locomotive | 729,765 | June 2 | 447 | 101 | 104 | 1219 |
| Ives Manufacturing Corporation. (See Ives, Harry C., assignor.) | | | | | | |
| Ives, William G. (See Nisbett, Ives, and Nicoll.) | | | | | | |
| Ivett, Daniel R., Whitebear, Minn. Condensing-locomotive | 730,020 | June 2 | 914 | 204<br>205 | 104 | 1314 |
| Ivey, W. H. C. (See Durand, John, assignor.) | | | | | | |
| Ivins, Dietz and Metzger Company. (See Hardwick, Harry, assignor.) | | | | | | |
| Ivon, Alexandre, Paris, assignor of one-half to A. Fournival et Lacaille, Rethel Ardennes, France. Traveler for spinning-frames | 717,748 | Jan. 6 | 426 | 99<br>100 | 102 | 93 |
| Ivor, Barry, and J. S. Ward, Chicago, Ill. Automatic oil feed and check valve | 723,211 | Mar. 17 | 2894 | 649 | 103 | 643 |
| Ivor, Barry, and J. S. Ward, Chicago, Ill. Force-feed lubricator | 734,069 | July 21 | 2527 | 589<br>590 | 105 | 568 |
| Iwan, William L., Streator, Ill. Earth-auger | 732,859 | July 7 | 291 | 73 | 105 | 64 |
| Izan, John L., New York, N. Y. Boot or shoe heel | 722,307 | Mar. 10 | 1220 | 271 | 103 | 276 |
| Izant, Silas, East Cleveland, Ohio. Harness making or mending device | 742,993 | Nov. 3 | 307 | 69 | 107 | 66 |
| Izatt, Joseph, St. Louis, Mo. Race-starting gate | 730,373 | June 9 | 1543 | 343 | 104 | 1459 |
| J. Ellwood Lee Company. (See Jones, Louis E., assignor.) | | | | | | |
| J. Manufacturing Company. (See Holtzmuller and Osborn, assignors.) | | | | | | |
| J. Stone and Company. (See Ralston, Gavin C., assignor.) | | | | | | |
| J. A. Kelly & Bros. (See Kelly, Joseph A., assignor.) | | | | | | |
| J. A. Kelly & Bros. (See Kelly, William J., assignor.) | | | | | | |
| J. B. Colt Company. (See Francfort, Alfred H., assignor.) | | | | | | |
| J. B. Colt Company. (See Franquist, Gustave E., assignor.) | | | | | | |
| J. B. Colt Company. (See Goodyear, Charles, assignor.) | | | | | | |
| J. B. Colt Company. (See Goodyear, Nelson, assignor.) | | | | | | |
| J. B. Colt Company. (See Long, David N., assignor.) | | | | | | |
| J. C. Hall Company. (See Sisson, Isaac H., assignor.) | | | | | | |
| J. C. Rhodes & Co. (See McCormack, George E., assignor.) (Reissue.) | | | | | | |
| J. E. Mergott Company. (See Hiering, Christian, assignor.) | | | | | | |
| J. G. McCarter Company. (See Coburn, Nathan P., assignor.) | | | | | | |
| J. G. McCarter Company. (See Rockwood, Aaron W., assignor.) | | | | | | |
| J. H. Sears Company. (See Lombard and Luce, assignors.) | | | | | | |
| J. H. Williams and Company. (See Bufford, George W., assignor.) | | | | | | |
| J. H. Williams and Company. (See Grinden, William J., assignor.) | | | | | | |
| J. I. Case Plow Works. (See Sobey, William, assignor.) | | | | | | |
| J. I. Case Threshing Machine Company. (See Dingee, William W., assignor.) | | | | | | |
| J. L. Mott Iron Works. (See Reid and Hooper, assignors.) | | | | | | |
| J. M. Mast Manufacturing Company. (See Mast, John M., assignor.) | | | | | | |
| J. M. Quinby and Company. (See Yelton, Walter C., assignor.) | | | | | | |
| J. M. Voith Maschinenfabrik. (See Schmitthenner, Carlos, assignor.) | | | | | | |
| J. P. Lindemann & Sons. (See Baeumle, John, assignor.) | | | | | | |
| J. S. Thorn Company. (See Rupp, Charles, assignor.) | | | | | | |
| J. W. Paxson Company. (See Brown, William J., assignor.) | | | | | | |
| J. W. Paxson Company. (See Warren, Ambrose G., assignor.) | | | | | | |
| J. W. Reedy Elevator Mnfg. Co. (See McCurdy, John P., assignor.) | | | | | | |
| J. W. Ruger Manufacturing Company. (See Ruger, James W., assignor.) | | | | | | |
| J. W. Sefton Manufacturing Company. (See Ferres, Ainslie W., assignor.) | | | | | | |
| Jaarsma, Heije, Snek, Netherlands. Safe | 727,371 | May 5 | 1023 | 222 | 104 | 220 |
| Jack, Alexander, Evansville, Ind. Automatic duplex steam-pump | 730,917 | June 16 | 2536 | 564 | 104 | 1690 |
| Jack, Charles, assignor of one-half to J. H. Schmeding, St. Louis, Mo. Box-lid holder | 722,652 | Mar. 10 | 1841 | 411 | 103 | 411 |
| Jack, Frank L., *et al.* (See Moore, James S., assignor.) | | | | | | |
| Jack, Joseph W., Truro, Canada. Filling-can | 733,486 | July 14 | 1411 | 332 | 105 | 316 |
| Jackman, Edward P., *et al.* (See Miesse, Americus, assignor.) | | | | | | |
| Jackman, Stephen E., Brooklyn, N. Y. Inclined railway | 737,409 | Aug. 25 | 4444 | 996<br>997 | 105 | 1980 |
| Jackman, Stephen E., Brooklyn, N. Y. Car | 737,410 | Aug. 25 | 4447 | 998 | 105 | 1981 |

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| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Jackman, Stephen E., New York, N. Y. Railway | 743,168 | Nov. 3 | 674 | 147 | 107 | 141 |
| Jackman, Stephen E., New York, N. Y. Car-coupling | 743,169 | Nov. 3 | 675 | 147 | 107 | 141 |
| Jackman, Stephen E., New York, N. Y. Railway | 743,170 | Nov. 3 | 676 | 147, 148 | 107 | 141 |
| Jackman, Stephen E., New York, N. Y. Locking device for seat-guards | 745,854 | Dec. 1 | 1000 | 225 | 107 | 1312 |
| Jackman, Stephen E., New York, N. Y. Track and car | 745,855 | Dec. 1 | 1001 | 225, 226 | 107 | 1312 |
| Jackman, Stephen E., New York, N. Y. Safety device for inclined railways | 745,962 | Dec. 1 | 1195 | 267, 268 | 107 | 1355 |
| Jackson, Alfred M. (See St. Louis and Jackson.) | | | | | | |
| Jackson, Andrew, Jr., Munich, Tenn. Eye-protector for chickens | 730,918 | June 16 | 2537 | 564 | 104 | 1691 |
| Jackson, Andrew, Wilmette, Ill. Hoisting apparatus | 742,994 | Nov. 3 | 308 | 69 | 107 | 67 |
| Jackson, Arthur V. (See Ingals and Jackson.) | | | | | | |
| Jackson, Brownlow, *et al.* (See Osteen, Percy C., assignor.) | | | | | | |
| Jackson, Byron. (See Boardman and Jackson, assignors.) | | | | | | |
| Jackson, Byron, San Francisco, Cal. Series high-pressure centrifugal pump for high heads | 729,870 | June 2 | 648 | 143 | 104 | 1261 |
| Jackson, Carrie D., Miller Township, Ind. Sleeve-holder | 732,942 | July 7 | 433 | 108 | 105 | 94 |
| Jackson, Charles H., Bentonville, Ark. Baling-press | 721,805 | Mar. 3 | 266 | 60 | 103 | 59 |
| Jackson, Charles S., Franklin, Ohio. Paper-bag machine | 722,986 | Mar. 17 | 2473 | 556 | 103 | 555 |
| Jackson, Corwill, and W. H. Daniels, Denver, Colo. Picture-hanger | 717,859 | Jan. 6 | 661 | 146 | 102 | 141 |
| Jackson, Daniel B., Warrensburg, Mo. Well or cistern cleaner | 747,974 | Dec. 29 | 4958 | 1120 | 107 | 2268 |
| Jackson, Dugald C., Madison, Wis. Alternating-current transformer | 739,004 | Sept. 15 | 2871 | 637 | 106 | 648 |
| Jackson, Dugald C., Madison, Wis. Power-driven machinery | 739,005 | Sept. 15 | 2874 | 637, 638 | 106 | 649 |
| Jackson, Dugald C., Madison, Wis. Dynamo-machine | 743,082 | Nov. 3 | 509 | 110 | 107 | 107 |
| Jackson, Eppa H., Colvinrun, Va. Horseshoe | 737,845 | Sept. 1 | 559 | 121, 122 | 106 | 124 |
| Jackson, Frank H. (See Boardman and Jackson.) | | | | | | |
| Jackson, Frankie B. (See Irvin and Jackson.) | | | | | | |
| Jackson, Frederick F., Wayne Township, Wayne county, Ind., assignor of one-half to E. E. Commons, New Paris, Ohio. Gate | 720,925 | Feb. 17 | 2803 | 643 | 102 | 1443 |
| Jackson, Frederick H., and G. M. Pierce, Cleveland, Ohio. Brick-handling device | 747,181 | Dec. 15 | 3437 | 779 | 107 | 1891 |
| Jackson, George E., Sheridan, Ill. Railway-gate | 740,658 | Oct. 6 | 512 | 112, 113 | 106 | 1356 |
| Jackson, George K., Reece, assignor of one-half to A. Howard, Eureka, Kans. Telephone call-annunciator | 727,801 | May 12 | 1863 | 415 | 104 | 415 |
| Jackson, Hiram L., Des Moines, Iowa. Lifting rails for self-dumping cages | 718,463 | Jan. 13 | 1763 | 391 | 102 | 391 |
| Jackson, Howard, Newton, Mass. Electrical apparatus for therapeutical work | 724,186 | Mar. 31 | 4761 | 1068 | 103 | 1054 |
| Jackson, Isaiah H., Flatlick, La. Cotton-planter | 722,233 | Mar. 10 | 1086 | 239 | 103 | 247 |
| Jackson, James E., assignor to J. Callahan, Lynn, Mass. Boot or shoe | 737,244 | Aug. 25 | 4133 | 919 | 105 | 1913 |
| Jackson, John, Grandcane, La. Station-indicator | 739,878 | Sept. 29 | 4526 | 1017 | 106 | 1034 |
| Jackson, John, London, England. Spring-wheel for vehicles | 743,289 | Nov. 3 | 919 | 199, 200 | 107 | 197 |
| Jackson, John F., Houghton, Mich., assignor to Wisconsin Bridge & Iron Co., Milwaukee, Wis. Anchorage for dams or other structures | 738,722 | Sept. 8 | 2344 | 515 | 106 | 516 |
| Jackson, John L., *et al.* (See Hart, Alfred, assignor.) | | | | | | |
| Jackson, John W., Weston, Mo. Druggist's mass-divider | 731,188 | June 16 | 3049 | 677 | 104 | 1792 |
| Jackson, Malery R., Tipton, Iowa. Horseshoe-calk | 738,451 | Sept. 8 | 1824 | 396 | 106 | 407 |
| Jackson, Mark P., Louisville, Ky. Temporary binder | 735,879 | Aug. 11 | 1620 | 346 | 105 | 1346 |
| Jackson, Peter H., San Francisco, Cal. Floor, roof, or like construction | 725,846 | Apr. 21 | 2652 | 604, 605 | 103 | 1764 |
| Jackson, Peter H., San Francisco, Cal. Illuminating-tile | 726,537 | Apr. 28 | 3039 | 890 | 103 | 2040 |
| Jackson, Peter H., San Francisco, Cal. Locking attachment for sidewalk elevator-doors | 733,652 | July 14 | 1701 | 403 | 105 | 376 |
| Jackson, Ralph B., and J. Sharp, Jr., Nelson, New Zealand. Razor-strop | 746,334 | Dec. 8 | 1879 | 428 | 107 | 1520 |
| Jackson, Ralph H., Rochester, N. Y. Auxiliary ironing-board | 720,926 | Feb. 17 | 2804 | 643 | 102 | 1443 |
| Jackson, Ralph M., near Fullerton, assignor of one-half to G. E. Harpham, Los Angeles, Cal. Hydrocarbon-burner | 742,119 | Oct. 20 | 3383 | 755 | 106 | 1994 |
| Jackson, Sheldon E., Weston, Mich. Wire-fence-stay fastener | 738,810 | Sept. 15 | 2544 | 559 | 106 | 577 |
| Jackson, Simeon. (See Smith, Jackson, and Hudson.) | | | | | | |
| Jackson, Stokely, and N. Thompson, Elcampo, Tex. Sand-screen for wells | 718,464 | Jan. 13 | 1764 | 392 | 102 | 391 |
| Jackson, Thomas A., and W. E. Thompson, Philadelphia, Pa. Wool-combing machine | 735,980 | Aug. 11 | 1805 | 386 | 105 | 1386 |
| Jackson, Thomas B., Belmont, Ohio. Hot-air heater | 744,760 | Nov. 24 | 3800 | 819 | 107 | 858 |
| Jackson, Warren L., Jamaica, N. Y. Wrench | 746,516 | Dec. 8 | 2182 | 501 | 107 | 1585 |
| Jackson, William B., Denver, assignor to Smoke Exterminator and Fume Condenser Company, Pueblo, Colo. Apparatus for condensing smoke, fumes, or gases | 723,531 | Mar. 24 | 3506 | 784, 785 | 103 | 778 |
| Jackson, William M., New Brunswick, N. J. Water-tube boiler | 720,356 | Feb. 10 | 1754 | 398 | 102 | 1211 |
| Jackson, William M., New Brunswick, N. J. Plug or cover for boilers | 721,955 | Mar. 3 | 570 | 126 | 103 | 124 |
| Jackson, William S., Hoboken, assignor of one-half to D. Young, Newark, N. J. Electric block-signal | 743,878 | Nov. 10 | 2100 | 449, 450 | 107 | 463 |
| Jacob, Curt. (See Jacob, Paul and C.) | | | | | | |
| Jacob, Frederick, Newark, N. J. Rotary engine | 730,661 | June 9 | 2069 | 461, 462 | 104 | 1571 |
| Jacob, Isaac J., Philadelphia, Pa. Base-ball-game apparatus | 738,452 | Sept. 8 | 1825 | 396 | 106 | 407 |
| Jacob, Paul and C., Zwickau, Germany. Burner for acetylene gas | 731,907 | June 23 | 4385 | 978 | 104 | 2089 |
| Jacob, Preston P., Clinton, Miss. Bridge-anchor | 729,591 | June 2 | 124 | 31 | 104 | 1152 |
| Jacob, Thomas H., Grand Rapids, Mich. Adjustable handle-bar for bicycles | 725,085 | Apr. 14 | 1243 | 280 | 103 | 1449 |
| Jacobi, Maurice, assignor of one-tenth to O. G. Boehm, Philadelphia, Pa. Apparatus for making metallic oxids | 731,055 | June 16 | 2795 | 622 | 104 | 1744 |
| Jacobi, Peter, Bad Manheim, Germany. Signaling apparatus | 726,933 | May 5 | 188 | 44 | 104 | 42 |
| Jacobs, Abram, Chicago, Ill. Trousers-former and coat-hanger | 734,232 | July 21 | 2832 | 664 | 105 | 634 |
| Jacobs, Alonzo, *et al.* (See Hartell, Frederick G., assignor.) | | | | | | |
| Jacobs, Andrew M., Climbing Hill, Iowa. Combined root-knife and subsoiler | 742,872 | Nov. 3 | 92 | 22 | 107 | 21 |
| Jacobs, Charles B., East Orange, assignor to Ampere Electro-Chemical Company, Jersey City, N. J. Making cyanids and acetone | 719,223 | Jan. 27 | 3238 | 723 | 102 | 729 |
| Jacobs, Charles B., East Orange, assignor, by mesne assignments, to United Barium Company, Jersey City, N. J. Preparing barium hydrate | 720,927 | Feb. 17 | 2805 | ..... | 102 | 1443 |
| Jacobs, Charles B., East Orange, assignor, by mesne assignments, to United Barium Company, Jersey City, N. J. Producing caustic soda and barium sulfate | 737,740 | Sept. 1 | 344 | ..... | 106 | 78 |
| Jacobs, Charles M., Maidenhead, and A. H. Nicholson, Wendover, England. Apparatus for transmitting electrical communications | 743,512 | Nov. 10 | 1440 | 301 | 107 | 324 |
| Jacobs, Eilt S., Neuharlingersiel, Germany. Propeller | 728,925 | May 26 | 3960 | 880 | 104 | 892 |
| Jacobs, Jacob, New York, N. Y. Illuminating-tile | 725,342 | Apr. 14 | 1712 | 385 | 103 | 1547 |
| Jacobs, James R., *et al.* (See Hartell, Frederick G., assignor.) | | | | | | |
| Jacobs, John F., Burnham, Pa. Miter-clamp | 744,555 | Nov. 17 | 3420 | 737 | 107 | 760 |
| Jacobs, John M., Norristown, Pa. Vending-machine | 726,934 | May 5 | 190 | 44, 45 | 104 | 43 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | Spec. | Dr'g. | Vol. | Page. |
| Jacobs, Louis P., Earling, Iowa. Ratchet-lever | 740,863 | Oct. 6 | 891 | 199 | 106 | 1436 |
| Jacobs, Morris. (See Miller and Jacobs.) | | | | | | |
| Jacobs, Moses, New York, N. Y. Deodorizing or disinfecting apparatus | 725,086 | Apr. 14 | 1244 | 280 | 103 | 1449 |
| Jacobs, Samuel, Lawrence, Kans. Elevated hay-carrier. (Reissue) | 12,135 | July 28 | 4355 | 1012 | 105 | 963 |
| Jacobs, William S., Malden, Mass. Wave-motor | 731,780 | June 23 | 4161 | 928 | 104 | 2038 |
| Jacobs, William S., assignor of one-half to W. E. Waterman, Malden, Mass. Foot-ball | 723,606 | Mar. 24 | 3636 | 814 | 103 | 805 |
| Jacobs, William S., assignor of one-half to W. E. Waterman, Malden, Mass. Derrick | 742,995 | Nov. 3 | 310 | 70 | 107 | 67 |
| Jacobsen, John, Lethbridge, Canada, assignor of one-half to G. A. Nordquist, Greatfalls, Mont. Miner's lamp | 718,128 | Jan. 13 | 1135 | 251 | 102 | 259 |
| Jacobsen, Soren S., Bellevue, Pa. Gate-valve | 729,181 | May 26 | 4416 | 974 | 104 | 986 |
| Jacobsen, Soren S., Bellevue, Pa. Gate-valve | 729,766 | June 2 | 449 | 101 | 104 | 1219 |
| Jacobson, Axel E., Minneapolis, Minn. Bed-rail coupling | 746,335 | Dec. 8 | 1880 | 429 | 107 | 1520 |
| Jacobson, Charles, *et al.* (See Lawson, August, assignor.) | | | | | | |
| Jacobson, Christian, Towner, N. D. Antikicking device and shield | 741,669 | Oct. 20 | 2454 | 549 | 106 | 1805 |
| Jacobson, Christian, Towner, N. D. Device for aiding in milking cows | 747,552 | Dec. 22 | 4127 | 926 | 107 | 2061 |
| Jacobson, Henry D., and J. F. Trede, Atlantic, Iowa. Package-tie | 732,081 | June 30 | 4738 | 1058 | 104 | 2174 |
| Jacobson, Jacob, Warren, Pa. Vise | 747,433 | Dec. 22 | 3915 | 882 | 107 | 2013 |
| Jacobson, John, assignor to I. M. Crawford, New York, N. Y. Half-tone screen | 725,252 | Apr. 14 | 1552 | 352 | 103 | 1514 |
| Jacobson, Julius, Warsaw, Russia. Tubular stalk for artificial flowers and making same | 742,438 | Oct. 27 | 3973 | 891 / 892 | 106 | 2131 |
| Jacobson, Peter, Milwaukee, Wis. Railway air-brake | 735,981 | Aug. 11 | 1807 | 387 | 105 | 1386 |
| Jacobson, Sydney, Chicago, Ill. Luggage-carrier | 725,715 | Apr. 21 | 2414 | 548 | 103 | 1711 |
| Jacobus, James W., Greatneck, N. Y. Inkstand | 736,105 | Aug. 11 | 2034 | 433 | 105 | 1435 |
| Jacobus, Mandeville C. (See Everett, William M., assignor.) | | | | | | |
| Jacoby, Charles A. (See Myers and Jacoby.) | | | | | | |
| Jacoby, Sellmar M., New York, N. Y. Sewing-machine | 732,353 | June 30 | 5284 | 1171 | 104 | 2288 |
| Jacquemin, Georges, Malzéville, France. Preparation of yeast | 736,401 | Aug. 18 | 2540 | | 105 | 1560 |
| Jacquemin, Georges, Malzéville, France. Preparing yeast | 736,402 | Aug. 18 | 2541 | | 105 | 1561 |
| Jaeck, Oscar, Elberfeld, Germany, assignor to Farbenfabriken of Elberfeld Co., New York, N. Y. Dyeing | 717,749 | Jan. 6 | 428 | | 102 | 93 |
| Jaeger, Albert, Jersey City, N. J. Boiler | 719,224 | Jan. 27 | 3240 | 723 / 724 | 102 | 729 |
| Jaeger, Arthur. (See Busch and Jaeger.) | | | | | | |
| Jaeger, Christian, *et al.* (See Selg and Guntrum, assignors.) | | | | | | |
| Jaeger, Ferdinand, New York, N. Y. Mirror | 728,926 | May 26 | 3962 | 880 | 104 | 892 |
| Jaeger, Ferdinand, New York, N. Y. Mirror | 728,927 | May 26 | 3962 | 881 | 104 | 892 |
| Jaeger, Frederick W., Baltimore, Md. Oil-burner | 747,434 | Dec. 22 | 3916 | 882 | 107 | 2013 |
| Jaeger, Gebhard, Monongahela, Pa., assignor of one-half to E. W. Morche, New York, N. Y. Woven-wire-fence machine | 739,679 | Sept. 22 | 4126 | 920 / 921 | 106 | 931 |
| Jaeger, Herman J., New York, N. Y. Incandescent electric lamp | 729,182 | May 26 | 4418 | 974 | 104 | 986 |
| Jaeger, Otto. (See Mooney and Jaeger.) | | | | | | |
| Jaeger, Otto, Philadelphia, Pa. Coin-detector chute | 732,746 | July 7 | 85 | 24 | 105 | 21 |
| Jaenecke, Wilhelm F., Salamanca, N. Y. Clutch | 728,720 | May 19 | 3589 | 797 | 104 | 801 |
| Jagenberg, Ferdinand E., Dusseldorf, Germany. Machine for labeling round pasteboard or paper boxes or casings | 743,083 | Nov. 3 | 511 | 110 | 107 | 107 |
| Jager, Frank, West Hoboken, N. J. Artificial-stone tub | 741,137 | Oct. 13 | 1389 | 318 | 106 | 1562 |
| Jagger, Peter B., London, England, assignor to Soutters Patent Bottle Syndicate, Limited, Bulawayo, South Africa. Non-refillable bottle or like vessel | 740,363 | Sept. 29 | 5412 | 1219 | 106 | 1221 |
| Jahelka, Otto, New York, N. Y. Heater | 724,873 | Apr. 7 | 850 | 195 | 103 | 1351 |
| Jahn, Frederick W. H., Los Angeles, Cal. Oil-burner | 734,712 | July 28 | 3729 | 872 | 105 | 835 |
| Jahn, Fredrik, Ridley Park, assignor to Harrison Bros. & Co., Incorporated, Philadelphia, Pa. Manufacturing hydrates of alkalies and alkali earths | 744,920 | Nov. 24 | 4079 | 879 | 107 | 916 |
| Jahn, Guillaum. (See Lievens and Jahn.) | | | | | | |
| Jahn, Philip A., Cleveland, Ohio. Rubber-heel holder | 740,760 | Oct. 6 | 715 | 161 | 106 | 1399 |
| Jakobsson, Herman G. (See Meigs and Jakobsson.) | | | | | | |
| Jakobsson, Herman G., Bethlehem, assignor to Bethlehem Steel Company, South Bethlehem, Pa. Breech-operating mechanism | 746,706 | Dec. 15 | 2536 | 583 | 107 | 1687 |
| James, Albert C., Topeka, Kans. Double and swingle tree | 735,982 | Aug. 11 | 1809 | 387 | 105 | 1387 |
| James, Albert J., and C. W. Patterson, Cropper, Okla. Ter. Calf-muzzle | 729,592 | June 2 | 125 | 32 | 104 | 1152 |
| James, Alfred, London, England. Filter-press | 744,761 | Nov. 24 | 3801 | 819 | 107 | 858 |
| James, Barclay A., Evansville, Ind. Safety-pocket | 722,584 | Mar. 10 | 1728 | 384 | 103 | 386 |
| James, Christopher R., Jersey City, N. J. Rotary explosive-engine | 740,138 | Sept. 29 | 4995 | 1122 | 106 | 1134 |
| James, David, Coffeyville, Kans. Vending-machine | 738,685 | Sept. 8 | 2286 | 503 | 106 | 505 |
| James, David, and L. D. Rusher; said Rusher assignor to A. Levan, Coffeyville, Kans. Vending-machine | 729,938 | June 2 | 750 | 167 / 168 | 104 | 1281 |
| James, David B., San Francisco, Cal. Swinging scraper and scoop machine | 735,388 | Aug. 4 | 663 | 141 | 105 | 1121 |
| James, Edward, assignor to Hileman-James Company, Pittsburg, Pa. Metallic packing | 725,253 | Apr. 14 | 1553 | 352 | 103 | 1514 |
| James & Foote. (See Foote, John B., assignor.) | | | | | | |
| James, Frank, Philadelphia, Pa. Fly-wheel | 748,380 | Dec. 29 | 5691 | 1299 | 107 | 2428 |
| James H. Clark Company. (See Clark, James H., assignor.) | | | | | | |
| James, Harry, Marlow, Ind. Ter. Lubricator | 736,263 | Aug. 11 | 2297 | 496 | 105 | 1400 |
| James, Henry F., Franklin, Pa. Hoisting, holding, and lowering device | 739,261 | Sept. 15 | 3346 | 742 / 743 | 106 | 748 |
| James, Henry F., and E. R. Inman, Franklin, Pa.; said Inman assignor to said James. Device for pumping oil-wells | 739,262 | Sept. 15 | 3349 | 744 | 106 | 748 |
| James, John W. H., Philadelphia, Pa. Furnace for oxidizing metals | 738,109 | May 12 | 2415 | 538 | 104 | 532 |
| James, Joseph H. (See Sjöstedt and James.) | | | | | | |
| James, Joseph H., Fort Scott, Kans. Display-rack | 731,806 | Mar. 3 | 268 | 60 | 103 | 59 |
| James, Preston W. (See Howard, William R., assignor.) | | | | | | |
| James Smith Woolen Machinery Company. (See Hill, Robert J., assignor.) | | | | | | |
| James, Wallace M., Eyota, Minn. Draft-equalizer | 727,956 | May 12 | 2154 | 480 | 104 | 478 |
| James, William G., Hillsgrove, R. I. Safety-lock for belt-shippers | 727,955 | May 12 | 2153 | 480 | 104 | 477 |
| James, William T., Chicago, Ill. Movable eccentric | 725,716 | Apr. 21 | 2415 | 548 | 103 | 1711 |
| James, William T., Chicago, Ill. Conveyer | 746,088 | Dec. 8 | 1421 | 318 / 319 | 107 | 1422 |
| Jameson Manufacturing Co. (See Walter, John, assignor.) | | | | | | |
| Jamieson, James A., Montreal, Canada. Storage-bin | 742,873 | Nov. 3 | 93 | 22 | 107 | 21 |
| Jamieson, James A., Montreal, Canada. Elevator-bin | 744,017 | Nov. 24 | 4246 | 921 | 107 | 951 |
| Jamieson, Robert, assignor to Draper Company, Hopedale, Mass. Take-up-arresting mechanism for looms | 729,593 | June 2 | 127 | 32 | 104 | 1153 |
| Jamieson, Walter G., Union Hill, N. J. Vessel | 743,171 | Nov. 3 | 677 | 148 | 107 | 142 |
| Jamison, Thomas H., assignor to himself and H. H. Miller, Claysville, Pa. Muffler | 734,878 | July 28 | 4059 | 947 | 105 | 902 |
| Janda, Joseph, Portage, Wis. Piston-rod and valve-stem packing | 733,588 | July 14 | 1595 | 380 | 105 | 355 |
| Jandin, Henry, Lyons, France. Piston or rod packing | 725,254 | Apr. 14 | 1554 | 352 | 103 | 1514 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| Jandt, G. H. (See Kneedler, John D., assignor.) | | | | | | |
| Jandus Electric Company. (See Stowe, Bernard A., assignor.) | | | | | | |
| Janes, Elmer H., Lansing, Mich. Brick-making machine | 720,928 | Feb. 17 | 2806 | 643, 644 | 102 | 1444 |
| Janes, William D., Saginaw, Mich. Spear for shade-rollers | 741,670 | Oct. 20 | 2455 | 549 | 106 | 1805 |
| Janesville Hay Tool Company. (See Strickler, Frank B., assignor.) | | | | | | |
| Janesville Machine Company. (See Heylman, Edward M., assignor.) | | | | | | |
| Janet, Armand, Paris, France. Compound sleeve for flexible shafts | 732,415 | June 30 | 5401 | 1197 | 104 | 2313 |
| Janicke, Gustavus A., Louisville, Ky. Balanced slide-valve | 725,255 | Apr. 14 | 1555 | 353 | 103 | 1514 |
| Janisch, John F., Kirksville, Mo. Surgical sling | 745,856 | Dec. 1 | 1003 | 226 | 107 | 1313 |
| Janney, Eli H., Fairfax County, Va. Car-coupling | 717,686 | Jan. 6 | 294 | 73 | 102 | 63 |
| Janney Manufacturing Company. (See Janney, Peyton R., assignor.) | | | | | | |
| Janney, Peyton R., assignor to Janney Manufacturing Company, Ottumwa, Iowa. Grinding-mill | 747,610 | Dec. 22 | 4230 | 951 | 107 | 2084 |
| Jansen, Herman, Schiedam, Netherlands. Production of seed-yeast for use in the manufacture of yeast by the aeration or clear-wort process | 724,293 | Mar. 31 | 4985 | ------ | 103 | 1100 |
| Janson, Louis, Brooklyn, N. Y. Car-seat | 728,238 | May 19 | 2670 | 596, 597 | 104 | 606 |
| Janson, Louis, Brooklyn, N. Y. Machine for inserting diagonal strands in woven-cane fabrics | 745,062 | Nov. 24 | 4368 | 943, 944 | 107 | 976 |
| Janssens, Antoine, St. Nicolas, Belgium. Apparatus for steering motor-vehicles | 739,420 | Sept. 22 | 3663 | 814 | 106 | 832 |
| Jansson, Frederick. (See Preuss and Jansson.) | | | | | | |
| Jantz, Peter B. (See Nightingale, Henry H., assignor.) | | | | | | |
| Japs, Frank A., Carver, Minn. Feed-indicator for screw-cutting on lathes | 728,928 | May 26 | 3963 | 881, 882 | 104 | 892 |
| Jaques, William E., assignor to A. O. Crozier, Grand Rapids, Mich. Making glazed bricks | 723,279 | Mar. 24 | 3022 | 680 | 103 | 684 |
| Jaques, William E., assignor to A. O. Crozier, Grand Rapids, Mich. Rail-support | 723,280 | Mar. 24 | 3023 | 681 | 103 | 684 |
| Jaques, William E., assignor to A. O. Crozier, Grand Rapids, Mich. Making cementitious products or artificial stone | 723,281 | Mar. 24 | 3025 | 681 | 103 | 684 |
| Jaques, William E., assignor to A. O. Crozier, Grand Rapids, Mich. Machine for making products of cement or artificial stone | 738,910 | Sept. 15 | 2722 | 602 | 106 | 617 |
| Jaquith, Azro B., Charlestown, Mass. Folding box or crate | 718,255 | Jan. 13 | 1361 | 302 | 102 | 308 |
| Jaray, Alfred, London, England. Photographic-printing apparatus | 725,969 | Apr. 21 | 2864 | 649, 650 | 103 | 1808 |
| Jarboe, Harry S., Trenton, N. J., and P. Keller, Springfield, Mass. Coin-operated machine | 744,921 | Nov. 24 | 4080 | 879 | 107 | 917 |
| Jardine, Thomas W., Englewood, N. J. Sectional electrical switchboard | 723,607 | Mar. 24 | 3638 | 814 | 103 | 805 |
| Jarecki, Alfred K., Sandusky, Ohio. Producing fertilizer | 731,461 | June 23 | 3571 | ------ | 104 | 1920 |
| Jarmain, Thomas M. (See Peto, Samuel A., assignor.) | | | | | | |
| Jarman, George R., assignor of one-half to S. H. Jarman, Baltimore, Md. Heat-interchanger | 745,499 | Dec. 1 | 355 | 82 | 107 | 1175 |
| Jarman, S. H. (See Jarman, George R., assignor.) | | | | | | |
| Jarmuth, Adolph J. (See Dimmick, Joseph O., assignor.) | | | | | | |
| Jarrell, Edwin, assignor of one-half to J. McArdle, Riverdale, Kans. Plow | 734,418 | July 21 | 3177 | 746 | 105 | 705 |
| Jarrett, Edwin S. (See Moran and Jarrett.) | | | | | | |
| Jarrett, Frederick P., Galena, Kans. Twine-holder | 743,643 | Nov. 10 | 1687 | 355 | 107 | 376 |
| Jarvis, Edgar B., Toronto, Canada. Mold for artificial stone | 733,396 | July 14 | 1258 | 299 | 105 | 283 |
| Jarvis, Franklin W., Chicago, Ill. Valve-gear | 744,202 | Nov. 17 | 2793 | 596, 597, 598 | 107 | 624 |
| Jarvis, Horace H. (See Emery, Ned H., assignor.) | | | | | | |
| Jas. H. Baker Manufacturing Company. (See Baker, James H., assignor.) | | | | | | |
| Jasinski, William L., Woodridge, N. J. Folding support for cans | 721,307 | Feb. 24 | 3561 | 810 | 102 | 1623 |
| Jasper, Henry N., Akron, Ohio. Chimney-block | 722,712 | Mar. 17 | 1995 | 446 | 103 | 457 |
| Jasper, Manuel E., assignor to D. M. Jermyn, Wiarton, Ontario, Canada. Truss | 724,014 | Mar. 31 | 4431 | 996 | 103 | 987 |
| Jassé, Alfred, Frankfort-on-the-Main, Germany. Picture post-card, &c. | 722,711 | Mar. 17 | 1994 | 445 | 103 | 457 |
| Jaubert, George F., Paris, France. Making hydrated calcium peroxid | 729,767 | June 2 | 451 | ------ | 104 | 1220 |
| Jaubert, George F., Paris, France. Manufacturing hydrate of calcium peroxid | 733,047 | July 7 | 613 | ------ | 105 | 131 |
| Jaubert, George F., Paris, France. Making hydrates of alkaline-earth dioxids | 734,713 | July 28 | 3730 | ------ | 105 | 836 |
| Jaubert, George F., Paris, France. Explosion-engine | 740,864 | Oct. 6 | 893 | 199, 200 | 106 | 1436 |
| Jayne, Benaiah G., New York, N. Y. Barrel-stave slicer | 735,669 | Aug. 4 | 1213 | 257 | 105 | 1238 |
| Jaynes, Alfonso L., Buffalo, N. Y. Workman's time-recorder | 721,374 | Feb. 24 | 3685 | 839, 840, 841 | 102 | 1648 |
| Jeager, Gustave, Philadelphia, Pa. Geographical clock | 746,517 | Dec. 8 | 2183 | 501 | 107 | 1585 |
| Jeanmaire, Paul, Mulhausen, Germany. Mercerizing apparatus | 734,333 | July 21 | 3034 | 715 | 105 | 676 |
| Jeannin, Frank H., Schenectady, N. Y., assignor to General Electric Company. System of dynamo-electric machines | 728,579 | May 19 | 3336 | 737 | 104 | 747 |
| Jeannin, Frank H., Schenectady, N. Y., assignor to General Electric Company. System of phase transformation | 730,828 | June 9 | 2350 | 520 | 104 | 1633 |
| Jeavons, William R., Cleveland, Ohio. Hydrocarbon-burner | 719,469 | Feb. 3 | 103 | 24 | 102 | 847 |
| Jeavons, William R., Cleveland, Ohio. Initial heating device for hydrocarbon-burners | 722,987 | Mar. 17 | 2475 | 557 | 103 | 556 |
| Jeavons, William R., Cleveland, Ohio. Lighting device for hydrocarbon-burners | 722,988 | Mar. 17 | 2477 | 557 | 103 | 556 |
| Jebb, Thomas A. (See Ellis, William T. G., assignor.) | | | | | | |
| Jecklin, Jacob, assignor of one-half to C. W. Schreiber, Dubuque, Iowa. Chuck | 746,707 | Dec. 15 | 2537 | 583 | 107 | 1687 |
| Jedlicka, Karl, assignor to Society of Chemical Industry in Basle, Basle, Switzerland. Yellow acridin dye and making same | 730,771 | June 9 | 2254 | ------ | 104 | 1613 |
| Jefcoate, Henry J., Crewe, England. Railway signaling apparatus | 722,109 | Mar. 3 | 832 | 185 | 103 | 179 |
| Jeffers, Harry L., Anniston, Ala., assignor of one-half to W. T. Dawkins, Jr., Aberdeen, Miss. Metallic rail-tie | 745,282 | Nov. 24 | 4807 | 1049 | 107 | 1066 |
| Jeffers, Herbert C., assignor to A. Johnson, Battlecreek, Mich. Grain cleaning and scouring machine | 736,264 | Aug. 11 | 2297 | 497 | 105 | 1490 |
| Jeffers, Howard W. (See Klippelt, Jeffers, and Bradford.) | | | | | | |
| Jefferson, Charles W., Schenectady, N. Y., assignor to Mica Insulator Company. Machine for making hollow forms from pliable compounds | 743,513 | Nov. 10 | 1441 | 301 | 107 | 324 |
| Jefferson, Edward, *et al.* (See Jefferson, Walter B., assignor.) | | | | | | |
| Jefferson, Isaac, Langston, Okla. Ter. Cotton-harvester | 745,190 | Nov. 24 | 4647 | 1011 | 107 | 1034 |
| Jefferson, Mordecai, *et al.* (See Jefferson, Walter B., assignor.) | | | | | | |
| Jefferson, Walter B., assignor of one-half to E. and M. Jefferson, Philadelphia, Pa. Drawing-off attachment for combing-machines | 730,021 | June 2 | 919 | 206 | 104 | 1315 |
| Jeffery, Richard E., Grass Valley, Cal. Vehicle-wheel | 720,253 | Feb. 10 | 1556 | 357 | 102 | 1169 |
| Jeffery, Thomas B. (See Symmonds, Robert, Jr., assignor.) | | | | | | |
| Jeffery, Thomas B., Chicago, Ill. Reversing and speed-reducing mechanism | 727,143 | May 5 | 621 | 133, 134 | 104 | 135 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|
| | | | Spec. | Drg. | Vol. | Page. |
| Jeffery, Thomas B., Chicago, Ill. Carbureter for gas-engines | 727,635 | May 12 | 1519 | 342 | 104 | 345 |
| Jeffery, Thomas B., Kenosha, Wis. Igniter for explosive-engines | 731,781 | June 23 | 4162 | 928 | 104 | 2038 |
| Jeffery, Thomas B., Kenosha, Wis. Current-distributer and circuit-breaker for gas-engine igniters | 740,020 | Sept. 29 | 4788 | 1077 | 106 | 1090 |
| Jeffery, Thomas B., Kenosha, Wis. Catalytic igniter for explosive-motors | 747,182 | Dec. 15 | 3439 | 780 | 107 | 1891 |
| Jeffery, Thomas B., and R. Symmonds, Jr., Kenosha, Wis.; said Symmonds assignor to said Jeffery. Power-transmitting device | 721,807 | Mar. 3 | 269 | 60 | 103 | 60 |
| Jeffords, Clyde R., Ithaca, N. Y. Combination-tool | 742,665 | Oct. 27 | 4390 | 990 | 106 | 2220 |
| Jeffords, Stephen V., Waycross, Ga. Plow | 727,372 | May 5 | 1024 | 222 | 104 | 221 |
| Jeffrey, Joseph A. (See Dierdorff, Henry B., assignor.) | | | | | | |
| Jeffrey, Joseph A. (See Horst, George C., assignor.) | | | | | | |
| Jeffrey, Joseph A. (See Slocum, John C., assignor.) | | | | | | |
| Jeffrey, Joseph A. (See Webster, Alfred J., assignor.) | | | | | | |
| Jeffrey, Joseph A. (See Willson, Freeman R., Jr., assignor.) | | | | | | |
| Jeffreys, Edward A., Moseley, near Birmingham, England. Appliance for picking up balls employed in table-tennis or other games | 721,196 | Feb. 24 | 3354 | 766 | 102 | 1580 |
| Jeffreys, Robert D. (See Potter and Jeffreys.) | | | | | | |
| Jemison, Robert W., Macon, Ga. Bookkeeper's stool | 722,585 | Mar. 10 | 1729 | 385 | 103 | 386 |
| Jenatzy, Camille, Fils, Brussels, Belgium. Clutch mechanism | 732,943 | July 7 | 435 | 108 | 105 | 94 |
| Jenatzy, Camille, Fils, Brussels, Belgium. Transmission device for motor-vehicles | 732,944 | July 7 | 437 | 108 | 105 | 94 |
| Jenatzy, Camille, Fils, Brussels, Belgium. Magnetic clutch | 743,514 | Nov. 10 | 1444 | 302 | 107 | 825 |
| Jenckes, Ray G., Terre Haute, Ind. Grain-car door | 748,281 | Dec. 29 | 5534 | 1261 | 107 | 2393 |
| Jencks, George F., Limerock, R. I. Railway-tie | 748,381 | Dec. 29 | 5693 | 1299 | 107 | 2428 |
| Jenkins, Arthur M., Norristown, Pa. Transmission-gear for automobiles | 740,659 | Oct. 6 | 514 | 113 | 106 | 1357 |
| Jenkins, Charles F., Washington, D. C., assignor, by mesne assignments, to Novelty Appliance Company. Vapor-burner | 731,370 | June 16 | 3367 | 752 / 753 | 104 | 1859 |
| Jenkins, Charles H., assignor of one-half to Kendrick & Davis, Lebanon, N. H. Watch-movement holder | 738,543 | Sept. 8 | 2011 | 437 | 106 | 447 |
| Jenkins, Charles H., assignor of one-half to F. B. Kendrick and W. F. Davis, Lebanon, N. H. Watchmaker's gage | 738,723 | Sept. 8 | 2346 | 515 | 106 | 517 |
| Jenkins, Clarence C., Brooklyn, N. Y. Disinfectant-block | 739,317 | Sept. 22 | 3449 | 769 | 106 | 785 |
| Jenkins, Claudius B. (See Barkley and Jenkins.) | | | | | | |
| Jenkins, Daniel C., Allegheny, Pa. Device for locking elevators | 740,568 | Oct. 6 | 366 | 76 | 106 | 1325 |
| Jenkins, Elmer E., Rochester, Minn. Bag-holder | 728,110 | May 12 | 2417 | 538 | 104 | 533 |
| Jenkins, Frank E. (See Nye and Jenkins.) | | | | | | |
| Jenkins, Howard M., Allegheny, Pa. Device for opening or closing elevator-doors | 740,569 | Oct. 6 | 368 | 76 | 106 | 1325 |
| Jenkins, Howard M., Allegheny, Pa. Device for locking elevators | 740,570 | Oct. 6 | 369 | 77 | 106 | 1326 |
| Jenkins, Jacob A., and J. F. Lord, Bessemer City, N. C. Rotary steam-engine | 718,207 | Jan. 13 | 1281 | 281 | 102 | 200 |
| Jenkins, Joel, Montclair, N. J. Cuff-holder | 729,768 | June 2 | 452 | 102 | 104 | 1220 |
| Jenkins, Joel, Montclair, N. J. Garment attachment | 729,769 | June 2 | 453 | 102 | 104 | 1220 |
| Jenkins, Joel, Montclair, N. J. Pin | 729,770 | June 2 | 454 | 102 | 104 | 1220 |
| Jenkins, Joel, Montclair, assignor to Consolidated Safety Pin Company, Bloomfield, N. J. Garment-supporter | 748,282 | Dec. 29 | 5535 | 1262 | 107 | 2394 |
| Jenkins, Newell S., Dresden, Germany. Portable melting apparatus | 721,808 | Mar. 3 | 273 | 61 | 103 | 61 |
| Jenkins, Thomas, Webster, assignor to W. S. Adams, Waynesville, N. C. Treating nickel ores, &c | 723,158 | Mar. 17 | 2784 | ..... | 103 | 619 |
| Jenkins, Thomas, Webster, assignor to W. S. Adams, Waynesville, N. C. Treating nickel ores, &c | 723,159 | Mar. 17 | 2785 | ..... | 103 | 619 |
| Jenkins, Thomas R., Jr., and J. Ebert, Baltimore, Md. Automatic gas cut-off | 741,498 | Oct. 13 | 2122 | 473 | 106 | 1719 |
| Jenkins, William, Eureka Springs, Ark. Fence | 747,435 | Dec. 22 | 3918 | 882 | 107 | 2014 |
| Jenkins, William R., Bellefonte, Pa. Power-hammer | 736,971 | Aug. 25 | 3640 | 806 | 105 | 1809 |
| Jenkins, William R., Bellefonte, Pa. Clevis | 740,865 | Oct. 6 | 894 | 200 | 106 | 1437 |
| Jenkins, William R., Bellefonte, Pa. Manufacturing rakes | 741,671 | Oct. 20 | 2457 | 550 | 106 | 1805 |
| Jenkins, William S., Keb, Iowa. Pick | 718,845 | Jan. 20 | 2503 | 557 | 102 | 560 |
| Jenkinson, Samuel, Kentish Town, London, England. Octave-coupler for reed-organs | 728,721 | May 19 | 3591 | 797 | 104 | 802 |
| Jenkinson, William E., Fort Wayne, Ind. Book of account for electric light and power stations | 726,538 | Apr. 28 | 3940 | 890 / 891 | 103 | 2040 |
| Jenks, Edward. (See Culp, John M., assignor.) | | | | | | |
| Jenks, Robert L., assignor to G. A. Clowes, London, and E. P. Hatschek, Needham Market, England. Manufacturing decolorizing and clarifying material | 729,350 | May 26 | 4719 | ..... | 104 | 1049 |
| Jenne, Henry S., Oneida, N. Y. Egg-carrier | 722,512 | Mar. 10 | 1603 | 353 | 103 | 360 |
| Jenner, Edward J., San Antonio, Tex. Confection-dipping machine | 733,968 | July 21 | 2316 | 544 / 545 | 105 | 521 |
| Jenness, Peter, Philadelphia, Pa. Carbureter for gasolene-engines | 745,063 | Nov. 24 | 4376 | 945 | 107 | 978 |
| Jenney, Harry C., New Bedford, Mass. Leather shoe | 730,919 | June 16 | 2538 | 565 | 104 | 1691 |
| Jenney, James A., Fairhaven, Mass. Oscillating-piston explosive-engine | 725,087 | Apr. 14 | 1246 | 280 / 281 | 103 | 1449 |
| Jennings, Abraham G. (See Davenport, John J., assignor.) | | | | | | |
| Jennings, Abraham G., New York, N. Y. Horseshoe | 740,281 | Sept. 29 | 5268 | 1187 | 106 | 1190 |
| Jennings, David M. (See Bogue and Jennings.) | | | | | | |
| Jennings, Elmira, Salt Lake City, Utah. Stove attachment | 720,589 | Feb. 17 | 2194 | 509 | 102 | 1315 |
| Jennings, Elmira, Salt Lake City, Utah. Skirt-supporter | 745,354 | Dec. 1 | 71 | 17 | 107 | 1116 |
| Jennings, George H., Brockton, Mass. System of heating | 725,717 | Apr. 21 | 2418 | 549 | 103 | 1712 |
| Jennings, George R., Brooklyn, N. Y. Window-shade fixture | 729,594 | June 2 | 129 | 32 | 104 | 1153 |
| Jennings, Jacob C., assignor to Columbus Polishing and Plating Company, Columbus, Ohio. Gas-distributing chandelier | 737,632 | Sept. 1 | 134 | 29 | 106 | 32 |
| Jennings, John, assignor to Greenwood Process Machine Co., Greenwood, Ind. Apparatus for steaming and processing canned goods | 740,981 | Oct. 6 | 1100 | 248 | 106 | 1480 |
| Jennings, John T., East St. Louis, Ill. Ironing-board | 746,518 | Dec. 8 | 2184 | 501 | 107 | 1585 |
| Jennings, Joseph H., Middleway, W. Va. Railway-tie | 743,084 | Nov. 3 | 512 | 111 | 107 | 707 |
| Jennings, Julian H., Atlanta, Ga. Combined cut-off and drain-cock | 734,179 | July 21 | 2737 | 643 | 105 | 612 |
| Jennings, Louis H., Homestead, Pa. Mechanical vender | 733,845 | July 14 | 2062 | 487 | 105 | 450 |
| Jennings, Rutherford W., Philadelphia, Pa. Call-service for restaurants | 724,874 | Apr. 7 | 852 | 196 | 103 | 1351 |
| Jennings, William F., Hopedale, Ill. Wire-stretcher | 737,846 | Sept. 1 | 561 | 122 | 106 | 125 |
| Jennings, Willis A., McKees Rocks, Pa. Pinless clothes-line | 725,447 | Apr. 14 | 1910 | 427 | 103 | 1589 |
| Jensen, Aage, Topeka, Kans. Milk heater or cooler | 730,662 | June 9 | 2073 | 462 | 104 | 1573 |
| Jensen, Aage, Topeka, Kans. Pasteurizer | 745,105 | Nov. 24 | 4464 | 965 / 966 | 107 | 995 |
| Jensen, Andrew, and W. Reissner, Des Moines, Iowa. Counter-refrigerator | 732,945 | July 7 | 438 | 108 / 109 | 105 | 95 |
| Jensen, Andrew P., *et al.* (See Farmer, Julius M., assignor.) | | | | | | |
| Jensen, Claus P., Clarks Grove, Minn. Pneumatic stacker | 720,697 | Feb. 17 | 2409 | 551 | 102 | 1359 |
| Jensen, Jens, Livermore, Cal. Baling-press | 729,183 | May 26 | 4420 | 974 | 104 | 986 |
| Jensen, Jens C., assignor to A. G. Weidensee, Pentwater, Mich. Water-gage cock | 728,722 | May 19 | 3592 | 798 | 104 | 802 |
| Jensen, Jens P., Esbjerg, Denmark, assignor to T. P. Hansen. Thermostatic pole-changer | 743,879 | Nov. 10 | 2107 | 450 | 107 | 464 |

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| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drgs. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Jensen, Laurits, and J. Christensen, San Francisco, Cal. Safety gas-cock | 721,308 | Feb. 24 | 3563 | 811 | 102 | 1623 |
| Jensen, Rasmus, Milwaukee, Wis. Internal-combustion engine | 741,138 | Oct. 13 | 1390 | 318<br>319 | 106 | 1562 |
| Jenssen, Christian P. A., Dwight, N. D. Nail-feeding device | 731,685 | June 23 | 3987 | 890 | 104 | 2002 |
| Jeppson, Olof. (See Lucas and Jeppson.) | | | | | | |
| Jepson, Erwin B., assignor to Jepson Systems Company, Limited, Grand Rapids, Mich. File and file-case | 745,106 | Nov. 24 | 4465 | 966 | 107 | 996 |
| Jepson, James T., Leeds, England. Self-discharging railway-wagon | 726,690 | Apr. 28 | 4229 | 956<br>957 | 103 | 2099 |
| Jepson Systems Company. (See Jepson, Erwin B., assignor.) | | | | | | |
| Jermyn, David M. (See Jasper, Manuel E., assignor.) | | | | | | |
| Jernberg, John G., Boston, Mass. Tool-stock | 728,929 | May 26 | 3966 | 882 | 104 | 893 |
| Jerome, Eugene D. (See Henderson and Jerome.) | | | | | | |
| Jerram, Frederic O., Westcliff on Sea, England. Bottling and corking machine | 728,396 | May 19 | 2372 | 654<br>655 | 104 | 670 |
| Jerrard, Charles H., East Ham, England. Apparatus for cleansing tram-rails or the like | 724,479 | Apr. 7 | 109 | 27 | 103 | 1192 |
| Jerrems, Thomas W., assignor of one-half to E. W. Goodrick, St. Paul, Minn. Machine for making grass twine | 745,625 | Dec. 1 | 568 | 132<br>133 | 107 | 1219 |
| Jessen, Jes J., and J. H. Ross, Omaha, Nebr. Bag | 723,282 | Mar. 24 | 3028 | 681 | 103 | 685 |
| Jessup, Robert W., assignor to Spiral Belt Separator Co., San Francisco, Cal. Separator | 746,089 | Dec. 8 | 1425 | 320 | 107 | 1422 |
| Jessup, William S., *et al.* (See Miner, Robert J., assignor.) | | | | | | |
| Jeter, J. W., *et al.* (See Renfroe, Thomas N., assignor.) | | | | | | |
| Jetmore, Aaron P., *et al.* (See Place, James F., assignor.) | | | | | | |
| Jevons, Benjamin F. (See Anderson and Jevons.) | | | | | | |
| Jewell, Cornelius, assignor to J. M. Hoyt, Walled Lake, Mich. Blacksmith's forging-hammer | 724,294 | Mar. 31 | 4988 | 1116 | 103 | 1100 |
| Jewell, Frank H. (See Jewell, William O. and F. H.) | | | | | | |
| Jewell, Omar H. and W. M., Chicago, Ill. Filtering | 726,304 | Apr. 28 | 3483 | 789 | 103 | 1950 |
| Jewell, Walter S., Philadelphia, Pa. Assorting-file for checks, &c | 744,350 | Nov. 17 | 3060 | 657 | 107 | 684 |
| Jewell, William M. (See Jewell, Omar H. and W. M.) | | | | | | |
| Jewell, William M., Chicago, Ill. Purifying water | 718,465 | Jan. 13 | 1765 | ..... | 102 | 392 |
| Jewell, William O. and F. H., Marion, Ind. Door-sill | 719,672 | Feb. 3 | 459 | 104 | 102 | 918 |
| Jewett, George S., Norridgewock, Me. Self-heating can for canned goods | 720,434 | Feb. 10 | 1877 | 428 | 102 | 1236 |
| Jewett, George S., Norridgewock, Me. Heating-can for fruit or vegetables, &c | 720,435 | Feb. 10 | 1878 | 428 | 102 | 1237 |
| Jewett, Pearl. (See Merrill, Emory, assignor.) | | | | | | |
| Jewett Typewriter Company. (See Singleton, George W., assignor.) | | | | | | |
| Jinkens, Thomas W., assignor of one-third to F. Grose, Fort Collins, Colo. Dumping-wagon | 748,190 | Dec. 29 | 5370 | 1220<br>1221 | 107 | 2357 |
| Jinks, Benjamin F., and E. W. Davis, Morrill, Kans. Hammer | 736,265 | Aug. 11 | 2300 | 497<br>498 | 105 | 1491 |
| Joachimson, Martin, assignor of one-half to S. Rothschild, New York, N. Y. Radiant-heat bath | 720,357 | Feb. 10 | 1755 | 398<br>399 | 102 | 1211 |
| Joatton, Joseph, Lyons, assignor to A. Michaud & Cie., Paris, France. Incandescent gas-burner | 739,879 | Sept. 29 | 4527 | 1017 | 106 | 1034 |
| Job, Evan J., *et al.* (See Holl, Gustav J., assignor.) | | | | | | |
| Jobert, Aristide, South Manchester, Conn. Warp-beam for looms | 729,496 | May 26 | 4950 | 1097 | 104 | 1098 |
| Jobin, Joseph R., assignor of one-third to L. E. Meyer, St. Louis, Mo. Apparatus for discharging bilge-water | 718,466 | Jan. 13 | 1767 | 392 | 102 | 392 |
| Jockin, William M. H., New York, N. Y. Separable button | 734,334 | July 21 | 3036 | 715 | 105 | 676 |
| Joecken, Peter, and J. Kotzlovsky, Philadelphia, Pa. Attachment-holder for sewing-machines | 723,608 | Mar. 24 | 3640 | 815 | 103 | 806 |
| Joecken, Peter J., assignor to Peter Gerlach Company, Cleveland, Ohio. Feeding apparatus for wood strips | 730,920 | June 16 | 2539 | 565 | 104 | 1691 |
| Joel, William, Syracuse, N. Y. Detachable collar for coats | 744,351 | Nov. 17 | 3061 | 657 | 107 | 684 |
| Joergensen, Niels, West Hoboken, N. J. Self-feeding attachment for cooking-stoves | 740,866 | Oct. 6 | 895 | 200 | 106 | 1437 |
| Joerissen, Carl A., Philadelphia, Pa. Tabulating mechanism for type-writing machines | 728,170 | May 12 | 2531 | 563<br>564 | 104 | 555 |
| Joest, Hermann, Hanover, Germany. Manufacture of table knives, forks, or similar articles | 730,921 | June 16 | 2542 | 565 | 104 | 1692 |
| Johanns, Rudolph, Brooklyn, assignor to F. Junge, Silverlake, N. Y. Electrolytic cell | 724,580 | Apr. 7 | 303 | 74 | 103 | 1233 |
| Johannsen, Palmer E., Carson, Iowa. Envelop | 736,853 | Aug. 18 | 3419 | 756 | 105 | 1743 |
| Johanson, Alfred, Saraland, Ala. Sash-lock | 748,505 | Dec. 29 | 5945 | 1349 | 107 | 2484 |
| Johanson, Emil G., Rockford, Ill. Mechanical movement | 736,972 | Aug. 25 | 3641 | 806 | 105 | 1810 |
| Johansson, Johan T. (See Bennet and Johansson.) | | | | | | |
| Johansson, Johan V., Skyrsta, Hammar, Sweden. Reversible propeller | 719,225 | Jan. 27 | 3243 | 724 | 102 | 729 |
| Johansson, Per J., and L. L. Jonsson, West Chelmsford, Mass. Plow | 732,302 | June 30 | 5178 | 1150 | 104 | 2266 |
| John, Evan, Lorain, Ohio. Tube-cleaner | 748,283 | Dec. 29 | 5536 | 1262 | 107 | 2394 |
| John Mehl & Company. (See Gentzel, Gustav H., assignor.) | | | | | | |
| John Mohr & Sons. (See Gabriel, Charles, assignor.) | | | | | | |
| John O'Brien Boiler Works Company. (See O'Brien, John J., assignor.) | | | | | | |
| John S. Bushnell Company. (See Snow, Levi T., assignor.) | | | | | | |
| John Thomson Press Company. (See Thomas, Frank W., assignor.) | | | | | | |
| John Thomson Press Company. (See Thomson, John, assignor.) | | | | | | |
| Johns, Albert F., Beaver City, Nebr., and H. A. Hill, Wichita, Kans. Joint for shears, scissors, or the like | 725,718 | Apr. 21 | 2420 | 549 | 103 | 1712 |
| Johns, Edward B., Nashville, Tenn. Group-indicator for freight-car systems | 738,911 | Sept. 15 | 2727 | 602 | 106 | 617 |
| Johns, Frank J., *et al.* (See Pulsifer, James P., assignor.) | | | | | | |
| Johns, George T. (See Meyeringh, Theodore, assignor.) | | | | | | |
| Johns-Pratt Company. (See Sachs, Joseph, assignor.) | | | | | | |
| Johnson, Adolph. (See Jeffers, Herbert C., assignor.) | | | | | | |
| Johnson, Adolph, Battlecreek, Mich. Combined hall-rack and umbrella-stand | 724,875 | Apr. 7 | 854 | 196 | 103 | 1352 |
| Johnson, Adolph, Battlecreek, Mich. Rotary steam-cooker | 731,573 | June 23 | 3790 | 844 | 104 | 1964 |
| Johnson, Adolph, Battlecreek, Mich. Rotary grain drier and cooler | 732,561 | June 30 | 5688 | 1263 | 104 | 2374 |
| Johnson, Albert, San Louis Obispo, and R. McKay, San Francisco, Cal. Quicksilver-roaster | 724,581 | Apr. 7 | 305 | 74 | 103 | 1233 |
| Johnson, Albert J. (See Harrod, Corbin V., assignor.) | | | | | | |
| Johnson, Alfred E., Colorado Springs, Colo. Barrel-filter | 741,499 | Oct. 13 | 2124 | 473 | 106 | 1719 |
| Johnson, Alfred W., New Brunswick, N. J. Meat-cutter | 734,335 | July 21 | 3037 | 715 | 105 | 676 |
| Johnson, Alvis L., Sipe Springs, Tex. Cultivator-shovel | 725,448 | Apr. 14 | 1910 | 428 | 103 | 1589 |
| Johnson, Andrew, *et al.* (See Bacon, Frederick J., assignor.) | | | | | | |
| Johnson, Andrew J., Cleveland, Ohio. Trolley | 719,006 | Jan. 27 | 2821 | 632 | 102 | 643 |
| Johnson, Andru, and J. C. Crofts, Nelson, Canada. Briqueting-machine | 724,876 | Apr. 7 | 855 | 196<br>197 | 103 | 1352 |
| Johnson, Arthur L., Seattle, Wash. Ticket or card holder | 735,773 | Aug. 11 | 1408 | 302 | 105 | 1298 |

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| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Johnson, August, Lafayette, Cal. Door-closing means for baling-presses | 732,513 | Mar. 10 | 1605 | 353 | 103 | 361 |
| Johnson, August, Butte, Mont. Mining column-bar | 726,066 | Apr. 21 | 3016 | 686 | 103 | 1839 |
| Johnson, Bennett, *et al.* (See Coble, William H., assignor.) | | | | | | |
| Johnson, Bernard F., assignor of two-thirds to W. H. Philips, Pawtucket, and W. J. McClue, Providence, R. I. Shade-roller bracket | 727,802 | May 12 | 1865 | 415 | 104 | 415 |
| Johnson, Charles, Butte, Mont. Combined supporting and attaching device | 731,908 | June 23 | 4386 | 978 | 104 | 2089 |
| Johnson, Charles, Butte, Mont. Lamp | 731,909 | June 23 | 4388 | 978 | 104 | 2089 |
| Johnson, Charles, St. George, Canada. Apparatus for cleaning ships' bottoms | 732,082 | June 30 | 4739 | 1058 | 104 | 2175 |
| Johnson, Charles F., *et al.* (See Johnson, William C., assignor.) | | | | | | |
| Johnson, Charles H. (See Vaughan and Johnson.) | | | | | | |
| Johnson, Charles H., Chicago, Ill. Fluid-pressure-operated tool | 726,305 | Apr. 28 | 3486 | 789 | 103 | 1950 |
| Johnson, Charles H., Chicago, Ill. Fluid-pressure-operated tool | 743,389 | Nov. 3 | 1132 | 240 | 107 | 239 |
| Johnson, Charles J., Newton, Iowa. Mop-wringer | 725,256 | Apr. 14 | 1556 | 353 | 103 | 1515 |
| Johnson, Charles M., assignor of one-half to C. H. and W. F. Coakley and S. S. Cramer, Milwaukee, Wis. Box-fastener | 729,595 | June 2 | 131 | 32 | 104 | 1154 |
| Johnson, Charles M., assignor of one-half to W. F. and C. H. Coakley and S. S. Cramer, Milwaukee, Wis. Box-fastener | 737,411 | Aug. 25 | 4449 | 998 | 105 | 1981 |
| Johnson, Charles N., Vincennes, Ind. Fire-escape | 732,946 | July 7 | 440 | 109 | 105 | 95 |
| Johnson, Charles R. (See Lingle, George W., assignor.) | | | | | | |
| Johnson, Charles S., Brownville, Me. Pipe-coupling | 723,675 | Mar. 24 | 3748 | 841 | 103 | 828 |
| Johnson, Charles W., St. Louis, Mo. Coin-counting machine | 726,067 | Apr. 21 | 3017 | 686 | 103 | 1839 |
| Johnson, Daniel E., Hartford, Conn. Metal-working by electricity | 739,601 | Sept. 22 | 3979 | 887 | 106 | 899 |
| Johnson, Daniel E., assignor to F. C. Billings, Hartford, Conn. Controlling means for motor-vehicles | 719,806 | Feb. 3 | 721 | 169 | 102 | 975 |
| Johnson, Delbert E., Chicago, Ill. Device for transmitting power from car-axles | 721,309 | Feb. 24 | 3564 | 811 | 102 | 1624 |
| Johnson, E. B., *et al.* (See Coleman, Lucius E., assignor.) | | | | | | |
| Johnson, Edward D., Covington, Va. Spring-wheel | 741,797 | Oct. 20 | 2710 | 604 | 106 | 1858 |
| Johnson, Edward G., Philadelphia, Pa., assignor to Savin Ice Pad Company, Philadelphia, Pa., and Camden, N. J. Pad or support for ice | 720,929 | Feb. 17 | 2809 | 644 | 102 | 1444 |
| Johnson, Edward H. (See Lang, Johan G. V., assignor.) | | | | | | |
| Johnson, Eldridge R., Philadelphia, Pa., assignor to Victor Talking Machine Company. Hand-motor for toy gramophones | 735,343 | Apr. 14 | 1713 | 386 | 103 | 1547 |
| Johnson, Eldridge R., Philadelphia, Pa., assignor to Victor Talking Machine Company. Sound-record | 739,318 | Sept. 22 | 3449 | 770 | 106 | 785 |
| Johnson, Eldridge R., Philadelphia, Pa., assignor to Victor Talking Machine Company. Sound-record for talking-machines | 739,421 | Sept. 22 | 3664 | 815 | 106 | 832 |
| Johnson, Eldridge R., Philadelphia, Pa., assignor to Victor Talking Machine Company. Turn-table for talking-machines | 741,247 | Oct. 13 | 1608 | 361 | 106 | 1609 |
| Johnson, Eldridge, R., Philadelphia, Pa., assignor to Victor Talking Machine Company. Sound-recording machine | 741,500 | Oct. 13 | 2126 | 474 | 106 | 1726 |
| Johnson, Eldridge R., Philadelphia, Pa., assignor to Victor Talking Machine Company. Brake for talking-machine motors | 741,501 | Oct. 13 | 2129 | 474 | 106 | 1721 |
| Johnson, Eldridge R., Philadelphia, Pa., assignor to Victor Talking Machine Company. Reproducer-support for gramophones | 742,666 | Oct. 27 | 4391 | 991 | 106 | 2221 |
| Johnson Electric Service Company. (See Johnson, Warren S., assignor.) | | | | | | |
| Johnson, Elias M., New York, N. Y. Projectile | 732,638 | June 30 | 5822 | 1291 | 104 | 2404 |
| Johnson, Ellsworth. (See Douglass, Elias B., assignor.) | | | | | | |
| Johnson, Elmer, New Haven, Conn. Blowpipe | 731,910 | June 23 | 4392 | 979 | 104 | 2090 |
| Johnson, Elmo W., Freehold, N. J. Phosphate-distributer | 727,957 | May 12 | 2155 | 480, 481 | 104 | 478 |
| Johnson, Emil. (See Forwerg and Larsen, assignors.) | | | | | | |
| Johnson, Eysteinn. (See Runolfson and Johnson.) | | | | | | |
| Johnson, Finis E. (See Wilbanks, William N., assignor.) | | | | | | |
| Johnson, Frank A. (See Howells and Johnson.) | | | | | | |
| Johnson, Frank L., Sapperton, Canada. Shingle-machine | 742,439 | Oct. 27 | 3975 | 892 | 106 | 2132 |
| Johnson, Frank P., Danville, Pa. Garment-hanger | 728,239 | May 19 | 2672 | 597 | 104 | 607 |
| Johnson, Franklin E. (See Hopkins, Jackson, assignor.) | | | | | | |
| Johnson, Fred C., Cloquet, Minn. Luggage-carrier for bicycles | 739,680 | Sept. 22 | 4131 | 921 | 106 | 932 |
| Johnson, Frederick G., assignor to F. G. Johnson Company, Hartford, Conn. Metal-working machine | 731,686 | June 23 | 3990 | 891 | 104 | 2003 |
| Johnson, Frederick W., Waltham, Mass. Device for preventing refilling of bottles | 737,633 | Sept. 1 | 135 | 30 | 106 | 32 |
| Johnson, Frederick W., Waltham, Mass. Self-closing bottle-stopper | 745,191 | Nov. 24 | 4648 | 1012 | 107 | 1034 |
| Johnson, George A., Parkridge, assignor of one-half to H. H. Harries, Chicago, Ill. Toy | 742,194 | Oct. 27 | 3521 | 785 | 106 | 2038 |
| Johnson, George B. (See Shaffer and Johnson.) | | | | | | |
| Johnson, George F., Pinners, Va. Trolley-stand | 725,719 | Apr. 21 | 2421 | 549, 550 | 103 | 1713 |
| Johnson, George W., Erie, Pa. Pipe-wrench | 737,847 | Sept. 1 | 563 | 122 | 106 | 125 |
| Johnson, George W., Nickerson, Nebr. Rail-joint | 741,139 | Oct. 13 | 1393 | 319 | 106 | 1563 |
| Johnson, Godfrey B., London, England. Machinery for rolling sheet or other metal strips or bars of curved or other section | 726,691 | Apr. 28 | 4232 | 957, 958, 959 | 103 | 2099 |
| Johnson, Grant T. (See Tuttle, Josiah S., assignor.) | | | | | | |
| Johnson, Gustaf, Pigeoncove, Mass. Voting-machine | 737,412 | Aug. 25 | 4450 | 999 | 105 | 1981 |
| Johnson, Gustaf E. (See Talen, Pearson, Christopher, Johnson, and Lindberg.) | | | | | | |
| Johnson, Guy R., Joliet, Ill. Cap and peep-hole for blast-furnace twyers | 728,111 | May 12 | 2417 | 539 | 104 | 533 |
| Johnson, H. S., *et al.* (See Hachmann, Frederick, assignor.) | | | | | | |
| Johnson, H. S., *et al.* (See Whittlesey, Edith O., assignor.) | | | | | | |
| Johnson, Hans G., and M. S. Howard, assignors of nine-tenths to Eureka Mining, Smelting and Power Company, Waukon, Iowa. Ore-separator | 724,705 | Apr. 7 | 537 | 127, 128 | 103 | 1283 |
| Johnson, Harold. (See Hodgson, Edgar J., assignor.) | | | | | | |
| Johnson, Harry L., Golden City, Mo. Planter and marker | 728,930 | May 26 | 3968 | 882, 883 | 104 | 893 |
| Johnson, Harry W., Lima, Ohio. Swimming-mitt | 742,440 | Oct. 27 | 3977 | 893 | 106 | 2132 |
| Johnson, Henry, assignor of one-half to Wolverine Manufacturing Company, Detroit, Mich. Extension-table | 720,590 | Feb. 17 | 2195 | 509 | 102 | 1316 |
| Johnson, Henry, Detroit, Mich., assignor of one-half to Wolverine Manufacturing Company. Extension-table | 732,354 | June 30 | 5286 | 1172 | 104 | 2288 |
| Johnson, Henry, Detroit, Mich., assignor of one-half to Wolverine Manufacturing Company. Extension-table | 741,910 | Oct. 20 | 2929 | 653 | 106 | 1904 |
| Johnson, Henry, Brunswick, assignor of one-half to G. W. Frier, Glenferrie, Victoria, Australia. Apparatus for the manufacture of steel | 742,441 | Oct. 27 | 3978 | 893 | 106 | 2132 |
| Johnson, Henry W., McPherson, Kans. Shocker | 739,084 | Sept. 15 | 3020 | 669 | 106 | 679 |
| Johnson, Hjalmar, Pittsburg, Pa. Toy | 742,032 | Oct. 20 | 3181 | 710 | 106 | 1955 |
| Johnson, J. Edward. (See McComb, William L., assignor.) | | | | | | |
| Johnson, James, Waverly, Iowa. Shoe polisher or inker | 720,930 | Feb. 17 | 2810 | 644 | 102 | 1444 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Johnson, James S. (See Plucker, Jacob J., assignor.) | | | | | | |
| Johnson, James W., *et al.* (See Whitaker, Richard, assignor.) | | | | | | |
| Johnson, Jeremiah P., Detroit, Mich. Corner-brace | 717,687 | Jan. 6 | 296 | 73 | 102 | 64 |
| Johnson, Jeremiah P., Detroit, Mich. Vehicle-body | 719,007 | Jan. 27 | 2823 | 633 | 102 | 644 |
| Johnson, Jeremiah P., Detroit, Mich. Wagon-body | 723,391 | Mar. 24 | 3250 | 728 | 103 | 726 |
| Johnson, Joel W., Hartford, Conn. Liquid filling and indicating device | 727,144 | May 5 | 624 | 134 | 104 | 135 |
| Johnson, John. (See Hereford, Edward L., assignor.) | | | | | | |
| Johnson, John, Des Moines, Iowa. Chain hoist | 740,660 | Oct. 6 | 516 | 113 | 106 | 1357 |
| Johnson, John, assignor to Alaska Packers Association, San Francisco, Cal. Fish-cleaning apparatus | 719,226 | Jan. 27 | 3244 | 724<br>725 | 102 | 730 |
| Johnson, John, and B. Picker, Bethalto, Ill. Pnematic water-elevator | 745,626 | Dec. 1 | 571 | 133 | 107 | 1219 |
| Johnson, John A., and J. G. Young, assignors of one-third to C. S. Duncan, Greenfield, Ind. Mold for cement receptacles | 736,973 | Aug. 25 | 3641 | 807 | 105 | 1810 |
| Johnson, John C., administrator. (See Runolfson and Johnson.) | | | | | | |
| Johnson, John C., Churchwood, Va. Railway level and gage | 747,975 | Dec. 29 | 4961 | 1120 | 107 | 2269 |
| Johnson, John D. A., Omaha, Nebr. Mechanical movement | 740,868 | Oct. 6 | 898 | 201 | 106 | 1438 |
| Johnson, John F., Battlecreek, Mich. Roller-rack | 722,514 | Mar. 10 | 1606 | 354 | 103 | 361 |
| Johnson, John P. (See Barber, Lewis S., assignor.) | | | | | | |
| Johnson, John P., Sonora, Cal. Cuspidor collector and carrier | 726,539 | Apr. 28 | 3942 | 891 | 103 | 2040 |
| Johnson, John P., Tustin, Mich. Metal-working appliance | 731,305 | June 16 | 3271 | 726<br>727 | 104 | 1840 |
| Johnson, John R., El Paso, Tex. Bridle-rod for railway-rails | 725,720 | Apr. 21 | 2425 | 550 | 103 | 1713 |
| Johnson, Joseph, assignor of one-half to C. Mumm, Minneapolis, Minn. Water-purifier | 718,935 | Jan. 20 | 2693 | 602 | 102 | 602 |
| Johnson, Joseph A., assignor of one-half to G. H. Stewart, Los Angeles, Cal. Ore-crusher | 727,958 | May 12 | 2158 | 481 | 104 | 479 |
| Johnson, Joseph B., Geneva, N. Y. Supporting and locking device | 723,466 | Mar. 24 | 3375 | 755 | 103 | 752 |
| Johnson, Joseph M. (See Cantrell, Louis G., assignor.) | | | | | | |
| Johnson, Joseph S., New York, N. Y. Fire-escape | 732,713 | Mar. 17 | 1996 | 446 | 103 | 457 |
| Johnson, Joshua P., Brunswick, Me., assignor to Draper Company, Hopedale, Mass. Shuttle-checking mechanism for looms | 743,880 | Nov. 10 | 2108 | 450 | 107 | 465 |
| Johnson, Lafayette W., assignor to C. E. Nathorst and C. W. Woods, Jerome, Ariz. Ter. Pipe-wrench | 717,579 | Jan. 6 | 100 | 26 | 102 | 24 |
| Johnson, Lawrence T. (See Macbeth and Johnson.) | | | | | | |
| Johnson, Lenson, Chicago, Ill. Brush | 719,227 | Jan. 27 | 3248 | 725 | 102 | 731 |
| Johnson, Lorenzio, assignor of one-half to A. A. Chapman, Louisville, Ky. Musical instrument | 738,811 | Sept. 15 | 2545 | 559 | 106 | 578 |
| Johnson, Louis K., assignor to Alden Type Machine Company, New York, N. Y. Mechanism for sorting types, &c. | 747,183 | Dec. 15 | 3443 | 780 | 107 | 1893 |
| Johnson, Lucius O., *et al.* (See Johnson, William C., assignor.) | | | | | | |
| Johnson, Manander M., Clay Center, Nebr. Brooder | 718,631 | Jan. 20 | 2114 | 460 | 102 | 483 |
| Johnson, Manander M., Clay Center, Nebr. Hot-water heating system for incubators | 742,033 | Oct. 20 | 3182 | 710 | 106 | 1955 |
| Johnson, Mark W., Jr., Birmingham, Ala. Device for charging blast-furnaces | 730,922 | June 16 | 2543 | 566 | 104 | 1692 |
| Johnson, Martin, Milwaukee, Wis., assignor to Milwaukee Paper Dampening Machine Company. Paper-damping machine | 727,373 | May 5 | 1025 | 222 | 104 | 221 |
| Johnson, Mary E. (See Ellstrom, Gustaf, assignor.) | | | | | | |
| Johnson, Maurice C., Chicago, Ill. Non-refillable bottle | 742,328 | Oct. 27 | 3782 | 847 | 106 | 2093 |
| Johnson, Merrills J. (See Betts, William H., assignor.) | | | | | | |
| Johnson, Montgomery H., Utica, N. Y. Electrical fuse or junction box | 718,632 | Jan. 20 | 2116 | 461 | 102 | 483 |
| Johnson, Moses C., assignor to Helix Gear Company, Hartford, Conn. Shaft-supporting device | 717,860 | Jan. 6 | 662 | 147 | 102 | 141 |
| Johnson, Moses C., assignor to Helix Gear Company, Hartford, Conn. Shifting-lever | 717,861 | Jan. 6 | 665 | 147 | 102 | 142 |
| Johnson, N. J., *et al.* (See Coble, William H., assignor.) | | | | | | |
| Johnson, Nellie E., assignor of one-half to H. Garrison, Frankston, Tex. Garment-seam | 735,623 | Apr. 14 | 2232 | 504 | 103 | 1659 |
| Johnson, Nels J. (See Golden, Ephraim P., assignor.) | | | | | | |
| Johnson, Oliver W., Oakharbor, Ohio. Car-replacer | 717,862 | Jan. 6 | 667 | 148 | 102 | 142 |
| Johnson, Oliver W., Cleveland, Ohio. Car-replacer | 735,206 | Aug. 4 | 453 | 90 | 105 | 1077 |
| Johnson, Osro P. (See Crockett and Johnson.) | | | | | | |
| Johnson, Reno D. O., St. Louis, Mo. Gas-heated comb | 736,266 | Aug. 11 | 2302 | 498 | 105 | 1491 |
| Johnson, Reno D. O., and W. H. Reeves, St. Louis, Mo. Rotary pump | 745,857 | Dec. 1 | 1006 | 226 | 107 | 1314 |
| Johnson, Reno D. O., and H. T. Bradner, St. Louis, Mo.; said Bradner assignor to said Johnson. Hair-drying comb | 732,860 | July 7 | 292 | 73 | 105 | 65 |
| Johnson, Richard L., assignor of one-half to S. L. Baysinger, Rolla, Mo. Invalid-bed | 740,867 | Oct. 6 | 896 | 200<br>201 | 106 | 1437 |
| Johnson, Richard S., Youngstown, Ohio. Drip-receiver for umbreilas | 739,494 | Sept. 22 | 3785 | 847 | 106 | 859 |
| Johnson, Robert F., Galesburg, Ill. Railway-signal | 739,681 | Sept. 22 | 4132 | 922 | 106 | 933 |
| Johnson, Robert S., Grand Rapids, Mich. Metallic crate | 739,006 | Sept. 15 | 2878 | 639 | 106 | 650 |
| Johnson, Robert W., *et al.* (See Whitaker, Richard, assignor.) | | | | | | |
| Johnson, Robert W., New Brunswick, N. J. Vaccination-shield | 720,812 | Feb. 17 | 2590 | 598 | 102 | 1398 |
| Johnson, Robert W., New Brunswick, N. J. Sterilizing and packaging surgical absorbent dressing | 727,145 | May 5 | 625 | 134 | 104 | 135 |
| Johnson, Robert W., New Brunswick, N. J. Substitute material for gauze | 727,146 | May 5 | 626 | 135 | 104 | 135 |
| Johnson, Robert W., New Brunswick, N. J. Formaldehyde-generator | 737,413 | Aug. 25 | 4456 | 1000 | 105 | 1983 |
| Johnson, Robert W., New Brunswick, N. J. Formaldehyde-fumigator | 747,184 | Dec. 15 | 3444 | 780 | 107 | 1893 |
| Johnson, Sameil W., Carbon, Wyo. Mower | 742,034 | Oct. 20 | 3183 | 710<br>711 | 106 | 1955 |
| Johnson, Samuel C. (See Teeple and Johnson.) | | | | | | |
| Johnson, Sinclair J., Montclair, N. J. Car-door | 732,947 | July 7 | 441 | 109 | 105 | 95 |
| Johnson, Sinclair J., Montclair, N. J. Dumping-car | 746,519 | Dec. 8 | 2185 | 502 | 107 | 1585 |
| Johnson, Thomas C., assignor to Winchester Repeating Arms Co., New Haven, Conn. Tubular magazine-gun | 719,807 | Feb. 3 | 724 | 170 | 102 | 976 |
| Johnson, Thomas C., assignor to Winchester Repeating Arms Co., New Haven, Conn. Two-tube gravity-charger for magazine-guns | 719,808 | Feb. 3 | 725 | 170<br>171 | 102 | 976 |
| Johnson, Thomas C., assignor to Winchester Repeating Arms Co., New Haven, Conn. Gas-operated firearm | 720,698 | Feb. 17 | 2410 | 551<br>552 | 102 | 1359 |
| Johnson, Thomas J., Norman, Okla. Ter. Paper file and index | 742,035 | Oct. 20 | 3185 | 711<br>712 | 106 | 1956 |
| Johnson, Thomas R., Joplin, Mo. Flanging-machine | 743,644 | Nov. 10 | 1688 | 355<br>356 | 107 | 376 |
| Johnson, Thornton H. (See Burrus, Henry, assignor.) | | | | | | |
| Johnson, Victor, St. Louis, Mo. Holder for crayons or the like | 724,877 | Apr. 7 | 858 | 197 | 103 | 1352 |
| Johnson, Warren S., Milwaukee, Wis. Thermostatic temperature-regulator | 733,210 | July 7 | 910 | 220 | 105 | 191 |
| Johnson, Warren S., assignor to Johnson Electric Service Company, Milwaukee, Wis. Air-vent-controlling apparatus for radiators | 721,809 | Mar. 3 | 274 | 61 | 103 | 61 |
| Johnson, William. (See Grant, Percy, assignor.) | | | | | | |
| Johnson, William C., Memphis, Tenn. Bleached paper-pulp from cotton-seed hulls | 733,969 | July 21 | 2322 | ------ | 105 | 522 |
| Johnson, William C., Winchester, assignor of three-fourths to L. O. Johnson, M. L. Critchfield, and C. F. Johnson, Oskaloosa, Kans. Bit | 721,894 | Mar. 3 | 439 | 97 | 103 | 97 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Johnson, William E., Spokane, assignor of one-half to S. L. Thomas, Hatton, Wash. Non-refillable bottle | 738,686 | Sept. 8 | 2294 | 503 | 106 | 506 |
| Johnson, William H., Veedersburg, Ind. Bending-machine | 727,959 | May 12 | 2159 | 481, 482, 483 | 104 | 479 |
| Johnson, William H., Veedersburg, Ind. Bending-machine | 746,090 | Dec. 8 | 1426 | 320, 321 | 107 | 1423 |
| Johnson, William H., Winthrop, and C. Gordon, Boston, Mass. Suspenders | 718,129 | Jan. 13 | 1136 | 252 | 102 | 260 |
| Johnson, William J. (See Colthar, William U., assignor.) | | | | | | |
| Johnson, Willie H., Waco, Tex. Water-boiler, skimmer, and oil-separator | 726,167 | Apr. 21 | 3189 | 721 | 103 | 1874 |
| Johnson, Wilson S., Sheraden, Pa. Fastening device for bath-tubs, stoves, &c. | 717,863 | Jan. 6 | 668 | 148 | 102 | 143 |
| Johnson, Winfield S., Duquoin, Ill. Automatic water-closet seat | 734,336 | July 21 | 3039 | 716 | 105 | 677 |
| Johnson, Woolsey M., Hartford, Conn. Electrodepositing metals | 742,442 | Oct. 27 | 3980 | 893 | 106 | 2133 |
| Johnson, Woolsey M., Hartford, Conn. Electrolytic apparatus | 742,443 | Oct. 27 | 3982 | 894 | 106 | 2133 |
| Johnsrud, Martin, Chicago, Ill. Cream-separator | 718,936 | Jan. 20 | 2694 | 603 | 102 | 603 |
| Johnsrud, Martin, Chicago, Ill. Mechanism for operating cream-separator cylinders | 729,596 | June 2 | 132 | 33 | 104 | 1154 |
| Johnston, Abner, assignor of one-half to C. L. Collins, New York, N. Y. Adjustable seat for two-wheeled vehicles | 720,524 | Feb. 10 | 2044 | 469 | 102 | 1270 |
| Johnston, Alexander A., Indianapolis, Ind. Washing-machine | 733,211 | July 7 | 913 | 220 | 105 | 191 |
| Johnston, Allen, Ottumwa, Iowa. Machine for reducing and finishing hollow bearing-balls | 720,436 | Feb. 10 | 1879 | 428, 429 | 102 | 1237 |
| Johnston, Allen, Ottumwa, Iowa. Sash-pulley or similar device | 724,878 | Apr. 7 | 858 | 197 | 103 | 1353 |
| Johnston, Allen, Ottumwa, Iowa. Ball-bearing | 747,436 | Dec. 22 | 3920 | 882 | 107 | 2014 |
| Johnston, Allen, Ottumwa, Iowa. Self-lubricating metallic ball and making same | 748,191 | Dec. 29 | 5372 | 1221 | 107 | 2358 |
| Johnston, Andrew J., Liverpool, England. Measuring and bag-filling apparatus | 739,602 | Sept. 22 | 3980 | 888 | 106 | 899 |
| Johnston, Arthur C., Bristol, Pa., assignor to Dodge Coal Storage Company, Naugatuck, Conn. Storage apparatus | 722,515 | Mar. 10 | 1609 | 354, 355 | 103 | 361 |
| Johnston, August. (See Bonneville and Johnston.) | | | | | | |
| Johnston Calking and Sole Stretching Machine Company. (See Johnston, Charles R., assignor.) | | | | | | |
| Johnston, Charles R., Eureka, Cal., assignor to Johnston Calking and Sole Stretching Machine Company, Kittery, Me. Machine for stretching the soles of boots or shoes | 744,078 | Nov. 17 | 2538 | 543 | 107 | 570 |
| Johnston, Charles W., assignor to himself and W. H. Pearce, Meeteetse, Wyo. Sad-iron | 736,733 | Aug. 18 | 3185 | 703 | 105 | 1693 |
| Johnston, Edward A., Chicago, Ill. Corn-harvester | 747,611 | Dec. 22 | 4233 | 952, 953 | 107 | 2085 |
| Johnston, Edward A., assignor to International Harvester Company, Chicago, Ill. Folding frame for grinders | 719,008 | Jan. 27 | 2824 | 633 | 102 | 644 |
| Johnston, Edward A., assignor to International Harvester Company, Chicago, Ill. Harvester pitman connection | 730,022 | June 2 | 921 | 206 | 104 | 1315 |
| Johnston, Edward A., assignor to International Harvester Company, Chicago, Ill. Breast-plate stripping device for grain-binders | 732,355 | June 30 | 5287 | 1172 | 104 | 2288 |
| Johnston, Edward A., assignor to International Harvester Company, Chicago, Ill. Automatic pawl-trip for horse hay-rakes | 732,861 | July 7 | 293 | 73, 74 | 105 | 65 |
| Johnston, Edward A., assignor to International Harvester Company, Chicago, Ill. Cutting apparatus for mowers or reapers | 734,714 | July 28 | 3731 | 873 | 105 | 836 |
| Johnston, Edward A., assignor to International Harvester Company, Chicago, Ill. Automatic trip for horse hay-rakes | 737,245 | Aug. 25 | 4135 | 919, 920 | 105 | 1913 |
| Johnston, Edward A., assignor to International Harvester Company, Chicago, Ill. Cord-holder for grain-binders | 737,246 | Aug. 25 | 4138 | 920, 921 | 105 | 1914 |
| Johnston, Edward A., assignor to International Harvester Company, Chicago, Ill. Foot-trip for horse hay-rakes | 738,912 | Sept. 15 | 2729 | 602, 603 | 106 | 618 |
| Johnston, Edward A., assignor to McCormick Harvesting Machine Company, Chicago, Ill. Mowing-machine | 728,580 | May 19 | 3338 | 737, 738, 739 | 104 | 747 |
| Johnston, Edward A., assignor to McCormick Harvesting Machine Company, Chicago, Ill. Reaping attachment for mowers | 728,931 | May 26 | 3972 | 883, 884 | 104 | 894 |
| Johnston, Edward A., assignor to McCormick Harvesting Machine Company, Chicago, Ill. Reaping attachment for mowers | 731,574 | June 23 | 3792 | 844, 845 | 104 | 1964 |
| Johnston, Edward A., assignor to McCormick Harvesting Machine Company, Chicago, Ill. Header | 735,983 | Aug. 11 | 1810 | 387, 388, 389 | 105 | 1387 |
| Johnston, Edward A., assignor to McCormick Harvesting Machine Company, Chicago, Ill. Harvester-reel | 737,848 | Sept. 1 | 564 | 122, 123 | 106 | 125 |
| Johnston, Edward A., assignor to McCormick Harvesting Machine Company, Chicago, Ill. Pitman connection | 738,812 | Sept. 15 | 2546 | 560 | 106 | 578 |
| Johnston, Edward A., assignor to McCormick Harvesting Machine Company, Chicago, Ill. Cord-knotter for grain-binders | 740,139 | Sept. 29 | 4996 | 1122, 1123 | 106 | 1134 |
| Johnston, Edward P., Highlands, Colo. Air-ship | 722,516 | Mar. 10 | 1610 | 355, 356 | 103 | 362 |
| Johnston, Frederick R., Fall River, Mass. Bottle or flask | 745,858 | Dec. 1 | 1007 | 227 | 107 | 1314 |
| Johnston, George, Durban, South Africa. Central buffer and coupling | 726,068 | Apr. 21 | 3019 | 686 | 103 | 1839 |
| Johnston, George, Detroit, Mich. Sight-testing apparatus | 742,329 | Oct. 27 | 3783 | 847 | 106 | 2093 |
| Johnston, George W., St. Joseph, Mo. Air or liquid reciprocating pump having rotary operating mechanism | 717,750 | Jan. 6 | 429 | 100 | 102 | 93 |
| Johnston, George W., Brooklyn, N. Y. Filter | 727,374 | May 5 | 1027 | 223 | 104 | 221 |
| Johnston, George W., Brooklyn, N. Y. Filter | 736,107 | Aug. 11 | 2036 | 433 | 105 | 1435 |
| Johnston, George W., Dorchester, Mass. Lacing device for boots or shoes, &c. | 736,106 | Aug. 11 | 2035 | 433 | 105 | 1435 |
| Johnston, Gray W., New York, N. Y. Automatic operating mechanism for electric-railway switches | 727,147 | May 5 | 627 | 135 | 104 | 135 |
| Johnston, Horace G., *et al.* (See Sloan, James W., assignor.) | | | | | | |
| Johnston, Horace G., assignor to American Well and Prospecting Company, Corsicana, Tex. Gripping device for well-boring apparatus | 718,937 | Jan. 20 | 2696 | 603 | 102 | 603 |
| Johnston, Horace G., assignor of one-half to W. P. and J. W. Sturm, Corsicana, Tex. Coupling for well-drilling machines | 725,568 | Apr. 14 | 2123 | 481 | 103 | 1635 |
| Johnston, Horace G., assignor of one-half to W. P. and J. W. Sturm, Corsicana, Tex. Hydraulic swivel | 742,667 | Oct. 27 | 4392 | 991 | 106 | 2221 |
| Johnston, Howard A., Ingersoll, Canada. Hair-supporter | 731,575 | June 23 | 3795 | 845 | 104 | 1965 |
| Johnston, James, Ashton, Kans. Endless-belt-carrying frame for harvesters | 725,088 | Apr. 14 | 1249 | 282 | 103 | 1450 |
| Johnston, James, Jamaica Plain, Mass. Artificial leg | 746,336 | Dec. 8 | 1881 | 429 | 107 | 1520 |
| Johnston, James J., deceased; J. E. Allen, Columbiana, Ohio, administrator, assignor to A. C. Ellis, Pittsburg, Pa. Gas-burner | 732,685 | June 30 | 5916 | 1312 | 104 | 2422 |
| Johnston, James L. (See Clover and Johnston.) | | | | | | |
| Johnston, James W., *et al.* (See Whitaker, Richard, assignor.) | | | | | | |
| Johnston, John. (See Potter and Johnston.) | | | | | | |
| Johnston, John F., New Kensington, assignor of one-half to O. H. Burgham, Parnassus, Pa. Railway-rail construction | 720,813 | Feb. 17 | 2590 | 598 | 102 | 1398 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | Spec. | Drg. | Vol. | Page. |
| Johnston, John J., Boston, Mass. Fire-escape | 722,110 | Mar. 3 | 834 | 186 | 103 | 180 |
| Johnston, John M., Chicago, Ill. Cabinet for exhibiting eye-testing devices | 728,112 | May 12 | 2419 | 539 | 104 | 534 |
| Johnston, John M., Chicago, Ill. Cabinet for exhibiting eye-testing devices | 730,023 | June 2 | 923 | 206<br>207 | 104 | 1315 |
| Johnston, John R. (See Anderson and Hollingsworth, assignors.) | | | | | | |
| Johnston, John S., New York, N. Y., assignor to Hale and Kilburn Manufacturing Company, Philadelphia, Pa. Car-seat | 734,560 | July 28 | 3440 | 802 | 105 | 776 |
| Johnston, Kirk G., Piqua, Ohio. Driving-gear for automobiles | 735,774 | Aug. 11 | 1409 | 303 | 105 | 1299 |
| Johnston, Lawrence M., Dayton, Ohio. Cylinder for explosive-engines | 722,846 | Mar. 17 | 2242 | 502 | 103 | 507 |
| Johnston, Moses C., *et al.* (See Nelson, Thomas J., assignor.) | | | | | | |
| Johnston, Moses C., Fort Smith, Ark. Fire-escape | 744,762 | Nov. 24 | 3803 | 820 | 107 | 858 |
| Johnston, Nathan, Egan, Tex. Rein-guide | 718,467 | Jan. 13 | 1768 | 392 | 102 | 392 |
| Johnston, Norton W. (See Hildebrandt and Johnston.) | | | | | | |
| Johnston, Oman E., assignor to Ohio Cultivator Company, Belleview, Ohio. Lister-cultivator | 746,633 | Dec. 8 | 2399 | 548<br>549 | 107 | 1636 |
| Johnston, Phil P., *et al.* (See Pagenhart, Charles L., assignor.) | | | | | | |
| Johnston, Robert L., *et al.* (See Bryar, George, assignor.) | | | | | | |
| Johnston, Robert T., Plainfield, N. J., assignor to Campbell Printing Press & Manufacturing Co., New York, N. Y. Sheet-delivery mechanism | 721,893 | Mar. 3 | 436 | 96, 97 | 103 | 96 |
| Johnston, Robert T., Plainfield, N. J., assignor to Campbell Printing Press & Manufacturing Company, New York, N. Y. Rotary folding and delivery mechanism | 729,597 | June 2 | 135 | 33, 34 | 104 | 1154 |
| Johnston, Thomas J., Brooklyn, N. Y., assignor to General Electric Company. Regulation of alternating circuits | 726,935 | May 5 | 192 | 45 | 104 | 43 |
| Johnston, Thomas J., Brooklyn, N. Y., assignor to General Electric Company. Transformer | 726,936 | May 5 | 194 | 45, 46 | 104 | 43 |
| Johnston, Thomas J., Schenectady, N. Y., assignor to General Electric Company. Electric heater | 729,771 | June 2 | 455 | 102 | 104 | 1220 |
| Johnston, Thomas T., Chicago, Ill. Rotary pump | 744,352 | Nov. 17 | 3062 | 657<br>658 | 107 | 684 |
| Johnston, William, assignor of one-half to M. V. Leguillon, Millersburg, Ohio. Fender for cars | 733,048 | July 7 | 614 | 150 | 105 | 131 |
| Johnston, William A., Rural Retreat, Va. Needle-threader | 746,091 | Dec. 8 | 1430 | 322 | 107 | 1424 |
| Johnston, William H., assignor to W. H. Binnian, Peoria, Ill. Ditching-machine | 732,747 | July 7 | 86 | 24, 25 | 105 | 22 |
| Johnston, William O., and P. J. Foley, Chicago, Ill. Sash-lifting apparatus for greenhouses | 724,879 | Apr. 7 | 859 | 197 | 103 | 1353 |
| Johnston, William O., and P. J. Foley, Chicago, Ill. Gutter and roof-support for greenhouses | 737,110 | Aug. 25 | 3873 | 860 | 105 | 1858 |
| Johnstone, Lewis, Prestwich, assignor to Radax Pneumatic Tyre Company, Limited, Warrington, England. Pneumatic-tire cover | 724,295 | Mar. 31 | 4989 | 1116<br>1117 | 103 | 1100 |
| Johnstone, Lloyd G., New York, N. Y. Third rail for electric railways | 737,935 | Sept. 1 | 756 | 166 | 106 | 166 |
| Johow, Emil, Berlin, Germany. Device for overcoming the dead-point position of cycle-cranks | 728,240 | May 19 | 2673 | 597<br>598 | 104 | 607 |
| Jolles, Max, and L. Lilienfeld, Vienna, Austria-Hungary. Solution for use in the production of photographic papers, plates, &c | 732,189 | June 30 | 4959 | ------ | 104 | 2221 |
| Jolly, Mathias L., assignor to C. C. Bohn, New York, N. Y. Illuminated sign or picture | 729,598 | June 2 | 138 | 34 | 104 | 1155 |
| Jolly, Mathias L., assignor to C. C. Bohn, New York, N. Y. Double-reading illuminated sign | 729,599 | June 2 | 139 | 34 | 104 | 1155 |
| Joly, Céleste, assignor of three-fourths to E. J. Richardson, B. Graves, and B. A. Spaull, London, England. Apparatus for the liquefaction of air or other aeriform fluids | 718,572 | Jan. 13 | 2009 | 437 | 102 | 447 |
| Jonas, Julius, New York, N. Y. Garment-supporting corset attachment | 739,603 | Sept. 22 | 3982 | 888 | 106 | 900 |
| Jonas, Richard, Bochum, Germany. Dumping-car | 739,880 | Sept. 29 | 4529 | 1017 | 106 | 1024 |
| Jones, Albert E., New York, N. Y., assignor to Virgil Practice Clavier Company. Exercising device for musicians | 738,198 | Sept. 8 | 1308 | 284 | 106 | 299 |
| Jones, Albert F., Salem, Mass. Machine for treating hides or skins | 726,306 | Apr. 28 | 3489 | 789<br>790 | 103 | 1951 |
| Jones, Albert F., assignor to American Granite Machine Company, Salem, Mass. Stone-dressing machine | 724,706 | Apr. 7 | 539 | 128<br>129 | 103 | 1284 |
| Jones, Albert F., assignor to American Granite Machine Company, Salem, Mass. Stone-dressing machine | 724,707 | Apr. 7 | 544 | 130 | 103 | 1285 |
| Jones, Albert F., assignor to American Granite Machine Company, Salem, Mass. Stone-dressing machine | 741,582 | Oct. 13 | 2292 | 512<br>513 | 106 | 1754 |
| Jones, Allen W., Omaha, Nebr. Mop-wringer | 726,692 | Apr. 28 | 4234 | 959 | 103 | 2099 |
| Jones, Alva D., Louisville, Ky. Massage-machine | 733,049 | July 7 | 615 | 151 | 105 | 131 |
| Jones, Amanda T., Junction City, Kans. Canning foods | 732,083 | June 30 | 4744 | 1059 | 104 | 2176 |
| Jones, Arthur A., Cass City, Mich. Robe-holder | 733,212 | July 7 | 915 | 221 | 105 | 191 |
| Jones, Benjamin N., East Orange, N. J. Automatic control system for elevators | 726,307 | Apr. 28 | 3493 | 791 | 103 | 1952 |
| Jones, Buford, Mooresville, Tenn. Vehicle-wheel | 718,468 | Jan. 13 | 1770 | 392 | 102 | 392 |
| Jones, Charles E., assignor to Glamorgan Pipe and Foundry Company, Lynchburg, Va. Fire-hydrant | 723,532 | Mar. 24 | 3507 | 785 | 103 | 779 |
| Jones, Charles F. (See Vance, Jones, and Chamberlain.) | | | | | | |
| Jones, Charles J., Yellowstone Park, Wyo. Draft-equalizer | 743,515 | Nov. 10 | 1445 | 302 | 107 | 352 |
| Jones, Charles K., Tuscumbia, Ala. Telegraph system | 726,693 | Apr. 28 | 4235 | 959 | 103 | 2100 |
| Jones, Charles W., and J. J. Wagner, St. Joseph, Mo. Non-refillable bottle | 728,241 | May 19 | 2675 | 598 | 104 | 608 |
| Jones, Clemens C., assignor of one-fifth to W. Moore, Richmond, Va. Recording instrument | 718,000 | Jan. 6 | 909 | 204 | 102 | 195 |
| Jones, David D., Pittsburg, Pa., and A. Francis, Swansea, England. Label-moistener | 747,723 | Dec. 22 | 4442 | 1002 | 107 | 2132 |
| Jones, David G., Chinagrove, Miss. Coupling for well-auger sections | 724,708 | Apr. 7 | 547 | 131 | 103 | 1286 |
| Jones, David W., Luhrig, Ohio. Self-dumping coal-elevator | 719,009 | Jan. 27 | 2826 | 633<br>634 | 102 | 644 |
| Jones, David W., San Francisco, Cal. Pumping apparatus | 723,676 | Mar. 24 | 3749 | 842 | 103 | 829 |
| Jones, E. Herbert. (See Mason, John L., assignor.) | | | | | | |
| Jones, Edith M., Manomet, Mass. Flour-sieve | 740,439 | Oct. 6 | 109 | 23 | 106 | 1270 |
| Jones, Edward A., Pittsfield, Mass. Emptying beating-engines | 724,880 | Apr. 7 | 861 | 198 | 103 | 1353 |
| Jones, Edward A., Pittsfield, Mass. Beating-engine | 745,859 | Dec. 1 | 1008 | 227 | 107 | 1314 |
| Jones, Edward C. (See Naphtaly, Jones, and Varney.) | | | | | | |
| Jones, Edward L., Memphis, Tenn. Automatic cylinder-cock | 719,809 | Feb. 3 | 727 | 171 | 102 | 977 |
| Jones, Edwin T. (See Finch, Robert B., assignor.) | | | | | | |
| Jones, Elmer J., Denver, Colo. Device for registering wood-base cuts on printing-presses | 728,723 | May 19 | 3594 | 798 | 104 | 802 |
| Jones, Elmer M., Savannah, Ga. Can or vessel | 732,862 | July 7 | 296 | 74 | 105 | 65 |
| Jones, Enoch E., North Tonawanda, N. Y. Slot feeding mechanism for check-controlled machines | 731,462 | June 23 | 3572 | 796 | 104 | 1920 |
| Jones, Ernest, and D. White, Cleckheaton, England. Means for securing card-clothing | 718,469 | Jan. 13 | 1771 | 393 | 102 | 392 |
| Jones, Ernest, and T. W. Cline, Burroak, Kans. Cane or corn topper | 743,516 | Nov. 10 | 1447 | 302 | 107 | 326 |
| Jones, Evan W., Portland, Oreg. Underfeed mechanical stoker for fire-chambers of furnaces, &c | 733,397 | July 14 | 1260 | 299 | 105 | 283 |
| Jones, Florentine A., Boston, Mass. Pen for recording instruments | 739,319 | Sept. 22 | 3450 | 770 | 106 | 786 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drgs. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Jones, Florentine A., Boston, Mass. Recording-pen | 743,725 | Nov. 10 | 1824 | 384 | 107 | 406 |
| Jones, Florentine A., assignor to E. M. Hill, Boston, Mass. Clock-movement | 744,203 | Nov. 17 | 2800 | 598, 599 | 107 | 627 |
| Jones, Francis W., New York, N. Y. Telegraph-repeater | 733,909 | July 14 | 2191 | 515 | 105 | 476 |
| Jones, Frank, Chicago, Ill. Bottle-package | 739,604 | Sept. 22 | 3983 | 888, 889 | 106 | 900 |
| Jones, Frank B. (See Lorenz and Jones.) | | | | | | |
| Jones, Frederick A., assignor of two-thirds to O. Bowman, G. McMullen, and A. Rankin, Perth, Western Australia, Australia. Nozzle appliance for cleaning railways | 733,653 | July 14 | 1703 | 403 | 105 | 376 |
| Jones, Frederick D., Los Angeles, Cal. Blackboard attachment | 732,863 | July 7 | 297 | 74 | 105 | 65 |
| Jones, Frederick H., Wakefield, assignor to Tyer Rubber Co., Andover, Mass. Hot-water bottle | 738,544 | Sept. 8 | 2013 | 438 | 106 | 448 |
| Jones, Frederick W., Santa Paula, Cal. Hydraulic indicator | 741,248 | Oct. 13 | 1608 | 361 | 106 | 1610 |
| Jones, G. E., *et al.* (See Willower, Guy F., assignor.) | | | | | | |
| Jones, George G., Chicago, Ill. Feed-pan bracket | 730,374 | June 9 | 1545 | 343 | 104 | 1459 |
| Jones, Gomer P., Penticton, Canada, assignor of one-half to M. K. Rodgers, Seattle, Wash. Hose-coupling | 736,108 | Aug. 11 | 2037 | 433 | 105 | 1435 |
| Jones, Harold E., Racine, Wis. Respirator | 718,470 | Jan. 13 | 1773 | 393 | 102 | 393 |
| Jones, Harry, Mahwah, assignor to American Brake Shoe and Foundry Company, Jersey City, N. J. Brake-shoe | 739,605 | Sept. 22 | 3985 | 889 | 106 | 900 |
| Jones, Harry H., assignor to Automatic Pie Machinery Company, Detroit, Mich. Pie-rolling machine | 728,171 | May 12 | 2535 | 564 | 104 | 557 |
| Jones, Harry H., assignor to Automatic Pie Machinery Company, Detroit, Mich. Pie-machine | 728,799 | May 19 | 3731 | 832 | 104 | 829 |
| Jones, Harry H., assignor to Automatic Pie Machinery Co., Detroit, Mich. Dish-washing machine | 748,077 | Dec. 29 | 5164 | 1167 | 107 | 2313 |
| Jones, Harry S., *et al.* (See Jones, Harvey P., assignor.) | | | | | | |
| Jones, Harry S. (See Jones, William G. and H. S.) | | | | | | |
| Jones, Harvey D. (See Morgan, Charles E., assignor.) | | | | | | |
| Jones, Harvey P., Chicago, Ill. Binder | 724,709 | Apr. 7 | 548 | 131 | 103 | 1286 |
| Jones, Harvey P., assignor of one-half to G. F. Kelly, Chicago, Ill. Binder | 719,673 | Feb. 3 | 461 | 105 | 102 | 919 |
| Jones, Harvey P., assignor to W. G. and H. S. Jones, Chicago, Ill. Index | 740,869 | Oct. 6 | 899 | 201 | 106 | 1438 |
| Jones, Henry, and R. L. Gibson, Philadelphia, Pa. Gramophone or phonograph | 726,937 | May 5 | 195 | 46 | 104 | 43 |
| Jones, Henry C., Raton, N. Mex. Ter. Detergent | 729,600 | June 2 | 141 | ------ | 104 | 1156 |
| Jones, Henry H., *et al.* (See Gary, Jefferson, assignor.) | | | | | | |
| Jones, Henry T., Byhalia, Ohio. Belt-fastener | 744,353 | Nov. 17 | 3065 | 658 | 107 | 685 |
| Jones, Herbert D., Chicago, Ill. Bottle-cap | 734,561 | July 28 | 3443 | 803 | 105 | 777 |
| Jones, Hilles C., Allentown, N. J. Pump-mounting | 718,001 | Jan. 6 | 915 | 204 | 102 | 197 |
| Jones, Homer E., Bristol, Tenn. Index and balancing attachment for ledgers | 741,140 | Oct. 13 | 1394 | 319, 320 | 106 | 1563 |
| Jones, Horace W., U. S. Navy, assignor to H. E. Curtis, Rock Island, Ill. Apparatus for sighting and firing ordnance | 743,881 | Nov. 10 | 2110 | 450, 451, 452 | 107 | 465 |
| Jones, Howard F., Wilson, N. C. Heat-alarm | 742,195 | Oct. 27 | 3522 | 786 | 106 | 2038 |
| Jones, Hugh, Edwardsdale, Pa. Car-brake | 720,151 | Feb. 10 | 1361 | 311, 312 | 102 | 1129 |
| Jones, Ira C., Grantsburg, Wis. Brick-truck | 746,520 | Dec. 8 | 2189 | 502 | 107 | 1587 |
| Jones, Isaac V., Kolls, Tex. Baling-press | 735,267 | Aug. 4 | 455 | 90, 91 | 105 | 1078 |
| Jones, J. Dana. (See Glass, Charles H., assignor.) | | | | | | |
| Jones, J. E., *et al.* (See Sheriff, Samuel, assignor.) | | | | | | |
| Jones, James E., Richmond, Ind. Mechanism for automatically operating exhaust-valves on explosive-engines | 723,160 | Mar. 17 | 2787 | 629 | 103 | 620 |
| Jones, James E., Switchback, W. Va. Loading-machine | 731,371 | June 16 | 3368 | 753, 754, 755 | 104 | 1859 |
| Jones, James E., Switchback, W. Va. Machine for discharging coke-ovens | 731,911 | June 23 | 4393 | 979, 980 | 104 | 2090 |
| Jones, James E., Switchback, W. Va. Mechanism for discharging coke-ovens | 731,912 | June 23 | 4397 | 980 | 104 | 2091 |
| Jones, James E., Switchback, W. Va. Machine for discharging coke-ovens | 731,913 | June 23 | 4401 | 981 | 104 | 2092 |
| Jones, James E., Scranton, Pa. Mine-car frame | 746,092 | Dec. 8 | 1431 | 322 | 107 | 1424 |
| Jones, James H., Springfield, Mass. Internal-combustion engine | 728,724 | May 19 | 3595 | 798 | 104 | 802 |
| Jones, James S., Newbern, Tenn. Brace for buggy-seat supports | 720,437 | Feb. 10 | 1885 | 429 | 102 | 1238 |
| Jones, James S., Newbern, Tenn. Rein-support | 720,438 | Feb. 10 | 1886 | 429 | 102 | 1238 |
| Jones, Jesse E., West Middleton, Ind. Rail-joint | 718,354 | Jan. 13 | 1550 | 342 | 102 | 347 |
| Jones, John, Denver, Colo. Rail-joint for street-car tracks | 719,010 | Jan. 27 | 2828 | 634 | 102 | 645 |
| Jones, John, Ashton-under-Lyne, England. Apparatus for lifting stone, &c | 729,939 | June 2 | 758 | 168 | 104 | 1283 |
| Jones, John B., Chicago, Ill. Bolster-roll | 732,864 | July 7 | 298 | 75 | 105 | 66 |
| Jones, John C., *et al.* (See Lemle, Jacob, assignor.) | | | | | | |
| Jones, John C. F., Braddock, Pa. Water-gage valve | 735,104 | Aug. 4 | 106 | 24 | 105 | 1006 |
| Jones, John H., Fostoria, Ohio. Concrete or cement building-block | 741,040 | Oct. 13 | 1202 | 272 | 106 | 1523 |
| Jones, John J., Los Angeles, Cal. Fruit-picker's receptacle | 719,810 | Feb. 3 | 730 | 171 | 102 | 977 |
| Jones, John L., and R. L. Rhea, assignors to Rhea, Thielens Implement Company, Peoria, Ill. Seeder | 731,463 | June 23 | 3574 | 796, 797 | 104 | 1921 |
| Jones, John M. (See Jones, Leroy and J. M.) | | | | | | |
| Jones, John T., Iron Mountain, Mich. Treating ores | 717,864 | Jan. 6 | 669 | 148 | 102 | 143 |
| Jones, John W., St. Louis, Mo. Stave-setter | 718,355 | Jan. 13 | 1551 | 343 | 102 | 348 |
| Jones, John W., Sumner, New Zealand. Table racket-and-fives apparatus | 735,521 | Aug. 4 | 935 | 198 | 105 | 1180 |
| Jones, Johnathan S., Westbend, and A. W. McFarland, Sioux City, Iowa. Apparatus for opening or closing railway-switches | 742,996 | Nov. 3 | 311 | 70 | 107 | 67 |
| Jones, Joseph F. (See Tucker and Jones.) | | | | | | |
| Jones, Joseph W., New York, N. Y., assignor to American Graphophone Company, Washington, D. C. Sound-recording tablet | 727,960 | May 12 | 2165 | 483 | 104 | 480 |
| Jones, Lebbeus, New Cumberland, W. Va. Bailer | 727,375 | May 5 | 1029 | 223 | 104 | 222 |
| Jones, Leroy and J. M., Clay Center, Nebr. Writing-cabinet | 746,093 | Dec. 8 | 1432 | 322 | 107 | 1424 |
| Jones, Lewis, Washington, D. C. Electric igniter for internal-combustion engines | 736,734 | Aug. 18 | 3186 | 703, 704 | 105 | 1693 |
| Jones, Lilian B., assignor of one-half to L. T. Ray, Denver, Colo. Hose-supporter | 721,645 | Feb. 24 | 4205 | 956 | 102 | 1761 |
| Jones, Llewellyn J. W. (See Cazin and Jones.) | | | | | | |
| Jones, Lloyd, Philadelphia, Pa. Clothes-rack for furniture | 724,582 | Apr. 7 | 306 | 74 | 103 | 1234 |
| Jones, Louis E., assignor to J. Ellwood Lee Company, Conshohocken, Pa. Disinfecting device | 719,228 | Jan. 27 | 3249 | 726 | 102 | 731 |
| Jones, Melville D., Boston, Mass. Bench | 724,583 | Apr. 7 | 308 | 75 | 103 | 1234 |
| Jones, Milton B., Meridian, Miss. Baling-press | 726,694 | Apr. 28 | 4240 | 960 | 103 | 2100 |
| Jones National Fence Company. (See Schillinger, Gustav A., assignor.) | | | | | | |
| Jones, Newton H., Philadelphia, Pa. Combined album and stand | 727,148 | May 5 | 632 | 135 | 104 | 137 |
| Jones, Orien A., assignor to himself and J. S. Nesbitt, Union City, Mich. Sticky fly-paper | 740,870 | Oct. 6 | 900 | 202 | 106 | 1438 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|
| | | | Spec. | Drg. | Vol. | Page. |
| Jones, Owen M., New York, N. Y. Valve | 737,414 | Aug. 25 | 4457 | 1000 | 105 | 1983 |
| Jones, Owen O., Poultney, Vt. Elevated carrier | 724,881 | Apr. 7 | 862 | 198 | 103 | 1353 |
| Jones, Peter L., San Francisco, Cal. Wagon brake-block | 720,814 | Feb. 17 | 2591 | 598 | 102 | 1398 |
| Jones, Philip F., Atlanta, Ga. Space-bar for linotype or other type-casting machines | 734,879 | July 28 | 4060 | 947 | 105 | 902 |
| Jones, Reese R. and T. W., St. Louis, Mo. Means for greasing the necks or journals of rolling-mill rolls | 718,471 | Jan. 13 | 1774 | 303<br>394 | 102 | 393 |
| Jones, Richard P., Washington, D. C. Flushing apparatus | 732,416 | June 30 | 5402 | 1197 | 104 | 2314 |
| Jones, Richard T., Baltimore, Md. Paper-cutter for roll-holders | 744,865 | Nov. 24 | 3988 | 859 | 107 | 898 |
| Jones, Robert C., Bellaire, Ohio. Pipe and tubing tongs | 747,612 | Dec. 22 | 4238 | 953 | 107 | 2086 |
| Jones, Robert V., Canton, Ohio. Cooking utensil | 739,422 | Sept. 22 | 3665 | 815 | 106 | 832 |
| Jones, Robert W., assignor of one-fourth to W. T. S. Rea, London, Ohio. Feed-water heater and purifier | 741,562 | Oct. 13 | 2130 | 475 | 106 | 1721 |
| Jones, Ruel A., Stanford, Ky. Soap cake | 740,440 | Oct. 6 | 109 | 23 | 106 | 1270 |
| Jones, Rufus, Pittsburg, Pa. Neck-yoke | 736,109 | Aug. 11 | 2038 | 434 | 105 | 1435 |
| Jones, Samuel, Jackson, Ohio. Refrigerator | 718,712 | Jan. 20 | 2274 | 499<br>500 | 102 | 514 |
| Jones, Samuel, Jackson, Ohio. Garden-plow | 737,111 | Aug. 25 | 3874 | 860 | 105 | 1858 |
| Jones, Samuel, Jackson, Ohio. Plane-bit | 737,112 | Aug. 25 | 3876 | 860 | 105 | 1858 |
| Jones, Samuel, Whatcheer, Iowa. Pick | 722,586 | Mar. 10 | 1731 | 385 | 103 | 387 |
| Jones, Samuel A., Deshler, Ohio. Mail-box | 731,372 | June 16 | 3377 | 755 | 104 | 1862 |
| Jones, Samuel A., Deshler, Ohio. Cream-separator | 739,423 | Sept. 22 | 3666 | 815 | 106 | 832 |
| Jones, Sterns F., Brooklyn, N. Y. Electromagnetic vibrating reed | 731,056 | June 16 | 2797 | 622<br>623 | 104 | 1744 |
| Jones, Stewart M. (See McRuer, Duncan, assignor.) | | | | | | |
| Jones, Sylvester B., Lakewood, N. Y. Pump | 741,672 | Oct. 20 | 2458 | 550 | 106 | 1805 |
| Jones, Sylvester H., assignor to Hoosier Drill Company, Richmond, Ind. Seeding-machine | 722,111 | Mar. 3 | 836 | 186 | 103 | 180 |
| Jones, Sylvester H., assignor to Hoosier Drill Company, Richmond, Ind. Seeding-machine | 724,710 | Apr. 7 | 550 | 131<br>132 | 103 | 1287 |
| Jones, Thomas, Iola, Kans. Apparatus for charging and cleaning furnaces | 742,196 | Oct. 27 | 3524 | 786 | 106 | 2038 |
| Jones, Thomas, Iola, Kans. Apparatus for cleaning furnaces | 742,197 | Oct. 27 | 3527 | 787 | 106 | 2039 |
| Jones, Thomas, assignor of one-half to N. F. Acers, Iola, Kans. Apparatus for refining zinc spelter | 726,432 | Apr. 28 | 3715 | 843 | 103 | 1997 |
| Jones, Thomas E., Chicago, Ill. Animal-shackle | 724,015 | Mar. 31 | 4432 | 996 | 103 | 987 |
| Jones, Thomas R., Wilkesbarre, Pa. Miner's blasting-squib | 741,968 | Oct. 20 | 3053 | 681 | 106 | 1929 |
| Jones, Thomas W. (See Jones, Reese R. and T. W.) | | | | | | |
| Jones, Thomas W., and C. F. Kanaer, New Philadelphia, Ohio. Sewer-pipe die | 738,913 | Sept. 15 | 2731 | 603 | 106 | 618 |
| Jones, W. Gifford, *et al.* (See Jones, Harvey P., assignor.) | | | | | | |
| Jones, Walter, Amblecote, and E. Wright, Stonebridge, England; said Wright assignor to said Jones. Machine or appliance for forming cores | 724,105 | Mar. 31 | 4592 | 1033 | 103 | 1021 |
| Jones, Willard E., Clearlake, Wash. Sawmill | 720,815 | Feb. 17 | 2593 | 598<br>599 | 102 | 1398 |
| Jones, William. (See Hemphill, Eli, assignor.) | | | | | | |
| Jones, William, Denver, Colo. Stethoscope-holder | 735,670 | Aug. 4 | 1215 | 257 | 105 | 1238 |
| Jones, William, Denver, Colo. Stethoscope | 742,790 | Oct. 27 | 4584 | 1039 | 106 | 2263 |
| Jones, William, Birmingham, England. Die for making hollow metal ware | 746,843 | Dec. 15 | 2798 | 645 | 107 | 1745 |
| Jones, William A., *et al.* (See Butler, Joseph, assignor.) | | | | | | |
| Jones, William B. (See Blue and Jones.) | | | | | | |
| Jones, William E., *et al.* (See Davis, Henry J., assignor.) | | | | | | |
| Jones, William F., Littlefalls, N. J Bucket or conveyer | 735,105 | Aug. 4 | 107 | 24 | 105 | 1006 |
| Jones, William G. and H. S., Chicago, Ill. Binder | 719,674 | Feb. 3 | 462 | 105 | 102 | 919 |
| Jones, William H., Cambridge, Mass. Valve-gear for explosive-engines | 734,562 | July 28 | 3444 | 803<br>804 | 105 | 777 |
| Jones, William H., Cambridge, Mass. Gas-engine | 735,035 | July 28 | 4331 | 1006 | 105 | 959 |
| Jones, William H., Cambridge, Mass. Igniter for explosive-engines | 735,036 | July 28 | 4332 | 1007 | 105 | 959 |
| Jones, William S., and J. P. Donohoe, Greensburg, Pa. Coke-drawer | 721,519 | Feb. 24 | 3950 | 900 | 102 | 1704 |
| Jones, William T., *et al.* (See Martin, Samuel, assignor.) | | | | | | |
| Jones, William W., Toledo, Ohio. Land-dredge | 735,522 | Aug. 4 | 936 | 199 | 105 | 1180 |
| Jones, Willis S., Chicago, Ill., assignor, by mesne assignments, to Railroad Supply Company. Rail-clamp | 724,711 | Apr. 7 | 552 | 132 | 103 | 1287 |
| Jones, Willis S., assignor to Railroad Supply Company, Chicago, Ill. Car-coupling | 724,712 | Apr. 7 | 554 | 132 | 103 | 1287 |
| Jones, Willis S., Chicago, Ill., assignor to G. Westinghouse, Pittsburg, Pa. Draw-gear and buffing apparatus | 742,791 | Oct. 27 | 4585 | 1039<br>1040 | 106 | 2264 |
| Jones, Willis S., Chicago, Ill., assignor to G. Westinghouse, Pittsburg, Pa. Draw-gear and buffing apparatus | 742,792 | Oct. 27 | 4588 | 1040 | 106 | 2264 |
| Jones, Willis S., Chicago, Ill., assignor to G. Westinghouse, Pittsburg, Pa. Draw-gear and buffing apparatus | 742,793 | Oct. 27 | 4592 | 1041 | 106 | 2265 |
| Jones, Zachariah F., Scottsville, Va. Bottle or other vessel | 737,741 | Sept. 1 | 345 | 73 | 106 | 78 |
| Jonson, Julius, New York, N. Y. Vending-machine | 736,110 | Aug. 11 | 2039 | 434<br>435 | 105 | 1435 |
| Jonsson, Lage L. (See Johansson and Jonsson.) | | | | | | |
| Joor, Samuel F., Morgan Park, Ill. Conveyer | 730,539 | June 9 | 1851 | 413 | 104 | 1525 |
| Joor, Samuel F., Morgan Park, Ill. Conveyer | 730,540 | June 9 | 1854 | 414 | 104 | 1526 |
| Joor, Samuel F., Morgan Park, Ill. Conveyer | 730,541 | June 9 | 1856 | 414<br>415 | 104 | 1526 |
| Joranson, Gustaf, assignor to Carl Anderson Company, Chicago, Ill. Gas-engine | 740,571 | Oct. 6 | 371 | 77 | 106 | 1326 |
| Jordan, Clark L. (See Harris and Case, assignors.) | | | | | | |
| Jordan, David N., East Providence, assignor of one-half to J. P. Beagan, Providence, R. I. Electric alarm-signal for railway-cars | 744,354 | Nov. 17 | 3067 | 658 | 107 | 685 |
| Jordan, Henry, Kearney, Nebr. Land-scorer, ballast-dresser, and weed-cutter | 728,932 | May 26 | 3975 | 885 | 104 | 895 |
| Jordan, Humphreys W., Pelzer, S. C., assignor to Draper Company, Hopedale, Mass. Clamping device for heddle bars or supports | 742,120 | Oct. 20 | 3385 | 755 | 106 | 1995 |
| Jordan, James B., Nashville, Tenn. Saliva-ejector | 730,128 | June 2 | 1088 | 244 | 104 | 1349 |
| Jordan, James B., Nashville, Tenn. Dental lip and cheek supporter | 744,204 | Nov. 17 | 2803 | 599 | 107 | 627 |
| Jordan, John J., *et al.* (See Farmer, Julius M., assignor.) | | | | | | |
| Jordan, John J., and J. M. Waller, Stillwater, Okla. Ter. Hydrocarbon-burner | 735,880 | Aug. 11 | 1621 | 346 | 105 | 1346 |
| Jordan, Joseph E., assignor of one-half to M. M. Chestnut, Andalusia, Ala. Spring-motor | 748,506 | Dec. 29 | 5946 | 1349 | 107 | 2484 |
| Jordan, Leroy B. (See Sewall, Robert H. F., assignor.) | | | | | | |
| Jordan, Mary A., Washington, D. C. Hair-crimper | 721,197 | Feb. 24 | 3354 | 767 | 102 | 1580 |
| Jordan, Mary A., Washington, D. C. Eyeglass-holder | 730,663 | June 9 | 2075 | 462 | 104 | 1573 |
| Jordan, Mary A., Washington, D. C. Eyeglass-holder | 746,844 | Dec. 15 | 2800 | 645 | 107 | 1745 |
| Jordan, Michael J., Derby, Conn. Advertising-machine | 738,914 | Sept. 15 | 2733 | 603<br>604 | 106 | 619 |
| Jordan, Moses Y., Comer, Ga. Recording-scale | 735,523 | Aug. 4 | 940 | 200 | 105 | 1181 |
| Jordan, Oliver, Lowell, Mass. Automatic switch | 747,724 | Dec. 22 | 4443 | 1002 | 107 | 2132 |
| Jordan, Orpah J., near Monticello, Ga. Machine for cremating sputa | 727,803 | May 12 | 1866 | 415 | 104 | 415 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| Jorgensen, Jorgen, Seattle, Wash. Suction-pipe | 735,106 | Aug. 4 | 108 | 25 | 105 | 1006 |
| Jorgensen, Niels H., and H. R. Palmer, Sleepyeye, Minn. Flour-mill gearing attachment | 734,880 | July 28 | 4062 | 947 | 105 | 902 |
| Jorndt, Coval G., *et al.* (See Stephenson, Levi T., assignor.) | | | | | | |
| Jorndt, Ola M., *et al.* (See Stephenson, Levi T., assignor.) | | | | | | |
| Joseph, Benjamin E., assignor to F. S. Betz, Chicago, Ill. Massaging instrument | 732,356 | June 30 | 5289 | 1172 | 104 | 2288 |
| Joseph, Benjamin E., assignor to F. S. Betz, Chicago, Ill. Massaging instrument | 733,398 | July 14 | 1263 | 299 | 105 | 283 |
| Joseph Richmond and Company. (See Carey, Robert F., assignor.) | | | | | | |
| Joseph, Sheldon, assignor of one-fourth to W. F. Shaffer, Wheeling, W. Va., and J. Hunker, Connellsville, Pa. Gas-fixture | 727,961 | May 12 | 2166 | 484 | 104 | 480 |
| Joseph, Theodore H., *et al.* (See McIntyre, Frank, assignor.) | | | | | | |
| Joseph, Thomas B., Mercur, Utah. Gold-extracting process | 718,633 | Jan. 20 | 2117 | ..... | 102 | 484 |
| Joseph, Thomas B., Mercur, Utah. Gold-extraction process | 725,257 | Apr. 14 | 1557 | ..... | 103 | 1515 |
| Joseph, Thomas B., Mercur, Utah. Gold-extracting process | 732,639 | June 30 | 5823 | ..... | 104 | 2405 |
| Joseph, Thomas B., Salt Lake City, Utah. Gold-extracting process | 728,397 | May 19 | 2978 | ..... | 104 | 672 |
| Joseph, Thomas B., Salt Lake City, Utah. Cement | 732,640 | June 30 | 5826 | ..... | 104 | 2405 |
| Joseph, Thomas B., Salt Lake City, Utah. Metal-leaching process | 732,641 | June 30 | 5827 | ..... | 104 | 2405 |
| Joseph, William A., Chicago, Ill. Car-heater | 743,726 | Nov. 10 | 1826 | 385 | 107 | 407 |
| Josephsan, Charly E. (See Linden, Peirson, and Josephsan.) | | | | | | |
| Joslin, Alexander D., Chicago, Ill. Cash-check holder and cutter | 722,234 | Mar. 10 | 1088 | 240 | 103 | 248 |
| Joslin, Holden, Grand Rapids, Mich. Suspender-fastener | 718,768 | Jan. 20 | 2384 | 529 | 102 | 537 |
| Josse, Emil, Charlottenburg, Germany. Feed-pump | 726,069 | Apr. 21 | 3020 | 687 | 103 | 1840 |
| Josse, Emil, Wilmersdorf, Germany. Means for regulating the pressure in evaporators of cold-vapor engines | 726,433 | Apr. 28 | 3718 | 843 | 103 | 1998 |
| Josselyn, Benage S. (See Waters and Josselyn.) | | | | | | |
| Jost, Fred, Susanville, Oreg. Non-refillable bottle | 734,881 | July 28 | 4063 | 947 | 105 | 903 |
| Jost, John F. W., Philadelphia, Pa. Adjustable gas-check | 725,089 | Apr. 14 | 1251 | 282 | 103 | 1451 |
| Jost, John F. W., Philadelphia, Pa. Adjustable gas-check | 738,199 | Sept. 8 | 1309 | 284 | 106 | 299 |
| Jost, John F. W., Philadelphia, Pa., assignor to Welsbach Light Company, Gloucester City, N. J. Gas and air mixer | 718,472 | Jan. 13 | 1776 | 394, 395 | 102 | 393 |
| Josten, Wilhelm, Neuss, Germany. Furnace with automatic feeding | 742,198 | Oct. 27 | 3530 | 787 | 106 | 2039 |
| Jourdan, William, Chicago, Ill. Smoke-consuming furnace | 725,090 | Apr. 14 | 1252 | 282 | 103 | 1451 |
| Jovignot, Charles, Paris, France. Stopper for jars, bottles, or the like | 723,467 | Mar. 24 | 3376 | 756 | 103 | 753 |
| Jovignot, Charles, Paris, France. Machine for hermetically closing bottles or other vessels | 741,249 | Oct. 13 | 1609 | 362 | 106 | 1610 |
| Joy, Charles H. (See Frantz, Charles T., assignor.) | | | | | | |
| Joy, Francis B., Detroit, Mich. Safety cap or closure for receptacles | 733,213 | July 7 | 916 | 221 | 105 | 191 |
| Joy, James P. (See Wilson, Robert J., assignor.) | | | | | | |
| Joy, John M., assignor to Page Machine Company, New York, N. Y. Electric time-switch | 746,708 | Dec. 15 | 2539 | 583, 584 | 107 | 1687 |
| Joy, Moses. (See Anthony, Mark, assignor.) | | | | | | |
| Joyal, Joseph, assignor of one-third to J. E. Church, Providence, R. I. Inclosed cabinet ironing-board | 743,517 | Nov. 10 | 1449 | 302 | 107 | 326 |
| Joyce, James A., Cleveland, Ohio. Vending-machine | 724,187 | Mar. 31 | 4763 | 1068 | 103 | 1054 |
| Joyce, James C., Florida, N. Y. Holdback for vehicles | 742,668 | Oct. 27 | 4394 | 991 | 106 | 2221 |
| Joyce, Maurice. (See Oliver, Charles M., assignor.) | | | | | | |
| Joyner, Walthal R., Atlanta, Ga. Hose-nozzle supporting and guiding device | 748,507 | Dec. 29 | 5947 | 1349, 1350 | 107 | 2484 |
| Judd, Ethan A., Olean, N. Y. Axle | 731,306 | June 16 | 3272 | 727 | 104 | 1841 |
| Judd, Ethan A., Olean, N. Y. Axle | 731,307 | June 16 | 3273 | 727 | 104 | 1841 |
| Judd, Henry G., assignor to Mattatuck Mfg. Co., Waterbury, Conn. Shackle | 732,417 | June 30 | 5403 | 1197 | 104 | 2314 |
| Judd, William J., New York, N. Y., assignor to F. C. Austin, Chicago, Ill. Rotary mixer for concrete | 717,580 | Jan. 6 | 101 | 26, 27 | 102 | 24 |
| Judge, James L., Minneapolis, Minn. Seal for steam-radiators | 741,503 | Oct. 13 | 2132 | 475 | 106 | 1721 |
| Judge, Thomas F., Cleveland, Ohio. Horseshoe | 737,849 | Sept. 1 | 566 | 124 | 106 | 126 |
| Judie, Benjamin Z., Oakland, Cal. Cuspidor | 740,761 | Oct. 6 | 717 | 161 | 106 | 1399 |
| Judson, Roswell S., Matteawan, N. Y. Stable-floor | 746,094 | Dec. 8 | 1434 | 323 | 107 | 1424 |
| Juelg, Harry H., Washington, D. C. Interchangeable roll for mechanical musical instruments | 745,500 | Dec. 1 | 356 | 83 | 107 | 1175 |
| Juhlin, Erik H., Chicago, Ill. Alarm-giving mechanism | 717,865 | Jan. 6 | 670 | 149 | 102 | 143 |
| Juif, Andrew, Detroit, Mich. Cooling and filling apparatus | 738,915 | Sept. 15 | 2734 | 604 | 106 | 619 |
| Julius, Paul, assignor to Badische Anilin & Soda Fabrik, Ludwigshafen-on-the-Rhine, Germany. Red azo dye | 718,356 | Jan. 13 | 1552 | ..... | 102 | 348 |
| Julius, Paul, and F. Reubold, assignors to Badische Anilin & Soda Fabrik, Ludwigshafen-on-the-Rhine, Germany. Substantive sulfur dye | 735,775 | Aug. 11 | 1410 | ..... | 105 | 1299 |
| July, Emil A., Brooklyn, N. Y. Transfer-switch for fluids | 735,881 | Aug. 11 | 1622 | 346, 347 | 105 | 1346 |
| Jumeau, Ferdinand A., Arbent, France. Transparent panel for glazed windows | 722,847 | Mar. 17 | 2245 | 503 | 103 | 508 |
| Jung, Carl, and A. Kittel, assignors of one-third to A. Brecher, Vienna, Austria-Hungary. Manufacture of electrical insulating material | 742,997 | Nov. 3 | 314 | ..... | 107 | 68 |
| Jung, Hermann, Gottesberg, Germany. Cotter | 745,728 | Dec. 1 | 743 | 170 | 107 | 1256 |
| Jungbecker, Theobald W., Aix-la-Chapelle, Germany. Machine for providing pin-shafts with heads of glass | 723,392 | Mar. 24 | 3251 | 729 | 103 | 727 |
| Junge, Friedrich. (See Johanns, Rudolph, assignor.) | | | | | | |
| Jungfermann, Jean J., *et al.* (See Nowák, Emil, assignor.) | | | | | | |
| Junggren, Oscar. (See Emmet and Junggren.) | | | | | | |
| Junggren, Oscar, Schenectady, N. Y., assignor to General Electric Company. Turbine | 735,107 | Aug. 4 | 110 | 25 | 105 | 1007 |
| Junggren, Oscar, Schenectady, N. Y., assignor to General Electric Company. Simultaneously-adjustable nozzle and intermediate for turbines | 735,109 | Aug. 4 | 117 | 26 | 105 | 1008 |
| Junggren, Oscar, Schenectady, N. Y., assignor to General Electric Company. Elastic-fluid turbine | 735,110 | Aug. 4 | 120 | 26 | 105 | 1008 |
| Junggren, Oscar, Schenectady, N. Y., assignor to General Electric Company. Automatic governor | 742,874 | Nov. 3 | 95 | 23 | 107 | 22 |
| Junggren, Oscar, Schenectady, N. Y., assignor to General Electric Company. Governor for elastic-fluid turbines | 743,727 | Nov. 10 | 1828 | 385, 386 | 107 | 407 |
| Junggren, Oscar, Schenectady, N. Y., assignor to General Electric Company. Electrically-controlled valve | 746,337 | Dec. 8 | 1882 | 429 | 107 | 1520 |
| Junggren, Oscar, and D. C. Garroway, Schenectady, N. Y., assignors to General Electric Company. Means for adjusting intermediates | 735,108 | Aug. 4 | 114 | 26 | 105 | 1007 |
| Junginger, Frederick J., Cincinnati, Ohio. Means for attaching the sides and ends of vehicle-bodies to the frames thereof | 746,845 | Dec. 15 | 2801 | 646 | 107 | 1740 |
| Jungner, Ernst W., Stockholm, Sweden. Producing electrodes for electric accumulators | 731,308 | June 16 | 3274 | 727, 728 | 104 | 1841 |
| Jungner, Ernst W., Norrköping, Sweden. Reversible galvanic battery | 738,110 | Sept. 1 | 1095 | ..... | 106 | 237 |
| Junkers, Hugo, Aix-la-Chapelle, Germany. Surface condenser | 721,310 | Feb. 24 | 3566 | 811 | 102 | 1624 |
| Junkin, John C., Grafton, N. D. Piston | 736,735 | Aug. 18 | 3188 | 704 | 105 | 1694 |
| Junod, Paul, Celina, Ohio. Trolling spoon or spinner | 747,976 | Dec. 29 | 4963 | 1120 | 107 | 2269 |

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| Junod-Turin, Arthur, assignor to Mermod Frères, St. Croix, Switzerland. Mechanical musical instrument | 717,581 | Jan. 6 | 103 | 27 | 102 | 25 |
| Juran, Joseph, New York, N. Y. Riding-habit | 718,769 | Jan. 20 | 2385 | 529 | 102 | 537 |
| Jürgens, Julius, Hamburg, Germany. Automatic gas-igniter | 731,782 | June 23 | 4165 | 928 | 104 | 2039 |
| Juričić, Ivo, Agram, Austria-Hungary. Duplicating or stencil machine | 727,636 | May 12 | 1521 | 343 | 104 | 346 |
| Jürschina, Franz, Stockholm, Sweden. Making artificial stones | 738,200 | Sept. 8 | 1311 | ..... | 106 | 299 |
| Jurtz, Otto, assignor of one-half to N. Kribs, Chicago, Ill. Rotary engine | 734,882 | July 28 | 4066 | 948 | 105 | 903 |
| Just, Max H., New York, N. Y. Coffee substitute | 741,041 | Oct. 13 | 1203 | ..... | 106 | 1523 |
| Justen, Joseph M., assignor of two-fifths to G. W. Birchall and C. R. Clapp, Toledo, Ohio. Alarm for vehicles | 722,587 | Mar. 10 | 1733 | 386 | 103 | 387 |
| Justice, William A., assignor of one-half to W. W. Glenn, Beach City, Ohio. Game | 734,883 | July 28 | 4068 | 949 | 105 | 904 |
| Justice, William A., assignor of one-half to W. W. Glenn, Beach City, Ohio. Puzzle | 734,884 | July 28 | 4069 | 949 | 105 | 904 |
| Justus, Charles W., Lima, Ohio. Folding hitching-rack | 727,376 | May 5 | 1030 | 223 | 104 | 222 |
| Justus, Johanne, Berlin-Halensee, Germany. Manufacturing plates of insulating substances | 743,882 | Nov. 10 | 2116 | 452 | 107 | 467 |
| Kacer, Martin V., *et al.* (See Ondra, Frant, assignor.) | | | | | | |
| Kade, Charles F., Sheboygan, Wis. Fluid container or receptacle | 718,357 | Jan. 13 | 1553 | 343 | 102 | 348 |
| Kade, Charles F., assignor to A. F. Winter, Sheboygan, Wis. Bracket | 723,677 | Mar. 24 | 3751 | 842 | 103 | 829 |
| Kade, Charles F., assignor to A. F. Winter, Sheboygan, Wis. Label-holding pull | 729,351 | May 26 | 4720 | 1043 | 104 | 1049 |
| Kade, Charles F., assignor to A. F. Winter, Sheboygan, Wis. Sheet-metal support or leg | 745,107 | Nov. 24 | 4466 | 966 | 107 | 996 |
| Kade, Charles F., assignor to I. F. Kade and K. F. Winter, Sheboygan, Wis. Show-case | 720,032 | Feb. 10 | 1150 | 262<br>263 | 102 | 1083 |
| Kade, Isabella F., *et al.* (See Kade, Charles F., assignor.) | | | | | | |
| Kade, Otto C., assignor to Melchoir Bros. Furniture Company, Chicago, Ill. Corner or fastening for show-cases | 722,588 | Mar. 10 | 1735 | 386 | 103 | 388 |
| Kadletz, William, Lemhi Agency, Idaho, and W. J. Fuller, Crowcreek, S. D. Fish skinning and scaling device | 720,439 | Feb. 10 | 1887 | 430 | 102 | 1238 |
| Kaefer, John. (See Rentschler and Kaefer.) | | | | | | |
| Kaehler, Otto A., Detroit, Mich. Flying-machine | 727,377 | May 5 | 1031 | 223<br>224 | 104 | 222 |
| Kaemerling, William J. (See Gmeiner, William, assignor.) | | | | | | |
| Kagelmacher, William A., Jr., Johnstown, Pa. Drilling-machine | 746,521 | Dec. 8 | 2191 | 502<br>503 | 107 | 1587 |
| Kahl, Frederick, Weehawken, N. J. Means for holding bed-sheets in position | 739,682 | Sept. 22 | 4135 | 922 | 106 | 934 |
| Kahle, August. (See Kuntzen and Kahle.) | | | | | | |
| Kahle, William, Chicago, Ill. Carbureting apparatus | 743,085 | Nov. 3 | 513 | 111 | 107 | 107 |
| Kahlenberg, Ernst L. K. F., Charlottenburg, near Berlin, Germany, assignor to Siemens & Halske Electric Company of America, Chicago, Ill. Traction system | 728,581 | May 19 | 3342 | 739 | 104 | 748 |
| Kahn, Ivan, *et al.* (See Mészáros, Béla G., assignor.) | | | | | | |
| Kahn, Julius, Detroit, Mich. Concrete and metal construction | 736,602 | Aug. 18 | 2936 | 642<br>643 | 105 | 1643 |
| Kahn, Julius, Detroit, Mich. Composite structural member | 743,086 | Nov. 3 | 516 | 111<br>112 | 107 | 108 |
| Kahn, Julius, Weehawken Heights, N. J., assignor to Pacific Novelty Company, New York, N. Y. Hair-comb | 722,714 | Mar. 17 | 1997 | 446 | 103 | 457 |
| Kahn, Myrtil, Elberfeld, Germany, assignor to Farbenfabriken of Elberfeld Co., New York, N. Y. Wool-dye and making same | 722,715 | Mar. 17 | 1998 | ..... | 103 | 458 |
| Kahn, Myrtil, Elberfeld, Germany, assignor to Farbenfabriken of Elberfeld Co., New York, N. Y. Wool-dye and making same | 722,716 | Mar. 17 | 1999 | ..... | 103 | 458 |
| Kahn, Myrtil, Elberfeld, Germany, assignor to Farbenfabriken of Elberfeld Co., New York, N. Y. Dyeing | 725,847 | Apr. 21 | 2656 | ..... | 103 | 1764 |
| Kahn, Myrtil, Elberfeld, Germany, assignor to Farbenfabriken of Elberfeld Co., New York, N. Y. Black azo dye | 725,848 | Apr. 21 | 2657 | ..... | 103 | 1764 |
| Kahn, Myrtil, Elberfeld, Germany, assignor to Farbenfabriken of Elberfeld Co., New York, N. Y. Black azo dye | 726,695 | Apr. 28 | 4243 | ..... | 103 | 2101 |
| Kahn, Myrtil, Elberfeld, Germany, assignor to Farbenfabriken of Elberfeld Co., New York, N. Y. Azo dye | 727,962 | May 12 | 2168 | ..... | 104 | 480 |
| Kahn, Myrtil, Elberfeld, Germany, assignor to Farbenfabriken of Elberfeld Co., New York, N. Y. Azo dye | 727,963 | May 12 | 2169 | ..... | 104 | 481 |
| Kahn, Myrtil, Elberfeld, Germany, assignor to Farbenfabriken of Elberfeld Co., New York, N. Y. Monoazo dye | 727,964 | May 12 | 2170 | ..... | 104 | 481 |
| Kahn, Myrtil, Elberfeld, Germany, assignor to Farbenfabriken of Elberfeld Co., New York, N. Y. Azo dye | 727,965 | May 12 | 2171 | ..... | 104 | 481 |
| Kahn, Myrtil, Elberfeld, Germany, assignor to Farbenfabriken of Elberfeld Co., New York, N. Y. Monoazo dye | 727,966 | May 12 | 2172 | ..... | 104 | 481 |
| Kahn, Myrtil, Elberfeld, Germany, assignor to Farbenfabriken of Elberfeld Co., New York, N. Y. Black azo dye | 727,967 | May 12 | 2173 | ..... | 104 | 481 |
| Kahn, Myrtil, Elberfeld, Germany, assignor to Farbenfabriken of Elberfeld Co., New York, N. Y. Azo dye and making same | 729,601 | June 2 | 141 | ..... | 104 | 1156 |
| Kail, Jackson L., assignor to Winslow Bros. Co., Chicago, Ill. Door-operating device for elevators | 719,470 | Feb. 3 | 105 | 25 | 102 | 847 |
| Kailor, John N., assignor to Reeves & Company, Columbus, Ind. Spring king-post | 739,320 | Sept. 22 | 3453 | 770 | 106 | 786 |
| Kailor, John N., assignor to Reeves & Company, Columbus, Ind. Hood for pneumatic stackers | 742,669 | Oct. 27 | 4395 | 991 | 106 | 2222 |
| Kailor, John N., and H. C. Clay, assignors to Reeves & Company, Columbus, Ind. Quick-release belt-tightener | 741,042 | Oct. 13 | 1204 | 272 | 106 | 1523 |
| Kailor, John N., and M. T. Reeves, assignors to Reeves & Company, Columbus, Ind. Screen-shoe for separators | 743,087 | Nov. 3 | 518 | 112 | 107 | 108 |
| Kaiser, Edward, Congerville, Ill. Sleigh-runner attachment for vehicles | 727,637 | May 12 | 1523 | 343 | 104 | 347 |
| Kaiser, Ernest, New York, N. Y. Water-purifier | 719,471 | Feb. 3 | 107 | 26 | 102 | 848 |
| Kaiser, John, Seneca Falls, N. Y. Aerial apparatus | 722,848 | Mar. 17 | 2246 | 503 | 103 | 508 |
| Kaiser, John, Seneca Falls, N. Y. Device for receiving mail-pouches from moving trains | 742,670 | Oct. 27 | 4396 | 992 | 106 | 2222 |
| Kaiser, Oliver B. (See Tudor and Kaiser.) | | | | | | |
| Kaiser, Oliver B., Norwood, assignor to Stacey Manufacturing Company, Cincinnati, Ohio. Gate-valve | 726,434 | Apr. 28 | 3720 | 843 | 103 | 1998 |
| Kaisling, William, assignor to Kellogg Switchboard and Supply Company, Chicago, Ill. Transmitter-arm | 729,184 | May 26 | 4421 | 975 | 104 | 987 |
| Kaisling, William, assignor to Kellogg Switchboard and Supply Company, Chicago, Ill. Cord-tip | 738,545 | Sept. 8 | 2013 | 438 | 106 | 448 |
| Kaisling, William, Chicago, Ill., assignor to Stromberg-Carlson Telephone Manufacturing Company, Rochester, N. Y. Transmitter-arm | 733,970 | July 21 | 2323 | 545 | 105 | 522 |
| Kaisling, William, Chicago, Ill., assignor to Stromberg-Carlson Telephone Manufacturing Company, Rochester, N. Y. Telephone apparatus | 738,813 | Sept. 15 | 2548 | 560 | 106 | 578 |
| Kaisling, William, Chicago, Ill., assignor to Stromberg-Carlson Telephone Manufacturing Company, Rochester, N. Y. Switching apparatus | 746,095 | Dec. 8 | 1435 | 323 | 107 | 1424 |
| Kaisling, William, Chicago, Ill., assignor to Stromberg-Carlson Telephone Manufacturing Company, Rochester, N. Y. Fastening device | 748,078 | Dec. 29 | 5165 | 1168 | 107 | 2314 |

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| Kalaba, Moritz, New Rochelle, and F. Gailer, New York, N. Y. Tool-heating handle | 747,725 | Dec. 22 | 4445 | 1003 | 107 | 2133 |
| Kalb, Adam, and A. A. R. Berger, New York, N. Y. Door check and fastener | 741,673 | Oct. 20 | 2459 | 550, 551 | 106 | 1806 |
| Kalb, Adam, and A. A. R. Berger, New York, N. Y. Combined door check and lock | 741,674 | Oct. 20 | 2463 | 551 | 106 | 1807 |
| Kalbach, Morgan D., Lebanon, Pa. Rotary engine | 743,883 | Nov. 10 | 2117 | 452, 453 | 107 | 467 |
| Kalbaugh, Isaac N., Elkins, W. Va. Spark-arrester | 746,522 | Dec. 8 | 2194 | 503 | 107 | 1588 |
| Kale, Zachary T., Newcastle, Va. Hub | 722,023 | Mar. 3 | 687 | 152 | 103 | 148 |
| Kalischer, Nathan, Cleveland, Ohio. Can-opener | 723,609 | Mar. 24 | 3642 | 815 | 103 | 806 |
| Kallberg, William F., Stillwater, Minn. Carpet-stretcher | 739,183 | Sept. 15 | 3198 | 707 | 106 | 715 |
| Kalle and Company. (See Ebeling, Hans, assignor.) | | | | | | |
| Kallstrom, Charles L., Chicago, Ill. Piano-action | 719,120 | Jan. 27 | 3067 | 682 | 102 | 693 |
| Kaltenecker, George, Hamburg, Germany. Umbrella | 735,776 | Aug. 11 | 1412 | 303 | 105 | 1299 |
| Kaltwasser, Oskar, and M. Gaumer, assignors to Actien Gesellschaft für Anilin Fabrikation, Berlin, Germany. Indigo-blue sulfur dye and making same | 736,403 | Aug. 18 | 2543 | ..... | 105 | 1561 |
| Kamerer, John H., assignor of one-half to W. H. Kamerer, Hartville, Ohio. Display-stand | 739,085 | Sept. 15 | 3023 | 670 | 106 | 679 |
| Kamerer, William H. (See Kamerer, John H., assignor.) | | | | | | |
| Kamke, Ferdinand, H. A. Schmidt, and C. H. Schabacker, Menomonie, Wis. Sleigh-knee | 728,725 | May 19 | 3597 | 799 | 104 | 803 |
| Kamm, Henry. (See Bader, Charles W., assignor.) | | | | | | |
| Kammerer, Frank G. (See Sweeney, Henry G., assignor.) | | | | | | |
| Kammerer, Frank G. (See Walter, William H., assignor.) | | | | | | |
| Kammerer, Frank G., Chicago, Ill. Glass-rinsing device | 737,247 | Aug. 25 | 4141 | 922 | 105 | 1914 |
| Kammerich, Andrew, Syracuse, Mo. Automatic railway-gate | 718,473 | Jan. 13 | 1779 | 395 | 102 | 394 |
| Kampfe, Frederick, R., and O., Brooklyn, N. Y. Razor-stropping device | 725,449 | Apr. 14 | 1911 | 428 | 103 | 1589 |
| Kampfe, Frederick, R., and O., New York, N. Y. Safety-razor | 733,399 | July 14 | 1264 | 300 | 105 | 284 |
| Kampfe, Frederick, R., and O., New York, N. Y. Safety-razor | 733,400 | July 14 | 1266 | 300 | 105 | 284 |
| Kampfe, Frederick, R., and O., New York, N. Y. Machine for stropping razor-blades. (Reissue) | 12,164 | Oct. 27 | 4647 | 1052 | 106 | 2277 |
| Kampfe, Otto. (See Kampfe, Frederick, R., and O.) | | | | | | |
| Kampfe, Otto. (See Kampfe, Frederick, R., and O.) (Reissue.) | | | | | | |
| Kampfe, Richard. (See Kampfe, Frederick, R., and O.) | | | | | | |
| Kampfe, Richard. (See Kampfe, Frederick, R., and O.) (Reissue.) | | | | | | |
| Kampmann, Hermann, Kreis Essen, Germany. Floating bridge | 745,192 | Nov. 24 | 4650 | 1012 | 107 | 1034 |
| Kanaer, Charles F. (See Jones and Kanaer.) | | | | | | |
| Kanaly, Morris E., Cambridge, Mass. Picture-hanger and gas-cock turner | 734,180 | July 21 | 2739 | 643 | 105 | 612 |
| Kanavel, Charles, Barberton, Ohio. Wire-fence-stay fastener | 732,190 | June 30 | 4960 | 1103 | 104 | 2221 |
| Kandeler, Charles F. T. (See Scherzer and Kandeler.) | | | | | | |
| Kandó, Koloman de, Budapest, Austria-Hungary. Liquid rhoestat operated by compressed air | 733,971 | July 21 | 2325 | 546 | 105 | 522 |
| Kane, Frank J., Rochester, N. Y. Buffing-head | 736,736 | Aug. 18 | 3189 | 705 | 105 | 1694 |
| Kane, James A. (See Berrye, Kane, and Stengard.) | | | | | | |
| Kane, James M., Doylestown, Pa. Collar-button | 727,638 | May 12 | 1524 | 343 | 104 | 346 |
| Kane, John. (See Hagen, Cooper, and Kane.) | | | | | | |
| Kane, Joseph P., Newark, Ohio. Tube-rolling machine | 739,424 | Sept. 22 | 3667 | 815 | 106 | 833 |
| Kann, William L., Pittsburg, Pa. Slab or plate | 741,043 | Oct. 13 | 1205 | 272, 273 | 106 | 1523 |
| Kann, William L., Pittsburg, Pa. Manufacture of glass plates or sheets | 747,437 | Dec. 22 | 3922 | ..... | 107 | 2014 |
| Kanstoroom, David S., Kansas City, Mo. Clock-dial | 744,355 | Nov. 17 | 3069 | 658 | 107 | 686 |
| Kanter, William, Cleveland, Ohio. Attachment for shears | 731,687 | June 23 | 3992 | 891 | 104 | 2003 |
| Kantlehner, Christian F., Chelsea, Mich. Instrument for testing eyes | 745,627 | Dec. 1 | 573 | 133, 134 | 107 | 1219 |
| Kaplan, Abe O., Cincinnati, Ohio. Flame-producing device | 739,425 | Sept. 22 | 3668 | 816 | 106 | 833 |
| Kappele, Arthur J., Vancouver, Canada. Mechanical movement | 730,375 | June 9 | 1546 | 344 | 104 | 1459 |
| Kapprel, Frank, Atchison, Kans. Headlight | 718,208 | Jan. 13 | 1282 | 281 | 102 | 291 |
| Kapus, Edward F., St. Joseph, Mo. Toy wagon | 724,296 | Mar. 31 | 4992 | 1117 | 103 | 1100 |
| Karavodine, Victor de, Paris, France. Manufacturing insulating material | 724,882 | Apr. 7 | 864 | ..... | 103 | 1354 |
| Karcher, Arthur A. and D. E., Lyons, Mich. Sparking igniter for explosive-engines | 736,737 | Aug. 18 | 3190 | 705 | 105 | 1694 |
| Karcher, D. (See Goodyear, William H., assignor.) | | | | | | |
| Karcher, Douglass E. (See Karcher, Arthur A. and D. E.) | | | | | | |
| Karhan, Albert, Johnstown, Pa. Combination billiard and pool table | 747,726 | Dec. 22 | 4447 | 1003 | 107 | 2133 |
| Karicofe, Gabriel H. (See Lyon and Karicofe.) | | | | | | |
| Karl Digestible Rusk Company. (See Zeininger, Jacob K., assignor.) | | | | | | |
| Karl, Eduard C., Hawthorne, Conn. Clamp | 720,816 | Feb. 17 | 2594 | 599 | 102 | 1399 |
| Karlson, John, New York, N. Y. Shoe-stretching device | 722,517 | Mar. 10 | 1613 | 356 | 103 | 362 |
| Karnes, John H. (See Williams, Andrew J., assignor.) | | | | | | |
| Karns, John P., Cripplecreek, Colo. Tunneling-machine | 744,763 | Nov. 24 | 3804 | 820 | 107 | 859 |
| Karpen & Bros., S. (See Streich and Ruehs, assignors.) | | | | | | |
| Karpen, Julius, Chicago, Ill. School-desk | 719,338 | Jan. 27 | 3456 | 769, 770 | 102 | 776 |
| Karpenstein, Henry, New York, N. Y. Welt-knife | 733,214 | July 7 | 917 | 221 | 105 | 192 |
| Karpenstein, Henry C., Brooklyn, N. Y. Safety-heel for footwear | 720,440 | Feb. 10 | 1889 | 430 | 102 | 1230 |
| Karr, Albert D. (See Arthur and Karr.) | | | | | | |
| Karr, Burton A., Council Bluffs, Iowa, assignor to Electric Gate and Signal Company. Railway-crossing gate | 726,308 | Apr. 28 | 3496 | 791, 792 | 103 | 1952 |
| Karr, Francis. (See Brouyette, Charles D., assignor.) | | | | | | |
| Karrer, Eduard, Frankfort-on-the-Main, Germany. Exhaust mechanism | 732,748 | July 7 | 93 | 25, 26 | 105 | 23 |
| Karsch, George J., Rockisland, Tex. Well-screen | 746,096 | Dec. 8 | 1439 | 323 | 107 | 1426 |
| Karten, Frank J. (See Double and Karten.) | | | | | | |
| Karwowski, Joseph, Herkimer, N. Y. Preserving the dead | 748,284 | Dec. 29 | 5538 | 1262 | 107 | 2394 |
| Kashian, Minas H., Amesbury, Mass. Combination cutunder carriage | 745,108 | Nov. 24 | 4467 | 967 | 107 | 996 |
| Kashichi, Suzuki, Shizuoka, Japan. Train-operating device | 735,111 | Aug. 4 | 122 | 27 | 105 | 1005 |
| Kasley, Alexander T. (See Arnold and Kasley.) | | | | | | |
| Kassler, Edwin S., *et al.* (See Mouat, Laurence, Jr., assignor.) | | | | | | |
| Kasson, Mahlon O., Sandyhill, N. Y., assignor to Union Bag & Paper Company. Grinding-machine | 718,474 | Jan. 13 | 1781 | 396 | 102 | 394 |
| Kasson, Mahlon O., Sandyhill, N. Y., assignor to Union Bag & Paper Company. Centrifugal drier | 726,696 | Apr. 28 | 4244 | 960 | 103 | 2101 |
| Kasson, Mahlon O., Sandyhill, N. Y., assignor to Union Bag & Paper Company. Fluid-controlled clutch | 731,464 | June 23 | 3578 | 797 | 104 | 1922 |
| Kastenhuber, Edwin G., Schenectady, N. Y., assignor to General Electric Company. Push-button switch | 729,772 | June 2 | 457 | 103 | 104 | 1221 |
| Kastien, Adolph E., East Peoria, Ill. Link-cutting attachment for milling-machines | 741,141 | Oct. 13 | 1395 | 320 | 106 | 1563 |
| Kastmann, Richard, New York, N. Y. Section-liner | 740,871 | Oct. 6 | 902 | 202 | 106 | 1438 |
| Kastner, Edward J., assignor to L. E. Waterman Company, New York, N. Y. Fountain-pen | 742,036 | Oct. 20 | 3188 | 712 | 106 | 1956 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|
| | | | Spec. | Drg. | Vol. | Page. |
| Kathol, William, Vailsburg, N. J. Filtering apparatus | 744,764 | Nov. 24 | 3806 | 821 | 107 | 859 |
| Kato Coffee Company. (See Kato, Satori, assignor.) | | | | | | |
| Kato, Satori, assignor to Kato Coffee Company, Chicago, Ill. Coffee concentrate and making same | 735,777 | Aug. 11 | 1412 | ..... | 105 | 1299 |
| Kattman, Henry E. (See Himes, Wrightsman D., assignor.) | | | | | | |
| Katz, Aaron E., New York, and W. S. Romme, New Rochelle, assignors of one-half to S. Frankenberg, New York, N. Y. Key | 729,773 | June 2 | 458 | 103 | 104 | 1221 |
| Katzenberger Keyless Lock Company. (See Katzenberger, Oscar, assignor.) | | | | | | |
| Katzenberger, Oscar, assignor to Katzenberger Keyless Lock Company, San Antonio, Tex. Lock | 745,064 | Nov. 24 | 4377 | 945 | 107 | 978 |
| Katzenmeyer, John, Kirby, Ohio. Railway-rail holder for metal cross-ties | 740,282 | Sept. 29 | 5269 | 1187 | 106 | 1191 |
| Katzke, Albert, Chicago, assignor of one-half to C. P. Benson, Oakpark, Ill. Holder for sticky fly-paper | 744,866 | Nov. 24 | 3989 | 860 | 107 | 898 |
| Kauffman, Henry C. (See Wilmeth, Charles S., assignor.) | | | | | | |
| Kaufman, John, Leetsdale, Pa. Rail-joint | 743,172 | Nov. 3 | 678 | 148 | 107 | 142 |
| Kaufman, Jonas, Newcastle, Pa. Wire fence | 741,798 | Oct. 20 | 2711 | 604 | 106 | 1858 |
| Kaufmann, Ernst, Solingen, Germany. Cutter and implement for the nails | 730,024 | June 2 | 924 | 207 | 104 | 1316 |
| Kaufmann, Ernst, Solingen, Germany. Pocket-knife | 730,025 | June 2 | 925 | 207 | 104 | 1316 |
| Kaufmann, Ernst, Solingen, Germany. Implement for the nails | 734,715 | July 28 | 3733 | 873 | 105 | 836 |
| Kaufmann, Ernst, Solingen, Germany. Pocket-knife | 736,524 | Aug. 18 | 2779 | 608 | 105 | 1612 |
| Kaufmann, Ernst, Solingen, Germany. Pocket-knife | 736,525 | Aug. 18 | 2780 | 608 | 105 | 1612 |
| Kaul, Carl F., Madison, Nebr. Lid for steam-cookers | 747,438 | Dec. 22 | 3923 | 883 | 107 | 2014 |
| Kaup, Joseph, assignor of one-half to F. J. Baumgartner, St. Louis, Mo. Jogger for printing-press flies | 726,435 | Apr. 28 | 3722 | 844 | 103 | 1999 |
| Kaussen, Heinrich, Rothe Erde, near Aachen, Germany. Calculating-machine | 747,977 | Dec. 29 | 4965 | 1120<br>1121 | 107 | 2270 |
| Kauth, William C. (See Lawrenz and Kauth.) | | | | | | |
| Kautz, Theodor, Bad Reichenhall, Germany. Inhaling apparatus | 736,111 | Aug. 11 | 2043 | 435 | 105 | 1436 |
| Kautzmann and Sussfeld. (See Lieb, John A., Jr., assignor.) | | | | | | |
| Kavanaugh, E. C. (See Burke, Ira N., assignor.) | | | | | | |
| Kavanaugh, Luke, Waterford, N. Y. Mechanism for treating arable lands | 729,185 | May 26 | 4424 | 975 | 104 | 987 |
| Kavel, August W., Sheboygan Wis. Vehicle-top | 736,974 | Aug. 25 | 3643 | 807 | 105 | 1810 |
| Kavetzki, Joseph W., Philadelphia, Pa. Breast-strap | 744,967 | Nov. 24 | 4171 | 902 | 107 | 935 |
| Kavle, Oscar C. (See Helmond and Kavle.) | | | | | | |
| Kavle, Oscar C. (See Manning and Kavle.) | | | | | | |
| Kavle, Oscar C., Hartford, Conn., assignor, by mesne assignments, to Underwood Type-writer Company, New York, N. Y. Support for links of type-writer actions | 737,742 | Sept. 1 | 346 | 73 | 106 | 78 |
| Kay, George A. (See Graef, Ernest W., assignor.) | | | | | | |
| Kaye, Walter K., Leeds, England. Lock | 748,285 | Dec. 29 | 5538 | 1262 | 107 | 2394 |
| Kaylor, John, Decatur, Ill. Seeding device for corn-planters | 734,716 | July 28 | 3734 | 873<br>874 | 105 | 836 |
| Kaylor, John, Decatur, Ill. Seeding device for corn-planters | 734,717 | July 28 | 3738 | 874 | 105 | 837 |
| Kayser, Charles H., West Orange, assignor to Multo-Photoscope Company, Elizabeth, N. J. Feeding mechanism for picture-bearing strips | 720,931 | Feb. 17 | 2811 | 645 | 102 | 1445 |
| Kayser, Meyer, Ouray, Colo. Device for cutting plug-tobacco | 745,355 | Dec. 1 | 72 | 17, 18 | 107 | 1117 |
| Kayser, William J., assignor to H. Danz, Greenbay, Wis. Cowl | 743,390 | Nov. 3 | 1135 | 240 | 107 | 240 |
| Keach, Abram, Somerville, Mass. Ruling-machine | 730,923 | June 16 | 2545 | 566 | 104 | 1693 |
| Keach, James N., Bloomington, Ill. Thill-coupling | 739,683 | Sept. 22 | 4136 | 922<br>923 | 106 | 934 |
| Kean, Henry. (See McMaster and Kean.) | | | | | | |
| Keane, James P., assignor of one-half to E. N. Roth, Cincinnati, Ohio. Filtering apparatus | 737,415 | Aug. 25 | 4459 | 1000 | 105 | 1983 |
| Keane, James V., Park City, Utah. Toy | 739,184 | Sept. 15 | 3199 | 707 | 106 | 715 |
| Kearney, Benjamin S., Franklinton, N. C. Combined hook and buckle | 732,865 | July 7 | 299 | 75 | 105 | 66 |
| Kearney, John, Louisville, Ky. Button | 739,185 | Sept. 15 | 3200 | 708 | 106 | 715 |
| Kearney, John J., Baltimore, Md. Chuck and boring tool | 727,639 | May 12 | 1526 | 344 | 104 | 346 |
| Kearney, Michael M., Scranton, Pa. Non-refillable bottle | 744,556 | Nov. 17 | 3421 | 737 | 107 | 760 |
| Kearns, Henry W., Accrington, England. Manufacturing cotton yarn | 738,040 | Sept. 1 | 956 | ..... | 106 | 208 |
| Kearns, John C., Maitland, Pa. Pruning implement | 746,964 | Dec. 15 | 3041 | 698 | 107 | 1801 |
| Kearns, William, Mammoth, Pa. Coke-drawer | 742,037 | Oct. 20 | 3191 | 712 | 106 | 1957 |
| Kearsley, John. (See Hargreaves, Stubbs, and Kearsley.) | | | | | | |
| Keasbey, Henry G., Philadelphia, Pa. Feed-water heater | 719,229 | Jan. 27 | 3250 | 726 | 102 | 731 |
| Keast, William J., Malta, Ill. Violin-bow attachment | 748,286 | Dec. 29 | 5540 | 1263 | 107 | 2394 |
| Keating, John H., St. Louis, Mo. Razor-strop swivel | 726,309 | Apr. 28 | 3500 | 792 | 103 | 1953 |
| Keats, John, deceased, Bagnall, England; J. C. Keats, administrator. Machine for repairing the soles of boots or shoes | 742,444 | Oct. 27 | 3984 | 894 | 106 | 2134 |
| Keats, John C., administrator. (See Keats, John.) | | | | | | |
| Keck, Albert J., St. Paul, Minn. Toy | 738,916 | Sept. 15 | 2735 | 604 | 106 | 619 |
| Keck, Christian, Crescent Springs, Ky., assignor to Globe-Wernicke Company, Cincinnati, Ohio. Card-file | 726,436 | Apr. 28 | 3723 | 844 | 103 | 1999 |
| Keck, Christian, Crescent Springs, Ky., assignor to Globe-Wernicke Company, Cincinnati, Ohio. Letter-file | 726,437 | Apr. 28 | 3724 | 844 | 103 | 1999 |
| Keck, Christian, Crescent Springs, Ky., assignor to Globe-Wernicke Company, Cincinnati, Ohio. Card-file | 735,112 | Aug. 4 | 123 | 27, 28 | 105 | 1009 |
| Keck, Frederick C., Joy, Ill. Incubator | 718,479 | Jan. 13 | 1789 | 397 | 102 | 396 |
| Keck, Frederick C., Joy, Ill. Incubator | 738,201 | Sept. 8 | 1312 | 284<br>285 | 106 | 299 |
| Keddington, John W., Salt Lake City, Utah. Float-operated valve | 741,343 | Oct. 13 | 1837 | 406 | 106 | 1659 |
| Keech, Archie T., Dodge City, Kans. Calf-weaner | 729,352 | May 26 | 4721 | 1043 | 104 | 1049 |
| Keedell, Albert, New York, N. Y. Puzzle | 730,026 | June 2 | 926 | 208 | 104 | 1316 |
| Keefer, William B., assignor of one-half to F. W. and J. P. Doerr, Philadelphia, Pa. Printing yarns or threads for woven carpet fabrics | 747,306 | Dec. 15 | 3688 | 831 | 107 | 1946 |
| Keefer, William D., Gas City, Ind., assignor to Obear-Nester Glass Company. Jar-closure | 741,969 | Oct. 20 | 3055 | 681 | 106 | 1930 |
| Keegan, Chauncey V., Fort Wadsworth, N. Y. Combination-car | 738,202 | Sept. 8 | 1313 | 285 | 106 | 300 |
| Keehme, Oscar, Bisbee, Ariz. Ter. Single-hand adz | 735,268 | Aug. 4 | 459 | 91 | 105 | 1078 |
| Keehn, William F. (See Bailey, Nelson E., assignor.) | | | | | | |
| Keel, James S. (See Clinton and Keel.) | | | | | | |
| Keeler, Burten A., *et al.* (See Down, Ernest U., assignor.) | | | | | | |
| Keeler Co., E. (See Moore, Frederick T., assignor.) | | | | | | |
| Keeler, Ezra W., New York, N. Y. Ore-concentrator | 745,860 | Dec. 1 | 1009 | 227<br>228 | 107 | 1314 |
| Keeler, Frank F., Indianapolis, Ind. Spring-buffer | 734,337 | July 21 | 3040 | 716 | 105 | 677 |
| Keeler, Herbert E., New York, N. Y. Curtain-fixture | 721,448 | Feb. 24 | 3822 | 869 | 102 | 1676 |
| Keeler, Herbert E., New York, N. Y. Curtain-fixture | 721,449 | Feb. 24 | 3824 | 870 | 102 | 1677 |
| Keeler, Herbert E., New York, N. Y. Curtain-fixture | 727,378 | May 5 | 1033 | 224 | 104 | 223 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| Keeler, Herbert E., New York, N. Y. Curtain-fixture | 737,248 | Aug. 25 | 4144 | 922 | 105 | 1915 |
| Keeler, Herbert E., New York, N. Y. Curtain-fixture | 746,097 | Dec. 8 | 1441 | 324 | 107 | 1426 |
| Keelor, Harry C. (See Watt and Keelor.) | | | | | | |
| Keen, Frederick W., assignor of one-half to C. H. Williams, Boston, Mass. Anatomical guard, boot, or pad | 746,338 | Dec. 8 | 1885 | 429 | 107 | 1521 |
| Keen, William A., Baltimore, Md. Means for securing basins, &c., to slabs | 726,070 | Apr. 21 | 3021 | 687 | 103 | 1840 |
| Keenan, Peter. (See Emerson and Keenan.) | | | | | | |
| Keenan, Thomas P., assignor of one-half to F. W. Sparks, Brooklyn, N. Y. Heater, radiator, or stove | 740,140 | Sept. 29 | 4999 | 1123 | 106 | 1135 |
| Keene, Irving J. (See Churchill and Keene.) | | | | | | |
| Keene, William J., assignor to Chicago Spring Butt Company, Chicago, Ill. Spring-hinge | 720,254 | Feb 10 | 1558 | 357 | 102 | 1169 |
| Keener, Frederick, Jeddo, Mich. Bug-gatherer | 746,098 | Dec. 8 | 1443 | 324 | 107 | 1426 |
| Keener, William W., Chesterfield, Ind. Automatic electric safety-signal | 736,975 | Aug. 25 | 3644 | 807<br>808 | 105 | 1811 |
| Keep, James M., New York, N. Y. Inkstand | 733,050 | July 7 | 617 | 151 | 105 | 131 |
| Keep, James M., New York, N. Y. Erasing-shield | 742,445 | Oct. 27 | 3986 | 895 | 106 | 2134 |
| Keep, James M., New York, N. Y., assignor to A. A. Weeks, Plainfield, N. J. Paper-clip | 729,871 | June 2 | 652 | 143 | 104 | 1262 |
| Kees, Frederick, Minneapolis, Minn. Wall for tanks, storage-bins, or warehouses | 726,071 | Apr. 21 | 3022 | 687 | 103 | 1840 |
| Kees, Frederick D., Beatrice, Nebr. Corn-husking implement | 728,113 | May 12 | 2420 | 539 | 104 | 534 |
| Kegrize, Frank M., Philadelphia, Pa. Fountain-pen | 734,563 | July 28 | 3447 | 804 | 105 | 778 |
| Kegrize, Frank M., Philadelphia, Pa. Pen | 744,557 | Nov. 17 | 3422 | 737 | 107 | 760 |
| Kehl, Frank A., and W. Goers, Detroit, Mich. Multiple-drill attachment for drill-presses | 733,719 | July 14 | 1810 | 428<br>429 | 105 | 399 |
| Kehm, August, assignor of one-half to J. H. Davis, Chicago, Ill. Heating apparatus | 732,749 | July 7 | 94 | 26 | 105 | 23 |
| Kehr, John F., Trenton, N. J. Antifreezing fire-plug | 739,684 | Sept. 22 | 4138 | 923 | 106 | 984 |
| Keiffer, Lenard B. (See Fultz, Winfield S., assignor.) | | | | | | |
| Keil, Francis, New York, and H. F. Keil, Bronxville, N. Y. Track or rail | 735,882 | Aug. 11 | 1625 | 347 | 105 | 1347 |
| Keil, Francis, New York, and H. F. Keil, Bronxville, N. Y. Cushioned base for receptacles | 735,883 | Aug. 11 | 1626 | 347 | 105 | 1347 |
| Keil, Henry F. (See Keil, Francis and H. F.) | | | | | | |
| Keil, Henry F., Bronxville, N. Y. Fastening device | 740,141 | Sept. 29 | 4999 | 1123 | 106 | 1135 |
| Keil, Henry F., Bronxville, N. Y. Support for brackets, &c | 742,330 | Oct. 27 | 3784 | 848 | 106 | 2094 |
| Keiley, John D., assignor to Weber Railway Joint Manufacturing Company, New York, N. Y. Insulated joint | 734,419 | July 21 | 3179 | 746 | 105 | 705 |
| Keilwerth, Franz, assignor of one half to J. Fleischmann, Cincinnati, Ohio. Sash-fastener | 727,968 | May 12 | 2174 | 484 | 104 | 481 |
| Keim, Henry M., and J. A. Prather, Carthage, Mo. Wire-cloth holder | 723,678 | Mar. 24 | 3752 | 842 | 103 | 829 |
| Keiper, Henry B., Lancaster, Pa. Centrifugal creamer | 736,976 | Aug. 25 | 3647 | 808<br>809 | 105 | 1811 |
| Keiper, Henry B., Lancaster, Pa. Centrifugal separator | 736,977 | Aug. 25 | 3651 | 809<br>810 | 105 | 1811 |
| Keiper, Henry B., Lancaster, Pa. Centrifugal separator | 736,978 | Aug. 25 | 3657 | 810 | 105 | 1813 |
| Keirstead, William W., Grand Rapids, Mich. Battery connection | 718,846 | Jan. 20 | 2504 | 557 | 102 | 560 |
| Keiser, Eugen. (See Wüst, Wilhelm, assignor.) | | | | | | |
| Keister, James B., *et al.* (See Quaas, Edward E., assignor.) | | | | | | |
| Keith, Alexander E. (See Snell, Oscar, assignor.) | | | | | | |
| Keith, Boyd. (See Griffin, Sanker, and Keith.) | | | | | | |
| Keith, Darius S. (See O'Brien and Keith.) | | | | | | |
| Keith, Elmer L., Brockton, Mass. Congress gaiter | 724,188 | Mar. 31 | 4765 | 1069 | 103 | 1055 |
| Keith, Frederick R., Randolph, Mass. Car-fender | 734,181 | July 21 | 2740 | 643 | 105 | 612 |
| Keith, George. (See Keith, James and G.) | | | | | | |
| Keith, James and G., London, England. Lighting device for incandescent gas-burners | 728,242 | May 19 | 2676 | 598 | 104 | 608 |
| Keith, James, and W. W. Wardle, London, England. Apparatus for drying and conditioning yarns | 718,770 | Jan. 20 | 2386 | 529 | 102 | 537 |
| Keith, Thomas K., assignor of one-half to G. A. Stickles, Boston, Mass. Puzzle | 735,269 | Aug. 4 | 460 | 91 | 105 | 1079 |
| Keithley, Herbert R., Buffalo, N. Y. Freight-car | 725,849 | Apr. 21 | 2658 | 605 | 103 | 1764 |
| Keithley, Herbert R., Buffalo, N. Y. Railway-car-truck bolster | 727,149 | May 5 | 632 | 136 | 104 | 137 |
| Keithley, Herbert R., Buffalo, N. Y. Railway-car truck | 728,582 | May 19 | 3343 | 739<br>740 | 104 | 748 |
| Keithley, Herbert R., Buffalo, N. Y. Railway-car truck | 728,583 | May 19 | 3345 | 740 | 104 | 749 |
| Keithley, Herbert R., Buffalo, N. Y. Railway-car truck | 731,057 | June 16 | 2798 | 623 | 104 | 1745 |
| Keithley, Herbert R., Buffalo, N. Y. Underframe for railway-cars | 741,799 | Oct. 20 | 2713 | 604<br>605 | 106 | 1858 |
| Keithley, Herbert R., Chicago, Ill. Freight-car | 740,142 | Sept. 29 | 5002 | 1123<br>1124 | 106 | 1136 |
| Keithley, Herbert R., Chicago, Ill. Hopper-bottom freight-car | 741,250 | Oct. 13 | 1611 | 363<br>364 | 106 | 1610 |
| Keizer, Lewis M., assignor to Crown Cork & Seal Company, Baltimore, Md. Machine for forming gaskets and applying them to sealing-caps | 734,564 | July 28 | 3448 | 804<br>805 | 105 | 778 |
| Kelch, Thomas, Newport, assignor of one-half to W. W. Tripp, Covington, Ky. Casing for trolley-wheels | 742,331 | Oct. 27 | 3786 | 848 | 106 | 2094 |
| Kelchner, David L., Brooklyn, N. Y. Saw-filer | 724,883 | Apr. 7 | 865 | 199 | 103 | 1354 |
| Kell, William H., assignor to Shea, Smith & Company, Chicago, Ill. Adjustable post for binder-files | 731,914 | June 23 | 4405 | 982 | 104 | 2093 |
| Kellam, Wilber, Washington Township, Ind. Nut-lock | 721,198 | Feb. 24 | 3355 | 767 | 102 | 1580 |
| Kelland, John, and H. Lawry, Plymouth, England. Brake for cycles or vehicles | 735,113 | Aug. 4 | 125 | 28 | 105 | 1009 |
| Kelleher, James H. (See Crowell, Edward E., assignor.) | | | | | | |
| Kellemen, Henry F. (See Crippen and Kellemen.) | | | | | | |
| Keller, Adam. (See Cooke and Keller.) | | | | | | |
| Keller, Albert T., Wilkinsburg, Pa. Expansion-joint for engines | 729,872 | June 2 | 652 | 144 | 104 | 1262 |
| Keller, Alfred, assignor to Mermod Frères, St. Croix, Switzerland. Damper for music-boxes | 735,114 | Aug. 4 | 128 | 28 | 105 | 1010 |
| Keller, Aloysius, Paris, Ill. Hasp-fastener | 721,045 | Feb. 17 | 3036 | 696 | 102 | 1494 |
| Keller, Charles F., Chicago, Ill., assignor, by mesne assignments, to American Post-Office Equipment Company. Combination-lock | 729,940 | June 2 | 760 | 168<br>169 | 104 | 1283 |
| Keller, Charles R., Dayton, Ohio. Air compressor and heater | 735,450 | Apr. 14 | 1913 | 428 | 103 | 1589 |
| Keller, Georg, Rudolstadt, Germany. Stone for imitating embroidery | 741,142 | Oct. 13 | 1397 | 320 | 106 | 1563 |
| Keller, John, Ottoville, Ohio. Automatic gate-valve for rain conductor-pipes | 735,451 | Apr. 14 | 1914 | 428 | 103 | 1590 |
| Keller, John E., Jr., Litchfield, Conn. Combined siphon and bottle-stopper | 730,267 | June 9 | 1358 | 298 | 104 | 1419 |
| Keller, John F., and H. R. Cartey, Philadelphia, Pa. Fish-cleaning machine | 745,861 | Dec. 1 | 1014 | 228 | 107 | 1315 |
| Keller, John W., Chicago, Ill. Gas-furnace | 730,268 | June 9 | 1360 | 298 | 104 | 1420 |
| Keller, Joseph. (See Oestreicher, George J., assignor.) | | | | | | |
| Keller, Joseph F., New York, N. Y. Machine for cutting dies | 739,086 | Sept. 15 | 3024 | 670 | 106 | 679 |
| Keller, Julius, Philadelphia, Pa. Stroke-changing mechanism for pneumatic tools | 738,546 | Sept. 8 | 2015 | 438 | 106 | 448 |
| Keller, Julius, Philadelphia, Pa., assignor to Philadelphia Pneumatic Tool Company. Reversing-valve for compressed-air motors | 723,179 | Mar. 3 | 957 | 212 | 103 | 202 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Keller, Louis P., assignor of one-fourth to G. L. Lavery, Chicago, Ill. Keyless lock | 718,092 | Jan. 6 | 916 | 204 | 102 | 197 |
| Keller, Michael, assignor of one-half to W. S. Pickard, New York, N. Y. Letter-box | 735,389 | Aug. 4 | 664 | 141 | 105 | 1122 |
| Keller, Peter [illegible], Knoxville, Tenn. Adjustable hanger for incandescent lamps | 727,150 | May 5 | 633 | 136 | 104 | 137 |
| Keller, Philip. (See Jarboe and Keller.) | | | | | | |
| Keller, Ralph D., *et al.* (See Perkins, Lindsay S., assignor.) | | | | | | |
| Keller, Samuel F. (See Kelley, William H., assignor.) | | | | | | |
| Keller, T. L. (See Clark, Ellsworth A., assignor.) | | | | | | |
| Keller, Volney P., Merchantville, N. J. Self-propelling automatic dumping-car | 731,783 | June 23 | 4166 | 928, 929 | 104 | 2039 |
| Kelley, Charles C., assignor of one-third to C. A. F. Randolph and L. D. Lowther, Salem, W. Va. Spring-wheel | 732,303 | June 30 | 5179 | 1150, 1151 | 104 | 2266 |
| Kelley, Edward W., Lowell, Mass. Indicator for truing up work | 734,182 | July 21 | 2742 | 644 | 105 | 613 |
| Kelley, Frederick W., and J. F. McElroy, assignors to Consolidated Car-Heating Company, Albany, N. Y. Electric heater | 747,185 | Dec. 15 | 3444 | 781 | 107 | 1[illegible]63 |
| Kelley, George H., Stanley, Ky. Tobacco-knife | 718,847 | Jan. 20 | 2506 | 558 | 102 | 561 |
| Kelley, George W., Russell, Pa. Machine for picking pea-pods from vines | 733,215 | July 7 | 918 | 221 | 105 | 192 |
| Kelley, Henry, assignor of one-half to F. M. Colvin, Anaconda, Mont. Car-coupling | 738,203 | Sept. 8 | 1315 | 285, 286 | 106 | 300 |
| Kelley, Henry, and F. M. Colvin, Anaconda, Mont. Automatic fluid-pressure brake-coupling | 735,884 | Aug. 11 | 1627 | 347, 348 | 105 | 1347 |
| Kelley, Henry S., Cairo, W. Va. Ice-creeper | 740,021 | Sept. 29 | 4792 | 1077 | 106 | 1091 |
| Kelley, James. (See Reid, Kelley, and Reid.) | | | | | | |
| Kelley, James, and P. A. Reid, Richmond, Ind.; said Kelley assignor to said Reid. Wire-stay-making machine | 721,567 | Feb. 24 | 4038 | 917, 918 | 102 | 1723 |
| Kelley, James, W. V. and P. A. Reid, Richmond, Ind.; said Kelley and W. V. Reid assignors to P. A. Reid. Wire-stay-making machine | 721,568 | Feb. 24 | 4049 | 918, 919, 920 | 102 | 1726 |
| Kelley, John D., Downing, Tex. Plow and cultivator | 726,168 | Apr. 21 | 3192 | 722 | 103 | 1875 |
| Kelley, Manley, Colo, Iowa. Churn | 724,584 | Apr. 7 | 308 | 75 | 103 | 1235 |
| Kelley, Michael C., and W. P. Terrell, Conroe, Tex. Insect-destroying machine | 746,523 | Dec. 8 | 2196 | 504 | 107 | 1588 |
| Kelley, William, Scammon, Kans. Slicing-knife | 726,697 | Apr. 28 | 4246 | 960 | 103 | 2102 |
| Kelley, William H., Reading, assignor of one-third to S. F. Keller, Stonycreek Mills, Pa. Picker-stick mechanism for looms | 733,655 | July 14 | 1705 | 404 | 105 | 377 |
| Kellington, John, assignor of one-half to D. J. Munn and A. Ewen, New Westminster, Canada. Fish-cleaning machine | 738,111 | Sept. 1 | 1097 | 243, 244 | 106 | 238 |
| Kellner, Franz, Nuremberg, Germany. Shoe-last | 733,846 | July 14 | 2065 | 487 | 105 | 450 |
| Kellogg, Henry E. (See Swain, George F., assignor.) | | | | | | |
| Kellogg, Henry E., assignor of one-half to G. F. Swain, Harvey, Ill. Variable-speed device | 738,814 | Sept. 15 | 2550 | 560, 561 | 106 | 579 |
| Kellogg, Henry F., Wellesley, Mass. Contact device for electric railways | 737,936 | Sept. 1 | 757 | 166 | 106 | 166 |
| Kellogg, Henry W., *et al.* (See Worth, William O., assignor.) | | | | | | |
| Kellogg, Hosford D., Philadelphia, Pa. Radiator-support | 727,969 | May 12 | 2175 | 484 | 104 | 481 |
| Kellogg, James L., New York, N. Y. Advertising novelty | 740,143 | Sept. 29 | 5006 | 1124 | 106 | 1137 |
| Kellogg, James W., Schenectady, N. Y., assignor to General Electric Company. Controlling electric motors | 730,376 | June 9 | 1547 | 344, 345 | 104 | 1460 |
| Kellogg, Karl. (See Barnes, Marcia I., assignor.) | | | | | | |
| Kellogg, Milton, Chicago, Ill., assignor to Underwood Typewriter Company, New York, N. Y. Silent-key mechanism | 745,356 | Dec. 1 | 76 | 18 | 107 | 1117 |
| Kellogg Switchboard and Supply Company. (See Burlingame, George L., assignor.) | | | | | | |
| Kellogg Switchboard and Supply Company. (See Dean, William W., assignor.) | | | | | | |
| Kellogg Switchboard and Supply Company. (See Dunbar, Francis W., assignor.) | | | | | | |
| Kellogg Switchboard and Supply Company. (See Dunbar and Dean, assignors.) | | | | | | |
| Kellogg Switchboard and Supply Company. (See Kaisling, William, assignor.) | | | | | | |
| Kellogg Switchboard and Supply Company. (See Miller, Kempster B., assignor.) | | | | | | |
| Kellogg Switchboard and Supply Company. (See Taylor, William A., assignor.) | | | | | | |
| Kellogg Switchboard and Supply Company. (See Whipple, Allen D., assignor.) | | | | | | |
| Kellogg, Thomas E., Mount Hood, Oreg. Hame and trace connector | 740,573 | Oct. 6 | 378 | 78 | 106 | 1327 |
| Kellogg, William L. (See Wallace and Kellogg.) | | | | | | |
| Kelly, Christopher M. (See Sneden, Freeland C., assignor.) | | | | | | |
| Kelly, Clarence E., assignor of one-half to W. H. Forse, Jr., Anderson, Ind. Speed-indicator | 721,199 | Feb. 24 | 3356 | 767 | 102 | 1580 |
| Kelly, Clarence E., assignor of one-half to W. H. Forse, Jr., Anderson, Ind. Speed-indicator | 721,200 | Feb. 24 | 3358 | 767, 768 | 102 | 1581 |
| Kelly, Fred J., Lansing, Mich. Weeder | 727,804 | May 12 | 1867 | 416 | 104 | 415 |
| Kelly, George. (See Matson, Frederick W., assignor.) | | | | | | |
| Kelly, George B., Jamaica Plain, Mass., assignor to Aeolian Company, New York, N. Y. Music-roll | 718,256 | Jan. 13 | 1362 | 302 | 102 | 308 |
| Kelly, George F. (See Jones, Harvey P., assignor.) | | | | | | |
| Kelly, Harry P., Denver, Colo. Dental filling-tool | 742,446 | Oct. 27 | 3987 | 895 | 106 | 2134 |
| Kelly, Henry, Los Angeles, Cal., assignor to Kelly and Taneyhill Company. Apparatus for drilling wells | 736,267 | Aug. 11 | 2303 | 499 | 105 | 1492 |
| Kelly, James, Pittsburg, Pa. Rail-joint | 720,358 | Feb. 10 | 1758 | 399 | 102 | 1211 |
| Kelly, John, Chicago, Ill. Gas-burner | 717,866 | Jan. 6 | 672 | 149 | 102 | 143 |
| Kelly, John, Chicago, Ill. Radiator | 741,404 | Oct. 13 | 1942 | 430 | 106 | 1681 |
| Kelly, John, assignor of one-half to T. McGeachie, Sandusky, Ohio. Rail-tie | 733,654 | July 14 | 1704 | 404 | 105 | 376 |
| Kelly, John D. (See Kelly, William D. and J. D.) | | | | | | |
| Kelly, John E., Buffalo, N. Y., assignor to Hallwood Cash Register Company, Jersey City, N. J. Cash register and indicator | 747,613 | Dec. 22 | 4240 | 954 | 107 | 2086 |
| Kelly, John F., Pittsfield, Mass. Commutator-meter | 720,152 | Feb. 10 | 1363 | 312 | 102 | 1130 |
| Kelly, John F., and C. C. Chesney, assignors to Stanley Electric Manufacturing Company, Pittsfield, Mass. Alternating-current apparatus | 725,091 | Apr. 14 | 1254 | 283 | 103 | 1451 |
| Kelly, John F., and C. C. Chesney, assignors to Stanley Electric Manufacturing Company, Pittsfield, Mass. Alternating-current apparatus | 725,092 | Apr. 14 | 1256 | 283, 284 | 103 | 1451 |
| Kelly, John J., Birdsville, Md. Tobacco-picker's frame | 743,518 | Nov. 10 | 1450 | 303 | 107 | 327 |
| Kelly, Joseph A., assignor to J. A. Kelly & Bros., Clinton, Iowa. Combined display-stand and truck | 733,847 | July 14 | 2065 | 488 | 105 | 450 |
| Kelly, Lester G., Hempstead, N. Y. Brush | 744,558 | Nov. 17 | 3423 | 738 | 107 | 760 |
| Kelly, Lewis O., Saranac, Mich. Ironing-table | 720,033 | Feb. 10 | 1150 | 263 | 102 | 1084 |
| Kelly, Maximus V., Omaha, Nebr. Shoe-lace hook | 727,805 | May 12 | 1868 | 416 | 104 | 416 |
| Kelly, Oliver W., Springfield, Ohio. Steam-engine | 729,602 | June 2 | 142 | 35 | 104 | 1156 |
| Kelly, Patrick J., Elizabeth, N. J. Tap | 731,784 | June 23 | 4168 | 929 | 104 | 2040 |
| Kelly, Richard C., Davenport, R. Stroppel, Cedar Valley, and P. F. Wyjack, Iowa City, Iowa. Vending apparatus | 726,938 | May 5 | 198 | 46, 47 | 104 | 44 |
| Kelly, Roland R., Williamstown Station, assignor of one-half to Draper Company, Hopedale, Mass. Cloth-roll shaft for looms | 718,949 | Jan. 20 | 2720 | 608 | 102 | 608 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Kelly and Taneyhill Company. (See Kelly, Henry, assignor.) | | | | | | |
| Kelly, Thomas P., trustee. (See Brady, William W., assignor.) | | | | | | |
| Kelly, Timothy, Watertown, Mass. Fire-escape | 728,114 | May 12 | 2421 | 540 | 104 | 534 |
| Kelly, Walter B., *et al.* (See Erickson, John E., assignor.) | | | | | | |
| Kelly, William D. and J. D., Chicago, Ill. Filing-case | 734,183 | July 21 | 2744 | 644 | 105 | 613 |
| Kelly, William H., Brownsburg, Va. Carriage-top | 735,270 | Aug. 4 | 461 | 91 | 105 | 1079 |
| Kelly, William J., assignor to J. A. Kelly & Bros., Clinton, Iowa. Chair-bottom | 740,022 | Sept. 29 | 4793 | 1077 | 106 | 1091 |
| Kelman, Joseph N., Colgate, Cal. Switch | 722,024 | Mar. 3 | 689 | 152 | 103 | 148 |
| Kelnhofer, Louis, Milwaukee, Wis. Musical instrument | 721,127 | Feb. 17 | 3217 | 736 | 102 | 1538 |
| Kelsey, Frederick E., New York, N. Y. Cigar-wrapper-cutting machine | 726,540 | Apr. 28 | 3944 | 891 | 103 | 2040 |
| Kelsey Heating Company. (See Bradley, Royal H., assignor.) | | | | | | |
| Kelsey, Orlando, Blackwood, N. J. Piston | 743,645 | Nov. 10 | 1690 | 356 | 107 | 377 |
| Kelsey, William H., Cambridge, Mass. Connector for electric circuits | 747,553 | Dec. 22 | 4128 | 926<br>927 | 107 | 2061 |
| Kelso, Joseph. (See McConway and Kelso.) (Reissue.) | | | | | | |
| Kelso, Joseph, assignor to McConway & Torley Company, Pittsburg, Pa. Car-coupling | 741,970 | Oct. 20 | 3056 | 681<br>682<br>683 | 106 | 1930 |
| Kelter, Matthew K. (See Cochran, John O., assignor.) | | | | | | |
| Kelting, Albert J. (See Wilson, Fergus F., assignor.) | | | | | | |
| Kelton, John M. (See Wright, James E., assignor.) | | | | | | |
| Kemm, Samuel P., Franklin, Pa. Screw-driver | 739,606 | Sept. 22 | 3987 | 889 | 106 | 901 |
| Kemp, Clarence M., Baltimore, Md. Acetylene-gas generator | 739,426 | Sept. 22 | 3669 | 816 | 106 | 833 |
| Kemp, George M., Williamsport, Md. Mill | 718,003 | Jan. 6 | 918 | 205 | 102 | 197 |
| Kemp, George P. (See Sharp, Isaac A., assignor.) | | | | | | |
| Kemp, Harry, Newton, Mass. Feed mechanism for carding-machines | 718,130 | Jan. 13 | 1137 | 252<br>253 | 102 | 260 |
| Kemp, Joseph F., Zanesville, Ohio. Means for adjustably securing tool-heads to handles | 730,542 | June 9 | 1860 | 415 | 104 | 1527 |
| Kemp-Welch, John S. (See Wilson and Kemp-Welch.) | | | | | | |
| Kemp, William, assignor of two-thirds to M. P. Freeman and B. L. Worthen, Tucson, Ariz. Ter. Means for utilizing oil or gas in ore-reducing furnaces | 741,504 | Oct. 13 | 2133 | 475 | 106 | 1721 |
| Kemper, Arthur. (See Kemper, Robert E. and A.) | | | | | | |
| Kemper, Claude S., Cameron, Mo. Furrow-opener attachment | 732,191 | June 30 | 4962 | 1103 | 104 | 2221 |
| Kemper, Otto, Bloomsburg, assignor, by mesne assignments, of one-half to J. E. Boone, Almedia, Pa. Garment-clasp | 722,308 | Mar. 10 | 1221 | 271 | 103 | 276 |
| Kemper, Robert E. and A., Rensselaer, N. Y. Chase-holding device for printing-presses | 718,634 | Jan. 20 | 2119 | 461 | 102 | 484 |
| Kemper, Robert E. and A., Rensselaer, N. Y. Platen printing-press | 724,106 | Mar. 31 | 4595 | 1034<br>1035 | 103 | 1028 |
| Kempf, August, Breslau, Germany. Type-writer | 735,271 | Aug. 4 | 463 | 92 | 105 | 1079 |
| Kempien, August J., St. Paul, Minn. Bottle-stopper | 725,970 | Apr. 21 | 2867 | 650 | 103 | 1808 |
| Kempien, August J., St. Paul, Minn. Bottle-stopper | 738,917 | Sept. 15 | 2737 | 605 | 106 | 620 |
| Kempshall, Eleazer, Boston, Mass. Making playing-balls | 727,542 | May 5 | 1331 | 297 | 104 | 287 |
| Kempshall, Eleazer, Boston, Mass. Golf-ball | 733,216 | July 7 | 919 | 222 | 105 | 192 |
| Kempshall, Eleazer, Boston, Mass. Playing-ball | 739,753 | Sept. 22 | 4252 | 952 | 106 | 960 |
| Kempshall Manufacturing Company. (See Richards, Francis H., assignor.) | | | | | | |
| Kempster, Daniel E., Boston, Mass. Antifriction-bearing | 747,324 | Dec. 15 | 3722 | 839 | 107 | 1953 |
| Kempster, P. W. (See Greene, John A., assignor.) | | | | | | |
| Kempter, Ernest W., Galena, Ill. Bottle-closure | 723,679 | Mar. 24 | 3753 | 843 | 103 | 829 |
| Kendal, Louis. (See Wolfe, George, assignor.) | | | | | | |
| Kendall, Alvah S., Yarmouth, Me. Machine for sawing wood | 738,453 | Sept. 8 | 1826 | 397 | 106 | 407 |
| Kendall, Amos M., deceased; S. H. Kendall, Davenport, Iowa, administratrix. Brake for cars | 744,079 | Nov. 17 | 2540 | 543<br>544 | 107 | 570 |
| Kendall, David. (See Gilmore and Kendall.) | | | | | | |
| Kendall, David W. (See Tannewitz, Edward, assignor.) | | | | | | |
| Kendall, Edward D., New York, N. Y. Composition of matter for electrolytic deposition | 724,107 | Mar. 31 | 4602 | ------ | 103 | 1023 |
| Kendall, Edward D., New York, N. Y. Composition for coating metal with silver | 724,108 | Mar. 31 | 4602 | ------ | 103 | 1023 |
| Kendall, Edward D., Brooklyn, N. Y. Treating ores | 730,462 | June 9 | 1723 | ------ | 104 | 1497 |
| Kendall, George A., St. Marks, Fla. Seal for bottles or like packages | 741,143 | Oct. 13 | 1398 | 320 | 106 | 1564 |
| Kendall, Sarah H., administratrix. (See Kendall, Amos M.) | | | | | | |
| Kendall, William L., assignor of one-half to J. D. Scothorn and H. A. Mohler, Fairfield, Iowa. Car-coupling | 732,642 | June 30 | 5828 | 1291 | 104 | 2405 |
| Kenderdine, William J., Philadelphia, Pa. Check-punch | 718,848 | Jan 20 | 2507 | 558 | 102 | 561 |
| Kenderdine, William J., Philadelphia, Pa. Check-punch | 728,726 | May 19 | 3598 | 799 | 104 | 803 |
| Kendrick & Davis. (See Jenkins, Charles H., assignor.) | | | | | | |
| Kendrick, Dyer T., Boston, Mass. Machine-clamp | 744,559 | Nov. 17 | 3425 | 738 | 107 | 761 |
| Kendrick, Frank B., *et al.* (See Jenkins, Charles H., assignor.) | | | | | | |
| Kendrick, James K., Germantown, Cal. Traction-engine | 726,939 | May 5 | 203 | 48 | 104 | 45 |
| Kendrick, Thomas A. (See Sappington, Kendrick, and Wright.) | | | | | | |
| Kenehan, Richard F., assignor of one-half to J. P. Dowdall, New York, N. Y. Automatic cut-off for gas-pipes | 737,113 | Aug. 25 | 3877 | 861 | 105 | 1858 |
| Kenely, Martin F., Elizabeth, N. J. Boiler | 737,937 | Sept. 1 | 759 | 166 | 106 | 167 |
| Kennedy, Alexander, Ponoka, Canada. Range-finder | 719,011 | Jan. 27 | 2829 | 634 | 102 | 645 |
| Kennedy, Charles J. (See Morris, Ruemmler, and Kennedy.) | | | | | | |
| Kennedy, Charles S. L., North Easton, Mass. Photographic bath apparatus. (Reissue) | 12,125 | June 23 | 4633 | 1036 | 104 | 2140 |
| Kennedy, Charles S. L., North Easton, Mass. Tack-hammer | 743,519 | Nov. 10 | 1451 | 303 | 107 | 327 |
| Kennedy, Charles W., deceased, Rutledge; S. H. Kennedy, administratrix, assignor of three-eighths to E. W. Patton, Philadelphia, Pa. Storage battery | 741,044 | Oct. 13 | 1206 | 273 | 106 | 1523 |
| Kennedy, Charles W., deceased, Rutledge, (S. H. Kennedy, administratrix,) and F. A. Pocock, Lansdowne; said Pocock and S. H. Kennedy assignors of three-eighths to E. W. Patton, Philadelphia, Pa. Controller for electric motors | 739,186 | Sept. 15 | 3200 | 708 | 106 | 715 |
| Kennedy, Donald A., Ashland, Wis. Sawmill machinery | 747,979 | Dec. 29 | 4968 | 1122 | 107 | 2270 |
| Kennedy, Donald A., Ashland, Wis. Cleaning-machine | 747,980 | Dec. 29 | 4970 | 1122 | 107 | 2271 |
| Kennedy, Frank K., New Brighton, Pa. Match-box | 731,785 | June 23 | 4170 | 929<br>930 | 104 | 2040 |
| Kennedy, George A., Toledo, Ohio. Steam-boiler | 720,153 | Feb. 10 | 1365 | 313 | 102 | 1130 |
| Kennedy, George A., assignor of one-eighth to W. W. Cilley, Mediapolis, Iowa. Nut-lock | 744,205 | Nov. 17 | 2804 | 599 | 107 | 627 |
| Kennedy, George J., Baltimore, Md. Pump | 741,045 | Oct. 13 | 1208 | 273<br>274<br>275 | 106 | 1524 |
| Kennedy, Henrique C., Philadelphia, Pa. Bottle-washing machine | 744,560 | Nov. 17 | 3426 | 738 | 107 | 761 |
| Kennedy, James, Bristol, Ill. Attachment for grain-separators | 724,480 | Apr. 7 | 110 | 27 | 103 | 1193 |
| Kennedy, James J., Hanover, Ill. Planter | 730,377 | June 9 | 1551 | 345 | 104 | 1161 |
| Kennedy, John E., Boston, Mass. Ventilated shoe | 734,338 | July 21 | 3042 | 716 | 105 | 677 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|
| | | | Spec. | Drgs. | Vol. | Page. |
| Kennedy, John H., assignor to A. F. Churchill, Savannah, Ga. Bale-tying attachment for compressors | 743,520 | Nov. 10 | 1455 | 303, 304, 305 | 107 | 327 |
| Kennedy, Josiah W., St. Louis, Mo. Foundation construction | 735,390 | Aug. 4 | 666 | 142 | 105 | 1122 |
| Kennedy, Julian, *et al.*, trustees. (See Wellman, Charles H., assignor.) | | | | | | |
| Kennedy, Julian, *et al.* (See Wellman, Samuel T. and C. H., assignors.) | | | | | | |
| Kennedy, Julian, Pittsburg, Pa. Adjusting-screw mechanism for rolling-mills | 720,932 | Feb. 17 | 2813 | 645 | 102 | 1445 |
| Kennedy, Julian, Pittsburg, Pa. Roll-housing support | 721,047 | Feb. 17 | 3039 | 696, 697 | 102 | 1494 |
| Kennedy, Julian, Pittsburg, Pa. Mixer for molten metal | 721,048 | Feb. 17 | 3039 | 697 | 102 | 1495 |
| Kennedy, Julian, Pittsburg, Pa. Rolling-mill feed-table | 721,569 | Feb. 24 | 4062 | 920, 921 | 102 | 1729 |
| Kennedy, Julian, Pittsburg, Pa. Hot-blast stove | 728,185 | May 12 | 2559 | 569 | 104 | 562 |
| Kennedy, Julian, Pittsburg, Pa. Three-high mill | 734,070 | July 21 | 2581 | 590 | 105 | 569 |
| Kennedy, Julian, Pittsburg, Pa. Rolling-mill feed-table | 735,391 | Aug. 4 | 668 | 142 | 105 | 1123 |
| Kennedy, Julian, Pittsburg, Pa., assignor to himself and S. T. Wellman, trustees, Cleveland, Ohio. Rolling-mill appliance | 721,046 | Feb. 17 | 3038 | 696 | 102 | 1494 |
| Kennedy, Luther L., Brooklyn, N. Y., assignor to Mergenthaler Linotype Company. Linotype-machine | 720,817 | Feb. 17 | 2596 | 599 | 102 | 1399 |
| Kennedy, Michael A., Boston, Mass. Rubber fabric for heels or the like | 723,876 | Mar. 31 | 4124 | 930 | 103 | 925 |
| Kennedy, Patrick. (See Cannan, Robert, assignor.) | | | | | | |
| Kennedy, Patrick, New York, N. Y., assignor to Consolidated Railway Electric Lighting and Equipment Company. Frosting glass bulbs or globes | 733,972 | July 21 | 2326 | 546 | 105 | 523 |
| Kennedy, Patrick, New York, N. Y., assignor to Consolidated Railway Electric Lighting and Equipment Company. Mechanism for driving dynamos on railway-trucks | 740,982 | Oct. 6 | 1102 | 248 | 106 | 1481 |
| Kennedy, Patrick, New York, N. Y., assignor to Consolidated Railway Electric Lighting & Equipment Co. Inclosing casing for the driving-gear of car-dynamos | 741,971 | Oct. 20 | 3058 | 683 | 106 | 1930 |
| Kennedy, Patrick, New York, N. Y., assignor to Consolidated Railway Electric Lighting and Equipment Company. Flexible connector for batteries | 745,193 | Nov. 24 | 4651 | 1012 | 107 | 1084 |
| Kennedy, Patrick, New York, N. Y., assignor to Consolidated Railway Electric Lighting and Equipment Company. Regulator for electric currents | 745,194 | Nov. 24 | 4652 | 1012, 1013 | 107 | 1035 |
| Kennedy, Sara H., administratrix. (See Kennedy, Charles W.) | | | | | | |
| Kennedy, Sarah H., administratrix. (See Kennedy and Pocock.) | | | | | | |
| Kennedy, Sheshbazzar. (See Ross, John M., assignor.) | | | | | | |
| Kennedy, Sylvester, Derby, Conn. Corset-clasp | 725,258 | Apr. 14 | 1559 | 353 | 103 | 1515 |
| Kennedy, Thomas L., Newton, Miss. Wrench | 730,269 | June 9 | 1362 | 299 | 104 | 1420 |
| Kennedy, Valentine E. (See Worthington, Harry L., assignor.) | | | | | | |
| Kennedy, Walter, Allegheny, Pa. Plant for feeding material to blast-furnaces | 738,815 | Sept. 15 | 2552 | 561 | 106 | 579 |
| Kennedy, Walter S., Minneapolis, Minn. Log-loader | 719,012 | Jan. 27 | 2831 | 634, 635 | 102 | 645 |
| Kennedy, Walter S., Minneapolis, Minn. Log-car | 731,576 | June 23 | 3797 | 846 | 104 | 1965 |
| Kennedy, William L., Hay, assignor of one-half to J. M. Cole, Pin, Ga. Fertilizer-distributer and seed-drill | 733,848 | July 14 | 2067 | 488, 489 | 105 | 451 |
| Kennedy, William R., Newark, Del. Hot-air engine | 739,187 | Sept. 15 | 3202 | 709 | 106 | 716 |
| Kennel, Thomas J. (See Otis, William H., assignor.) | | | | | | |
| Kennelly, John J., *et al.* (See McGuire, Peter J., assignor.) | | | | | | |
| Kennelly, John J., New York, N. Y. Railway-car brake | 722,989 | Mar. 17 | 2478 | 557 | 103 | 556 |
| Kennelly, John J., New York, N. Y. Sanding device | 722,990 | Mar. 17 | 2479 | 557 | 103 | 556 |
| Kenner, George A., East St. Louis, Ill. Die-socket | 720,441 | Feb. 10 | 1890 | 430 | 102 | 1239 |
| Kenney, Charles, Chepstow, Canada. Bag-holder | 725,721 | Apr. 21 | 2427 | 550 | 103 | 1714 |
| Kenney, David T., North Plainfield, N. J. Separator for apparatus for removing dust | 739,263 | Sept. 15 | 3350 | 744 | 106 | 748 |
| Kenney, George E., assignor to Pulsometer Engineering Company, Limited, Reading, England. Type-setting machine | 742,671 | Oct. 27 | 4399 | 992 | 106 | 2222 |
| Kenney, Joseph H., *et al.* (See O'Neill, William F., assignor.) | | | | | | |
| Kenney, Owen E. (See Yost and Kenney.) | | | | | | |
| Kenney, Owen E., assignor to Yost Electric Manufacturing Company, Toledo, Ohio. Making fiber insulating-linings for incandescent-lamp sockets | 735,778 | Aug. 11 | 1414 | 303 | 105 | 1300 |
| Kenney, Owen E., assignor to Yost Electric Manufacturing Company, Toledo, Ohio. Incandescent-lamp socket | 737,114 | Aug. 25 | 3878 | 861 | 105 | 1859 |
| Kennicott, Cass L., Chicago, Ill., assignor to Kennicott Water-Softener Co. Water-purifier | 732,357 | June 30 | 5290 | 1173 | 104 | 2289 |
| Kennicott Water-Softener Co. (See Kennicott, Cass L., assignor.) | | | | | | |
| Kennington, Frederick, and D. L. Fawcett, Leeds, England. Trolley-stand | 743,521 | Nov. 10 | 1460 | 305 | 107 | 328 |
| Kennon, James D., Duke, Tex. Centrifugal machine | 737,416 | Aug. 25 | 4460 | 1000, 1001 | 105 | 1983 |
| Kenny, Hugh E., assignor to Chamberlin Metal Weather Strip Company, Detroit, Mich. Metal weather-strip | 719,472 | Feb. 3 | 110 | 26 | 102 | 848 |
| Kenny, Patrick W., Waterford, Ireland. Reaping and mowing machine | 723,393 | Mar. 24 | 3253 | 729 | 103 | 727 |
| Kent, George T. (See Glaholm and Kent.) | | | | | | |
| Kent, Henry B., New Brunswick, N. J. Top for tooth-powder bottles, cans, or other containers | 747,978 | Dec. 29 | 4967 | 1121 | 107 | 2270 |
| Kent, Henry E., Buffalo, assignor to said Kent, K. W. and D. Campbell, New York, and A. H. Gilbert, Brooklyn, N. Y. Furnace | 717,582 | Jan. 6 | 104 | 27, 28 | 102 | 25 |
| Kent, Paris E., Ellendale, N. D. Infant's diaper | 719,811 | Feb. 3 | 732 | 171, 172 | 102 | 978 |
| Kent, William, Passaic, N. J. Making gas | 735,272 | Aug. 4 | 464 | 92 | 105 | 1080 |
| Kent, William J., Brooklyn, N. Y., assignor to Revere Rubber Company, Boston, Mass. Hoof-pad | 729,941 | June 2 | 762 | 169 | 104 | 1284 |
| Kent, William J., Brooklyn, N. Y., assignor to Revere Rubber Company, Boston, Mass. Hoof-pad | 733,656 | July 14 | 1706 | 404 | 105 | 377 |
| Kenter, John T., Allwood, N. J. Axle for vehicles | 735,984 | Aug. 11 | 1813 | 389 | 105 | 1388 |
| Kentucky Distilleries & Warehouse Company. (See Graves, Martin M., assignor.) | | | | | | |
| Kentucky Tobacco Product Company. (See Lindenberger, George H., assignor.) | | | | | | |
| Kenworthy, Harry C., and W. H. Minckemeyer, Fort Madison, Iowa. Shoe | 726,940 | May 5 | 204 | 48 | 104 | 45 |
| Kenworthy, Thomas W., Richland, Iowa. Rod-coupling | 739,548 | Sept. 22 | 3867 | 857 | 106 | 876 |
| Kenyon, Charles B., Greenwich, N. Y. Incubator | 735,885 | Aug. 11 | 1629 | 348 | 105 | 1347 |
| Kenyon, Moses D. Chicago, Ill. Paper file and binder | 732,192 | June 30 | 4963 | 1104 | 104 | 2222 |
| Keogh, Lucius R., Hamilton, Canada. Making alumina and by-products | 740,364 | Sept. 29 | 5416 | 1219, 1220 | 106 | 1221 |
| Keogh, Lucius R., assignor of one-third to N. J. Gareau, Pembroke, Canada. Making alumina and by-products | 744,765 | Nov. 24 | 3808 | 821 | 107 | 860 |
| Kepford, David E., Merriam, Ind. Horseshoeing apparatus | 719,473 | Feb. 3 | 111 | 26 | 102 | 849 |
| Kepler, Andrew, assignor of one-half to C. S. Mooney, Dunning, Nebr. Bog-evener | 720,525 | Feb. 10 | 2045 | 470 | 102 | 1270 |
| Keplinger, George B., Chicago, Ill. Handle or head for canes or like articles | 729,353 | May 26 | 4722 | 1043 | 104 | 1049 |
| Kepner, Albertus B., Bethany, Nebr. Seed-planter | 729,354 | May 26 | 4723 | 1044 | 104 | 1050 |
| Kepp, Ezra, Xenia, Ill. Vehicle-brake | 727,379 | May 5 | 1035 | 225 | 104 | 223 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | Spec. | Drg. | Vol. | Page. |
| Keppler, Henry, Brooklyn, N. Y. Coating glass or fabrics | 743,522 | Nov. 10 | 1461 | 305 | 107 | 329 |
| Kerans, Charles P., Danvers, Mass. Tanning apparatus | 732,562 | June 30 | 5690 | 1264 | 104 | 2374 |
| Kerby, Frederick C., Detroit, Mich. Interchangeable reach and short-turning gear | 736,738 | Aug. 18 | 3192 | 706 | 105 | 1694 |
| Kerfoot, George H., *et al.* (See Edney, Cartwright J., assignor.) | | | | | | |
| Kerfoot, Katherine. (See Kerfoot, William A., assignor.) | | | | | | |
| Kerfoot, William A., Evanston, Ill. Pump | 723,394 | Mar. 24 | 3254 | 729 | 103 | 727 |
| Kerfoot, William A., assignor to K. Kerfoot, Evanston, Ill. Force-pump | 718,771 | Jan. 20 | 2387 | 530 | 102 | 538 |
| Kerfoot, William A., assignor to K. Kerfoot, Evanston, Ill. Pump | 721,810 | Mar. 3 | 277 | 62 | 103 | 62 |
| Kerfoot, William A., assignor to K. Kerfoot, Evanston, Ill. Pump | 728,933 | May 26 | 3976 | 885 | 104 | 895 |
| Kerley, Melvie V., Roanoke, Tex. Match-box | 744,561 | Nov. 17 | 3428 | 739 | 107 | 762 |
| Kern, Alfred B., Jackson, Mich. Vehicle-wheel | 739,188 | Sept. 15 | 3207 | 709 | 106 | 717 |
| Kern, Charles A. (See Spreckels and Kern.) | | | | | | |
| Kern, Friedrich W., Antwerp, Belgium. Life-belt | 731,058 | June 16 | 2800 | 623 | 104 | 1745 |
| Kern, Howard E., Allentown, Pa. Insulated ferrule | 721,049 | Feb. 17 | 3041 | 698 | 102 | 1495 |
| Kern Incandescent Gas Light Company. (See Rettich, Victor A., assignor.) | | | | | | |
| Kern, John W., deceased; S. M. Kern, Portland, Oreg., administratrix. Range-finder | 742,038 | Oct. 20 | 3192 | 713, 714 | 106 | 1957 |
| Kern, Sarah M., administratrix. (See Kern, John W.) | | | | | | |
| Kern, Valentine, Erie, Pa. Fastener | 730,129 | June 2 | 1091 | 244 | 104 | 1349 |
| Kern, William, *et al.* (See Down, Ernest U., assignor.) | | | | | | |
| Kernan, Francis, Utica, and J. F. Kernan, New York, N. Y. Grate-bar | 730,772 | June 9 | 2255 | 501 | 104 | 1613 |
| Kernan, Joseph F. (See Kernan, Francis and J. F.) | | | | | | |
| Kerngood, Herman, Baltimore, Md. Buckle | 724,586 | Apr. 7 | 311 | 76 | 103 | 1235 |
| Kerngood, Herman, assignor to Alma Button Company, Baltimore, Md. Buckle | 724,585 | Apr. 7 | 310 | 76 | 103 | 1235 |
| Kerngood, Herman, assignor to Alma Button Company, Baltimore, Md. Garment-hook | 727,970 | May 12 | 2176 | 484 | 104 | 482 |
| Kernodle, George W., Elon College, N. C. Vehicle-top | 725,722 | Apr. 21 | 2428 | 550, 551 | 103 | 1714 |
| Kernohan, Robert B., Pittsburg, Pa. Continuous heating-furnace | 732,866 | July 7 | 300 | 75 | 105 | 66 |
| Kerns, Elmer E., Bradford, Pa. Gas and air regulating valve | 717,688 | Jan. 6 | 297 | 73 | 102 | 64 |
| Kerns, William W., and J. W. Ackley, Bloxom, Va. Paper-hanging brush | 746,099 | Dec. 8 | 1445 | 324 | 107 | 1427 |
| Kerpely, Anton von, Vienna, Austria-Hungary. Device for continuously tapping pig-iron from blast-furnaces | 728,727 | May 19 | 3601 | 799 | 104 | 803 |
| Kerr, Alexander M., *et al.* (See Foley, James E., assignor.) | | | | | | |
| Kerr, Alexander M., Detroit, Mich., assignor of one-half to H. H. Hewitt, Buffalo, N. Y. Journal-bearing | 722,427 | Mar. 10 | 1428 | 315 | 103 | 320 |
| Kerr, Elisha R., Erin, Tenn. Baling-press | 745,862 | Dec. 1 | 1016 | 229 | 107 | 1316 |
| Kerr, George R., *et al.* (See Kerr, Thomas, assignor.) | | | | | | |
| Kerr, George S., New London, Pa. Swing | 719,013 | Jan. 27 | 2833 | 636 | 102 | 646 |
| Kerr, George S., Boothwyn, Pa. Swing attachment | 720,034 | Feb. 10 | 1152 | 263 | 102 | 1084 |
| Kerr, Hugh S., Philadelphia, Pa. Pendent ornament | 726,698 | Apr. 28 | 4247 | 960, 961 | 103 | 2102 |
| Kerr, John M., *et al.* (See Perkins, William D., assignor.) | | | | | | |
| Kerr, Joseph P. (See Lawler and Kerr.) | | | | | | |
| Kerr, Thomas, assignor to G. R. Kerr, London, Canada, and W. W. Kerr, Chicago, Ill. Rail-bond for electric railways | 722,991 | Mar. 17 | 2481 | 558 | 103 | 557 |
| Kerr, Thomas, assignor to G. R. Kerr, London, Canada, and W. W. Kerr, Chicago, Ill. Rail-coupling for electric railways | 722,992 | Mar. 17 | 2482 | 558 | 103 | 557 |
| Kerr, William F., Cleveland, Ohio. Windmill | 728,468 | May 19 | 3118 | 689 | 104 | 701 |
| Kerr, William W., *et al.* (See Kerr, Thomas, assignor.) | | | | | | |
| Kerrigan, Michael F., New York, assignor of one-fourth to W. J. Frey, Brooklyn, N. Y. Safety gas-burner | 741,344 | Oct. 13 | 1838 | 406 | 106 | 1659 |
| Kersey, James M., Bethany, assignor of one-third to F. A. Chapman, Wellsburg, W. Va. Gun-cleaner | 721,050 | Feb. 17 | 3042 | 698 | 102 | 1495 |
| Kersey, James M., assignor of one-half to W. W. Beall and S. George, Jr., Wellsburg, W. Va. Smoke-consumer | 731,373 | June 16 | 3379 | 755 | 104 | 1862 |
| Kershaw, James L., Cleveland, Ohio. Sectional bookcase | 739,007 | Sept. 15 | 2879 | 639 | 106 | 650 |
| Kershner, Alonzo P., Flatwoods, W. Va. Ratchet-wrench | 722,450 | Mar. 10 | 1484 | 328 | 103 | 332 |
| Kerslake, Harry A., Auburn, N. Y. Wrench | 746,339 | Dec. 8 | 1887 | 430 | 107 | 1521 |
| Kerst, Fredrick C., deceased, Springfield, Ill.; J. Kerst, administratrix. Miner's safety-cage | 740,872 | Oct. 6 | 903 | 202, 203 | 106 | 1439 |
| Kerst, Grant W. (See Collamore and Kerst.) | | | | | | |
| Kerst, Julia, administratrix. (See Kerst, Fredrick C.) | | | | | | |
| Kersteter, Charles W., Chicago, Ill. Sprinkler-head | 723,161 | Mar. 17 | 2789 | 629 | 103 | 620 |
| Kertz, Gustave M., St. Louis, Mo. Knockdown crate | 726,941 | May 5 | 205 | 48 | 104 | 45 |
| Kervick, Emily T., Baltimore, Md. Pew | 724,189 | Mar. 31 | 4767 | 1069 | 103 | 1055 |
| Kesselring, Wilhelm, Strasburg, Germany. Rose for shower-baths | 722,849 | Mar. 17 | 2250 | 504 | 103 | 508 |
| Kessler, Christian, Indianapolis, Ind. Bread-making machine | 745,018 | Nov. 24 | 4248 | 921, 922, 923 | 107 | 951 |
| Kessler, Edward J., Toledo, Ohio. Screen for fruit-washing machines | 740,441 | Oct. 6 | 111 | 23 | 106 | 1270 |
| Kessler, Ferdinand, Rosario, Argentina. Centrifugal apparatus | 735,524 | Aug. 4 | 941 | 200 | 105 | 1181 |
| Kessler, Henri. (See Chautard and Kessler.) | | | | | | |
| Kessler, Louis, Des Moines, Iowa. Safety attachment for cans or vessels | 718,475 | Jan. 13 | 1783 | 396 | 102 | 395 |
| Kessler, Louis, Des Moines, Iowa. Hydropneumatic engine | 746,100 | Dec. 8 | 1446 | 324, 325 | 107 | 1427 |
| Kessler, Wilbur A. (See Simpson, George A., assignor.) | | | | | | |
| Kessmeier, Julius T. C., Washington, Pa. Melting glass | 745,863 | Dec. 1 | 1018 | 229 | 107 | 1316 |
| Kestel, Harry C., assignor of one-half to H. Ensign, Toledo, Ohio. Elbow-fastening for talking-machines | 745,444 | Dec. 1 | 249 | 57 | 107 | 1153 |
| Kester, Thomas W., assignor of one-half to T. A. Snyder, Treichlers, Pa. Car-wheel and track therefor | 719,339 | Jan. 27 | 3459 | 770 | 102 | 777 |
| Kester, William A., assignor of one-half to W. A. Dierchs, Rock Island, Ill. Clothes-drier | 736,603 | Aug. 18 | 2938 | 643 | 105 | 1643 |
| Ketcham, Benjamin P., Carthage, N. Y. Fire-alarm system | 721,520 | Feb. 24 | 3953 | 901 | 102 | 1705 |
| Ketcham, Israel V., New York, N. Y. Rotary engine | 747,727 | Dec. 22 | 4448 | 1003, 1004 | 107 | 2133 |
| Ketcheson, John H., assignor of one-half to J. M. Gomes, St. Louis, Mo. Printing apparatus | 743,884 | Nov. 10 | 2118 | 453 | 107 | 467 |
| Kett, William G., East Melbourne, and L. R. Hossenlopp, Albert Park, Victoria, Australia. Elevator-shaft-floor covering and the lifting and deposition of same | 722,850 | Mar. 17 | 2251 | 504 | 103 | 509 |
| Ketterer, Max, Springfield, Ohio. Screw-jack | 743,290 | Nov. 3 | 922 | 200 | 107 | 198 |
| Keuffel & Esser Company. (See Bernegau, Carl M., assignor.) | | | | | | |
| Keuffel & Esser Company. (See Keuffel, Willie L. E., assignor.) | | | | | | |
| Keuffel, Willie L. E., Hoboken, N. J., assignor to Keuffel & Esser Company. Surveyor's rod | 727,151 | May 5 | 634 | 136 | 104 | 137 |
| Keunst, John J. (See Wehner and Keunst.) | | | | | | |
| Keuscher, Carl H., Jersey City, N. J. Watch-chain hook | 732,358 | June 30 | 5292 | 1173 | 104 | 2289 |
| Keverline, Joseph E., Coalhill, Pa. Hame | 727,806 | May 12 | 1869 | 416 | 104 | 416 |

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| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Keverline, Joseph E., Coalhill, Pa. Combined latch and lock | 729,603 | June 2 | 145 | 35 | 104 | 1156 |
| Keverline, Joseph E., Coalhill, Pa. Combined lock and latch | 742,875 | Nov. 3 | 97 | 23 | 107 | 22 |
| Keverline, Joseph E., Coalhill, Pa. Lock for double doors | 742,876 | Nov. 3 | 99 | 23 | 107 | 23 |
| Kevorkian, Joseph H., Philadelphia, Pa. Back-rest for display-cards, &c | 730,027 | June 2 | 927 | 208 | 104 | 1316 |
| Kewell, Charles H. (See Breidenstein, Charles F., assignor.) | | | | | | |
| Key, Francis W., Staunton, Ga. Cotton-planter | 738,041 | Sept. 1 | 957 | 213 | 106 | 208 |
| Keyes, Albert B., Chicago, Ill. Carriage-apron | 729,186 | May 26 | 4425 | 975 | 104 | 988 |
| Keyes, Martin L., Cambridge, Mass. Apparatus for making pulp articles | 740,023 | Sept. 29 | 4795 | 1078 | 106 | 1092 |
| Keyes, Walter F., South Milwaukee, Wis. Fastening device | 726,942 | May 5 | 206 | 49 | 104 | 45 |
| Keyes, Washington D., Kittanning, Pa. Apparatus for annealing glass | 718,257 | Jan. 13 | 1362 | 302 | 102 | 309 |
| Keyes, Winfield S., San Francisco, Cal. Desiccating fruit | 732,563 | June 30 | 5692 | 1264 | 104 | 2374 |
| Keyless Lock Company. (See Flora and Clough, assignors.) | | | | | | |
| Keyser, Charles C., Newport News, Va. Sprocket-wheel | 720,442 | Feb. 10 | 1891 | 430 | 102 | 1239 |
| Keyser, George, assignor to J. W. Hepworth, Philadelphia, Pa. Trimming attachment for machines for sewing looped fabrics | 724,016 | Mar. 31 | 4433 | 996 | 103 | 987 |
| Keyser, George, assignor to J. W. Hepworth, Philadelphia, Pa. Overedge sewing-machine | 724,017 | Mar. 31 | 4436 | 997 | 103 | 988 |
| Keyser, George, and J. M. Weber, assignors to J. W. Hepworth, Philadelphia, Pa. Overedge sewing-machine | 724,109 | Mar. 31 | 4603 | 1036, 1037 | 103 | 1023 |
| Keyser, George, and J. M. Weber, assignors to J. W. Hepworth, Philadelphia, Pa. Overedge sewing-machine | 724,110 | Mar. 31 | 4606 | 1037 | 103 | 1024 |
| Keystone Cork Seal Company. (See Campbell, Henry, assignor.) | | | | | | |
| Keystone Electric Company. (See Powell, William H., assignor.) | | | | | | |
| Keystone Electric Company. (See Woods, Clinton E., assignor.) | | | | | | |
| Keystone Electric & Manufacturing Co. (See Schweitzer, Albert, assignor.) | | | | | | |
| Keystone Electric & Manufacturing Co. (See Schweitzer and Hausold, assignors.) | | | | | | |
| Keystone Lantern Company. (See Casey, John T., assignor.) | | | | | | |
| Keystone Seal & Press Company. (See Schofield, Albert B., assignor.) | | | | | | |
| Keystone Telephone Company. (See Stakes, David F., assignor.) | | | | | | |
| Keystone Type Foundry. (See Brooks, Richards T., assignor.) | | | | | | |
| Keystone Type Foundry. (See Huston and Smith, assignors.) | | | | | | |
| Keyt, John E., San Francisco, Cal. Siphon-trap | 730,463 | June 9 | 1724 | 385 | 104 | 1497 |
| Kezer, Allen R., Los Angeles, Cal. Mattress-stuffing machine | 733,324 | July 7 | 1113 | 264 | 105 | 234 |
| Khlebnikon, Wladimir, St. Petersburg, Russia. Steam-trap | 723,877 | Mar. 31 | 4126 | 931 | 103 | 925 |
| Khuner & Sohn, Emanuel. (See Klimont, Isidor, assignor.) | | | | | | |
| Kibby, Palmer, Chicago, Ill. Wringer | 741,911 | Oct. 20 | 2930 | 653, 654 | 106 | 1904 |
| Kibling, George F., Norwich, Vt. Lantern-holder for vehicles | 736,404 | Aug. 18 | 2544 | 558 | 105 | 1561 |
| Kibling, George F., Norwich, Vt. Lantern holder and protector | 736,405 | Aug. 18 | 2545 | 558 | 105 | 1561 |
| Kicak, Ignaz, Pittsburg, Pa. Rail-joint | 730,130 | June 2 | 1091 | 244 | 104 | 1349 |
| Kichline, George F. (See Reichard, Forrest, assignor.) | | | | | | |
| Kichline, William E., West Bethlehem, Pa. Engine | 726,943 | May 5 | 207 | 49 | 104 | 46 |
| Kidd, Joseph, Duluth, Minn. Anchor-stowing mechanism for ships | 735,985 | Aug. 11 | 1816 | 389 | 105 | 1388 |
| Kidder, Frank E., Denver, Colo. Building block and wall | 743,391 | Nov. 3 | 1136 | 241 | 107 | 240 |
| Kidder, Frank E., assignor, by mesne assignments, to J. A. Ferguson, Denver, Colo. Building block and wall | 742,094 | Oct. 20 | 3341 | 745 | 106 | 1986 |
| Kidder Press Company. (See Meisel, Francis, assignor.) | | | | | | |
| Kidder, Wellington P., assignor to F. H. Goodyear and G. E. Matthews, trustees, Boston, Mass. Apparatus for removing bark from standing trees | 734,565 | July 28 | 3451 | 805 | 105 | 779 |
| Kidder, Wellington P., assignor to F. H. Goodyear and G. E. Matthews, trustees, Boston, Mass. Drag-saw | 739,496 | Sept. 22 | 3787 | 848 | 106 | 860 |
| Kidder, Wellington P., Boston, Mass., assignor to F. H. Goodyear and G. E. Matthews, trustees, Buffalo, N. Y. Portable engine for use in removing bark from standing trees, &c | 739,785 | Sept. 22 | 4318 | 967 | 106 | 975 |
| Kidder, Wellington P., Boston, Mass., assignor to F. H. Goodyear and G. E. Matthews, trustees, Buffalo, N. Y. Tree-climbing motor | 742,447 | Oct. 27 | 3989 | 895 | 106 | 2135 |
| Kidder, Wellington P., Boston, Mass., assignor of eleven-twentieths to F. H. & C. W. Goodyear and G. E. Matthews, Buffalo, N. Y. Apparatus for removing bark from standing trees | 739,495 | Sept. 22 | 3786 | 847, 848 | 106 | 860 |
| Kiefer, Adam S., Cleveland, Ohio. Steam-generator | 722,717 | Mar. 17 | 2000 | 446, 447 | 103 | 458 |
| Kiefer, Fred, Priceburg, and C. Freeman, Scranton, Pa. Snow-plow | 740,572 | Oct. 6 | 376 | 77, 78 | 106 | 1327 |
| Kiefer, Karl, Cincinnati, Ohio. Clearing and purifying champagne fermented in bottles | 737,634 | Sept. 1 | 137 | 30 | 106 | 33 |
| Kieffer, Joseph L., Montreal, Canada. Stitch-forming mechanism for shoe-sewing machines | 719,980 | Feb. 3 | 1015 | 236, 237, 756, 757, 758 | 102 | 1039 |
| Kieffer, Joseph L., Montreal, Canada. Sole rough-rounding and channeling machine | 723,468 | Mar. 24 | 3378 | | 103 | 753 |
| Kieffer, Joseph L., Montreal, Canada. Take-up mechanism for shoe-sewing machines | 729,604 | June 2 | 146 | 35, 36 | 104 | 1157 |
| Kieffer, Joseph L., Montreal, Canada. Work-gage for shoe-sewing machines | 729,605 | June 2 | 149 | 36 | 104 | 1157 |
| Kieffer, Joseph L., Montreal, Canada. Needle-guide mechanism for sewing-machines | 737,417 | Aug. 25 | 4462 | 1001 | 105 | 1984 |
| Kieffer, Joseph L., Montreal, Canada. Shoe and leather sewing machine | 742,998 | Nov. 3 | 315 | 70, 71, 72, 73, 74 | 107 | 68 |
| Kiernan, Thomas J., assignor to Brooks Improved Steam Valve Company, Columbia, S. C., Steam-valve | 734,885 | July 28 | 4070 | 949 | 105 | 904 |
| Kiernan, Thomas J., assignor to Brooks Improved Steam Valve Company, Columbia, S. C. Steam-valve | 734,886 | July 28 | 4071 | 949 | 105 | 904 |
| Kiesel, William F., Jr., Altoona, Pa. Steel-car construction | 726,169 | Apr. 21 | 3194 | 722 | 103 | 1875 |
| Kiesel, William F., Jr., Altoona, Pa. Door-operating gear for coal or coke cars | 726,541 | Apr. 28 | 3946 | 891, 892 | 103 | 2041 |
| Kievit, Louis, and C. Blaauboer, Albany, N. Y. Gate | 746,846 | Dec. 15 | 2804 | 646 | 107 | 1746 |
| Kifer, George M., and W. F. Shrader, Penns Station, Pa. Adjustable wrench | 720,933 | Feb. 17 | 2814 | 646 | 102 | 1445 |
| Kilborn, Chauncey W., Rosenhayn, assignor of two-thirds to J. D. Cox and T. L. Woodruff, Bridgton, N. J. Brick-machine | 739,881 | Sept. 29 | 4529 | 1017 | 106 | 1034 |
| Kilbourn Knitting Machine Company. (See Blood, George, Jr., assignor.) | | | | | | |
| Kilbourn, Sophia E. (See Kilbourn, William D., assignor.) | | | | | | |
| Kilbourn, Washington H., Greenfield, assignor to Stanley Electric Manufacturing Company, Pittsfield, Mass. Trolley-pole and stand therefor | 717,583 | Jan. 6 | 105 | 28 | 102 | 25 |
| Kilbourn, William D., Pueblo, Colo., assignor of one-tenth to S. E. Kilbourn, Middletown, Conn. Building-blocks | 731,309 | June 16 | 3277 | 728, 729 | 104 | 1841 |
| Kilbourne & Jacobs Manufacturing Company. (See Stagg, Thomas, assignor.) | | | | | | |
| Kilbride, Thomas F., *et al.* (See Morin, Oliver N., assignor.) | | | | | | |
| Kilburn, John, Belmont, Mass., assignor to Sawyer Spindle Company, of Maine. Doffer-guard | 719,812 | Feb. 3 | 733 | 172 | 102 | 978 |

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| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| Kiler, Charles M., Indianapolis, Ind. Motor | 737,115 | Aug. 25 | 3879 | 861 | 105 | 1859 |
| Kiler, William H., Pomona, Cal. Irrigating water-gate | 725,093 | Apr. 14 | 1258 | 284 | 103 | 1452 |
| Kilgore, Ira B., Concord, Cal. Vineyard or orchard cultivator | 735,986 | Aug. 11 | 1818 | 390 | 105 | 1389 |
| Kilgore, Isaac P., Westpoint, Ill. Broom attachment | 734,887 | July 28 | 4073 | 950 | 105 | 905 |
| Kilham, Daniel A. (See Walker, William A., assignor.) | | | | | | |
| Kilhoffer, William G. (See Burns, John G., assignor.) | | | | | | |
| Kilian, Michael P., St. Louis, Mo. Basket | 719,121 | Jan. 27 | 3069 | 682 | 102 | 694 |
| Killam, James C., Everett, Mass. Sawing lumber | 723,469 | Mar. 24 | 3387 | 758 | 103 | 755 |
| Killam, James C., Everett, Mass. Clapboard-machine | 723,470 | Mar. 24 | 3390 | 759, 760, 761, 762 | 103 | 755 |
| Killeen, Michael, *et al.* (See Aiken, Albion P., assignor.) | | | | | | |
| Killeen, Michael, *et al.* (See Lewis, John F., assignor.) | | | | | | |
| Killeen, Michael, J. F. Lewis, Braddock, and A. P. Aiken, Port Perry, Pa. Furnace-bott-ing apparatus | 742,199 | Oct. 27 | 3531 | 787, 788 | 106 | 2039 |
| Killey, John C., San Diego, Cal. Ink-well holder | 728,115 | May 12 | 2423 | 540 | 104 | 534 |
| Killits, Miner L. (See Horton, Peter D., assignor.) | | | | | | |
| Killman, Thomas A., Liberty, Tenn. Baling-press | 733,849 | July 14 | 2069 | 489, 490, 491 | 105 | 451 |
| Kilpatrick, Alexander B., Warren, Ohio. Sap-spout | 729,355 | May 26 | 4724 | 1044 | 104 | 1050 |
| Kimball, Benjamin A. (See Cushman, Abe L., assignor.) | | | | | | |
| Kimball Company, C. J. (See Thompson, Edward J., assignor.) | | | | | | |
| Kimball, Frank C., Salem, assignor to C. H. Bradshaw, Somerville, Mass. Staking-machine | 719,340 | Jan. 27 | 3460 | 771 | 102 | 777 |
| Kimball, Perley L., Bellows Falls, Vt. Centrifugal separator | 720,154 | Feb. 10 | 1367 | 313, 314 | 102 | 1130 |
| Kimball, Perley L., assignor to Vermont Farm Machine Company, Bellows Falls, Vt. Liquid-separator | 726,438 | Apr. 28 | 3725 | 844, 845 | 103 | 1999 |
| Kimball, Perley L., assignor to Vermont Farm Machine Company, Bellows Falls, Vt. Nut-lock | 727,152 | May 5 | 636 | 136 | 104 | 138 |
| Kimball, Perley L., assignor to Vermont Farm Machine Company, Bellows Falls, Vt. Centrifugal cream-separator | 732,750 | July 7 | 97 | 27 | 105 | 24 |
| Kimball, Robert E., Akron, Ohio. Car-brake | 720,359 | Feb. 10 | 1760 | 399 | 102 | 1212 |
| Kimball, Samuel P., Salem, Oreg. Cultivator | 735,886 | Aug. 11 | 1631 | 348 | 105 | 1348 |
| Kimball, Sophie, Painesville, and A. G. Haver, Cleveland, Ohio. Garment-hanger | 717,751 | Jan. 6 | 431 | 100 | 102 | 94 |
| Kimball, William W. (See Palmer and Kimball.) | | | | | | |
| Kimball, William W., and A. N. Palmer, assignors to Syracuse Time Recorder Company, Syracuse, N. Y. Time-recorder | 738,454 | Sept. 8 | 1827 | 397, 398, 399 | 106 | 408 |
| Kimbark, Daniel A. (See Felt and Kimbark.) | | | | | | |
| Kimbell, John B., Alpharetta, Ga. Tire-set | 722,993 | Mar. 17 | 2484 | 558 | 103 | 557 |
| Kimberlin, Winfield M., assignor to Goodyear Tire & Rubber Company, Akron, Ohio. Cementing substances | 725,094 | Apr. 14 | 1260 | ..... | 103 | 1452 |
| Kimberly, John A. (See Thurman, Charles E., assignor.) | | | | | | |
| Kimble, Andrew, Zanesville, Ohio. Shaping-machine | 731,786 | June 23 | 4172 | 930 | 104 | 2041 |
| Kimble, Andrew, Zanesville, Ohio. Convertible passenger-car | 743,291 | Nov. 3 | 923 | 201 | 107 | 198 |
| Kimble, Austin, assignor of one-half to F. S. Betz, Chicago, Ill. Alternating-current-motor controller | 733,401 | July 14 | 1268 | 301 | 105 | 285 |
| Kimble, Roy C., Vicksburg, Mich. Speed-regulating device for engine-governors | 720,934 | Feb. 17 | 2816 | 646 | 102 | 1446 |
| Kimble, Solomon M., Corunna, Mich. Cement-brick mold | 740,024 | Sept. 29 | 4807 | 1078 | 106 | 1095 |
| Kimbrough, Sidney W., W. E. Watkins, and J. W. McCarley, Cleburne, Tex. Metallic end yoke for railway-cars | 744,356 | Nov. 17 | 3070 | 659 | 107 | 686 |
| Kimman, Frederick G., Syracuse, N. Y. Clothes-line-prop attachment | 724,713 | Apr. 7 | 557 | 133 | 103 | 1288 |
| Kimmich, Ernest, Detroit, Mich. Fumigating-candle | 744,766 | Nov. 24 | 3812 | 822 | 107 | 861 |
| Kimsey, James C., Philadelphia, Pa. Binder for sheet-music, &c. | 722,589 | Mar. 10 | 1736 | 386 | 103 | 388 |
| Kimsey, James C., Philadelphia, Pa. Machine for stringing tags, &c. | 724,714 | Apr. 7 | 558 | 133 | 103 | 1288 |
| Kimsey, James C., Philadelphia, Pa. Machine for stringing tags | 736,406 | Aug. 18 | 2546 | 558, 559 | 105 | 1561 |
| Kimsey, James C., Philadelphia, Pa. Mailing-tube | 736,407 | Aug. 18 | 2549 | 559 | 105 | 1562 |
| Kimsey, James C., Philadelphia, Pa. Shipping-tag | 738,042 | Sept. 1 | 958 | 213 | 106 | 208 |
| Kimsey, James C., Philadelphia, Pa. Clasp-envelop | 744,562 | Nov. 17 | 3429 | 739 | 107 | 762 |
| Kimsey, James C., Philadelphia, Pa. Closure for milk-bottles | 745,195 | Nov. 24 | 4656 | 1014 | 107 | 1035 |
| Kincaid, Fred L., Stockton, Cal. Harvester | 731,465 | June 23 | 3580 | 797, 798 | 104 | 1922 |
| Kincaid, John, Vancouver, Canada. Roller-bearing | 730,773 | June 9 | 2257 | 501 | 104 | 1614 |
| Kincaid, John W., Covington, Ky. Mechanical stoker | 733,657 | July 14 | 1709 | 405 | 105 | 377 |
| Kincaid & Liggett Company. (See Liggett, William K., assignor.) | | | | | | |
| Kinch, Grant T., Chicago, Ill. Dipper or skimmer | 744,206 | Nov. 17 | 2805 | 599 | 107 | 628 |
| Kinchla, Timothy B., Newton, Mass. Gas-meter support | 719,230 | Jan. 27 | 3251 | 726 | 102 | 731 |
| Kind, Herman, New York, N. Y. Pedal attachment for pianos | 746,101 | Dec. 8 | 1448 | 325 | 107 | 1428 |
| Kinder, George W. (See Crawford and Kinder.) | | | | | | |
| Kinder, Joseph J. de, Philadelphia, Pa. Pulverized-fuel feeder | 728,934 | May 26 | 3978 | 885 | 104 | 895 |
| Kinder, Joseph J. de, Philadelphia, Pa. Fuel-feeding mechanism | 728,935 | May 26 | 3980 | 886 | 104 | 896 |
| Kindermann, Friedrich, Monroeville, Ohio. Musical instrument | 736,979 | Aug. 25 | 3659 | 810, 811 | 105 | 1813 |
| Kindig, Samuel C., and T. J. Spicer, Baltimore, Md. Non-refillable bottle | 741,912 | Oct. 20 | 2931 | 654 | 106 | 1904 |
| Kindig, Samuel C., and T. J. Spicer, Baltimore, Md. Non-refillable bottle | 746,102 | Dec. 8 | 1449 | 325 | 107 | 1428 |
| Kindig, Samuel C., and T. J. Spicer, Baltimore, Md. Non-refillable bottle | 746,103 | Dec. 8 | 1450 | 325 | 107 | 1428 |
| Kindl, Frederick H. (See Beker, Rudolph G., assignor.) | | | | | | |
| Kindsvater, John H., Manhattan, Kans. Grain-drill | 738,816 | Sept. 15 | 2553 | 561, 562 | 106 | 580 |
| King, Addie. (See King, Arthur, assignor.) | | | | | | |
| King, Albert, Nottingham, England. Switch-operating apparatus for tramway or other cars | 748,508 | Dec. 29 | 5949 | 1350 | 107 | 2485 |
| King, Albert V. (See Brady, Everett S., assignor.) | | | | | | |
| King, Alfred J., Los Angeles, Cal., assignor of one-fourth to T. Candy, Chicago, Ill. Toy gas-balloon | 721,051 | Feb. 17 | 3043 | 698 | 102 | 1495 |
| King, Andrew, Nottingham, England. Change-speed driving mechanism | 738,817 | Sept. 15 | 2558 | 562, 563 | 106 | 580 |
| King, Arthur, assignor to A. King, Buffalo, N. Y. Apparatus for removing plants from streams | 727,807 | May 12 | 1870 | 416, 417 | 104 | 416 |
| King Bridge Company. (See Clarke, Arthur, assignor.) | | | | | | |
| King, Charles, Port Huron, assignor of one-third to R. J. Groves, Davison, Mich. Carpet-sweeper | 724,111 | Mar. 31 | 4609 | 1038 | 102 | 1024 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| King, Charles B. (See King, Barnhart, and King.) | | | | | | |
| King, Charles B., Detroit, Mich. Sparking mechanism for electric igniters | 739,882 | Sept. 29 | 4530 | 1018 | 106 | 1035 |
| King, Charles N. (See King, Louis A. and C. N.) | | | | | | |
| King, Charles P., assignor of one-half to J. J. Sturla, Cincinnati, Ohio. Combined hand and automatic roll printing device | 747,325 | Dec. 15 | 3724 | 839 | 107 | 1953 |
| King, Edward R., East Oakland, Cal. Fountain blacking-brush | 738,455 | Sept. 8 | 1839 | 399 | 106 | 410 |
| King, Elton J., Fort Wayne, Ind., assignor to General Electric Company. Electric meter | 727,640 | May 12 | 1527 | 344 | 104 | 347 |
| King, Elton J., Fort Wayne, Ind., assignor to General Electric Company. Electrostatic instrument | 731,787 | June 23 | 4176 | 931 | 104 | 2041 |
| King, Eustachius J., Philadelphia, Pa. Spring-point switch | 743,885 | Nov. 10 | 2121 | 454 | 107 | 468 |
| King, Ferdinand, New York, N. Y. Clasp | 737,418 | Aug. 25 | 4467 | 1002 | 105 | 1985 |
| King, Ferdinand, New York, N. Y. Match-safe | 744,357 | Nov. 17 | 3071 | 659 | 107 | 686 |
| King, Francis, San Francisco, Cal. Support for massage-machines | 719,675 | Feb. 3 | 465 | 106 | 102 | 920 |
| King, Frank, assignor of forty-five one-hundredths to J. F. Haneman, Indianapolis, Ind. Lazy-tongs construction | 732,418 | June 30 | 5404 | 1198 | 104 | 2314 |
| King, Fred E., West Philadelphia, Pa. Device for sterilizing razors | 747,554 | Dec. 22 | 4131 | 927 | 107 | 2062 |
| King, Frederick L., Providence, assignor to G. W. Dover, Cranston, R. I. Setting | 729,606 | June 2 | 152 | 36 | 104 | 1158 |
| King, George E., Newton Highlands, Mass., assignor to Gamewell Fire Alarm Telegraph Co., New York, N. Y. Multiple-signal transmitter | 726,944 | May 5 | 211 | 50 | 104 | 46 |
| King, George E., Newton, Mass., assignor to Gamewell Fire Alarm Telegraph Co., New York, N. Y. Multiple-signal transmitter | 727,543 | May 5 | 1332 | 297 | 104 | 287 |
| King, George I., Middletown, Pa. Underframing for railway-cars | 736,739 | Aug. 18 | 3193 | 706 | 105 | 1695 |
| King, George I., Detroit, Mich., assignor to American Car & Foundry Company, St. Louis, Mo. Car construction | 728,800 | May 19 | 3732 | 833 | 104 | 829 |
| King, George I., and J. H. Frank, assignors to Middletown Car Works, Middletown, Pa. Underframing for railway-cars | 746,340 | Dec. 8 | 1888 | 430 | 107 | 1521 |
| King, George W., Glasgow, Scotland. Collapsible or folding box for holding fruit, confectionery, pastry, &c | 744,563 | Nov. 17 | 3430 | 739 | 107 | 762 |
| King, George W., H. J. Barnhart, and C. B. King, assignors to Marion Steam Shovel Company, Marion, Ohio. Truck | 725,344 | Apr. 14 | 1714 | 386 | 103 | 1548 |
| King, George W., H. J. Barnhart, and C. B. King, assignors to Marion Steam Shovel Company, Marion, Ohio. Bearing | 729,356 | May 26 | 4725 | 1044 | 104 | 1050 |
| King, Harry L., Denver, Colo. Bumping-screen | 735,525 | Aug. 4 | 943 | 200, 201 | 105 | 1181 |
| King, Henry. (See Cruzan, Edward L., assignor.) | | | | | | |
| King, Henry, St. Leonard-on-Sea, England. Slate or similar device for educational purposes | 722,994 | Mar. 17 | 2485 | 559 | 103 | 557 |
| King, Henry A., New York, N. Y. Dental napkin-holder | 718,772 | Jan. 20 | 2389 | 530 | 102 | 538 |
| King, Henry B. (See Quick, Hiram M., assignor.) | | | | | | |
| King, Henry L., Bridgewater, Mass. Brush | 729,187 | May 26 | 4426 | 975, 976 | 104 | 988 |
| King, Henry N., Adrian, Mich. Mail-box for rural free delivery | 719,474 | Feb. 3 | 113 | 27 | 102 | 849 |
| King, Hugh M., Oklaunion, Tex. Disk plow | 738,818 | Sept. 15 | 2560 | 563 | 106 | 580 |
| King, Jacob H., Piqua, Ohio. Carriage-top-operating device | 735,779 | Aug. 11 | 1415 | 303 | 105 | 1300 |
| King, James F., New York, N. Y. Wireless telegraphy | 728,243 | May 19 | 2677 | 599 | 104 | 608 |
| King, James F., New York, N. Y. Wireless telegraphy | 729,497 | May 26 | 4951 | 1098 | 104 | 1099 |
| King, John, Jr., Philadelphia, Pa. Machine for creasing paper-board | 744,207 | Nov. 17 | 2806 | 600 | 107 | 628 |
| King, John, assignor of two-thirds to W. D. Totten, Detroit, Mich. Brake mechanism | 719,813 | Feb. 3 | 735 | 172 | 102 | 978 |
| King, John G., Burlington, N. C. Shuttle | 739,008 | Sept. 15 | 2880 | 639 | 106 | 650 |
| King, John H., and E. M. Wolfe, Beaverfalls, assignors of one-third to G. H. Blaxter, Pittsburg, Pa. Mill for rolling seamless tubing | 718,476 | Jan. 13 | 1785 | 396 | 102 | 395 |
| King, John H., and E. M. Wolfe, Beaverfalls, assignors of one-third to G. H. Blaxter, Pittsburg, Pa. Apparatus for manufacturing seamless tubing | 719,231 | Jan. 27 | 3252 | 727 | 102 | 732 |
| King, John H., and E. M. Wolfe, Beaverfalls, assignors of one-third to G. H. Blaxter, Pittsburg, Pa. Apparatus for manufacturing seamless tubing | 740,442 | Oct. 6 | 112 | 23 | 103 | 1270 |
| King, John H., and E. M. Wolfe, Beaverfalls, assignors of one-third to G. H. Blaxter, Pittsburg, Pa. Apparatus for manufacturing seamless tubing | 742,200 | Oct. 27 | 3532 | 788 | 106 | 2040 |
| King, John Q. A., Phoenix, Ariz. Ter., assignor of one-half to F. H. Stanwood, Lowell, Mass., assayer's pulverizing apparatus | 746,104 | Dec. 8 | 1452 | 326 | 107 | 1429 |
| King, John T. (See Du Pree, Lewis J., assignor.) | | | | | | |
| King, John W., Waitsburg, Wash. Elevator and dump | 744,767 | Nov. 24 | 3813 | 822 | 107 | 861 |
| King, Joseph G., Port Arthur, Canada. Grain-drier | 748,079 | Dec. 29 | 5167 | 1168 | 107 | 2314 |
| King, Joseph G., and J. Edwards, Port Arthur, Canada; said Edwards assignor to said King. Grain-drier | 723,680 | Mar. 24 | 3754 | 843 | 103 | 830 |
| King, Louis A. and C. N., Salem, Mass. Egg boiler and server | 745,196 | Nov. 24 | 4657 | 1014 | 107 | 1036 |
| King Machine Tool Company. (See Harrison, Alfred M., assignor.) | | | | | | |
| King, Peter J. (See Curtis and King.) | | | | | | |
| King, Phineas F., Cleveland, Ohio. Cotton-gin | 718,635 | Jan. 20 | 2120 | 461, 462, 463 | 102 | 484 |
| King, Phineas F., Cleveland, Ohio. Railway-switch | 718,636 | Jan. 20 | 2124 | 463 | 102 | 485 |
| King, Phineas F., assignor to A. C. Reed, Cleveland, Ohio. Riveting-machine | 728,936 | May 26 | 3982 | 886 | 104 | 896 |
| King, Phineas F., assignor of one-half to C. H. Tucker, Cleveland, Ohio. Trolley-pole | 740,144 | Sept. 29 | 5007 | 1125 | 106 | 1137 |
| King, Phineas F., assignor of one-half to C. H. Tucker, Cleveland, Ohio. Closet-flushing apparatus | 747,439 | Dec. 22 | 3924 | 883 | 107 | 2015 |
| King, Sara E., Decatur, Ill. Dress-shield | 724,112 | Mar. 31 | 4611 | 1038 | 103 | 1024 |
| King, Theophilus. (See Boardman, Charles H., assignor.) | | | | | | |
| King, Theophilus. (See Boardman and Miskell, assignors.) | | | | | | |
| King, Theophilus, Quincy, Mass., assignor to Eureka Silk Manufacturing Company, Portland, Me. Skein-holder | 721,375 | Feb. 24 | 3693 | 841 | 102 | 1651 |
| King, Thomas, Glencoe, Mich. Permutation-padlock | 717,867 | Jan. 6 | 673 | 149 | 102 | 144 |
| King, Thomas W., Cleveland, Ohio. Automatic damper | 727,971 | May 12 | 2177 | 485 | 104 | 482 |
| King, Ulysses S., Cherokee, Kans. Motor | 733,217 | July 7 | 920 | 222 | 105 | 193 |
| King, Victor J., Trumansburg, N. Y. Skirt-supporter | 723,533 | Mar. 24 | 3509 | 785 | 103 | 779 |
| King, William, Eccles, England. Wrench | 727,153 | May 5 | 637 | 137 | 104 | 138 |
| King, William A. (See Peavey, William S., assignor.) | | | | | | |
| King, William A., Pierre, S. D. Self-heating branding-iron | 728,116 | May 12 | 2424 | 540 | 104 | 535 |
| King, William H., *et al.* (See Albee, Honestus M., assignor.) | | | | | | |
| King, William H., Lincoln, Nebr. Threshing-machine | 720,699 | Feb. 17 | 2416 | 552, 553 | 102 | 1360 |
| King, William R. (See Wright, Fred M., assignor.) | | | | | | |
| King, William V., Waco, Tex. Type-writer attachment | 724,297 | Mar. 31 | 4993 | 1117 | 103 | 1101 |
| Kingman, Barton E. (See McLoughlin, Harry, assignor.) | | | | | | |
| Kingman, Edward B., Leominster, Mass. Comb | 726,699 | Apr. 28 | 4249 | 961 | 103 | 2103 |
| Kingman, Edward B., Leominster, Mass. Comb | 735,115 | Aug. 4 | 130 | 29 | 105 | 1010 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| Kingman Plow Company. (See Evans, George E., assignor.) | | | | | | |
| Kingory, Joseph, Buffalo, N. Y. Faucet | 735,526 | Aug. 4 | 945 | 201 | 105 | 1182 |
| Kingsbury & Davis Machine Company. (See Davis and Webster, assignors.) | | | | | | |
| Kingsbury, Edmund W., Framingham, Mass. Easel | 730,774 | June 9 | 2258 | 501 | 104 | 1614 |
| Kingsbury, George M., assignor to Cassopolis Manufacturing Company, Cassopolis, Mich. Grain-drill | 745,197 | Nov. 24 | 4658 | 1014 | 107 | 1036 |
| Kingsland, William, London, England. Ratchet-operated electric switch | 743,173 | Nov. 3 | 679 | 149<br>150 | 107 | 142 |
| Kingsley, Hugh J., Rutland, Vt. Ice-tool | 747,981 | Dec. 29 | 4972 | 1123 | 107 | 2271 |
| Kingston, George, Kokomo, Ind. Carbureter for gasolene-engines | 727,972 | May 12 | 2178 | 485 | 104 | 482 |
| Kingston, James L., Boston, Mass. Rug-fastener | 724,884 | Apr. 7 | 866 | 199 | 103 | 1354 |
| Kingston, James L., Boston, Mass. Edge-holder for carpets or rugs | 724,885 | Apr. 7 | 868 | 199 | 103 | 1355 |
| Kington, James M., and M. Ellis, New Decatur, Ala. Taper attachment for lathes | 728,398 | May 19 | 2980 | 655<br>656 | 104 | 672 |
| Kingzett, Charles T., Chislehurst, England. Manufacture of golf-balls | 734,339 | July 21 | 3043 | 716 | 105 | 677 |
| Kingzett, Charles T., Chislehurst, England. Golf-ball | 734,462 | July 21 | 3251 | 764 | 105 | 720 |
| Kingzett, Charles T., Chislehurst, England. Golf-ball | 734,463 | July 21 | 3253 | 765 | 105 | 720 |
| Kingzett, Charles T., Chislehurst, England. Making playing-balls | 734,888 | July 28 | 4074 | 950 | 105 | 905 |
| Kinkade, Thomas, Rock Springs, Wyo. Rod-packing | 738,043 | Sept. 1 | 959 | 213 | 106 | 209 |
| Kinnard, John M., Cleveland, Ohio. Measuring caddy or cabinet | 731,577 | June 23 | 3799 | 847 | 104 | 1965 |
| Kinnear Manufacturing Company. (See Brunst, William M., assignor.) | | | | | | |
| Kinnear Manufacturing Company. (See Volp, John, assignor.) | | | | | | |
| Kinnear, William R., Columbus, Ohio. Sheet-metal radiator | 742,672 | Oct. 27 | 4401 | 992<br>993 | 106 | 2223 |
| Kinnear, William R., Columbus, Ohio. Sheet-metal radiator | 742,673 | Oct. 27 | 4403 | 993 | 106 | 2223 |
| Kinnear, William R., Columbus, Ohio. Tubular sheet-metal radiator | 742,674 | Oct. 27 | 4404 | 993<br>994 | 106 | 2224 |
| Kinnear, William R., Columbus, Ohio. Sheet-metal radiator | 742,794 | Oct. 27 | 4596 | 1041 | 106 | 2265 |
| Kinnecom, Fred O., assignor to E. L. and G. Hail, Providence, R. I. Electric alarm for elevators | 737,635 | Sept. 1 | 139 | 30 | 106 | 33 |
| Kinney, William G., *et al.* (See Newgarden, Max, assignor.) | | | | | | |
| Kinsell, David R., Altoona, Pa. Curtain-pole | 723,203 | Mar. 17 | 2883 | 646 | 103 | 641 |
| Kinser, Henry F., assignor to Arithmetical Scale Company, Chattanooga, Tenn. Computing-scale | 734,464 | July 21 | 3254 | 765 | 105 | 720 |
| Kinser, Henry F., Athens, assignor to Arithmetical Scale Company, Chattanooga, Tenn. Computing-scale | 735,273 | Aug. 4 | 465 | 92 | 105 | 1080 |
| Kinsey, Ernest U., assignor to Hammel, Riglander & Company, New York, N. Y. Watch-glass tray or drawer | 722,180 | Mar. 3 | 959 | 213 | 103 | 203 |
| Kinsey, Isaac, assignor to Stoddard Manufacturing Company, Dayton, Ohio. Vapor-stove | 741,913 | Oct. 20 | 2932 | 654 | 106 | 1905 |
| Kinsey, Peter S., *et al.* (See Cook, Francis L., assignor.) | | | | | | |
| Kinsey, Walter, *et al.* (See Cook, Francis L., assignor.) | | | | | | |
| Kinsman, Charles T., Cambridge, Mass. Dentimeter | 744,358 | Nov. 17 | 3074 | 659 | 107 | 687 |
| Kinsman, Frank E., Plainfield, N. J. Means for controlling the movements of vehicles | 735,527 | Aug. 4 | 946 | 201<br>202 | 105 | 1182 |
| Kintzing, W. F. (See McKnight, John W., assignor.) | | | | | | |
| Kintzing, William F., New Freedom, Pa. Let-off and take-up mechanism for looms | 737,938 | Sept. 1 | 760 | 166 | 106 | 167 |
| Kintzing, William F., New Freedom, Pa. Shuttle-motion for looms | 737,939 | Sept. 1 | 762 | 167 | 106 | 167 |
| Kinzer, John J., assignor to Pittsburgh Brake Shoe Company, Pittsburg, Pa. Brake-shoe | 734,566 | July 28 | 3452 | 805 | 105 | 779 |
| Kinzer, John J., assignor to Pittsburgh Brake Shoe Company, Pittsburg, Pa. Brake-shoe | 734,567 | July 28 | 3453 | 806 | 105 | 779 |
| Kinzer, John J., assignor to Pittsburgh Brake Shoe Company, Pittsburg, Pa. Brake-head | 734,568 | July 28 | 3455 | 806 | 105 | 779 |
| Kinzy, Harry L. (See Treas and Kinzy.) | | | | | | |
| Kions, Silas G. (See Eason, Samuel L., assignor.) | | | | | | |
| Kip-Armstrong Company. (See Baker and Kip, assignors.) | | | | | | |
| Kip, Frederic E. (See Baker and Kip.) | | | | | | |
| Kip, Frederic E., Montclair, N. J. Weft-controlling mechanism for looms | 724,113 | Mar. 31 | 4611 | 1038<br>1039 | 103 | 1025 |
| Kip, Frederic E., Montclair, N. J. Weft-controlling mechanism for looms | 724,114 | Mar. 31 | 4616 | 1040 | 103 | 1026 |
| Kip, Frederic E., Montclair, N. J. Weft-controlling mechanism for looms | 743,292 | Nov. 3 | 926 | 201 | 107 | 199 |
| Kipp, James, New York, N. Y. Waterproof garment | 743,174 | Nov. 3 | 684 | 150 | 107 | 143 |
| Kippenberg, Heinrich. (See Wichmann and Kippenberg.) | | | | | | |
| Kirby, Charles. (See Blair and Kirby.) | | | | | | |
| Kirby, Eugene J., *et al.* (See Meyer, Frederick, assignor.) | | | | | | |
| Kirby, Fitz A., Wyandotte, Mich. Smoke-consuming furnace and damper-regulator therefor | 729,188 | May 26 | 4427 | 976 | 104 | 988 |
| Kirby, George J. (See Levoy, Benjamin M., assignor.) | | | | | | |
| Kirby, Jerry W., assignor of one-fourth to B. Price, Butte, Mont. Carpenter's plane | 725,569 | Apr. 14 | 2124 | 481 | 103 | 1635 |
| Kirby, John, Jr., Dayton, Ohio, assignor to United States Headlight Company, Buffalo, N. Y. Electric headlight | 721,646 | Feb. 24 | 4206 | 956<br>957<br>958 | 102 | 1761 |
| Kirby, John, Jr., Dayton, Ohio, assignor to United States Headlight Company, Buffalo, N. Y. Headlight | 721,647 | Feb. 24 | 4213 | 958<br>959 | 102 | 1763 |
| Kirby, John, Jr., Dayton, Ohio, assignor to United States Headlight Company, Buffalo, N. Y. Adjustable means for mounting reflectors | 721,648 | Feb. 24 | 4218 | 959 | 102 | 1764 |
| Kirby, Thomas B., *et al.* (See Kuhlman and Woodman, assignors.) | | | | | | |
| Kirch, Charles J., Keokuk, Iowa. Adjustable flue-thimble | 719,232 | Jan. 27 | 3254 | 727 | 102 | 732 |
| Kirch, Charles J., Keokuk, Iowa. Heating-stove | 736,740 | Aug. 18 | 3196 | 707 | 105 | 1696 |
| Kirchhoff, Hermann, assignor to Mann & Stumpe, Barmen, Germany. Linen button | 748,287 | Dec. 29 | 5541 | 1263 | 107 | 2395 |
| Kirchhoff, William G., assignor to St. Louis Register Company, St. Louis, Mo. Indicator-wheel | 724,115 | Mar. 31 | 4620 | 1041 | 103 | 1027 |
| Kirgeis, Paul, Breslau, Germany. Means for closing steam or other pressure chambers | 720,155 | Feb. 10 | 1369 | 314 | 102 | 1131 |
| Kirk, Charles M., Rosemont, Ohio. Railway-tie | 742,675 | Oct. 27 | 4405 | 994 | 106 | 2224 |
| Kirk, Edward, Philadelphia, Pa. Melting-furnace | 741,505 | Oct. 13 | 2136 | 476 | 106 | 1722 |
| Kirk, Edward B., Jacksonville, Ill. Puzzle | 746,105 | Dec. 8 | 1453 | 326 | 107 | 1429 |
| Kirk, Ephraim L., Knoxville, Tenn. Folding bed | 747,186 | Dec. 15 | 3447 | 781<br>782 | 107 | 1894 |
| Kirk, Frank, Akron, Ohio. Spring-coiling machine | 725,723 | Apr. 21 | 2430 | 551 | 103 | 1714 |
| Kirk, John T. (See Owen and Kirk.) | | | | | | |
| Kirk, Joseph E., Sistersville, W. Va. Pumping apparatus | 747,728 | Dec. 22 | 4452 | 1004 | 107 | 2134 |
| Kirk Manufacturing Co. (See Demory, Adam R., assignor.) | | | | | | |
| Kirk, Thomas O., Fordland, Mo. Seed-planting attachment for cultivators | 718,938 | Jan. 20 | 2698 | 603<br>604 | 102 | 604 |
| Kirk, William A., Madison, Ind. Mold or form for concrete walls | 739,549 | Sept. 22 | 3868 | 867 | 106 | 876 |

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| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | Spec. | Drg. | Vol. | Page. |
| Kirk, William C., Chattanooga, Tenn. Column-lathe | 743,728 | Nov. 10 | 1833 | 386 | 107 | 408 |
| Kirk, William C., Chattanooga, Tenn. Work-support for lathes | 743,729 | Nov. 10 | 1835 | 387 | 107 | 408 |
| Kirk, William C., Chattanooga, Tenn. Belt-tightener for lathes | 743,730 | Nov. 10 | 1837 | 387 | 107 | 409 |
| Kirkaldy, John, London, England. Portable distilling apparatus | 718,209 | Jan. 13 | 1285 | 282, 283 | 102 | 291 |
| Kirker-Bender Fire Escape Company. (See Logan, William H., assignor.) | | | | | | |
| Kirkham, Orlando, Diagonal, Iowa. Potato-harvester | 733,589 | July 14 | 1595 | 380 | 105 | 355 |
| Kirkhuff, Marshall N., assignor to Parlin & Orendorff Company, Canton, Ohio. Lock-lever | 734,420 | July 21 | 3180 | 747 | 105 | 705 |
| Kirkland, Henry E. W., Smithdale, Miss. Cotton or rice chopper | 745,864 | Dec. 1 | 1019 | 229 | 107 | 1317 |
| Kirkland, Samuel A. (See Coffield, Jesse M., assignor.) | | | | | | |
| Kirkland, William C., New Orleans, La. Railway-tie | 726,170 | Apr. 21 | 3196 | 723 | 103 | 1876 |
| Kirkman, Joseph. (See Norman, Thomas E., assignor.) | | | | | | |
| Kirkman, Thomas W., New York, N. Y. Scale | 730,270 | June 9 | 1363 | 299 | 104 | 1420 |
| Kirkpatrick, Dwight E., and I. A. Dryden, St. Louis, Mo. Stereoscope | 722,851 | Mar. 17 | 2252 | 504 | 103 | 509 |
| Kirkpatrick, James E., Taunton, England. Manufacture of bricks for furnaces | 735,528 | Aug. 4 | 956 | ..... | 105 | 1184 |
| Kirkpatrick-Picard, Hugh F. (See Sulman and Kirkpatrick-Picard.) | | | | | | |
| Kirkpatrick, T. J. (See Bradbury, William H., assignor.) | | | | | | |
| Kirkwood, Robert G., Pittsburg, Pa. Liquid-fuel burner | 727,380 | May 5 | 1037 | 225 | 104 | 223 |
| Kirkwood, Robert G., Pittsburg, Pa. Fluid-fuel heater and pumping system | 742,333 | Oct. 27 | 3789 | 848 | 106 | 2094 |
| Kirkwood, Robert G., Pittsburg, Pa. Oil feeding and storing system | 742,334 | Oct. 27 | 3791 | 849 | 106 | 2095 |
| Kirlin, Linden, Kansas City, Mo. Two-row disk cultivator | 722,235 | Mar. 10 | 1090 | 240 | 103 | 248 |
| Kirlin, Samuel, Watertown, S. D. Lineman's implement | 728,728 | May 19 | 3601 | 799 | 104 | 804 |
| Kirmse, Oscar, Whitneyville, assignor of one-third to H. H. Schulz, New Haven, Conn. Lock mechanism for breakdown guns | 741,506 | Oct. 13 | 2137 | 476 | 106 | 1722 |
| Kirry, Walter, Blue Lake, Cal. Elevated cableway | 720,443 | Feb. 10 | 1892 | 431 | 102 | 1240 |
| Kirry, Walter, Blue Lake, Cal. Grapple | 720,700 | Feb. 17 | 2419 | 553 | 102 | 1361 |
| Kirsch, Bernhard, assignor of one-half A. Pessl, Vienna, Austria-Hungary. Rope | 728,399 | May 19 | 2981 | 656 | 104 | 672 |
| Kirsch, Bernhard, C. V. Suppan, Vienna, and B. Szendi, Budapest, Austria-Hungary. Ship-railway carriage | 728,117 | May 12 | 2425 | 540, 541 | 104 | 535 |
| Kirsch, Charles W., St. Paul, Minn. Device for automatically operating elevator-doors | 743,886 | Nov. 10 | 2122 | 454 | 107 | 468 |
| Kirsch, Charles W., assignor to Elevator Safety Device Co., Chicago, Ill. Device for operating elevator-gates | 722,590 | Mar. 10 | 1737 | 386, 387 | 103 | 388 |
| Kirschbaum, John, assignor of one-half to Novelty Mfg. Co., Waterbury, Conn. Making sheet-metal ware | 741,046 | Oct. 13 | 1214 | 275 | 106 | 1525 |
| Kirschbaum, John, assignor to Novelty Mfg. Co., Waterbury, Conn. Embossing-machine | 741,914 | Oct. 20 | 2935 | 654 | 106 | 1905 |
| Kirschbaum, John, assignor to Novelty Mfg. Co., Waterbury, Conn. Device for ornamenting articles | 741,915 | Oct. 20 | 2936 | 655 | 106 | 1905 |
| Kirschbaum, John, Waterbury, Conn., assignor to A. R. Fergusson, New York, N. Y. Clamp | 743,646 | Nov. 10 | 1692 | 356 | 107 | 377 |
| Kirschner, Michael J., Oil City, Pa. Tubing-top | 730,664 | June 9 | 2076 | 462 | 104 | 1575 |
| Kirschweng, John, Butte, Mont. Magnetic separator | 720,156 | Feb. 10 | 1370 | 315 | 102 | 1131 |
| Kirst, Peter, Sheboygan, Wis. Carpet-stretcher | 739,009 | Sept. 15 | 2880 | 639 | 106 | 650 |
| Kirten, Charles H. S. (See Terry and Kirten.) | | | | | | |
| Kiser, Lewis C., Decatur, Ill. Piston-cylinder | 745,729 | Dec. 1 | 743 | 170 | 107 | 1257 |
| Kisinger-Ison Company. (See Conway, Michael R., assignor.) | | | | | | |
| Kisling, Robert C., and A. Coe, Newark, N. J. Spring-band | 744,564 | Nov. 17 | 3431 | 739 | 107 | 762 |
| Kissinger, Albert, and H. J. Coll, Pittsburg, Pa. Nut-lock | 723,395 | Mar. 24 | 3256 | 729 | 103 | 727 |
| Kissinger, Robert. (See Tisch and Kissinger.) | | | | | | |
| Kissling, Helen M., Oriole, Ind. Fan | 746,524 | Dec. 8 | 2198 | 504 | 107 | 1589 |
| Kistler, Libbie F. (See Symonds, Henry, assignor.) | | | | | | |
| Kitchen, Joseph M. W., East Orange, N. J. Combustion-regulating attachment | 747,440 | Dec. 22 | 3925 | 883, 884 | 107 | 2015 |
| Kitsee, Isidor, Philadelphia, Pa. Secondary battery | 718,637 | Jan. 20 | 2126 | 464 | 102 | 485 |
| Kitsee, Isidor, Philadelphia, Pa. Automatic cut-out | 725,259 | Apr. 14 | 1560 | 353 | 103 | 1515 |
| Kitsee, Isidor, Philadelphia, Pa. Apparatus for making designs and jacquards for same | 732,948 | July 7 | 444 | 109, 110 | 105 | 96 |
| Kitsee, Isidor, Philadelphia, Pa. Book or periodical | 733,218 | July 7 | 924 | 223 | 105 | 193 |
| Kitsee, Isidor, Philadelphia, Pa. Automatic fire-extinguisher | 737,419 | Aug. 25 | 4468 | 1002 | 105 | 1985 |
| Kitsee, Isidor, Philadelphia, Pa. Apparatus for regulating the flow of current in electric circuits | 743,887 | Nov. 10 | 2124 | 455 | 107 | 469 |
| Kitsee, Isidor, Philadelphia, Pa. Telephony | 745,019 | Nov. 24 | 4264 | 923, 924 | 107 | 954 |
| Kitsee, Isidor, assignor to J. H. Bell, Philadelphia, Pa. Electric telegraphy | 722,852 | Mar. 17 | 2253 | 504 | 103 | 509 |
| Kitsee, Isidor, assignor of one-half to C. L. Hamilton, Philadelphia, Pa. Paper-making machine | 725,345 | Apr. 14 | 1715 | 386 | 103 | 1548 |
| Kitselman, Alva L., *et al.* (See Parrish, William N., assignor.) | | | | | | |
| Kitselman, Alva L., Muncie, Ind. Earth-auger | 720,255 | Feb. 10 | 1561 | 357 | 102 | 1170 |
| Kitselman, David M., *et al.* (See Parrish, William N., assignor.) | | | | | | |
| Kitson, Arthur, Philadelphia, Pa. Table-lamp | 738,204 | Sept. 8 | 1317 | 286 | 106 | 301 |
| Kitson, Arthur J., Ann Arbor, Mich. Weather-strip | 728,244 | May 19 | 2679 | 599 | 104 | 609 |
| Kitson Hydrocarbon Heating and Incandescent Lighting Company. (See Curran, Philip B., assignor.) | | | | | | |
| Kitson Hydrocarbon Heating and Incandescent Lighting Company. (See Perillat, Charles, assignor.) | | | | | | |
| Kitson Hydrocarbon Heating and Incandescent Lighting Company. (See Thayer, Russell, assignor.) | | | | | | |
| Kitson Machine Company. (See Perham, Haven C., assignor.) | | | | | | |
| Kitt, Frederick T., Denver, Colo. Electrically-controlled railway-switch | 748,557 | Dec. 29 | 6052 | 1370, 1371 | 107 | 2509 |
| Kittel, Adolf. (See Jung and Kittel.) | | | | | | |
| Kitterman, Alexander, Portland, Oreg. Roundabout sailing apparatus | 723,162 | Mar. 17 | 2792 | 629 | 103 | 621 |
| Kitterman, Christopher C., Bolckow, Mo. Mail collection and delivery apparatus | 744,005 | Nov. 10 | 2370 | 509 | 107 | 524 |
| Kittinger, John B., Central City, Ky. Harrow | 738,687 | Sept. 8 | 2296 | 504 | 106 | 506 |
| Kittredge, Anson O., Springfield, Mass., assignor, by mesne assignments, to Account-Audit Company. Bank-check | 747,187 | Dec. 15 | 3448 | 782 | 107 | 1894 |
| Kittredge, Anson O., New York, and E. R. Kittredge, Brooklyn, assignors to Stationery Patents Company, New York, N. Y. Summarizing-sheet for serial-binders | 724,886 | Apr. 7 | 869 | 200 | 103 | 1355 |
| Kittredge, Ernest R. (See Kittredge, Anson O. and E. R.) | | | | | | |
| Kittredge, Rufus J., and J. Niemes, Chicago, Ill. Printing | 722,591 | Mar. 10 | 1738 | 387 | 103 | 389 |
| Kitzmiller, Josiah, South Auburn, Nebr. Whiffletree | 745,730 | Dec. 1 | 744 | 170 | 107 | 1257 |
| Kjaersgaard, Christen P. A., Aarhus, Denmark. Safety-lamp | 734,233 | July 21 | 2834 | 665 | 105 | 634 |
| Kjeldsen, Jakob, Copenhagen, Denmark. Apparatus for treating skin diseases, &c. | 740,873 | Oct. 6 | 906 | 203 | 106 | 1439 |
| Kjelgaard, Carroll W. (See French, John E., assignor.) | | | | | | |
| Klaber, Augustus D., London, England, assignor to A. B. Dick Company, Chicago, Ill. Duplicating-machine | 732,002 | June 23 | 4565 | 1018 | 104 | 2126 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | Spec. | Drg. | Vol. | Page. |
| Klaber, Augustus D., London, England, assignor to A. B. Dick Company, Chicago, Ill. Stencil-sheet | 732,564 | June 30 | 5692 | 1264<br>1265 | 104 | 2374 |
| Klaber, Augustus D., London, England, assignor to A. B. Dick Company, Chicago, Ill. Stencil duplicating apparatus | 739,497 | Sept. 22 | 3788 | 848 | 106 | 860 |
| Klaber, Augustus D., London, England, assignor to A. B. Dick Company, Chicago, Ill. Means for attaching stencil-sheets to duplicating-machines | 739,498 | Sept. 22 | 3790 | 849 | 106 | 860 |
| Klaber, Augustus D., London, England, assignor to A. B. Dick Company, Chicago, Ill. Printing and duplicating apparatus | 747,074 | Dec. 15 | 3252 | 740 | 107 | 1851 |
| Klages, Edward A., Crafton, Pa. Window-fastener | 746,709 | Dec. 15 | 2542 | 584 | 107 | 1688 |
| Klahn, Emil, West Hoboken, N. J., assignor of one-half to G. E. Strauss, New York, N. Y. Roller-bearing | 745,198 | Nov. 24 | 4659 | 1014 | 107 | 1026 |
| Klaiber, Maximilian, Brooklyn, assignor to Prosch Manufacturing Company, New York, N. Y. Photographic shutter | 726,700 | Apr. 28 | 4250 | 961 | 103 | 2103 |
| Klaiber, Maximilian, and I. G. McColl, New York, N. Y. Storage flash-lamp | 744,565 | Nov. 17 | 3433 | 740 | 107 | 762 |
| Klaus, Fred, Chicago, Ill. Press for cans | 722,853 | Mar. 17 | 2255 | 505 | 103 | 509 |
| Klay, Abraham B., assignor to A. B. Klay Company, Lima, Ohio. Tile | 730,131 | June 2 | 1093 | 245 | 104 | 1349 |
| Klay, Andrew. (See Steiner, John G., assignor.) | | | | | | |
| Kleb, Louis, Newark, N. J. Eyeglasses | 746,341 | Dec. 8 | 1890 | 430<br>431 | 107 | 1522 |
| Kleber, Charles P. (See Murphy, Thomas F., assignor.) | | | | | | |
| Kleber, John P., assignor of one-half to A. C. Canfield, Pittsburg, Pa. Lubricating device for engines | 743,523 | Nov. 10 | 1462 | 306 | 107 | 329 |
| Kleckner, Robert, Highbridge, N. J. Nut-lock | 735,116 | Aug. 4 | 131 | 29 | 105 | 1011 |
| Klee, Frederick C., assignor to National Hotel Register Company, Dubuque, Iowa. Leaf-holding device | 747,188 | Dec. 15 | 3449 | 782 | 107 | 1894 |
| Kleiber, Andrew. (See Kralinger and Kleiber.) | | | | | | |
| Kleiderer, Louis P., Louisville, Ky. Waistband | 717,868 | Jan. 6 | 676 | 150 | 102 | 144 |
| Kleifgen, Casper, Indianapolis, Ind. Refrigerator-alarm | 736,112 | Aug. 11 | 2044 | 435 | 105 | 1436 |
| Klein, Adolf, assignor to Société des Inventions Jan Szczepanik & Cie., Vienna, Austria-Hungary. Draft-regulating apparatus for furnaces | 739,321 | Sept. 22 | 3453 | 771 | 106 | 786 |
| Klein, Bernhard, New York, N. Y. Fan attachment | 730,271 | June 9 | 1366 | 300 | 104 | 1421 |
| Klein, Bernhard, New York, N. Y. Rocking-chair | 740,661 | Oct. 6 | 517 | 114 | 106 | 1358 |
| Klein, Charles F., New Orleans, La. Shoe | 729,357 | May 26 | 4726 | 1045 | 104 | 1050 |
| Klein, Charles F., Cincinnati, Ohio, and H. A. Hecker, Belleview, Ky., assignors to F. M. Watkins Company, Cincinnati, Ohio. Mangle | 730,322 | Sept. 22 | 3459 | 771<br>772 | 106 | 788 |
| Klein, Emil T., Dayton, Ky., assignor to Witt & Brown, Cincinnati, Ohio. Ventilator-head | 725,452 | Apr. 14 | 1916 | 429 | 103 | 1590 |
| Klein, Emily E., administratrix. (See Klein, John S.) | | | | | | |
| Klein, Eugen. (See Sievert and Klein.) | | | | | | |
| Klein, George, San Francisco, Cal. Convertible knapsack, hammock, and sleeping-bag. | 748,288 | Dec. 29 | 5541 | 1263 | 107 | 2395 |
| Klein, Henry, Hoboken, N. J. Mechanism for cutting, crushing, and dislodging ice or sleet on the third rail of electric railways | 726,225 | Apr. 21 | 3307 | 750 | 103 | 1899 |
| Klein, Hugo L., Chicago, Ill. Petticoat | 722,854 | Mar. 17 | 2255 | 505 | 103 | 510 |
| Klein, Johann, Frankenthal, Germany. Suction-valve for pumps. (Reissue) | 12,094 | Mar. 10 | 1849 | 413 | 103 | 413 |
| Klein, John, Desloge, assignor of one-third to P. A. Fusz and C. D. McLure, St. Louis, Mo. Rotary ore-classifier | 727,973 | May 12 | 2179 | 485 | 104 | 482 |
| Klein, John, Desloge, assignor of one-fourth to P. A. Fusz and C. D. McLure, St. Louis, Mo. Ore-classifier | 727,974 | May 12 | 2181 | 486 | 104 | 483 |
| Klein, John S., deceased, Oil City, Pa.; E. E. Klein, administratrix. Water-cooled rod and piston | 730,924 | June 16 | 2546 | 567 | 104 | 1693 |
| Klein, John S., deceased, Oil City, Pa.; E. E. Klein, administratrix. Rod-packing | 730,925 | June 16 | 2547 | 567 | 104 | 1693 |
| Klein, John V., Battlecreek, Nebr. Corn-planter | 730,775 | June 9 | 2260 | 502 | 104 | 1614 |
| Klein, Joseph, Cass City, Mich. Cream-separator and churn | 742,095 | Oct. 20 | 3342 | 745<br>746 | 106 | 1986 |
| Klein, S. Stanley. (See Hofmann, Clifford L., assignor.) | | | | | | |
| Klein, William C. (See Glantz, Jacob, assignor.) | | | | | | |
| Kleindienst, Max F., *et al.* (See Lind, Gustaf A. L., assignor.) | | | | | | |
| Kleiner, Charles A., New York, N. Y. Car-brake | 729,358 | May 26 | 4727 | 1045 | 104 | 1050 |
| Kleinert, George H., Cleveland, Ohio. Adjustable tool-holder for planers, &c | 721,201 | Feb. 24 | 3361 | 768 | 102 | 1582 |
| Kleinewefers, Johannes, assignor to J. Kleinewefers Söhne, Krefeld, Germany. Calender-machine | 728,937 | May 26 | 3984 | 886<br>887 | 104 | 896 |
| Kleinewefers Söhne, Joh. (See Kleinewefers, Johannes, assignor.) | | | | | | |
| Kleinschmidt, Edward E., New York, N. Y. Pliers | 731,688 | June 23 | 3993 | 891 | 104 | 2003 |
| Kleinschmidt, Edward E., assignor to F. Kleinschmidt, New York, N. Y. Facsimile-telegraph | 721,202 | Feb. 24 | 3363 | 768<br>769<br>770<br>771 | 102 | 1582 |
| Kleinschmidt, Frank, Doyle, and C. H. A. Wannenwetsch, Buffalo, N. Y. Rendering apparatus | 735,987 | Aug. 11 | 1820 | 390 | 105 | 1389 |
| Kleinschmidt, Frederick. (See Kleinschmidt, Edward E., assignor.) | | | | | | |
| Kleinschmidt, Henry F. A., Johnstown, Pa., assignor to Lorain Steel Company. Clamp. | 720,256 | Feb. 10 | 1562 | 357 | 102 | 1170 |
| Kleinschmidt, Henry F. A., Johnstown, Pa., assignor to Lorain Steel Company. Car-coupling | 731,788 | June 23 | 4177 | 931 | 104 | 2042 |
| Kleinstiver, Frederick C., Port Huron, Mich. Deep-well pump | 742,676 | Oct. 27 | 4407 | 994<br>995 | 106 | 2224 |
| Kleist, Eugene de, North Tonawanda, N. Y. Coin-controlled machine | 723,878 | Mar. 31 | 4130 | 931 | 103 | 926 |
| Kleist, Eugene de, North Tonawanda, N. Y. Automatic musical instrument | 726,701 | Apr. 28 | 4254 | 961<br>962 | 103 | 2104 |
| Klemm, George F., Philadelphia, Pa. Globe-holder for burners | 734,569 | July 28 | 3455 | 806<br>807 | 105 | 780 |
| Klemm, George H., Fowler, Colo. Insertible closure for liquid-receptacles | 732,565 | June 30 | 5696 | 1265 | 104 | 2375 |
| Klemm, Hermann A., New York, N. Y. Loop-holder for sewing-machines | 722,236 | Mar. 10 | 1092 | 240 | 103 | 249 |
| Klemm, Hermann A., New York, N. Y. Loop-spreader mechanism for sewing-machines. | 726,310 | Apr. 28 | 3501 | 792 | 103 | 1953 |
| Klemm, Hermann A., New York, N. Y., assignor to S. Hessel, Sheldon, Conn., and A. Hessel, New York, N. Y. Thread-and-cord edge-finish for fabrics | 726,311 | Apr. 28 | 3502 | 793 | 103 | 1954 |
| Klemm, Lawrence J., assignor of one-half to E. J. Andler, Allegheny, Pa. Glazier's tool. | 736,741 | Aug. 18 | 3197 | 707 | 105 | 1696 |
| Klemm, William J. (See Knisely and Klemm.) | | | | | | |
| Klemm, William J., assignor to J. A. Knisely, Chicago, Ill. Metal window-frame | 742,999 | Nov. 3 | 342 | 74 | 107 | 72 |
| Klenk, Georg, Hamburg, Germany. Making decolorized tannin extracts | 720,157 | Feb. 10 | 1371 | ------ | 102 | 1132 |
| Klenk, Georg, Hamburg, Germany. Tannin extract and making same | 734,889 | July 28 | 4076 | ------ | 105 | 905 |
| Klenk, Georg, Hamburg, Germany. Making tannin extracts | 740,283 | Sept. 29 | 5271 | ------ | 106 | 1191 |
| Klentschi, Louis, Richmond Hill, N. Y. Electric safety appliance | 743,888 | Nov. 10 | 2125 | 455 | 107 | 469 |
| Klepetko, Frank, New York, N. Y. Roasting-furnace | 733,658 | July 14 | 1711 | 405 | 105 | 378 |
| Klepetko, Frank, New York, N. Y. Roasting-furnace | 744,359 | Nov. 17 | 3076 | 660 | 107 | 687 |
| Klepetko, Frank, Anaconda, Mont. Water-jacket | 743,731 | Nov. 10 | 1838 | 387<br>388 | 107 | 409 |

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| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| Klepfer, Solomon. (See Whitted, Robert H., assignor.) | | | | | | |
| Klepper, Bernhard, Brooklyn, N. Y. Removing sound-records | 741,047 | Oct. 13 | 1216 | ------ | 106 | 1526 |
| Klerx, Johann H., assignor to Susquehanna Silk Mills, Sunbury, Pa. Means for controlling looms by the quantity of weft in the shuttles | 723,879 | Mar. 31 | 4132 | 931 | 103 | 926 |
| Klett, Philip, Lowville, N. Y. Running-gear for carriages | 746,710 | Dec. 15 | 2544 | 584 | 107 | 1688 |
| Klette, Paul H. L., Bates, Cal. Saw-set | 738,615 | Sept. 8 | 2135 | 467 | 106 | 475 |
| Klic, Karl, Vienna, Austria-Hungary, and O. Poppe, assignors to Deutsche Linoleum- & Wachstuch Co., Rixdorf, near Berlin, Germany. Manufacture of patterned linoleum | 718,477 | Jan. 13 | 1786 | ------ | 102 | 395 |
| Kliegl, Anton T., New York, N. Y. Lighting apparatus | 720,935 | Feb. 17 | 2817 | 646 | 102 | 1446 |
| Klietsch, Adolf, Görlitz, Germany. Stirrup | 744,360 | Nov. 17 | 3078 | 660 | 107 | 687 |
| Klijnen, Pierre. (See Duysens and Klijnen.) | | | | | | |
| Klimont, Isidor, assignor to E. Khuner & Sohn, Vienna, Austria-Hungary. Purifying fats | 719,014 | Jan. 27 | 2834 | ------ | 102 | 646 |
| Klinck, William, Philadelphia, Pa. Fireproof building structure | 743,000 | Nov. 3 | 343 | 75 | 107 | 72 |
| Kline, Charles, Erie, Pa. File-cabinet | 736,268 | Aug. 11 | 2305 | 499 | 105 | 1492 |
| Kline, Charles L., Chicago, Ill. Protractor | 724,018 | Mar. 31 | 4437 | 997 | 103 | 988 |
| Kline, George P., Rock Island, Ill. Piston-rod packing | 723,681 | Mar. 24 | 3757 | 844 | 103 | 830 |
| Kline, Jacob Y., assignor to himself and P. G. Shelly, Florin, Pa. Vegetable cutter or slicer | 719,944 | Feb. 3 | 944 | 220 | 102 | 1024 |
| Kling, Aloys W., Dayton, Ohio. Lithographing and printing roller | 725,971 | Apr. 21 | 2867 | 650 | 103 | 1809 |
| Kling, Peter M. (See Knobbs, Charles H., assignor.) | | | | | | |
| Kling, Peter M., Elizabeth, N. J. Hook and eye | 742,677 | Oct. 27 | 4408 | 995 | 106 | 2225 |
| Klingeberg, Frederick, *et al.* (See Buckingham, Albert E., assignor.) | | | | | | |
| Klingensmith, Edward W., Century, Fla. Stopper-fastener | 739,323 | Sept. 22 | 3462 | 772 | 106 | 788 |
| Klingler, Matthäus, Oberndorf, assignor to Schramberger Uhrfedernfabrik Gesellschaft mit Beschraenkter Haftung Schramberg-Wurtemberg, Germany. Door closer and check | 733,219 | July 7 | 925 | 223 | 105 | 193 |
| Klinkner, Anthony J., Carrick, Pa. Metallic tie and rail-fastener | 739,607 | Sept. 22 | 3988 | 889 | 106 | 901 |
| Klippelt, James R., H. W. Jeffers, and W. D. Bradford, Pittsburg, Pa. Automatic street-railway switch | 717,689 | Jan. 6 | 298 | 74 | 102 | 64 |
| Klise, Charles A. (See Heeg and Klise.) | | | | | | |
| Kloboucnik, Frank. (See Klobouenik, Joseph and F.) | | | | | | |
| Klobouenik, Joseph and F., Chicago, Ill. Mechanical movement | 731,915 | June 23 | 4407 | 982 | 104 | 2093 |
| Klocke, William, assignor to E. W. Bliss Company, Brooklyn, N. Y. Drawing-press | 739,427 | Sept. 22 | 3676 | 816<br>817 | 106 | 835 |
| Klocksiem, Frederick A. and H. F., Paton, Iowa. Hydrocarbon-traction-engine body | 731,689 | June 23 | 3994 | 892 | 104 | 2003 |
| Klocksiem, Frederick A. and H. F., Paton, Iowa. Valve-gear for hydrocarbon traction-engines | 748,509 | Dec. 29 | 5951 | 1350 | 107 | 2485 |
| Klocksiem, Henry F. (See Klocksiem, Frederick A. and H. F.) | | | | | | |
| Klohs, Samuel F., Chicago, Ill. Draft-gear for cars | 718,638 | Jan. 20 | 2127 | 464 | 102 | 486 |
| Klohs, Samuel F., assignor to H. C. Buhoup, Chicago, Ill. Car-truck | 718,773 | Jan. 20 | 2389 | 530<br>531 | 102 | 538 |
| Kloman, Andrew C., Saxton, Pa. Hot-blast stove | 732,867 | July 7 | 302 | 76 | 105 | 66 |
| Klopfanstein, Christian and G., Utica, N. Y. Thermostatic electric-circuit controller | 739,685 | Sept. 22 | 4139 | 923 | 106 | 935 |
| Klopfanstein, Godfried. (See Klopfanstein, Christian and G.) | | | | | | |
| Klopfenstein, Joseph, Paris, France. Equalizing electric coupling | 740,284 | Sept. 29 | 5271 | 1187 | 106 | 1191 |
| Klopsch, Louis, New York, N. Y. Index | 746,847 | Dec. 15 | 2806 | 646 | 107 | 1747 |
| Kloster, Peter. (See Gaworzewski, Johannes, assignor.) | | | | | | |
| Klotz, Sampson G., Mount Vernon, Ind. Wheel-tightener | 726,542 | Apr. 28 | 3948 | 892 | 103 | 2042 |
| Klumpp, August. (See Reis, Korbinian, assignor.) | | | | | | |
| Klumpp, August, Munich, Germany. Elastic supporting device | 746,848 | Dec. 15 | 2807 | 647 | 107 | 1747 |
| Klumpp, August, Munich, Germany, assignor to Dayton Autoelectric Co., Dayton, Ohio. Automatic display mechanism | 730,132 | June 2 | 1094 | 245<br>246 | 104 | 1350 |
| Knadle, John M., *et al.* (See Zimmerman, Casper, assignor.) | | | | | | |
| Knape, Charles, assignor of one-half to C. A. Psilander, Pittsburg, Pa. Armature-coil | 744,012 | Nov. 10 | 2399 | 515 | 107 | 527 |
| Knapp, Alvin W., Brandon, N. Y. Oar-lock | 724,298 | Mar. 31 | 4995 | 1117 | 103 | 1101 |
| Knapp, Charles H., Paterson, N. J. Cuff | 734,570 | July 28 | 3456 | 807 | 105 | 780 |
| Knapp, Eugene L., Chittenden, Vt. Shoe-fastening | 736,742 | Aug. 18 | 3199 | 707 | 105 | 1696 |
| Knapp, Fred H., and C. W. Blackstone, assignors to Fred H. Knapp Company, Chicago, Ill. Labeling-machine | 724,715 | Apr. 7 | 560 | 134 | 103 | 1289 |
| Knapp, George W., Stoneham, and C. H. Rollins, Watertown, Mass. Water-closet | 740,662 | Oct. 6 | 518 | 114 | 106 | 1358 |
| Knapp, Gilbert P., New York, N. Y. Index-card | 726,439 | Apr. 28 | 3726 | 845 | 103 | 2000 |
| Knapp, Jacob, assignor of one-half to Sechler & Company, Cincinnati, Ohio. Coach platform-gear | 717,690 | Jan. 6 | 300 | 74 | 102 | 65 |
| Knapp, Lewis O., T. S. Stephenson, and O. P. Vroom, Linneus, Mo. Hay-rake | 738,819 | Sept. 15 | 2562 | 563<br>564 | 106 | 581 |
| Knapp, Lewis O., O. P. Vroom, T. S. Stephenson, and C. H. Arbuckle, Linneus, Mo. Horse hay-rake | 727,154 | May 5 | 638 | 137 | 104 | 138 |
| Knapp, Oscar F., Dubuque, Iowa. Machine for collecting shells | 734,571 | July 28 | 3457 | 807 | 105 | 780 |
| Knapp, Paul S. (See Shade and Knapp.) | | | | | | |
| Knapp, Tillman. (See Vance and Knapp.) | | | | | | |
| Knappe, Paul A., Grantville, Ga., assignor to American Amalgamating Company, Boston, Mass. Treating ores | 723,212 | Mar. 17 | 2896 | 649 | 103 | 644 |
| Knaub, William R., assignor to Ohio Rake Company, Dayton, Ohio. Cultivator | 736,113 | Aug. 11 | 2045 | 435<br>436 | 105 | 1437 |
| Knauss, Harrison E., Easton, Pa. Chair | 733,659 | July 14 | 1713 | 406 | 105 | 378 |
| Kneas, Frank N., Chicago, Ill. Metal sheet-piling | 744,361 | Nov. 17 | 3079 | 660 | 107 | 688 |
| Knecht, Frederick. (See Hafften, Hans, assignor.) | | | | | | |
| Kneedler, John D., assignor of one-half to G. H. Jandt, Sioux City, Iowa. Vending-machine | 736,980 | Aug. 25 | 3661 | 811<br>812 | 105 | 1814 |
| Kneeland, David O., Miami, Ind. Ter. Churn | 718,849 | Jan. 20 | 2509 | 558<br>559 | 102 | 561 |
| Knell, William F., assignor to E. L. Markey, R. R. Hicks, N. I. Phelps, and A. C. Wisner, Battlecreek, Mich. Controlling-valve for air-brake systems | 733,051 | July 7 | 618 | 151 | 105 | 132 |
| Kneuper, George M., New York, N. Y. Filter | 718,358 | Jan. 13 | 1554 | 343 | 102 | 348 |
| Knibbs, Charles, and R. H. Sterrett, Paterson, N. J. Loom-harness | 733,660 | July 14 | 1716 | 406 | 105 | 379 |
| Knickerbacker, Thomas A., Troy, assignor to Eddy Valve Company, Waterford, N. Y. Valve | 724,887 | Apr. 7 | 872 | 200 | 103 | 1355 |
| Knietsch, Rudolf, and H. S. A. Holt, assignors to Badische Anilin & Soda Fabrik, Ludwigshafen-on-the-Rhine, Germany. Making indoxyl and derivatives thereof | 746,965 | Dec. 15 | 3042 | ------ | 107 | 1801 |
| Kniffen, Le Grand, Chicago, Ill. Manure-spreader | 729,189 | May 26 | 4428 | 976<br>977 | 104 | 988 |
| Kniffin, George G. (See Marshall, Rouse, and Kniffin.) | | | | | | |
| Knight, Arthur F., assignor of one-eighth to R. H. Read, Schenectady, N. Y. Golf-club | 723,534 | Mar. 24 | 3510 | 785 | 103 | 779 |
| Knight, Charles D., assignor to National Electric Company, Milwaukee, Wis. Armature for electric motors and generators | 741,676 | Oct. 20 | 2468 | 552 | 106 | 1807 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|
| | | | Spec. | Drgs. | Vol. | Page. |
| Knight, Charles E. M., Huntington, Ind. Track-sander | 745,065 | Nov. 24 | 4383 | 945 | 107 | 979 |
| Knight, Edward M., Brooklyn, N. Y. Filtering medium and making same | 737,116 | Aug. 25 | 3882 | 862 | 105 | 1860 |
| Knight, Edward M., Brooklyn, assignor of one-half to R. H. Martin, New York, N. Y. Filter | 734,890 | July 28 | 4076 | 950 | 105 | 905 |
| Knight, Edward M., Brooklyn, assignor of one-half to R. H. Martin, New York, N. Y. Mold for making filter-pads | 739,087 | Sept. 15 | 3027 | 671 | 106 | 680 |
| Knight, Edward M., Brooklyn, assignor of one-half to R. H. Martin, New York, N. Y. Filter | 740,365 | Sept. 29 | 5418 | 1220 | 106 | 1222 |
| Knight, Edward M., Brooklyn, assignor of one-half to R. H. Martin, New York, N. Y. Filter | 740,366 | Sept. 29 | 5420 | 1220 | 106 | 1222 |
| Knight, Edward M., Brooklyn, assignor of one-half to R. H. Martin, New York, N. Y. Filter-pad and making same | 740,367 | Sept. 29 | 5422 | 1221 | 106 | 1223 |
| Knight, George, Brockton, Mass. Eyeleting-machine | 719,475 | Feb. 3 | 114 | 27 | 102 | 849 |
| Knight, George A., *et al.* (See Stratton, Sadie, assignor.) | | | | | | |
| Knight, Godfrey. (See Wade, Oscar A., assignor.) | | | | | | |
| Knight, James. (See Wilson and Knight.) | | | | | | |
| Knight, John A., Marlboro, N. H. Folding table | 733,661 | July 14 | 1718 | 406 | 105 | 379 |
| Knight, John H., Barfield, England. Brick-laying machine | 741,507 | Oct. 13 | 2139 | 476 | 106 | 1723 |
| Knight, Jonathan L., and H. W. Roby, Topeka, Kans.; said Knight assignor to said Roby. Clothes-line apparatus | 743,001 | Nov. 3 | 346 | 75 | 107 | 73 |
| Knight, Margaret E., South Framingham, Mass. Rotary engine | 717,869 | Jan. 6 | 676 | 150, 151 | 102 | 144 |
| Knight, Margaret E., South Framingham, Mass. Rotary engine | 720,818 | Feb. 17 | 2597 | 600, 601 | 102 | 1399 |
| Knight, Margaret E., South Framingham, Mass. Rotary engine | 730,543 | June 9 | 1862 | 415, 416 | 104 | 1528 |
| Knight, Margaret E., South Framingham, and J. M. Benjamin, Boston, Mass.; said Benjamin assignor to said Knight. Automatic tool for boring or planing concave or cylindroidal surfaces | 743,293 | Nov. 3 | 931 | 202 | 107 | 200 |
| Knight, William B. (See Haas, Knight, and Kochs.) | | | | | | |
| Knight, William B. (See Shaw and Knight.) | | | | | | |
| Knipe, Oliver C., Norristown, Pa. Ball-bearing | 735,529 | Aug. 4 | 958 | 202 | 105 | 1185 |
| Knipe, William A. (See Irving, Joseph M., assignor.) | | | | | | |
| Knippenberg, Philip M. (See Preston, William H., assignor.) | | | | | | |
| Knisely, John A. (See Klemm, William J., assignor.) | | | | | | |
| Knisely, John A., Chicago, Ill. Pivot-hinge for metal windows | 747,189 | Dec. 15 | 3451 | 782 | 107 | 1895 |
| Knisely, John A., and W. J. Klemm, Chicago, Ill.; said Klemm assignor to said Knisely. Fireproof metal window | 743,088 | Nov. 3 | 519 | 112 | 107 | 109 |
| Knitted Mattress Company. (See Sumner, George F., assignor.) | | | | | | |
| Knittel, Andrew W., Newcastle, Pa. Fence or gate | 719,341 | Jan. 27 | 3462 | 772 | 102 | 778 |
| Knobbs, Charles H., assignor to P. M. Kling, Elizabeth, N. J. Hydrocarbon-burner | 746,525 | Dec. 8 | 2198 | 504 | 107 | 1589 |
| Knobel, Charles C., assignor of one-half to T. W. Green, Philadelphia, Pa. Water-trough | 724,299 | Mar. 31 | 4996 | 1118 | 103 | 1105 |
| Knoble, William B., Tacoma, Wash. Rapid-fire pistol | 743,002 | Nov. 3 | 348 | 75,76 | 107 | 73 |
| Knoblich, Theodor, Hamburg, Germany. Movable letters for advertising-boards | 726,702 | Apr. 28 | 4257 | 962 | 103 | 2101 |
| Knobloch, John. (See Hartung, Gustave K., assignor.) | | | | | | |
| Knoch, Oscar, Rüttenscheid, near Essen-on-the-Ruhr, assignor to F. Krupp, Essen-on-the-Ruhr, Germany. Gun-carriage having a swinging barrel-carrier | 735,892 | Aug. 4 | 670 | 143 | 105 | 1123 |
| Knoche, John, assignor of one-half to H. Vocke, Cincinnati, Ohio. Automatic closing-valve | 735,671 | Aug. 4 | 1216 | 258 | 105 | 1239 |
| Knochenhauer, Gustav, Schaala, Germany. Light or glazed frame for hotbeds, forcing-frames, &c | 723,163 | Mar. 17 | 2793 | 629 | 103 | 621 |
| Knoderer, Levi F., Columbus, Ohio. Gas-burner | 732,193 | June 30 | 4964 | 1104 | 104 | 2222 |
| Knoll, Charles A. G., assignor to F. S. M. Blun, New York, N. Y. Necktie-fastener | 728,801 | May 19 | 3735 | 833 | 104 | 830 |
| Knoll & Co. (See Vieth, Hermann, assignor.) | | | | | | |
| Knopf, George J., assignor of one-half to J. H. Ryan, Rochester, N. Y. Device for holding and filling blank bills | 726,171 | Apr. 21 | 3197 | 723 | 103 | 1876 |
| Knopf, Leo, Bürstadt, Germany. Pessary | 741,345 | Oct. 13 | 1840 | 406 | 106 | 1660 |
| Knorr, Oscar, Chicago, Ill. Sewing device | 744,080 | Nov. 17 | 2542 | 544 | 107 | 571 |
| Knoth, Louis C., and O. Willmanowsky, New Haven, Conn. Curtain-fixture | 725,724 | Apr. 21 | 2433 | 552 | 103 | 1715 |
| Knothe, Charles F., Fort Wayne, Ind. Engine-governor | 738,547 | Sept. 8 | 2019 | 439 | 106 | 449 |
| Knothe, Frank F., New York, N. Y. Belt | 743,984 | Nov. 10 | 2315 | 494 | 107 | 514 |
| Knott, Arthur H., Milwaukee, Wis. Conduit-threading device | 734,267 | July 21 | 2903 | 679 | 105 | 649 |
| Knotts, Elijah F., Des Moines, Iowa. Muller for grinding or amalgamating mills | 724,019 | Mar. 31 | 4438 | 997, 998 | 103 | 988 |
| Knowles, Edwin F., and A. G. Dickson, Santa Ana, Cal. Twine-cutter | 730,158 | Feb. 10 | 1372 | 315 | 102 | 1132 |
| Knowles, George E. (See Mather, Charles H., assignor.) | | | | | | |
| Knowles, James H., Springfield, Ill. Ironing-board | 741,144 | Oct. 13 | 1399 | 321 | 106 | 1564 |
| Knowles, John, Colorado Springs, Colo. Rotary engine | 733,052 | July 7 | 621 | 152, 153 | 105 | 132 |
| Knowles, John, Colorado Springs, Colo. Valve | 748,192 | Dec. 29 | 5373 | 1221, 1222 | 107 | 2358 |
| Knowles, Vernon, Reading, England. Anesthetic apparatus | 743,294 | Nov. 3 | 933 | 203 | 107 | 200 |
| Knowlton, Dallas, Washington, D. C. Bottle | 720,819 | Feb. 17 | 2599 | 601 | 102 | 1400 |
| Knowlton, Dallas, Washington, D. C. Jar-closure | 727,808 | May 12 | 1873 | 417 | 104 | 417 |
| Knowlton, Daniel C., New York, N. Y. Gold-separator | 733,973 | July 21 | 2327 | 546 | 105 | 523 |
| Knowlton, Edgar, Schenectady, N. Y., assignor to General Electric Company. Magnetic clutch | 727,641 | May 12 | 1530 | 345 | 104 | 347 |
| Knowlton, Ephraim H. B., Superior, Wis., assignor of one-eighth to J. J. Sullivan, Duluth, Minn. Load retaining or releasing means for vehicles | 736,269 | Aug. 11 | 2306 | 499 | 105 | 1492 |
| Knowlton, Gerry E., Boone, Iowa. Swing | 743,524 | Nov. 10 | 1465 | 306 | 107 | 329 |
| Knowlton, John E., Putnam, Conn. Garment-hanger | 734,128 | July 21 | 2645 | 624 | 105 | 592 |
| Knowlton, Mark D., *et al.* (See Sisson, Harry D., assignor.) | | | | | | |
| Knowlton, Mark D., Rochester, N. Y. Machine for scoring cardboard | 725,453 | Apr. 14 | 1917 | 429, 430, 431 | 103 | 1590 |
| Knox, Andrew W., New York, N. Y. Time valve mechanism | 724,888 | Apr. 7 | 873 | 200 | 103 | 1356 |
| Knox, Arthur R. (See Nickett, Horace J., assignor.) | | | | | | |
| Knox Automobile Company. (See Knox, Harry A., assignor.) | | | | | | |
| Knox, Clarence L., Hopedale, Mass., assignor to Draper Company, Portland, Me. Harness-retractor for looms | 729,190 | May 26 | 4434 | 977, 978 | 104 | 989 |
| Knox, Harry A., assignor to Knox Automobile Company, Springfield, Mass. Variable-speed mechanism | 734,891 | July 28 | 4079 | 950, 951 | 105 | 906 |
| Knox, John, Albany, N. Y. Penholder | 723,283 | Mar. 24 | 3029 | 681 | 103 | 685 |
| Knox, Lawrence O. (See Harrison, William D., assignor.) | | | | | | |
| Knox, Matthias F., Nashville, Tenn. Combined panel and beam for computing-scales | 729,607 | June 2 | 153 | 37 | 104 | 1158 |
| Knox, Matthias F., Nashville, Tenn. Weighing-scale | 743,089 | Nov. 3 | 522 | 113 | 107 | 109 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| Knox, Samuel L. G., Milwaukee, and W. Ferris, South Milwaukee, Wis. Hoisting apparatus | 743,889 | Nov. 10 | 2126 | 455<br>456<br>457 | 107 | 469 |
| Knox, William J., Allegheny, Pa. Car-truck | 741,145 | Oct. 13 | 1400 | 321 | 106 | 1564 |
| Knox, William J., West Fairlee, Vt., assignor to G. Westinghouse, Pittsburg, Pa. Making cuprous magnetic oxid | 743,732 | Nov. 10 | 1839 | ..... | 107 | 409 |
| Knox, William J., West Fairlee, Vt., assignor to G. Westinghouse, Pittsburg, Pa. Chemical compound | 743,733 | Nov. 10 | 1840 | ..... | 107 | 409 |
| Knudsen, Emil, Sulitjelma, Norway. Smelting | 721,311 | Feb. 24 | 3568 | 812 | 102 | 1624 |
| Knudsen, Hans. (See Walden and Knudsen.) | | | | | | |
| Knudson, Adolphus A., Brooklyn, N. Y. Means for prevention of weakening propeller-shafts by electrolysis | 727,381 | May 5 | 1038 | 226 | 104 | 224 |
| Knudson, Adolphus A., Brooklyn, N. Y. Means for prevention of weakening propeller-shafts by electrolysis | 727,382 | May 5 | 1040 | 226 | 104 | 224 |
| Knudson, Ole, Delhi, Minn. Combined punch and shearing machine | 723,164 | Mar. 17 | 2794 | 630 | 103 | 621 |
| Knuehmann, John P., Sumas, Wash. Paint-brush | 748,193 | Dec. 29 | 5378 | 1222 | 107 | 2359 |
| Knupp, Jacob C., Chaffee, Pa. Well-derrick | 731,109 | June 16 | 2899 | 643 | 104 | 1765 |
| Knutson, Alfred W., assignor to Trolley Supply Company, Canton, Ohio. Trolley-retriever | 735,672 | Aug. 4 | 1218 | 258 | 105 | 1239 |
| Knutson, Peter C., Diamond Bluff, Wis. Corn-shocker | 736,526 | Aug. 18 | 2781 | 609 | 105 | 1612 |
| Knutzen, Nels E. (See Anderson, Christopher, assignor.) | | | | | | |
| Kny, Richard, Brooklyn, N. Y. Sterilizer | 720,159 | Feb. 10 | 1373 | 315 | 102 | 1132 |
| Kobayashi, Masataro, Ise, Wataraikori, Tamaru-Machi, Japan. Film for wrapping medicines | 730,926 | June 16 | 2549 | ..... | 104 | 1694 |
| Kobelt, Adolph. (See Ely and Kobelt.) | | | | | | |
| Kobmann, Charles. (See Hoy, Charles B., assignor.) | | | | | | |
| Kobmann, Charles, Cincinnati, Ohio. Deflector for heaters | 734,071 | July 21 | 2532 | 591 | 105 | 570 |
| Kobos, Jacob, Bridgeport, Conn. Automatic stopping device for elevators | 732,868 | July 7 | 303 | 76 | 105 | 67 |
| Kobusch, George J. (See Du Pont and Kobusch.) | | | | | | |
| Koch, Aaron P. (See Koch, William E., assignor.) | | | | | | |
| Koch, Alfred J., New York, N. Y. Suspender-belt | 735,274 | Aug. 4 | 467 | 93 | 105 | 1080 |
| Koch, Arthur A., Montezuma, Iowa. Punching and shearing machine | 745,628 | Dec. 1 | 576 | 134 | 107 | 1220 |
| Koch, Charles, and J. Fischer, New York, N. Y. Game apparatus | 733,850 | July 14 | 2078 | 491 | 105 | 453 |
| Koch, Erwin. (See Wittenberg, Brock, and Koch.) | | | | | | |
| Koch, George, *et al.* (See Benke, Charles A., assignor.) | | | | | | |
| Koch, Gustav, St. Cloud, Minn. Bob-sled | 748,194 | Dec. 29 | 5379 | 1222 | 107 | 2359 |
| Koch, Henry E., Hartington, Nebr. Grain-dislodger | 723,880 | Mar. 31 | 4134 | 931 | 103 | 927 |
| Koch, Henry E., Hartington, Nebr. Obstetrical forceps | 733,402 | July 14 | 1270 | 301 | 105 | 285 |
| Koch, Isaac M., Cleveland, Ohio. Street-indicator for railways | 739,189 | Sept. 15 | 3208 | 709 | 106 | 717 |
| Koch, James W., Reynolds, Pa. Railway switch and track construction | 745,199 | Nov. 24 | 4661 | 1015 | 107 | 1036 |
| Koch, John, West Berkeley, Cal. Acid-valve | 740,762 | Oct. 6 | 718 | 161 | 106 | 1399 |
| Koch, Royal, Bethlehem, Pa. Non-refillable bottle | 720,035 | Feb. 10 | 1153 | 263 | 102 | 1084 |
| Koch, Royal, Bethlehem, Pa. Ribbon-guide and paper-holder for type-writing machines | 733,851 | July 14 | 2080 | 492 | 105 | 453 |
| Koch, Walter E., Pittsburg, Pa., assignor, by mesne assignments, to United States Sulphide Furnace Company, Toledo, Ohio. Smelting plant | 732,084 | June 30 | 4748 | 1059<br>1060 | 104 | 2176 |
| Koch, Walter E., and J. W. MacDonald, Pittsburg, Pa.; said Koch assignor to said MacDonald. Combined dust-catcher and blast-heater | 720,257 | Feb. 10 | 1563 | 358 | 102 | 1171 |
| Koch, William E., Whitehall, N. Y. Fish-hook | 745,066 | Nov. 24 | 4384 | 946 | 107 | 979 |
| Koch, William E., assignor of one-half to A. P. Koch, Duvall, Ohio. Corn-harvester | 720,444 | Feb. 10 | 1894 | 431<br>432<br>433 | 102 | 1240 |
| Kochenderfer, John H., Galion, Ohio. Hernial forceps | 724,889 | Apr. 7 | 875 | 201 | 103 | 1356 |
| Kochkum, Jr., & Ohlsson. (See Rennerfelt, Gustaf, assignor.) | | | | | | |
| Kochs, Benjamin. (See Haas, Knight, and Kochs.) | | | | | | |
| Kocks, John B., Tours, Tex. Marker | 745,629 | Dec. 1 | 577 | 134 | 107 | 1220 |
| Koeb, Emil. (See Thompson and Koeb.) | | | | | | |
| Koeber, Edward, Chicago, Ill. Joint for artificial limbs | 727,383 | May 5 | 1041 | 226 | 104 | 224 |
| Koedding, William, St. Louis, Mo. Automatic filling-machine | 747,729 | Dec. 22 | 4454 | 1004 | 107 | 2134 |
| Koegel, Charles, Holyoke, Mass. Mill-truck | 717,752 | Jan. 6 | 432 | 101 | 102 | 94 |
| Koegel, Julius, Newark, N. J. Combination-tool | 731,916 | June 23 | 4408 | 982 | 104 | 2093 |
| Koegler, August J., Milwaukee, Wis. Spray-nozzle | 730,927 | June 16 | 2549 | 567 | 104 | 1694 |
| Koehler, Frank G., assignor of one-half to H. Polst, St. Louis, Mo. Combined split and crosscut shears | 740,763 | Oct. 6 | 719 | 162 | 106 | 1399 |
| Koehler, Frederick D., and T. W. Monahan, New York, N. Y. Steam-trap | 721,312 | Feb. 24 | 3569 | 812 | 102 | 1625 |
| Koehler, Frederick D., and T. W. Monahan, New York, N. Y. Steam-trap | 729,359 | May 26 | 4729 | 1045 | 104 | 1051 |
| Koehler, Frederick D., and T. W. Monahan, New York, N. Y. Steam-trap | 730,213 | June 2 | 1230 | 275 | 104 | 1378 |
| Koehler, Fredrick D., and T. W. Monahan, New York, N. Y. Steam-trap | 720,701 | Feb. 17 | 2421 | 554 | 102 | 1361 |
| Koehler, Hermann. (See May, Michael M., assignor.) | | | | | | |
| Koehler, John, Newark, N. J. Grip for opening or closing jars | 745,200 | Nov. 24 | 4664 | 1016 | 107 | 1037 |
| Koehler, Joseph. (See Koehler and Milde, assignors.) | | | | | | |
| Koehler, Joseph F., and J. F. Milde, assignors to J. Koehler, Jackson, Mo. Joining or connecting railway-rails | 730,928 | June 16 | 2551 | 568 | 104 | 1694 |
| Koehler, Julius H., and G. Linde, St. Louis, Mo. Bottle-cleansing machine | 723,881 | Mar. 31 | 4135 | 932 | 103 | 927 |
| Koehler, René, Lyons-Monplaisir, France. Solid soluble antiseptic | 731,578 | June 23 | 3803 | ..... | 104 | 1966 |
| Koehn, Edouard, Geneva, Switzerland. Stem-winding watch | 731,789 | June 23 | 4178 | 931<br>932 | 104 | 2042 |
| Koehn, William J., assignor to A. L. Blackstone, Waukesha, Wis. Head-rest bar | 722,855 | Mar. 17 | 2257 | 505 | 103 | 510 |
| Koelkebeck, Carl W. A. (See Cromwell and Koelkebeck.) | | | | | | |
| Koelkebeck, Carl W. A., Cleveland, Ohio. Blast-furnace | 721,956 | Mar. 3 | 570 | 126<br>127 | 103 | 125 |
| Koelkebeck, Carl W. A., Pittsburg, Pa. Valve | 743,985 | Nov. 10 | 2315 | 495 | 107 | 514 |
| Koelling, Henry. (See Koelling, John, H., and H.) | | | | | | |
| Koelling, Hermann. (See Koelling, John, H., and H.) | | | | | | |
| Koelling, John, H., and H., Arlington Heights, Ill. Corn-husking machine | 746,526 | Dec. 8 | 2201 | 505 | 107 | 1590 |
| Koelner, John, Louisville, Ky. Dough-mixer | 722,112 | Mar. 3 | 838 | 187 | 103 | 180 |
| Koelner, John, Louisville, Ky. Apparatus for kneading dough | 722,113 | Mar. 3 | 840 | 187 | 103 | 181 |
| Koelner, John, Louisville, Ky. Apparatus for mixing and kneading dough | 743,090 | Nov. 3 | 526 | 114 | 107 | 110 |
| Koenig, August, Lowell, Mass., assignor to Lamson Consolidated Store Service Company, Newark, N. J. Safety-valve for pneumatic tubes | 726,072 | Apr. 21 | 3024 | 687<br>688 | 103 | 1840 |
| Koenig, C. August. (See Cook, Charles O., assignor.) | | | | | | |
| Koenig, Charles L., San Antonio, Tex. Blind-stop | 736,408 | Aug. 18 | 2550 | 559 | 105 | 1562 |
| Koenig, Clement, and N. D. Le Blanc, Erath, La. Combined harrow and cultivator | 734,234 | July 21 | 2836 | 665 | 105 | 634 |
| Koenig, Joseph, assignor to Aluminum Manufacturing Company, Two Rivers, Wis. Fish-net float | 739,324 | Sept. 22 | 3463 | 772 | 106 | 788 |
| Koenig, Joseph, assignor to Aluminum Manufacturing Company, Two Rivers, Wis. Comb | 744,768 | Nov. 24 | 3815 | 822 | 107 | 861 |

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| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drgs. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Koenig, Leonard G., Hazleton, Pa. Polishing cone and wheel | 732,949 | July 7 | 447 | 110 | 105 | 97 |
| Koenig, Leonard G., Hazleton, Pa. Grinding or polishing cone | 736,114 | Aug. 11 | 2048 | 436 | 105 | 1437 |
| Koenig, William J., New York, N. Y. Hair-clamp | 732,566 | June 30 | 5698 | 1265 | 104 | 2375 |
| Koenigstein, Jacob. (See Murphy, Solomon, assignor.) | | | | | | |
| Koeper, William, Fort Dodge, Iowa. Coffin-guide | 748,510 | Dec. 29 | 5954 | 1351 | 107 | 2485 |
| Koepp, John F., New Kensington, Pa. Curtain-stretcher | 726,703 | Apr. 28 | 4258 | 963 | 103 | 2105 |
| Koerber, John, Akron, Ohio. Telltale for locks | 718,359 | Jan. 13 | 1556 | 343 | 102 | 348 |
| Koester, Henry, assignor to Crane Company, Chicago, Ill. Threading-machine | 734,572 | July 28 | 3460 | 808, 809 | 105 | 781 |
| Kofske, Charles, Aplington, Iowa. Car-truck jack | 724,587 | Apr. 7 | 312 | 76 | 103 | 1235 |
| Kohl, Max. (See Nöldner, Bruno, assignor.) | | | | | | |
| Kohler & Campbell. (See Danquard, Thomas, assignor.) | | | | | | |
| Kohler, Charles H., Mariner Harbor, N. Y. Attachment for handsaws | 734,892 | July 28 | 4081 | 951 | 105 | 906 |
| Kohler, Franklin W., *et al.* (See Dresser, Charles A., assignor.) | | | | | | |
| Kohler, G. A. Edward, *et al.* (See Dresser, Charles A., assignor.) | | | | | | |
| Kohler, John F., New York, N. Y. Awning-fixture | 723,610 | Mar. 24 | 3643 | 815 | 103 | 806 |
| Köhler, Julius, Limbach, Germany. Feeding mechanism for sewing-machines | 727,384 | May 5 | 1042 | 227 | 104 | 224 |
| Kohlhaas, Otto H., Calumet, Mich. Rectal or vaginal speculum | 726,704 | Apr. 28 | 4259 | 963 | 103 | 2105 |
| Kohlhepp, John W., Chicago, Ill. Machine for scraping or dehairing animals | 720,702 | Feb. 17 | 2423 | 554 | 102 | 1361 |
| Kohlmann, Charles W., Baltimore, Md. Belt and garment supporter | 720,591 | Feb. 17 | 2196 | 509 | 102 | 1316 |
| Kohlmeyer, August H., St. Louis, Mo. Filter | 740,574 | Oct. 6 | 379 | 78, 79 | 106 | 1327 |
| Kohn, Adalbert, Pilsen, Austria-Hungary. Lubricating device for slide-valves | 745,630 | Dec. 1 | 578 | 134 | 107 | 1221 |
| Kohn, Bruno, Leipzig, Germany. Machine for measuring ribbon, &c | 725,972 | Apr. 21 | 2869 | 650, 651 | 103 | 1809 |
| Köhn, Franz, Plön, Germany. Lateral coupling for railway-cars | 722,114 | Mar. 3 | 841 | 187 | 103 | 181 |
| Kohn, H. T. (See Sines, John, assignor.) | | | | | | |
| Kohn, Koby, Lincoln, Nebr. Rail-joint | 728,469 | May 19 | 3119 | 689, 690 | 104 | 702 |
| Kohn, Milton M., Chicago, Ill. Electric battery | 720,592 | Feb. 17 | 2198 | 509, 510 | 102 | 1316 |
| Kohout, Ferdinand, assignor to St. Louis Car Company, St. Louis, Mo. Reversible car-seat | 730,853 | June 9 | 2388 | 527 | 104 | 1640 |
| Kohser, Franz, Greifenhagen, Germany. Potato-planter | 736,981 | Aug. 25 | 3663 | 812 | 105 | 1814 |
| Kolb, Charles, Maxéville, France. Filter-press | 730,776 | June 9 | 2262 | 502, 503 | 104 | 1614 |
| Kolb, Gottlieb, Mannheim, Germany. Composition for hardening steel | 744,208 | Nov. 17 | 2811 | ------ | 107 | 629 |
| Kolb, Gustave F., Mount Vernon, N. Y. Back for brushes or similar toilet articles | 723,611 | Mar. 24 | 3644 | 815 | 103 | 806 |
| Kolb, Richard, Bamberg, Germany. Letter-file and register for papers or documents | 718,258 | Jan. 13 | 1365 | 303 | 102 | 309 |
| Kolf, Max, assignor to St. Louis Adjustable Sliding Screen Company, St. Louis, Mo. Window-screen | 725,725 | Apr. 21 | 2433 | 552 | 103 | 1715 |
| Koll, Ernst, Chicago, Ill. Wood column | 744,566 | Nov. 17 | 3436 | 740 | 107 | 763 |
| Kolle, Harold W., London, England. Water-tube steam-generator | 736,743 | Aug. 18 | 3200 | 707, 708 | 105 | 1697 |
| Koller, John J., Cleveland, Ohio. Dust-guard | 727,155 | May 5 | 641 | 138 | 104 | 138 |
| Koller, Wolfgang, Pittsburg, Pa. Hose-coupling | 748,382 | Dec. 29 | 5694 | 1299 | 107 | 2429 |
| Kollerich, Ludwig von. (See Szirmay, Ignaz, assignor.) | | | | | | |
| Kollinger, Johann E., Munich, Germany. Paint and making same | 738,456 | Sept. 8 | 1840 | ------ | 106 | 410 |
| Köllmann, Wilhelm, Barmen, Germany. Beet-slicer | 738,616 | Sept. 8 | 2136 | 467, 468 | 106 | 475 |
| Kollmar, Robert, Newark, N. J. Pocket pen and pencil retainer | 734,573 | July 28 | 3462 | 809 | 105 | 781 |
| Kollock, George L. (See Kollock, Samuel W. M. and G. L.) | | | | | | |
| Kollock, Samuel W. M. and G. L., Seattle, Wash. Device for checking horses | 731,189 | June 16 | 3051 | 678 | 104 | 1793 |
| Kölner Accumulatoren-Werke Gottfried Hagen. (See Elsner, Hans J., assignor.) | | | | | | |
| Kolsch, John. (See Wischermann and Kolsch.) | | | | | | |
| Komarek, Franz X., Vienna, Austria-Hungary. Steam-boiler | 742,335 | Oct. 27 | 3792 | 849 | 106 | 2095 |
| Kommer, Rüdolf, Troppau, Austria-Hungary. Glove | 747,730 | Dec. 22 | 4456 | 1005 | 107 | 2135 |
| Komnick, Franz, Elbing, Germany. Device for intermittently rotating tables of machine-tools | 746,849 | Dec. 15 | 2808 | 647 | 107 | 1747 |
| Komo Heat and Light Company. (See Thornton, Harold S., assignor.) | | | | | | |
| Kondolf, Mathias, Rochester, N. Y. Implement for laying underground conduits | 744,362 | Nov. 17 | 3081 | 661 | 107 | 688 |
| Kondolf, Mathias, Rochester, N. Y. Box for making angular tiles | 744,363 | Nov. 17 | 3083 | 661 | 107 | 688 |
| Konegen, Julius, Brunswick, Germany. Plan sifter | 726,073 | Apr. 21 | 3025 | 688 | 103 | 1841 |
| Köneman, William A., Chicago, Ill. Heating attachment for gas-burners | 732,085 | June 30 | 4750 | 1060, 1061 | 104 | 2177 |
| Köneman, William A., Chicago, Ill. Carburizing iron | 740,025 | Sept. 29 | 4808 | 1079 | 106 | 1096 |
| Köneman, William A., Chicago, Ill. Smoke-preventing furnace | 741,346 | Oct. 13 | 1841 | 407 | 106 | 1660 |
| Köneman, William A., assignor to International Fuel Company, Chicago, Ill. Briqueting-machine | 724,588 | Apr. 7 | 313 | 76, 77, 78 | 103 | 1235 |
| Köneman, William A., assignor of one-half to A. F. Hatch, Chicago, Ill. Pulverizing apparatus | 740,764 | Oct. 6 | 720 | 162, 163, 164 | 106 | 1399 |
| Konerman, Harry, Newport, Ky., assignor to Globe Register Company, Cincinnati, Ohio. Autographic register | 729,942 | June 2 | 764 | 169, 170 | 104 | 1284 |
| Konerman, Harry, Newport, Ky., assignor to Globe Register Company, Cincinnati, Ohio. Autographic register | 729,943 | June 2 | 766 | 170 | 104 | 1284 |
| Konigs, Julius J., New York, N. Y. Stove | 721,376 | Feb. 24 | 3694 | 841 | 102 | 1051 |
| Königstein, Gábor, assignor of one-half to M., Jr., and E. Horwinski, San Francisco, Cal. Telephone-receiver holder | 725,850 | Apr. 21 | 2661 | 606 | 103 | 1765 |
| Konigstein, Sigmund, San Francisco, Cal. Holder for telephone-receivers | 723,471 | Mar. 24 | 3411 | 762 | 103 | 759 |
| Konkel, Xavier B., Detroit, Mich. Candelabrum | 742,039 | Oct. 20 | 3198 | 714 | 106 | 1959 |
| Konrad, John C., New York, N. Y. Carriage-door handle | 742,448 | Oct. 27 | 3990 | 896 | 106 | 2135 |
| Konsey, Joseph A., *et al.* (See Sterne, Davey, assignor.) | | | | | | |
| Koob, Adam J., Cedar Rapids, Iowa. Dumping-wagon | 739,325 | Sept. 22 | 3463 | 773 | 106 | 788 |
| Koonce, Samuel C., *et al.* (See Lindsay, Robert F., assignor.) | | | | | | |
| Koontz, Edward R. (See Ackles and Koontz.) | | | | | | |
| Koontz, Louis K., assignor to Martin Hardsocg Manufacturing Company, Limited, Allegheny, Pa. Coal or rock drill | 721,895 | Mar. 3 | 440 | 97 | 103 | 97 |
| Koontz, Louis K., assignor to Martin Hardsocg Manufacturing Company, Limited, Allegheny, Pa. Coal or rock drill | 721,896 | Mar. 3 | 441 | 97 | 103 | 97 |
| Koorie, Hanna, Paterson, N. J. Non-refillable bottle | 740,285 | Sept. 29 | 5273 | 1188 | 106 | 1191 |
| Koorie, Hanna, and J. Turpangy, Paterson, N. J. Non-refillable bottle | 722,718 | Mar. 17 | 2003 | 447 | 103 | 459 |
| Kopczynski, Leon. (See Ellinger and Kopczynski.) | | | | | | |
| Kopp, John, Newark, N. J. Bread or cake rack | 725,851 | Apr. 21 | 2662 | 606 | 103 | 1766 |
| Koppelman, Morris, Brooklyn, N. Y. Waistband | 729,072 | May 26 | 4226 | 934 | 104 | 946 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | Spec. | Desig. | Vol. | Page. |
| Köppen, Lothar von, New York, N. Y. Securing device for scarfs and scarf-pins | 745,445 | Dec. 1 | 250 | 58 | 107 | 1153 |
| Koppers, Heinrich, Carnap, near Essen, Germany. Regenerative coke-oven | 38,918 | Sept. 15 | 2739 | 605 | 106 | 620 |
| Kopperud, Andrew, Milwaukee, Wis. Well-boring machine | 730,272 | June 9 | 1366 | 300 | 104 | 1421 |
| Kops, Daniel, New York, N. Y. Corset | 727,385 | May 5 | 1044 | 227 | 104 | 225 |
| Kops, Daniel, New York, N. Y. Corset. (Reissue) | 12,120 | June 16 | 3477 | 777 | 104 | 1881 |
| Koráb, Ludvig, Renville, Minn. Apparatus for manufacturing flour | 726,172 | Apr. 21 | 3199 | 723<br>724<br>725 | 103 | 1876 |
| Kordick, John E., and E. Sulgrove, Bridgewater, Iowa. Valve | 747,982 | Dec. 29 | 4974 | 1123 | 107 | 2272 |
| Korik, Bela K., Milwaukee, Wis. Piano | 723,396 | Mar. 24 | 3257 | 730 | 103 | 728 |
| Korn, George W., Little Valley, N. Y. Safety-razor | 720,360 | Feb. 10 | 1761 | 399 | 102 | 1212 |
| Korn, George W., Little Valley, N. Y. Razor-strop | 735,780 | Aug. 11 | 1416 | 304 | 105 | 1300 |
| Korn, Isaac. (See Creider and Korn.) | | | | | | |
| Kornemann, William F., New York, N. Y. Nose-piece for eyeglasses | 743,175 | Nov. 3 | 686 | 151 | 107 | 144 |
| Kornfeld, Adrien. (See Tapin, Léon, assignor.) | | | | | | |
| Korns, Clarence C., Johnstown, Pa., assignor to Lorain Steel Company. Switch-throw | 738,205 | Sept. 8 | 1320 | 286 | 106 | 301 |
| Korth, John C., Harrison, N. Y. Exercising-machine | 740,443 | Oct. 6 | 114 | 24 | 106 | 1271 |
| Körting, Ernst, Körtingsdorf, near Hanover, Germany. Internal-combustion engine | 746,342 | Dec. 8 | 1892 | 431<br>432 | 107 | 1522 |
| Körting, Ernst G. B., Berlin, Germany. Coke-conveyer | 736,115 | Aug. 11 | 2048 | 436<br>437 | 105 | 1437 |
| Kortright, Reuben L., Manchester, Iowa. Tension device for binders | 723,682 | Mar. 24 | 3259 | 844 | 103 | 831 |
| Koryta, Charles, Cleveland, Ohio. Press-board | 719,015 | Jan. 27 | 2835 | 636 | 102 | 646 |
| Kosicky, William, Detroit, Mich. Baker's oven | 727,544 | May 5 | 1335 | 297 | 104 | 287 |
| Kosiol, Louis, assignor of one-fourth to W. T. Leachman, Louisville, Ky. Waste and overflow fixture | 729,360 | May 26 | 4731 | 1045 | 104 | 1051 |
| Koslopsky, Julius, New York, N. Y. Sink and sink-strainer | 745,963 | Dec. 1 | 1196 | 268 | 107 | 1355 |
| Koslopsky, Julius, New York, N. Y. Cover for ash-cans | 745,964 | Dec. 1 | 1198 | 268 | 107 | 1355 |
| Kosotsch, Andrew, *et al.* (See Mehlferber, John, assignor.) | | | | | | |
| Koss, Gotthard, Berlin, Germany. Edging for skirts | 722,115 | Mar. 3 | 842 | 187 | 103 | 181 |
| Koss, Louis. (See Tarpenning, Charles T., assignor.) | | | | | | |
| Kostálek, Josef, Prague-Vinohrady, assignor to Society Akciová Spolecnost Strojirny Drive Breitfeld, Daněk I Spol. (Maschinenfabrik-Actiengesellschaft, vormals Brietfeld, Daněk & Co.,) Karlin, Austria-Hungary. Filter | 737,850 | Sept. 1 | 567 | 124 | 106 | 126 |
| Köster, Johannes, Hamburg, Germany. Frame | 740,765 | Oct. 6 | 725 | 164 | 106 | 1400 |
| Kostka, Bohumil V., New York, N. Y. Sign-letter | 722,592 | Mar. 10 | 1739 | 387 | 103 | 389 |
| Kothe, Richard. (See Israel and Kothe.) | | | | | | |
| Kotten, Herman G., New York, N. Y. Pneumatic tool | 726,074 | Apr. 21 | 3026 | 688 | 103 | 1841 |
| Kotten, Herman G., New York, N. Y. Pneumatic tool | 739,608 | Sept. 22 | 3988 | 890 | 106 | 901 |
| Kotten, Herman G., New York, N. Y. Pneumatic tool | 739,609 | Sept. 22 | 3990 | 890 | 106 | 901 |
| Kottusch, Emanuel, assignor to F. Holzach, Zurich, Switzerland. Collapsible stretcher | 748,289 | Dec. 29 | 5542 | 1263<br>1264 | 107 | 2395 |
| Kotzlovsky, Julius. (See Joecken and Kotzlovsky.) | | | | | | |
| Kowitzke, Hermann, Berlin, Germany. Smoke-consuming furnace-controlling apparatus | 732,419 | June 30 | 5405 | 1198<br>1199 | 104 | 2314 |
| Krabach, Frank X., Fort Wayne, Ind. Laundry-fork | 728,038 | May 26 | 3985 | 887 | 104 | 896 |
| Krabach, Frank X., Fort Wayne, Ind. Rack | 747,614 | Dec. 22 | 4242 | 955 | 107 | 2087 |
| Krabach, Frank X., Fort Wayne, Ind. Ironing-table | 747,615 | Dec. 22 | 4244 | 955 | 107 | 2087 |
| Kraemer, Frank, Chicago, Ill. Cigar-lighter | 721,450 | Feb. 24 | 3826 | 870 | 102 | 1677 |
| Kraetzer, Edwin J., Somerville, Mass. Jar-clamp | 731,690 | June 23 | 3995 | 892 | 104 | 2004 |
| Kraetzer, Edwin J., Somerville, Mass. Buckle | 741,677 | Oct. 20 | 2470 | 552 | 106 | 1808 |
| Kraft, Anna M. (See Buck, George H., assignor.) | | | | | | |
| Krag, Erik L. (See Barrett, John R., assignor.) | | | | | | |
| Krag, Erik L. (See Schult, Lars G., assignor.) | | | | | | |
| Krag, Erik L., Chicago, Ill. Temporary binder | 730,544 | June 9 | 1863 | 416 | 104 | 1526 |
| Krag, Erik L., Chicago, Ill. Loose-leaf binder | 731,579 | June 23 | 3803 | 847 | 104 | 1968 |
| Krag, Erik L., Chicago, Ill. Lock-box | 746,106 | Dec. 8 | 1454 | 326 | 107 | 1429 |
| Kragen, Louis, San Francisco, Cal. Convertible bed and sofa or chair | 737,743 | Sept. 1 | 348 | 73 | 106 | 79 |
| Kragnik, Anthony, *et al.* (See Thomas, Frank P., assignor.) | | | | | | |
| Kragnik, Charles, *et al.* (See Thomas, Frank P., assignor.) | | | | | | |
| Krah, Ludwig A., Allegheny, Pa. Valve for water-heaters | 737,744 | Sept. 1 | 349 | 73 | 106 | 79 |
| Krajicek, Joseph, Elizabeth, N. J. Lock | 731,691 | June 23 | 3998 | 892 | 104 | 2004 |
| Krakau, Harry T., assignor to National Malleable Castings Company, Cleveland, Ohio. Draft-rigging | 720,526 | Feb. 10 | 2046 | 470<br>471 | 102 | 1270 |
| Krakau, Harry T., assignor to National Malleable Castings Company, Cleveland, Ohio. Draft-rigging | 720,527 | Feb. 10 | 2049 | 471<br>472 | 102 | 1271 |
| Krakau, Harry T., assignor to National Malleable Castings Company, Cleveland, Ohio. Bolster | 720,528 | Feb. 10 | 2053 | 473 | 102 | 1272 |
| Krakau, Harry T., assignor to National Malleable Castings Company, Cleveland, Ohio. Draft-rigging | 720,529 | Feb. 10 | 2054 | 473<br>474 | 102 | 1272 |
| Krakau, Harry T., assignor to National Malleable Castings Company, Cleveland, Ohio. Draft-rigging attachment | 721,570 | Feb. 24 | 4063 | 921<br>922 | 102 | 1730 |
| Krakau, Harry T., assignor to National Malleable Castings Company, Cleveland, Ohio. Draft-rigging for cars | 727,386 | May 5 | 1046 | 227<br>228 | 104 | 225 |
| Krakau, Harry T., assignor to National Malleable Castings Company, Cleveland, Ohio. Draft-rigging | 727,545 | May 5 | 1336 | 298<br>299<br>300<br>301 | 104 | 287 |
| Krakau, Harry T., assignor to National Malleable Castings Company, Cleveland, Ohio. Draft-rigging. (Reissue) | 12,178 | Dec. 1 | 1230 | 277<br>278 | 107 | 1362 |
| Krakow, Henry O., Dubuque, Iowa. Water-closet | 723,612 | Mar. 24 | 3645 | 816 | 103 | 806 |
| Kralinger, Joseph R., and A. Kleiber, Canton, Ohio. Seeding-machine | 729,774 | June 2 | 459 | 103 | 104 | 1221 |
| Krall, Philip, assignor of one-half to H. Schutte, San Francisco, Cal. Swingletree | 737,420 | Aug. 25 | 4470 | 1002 | 105 | 1985 |
| Kram, Charles A. (See Watson, Robert, assignor.) | | | | | | |
| Kramer, Charles G., assignor to Union Special Sewing Machine Company, Chicago, Ill. Chain-stitch sewing-machine | 734,574 | July 28 | 3463 | 809<br>810 | 105 | 781 |
| Kramer, Charles G., assignor to Union Special Sewing Machine Company, Chicago, Ill. Overseaming-machine | 739,550 | Sept. 22 | 3870 | 868 | 106 | 876 |
| Kramer, Christopher W. (See Kramer, George W., assignor.) | | | | | | |
| Kramer, Emil M., Cissna Park, Ill. Grain-separator | 740,575 | Oct. 6 | 381 | 79 | 106 | 1328 |
| Kramer, George W., assignor of one-half to C. W. Kramer, Peoria, Ill. Elevator | 721,571 | Feb. 24 | 4064 | 922 | 102 | 1730 |
| Kramer, Henry C., East Pittsburg, Pa. Game apparatus | 745,865 | Dec. 1 | 1022 | 230 | 107 | 1317 |
| Kramer, Samuel R., Perkasie, Pa. Feed-controlling attachment for printing-presses | 723,683 | Mar. 24 | 3760 | 844 | 103 | 831 |
| Kramer, William, Brooklyn, assignor to Gas-Tip and Self-Lighter Company, New York, N. Y. Gas-tip | 736,604 | Aug. 18 | 2940 | 644 | 105 | 1644 |
| Krampe, Otto, Schalksmühle, Germany. Doll-head | 720,703 | Feb. 17 | 2424 | 554 | 102 | 1362 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| Kramper, Andrew J. (See Salisbury, William C., assignor.) | | | | | | |
| Krannichfeldt, Johann. (See Schmitt and Krannichfeldt.) | | | | | | |
| Krantz, Adolf, Geneva, Switzerland. Flute | 723,613 | Mar. 24 | 3646 | 816 | 103 | 807 |
| Krantz, August, Springlake, Minn. Animal-poke | 728,939 | May 26 | 3986 | 887 | 104 | 897 |
| Krantz, Hubert, Brooklyn, N. Y. Electrical outlet-box | 726,945 | May 5 | 215 | 50 | 104 | 47 |
| Krantz, Hubert, Brooklyn, N. Y. Floor-box | 738,688 | Sept. 8 | 2298 | 504<br>505 | 106 | 507 |
| Krantz, Hubert, Brooklyn, N. Y. Quick-break switch | 742,449 | Oct. 27 | 3991 | 896 | 106 | 2135 |
| Krantz, Hubert, New York, N. Y. Electrical outlet-box | 740,663 | Oct. 6 | 521 | 115 | 106 | 1358 |
| Krastin, August, assignor to Krastin Automobile Company, Cleveland, Ohio. Explosive-engine | 726,226 | Apr. 21 | 3308 | 750 | 103 | 1899 |
| Krastin Automobile Company. (See Krastin, August, assignor.) | | | | | | |
| Kratz & Co. of Wald, C. Friedr. (See Halbekann, Franz J., assignor.) | | | | | | |
| Kratz, John A., Baltimore, Md. Street-car | 747,075 | Dec. 15 | 3254 | 741 | 107 | 1851 |
| Kratzmueller, Louis R., Chicago, Ill. Surgical écraseur | 736,744 | Aug. 18 | 3201 | 708 | 105 | 1697 |
| Kraus, Alfred, Paris, France, and N. Collins, London, England; said Collins assignor to said Kraus. Machine for producing stereotype or electrotype matrices and printing-blocks | 743,890 | Nov. 10 | 2132 | 457<br>458<br>459 | 107 | 470 |
| Kraus, Emil, assignor to Society of Chemical Industrie in Basle, Basle, Switzerland. Blue sulfur dye and making same | 727,387 | May 5 | 1048 | ..... | 104 | 226 |
| Kraus, Joel A., New York, N. Y. Shadow-picture | 720,820 | Feb. 17 | 2601 | 601 | 102 | 1400 |
| Kraus, Joseph, New York, N. Y. Cigar and mouthpiece therefor | 726,946 | May 5 | 215 | 51 | 104 | 47 |
| Kraus, Otto, New York, N. Y. Neckwear supporter and fastener | 719,814 | Feb. 3 | 737 | 173 | 102 | 979 |
| Kraus, Otto, New York, N. Y. Necktie-fastener | 730,028 | June 2 | 928 | 208 | 104 | 1317 |
| Kraus, Otto, New York, N. Y. Garment-supporter | 730,029 | June 2 | 930 | 208<br>209 | 104 | 1317 |
| Kraus, Otto, New York, N. Y. Garment-supporter | 742,678 | Oct. 27 | 4410 | 995 | 106 | 2225 |
| Kraus, Otto, New York, N. Y. Garment-supporter | 747,555 | Dec. 22 | 4132 | 927 | 107 | 2062 |
| Krause, Arthur E., Jersey City, N. J. Removing oil or oily matter from water | 729,775 | June 2 | 461 | 103 | 104 | 1222 |
| Krause, August, Boston, Mass. Sliding-door closer | 735,393 | Aug. 4 | 672 | 143 | 105 | 1124 |
| Krause, Friedrich, Jersey City, N. J. Forming diamond draw-plates in iron or steel alloys | 740,874 | Oct. 6 | 907 | 203 | 106 | 1440 |
| Krause, George E. (See Bolen and Krause.) | | | | | | |
| Krause, Ida, *et al.* (See Neubauer, Carl E., assignor.) | | | | | | |
| Kraushaar, Wilhelm, Neumühl, Germany. Accumulator-plate | 718,774 | Jan. 20 | 2392 | 531 | 102 | 539 |
| Krauss, Constantin. (See Le Blanc and Krauss.) | | | | | | |
| Krauss, Constantin, and R. M. von Berneck, assignors to Farbwerke, vormals Meister, Lucius & Brüning, Höchst-on-the-Main, Germany. Regenerating platinum contact substances | 720,361 | Feb. 10 | 1762 | ..... | 102 | 1212 |
| Krauss, Jacob, Lexington, Ky. Storm-window for vehicles | 740,286 | Sept. 29 | 5274 | 1188 | 106 | 1192 |
| Krauss, Jacob, Lexington, Ky. Wheel-hub | 740,287 | Sept. 29 | 5275 | 1188 | 106 | 1192 |
| Krauss, Jacob, Lexington, Ky. Running-gear for vehicles | 748,080 | Dec. 29 | 5169 | 1168 | 107 | 2315 |
| Krauss, Wilhelm, Berlin, Germany, and A. Berrenberg, Boston, Mass. Motor-wheel for bicycles or other vehicles | 747,190 | Dec. 15 | 3452 | 783 | 107 | 1895 |
| Kraut, Emil A., and H. Fischer, West Manchester, N. H. Curtain-fixture | 723,284 | Mar. 24 | 3030 | 682 | 103 | 685 |
| Krauth, Ferdinand E., Hebron, N. D. Foot-scraper | 735,781 | Aug. 11 | 1417 | 304 | 105 | 1300 |
| Krautheim, Richard J., Newark N. J. Conductor's punch | 736,116 | Aug. 11 | 2050 | 437 | 105 | 1437 |
| Krautter, William F. (See Emrich and Krautter.) | | | | | | |
| Krayn, Robert, Berlin, Germany. Copying material for photographic purposes | 728,245 | May 19 | 2680 | 599 | 104 | 609 |
| Krebs, Arthur, assignor to Ste. Ame des Anciens Établissements Panhard et Levassor, Paris, France. Valve-gear for explosive-engines | 733,220 | July 7 | 926 | 223 | 105 | 193 |
| Krebs, Arthur, assignor to Société Anonyme des Anciens Établissements Panhard et Levassor, Paris, France. Fuel-governor for oil-engines | 734,421 | July 21 | 3181 | 747 | 105 | 706 |
| Krebs, Arthur, assignor to Société Anonyme des Anciens Établissements Panhard et Levassor, Paris, France. Exhaust-box or silencer for explosion-engines | 746,527 | Dec. 8 | 2202 | 505 | 107 | 1590 |
| Krebs, Arthur C., assignor to Société Anonyme des Anciens Établissements Panhard et Levassor, Paris, France. Cone-clutch | 734,893 | July 28 | 4082 | 951 | 105 | 906 |
| Krebs, Charles E., *et al.* (See De France, Murry A., assignor.) | | | | | | |
| Krebs, Charles E. (See Wetton, Thomas F., assignor.) | | | | | | |
| Krebs, Eduart H., Oxnard, Cal. Washer | 733,487 | July 14 | 1411 | 333 | 105 | 316 |
| Krebs, George, Durant, Iowa. Coupling | 730,777 | June 9 | 2263 | 503 | 104 | 1615 |
| Krefting, Axel, Christiania, Norway, assignor to E. Herrmann, Paris, France. Extracting glutinous substances from seaweed | 737,421 | Aug. 25 | 4471 | ..... | 105 | 1986 |
| Kreh, Henry M., and R. Parsons, Philadelphia, Pa. Window-screen | 745,201 | Nov. 24 | 4665 | 1016 | 107 | 1037 |
| Krehbiel, John, Harrishill, N. Y. Printing-press | 731,790 | June 23 | 4180 | 932 | 104 | 2042 |
| Krehbiel, John, Harrishill, N. Y. Printing-press | 733,325 | July 7 | 1114 | 264<br>265 | 105 | 235 |
| Kreidler, Waldo M., Hornellsville, N. Y. Label-holder | 739,190 | Sept. 15 | 3211 | 710 | 106 | 718 |
| Kreiger, George J., Jr., *et al.* (See Miller, Benjamin F. D., assignor.) | | | | | | |
| Kreisser, John D., assignor to Perfection Pulley Cover Company, Cleveland, Ohio. Pulley-cover | 742,679 | Oct. 27 | 4412 | 995 | 106 | 2225 |
| Kreitinger, Louis, Springfield, Minn. Draft-coupling | 743,891 | Nov. 10 | 2136 | 459<br>460 | 107 | 470 |
| Krell, Rudolf, assignor to Vereinigte Maschinenfabrik Augsburg und Maschinenbaugesellschaft Nürnberg, A. G., Nuremberg, Germany. Lifting apparatus for raising or lowering canal-boats, &c. | 742,450 | Oct. 27 | 3992 | 896<br>897 | 106 | 2135 |
| Kremer, Adolph, Sacramento, Cal. Decoy-duck | 747,732 | Dec. 22 | 4458 | 1005 | 107 | 2135 |
| Kremer, Franklin W., Akron, Ohio. Exhibition apparatus | 728,246 | May 19 | 2681 | 599<br>600 | 104 | 609 |
| Kremer, Michael J., assignor of one-half to M., M., E., and L. Silberstein, Davenport, Iowa. Washing-machine | 725,260 | Apr. 14 | 1562 | 354 | 103 | 1515 |
| Krepps, Jesse E. (See Gage, Charles H., assignor.) | | | | | | |
| Kreps, Abraham, Freedom, Pa. Rail-joint tie | 738,548 | Sept. 8 | 2021 | 439 | 106 | 449 |
| Kress, John, New Rochelle, N. Y. Lemon-squeezer | 726,075 | Apr. 21 | 3029 | 688 | 103 | 1842 |
| Kretschmar, Charles L. and L. B., St. Louis, Mo. Shirt-bosom | 720,160 | Feb. 10 | 1375 | 316 | 102 | 1133 |
| Kretschmar, Lulu B. (See Kretschmar, Charles L. and L. B.) | | | | | | |
| Kretzschmar, Fred, Chicago, Ill. Basket | 738,724 | Sept. 8 | 2349 | 515 | 106 | 518 |
| Kreuter, Ferdinand, New York, N. Y. Eyeglasses | 746,711 | Dec. 15 | 2546 | 584 | 107 | 1688 |
| Kreutler, Louis, and H. Manger, Newark, N. J. Coal-wagon | 725,095 | Apr. 14 | 1261 | 284<br>285 | 103 | 1452 |
| Krewson, John E., St. Louis, Mo. Device for capping, decapping, and loading cartridges | 744,364 | Nov. 17 | 3085 | 661 | 107 | 689 |
| Krezdorn, Herman A., Seguin, Tex. Hat and coat hanger | 722,856 | Mar. 17 | 2258 | 505 | 103 | 510 |
| Krezdorn, Herman A., Seguin, Tex. Spring-hub | 732,751 | July 7 | 97 | 27 | 105 | 24 |
| Kribs, Nicholas. (See Jurtz, Otto, assignor.) | | | | | | |
| Kribs, Seraphin, New York, N. Y. Glass-molding machine | 730,665 | June 9 | 2076 | 463<br>464 | 104 | 1573 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Krieg, Christian U., Sr., Nashville, Tenn. Portable pleasure-tent | 720,445 | Feb. 10 | 1901 | 433<br>434 | 102 | 1241 |
| Krieger, George J., *et al.* (See Miller, Benjamin F. D., assignor.) | | | | | | |
| Krieger, Gustave A., assignor of one-half to G. C. Banks, Chicago, Ill. Hogshead-cover | 719,945 | Feb. 3 | 946 | 220 | 102 | 1024 |
| Krifka, John, Chicago, Ill. Bottler's glove | 731,791 | June 23 | 4183 | 933 | 104 | 2043 |
| Kringel, Frank W., Los Angeles, Cal. Piano with auxiliary harmonic sounding-board | 732,304 | June 30 | 5180 | 1151 | 104 | 2267 |
| Krisner, Louis P., St. Louis, Mo. Hinge | 739,088 | Sept. 15 | 3028 | 671 | 106 | 680 |
| Kritch, Armin G., *et al.* (See Shaw, John, assignor.) | | | | | | |
| Kroehler, Joe, Quincy, Minn. Can | 722,025 | Mar. 3 | 690 | 153 | 103 | 149 |
| Kroelling, Walther. (See Holmok, Charles, assignor.) | | | | | | |
| Krohn, Frederick W., San Francisco, Cal. Safety gas-supply-pipe attachment | 740,145 | Sept. 29 | 5009 | 1125 | 106 | 1137 |
| Krohn, Gustave A., Coarsegold, Cal. Pumping-engine | 746,343 | Dec. 8 | 1896 | 432 | 107 | 1523 |
| Krohn, Gustave A., Coarsegold, Cal. Interchangeable-cylinder pump | 746,344 | Dec. 8 | 1899 | 432 | 107 | 1524 |
| Krohn, Harry H., assignor of one-half to L. G. Loomis, Los Angeles, Cal. Ratchet-swivel | 740,026 | Sept. 29 | 4810 | 1079 | 106 | 1096 |
| Krohn, John, Barberton, Ohio, assignor to National Drill & Manufacturing Company, Chicago, Ill. Axle-box | 743,892 | Nov. 10 | 2138 | 460 | 107 | 471 |
| Krohn, John O. E., Harvey, Ill. Nut-lock | 723,882 | Mar. 31 | 4138 | 932 | 103 | 927 |
| Krohn, Sigvald, Berlin, Germany, assignor to General Electric Company. Alternating-current motor system | 725,454 | Apr. 14 | 1925 | 431 | 103 | 1592 |
| Krohnson, Herman. (See Blivin, Howard C., assignor.) | | | | | | |
| Kroll, Charles W. F. (See Greenbaum and Kroll.) | | | | | | |
| Kroll, Charles W. F., Jersey City, N. J. Hose-coupling | 740,664 | Oct. 6 | 522 | 115 | 106 | 1359 |
| Kroll, Rudolph, Spearfish, S. D. Preservation of timber | 727,975 | May 12 | 2182 | 486 | 104 | 483 |
| Kromberg, Herman H., New York, N. Y. Barrel-head fastener | 730,666 | June 9 | 2086 | 464 | 104 | 1576 |
| Kron, Georg, Malmö, Sweden. Mechanical hammering device for use in the manufacture of boots or shoes | 733,974 | July 21 | 2329 | 547 | 105 | 523 |
| Krone, Johannes, and O. Behnke, assignors to F. Krupp, Essen-on-the-Ruhr, Germany. Gun-carriage for portable guns | 723,684 | Mar. 24 | 3764 | 845 | 103 | 832 |
| Kronenberg, Rudolf, Ohligs, Germany. Felly for vehicle-wheels | 737,745 | Sept. 1 | 350 | 74 | 106 | 79 |
| Kronenberg, Rudolf, Ohligs, Germany. Combined cane and umbrella or parasol | 741,678 | Oct. 20 | 2473 | 552 | 106 | 1808 |
| Kronstein, Abraham, Karlsruhe, Germany. Converting solidified oils into a soluble oil | 737,249 | Aug. 25 | 4146 | ..... | 105 | 1916 |
| Krook, John L. L., Cambridge, Mass. Automatic gas shut-off | 734,718 | July 28 | 3741 | 875 | 105 | 837 |
| Kropff, William, New York, N. Y. Apparatus for making toilet-tablets | 718,713 | Jan. 20 | 2275 | 500 | 102 | 515 |
| Krosli, Varvel. (See Fisher and Krosli.) | | | | | | |
| Krotz, Linford E., Victor, Colo., assignor of two-thirds to G. T. Seabury and F. W. Roedel, Cheyenne, Wyo. Changeable-speed gear | 737,746 | Sept. 1 | 351 | 74 | 106 | 79 |
| Krough, Emil, C. and J. E. Hogan, Chicago, Ill. Cartridge-carrier | 724,190 | Mar. 31 | 4768 | 1069 | 103 | 1055 |
| Krouse, Walter E., Bridgeport, Conn. Pencil-sharpener | 720,821 | Feb. 17 | 2602 | 601 | 102 | 1400 |
| Krubetke, Reinhold, Tegel, Germany. Shutter-fastener | 734,575 | July 28 | 3465 | 810 | 105 | 782 |
| Krueger, Charles R. (See Specht and Krueger.) | | | | | | |
| Krueger, Herman. (See Wishart, William, assignor.) | | | | | | |
| Krueger, John, Milwaukee, Wis. Bending-machine | 718,478 | Jan. 13 | 1787 | 396<br>397 | 102 | 396 |
| Krueger, Max C., *et al.* (See Freeman, Clarence E., assignor.) | | | | | | |
| Kruemling, August W., Anderson, Ind. Buckle | 726,312 | Apr. 28 | 3503 | 793 | 103 | 1954 |
| Krug, Philip F., New York, N. Y. Chuck | 725,846 | Apr. 14 | 1718 | 386<br>387 | 103 | 1549 |
| Krug, William H., New York, N. Y., assignor to Standard Turpentine Company, Raleigh, N. C. Turpentine-still | 746,850 | Dec. 15 | 2809 | 647 | 107 | 1747 |
| Krüger, Ferdinand, assignor to Phönix Maschinenbau Gesellschaft M. B. H., Berlin, Germany. Pressure-regulating, governing, safety apparatus | 722,026 | Mar. 3 | 691 | 153 | 103 | 149 |
| Krumeich, Frank J. (See La Francis and Krumeich.) | | | | | | |
| Krumlauf, W. J. (See Levitt and Shough, assignors.) | | | | | | |
| Krupke, Herman E., Paynesville, Minn. Powder-blower | 728,247 | May 19 | 2682 | 600 | 104 | 610 |
| Krupp, Actiengesellschaft, Fried. (See Meinrich, Wilhelm, assignor.) | | | | | | |
| Krupp, Eli C., assignor to Krupp Foundry Co., Ltd., Lansdale, Pa. Culvert | 739,686 | Sept. 22 | 4140 | 924 | 106 | 935 |
| Krupp Foundry Co. (See Krupp, Eli C., assignor.) | | | | | | |
| Krupp, Fried. (See Behnke, Otto, assignor.) | | | | | | |
| Krupp, Fried. (See Behnke and Friese, assignors.) | | | | | | |
| Krupp, Fried. (See Dreger and Pohlit, assignors.) | | | | | | |
| Krupp, Fried. (See Gardin, Theodor, assignor.) | | | | | | |
| Krupp, Fried. (See Haase, Albert, assignor.) | | | | | | |
| Krupp, Fried. (See Hartmann, Oscar, assignor.) | | | | | | |
| Krupp, Fried. (See Knoch, Oscar, assignor.) | | | | | | |
| Krupp, Fried. (See Krone and Behnke, assignors.) | | | | | | |
| Krupp, Fried. (See Lauber, Otto, assignor.) | | | | | | |
| Krupp, Fried. (See Lauber and Stock, assignors.) | | | | | | |
| Krupp, Fried. (See Resow and Lauber, assignors.) | | | | | | |
| Krupp, Fried. (See Schoeller, Gustav A., assignor.) | | | | | | |
| Krupp, Fried. (See Wieser, Karl, assignor.) | | | | | | |
| Krus, Charles P., Chicago, Ill. Fish-hook | 741,916 | Oct. 20 | 2937 | 655 | 106 | 1906 |
| Kruse, Robert J. (See Pilling and Kruse.) | | | | | | |
| Kruseman, Johannes A., Lisse, Netherlands. Cycle-saddle | 718,850 | Jan. 20 | 2510 | 559 | 102 | 562 |
| Kruseman, Johannes A., Lisse, Netherlands. Acetylene-lamp | 738,549 | Sept. 8 | 2023 | 439<br>440 | 106 | 450 |
| Krusemark, Hans, Dresden, Germany. Malt-breaking mill | 744,567 | Nov. 17 | 3437 | 740 | 107 | 764 |
| Krux, Frank, San Francisco, Cal. Stove | 730,464 | June 9 | 1726 | 385<br>386 | 104 | 1498 |
| Kubbernuss, Hermann L., St. Louis, Mo. Composition of matter | 731,310 | June 16 | 3278 | ..... | 104 | 1842 |
| Kubbernuss, Hermann L., St. Louis, Mo. Means for excluding dampness from vaults | 741,679 | Oct. 20 | 2474 | 553 | 106 | 1808 |
| Kubbernuss, Hermann L., St. Louis, Mo. Fireproof construction | 743,295 | Nov. 3 | 934 | 203 | 107 | 200 |
| Kubbernuss, Hermann L., St. Louis, Mo. Means for stiffening wire-plaster | 745,446 | Dec. 1 | 252 | 58 | 107 | 1153 |
| Kubbernuss, Hermann L., St. Louis, Mo. Fireproof construction | 746,345 | Dec. 8 | 1900 | 432<br>433 | 107 | 1524 |
| Kubierschky, Martin T. A., Berlin, Germany. Electric railway | 719,016 | Jan. 27 | 2836 | 636 | 102 | 646 |
| Kubierschky, Martin T. A., and P. Herkner, Berlin, Germany. Suspension of trolley-wires | 738,919 | Sept. 15 | 2740 | 605 | 106 | 620 |
| Kubin, Hanns E. von, Vienna, Austria-Hungary. Bridle | 721,572 | Feb. 24 | 4067 | 922<br>923 | 102 | 1731 |
| Kubin, Joseph L., Wallaceburg, Canada. Osmose apparatus | 736,745 | Aug. 18 | 3202 | 708 | 105 | 1697 |
| Kuebler, John M. (See Hayes and Kuebler.) | | | | | | |
| Kuebler, John M., Wausau, Wis. Cutter-head | 733,221 | July 7 | 927 | 224 | 105 | 194 |
| Kuehlborth, Bernard, Baltimore, Md. Curtain-fixture | 728,585 | May 19 | 3352 | 742 | 104 | 750 |
| Kuehlhorn, Arnold A., Lakota, N. D. Eyelet | 724,716 | Apr. 7 | 562 | 134 | 103 | 1289 |
| Kuenzel, Charles A., Jr., Hoboken, N. J. Producing combustible fluid | 721,957 | Mar. 3 | 572 | 127 | 103 | 125 |
| Kuenzel, Christopher, Springfield, Mass. Stem winding and setting watch | 720,258 | Feb. 10 | 1565 | 358 | 102 | 1171 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|
| | | | Spec. | Dr'g. | Vol. | Page. |
| Kuenzel, Christopher, Springfield, Mass. Stem winding and setting watch | 720,259 | Feb. 10 | 1567 | 358 | 102 | 1172 |
| Kuenzel, Christopher, Springfield, Mass. Stem winding and setting watch | 739,089 | Sept. 15 | 3029 | 671 | 106 | 680 |
| Kuersten, Hugo R. (See Rolph and Kuersten.) | | | | | | |
| Kueter, William, Herman, Wis. Stanchion | 739,610 | Sept. 22 | 3993 | 890 | 106 | 902 |
| Kugel, Max, Wiesdorf, near Cologne, Germany, assignor to Farbenfabriken of Elberfeld Co., New York, N. Y. Anthracene derivatives and making same | 722,719 | Mar. 17 | 2004 | ..... | 103 | 459 |
| Kugel, Max, Wiesdorf, Germany, assignor to Farbenfabriken of Elberfeld Co., New York, N. Y. Anthracene dye | 729,073 | May 26 | 4227 | ..... | 104 | 946 |
| Kugel, Paul, and V. Gelpke, Zurich, Switzerland. Steam-turbine | 739,191 | Sept. 15 | 3213 | 710 | 106 | 718 |
| Kugel, Paul, and V. Gelpke, Zurich, Switzerland. Centrifugal high-pressure pump | 743,296 | Nov. 3 | 935 | 203 | 107 | 200 |
| Kugler, Emile. (See Bizouarne and Kugler.) | | | | | | |
| Kugler, Friedrich, assignor to Aktiengesellschaft, vormals F. Martini & Co., Frauenfeld, Switzerland. Book-stitching machine | 723,535 | Mar. 24 | 3511 | 786 | 103 | 779 |
| Kuhlemeier, August R., Burlington, Iowa. Duck-call | 742,680 | Oct. 27 | 4413 | 996 | 106 | 2225 |
| Kuhlewind, Cornelius, assignor to Hydraulic Valve and Regulator Company, Limited, Pittsburg, Pa. Automatic controller for rolling-mills, shafts, &c | 728,802 | May 19 | 3736 | 833 | 104 | 830 |
| Kuhlman, Henry V., and G. A. Woodman, assignors of one-half to T. B. Kirby and F. W. Renshaw, Chicago, Ill. Grain-car door | 719,815 | Feb. 3 | 739 | 173 | 102 | 979 |
| Kuhlman, John C., Terre Haute, Ind. Pipe-cleaner | 731,190 | June 16 | 3052 | 678 | 104 | 1793 |
| Kuhlman, William A., and G. W. Carpenter, Toledo, Ohio. Cover for stovepipe-holes | 719,816 | Feb. 3 | 741 | 173 | 102 | 980 |
| Kuhlmann, Albert, San Francisco, Cal. Gage | 725,973 | Apr. 21 | 2870 | 651 | 103 | 1809 |
| Kuhlmann, Hans, Gross-Salzl, Germany. Inflatable air-bag for life-preserving garments | 723,883 | Mar. 31 | 4139 | 932 | 103 | 927 |
| Kuhlmann, Wilhelm, Offenbach-on-the-Main, Germany. Valve | 745,591 | Dec. 1 | 358 | 83 | 107 | 1176 |
| Kühn, Arthur, Magdeburg, Germany. Cycle safety apparatus | 736,409 | Aug. 18 | 2551 | 560 | 105 | 1562 |
| Kuhn, Edmond, East Orange, N. J., assignor to G. and E. Bunzl, New York, N. Y. Gearing for timepieces | 719,342 | Jan. 27 | 3464 | 772 | 102 | 778 |
| Kuhn, Edmond, East Orange, N. J., assignor to G. and E. Bunzl, New York, N. Y. Stem winding and setting watch | 736,270 | Aug. 11 | 2307 | 499 | 105 | 1493 |
| Kuhn Formaldehyde Generator Company. (See Kuhn, Richard P., assignor.) (Reissue.) | | | | | | |
| Kuhn Formaldehyde Generator Company. (See Munroe, Charles E., assignor.) | | | | | | |
| Kuhn, Harry R., Homestead, Pa. Air-brake system | 746,107 | Dec. 8 | 1455 | 327 | 107 | 1429 |
| Kuhn, Richard P., assignor to Kuhn Formaldehyde Generator Company, Alexandria, Va. Formaldehyde-lamp. (Reissue) | 12,150 | Aug. 25 | 4740 | 1062 | 105 | 2046 |
| Kuhn, Robert, Cincinnati, Ohio. Machine for compressing tubes | 727,642 | May 12 | 1532 | 345<br>346 | 104 | 348 |
| Kuhne, Ernest, New York, N. Y. Cigar-machine | 742,877 | Nov. 3 | 102 | 24 | 107 | 23 |
| Kühne, Paul, New York, N. Y. Apparatus for mixing concrete | 735,530 | Aug. 4 | 959 | 203 | 105 | 1185 |
| Kules, Leo, Homestead, Pa. Wrench | 732,752 | July 7 | 99 | 28 | 105 | 25 |
| Kulhánek, Augustin, Prague, Austria-Hungary. Water-closet flushing apparatus | 728,470 | May 19 | 3120 | 690 | 104 | 702 |
| Kulhánek, Jan, Prague, Austria-Hungary. Construction of ceilings, roofs, or the like | 724,717 | Apr. 7 | 563 | 135 | 103 | 1289 |
| Kulhánek, Jan, Prague, Austria-Hungary. Semipermanent portable building | 728,471 | May 19 | 3122 | 690 | 104 | 702 |
| Kulhánek, Jan, Prague, Austria-Hungary. Provisional or permanent wall | 728,472 | May 19 | 3123 | 690 | 104 | 702 |
| Kuljis, Jacob, assignor to Electralene Manufacturing Company, Portland, Oreg. Acetylene-gas generator | 737,747 | Sept. 1 | 353 | 74, 75 | 106 | 80 |
| Kumber, Frederick, H. and E. Haenze, Pittsburg, Pa. Stove-door | 747,731 | Dec. 22 | 4458 | 1005 | 107 | 2135 |
| Kümmel, Edward A. (See Walk, Rudolph H., assignor.) | | | | | | |
| Kunath, Edward F., Jersey City, N. J., assignor to Underwood Typewriter Company, New York, N. Y. Ribbon-guide holder for type-writers | 733,975 | July 21 | 2330 | 547 | 105 | 523 |
| Kunath, Edward F., Jersey City, N. J., assignor, by mesne assignments, to Underwood Typewriter Company, New York, N. Y. Tool for applying type to type-bars of writing-machines | 734,719 | July 28 | 3743 | 875 | 105 | 838 |
| Kundmueller, George, assignor of one-half to J. N. Hahn, Cleveland, Ohio. Sawing-machine | 742,121 | Oct. 20 | 3386 | 756 | 106 | 1995 |
| Kundson, Theodore A., Wannaska, Minn. Portable stump-puller | 728,248 | May 19 | 2683 | 600 | 104 | 610 |
| Kundtz, Theodor, Cleveland, Ohio. Machine-bearing cabinet | 719,233 | Jan. 27 | 3256 | 727<br>728 | 102 | 733 |
| Kunick, George, London, England. Manufacture of tiles, slabs, or the like | 730,778 | June 9 | 2264 | ..... | 104 | 1615 |
| Kunkel, Henry, Franklin, Pa. Combined rail joint and chair | 721,573 | Feb. 24 | 4068 | 923 | 102 | 1731 |
| Kunkel, John, Lazearville, W. Va. Jar-closure | 731,792 | June 23 | 4184 | 933 | 104 | 2043 |
| Kunkel, John W., Lazearville, and C. Robinson, Wellsburg, W. Va. Closure for jars, bottles, jelly-glasses, &c | 721,897 | Mar. 3 | 442 | 98 | 103 | 98 |
| Kunny, John, H. G. Arundell, and P. R. Kunny, Los Angeles, Cal. Ratchet-clutch for drilling-swivels | 742,332 | Oct. 27 | 3787 | 848 | 106 | 2094 |
| Kunny, Peter R. (See Kunny, Arundell, and Kunny.) | | | | | | |
| Künstner, Wilhelm. (See Walter and Künstner.) | | | | | | |
| Kuntz, Edward A., Dayton, Ohio. Carpenter's scaffolding | 729,608 | June 2 | 155 | 37 | 104 | 1158 |
| Kuntz, Wellington W., Allentown, Pa. Double-acting force-pump | 741,508 | Oct. 13 | 2142 | 476 | 106 | 1723 |
| Kuntzen, Otto, and A. Kahle, Berlin, Germany. Fare-indicator | 718,259 | Jan. 13 | 1365 | 303<br>304 | 102 | 309 |
| Kunz, A. L. (See Russell, George E., assignor.) | | | | | | |
| Kunze, Albert. (See Cotton, Walter H., assignor.) | | | | | | |
| Kunze Clamp and Hose Mender Company. (See Kunze, Reinhart F., assignor.) | | | | | | |
| Kunze, Louis G., assignor to C. C. Darling and Co., Providence, R. I. Separable button | 727,546 | May 5 | 1341 | 301 | 104 | 288 |
| Kunze, Reinhart F., assignor to Kunze Clamp and Hose Mender Company, Detroit, Mich. Hose or pipe mender | 719,817 | Feb. 3 | 741 | 174 | 102 | 980 |
| Künzel, Hugo, Cologne, Germany. Toy shooting apparatus | 739,010 | Sept. 15 | 2882 | 640 | 106 | 651 |
| Kunzer, Louis G. (See Lewis and Kunzer.) | | | | | | |
| Kunzmann, Robert A., assignor of one-half to P. Mineck, Cedar Rapids, Iowa. Measuring-pump | 734,465 | July 21 | 3257 | 766 | 105 | 721 |
| Kupfer, Henry W., and C. E. Schoder, New York, N. Y. Die-cutting machine | 739,090 | Sept. 15 | 3032 | 672 | 106 | 681 |
| Küpper, Franz, and A. E. Vorreiter, assignors to Aachener Stahlwaarenfabrik, vorm. Carl Schwanemeyer, Actien-Gesellschaft, Aix-la-Chapelle, Germany. Driving mechanism for motor-vehicles | 739,687 | Sept. 22 | 4141 | 924 | 106 | 935 |
| Kursheedt Manufacturing Company. (See Groebli, Joseph A., assignor.) | | | | | | |
| Kurtis, Joseph F., Springfield, and H. F. Miller, Dayton, assignors to G. J. and E. C. Ihrig, Springfield, Ohio. Muffler for gas or gasolene engines | 718,131 | Jan. 13 | 1139 | 253 | 102 | 260 |
| Kurtz, Edward W., Sr., Chicago, Ill. Fish-hook holder | 742,040 | Oct. 20 | 3199 | 714 | 106 | 1959 |
| Kurtz, George C., *et al.* (See Higgins, Thomas, assignor.) | | | | | | |
| Kurz, Martin, and A. Beiser, St. Louis, Mo. Vehicle-brake | 730,829 | June 9 | 2351 | 520 | 104 | 1633 |
| Kusche, Carlton J., Oshkosh, Wis. Shade-holder | 725,455 | Apr. 14 | 1926 | 431 | 103 | 1592 |
| Kuske, Wilhelm, Berlin, Germany. Rail for street-railways | 720,704 | Feb. 17 | 2424 | 554 | 102 | 1362 |
| Kutscher, Adolph O., and J. G. Auradou, San Francisco, Cal. Roll lap-robe or storm-apron | 720,260 | Feb. 10 | 1570 | 359 | 102 | 1172 |
| Kutter, Herman L. (See Frye, Cyrus E., assignor.) | | | | | | |
| Kutz, Nelson, Burton City, Ohio. Dust-guard for vehicles | 730,929 | June 16 | 2552 | 568 | 104 | 1694 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | Spec. | Drgs. | Vol. | Page. |
| Kutzner, John G., McKees Rocks, Pa. Rail-joint | 744,968 | Nov. 24 | 4172 | 902 | 107 | 935 |
| Kwaysser, Emil. (See Scheiber and Kwaysser.) | | | | | | |
| Kyle, George H., *et al.* (See Wolf and Williams, assignors.) | | | | | | |
| Kyle, George S., assignor of one-fourth to N. L. Bonbrake, Chambersburg, Pa. Car-wheel | 747,983 | Dec. 29 | 4975 | 1123 | 107 | 2272 |
| Kyle, Jennie R., Gex, Ky. Sleigh | 738,617 | Sept. 8 | 2137 | 468 | 106 | 475 |
| Kyle, Joseph D., Springfield, assignor of one-half to J. S. Harshman, Enon, Ohio. Decoration and making same | 744,209 | Nov. 17 | 2811 | 600 | 107 | 629 |
| Kyle, Joseph D., and A. J. Baum, assignors to said Kyle and J. S. Harshman, Springfield, Ohio. Decoration | 742,122 | Oct. 20 | 3387 | 756 | 106 | 1995 |
| Kyler, Rex, Lockhaven, Pa. Device for emptying pans of clay-mills | 728,940 | May 26 | 3987 | 888 | 104 | 897 |
| Kymer, Alfred. (See Boral and Kymer.) | | | | | | |
| Kynoch, James, assignor to Canadian General Electric Company, Limited, Toronto, Canada. Frictional gearing | 728,400 | May 19 | 2982 | 656 | 104 | 673 |
| Kynoch, James, Toronto, Canada, assignor, by mesne assignments, to International Trolley Controller Company, Buffalo, N. Y. Combined trolley and air-brake controller | 745,502 | Dec. 1 | 359 | 83, 84 | 107 | 1176 |
| Kyrlach, Frank. (See Havekotte, Frederick H., assignor.) | | | | | | |
| Kyser, Worth D., Frankfort, and J. C. Morgan, Mohawk, N. Y. Solder-saving machine. | 746,108 | Dec. 8 | 1456 | 327 | 107 | 1429 |
| L. A. Rheostat Co. (See Alexander, William W., assignor.) | | | | | | |
| L. A. Rheostat Co. (See Letord, Alexander, and Letord, assignors.) | | | | | | |
| L. C. Smith and Bros. Typewriter Company. (See Gabrielson, Carl, assignor.) | | | | | | |
| L. E. Waterman Company. (See Ferris, William I., assignor.) | | | | | | |
| L. E. Waterman Company. (See Kastner, Edward J., assignor.) | | | | | | |
| L. S. Starrett Company. (See Starrett, Laroy S., assignor.) | | | | | | |
| L'Orange, Prosper, Königsberg, Germany. Valve-motion | 731,699 | June 23 | 4015 | 896 | 104 | 2008 |
| La Barre, George B., *et al.* (See Scudder, Charles, assignor.) | | | | | | |
| La Beaume, Neal A. (See Stapp, John M., assignor.) | | | | | | |
| La Belle Iron Works. (See La Voo, George W., assignor.) | | | | | | |
| La Burt, John, New York, N. Y. Marking-pen | 720,705 | Feb. 17 | 2425 | 555 | 102 | 1362 |
| La Burt, John, New York, N. Y., assignor to himself, C. D. Bradley and A. L. Eliel, Parlin, N. J. Wrench | 738,457 | Sept. 8 | 1841 | 400 | 106 | 411 |
| La Burt, John, and D. M. P. Campbell, New York, N. Y.; said La Burt assignor to himself, C. D. Bradley and A. L. Eliel, Parlin, N. J. Marking-pen | 741,147 | Oct. 13 | 1405 | 322 | 106 | 1565 |
| La Croix, Joseph, assignor to Hyde Manufacturing Company, Southbridge, Mass. Knife-handle | 743,647 | Nov. 10 | 1693 | 357 | 107 | 377 |
| La Dow, Charles, Albany, N. Y. Draft-evener | 741,800 | Oct. 20 | 2715 | 605 | 106 | 1859 |
| La Due, Daniel J., Philadelphia, Pa. Window-screen | 745,731 | Dec. 1 | 745 | 171 | 107 | 1257 |
| La Flamboy, Harry C., assignor of two-thirds to R. Thuner and B. Duffield, Detroit, Mich. Match-box-making machine | 718,480 | Jan. 13 | 1790 | 397<br>398 | 102 | 396 |
| La Flamboy, Harry C., assignor of two-thirds to R. Thuner and B. Duffield, Detroit, Mich. Match-machine | 727,547 | May 5 | 1341 | 301<br>302 | 104 | 288 |
| La France, Asa W., Elmira, N. Y. Steam-boiler | 737,250 | Aug. 25 | 4148 | 922 | 105 | 1916 |
| La France, Asa W., Elmira, N. Y. Steam-boiler | 737,558 | Aug. 25 | 4718 | 1059 | 105 | 2042 |
| La France, Asa W., and W. Wright, Elmira, N. Y. Aerial apparatus | 726,543 | Apr. 28 | 3949 | 892<br>893 | 103 | 2042 |
| La Francis, Anthony, East Orange, and F. J. Krumeich, Newark, N. J. Borax-rubbing machine | 740,146 | Sept. 29 | 5010 | 1125<br>1126 | 106 | 1138 |
| La Jeunesse, Jean B. A., Alameda, Cal. Weather-strip | 733,488 | July 14 | 1412 | 333 | 105 | 316 |
| La Jeunesse, Jean B. A., Alameda, Cal. Weather-strip | 733,489 | July 14 | 1415 | 333 | 105 | 317 |
| La Londe, Moses, assignor of one-half to O. A. La Riviere, Indian Orchard, Mass. Valve-gate | 729,609 | June 2 | 156 | 37 | 104 | 1159 |
| La May, Arthur C., assignor to Warnica Company, Rochester, N. Y. Photographic-plate holder | 745,202 | Nov. 24 | 4666 | 1016 | 107 | 1038 |
| La May, Frank B., and W. C. Whitlock, assignors to Seneca Camera Company, Rochester, N. Y. Focusing-hood for cameras | 736,271 | Aug. 11 | 2308 | 500 | 105 | 1493 |
| La Parr, Charles E., Central Lake, Mich. Ice-creeper | 743,736 | Nov. 10 | 1844 | 389 | 107 | 410 |
| La Pierre, Frank H., *et al.* (See Albee, Honestus M., assignor.) | | | | | | |
| La Point, George W. (See Adams, David, assignor.) | | | | | | |
| La Prelle, James L. (See Eddins and Buddie, assignors.) | | | | | | |
| La Riviere, Joseph. (See Harder and La Riviere.) | | | | | | |
| La Riviere, Octave A. (See Dumas, Henry T., assignor.) | | | | | | |
| La Riviere, Octave A. (See La Londe, Moses, assignor.) | | | | | | |
| La Roche, Fredrick A., New York, N. Y. Quick-break electrical switch | 718,775 | Jan. 20 | 2393 | 531 | 102 | 539 |
| La Société A. Poméon et ses Fils. (See Coulet and Poméon, assignors.) | | | | | | |
| La Société Générale des Industries Economiques. (See Genty, Lucien, assignor.) | | | | | | |
| La Société Nouvelles des Etablissements de L'Horme et de la Buire. (See Maurice, Paul, assignor.) | | | | | | |
| La Société Vedovelli et Priestley. (See Vedovelli, Edouard, assignor.) | | | | | | |
| La Veine, Edward N., Kansas City, Mo. Stove or furnace pipe damper | 733,404 | July 14 | 1273 | 301 | 105 | 286 |
| La Veine, Edward N., Kansas City, Mo. Combined syringe and applicator | 747,444 | Dec. 22 | 3933 | 885 | 107 | 2017 |
| La Voo, George W., Steubenville, Ohio. Thread-protector | 741,213 | Nov. 17 | 2815 | 601 | 107 | 630 |
| La Voo, George W., assignor of one-half to La Belle Iron Works, Steubenville, Ohio. Apparatus for welding rings | 740,149 | Sept. 29 | 5015 | 1127 | 106 | 1139 |
| Laas, Edward. (See Sponenburg, Hiram H., assignor.) | | | | | | |
| Laas, Edward, Elgin, and H. Sponenburg, Wadsworth, Ill. Railway-rail stay | 720,362 | Feb. 10 | 1763 | 400 | 102 | 1213 |
| Laatsch, William, Effingham, Ill. Wheel for vehicles | 743,734 | Nov. 10 | 1841 | 388 | 107 | 409 |
| Labadie, William D., South Bend, Ind. Injector or ejector | 744,365 | Nov. 17 | 3086 | 662 | 107 | 689 |
| Labbé, Henri. (See Donard and Labbé.) | | | | | | |
| Labelle, Wilfred, Cohoes, N. Y. Window-fixture | 734,129 | July 21 | 2645 | 624 | 105 | 592 |
| Labine, Joseph. (See Le Blanc, Arthur, assignor.) | | | | | | |
| Labofish, Charles S., Washington, D. C. Gage | 741,146 | Oct. 13 | 1402 | 321 | 106 | 1564 |
| Labrum, Levi J. (See Bates and Labrum.) | | | | | | |
| Lacey, Charles E. (See Watson, O'Neal, assignor.) | | | | | | |
| Lacey, Orra M., Hanford, Cal. Switch for systems of remote control | 735,531 | Aug. 4 | 961 | 203 | 105 | 1185 |
| Lacey, Patrick, New York, N. Y. Millstone | 727,156 | May 5 | 642 | 138 | 104 | 139 |
| Lachman, Albert. (See Birch, Frank C., assignor.) | | | | | | |
| Lackey, James J. (See Harrison, Lyon, and Lackey.) | | | | | | |
| Lackner, Robert E., Paragould, Ark. Grappling-tongs | 731,917 | June 23 | 4409 | 983 | 104 | 2094 |
| Laclede Fire Brick Manufacturing Company. (See Hamlink, Lazenby C., assignor.) | | | | | | |
| Lacoin, Louis, Paris, France. Apparatus for automatically regulating the supply of water under pressure to hydraulic machinery | 720,261 | Feb. 10 | 1572 | 359 | 102 | 1172 |
| Lacour, Wilhelm, F. Fischer, and G. Lindenberg, Barmen, Germany. Machine for cutting ham | 733,976 | July 21 | 2331 | 547 | 105 | 524 |
| Lacy, Frederick V., Chester, W. Va. Rail-joint | 737,422 | Aug. 25 | 4472 | 1002 | 105 | 1986 |
| Lacy, Luke F., Baltimore, Md. Support for plants or flowers | 730,779 | June 9 | 2265 | 503 | 104 | 1615 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|
| | | | Spec. | Dr'g. | Vol. | Page. |
| Ladd, Allston C., Cambridge, Mass. Galley-lock | 728,729 | May 19 | 3603 | 800 | 104 | 804 |
| Ladd, Frank E., Springfield, Mass. Tag-clip | 741,509 | Oct. 13 | 2144 | 477 | 106 | 1724 |
| Ladd, Hermon W., Boston, assignor to G. E. Smith, trustee, Everett, Mass. Determining the nautical bearing of navigable vessels | 733,910 | July 14 | 2192 | 515 | 105 | 476 |
| Ladd, James B., Wayne, Pa., assignor to Semet-Solvay Company. Coal-compressing device | 731,374 | June 16 | 3381 | 756 | 104 | 1863 |
| Ladd, Sherman W., assignor to S. W. Winslow, trustee, Beverly, Mass. Buffing-machine | 721,052 | Feb. 17 | 3044 | 698 | 102 | 1496 |
| Ladislaw, Heinrich, and L. Sgal, Vienna, Austria-Hungary. Automatic feeding-regulator for steam-boilers | 730,465 | June 9 | 1728 | 386 | 104 | 1498 |
| Ladley, William H., assignor of one-half to R. L. Peeler, Maricopa, Cal. Water-supply device for well-drilling | 742,451 | Oct. 27 | 3993 | 897 | 106 | 2135 |
| Laernoes, Martin, and J. Dunn, Streator, Ill., assignors to Vulcan Detinning Company, New York, N. Y. Basket for holding tin scraps | 734,894 | July 28 | 4083 | 951 | 105 | 907 |
| Laernoes, Martin, and J. Dunn, Streator, Ill., assignors to Vulcan Detinning Company, New York, N. Y. Apparatus for transferring detinned scraps | 737,117 | Aug. 25 | 3883 | 862 | 105 | 1860 |
| Laernoes, Martin, and J. Dunn, Streator, Ill., assignors to Vulcan Detinning Company, New York, N. Y. Cathode for electric detinning-baths | 737,423 | Aug. 25 | 4474 | 1003 | 105 | 1986 |
| Laernoes, Martin, and J. Dunn, Streator, Ill., assignors to Vulcan Detinning Company, New York, N. Y. Machine for compressing detinned or other scraps | 737,424 | Aug. 25 | 4475 | 1003<br>1004 | 105 | 1986 |
| Laernoes, Martin, and J. Dunn, Streator, Ill., assignors to Vulcan Detinning Company, New York, N. Y. Machine for compressing detinned or other scraps | 737,425 | Aug. 25 | 4478 | 1004 | 105 | 1987 |
| Lafaurie, Jules, Castlemoron-on-the-Lot, France. Stenographic printing or writing machine | 734,895 | July 28 | 4085 | 952 | 105 | 907 |
| Lafferty, Erastus S., Galesburg, Ill. Tile-molding machine | 735,117 | Aug. 4 | 131 | 29 | 105 | 1011 |
| Lafferty, Erastus S., assignor to Lafferty Mfg. Co., Galesburg, Ill. Railway-torpedo | 738,112 | Sept. 1 | 1102 | 244 | 106 | 238 |
| Lafferty, Harry C., Allegheny, Pa. Coupling for air-pipes | 747,733 | Dec. 22 | 4460 | 1005 | 107 | 2135 |
| Lafferty Mfg. Co. (See Lafferty, Erastus S., assignor.) | | | | | | |
| Lafferty, William E., Olney, Pa. Automatic attaching or detaching hook | 720,822 | Feb. 17 | 2604 | 602 | 102 | 1401 |
| Laflin & Rand Powder Company. (See Howard, Frank B., assignor.) | | | | | | |
| Laflin, Stephen C., Southbridge, Mass. Connection for spectacle-frames or the like | 746,966 | Dec. 15 | 3043 | 698 | 107 | 1801 |
| Lafon, Nathaniel, Earlington, Ky. Display-cabinet for ribbons | 719,234 | Jan. 27 | 3258 | 728 | 102 | 733 |
| Lafrentz, Gertrude, Chicago, Ill. Strainer | 745,109 | Nov. 24 | 4469 | 967 | 107 | 996 |
| Lagaehe, George, Akron, Ohio. Tire for vehicle-wheels | 744,210 | Nov. 17 | 2813 | 600 | 107 | 630 |
| Laganke, Charles F., Cleveland, Ohio, and J. A. Smith, Athens, Tenn., assignors to Fisher Book Typewriter Company, Cleveland, Ohio. Ribbon guiding, guarding, and shifting mechanism for type-writing machines | 723,884 | Mar. 31 | 4139 | 933<br>934 | 103 | 928 |
| Lagarde, Jules, Clermont-Ferrand, France. Type-writing or similar machine and apparatus for use in connection therewith | 729,873 | June 2 | 653 | 144 | 104 | 1262 |
| Lagarde, Jules, Clermont-Ferrand, France. Machine for producing perforated strips for composing or like machines | 734,576 | July 28 | 3466 | 810 | 105 | 782 |
| Lagerstrom, Francis G., and A. G. Anderson, Salina, Kans. Massage apparatus | 733,977 | July 21 | 2333 | 548 | 105 | 524 |
| Lagomarsino, Giuseppe, San Francisco, Cal. Apparatus for distributing powder upon vines, plants, or the like | 735,887 | Aug. 11 | 1632 | 349 | 105 | 1348 |
| Lagonda Manufacturing Company. (See Weinland, Henry F., assignor.) | | | | | | |
| Lahn, John A., New York, N. Y. Non-refillable bottle | 723,536 | Mar. 24 | 3513 | 786 | 103 | 780 |
| Lahue, Moses M., Lowell, Mass. Brush | 726,544 | Apr. 28 | 3952 | 893 | 103 | 2042 |
| Laidlaw, John, Glasgow, Scotland. Centrifugal machine | 719,476 | Feb. 3 | 116 | 27 | 102 | 850 |
| Laineau Manufacturing Co. (See Tourigny, John, assignor.) | | | | | | |
| Laing, Edward M. (See McPherson and Laing.) | | | | | | |
| Laing, Edwin H. B., assignor of one-eighth to G. W. Clarke, London, England. Combined bandoleer and waist-belt rifle-carrier | 745,866 | Dec. 1 | 1023 | 230 | 107 | 1317 |
| Laingor, William W., Winfield, Tex. Draft-equalizer | 726,440 | Apr. 28 | 3726 | 845 | 103 | 2000 |
| Laird, Andrew. (See Ross, McKee, Laird, and McKeown.) | | | | | | |
| Laird, Wesley E., assignor to Stanley Electric Manufacturing Company, Pittsfield, Mass. Automatic indicator | 742,681 | Oct. 27 | 4415 | 996<br>997 | 106 | 2225 |
| Laist, Frederick, assignor of two-thirds to H. Smith and P. C. Brown, Salt Lake City, Utah. Treating ores | 739,011 | Sept. 15 | 2882 | 640 | 106 | 651 |
| Laitte, Benoit de, Paris, France. Carbureter | 742,452 | Oct. 27 | 3995 | 897 | 106 | 2136 |
| Lake, Albert, Washington, D. C. Molding stone | 743,525 | Nov. 10 | 1466 | | 107 | 330 |
| Lake, Archibald, Galt, Canada. Lawn-mower | 730,133 | June 2 | 1096 | 246 | 104 | 1350 |
| Lake, Edward N., Chicago, Ill. Focusing-hood for cameras | 731,898 | Mar. 3 | 444 | 98 | 103 | 98 |
| Lake, Edward N., Chicago, Ill. Split electrical conduit | 742,453 | Oct. 27 | 3996 | 897 | 106 | 2136 |
| Lake, James R., Milburn, N. J. Bracketed shelving | 727,157 | May 5 | 643 | 138 | 104 | 139 |
| Lake, John C., Mansfield, Ohio. Self-heating sad-iron | 725,261 | Apr. 14 | 1563 | 354 | 103 | 1516 |
| Lake, Simon, Bridgeport, Conn. Ventilation of submarine boats | 719,235 | Jan. 27 | 3259 | 728 | 102 | 733 |
| Lake, Simon, Bridgeport, Conn. Observing-tube for submarine boats | 725,570 | Apr. 14 | 2125 | 481<br>482 | 103 | 1635 |
| Lake, Simon, Bridgeport, Conn. Submarine boat | 726,227 | Apr. 21 | 3309 | 751 | 103 | 1900 |
| Lake, Simon, Bridgeport, Conn. Submarine boat | 726,705 | Apr. 28 | 4261 | 963 | 103 | 2106 |
| Lake, Simon, Bridgeport, Conn. Combined ventilating and observing tube for submarine boats | 726,947 | May 5 | 217 | 51 | 104 | 47 |
| Lake, Simon, Bridgeport, Conn. Subaqueous tunnel construction | 730,134 | June 2 | 1098 | 246<br>247 | 104 | 1351 |
| Lake, Simon, Bridgeport, Conn. Building subaqueous tunnels | 730,135 | June 2 | 1103 | 247<br>248 | 104 | 1352 |
| Lake, Simon, Bridgeport, Conn. Semisubmergible vessel | 738,206 | Sept. 8 | 1321 | 286 | 106 | 302 |
| Lake, Simon, Bridgeport, Conn. System of submarine communication | 738,725 | Sept. 8 | 2350 | 515<br>516 | 106 | 518 |
| Lake Superior Power Company. (See Sjöstedt, Ernst A., assignor.) | | | | | | |
| Lake Superior Power Company. (See Sjöstedt and Goodwin, assignors.) | | | | | | |
| Lakeberg, Leopold, Lehe, Germany. Packing material for hot-rivet joints | 735,782 | Aug. 11 | 1419 | 304 | 105 | 1301 |
| Lakin, Daniel A., *et al.* (See Ring, Francis C., assignor.) | | | | | | |
| Lakin, Samuel W. (See Morelock, Albert E., assignor.) | | | | | | |
| Lallement, Julius A., Ennis, Tex. Fruit or vegetable slicer | 725,262 | Apr. 14 | 1565 | 354 | 103 | 1516 |
| Lallie, John S. J., Denver, Colo. Solar and vertical sighting attachment for transits | 745,110 | Nov. 24 | 4470 | 967<br>968 | 107 | 997 |
| Lalor, Patrick, San Francisco, Cal., assignor, by mesne assignments, to National Cash Register Company, Dayton, Ohio, and Jersey City, N. J. Cash-register | 724,409 | Mar. 31 | 5217 | 1169<br>1170 | 103 | 1148 |
| Lamar, Charles, Jackson Township, Ind. Hoisting and dumping apparatus | 737,426 | Aug. 25 | 4481 | 1005 | 105 | 1988 |
| Lamar, Harry E., *et al.* (See Palmer, Alfred E., assignor.) | | | | | | |
| Lamasney, John P., Gardner, Kans. Ear-stripping device for corn-harvesters | 729,610 | June 2 | 157 | 38 | 104 | 1159 |
| Lamb, Al H., Elbon, Pa. Music-leaf turner | 729,944 | June 2 | 768 | 170 | 104 | 1285 |
| Lamb, Aloysius M., Brooklyn, N. Y. Tree-trimmer | 720,706 | Feb. 17 | 2426 | 555 | 102 | 1302 |
| Lamb, Charles M., Monessen, Pa., assignor to Page Woven Wire Fence Company, Adrian, Mich. Wire splice and producing same | 741,347 | Oct. 13 | 1843 | 407 | 106 | 1660 |

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| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Lamb, Charles M., Monessen, Pa., and J. W. Snedeker, assignors to Page Woven Wire Fence Company, Adrian, Mich. Eye-forming machine | 740,444 | Oct. 6 | 116 | 24 | 106 | 1271 |
| Lamb, Edwin, Youngstown, Ohio. Axle-skein | 738,044 | Sept. 1 | 960 | 213 | 106 | 209 |
| Lamb, Frank A. (See Banks, George, assignor.) | | | | | | |
| Lamb, Frank H., Hoquiam, Wash. Tramway-carriage | 719,477 | Feb. 3 | 117 | 27 | 102 | 850 |
| Lamb, Frank H., Hoquiam, Wash. Cableway system | 719,478 | Feb. 3 | 119 | 28 | 102 | 850 |
| Lamb, Frank H., Hoquiam, Wash. Conveyer-carriage | 722,720 | Mar. 17 | 2006 | 447 | 103 | 459 |
| Lamb, Frank H., Hoquiam, Wash. Bridle for cableway systems | 722,721 | Mar. 17 | 2009 | 448 | 103 | 460 |
| Lamb, George B., and D. C. Griggs, Waterbury, Conn. Draw-bench | 736,605 | Aug. 18 | 2941 | 644 / 645 | 105 | 1644 |
| Lamb, George L., Nappanee, Ind., assignor to C. A. Baker, Salem, Ill. Sash-lock | 739,883 | Sept. 29 | 4532 | 1018 | 106 | 1035 |
| Lamb, Henry W., *et al.* (See Braddock, Edward I., assignor.) | | | | | | |
| Lamb, James D. (See Ewald, William E., assignor.) | | | | | | |
| Lamb, John L. (See Highleyman and Lamb.) | | | | | | |
| Lamb Knitting Machine Company. (See Nichols, Frederick M., assignor.) | | | | | | |
| Lamb Mfg. Co. (See Lamb, Wilbert W., assignor.) | | | | | | |
| Lamb, Morris C., Bermondsey, assignor to P. Spence & Sons, Limited, Manchester, England. Tanning | 722,857 | Mar. 17 | 2259 | ------ | 103 | 510 |
| Lamb, Newton, Yreka, Cal. Bolt-cutter | 743,003 | Nov. 3 | 354 | 76 | 107 | 74 |
| Lamb, Restore B., *et al.* (See Storey, Bradford W., assignor.) | | | | | | |
| Lamb & Ritchie. (See Ritchie, David A., assignor.) | | | | | | |
| Lamb, Wilbert W., South Sioux City, Nebr., assignor to Lamb Mfg. Co. Sad-iron | 743,648 | Nov. 10 | 1694 | 357 | 107 | 378 |
| Lamb, William H., assignor to C. H. Allen & Company, Attleboro, Mass. Watch-fob | 736,606 | Aug. 18 | 2946 | 646 | 105 | 1644 |
| Lamb, Wilmer S. (See Müller, John P., assignor.) | | | | | | |
| Lamb Wire Fence Co. (See Hoxie and Truman, assignors.) | | | | | | |
| Lambden, William E., Brooklyn, N. Y. Display-rack | 723,885 | Mar. 31 | 4148 | 935 | 103 | 930 |
| Lambert, Albert L., Bridgeton, N. J. Tube-closure | 730,378 | June 9 | 1553 | 346 | 104 | 1461 |
| Lambert, Asher, Newark, N. J. Convertible engine for derricks and cableways | 724,890 | Apr. 7 | 877 | 201 | 103 | 1357 |
| Lambert, Asher, and J. G. Delaney, Newark, N. J. Fall-rope carrier and operating device therefor | 722,518 | Mar. 10 | 1614 | 356 | 103 | 363 |
| Lambert, Birkley L., Aiken, S. C. Soil-pulverizer | 732,194 | June 30 | 4966 | 1104 / 1105 | 104 | 2222 |
| Lambert, Carl. (See Lieber and Lambert.) | | | | | | |
| Lambert Company. (See Lambert, Thomas B., assignor.) | | | | | | |
| Lambert, Frank, Brooklyn, N. Y. Water-meter | 724,718 | Apr. 7 | 564 | 135 | 103 | 1289 |
| Lambert, Frank, Brooklyn, N. Y. Water-meter | 741,251 | Oct. 13 | 1613 | 364 | 106 | 1611 |
| Lambert, Frank, Brooklyn, N. Y. Water-meter | 741,252 | Oct. 13 | 1614 | 364 | 106 | 1611 |
| Lambert, Frank, Brooklyn, N. Y. Water-meter | 741,253 | Oct. 13 | 1616 | 365 | 106 | 1611 |
| Lambert, Frank, Brooklyn, N. Y. Water-meter | 741,254 | Oct. 13 | 1617 | 365 | 106 | 1611 |
| Lambert, George A., *et al.* (See Dunn, Frank P., assignor.) | | | | | | |
| Lambert, Horace B., Chelsea, assignor to United States Security Mail Box Company, Boston, Mass. Letter-box | 726,821 | Apr. 28 | 4479 | 1011 | 103 | 2150 |
| Lambert, John W., Anderson, assignor to Union Automobile Co., Union City, Ind. Transmission-gear for automobiles | 730,930 | June 16 | 2552 | 568 | 104 | 1694 |
| Lambert, Joseph, Southport, England. Portable dark chamber for photographic purposes | 732,086 | June 30 | 4752 | 1061 | 104 | 2177 |
| Lambert, Julius J., *et al.* (See Loomis, Harry T., assignor.) | | | | | | |
| Lambert, Thomas B., assignor to Lambert Company, Chicago, Ill. Reproducing phonographic records | 742,454 | Oct. 27 | 3998 | 898 | 106 | 2136 |
| Lambert, Thomas B., assignor to Lambert Company, Chicago, Ill. Apparatus for reproducing phonographic records | 742,455 | Oct. 27 | 4000 | 898 | 106 | 2137 |
| Lambert, William C. (See Olson, Angier, and Lambert.) | | | | | | |
| Lambin, Louis, Chicago, Ill. Can-ending machine | 726,799 | Apr. 28 | 4437 | 999 / 1000 | 103 | 2141 |
| Lambion, Frank, New York, N. Y. Necktie shield and fastener | 739,428 | Sept. 22 | 3679 | 817 | 106 | 836 |
| Lamm, Carl R. (See Lindahl, John T., assignor.) | | | | | | |
| Lamme, Benjamin G., Pittsburg, Pa. Puzzle | 728,249 | May 19 | 2684 | 600 | 104 | 610 |
| Lamme, Benjamin G., Pittsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Lighting apparatus for railway-vehicles | 731,466 | June 23 | 3585 | 798 | 104 | 1923 |
| Lamme, Benjamin G., Pittsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Electric-lighting apparatus | 731,467 | June 23 | 3586 | 798 | 104 | 1923 |
| Lamme, Benjamin G., Pittsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Electromotive-force regulator | 740,147 | Sept. 29 | 5013 | 1126 | 106 | 1138 |
| Lammerts, Lambertus A., Rotterdam, Netherlands. Portable electric accumulator | 734,896 | July 28 | 4086 | 952 | 105 | 907 |
| Lamont, Harvey D. (See Penman, Charles E., assignor.) | | | | | | |
| Lamont, Robert P., assignor to Simplex Railway Appliance Company, Chicago, Ill. Fulcrum-block for brake-beams | 743,004 | Nov. 3 | 354 | 76 | 107 | 75 |
| Lamoreux, Forest P. (See Whitney, Charles S., assignor.) | | | | | | |
| Lamplough, Frederick, Willesden, London, England. Reciprocating pump | 718,132 | Jan. 13 | 1141 | 253 / 254 | 102 | 261 |
| Lamplough, Frederick, Willesden, London, England. Steam or other fluid-pressure motor | 722,722 | Mar. 17 | 2010 | 448 | 103 | 461 |
| Lamplough, Frederick, Willesden, London, England. Steering-gear for motor-vehicles | 722,723 | Mar. 17 | 2013 | 449 | 103 | 461 |
| Lamplough, Frederick, Willesden, London, England. Steam-generator | 735,275 | Aug. 4 | 468 | 93, 94 | 105 | 1081 |
| Lamplough, Frederick, London, England. Condenser | 718,851 | Jan. 20 | 2511 | 559 | 102 | 562 |
| Lamplough, Frederick, London, England. Condenser | 720,707 | Feb. 17 | 2429 | 555 | 102 | 1363 |
| Lamplough, Frederick, London, England. Tube-expander | 723,685 | Mar. 24 | 3768 | 846 | 103 | 833 |
| Lampson, Robert D., assignor to himself and M. Michaels, New York, N. Y. Electric advertising device and street-indicator | 733,053 | July 7 | 628 | 153 | 105 | 133 |
| Lampton, Flavius J., Weir City, Kans. Fly-trap | 734,340 | July 21 | 3045 | 717 | 105 | 678 |
| Lamson, Alexander O., Bridgeport, Conn. Self-adjusting car-fender | 748,195 | Dec. 29 | 5380 | 1222 / 1223 | 107 | 2359 |
| Lamson Consolidated Store Service Company. (See Amsden, George A., assignor.) | | | | | | |
| Lamson Consolidated Store Service Company. (See Cowley, James T., assignor.) | | | | | | |
| Lamson Consolidated Store Service Company. (See Cutting, Frederick C., assignor.) | | | | | | |
| Lamson Consolidated Store Service Company. (See Giles, Edwin L., assignor.) | | | | | | |
| Lamson Consolidated Store Service Company. (See Koenig, August, assignor.) | | | | | | |
| Lamson Consolidated Store Service Company. (See McCormick, Charles W., assignor.) | | | | | | |
| Lamson, John D. R. (See Huyck, Francis P., assignor.) | | | | | | |
| Lancaster, Charles P., assignor of one-third to E. A. Minehart, Jonesboro, Ind. Washing-machine | 723,537 | Mar. 24 | 3514 | 786 | 103 | 780 |
| Lancaster, Conrad F., East Liverpool, Ohio. Ore-separator | 738,331 | Sept. 8 | 1598 | 347 | 106 | 360 |
| Lancaster, Conrad F., East Liverpool, Ohio. Illuminated sign | 738,332 | Sept. 8 | 1599 | 347 | 106 | 360 |
| Lancaster, Conrad F., East Liverpool, Ohio. Contact-maker for electrical signs | 738,333 | Sept. 8 | 1600 | 347 | 106 | 360 |
| Lancaster, Conrad F., East Liverpool, Ohio. Hair-singer | 743,893 | Nov. 10 | 2140 | 460 | 107 | 471 |
| Lancaster, Littleton, *et al.* (See Beard and Stephens, assignors.) | | | | | | |
| Lanchester, Frederick W., Birmingham, England. Fluid-pressure engine | 721,899 | Mar. 3 | 445 | 98 | 103 | 98 |

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| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Lanchester, Frederick W., Birmingham, England. Motor-propelled vehicle | 722,116 | Mar. 3 | 843 | 188 | 103 | 181 |
| Land, Gordon, Denver, Colo., assignor to O. H. P. Baxter and W. F. Oakes. Centrifugal ore-separator | 726,948 | May 5 | 219 | 51 | 104 | 48 |
| Landau, Adolph, New York, N. Y. Combined suspenders and belt | 726,441 | Apr. 28 | 3727 | 845 | 103 | 2000 |
| Landauer, Isidor, *et al.* (See Hauslehner, Leopold, assignor.) | | | | | | |
| Landauer, Isidor N., assignor of one-half to A. A. Stolle, New York, N. Y. Display-counter | 717,870 | Jan. 6 | 678 | 151 | 102 | 144 |
| Landauer, Isidor N., assignor of one-half to A. A. Stolle, New York, N. Y. Display-counter | 720,036 | Feb. 10 | 1154 | 264 | 102 | 1084 |
| Lander, Angus M., Pelzer, S. C. Bale-tie | 718,133 | Jan. 13 | 1144 | 254 | 102 | 261 |
| Lander, Leonard E., Warren, N. H. Cell for electrolytic bleaching plant | 724,191 | Mar. 31 | 4772 | 1070 | 103 | 1056 |
| Landers, Frary, and Clark. (See Munson, Samuel R., assignor.) | | | | | | |
| Landers, George B., assignor of one-fourth to T. Spellacy, Bakersfield, Cal. Hydrocarbon-supply tank | 731,918 | June 23 | 4410 | 983 | 104 | 2094 |
| Landers, George M., *et al.* (See Garrigus and Warner, assignors.) | | | | | | |
| Landers, George M., *et al.* (See Munson, Samuel R., assignor.) | | | | | | |
| Landers, George M., Terre Haute, Ind. Butchering-scaffold | 737,851 | Sept. 1 | 568 | 125 | 106 | 126 |
| Landers, Morgan H. (See Daggett, John, assignor.) | | | | | | |
| Landers, William H. (See Herrick and Landers.) | | | | | | |
| Landers, Willis M., Lawn, Tex. Animal-yoke | 727,976 | May 12 | 2183 | 486, 487 | 104 | 483 |
| Landing, Lars M., Glenwood, Minn. Interest-computer | 733,054 | July 7 | 631 | 153, 154 | 105 | 134 |
| Landis, Abraham B., Waynesboro, Pa. Grinding-machine | 724,891 | Apr. 7 | 879 | 201, 202 | 103 | 1357 |
| Landis, Abraham B., Waynesboro, Pa. Automatic grinding-machine | 734,897 | July 28 | 4087 | 952, 953 | 105 | 908 |
| Landis, Hiram B., Trail, Canada. Can-opener | 743,735 | Nov. 10 | 1842 | 388 | 107 | 410 |
| Landis, Israel L., Chicago, Ill. Brush-holder | 723,165 | Mar. 17 | 2797 | 630 | 103 | 622 |
| Landis, Israel L., Chicago, Ill. Curbing-plate fastener | 738,334 | Sept. 8 | 1600 | 348 | 106 | 360 |
| Landis Machine Company. (See Fleming, Robert S., assignor.) | | | | | | |
| Landis Machine Company. (See Whipple, Joel N., assignor.) | | | | | | |
| Landis, Samuel E., Cumberland, Md. Monkey-wrench | 746,712 | Dec. 15 | 2546 | 585 | 107 | 1689 |
| Landman, Herman, Kansas City, Mo. Collar-button | 721,203 | Feb. 24 | 3397 | 771 | 102 | 1588 |
| Landon, Charles A., Vanburen, Ohio. Sarcophagus | 740,766 | Oct. 6 | 726 | 164 | 106 | 1400 |
| Landrum, Tom J. (See Tubbs, Nelson J., assignor.) | | | | | | |
| Landrum, Tom J., L. J. Bamberger, Louisville, Ky., and D. C. Wright, New Albany, Ind. Stop mechanism for machinery | 725,571 | Apr. 14 | 2131 | 482 | 103 | 1637 |
| Landry, John B., Franklin, Mass. Shade-bracket | 744,366 | Nov. 17 | 3087 | 662 | 107 | 689 |
| Landry, Telesma X., Labadieville, La. Stubble-shaver | 719,236 | Jan. 27 | 3262 | 729 | 102 | 734 |
| Landsberger, Julius A. (See Goltstein, Ewald, assignor.) | | | | | | |
| Landsberger, Julius A., Alameda, Cal. Closure for receptacles | 731,793 | June 23 | 4185 | 933 | 104 | 2044 |
| Landt, William C., New York, N. Y. Window-blind hinge | 721,204 | Feb. 24 | 3398 | 772 | 102 | 1588 |
| Lane, Almeron M., Meriden, Conn. Balance-escapement | 748,290 | Dec. 29 | 5545 | 1265 | 107 | 2396 |
| Lane and Brother, W. T. (See Lane, John I., assignor.) | | | | | | |
| Lane, Charles C., Los Angeles, Cal. Stamp-mill | 727,809 | May 12 | 1875 | 417 | 104 | 417 |
| Lane, Charles H., Cleveland, Ohio. Air-separator | 728,473 | May 19 | 3123 | 691 | 104 | 703 |
| Lane, Charles H., Cleveland, Ohio. Air-separator | 728,474 | May 19 | 3125 | 691 | 104 | 703 |
| Lane, Charles H., Cleveland, Ohio. Air-separator | 728,475 | May 19 | 3127 | 692 | 104 | 704 |
| Lane, Charles R., Fort Wayne, Ind. Tooth-brush appliance | 736,607 | Aug. 18 | 2947 | 646 | 105 | 1645 |
| Lane, Edwin J., South Hackney, London, England. Ironing-machine | 722,858 | Mar. 17 | 2260 | 506 | 103 | 510 |
| Lane, Francis L., and W. Rainforth, Leeds, England. Hydraulic controlling apparatus for hydraulic machinery | 730,273 | June 9 | 1368 | 301 | 104 | 1421 |
| Lane, Frederic A., assignor to D. H. Burrell & Company, Littlefalls, N. Y. Toy savings-bank | 734,268 | July 21 | 2905 | 680 | 105 | 650 |
| Lane, Frederick. (See Box, Alfred, assignor.) | | | | | | |
| Lane, George. (See Lane, William J. and G.) | | | | | | |
| Lane, George M., Brooklyn, N. Y., assignor to Interstate Electric and Manufacturing Company. Electric-arc lamp | 741,255 | Oct. 13 | 1620 | 366 | 106 | 1612 |
| Lane, John I., assignor to W. T. Lane and Brother, Port Chester, N. Y. Basket | 722,408 | Mar. 10 | 1397 | 308 | 103 | 313 |
| Lane, John R., New York, N. Y. Vaginal syringe | 735,276 | Aug. 4 | 470 | 94 | 105 | 1081 |
| Lane, Joseph. (See Sheriff, James E., assignor.) | | | | | | |
| Lane, Lawrence R., Oakmont, Pa. Work-box | 740,288 | Sept. 29 | 5276 | 1188 | 106 | 1192 |
| Lane, Louis, assignor to American Arch and Culvert Company, Toledo, Ohio. Conduit or culvert | 735,533 | Aug. 4 | 965 | 204 | 105 | 1186 |
| Lane, Oscar A., assignor of one-half to C. B. Pennock, Adrian, Mich. Cooking utensil | 741,348 | Oct. 13 | 1845 | 407 | 106 | 1661 |
| Lane, Robert C. (See Ellis, Charles Z., assignor.) | | | | | | |
| Lane, Thomas F. (See Ayer, Albert E., assignor.) | | | | | | |
| Lane, Wilber A. (See Hugunin and Lane.) | | | | | | |
| Lane, Wilber A., North Haven, Conn. Metal casing for tugs | 729,611 | June 2 | 161 | 38 | 104 | 1160 |
| Lane, William J. and G., Poughkeepsie, N. Y. Hydrocarbon-burner | 717,753 | Jan. 6 | 433 | 101 | 102 | 94 |
| Lane, William J. and G., Poughkeepsie, N. Y. Hydrocarbon-burner and attachment | 717,754 | Jan. 6 | 435 | 101 | 102 | 95 |
| Lane, William J. and G., Poughkeepsie, N. Y. Heating feed-water for motor-vehicles | 732,309 | Mar. 10 | 1222 | 272 | 103 | 276 |
| Lanerd, Henry P., Chicago, Ill. Broom-holder | 721,811 | Mar. 3 | 280 | 62 | 103 | 62 |
| Laney, Thomas, Philadelphia, Pa. Device for preventing horses kicking the stalls of stables | 720,937 | Feb. 17 | 2820 | 647 | 102 | 1447 |
| Lang, Arthur, New York, N. Y. Tuning mechanism for stringed instruments | 726,706 | Apr. 28 | 4264 | 964 | 103 | 2106 |
| Lang, Henry H., assignor to J. D. Lang, Erie, Pa. Ironing-board | 727,810 | May 12 | 1876 | 418 | 104 | 417 |
| Lang, Herbert, Oakland, Cal. Hot-blast stove | 741,680 | Oct. 20 | 2474 | 553 | 106 | 1808 |
| Lang, James S., Boston, Mass. Incandescent igniter for gas-engines | 727,158 | May 5 | 645 | 138 | 104 | 139 |
| Lang, Jennie D. (See Lang, Henry H., assignor.) | | | | | | |
| Lang, Johan G. V., assignor of one-half to E. H. Johnson, London, England. Brake apparatus for electric railway or tramway vehicles | 736,608 | Aug. 18 | 2948 | 646 | 105 | 1645 |
| Lang, John, M. Blake, and R. H. Smart, Greenock, Scotland; said Lang assignor to said Blake and Smart. Vacuum-pan | 722,519 | Mar. 10 | 1616 | 357 | 103 | 363 |
| Lang, Robert, Johnstone, Scotland. Variable-speed mechanism | 741,510 | Oct. 13 | 2145 | 477 | 106 | 1724 |
| Lang, William H., assignor to Suffolk Nailing Machine Company of Portland, Maine, Burlington, Vt. Nail making and driving machine | 745,867 | Dec. 1 | 1024 | 230, 231, 232, 233 | 107 | 1318 |
| Lang, William M. F. (See Arft, Charles H., assignor.) | | | | | | |
| Langan, David H., Gaines, Pa. Cant-hook | 725,347 | Apr. 14 | 1721 | 387 | 103 | 1549 |
| Langan, William B., Hawley, Pa. Bottle-stopper | 727,388 | May 5 | 1050 | 228 | 104 | 226 |
| Langbein, Wilhelm, Döttendorf, near Bonn, Germany. Machine for the manufacture of bottle-capsules | 726,800 | Apr. 28 | 4439 | 1001, 1002 | 103 | 2142 |
| Langdon, Charles N., Peoria, Ill. Adjustable mirror-support | 736,609 | Aug. 18 | 2951 | 646 | 105 | 1645 |
| Langdon-Davies, Walter, and A. Soames, County of Surrey, England. Internal-combustion engine | 718,481 | Jan. 13 | 1793 | 399 | 102 | 397 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Langdon-Davies, Walter, and A. Soames, Surrey, England. Polyphase alternating-current induction-motor | 735,118 | Aug. 4 | 135 | 30 | 105 | 1011 |
| Langdon, Pierpont T., Audubon, Minn. Car-axle lubricator | 742,041 | Oct. 20 | 3200 | 715 | 106 | 1959 |
| Langdon, Samuel P., Philadelphia, Pa. Catamenial bandage | 727,159 | May 5 | 646 | 139 | 104 | 140 |
| Lange, Emil. (See Busenbenz and Lange.) | | | | | | |
| Lange, Gustav, New York, N. Y. Shade-cord holder | 742,682 | Oct. 27 | 4418 | 997 | 106 | 2226 |
| Lange, Henry, St. Louis, Mo. Window-screen | 729,498 | May 26 | 4953 | 1098 | 104 | 1099 |
| Lange, Henry F. (See Wroe, James P., assignor.) | | | | | | |
| Lange, Hjalmar, Vesterås, Sweden. Soldering of aluminium | 733,662 | July 14 | 1719 | | 105 | 379 |
| Lange, Jans J. M., Svendborg, Denmark. Fire-box for fireplaces | 735,532 | Aug. 4 | 963 | 203, 204 | 105 | 1186 |
| Lange, Jürgen P., Passaic, N. J. Propelling device for vehicles | 742,683 | Oct. 27 | 4419 | 998 | 106 | 2227 |
| Lange, Richard, Glashütte, Germany. Watch-regulator | 736,117 | Aug. 11 | 2051 | 437 | 105 | 1437 |
| Langellier, Moses, Ransom, Kans. Riding-harrow | 740,875 | Oct. 6 | 908 | 204 | 106 | 1440 |
| Langen, Adolf, Cologne, Germany. Gas-generator | 726,949 | May 5 | 220 | 52 | 104 | 48 |
| Langenbach, Edward A. (See Slentz, Albertus O., assignor.) | | | | | | |
| Langer, Esther, Brooklyn, N. Y. Protective hood | 728,476 | May 19 | 3129 | 692 | 104 | 704 |
| Langer, Gotthold, Monongahela, assignor to E. C. Mathews, Donora, Pa. Machine for making wire fabric | 736,118 | Aug. 11 | 2052 | 437, 438, 439 | 105 | 1438 |
| Langerfeld, Arthur, Scranton, Pa. Separator | 719,343 | Jan. 27 | 3465 | 772, 773 | 102 | 778 |
| Langerfeld, Arthur, Scranton, Pa. Sprocket-wheel | 740,445 | Oct. 6 | 118 | 24 | 106 | 1271 |
| Langewische, Henry F., St. Louis, Mo. Building-roof | 730,030 | June 2 | 935 | 209 | 104 | 1318 |
| Langford, Jeremiah E., Salt Lake City, Utah. Furnace | 736,746 | Aug. 18 | 3204 | 708 | 105 | 1698 |
| Langford, John T., Newton, Mass. Cement-lined pipe | 724,892 | Apr. 7 | 882 | 203 | 103 | 1358 |
| Langford, Samuel S., Craig, Nebr. Mail-box | 728,401 | May 19 | 2984 | 657 | 104 | 673 |
| Langford, Samuel S., Craig, Nebr. Shaft attachment for vehicles | 738,207 | Sept. 8 | 1325 | 287 | 106 | 303 |
| Langham, Herbert W., Barton, Md. Broom-binder | 741,211 | Nov. 17 | 2813 | 601 | 107 | 630 |
| Langham, Mary E., assignor to A. Allen, Baldwinsville, N. Y. Lady's vest | 738,045 | Sept. 1 | 961 | 214 | 106 | 209 |
| Langill, John E., New York, N. Y. Marking device | 748,383 | Dec. 29 | 5695 | 1300 | 107 | 2429 |
| Langill, John T., New York, N. Y. Fountain-brush | 745,503 | Dec. 1 | 363 | 84 | 107 | 1177 |
| Langridge, Charles W., Pueblo, Colo. Track-sanding device for tram-cars | 741,048 | Oct. 13 | 1216 | 275, 276 | 106 | 1526 |
| Langstaff, Lewis G., Brooklyn, N. Y. Vessel for dispensing liquids | 736,545 | Apr. 28 | 3953 | 893 | 103 | 2042 |
| Langston, Richard H., Ebenezer, S. C. Fertilizer-distributer | 746,713 | Dec. 15 | 2547 | 585 | 107 | 1689 |
| Langton, James, Hamilton, Canada. Tailor's pressing-machine | 729,191 | May 26 | 4435 | 978 | 104 | 990 |
| Langton, James H. (See Bellairs and Langton.) | | | | | | |
| Languages Printing Company. (See Smith, Samuel, assignor.) | | | | | | |
| Lanham, Benjamin F., assignor of one-half to L. McKinniss, Decatur, Ill. Lifting device | 728,941 | May 26 | 3989 | 888 | 104 | 897 |
| Lanham, Calbreith B., Pittsburg, Pa. Tester for blast-cavities | 745,357 | Dec. 1 | 77 | 19 | 107 | 1118 |
| Lanier, Thomas W., Guyton, Ga. Sugar-boiler | 741,148 | Oct. 13 | 1406 | 322 | 106 | 1566 |
| Lanier, Timuel B., assignor of one-half to W. Goolden, Chicago, Ill. Hot-water heater | 743,649 | Nov. 10 | 1697 | 357, 358 | 107 | 378 |
| Laning, Jay F., Norwalk, Ohio. Manifold sales-book | 722,593 | Mar. 10 | 1740 | 387 | 103 | 389 |
| Lannert, J. A., *et al.* (See Frink and Lee, assignors.) | | | | | | |
| Lannert, John A. (See Dun Lany and Lannert.) | | | | | | |
| Lanphear, Hiram L., Chicago, Ill., assignor to Fisher Book Typewriter Company, Cleveland, Ohio. Copy-holder for type-writing machines | 722,365 | Mar. 10 | 1317 | 292 | 103 | 296 |
| Lanphear, Lewis C., assignor to M. E. Carr, Boston, Mass. Exhaust-ventilator for cars | 743,005 | Nov. 3 | 355 | 77 | 107 | 75 |
| Lanpher, Earl R., Carthage, Mo. Rubber-tire-setting machine | 745,358 | Dec. 1 | 78 | 19 | 107 | 1118 |
| Lanpher, Earl R., Carthage, Mo. Apparatus for applying rubber tires to vehicles | 745,631 | Dec. 1 | 579 | 135 | 107 | 1221 |
| Lanphier, Robert C. (See Gutmann and Lanphier.) | | | | | | |
| Lanston Monotype Machine Company. (See Bancroft, John S., assignor.) | | | | | | |
| Lanston Monotype Machine Company. (See Dove, John M., assignor.) | | | | | | |
| Lanston Monotype Machine Company. (See Lightbown, William L., assignor.) | | | | | | |
| Lanston Monotype Machine Company. (See Pierpont, Frank H., assignor.) | | | | | | |
| Lanston, Talbert, Washington, D. C. Horseshoe | 734,269 | July 21 | 2908 | 680 | 105 | 650 |
| Lantz, Charles H. (See Browning, Eli, assignor.) | | | | | | |
| Lantz, L. R. (See Finney, Charles L., assignor.) | | | | | | |
| Lanum, Andrew S., Conneaut, Ohio. Rail-joint | 744,212 | Nov. 17 | 2815 | 601 | 107 | 630 |
| Lanyon, Robert H. (See Brambach, Aloys, assignor.) | | | | | | |
| Lanz, John, Pittsburg, Pa. Metal column | 747,441 | Dec. 22 | 3929 | 884 | 107 | 2016 |
| Lanz, William, Chicago, Ill. Shoe | 729,361 | May 26 | 4732 | 1046 | 104 | 1052 |
| Lanzendoerfer, George, Boston, Mass. Digester-lining | 744,769 | Nov. 24 | 3815 | 823 | 107 | 861 |
| Lapacz, Wladys, Philadelphia, Pa. Bow-facing oar | 745,504 | Dec. 1 | 363 | 84 | 107 | 1177 |
| Lapham, Valentine, Chicago, Ill. Sprinkler-head | 734,184 | July 21 | 2745 | 644 | 105 | 613 |
| Lapinski, Adam, Chicago, Ill. Sad-iron support | 740,876 | Oct. 6 | 909 | 204 | 106 | 1440 |
| Lapointe, Joseph, St. Sauveur de Quebec, Canada. Guide for shoe-sewing machines | 725,096 | Apr. 14 | 1265 | 286 | 103 | 1453 |
| Lapp, Peter, Brooklyn, N. Y. Return-ball attachment for pool-tables | 720,446 | Feb. 10 | 1902 | 434 | 102 | 1242 |
| Lapp, Valentin, Lindenau, near Leipsic, Germany. Preparing malt for mashing | 719,479 | Feb. 3 | 121 | 28 | 102 | 851 |
| Lapp, Valentin, Lindenau, Germany. Accelerating the production of wort | 719,480 | Feb. 3 | 123 | 28 | 102 | 851 |
| Lapp, Valentin, Lindenau, near Leipzig, Germany. Apparatus for preparing bruised or ground malt for mashing | 722,310 | Mar. 10 | 1223 | 272 | 103 | 277 |
| Lapp, Valentin, Lindenau, near Leipzig, Germany. Apparatus for transporting filter-ing-plates, &c. | 734,898 | July 28 | 4090 | 953 | 105 | 908 |
| Lapp, Valentin, Lindenau, near Leipzig, Germany. Producing wort | 734,899 | July 28 | 4092 | 954 | 105 | 909 |
| Lapp, Valentin, Lindenau, near Leipzig, Germany. Closed surface cooler connected with a sediment-removing device | 738,820 | Sept. 15 | 2565 | 564 | 106 | 581 |
| Lapp, Valentin, Leipzig, Germany. Apparatus for decomposing brewers' mash | 732,195 | June 30 | 4967 | 1105, 1106 | 104 | 2223 |
| Lapp, Valentin, Leipzig, Germany. Combined clearer and lifter for grain-steepers | 733,055 | July 7 | 633 | 154 | 105 | 134 |
| Lapp, Valentin, Leipzig, Germany. Filtering-press | 733,663 | July 14 | 1720 | 407 | 105 | 379 |
| Lapp, Valentin, Leipzig, Germany. Bottle-washing machine | 736,272 | Aug. 11 | 2310 | 500, 501 | 105 | 1494 |
| Laprade, Léon G., San Jose, Costa Rica. Drying-machine | 739,688 | Sept. 22 | 4142 | 925 | 106 | 935 |
| Larchar, Arthur B., Oldtown, Me., assignor to Penobscot Chemical Fibre Company. Electrolytic decomposition of saline solutions | 736,982 | Aug. 25 | 3664 | 812, 813 | 105 | 1814 |
| Lard, Allan E., St. Joseph, Mo. Single-trigger firearm | 747,191 | Dec. 15 | 3454 | 783, 784 | 107 | 1895 |
| Larimer, Joseph H. (See Whittington, George W., assignor.) | | | | | | |
| Larimore, John W., Modesto, assignor to Larimore Rotary Engine Company, Pekin, Ill. Rotary engine | 741,149 | Oct. 13 | 1407 | 322, 323 | 106 | 1566 |
| Larimore Rotary Engine Company. (See Larimore, John W., assignor.) | | | | | | |
| Larison, George W., Lincoln, Ill. Combined roller and harrow | 746,528 | Dec. 8 | 2203 | 505, 506 | 107 | 1590 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|
| | | | Spec. | Drg. | Vol. | Page. |
| Larkin, Arthur G., New York, N. Y. Trousers | 723,614 | Mar. 24 | 3648 | 816 | 103 | 807 |
| Larkin, Bernard H., Maywood, Ill., assignor to American Can Company, Jersey City, N. J. Manufacture of key-opening tongued-tearing-strip can-bodies | 735,783 | Aug. 11 | 1419 | 304 | 105 | 1301 |
| Larkin, John D. (See Smith, William R., assignor.) | | | | | | |
| Larkin, Walter, Hiawatha, Kans. Rail-joint | 747,076 | Dec. 15 | 3257 | 741 | 107 | 1851 |
| Larmon, William E., Alvaton, Ky. Grain scourer and separator | 733,978 | July 21 | 2335 | 548 | 105 | 524 |
| Larmon, William E., Alvaton, Ky. Grain hulling and scouring machine | 747,556 | Dec. 22 | 4134 | 927, 928 | 107 | 2063 |
| Larom, George U. (See Long and Larom.) | | | | | | |
| Larr, Ira H., Sullivan, Ind. Barge steering and retarding mechanismr | 731,110 | June 16 | 2900 | 644 | 104 | 1765 |
| Larr, Ira H., Sullivan, Ind. Boat-coupling | 739,091 | Sept. 15 | 3036 | 672 | 106 | 682 |
| Larrabee, Clinton E., Binghamton, N. Y. Workman's time-recorder | 726,546 | Apr. 28 | 3954 | 893, 894 | 103 | 2043 |
| Larrabee, William H., Worcester, Mass. Rotary meter | 746,634 | Dec. 8 | 2403 | 550 | 107 | 1637 |
| Larrimore, Louise, Los Angeles, Cal. Bib and head-rest for shampooing | 748,081 | Dec. 29 | 5170 | 1169 | 107 | 2315 |
| Larsen, Andru, Chicago, Ill. Horseshoe-pad | 740,148 | Sept. 29 | 5014 | 1127 | 106 | 1139 |
| Larsen, Andrü, Chicago, Ill. Horseshoe-pad | 740,665 | Oct. 6 | 524 | 115 | 106 | 1359 |
| Larsen, Bertinius. (See Forwerg and Larsen.) | | | | | | |
| Larsen, Lars P., Horsens, Denmark. Regenerative apparatus for the simultaneous warming and cooling of milk | 722,366 | Mar. 10 | 1322 | 293 | 103 | 297 |
| Larsen, Nils, assignor to Widness Manufacturing Company, Parkridge, N. J. Wrench | 720,530 | Feb. 10 | 2056 | 474 | 102 | 1273 |
| Larson, Alex, *et al.* (See Swanburg, Arthur W., assignor.) | | | | | | |
| Larson, Carl A., West Superior, Wis. Foldable grate | 718,714 | Jan. 20 | 2276 | 500 | 102 | 515 |
| Larson, Carl W., Schenectady, N. Y., assignor to General Electric Company. Removable brake-shoe | 745,359 | Dec. 1 | 80 | 20 | 107 | 1118 |
| Larson, Eric B., Dallas, Tex. Cotton huller, cleaner, and gin-feeder | 732,869 | July 7 | 306 | 77 | 105 | 68 |
| Larson, Erick. (See Gabrielson, William, assignor.) | | | | | | |
| Larson, John, Chicago, Ill. Miter-box | 731,794 | June 23 | 4187 | 933, 934 | 104 | 2044 |
| Larson, John, Chicago, Ill. Miter-box | 731,919 | June 23 | 4411 | 983 | 104 | 2094 |
| Larson, John A., Brooklyn, N. Y. Curtain-pole bracket | 726,950 | May 5 | 221 | 52 | 104 | 48 |
| Larson, John L., Butte, Mont. Dresser | 724,300 | Mar. 31 | 4997 | 1118 | 103 | 1102 |
| Larson, John L., Butte, Mont. Dresser | 728,586 | May 19 | 3353 | 742 | 104 | 750 |
| Larson, John L., Jamestown, N. Y. Plant-cover | 728,250 | May 19 | 2687 | 601 | 104 | 611 |
| Larson, Ole H., Fort Dodge, Iowa. Washing-machine | 728,587 | May 19 | 3354 | 743 | 104 | 751 |
| Larson, Peter L., Des Moines, Iowa. Counterbalancing stair | 722,859 | Mar. 17 | 2262 | 507 | 103 | 511 |
| Larsson, Hans E. (See Green and Larsson.) | | | | | | |
| Larter, Frederick H., assignor of two-thirds to H. C. and H. M. Larter, Newark, N. J. Button | 728,172 | May 12 | 2537 | 564 | 104 | 557 |
| Larter, Halsey M., *et al.* (See Larter, Frederick H., assignor.) | | | | | | |
| Larter, Harry C., *et al.* (See Larter, Frederick H., assignor.) | | | | | | |
| Lasar, Walter, St. Louis, Mo. Automatic electric switch | 719,122 | Jan. 27 | 3069 | 682 | 102 | 694 |
| Lasar, Walter, St. Louis, Mo. Safety appliance for elevators | 744,568 | Nov. 17 | 3439 | 740 | 107 | 764 |
| Lasche, Oskar, Charlottenburg, Germany. Vehicle with electromotive power | 718,639 | Jan. 20 | 2128 | 464, 465 | 102 | 486 |
| Lash, Horace W., Cleveland, Ohio. Ingot-casting apparatus | 730,274 | June 9 | 1370 | 301, 302 | 104 | 1422 |
| Lasher, Elmer J., assignor of one-third to P. M. Vandenburgh, Johnstown, N. Y. Car-door | 746,109 | Dec. 8 | 1458 | 327, 328 | 107 | 1430 |
| Lasher, Elmer J., assignor of one-half to P. M. Vandenburg, Johnstown, N. Y. Nozzle-directing device | 746,110 | Dec. 8 | 1461 | 328 | 107 | 1431 |
| Lasher, Frank, Bennington, Vt. Circular-rib-knitting machine | 729,074 | May 26 | 4228 | 934, 935 | 104 | 946 |
| Lasher, Frank, Bennington, Vt. Needle-actuating device for knitting-machines | 729,075 | May 26 | 4232 | 935 | 104 | 947 |
| Lasher, George F., assignor of one-half to I. B. Holzman, Portland, Oreg. Marine-engine governor | 732,567 | June 30 | 5699 | 1266 | 104 | 2376 |
| Lasiter, Charles W., Sunbury, N. C. Peanut-stemmer | 746,714 | Dec. 15 | 2549 | 585 | 107 | 1689 |
| Laska, August L., assignor to K. Oehler, Anilin & Anilinfarben Fabrik, Offenbach-on-the-Main, Germany. Violet azo dye and making same | 724,893 | Apr. 7 | 882 | ..... | 103 | 1359 |
| Laska, August L., assignor to K. Oehler, Anilin- & Anilinfarben- Fabrik, Offenbach-on-the-Main, Germany. Red to violet dyestuff and making same | 724,894 | Apr. 7 | 883 | ..... | 103 | 1359 |
| Laska, August L., assignor to K. Oehler Anilin & Anilinfarben Fabrik, Offenbach-on-the-Main, Germany. Blue disazo dye | 728,477 | May 19 | 3129 | ..... | 104 | 704 |
| Laska, August L., assignor to K. Oehler, Anilin- & Anilinfarben Fabrik, Offenbach-on-the-Main, Germany. Olive-green sulfur dye and making same | 729,874 | June 2 | 656 | ..... | 104 | 1262 |
| Laska, August L., assignor to Firm of K. Oehler, Anilin & Anilin Farbenfabrik, Offenbach-on-the-Main, Germany. Mordant disazo dye and making same | 740,767 | Oct. 6 | 727 | ..... | 106 | 1401 |
| Laska, August L., assignor to Firm of K. Oehler, Anilin & Anilin Farbenfabrik, Offenbach-on-the-Main, Germany. Black mordant dye and making same | 740,768 | Oct. 6 | 728 | ..... | 106 | 1401 |
| Laskey, Philip B., Marblehead, Mass. Dental clamp | 734,072 | July 21 | 2533 | 591 | 105 | 570 |
| Laskowski, Peter E., Los Angeles, Cal. Baking-oven | 718,260 | Jan. 13 | 1368 | 304 | 102 | 310 |
| Lasley, Theodore, *et al.* (See Willard, James A., assignor.) | | | | | | |
| Lasley, William M., *et al.* (See Willard, James A., assignor.) | | | | | | |
| Lassén, Caroline, New York, N. Y. Collar-fastening clasp | 740,289 | Sept. 29 | 5277 | 1189 | 106 | 1192 |
| Lassen, Peter, Wetmore, Tex. Plow | 729,612 | June 2 | 162 | 39 | 104 | 1160 |
| Lassen, Peter J., New York, N. Y. Noiseless crossing | 746,529 | Dec. 8 | 2206 | 506 | 107 | 1591 |
| Lasserre, Augusto, Buenos Aires, Argentina. Life-boat | 736,747 | Aug. 18 | 3207 | 709 | 105 | 1698 |
| Lasso, John U., assignor to Perfection Fixture Co., Flint, Mich. Show-case | 724,410 | Mar. 31 | 5227 | 1171 | 103 | 1151 |
| Lasso, John U., assignor to Perfection Fixture Co., Flint, Mich. Display-cabinet | 742,878 | Nov. 3 | 103 | 24 | 107 | 23 |
| Lässoe, Valdemar F. (See Lovekin and Lässoe.) | | | | | | |
| Lässoe, Valdemar F., New York, N. Y., and L. D. Lovekin, Ardmore, Pa. Oil-burner | 721,900 | Mar. 3 | 448 | 99 | 103 | 99 |
| Lasswell, William H., assignor of one-half to C. E. Mays and H. Wiggins, San Angelo, Tex. Wheel | 724,895 | Apr. 7 | 884 | 203 | 103 | 1359 |
| Laster, Harry W., Chicago, Ill., assignor to Barber Asphalt Paving Company, Washington, D. C., and New York, N. Y. Apparatus for constructing asphalt pavements | 727,160 | May 5 | 647 | 139 | 104 | 140 |
| Laswell, Thomas M., Harris, Mo. Portable folding shed | 730,275 | June 9 | 1371 | 302 | 104 | 1422 |
| Latchford, William J., Vanwert, Ohio, assignor of two-thirds to Royal Packing Company, Chicago, Ill. Machine for preparing fruit for canning | 746,530 | Dec. 8 | 2207 | 506, 507 | 107 | 1591 |
| Latchford, William J., Vanwert, Ohio, assignor of two-thirds to Royal Packing Company, Chicago, Ill. Machine for preparing fruit for canning | 746,531 | Dec. 8 | 2211 | 507 | 107 | 1592 |
| Latham, James R., assignor of one-half to R. Milbank, New York, N. Y. Non-refillable bottle | 727,643 | May 12 | 1538 | 346, 347 | 104 | 349 |
| Lathrop, Frank K., assignor to Ohio Rake Company, Dayton, Ohio. Seeding-machine | 718,640 | Jan. 20 | 2130 | 465 | 102 | 486 |
| Lathwesen, Louis J. (See McGehee and Lathwesen.) | | | | | | |
| Latille, Jules, Levallois-Perret, France. Change-speed gear | 729,875 | June 2 | 657 | 145 | 104 | 1262 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Des. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Latimer, A. O. (See Holets, Joseph, assignor.) | | | | | | |
| Latimer, John M., Philadelphia, Pa., assignor to United Pneumatic Fire Alarm Telegraph Company, New York, N. Y. Thermostat | 721,451 | Feb. 24 | 3828 | 870 | 102 | 1678 |
| Latimer, John W., Chicago, Ill. Bunching attachment for mowers | 723,166 | Mar. 17 | 2798 | 630, 631 | 103 | 622 |
| Latimer, John W., Chicago, Ill. Cutting device for mowing-machines | 723,397 | Mar. 24 | 3258 | 730 | 103 | 728 |
| Latimer, John W., assignor to Deering Harvester Company, Chicago, Ill. Mowing-machine | 720,262 | Feb. 10 | 1576 | 359 | 102 | 1173 |
| Latimer, John W., assignor to Deering Harvester Company, Chicago, Ill. Knife-grinder | 741,681 | Oct. 20 | 2477 | 554 | 106 | 1809 |
| Latimer, John W., Chicago, Ill., assignor to International Harvester Company. Mowing-machine | 727,644 | May 12 | 1539 | 347, 348 | 104 | 349 |
| Latrobe Steel & Coupler Company. (See Warner, Edward O., assignor.) | | | | | | |
| Latshaw, Charles E., Lincoln, Nebr. Display-case | 725,572 | Apr. 14 | 2133 | 482, 483 | 103 | 1637 |
| Latshaw, Charles E., Lincoln, Nebr. Interchangeable and adjustable display-bracket for show-cases, windows, &c. | 747,442 | Dec. 22 | 3930 | 884 | 107 | 2016 |
| Latta, Charles, St. Louis, Mo. Extension step-ladder and trestle | 737,636 | Sept. 1 | 142 | 31 | 106 | 34 |
| Latta, Emmit G., Friendship, N. Y. Velocipede-frame | 736,527 | Aug. 18 | 2782 | 609 | 105 | 1612 |
| Latta, Emmit G., Friendship, N. Y. Velocipede-bearing | 748,291 | Dec. 29 | 5547 | 1265 | 107 | 2396 |
| Latta, George S., Berea, N. C. Plow | 745,203 | Nov. 24 | 4667 | 1016 | 107 | 1038 |
| Latta, Paul, Dresden, Germany. Apparatus for developing, fixing, and toning kinematographic or other photographic films | 720,703 | Feb. 17 | 2430 | 555, 556 | 102 | 1363 |
| Latta, Paul, Berlin, Germany. Photocopying-machine | 728,730 | May 19 | 3605 | 800 | 104 | 804 |
| Lattard, Nestor, and A. C. Schott, New York, N. Y. Drink-shaker | 740,446 | Oct. 6 | 120 | 25 | 106 | 1272 |
| Lattemann, John J., New York, N. Y. Ankle-supporting corset-shoe | 721,574 | Feb. 24 | 4069 | 923 | 102 | 1732 |
| Lattig, Jacob W. (See Goodrum and Lattig.) | | | | | | |
| Lattig, Jacob W., and C. L. Goodrum, Philadelphia, Pa. Telephone system | 722,367 | Mar. 10 | 1323 | 293 | 103 | 298 |
| Lattig, Jacob W., West Bethlehem, and C. L. Goodrum, assignors to Eastern Telephone Manufacturing Company, Westchester, Pa. Telephone system. (Reissue) | 12,156 | Sept. 8 | 2413 | 529 | 106 | 531 |
| Lattimer, George E., Buffalo, N. Y. Bridle-check | 725,852 | Apr. 21 | 2664 | 606 | 103 | 1766 |
| Lattin, George, assignor to West Tire Setter Company, Rochester, N. Y. Machine for setting tires | 748,292 | Dec. 29 | 5549 | 1266 | 107 | 2396 |
| Lau, John B., Newark, N. J. Car-brake | 744,569 | Nov. 17 | 3441 | 741 | 107 | 764 |
| Laub, Henry C. (See Pettingell, George D., assignor.) | | | | | | |
| Laub, Karl G., Mainz, Germany. Friction element | 742,456 | Oct. 27 | 4005 | 898 | 106 | 2139 |
| Laube, Joseph M., assignor of two-thirds to A. and O. A. Franzke, Whatcom, Wash. Umbrella-tip | 748,082 | Dec. 29 | 5171 | 1169 | 107 | 2315 |
| Lauber, Otto. (See Resow and Lauber.) | | | | | | |
| Lauber, Otto, assignor to F. Krupp, Essen-on-the-Ruhr, Germany. Recoil-brake for guns | 722,724 | Mar. 17 | 2014 | 450 | 103 | 462 |
| Lauber, Otto, assignor to F. Krupp, Essen-on-the-Ruhr, Germany. Gun with barrel-recoil having recuperator-spring | 722,725 | Mar. 17 | 2016 | 450 | 103 | 462 |
| Lauber, Otto, and F. Stock, assignors to F. Krupp, Essen-on-the-Ruhr, Germany. Ordnance | 718,004 | Jan. 6 | 920 | 205 | 102 | 198 |
| Laubmann, Heinrich, assignor to Farbwerke, vorm. Meister, Lucius & Brüning, Höchst-on-the-Main, Germany. Blue dye and making same | 727,389 | May 5 | 1051 | ------ | 104 | 226 |
| Laubscher, Alexander. (See Eames and Laubscher.) | | | | | | |
| Laubscher, Alexander, assignor to Wheeler & Wilson Manufacturing Company, Bridgeport, Conn. Hem-folder for sewing-machines | 723,615 | Mar. 24 | 3648 | 817 | 103 | 807 |
| Laubscher, Alexander, assignor to Wheeler & Wilson Manufacturing Company, Bridgeport, Conn. Hemmer for sewing-machines | 741,682 | Oct. 20 | 2479 | 554, 555 | 106 | 1809 |
| Laubscher, Alexander, Fairfield, assignor to Wheeler & Wilson Manufacturing Company, Bridgeport, Conn. Sewing-machine ruffler | 724,589 | Apr. 7 | 320 | 79 | 103 | 1237 |
| Lauderdale, Chapin F., Milwaukee, Wis. Dental swaging-machine | 727,811 | May 12 | 1877 | 418 | 104 | 417 |
| Lauer, Theodore C., Toledo, Ohio. Headlight-signal | 721,452 | Feb. 24 | 3829 | 871 | 102 | 1678 |
| Lauer, William D., New York, N. Y. Closet-seat cover | 746,111 | Dec. 8 | 1463 | 328 | 107 | 1431 |
| Lauferty, David, and B. Stein, New York, N. Y. Convertible suspenders and belt | 718,360 | Jan. 13 | 1557 | 344 | 102 | 349 |
| Lauffer, Fredrick E. (See Schroeder and Lauffer.) | | | | | | |
| Lauffer, Simon D., *et al.* (See McConnell, Edward E., assignor.) | | | | | | |
| Laufman, William A. (See Van Pelt and Laufman.) | | | | | | |
| Laughlin, Alexander. (See Reuleaux, Josef, assignor.) | | | | | | |
| Laughlin, Alexander, Sewickley, and J. Reuleaux, Wilkinsburg, Pa.; said Reuleaux assignor to said Laughlin. Continuous heating-furnace | 726,173 | Apr. 21 | 3203 | 725, 726 | 103 | 1876 |
| Laughlin, Henry D. (See Perry, Hubert M., assignor.) | | | | | | |
| Laughlin, Henry D., Chicago, Ill. Side bearing for cars | 722,995 | Mar. 17 | 2486 | 559 | 103 | 558 |
| Laughlin, Thomas, Cable, Wis. Saw-handle | 746,635 | Dec. 8 | 2404 | 550 | 107 | 1637 |
| Laughlin, Thomas S., Portland, Me. Fastening device for booms | 737,118 | Aug. 25 | 3885 | 862 | 105 | 1860 |
| Laughray, Robert, West Bay City, Mich. Brick-making plant | 747,443 | Dec. 22 | 3932 | 885 | 107 | 2017 |
| Laughridge, William H., assignor of two-thirds to S. S. Stiffey and M. S. Connors, Columbus, Ohio. Fire-box for boilers | 732,643 | June 30 | 5829 | 1291 | 104 | 2405 |
| Laughton, Joseph B., Westfield, Mass. Inking-pad | 738,550 | Sept. 8 | 2024 | 440 | 106 | 450 |
| Laur, Charles F. (See Robinson and Laur.) | | | | | | |
| Laurell, Per Lorentz, Stockholm, Sweden. Retort for carbonizing wood or the like | 731,059 | June 16 | 2802 | 624 | 104 | 1745 |
| Laurency, Guillaume, Brussels, Belgium. Carding-engine | 718,261 | Jan. 13 | 1370 | 305 | 102 | 310 |
| Laurick, Carl, Berlin, Germany, assignor to National Cash Register Company, Jersey City, N. J. Cash-register | 720,531 | Feb. 10 | 2057 | 474, 475 | 102 | 1273 |
| Lauridtzen, Albert, Lyons, Mich. Culvert | 746,112 | Dec. 8 | 1463 | 328, 329 | 107 | 1432 |
| Laurie, William R., and T. H. Wilson, Johannesburg, Transvaal, South Africa. Belt or like conveyer | 739,884 | Sept. 29 | 4533 | 1018 | 106 | 1035 |
| Laurin, Joseph, Maisonneuve, Canada. Shoe-sewing machine | 733,403 | July 14 | 1271 | 301 | 105 | 285 |
| Lauster, Imanuel, assignor to Vereinigte Maschinenfabrik Augsburg und Maschinenbaugesellschaft Nürnberg A. G., Augsburg, Germany. Fuel-feed governor for explosive-engines | 729,613 | June 2 | 164 | 39 | 104 | 1160 |
| Lautenbach, Evert, Chicago, Ill. Skirt-lifter | 726,951 | May 5 | 223 | 52 | 104 | 48 |
| Lauter, Albert W., Sr., Chattanooga, Tenn. Electric time-switch | 721,205 | Feb. 24 | 3399 | 772 | 102 | 1588 |
| Lauterbach, Ludwig, New York, N. Y. Bath-brush | 719,596 | Feb. 3 | 333 | 77 | 102 | 891 |
| Lauth, Jacob. (See Sandell, Axel W., assignor.) | | | | | | |
| Lauth, Jacob, Chicago, Ill. Vehicle-wheel | 744,969 | Nov. 24 | 4173 | 902 | 107 | 935 |
| Lautreppe, Albert L. de, assignor of one-half to H. G. Catlin, New York, N. Y. Still | 744,367 | Nov. 17 | 3088 | 662 | 107 | 689 |
| Laux, Mathias, *et al.* (See Berg, Joseph, assignor.) | | | | | | |
| Laux, Wilhelm F., Reading, Pa. Catamenial bandage | 725,726 | Apr. 21 | 2434 | 552 | 103 | 1715 |
| Lavagne, Louis, and L. Bertrand, Marseilles, France. Trolley | 736,610 | Aug. 18 | 2953 | 647 | 105 | 1646 |
| Laval, Carl G. P. de, Stockholm, Sweden. Treating materials by radiated heat in electric furnaces | 729,614 | June 2 | 165 | 40 | 104 | 1161 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|
| | | | Spec. | Dr'g. | Vol. | Page. |
| Laval, Carl G. P. de, Stockholm, Sweden. Extracting zinc from its ores | 736,611 | Aug. 18 | 2954 | 647 | 105 | 1646 |
| Lavender, George A., Roanoke, La. Attachment for rims of traction-wheels | 724,896 | Apr. 7 | 885 | 203 | 103 | 1359 |
| Lavender, Thomas J., Grand Rapids, Mich. Chopping-knife | 726,707 | Apr. 28 | 4266 | 964 | 103 | 2106 |
| Laverty, Albert P., West Bay City, Mich. Emergency-yoke for car-couplings | 736,983 | Aug. 25 | 3667 | 813 | 105 | 1815 |
| Lavery, George L. (See Keller, Louis P., assignor.) | | | | | | |
| Lavery, George L., Chicago, Ill., assignor to American Post-Office Equipment Company. Lock-box front | 729,945 | June 2 | 771 | 171 | 104 | 1285 |
| Lavery, Richard W. (See Patterson, Lemuel, assignor.) | | | | | | |
| Lavine, Harry, New York, N. Y. Shoulder-pad | 747,734 | Dec. 22 | 4461 | 1006 | 107 | 2135 |
| Lavine, Harry S. (See Averill, George E., assignor.) | | | | | | |
| Lavington, Henry C., New Southgate, England. Machine for dressing leather | 730,931 | June 16 | 2555 | 569 | 104 | 1695 |
| Lavley, John E., Colorado Springs, Colo. Cushion billiard-tip | 723,285 | Mar. 24 | 3031 | 682 | 103 | 685 |
| Law, Carl C. (See Bischoff, Frederick F., assignor.) | | | | | | |
| Law, Fred A., Hartford, Conn., assignor, by mesne assignments, to Morton Trust Company, trustee. Cooling means for explosive-engines | 718,482 | Jan. 13 | 1794 | ------ | 102 | 397 |
| Law, Fred A., Hartford, Conn., assignor to Electric Vehicle Company, Jersey City, N. J. Steering mechanism for vehicles | 720,936 | Feb. 17 | 2818 | 646<br>647 | 102 | 1446 |
| Law, John, deceased; K. J. Law, Merriam Park, Minn., executrix. Hay-stacker | 735,784 | Aug. 11 | 1420 | 305 | 105 | 1301 |
| Law, Kathrine J., executrix. (See Law, John.) | | | | | | |
| Law, Myron D., New York, N. Y. Electrical instrument for surgical or similar purposes | 722,594 | Mar. 10 | 1741 | 388 | 103 | 389 |
| Law, Robert E., Scio, Ohio. Superheater for steam-engines | 738,618 | Sept. 8 | 2138 | 468<br>469 | 106 | 476 |
| Law, William A., Merriam Park, Minn. Hay-sling | 745,360 | Dec. 1 | 83 | 20 | 107 | 1119 |
| Lawder, William W., Halethorpe, Md. Machine for soldering caps on cans | 718,210 | Jan. 13 | 1287 | 283 | 102 | 292 |
| Lawhead, James W., *et al.* (See Loree, Fannie L., assignor.) | | | | | | |
| Lawhon, James C., Lake City, Fla. Resawing-machine | 744,368 | Nov. 17 | 3089 | 662<br>663 | 107 | 690 |
| Lawhon, Lawrence H., Atlanta, Ga. Spring structure for seat or bed bottoms | 740,983 | Oct. 6 | 1105 | 248 | 106 | 1482 |
| Lawler, Harry A., and J. P. Kerr, Springfield, Mo. Adjustable bridle-rod for railway-switches | 730,932 | June 16 | 2559 | 570 | 104 | 1696 |
| Lawler, James G., St. Charles, Mo. Platform-frame for railway-cars | 735,394 | Aug. 4 | 673 | 144 | 105 | 1124 |
| Lawler, James J., Mount Vernon, N. Y. Check-valve for hot-water systems | 723,286 | Mar. 24 | 3032 | 682 | 103 | 685 |
| Lawler, James J., Mount Vernon, N. Y. Fitting for hot-water boilers | 738,208 | Sept. 8 | 1326 | 287 | 106 | 303 |
| Lawler, James J., Mount Vernon, N. Y. Bunsen gas heating-burner | 740,150 | Sept. 29 | 5016 | 1127 | 106 | 1139 |
| Lawler, James J., Mount Vernon, N. Y. Porous brick for heating purposes | 742,879 | Nov. 3 | 104 | 24 | 107 | 24 |
| Lawler, Miles J., Parnell, Iowa. Washing-machine | 736,410 | Aug. 18 | 2551 | 560 | 105 | 1562 |
| Lawless, P. H. (See Mills, Henry D., assignor.) | | | | | | |
| Lawless, Philip C., London, England. Paper-clip | 721,313 | Feb. 24 | 3571 | 812<br>813 | 102 | 1625 |
| Lawlor, Jas. (See Hall, Samuel N., assignor.) | | | | | | |
| Lawlor, Joseph M., New York, N. Y. Curling-iron heater | 746,532 | Dec. 8 | 2214 | 507 | 107 | 1593 |
| Lawlor, Simeon C., Duluth, Minn. Window-cleaning apparatus | 724,590 | Apr. 7 | 322 | 79 | 103 | 1237 |
| Lawlor, Simeon C., Duluth, Minn. Window-washing apparatus | 744,013 | Nov. 10 | 2400 | 516 | 107 | 527 |
| Lawrance, James P. S., U. S. Navy, assignor of one-half to T. B. Zell, Reading, Pa. Device for case-hardening steel articles | 723,167 | Mar. 17 | 2800 | 631 | 103 | 623 |
| Lawrance, James P. S., U. S. Navy, assignor of one-half to T. B. Zell, Reading, Pa. Cast-steel wheel | 742,684 | Oct. 27 | 4421 | 998 | 106 | 2227 |
| Lawrence, Ambrose, Acme, Tex. Calcining apparatus | 745,067 | Nov. 24 | 4384 | 946 | 107 | 979 |
| Lawrence, David, and J. Vincent, Tom Bean, Tex. Draft-equalizer | 720,037 | Feb. 10 | 1156 | 264 | 102 | 1085 |
| Lawrence, Florida E. (See Lawrence, Joseph E., assignor.) | | | | | | |
| Lawrence, James B., Barboursville, W. Va. Fruit-picker | 743,894 | Nov. 10 | 2141 | 460 | 107 | 472 |
| Lawrence, Joseph E., assignor to F. E. Lawrence, Wolcott, N. Y. Burial apparatus | 741,583 | Oct. 13 | 2297 | 513<br>514 | 106 | 1755 |
| Lawrence, Joseph L., Brookline, assignor of one-half to Chauncey Thomas & Company, Boston, Mass. Vehicle-window mechanism for canopy-tops | 747,888 | Dec. 22 | 4761 | 1076 | 107 | 2204 |
| Lawrence, Joseph W., Small Heath, near Birmingham, assignor to Hoskins and Sewell, Limited, Bordesley, Birmingham, England. Caster | 746,636 | Dec. 8 | 2405 | 550 | 107 | 1637 |
| Lawrence, Laura, Detroit, Mich. Corset | 720,363 | Feb. 10 | 1765 | 400 | 102 | 1213 |
| Lawrence, Mack E., Morrowville, Kans. Windmill-regulator | 720,161 | Feb. 10 | 1376 | 316 | 102 | 1133 |
| Lawrence, Mills E., Franklin, Va. Fertilizer-distributer | 737,637 | Sept. 1 | 144 | 31 | 106 | 34 |
| Lawrence, Milton J., Beaver, Pa. Mail-box | 743,297 | Nov. 3 | 936 | 204 | 107 | 201 |
| Lawrence, Patrick J., St. Louis, Mo. Coping-saw | 747,735 | Dec. 22 | 4462 | 1006 | 107 | 2136 |
| Lawrence, Sidney J., Christchurch, New Zealand. Apparatus for indicating speed of vessels | 738,458 | Sept. 8 | 1842 | 400 | 106 | 411 |
| Lawrence, Stanley, and R. O. Nichols, Fostoria, Ohio. Attachment for arc-lamps | 733,664 | July 14 | 1721 | 407 | 105 | 380 |
| Lawrence, Stephen S., Columbus, Ohio. Parachute toy | 728,251 | May 19 | 2688 | 601 | 104 | 611 |
| Lawrence, William, assignor of one-half to M. Schachtel, Chicago, Ill. Burglar-trap | 727,812 | May 12 | 1879 | 418 | 104 | 418 |
| Lawrence, William A., New York, N. Y., assignor to Continental Rubber Company, Jersey City, N. J. Extracting gum | 741,256 | Oct. 13 | 1622 | 366 | 106 | 1612 |
| Lawrence, William A., New York, N. Y., assignor to Continental Rubber Company, Jersey City, N. J. Apparatus for extracting gum | 741,257 | Oct. 13 | 1625 | 366 | 106 | 1613 |
| Lawrence, William A., New York, N. Y., assignor to Continental Rubber Company, Jersey City, N. J. Extracting rubber without solvents | 741,258 | Oct. 13 | 1626 | 367 | 106 | 1613 |
| Lawrence, William A., New York, N. Y., assignor to Continental Rubber Company, Jersey City, N. J. Composition of matter | 741,259 | Oct. 13 | 1629 | ------ | 106 | 1613 |
| Lawrence, William A., New York, N. Y., assignor to Continental Rubber Company, Jersey City, N. J. Refining crude rubber | 741,260 | Oct. 13 | 1630 | 367 | 106 | 1614 |
| Lawrenz, Emil. (See Mergenthaler and Lawrenz.) | | | | | | |
| Lawrenz, William F., Hancock, Mich. Portable folding shade | 720,709 | Feb. 17 | 2431 | 556 | 102 | 1364 |
| Lawrenz, William F., and W. C. Kauth, Hancock, Mich. Vehicle-top | 720,710 | Feb. 17 | 2433 | 556<br>557 | 102 | 1364 |
| Lawry, Henry. (See Kelland and Lawry.) | | | | | | |
| Lawshe, Charles P., Trenton, N. J. Tile flooring | 722,520 | Mar. 10 | 1618 | 357 | 103 | 363 |
| Lawson, Albert, St. Louis, Mo. Temporary binder | 744,369 | Nov. 17 | 3091 | 663 | 107 | 690 |
| Lawson, Albert F., Buffalo, assignor of seven-twelfths to R. W. Daniels, Lockport, and J. Atkins, Buffalo, N. Y. Telephone-transmitter | 721,708 | Mar. 3 | 106 | 23 | 103 | 23 |
| Lawson, James G. F. (See Cormack, William, assignor.) | | | | | | |
| Lawson, James W., East Providence, R. I. Stud for shirt-bosoms | 724,591 | Apr. 7 | 324 | 80 | 103 | 1238 |
| Lawson, John, and J. E. Daniels, Calais, Me. Vapor-burner | 738,922 | Sept. 15 | 2746 | 607 | 106 | 622 |
| Lawson, Robert R., Brooklyn, assignor to T. J. Gorman, New York, N. Y. Combined letter-sheet and return-sheet | 730,933 | June 16 | 2560 | 570 | 104 | 1696 |
| Lawson, Robert R., assignor to M. C. Gorman, New York, N. Y. Package wrap and receptacle | 745,283 | Nov. 24 | 4809 | 1049 | 107 | 1066 |
| Lawson, August, assignor of two-thirds to E. Ohnstrand, Jamestown, N. Y., and C. Jacobson, Warren, Pa. Rubbing-machine | 738,921 | Sept. 15 | 2743 | 606<br>607 | 106 | 621 |
| Lawson, David. (See Fulton and Lawson.) | | | | | | |
| Lawson, Harry, Jersey City, N. J. Water-tube boiler | 746,533 | Dec. 8 | 2215 | 508 | 107 | 1593 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Lawson, Roberta C., and M. McLaren, Milwaukee, Wis. Tea-leaf holder | 723,287 | Mar. 24 | 3033 | 682 | 103 | 686 |
| Lawson, Sherman S. (See Strouss and Lawson.) | | | | | | |
| Lawson, William C., Rural Retreat, Va. Horse-collar | 733,911 | July 14 | 2194 | 516 | 105 | 477 |
| Lawson, William C., Rural Retreat, Va. Connection for hames, collars, or the like | 734,073 | July 21 | 2535 | 591 | 105 | 570 |
| Lawson, William C., Rural Retreat, Va. Hame and trace connection | 734,074 | July 21 | 2536 | 591 | 105 | 570 |
| Lawther, Alfred B., Syracuse, N. Y. Automatic hydraulic apparatus | 720,162 | Feb. 10 | 1378 | 316 | 102 | 1133 |
| Lawther, Alfred B., Syracuse, N. Y., assignor to F. O. Swannell, Chicago, Ill. Apparatus for automatically extracting oil from seeds | 720,532 | Feb. 10 | 2059 | 475, 476, 477, 478, 479 | 102 | 1273 |
| Lawton, Frank B. (See Crosley, George E., assignor.) | | | | | | |
| Lawver, Edgar A., Denver, Colo. Wind-motor | 746,851 | Dec. 15 | 2811 | 648 | 107 | 1748 |
| Lay, Frank R., assignor to Perfection Broom Company, Indianapolis, Ind. Mop | 739,786 | Sept. 22 | 4319 | 967 | 106 | 975 |
| Lay, Robert J., Cairo, W. Va. Whiffletree-connector for traces | 738,551 | Sept. 8 | 2026 | 440 | 106 | 451 |
| Lay, William, Kremlin, Okla. Ter. Nut-locking means | 747,984 | Dec. 29 | 4977 | 1124 | 107 | 2272 |
| Lay, William, Enid, Okla. Ter. Lock means for nuts and bolts | 747,985 | Dec. 29 | 4978 | 1124 | 107 | 2273 |
| Laybourn, Myron H., Windsor, Colo. Sheet-metal flume | 745,868 | Dec. 1 | 1033 | 233 | 107 | 1319 |
| Layland, William E. (See Whitehead and Layland.) | | | | | | |
| Layman, Charles W., *et al.* (See Evans, Elmer O., assignor.) | | | | | | |
| Layman, Waldo A., and F. Schwedtmann; said Schwedtmann assignor to Wagner Electric Manufacturing Company, St. Louis, Mo. Means for regulating alternating-current circuits | 740,447 | Oct. 6 | 121 | 25 | 106 | 1272 |
| Layne, Leroy L., Golden City, Mo. Pitchfork | 747,986 | Dec. 29 | 4980 | 1124 | 107 | 2273 |
| Layng, George H., Sault Ste. Marie, Canada. Nut-lock | 734,577 | July 28 | 3470 | 811 | 105 | 783 |
| Layng, Henry G., New York, N. Y. Briqueting-machine | 741,511 | Oct. 13 | 2147 | 478 | 106 | 1725 |
| Layton, John S., Springfield, Ohio. Vehicle-wheel | 719,818 | Feb. 3 | 742 | 174 | 102 | 980 |
| Layton, John S., Springfield, Ohio. Running-gear for vehicles | 728,252 | May 19 | 2689 | 601, 602 | 104 | 612 |
| Layton, Mark P., and J. W. Van Doren, Minonk, Ill. Derailer | 735,534 | Aug. 4 | 967 | 205 | 105 | 1186 |
| Layton, Richardson C., New York, N. Y., assignor to Empire Pipe Bending and Supply Company. Car-fender | 735,535 | Aug. 4 | 969 | 205 | 105 | 1187 |
| Lazareff, Mathias A., New York, N. Y. Bottle | 737,638 | Sept. 1 | 145 | 32 | 106 | 34 |
| Le Beau, Edwin H., Toledo, Ohio. Chimney-top | 744,570 | Nov. 17 | 3443 | 741 | 107 | 765 |
| Le Beau, John F., assignor to C. H. A. Beckman, Toledo, Ohio. Chimney-top and ventilator | 736,748 | Aug. 18 | 3209 | 709 | 105 | 1698 |
| Le Blanc, Alexis, New York, N. Y. Voltage-regulator | 744,771 | Nov. 24 | 3818 | 823 | 107 | 862 |
| Le Blanc, Arthur, Worcester, Mass., assignor of one-half to J. Labine, Nashua, N. H. Antifrosting attachment for car-windows | 732,087 | June 30 | 4754 | 1062 | 104 | 2178 |
| Le Blanc, Max, Karlsruhe, and C. Krauss, assignors to Farbwerke, vorm. Meister, Lucius & Brüning, Höchst-on-the-Main, Germany. Making sulfuric anhydrid | 726,076 | Apr. 21 | 3031 | 689 | 103 | 1842 |
| Le Blanc, Numa D. (See Koenig and Le Blanc.) | | | | | | |
| Le Blond, Richard K., and W. F. Groene, assignors to R. K. Le Blond Machine Tool Company, Cincinnati, Ohio. Variable-speed mechanism for back-gearing | 725,099 | Apr. 14 | 1271 | 287 | 103 | 1454 |
| Le Blond, Richard K., and W. F. Groene, Cincinnati, Ohio, assignors to R. K. Le Blond Machine Tool Company. Speed-changing mechanism | 725,100 | Apr. 14 | 1273 | 287 | 103 | 1455 |
| Le Blond, Richard K., and W. F. Groene, Cincinnati, Ohio, assignors to R. K. Le Blond Machine Tool Company. Speed-changing box | 727,977 | May 12 | 2185 | 487 | 104 | 483 |
| Le Clair, George E., Elyria, Ohio. Wood-fiber-cutting machine | 745,204 | Nov. 24 | 4668 | 1017 | 107 | 1038 |
| Le Compte, Edward P., Park City, Utah. Fire-escape | 726,708 | Apr. 28 | 4266 | 964 | 103 | 2106 |
| Le Fevre, Edward Y., Fallsburg, N. Y. Making cloth-lined paper | 747,445 | Dec. 22 | 3935 | 885 | 107 | 2017 |
| Le Fevre, George A., New York, N. Y. Electric brake | 736,120 | Aug. 11 | 2060 | 441, 442 | 105 | 1439 |
| Le Fevre, Peter E., Rosendale, Wis. Bundle-carrier | 748,293 | Dec. 29 | 5552 | 1267 | 107 | 2397 |
| Le Franc, Louis, assignor to Société Suisse du Bouchege par le Bois, Bex, Switzerland. Making wooden corks | 721,958 | Mar. 3 | 573 | 127 | 103 | 125 |
| Le Grand, Augustus L., West Pittston, Pa. Bucket conveyer | 725,573 | Apr. 14 | 2135 | 483, 484 | 103 | 1638 |
| Le Lande, Lester R., San Francisco, Cal. Napkin-holder | 734,342 | July 21 | 3046 | 717 | 105 | 678 |
| Le Maitre, John B., near Birmingham, England. Door and window for carriages | 727,978 | May 12 | 2187 | 487, 488 | 104 | 484 |
| Le Maitre, John B., near Birmingham, England. Door and window for carriages | 727,979 | May 12 | 2188 | 488 | 104 | 484 |
| Le Maitre, Walter L., F. G. W. Parker, and E. Rhodes, Leeds, England. Appliance for cutting off the upper or wearing portions of compound tramway-rails | 718,362 | Jan. 13 | 1561 | 344 | 102 | 350 |
| Le May, John, Chicago, Ill. Flash-lamp | 722,117 | Mar. 3 | 845 | 188 | 103 | 182 |
| Le Pontois, Leon J., New York, N. Y. Condenser | 731,469 | June 23 | 3590 | 800 | 104 | 1924 |
| Le Pontois, Leon J., New York, N. Y. Electrically-controlled speed-changing apparatus | 731,470 | June 23 | 3591 | 800, 801 | 104 | 1924 |
| Le Pontois, Leon J., New York, N. Y. Electromagnetic friction-clutch | 731,471 | June 23 | 3594 | 801 | 104 | 1925 |
| Le Pontois, Leon J., New York, N. Y. Electrically-controlled speed-changing mechanism | 731,472 | June 23 | 3594 | 801 | 104 | 1925 |
| Le Pontois, Leon J., New York, N. Y. Means for supporting power-transmitting mechanism | 731,473 | June 23 | 3595 | 801, 802 | 104 | 1925 |
| Le Pontois, Leon J., New York, N. Y. Electrically-controlled speed-changing apparatus | 731,474 | June 23 | 3597 | 802, 803 | 104 | 1926 |
| Le Pontois, Leon J., assignor, by mesne assignments, to Auto-Igniter Company, New York, N. Y. Generator for electric igniters | 732,371 | June 30 | 5312 | 1177 | 104 | 2294 |
| Le Pontois, Leon J., assignor, by mesne assignments, to Auto-Igniter Company, New York, N. Y. Generator for igniters | 732,372 | June 30 | 5316 | 1178 | 104 | 2295 |
| Le Pontois, Leon J., and A. Clément, Levallois-Perret, France. Magneto-electric generator | 744,573 | Nov. 17 | 3447 | 743 | 107 | 766 |
| Le Reau, dit L'Heureux, Jean B., Detroit, Mich., and J. Le Reau, dit L'Heureux, Windsor, Canada. Air-forcing device for ventilation or similar uses | 733,223 | July 7 | 930 | 224 | 105 | 195 |
| Le Reau, dit L'Heureux, Joseph. (See Le Reau, dit L'Heureux, Jean B. and J.) | | | | | | |
| Le Reau, dit L'Heureux, Joseph, Windsor, Canada. Apparatus for flushing and ventilating urinals | 743,528 | Nov. 10 | 1470 | 307 | 107 | 331 |
| Le Rond, Louis J. J. B., Paris, France. Rotary engine | 746,346 | Dec. 8 | 1902 | 434, 435 | 107 | 1524 |
| Le Rond, Louis J. J. B., Paris, France. Rotary engine | 748,196 | Dec. 29 | 5384 | 1223, 1224, 1225 | 107 | 2360 |
| Le Roy, Robert, Park City, Utah. Cage and cable releasing device | 728,588 | May 19 | 3356 | 743 | 104 | 751 |
| Le Sueur, Ernest A., Sault Ste. Marie, Canada. Operating electrolytic cells | 723,398 | Mar. 24 | 3259 | 730 | 103 | 728 |
| Le Sueur, Philip, Calabasas, assignor of two-thirds to W. C. Fry, Hollywood, and P. J. Hummel, Los Angeles, Cal. Combined seed-planter | 728,803 | May 19 | 3738 | 834 | 104 | 831 |
| Le Valley, Charles J., and W. T. Bird, Sheffield, Iowa. Pump-rod coupling | 727,548 | May 5 | 1346 | 303 | 104 | 289 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Le Vasseur, D. J. (See Smith, Harvey E., assignor.) | | | | | | |
| Lea, Norman S., Charleston, S. C. Dose-indicator for medicine-bottles | 727,645 | May 12 | 1542 | 348 | 104 | 350 |
| Lea, William W., Iron River, Wis. Dredging-machine | 722,595 | Mar. 10 | 1742 | 388 | 103 | 389 |
| Leach, Arthur H., Middleboro, Mass. Tea or coffee strainer | 731,920 | June 23 | 4413 | 983 | 104 | 2094 |
| Leach, Arthur H., Middleboro, Mass. Olive or pickle spoon | 742,685 | Oct. 27 | 4422 | 998 | 106 | 2227 |
| Leach, Charles H., Orchards, Wash. Cuff-holder | 732,305 | June 30 | 5182 | 1151 | 104 | 2267 |
| Leach, Frederic J., *et al.*, trustees. (See Steiger, Andrew W., assignor.) | | | | | | |
| Leach, John, *et al.* (See Murray, Peter, assignor.) | | | | | | |
| Leach, John J., Springfield, Mass. Boiler-furnace | 732,359 | June 30 | 5293 | 1173 | 104 | 2289 |
| Leach, John N., Melrose, Mass., assignor to National Oil Heating Company. Odometer | 726,547 | Apr. 28 | 3958 | 894 | 103 | 2044 |
| Leach, Thomas E., Brooklyn, N. Y. Water-heater | 731,921 | June 23 | 4414 | 984 | 104 | 2095 |
| Leach, William, *et al.* (See Harvey, Lewis P., assignor.) | | | | | | |
| Leachman, William T. (See Kosiol, Louis, assignor.) | | | | | | |
| Leadbetter, George D., Detroit, Mich. Perambulator | 728,253 | May 19 | 2692 | 602 | 104 | 612 |
| Leahy, John J., North Adelaide, and A. Parmiter, Adelaide, South Australia, Australia. Belt-shifter | 718,262 | Jan. 13 | 1371 | 306 | 102 | 310 |
| Leake, Henry C., Newcastle-upon-Tyne, England. Means for avoiding hunting of alternate-current machinery | 726,952 | May 5 | 223 | 52, 53, 54 | 104 | 49 |
| Lean, Clement, New Cross, London, England. Steam-engine | 718,715 | Jan. 20 | 2278 | 500, 501, 502 | 102 | 515 |
| Lean, Emerson O., assignor to Roderick Lean Manufacturing Company, Mansfield, Ohio. Land-roller | 734,900 | July 28 | 4093 | 954 | 105 | 909 |
| Learmonth, Robert, Buffalo, N. Y. Feed-water regulator | 731,191 | June 16 | 3053 | 678 | 104 | 1793 |
| Learnard, Arthur W., Boston, Mass. Propeller | 725,097 | Apr. 14 | 1267 | 286 | 103 | 1453 |
| Learned, Rufus F., Natchez, Miss. Ice-making machine | 735,673 | Aug. 4 | 1222 | 259 | 105 | 1240 |
| Learned, Wilbur F., Watertown, Mass. Form or center for molding the inverts of concrete conduits | 725,098 | Apr. 14 | 1268 | 286 | 103 | 1454 |
| Leary, Elmer E., Rockhall, Md. Hoop for veneer baskets | 738,552 | Sept. 8 | 2027 | 441 | 106 | 451 |
| Leary, John C., San Francisco, Cal. Shaving-feeder for furnaces | 730,934 | June 16 | 2561 | 571 | 104 | 1696 |
| Leary, William J., Buffalo, N. Y. Brick-molding machine | 727,646 | May 12 | 1542 | 348 | 104 | 350 |
| Leason, Lyman S., *et al.* (See Brady, James, assignor.) | | | | | | |
| Leatherbarrow, Joseph B., New York, N. Y., assignor to Display Machine Company, East Orange, N. J. Card, picture, or sign exhibitor | 737,940 | Sept. 1 | 764 | 167, 168 | 106 | 168 |
| Leathers, Levi L., St. Albans, Me. Snow-excluder | 719,344 | Jan. 27 | 3473 | 773 | 102 | 780 |
| Leathers, Levi L., St. Albans, Me. Trolley | 744,770 | Nov. 24 | 3816 | 823 | 107 | 861 |
| Leavell, Buckner. (See Monroe, John P., assignor.) | | | | | | |
| Leavell, Walter F., Castlerock, Wash. Universal fraction rule or scale | 731,311 | June 16 | 3279 | 729 | 104 | 1842 |
| Leavenworth, Seth H., assignor to Homan Silver Plate Company, Cincinnati, Ohio. Shaving-mug | 733,057 | July 7 | 639 | 155 | 105 | 136 |
| Leavitt, Frank M., New York, N. Y. Automobile | 740,666 | Oct. 6 | 526 | 115, 116 | 106 | 1359 |
| Leavitt, Frank M., assignor to E. W. Bliss Company, Brooklyn, N. Y. Punch and feeding mechanism | 735,119 | Aug. 4 | 136 | 30, 31 | 105 | 1011 |
| Leavitt, Frank M., assignor to E. W. Bliss Company, Brooklyn, N. Y. Drawing-press | 738,335 | Sept. 8 | 1602 | 348, 349 | 106 | 361 |
| Leavitt, Frank M., assignor to E. W. Bliss Company, Brooklyn, N. Y. Drawing-press | 738,459 | Sept. 8 | 1844 | 400, 401, 402 | 106 | 411 |
| Leavitt, Frank M., assignor to E. W. Bliss Company, Brooklyn, N. Y. Gyroscopic apparatus for steering torpedoes | 741,683 | Oct. 20 | 2480 | 555, 556 | 106 | 1810 |
| Leavitt, James. (See Harris, Warner S. G., assignor.) | | | | | | |
| Leavitt, John W., San Francisco, Cal. Handle-bar for bicycles | 718,641 | Jan. 20 | 2131 | 465 | 102 | 487 |
| Leavitt, Samuel A., Millinocket, Me. Lining for pulp-digesters | 720,038 | Feb. 10 | 1157 | 264 | 102 | 1085 |
| Lebenheim & Sons, J., *et al.* (See Shepard, Chester, assignor.) | | | | | | |
| Lebioda, Georg F., Bologne-sur-Seine, France. Obtaining impregnated wood | 729,362 | May 26 | 4733 | ------ | 104 | 1052 |
| Leblanc, Léon, Rutland, Vt. Centrifugal pump | 718,642 | Jan. 20 | 2132 | 466 | 102 | 487 |
| Leblanc, Maurice, Paris, France. Transformer | 730,214 | June 2 | 1232 | 276, 277 | 104 | 1378 |
| Leblanc, Maurice, Paris, France, assignor to G. Westinghouse, Pittsburg, Pa. Shaping rotary fluxes and operating transformers | 730,215 | June 2 | 1243 | 277, 278 | 104 | 1379 |
| Lecarme, Louis, Paris, France. Two-speed gear for velocipedes, motor-cycles, &c | 745,632 | Dec. 1 | 581 | 135 | 107 | 1221 |
| Leckband Gas Company. (See Leckband, Theodor H. J., assignor.) | | | | | | |
| Leckband, Theodor H. J., Des Moines, assignor of one-half to Mason City Gas and Fuel Co., Mason City, Iowa. Apparatus for carbureting air | 718,361 | Jan. 13 | 1559 | 344 | 102 | 349 |
| Leckband, Theodor H. J., Des Moines, Iowa, assignor to A. C. Einstein, St. Louis, Mo. Acetylene-gas generator | 718,950 | Jan. 20 | 2721 | 608 | 102 | 608 |
| Leckband, Theodor H. J., Des Moines, assignor of one-half to Leckband Gas Company, Mason City, Iowa. Apparatus for carbureting air | 727,161 | May 5 | 651 | 140 | 104 | 141 |
| Leckinger, Philip H., Rochester, N. Y. Adjustable support for chair-backs | 740,390 | Sept. 29 | 5279 | 1189 | 106 | 1192 |
| Leclere, André, Paris, assignor to Société Anonyme pour la Production et l'Emploide la Vapeur Surchauffée, Châlon-sur-Saône, France. Gas-producer | 732,950 | July 7 | 448 | 111 | 105 | 97 |
| Ledbetter, John E. (See Malone, Samuel R., assignor.) | | | | | | |
| Ledbetter, William H., assignor to One-Seed Planter Co., Dallas, Tex. Seed-planter | 733,912 | July 14 | 2197 | 516, 517 | 105 | 477 |
| Lederlin, Pierre, Chedde, France. Electrolytic manufacture of chlorates and perchlorates | 727,813 | May 12 | 1880 | 419 | 104 | 418 |
| Lederlin, Pierre, Chedde, France. Electrolytic manufacture of chlorates and perchlorates | 732,753 | July 7 | 100 | 28 | 105 | 25 |
| Ledermann, Hans, Neumarkt, Germany. Air-brake for motor road-vehicles | 741,361 | Oct. 13 | 1633 | 367, 368 | 106 | 1614 |
| Ledger, Sara. (See Croom and Ledger.) | | | | | | |
| Ledoux, Hector, assignor to Crompton & Knowles Loom Works, Worcester, Mass. Lappet-loom | 733,490 | July 14 | 1418 | 333, 334 | 105 | 317 |
| Ledreux, Florent P., Paris, France. Embroidery-machine | 736,612 | Aug. 18 | 2955 | 647, 648, 649 | 105 | 1647 |
| Leduc, Joseph D., *et al.* (See Leduc, William O., assignor.) | | | | | | |
| Leduc, William O., Lachine, assignor of twenty-three fortieths to J. D. Leduc, Cascade Point, and L. Clement, Lachine, Canada. Cant-hook | 742,457 | Oct. 27 | 4006 | 899 | 106 | 2139 |
| Lee, Benjamin F., Belton, S. C., assignor to Draper Company, Hopedale, Mass. Filling tension device for looms | 721,206 | Feb. 24 | 3400 | 772 | 102 | 1589 |
| Lee Broom & Duster Co. (See Duvall, George W., assignor.) | | | | | | |
| Lee, Burton H., *et al.* (See French, Ira G., assignor.) | | | | | | |
| Lee, Charles C., assignor of one-half to V. A. Hutchison, Paducah, Ky. Document holder and exhibitor | 719,597 | Feb. 3 | 333 | 78 | 102 | 892 |

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| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drgs. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Lee, Charles E., Chicago, Ill. Illuminated sign | 728,731 | May 19 | 3608 | 800 | 104 | 805 |
| Lee, Charles H. (See McGinn and Lee.) | | | | | | |
| Lee, Charles H., Southampton, N. Y. Self-clearing propeller | 732,568 | June 30 | 5701 | 1266 | 104 | 2376 |
| Lee, Charles H., Southampton, N. Y. Marine vessel | 741,512 | Oct. 13 | 2149 | 479 | 106 | 1725 |
| Lee, Charles W., Lawrenceville, Va. Eccentric | 733,852 | July 14 | 2081 | 492 | 105 | 453 |
| Lee, Frank B., Buffalo, N. Y. Electric foot-arch supporter | 730,545 | June 9 | 1865 | 417 | 104 | 1528 |
| Lee, Frank R., Leadhill, Ark. Taper attachment for lathes | 724,592 | Apr. 7 | 326 | 80 | 103 | 1238 |
| Lee, George B., New London, Conn. Joint for carpentry | 724,897 | Apr. 7 | 886 | 203 | 103 | 1359 |
| Lee, George H., Omaha, Nebr. Camera | 729,363 | May 26 | 4734 | 1046 | 104 | 1052 |
| Lee, George H., Omaha, Nebr. Camera | 729,364 | May 26 | 4736 | 1046 | 104 | 1052 |
| Lee, George W., Binghamton, N. Y. Fastening | 747,192 | Dec. 15 | 3459 | 784 | 107 | 1896 |
| Lee, Henry B. (See McRae, Daniel M., assignor.) | | | | | | |
| Lee, Henry K., Hartford, Conn. Steam-engine | 734,720 | July 28 | 3746 | 875, 876 | 105 | 838 |
| Lee, Henry L., Timpas, Colo. Electric signal | 734,341 | July 21 | 3046 | 717 | 105 | 678 |
| Lee, J. W., *et al.* (See Wright, William J., assignor.) | | | | | | |
| Lee, James L., assignor to Challenge Machinery Co., Chicago, Ill. Paper-cutter | 732,754 | July 7 | 100 | 28 | 105 | 25 |
| Lee, John, San Francisco, Cal. Filing-case | 729,076 | May 26 | 4235 | 936 | 104 | 947 |
| Lee, John, San Francisco, Cal. Cutting can ends | 745,505 | Dec. 1 | 365 | 84 | 107 | 1177 |
| Lee, John H., Chicago, Ill. Line-holder | 744,772 | Nov. 24 | 3820 | 823 | 107 | 862 |
| Lee, John H., Chicago, Ill. Strap-holder | 747,077 | Dec. 15 | 3258 | 741 | 107 | 1852 |
| Lee, John W., Athens, Ga. Plow | 739,092 | Sept. 15 | 3039 | 673 | 106 | 682 |
| Lee, Leo J., Stark, Wis. Pneumatic conveyer attachment for feed-cutters | 747,987 | Dec. 29 | 4981 | 1124, 1125 | 107 | 2274 |
| Lee, Thomas B., Hesperus, Colo. Amalgamator and concentrator | 744,687 | Nov. 17 | 3630 | 783 | 107 | 804 |
| Lee, Thomas B., assignor of one-half to L. T. Everett, Catlettsburg, Ky. Clothes-line and curtain-stretcher | 740,291 | Sept. 29 | 5280 | 1189 | 106 | 1193 |
| Lee, Walker D. (See Frink and Lee.) | | | | | | |
| Lee, William, and W. McMurray, Glasgow, Scotland. Apparatus for the automatic production and the delivery of aerated waters | 722,368 | Mar. 10 | 1327 | 293 | 103 | 298 |
| Lee, William A., Blackwell, Okla. Ter. Harvester | 739,885 | Sept. 29 | 4534 | 1019 | 106 | 1035 |
| Lee, William B., and W. Fisher, Bradford, England. Drawing-off mechanism for combing-machines | 719,676 | Feb. 3 | 467 | 106, 107 | 102 | 920 |
| Lee, William E. (See Monroe and Lee.) | | | | | | |
| Lee, William S., Mystic, Iowa. Car-coupling | 735,888 | Aug. 11 | 1634 | 349 | 105 | 1349 |
| Lee, Willis C., and M. F. Moore, South Chicago, assignors to Morden Frog & Crossing Works, Chicago, Ill. Combination crossing and double slip-switch with movable center points | 736,119 | Aug. 11 | 2055 | 439, 440, 441 | 105 | 1438 |
| Leecraft, Walter B., Denison, Tex. Trolley-controller | 745,020 | Nov. 24 | 4268 | 925 | 107 | 955 |
| Leedle, George D., Springfield, Ohio. Wringer | 725,727 | Apr. 21 | 2434 | 552, 553 | 103 | 1715 |
| Leeds and Company, Morris E. (See Northrup, Edwin F., assignor.) | | | | | | |
| Leeds, Edward F. (See Haug, Andrew, assignor.) | | | | | | |
| Leeds and Northrup Company. (See Hoopes, William, assignor.) | | | | | | |
| Leeper, John F., Alton, Ill. Corn-harvester | 744,571 | Nov. 17 | 3444 | 741, 742 | 107 | 765 |
| Lees, George, Chicago, Ill., assignor to himself, and C. C. Hovey, Bainbridge, N. Y. Sealing-jar for preserving articles of food | 718,643 | Jan. 20 | 2136 | 466 | 102 | 488 |
| Leese, Thaddeus S., Bellevue, assignor to Pittsburg Light & Manufacturing Company, Allegheny, Pa. Lamp | 746,637 | Dec. 8 | 2406 | 551 | 107 | 1637 |
| Leeser, Emil, Chicago, Ill. Manifolding device | 717,691 | Jan. 6 | 300 | 74,75 | 102 | 65 |
| Leet, Lynn T. (See Bell and Leet.) | | | | | | |
| Leet, Lynn T., and C. A. O. Rosell, New York, N. Y., assignors to Composite Stone & Brick Company. Indurating stone | 747,193 | Dec. 15 | 3460 | ------ | 107 | 1896 |
| Leethem, Frank C., Cleveland, Ohio. Printing-plate-finishing machine | 737,251 | Aug. 25 | 4150 | 923 | 105 | 1916 |
| Leethem, Frank C., assignor to L. A. Leethem, Cleveland, Ohio. Printer's form | 745,869 | Dec. 1 | 1034 | 233, 234 | 107 | 1320 |
| Leethem, Louise A. (See Leethem, Frank C., assignor.) | | | | | | |
| Lefever, Charles F., assignor of one-half to D. M. Lefever, Syracuse, N. Y. Breakdown gun | 732,420 | June 30 | 5409 | 1200 | 104 | 2315 |
| Lefever, Daniel M. (See Lefever, Charles F., assignor.) | | | | | | |
| Lefler, George C. (See Egbert, Francis M., assignor.) | | | | | | |
| Leguillon, M. V. (See Johnston, William, assignor.) | | | | | | |
| Lehman, Alfred B., Johnstown, N. Y. Broom-rack | 718,005 | Jan. 6 | 923 | 205, 206 | 102 | 199 |
| Lehman, Isador, Cleveland, Ohio. Extensible shaft | 729,365 | May 26 | 4737 | 1047 | 104 | 1052 |
| Lehman, Isador, Cleveland, Ohio. Power-transmitting mechanism | 730,935 | June 16 | 2564 | 571 | 104 | 1697 |
| Lehman, Isador, Cleveland, Ohio. Power-transmitting mechanism | 730,936 | June 16 | 2566 | 571 | 104 | 1698 |
| Lehman, Joseph H., New York, N. Y. Jump-spark ignition-plug | 741,684 | Oct. 20 | 2488 | 556 | 106 | 1811 |
| Lehmann, Adolf, and E. Schönhals, Moscow, Russia. Photolithographic transfer-plate | 735,536 | Aug. 4 | 970 | 205 | 105 | 1187 |
| Lehmann, Albert, Vienna, Austria-Hungary. Single-rail-railway wagon | 737,748 | Sept. 1 | 355 | 75,76 | 106 | 80 |
| Lehmann, Aloys, Dubuque, Iowa. Article of furniture | 735,277 | Aug. 4 | 471 | 94 | 105 | 1081 |
| Lehmann, Ernst, Wiesbaden, Germany. Incandescent burner for hydrocarbons | 731,060 | June 16 | 2804 | 624 | 104 | 1746 |
| Lehmann, Ernst P., Brandenburg, Germany. Rigidly securing wire to other objects | 728,118 | May 12 | 2431 | 541, 542 | 104 | 536 |
| Lehner, Alfred. (See Lehner, Friedrich and A.) | | | | | | |
| Lehner, Friedrich and A., Zurich, Switzerland. Preparing cellulose films or filaments | 724,020 | Mar. 31 | 4440 | ------ | 103 | 989 |
| Lehotzky, Lorentz, McKeesport, Pa. Hose-coupling | 726,077 | Apr. 21 | 3033 | 689 | 103 | 1842 |
| Lehotzky, Lorentz, McKeesport, Pa. Rail-joint | 729,946 | June 2 | 772 | 171 | 104 | 1285 |
| Lehotzky, Lorentz and S., McKeesport, Pa. Furnace-grate | 735,537 | Aug. 4 | 971 | 205, 206 | 105 | 1187 |
| Lehotzky, Samuel. (See Lehotzky, Lorentz and S.) | | | | | | |
| Lehr, John C., New York, N. Y. Ash-cart | 739,012 | Sept. 15 | 2884 | 640, 641 | 106 | 651 |
| Lehrmann, Frederick, Turtlecreek, Pa. Trolley | 729,366 | May 26 | 4738 | 1047 | 104 | 1053 |
| Lehrmann, Frederick, Blythedale, Pa. Car-coupling | 748,384 | Dec. 29 | 5696 | 1300 | 107 | 2429 |
| Leibert, Owen F., and C. von Philp, Bethlehem, Pa. Composite shaft | 733,222 | July 7 | 929 | 224 | 105 | 194 |
| Leibold, Adam and H., New York, N. Y. Heating device | 731,580 | June 23 | 3805 | 847 | 104 | 1966 |
| Leibold, Henry. (See Leibold, Adam and H.) | | | | | | |
| Leichtenschlag, Carl, Berlin, Germany, assignor to Siemens & Halske Electric Company of America, Chicago, Ill. Terminal socket | 732,196 | June 30 | 4972 | 1106 | 104 | 2224 |
| Leidy, Sylvester B., assignor to Enterprise Manufacturing Company, Philadelphia, Pa. Pump | 723,686 | Mar. 24 | 3769 | 846 | 103 | 833 |
| Leiger, George F., assignor of three-fourths to L. Benedict, Chicago, Ill. Can-soldering machine | 732,003 | June 23 | 4570 | 1019, 1020 | 104 | 2128 |

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| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drgs. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Leiger, George F., assignor of three-fourths to L. Benedict, Chicago, Ill. Machine for making can-bodies | 732,004 | June 23 | 4575 | 1020, 1021, 1022, 1023 | 104 | 2128 |
| Leiger, George F., assignor of three-fourths to L. Benedict, Chicago, Ill. Can-body-soldering machine | 732,005 | June 23 | 4589 | 1024, 1025 | 104 | 2131 |
| Leiger, George F., assignor to himself and L. Benedict, Chicago, Ill. Pneumatic sheet-feeding machine | 734,466 | July 21 | 3259 | 766, 767 | 105 | 721 |
| Leigh, Charles Q. C., Paducah, Ky. Shipping-crate | 719,819 | Feb. 3 | 744 | 174 | 102 | 980 |
| Leigh, Charles Q. C., Paducah, Ky. Adjustable mouth for shipping-packages | 719,820 | Feb. 3 | 745 | 174 | 102 | 980 |
| Leigh, Thomas E., Manchester, England. Ring-frame spindle | 731,111 | June 16 | 2903 | 644 | 104 | 1766 |
| Leighton, George A., assignor to Leighton Machine Company, Manchester, N. H. Knitting-machine | 747,988 | Dec. 29 | 4982 | 1125 | 107 | 2274 |
| Leighton, James A., Crowley, La. Feed measure and box | 741,262 | Oct. 13 | 1634 | 368 | 106 | 1614 |
| Leighton Machine Company. (See Dodge and Rice, assignors.) | | | | | | |
| Leighton Machine Company. (See Leighton, George A., assignor.) | | | | | | |
| Leighton, Mary E., New York, N. Y. Maternity-corset | 721,575 | Feb. 24 | 4070 | 923, 924 | 102 | 1732 |
| Leikem, Anton, assignor of two-thirds to W. Wilcox and J. W. Stoll, Chicago, Ill. Friction-coupling | 727,390 | May 5 | 1052 | 228, 229 | 104 | 226 |
| Leilich, Henry L., Delphos, Ohio. Stopper-lock | 742,686 | Oct. 27 | 4423 | 999 | 106 | 2227 |
| Leimberger, Frederick W., Cincinnati, Ohio. Garment-hanger | 737,252 | Aug. 25 | 4153 | 923 | 105 | 1917 |
| Leimgruber, Charles A. (See Nientimp, John T., assignor.) | | | | | | |
| Lein, John P., New York, N. Y. Mattress-frame | 724,192 | Mar. 31 | 4775 | 1070 | 103 | 1056 |
| Lein, John P., New York, N. Y. Bunk or mattress-frame | 733,405 | July 14 | 1274 | 302 | 105 | 286 |
| Lein, John P., New York, N. Y. Folding berth | 743,526 | Nov. 10 | 1467 | 306 | 107 | 330 |
| Lein, John P., New York, N. Y. Bedstead | 746,852 | Dec. 15 | 2813 | 648 | 107 | 1748 |
| Leinbach, A. Ellsworth. (See Seisler, Philip, assignor.) | | | | | | |
| Leipold, John, Pittsburg, Pa. Horn for campaign marching clubs | 747,078 | Dec. 15 | 3260 | 742 | 107 | 1852 |
| Leisel, Albert, Peekskill, assignor to Standard Table Oil Cloth Company, New York, N. Y. Composite material | 732,569 | June 30 | 5704 | 1267 | 104 | 2377 |
| Leitch, Alfred R., and T. A. Drummond, Winnipeg, Canada. Automatic weighing apparatus | 738,336 | Sept. 8 | 1606 | 349 | 106 | 361 |
| Leitch, Howard W., New York, N. Y. Sanitary cover for closet-basin seats | 721,576 | Feb. 24 | 4071 | 924 | 102 | 1732 |
| Leiter, Jeremiah J. (See Converse and Leiter.) | | | | | | |
| Leiter, L. Z. (See Moss, Robert S., assignor.) | | | | | | |
| Leithauser, Peter J., Clarendon, Tex. Valve or cut-off for tanks | 737,941 | Sept. 1 | 766 | 168 | 106 | 168 |
| Leitner, Henry, Woking, and R. N. Lucas, Byfleet, England. Electrical cut-out and regulator | 728,942 | May 26 | 3990 | 888, 889 | 104 | 898 |
| Leitner, Henry, Woking, and R. N. Lucas, London, England. Dynamo-electric machinery | 731,581 | June 23 | 3806 | 848 | 104 | 1967 |
| Leitner, Henry, Woking, and R. N. Lucas, Byfleet, England. System of electric lighting | 738,113 | Sept. 1 | 1104 | 244 | 106 | 239 |
| Leitschuh, Joseph. Dayton, Ohio. Combination drafting instrument | 717,871 | Jan. 6 | 681 | 151 | 102 | 145 |
| Leland, Charles S., Mount Desert, Me. Wrench | 746,113 | Dec. 8 | 1465 | 329 | 107 | 1432 |
| Leman, William T., Bayonne, N. J. Condenser | 727,391 | May 5 | 1054 | 229 | 104 | 227 |
| Lemberg, Max, Sewaren, N. J., assignor to Vulcan Detinning Company, New York, N. Y. Machine for compressing detinned scraps | 737,427 | Aug. 25 | 4483 | 1005, 1006 | 105 | 1988 |
| Lemberg, Max, Sewaren, N. J., assignor to Vulcan Detinning Company, New York, N. Y. Machine for cutting up tin scraps | 744,572 | Nov. 17 | 3445 | 742 | 107 | 765 |
| Lembke, Emil L., New York, N. Y. Temple and spring-clamp for lenses or the like | 718,363 | Jan. 13 | 1563 | 345 | 102 | 350 |
| Lembke, Emil L., assignor to Gall and Lembke, New York, N. Y. Eyeglasses | 722,521 | Mar. 10 | 1620 | 357 | 103 | 364 |
| Lemelin, George T., Springfield, Mass. Back-folder for envelop-machines | 738,553 | Sept. 8 | 2028 | 441 | 106 | 451 |
| Lemert, Beverly D., Fort Morgan, Colo. Ditching-plow | 726,709 | Apr. 28 | 4267 | 965 | 103 | 2107 |
| Lemire, Joseph, Drummondville, Canada. Milk-areator | 718,644 | Jan. 20 | 2137 | 467 | 102 | 488 |
| Lemle, Jacob, Toledo, assignor of three-fourths to J. C. Jones, H. A. Shanks, and H. J. Warren, Sylvania, Ohio. Spirit-level | 741,801 | Oct. 20 | 2717 | 605 | 106 | 1859 |
| Lemley, David, New Orleans, La. Cistern | 718,483 | Jan. 13 | 1795 | 399 | 102 | 397 |
| Lemley, Louie H. (See Getty and Lemley.) | | | | | | |
| Lemley, Louis E., New Orleans, La. Automatic cut-off for drain-pipes | 718,134 | Jan. 13 | 1145 | 254 | 102 | 261 |
| Lemmermann, Henry, Hasbrouck Heights, N. J., assignor to Mattson Rubber Company, New York, N. Y. Bathing-cap | 734,578 | July 28 | 3472 | 811 | 105 | 783 |
| Lemmon, Alexander, Shelbyville, Ind. Cutter-guard | 720,039 | Feb. 10 | 1157 | 264 | 102 | 1085 |
| Lemmon, John M., Des Moines, Iowa. Washing-machine | 739,093 | Sept. 15 | 3041 | 673 | 106 | 683 |
| Lemon, Abby C., assignor to W. J. Lemon, Roanoke, Va. Dumping-wagon | 721,901 | Mar. 3 | 450 | 99 | 103 | 100 |
| Lemon, Willie J. (See Lemon, Abby C., assignor.) | | | | | | |
| Lemons, H. T. (See Adler, Augusta, assignor.) | | | | | | |
| Lemp, Hermann, Lynn, Mass. Relief-valve | 732,871 | July 7 | 311 | 78 | 105 | 69 |
| Lemp, Hermann, Lynn, Mass., assignor to General Electric Company. Propelling means for automobiles | 723,168 | Mar. 17 | 2802 | 631, 632 | 103 | 623 |
| Lemp, Hermann, Lynn, Mass., assignor to General Electric Company. Automobile vehicle | 724,021 | Mar. 31 | 4441 | 998 | 103 | 989 |
| Lemp, Hermann, Lynn, Mass., assignor to General Electric Company. Charging device for storage batteries | 726,548 | Apr. 28 | 3961 | 895 | 103 | 2044 |
| Lemp, Hermann, Lynn, assignor to E. Thomson, Swampscott, Mass. Electromagnetically-operated steering-check | 725,456 | Apr. 14 | 1928 | 432 | 103 | 1593 |
| Lemp, Hermann, Lynn, assignor to E. Thomson, Swampscott, Mass. Steering-check for vehicles | 725,457 | Apr. 14 | 1929 | 432, 433 | 103 | 1593 |
| Lemp, Hermann, Lynn, assignor to E. Thomson, Swampscott, Mass. Self-propelled vehicle | 732,870 | July 7 | 308 | 77, 78 | 105 | 68 |
| Lemp, Hermann, Lynn, assignor to E. Thomson, Swampscott, Mass. Support for motive-power agencies | 732,872 | July 7 | 313 | 78, 79 | 105 | 69 |
| Lemp, Hermann, Lynn, assignor to E. Thomson, Swampscott, Mass. Packing-ring for pistons | 733,665 | July 14 | 1723 | 407 | 105 | 380 |
| Lemp, Hermann, and O. F. Persson, Lynn, assignors to E. Thomson, Swampscott, Mass. Controlling mechanism for automobiles | 729,776 | June 2 | 462 | 104 | 104 | 1222 |
| Lemp, Herman, and O. F. Persson, Lynn, Mass., assignors, by mesne assignments, to General Electric Company. Multiple-cylinder steam-engine | 748,083 | Dec. 29 | 5172 | 1169, 1170 | 107 | 2315 |
| Lemström, Karl S., Helsingfors, Russia. Insulator for high-tension currents | 732,088 | June 30 | 4755 | 1062 | 104 | 2178 |
| Lemström, Selim, Helsingfors, Russia. Electrical influence-machine | 720,711 | Feb. 17 | 2434 | 557 | 102 | 1364 |
| Lemyre, Joseph E., Manchester, N. H., assignor to Textile Machinery Improvement Company. Loom-shuttle | 729,615 | June 2 | 166 | 40 | 104 | 1161 |
| Lemyre, Joseph E., Manchester, N. H., assignor to Textile Machinery Improvement Company. Warp stop-motion for looms | 735,785 | Aug. 11 | 1424 | 305, 306 | 105 | 1302 |
| Lenahan, John E., assignor to Eastman Kodak Company, Rochester, N. Y. Panoramic photographic camera | 726,313 | Apr. 28 | 3504 | 793 | 103 | 1954 |
| Lencauchez, J. A. (See Bellon-Lencauchez, James A.) | | | | | | |
| Lenderking, Louis T., Baltimore, Md. Stove cover and lifter | 736,749 | Aug. 18 | 3210 | 709 | 105 | 1699 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|
| | | | Spec. | Drg. | Vol. | Page. |
| Lendh, Charles W., Brockton, Mass. Flush-valve | 743,895 | Nov. 10 | 2143 | 461 | 107 | 472 |
| Lengert, George E. (See Uffel and Lengert.) | | | | | | |
| Lenhard, Gottfried, Neuhausen, Switzerland. Lock | 736,528 | Aug. 18 | 2784 | 610 | 105 | 1613 |
| Lenhardtson, Albin, Stockholm, Sweden. Toothpick | 719,017 | Jan. 27 | 2838 | 637 | 162 | 647 |
| Lenhart, Willie S., Bakersville, Pa. Wrench attachment | 717,872 | Jan. 6 | 682 | 152 | 102 | 145 |
| Lenhoff, John A. (See Allan and Lenhoff.) | | | | | | |
| Lenholt, John E., assignor of one-half to A. N. Pierson, Cromwell, Conn. Nut-lock | 734,579 | July 28 | 3473 | 811 | 105 | 783 |
| Lenk, Wenzel. (See Suter and Lenk.) | | | | | | |
| Lenna, Andrew S., Canton, S. D. Clothes or mop wringer | 723,687 | Mar. 24 | 3770 | 846 | 103 | 834 |
| Lennox Chemical Company. (See Clarke, Graham, assignor.) | | | | | | |
| Lennox, Talbot, Ames, Iowa. Massage-roller | 731,693 | June 23 | 4001 | 893 | 104 | 2005 |
| Lent, Alvah F., and J. W. Hatt, Newark, N. J. Tapping-bung | 729,367 | May 26 | 4739 | 1047 | 104 | 1053 |
| Lentz, Benjamin F., Somerset, Ohio. Button-clasp | 730,136 | June 2 | 1107 | 248 | 104 | 1352 |
| Lentz, David H., Joliet, Ill. Spreading-roll | 732,006 | June 23 | 4593 | 1025 | 104 | 2132 |
| Lentz, David H., Joliet, Ill., assignor, by mesne assignments, to American McKenna Process Company, Milwaukee, Wis. Charging-machine | 738,114 | Sept. 1 | 1107 | 245<br>246 | 106 | 239 |
| Lentz, Hugo, Magdeburg, Germany. Device for packing rods, &c | 726,953 | May 5 | 232 | 55 | 104 | 50 |
| Lentz, Hugo, Leipzig-Schleussig, Germany. Valve-gear | 732,570 | June 30 | 5704 | 1267 | 104 | 2377 |
| Lentz, Hugo, Leipzig-Schleussig, Germany. Reversing-gear for steam or other engines | 733,058 | July 7 | 640 | 155 | 105 | 136 |
| Lenz, Albert E. (See Stevens, Frederick A., assignor.) | | | | | | |
| Lenzen, Bertram, assignor of one-half to G. C. Rueckert, Providence, R. I. Ring-tray | 732,089 | June 30 | 4756 | 1062 | 104 | 2178 |
| Leo Canda Mfg. Co. (See Hoermle, Albert, assignor.) | | | | | | |
| Leon, Bert, Toledo, Ohio. Curtain-operating mechanism | 725,728 | Apr. 21 | 2436 | 553 | 103 | 1716 |
| Leonard, Charles N., Indianapolis, Ind. Pneumatic stacker | 723,204 | Mar. 17 | 2884 | 646 | 103 | 641 |
| Leonard, Charles N., assignor to Indiana Manufacturing Company, Indianapolis, Ind. Pneumatic stacker | 722,369 | Mar. 10 | 1330 | 293<br>294 | 103 | 299 |
| Leonard, Charles N., assignor, by mesne assignments, to Indiana Manufacturing Company, Indianapolis, Ind. Pneumatic stacker | 725,624 | Apr. 14 | 2233 | 504<br>505 | 103 | 1659 |
| Leonard, Charles N., assignor, by mesne assignments, to Indiana Manufacturing Company, Indianapolis, Ind. Pneumatic stacker | 729,947 | June 2 | 773 | 171<br>172 | 104 | 1286 |
| Leonard, David E., assignor of one-half to M. W. Leonard, Utica, Nebr. End-gate fastener | 745,205 | Nov. 24 | 4670 | 1017 | 107 | 1039 |
| Leonard, George I., Pasadena, assignor of two-thirds to J. M. Armstrong, Longbeach, and E. W. Lincoln, Pasadena, Cal. Locating minerals | 736,411 | Aug. 18 | 2552 | 560 | 105 | 1562 |
| Leonard, Harry W., East Orange, N. J. Controlling the supply of electric energy to translating devices | 717,584 | Jan. 6 | 108 | 29 | 102 | 26 |
| Leonard, Harry W., New York, N. Y. Automatic electric-circuit controller | 719,018 | Jan. 27 | 2838 | 637 | 102 | 647 |
| Leonard, Harsey K., Deposit, N. Y. Game apparatus | 747,989 | Dec. 29 | 4985 | 1126 | 107 | 2274 |
| Leonard, John, assignor to Waring Hat Manufacturing Company, Yonkers, N. Y. Hat-body-felting machine | 732,421 | June 30 | 5412 | 1200<br>1201 | 104 | 2316 |
| Leonard, John T. (See Hultmark, Peter O., assignor.) | | | | | | |
| Leonard, Mathew W. (See Leonard, David E., assignor.) | | | | | | |
| Leonard, Norris C. (See Gillespie, William C., assignor.) | | | | | | |
| Leonard, Samuel E., Ashtabula Harbor, Ohio. Scraper attachment for hoist apparatus | 732,571 | June 30 | 5705 | 1267<br>1268 | 104 | 2377 |
| Leonard, Sylvester S., Chicago, Ill. Step for telegraph-poles or the like | 739,326 | Sept. 22 | 3465 | 773 | 106 | 789 |
| Leonius, Joseph, alias Nilus Leclerc, St. Eugene, Canada. Window-opener | 743,527 | Nov. 10 | 1468 | 307 | 107 | 330 |
| Leopold, Frederick B., Cincinnati, Ohio, assignor to New York Continental Jewel Filtration Company, New York, N. Y. Apparatus for softening or otherwise chemically treating, filtering, and storing water | 731,468 | June 23 | 3587 | 799 | 104 | 1923 |
| Leopold, Frederick W., New York, N. Y. Lace-fastener | 730,031 | June 2 | 936 | 209 | 104 | 1318 |
| Lepard, Warren W., Otsego, Mich. Convertible chair | 728,943 | May 26 | 3994 | 889 | 104 | 899 |
| Lepetit, Roberto, Susa, Italy. Formaldehyde compound | 736,529 | Aug. 18 | 2785 | ..... | 105 | 1613 |
| Lepley, Daniel F., Connellsville, Pa. Steam-engine | 720,263 | Feb. 10 | 1577 | 360 | 102 | 1173 |
| Lepley, Daniel F., Connellsville, Pa. Ventilator for mines | 720,264 | Feb. 10 | 1580 | 360<br>361 | 102 | 1173 |
| Lepley, Daniel F., Connellsville, Pa. Mine-cage | 720,265 | Feb. 10 | 1582 | 361 | 102 | 1174 |
| Lepper, John J., Milwaukee, Wis. Package-support | 730,276 | June 9 | 1372 | 302 | 104 | 1422 |
| Lepper, Max F. (See Ploss, Adam, assignor.) | | | | | | |
| Leppert, William, Tippecanoe City, Ohio. Wagon-body | 734,422 | July 21 | 3182 | 747<br>748 | 105 | 706 |
| Leppert, William, Tippecanoe City, Ohio. Wagon-body. (Reissue) | 12,187 | Dec. 29 | 6074 | 1376 | 107 | 2514 |
| Leppley, William H., *et al.* (See Banwell, James, assignor.) | | | | | | |
| Lerol, Knud K., Jr., Highland, Minn. Regulator for windmills | 719,821 | Feb. 3 | 746 | 175 | 102 | 981 |
| Lerol, Knud K., Jr., Amherst, Minn. Corn-planter | 747,194 | Dec. 15 | 3461 | 784<br>785 | 107 | 1896 |
| Leroux, Edmond. (See Leroux, Paul and E.) | | | | | | |
| Leroux, Paul and E., Roubaix, France. Pile-fabric loom | 748,084 | Dec. 29 | 5174 | 1171 | 107 | 2316 |
| Leroy Plow Company. (See Hall, Edwin, assignor.) | | | | | | |
| Leske, Christian A., Heldburg, Germany. Protecting-mantle for cycle or air tubes | 744,574 | Nov. 17 | 3449 | 743 | 107 | 766 |
| Leslie, Bradford, Harrow-on-the-Hill, England. Apparatus for measuring and conveying coal or the like | 723,688 | Mar. 24 | 3772 | 847 | 103 | 834 |
| Leslie, Bradford, Harrow-on-the-Hill, England. Apparatus for measuring coal or the like | 734,901 | July 28 | 4094 | 954 | 105 | 909 |
| Leslie, Curtis W., Pittsburg, Pa., assignor of two-thirds to F. W. and H. C. Leslie. Stair-carpet fastener | 720,447 | Feb. 10 | 1905 | 434 | 102 | 1242 |
| Leslie, Frank W., *et al.* (See Leslie, Curtis W., assignor.) | | | | | | |
| Leslie, Harry C., *et al.* (See Leslie, Curtis W., assignor.) | | | | | | |
| Leslie, James W., assignor to Winship, Boit & Company, Wakefield, Mass. Curtain-ring | 722,370 | Mar. 10 | 1332 | 294 | 103 | 299 |
| Leslie, John S., *et al.* (See Lindsay, Robert F., assignor.) | | | | | | |
| Lesser, Rudolf, Berlin, Germany. Making substitution products of aromatic amins | 729,876 | June 2 | 658 | ..... | 104 | 1263 |
| Lester, Cassius C., Penn Yan, N. Y. Rural mail-carrier | 743,298 | Nov. 3 | 937 | 204 | 107 | 201 |
| Lester, Daniel M., Norwich, Conn. Clamp-collar | 748,385 | Dec. 29 | 5697 | 1300 | 107 | 2429 |
| Lester, E. C., *et al.* (See Miller, Carey W., assignor.) | | | | | | |
| Lester, George C., New York, N. Y. Electric coffee-roaster | 718,135 | Jan. 13 | 1146 | 255 | 102 | 262 |
| Lester, James S., assignor of one-half to S. W. Small and A. P. Herrington, Atlanta, Ga. Locomotive-headlight | 720,823 | Feb. 17 | 2605 | 602 | 102 | 1401 |
| Lester, John E., Omaha, Nebr. Machine for sealing and stamping envelops | 746,114 | Dec. 8 | 1467 | 329<br>330 | 107 | 1433 |
| Lester, Orlando B., assignor to W. F. Mahony, Washington, D. C. Eye-shade | 734,270 | July 21 | 2909 | 680 | 105 | 650 |
| Letombe, Leon A. C., Lille, France. Gas or explosive engine | 726,710 | Apr. 28 | 4273 | 965 | 103 | 2108 |
| Letord, Henri. (See Letord, Alexander, and Letord.) | | | | | | |
| Letord, Joseph S., W. W. Alexander, and H. Letord, assignors to L. A. Rheostat Co., Kansas City, Mo. Circuit-controller for surgico-dental engines | 730,379 | June 9 | 1553 | 346<br>347 | 104 | 1461 |
| Leuenberger, Carl A., assignor to Firm of "Union," Biel, Switzerland. Automatic electric chain-welding machine | 728,119 | May 12 | 2434 | 542<br>543 | 104 | 536 |
| Leuthesser, Fred W., Chicago, Ill. Directory or name board | 731,795 | June 23 | 4190 | 934 | 104 | 2045 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drig. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Leuthesser, Fred W., assignor to Monash-Younker Company, Chicago, Ill. Air-valve for radiators | 721,521 | Feb. 24 | 3955 | 901 | 102 | 1705 |
| Leuthesser, Fred W., assignor to Monash-Younker Company, Chicago, Ill. Steam-trap | 736,750 | Aug. 18 | 3211 | 709 | 105 | 1699 |
| Levalley, Christopher W., Milwaukee, Wis. Shaft-hanger | 734,902 | July 28 | 4094 | 954 | 105 | 910 |
| Levalley, Christopher W., Milwaukee, Wis. Drive-chain | 737,749 | Sept. 1 | 357 | 76 | 106 | 80 |
| Levalley, Christopher W., Milwaukee, Wis. Chain | 745,361 | Dec. 1 | 85 | 20 | 107 | 1119 |
| Levan, Arthur. (See James and Rusher, assignors.) | | | | | | |
| Levan, Samuel, Saginaw, Mich. Miter-cutting machine | 734,185 | July 21 | 2747 | 645 | 105 | 614 |
| Levant, Joseph. (See Barnes, Jeremiah, assignor.) | | | | | | |
| Levé, Marcus S., Fruitvale, Cal. Driving mechanism for ore-concentrators | 740,027 | Sept. 29 | 4813 | 1079 | 106 | 1097 |
| Leveck, Frank, Symmes Township, Ohio. Apparatus for ridding poultry of vermin | 738,460 | Sept. 8 | 1850 | 403 | 106 | 412 |
| Leverich, William H. C. (See Blanchard, Alva W., assignor.) | | | | | | |
| Leveson, Max, Scotland, S. D. Insect-trap | 739,689 | Sept. 22 | 4144 | 925 | 106 | 936 |
| Levey, Clarence D., New York, N. Y. Fireproofing for books | 738,744 | Sept. 8 | 2398 | 527 | 106 | 529 |
| Levi, Abraham, assignor of one-half to M. Levi, Baltimore, Md. Shirt-waist | 724,301 | Mar. 31 | 4999 | 1118 | 103 | 1102 |
| Levi, Abraham, assignor of two-thirds to L. and M. Levi, Baltimore, Md. Sanitary attachment for sound receivers or transmitters | 743,896 | Nov. 10 | 2144 | 461 | 107 | 472 |
| Levi, Benjamin I., assignor of one-half to M. Lowenstein, New York, N. Y. Miniature telegraphic instrument | 744,575 | Nov. 17 | 3449 | 743 | 107 | 766 |
| Levi, Grace M. (See Bonnell, William R., assignor.) | | | | | | |
| Levi, Isaac, Buffalo, N. Y. Attachment for electric-light poles | 723,886 | Mar. 31 | 4149 | 935 | 103 | 930 |
| Levi, Leone, Genoa, Italy. Surgical instrument | 728,589 | May 19 | 3357 | 744 | 104 | 752 |
| Levi, Louis, *et al.* (See Levi, Abraham, assignor.) | | | | | | |
| Levi, Max, *et al.* (See Levi, Abraham, assignor.) | | | | | | |
| Levi, Philip, Brooklyn, N. Y. Cleaning and polishing compound | 721,053 | Feb. 17 | 3045 | ..... | 102 | 1496 |
| Levin, Harris, Freeport, N. Y. Cluster-setting for jewelry | 736,273 | Aug. 11 | 2312 | 501 | 105 | 1494 |
| Levin, Judah L., Detroit, Mich. Adding-machine | 727,392 | May 5 | 1056 | 229 | 104 | 228 |
| Levin, Lewis, Newcastle, Pa. Vehicle brake or lock | 725,853 | Apr. 21 | 2665 | 607 | 103 | 1766 |
| Levin, Samuel, Highland Park, assignor of one-half to G. E. Griffin, Fort Sheridan, Ill. Game apparatus | 740,448 | Oct. 6 | 125 | 25 | 106 | 1272 |
| Levinger, Leo V., San Francisco, Cal. Bathing apparatus | 744,370 | Nov. 17 | 3092 | 663 | 107 | 690 |
| Levinstein, Herbert. (See Levinstein, Ivan and H.) | | | | | | |
| Levinstein, Ivan, and C. Mensching, assignors to Levinstein, Limited, Manchester, England. Blue polyazo dye and making same | 722,860 | Mar. 17 | 2264 | ..... | 103 | 511 |
| Levinstein, Ivan, and C. Mensching, assignors to Levinstein, Limited, Manchester, England. Benzylnaphthylamin-sulfonic acid and making same | 722,861 | Mar. 17 | 2265 | ..... | 103 | 511 |
| Levinstein, Ivan and H., assignors to Levinstein, Limited, Manchester, England. Blue sulfur dye and making same | 732,090 | June 30 | 4757 | ..... | 104 | 2178 |
| Levinstein, Limited. (See Levinstein, Ivan and H., assignors.) | | | | | | |
| Levinstein, Limited. (See Levinstein and Mensching, assignors.) | | | | | | |
| Levis, De Haven M. (See Peters and Levis.) | | | | | | |
| Levitt, Robert W., and J. L. Shough, assignors of one-third to W. J. Krumlauf, Somerset, Ohio. Staple feeding and inserting device | 746,967 | Dec. 15 | 3044 | 698 | 107 | 1801 |
| Levoy, Benjamin M., New York, N. Y., assignor to G. J. Kirby, Providence, R. I. Eyeglasses | 742,458 | Oct. 27 | 4008 | 899 | 106 | 2139 |
| Levy, Abraham B. (See Bleoo, John H., assignor.) | | | | | | |
| Levy, Adolf, Philadelphia, Pa. Apparatus for moistening air | 720,364 | Feb. 10 | 1766 | 400 | 102 | 1213 |
| Levy, Charles. (See Bernstein, Alexander, assignor.) | | | | | | |
| Levy, Deronda, assignor to Mason Monogram Company, New York, N. Y. Interchangeable electric display apparatus | 728,944 | May 26 | 3995 | 889 | 104 | 899 |
| Levy, Edward, and L. Irens, Chatham, Mich. Nut-lock | 718,776 | Jan. 20 | 2394 | 531 | 102 | 539 |
| Levy, Emile, *et al.* (See Moseley, Lee R., assignor.) | | | | | | |
| Levy, Henry B., New York, N. Y. Self-filling fountain-pen | 717,873 | Jan. 6 | 683 | 152 | 102 | 146 |
| Levy, Jacob M., Baltimore, Md. Machine for drying fabrics | 733,224 | July 7 | 931 | 225 | 105 | 195 |
| Levy, Joseph, Verdigris, Nebr. Ratchet pipe-wrench | 728,945 | May 26 | 3999 | 890 | 104 | 900 |
| Levy, Joseph L. (See Bower, Sigmund, assignor.) | | | | | | |
| Levy, Morris F., Chicago, Ill. Banana-bunch hanger | 725,458 | Apr. 14 | 1932 | 433 | 103 | 1594 |
| Levy, Sam, *et al.* (See Fender, John B., assignor.) | | | | | | |
| Lewandowfski, Josep, Allegheny, Pa. Curtain-fixture | 728,120 | May 12 | 2441 | 543 | 104 | 538 |
| Lewandowfski, Josep, Allegheny, Pa. Carpet-cleaning machine | 739,611 | Sept. 22 | 3994 | 891 | 106 | 902 |
| Lewars, Lincoln H., Goldengate, assignor of one-half to D. E. Garrett and H. J. Perreau, West Berkeley, Cal. Oil-burner | 719,345 | Jan. 27 | 3475 | 774 | 102 | 780 |
| Lewellen, Samuel, Philadelphia, Pa. Electric lighting attachment for gas-stoves | 747,446 | Dec. 22 | 3936 | 885 | 107 | 2017 |
| Lewin, John J., Paloalto, Cal. Movement-cure apparatus | 745,021 | Nov. 24 | 4270 | 925 | 107 | 956 |
| Lewin, Martin, Berlin, Germany, assignor, by mesne assignments, to E. C. Mix, New York, N. Y. Imitation astrakhan | 736,412 | Aug. 18 | 2554 | 560 | 105 | 1563 |
| Lewin, Walter. (See Tabrett and Lewin.) | | | | | | |
| Lewinski, William, assignor to himself, R. B. Arnold, W. E. Burton, and C. S. French, Lake Geneva, Wis. Strainer | 720,365 | Feb. 10 | 1767 | 400 | 102 | 1214 |
| Lewis, Albert. (See Lewis, Shirley S. and A.) | | | | | | |
| Lewis, Albert H., J. C. Shields, and A. G. Quimby, Uhrichsville, Ohio. Envelop and writing-sheet | 725,459 | Apr. 14 | 1933 | 433 | 103 | 1594 |
| Lewis, Albert H., A. G. Quimby, C. T. Harlow, and J. C. Shields, Uhrichsville, Ohio. Railway-crossing | 717,692 | Jan. 6 | 302 | 75 | 102 | 65 |
| Lewis, Albert P., Philadelphia, Pa. Clasp or fastener | 727,162 | May 5 | 653 | 140 | 104 | 141 |
| Lewis, Albert S., Yellville, Ark. Neck-yoke | 742,042 | Oct. 20 | 3201 | 715 | 106 | 1959 |
| Lewis, Alfred, Kettering, England. Last for boots or shoes | 729,192 | May 26 | 4436 | 978 | 104 | 990 |
| Lewis, Ammon H. (See Henderson and Lewis.) | | | | | | |
| Lewis, Atwood L., Philadelphia, Pa. Range-finder for photographic cameras | 729,948 | June 2 | 775 | 172 | 104 | 1286 |
| Lewis, C. M., *et al.* (See Broyles, Oliver P., assignor.) | | | | | | |
| Lewis, David R., Manchester, Iowa. Float for fishing-lines | 738,923 | Sept. 15 | 2748 | 608 | 106 | 622 |
| Lewis, Edward G., assignor to Controller Company of America, St. Louis, Mo. Telephone-lock | 728,478 | May 19 | 3130 | 692 | 104 | 704 |
| Lewis, Edwin W., and J. S. Unger, Munhall, Pa. Cutting steel plates | 744,014 | Nov. 10 | 2404 | 516 | 107 | 528 |
| Lewis, Egbert G., Buffalo, N. Y. Device for removing casters | 744,081 | Nov. 17 | 2543 | 544 | 107 | 571 |
| Lewis, Elias, Terre Haute, Ind. Solid draft-rigging | 733,720 | July 14 | 1812 | 429 | 105 | 399 |
| Lewis, Erastus L., and F. Luckey, assignors of one-half to R. R. and J. Fisher, Marshall, Mich. Vehicle-pole tip | 725,720 | Apr. 21 | 2437 | 553 | 103 | 1716 |
| Lewis, Ernest A., Toronto, Canada. Eyeglasses | 729,616 | June 2 | 167 | 40 | 104 | 1161 |
| Lewis, Frank C., Milwaukee, Wis. Pump | 743,299 | Nov. 3 | 938 | 204 | 107 | 291 |
| Lewis, Frank G. (See Clements, William G., assignor.) | | | | | | |
| Lewis, George, Beverly, Mass. Kicking-block for horses | 721,959 | Mar. 3 | 575 | 127 | 103 | 426 |
| Lewis, George E. (See O'Bannon and Chamberlain, assignors.) | | | | | | |
| Lewis, George W., Portsmouth, assignor of one-half to C. A. Nash, Norfolk, Va. Lock for bearing-pieces of journal-boxes | 731,694 | June 23 | 4002 | 893 | 104 | 2005 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | Spec. | Drg. | Vol. | Page. |
| Lewis, Harry A., Norristown, assignor of one-half to W. J. Caskey, Philadelphia, Pa. Electrical testing apparatus | 723,205 | Mar. 17 | 2886 | 647 | 103 | 642 |
| Lewis, Harry L., assignor of one-half to S. E. Moore and B. F. Call, Pittsburg, Pa. Rotary engine | 726,228 | Apr. 21 | 3311 | 751 | 103 | 1900 |
| Lewis, Harry S., New Orleans, La. Cipher-key for cryptographic codes | 723,288 | Mar. 24 | 3034 | 683 | 103 | 686 |
| Lewis, John, *et al.* (See Weed, James, assignor.) | | | | | | |
| Lewis, John E. (See Moore and Lewis.) | | | | | | |
| Lewis, John E., Avenue, assignor of three-fifths to Allegheny Steel and Iron Company, Pittsburg, Pa. Machinery for pickling plates for coating with tin, &c | 717,585 | Jan. 6 | 112 | 29 | 102 | 26 |
| Lewis, John F., *et al.* (See Aiken, Albion P., assignor.) | | | | | | |
| Lewis, John F. (See Killeen, Lewis, and Aiken.) | | | | | | |
| Lewis, John F., Philadelphia, Pa. Sounding apparatus | 718,006 | Jan. 6 | 926 | 206 | 102 | 199 |
| Lewis, John F., assignor to Philadelphia Lubricator Manufacturing Company, Philadelphia, Pa. Grease-cup | 726,314 | Apr. 28 | 3506 | 793 | 103 | 1954 |
| Lewis, John F., assignor of five-sixths to M. Killeen, Braddock, and A. P. Aiken, Port Perry, Pa. Furnace-charging apparatus | 729,877 | June 2 | 660 | 146 | 104 | 1263 |
| Lewis, John F., assignor of one-half to J. Roth, Philadelphia, and C. Murphy, Scranton, Pa. Lubricator | 738,046 | Sept. 1 | 962 | 214 | 106 | 209 |
| Lewis, John G., St. Louis, Mo. Blindstitch sewing-machine | 731,695 | June 23 | 4003 | 893<br>894 | 104 | 2005 |
| Lewis, John G., St. Louis, Mo. Blindstitch sewing-machine | 731,696 | June 23 | 4006 | 894 | 104 | 2006 |
| Lewis, John G., St. Louis, Mo. Blindstitch sewing-machine | 731,697 | June 23 | 4007 | 894 | 104 | 2006 |
| Lewis, John G., St. Louis, Mo. Blindstitch sewing-machine | 746,853 | Dec. 15 | 2814 | 648<br>649<br>650 | 107 | 1748 |
| Lewis, John G., Fairfield, Nebr. Halter | 734,903 | July 28 | 4096 | 955 | 105 | 910 |
| Lewis, John H., and L. G. Kunzer, Chicago, Ill. Metallic packing for piston-rods | 721,709 | Mar. 3 | 107 | 23 | 103 | 24 |
| Lewis, John H., and L. G. Kunzer, Chicago, Ill. Metallic packing and packing-case for piston-rods | 721,710 | Mar. 3 | 109 | 23 | 103 | 24 |
| Lewis, John H., and L. G. Kunzer, Chicago, Ill. Piston-rod packing and packing-case | 724,022 | Mar. 31 | 4444 | 998 | 103 | 989 |
| Lewis, John H., and L. G. Kunzer, Chicago, Ill. Gland for piston-rod packing | 737,639 | Sept. 1 | 147 | 32 | 106 | 35 |
| Lewis, John R., Weatherford, Tex. Well-drilling machine | 726,174 | Apr. 21 | 3205 | 726 | 103 | 1877 |
| Lewis, John S., D. F. Grow, and L. Wolf, Wabash, Ind. Show-case | 742,459 | Oct. 27 | 4009 | 899 | 106 | 2140 |
| Lewis, Joseph S., Milton, Pa. Key-ring | 739,094 | Sept. 15 | 3042 | 673 | 106 | 683 |
| Lewis, Leslie H., Lexington, Ky. Coal-conveyer for locomotive-tanks | 726,711 | Apr. 28 | 4274 | 965 | 103 | 2108 |
| Lewis, Lester L. (See Mitchell and Lewis.) | | | | | | |
| Lewis, Lorenzo D., Adams, N. Y. Paper-box machine | 738,047 | Sept. 1 | 964 | 214 | 106 | 210 |
| Lewis, Louis B., Columbus, Ohio. Game | 731,192 | June 16 | 3058 | 679 | 104 | 1795 |
| Lewis, Matthew C. (See Coffin and Lewis.) | | | | | | |
| Lewis, Mortimer G. (See Pedersen, Johannes T., assignor.) | | | | | | |
| Lewis, Mortimer G., New York, N. Y. Liquid-fuel heater-burner | 742,460 | Oct. 27 | 4011 | 900 | 106 | 2140 |
| Lewis, Murray D., Sydney River, Canada. Self-mitering cornice-mold | 727,647 | May 12 | 1547 | 349 | 104 | 350 |
| Lewis, Richard H., Riverdale, Md. Tire-tightener | 747,736 | Dec. 22 | 4462 | 1006 | 107 | 2136 |
| Lewis, Rollin C., Stamford, Conn., assignor to Varley Duplex Magnet Company. Tapping-machine | 743,737 | Nov. 10 | 1845 | 389<br>390 | 107 | 410 |
| Lewis, Sarah D., and H. M. Fessenden, New York, N. Y. Combined ventilator and weather-shield for windows | 720,712 | Feb. 17 | 2436 | 557 | 102 | 1364 |
| Lewis, Shirley S. and A., Syracuse, N. Y. Motor-vehicle | 719,822 | Feb. 3 | 748 | 175 | 102 | 981 |
| Lewis, Sylvester G., Chicago, Ill. Lace-machine | 745,206 | Nov. 24 | 4671 | 1017 | 107 | 1039 |
| Lewis, Theodore G., Buffalo, N. Y. Dental flask-press | 722,726 | Mar. 17 | 2017 | 450 | 103 | 463 |
| Lewis, Walter A., assignor of two-thirds to R. M. Horton and J. Dimond, Battle Mountain, Nev. Nut-lock | 727,393 | May 5 | 1059 | 229 | 104 | 228 |
| Lewis, Wilfred, assignor to Tabor Manufacturing Company, Philadelphia, Pa. Vibrator-engine | 738,209 | Sept. 8 | 1327 | 287 | 106 | 303 |
| Lewis, William, Elkins, W. Va. Currycomb attachment | 736,984 | Aug. 25 | 3668 | 813 | 105 | 1815 |
| Lewis, William C., Washington, D. C. Fireproof floor construction | 732,091 | June 30 | 4758 | 1062 | 104 | 2178 |
| Lewis, William R., Montezuma, Iowa. Jack | 740,878 | Oct. 6 | 911 | 204 | 106 | 1440 |
| Lewisheim, Leopold. (See Woodworth, George D., assignor.) | | | | | | |
| Lewison, Lewis C., Adams, Minn. Wire fence-gate | 718,777 | Jan. 20 | 2395 | 532 | 102 | 539 |
| Lewitz, Reinhold, New York, N. Y. Bicycle-alarm | 739,095 | Sept. 15 | 3043 | 674 | 106 | 683 |
| Lewy, Julius, Biebrich, Germany. Artificial wax | 735,538 | Aug. 4 | 972 | ..... | 105 | 1187 |
| Lewy, Philipp, Charlottenburg, Germany. Preparing oils for medicinal use | 738,461 | Sept. 8 | 1852 | ..... | 106 | 412 |
| Ley, Harold A. (See Culver, Charles R., assignor.) | | | | | | |
| Leyhtwine, Joseph, Woodhill, Mo., assignor of one-half to W. E. Leyhtwine, Woodbine, Iowa. Corn-planter | 748,386 | Dec. 29 | 5698 | 1300<br>1301 | 107 | 2430 |
| Leyhtwine, W. E. (See Leyhtwine, Joseph, assignor.) | | | | | | |
| Leyner, John G., Denver, Colo. Rock-drilling system | 739,551 | Sept. 22 | 3871 | 868 | 106 | 877 |
| Libaire, Henry A., New York, N. Y. Cuff-button | 730,277 | June 9 | 1374 | 303 | 104 | 1423 |
| Libbe Engineering and Construction Co. (See Libbe, John H. W., assignor.) | | | | | | |
| Libbe, John H. W., Toledo, Ohio, assignor to Libbe Engineering and Construction Co., Ltd., Lansing, Mich., and Toledo, Ohio. Trench-digging machine | 743,300 | Nov. 3 | 939 | 204<br>205 | 107 | 201 |
| Libby, Frederick M., Portland, Me. Food compound | 737,119 | Aug. 25 | 3885 | ..... | 105 | 1860 |
| Libby, Lawrence R., Hartford, Conn. Sectional boiler | 727,814 | May 12 | 1882 | 419 | 104 | 418 |
| Libby, Lute B., *et al.* (See Burnham, Arthur M., assignor.) | | | | | | |
| Libby, Robert H., Marshfield Center, Mass. Fruit-picker | 740,292 | Sept. 29 | 5281 | 1189 | 106 | 1193 |
| Liberman, Isadore, Philadelphia, Pa. Cigar-branding machine | 747,990 | Dec. 29 | 4987 | 1126<br>1127 | 107 | 2274 |
| Liberty Bell Company. (See Rockwell, Edward D., assignor.) | | | | | | |
| Library Bureau. (See Hunter, David E., assignor.) | | | | | | |
| Lichtenberg, Gerhard, Wilhelmshaven, Germany. Spout for vessels containing explosive liquids | 746,854 | Dec. 15 | 2818 | 650 | 107 | 1749 |
| Lichtenberger, Paul W., and W. M. Zimmermann, Philadelphia, Pa. Automatic coal stoker or feeder | 728,732 | May 19 | 3609 | 801 | 104 | 805 |
| Lichtenstadt, Charles, Chicago, Ill. Machine for treating fabrics for rendering them water-repellent | 736,413 | Aug. 18 | 2555 | 561<br>562 | 105 | 1563 |
| Lidberg, Tiodolf, assignor to Swedish-American Telephone Company, Chicago, Ill. Electric bell-ringer | 733,225 | July 7 | 933 | 225 | 105 | 195 |
| Liddle, William F., London, England. Paper-folding machine | 728,733 | May 19 | 3611 | 801 | 104 | 805 |
| Lidgerwood Manufacturing Company. (See Covell, Harry N., assignor.) | | | | | | |
| Lidgerwood Manufacturing Company. (See Crowdes, Jackson G., assignor.) | | | | | | |
| Lidgerwood Manufacturing Company. (See Dickinson, Joseph H., assignor.) | | | | | | |
| Lidgerwood Manufacturing Company. (See Miller and Dickinson, assignors.) | | | | | | |
| Lidgerwood Manufacturing Company. (See Reynolds, Henry L., assignor.) | | | | | | |
| Lidke, Otto F., Ypsilanti, Mich. Hoisting apparatus | 747,737 | Dec. 22 | 4464 | 1006 | 107 | 2136 |
| Lieb, Charles A., New York, N. Y. Motor-vehicle | 720,713 | Feb. 17 | 2437 | 558 | 102 | 1365 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Lieb, John A., Jr., assignor to Kautzmann and Sussfeld, Newark, N. J. Interchangeable initial letter or insignia for finger-rings, &c. | 727,648 | May 12 | 1549 | 349 | 104 | 351 |
| Lieber, Carl H., Indianapolis, Ind. Margin-gage | 720,824 | Feb. 17 | 2606 | 602 | 102 | 1401 |
| Lieber, Joseph, Boonville, Mo. Mail-box | 725,101 | Apr. 14 | 1275 | 288 | 103 | 1455 |
| Lieber, Rudolph, and C. Lambert, Dusseldorf, Germany. Skylight | 739,013 | Sept. 15 | 2886 | 641 | 106 | 652 |
| Lieberknecht, Theodor, Hohenstein, Germany. Knitting-frame | 735,988 | Aug. 11 | 1822 | 390<br>391 | 105 | 1390 |
| Liebert, Edwin M., Dusseldorf, Germany. Trigger mechanism for firearms | 719,019 | Jan. 27 | 2843 | 637 | 102 | 648 |
| Liebreich, Hans, and J. C. Francis, assignors to A. Helbig, Detroit, Mich. Facsimile-telegraph | 728,254 | May 19 | 2693 | 602<br>603<br>604 | 104 | 612 |
| Liebreich, Oscar, Berlin, Germany. Making fatty substances | 741,584 | Oct. 13 | 2299 | ..... | 106 | 1756 |
| Liebreich, Oscar, Berlin, Germany. Producing glycerin and acidylated derivatives of aromatic bases and the product thereof | 741,585 | Oct. 13 | 2300 | ..... | 106 | 1756 |
| Liebreich, Oscar, Berlin, Germany. Fatty substance and making same | 746,638 | Dec. 8 | 2409 | ..... | 107 | 1638 |
| Liebreich, Oscar, Berlin, Germany. Fat-like substance and making same | 748,511 | Dec. 29 | 5955 | ..... | 107 | 2486 |
| Liechty, William, Bluffton, Ohio. Wire-working tool | 743,738 | Nov. 10 | 1848 | 390 | 107 | 411 |
| Liedbeck, Per F. A., Stockholm, Sweden. Apparatus for evaporating solvents from smokeless powder | 718,484 | Jan. 13 | 1796 | 399 | 102 | 398 |
| Liepmann, M. Martha. (See Liepmann, Oscar, assignor.) | | | | | | |
| Liepmann, Oscar, assignor to M. M. Liepmann, Berlin, Germany. Manufacture of veneered molding or the like | 734,423 | July 21 | 3184 | 748 | 105 | 706 |
| Lierz, Henry. (See Schmalfuss, Gottfried, assignor.) | | | | | | |
| Lietz, Henry, Cleveland, Ohio. Device for protecting combination-dials | 732,197 | June 30 | 4974 | 1106 | 104 | 2224 |
| Lievens, Pierre, and G. Jahn, Brussels, Belgium. Burglar-alarm | 739,429 | Sept. 22 | 3679 | 818 | 106 | 836 |
| Lifquist, Andrew C., Wadena, Minn. Cream cooler and aerator | 734,075 | July 21 | 2537 | 592 | 105 | 571 |
| Liftchild, Frank A., Brooklyn, N. Y. Medicine-dropper | 732,689 | June 30 | 5921 | 1313 | 104 | 2424 |
| Liggett, William K., assignor to Kincaid & Liggett Company, Columbus, Ohio. Electric controller for electric motors | 731,375 | June 16 | 3384 | 757<br>758 | 104 | 1864 |
| Light, Frank, Louisville, Colo. Flushing apparatus for closets | 719,598 | Feb. 3 | 334 | 78 | 102 | 892 |
| Lightbown, William L., Philadelphia, Pa., assignor to Lanston Monotype Machine Company, Washington, D. C. Fluid-metal-injecting mechanism | 720,714 | Feb. 17 | 2438 | 558 | 102 | 1365 |
| Lightcap, William H., Lancaster, assignor of one-half to W. T. Andrews and G. F. Beal, Milwaukee, Wis. Harvester-reel | 746,534 | Dec. 8 | 2217 | 509 | 107 | 1594 |
| Lightner, William J., Cincinnati, Ohio, and J. J. Hollearn, Newport, Ky. Adjustable support for roller-curtains | 717,693 | Jan. 6 | 305 | 75 | 102 | 66 |
| Lignières, René D. de, Paris, France. Means for starting and regulating induction-motors | 739,096 | Sept. 15 | 3045 | 674<br>675 | 106 | 683 |
| Ligon, Robert B., Greenville, S. C. Kitchen utensil | 744,576 | Nov. 17 | 3450 | 743 | 107 | 766 |
| Ligon, William H. (See Matthews, Thomas A., assignor.) | | | | | | |
| Liken, Ezra, Barkeyville, Pa. Friction-clutch | 733,406 | July 14 | 1275 | 302 | 105 | 286 |
| Liles, La Fayette W., Mineralwells, Tex. Grain-drying means | 722,118 | Mar. 3 | 846 | 188<br>189 | 103 | 182 |
| Lilienfeld, Leon. (See Jolles and Lilienfeld.) | | | | | | |
| Lilley, George W., Lapeer, Mich. Land-roller | 735,120 | Aug. 4 | 144 | 32 | 105 | 1013 |
| Lilley, Hugh H. V., deceased, J. L. Lilley, Milford, Mass., administrator, assignor, by mesne assignments, to said J. L. Lilley. Clamp-lathe dog | 728,946 | May 26 | 4000 | 890 | 104 | 900 |
| Lilley, James L., administrator. (See Lilley, Hugh H. V.) | | | | | | |
| Lillie, George H., Denver, Colo. Type-writer | 719,346 | Jan. 27 | 3476 | 774 | 102 | 780 |
| Lillie, Samuel M., Philadelphia, Pa. Tube for evaporators | 740,449 | Oct. 6 | 126 | 26 | 106 | 1273 |
| Lilly, Francis G., assignor of one-half to S. E. Clark, Padanaram, Ohio. Potato-digger | 726,549 | Apr. 28 | 3964 | 896 | 103 | 2045 |
| Lilly, Grant E., *et al.* (See Taylor, James A., assignor.) | | | | | | |
| Lilly, William, Tilsonburg, Canada. Bag-holder | 748,387 | Dec. 29 | 5700 | 1301 | 107 | 2430 |
| Lilly, William C., Akron, Ohio. Elastic wheel-tire | 718,645 | Jan. 20 | 2140 | 467 | 102 | 488 |
| Limauge, Eugène, Brussels, Belgium. Trolley-catcher | 727,649 | May 12 | 1550 | 349<br>350 | 104 | 351 |
| Limbach, George, New York, N. Y. Bottle-stopper head | 722,596 | Mar. 10 | 1744 | 388 | 103 | 390 |
| Limberg, Bruno, Kelsterbach, Germany. Wagon-unloading device | 726,713 | Apr. 28 | 4277 | 966 | 103 | 2109 |
| Limbert, Carl B. (See Limbert, Samuel H., assignor.) | | | | | | |
| Limbert, Samuel H., assignor, by mesne assignments, of one-half to C. B. Limbert, Springfield, Ohio. Trolley | 722,862 | Mar. 17 | 2265 | 507 | 103 | 511 |
| Limnell, Mike, Superior, Wis. Rotary eccentric-piston pump | 726,712 | Apr. 28 | 4275 | 966 | 103 | 2109 |
| Limper, Franz, Recklinghausen, Germany. Wick for lamps | 738,210 | Sept. 8 | 1329 | 287 | 106 | 303 |
| Linch, Edward P., Waterbury, Conn. Forming wire into collar or sleeve buttons | 724,719 | Apr. 7 | 565 | 135 | 103 | 1289 |
| Linck, Edward C., St. Louis, Mo. Window-screen | 746,347 | Dec. 8 | 1904 | 435 | 107 | 1525 |
| Lincoln, Chester E. H., Douglas, Ariz. Ter. Locomotive-valve | 738,115 | Sept. 1 | 1112 | 246 | 106 | 240 |
| Lincoln, Clinton E., Kingston, N. C. Bench-plane | 739,014 | Sept. 15 | 2887 | 641 | 106 | 652 |
| Lincoln, Erfell W., *et al.* (See Leonard, George I., assignor.) | | | | | | |
| Lincoln, Paul M., Pittsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Synchronizing apparatus for electrical machines | 735,786 | Aug. 11 | 1427 | 307 | 105 | 1302 |
| Lincoln, Regina, New York, N. Y. Combined book-carrier and scholar's companion | 738,462 | Sept. 8 | 1852 | 403 | 106 | 412 |
| Lincoln, Robert B. (See Rheutan, Garrett H., assignor.) | | | | | | |
| Lincoln, Ward, assignor to Sterling Manufacturing Company, Rockfalls, Ill. Hay-rake | 740,769 | Oct. 6 | 729 | 165 | 106 | 1401 |
| Lind, August L., Stockholm, and C. H. Carlsson, Liljeholmen, Sweden. Electric igniter for lamps | 745,447 | Dec. 1 | 253 | 58, 59 | 107 | 1154 |
| Lind, Charley, Isanti, Minn. Currycomb | 720,448 | Feb. 10 | 1906 | 435 | 102 | 1242 |
| Lind, Frederick, Jr., Passaic, N. J. Window-screen | 725,854 | Apr. 21 | 2666 | 607 | 103 | 1767 |
| Lind, Gustaf A. L., assignor of two thirds to E. A. Mason and M. F. Kleindienst, Boston, Mass. Reversible rotary engine | 723,689 | Mar. 24 | 3773 | 847 | 103 | 834 |
| Lind, Jacob P., Columbus, Ohio. Truck | 736,613 | Aug. 18 | 2959 | 650 | 105 | 1647 |
| Lind, James A. (See Disken, Martin B., assignor.) | | | | | | |
| Lind, Trued E., Monson, Minn. Needle-bar for self-binders | 731,796 | June 23 | 4192 | 934<br>935 | 104 | 2045 |
| Lind, Walter W., East Orange, N. J. Sad-iron | 737,120 | Aug. 25 | 3886 | 863 | 105 | 1861 |
| Lindahl, John T., assignor to C. R. Lamm, Stockholm, Sweden. Furnace-door for steam-boilers, &c. | 746,855 | Dec. 15 | 2818 | 650<br>651 | 107 | 1749 |
| Lindberg, Gustaf S., Gothenburg, Sweden. Apparatus for producing perforated sheets of wood-pulp | 720,593 | Feb. 17 | 2201 | 510 | 102 | 1317 |
| Lindberg, Gustaf S., Gothenburg, Sweden. Manufacturing perforated sheets of wood-pulp | 728,804 | May 19 | 3742 | 884 | 104 | 832 |
| Lindberg, Lars A. (See Talen, Pearson, Christopher, Johnson, and Lindberg.) | | | | | | |
| Linde, Carl, Munich, Germany, assignor of one-third to C. F. Brush, Cleveland, Ohio. Producing low temperatures, liquefaction of gases, and the separation of the constituents of gaseous mixtures | 727,650 | May 12 | 1552 | 350 | 104 | 351 |
| Linde, Carl, Munich, Germany, assignor of one-third to C. F. Brush, Cleveland, Ohio. Apparatus for producing low temperatures, the liquefaction of gases, and the separation of the constituents of gaseous mixtures | 728,173 | May 12 | 2538 | 565 | 104 | 557 |

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| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| Linde, Gustav. (See Koehler and Linde.) | | | | | | |
| Lindemann, Albert J., assignor to A. J. Lindemann & Hoverson Co., Milwaukee, Wis. Oil-vapor burner | 738,463 | Sept. 8 | 1853 | 403 | 106 | 412 |
| Lindemann, Peter, Westchester, N. Y. Means for removing sleet, snow, and ice from third rails | 721,960 | Mar. 3 | 576 | 128 | 103 | 126 |
| Lindemeyr, Philip, Baltimore, Md. Holder and dispenser of fluids | 742,201 | Oct. 27 | 3535 | 789 | 106 | 2040 |
| Linden, Johan, P. Peirson, and C. E. Josephsan, Brooklyn, N. Y. Knockdown cot | 732,755 | July 7 | 102 | 29 | 105 | 25 |
| Lindenberg, Frank H., Columbus, Ohio. Flushing-tank | 747,447 | Dec. 22 | 3938 | 886 | 107 | 2018 |
| Lindenberg, Gustav. (See Lacour, Fischer, and Lindenberg.) | | | | | | |
| Lindenberger, George H., assignor to Kentucky Tobacco Product Company, Louisville, Ky. Obtaining nicotin or other volatile constituents from tobacco vapors | 730,032 | June 2 | 937 | 210 | 104 | 1318 |
| Lindenberger, Harry, assignor to Diamond Electric Machinery Company, St. Louis, Mo. Electric motor | 737,253 | Aug. 25 | 4153 | 923<br>924 | 105 | 1917 |
| Linder, George W., Baltimore, Md. Switch for electric railways | 723,690 | Mar. 24 | 3775 | 848 | 103 | 835 |
| Lindewirth, William H. (See Holtmann, Lindewirth, and Schunk.) | | | | | | |
| Lindewirth, William H. (See Zimmerly and Lindewirth.) | | | | | | |
| Lindgren, Alexander. (See Harlow and Lindgren.) | | | | | | |
| Lindgren, Alexus C., Moline, Ill., assignor to Moline Plow Company. Seed-dropping mechanism | 719,237 | Jan. 27 | 3264 | 729<br>730 | 102 | 734 |
| Lindgren, Alexus C., Moline, Ill., assignor to Moline Plow Company. Covering device for seeding-machines | 719,823 | Feb. 3 | 749 | 176 | 102 | 981 |
| Lindgren, Alexus C., Moline, Ill., assignor to Moline Plow Company. Lister-cultivator | 720,266 | Feb. 10 | 1584 | 362 | 102 | 1175 |
| Lindgren, Alexus C., Moline, Ill., assignor to Moline Plow Company. Seed-dropping mechanism | 725,460 | Apr. 14 | 1934 | 433<br>434 | 103 | 1594 |
| Lindgren, Frank W., Rockford, Ill. Lock | 741,685 | Oct. 20 | 2490 | 556 | 106 | 1812 |
| Lindh, Birger, Stockholm, Sweden. Operating and locking device for railway switches and signals | 732,198 | June 30 | 4974 | 1107 | 104 | 2224 |
| Lindhard, Povl T., New York, N. Y., assignor to F. L. Smidth & Co., Copenhagen, Denmark. Ball grinding-mill | 737,750 | Sept. 1 | 358 | 76 | 106 | 80 |
| Lindhard, Povl T., New York, N. Y., assignor to F. L. Smidth & Co., Copenhagen, Denmark. Ball grinding-mill | 740,879 | Oct. 6 | 912 | 205 | 106 | 1441 |
| Lindheimer, Edward G., Port Richmond, N. Y. Coin-operated coat and hat rack | 717,874 | Jan. 6 | 684 | 152<br>153 | 102 | 146 |
| Lindholm, Andrew P. (See Schroeder and Lindholm.) | | | | | | |
| Lindhorst, Edward H. B., Sacramento, Cal. Shade and curtain-pole bracket | 720,938 | Feb. 17 | 2822 | 647 | 102 | 1447 |
| Lindmark, Tore G. E., Stockholm, Sweden. Multiple engine | 717,875 | Jan. 6 | 686 | 153 | 102 | 146 |
| Lindmark, Tore G. E., Stockholm, Sweden. Elastic-fluid turbine | 717,876 | Jan. 6 | 689 | 154 | 102 | 147 |
| Lindmark, Tore G. E., Stockholm, Sweden. Pump | 717,877 | Jan. 6 | 691 | 154 | 102 | 147 |
| Lindmark, Tore G. E., Stockholm, Sweden. Steam-turbine | 726,315 | Apr. 28 | 3508 | 794 | 103 | 1955 |
| Lindmark, Tore G. E., Stockholm, Sweden. Steam-turbine | 735,889 | Aug. 11 | 1635 | 350 | 105 | 1349 |
| Lindmark, Tore G. E., Stockholm, Sweden. Elastic-fluid turbine | 737,121 | Aug. 25 | 3888 | 863 | 105 | 1861 |
| Lindner, Arthur E., Brooklyn, assignor to O. J Ahlstrom, New York, N. Y. Sewing-machine | 719,347 | Jan. 27 | 3479 | 774<br>775 | 102 | 781 |
| Lindner, Frank H., Bayonne, N. J. Mechanical movement | 729,949 | June 2 | 776 | 172<br>173<br>174 | 104 | 1286 |
| Lindner, Frank H., Bayonne, N. J. Printing-press | 738,821 | Sept. 15 | 2566 | 564<br>565<br>566<br>567 | 106 | 582 |
| Lindner, Isidor, New York, N. Y. Locking device for gas-tube connections | 721,577 | Feb. 24 | 4073 | 924<br>925 | 102 | 1732 |
| Lindquist, Andy W. (See Schultz, Wilbur, assignor.) | | | | | | |
| Lindquist, David L. (See Sundh and Lindquist.) | | | | | | |
| Lindquist, David L., Yonkers, N. Y. Electromagnet | 733,549 | July 14 | 1519 | 362 | 105 | 338 |
| Lindquist, David L., Yonkers, N. Y. Controlling device for alternating-current motors. | 733,550 | July 14 | 1520 | 362<br>363 | 105 | 338 |
| Lindquist, David L., Yonkers, N. Y. Electric controller | 733,551 | July 14 | 1524 | 363<br>364 | 105 | 339 |
| Lindquist, David L., Yonkers, N. Y. Electromagnet | 744,773 | Nov. 24 | 3822 | 824 | 107 | 863 |
| Lindquist, Erick W., Weymouth, Mass., assignor, by mesne assignments, to I. L. Drake, Providence, R. I. Machine for covering eyeglass-cases | 721,054 | Feb. 17 | 3046 | 699 | 102 | 1496 |
| Lindquist, Leonard B., and E. Agle, Argyle, Minn. Display-rack | 731,922 | June 23 | 4415 | 984 | 104 | 2095 |
| Lindqvist, John T., Stockholm, Sweden. Automatic safety uncoupling device | 746,535 | Dec. 8 | 2219 | 509 | 107 | 1594 |
| Lindsay & Addison Foundry and Machine Works. (See Addison, Robert, assignor.) | | | | | | |
| Lindsay, Charles R., Jr. (See Redell, Alvin B., assignor.) | | | | | | |
| Lindsay, Clarence A., New York, N. Y. Seamless rubber glove | 732,360 | June 30 | 5295 | 1174 | 104 | 2290 |
| Lindsay, Hamilton, Glenville, Ohio. Loom | 731,112 | June 16 | 2904 | 645<br>646 | 104 | 1766 |
| Lindsay, John S. (See Mayotte, Philis, assignor.) | | | | | | |
| Lindsay, Leroy J., Seymour, Iowa. Marker for corn-planters | 742,202 | Oct. 27 | 3537 | 789 | 106 | 2041 |
| Lindsay, Leroy J., Seymour, Iowa. Marker for corn-planters | 742,203 | Oct. 27 | 3539 | 789 | 106 | 2041 |
| Lindsay, Robert F., Greenville, S. C., assignor to S. C. Koonce, Clarksville, and J. S. Leslie, Sharon, Pa. Drainage means for water-supply systems | 746,115 | Dec. 8 | 1473 | 330<br>331 | 107 | 1434 |
| Lindsay, Thomas, and L. L. White, Wilmerding, Pa. Lamp-hanger | 745,633 | Dec. 1 | 582 | 135 | 107 | 1222 |
| Lindsay, Thomas J., Indianapolis, Ind. Compensating gear | 724,393 | Mar. 31 | 5188 | 1163 | 103 | 1142 |
| Lindsay, William D., Milwaukee, Wis. Coupling-governor | 746,715 | Dec. 15 | 2550 | 586 | 107 | 1689 |
| Lindsey, B. H. (See Swartz, George W., assignor.) | | | | | | |
| Lindsey, Charles. (See Skinner and Lindsey.) | | | | | | |
| Lindsey, Charles E., assignor of one-half to C. G. Hayes, Greenfield, Ohio. Bed-bottom. | 729,950 | June 2 | 781 | 174 | 104 | 1287 |
| Lindsey, Theodore C. and Theodore C., Jr., and M. U. Loree, Dayton, Ohio. Fishing-net. | 737,428 | Aug. 25 | 4487 | 1006 | 105 | 1989 |
| Lindström, Charles A., Allegheny, Pa. Bearing-plate for springs | 748,512 | Dec. 29 | 5956 | 1351 | 107 | 2486 |
| Lindström, Charles A., Allegheny, assignor to Pressed Steel Car Company, Pittsburg, Pa. Center-bearing plate | 744,922 | Nov. 24 | 4082 | 880 | 107 | 917 |
| Lindstrom, Charles A., assignor of two-thirds to A. C. Van Roden and G. Van Wagoner, East Rutherford, N. J. Non-refillable bottle | 730,380 | June 9 | 1559 | 347 | 104 | 1462 |
| Lindstrom, John, Henderson, Ky. Stringed musical instrument | 728,255 | May 19 | 2705 | 604 | 104 | 614 |
| Lindstrom, John T., Allentown, Pa. Steam-trap | 723,691 | Mar. 24 | 3777 | 848 | 103 | 835 |
| Lindström, Karl A. (See Dahlander and Lindström.) | | | | | | |
| Lindstrom, Nils O., assignor to A. B. See and W. L. Tyler, New York, N. Y. Safety-stop for elevators | 735,395 | Aug. 4 | 675 | 144<br>145 | 105 | 1124 |
| Linen Manufacturing Company. (See Mudge, Benjamin C., assignor.) | | | | | | |
| Lines, Jesse, Sabetha, Kans. Scale | 733,226 | July 7 | 934 | 226 | 105 | 195 |
| Lines, Samuel C., Curtice, Ohio. Vehicle-wheel tire | 732,199 | June 30 | 4977 | 1108 | 104 | 2225 |
| Lingel, Johann, Budapest, Austria-Hungary. Umbrella | 738,554 | Sept. 8 | 2030 | 441 | 106 | 452 |
| Lingelbach, Henry, Merino, Colo. Horse hay-rake | 745,207 | Nov. 24 | 4673 | 1018 | 107 | 1039 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page |
|---|---|---|---|---|---|---|
| Lingenfelter, Carl E., assignor to Scully Steel & Iron Company, Chicago, Ill. Metal-shearing machine | 746,716 | Dec. 15 | 2552 | 586<br>587 | 107 | 1690 |
| Lingle, George W., Eaglegrove, assignor of one-half to C. R. Johnson, Lanesboro, Iowa. Tripod | 730,830 | June 9 | 2352 | 521 | 104 | 1633 |
| Lingner, Karl A. (See Greimer, Karl, assignor.) | | | | | | |
| Lingo, John, Philadelphia, Pa. Drying apparatus for laundries | 736,274 | Aug. 11 | 2314 | 502 | 105 | 1494 |
| Linhoff, William, Nebraska City, Nebr. Hedge-trimmer | 722,371 | Mar. 10 | 1335 | 295 | 103 | 300 |
| Link Belt Engineering Company. (See Dodge, James M., assignor.) | | | | | | |
| Link Belt Engineering Company. (See Hetzel, Frederic V., assignor.) | | | | | | |
| Link Belt Engineering Company. (See Wolfe, Frank G., assignor.) | | | | | | |
| Link Belt Machinery Company. (See Birkholz, Richard, assignor.) | | | | | | |
| Link Belt Machinery Company. (See Peck, Staunton B., assignor.) | | | | | | |
| Link Belt Machinery Company. (See Petersen, John, assignor.) | | | | | | |
| Link Belt Machinery Company. (See Werner, John A., assignor.) | | | | | | |
| Link, Calvin W., Jersey City, N. J. Composition for use in producing metal castings | 729,617 | June 2 | 168 | ..... | 104 | 1161 |
| Link, Michael P., Bennett, Pa. Ice spur or creeper | 741,349 | Oct. 13 | 1846 | 407 | 106 | 1661 |
| Link, William D., Talladega, Ala. Fire-extinguishing apparatus | 739,327 | Sept. 22 | 3466 | 773 | 106 | 789 |
| Linke, Theodore, New York, N. Y. Water-filter | 726,714 | Apr. 28 | 4277 | 966 | 103 | 2109 |
| Linker, Peter, Philadelphia, Pa. Bottle-crate | 717,586 | Jan. 6 | 113 | 30 | 102 | 27 |
| Linn, Charles W., Muncie, Ind. Sash lock and alarm | 718,007 | Jan. 6 | 928 | 206 | 102 | 200 |
| Linn, Clyde H., assignor of one-half to C. W. Mali, New Brighton, Pa. Siphon | 741,513 | Oct. 13 | 2151 | 479 | 106 | 1735 |
| Linn, Edgar C. (See Arms, Hiram P., assignor.) | | | | | | |
| Linn, John B., Schenectady, N. Y., assignor to General Electric Company. Controller | 725,730 | Apr. 21 | 2438 | 553 | 103 | 1716 |
| Linn, John B., Schenectady, N. Y., assignor to General Electric Company. Lock for controller-handles | 728,590 | May 19 | 3358 | 744 | 104 | 752 |
| Linn, John B., Schenectady, N. Y., assignor to General Electric Company. Controller for electric motors | 730,667 | June 9 | 2087 | 464 | 104 | 1576 |
| Linn, Samuel H., Rochester, N. Y. Cataphoric electrode | 725,731 | Apr. 21 | 2439 | 554 | 103 | 1716 |
| Linotype Company. (See Barr, Mark, assignor.) | | | | | | |
| Linotype Company. (See Nadall, Berne, assignor.) | | | | | | |
| Linotype Company. (See Wich and Hoyt, assignors.) | | | | | | |
| Linsley, Edward B., *et al.* (See Green, John D., assignor.) | | | | | | |
| Linstrom, Charles, Vicksburg, Miss. Injector | 738,822 | Sept. 15 | 2574 | 567 | 106 | 583 |
| Lintern, William, Westpark, assignor of one-fourth to E. J. Redmond, Cleveland, Ohio. Wheel guard and sander | 746,116 | Dec. 8 | 1481 | 331 | 107 | 1437 |
| Linthicum, Carrie R., Toledo, Ohio. Hair-crimper | 742,795 | Oct. 27 | 4598 | 1042 | 106 | 2266 |
| Lintner, Robert E., East Pittsburg, assignor of one-half to J. H. Perrine, Turtlecreek, Pa. Toy money-bank | 720,825 | Feb. 17 | 2607 | 602 | 102 | 1401 |
| Linton, William J., Woodstock, assignor to Taylor Hydraulic Air Compressing Company, Limited, Montreal, Canada. Controller for hydraulic air-compressors | 734,904 | July 28 | 4097 | 955 | 105 | 910 |
| Lipe, Charles E. (See Brown and Lipe.) | | | | | | |
| Lipe, Willard C., Syracuse, N. Y. Broom-sewing machine | 718,263 | Jan. 13 | 1373 | 306<br>307<br>308<br>309 | 102 | 311 |
| Lipkowski, Joseph, assignor to Société Generale des Freins Lipkowski, Paris, France. Engineer's air-brake-controlling valve | 724,302 | Mar. 31 | 5000 | 1119 | 103 | 1102 |
| Lipkowski, Joseph, assignor to Société Generale des Freins Lipkowski, Paris, France. Air-brake | 727,894 | May 5 | 1060 | 230 | 104 | 228 |
| Lipman, Carl E. L., Beloit, Wis. Sparking plug | 746,968 | Dec. 15 | 3046 | 699 | 107 | 1801 |
| Lippengood, Tilghman F., Libertyville, Iowa. Metal-shears | 731,312 | June 16 | 3280 | 729 | 104 | 1842 |
| Lippert & Hahn. (See Tupper, John B., assignor.) | | | | | | |
| Lippincott, Fisher H., Philadelphia, Pa. Pencil-sharpener | 724,303 | Mar. 31 | 5001 | 1119 | 103 | 1102 |
| Lippincott, Frank T., Newark, Ohio. Hose-clamp | 735,989 | Aug. 11 | 1823 | 391 | 105 | 1390 |
| Lippincott, Oliver S., Camden, N. J., assignor of one-half to F. W. Poeppel, Philadelphia, Pa. Garment-supporter | 721,902 | Mar. 3 | 451 | 99 | 103 | 100 |
| Lippincott, Robert E., Worcester, Mass. Means for controlling illuminated announcement and display signals | 744,923 | Nov. 24 | 4083 | 880 | 107 | 917 |
| Lippitt, Elihu, assignor of one-half to George D. Whitcomb Co., Chicago, Ill. Frame for incandescent mantles | 746,639 | Dec. 8 | 2411 | 551 | 107 | 1638 |
| Lippitt, Elihu, and W. C. Whitcomb, Chicago, Ill., assignors to George D. Whitcomb Company. Mantles for gas-burners | 746,536 | Dec. 8 | 2221 | 509 | 107 | 1595 |
| Lippmann, Philipp, New York, N. Y. Corset-clasp attachment | 731,475 | June 23 | 3599 | 803 | 104 | 1926 |
| Lippold, Charles J., Washington, D. C. Twine-holder | 721,055 | Feb. 17 | 3047 | 699 | 102 | 1496 |
| Lipps, Frank F., Holyoke, Mass. Automatic coupling for the steam, air, or other pipes of railway-cars | 724,720 | Apr. 7 | 566 | 136 | 103 | 1290 |
| Lipps, William, Ridgedale, Tenn. Windlass water-elevator | 729,618 | June 2 | 169 | 40, 41 | 164 | 1161 |
| Lippy, David, Mansfield, Ohio. Heating-stove | 731,476 | June 23 | 3602 | 803 | 104 | 1927 |
| Lipschutz, Arthur. (See Toltz and Lipschutz.) | | | | | | |
| Lipschutz, Arthur. (See Wolff and Lipschutz.) | | | | | | |
| Lipschutz, Arthur, St. Louis, Mo. Rigid arch-bar truck | 730,668 | June 9 | 2089 | 465 | 104 | 1576 |
| Lipschutz, Arthur, St. Louis, Mo. Brake-jaw for car-brake rods | 733,853 | July 14 | 2083 | 492 | 105 | 454 |
| Lipschutz, Arthur, St. Louis, Mo. Truck and body bolster | 738,211 | Sept. 8 | 1330 | 288 | 106 | 303 |
| Lipschutz, Arthur, St. Louis, Mo. Truck and body bolster | 738,212 | Sept. 8 | 1331 | 288 | 106 | 304 |
| Lipschutz, Arthur, St. Louis, Mo. Truck and body bolster | 738,213 | Sept. 8 | 1332 | 288 | 106 | 304 |
| Lipschutz, Arthur, St. Louis, Mo. Truck and body bolster | 738,214 | Sept. 8 | 1334 | 288 | 106 | 304 |
| Lipschutz, Arthur, St. Louis, Mo. Truck and body bolster | 738,337 | Sept. 8 | 1609 | 349<br>350 | 106 | 362 |
| Lipschutz, Arthur, St. Louis, Mo., assignor of one-half to M. Toltz, St. Paul, Minn. Draft-rigging | 723,169 | Mar. 17 | 2804 | 632 | 103 | 623 |
| Lipschutz, Arthur, assignor of one-half to H. W. Wolff, St. Louis, Mo. Brake-beam | 733,854 | July 14 | 2084 | 493 | 105 | 454 |
| Lipscomb, Abraham B., Yaeger, Cal. Boot-calk | 736,121 | Aug. 11 | 2063 | 442 | 105 | 1440 |
| Lipscomb, Jeff, *et al.* (See Hulings, James H., assignor.) | | | | | | |
| Lisch, Jacob J. (See Downs, Theodore, assignor.) | | | | | | |
| Lischtiak, Ferdinand, Liesing, near Vienna, Austria-Hungary, assignor to J. F. Heurteur, Paterson, N. J. Kite | 743,301 | Nov. 3 | 944 | 205 | 107 | 203 |
| Lisk, David A., Clifton Springs, N. Y. Metallic-vessel bottom | 733,979 | July 21 | 2337 | 548 | 105 | 525 |
| Lisk, George W., Clifton Springs, N. Y. Hand-sprayer | 732,092 | June 30 | 4759 | 1063 | 104 | 2179 |
| List, Conrad W. W. T. (See Beyer and List.) | | | | | | |
| Lister, John T., Cleveland, Ohio. Mantle-support | 738,215 | Sept. 8 | 1334 | 289 | 106 | 305 |
| Listerman, Frank, Newport, Ky., assignor to E. H. Huenefeld, Cincinnati, Ohio. Portable oven | 727,163 | May 5 | 654 | 140 | 104 | 141 |
| Litchfield, Jesse I., Wollaston, Mass. Inking appliance | 733,491 | July 14 | 1420 | 334 | 105 | 317 |
| Litchfield, Paul W., Akron, Ohio. Pneumatic tire | 736,414 | Aug. 18 | 2564 | 563 | 105 | 1565 |
| Litchfield, Paul W., assignor to Goodyear Tire and Rubber Company, Akron, Ohio. Tiles | 725,102 | Apr. 14 | 1277 | 288 | 103 | 1456 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Litchfield, Walter D., Schenectady, N. Y., assignor to General Electric Company. Brush for dynamo-electric machines | 728,256 | May 19 | 2707 | 604 | 104 | 614 |
| Litle, Thomas J., Jr., Philadelphia, Pa. Lantern-bottom | 740,667 | Oct. 6 | 528 | 116 | 106 | 1360 |
| Litle, Thomas J., Jr., Philadelphia, Pa., assignor to New Process Lighting Company, Cleveland, Ohio. Apparatus for supplying air or other combustion-supporting fluid or substance to gas or other burners | 731,376 | June 16 | 3392 | 758 759 | 104 | 1865 |
| Litschge, Joseph, Pittsburg, Pa. Wrench | 742,043 | Oct. 20 | 3202 | 715 | 106 | 1960 |
| Litsey, Robert G., Haskell, Tex. School-desk | 723,692 | Mar. 24 | 3778 | 849 | 103 | 836 |
| Little, Charles H., Chicago, Ill. Rail-joint | 744,577 | Nov. 17 | 3451 | 744 | 107 | 766 |
| Little, Charles S., Montpelier, Ind. Partition-plug for oil-wells | 733,492 | July 14 | 1422 | 334 | 105 | 318 |
| Little, Cyrus A., *et al.* (See Fox, Nat, assignor.) | | | | | | |
| Little, Edmund B., Union City, Tenn. Salt-cellar | 738,048 | Sept. 1 | 965 | 215 | 106 | 210 |
| Little, Eugene J., G. H. Breymann, and D. C. Shaw, Toledo, Ohio. Garbage furnace or crematory | 724,898 | Apr. 7 | 888 | 204 | 103 | 1360 |
| Little, George G., and E. A. Reed, St. Louis, Mo. Apparatus for forming type under pressure | 745,208 | Nov. 24 | 4674 | 1018 | 107 | 1039 |
| Little, Henry H., Philadelphia, Pa. Propulsion mechanism for vessels | 745,732 | Dec. 1 | 746 | 171 | 107 | 1257 |
| Little, Henry M., *et al.* (See Yeiser, John C., assignor.) | | | | | | |
| Little, Henry O., Bridgewater, Mass. Fruit box or basket | 734,721 | July 28 | 3749 | 876 | 105 | 839 |
| Little, James M., Clearspring, Md. Combined halter and hitching-rope | 736,275 | Aug. 11 | 2316 | 502 | 105 | 1495 |
| Little, James O., assignor to Thomas White Stove Company, Quincy, Ill. Duplex grate | 740,880 | Oct. 6 | 913 | 205 | 106 | 1441 |
| Little, John A., assignor to Globe Electric Company, St. Louis, Mo. Armature | 732,200 | June 30 | 4978 | 1108 | 104 | 2225 |
| Little, John A., assignor to Globe Electric Company, St. Louis, Mo. Electric controller | 732,201 | June 30 | 4979 | 1108 | 104 | 2225 |
| Little, John E., and C. E. Rogers, Des Moines, Iowa. Shock or hay loader | 731,698 | June 23 | 4008 | 895 | 104 | 2007 |
| Little, Lewis S., *et al.* (See Fox, Nat, assignor.) | | | | | | |
| Little, Orton C., Menasha, Wis. Latch | 742,881 | Nov. 3 | 107 | 25 | 107 | 24 |
| Little, Orton C., Menasha, Wis. Window-fastener | 742,882 | Nov. 3 | 108 | 25 | 107 | 25 |
| Little, Peter, Sr., Peoria, Ill. Antifriction-wheel | 746,117 | Dec. 8 | 1482 | 331 | 107 | 1437 |
| Little, Peter E., Dayton, Ohio. Draft-equalizer | 742,461 | Oct. 27 | 4013 | 900 | 106 | 2140 |
| Little River Manufacturing Company. (See Ernst, John C., assignor.) | | | | | | |
| Little, Thomas, Detroit, Mich. Eye-shade | 733,721 | July 14 | 1814 | 430 | 105 | 400 |
| Little, William G., Duluth, Minn. Fish-hook | 720,449 | Feb. 10 | 1907 | 435 | 102 | 1242 |
| Littlefield, Charles A., New Bedford, assignor to Draper Company, Hopedale, Mass. Lappet-loom | 731,377 | June 16 | 3996 | 759 760 | 104 | 1866 |
| Littlefield, Loring G., *et al.* (See Hayden and Packard, assignors.) | | | | | | |
| Littlefield, Loring G., *et al.* (See Packard, William F., assignor.) | | | | | | |
| Littlejohn, Charles F., assignor to I. A. Littlejohn, New Haven, Conn. Pencil-sharpener | 740,881 | Oct. 6 | 915 | 205 | 106 | 1441 |
| Littlejohn, Isabel A. (See Littlejohn, Charles F., assignor.) | | | | | | |
| Littlepage, Hardin B., Washington, D. C. Despatch-bomb | 743,302 | Nov. 3 | 945 | 206 | 107 | 203 |
| Littley, William, Philadelphia, Pa. Pipe-wrench | 738,216 | Sept. 8 | 1336 | 289 | 106 | 305 |
| Littmann, Edgar, St. Louis, Mo. Adjustable trace attachment for hames | 745,209 | Nov. 24 | 4675 | 1018 | 107 | 1040 |
| Livengood, Winfield S., assignor to Smith & Sons Manufacturing Co., Kansas City, Mo. Wheeled scraper | 723,887 | Mar. 31 | 4151 | 935 | 103 | 930 |
| Livengood, Winfield S., assignor to Smith & Sons Manufacturing Company, Kansas City, Mo. Wheeled scraper | 742,336 | Oct. 27 | 3793 | 849 | 106 | 2095 |
| Livermore, John W., Berkeley, Cal. Traction-wheel | 742,462 | Oct. 27 | 4014 | 900 | 106 | 2140 |
| Livesay, Charles E., Ealing, England. Apparatus for controlling flow of water from rivers, &c., to canals, docks, or other hydraulic works | 726,316 | Apr. 28 | 3509 | 794 795 | 103 | 1955 |
| Livingston, Andrew W., Alameda, Cal. Attachment for locks | 724,899 | Apr. 7 | 892 | 204 | 103 | 1360 |
| Livingston, Charles G., *et al.* (See Beardsley, Robert F. W., assignor.) | | | | | | |
| Livingston, Charles G., *et al.* (See Cormack, George H., assignor.) | | | | | | |
| Livingston, Charles G., *et al.* (See Redd, Charlie, assignor.) | | | | | | |
| Livingston, Charles G., *et al.* (See Redd and Cormack, assignors.) | | | | | | |
| Livingston, Francis M., Newark, N. J. Street-car reflector | 742,687 | Oct. 27 | 4424 | 999 | 106 | 2227 |
| Livingston, Fremont P., Wilkinsburg, assignor to Westinghouse Air Brake Company, Pittsburg, Pa. Brake-rigging for six-wheeled trucks | 731,477 | June 23 | 3603 | 804 | 104 | 1927 |
| Livingston, Fremont P., Wilkinsburg, assignor to Westinghouse Air Brake Company, Pittsburg, Pa. Brake-rigging for six-wheeled trucks | 731,478 | June 23 | 3604 | 804 | 104 | 1927 |
| Livingston, Fremont P., Wilkinsburg, assignor to Westinghouse Air Brake Company, Pittsburg, Pa. Brake-rigging for six-wheeled trucks | 731,797 | June 23 | 4193 | 935 | 104 | 2046 |
| Livingston, Mary M., Thomasville, Ga. Garment-supporting apparatus | 730,137 | June 2 | 1108 | 248 | 104 | 1352 |
| Livingston, Max, assignor to Atlantic Refining Company, Philadelphia, Pa. Apparatus for continuously distilling petroleum | 728,257 | May 19 | 2708 | 604 605 | 104 | 615 |
| Livingston, Richard, Los Angeles, Cal. Burner | 725,974 | Apr. 21 | 2872 | 651 | 103 | 1809 |
| Livingston, Robert B. (See Scofield, Walter P., assignor.) | | | | | | |
| Livingston, William A. (See Hamblet, Bayard, assignor.) | | | | | | |
| Livingstone, Samuel A., and W. F. Bennett, Hammond, Ind. Shaft-support | 730,278 | June 9 | 1375 | 303 | 104 | 1423 |
| Livor, Henry M., assignor to I. Z. Place, New York, N. Y. Apparatus for purifying water | 718,485 | Jan. 13 | 1797 | 400 | 102 | 398 |
| Lloyd, Cyrus S., Sowerby Bridge, England, assignor to M. B. Lloyd, Minneapolis, Minn. Wire mattress | 741,514 | Oct. 13 | 2153 | 479 480 | 106 | 1726 |
| Lloyd, Edward. (See Dillon, William C., assignor.) | | | | | | |
| Lloyd, Edwin. (See Watkins and Screeton, assignors.) | | | | | | |
| Lloyd, Edwin L., Philadelphia, Pa. Window-screen | 728,121 | May 12 | 2442 | 544 | 104 | 538 |
| Lloyd, Ernest F., Detroit, Mich. Gas-purifier | 732,756 | July 7 | 104 | 29 | 105 | 26 |
| Lloyd, Ernest F., Fort Wayne, Ind. Gas-purifier box | 741,350 | Oct. 13 | 1846 | 408 | 106 | 1661 |
| Lloyd, George H., Birmingham, England. Tank | 726,550 | Apr. 28 | 3965 | 896 | 103 | 2045 |
| Lloyd, George H., Birmingham, England. Tank | 726,551 | Apr. 28 | 3966 | 897 | 103 | 2045 |
| Lloyd, H. P. (See Sagendorph, Longley L., assignor.) | | | | | | |
| Lloyd, Harlan P., *et al.* (See Ryan, Walter D., assignor.) | | | | | | |
| Lloyd, Harlan P. (See Ryan and Sagendorph, assignors.) | | | | | | |
| Lloyd, James B., Tarboro, N. C. Portable fire-escape | 727,980 | May 12 | 2188 | 488 | 104 | 484 |
| Lloyd, Marshall B. (See Lloyd, Cyrus S., assignor.) | | | | | | |
| Lloyd, V. A. (See Goepper, Emil A., assignor.) | | | | | | |
| Lloyd, William J. (See Chesney and Lloyd.) | | | | | | |
| Lloyd, William J., assignor to Stanley Electric Manufacturing Company, Pittsfield, Mass. Fuse | 737,254 | Aug. 25 | 4155 | 924 | 105 | 1917 |
| Lloyd, William J., assignor to Stanley Electric Manufacturing Company, Pittsfield, Mass. Electrical measuring instrument | 737,255 | Aug. 25 | 4156 | 924 | 105 | 1918 |
| Lloyd, William J., assignor to Stanley Electric Manufacturing Company, Pittsfield, Mass. Electrical apparatus | 738,823 | Sept. 15 | 2575 | 568 | 106 | 584 |
| Loaring, Thomas W., assignor of eleven-fifteenths to W. J. Friedlander, Cincinnati, Ohio. Changeable sign | 736,122 | Aug. 11 | 2064 | 442 | 105 | 1440 |
| Lobdell Car Wheel Company. (See Stuart, Joseph, assignor.) | | | | | | |
| Lobenthal, Levi, New York, N. Y., and J. McCullough, Newark, N. J. Switch for double-filament electric lamps | 732,644 | June 30 | 5831 | 1292 | 104 | 2405 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|
| | | | Spec. | Dr'g | Vol. | Page. |
| Lobet, John B., Toledo, Ohio. Grinding or polishing machine | 742,688 | Oct. 27 | 4426 | 999 | 106 | 2228 |
| Lobitz, Gottfried, Chicago, Ill. Hand-stamp | 726,954 | May 5 | 233 | 55 | 104 | 50 |
| Lobmiller, John, Wellsburg, W. Va. Transparency | 736,751 | Aug. 18 | 3213 | 710 | 105 | 1699 |
| Loch, Joseph, assignor of one-half to P. Schissel, Brooklyn, N. Y. Lock | 730,831 | June 9 | 2354 | 521 | 104 | 1634 |
| Loch, Joseph, Brooklyn, N. Y., assignor to C. O. Burns Company. Coin-slot | 737,640 | Sept. 1 | 147 | 32 | 106 | 35 |
| Locherty, William C., New York, N. Y. Watch guard or protector | 737,429 | Aug. 25 | 4488 | 1006 | 105 | 1989 |
| Lock Lamp Burner Company. (See Hall, George A., assignor.) | | | | | | |
| Lock Safety Pin Company. (See Andresen, Christian, assignor.) | | | | | | |
| Locke, Albert N., Salem, Mass. Motor-vehicle | 725,574 | Apr. 14 | 2139 | 484 | 103 | 1639 |
| Locke, Frank T. (See Stewart, George W., assignor.) | | | | | | |
| Locke, Fred M., Victor, N. Y. Insulator | 728,805 | May 19 | 3744 | 835 | 104 | 832 |
| Locke, Fred M., Victor, N. Y. Insulator | 745,284 | Nov. 24 | 4810 | 1049 | 107 | 1066 |
| Locke, Harvey W., assignor to Century Camera Company, Rochester, N. Y. Camera | 720,040 | Feb. 10 | 1159 | 265 | 102 | 1085 |
| Locke, Henry, Marion, Iowa. Stall | 721,578 | Feb. 24 | 4074 | 925 | 102 | 1733 |
| Locke, Henry A., *et al.* (See Briggs, Frank J., assignor.) | | | | | | |
| Locke, Nathaniel C., assignor to Locke Regulator Company, Salem, Mass. Pressure-regulator | 724,481 | Apr. 7 | 112 | 27 | 103 | 1193 |
| Locke, Nathaniel C., assignor to Locke Regulator Company, Salem, Mass. Combined hand and automatic shut-off valve | 740,882 | Oct. 6 | 918 | 206 | 106 | 1442 |
| Locke, Nathaniel C., assignor to Locke Regulator Company, Salem, Mass. Automatic shut-off valve | 746,640 | Dec. 8 | 2413 | {551 / 552} | {107} | 1639 |
| Locke Regulator Company. (See Locke, Nathaniel C., assignor.) | | | | | | |
| Lockhart, Albert E., Cambridge, Mass. Metallic box for burial purposes | 737,641 | Sept. 1 | 149 | 32 | 106 | 35 |
| Lockhart, David, Hoquiam, Wash. Wire-clamp | 734,580 | July 28 | 3474 | 812 | 105 | 783 |
| Lockhart Iron and Steel Company. (See Purcell, John J., assignor.) | | | | | | |
| Lockhart, Richard J., Pittsburg, Pa. Wrench | 725,103 | Apr. 14 | 1277 | 288 | 103 | 1456 |
| Lockhart, William J., Boston, Mass. Lifting-jack | 727,395 | May 5 | 1061 | 230 | 104 | 229 |
| Locklin, George C., Chicago, Ill. Locking device for springs | 720,715 | Feb. 17 | 2440 | 558 | 102 | 1365 |
| Lockwood, Benjamin F., Lyons, N. Y. Portable burial-vault | 720,163 | Feb. 10 | 1381 | 316 | 102 | 1134 |
| Lockwood, Benjamin F., Frewsburg, N. Y. Valve-float | 726,317 | Apr. 28 | 3514 | 796 | 103 | 1956 |
| Lockwood, Charles R., assignor of one-half to G. E. Smith, Chicago, Ill. Drover's whip | 733,227 | July 7 | 935 | 226 | 105 | 196 |
| Lockwood, Clifford G., Hamilton, Ohio. Polishing-wheel | 734,581 | July 28 | 3475 | 812 | 105 | 784 |
| Lockwood, George W., *et al.* (See Hunt, George W., assignor.) | | | | | | |
| Lockwood, Harry T., Philadelphia, Pa. Railway-rail joint | 731,582 | June 23 | 3807 | 848 | 104 | 1967 |
| Lockwood, James B. C., Seattle, Wash. Rotary pump | 721,207 | Feb. 24 | 3402 | {772 / 773} | {102} | 1589 |
| Lockwood, James R. (See Degree, Edgar L., assignor.) | | | | | | |
| Lockwood, John S., Kansas City, Mo. Electric railway-brake | 745,285 | Nov. 24 | 4811 | 1050 | 107 | 1066 |
| Lockwood, Philo J., Washington, D. C. Lubricator or lubrication system | 743,392 | Nov. 3 | 1137 | 241 | 107 | 240 |
| Lockwood, Rhodes, *et al.* (See Turner, Charles L., assignor.) | | | | | | |
| Lockwood, Rhodes G., *et al.* (See Turner, Charles L., assignor.) | | | | | | |
| Lockwood, Theodore G., Chester, S. C. Incrustation preventive | 728,258 | May 19 | 2712 | ------ | 104 | 615 |
| Lockwood, William C., Sheffield, England. Steam-boiler | 728,591 | May 19 | 3360 | 744 | 104 | 752 |
| Lockwood, William N., *et al.* (See Turner, Charles L., assignor.) | | | | | | |
| "Locomobile" Company of America. (See MacAlman, John H., assignor.) | | | | | | |
| "Locomobile" Company of America. (See Moore, Charles J., assignor.) | | | | | | |
| "Locomobile" Company of America. (See Riker, Andrew L., assignor.) | | | | | | |
| Loder Pyritic Reduction Company. (See Edwards, Henry W., assignor.) | | | | | | |
| Loder, William A., Pittsford, N. Y. Making pickles | 723,693 | Mar. 24 | 3779 | ------ | 103 | 836 |
| Lodge & Shipley Machine Tool Company. (See Chard, Nicholas D., assignor.) | | | | | | |
| Lodge & Shipley Machine Tool Company. (See Follows, George H., assignor.) | | | | | | |
| Lodge & Shipley Machine Tool Company. (See Montstream, Schellenbach, and Lodge, assignors.) | | | | | | |
| Lodge, William. (See Montstream, Schellenbach, and Lodge.) | | | | | | |
| Lodge, William S., Albany, N. Y. Mitten | 722,863 | Mar. 17 | 2267 | 507 | 103 | 512 |
| Loeb, Adam, Portland, Oreg. Piano-truck | 734,076 | July 21 | 2538 | 592 | 105 | 571 |
| Loeb, George, Jr., Lakewood, Ohio. Washtub | 741,351 | Oct. 13 | 1849 | 408 | 106 | 1662 |
| Loeb, Leo, assignor to National Leather Belting Company, New York, N. Y. Waterproof protected leather belt | 730,832 | June 9 | 2355 | 521 | 104 | 1634 |
| Loeben, Gustave A., Philadelphia, Pa. Apparatus for mixing fluids | 723,888 | Mar. 31 | 4152 | 936 | 103 | 930 |
| Loeble, Gottlob E., New York, N. Y. Decoy | 740,293 | Sept. 29 | 5282 | 1190 | 106 | 1193 |
| Loeffel, Martin, St. Louis, Mo. Knockdown cabinet | 729,368 | May 26 | 4741 | 1047 | 104 | 1053 |
| Loehr, August. (See Rupp and Loehr.) | | | | | | |
| Loetscher, Andrew A., Dubuque, Iowa. Sash-stile plowing and boring machine | 725,461 | Apr. 14 | 1937 | {434 / 435} | {103} | 1595 |
| Loetscher, Andrew A., Dubuque, Iowa. Column-clamp | 727,651 | May 12 | 1555 | 350 | 104 | 352 |
| Loetzer, Christian E., Towanda, Pa. Hydrant | 720,716 | Feb. 17 | 2441 | 558 | 102 | 1365 |
| Loew, Adam. (See Polster and Loew.) | | | | | | |
| Loew, Charles H., and L. Bolz, assignors to Loew Supply and Manufacturing Company, Cleveland, Ohio. Machine for washing filtering material | 721,711 | Mar. 3 | 111 | 23, 24 | 103 | 25 |
| Loew Supply and Manufacturing Company. (See Loew and Bolz, assignors.) | | | | | | |
| Loewe, Carl, Berlin, Germany. Guide-book for streets, railways, rivers, or the like | 738,555 | Sept. 8 | 2031 | 441 | 106 | 452 |
| Loewenstein, Dolf. (See Schauli and Loewenstein.) | | | | | | |
| Loewenthal, Max, New York, N. Y. Electric heater | 729,369 | May 26 | 4742 | {1048 / 1049} | {104} | 1053 |
| Loewenthal, Max, assignor to Prometheus Electric Company, New York, N. Y. Electric-tool holder | 724,721 | Apr. 7 | 571 | {136 / 137} | {103} | 1291 |
| Loewy, Heinrich, Berlin, Germany. Hernia-truss | 732,361 | June 30 | 5296 | 1174 | 104 | 2290 |
| Löffler, Andrew D., Washington, D. C. Automatic fire extinguisher and alarm | 719,946 | Feb. 3 | 947 | 221 | 102 | 1024 |
| Löffler, Bernhard H., assignor to J. Wiesbader, Frankfort-on-the-Main, Germany. Automatically opening or closing sliding door | 733,493 | July 14 | 1424 | {334 / 335} | {105} | 318 |
| Lofland, Alfred D., *et al.* (See Whittington, George W., assignor.) | | | | | | |
| Lofland, Anna, *et al.* (See Whittington, George W., assignor.) | | | | | | |
| Lofland, John S., Jr., *et al.* (See Whittington, George W., assignor.) | | | | | | |
| Loftiss, Gideon M., Denver, Colo. Calf-weaner | 722,119 | Mar. 3 | 848 | 189 | 103 | 182 |
| Loftus, Thomas A., Chicago, Ill. Folding top for vehicles | 745,022 | Nov. 24 | 4272 | 925 | 107 | 956 |
| Logan, George A., Chicago, Ill. Beverage-dispenser | 733,228 | July 7 | 937 | 226 | 105 | 196 |
| Logan, H. K., *et al.* (See Shepard, Sylvander C., assignor.) | | | | | | |
| Logan, John, *et al.* (See Shepard, Sylvander C., assignor.) | | | | | | |
| Logan, Melville E., Wellman, Iowa. Merry-go-round | 741,802 | Oct. 20 | 2719 | 605 | 106 | 1860 |
| Logan, William. (See Fox, Edward, assignor.) | | | | | | |
| Logan, William H., Carnegie, Pa. Fish-plate and rail-fastener | 737,942 | Sept. 1 | 769 | 168 | 106 | 169 |
| Logan, William H., Carnegie, Pa. Rail-joint fastener | 740,883 | Oct. 6 | 920 | 206 | 106 | 1443 |
| Logan, William H., assignor to Kirker-Bender Fire Escape Company, Louisville, Ky. Fire-escape | 732,645 | June 30 | 5833 | 1292 | 104 | 2406 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dsgs. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Loge, Robert, Hamilton, and G. W. Zoell, Cincinnati, Ohio. Curtain-frame | 739,886 | Sept. 29 | 4536 | 1019 | 106 | 1036 |
| Logue, James C., Hazel Hill, Canada. Wire-grip | 733,855 | July 14 | 2085 | 493 | 105 | 454 |
| Logue, John F., Sacramento, Cal. Attachment for telephone-mouthpieces | 718,264 | Jan. 13 | 1387 | 310 | 102 | 314 |
| Logue, William A., assignor of one-half to S. E. Beggs, Rathdrum, Idaho. Printing-press | 744,371 | Nov. 17 | 3093 | 663 | 107 | 690 |
| Lohmann, August, assignor of one-half to H. Freeman, Dallas, Tex. Composition of matter for artificial fuel | 746,118 | Dec. 8 | 1484 | | 107 | 1437 |
| Lohmann, Edwin, Greenville, Ohio. Photographic lens system | 730,937 | June 16 | 2567 | 572 | 104 | 1698 |
| Löhr, Bernhard, Frankfort-on-the-Main, Germany. Drop-stamp | 740,884 | Oct. 6 | 921 | 206 | 106 | 1443 |
| Lohrbauar, Harald J., *et al.* (See Erickson, John E., assignor.) | | | | | | |
| Lohrbauar, Johannes, *et al.* (See Erickson, John E., assignor.) | | | | | | |
| Lohsand, Earnest, Chicago, Ill. Vehicle | 737,852 | Sept. 1 | 569 | 125, 126 | 106 | 126 |
| Loizeaux, Josua D., *et al.* (See Hetfield, John M., assignor.) | | | | | | |
| Loker, Edwin, assignor to International Motor Company, St. Louis, Mo. Governing and reversing mechanism for gas-engines | 732,202 | June 30 | 4981 | 1109 | 104 | 2226 |
| Lomasney, Leonard J., Youngstown, Ohio. Gasket | 747,448 | Dec. 22 | 3940 | 886 | 107 | 2018 |
| Lomasney, William F., assignor of two-thirds to C. Heatly and J. R. Howgate, Schenectady, N. Y. Grinding-machine | 727,981 | May 12 | 2189 | 488, 489 | 104 | 485 |
| Lomax, Henry and R., and J. Tomlinson, Darwen, England. Electrical switch | 744,924 | Nov. 24 | 4088 | 881 | 107 | 918 |
| Lomax, Ralph. (See Lomax and Tomlinson.) | | | | | | |
| Lombard, Charles E., East Wilton, Me. Fire-alarm pistol | 718,211 | Jan. 13 | 1288 | 283 | 102 | 292 |
| Lombard, Cyril B., Darien Center, N. Y. Fence-wire fastener | 735,121 | Aug. 4 | 146 | 32 | 105 | 1013 |
| Lombard, Cyril B., Darien Center, N. Y. Fence-post | 737,642 | Sept. 1 | 151 | 33 | 106 | 35 |
| Lombard Governor Company. (See Warren, Henry E., assignor.) | | | | | | |
| Lombard, John E., and J. R. Bowling, assignors to Ingoldsby Automatic Car Company, St. Louis, Mo. Bolster for railway-cars | 728,479 | May 19 | 3132 | 692 | 104 | 705 |
| Lombard, Nathaniel, Brookline, Mass. Speed-changing device | 741,686 | Oct. 20 | 2491 | 556, 557 | 106 | 1812 |
| Lombard, Nathaniel, Brookline, assignor to N. Lombard Improved Governor Company, Boston, Mass. Governor | 727,652 | May 12 | 1556 | 351 | 104 | 352 |
| Lombard, Nathaniel, Brookline, assignor to N. Lombard Improved Governor Company, Boston, Mass. Governor | 736,276 | Aug. 11 | 2317 | 502, 503, 504 | 105 | 1495 |
| Lombard, Nathaniel, Brookline, assignor to N. Lombard Improved Governor Company, Boston, Mass. Centrifugal governor | 736,277 | Aug. 11 | 2324 | 504 | 105 | 1497 |
| Lombard, Walter E., Arlington, and E. T. Luce, Somerville, Mass., assignors to J. H. Sears Company, Portland, Me., and Boston, Mass. Machine for fleshing hides | 736,278 | Aug. 11 | 2328 | 505, 506 | 105 | 1498 |
| Lomeister, Frank. (See Ferry, James F., assignor.) | | | | | | |
| London, John R. (See Dabbs, John L., assignor.) | | | | | | |
| London Wax Vesta Company. (See Fredrikson, Andrew J., assignor.) | | | | | | |
| Lonergan, John E., Philadelphia, Pa. Lifting-gear for spring-pressure safety-valves | 724,304 | Mar. 31 | 5002 | 1120 | 103 | 1102 |
| Lonergan, William H. (See Rathbun and Lonergan.) | | | | | | |
| Loney, William E., Boscobel, Wis. Pipe-holder | 740,028 | Sept. 29 | 4816 | 1080 | 106 | 1097 |
| Long, Andrew. (See Spring, Long, and Ebeling.) | | | | | | |
| "Long Arm" System Company. (See Cowles, William B., assignor.) | | | | | | |
| Long, Calvin A., Soldier, Kans. Loading or unloading apparatus | 745,362 | Dec. 1 | 86 | 20 | 107 | 1120 |
| Long, Daniel, Brookville, Pa. Piano-tuning apparatus | 745,634 | Dec. 1 | 584 | 136 | 107 | 1222 |
| Long, David N., Buffalo, N. Y., assignor, by mesne assignments, to J. B. Colt Company. Acetylene-gas generator | 722,181 | Mar. 3 | 961 | 213 | 103 | 204 |
| Long, Eli M., and C. W. Howland, Geneva, N. Y. Lens-grinding machine | 739,264 | Sept. 15 | 3352 | 745 | 106 | 753 |
| Long, Emerson W., Cadiz, Ohio. Rail-joint | 721,712 | Mar. 3 | 112 | 24 | 103 | 25 |
| Long, Euphemia S., Altoona, Pa. Curtain-pole | 725,078 | Apr. 21 | 3034 | 689 | 103 | 1842 |
| Long, George A., assignor to Gray Telephone Pay Station Company, Hartford, Conn. Telephone toll-register | 723,694 | Mar. 24 | 3780 | 849 | 103 | 836 |
| Long, George A., assignor to Gray Telephone Pay Station Company, Hartford, Conn. Hinge | 727,653 | May 12 | 1557 | 351 | 104 | 353 |
| Long, George A., assignor to Gray Telephone Pay Station Company, Hartford, Conn. Telephone toll-indicator | 733,494 | July 14 | 1425 | 335 | 105 | 319 |
| Long, John R., Warren, Pa. Vise | 719,348 | Jan. 27 | 3485 | 775 | 102 | 782 |
| Long, John R., East Akron, Ohio. Vise | 732,757 | July 7 | 106 | 29,30 | 105 | 27 |
| Long, John R., East Akron, Ohio. Vise | 732,761 | July 7 | 112 | 31 | 105 | 28 |
| Long, John R., Akron, Ohio. Pipe-vise | 732,758 | July 7 | 107 | 30 | 105 | 27 |
| Long, John R., Akron, Ohio. Pipe-vise | 732,759 | July 7 | 109 | 30 | 105 | 27 |
| Long, John R., Akron, Ohio. Pipe-vise | 732,760 | July 7 | 111 | 30,31 | 105 | 27 |
| Long, John R., Akron, Ohio. Bench-vise | 742,096 | Oct. 20 | 3343 | 746 | 106 | 1987 |
| Long and Koch. (See Long, Philip H., assignor.) | | | | | | |
| Long, Marion M., Canton, Ill. Well-drill | 741,150 | Oct. 13 | 1410 | 323 | 106 | 1566 |
| Long, Marion M., assignor to J. W. Peck, Canton, Ill. Safe | 738,116 | Sept. 1 | 1113 | 246, 247 | 106 | 240 |
| Long, Morton C., Piper City, Ill. Attachment for rugs | 718,136 | Jan. 13 | 1150 | 255 | 102 | 263 |
| Long, Philip H., assignor to Long and Koch, Newark, N. J. Sand-blast | 730,138 | June 2 | 1109 | 249 | 104 | 1352 |
| Long, Sylvanus W., and G. U. Larom. New York, N. Y. Placket-closer | 726,715 | Apr. 28 | 4280 | 967 | 103 | 2110 |
| Long, Thomas A., Sparrows Point, and G. W. Cofran, Baltimore, assignors, by mesne assignments, to Standard Fire Alarm Company, Sparrows Point, Md. Circuit-closer | 734,905 | July 28 | 4099 | 955 | 105 | 911 |
| Long, Thomas A., Sparrows Point, and G. W. Cofran, Baltimore, assignors, by mesne assignments, to Standard Fire Alarm Company, Sparrows Point, Md. Fire-alarm mechanism | 734,906 | July 28 | 4101 | 955, 956 | 105 | 911 |
| Long, Thomas E., Bellevue, Pa. Handle-bearer for pumps | 728,402 | May 19 | 2986 | 657 | 104 | 673 |
| Long, Thomas P., Harmon, Ill. Display-rack | 742,883 | Nov. 3 | 110 | 26 | 107 | 25 |
| Long, Walter B., Cleveland, Ohio. Wheel-painting apparatus | 746,717 | Dec. 15 | 2555 | 587 | 107 | 1691 |
| Long, William J., assignor of six-eighths to A. R. Pelton and C. J. Tifft, Denver, Colo. Hair-clipper | 736,851 | Aug. 18 | 3419 | 756 | 105 | 1743 |
| Longard, Clarence C., Halifax, Canada. Wrench | 732,306 | June 30 | 5182 | 1151 | 104 | 2267 |
| Longbottom, John, Lawrence, Mass. Bicycle-support | 747,449 | Dec. 22 | 3941 | 886 | 107 | 2018 |
| Longdon, Elmer A., Toledo, Ohio. Razor-handle | 746,348 | Dec. 8 | 1905 | 435 | 107 | 1525 |
| Longdon, Francis J., Lincoln Place, Pa. Apparatus for elevating liquids | 740,151 | Sept. 29 | 5018 | 1128 | 106 | 1140 |
| Longhurst, Henry A. (See Holbourns and Longhurst.) | | | | | | |
| Longinotte, Joseph, Cincinnati, Ohio. Car-coupling | 730,033 | June 2 | 938 | 210 | 104 | 1319 |
| Longsteth, Charles, Lansdowne, Pa., assignor to American Locomotive Sander Company, Camden, N. J; Philadelphia, Pa., and Chicago, Ill. Alarm-valve for locomotive track-sanding apparatus | 746,537 | Dec. 8 | 2223 | 509 | 107 | 1595 |
| Longuemare, Amélie A. (See Longuemare, Fernand and G., assignors.) | | | | | | |
| Longuemare, Fernand and G., assignors to A. A. Longuemare, Paris, France. Carbureter for explosive-motors | 746,119 | Dec. 8 | 1485 | 332 | 107 | 1437 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Longuemare, Georges. (See Longuemare, Fernand and G.) | | | | | | |
| Longwell, Fay N. (See Hammond, Leander W., assignor.) | | | | | | |
| Loofbourrow, William. (See Cunningham, Cleophus K., assignor.) | | | | | | |
| Loomis, Arthur B., Scranton, Pa. Valve lock and adjuster | 739,015 | Sept. 15 | 2889 | 641 | 106 | 652 |
| Loomis, Charles W., Lake Charles, La. Rotary pump | 733,229 | July 7 | 941 | 227 | 105 | 197 |
| Loomis, George D., Tiffin, Ohio. Well-drilling machine | 731,313 | June 16 | 3281 | 729, 730 | 104 | 1842 |
| Loomis, George D., Tiffin, Ohio. Well-drilling machine | 733,980 | July 21 | 2338 | 549 | 105 | 525 |
| Loomis, Harry T., assignor to Frank & Lambert, New York, N. Y. Trimming | 722,996 | Mar. 17 | 2489 | 559 | 103 | 558 |
| Loomis, Harry T., assignor to J. J. Lambert and M. Frank, New York, N. Y. Machine for embossing trimmings for caskets | 719,238 | Jan. 27 | 3267 | 730 | 102 | 735 |
| Loomis, John J. (See Bush, Charles A., assignor.) | | | | | | |
| Loomis, Lester G. (See Krohn, Harry H., assignor.) | | | | | | |
| Loop, Admah I., assignor of one-half to Pierce Bros., Northeast, Pa. Strainer attachment for spraying apparatus | 743,091 | Nov. 3 | 527 | 114 | 107 | 111 |
| Loos, Franz, Carlsbad, Austria-Hungary. Dust-wagon | 732,422 | June 30 | 5417 | 1201, 1202 | 104 | 2317 |
| Loper, William H., and M. Halley, Coeur d'Alene, Idaho. Wagon-brake | 724,900 | Apr. 7 | 893 | 204 | 103 | 1360 |
| Loptien, Hans C. F., Sycamore, Ill. Neck-yoke | 741,263 | Oct. 13 | 1635 | 369 | 106 | 1615 |
| Lorain Steel Company. (See Berkley, Norman W., assignor.) | | | | | | |
| Lorain Steel Company. (See Brown, Cyrus E., assignor.) | | | | | | |
| Lorain Steel Company. (See Brown, William M., assignor.) | | | | | | |
| Lorain Steel Company. (See Entwisle, Edward B., assignor.) | | | | | | |
| Lorain Steel Company. (See Entwisle and Wertz, assignors.) | | | | | | |
| Lorain Steel Company. (See Ervin, George M., assignor.) | | | | | | |
| Lorain Steel Company. (See George, Arthur L., assignor.) | | | | | | |
| Lorain Steel Company. (See Hart, James, assignor.) | | | | | | |
| Lorain Steel Company. (See Kleinschmidt, Henry F. A., assignor.) | | | | | | |
| Lorain Steel Company. (See Korns, Clarence C., assignor.) | | | | | | |
| Lorain Steel Company. (See Parmelee, George H., assignor.) | | | | | | |
| Lord, Allen P., assignor of one-half to O. P. Dunn, North Warren, Pa. Trolley | 736,855 | Aug. 18 | 3421 | 756 | 105 | 1743 |
| Lord, Andrew, Lynn, Mass. Plant-basket | 726,079 | Apr. 21 | 3035 | 689 | 103 | 1843 |
| Lord Auxiliary Bank Company. (See Lord, Charles A., assignor.) | | | | | | |
| Lord, Charles A., assignor to Lord Auxiliary Bank Company, Milwaukee, Wis. Key mechanism | 719,239 | Jan. 27 | 3270 | 730 | 102 | 736 |
| Lord, Charles A., assignor to Lord Auxiliary Bank Company, Milwaukee, Wis. Safety-deposit receptacle | 730,279 | June 9 | 1376 | 303 | 104 | 1423 |
| Lord, Charles W., Providence, R. I. Joint for pin-tongues | 742,463 | Oct. 27 | 4015 | 901 | 106 | 2141 |
| Lord, Francis S., Boston, Mass., assignor to A. T. Stearns Lumber Company. Silo | 734,722 | July 28 | 3750 | 876 | 105 | 739 |
| Lord, Harry S., Bath, Me. Pipe-covering | 742,689 | Oct. 27 | 4429 | 1000 | 106 | 2229 |
| Lord, John F. (See Jenkins and Lord.) | | | | | | |
| Lord, John M., Kansas City, Mo. Horseshoe-pad | 723,889 | Mar. 31 | 4156 | 936 | 103 | 931 |
| Lord, John P., Omaha, Nebr. Sterilizer | 717,587 | Jan. 6 | 114 | 30 | 102 | 27 |
| Lord, John R., Tottenville, N. Y. Galvanic battery | 730,833 | June 9 | 2356 | 522 | 104 | 1634 |
| Lord, Narcisse, *et al.* (See Hèbert, Louis H., assignor.) | | | | | | |
| Lore, George C., and A. J. Barr, assignors of one-third to C. L. Williams, Mansfield, Ohio. Picture-support | 721,579 | Feb. 24 | 4075 | 926 | 102 | 1733 |
| Lore, Richard J., assignor of one-third to L. Wheat, Coxville, Ind. Stove-grate | 744,082 | Nov. 17 | 2544 | 544 | 107 | 571 |
| Loree, Fannie L., assignor to M. U. Loree, Miamisburg, and J. W. Lawhead, Dayton, Ohio. Snap | 742,690 | Oct. 27 | 4429 | 1000 | 106 | 2229 |
| Loree, Leonor F., and F. P. J. Patenall, Baltimore, Md. Semaphore | 733,981 | July 21 | 2340 | 549 | 105 | 525 |
| Loree, Manfred U. (See Lindsey and Loree.) | | | | | | |
| Loree, Manfred U., *et al.* (See Loree, Fannie L., assignor.) | | | | | | |
| Loree, Perry E., Dayton, Ohio, assignor, by mesne assignments, to International Manufacturing Company, New York, N. Y. Reversible window-sash | 720,164 | Feb. 10 | 1383 | 317 | 102 | 1134 |
| Lorenz, August H., assignor to W. J. Watters, Chicago, Ill. Binder-frame | 739,552 | Sept. 22 | 3873 | 869 | 106 | 877 |
| Lorenz, Jacob M. (See Currier, Hiram D., assignor.) | | | | | | |
| Lorenz, Louis O., and F. B. Jones, Streator, Ill. Ladder attachment | 722,864 | Mar. 17 | 2268 | 507, 508 | 103 | 512 |
| Lorenz, Louis O., and F. B. Jones, Streator, Ill. Ladder | 722,865 | Mar. 17 | 2269 | 508 | 103 | 512 |
| Lorenz, Otto, Melkow, Germany. Swingletree-clasp | 728,947 | May 26 | 4001 | 890 | 104 | 900 |
| Lorenz, Paul A., Dresden, Germany. Hernial-truss pad | 721,812 | Mar. 3 | 281 | 62 | 103 | 62 |
| Lorenz, Wilhelm, Karlsruhe, Germany. Rotary tool for plows | 736,279 | Aug. 11 | 2333 | 506, 507 | 105 | 1500 |
| Lorenz, William A., *et al.* (See Honiss, William H., assignor.) | | | | | | |
| Lorenz, William A., *et al.* (See Millett, Charles W., assignor.) | | | | | | |
| Lorenz, William A., Hartford, Conn. Paper-bag machine | 733,982 | July 21 | 2341 | 549, 550 | 105 | 526 |
| Lorenz, William A., Hartford, Conn., assignor to Union Paper Bag Machine Company, Philadelphia, Pa. Manufacturing square-bottom paper bags | 720,366 | Feb. 10 | 1768 | 401 | 102 | 1214 |
| Lorenz, William A., Hartford, Conn., assignor to Union Paper Bag Machine Company, Philadelphia, Pa. Paper-bag machine | 742,204 | Oct. 27 | 3541 | 790 | 106 | 2041 |
| Lorenz, William A., Hartford, Conn., assignor to Union Paper Bag Machine Company, Philadelphia, Pa. Paper-bag machine | 742,205 | Oct. 27 | 3545 | 790, 791 | 106 | 2042 |
| Lorenz, William A., Hartford, Conn., assignor of three-fourths to Beech-Nut Packing Company, Canajoharie, N. Y., and W. H. Honiss, Hartford, Conn. Hermetically-sealed jar | 747,450 | Dec. 22 | 3942 | 887 | 107 | 2018 |
| Lorenz, William A., assignor of three-fourths to W. H. Honiss, Hartford, Conn., and Beech-Nut Packing Company, Canajoharie, N. Y. Can or jar | 747,451 | Dec. 22 | 3944 | 887 | 107 | 2019 |
| Lorenz, William A., Hartford, Conn., assignor to himself, and Beech-Nut Packing Company, Canajoharie, N. Y., and W. H. Honiss, Hartford, Conn. Jar-sealing apparatus | 739,887 | Sept. 29 | 4537 | 1019 | 106 | 1036 |
| Lorgion, Charles C., assignor to Frederick Stearns & Company, Detroit, Mich. Paper-box machine | 726,955 | May 5 | 235 | 55 | 104 | 51 |
| Lorie, Adolph F. W., Dunedin, New Zealand. Sash-fastener | 747,616 | Dec. 22 | 4245 | 955 | 107 | 2088 |
| Lorie, Adolph F. W., Dunedin, New Zealand. Sash-fastener | 747,617 | Dec. 22 | 4247 | 956 | 107 | 2088 |
| Lorie, Adolph F. W., Dunedin, New Zealand. Sash-fastener | 747,618 | Dec. 22 | 4248 | 956 | 107 | 2088 |
| Lorie, Adolph F. W., Dunedin, New Zealand. Sash-fastener | 747,619 | Dec. 22 | 4250 | 956 | 107 | 2089 |
| Lorimer, Egbert S., Piqua, Ohio. Electromechanical movement | 718,212 | Jan. 13 | 1289 | 283, 284 | 102 | 292 |
| Lorimer & Gallagher Co. (See Gallagher, Joseph P., assignor.) | | | | | | |
| Loring, Elmer. (See Friis, Niels M., assignor.) | | | | | | |
| Loring, Frederick H., Chester, England. Commutating and current-shaping device | 734,424 | July 21 | 3185 | 749, 750 | 105 | 707 |
| Lorrillard, Pierre, Jr. (See Willard, William A. P., Jr., assignor.) | | | | | | |
| Loscalzo, Antonio, New York, N. Y. Riding-habit | 742,123 | Oct. 20 | 3389 | 756 | 106 | 1995 |
| Löser, Franz H., assignor to Nollesche Werke Act. Ges., Weissenfels, Germany. Boring or cutting tool holder | 721,056 | Feb. 17 | 3048 | 699 | 102 | 1497 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Losey, John B. (See Hutchins and Losey.) | | | | | | |
| Loss, Henrik V., Philadelphia, Pa. Continuous heating-furnace | 729,370 | May 26 | 4745 | 1049 | 104 | 1054 |
| Loss, Henrik V., Philadelphia, Pa., assignor to Westinghouse Electric & Manufacturing Company. Heating rivets | 722,727 | Mar. 17 | 2019 | 451 | 103 | 463 |
| Loss, Henrik V., Philadelphia, Pa., assignor to Westinghouse Electric & Manufacturing Company. Device for electrically heating rivets | 722,728 | Mar. 17 | 2019 | 451 | 103 | 463 |
| Loss, Henrik V., assignor to C. T. Schoen, Philadelphia, Pa. Car-wheel | 746,538 | Dec. 8 | 2224 | 510 | 107 | 1595 |
| Loth, Harry H., Wapakoneta, assignor to W. G. Nagel Electric Company, Toledo, Ohio. Roller-hanger for aerial cables | 746,718 | Dec. 15 | 2556 | 588 | 107 | 1691 |
| Lothrop, Arthur P., *et al.* (See Hachmann, Frederick, assignor.) | | | | | | |
| Lothrop, Arthur P., *et al.* (See Whittlesey, Edith O., assignor.) | | | | | | |
| Lotspike, George H., Rochester, N. Y. Igniter | 723,472 | Mar. 24 | 3412 | 762 | 103 | 759 |
| Lotspike, George H., Rochester, N. Y. Fire-kindler | 747,452 | Dec. 22 | 3946 | 887 | 107 | 2019 |
| Lotterhand, Jason C., New York, N. Y. Adding-machine | 718,486 | Jan. 13 | 1800 | 400, 401, 402 | 102 | 398 |
| Lotz, Albert. (See Stern and Lotz.) | | | | | | |
| Lotz, Alfred, assignor to Monongahela Foundry and Forge Company, Monongahela, Pa. Molding-machine | 722,120 | Mar. 3 | 849 | 189, 190 | 103 | 183 |
| Lotz, Augustus, assignor to American Can Company, San Francisco, Cal. Can-body-blank-feed mechanism | 733,983 | July 21 | 2345 | 550, 551 | 105 | 527 |
| Lotz, Augustus, assignor to Sanitary Compressed Air and Suction Dust Removing Co., San Francisco, Cal. Pneumatic device for cleaning carpets, floors, or the like | 742,880 | Nov. 3 | 105 | 25 | 107 | 24 |
| Lotz, Leonhard B., Plaquemine, La. Cane-fork | 730,669 | June 9 | 2091 | 465 | 104 | 1577 |
| Lotz, Leonhard B., Plaquemine, La. Cane-loader | 731,923 | June 23 | 4416 | 984 | 104 | 2095 |
| Loucks, James C., assignor of one-half to T. F. Donahue, Grand Rapids, Mich. Foot-valve | 743,006 | Nov. 3 | 357 | 77 | 107 | 75 |
| Louden, Thomas C., Riverside, Conn. Safety-pocket | 733,666 | July 14 | 1725 | 407 | 105 | 381 |
| Louden, William, Fairfield, Iowa. Hay-carrier | 726,552 | Apr. 28 | 3967 | 897 | 103 | 2045 |
| Louden, William, Fairfield, Iowa. Hay-fork | 733,230 | July 7 | 942 | 227 | 105 | 197 |
| Louden, William, Fairfield, Iowa. Hay-carrier | 738,338 | Sept. 8 | 1611 | 350 | 106 | 363 |
| Louden, William, Fairfield, Iowa. Cross-timber clamp | 741,803 | Oct. 20 | 2720 | 606 | 106 | 1860 |
| Louden, William, Fairfield, Iowa. Overhead switch | 744,372 | Nov. 17 | 3094 | 664 | 107 | 691 |
| Loudenslager, Joseph, Tiffin, Ohio. Boiler compound | 720,267 | Feb. 10 | 1587 | ------ | 102 | 1175 |
| Louder, Joel H., Elgin, Ill. Display-box for neckwear | 734,343 | July 21 | 3047 | 718 | 105 | 678 |
| Loudon, Milton H., *et al.* (See Born, Marion A., assignor.) | | | | | | |
| Loudon, William F., Stonington, Conn. Lamp | 738,689 | Sept. 8 | 2300 | 505 | 106 | 507 |
| Lougee, Amanda M., Boston, Mass. Fabric | 737,751 | Sept. 1 | 360 | 77 | 106 | 81 |
| Lougee, Courtland D. (See Gilman, Herbert A., assignor.) | | | | | | |
| Lough, Hector V., North Plainfield, N. J. Writing-tablet | 744,578 | Nov. 17 | 3452 | 744 | 107 | 766 |
| Loughead, John B., Ellzabeth, N. J. Safety gas-burner | 722,027 | Mar. 3 | 692 | 153 | 103 | 149 |
| Loughman, Stephen H., *et al.* (See Hanson, John H., assignor.) | | | | | | |
| Louis, Herman H., Newburg Hamlet, assignor of two-thirds to H. M. Fenton and J. P. Hamilton, Cleveland, Ohio. Switch-lock | 734,723 | July 28 | 3752 | 876 | 105 | 839 |
| Louis, Loui, New York, N. Y. Lunch-box | 732,423 | June 30 | 5418 | 1202 | 104 | 2317 |
| Louisville Novelty Company. (See Heilbron, Edward E., assignor.) | | | | | | |
| Louisville Tin and Stove Company. (See Heinig, Frederick E., assignor.) | | | | | | |
| Lount, Samuel, Barrie, Canada. Turbine-engine | 733,722 | July 14 | 1815 | 430 | 105 | 400 |
| Louque, George A., New Orleans, La. Artificial tooth | 726,956 | May 5 | 237 | 55 | 104 | 51 |
| Loutt, Nancy E. (See Pumphrey, Edward M., assignor.) | | | | | | |
| Loutzenhiser, Charles H. (See Griscom and Loutzenhiser.) | | | | | | |
| Lovas, Louis, Pittsburg, Pa. Machine for forming rivet or bolt heads | 735,539 | Aug. 4 | 973 | 206 | 105 | 1187 |
| Lovberg, Martin M., Blair, Wis. Land-roller | 747,453 | Dec. 22 | 3947 | 887 | 107 | 2019 |
| Love, Harry T., Brookville, Pa. Nut and washer | 738,217 | Sept. 8 | 1337 | 289 | 106 | 305 |
| Love, James L., *et al.* (See Stinson, William, assignor.) | | | | | | |
| Love, Lillian A. K. and W., Bournemouth, England. Cleaning and polishing device | 731,583 | June 23 | 3809 | 848 | 104 | 1967 |
| Love, Robert, Tunnelton, Pa. Wagon-brake | 739,192 | Sept. 15 | 3214 | 711 | 106 | 718 |
| Love, William. (See Love, Lillian A. K. and W.) | | | | | | |
| Lovece, Michele, Chicago, Ill. Pocket-book | 739,754 | Sept. 22 | 4253 | 953 | 106 | 961 |
| Lovejoy, Alfred A., Lowell, Mass. Safety gas-burner | 743,007 | Nov. 3 | 358 | 77 | 107 | 75 |
| Lovejoy, Alfred A., Lowell, assignor of one-half to L. J. Fosdick, Boston, Mass. Spinning-ring | 733,495 | July 14 | 1427 | 335 | 105 | 319 |
| Lovejoy, Charles E., Lowell, assignor of one-half to Draper Company, Hopedale, Mass. Ring-spinning frame | 720,268 | Feb. 10 | 1587 | 362 | 102 | 1175 |
| Lovejoy, Charles E., Lowell, Mass., assignor of one-half to Sawyer Spindle Company, of Maine. Spindle-bearing | 729,777 | June 2 | 466 | 105 | 104 | 1223 |
| Lovejoy, Francis E. (See Cushing, Cyrus F., assignor.) | | | | | | |
| Lovejoy, John G., Greig, N. Y. Pole or shaft | 723,695 | Mar. 24 | 3783 | 849 | 103 | 837 |
| Lovekin, Luther D. (See Lässoe and Lovekin.) | | | | | | |
| Lovekin, Luther D., Philadelphia, Pa. Cushioning device for steam-valves | 731,193 | June 16 | 3059 | 679 | 104 | 1795 |
| Lovekin, Luther D., Philadelphia, Pa. Expanding and flanging tool | 734,271 | July 21 | 2911 | 680, 681 | 105 | 651 |
| Lovekin, Luther D., Philadelphia, Pa. Expanding-tool | 734,272 | July 21 | 2913 | 681 | 105 | 651 |
| Lovekin, Luther D., Philadelphia, Pa. Tool for flanging pipe | 734,273 | July 21 | 2915 | 682 | 105 | 651 |
| Lovekin, Luther D., Philadelphia, Pa. Expanding and flanging tool | 734,274 | July 21 | 2919 | 682 | 105 | 652 |
| Lovekin, Luther D., Ardmore, Pa. Retarding device for boiler-tubes | 731,194 | June 16 | 3061 | 679 | 104 | 1796 |
| Lovekin, Luther D., assignor of one-half to J. P. Mathieu, Philadelphia, Pa. Expanding and upsetting tool | 723,289 | Mar. 24 | 3036 | 683 | 103 | 686 |
| Lovekin, Luther D., Ardmore, Pa., and V. F. Lässoe, New York, N. Y. System for burning oil for heating purposes | 744,373 | Nov. 17 | 3097 | 665, 666 | 107 | 691 |
| Loveland, Byron S., assignor to B. D. Whitney, Winchendon, Mass. Wood-turning lathe | 719,349 | Jan. 27 | 3487 | 776 | 102 | 783 |
| Loveland, Byron S., assignor to B. D. Whitney, Winchendon, Mass. Barrel-stave-sawing machine | 746,719 | Dec. 15 | 2557 | 588 | 107 | 1691 |
| Loveland, Emmett O., Kansas City, Mo. Preparing embossing-molds | 733,856 | July 14 | 2086 | 493 | 105 | 454 |
| Loveless, Fred H., assignor of one-half to C. L. Daniels, Tiffin, Ohio. Combination floor, carpet, and wall brush | 717,878 | Jan. 6 | 692 | 154 | 102 | 147 |
| Loveless, Fred H., assignor to Ohio Brush Company, Tiffin, Ohio. Brush-strap fastener | 740,576 | Oct. 6 | 383 | 79 | 106 | 1328 |
| Loveless, Joseph E., and J. W. Mulligan, Atlanta, Ga. Combined writing-tablet and copy-holder | 738,049 | Sept. 1 | 966 | 215 | 106 | 210 |
| Lovell, Charles W., and D. Williamson, New York, N. Y.; said Williamson assignor to said Lovell. Book-trimming machine | 734,907 | July 28 | 4106 | 956, 957 | 105 | 913 |
| Lovell, Edward C., Montpelier, England. Machine for making cartons | 726,553 | Apr. 28 | 3968 | 897, 898, 899 | 103 | 2046 |
| Lovell, Ralph L., and F. P. Palen, Newport News, Va. Automatic brake for hoisting-machines | 738,556 | Sept. 8 | 2032 | 442 | 106 | 452 |

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| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|
| | | | Spec. | Dr'g. | Vol. | Page. |
| Lovely, John H., and P. Batchder, Haverhill, Mass. Buffer | 728,480 | May 19 | 3133 | 693 | 104 | 705 |
| Lovely, Thomas, South Amboy, N. J. Sanitary pipe-protector | 728,734 | May 19 | 3612 | 801 | 104 | 806 |
| Lovercheck, Charles E., Hebron, Nebr. Grain-shocker | 747,195 | Dec. 15 | 3463 | 785, 786, 787 | 107 | 1896 |
| Loveridge, Frederick H. (See McBerty and Loveridge.) | | | | | | |
| Loveridge, Frederick H., Coldwater, Mich., and C. D. Haskins, assignors to Western Electric Company, Chicago, Ill. Multiple-series system of electrical distribution | 721,128 | Feb. 17 | 3218 | 736, 737 | 102 | 1538 |
| Lovett, Albert E., Jersey City, N. J., assignor, by mesne assignments, to Municipal Lighting Company. Oil-supply-controlling mechanism | 720,939 | Feb. 17 | 2824 | 647, 648 | 102 | 1447 |
| Lovett, John. (See Tilden, William C., assignor.) | | | | | | |
| Low, Abbot A., *et al.* (See Baldwin, James E., assignor.) | | | | | | |
| Low, Abbot A. (See Hicks, James M., assignor.) | | | | | | |
| Low, Abbot A. (See Hirsch, Feodor C., assignor.) | | | | | | |
| Low, Abbot A. (See Phail, George A., assignor.) | | | | | | |
| Low, Abbot A. (See Tuck and Low.) | | | | | | |
| Low, Abbot A. (See Tuck and Wassmann, assignors.) | | | | | | |
| Low, Abbot A. (See Tuck, Low, and Wassmann.) | | | | | | |
| Low, Abbot A., Brooklyn, N. Y. Ignition-chamber for gas-engines | 725,104 | Apr. 14 | 1279 | 288, 289 | 103 | 1456 |
| Low, Abbot A., Horseshoe, N. Y. Fuel-support for open fireplaces | 744,083 | Nov. 17 | 2545 | 545 | 107 | 571 |
| Low, Abbot A., Horseshoe, N. Y. Andiron for fireplaces | 746,539 | Dec. 8 | 2225 | 510 | 107 | 1596 |
| Low, Abbot A., Horseshoe, N. Y. Cord holding and serving device | 747,557 | Dec. 22 | 4136 | 928 | 107 | 2063 |
| Low, Abbot A., Horseshoe, N. Y., and J. M. Hicks, Summit, N. J. Ventilating-spout for vessels | 718,487 | Jan. 13 | 1832 | 402 | 102 | 410 |
| Low, Abbot A., Horseshoe, and A. Wassmann, Astoria, N. Y., assignors to said Low. Kerosene-oil engine | 747,620 | Dec. 22 | 4252 | 956 | 107 | 2089 |
| Low, Abbot A., Horseshoe, and J. Breakey, assignors to Alden Type Machine Company, New York, N. Y. Type-distributing apparatus | 747,196 | Dec. 15 | 3473 | 787 | 107 | 1898 |
| Low, James A., Aiea, Hawaii. Machine for gathering and loading crops | 742,044 | Oct. 20 | 3203 | 715, 716 | 106 | 1960 |
| Low, James A., Aiea, Hawaii. Machine for conveying and loading | 743,008 | Nov. 3 | 360 | 78 | 107 | 76 |
| Low, Josiah O., *et al.* (See Boyd, George W., assignor.) | | | | | | |
| Lowder, Elmer E., Waverly, Ill. Draft-equalizer | 731,113 | June 16 | 2910 | 646 | 104 | 1767 |
| Lowdon, John G., *et al.* (See Tyson, Frank, assignor.) | | | | | | |
| Lowe, John M., Butler, Ind. Windmill-regulator | 733,056 | July 7 | 635 | 154 | 105 | 135 |
| Lowe, Joseph P., Seattle, Wash. Switch-operating device | 718,364 | Jan. 13 | 1564 | 345 | 102 | 351 |
| Lowe, Leon P., San Francisco, Cal. Gate-valve and door | 744,214 | Nov. 17 | 2816 | 601 | 107 | 630 |
| Lowe, Leon P., San Francisco, Cal. Apparatus for separating and collecting condensable carbonaceous substances | 745,870 | Dec. 1 | 1037 | 234 | 107 | 1320 |
| Lowe, Robert, Washington, Pa. Rolling-pin | 724,023 | Mar. 31 | 4446 | 999 | 103 | 989 |
| Lowe, Thaddeus S. C., Los Angeles, Cal. Air-heater and steam-generator | 718,008 | Jan. 6 | 929 | 206 | 102 | 200 |
| Lowe, Theodore W., Stockton, Cal. Windmill | 741,515 | Oct. 13 | 2154 | 480 | 106 | 1726 |
| Lowell, Grant S., Salina, Kans. Windmill | 728,481 | May 19 | 3135 | 693 | 104 | 705 |
| Lowell Machine Shop. (See Hildreth, Charles L., assignor.) | | | | | | |
| Lowell Machine Shop. (See Hildreth, Charles L., assignor.) (Reissue.) | | | | | | |
| Löwendahl, Victor, Stockholm, Sweden. Electric conductor | 747,454 | Dec. 22 | 3949 | 888 | 107 | 2019 |
| Lowenstein, Moses. (See Levi, Benjamin I., assignor.) | | | | | | |
| Lowenstein, William J., Statesville, N. C. Bottle attachment | 728,735 | May 19 | 3613 | 802 | 104 | 806 |
| Löwi, Edmund, Vienna, Austria-Hungary. Apparatus for drying industrial wastes | 742,337 | Oct. 27 | 3795 | 850 | 106 | 2096 |
| Lownsbury, Jehu H., Philadelphia, Pa., assignor to H. W. Butterworth & Sons Company. Tentering-machine | 745,023 | Nov. 24 | 4273 | 925, 926 | 107 | 956 |
| Lowres, George, Newark, N. J. Clasp for eyeglasses | 737,943 | Sept. 1 | 770 | 168 | 106 | 169 |
| Lowrie, Harvey C., Denver, Colo. Safe | 735,787 | Aug. 11 | 1429 | 307 | 105 | 1303 |
| Lowrie, Harvey C., Denver, Colo. Means for securing circular doors or covers to casings | 739,328 | Sept. 22 | 3467 | 773, 774 | 106 | 789 |
| Lowrie, Newell S., and W. W. Votaw, Lincoln, Nebr. Windmill-pump stroke-regulator | 736,530 | Aug. 18 | 2786 | 610 | 105 | 1613 |
| Lowry, Audy A., assignor of one-half to C. M. Miller, Anna, Ill. Threshing-machine | 733,231 | July 7 | 944 | 227, 228 | 105 | 198 |
| Lowry, George A., Boston, Mass. Apparatus for charging fluids or the like with carbonic-acid or other gas | 732,203 | June 30 | 4985 | 1109 | 104 | 2227 |
| Lowry, Mary I., Indianapolis, Ind. Automatic straining device | 737,752 | Sept. 1 | 361 | 77 | 106 | 81 |
| Lowther, Lucian D., *et al.* (See Kelley, Charles C., assignor.) | | | | | | |
| Lowther, Thomas. (See Raymond, Lowther, and Perry.) | | | | | | |
| Lowthorp, Charles S. (See McElwee and Lowthorp.) | | | | | | |
| Lowthorp, Francis C., Trenton, N. J. Sad-iron | 743,897 | Nov. 10 | 2145 | 461 | 107 | 473 |
| Lowy, Henry, New York, N. Y. Foldable paper box | 731,924 | June 23 | 4418 | 985 | 104 | 2096 |
| Loyd, William F., Granville, Ohio. Type-writer | 725,855 | Apr. 21 | 2667 | 607, 608 | 103 | 1767 |
| Luallen, Samuel V., Alva, Okla. Ter. Silk-holder | 725,462 | Apr. 14 | 1940 | 435 | 103 | 1595 |
| Lubbers, John H., assignor to J. A. Chambers, trustee, Allegheny, Pa. Drawing glass articles | 739,329 | Sept. 22 | 3470 | 774, 775 | 106 | 790 |
| Lubbers, John H., Allegheny, assignor to J. A. Chambers, trustee, Pittsburg, Pa. Bait for drawing glass | 743,898 | Nov. 10 | 2146 | 461, 462 | 107 | 473 |
| Lubbes, Julius C. (See Ashcraft and Lubbes.) | | | | | | |
| Lubin, David, New York, N. Y. Power-propelled agricultural implement | 721,580 | Feb. 24 | 4076 | 926 | 102 | 1733 |
| Lubin, David, New York, N. Y. Power-operated agricultural implement | 721,581 | Feb. 24 | 4078 | 927, 928 | 102 | 1733 |
| Lubin, David, New York, N. Y. Agricultural implement | 721,582 | Feb. 24 | 4081 | 928 | 102 | 1734 |
| Lubin, David, New York, N. Y. Agricultural machine | 721,583 | Feb. 24 | 4083 | 928, 929 | 102 | 1735 |
| Lubin, David, New York, N. Y. Agricultural machine | 721,584 | Feb. 24 | 4086 | 930 | 102 | 1735 |
| Lubin, David, New York, N. Y. Motor-operated agricultural machine | 721,585 | Feb. 24 | 4088 | 930, 931 | 102 | 1736 |
| Lubin, David, New York, N. Y. Agricultural implement | 722,028 | Mar. 3 | 694 | 153, 154 | 103 | 150 |
| Lubin, David, New York, N. Y. Power device | 737,944 | Sept. 1 | 771 | 169 | 106 | 169 |
| Lubin, David, New York, N. Y. Agricultural implement | 739,193 | Sept. 15 | 3216 | 711 | 106 | 719 |
| Lubin, David, New York, N. Y. Agricultural implement | 739,194 | Sept. 15 | 3217 | 711 | 106 | 719 |
| Lucas, Abram N., and C. W. Danglemyer, Dubuque, Iowa. Flue-cutter | 725,856 | Apr. 21 | 2671 | 608 | 103 | 1768 |
| Lucas, Albert, Magdeburg, Germany. Bottle-stopper | 731,798 | June 23 | 4195 | 935 | 104 | 2046 |
| Lucas, Anthony F., Washington, D. C. Lubricating explosive-hydrocarbon engines | 721,057 | Feb. 17 | 3049 | 700 | 102 | 1497 |
| Lucas, Charles E., assignor of one-half to A. J. Hackett, McComb, Miss. Car-coupling | 725,105 | Apr. 14 | 1281 | 289 | 103 | 1457 |
| Lucas, Frank N. (See Hannan and Lucas.) | | | | | | |
| Lucas, Harry, Birmingham, England. Acetylene-lamp | 725,106 | Apr. 14 | 1283 | 290 | 103 | 1457 |

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| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drgs. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Lucas, John. (See Wemmer, William N., assignor.) | | | | | | |
| Lucas, John E., Covert, Mich. Paint-bucket | 733,984 | July 21 | 2350 | 551, 552 | 105 | 527 |
| Lucas, Julius, and C. Vorsteher, Barmen, Germany. Weaving initials, names, monograms, &c | 744,579 | Nov. 17 | 3453 | 744 | 107 | 727 |
| Lucas, Oscar S., Princeton, Ind. Collar-holder | 718,716 | Jan. 20 | 2282 | 503 | 102 | 516 |
| Lucas, Raymond A., and O. Jeppson, Hilo, Hawaii. Centrifugal separator | 722,522 | Mar. 10 | 1621 | 358 | 103 | 364 |
| Lucas, Richard N. (See Leitner and Lucas.) | | | | | | |
| Lucas, William C., Jersey City, N. J. Festoon decoration | 720,367 | Feb. 10 | 1770 | 401 | 102 | 1214 |
| Luce, Edward F., Chicago, Ill. Box-car door | 720,368 | Feb. 10 | 1772 | 401, 402 | 102 | 1214 |
| Luce, Edwin T. (See Lombard and Luce.) | | | | | | |
| Luce, George D., New Orleans, La. Cane-harvester | 730,671 | June 9 | 2093 | 466 | 104 | 1577 |
| Luchia, Henry M., assignor of one-half to J. J. Areceneau, North Abington, Mass. Weather-strip for doors | 719,599 | Feb. 3 | 336 | 78 | 102 | 892 |
| Luckenbach, Harry, assignor of one-half to H. G. Price, Seattle, Wash. Oil-burner | 723,206 | Mar. 17 | 2889 | 647 | 103 | 642 |
| Luckett, John P., assignor to Luckett Smokeless Fuel Economizer Company, Baltimore, Md. Automatic stoker | 721,586 | Feb. 24 | 4090 | 931 | 102 | 1736 |
| Luckett Smokeless Fuel Economizer Company. (See Luckett, John P., assignor.) | | | | | | |
| Luckey, Frank. (See Lewis and Luckey.) | | | | | | |
| Luckey, John H., New York, N. Y. Safety device for air-brakes | 746,969 | Dec. 15 | 3047 | 699 | 107 | 1801 |
| Luckfield, Charles A., Indio, Cal. Holder for train-orders | 724,024 | Mar. 31 | 4447 | 999 | 103 | 990 |
| Luckhurst, Allen E. J., Philadelphia, Pa. Combined cutting and countersinking tool | 730,670 | June 9 | 2092 | 465 | 104 | 1577 |
| Lucore, Frank M., Lincoln, Nebr. Car-report book | 727,164 | May 5 | 655 | 141 | 104 | 142 |
| Luddington, Daniel L., assignor of one-half to G. Mainhart, Grass Valley, Cal. Extension-bit or drilling-tool | 744,925 | Nov. 24 | 4090 | 881 | 107 | 919 |
| Ludford, Enoch, Jr., Eastlake, N. C. Stake-holder for logging-cars | 740,885 | Oct. 6 | 922 | 206 | 106 | 1443 |
| Ludington, Frank J., Waterbury, Conn. Creasing device for continuous-cigarette machines | 742,338 | Oct. 27 | 3796 | 850 | 106 | 2096 |
| Ludington, Frank J., Waterbury, Conn. Machine for making cigarettes from continuous filler-rod | 743,739 | Nov. 10 | 1849 | 390, 391 | 107 | 411 |
| Ludlow, A. Phillips. (See Williams, William E., assignor.) | | | | | | |
| Ludlow, Frank K., Cincinnati, Ohio. Automatic fire-alarm and sprinkler system | 740,450 | Oct. 6 | 128 | 26 | 106 | 1273 |
| Ludwig, Bernhard, New York, N. Y. Producing celluloid printing-plates | 747,738 | Dec. 22 | 4465 | ..... | 107 | 2137 |
| Ludwig & Company. (See Salyer, Harry M., assignor.) | | | | | | |
| Ludwig, John G., Sprakers, N. Y. Fluid-pressure coupling for air-brake pipes | 727,982 | May 12 | 2196 | 489 | 104 | 486 |
| Luedke, Frederick W., Philadelphia, Pa. Feed-water heater | 730,938 | June 16 | 2568 | 572 | 104 | 1698 |
| Luedke, Frederick W., Philadelphia, Pa. Car-truck | 741,917 | Oct. 20 | 2938 | 655 | 106 | 1906 |
| Luellen, Lawrence W., Brookline, Mass. Fastener | 720,451 | Feb. 10 | 1910 | 435 | 102 | 1243 |
| Luellen, Lawrence W., Olathe, Kans. Voting-machine | 747,455 | Dec. 22 | 3950 | 888 | 107 | 2020 |
| Luellen, Lawrence W. and S. M., Brookline, Mass. Placket-closure | 720,450 | Feb. 10 | 1909 | 435 | 102 | 1243 |
| Luellen, Sallie M. (See Luellen, Lawrence W. and S. M.) | | | | | | |
| Luenberger, Abner, Alburnett, Iowa. Cover or protector for plows | 732,873 | July 7 | 314 | 79 | 105 | 70 |
| Luensmann, Henry, New Berlin, Tex. Box stand or bracket | 729,619 | June 2 | 170 | 41 | 104 | 1162 |
| Luethy, Jacob A., Camden, N. J. Packing mechanism | 734,344 | July 21 | 3048 | 718 | 105 | 679 |
| Lufkin Rule Company. (See Buck, Fred, assignor.) | | | | | | |
| Luft, Adolf, Lemberg, Austria-Hungary. Producing plastic compounds | 735,278 | Aug. 4 | 473 | ..... | 105 | 1081 |
| Luger, John, Jr., and J. Muller, North St. Paul, Minn., assignors to E. Tyden, Hastings, Mich. Pedestal extension-table | 741,049 | Oct. 13 | 1218 | 276 | 106 | 1526 |
| Lugibihl, A. D. (See Zehrbach, Henry D., assignor.) | | | | | | |
| Lugibihl, Adam D., and H. D. Zehrbach, Bluffton, Ohio. Cream-separator | 735,122 | Aug. 4 | 147 | 32 | 105 | 1013 |
| Lugino, Albert, Berlin-Charlottenburg, Germany. Construction of walls | 744,374 | Nov. 17 | 3102 | 667 | 107 | 693 |
| Luhr, Otto, and T. Andresen, Chicago, Ill. Lubricator for engine-cylinders | 723,290 | Mar. 24 | 3088 | 684 | 103 | 687 |
| Luhrman, Joseph F., Hamilton, Md. Device for shaving celery | 727,396 | May 5 | 1063 | 231 | 104 | 229 |
| Luis, Caesar G. (See Gould, Robert H., assignor.) | | | | | | |
| Luitwieler, Clarence S. (See Humphrey and Storz, assignors.) | | | | | | |
| Lukens, Clarence D., St. Louis, Mo. Serrefin | 733,723 | July 14 | 1816 | 430 | 105 | 400 |
| Lukes, Paul J., Balls Ferry, Cal. Rail-joint | 736,123 | Aug. 11 | 2067 | 442, 443 | 105 | 1441 |
| Luks, Emil C., assignor to himself, R. A. Luks, R. P. Shick, and C. F. Molly, Reading, Pa. Box-lid support, &c | 727,983 | May 12 | 2196 | 489 | 104 | 487 |
| Luks, Robert A., *et al.* (See Luks, Emil C., assignor.) | | | | | | |
| Lum, Walter H., Chicago, Ill. Tip-printing press and embossing-machine | 742,691 | Oct. 27 | 4430 | 1000 | 106 | 2229 |
| Lumley, William, Chicago, Ill. Means for operating rolling partitions | 747,621 | Dec. 22 | 4252 | 957 | 107 | 2089 |
| Lummis, Charles W., Cleveland, Ohio. Manufacturing gas | 745,635 | Dec. 1 | 585 | 136 | 107 | 1222 |
| Lummus, Walter E., Lynn, Mass. Distilling apparatus | 731,799 | June 23 | 4195 | 936 | 104 | 2046 |
| Lumry, Rufus L., Fort Collins, Colo. Key-fastener | 736,985 | Aug. 25 | 3669 | 814 | 105 | 1815 |
| Lunau, Ernest H., New York, N. Y. Clothes-hanger | 730,546 | June 9 | 1866 | 417 | 104 | 1528 |
| Lund, Clarence W., Chicago, Ill. Fan | 725,107 | Apr. 14 | 1284 | 290 | 103 | 1457 |
| Lund, George, Victoria, Canada. Heater attachment | 730,672 | June 9 | 2095 | 466 | 104 | 1578 |
| Lund, Jens G. F., Christiania, Norway. Wall | 722,237 | Mar. 10 | 1094 | 241 | 103 | 249 |
| Lundblad, Konrad N., Orebro, Sweden. Composition of matter | 733,407 | July 14 | 1278 | ..... | 105 | 287 |
| Lundeberg, August F., Stockholm, Sweden. Printing or coloring floor-coverings, &c., and articles thus produced | 737,945 | Sept. 1 | 774 | 169 | 106 | 170 |
| Lundell, Robert, New York, N. Y. Brush-holder and brush for dynamo-electric machines | 729,878 | June 2 | 661 | 145 | 104 | 1263 |
| Lundell, Robert, New York, N. Y. Field-magnet for dynamo-electric machines or electric motors | 729,879 | June 2 | 662 | 145 | 104 | 1263 |
| Lundell, Robert, New York, N. Y. Means for controlling electric motors | 734,724 | July 28 | 3754 | 877 | 105 | 839 |
| Lunden, Peter J., Brookings, S. D. Snow-plow | 732,646 | June 30 | 5835 | 1292 | 104 | 2407 |
| Lundgren, Jakob, Philadelphia, Pa., assignor to H. M. Harley, Gloucester City, N. J. Braiding-machine | 736,856 | Aug. 18 | 3422 | 757, 758 | 105 | 1744 |
| Lundin, Efraim, assignor of three-fourths to M. L. Felkin, Boston, Mass. Street or station indicator | 738,464 | Sept. 8 | 1854 | 403, 404 | 106 | 413 |
| Lundin, Emil O. (See Gilbert and Lundin.) | | | | | | |
| Lundquist, Frank A., Chicago, Ill., assignor to M. E. Richardson, trustee Sterling, Kans. Telephone-exchange | 747,197 | Dec. 15 | 3474 | 788, 789 | 107 | 1898 |
| Lundquist, Samuel, assignor of one-half to W. Osborn, Dubois, Pa. Steam-actuated valve for engines | 733,985 | July 21 | 2351 | 552 | 105 | 528 |
| Lundskog, Julius W., Lynn, Mass., assignor to General Electric Company. Winding-form | 733,232 | July 7 | 946 | 228, 229 | 105 | 198 |
| Lundskog, Julius W., Lynn, Mass., assignor to General Electric Company. Winding coils | 733,233 | July 7 | 950 | 229 | 105 | 199 |
| Lundskog, Julius W., Lynn, Mass., assignor to General Electric Company. Forming coils | 733,234 | July 7 | 952 | 230 | 105 | 199 |
| Lungen, Adam, assignor to himself and R. Edwards, New York, N. Y. Push-button | 731,479 | June 23 | 3606 | 804 | 104 | 1928 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Lungen, Adam, assignor to himself and R. Edwards, New York, N. Y. Circuit-controller. | 741,804 | Oct. 20 | 2721 | 606 | 106 | 1860 |
| Lungen, Adam, assignor to himself and R. Edwards, New York, N. Y. Circuit-controller. | 744,215 | Nov. 17 | 2817 | 602 | 107 | 630 |
| Lungren, Bennett, Alexandria, Minn. Combined water-heater and washing-machine | 718,778 | Jan. 20 | 2396 | 532 | 102 | 540 |
| Lunken, Edmund H., Denver, Colo. Window | 739,430 | Sept. 22 | 3682 | 819 | 106 | 836 |
| Lunken, Edmund H., Denver, Colo. Window | 739,431 | Sept. 22 | 3685 | 820 | 106 | 837 |
| Lunken, Edmund H., Denver, Colo., assignor to Lunkenheimer Company, Cincinnati, Ohio. Blow-off valve | 721,453 | Feb. 24 | 3831 | 871 | 102 | 1678 |
| Lunkenheimer Company. (See Burns and Aull, assignors.) | | | | | | |
| Lunkenheimer Company. (See Lunken, Edmund H., assignor.) | | | | | | |
| Lunkenheimer Company. (See Ritter, Henry, assignor.) | | | | | | |
| Lunt, Alexander D., Schenectady, N. Y., assignor to General Electric Company. System of distribution | 725,463 | Apr. 14 | 1941 | 435 | 103 | 1596 |
| Lunt, Alexander D., Schenectady, N. Y., assignor to General Electric Company. System of electrical distribution | 728,259 | May 19 | 2713 | 605 | 104 | 615 |
| Lunt, Alexander D., Schenectady, N. Y., assignor to General Electric Company. System of electrical distribution | 729,778 | June 2 | 470 | 105 | 104 | 1224 |
| Lunt, Alexander D., Schenectady, N. Y., assignor to General Electric Company. Generating alternating currents | 730,673 | June 9 | 2096 | 467 | 104 | 1578 |
| Lunt, Alexander D., Schenectady, N. Y., assignor to General Electric Company. Phase transformation | 732,204 | June 30 | 4988 | 1110 | 104 | 2227 |
| Lupfer, James L., Swatara Township, Dauphin county, Pa. Suspensory bandage | 722,121 | Mar. 3 | 852 | 190 | 103 | 183 |
| Luppino, Joseph, New Haven, Conn. Head-rest support for couches | 722,372 | Mar. 10 | 1337 | 295, 296 | 103 | 301 |
| Luppino, Joseph, New Haven, Conn. Adjustable support for chair-backs | 724,901 | Apr. 7 | 894 | 205 | 103 | 1361 |
| Luquire, Wiley, Buckhead, assignor of one-half to G. A. Merritt, Greensboro, Ga. Root-cutting attachment for plows | 743,176 | Nov. 3 | 686 | 151 | 107 | 144 |
| Lurye, Henry I. and M. A., assignors of one-half to N. Wolfert, New York, N. Y. Display-stand | 725,625 | Apr. 14 | 2235 | 505 | 103 | 1660 |
| Lurye, Myron A. (See Lurye, Henry I. and M. A.) | | | | | | |
| Luscomb, Martin, Bridgeport, Conn. Pressure-gage | 745,636 | Dec. 1 | 588 | 136 | 107 | 1223 |
| Luse, David N., Carroll, Iowa. Neck-yoke attachment | 748,388 | Dec. 29 | 5701 | 1301 | 107 | 2430 |
| Lussier, Joseph A., Minneapolis, Minn. Grain-drill | 744,375 | Nov. 17 | 3104 | 667 | 107 | 693 |
| Lustig, Adolphus J., Newark, N. J. Apparatus for casting ingots | 727,397 | May 5 | 1063 | 231 | 104 | 230 |
| Luther Brothers Company. (See Luther, George M., assignor.) | | | | | | |
| Luther, Clarence J. (See Luther, George M. and C. J.) | | | | | | |
| Luther, George M., Milwaukee, Wis. Grinding-machine | 718,488 | Jan. 13 | 1833 | 402, 403 | 102 | 410 |
| Luther, George M., assignor to Luther Brothers Company, Milwaukee, Wis. Milk-tester. | 734,725 | July 28 | 3758 | 877 | 105 | 840 |
| Luther, George M. and C. J., Milwaukee, Wis. Grinding-machine | 719,677 | Feb. 3 | 469 | 107 | 102 | 921 |
| Luther, George M. and C. J., Milwaukee, Wis. Grinding-machine | 719,678 | Feb. 3 | 472 | 107 | 102 | 921 |
| Luther, Justus P., assignor of one-half to F. L. Durfey, Berlin, Wis. Purse or pouch | 731,378 | June 16 | 3401 | 760 | 104 | 1867 |
| Luther, Paul, Allegheny, Pa. Car-coupling | 741,264 | Oct. 13 | 1636 | 369 | 106 | 1615 |
| Lüttke, Hans, Hamburg, Germany. Photographic emulsion and making same | 722,238 | Mar. 10 | 1095 | ------ | 103 | 249 |
| Lutton, William J., Paterson, N. J. Pattern mechanism for looms | 729,880 | June 2 | 664 | 146 | 104 | 1264 |
| Lutton, William J., Paterson, N. J. Pattern-chain for looms | 735,037 | July 28 | 4334 | 1007, 1008 | 105 | 959 |
| Luttrell, John D., and W. C. Cantrell, Benton Harbor, Mich. Cement-brick machine | 741,516 | Oct. 13 | 2157 | 481 | 106 | 1727 |
| Lutz, Albert A., *et al.* (See Lutz, Edward G., assignor.) | | | | | | |
| Lutz, Edward G., Avalon, assignor of one-half to A. A. and W. J. Lutz, Allegheny, Pa. Metal shoe-sole | 729,371 | May 26 | 4746 | 1049 | 104 | 1054 |
| Lutz, George W., Dayton, Ohio. Folding stake-holder | 725,464 | Apr. 14 | 1944 | 436 | 103 | 1596 |
| Lutz, John E., Vernon, Tex. Abstract-book for county records, &c | 719,481 | Feb. 3 | 124 | 29 | 102 | 851 |
| Lutz, William J., *et al.* (See Lutz, Edward G., assignor.) | | | | | | |
| Lux, Alfred A., St. Paul, Minn. Safety-guard for razors | 742,692 | Oct. 27 | 4434 | 1001 | 106 | 2230 |
| Luyten, Johannes J., Weltevreden, Java. Combined acetylene-gas generator and lighting-buoy | 723,473 | Mar. 24 | 3413 | 762, 763 | 103 | 759 |
| Lybrand, George W. (See Nunamaker, Arthur S., assignor.) | | | | | | |
| Lydon, Timothy, Baltimore, Md. Means for purifying the water of dams or reservoirs | 719,240 | Jan. 27 | 3272 | 731 | 102 | 736 |
| Lyford, Charles D., *et al.*, trustees. (See Nunn, Alfred W., assignor.) | | | | | | |
| Lyford, Jay B., and C. E. Hartman, Bridgeport, Conn. Air-pump | 736,986 | Aug. 25 | 3670 | 814 | 105 | 1815 |
| Lyford, John H., Manly, Iowa. End-gate rod | 723,890 | Mar. 31 | 4156 | 937 | 103 | 931 |
| Lyford, Oliver S. (See Sargent, Charles E., assignor.) | | | | | | |
| Lyle, George H., Ben Avon, Pa. Metallic tie for railways | 722,373 | Mar. 10 | 1339 | 296 | 103 | 301 |
| Lyle, Robert W., New York, N. Y. Mandrel for conduit-sections | 720,369 | Feb. 10 | 1774 | 402 | 102 | 1215 |
| Lyle, Robert W., New York, N. Y. Machine for beveling the inner walls of conduit-sections | 720,717 | Feb. 17 | 2443 | 559 | 102 | 1366 |
| Lyle, Robert W., New York, N. Y. Grappling device for mandrels for conduit-sections | 721,713 | Mar. 3 | 114 | 24 | 103 | 25 |
| Lyle, Robert W., New York, N. Y. Mandrel for conduit-sections | 722,729 | Mar. 17 | 2021 | 451 | 103 | 463 |
| Lyle, Robert W., Perth Amboy, N. J. Boring-machine | 723,891 | Mar. 31 | 4158 | 937 | 103 | 932 |
| Lyle, Robert W., Perth Amboy, N. J. Tile or conduit for electric conductors | 723,892 | Mar. 31 | 4161 | 937 | 103 | 933 |
| Lyman, Chauncey O., Brockwayville, assignor of two-thirds to R. A. Hamilton and W. T. Blose, Bigrun, Pa. Swing | 732,307 | June 30 | 5184 | 1152 | 104 | 2268 |
| Lyman, Edwin R. (See Mood and Lyman.) | | | | | | |
| Lyman, George F., Norfolk, Va. Sash-holding device | 727,815 | May 12 | 1884 | 420 | 104 | 419 |
| Lyman, Henry J., Corry, Pa. Evaporator | 744,867 | Nov. 24 | 3990 | 860 | 107 | 898 |
| Lyman, Isidor, Cleveland, Ohio. Chip-blower and syringe attachment for dental engines | 743,529 | Nov. 10 | 1471 | 307, 308 | 107 | 331 |
| Lyman, John M., Chicago, Ill. Making lump-starch | 721,314 | Feb. 24 | 3573 | ------ | 102 | 1626 |
| Lyman, Jonathan F., South San Francisco, Cal. Wall or chimney construction | 719,679 | Feb. 3 | 474 | 108 | 102 | 922 |
| Lynch, Dennis J., Boston, Mass. Sewage-trap | 719,680 | Feb. 3 | 475 | 108 | 102 | 922 |
| Lynch, George R. (See Wetterstein and Lynch.) | | | | | | |
| Lynch, John D., Millers Falls, Mass. Adjustable step-ladder | 743,899 | Nov. 10 | 2147 | 462 | 107 | 473 |
| Lynch, Thomas, Brockport, N. Y. Whiffletree | 727,165 | May 5 | 657 | 141 | 104 | 142 |
| Lynch, Thomas J., Marietta, Pa. Serum container and injector | 740,152 | Sept. 29 | 5020 | 1128 | 106 | 1140 |
| Lynchard Square Lock Quoin Company. (See Lynchard, William H., assignor.) | | | | | | |
| Lynchard, William H., Council Bluffs, Iowa, assignor to Lynchard Square Lock Quoin Company, Omaha, Nebr. Printer's quoin | 741,151 | Oct. 13 | 1412 | 323 | 106 | 1567 |
| Lynde, Leander E. (See Bailey, James W., assignor.) | | | | | | |
| Lyndon, Lamar, New York, assignor to National Battery Company, Buffalo, N. Y. Regulating system of electrical distribution | 735,990 | Aug. 11 | 1825 | 391 | 105 | 1390 |
| Lyndon, Lamar, New York, assignor to National Battery Company, Buffalo, N. Y. Regulating system of electric distribution | 736,280 | Aug. 11 | 2335 | 507 | 105 | 1501 |
| Lyne, Lewis F., Jersey City, N. J., assignor to G. N. Robinson, Brooklyn, N. Y. Grate | 740,153 | Sept. 29 | 5022 | 1128 | 106 | 1140 |
| Lynes, William, Sparkhill, England. Appliance for use with metallurgical or chemical vessels | 728,122 | May 12 | 2445 | 544, 545 | 104 | 538 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | Spec. | Dr'g. | Vol. | Page. |
| Lynn, James. (See Field and Lynn.) | | | | | | |
| Lynn, John A. (See Samuelson and Lynn.) | | | | | | |
| Lynn, Joseph, assignor to Farr Alpaca Company, Holyoke, Mass. Cloth-pressing device | 739,499 | Sept. 22 | 3790 | 849 | 106 | 861 |
| Lynne, William C., *et al.* (See Averill, George F., assignor.) | | | | | | |
| Lynx, Frances, New York, N. Y. Safety-hook | 732,308 | June 30 | 5186 | 1152 | 104 | 2268 |
| Lyon, Charles H. (See Machalske, Florentine J., assignor.) | | | | | | |
| Lyon, George H., and G. H. Karicofe, Delray, Mich. Air-heater for steam-generators | 747,198 | Dec. 15 | 3479 | 789 | 107 | 1899 |
| Lyon, Grenville W., Chicago, Ill. Furnace | 720,370 | Feb. 10 | 1775 | 402<br>403 | 102 | 1215 |
| Lyon, Harry, Brockton, Mass., assignor to Brockton Supply Company. Welt-slitting machine | 737,430 | Aug. 25 | 4489 | 1007 | 105 | 1990 |
| Lyon, Harry, assignor to Brockton Supply Company, Brockton, Mass. Welt-slitting machine | 745,965 | Dec. 1 | 1199 | 269 | 107 | 1356 |
| Lyon & Healy. (See Bennett, Robert J., assignor.) | | | | | | |
| Lyon, Henry, Manchester, England. Screen or grating for half-tone photomechanical engraving processes | 727,816 | May 12 | 1885 | 420 | 104 | 419 |
| Lyon, Henry H., Riverside, Cal. Rotary vegetable-grater | 744,774 | Nov. 24 | 3824 | 824 | 107 | 863 |
| Lyon, Henry H., Riverside, Cal. Apparatus for removing pulp from fruit | 746,720 | Dec. 15 | 2559 | 588<br>589 | 107 | 1692 |
| Lyon, Jesse D., Pittsburg, Pa. Explosive-engine | 738,690 | Sept. 8 | 2301 | 505<br>506 | 106 | 508 |
| Lyon, Jesse D., Pittsburg, Pa. Developing apparatus for photographic plates | 744,376 | Nov. 17 | 3105 | 667<br>668 | 107 | 693 |
| Lyon, Samuel V. (See Harrison, Lyon, and Lackey.) | | | | | | |
| Lyon, Wallace C., Hyattsville, Md. Metallic matrix for building-blocks | 718,009 | Jan. 6 | 931 | 207 | 102 | 200 |
| Lyon, Wallace C., Hyattsville, Md. Sectional connecting-clip | 734,275 | July 21 | 2923 | 683 | 105 | 653 |
| Lyon, Wallace C., Hyattsville, Md., and K. Berle, Washington, D. C. Monolithic construction | 720,165 | Feb. 10 | 1384 | 317 | 102 | 1134 |
| Lyon, Wallace C., Hyattsville, Md., and K. Berle, Washington, D. C. Constructing fire-proof partitions | 742,045 | Oct. 20 | 3205 | 716 | 106 | 1960 |
| Lyon, Wallace W., and J. L. Davis, Mount Salem, Ky.; said Davis assignor to R. M. Stewart, Atlanta, Ga. Crupper | 739,195 | Sept. 15 | 3218 | 712 | 106 | 719 |
| Lyon, William H., assignor to Charles Parker Co., Meriden, Conn. Device for attaching window-shades to rollers | 735,540 | Aug. 4 | 974 | 206 | 105 | 1188 |
| Lyon, William H., and D. V. Fisher, Creston, Iowa. Lady's hat-pin | 735,732 | Apr. 21 | 2443 | 554 | 103 | 1717 |
| Lyons, Albert B., assignor to Nelson, Baker & Company, Detroit, Mich. Saccharimeter | 730,674 | June 9 | 2098 | 467 | 104 | 1579 |
| Lyons, Charles, assignor to Columbus Pharmacal Company, Columbus, Ohio. Operating-table | 721,587 | Feb. 24 | 4094 | 932 | 102 | 1737 |
| Lyons, Harry J., Guyandotte, W. Va. Electric automatic gas lighter and shut-off | 735,541 | Aug. 4 | 975 | 207 | 105 | 1188 |
| Lyons, Hugh. (See Turner and Lyons.) | | | | | | |
| Lyons, James A., Fountain City, Tenn. Curtain-fixture | 739,888 | Sept. 29 | 4539 | 1020 | 106 | 1036 |
| Lyons, James A., Fountain City, Tenn. Curtain-fixture | 739,889 | Sept. 29 | 4541 | 1020 | 106 | 1036 |
| Lyons, James A., Fountain City, Tenn. Curtain-fixture | 739,890 | Sept. 29 | 4543 | 1020 | 106 | 1037 |
| Lyons, James W., Chicago, Ill. Steam-engine | 720,826 | Feb. 17 | 2609 | 603 | 102 | 1402 |
| Lyons, James W., Chicago, Ill. Steam-engine | 720,940 | Feb. 17 | 2826 | 648 | 102 | 1448 |
| Lyons, James W., Springfield, Mo. Spark-arrester | 742,339 | Oct. 27 | 3799 | 851 | 106 | 2097 |
| Lyons, John A., and E. C. Broadwell, Chicago, Ill. Electrical storage-cell | 744,216 | Nov. 17 | 2818 | 602 | 107 | 631 |
| Lyons, John B., Opelika, Ala. Book | 743,530 | Nov. 10 | 1473 | 308 | 107 | 332 |
| Lyons, John C., and D. H. Brown, McComb, Miss. Rotary valve | 734,908 | July 28 | 4110 | 958 | 105 | 913 |
| Lyons, Jonathan A., Nuevitas, Cuba. Shoe-tongue | 748,197 | Dec. 29 | 5387 | 1225 | 107 | 2361 |
| Lyons, Kennedy, assignor to M. R. Manbeck, New Rumley, Ohio. Trolley for electric lines | 733,496 | July 14 | 1429 | 335 | 105 | 319 |
| Lyons, Robert L., Boston, Mass. Thread-cutting mechanism for sewing-machines | 737,122 | Aug. 25 | 3890 | 863<br>864 | 105 | 1861 |
| Lyons, Robert L., assignor to Union Button Sewing Machine Company, Boston, Mass. Thread-cutter for sewing-machines | 726,318 | Apr. 28 | 3515 | 796 | 103 | 1956 |
| Lytle, Albert E., assignor of one-half to H. F. Dousman, Chicago, Ill. Waste-pipe strainer | 738,726 | Sept. 8 | 2354 | 516 | 106 | 519 |
| Lytle, Albert E., assignor of one-half to H. F. Dousman, Chicago, Ill. Electric conductor | 744,926 | Nov. 24 | 4090 | 881 | 107 | 919 |
| Lytle, Henry M., Braddock, Pa. Double-decked freight-car | 735,123 | Aug. 4 | 148 | 33 | 105 | 1014 |
| Lytle, John H., Delphi, Ind. Prescription-file | 721,454 | Feb. 24 | 3832 | 871<br>872 | 102 | 1679 |
| Lytle, William, Pearl, Ill. Axle-skein | 717,879 | Jan. 6 | 693 | 155 | 102 | 148 |
| Lyttleton, Henry T., Marshall, Tex. Spirometer | 735,542 | Aug. 4 | 980 | 208 | 105 | 1189 |
| Lytton, Edward, Bedford Park, England. Apparatus for raising or lowering the scenery of theaters | 722,597 | Mar. 10 | 1745 | 389 | 103 | 390 |
| M. Garland Company. (See Garland, Michael, assignor.) | | | | | | |
| M. Prager Company, *et al.* (See Mead, Charles, assignor.) | | | | | | |
| M. Rumely Company. (See Robby, William C., assignor.) | | | | | | |
| M. H. Treadwell & Company. (See Coffin, Albert S., assignor.) | | | | | | |
| M. and P. Co. of Chicago. (See Reynolds, Willie H., assignor.) | | | | | | |
| M'Gregor, George T., *et al.* (See Flanigan, Joseph H., assignor.) | | | | | | |
| Maag, Enrico, Zurich, Switzerland. Sifting apparatus | 728,482 | May 19 | 3136 | 693 | 104 | 705 |
| Maas, Gottfried H. J., Arnsberg, Germany. Semaphore | 739,891 | Sept. 29 | 4545 | 1021 | 106 | 1037 |
| Maas, Gottfried H. J., Arnsberg, Germany. Suspended rail-joint for railways | 744,868 | Nov. 24 | 3991 | 860 | 107 | 899 |
| Maasch, William, Brooklyn, N. Y. Wagon | 725,733 | Apr. 21 | 2444 | 554 | 103 | 1717 |
| Maass, Henry, Jersey City, N. J. Crutch | 730,466 | June 9 | 1729 | 386 | 104 | 1498 |
| Mable, William, assignor of one-half to R. J. Andrews, Fort Collins, Colo. Window-cleaner | 732,205 | June 30 | 4989 | 1110 | 104 | 2228 |
| Mabus, John, Lilly, assignor to D. C. Emerson, Peoria, Ill. Locking railway-splice | 724,902 | Apr. 7 | 895 | 205 | 103 | 1361 |
| Mabus, John, Lilly, assignor of one-half to D. C. Emerson, Peoria, Ill. Railway-splice | 724,903 | Apr. 7 | 898 | 205 | 103 | 1361 |
| Mabus, John, and F. L. Hay, Lilly, Ill. Elevator for corn or grain dumps | 722,997 | Mar. 17 | 2490 | 560 | 103 | 558 |
| Mabus, John, and F. L. Hay, Lilly, Ill. Grain-conveyer | 737,643 | Sept. 1 | 152 | 33 | 106 | 36 |
| MacAlman, John H., Somerville, Mass., assignor to "Locomobile" Company of America, New York, N. Y. Motor-vehicle | 740,896 | Oct. 6 | 941 | 211 | 106 | 1448 |
| MacAlman, John H., Somerville, Mass., assignor to "Locomobile" Company of America, New York, N. Y. Automobile-body | 740,897 | Oct. 6 | 943 | 212 | 106 | 1448 |
| MacCance, Anna. (See Maurer, Fred, assignor.) | | | | | | |
| MacClernan, Richard H. (See Freeburg, Frank M., assignor.) | | | | | | |
| MacCordy, Samuel P., Amsterdam, N. Y. Button-drilling machine | 725,734 | Apr. 21 | 2445 | 554<br>555 | 103 | 1718 |
| MacCormack, John, Bayonne, N. J., assignor to R. C. Peabody, Brooklyn, N. Y. Rotary-grate furnace | 724,025 | Mar. 31 | 4448 | 999<br>1000 | 103 | 990 |
| MacCormack, John, Bayonne, N. J., assignor to R. C. Peabody, Brooklyn, N. Y. Furnace for vertical boilers | 724,482 | Apr. 7 | 114 | 28 | 103 | 1193 |
| MacCormack, John, Bayonne, N. J., assignor to R. C. Peabody, Brooklyn, N. Y. Furnace | 740,668 | Oct. 6 | 528 | 116<br>117 | 106 | 1360 |

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| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| MacCormack, John, Bayonne, N. J., assignor to R. C. Peabody, Brooklyn, N. Y. Furnace | 740,669 | Oct. 6 | 530 | 117 | 106 | 1360 |
| MacDonald, George R., Seattle, Wash. Miner's crate | 733,552 | July 14 | 1526 | 364 | 105 | 340 |
| MacDonald, James M., Detroit, Mich. Machine for grading tablets | 735,396 | Aug. 4 | 677 | 145 | 105 | 1125 |
| MacDonald, John W. (See Koch and MacDonald.) | | | | | | |
| MacDonald, John W., Pittsburg, Pa. Device for freezing milk or other liquids | 748,389 | Dec. 29 | 5703 | 1301 | 107 | 2430 |
| MacDonald, John W., Pittsburg, Pa., assignor to United States Sulphide Smelting Furnace Company, Toledo, Ohio. Converting metal compounds | 746,721 | Dec. 15 | 2562 | 589 | 107 | 1693 |
| MacDonald, John W., Pittsburg, Pa., assignor to United States Sulphide Smelting Furnace Company, Toledo, Ohio. Smelting ores | 746,970 | Dec. 15 | 3048 | 699 | 107 | 1802 |
| MacDonald, Thomas A., Paterson, N. J. Motor driven by water-currents | 737,256 | Aug. 25 | 4157 | 925 | 105 | 1918 |
| MacDougall, George W., Boonton, N. J. Steam-boiler feed | 730,547 | June 9 | 1867 | 417 | 104 | 1529 |
| MacDowell, James N., Chicago, Ill. Tooth-regulating apparatus | 741,687 | Oct. 20 | 2496 | 557 | 106 | 1814 |
| MacDowell, Nathan M., Montgomery, Ala., and J. T. Sperling, Elizabeth, N. J., assignors of one-third to R. P. Duff, Swissvale, Pa. Signature-gatherer | 748,198 | Dec. 29 | 5388 | {1225<br>1226 | {107 | 2361 |
| MacFadden, Carl K. (See O'Connor, Samuel S., assignor.) | | | | | | |
| MacFarland, Fredrick, Meriden, Kans. Exterminator | 724,305 | Mar. 31 | 5003 | 1120 | 103 | 1103 |
| MacFarland, Frederick, Topeka, Kans. Germicide-generator | 732,572 | June 30 | 5707 | 1268 | 104 | 2378 |
| MacGregor, John. (See Blandford and MacGregor.) | | | | | | |
| MacHaffie, John, Schenectady, N. Y. Igniter for gas-engines | 729,499 | May 26 | 4954 | 1098 | 104 | 1099 |
| MacHaffie, John, Schenectady, N.Y., assignor to General Electric Company. Gas-engine | 729,194 | May 26 | 4440 | 979 | 104 | 991 |
| MacIntosh, Joseph B., Lexington, Mass. Device for filing commutators for dynamos or motors | 723,399 | Mar. 24 | 3260 | 730 | 103 | 728 |
| MacKaye, Harold S. (See Hiss and MacKaye.) | | | | | | |
| MacKaye, Harold S., New York, N. Y. Toy | 722,731 | Mar. 17 | 2023 | 452 | 103 | 464 |
| MacKaye, Harold S., Yonkers, N. Y. Portable electric light | 740,671 | Oct. 6 | 533 | 118 | 106 | 1361 |
| MacKenzie, Alexander W. (See Ross and MacKenzie.) | | | | | | |
| MacKenzie, Frederick J., Trenton, N. J. Turbine-engine | 748,294 | Dec. 29 | 5553 | 1267 | 107 | 2397 |
| MacKenzie, George W., Beaver, Pa. Acetylene-gas generator | 723,778 | Mar. 24 | 3934 | 887 | 103 | 869 |
| MacKenzie, George W., Beaver, Pa. Acetylene-gas generator | 723,779 | Mar. 24 | 3936 | 888 | 103 | 869 |
| MacKenzie, George W., Beaver, Pa. Vending apparatus | 744,377 | Nov. 17 | 3107 | 668 | 107 | 694 |
| MacKenzie, Irvine K., Boston, Mass., assignor to Consolidated Fastener Company, Portland, Me. Feed mechanism | 723,400 | Mar. 24 | 3262 | 731 | 103 | 729 |
| MacKinnon & Co., Robert. (See Stairs and Petrie, assignors.) | | | | | | |
| MacLean, James, Boston, Mass. Horseshoe | 742,464 | Oct. 27 | 4016 | 901 | 106 | 2141 |
| MacLean, Margaret, Jamaica Plains, Mass. Paring-knife | 734,909 | July 28 | 4112 | 958 | 105 | 914 |
| MacMillan, Malcolm, Williamsport, Pa. Checkrein-fastener | 744,580 | Nov. 17 | 3454 | 744 | 107 | 767 |
| MacMillan, William, assignor of one-half to E. Winkler, New York, N. Y. Electric lock | 738,824 | Sept. 15 | 2578 | {568<br>569 | {106 | 585 |
| MacMulkin, John J., assignor to Daimler Manufacturing Company, Long Island City, N. Y. Frame for motor-cars | 744,775 | Nov. 24 | 3825 | 825 | 107 | 864 |
| MacMurray, James E., assignor to Acme Flexible Clasp Company, Chicago, Ill. Mat | 743,303 | Nov. 3 | 947 | 206 | 107 | 203 |
| MacNaughton, James. (See Rossi, Auguste J., assignor.) | | | | | | |
| MacNeill, Angus. (See Schwaab and MacNeill.) | | | | | | |
| MacNeill, Charles M. (See Mosher, De Witt C., assignor.) | | | | | | |
| MacRae, John L., assignor of one-half to E. C. Norton, Escanaba, Mich. Game | 747,199 | Dec. 15 | 3480 | 790 | 107 | 1899 |
| Mac Vane, James, Riverside, R. I. Sash-lock | 727,984 | May 12 | 2198 | 490 | 104 | 487 |
| MacVay, Oliver A. (See Bryant and McGaw, assignors.) | | | | | | |
| MacWilliam, James E., Hubbardston, Mass. Fire-extinguisher | 739,016 | Sept. 15 | 2890 | 642 | 106 | 652 |
| Macalpine, Thomas, Chiswick, assignor to Alcohol Syndicate, Limited, London, England. Refining mineral oils | 741,517 | Oct. 13 | 2160 | 481 | 106 | 1727 |
| Macandrew, Alick G. (See Heeley, Page, and Macandrew.) | | | | | | |
| Macarthy, Fred, assignor to E. A. Fisher, Sayreville, N. J. Machine for enameling clay articles | 720,594 | Feb. 17 | 2203 | {510<br>511 | {102 | 1317 |
| Macaulay, John W., San Jose, Cal. Railway-spike and tie-plate therefor | 730,139 | June 2 | 1111 | 249 | 104 | 1353 |
| Macauley, Alvan. (See Cleal and Macauley.) | | | | | | |
| Macauley, Frank I., San Francisco, Cal. Gripper for printing-presses | 721,377 | Feb. 24 | 3696 | 841 | 102 | 1651 |
| Macbeth Evans Glass Company. (See Schnelbach and Heupel, assignors.) | | | | | | |
| Macbeth, James, and L. T. Johnson, Buffalo, N. Y. Dolly-bar | 726,080 | Apr. 21 | 3036 | 690 | 103 | 1843 |
| Maccolini, Icilius W., Long Island, N. Y. Life-preserver | 721,813 | Mar. 3 | 282 | 62 | 103 | 62 |
| Macdonald, Alexander F., Schenectady, N. Y., assignor to E. Thomson, Swampscott, Mass. Flash-boiler system | 726,442 | Apr. 28 | 3728 | 846 | 103 | 2000 |
| Macdonald, Duncan F., Glasgow, Scotland. Derrick for ships | 731,584 | June 23 | 3810 | 848 | 104 | 1967 |
| Macdonald, Duncan F., Glasgow, Scotland. Crane for vessels | 746,120 | Dec. 8 | 1487 | 332 | 107 | 1438 |
| Macdonald, James W., Providence, R. I. Toy | 719,681 | Feb. 3 | 477 | 108 | 102 | 923 |
| Macdonald, John and T., Glasgow, Scotland. Portable heater for heating rivets, &c | 740,670 | Oct. 6 | 531 | 118 | 106 | 1360 |
| Macdonald, John V., Newton Center, Mass. Delivery-wagon | 727,817 | May 12 | 1886 | 421 | 104 | 419 |
| Macdonald, Murdock, Cleveland, Ohio. Ticket-case | 731,480 | June 23 | 3607 | 805 | 104 | 1928 |
| Macdonald, Norman D., *et al.* (See Smith, Allison D., assignor.) | | | | | | |
| Macdonald, Rob Roy. (See Warwick and Macdonald.) | | | | | | |
| Macdonald, Rob Roy, and G. T. Warwick, Springfield, Mass. Door-operating machine | 719,682 | Feb. 3 | 478 | {108<br>109 | {102 | 923 |
| Macdonald, Robert B. (See Blaney, William H., assignor.) | | | | | | |
| Macdonald, Thomas. (See Macdonald, John and T.) | | | | | | |
| Macdonald, Thomas H., Bridgeport, Conn. Speed-regulator and stop mechanism | 725,857 | Apr. 21 | 2672 | 609 | 103 | 1768 |
| Macdonald, Thomas H., Bridgeport, Conn., assignor to American Graphophone Company, Washington, D. C. Making sound-records. (Reissue) | 12,095 | Mar. 10 | 1852 | 413 | 103 | 414 |
| Macdonald, Thomas H., Bridgeport, Conn., assignor to American Graphophone Company, Washington, D. C. Sound-record. (Reissue) | 12,096 | Mar. 10 | 1853 | 413 | 103 | 414 |
| Macdonald, Thomas H., Bridgeport, Conn., assignor to American Graphophone Company, Washington, D. C. Sound-reproducer | 747,991 | Dec. 29 | 4989 | 1127 | 107 | 2275 |
| Macdonald, William D., New York, N. Y. Camera-controller | 729,193 | May 26 | 4437 | {978<br>979 | {104 | 990 |
| Macdougall, George D., Buffalo, N. Y. Coke-oven door | 736,281 | Aug. 11 | 2336 | {507<br>508 | {105 | 1501 |
| Macdougall, George D., Buffalo, N. Y. Coke-lorry | 748,390 | Dec. 29 | 5704 | 1302 | 107 | 2431 |
| Macduff, James B., Brooklyn, N. Y. Screw-propeller | 745,871 | Dec. 1 | 1038 | 234 | 107 | 1320 |
| Macduffee, Chester E. (See Dabb and Macduffee.) | | | | | | |
| Macedo, Joaquim A. de, Leventhorpe Hall, county of York, England. Adjustable housing for cars | 728,736 | May 19 | 3614 | 802 | 104 | 806 |
| Macey, Frank, Grand Rapids, Mich. Door for sectional bookcases | 726,957 | May 5 | 240 | 56 | 104 | 51 |
| Macey, Frank, assignor to Fred Macey Company, Limited, Grand Rapids, Mich. Sectional furniture | 727,654 | May 12 | 1558 | 352 | 104 | 353 |
| Macfarlane, James W., Glasgow, Scotland. Apparatus for governing fluid-pressure impulse-motors | 726,175 | Apr. 21 | 3207 | {726<br>727<br>728 | {103 | 1878 |
| Macfarlane, James W., Kingston, Scotland. Centrifugal machine | 728,737 | May 19 | 3616 | {802<br>803 | {104 | 807 |

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| Macfarlane, James W., and A. R. Robertson, Glasgow, Scotland. Centrifugal machine | 722,730 | Mar. 17 | 2022 | 451<br>452 | 103 | 464 |
| Macfee, Edward D., Jr., Rolling Hill, Va. Embossing-die | 732,762 | July 7 | 114 | 31 | 105 | 28 |
| Macgowan, William, Ardrossan, Scotland. Letter-file | 719,350 | Jan. 27 | 3489 | 776 | 102 | 783 |
| Machalske, Florentine J., Brooklyn, N. Y. Producing carbon chlorids and silicon | 745,637 | Dec. 1 | 589 | 137 | 107 | 1223 |
| Machalske, Florentine J., assignor of one-half to C. H. Lyon, Chicago, Ill. Producing chlorids of carbon | 737,123 | Aug. 25 | 3891 | 864 | 105 | 1862 |
| Machalske, Florentine J., assignor of one-half to C. H. Lyon, Chicago, Ill. Producing silicon chlorids, hydrochloric acid, and alkali hydroxids | 745,966 | Dec. 1 | 1200 | ..... | 107 | 1356 |
| Machalske, Florentine J., Brooklyn, N. Y., assignor of one-half to C. H. Lyon, Chicago, Ill. Producing chlorids of carbon | 742,340 | Oct. 27 | 3802 | 851 | 106 | 2098 |
| Machleith, Walter D., *et al.* (See Farmer, Julius M., assignor.) | | | | | | |
| Machlet, George, Jr., Elizabeth, N. J. Burner | 733,235 | July 7 | 954 | 230 | 105 | 200 |
| Machlet, George, Jr., Elizabeth, N. J. Burner | 733,236 | July 7 | 956 | 230 | 105 | 200 |
| Machlet, George, Jr., Elizabeth, N. J. Burner | 745,872 | Dec. 1 | 1039 | 234 | 107 | 1320 |
| Macintosh, Albert C. (See De Witt, Frederick J., assignor.) | | | | | | |
| Mack, Adolf, Cannstadt, Germany. Slab or block for building purposes | 719,123 | Jan. 27 | 3072 | 683 | 102 | 694 |
| Mack, Charles E., assignor of one-half to J. D. Boynton, Reading, Pa. Reversing mechanism for engines | 726,443 | Apr. 28 | 3731 | 846 | 103 | 2001 |
| Mack, Charles E., assignor of one-half to J. D. Boynton, Reading, Pa. Valve | 734,186 | July 21 | 2749 | 645 | 105 | 614 |
| Mack, Ernest U., Florence, S. C., assignor to Eagle Pencil Company, New York, N. Y. Rubber-tip attachment for lead-pencils | 727,398 | May 5 | 1068 | 231 | 104 | 230 |
| Mack, Margaret A., Cleveland, Ohio. Carriage-pole protector | 747,739 | Dec. 22 | 4466 | 1007 | 107 | 2137 |
| Mack, Otto, Ludwigsburg, Germany. Fireproofing material | 720,941 | Feb. 17 | 2828 | 648 | 102 | 1449 |
| Mack, Patrick H., Bradford, assignor to Oil Well Supply Company, Pittsburg, Pa. Drive-head for pipe | 722,866 | Mar. 17 | 2271 | 508 | 103 | 512 |
| Mack, Patrick H., Bradford, assignor to Oil Well Supply Company, Pittsburg, Pa. Casing-perforator | 724,904 | Apr. 7 | 900 | 206 | 103 | 1362 |
| Mack, Patrick H., Bradford, assignor to Oil Well Supply Company, Pittsburg, Pa. Friction-clutch mechanism | 725,735 | Apr. 21 | 2453 | 555 | 103 | 1721 |
| Mack, Patrick H., Bradford, assignor to Oil Well Supply Company, Pittsburg, Pa. Coupling | 733,408 | July 14 | 1279 | 302 | 105 | 287 |
| Mack, Samuel B., assignor of two-thirds to A. Munch and S. R. Parslow, St. Paul, Minn. Mold mechanism for casting packing-rings | 720,269 | Feb. 10 | 1589 | 363 | 102 | 1176 |
| Mack, William A., Norwalk, assignor to Standard Sewing Machine Company, Cleveland, Ohio. Bobbin-latch for sewing-machines | 723,170 | Mar. 17 | 2806 | 632 | 103 | 624 |
| Mack, William E., Oswego, N. Y. Indicator for thermo-electric regulators for valves or dampers | 738,557 | Sept. 8 | 2033 | 442<br>443 | 106 | 452 |
| Mack, William H., Messmore, Pa. Horse-releaser | 739,330 | Sept. 22 | 3472 | 775 | 106 | 790 |
| Mackay, Frederick N., Croydon, England. Air or gas pump for refrigerating-machines | 746,856 | Dec. 15 | 2820 | 651<br>652 | 107 | 1750 |
| Macke, Fred. (See Nielander, Joseph, assignor.) | | | | | | |
| Mackenzie, Cecilia M. and J. E., London, England. Underclothing | 746,349 | Dec. 8 | 1906 | 436 | 107 | 1525 |
| Mackenzie, Colin F., and R. J. Pense, Shell, Wyo. Rural mail-box | 731,061 | June 16 | 2805 | 624 | 104 | 1746 |
| Mackenzie, Herbert, Saugus, assignor of three-fourths to J. N. McKerry, Dedham, J. E. Hallett, Malden, and T. D. Walsh, Boston, Mass. Non-refillable bottle | 739,265 | Sept. 15 | 3356 | 745 | 106 | 753 |
| Mackenzie, Hugh W., Edinburgh, Scotland. Apparatus for baking wafers, &c | 721,455 | Feb. 24 | 3834 | 872 | 102 | 1679 |
| Mackenzie-Hughes, Edward W., Westminster, England. Wheel | 730,548 | June 9 | 1869 | 418 | 104 | 1529 |
| Mackenzie, James, Glasgow, Scotland. Washing-machine | 724,026 | Mar. 31 | 4450 | 1000<br>1001 | 103 | 990 |
| Mackenzie, Jessie E. (See Mackenzie, Cecilia M. and J. E.) | | | | | | |
| Mackey, George B., East Liverpool, Ohio. Wind musical instrument | 727,655 | May 12 | 1560 | 352 | 104 | 353 |
| Mackey, George E., and M. J. Raub, Wheeling, W. Va. Photographic-printing frame | 748,085 | Dec. 29 | 5176 | 1171 | 107 | 2317 |
| Mackey, Henry F., Crystal Springs, Miss. Cotton-chopper | 733,237 | July 7 | 957 | 231 | 105 | 200 |
| Mackey, Samuel C. (See Waters and Elder, assignors.) | | | | | | |
| Mackie, Matthew D. (See Beard and Mackie.) | | | | | | |
| Mackie, William A., Providence, R. I. Thread-retaining bar for twisting-machines | 741,518 | Oct. 13 | 2162 | 482 | 106 | 1728 |
| Mackin, Joseph F., Columbus, Ohio. Trolley-pole | 740,577 | Oct. 6 | 384 | 80 | 106 | 1328 |
| Mackintosh, Edward D., Brooklyn, assignor of one-half to S. S. Hepworth Company, New York, N. Y. Centrifugal machine | 721,714 | Mar. 3 | 115 | 24 | 103 | 25 |
| Mackintosh, Harry J., and R. R. Tweed, Audubon, N. J. Woven fabric | 738,218 | Sept. 8 | 1338 | 289 | 106 | 305 |
| Macklin, Athol B., assignor to E. H. Fessenden, Brooklyn, N. Y. Hydrocarbon-vapor burner | 731,800 | June 23 | 4200 | 937 | 104 | 2048 |
| Macklin, Charles H., assignor to F. T. Williams and W. H. Abbey, Worcester, Mass. Clothes-drier | 730,675 | June 9 | 2100 | 467 | 104 | 1579 |
| Macko, Gustav W., Chicago, Ill. Mechanical toy | 733,409 | July 14 | 1281 | 303 | 105 | 287 |
| Mackrow, George C., and H. G. Cameron, London, England. Elevating or hoisting apparatus | 741,918 | Oct. 20 | 2940 | 655<br>656 | 106 | 1906 |
| Maclay, William W., Glens Falls, N. Y. Cement-kiln | 725,975 | Apr. 21 | 2873 | 651<br>652 | 103 | 1810 |
| Macloskie, George, Schenectady, N. Y., assignor to General Electric Company. Lubricating device | 730,676 | June 9 | 2102 | 467 | 104 | 1579 |
| Macloskie, George, Schenectady, N. Y., assignor to General Electric Company. Dynamo-electric machine | 744,084 | Nov. 17 | 2547 | 545 | 107 | 571 |
| Macmillan, Colin C., and C. A. Whyte, Partick, Glasgow, Scotland. Air-feeding apparatus for furnaces | 737,644 | Sept. 1 | 155 | 33, 34 | 106 | 36 |
| Macmillan, James R. (See Gardiner and Macmillan.) | | | | | | |
| Macnamara, Joseph C., New York, N. Y. Bookkeeping | 724,306 | Mar. 31 | 3005 | 1120<br>1121 | 103 | 1103 |
| Macomber, Clifford C. (See Morison, Alexander, assignor.) | | | | | | |
| Macomber, Francis S. (See Selden, Arthur R., assignor.) | | | | | | |
| Macomber, Isaac B., Portsmouth, R. I. Ankle-support for skates | 718,265 | Jan. 13 | 1388 | 310 | 102 | 315 |
| Maconochie, Richardson, Birmingham, England. Library or like indicator | 730,034 | June 2 | 939 | 210 | 104 | 1319 |
| Macphail, James, Blue Island, assignor to International Harvester Company, Chicago, Ill. Sheet-metal hub | 725,976 | Apr. 21 | 2875 | 652 | 103 | 1810 |
| Macphail, James, Blue Island, assignor to International Harvester Company, Chicago, Ill. Self-fastening spring-tooth for hay-rakes or other implements | 728,592 | May 19 | 3361 | 745 | 104 | 753 |
| Macphail, James, Blue Island, assignor to McCormick Harvesting Machine Company, Chicago, Ill. Adjusting mechanism for platform-supports for harvester-machines | 732,093 | June 30 | 4761 | 1063 | 104 | 2179 |
| Macphail, James, Blue Island, assignor to International Harvester Company, Chicago, Ill. Cleaner for wheeled hay-rakes | 732,094 | June 30 | 4764 | 1063 | 104 | 2179 |
| Macphail, Robert D. (See McCormick and Macphail.) | | | | | | |
| Macphail, Roland B., Blue Island, assignor to McCormick Harvesting Machine Company, Chicago, Ill. Adjusting mechanism for rakes | 741,152 | Oct. 13 | 1414 | 323<br>324 | 106 | 1567 |
| Macpherson, Duncan R., San Francisco, Cal. Elevator | 733,238 | July 7 | 958 | 231<br>232 | 105 | 201 |

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| Macqueene, Alice J., Winnetka, Ill. Skirt and dress-waist retaining device | 727,167 | May 5 | 659 | 142 | 104 | 142 |
| Macquisten, Arthur P. S., Glasgow, Scotland. Controlling mechanism | 724,307 | Mar. 31 | 5007 | 1121 | 103 | 1103 |
| Macquisten, Arthur P. S., Glasgow, Scotland. Warp stop-motion | 740,672 | Oct. 6 | 534 | 118, 119 | 106 | 1361 |
| Macy, Ira M., Norfolk, Nebr. Camera-shutter | 747,992 | Dec. 29 | 4989 | 1127, 1128 | 107 | 2275 |
| Macy, Josiah H. (See Amend, Otto P., assignor.) | | | | | | |
| Macy, Seth W., Colfax, and S. R. Macy, Des Moines, Iowa. Vermin-exterminator | 736,282 | Aug. 11 | 2338 | 508 | 105 | 1501 |
| Macy, Sherman R. (See Macy, Seth W. and S. R.) | | | | | | |
| Madas, Louis, assignor of sixty-four one-hundredths to S. Neederman and H. S. Geary, New York, N. Y. Automatic envelop-sealing device | 741,805 | Oct. 20 | 2722 | 606, 607 | 106 | 1861 |
| Maddaus, Louis W., Minneapolis, Minn. Loop-the-loop bowling-alley | 738,558 | Sept. 8 | 2036 | 443 | 106 | 453 |
| Madden, Edwin L., Kanawha, Iowa. Electrical generator and distributer for medical use | 722,598 | Mar. 10 | 1747 | 389 | 103 | 390 |
| Madden, John E. (See Stansbury, George F., assignor.) | | | | | | |
| Madden, Patrick J., Chicago, Ill. Water-closet | 741,919 | Oct. 20 | 2942 | 656 | 106 | 1907 |
| Maddock, William E., Wolstanton, and W. Orme, Burslem, England. Apparatus for pressing hollow ware | 720,718 | Feb. 17 | 2445 | 559 | 102 | 1367 |
| Maddocks, Willis, East Holden, Me. Band-saw | 727,168 | May 5 | 660 | 142 | 104 | 143 |
| Maddox, Aaron D. (See Wineman and Maddox.) | | | | | | |
| Maddox, Milton F., Indianapolis, Ind. Corner-fastener for beds | 726,554 | Apr. 28 | 3974 | 900 | 103 | 2046 |
| Maddox, Samuel J., Chicago, Ill. Piston-rod packing | 730,381 | June 9 | 1560 | 347 | 104 | 1462 |
| Maddux, Thomas E., Goldbar, Wash. Tackle-block | 733,239 | July 7 | 962 | 232 | 105 | 202 |
| Madeira, Sidney P., and J. J. Purcell, Pueblo, Colo. Bust-developer | 738,339 | Sept. 8 | 1613 | 350, 351 | 106 | 363 |
| Madge, William C., Anaconda, Mont. Crushing roll | 721,208 | Feb. 24 | 3404 | 773 | 102 | 1589 |
| Madigin, Jacob W., Toronto, Canada. Secondary battery | 718,489 | Jan. 13 | 1836 | 403 | 102 | 411 |
| Madigin, Jacob W., Toronto, Canada. Terminal for storage batteries | 739,432 | Sept. 22 | 3688 | 821 | 106 | 837 |
| Madison, George C., St. Paul, Minn. Fountain-brush | 734,910 | July 28 | 4112 | 958 | 105 | 914 |
| Madison, Joseph W., Brooklyn, N. Y. Machine for capping bottles | 738,219 | Sept. 8 | 1338 | 290 | 106 | 305 |
| Madison, Walter R., Springfield, Mass. Sash-cord pulley | 725,263 | Apr. 14 | 1567 | 355 | 103 | 1516 |
| Maerky, Emil, Philadelphia, Pa. Sparking igniter for explosive-engines | 727,399 | May 5 | 1068 | 232 | 104 | 231 |
| Maestro Company. (See Doman, Lewis B., assignor.) | | | | | | |
| Magale, Mollie G. (See Taylor, Charles E., assignor.) | | | | | | |
| Magan, Frank R., New York, N. Y. Stopper for bottles | 730,939 | June 16 | 2569 | 572 | 104 | 1699 |
| Magee, Frederick N., assignor to M. Daab, Jr., Hoboken, N. J. Automatic weighing-machine | 733,059 | July 7 | 641 | 155 | 105 | 136 |
| Magerhans, Adolph W., Brooklyn, N. Y. Picture-hanger | 722,311 | Mar. 10 | 1224 | 272 | 103 | 277 |
| Magidson, Louis, Pittsburg, Pa. Siphon-bottle | 722,523 | Mar. 10 | 1623 | 358 | 103 | 365 |
| Maginnis, James P., London, England. Locking-bar | 719,351 | Jan. 27 | 3490 | 776 | 102 | 783 |
| Magner, William, Lockport, N. Y. Trolley-stand | 729,620 | June 2 | 171 | 41 | 104 | 1162 |
| Magnetic Equipment Company. (See Honey, Albert A., assignor.) | | | | | | |
| Magneto Electric Company. (See Woolley, Leonidas G., assignor.) | | | | | | |
| Magney, Joseph P. (See Masterman and Magney.) | | | | | | |
| Magnien, George, Kansas City, Mo. Gang slitting-machine | 745,967 | Dec. 1 | 1202 | 269 | 107 | 1356 |
| Magniez, Ernest P. F., Amiens, assignor to A. H. Savy, Paris, France. Machine for manufacturing chocolate | 735,890 | Aug. 11 | 1636 | 350 | 105 | 1349 |
| Magnus, Philip, Collingwood, Victoria, Australia. Pneumatic tire | 740,578 | Oct. 6 | 386 | 80 | 106 | 1329 |
| Magnuson, Axel, New York, and T. Eskilsson, Long Island City, N. Y., assignors to Otis Elevator Company, East Orange, N. J. Automatic lock for elevator-hatchway doors | 740,154 | Sept. 29 | 5024 | 1128 | 106 | 1141 |
| Magoun, Francis P., Bernardsville, N. J., assignor to Acme Ball Bearing Caster Company. Ball-caster | 725,108 | Apr. 14 | 1286 | 290 | 103 | 1458 |
| Magruder, George C. W. (See Magruder, Julian and G. C. W.) | | | | | | |
| Magruder, Julian, Poolesville, Md., and G. C. W. Magruder, Tennallytown, D. C. Combination lamp attachment | 745,111 | Nov. 24 | 4474 | 968 | 107 | 998 |
| Maguire, Joseph H., Wayne, assignor of one-half to T. J. Ryan, Philadelphia, Pa. Amusement apparatus | 737,753 | Sept. 1 | 364 | 77,78 | 106 | 81 |
| Maguire, William. (See Gallinowsky, Hugo, assignor.) | | | | | | |
| Mahaffy, James R., Wilmington, Del. Veterinary dental float | 741,519 | Oct. 13 | 2164 | 482 | 106 | 1728 |
| Mahan, Matt K., Hartsells, Ala. Panel fence | 729,779 | June 2 | 473 | 105 | 104 | 1225 |
| Mahan, William B., assignor of one-half to H. M. Gusswein, Springfield, Ill. Carpenter's framing-square | 743,900 | Nov. 10 | 2149 | 462 | 107 | 473 |
| Maher, David F., Watsonville, Cal. Brush | 726,716 | Apr. 28 | 4282 | 967 | 103 | 2110 |
| Maher, John, *et al.* (See Ackerman, Elmer H., assignor.) | | | | | | |
| Maher, John, Medina, N. Y. Sofa-bed | 723,171 | Mar. 17 | 2807 | 632, 633 | 103 | 624 |
| Maher, Michael R., Zanesville, Ohio. Cabinet | 737,985 | May 12 | 2200 | 490 | 104 | 487 |
| Maheu, Victor, Willimantic, Conn., assignor of one-half to J. B. McCarthy, Franklin, Mass., J. O'Connor, Putnam, and H. M. Turner, Turnersville, Conn. Roll-cleaning device for spinning-machines | 723,172 | Mar. 17 | 2808 | 633 | 103 | 624 |
| Mahler, Ella P., Newark, N. J. Matting | 746,722 | Dec. 15 | 2564 | 589 | 107 | 1693 |
| Mahler, Fred E. (See Carlsen, Andrew M., assignor.) | | | | | | |
| Mahler, William, New York, N. Y. Sectional corn-plaster | 730,035 | June 2 | 941 | 211 | 104 | 1319 |
| Mahon, Charles, assignor to M. L. Mahon, Washington, D. C. Automatic coupling for electrical conductors | 741,052 | Oct. 13 | 1228 | 278 | 106 | 1529 |
| Mahon, Charles, assignor to M. L. Mahon and T. E. Roessle, Washington, D. C. Pipe-coupling for railway-cars | 741,050 | Oct. 13 | 1220 | 277 | 106 | 1527 |
| Mahon, Charles, assignor to M. L. Mahon and T. E. Roessle, Washington, D. C. Train-pipe coupling | 741,051 | Oct. 13 | 1223 | 277, 278 | 106 | 1528 |
| Mahon, Frank P., Pittsburg, Pa. Attachment for pails, &c | 720,041 | Feb. 10 | 1160 | 265 | 102 | 1086 |
| Mahon, John, Langdon, N. D. Device for measuring boards | 743,531 | Nov. 10 | 1475 | 309 | 107 | 332 |
| Mahon, Minna L., *et al.* (See Mahon, Charles, assignor.) | | | | | | |
| Mahoney, Joseph N., assignor to Price, Darling & Company, New York, N. Y. Electric brake for vehicles. (Reissue) | 12,098 | Mar. 10 | 1856 | 414, 415 | 103 | 415 |
| Mahoney, Thomas E., Bunkerhill, Kans. Automatic tripping device for hoisting machinery | 729,077 | May 26 | 4236 | 936 | 104 | 948 |
| Mahoney, Thomas L., San Francisco, Cal. Bed | 728,483 | May 19 | 3137 | 694 | 104 | 705 |
| Mahoney, Timothy, San Francisco, Cal. Electric-railway system | 736,752 | Aug. 18 | 3214 | 710 | 105 | 1699 |
| Mahony, William F. (See Lester, Orlando B., assignor.) | | | | | | |
| Mahony, William F., assignor of one-third to C. H. Ridenour, Washington, D. C. Eye-shade | 729,500 | May 26 | 4955 | 1099 | 104 | 1100 |
| Mahr, Gregor G., Buffalo, N. Y. Keyboard attachment for pianos | 722,998 | Mar. 17 | 2492 | 560 | 103 | 559 |
| Maier, Joseph, *et al.* (See Rademacher, Frank, assignor.) | | | | | | |
| Maiers, George F., Goleta, Cal. Walnut hulling and washing machine | 733,060 | July 7 | 643 | 136 | 105 | 136 |
| Mail, Isaac, *et al.* (See Stafford, James M., assignor.) | | | | | | |
| Maillé, Jules, St. Jerome, Canada. Carriage-spring | 718,137 | Jan. 13 | 1151 | 256 | 102 | 263 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | Spec. | Drg. | Vol. | Page. |
| Mailloux, Cyprien O., assignor to Otis Elevator Company, New York, N. Y. Electrical controlling system for elevators | 724,722 | Apr. 7 | 573 | 137 | 103 | 1291 |
| Mailloux, Cyprien O., assignor to Otis Elevator Company, New York, N. Y. Indicating and controlling apparatus | 725,001 | Apr. 7 | 1079 | 246, 247 | 103 | 1398 |
| Mailloux, Cyprien O., and W. C. Gotshall, New York, N. Y. Railway electric-motor-cooling system | 719,020 | Jan. 27 | 2844 | 638, 639 | 102 | 648 |
| Main Belting Company. (See Plummer, George C., assignor.) | | | | | | |
| Main, Frank J., and R. C. Wildhagen, Madison, Wis. Band-cutter and feeder | 747,456 | Dec. 22 | 3952 | 888 | 107 | 2020 |
| Main, R. and A. (See Beaumont, Frederick J., assignor.) | | | | | | |
| Maine, Andrew J., Appleton, Wis. Car-mover | 728,484 | May 19 | 3138 | 694 | 104 | 706 |
| Maine, Frederic E., Brooklyn, N. Y. Passe-partout frame | 723,696 | Mar. 24 | 3784 | 850 | 103 | 837 |
| Maine, John, Detroit, Mich. Mucilage or paste pot | 728,260 | May 19 | 2716 | 606 | 104 | 616 |
| Mainguet, Edward A., Evangeline, La. Harvester | 721,058 | Feb. 17 | 3050 | 700, 701 | 102 | 1497 |
| Mainguet, Edward A., Evangeline, La. Mechanical movement | 725,977 | Apr. 21 | 2877 | 652 | 103 | 1810 |
| Mainguet, Edward A., Evangeline, La. Harvester | 732,763 | July 7 | 115 | 31, 32 | 105 | 28 |
| Mainguet, Edward A., Evangeline, La. Harvester | 739,690 | Sept. 22 | 4145 | 925 | 106 | 936 |
| Mainhart, George. (See Luddington, Daniel L., assignor.) | | | | | | |
| Mains, Oliver E. (See Mains, William F. and O. E.) | | | | | | |
| Mains, William F. and O. E., Cleveland, Ohio. Foundry-truck | 741,352 | Oct. 13 | 1850 | 409 | 106 | 1662 |
| Maitland, John. Swampscott, Mass. Strength-testing device | 723,291 | Mar. 24 | 3042 | 684, 685 | 103 | 687 |
| Majestic Wire Fence Company. (See Barnes, John S., assignor.) | | | | | | |
| Majno, Gerardo, Milan, Italy. Electric field game | 737,257 | Aug. 25 | 4159 | 925, 926 | 105 | 1918 |
| Major, Benjamin G. (See Hunter, James, assignor.) | | | | | | |
| Major, James, Eccles, England. Apparatus for facilitating the picking or sorting of dried peas or the like | 735,788 | Aug. 11 | 1432 | 308 | 105 | 1303 |
| Major, John H., Elreno, Okla. Ter. Wire-working tool | 738,050 | Sept. 1 | 969 | 216 | 106 | 210 |
| Majors, Green, *et al.* (See Michelsen and Borglum, assignors.) | | | | | | |
| Majors, Henry, Springfield, Mo. Folding ironing-board | 732,764 | July 7 | 117 | 32 | 105 | 29 |
| Makepeace, William T., Marstons Mills, Mass. Tine and cranberry-scoop | 722,732 | Mar. 17 | 2024 | 452 | 103 | 464 |
| Maker, Harry T., Milwaukee, Wis. Electric-brush holder | 719,824 | Feb. 3 | 751 | 176 | 102 | 982 |
| Makin, Edward, Jr., Manchester, England. Steam-generator | 741,353 | Oct. 13 | 1851 | 409 | 106 | 1662 |
| Makowsky, Julius G. (See Makowsky, Robert H., assignor.) | | | | | | |
| Makowsky, Robert H., New Haven, Conn., assignor to himself, and J. G. Makowsky, Brooklyn, N. Y. Clamp | 727,986 | May 12 | 2202 | 491 | 104 | 488 |
| Makutchan, William H., Princeton, Ill. Ball-bearing construction | 745,638 | Dec. 1 | 591 | 137 | 107 | 1224 |
| Malcolm, Walter R., Albany, N. Y. Water-gage | 741,972 | Oct. 20 | 3060 | 683 | 106 | 1931 |
| Malein, Wilhelm M. von, Hamburg, Germany. Float arrangement for boats | 725,264 | Apr. 14 | 1568 | 355 | 103 | 1516 |
| Maley, Henry A., Boston, Mass. Plate-holder for printing-presses | 724,116 | Mar. 31 | 4621 | 1041 | 103 | 1027 |
| Mali, Chris. W. (See Linn, Clyde H., assignor.) | | | | | | |
| Malizan, Victor, and J. G. Prochaska, Chicago, Ill. Dentist's clamp | 735,543 | Aug. 4 | 981 | 208 | 105 | 1189 |
| Mallalieu, Lee H., and M. Coke, St. Louis, Mo. Catamenial sack | 737,258 | Aug. 25 | 4161 | 926 | 105 | 1919 |
| Malleable Iron Truck Company. (See Colestock, Harry H., assignor.) | | | | | | |
| Mallebre, Henry, Baltimore, Md. Piano music-desk | 733,724 | July 14 | 1818 | 431 | 105 | 400 |
| Mallebre, Henry, Baltimore, Md. Adjustment for piano-actions | 733,725 | July 14 | 1819 | 431 | 105 | 401 |
| Mallery, Arlington H., New York, N. Y. Transfer-bridge | 743,901 | Nov. 10 | 2151 | 463 | 107 | 474 |
| Mallett, Francis W., assignor to Ph. J. Bender & Sons, New York, N. Y. Machine for straightening wire | 730,549 | June 9 | 1870 | 418 | 104 | 1530 |
| Malliet, William A., Hackensack, N. J. Jewelry and producing same | 735,891 | Aug. 11 | 1640 | 351 | 105 | 1349 |
| Mallinckrodt, John F. (See Buck and Mallinckrodt.) | | | | | | |
| Mallinckrodt, John F., assignor to Sauvage Duplex Air Brake Company, Denver, Colo. Fluid-brake mechanism | 728,485 | May 19 | 3139 | 694 | 104 | 706 |
| Mallinson, Joseph B. (See Mallinson, William C. and J. B.) | | | | | | |
| Mallinson, William C. and J. B., Newark, N. J. Cutlery-polishing machine | 748,391 | Dec. 29 | 5704 | 1302, 1303 | 107 | 2431 |
| Mallison, Alvin H. (See White and Mallison.) | | | | | | |
| Mallmann, James, Sheboygan, Wis. Calculating-machine | 745,024 | Nov. 24 | 4275 | 926, 927, 928 | 107 | 957 |
| Mallon, Adolph. (See Gebauer, Oscar, assignor.) | | | | | | |
| Mallory, D. D. (See Brooks, William D., assignor.) | | | | | | |
| Mallory, Elwyn A., assignor to Berger Manufacturing Company, Canton, Ohio. Expanded metal | 738,825 | Sept. 15 | 2580 | 569 | 106 | 585 |
| Mallory, John C. (See Stenger and Mallory.) | | | | | | |
| Mallory, John C., deceased, Franklin, Pa.: M. B. Mallory, executrix. Fireproof door or shutter | 725,575 | Apr. 14 | 2141 | 484, 485 | 103 | 1639 |
| Mallory, Marshall H., Bridgeport, Conn. Collar-button | 726,717 | Apr. 28 | 4283 | 967 | 103 | 2110 |
| Mallory, Marshall H., Bridgeport, Conn. Garment-retainer | 726,718 | Apr. 28 | 4284 | 967 | 103 | 2110 |
| Mallory, Marshall H., Bridgeport, Conn. Collar-button | 726,719 | Apr. 28 | 4285 | 968 | 103 | 2110 |
| Mallory, Marshall H., Bridgeport, Conn. Garment-retainer | 726,720 | Apr. 28 | 4286 | 968 | 103 | 2111 |
| Mallory, Mary B., executrix. (See Mallory, John C.) | | | | | | |
| Mallow, Orville S., Washingtown Court-House, Ohio. Apparatus for rural mail delivery | 726,958 | May 5 | 241 | 56 | 104 | 52 |
| Malmquist, Swan, Carlton, Minn. Horseshoe-calk | 741,153 | Oct. 13 | 1416 | 324 | 106 | 1567 |
| Malmqvist, Johan A., Campello, Mass. Pneumatic life-belt | 731,314 | June 16 | 3284 | 731 | 104 | 1843 |
| Malmstead, Adolph F., assignor of one-half to I. B. Malmstead, Worcester, Mass. Hat-fastener | 732,362 | June 30 | 5297 | 1174 | 104 | 2290 |
| Malmstead, Isaac B. (See Malmstead, Adolph F., assignor.) | | | | | | |
| Malmstrom, Peter E., assignor to J. Mulholland, New York, N. Y. Apparatus for producing aerated beverages | 720,719 | Feb. 17 | 2447 | 560 | 102 | 1367 |
| Malone, Daniel, Baltimore, Md. Preparing wooden barrels to receive spirituous liquors | 747,740 | Dec. 22 | 4467 | 1007 | 107 | 2137 |
| Malone, Ira, Sapulpa, Ind. Ter. Dental suction-plate | 729,621 | June 2 | 174 | 42 | 104 | 1163 |
| Malone, Samuel R., assignor of one-half to J. E. Ledbetter, Quanah, Tex. Cement-kiln | 739,196 | Sept. 15 | 3220 | 712 | 106 | 720 |
| Maloney, Peter J. (See Maloney, William E. and P. J.) | | | | | | |
| Maloney, William, Sherbrooke, assignor of one-half to M. S. Inglis and I. Pitblado as individuals and as trustees, Winnipeg, Canada. Grain-thresher | 719,482 | Feb. 3 | 125 | 29, 30 | 102 | 851 |
| Maloney, William, Calgary, assignor of one-half to M. S. Inglis and I. Pitblado as individuals and as trustees, Winnipeg, Canada. Grain-threshing machine | 719,825 | Feb. 3 | 752 | 176, 177 | 102 | 982 |
| Maloney, William, E. and J. Doré, Laprairie, assignors to said Maloney, M. S. Inglis, and I. Pitblado; said Inglis and Pitblado individually and as trustees, Winnipeg, Canada. Grain-threshing machine | 717,588 | Jan. 6 | 115 | 30, 31, 32 | 102 | 27 |
| Maloney, William, Sherbrooke, and E. and J. Dore, Laprairie; said E. and J. Dore assignors to said Maloney; said Maloney assignor of seven-tenths to M. S. Inglis and I. Pitblado, Winnipeg, Manitoba, Canada, and L. T. Watson, Minneapolis, Minn. Grain-harvester | 722,182 | Mar. 3 | 964 | 213, 214 | 103 | 204 |
| Maloney, William E. and P. J., Worcester, Mass. Excavator | 727,656 | May 12 | 1562 | 353 | 104 | 353 |

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| Malpas, Samuel H., assignor to J. L. Bieler, Indianapolis, Ind. Automatic gas-lighter | 724,027 | Mar. 31 | 4451 | 1001 | 103 | 991 |
| Malsch, Frank, assignor to Industrial Manufacturing Company, Camden, N. J. Over-seaming sewing and trimming machine | 721,315 | Feb. 24 | 3574 | 813 | 102 | 1626 |
| Malta Vita Pure Food Company. (See Bourdeau, Arthur C., assignor.) | | | | | | |
| Maltby, George B. (See Otis and Maltby.) | | | | | | |
| Maltby, George B., assignor of one-half to B. Haskell, Saginaw, Mich. Car-truck | 721,715 | Mar. 3 | 116 | 25 | 103 | 26 |
| Maltby, George B., Chicago, Ill., assignor to National Coal Dump Car Company, of South Dakota, Rapid City, S. D., and Chicago, Ill. Dump-car | 739,892 | Sept. 29 | 4547 | 1021 | 106 | 1038 |
| Maltby, George B., Chicago, Ill., assignor to National Coal Dump Car Company, of South Dakota, Rapid City, S. D., and Chicago, Ill. Dump-car | 739,893 | Sept. 29 | 4549 | 1021, 1022 | 106 | 1039 |
| Maltby, George B., Chicago, Ill., assignor to National Coal Dump Car Company, of South Dakota, Rapid City, S. D., and Chicago, Ill. Dump-car | 739,894 | Sept. 29 | 4551 | 1022 | 106 | 1039 |
| Maltby, George B., assignor to Cleveland Car Specialty Company, Cleveland, Ohio. Roof-carline | 742,465 | Oct. 27 | 4017 | 901 | 106 | 2141 |
| Malthaner, John C. F., assignor of one-half to J. O. Therien, Minneapolis, Minn. Ringing-generator | 720,595 | Feb. 17 | 2205 | 511 | 102 | 1318 |
| Malthauer, John C. F., Minneapolis, Minn., assignor, by mesne assignments, to Stromberg-Carlson Telephone Manufacturing Company, Rochester, N. Y. Telephone-exchange system | 743,532 | Nov. 10 | 1478 | 309 | 107 | 332 |
| Maltner, Carl. (See Wehner, Maltner, and Bansen.) | | | | | | |
| Maltry, John, Omaha, Nebr. Car-axle box | 727,987 | May 12 | 2202 | 491 | 104 | 488 |
| Maltry, John, Omaha, Nebr. Dust-guard | 743,177 | Nov. 3 | 688 | 151 | 107 | 144 |
| Maly, Franz J., Aussig, Austria-Hungary. Forced-draft furnace | 718,779 | Jan. 20 | 2397 | 532 | 102 | 540 |
| Malzahn, Robert, Westbend, Wis. Purse | 717,880 | Jan. 6 | 694 | 155 | 102 | 148 |
| Mamerow, George T. J., Chicago, Ill. Beer-cooler | 747,622 | Dec. 22 | 4254 | 957 | 107 | 2090 |
| Manahan, Joseph A., assignor to T. Manahan, New York, N. Y. Chair | 733,857 | July 14 | 2086 | 493 | 105 | 454 |
| Manahan, Thomas. (See Manahan, Joseph A., assignor.) | | | | | | |
| Manbeck, Mellie R. (See Lyons, Kennedy, assignor.) | | | | | | |
| Mancha, Raymond, Grand Rapids, Mich. Show-case | 720,452 | Feb. 10 | 1912 | 436 | 102 | 1243 |
| Mancha, Raymond, Grand Rapids, Mich. Illuminating device | 726,081 | Apr. 21 | 3038 | 690 | 103 | 1843 |
| Mancha, Raymond, Grand Rapids, Mich. Shelf-bracket | 745,873 | Dec. 1 | 1040 | 235 | 107 | 1321 |
| Mancha, Raymond, assignor to Specialty Manufacturing Company, Grand Rapids, Mich. Gage for saw-tables | 743,650 | Nov. 10 | 1698 | 358 | 107 | 378 |
| Mandel, Charles I., New York, N. Y. Boy s suspenders | 741,405 | Oct. 13 | 1943 | 430 | 106 | 1681 |
| Mandel, John. (See Stein and Mandel.) | | | | | | |
| Mandel, Leo C., St. Louis, Mo. Composition for dentists' tapers | 733,061 | July 7 | 644 | ..... | 105 | 137 |
| Mandt Wagon Company. (See Burull, Albert, assignor.) | | | | | | |
| Manfred, Marten, Santa Barbara, Cal. Table | 724,905 | Apr. 7 | 902 | 206 | 103 | 1362 |
| Mangan, Joseph, Galesburg, Ill. Riding attachment for harrows | 718,852 | Jan. 20 | 2512 | 560 | 102 | 562 |
| Mangan, Michael R., Chicago, Ill. Wire mattress | 746,857 | Dec. 15 | 2826 | 652 | 107 | 1750 |
| Manganese Steel Safe Company. (See Hibbard, Henry D., assignor.) | | | | | | |
| Mangels, William F., New York, N. Y. Electric target | 734,911 | July 28 | 4113 | 958 | 105 | 914 |
| Mangelsdorf, Edward C., Rock Island, Ill. Protected car | 738,220 | Sept. 8 | 1340 | 290 | 106 | 306 |
| Manger, Henry. (See Kreutler and Manger.) | | | | | | |
| Manger, Henry K. J., assignor of one-half to O. F. Ehlman, Des Moines, Iowa. Metal railway-tie | 746,858 | Dec. 15 | 2827 | 652 | 107 | 1751 |
| Manger, Philip J., Minier, Ill. Dumping and elevating apparatus | 738,620 | Sept. 8 | 2142 | 469, 470, 471 | 106 | 476 |
| Manhardt, Anton, Vienna, Austria-Hungary. Producing alloys of aluminium | 721,814 | Mar. 3 | 283 | ..... | 103 | 62 |
| Manhattan Brass Company. (See Cook, William A., assignor.) | | | | | | |
| Manhattan Brass Company. (See Gross, August, assignor.) | | | | | | |
| Manhattan Brass Company. (See Maytrott, Henry, assignor.) | | | | | | |
| Manheim, Emil E. (See Byde, George R., assignor.) | | | | | | |
| Manich, Isabelle M., Magnolia Springs, Ala. Match-box | 737,754 | Sept. 1 | 367 | 78 | 106 | 82 |
| Manierre, George, Chicago, Ill. Filling-machine | 743,533 | Nov. 10 | 1481 | 309, 310 | 107 | 334 |
| Manifold, James M., Ridgeville, Ind. Automatic stock-feeder | 745,506 | Dec. 1 | 365 | 85 | 107 | 1177 |
| Manig, Oscar, Halle-on-the-Saale, Germany. Roundabout | 739,691 | Sept. 22 | 4147 | 926 | 106 | 936 |
| Manion, John A., Montreal, Canada. Device for removing snow | 720,942 | Feb. 17 | 2829 | 648 | 102 | 1449 |
| Manker, Carey A., Pearl, Ill. Counter-gravity screw-propeller | 727,169 | May 5 | 661 | 142 | 104 | 143 |
| Manker, Carey A., Pearl, Ill. Marine propeller | 742,693 | Oct. 27 | 4436 | 1001 | 106 | 2230 |
| Mankiewicz, Eugen J., Hamburg, Germany. Letter-copying machine | 739,197 | Sept. 15 | 3221 | 712, 713 | 106 | 720 |
| Mankiewicz, Eugen J., Hamburg, Germany. Hand-stamp for indorsing, &c | 741,520 | Oct. 13 | 2167 | 482, 483 | 106 | 1728 |
| Manley, George W., Rantoul, Ill. Lantern | 728,738 | May 19 | 3618 | 803, 804 | 104 | 807 |
| Manley, Robert E., Media, Pa. Soldering-iron | 736,283 | Aug. 11 | 2341 | 508 | 105 | 1502 |
| Mann, Andrew. (See Melvin and Mann.) | | | | | | |
| Mann, Charles H. (See Deckert, Mann, and Prizer.) | | | | | | |
| Mann, Charles W., Greenville, S. C. Brush device for cleaning bolting-cloth | 733,858 | July 14 | 2087 | 494 | 105 | 455 |
| Mann, Franklin, Chicago, Ill. Pocket book or file | 745,210 | Nov. 24 | 4676 | 1019 | 107 | 1040 |
| Mann, Franklin W., Milford, Mass. Bone-cutting machine | 730,140 | June 2 | 1111 | 249 | 104 | 1353 |
| Mann, Frederick H., and J. J. Collister, Kansas City, Mo. Return-letter system | 734,077 | July 21 | 2541 | 592, 593 | 105 | 572 |
| Mann, Frederick T. B., Longbeach, Cal. Folding shade-chair | 725,348 | Apr. 14 | 1722 | 387 | 103 | 1549 |
| Mann, Gilbert H., Zoar, Mass. Means for canal-boat propulsion | 744,378 | Nov. 17 | 3109 | 668, 669 | 107 | 694 |
| Mann, James, Dowagiac, Mich. Garbage-burner and water-heater | 718,490 | Jan. 13 | 1838 | 403, 404 | 102 | 411 |
| Mann, James, Yorkton, Canada. Sled-runner | 743,902 | Nov. 10 | 2152 | 463 | 107 | 474 |
| Mann, John C., Bigcove Tannery, Pa. Device for cleaning the cloths of bolting-sieves | 726,319 | Apr. 28 | 3515 | 796 | 103 | 1956 |
| Mann, John W., Center, Ind. Ter. Wheel-scraper for wagons | 746,723 | Dec. 15 | 2565 | 590 | 107 | 1693 |
| Mann, Orville C. (See Young, Otis W., assignor.) | | | | | | |
| Mann, Robert E., Hicksville, Ohio. Stovepipe thimble | 722,029 | Mar. 3 | 697 | 154 | 103 | 150 |
| Mann & Stumpe. (See Kirchhoff, Hermann, assignor.) | | | | | | |
| Mann, William B., Baltimore, Md. High-speed railway-brake | 720,827 | Feb. 17 | 2612 | 603, 604 | 102 | 1402 |
| Mann, William B., Baltimore, Md. Load-regulated valve | 720,828 | Feb. 17 | 2614 | 604 | 102 | 1403 |
| Mann, William B., Baltimore, Md. Air-brake system | 735,544 | Aug. 4 | 982 | 208 | 105 | 1189 |
| Mann, Willis E., Allenville, Ill. Harvester-reel | 739,692 | Sept. 22 | 4148 | 926 | 106 | 936 |
| Mann, Willis E., Allenville, Ill. Harvester-platform | 739,693 | Sept. 22 | 4149 | 927 | 106 | 937 |
| Mannen, John E. (See Esterly and Mannen.) | | | | | | |
| Mannen, John E., and W. M. Esterly, Cleveland, Ohio. Clothes-drier for laundries | 731,481 | June 23 | 3610 | 805 | 104 | 1928 |

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| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
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| Manners, Thomas, Sunnylane, Ky. Harness | 742,694 | Oct. 27 | 4438 | 1001<br>1002 | 106 | 2231 |
| Mannes, Leonard, *et al.* (See Howard, John P., assignor.) | | | | | | |
| Mannes, Owen H., *et al.* (See Howard, John P., assignor.) | | | | | | |
| Manneschmidt, Jacob, Jr. (See Renton, Herbert S., assignor.) | | | | | | |
| Mannesmann, Max, Remscheid-Bliedinghausen, Germany. Rolling tubes | 721,209 | Feb. 24 | 3405 | 773<br>774 | 102 | 1590 |
| Mannesmann, Max, Remscheid-Bliedinghausen, Germany. Rolling tubes | 721,210 | Feb. 24 | 3409 | 774 | 102 | 1590 |
| Mannesmann, Max, Remscheid-Bliedinghausen, Germany. Rolling tubes | 721,211 | Feb. 24 | 3411 | 775 | 102 | 1591 |
| Mannesmann, Max, Remscheid-Bliedinghausen, Germany. Machine for rolling tubes | 721,212 | Feb. 24 | 3412 | 775 | 102 | 1591 |
| Mannesmann, Max, Remscheid-Bliedinghausen, Germany. Rolling tubes | 721,213 | Feb. 24 | 3415 | 775 | 102 | 1592 |
| Mannesmann, Max, Remscheid-Bliedinghausen, Germany. Elongating tubes | 721,214 | Feb. 24 | 3418 | 776 | 102 | 1592 |
| Manning, Bowman & Company. (See Chapman and Seips, assignors.) | | | | | | |
| Manning, Charlotte R., Meriden, Conn. Finishing metal articles | 746,724 | Dec. 15 | 2567 | 590 | 107 | 1694 |
| Manning, Coleman J., Medford, Mass. Pressure-gage | 723,616 | Mar. 24 | 3650 | 817 | 103 | 807 |
| Manning, Coleman J., Medford, Mass. Pressure-gage | 731,585 | June 23 | 3811 | 849 | 104 | 1968 |
| Manning, Eben J., Lake City, Minn. Metallic floor-mat | 724,723 | Apr. 7 | 578 | 138 | 103 | 1292 |
| Manning, Edward E., Belvidere, Ill. Sewing-machine cabinet | 740,579 | Oct. 6 | 387 | 80 | 106 | 1329 |
| Manning, Edward J., and O. C. Kavle, Hartford, Conn., assignors, by mesne assignments, to Underwood Typewriter Company, New York, N. Y. Shift-key mechanism for type-writers | 734,727 | July 28 | 3763 | 878 | 105 | 841 |
| Manning, Francis S., Versailles, Mo. Upper-cuspid forceps | 731,586 | June 23 | 3812 | 849 | 104 | 1968 |
| Manning, Hugh L., Philadelphia, Pa. Pie-making machine | 748,392 | Dec. 29 | 5706 | 1303<br>1304<br>1305 | 107 | 2431 |
| Manning, Mary M. C., executrix. (See Manning, William C.) | | | | | | |
| Manning, Timothy W., St. Louis, Mo. Clarifying apparatus | 733,726 | July 14 | 1820 | 431 | 105 | 401 |
| Manning, William C., deceased: M. M. C. Manning, Washington, D. C., executrix. Apparatus for distributing ammunition | 740,673 | Oct. 6 | 535 | 119 | 106 | 1361 |
| Manning, William M., assignor to N. Drucker & Company, Cincinnati, Ohio. Hat-box | 736,987 | Aug. 25 | 3671 | 814 | 105 | 1815 |
| Mannlicher, Ferdinand von, Vienna, Austria-Hungary. Automatic firearm | 728,739 | May 19 | 3619 | 804 | 104 | 807 |
| Mannooch, Charles W., assignor of fifty-five one-hundredths to S. H. Hobbs, R. Cabaniss, and F. R. Russell, Petersburg, Va. Shoe blacking and polishing machine | 747,558 | Dec. 22 | 4138 | 928<br>929 | 107 | 2063 |
| Manor, Joseph A., Fristoe, Mo. Fruit-gatherer | 720,943 | Feb. 17 | 2880 | 649 | 102 | 1449 |
| Manor, Joseph A., Fristoe, Mo. Automatic wagon-brake | 735,124 | Aug. 4 | 149 | 33 | 105 | 1014 |
| Manor, Joseph A., Fristoe, Mo. Picture-frame | 737,124 | Aug. 25 | 3892 | 865 | 105 | 1862 |
| Mansan, Philip, Amanda, Ohio. Water-tank mold for making water-tanks | 720,371 | Feb. 10 | 1778 | 403 | 102 | 1216 |
| Mansell, Caleb B., Vancouver, Canada. Rein-holder | 734,582 | July 28 | 3476 | 812 | 105 | 784 |
| Mansell, Ford A., Trenton, Canada. Window-screen | 739,553 | Sept. 22 | 3875 | 869 | 106 | 878 |
| Mansell, William M., Booneville, Ark. Sewing-awl | 744,581 | Nov. 17 | 3455 | 745 | 107 | 767 |
| Mansfield, Albert K., Salem, Ohio. Railway water-column | 719,483 | Feb. 3 | 131 | 30 | 102 | 852 |
| Mansfield, Albert K., Salem, Ohio, and G. L. Mansfield, Pullman, Ill. Semaphore switch-stand | 717,694 | Jan. 6 | 306 | 76 | 102 | 66 |
| Mansfield, Alexander, North Fitzroy, assignor to H. S. Hayling, St. Kilda, Victoria, Australia. Tip-wagon mechanism | 746,541 | Dec. 8 | 2227 | 511 | 107 | 1596 |
| Mansfield, Cassius E., Ravenna, Mich., and J. O. Mansfield, Cleveland, Ohio. Fruit or vegetable crate | 737,259 | Aug. 25 | 4161 | 926 | 105 | 1919 |
| Mansfield, Charles A., and G. D. Hayes, Hillsboro, Tex. Combination-heater | 723,538 | Mar. 24 | 3516 | 787 | 103 | 780 |
| Mansfield, Edward O. (See Tokheim and Mansfield.) | | | | | | |
| Mansfield, George L. (See Mansfield, Albert K. and G. L.) | | | | | | |
| Mansfield, George L., Chicago, Ill. Switch-stand | 719,826 | Feb. 3 | 754 | 177 | 102 | 982 |
| Mansfield, George L., Chicago, Ill. Derailer | 728,740 | May 19 | 3621 | 804 | 104 | 807 |
| Mansfield, George L., Chicago, Ill. Automatic switch-stand | 747,200 | Dec. 15 | 3482 | 790 | 107 | 1900 |
| Mansfield, John O. (See Mansfield, Cassius E. and J. O.) | | | | | | |
| Mansfield, Richard W., New London, Conn. Educational and puzzle block | 740,451 | Oct. 6 | 131 | 26 | 106 | 1274 |
| Manter, Edwin E., Auburndale, Mass. Sliding door | 736,124 | Aug. 11 | 2069 | 443 | 105 | 1441 |
| Manter, J. F. (See Guber, Frederick H., assignor.) | | | | | | |
| Manton, James J., Pittsburg, Pa. Rail-joint | 724,193 | Mar. 31 | 4776 | 1071 | 103 | 1057 |
| Manuel, Frank A., Richford, Vt. Making wood plates | 722,999 | Mar. 17 | 2494 | 560 | 103 | 559 |
| Manufacture Dijonnaise des Biscuits Pernot. (See Richard, Lucien, assignor.) | | | | | | |
| Manwaring, George A., Bayonne, N. J., assignor to National Automatic Needle Company, New York, N. Y. Sewing-machine needle | 721,588 | Feb. 24 | 4096 | 932 | 102 | 1737 |
| Mapes, Clarence T., Crafton, Pa. Device for cutting wire cables | 729,951 | June 2 | 782 | 174 | 104 | 1287 |
| Mapes, Oscar W., Middletown, N. Y. Heating system | 738,340 | Sept. 8 | 1615 | 351 | 106 | 364 |
| Marak, Francis, National Military Home, Kans. Foot-power fan | 732,363 | June 30 | 5299 | 1174 | 104 | 2291 |
| Maranville, Egbert L., assignor of one-half to F. C. Warren, Poultney, Vt. Harness-snap. | 721,815 | Mar. 3 | 283 | 63 | 103 | 63 |
| Marbach, Frank G., Cleveland, Ohio. Vernier and micrometer calipers | 718,266 | Jan. 13 | 1390 | 310 | 102 | 315 |
| Marble, Albert D., Oklahoma, Okla. Ter. Gun-stock and cartridge-magazine | 746,859 | Dec. 15 | 2829 | 653 | 107 | 1751 |
| Marble, Edwin H., assignor to Curtis & Marble Machine Company, Worcester, Mass. Lifting mechanism for the cutting parts of cloth-shearing machines | 721,903 | Mar. 3 | 453 | 100 | 103 | 100 |
| Marble, George W., Buchanan, Mich., assignor, by mesne assignments, to Marble-Swift Automobile Company. Power-translating device | 717,881 | Jan. 6 | 695 | 155<br>156 | 102 | 148 |
| Marble, George W., Buchanan, Mich., assignor, by mesne assignments, to Marble-Swift Automobile Company. Power-translating device | 725,978 | Apr. 21 | 2879 | 653 | 103 | 1810 |
| Marble, George W., Buchanan, Mich., assignor to Marble-Swift Automobile Co. Power-translating device | 732,647 | June 30 | 5836 | 1293 | 104 | 2407 |
| Marble, George W., Buchanan, Mich., assignor to Marble-Swift Automobile Co. Power-translating device | 744,776 | Nov. 24 | 3827 | 825<br>826 | 107 | 864 |
| Marble-Swift Automobile Company. (See Marble, George W., assignor.) | | | | | | |
| Marble, Webster L., *et al.* (See Rowland, Milton H., assignor.) | | | | | | |
| Marble, Webster L., assignor of one-half to F. H. Van Cleve, Gladstone, Mich. Gun-sight | 741,920 | Oct. 20 | 2944 | 656 | 106 | 1907 |
| Marceau, Alfred, Brooklyn, N. Y. Tripod-head | 737,755 | Sept. 1 | 367 | 79 | 106 | 82 |
| Marcellus, Charles N., Grand Rapids, Mich. Flushing apparatus | 732,095 | June 30 | 4765 | 1064 | 104 | 2180 |
| Marcellus, William G. T. (See Dorn, Christian, assignor.) | | | | | | |
| March-Brownback Stove Company. (See March, Thomas J., assignor.) | | | | | | |
| March, Jacob M., Philadelphia, Pa. Fastening device for overshoes | 742,884 | Nov. 3 | 111 | 26 | 107 | 25 |
| March, John C. R., Philadelphia, Pa. Device for transporting and emptying bath-tubs | 747,559 | Dec. 22 | 4140 | 929<br>930 | 107 | 2064 |
| March, Thomas J., Pottstown, Pa. Heating apparatus | 732,951 | July 7 | 449 | 111 | 105 | 97 |
| March, Thomas J., Pottstown, Pa. Heating apparatus | 734,728 | July 28 | 3766 | 878 | 105 | 842 |
| March, Thomas J., assignor to March-Brownback Stove Company, Pottstown, Pa. Stove. | 740,674 | Oct. 6 | 539 | 120 | 106 | 1363 |
| Marchiony, Italo, New York, N. Y. Mold | 746,971 | Dec. 15 | 3050 | 699 | 107 | 1802 |
| Marcille, Edward, Decatur, Ill. Box-tool | 729,372 | May 26 | 4747 | 1050 | 104 | 1054 |
| Marckwald, Leo, Charlottenburg, Germany. Halogenizing organic fluids | 721,961 | Mar. 3 | 577 | 128 | 103 | 126 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| Marcotte, Joseph R. (See Vegiard, Emile, dit Labonté, assignor.) | | | | | | |
| Marcoux, Alida M., Milford, assignor to Draper Company, Hopedale, Mass. Filling-replenishing loom | 745,363 | Dec. 1 | 88 | 21 | 107 | 1120 |
| Marcum, William, Tazewell, Tenn. Seeder and fertilizer-dropper | 725,109 | Apr. 14 | 1290 | 291 | 103 | 1458 |
| Marcus, Henry C., Bohemia, Oreg. Awning | 730,677 | June 9 | 2103 | 468 | 104 | 1580 |
| Marcus, Hermann, Cologne, Germany. Apparatus for the transport of materials | 736,753 | Aug. 18 | 3216 | 710<br>711 | 105 | 1700 |
| Marcus, James, *et al.* (See Dement, Wallace E., assignor.) | | | | | | |
| Marcuson, Elias. (See Sutherland and Marcuson.) | | | | | | |
| Marcy, Frank E. (See Repath and Marcy.) | | | | | | |
| Marcy, Frank M., Worcester, assignor of one-half to G. O. Draper, Hopedale, Mass. Hose or tubing | 739,097 | Sept. 15 | 3049 | 675 | 106 | 684 |
| Marcy, Henry W., Utica, N. Y. Picker-stick safety-fastener for looms | 742,695 | Oct. 27 | 4440 | 1002 | 106 | 2231 |
| Marcy Manufacturing Company, R. G. (See Schneider, Gottlieb, assignor.) | | | | | | |
| Mare, Frederic de, Brussels, Belgium. Electrothermal diffuser | 743,534 | Nov. 10 | 1484 | 310 | 107 | 334 |
| Mare, Frederic de, Brussels, Belgium. Electrothermic ventilator | 745,507 | Dec. 1 | 367 | 85 | 107 | 1178 |
| Marek, Alois, Kalona, Iowa. Drilling-machine | 736,284 | Aug. 11 | 2341 | 508<br>509 | 105 | 1502 |
| Margerison, A. E., *et al.* (See Whitehead, John, assignor.) | | | | | | |
| Margerison, Joseph H., Philadelphia, Pa. Terry fabric | 745,112 | Nov. 24 | 4476 | 968 | 107 | 998 |
| Margerison, William H., *et al.* (See Whitehead, John, assignor.) | | | | | | |
| Marhoff, Walter E. (See Shakespeare and Marhoff.) | | | | | | |
| Marier, Gustave A., assignor of three-fourths to S. Davis & Sons, Montreal, Canada. Tobacco-leaf-stripping machine | 740,675 | Oct. 6 | 540 | 120 | 106 | 1363 |
| Marine Engine and Machine Company. (See Smith, Amour C., assignor.) | | | | | | |
| Marine Hardware Company. (See Marshall, William H., assignor.) | | | | | | |
| Marine Iron Works. (See Bates and Douglass, assignors.) | | | | | | |
| Marine Torch Company of Baltimore City. (See Rose and Watson, assignors.) | | | | | | |
| Maring, Hermann, Darien, Conn. Fireproof floor | 718,267 | Jan. 13 | 1392 | 310<br>311 | 102 | 315 |
| Maring, Hermann, Darien, Conn. Fireproof partition | 721,962 | Mar. 3 | 579 | 128<br>129 | 103 | 126 |
| Marinier, Ernest E. (See Avril, Marinier, and Navoit.) | | | | | | |
| Marion, Joseph, Holyoke, Mass. Horseshoe | 725,736 | Apr. 21 | 2455 | 556 | 103 | 1721 |
| Marion Steam Shovel Company. (See King, Barnhart, and King, assignors.) | | | | | | |
| Mark, Anders C. (See Aminoff, Hinrik C., assignor.) | | | | | | |
| Mark, Charlie E., Chicago, Ill. Method of and apparatus for making continuous lengths of railway-track rails | 727,657 | May 12 | 1564 | 353<br>354 | 104 | 354 |
| Mark, Charlie E., Chicago, Ill. Subjecting materials to the action of air or other gases | 728,261 | May 19 | 2717 | 606 | 104 | 617 |
| Markam, Andrew A. (See Urie and Markam.) | | | | | | |
| Markel, Edward V. (See Crist, William A., assignor.) | | | | | | |
| Markel, Emerich J., Hartford, Conn. Water-controlling device | 736,754 | Aug. 18 | 3218 | 711 | 105 | 1700 |
| Markell, Peter V., Jordan, N. Y. Recording apparatus | 720,829 | Feb. 17 | 2616 | 604 | 102 | 1403 |
| Marker, George H., Spokane, Wash. Hub-attaching device | 729,622 | June 2 | 174 | 42 | 104 | 1163 |
| Markey, Eugene L., *et al.* (See Knell, William F., assignor.) | | | | | | |
| Markey, Frank. (See Richardson, Hendricks, and Markey.) | | | | | | |
| Markham, William F., Plymouth, Mich. Spring air-gun | 718,646 | Jan. 20 | 2141 | 467 | 102 | 489 |
| Markiewicz, Otto, Berlin, Germany. Folding theater-chair | 738,341 | Sept. 8 | 1617 | 351 | 106 | 364 |
| Markle, John R., Chicago, Ill. Hot-bearing indicator | 731,801 | June 23 | 4204 | 937 | 104 | 2049 |
| Marks, Arthur H., Akron, Ohio. Pneumatic tire and rim | 734,916 | July 28 | 4119 | 960 | 105 | 916 |
| Marks, Arthur H., assignor to Diamond Rubber Company, Akron, Ohio. Pneumatic tire | 734,912 | July 28 | 4115 | 959 | 105 | 915 |
| Marks, Arthur H., assignor to Diamond Rubber Company, Akron, Ohio. Pneumatic tire | 734,913 | July 28 | 4115 | 959 | 105 | 915 |
| Marks, Arthur H., assignor to Diamond Rubber Company, Akron, Ohio. Pneumatic tire | 734,914 | July 28 | 4116 | 959 | 105 | 915 |
| Marks, Arthur H., assignor to Diamond Rubber Company, Akron, Ohio. Pneumatic tire | 734,915 | July 28 | 4118 | 959 | 105 | 915 |
| Marks, Charles J. (See Abbott and Marks.) | | | | | | |
| Marks, George, *et al.* (See Harp and Starkweather, assignors.) | | | | | | |
| Marks, George. (See Hoeschen, Marks, and Eisele.) | | | | | | |
| Marks, Henry L., Kansas City, Mo. Line-holder | 744,217 | Nov. 17 | 2819 | 602 | 107 | 631 |
| Marks, Isaac, New York, N. Y. Washing-machine | 729,373 | May 26 | 4748 | 1050 | 104 | 1055 |
| Marks, Marcus, St. Louis, Mo. Hose-supporter | 740,580 | Oct. 6 | 388 | 81 | 106 | 1329 |
| Marks, Morris M., Philadelphia, Pa. Breast-stay for coats | 743,304 | Nov. 3 | 948 | 206 | 107 | 204 |
| Marks, Samuel M. (See Queen, William T., assignor.) | | | | | | |
| Marlin Firearms Company. (See Hepburn, Lewis L., assignor.) | | | | | | |
| Marlow, George, Sr., Spokane, Wash. Air and steam feeding attachment for boiler-furnaces | 736,857 | Aug. 18 | 3427 | 758<br>759 | 105 | 1744 |
| Marney, Frank M., Indianapolis, Ind. Convertible horseshoe | 721,456 | Feb. 24 | 3835 | 873 | 102 | 1680 |
| Maroney, Thomas, Buffalo, N. Y. Car-replacer | 724,194 | Mar. 31 | 4777 | 1071 | 103 | 1057 |
| Marple, Charles F. (See George, Benjamin F., assignor.) | | | | | | |
| Marple, Joel. (See Cloud and Marple.) | | | | | | |
| Marple, Robert K., Philadelphia, Pa. Staple-machine | 731,587 | June 23 | 3813 | 849 | 104 | 1968 |
| Marqua, William A., Cincinnati, Ohio. Tricycle | 722,524 | Mar. 10 | 1625 | 359 | 103 | 365 |
| Marqua, William A., Cincinnati, Ohio. Baby-jumper | 731,197 | June 16 | 3065 | 680 | 104 | 1796 |
| Marqua, William A., Cincinnati, Ohio. Sled | 731,925 | June 23 | 4419 | 985 | 104 | 2096 |
| Marquardt, Max, and E. Höffuer, Dresden, Germany. Steam-superheater | 727,400 | May 5 | 1069 | 232 | 104 | 231 |
| Marr, Cassius W., Alliance, Ohio. Lock | 723,539 | Mar. 24 | 3518 | 787 | 103 | 780 |
| Marr, Walter L., Detroit, Mich. Changeable-speed gear | 736,415 | Aug. 18 | 2565 | 563 | 105 | 1565 |
| Marrder, Charles A., New York, N. Y. Steam-generator | 725,737 | Apr. 21 | 2456 | 556<br>557 | 103 | 1721 |
| Marrder, Charles A., assignor of one-half to Hayward Company, New York, N. Y. Excavating and dredging bucket or grapple | 745,448 | Dec. 1 | 254 | 59.60 | 107 | 1154 |
| Marresford, William F., New York, N. Y. Winding and printing machine | 747,623 | Dec. 22 | 4256 | 957<br>958 | 107 | 2090 |
| Mars, Edward M. and T. H., Chicago, Ill.; said Edward M. Mars assignor to said T. H. Mars. Non-refillable bottle | 733,062 | July 7 | 644 | 156 | 105 | 137 |
| Mars, Thomas H. (See Mars, Edward M. and T. H.) | | | | | | |
| Mars, William L., Buffalo, N. Y. Apparatus for drying molds and cores | 722,312 | Mar. 10 | 1225 | 272<br>273 | 103 | 277 |
| Marsalis, Elijah, Smithdale, Miss. Plow attachment | 720,453 | Feb. 10 | 1913 | 436 | 102 | 1243 |
| Marsden, Mark W., Philadelphia, Pa. Tobacco-wrapper and making same | 720,830 | Feb. 17 | 2617 | ..... | 102 | 1404 |
| Marsden, Mark W., Philadelphia, Pa. Pulp-machine | 721,378 | Feb. 24 | 3697 | 842 | 102 | 1651 |
| Marsden, Mark W., Philadelphia, Pa., assignor to F. S. Cobb, Cleveland, Ohio. Air-compressor | 723,000 | Mar. 17 | 2495 | 561 | 103 | 559 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| Marsden, Thomas R., Oldham, England. Attachment for pneumatic feeding-trunks | 733,986 | July 21 | 2353 | 552, 553 | 105 | 528 |
| Marsee, William H., Fontainbleau, Mo. Cutter-bar | 723,697 | Mar. 24 | 3785 | 850 | 103 | 837 |
| Marsh, Albert, London, England. Machine for registering at a distance admissions by turnstiles | 735,279 | Aug. 4 | 474 | 95 | 105 | 1082 |
| Marsh, Alpheus B., Whitman, Kans. Cultivator | 718,780 | Jan. 20 | 2399 | 532 | 102 | 540 |
| Marsh, Calvin D., assignor to Hermance Machine Company, Williamsport, Pa. Sawing-machine | 733,063 | July 7 | 646 | 156 | 105 | 137 |
| Marsh, Carl D. (See Durlin, Byron, assignor.) | | | | | | |
| Marsh, Charles F., Elgin, Ill. Self-adjusting plunger | 738,826 | Sept. 15 | 2581 | 569 | 106 | 585 |
| Marsh, Charles M. (See Stempel, Omar A., assignor.) | | | | | | |
| Marsh, Elon A., Detroit, Mich. Supply-valve | 723,698 | Mar. 24 | 3786 | 850 | 103 | 837 |
| Marsh, Eugene S., assignor of one-half to G. E. Betts, Bridgeport, Conn. Cable-hanger | 733,064 | July 7 | 648 | 157 | 105 | 137 |
| Marsh, Frank E., assignor to Fountain City Drill Company, La Crosse, Wis. Grain-drill | 720,720 | Feb. 17 | 2451 | 561 | 102 | 1368 |
| Marsh, Frederick V., Haverhill, Mass. Trolley-head | 733,727 | July 14 | 1821 | 432 | 105 | 401 |
| Marsh, George W., Oakland, Cal. Compound air-compressor | 723,001 | Mar. 17 | 2499 | 561 | 103 | 560 |
| Marsh, Howard E., assignor of two-thirds to M. W. Denne, New York, N. Y. Acetylene-gas generator | 729,623 | June 2 | 176 | 42 | 104 | 1163 |
| Marsh, Ira E., Redhouse, N. Y. Cheese-press | 731,482 | June 23 | 3611 | 805 | 104 | 1929 |
| Marsh, John H., Amanda, Wis. Carriage-curtain fastener | 743,903 | Nov. 10 | 2153 | 464 | 107 | 474 |
| Marsh, John T., Farmer City, Ill. Rotary churn | 724,308 | Mar. 31 | 5009 | 1122 | 103 | 1104 |
| Marsh, John T., Farmer City, Ill. Truck for moving buildings | 724,309 | Mar. 31 | 5010 | 1122 | 103 | 1104 |
| Marsh, John T., Farmer City, Ill. Sawing-machine | 729,374 | May 26 | 4750 | 1051 | 104 | 1055 |
| Marsh, John T., deceased, Farmer City, Ill.; L. P. Marsh, administrator. Gage-board attachment for sawing-machines | 746,972 | Dec. 15 | 3052 | 700 | 107 | 1803 |
| Marsh, Joseph A., New York, N. Y. Portable display-stand | 747,741 | Dec. 22 | 4468 | 1007, 1008 | 107 | 2137 |
| Marsh, Joseph G., assignor of one-half to H. A. Farrington, Manchester, N. H. Finger-pad | 719,352 | Jan. 27 | 3490 | 776 | 102 | 783 |
| Marsh, Lewis P., administrator. (See Marsh, John T.) | | | | | | |
| Marsh, Wilbur W., and C. H. Hackett, assignors to Hackett & Dailey Creamery Supply Company, Waterloo, Iowa. Liner for centrifugal liquid-separators | 724,195 | Mar. 31 | 4780 | 1071, 1072 | 103 | 1057 |
| Marshall, Andrew and A. R., Pittsburg, Pa. Nut-lock | 742,466 | Oct. 27 | 4018 | 901 | 106 | 2141 |
| Marshall, Aquilla B., New York, N. Y., R. Rouse, Jr., Elizabeth, and G. G. Kniffin, Bayonne, N. J., assignors to Boynton Furnace Company, New York, N. Y. Shaking-grate | 725,738 | Apr. 21 | 2459 | 557 | 103 | 1722 |
| Marshall, Arthur R. (See Marshall, Andrew and A. R.) | | | | | | |
| Marshall and Brothers, James, *et al.* (See Marshall, John, assignor.) | | | | | | |
| Marshall, Charles, South Yarra, near Melbourne, Victoria, Australia. Antivibrating burner | 747,457 | Dec. 22 | 3953 | 889 | 107 | 2020 |
| Marshall, Cloyd, Lafayette, Ind., assignor to J. S. Andrews, St. Louis, Mo., and W. M. Simpson, Chicago, Ill. Electromagnetic reciprocating tool | 720,596 | Feb. 17 | 2206 | 512 | 102 | 1318 |
| Marshall, E. S. (See Flatau, Louis S., assignor.) | | | | | | |
| Marshall, Ebenezer R., Hamilton, Canada. Pool-ball rack and register | 742,467 | Oct. 27 | 4018 | 902 | 106 | 2141 |
| Marshall, Ebenezer R., Hamilton, Canada. Pool-ball rack and register | 747,458 | Dec. 22 | 3954 | 889 | 107 | 2021 |
| Marshall, Edmund B., Rome, Ga. Rubber-dam holder | 733,410 | July 14 | 1281 | 303 | 105 | 287 |
| Marshall, Edwin, Warrensburg, assignor to G. C. Pitcher, Kansas City, Mo., and H. C. Pitcher, Lakeland, La. Anesthetic-inhaler | 747,742 | Dec. 22 | 4469 | 1008 | 107 | 2138 |
| Marshall, Frank J., Turners Falls, Mass. Pulp-beating engine | 725,349 | Apr. 14 | 1723 | 388 | 103 | 1549 |
| Marshall, Frank S. (See Snyder, David M., assignor.) | | | | | | |
| Marshall, George, Denison, Kans. Corn-husking implement | 742,696 | Oct. 27 | 4441 | 1002 | 106 | 2231 |
| Marshall, Henry C., *et al.* (See Conde, Joseph, assignor.) | | | | | | |
| Marshall, Holmes, New York, N. Y. Combined type-writing and computing machine | 743,904 | Nov. 10 | 2154 | 464, 465 | 107 | 475 |
| Marshall, James, Fall River, Mass., assignor of one-half to P. C. Waring, Yonkers, N. Y. Weighing-machine | 720,042 | Feb. 10 | 1161 | 265, 266 | 102 | 1086 |
| Marshall, John, Harmony, Pa. Nut-lock | 724,196 | Mar. 31 | 4782 | 1072 | 103 | 1058 |
| Marshall, John, Fall River, Mass., assignor to P. C. Waring, Yonkers, N. Y., and J. Marshall and Brothers, Fall River, Mass. Hat-forming machine | 739,787 | Sept. 22 | 4320 | 967 | 106 | 976 |
| Marshall, John J., Kansas City, Mo. Match-shooting pistol | 746,542 | Dec. 8 | 2229 | 511 | 107 | 1597 |
| Marshall, John W., Butte, Mont. Clamp | 732,309 | June 30 | 5186 | 1152 | 104 | 2268 |
| Marshall, Thomas B. (See Price, William W., assignor.) | | | | | | |
| Marshall, William C., Chicago, Ill. Fluid-extracting press | 734,917 | July 28 | 4119 | 960 | 105 | 916 |
| Marshall, William H., Wakefield, Mass., assignor of one-half to Marine Hardware Company. Sheet-leader block | 719,124 | Jan. 27 | 3074 | 683 | 102 | 695 |
| Marshall, William S., assignor of one-half to G. J. Moses, Westchester, Pa. Thill-coupling | 739,500 | Sept. 22 | 3792 | 849 | 106 | 861 |
| Marshutz, Siegfried G., Los Angeles, Cal. Trial-frame for oculists or opticians | 724,197 | Mar. 31 | 4783 | 1072, 1073 | 103 | 1058 |
| Marsland, John S. (See Thomas and Marsland.) | | | | | | |
| Martel, Louis V., Hillsboro, N. H. Shuttle | 732,310 | June 30 | 5187 | 1153 | 104 | 2268 |
| Martell, Louis H., Wilkinsburg, Pa. Packing-ring for piston-rods, &c | 720,597 | Feb. 17 | 2208 | 512 | 102 | 1319 |
| Martell, Louis H., Wilkinsburg, Pa. Box for packing-rings | 722,428 | Mar. 10 | 1429 | 316 | 103 | 320 |
| Martelli, Bernardo. (See D'Aquila and Martelli.) | | | | | | |
| Marten, Albert S., East Orange, N. J. Support for amplifying-horns | 726,320 | Apr. 28 | 3517 | 796 | 103 | 1957 |
| Marten, Albert S., East Orange, N. J. Interchangeable sound-amplifying means for talking or sound-reproducing machines | 738,342 | Sept. 8 | 1618 | 351 | 106 | 364 |
| Marten, Albert S., East Orange, N. J. Stand or support for horns | 740,886 | Oct. 6 | 924 | 207 | 106 | 1443 |
| Marth, Oscar, Also Lieszko, Austria-Hungary. Friction-gearing. (Reissue) | 12,075 | Jan. 27 | 3606 | 807 | 102 | 808 |
| Marthis, John W., Lincoln, Nebr. Journal-cooler | 723,173 | Mar. 17 | 2809 | 633 | 103 | 625 |
| Martien, Benjamin F., assignor to Hixson Adjustable Sieve Co., Ashland, Ohio. Adjustable chaffer and sieve | 734,467 | July 21 | 3265 | 767 | 105 | 722 |
| Martien, Gilbert, Mansfield, Ohio. Cap-nut and washer for vehicle-spindles | 731,196 | June 16 | 3064 | 680 | 104 | 1796 |
| Martin, Aaron J., Canton, Ohio. Bottle-cap | 736,988 | Aug. 25 | 3672 | 814 | 105 | 1816 |
| Martin, Albert L. (See Andrews, Isbell, and Martin.) | | | | | | |
| Martin, Albert L., assignor to A. C. Tenney, Clinton, Iowa. Manufacturing vegetable gelatin | 742,124 | Oct. 20 | 3390 | ------ | 106 | 1995 |
| Martin, Albert R., *et al.* (See McAdams, Sylvester L., assignor.) | | | | | | |
| Martin, Anthony S., Maiden, assignor of one-half to S. A. Robertson, Granite Quarry, N. C. Lamp-stove | 731,926 | June 23 | 4420 | 986 | 104 | 2096 |
| Martin Automatic Fish Reel Company. (See Van Alstyne, Harry E., assignor.) | | | | | | |
| Martin, Bernard S. D. S., McPherson, Kans. Storm-curtain for buggies | 724,593 | Apr. 7 | 327 | 80 | 103 | 1238 |
| Martin, Bernard S. D. S., McPherson, Kans. Storm-curtain for vehicles | 741,265 | Oct. 13 | 1638 | 369 | 106 | 1615 |
| Martin, Cary W., New York, N. Y. Pipe or hose coupling | 731,379 | June 16 | 3403 | 760 | 104 | 1867 |
| Martin, Charles P., Lemont Furnace, assignor of five-eighths to C. H. Rhodes, Haydentown, and L. Martin, Lemont Furnace, Pa. Unloading apparatus | 742,125 | Oct. 20 | 3391 | 757 | 106 | 1996 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|
| | | | Spec. | Dr'g. | Vol. | Page. |
| Martin, Daniel B., Rittman, Ohio. Well-drilling machine | 732,206 | June 30 | 4991 | 1110 | 104 | 2228 |
| Martin, Dieudonne. (See Martin, Jean B., assignor.) | | | | | | |
| Martin, Edgar M., Indianapolis, Ind. Trousers presser and creaser | 724,198 | Mar. 31 | 4789 | 1073 | 103 | 1059 |
| Martin Ekenbergs Aktiebolag. (See Ekenberg, Martin, assignor.) | | | | | | |
| Martin, Emlen, *et al.*, executors. (See Martin, William L.) | | | | | | |
| Martin, Ernest C., assignor to Goodell Co., Antrim, N. H. Carver-fork and guard | 724,906 | Apr. 7 | 903 | 206 | 103 | 1363 |
| Martin, Fred S., assignor of one-half to N. H. Emery, South Sioux City, Nebr. Lock for gas-cocks | 719,241 | Jan. 27 | 3272 | 731 | 102 | 736 |
| Martin, Frederic, Jr., Columbus, Ohio. Rubbing-surface for washboards | 726,082 | Apr. 21 | 3039 | 690 | 103 | 1843 |
| Martin, George A., Myerstown, Pa. Stop-motion | 732,573 | June 30 | 5708 | {1268 {1269 | {104 | 2378 |
| Martin, George A., Parkersburg, Ohio. Insect-trap | 745,364 | Dec. 1 | 91 | 21 | 107 | 1120 |
| Martin, George B., Zanesville, Ohio. Electric fire-alarm | 736,755 | Aug. 18 | 3219 | 711 | 105 | 1700 |
| Martin, George E., assignor to Pedrick & Ayer Company, Philadelphia, Pa. Riveting-machine | 718,365 | Jan. 13 | 1566 | {345 {346 | {102 | 351 |
| Martin, George E., assignor to Pedrick and Ayer Company, Philadelphia, Pa. Riveting-machine | 719,242 | Jan. 27 | 3273 | {731 {732 | {102 | 736 |
| Martin, George E., Philadelphia, Pa., assignor to Pedrick and Ayer Company, Plainfield, N. J. Riveting-machine | 733,497 | July 14 | 1430 | 336 | 105 | 320 |
| Martin, George L., New York, N. Y. Water-tight union for lead cables | 731,195 | June 16 | 3063 | 679 | 104 | 1796 |
| Martin, George L., New York, N. Y. Supplemental base for outlet-boxes | 737,946 | Sept. 1 | 777 | 170 | 106 | 170 |
| Martin Hardsocg Manufacturing Company. (See Anderson, Cecil R., assignor.) | | | | | | |
| Martin Hardsocg Manufacturing Company. (See Koontz, Louis K., assignor.) | | | | | | |
| Martin, Henry, assignor of one-half to W. H. Peddy, Columbus, Ga. Draft attachment for cars | 721,059 | Feb. 17 | 3053 | 701 | 102 | 1498 |
| Martin, Henry B., Buffalo, N. Y. Apparatus for bailing oil-wells | 730,940 | June 16 | 2571 | {572 {573 | {104 | 1699 |
| Martin, Henry C., Grand Rapids, Mich. Cornet | 736,756 | Aug. 18 | 3220 | 712 | 105 | 1701 |
| Martin, Henry H. (See Feurt and Martin.) | | | | | | |
| Martin, Henry P., Owensboro, Ky. Service-box cover | 748,394 | Dec. 29 | 5714 | 1305 | 107 | 2433 |
| Martin, Horace E., Athens, Ga. Vehicle-pole socket | 736,858 | Aug. 18 | 3429 | 759 | 105 | 1745 |
| Martin, Horace G., Brooklyn, N. Y., assignor of one-half to W. P. Phillips, Bridgeport, Conn. Telegraphic transmitter | 732,648 | June 30 | 5839 | {1293 {1294 | {104 | 2407 |
| Martin, Horace R., East Bloomfield, N. Y. Trolley-catcher | 746,860 | Dec. 15 | 2830 | 653 | 107 | 1751 |
| Martin, Irvin, assignor of one-half to R. Wayne, Desire, Pa. Wrench | 744,869 | Nov. 24 | 3994 | 861 | 107 | 889 |
| Martin, J. Motte, *et al*, trustees. (See Osborne, Eugene F., assignor.) | | | | | | |
| Martin, Jacob, New York, N. Y. Third-rail guard for electric railways | 726,721 | Apr. 28 | 4287 | 968 | 103 | 2111 |
| Martin, James F., assignor to J. B. Hall, Philadelphia, Pa. Hair-crimper | 748,393 | Dec. 29 | 5713 | 1305 | 107 | 2433 |
| Martin, James M., Knoxville, Tenn. Cushioned rocker or wheel | 721,904 | Mar. 3 | 455 | 100 | 103 | 101 |
| Martin, James M., assignor to C. F. Spence, Knoxville, Tenn. Trunk | 746,121 | Dec. 8 | 1488 | 332 | 107 | 1438 |
| Martin, James W., assignor to International Manufacturing Co., Omaha, Nebr. Mechanical movement | 736,285 | Aug. 11 | 2342 | 509 | 105 | 1502 |
| Martin, Jean B., assignor of one-half to D. Martin, St. Polycarpe, Canada. Combination-derrick | 727,658 | May 12 | 1566 | 354 | 104 | 354 |
| Martin, Jean B. A. (See Savaria, Louis, assignor.) | | | | | | |
| Martin, Jesse C., Jr., San Francisco, Cal. Flexible pipe-joint | 733,065 | July 7 | 649 | 157 | 105 | 138 |
| Martin, Jesse C., Jr., San Francisco, Cal. Train-pipe coupling | 735,991 | Aug. 11 | 1826 | 391 | 105 | 1390 |
| Martin, Jesse C., Jr., San Francisco, Cal., assignor to Holland Company, Chicago, Ill. Ball-and-socket joint | 717,882 | Jan. 6 | 698 | 156 | 102 | 149 |
| Martin, John A., *et al.* (See Dameron, Warren P., assignor.) | | | | | | |
| Martin, John F., Marshall, Mich. Fence-post | 741,354 | Oct. 13 | 1851 | 409 | 106 | 1662 |
| Martin, John H., assignor of one-half to C. Muenzenberger, Meadville, Pa. Lock-nut | 735,992 | Aug. 11 | 1827 | 392 | 105 | 1391 |
| Martin, Joseph A., Pittsburg, Pa. Attachment for bedsteads | 719,125 | Jan. 27 | 3075 | 683 | 102 | 695 |
| Martin, Joseph E. (See Petrie and Martin.) | | | | | | |
| Martin, Joseph E., Newark, N. J. Quick-closing balanced and non-return valve | 744,777 | Nov. 24 | 3829 | 826 | 107 | 864 |
| Martin, Joseph F. (See Francisco and Martin.) | | | | | | |
| Martin, Joseph H., assignor of one-half to R. W. A. Godfrey, Riverside, Cal. Cultivator | 743,535 | Nov. 10 | 1485 | 310 | 107 | 334 |
| Martin, Joseph H., and D. Ormand, Riverside, Cal. Water-gate | 739,755 | Sept. 22 | 4254 | 953 | 106 | 961 |
| Martin, Lane, *et al.* (See Martin, Charles P., assignor.) | | | | | | |
| Martin, Louis B., Boston, Mass. Printing-press | 728,948 | May 26 | 4002 | {890 {891 | {104 | 900 |
| Martin, Lyman C., Winfield, Kans. Churn | 728,262 | May 19 | 2719 | 606 | 104 | 617 |
| Martin, Nathan E., Greenfield, Mass. Calipers or dividers | 721,379 | Feb. 24 | 3700 | 842 | 102 | 1652 |
| Martin, Nicholas J., Taunton, Mass. Warp-beam for looms | 745,211 | Nov. 24 | 4677 | 1019 | 107 | 1040 |
| Martin, Patrick A., Birmingham, England. Manufacture of the cores of golf or like balls | 745,212 | Nov. 24 | 4678 | 1019 | 107 | 1040 |
| Martin, Patrick A., Birmingham, England. Manufacture of golf-balls | 745,213 | Nov. 24 | 4680 | 1020 | 107 | 1040 |
| Martin, Peter, Huntington, Ind. Limekiln | 730,467 | June 9 | 1730 | 386 | 104 | 1498 |
| Martin, R. H. (See Knight, Edward M., assignor.) | | | | | | |
| Martin, Robert, and J. F. Busley, Elkhart, Ind. Furnace | 745,365 | Dec. 1 | 92 | 21 | 107 | 1121 |
| Martin, Robert H., New York, N. Y. Conveyer-belt | 724,483 | Apr. 7 | 115 | 28, 29 | 103 | 1194 |
| Martin, Robert T. J., Elyria, Ohio. Pressed-metal seat | 726,176 | Apr. 21 | 3209 | 728 | 103 | 1878 |
| Martin, Samuel, assignor of one-half to W. T. Jones and A. B. McVay, Pittsburg, Pa. Balanced valve | 722,733 | Mar. 17 | 2025 | 453 | 103 | 464 |
| Martin, Samuel B., Dalton, Ohio. Windmill-tower | 742,885 | Nov. 3 | 114 | 26 | 107 | 26 |
| Martin, Sidney B., deceased, McKee; K. Morris, administrator, assignor to A. W. and H. G. Creekmore, Lexington, Ky. Still | 742,697 | Oct. 27 | 4442 | 1003 | 106 | 2232 |
| Martin, Thomas, Birmingham, England, assignor to Mergenthaler Linotype Company, New York, N. Y. Means for setting tabular matter in linotype-machines | 720,270 | Feb. 10 | 1590 | {363 {364 | {102 | 1176 |
| Martin, Thomas A., Brainerd, Minn. Shearing or clipping cutters | 722,313 | Mar. 10 | 1228 | 273 | 103 | 277 |
| Martin, Thomas C., Cleveland, Ohio. Attachment for tobacco-pipes | 736,757 | Aug. 18 | 3221 | 712 | 105 | 1701 |
| Martin, Thomas L., assignor of one-half to J. Snell, Lewisburg, Ky. Preserving device | 720,043 | Feb. 10 | 1163 | 266 | 102 | 1086 |
| Martin, Wallace B., Nickerson, Minn. Corn-shocker | 745,733 | Dec. 1 | 748 | {171 {172 | {107 | 1258 |
| Martin, Wallace B., Nickerson, Minn. Automatic lock for belt-tighteners | 747,743 | Dec. 22 | 4471 | 1008 | 107 | 2138 |
| Martin, Walter N., assignor of one-half to J. T. Stewart, Cripplecreek, Colo. Elevator safety device | 721,816 | Mar. 3 | 284 | 63, 64 | 103 | 63 |
| Martin, William, *et al.*, executors. (See Martin, William L.) | | | | | | |
| Martin, William A. K., Homestead, Pa. Folding bench | 720,044 | Feb. 10 | 1165 | 267 | 102 | 1087 |
| Martin, William E., assignor of one-half to C. F. Sagerdahl, Jamestown, N. Y. Combined cant-hook and binder | 747,079 | Dec. 15 | 3260 | 742 | 107 | 1852 |
| Martin, William F., New York, N. Y. Watch-guard | 744,582 | Nov. 17 | 3456 | 745 | 107 | 767 |
| Martin, William L., deceased, Rancocas, N. J.; E. and W. Martin, executors. Vehicle-wheel and bearing therefor | 734,918 | July 28 | 4121 | 960 | 105 | 916 |
| Martin, William U. G., Indianapolis, Ind. Body-support | 741,521 | Oct. 13 | 2168 | 483 | 106 | 1729 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Martindale, Warren B., assignor to Corn King Husker Company, Rochester, Ind. Corn-shredding and husking machine | 722,429 | Mar. 10 | 1429 | 316, 317 | 103 | 320 |
| Martineau, William C., assignor of one-fourth to J. R. Slack, Albany, N. Y. Tape-fastener | 735,892 | Aug. 11 | 1641 | 351 | 105 | 1350 |
| Martini, Ernst, Vienna, Austria-Hungary. Coin-freed delivery apparatus for paper sheets or packages | 730,382 | June 9 | 1562 | 347, 348 | 104 | 1462 |
| Martino, Frederick W., Sheffield, England. Extracting noble metals | 727,659 | May 12 | 1569 | ..... | 104 | 355 |
| Martucci, Francesco, *et al.* (See Prioletta, Giovanni, assignor.) | | | | | | |
| Marty, John M., assignor of one-half to C. J. Diebold, Cleveland, Ohio. Mine-gate | 718,138 | Jan. 13 | 1153 | 256 | 102 | 263 |
| Marugg, John, and J. Ruppert, Jersey City, N. J. Loom-shuttle | 747,993 | Dec. 29 | 4993 | 1128 | 107 | 2276 |
| Marvel Patents Company. (See Snedeker, Elbert, assignor.) | | | | | | |
| Marvin, Albert N. (See Greenwood and Marvin.) | | | | | | |
| Marvin, Harry N., and H. Casler, Canastota, N. Y. Moving-picture apparatus | 729,375 | May 26 | 4753 | 1051, 1052 | 104 | 1055 |
| Marvin, Harry N., and H. Casler, assignors, by mesne assignments, to F. E. Casler, Canastota, N. Y. Regulating device for ribbon-feeds | 732,765 | July 7 | 118 | 32 | 105 | 29 |
| Marx, Conrad, New York, N. Y. Spinning-top | 737,431 | Aug. 25 | 4491 | 1007 | 105 | 1999 |
| Marx, Franz, and E. Mérei, Budapest, Austria-Hungary. Apparatus for receiving and collecting mail | 718,717 | Jan. 20 | 2283 | 503 | 102 | 516 |
| Marx, Fred, Newark, N. J. Air purifier and blower | 731,927 | June 23 | 4421 | 986 | 104 | 2096 |
| Marx, Gustave C., Elizabeth, N. J., assignor to Diehl Manufacturing Company. Electrical controller | 739,433 | Sept. 22 | 3689 | 821 | 106 | 837 |
| Marzolf, Joseph M., Homestead, Pa. Lifting or screw jack | 733,240 | July 7 | 964 | 232 | 105 | 202 |
| Mascall, Arthur E. (See Holmström and Mascall.) | | | | | | |
| Maschinenfabrik Grevenbroich. (See Hirt, Ludwig, assignor.) | | | | | | |
| Maschinenfabrik Rüti, vormals Caspar Honegger. (See Sameck, Franz, assignor.) | | | | | | |
| Masino, Anthony, *et al.* (See Musso, Alfredo, assignor.) | | | | | | |
| Maske, Emil, Trondhjem, Norway. Cleaning device for windows | 736,989 | Aug. 25 | 3672 | 815 | 105 | 1816 |
| Maskrey, Arthur J., Martins Ferry, Ohio. Folding-machine | 721,589 | Feb. 24 | 4096 | 932, 933 | 102 | 1737 |
| Maskrey, Arthur J., Martins Ferry, Ohio. Feeding mechanism for branners | 740,294 | Sept. 29 | 5283 | 1190 | 106 | 1194 |
| Maskrey, Arthur J., Martins Ferry, Ohio. Automatic feeder for branners | 740,295 | Sept. 29 | 5286 | 1190 | 106 | 1194 |
| Mason, A. B., *et al.* (See Sanders, Burrus L., assignor.) | | | | | | |
| Mason, Alexander, Fort Madison, Iowa. Sliding gate | 727,818 | May 12 | 1887 | 421 | 104 | 419 |
| Mason, Alexander, Salem, Mass. Matching-plane | 748,199 | Dec. 29 | 5392 | 1226 | 107 | 2362 |
| Mason, Arthur J. (See Hoover and Mason.) | | | | | | |
| Mason, Arthur J., *et al.* (See Stolp, Frank H., assignor.) | | | | | | |
| Mason, Arthur J., assignor of one-half to F. K. Hoover, Chicago, Ill. Excavating apparatus | 729,195 | May 26 | 4443 | 980 | 104 | 991 |
| Mason, Beverly R. (See Triplett, George B., assignor.) | | | | | | |
| Mason, Charles C., London, England. Cleaning surfaces | 729,624 | June 2 | 179 | 42 | 104 | 1164 |
| Mason, Charles F., Dryden, N. Y. Automatic gas-lighting attachment | 733,667 | July 14 | 1726 | 408 | 105 | 381 |
| Mason, Charles H., Shortsville, N. Y. Grain-drill | 725,465 | Apr. 14 | 1945 | 436 | 103 | 1597 |
| Mather, Charles H., Essex, Conn., assignor of one-half to G. E. Knowles, Brooklyn, N. Y. Store-bin | 718,647 | Jan. 20 | 2143 | 467 | 102 | 489 |
| Mason City Gas and Fuel Co. (See Leckband, Theodor H. J., assignor.) | | | | | | |
| Mason, Edgar L., deceased, Rockland, Me.; F. L. Mason, administrator. Dental jaw-prop | 742,698 | Oct. 27 | 4443 | 1003 | 106 | 2232 |
| Mason, Edward C., *et al.* (See Barron, John J., assignor.) | | | | | | |
| Mason, Edwin A., *et al.* (See Lind, Gustaf A. L., assignor.) | | | | | | |
| Mason, Everett H., Clarksville, Tex. Carriage-top support | 736,990 | Aug. 25 | 3673 | 815 | 105 | 1816 |
| Mason, Frank E., South Whitley, Ind. Stovepipe-fastener | 746,122 | Dec. 8 | 1489 | 333 | 107 | 1438 |
| Mason, Fred L., administrator. (See Mason, Edgar L.) | | | | | | |
| Mason, Frederick, Attleboro, Mass., assignor to Mason Howard & Company. Automatically-adjustable bracelet or belt | 728,741 | May 19 | 3624 | 805 | 104 | 808 |
| Mason, Harry J., Jr. (See Whittemore, Zenas, assignor.) | | | | | | |
| Mason, Harry R., Chicago, Ill., assignor to Westinghouse Air Brake Company, Pittsburg, Pa. Fluid-pressure mechanism | 718,491 | Jan. 13 | 1841 | 404, 405 | 102 | 412 |
| Mason, Harry R., Chicago, Ill., assignor to Westinghouse Air Brake Company, Pittsburg, Pa. Fluid-pressure mechanism | 718,492 | Jan. 13 | 1844 | 405 | 102 | 412 |
| Mason, Harry R., Chicago, Ill., assignor to Westinghouse Air Brake Company, Pittsburg, Pa. Fluid-pressure mechanism | 718,493 | Jan. 13 | 1845 | 405 | 102 | 413 |
| Mason, Henry T., South Chicago, Ill. Stopper for boiler-tubes | 724,595 | Apr. 7 | 332 | 81 | 103 | 1239 |
| Mason Howard & Company. (See Mason, Frederick, assignor.) | | | | | | |
| Mason, Isaac M., *et al.*, administrators. (See Wright, Benjamin.) | | | | | | |
| Mason, Jennie S., Boston, Mass. Thread cutter and holder | 746,973 | Dec. 15 | 3053 | 700 | 107 | 1803 |
| Mason, John H., Philadelphia, assignor to Wheatstone Bridge Telephone Company, Souderton, Pa. Telephone system | 724,594 | Apr. 7 | 329 | 80, 81 | 103 | 1239 |
| Mason, John L., deceased; N. M. Hetrich, administratrix, assignor to E. H. Jones, New York, N. Y. Receptacle and packing-ring therefor | 726,321 | Apr. 28 | 3518 | 797 | 103 | 1957 |
| Mason Machine Works. (See Meats, John T., assignor.) | | | | | | |
| Mason Machine Works. (See Meats and Greensmith, assignors.) | | | | | | |
| Mason Monogram Company. (See Levy, Deronda, assignor.) | | | | | | |
| Mason, Stephen C., assignor to McConway and Torley Company, Pittsburg, Pa. Car-coupling | 738,727 | Sept. 8 | 2355 | 516, 517 | 106 | 519 |
| Mason, Sydney. (See Slater, James, assignor.) | | | | | | |
| Mason, Thomas G. (See Gassard, Louis, assignor.) | | | | | | |
| Mason, Volney W., Jr., New York, N. Y. Revolving screen | 731,315 | June 16 | 3284 | 731 | 104 | 1843 |
| Mason, Volney W., Jr., New York, N. Y. Grinding or crushing head | 745,639 | Dec. 1 | 593 | 137 | 107 | 1224 |
| Mason, Volney W., Jr., New York, N. Y. Grinding or crushing head or roll | 745,640 | Dec. 1 | 594 | 138 | 107 | 1224 |
| Mason, Washington M., Byrd, Tenn. Vehicle-brake | 728,949 | May 26 | 4004 | 891 | 104 | 901 |
| Mason, William, and F. F. Burton, assignors to Winchester Repeating Arms Co., New Haven, Conn. Tubular-magazine firearm | 748,395 | Dec. 29 | 5716 | 1306 | 107 | 2434 |
| Massachusetts Street Railway and Park Association. (See Pepin, David E., assignor.) | | | | | | |
| Massey, Henry L., Memphis, Tenn. Copy-holder | 722,239 | Mar. 10 | 1096 | 241 | 103 | 249 |
| Massey, John, Anderson, Ind. Electric motor or engine | 726,177 | Apr. 21 | 3210 | 728 | 103 | 1878 |
| Mast, Foos & Company. (See Pfeifer, John, assignor.) | | | | | | |
| Mast, Frank A., Davenport, Iowa. Truck for stools or chairs | 743,919 | July 28 | 4123 | 961 | 105 | 917 |
| Mast, John M., Lancaster, assignor to J. M. Mast Manufacturing Company, Lititz, Pa. Animal-trap | 744,379 | Nov. 17 | 3110 | 669 | 107 | 695 |
| Masten, Benjamin F., *et al.* (See Best, William N., assignor.) | | | | | | |
| Masterman, William H., and J. P. Magney, assignors to Michigan Engine Co., Allegan, Mich. Rotary engine | 728,263 | May 19 | 2721 | 606, 607 | 104 | 617 |
| Masterson, Bernard W., San Antonio, Tex. Inside pipe-clamp | 725,739 | Apr. 21 | 2462 | 557 | 103 | 1722 |
| Masterson, Harry H., and A. V. Franklin, Arkansas City, Kans. Cream-separator | 746,861 | Dec. 15 | 2834 | 653, 654 | 107 | 1753 |
| Masterson, Meckley, Cripplecreek, Colo. Oil-can | 727,660 | May 12 | 1569 | 354 | 104 | 355 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Masterson, Meckley, Cripplecreek, Colo. Liquid-dispensing apparatus | 744,085 | Nov. 17 | 2548 | 546 | 107 | 572 |
| Mastick, John C., *et al.* (See Brooks, Howard, assignor.) | | | | | | |
| Matheney, George L., Bridgeport, assignor of one-fourth to R. C. Montgomery, Martins Ferry, Ohio. Rail-joint | 723,699 | Mar. 24 | 3788 | 850 | 103 | 838 |
| Matheny, Charles A., High Springs, Fla. Machine for turning cross-head pins | 745,214 | Nov. 24 | 4681 | 1020 | 107 | 1041 |
| Mather, Allan G., Milwaukee, Wis. Exhaust apparatus for roller-mills | 740,155 | Sept. 29 | 5025 | 1129 | 106 | 1141 |
| Mather, Allan G., assignor of one-half to Allis-Chalmers Company, Milwaukee, Wis. Shaft for bolting or other machines | 721,316 | Feb. 24 | 3575 | 813<br>814 | 102 | 1626 |
| Mather, Alonzo C., Chicago, Ill. Sparking igniter for explosive-engines | 728,950 | May 26 | 4005 | 891 | 104 | 901 |
| Mather, Henry W., Roseville, N. J. Sales-pad | 718,648 | Jan. 20 | 2144 | 468 | 102 | 489 |
| Mather, Joseph S., St. Louis, Mo. System of advertising | 726,444 | Apr. 28 | 3733 | 847 | 103 | 2061 |
| Mather & Platt. (See Sanderson, John G., assignor.) | | | | | | |
| Mather, William G. (See Farrell, Austin, assignor.) | | | | | | |
| Mather, William S., Newark, N. J. Crucible-shaker | 718,494 | Jan. 13 | 1846 | 405<br>406 | 102 | 413 |
| Mather, William S., Newark, N. J. Machine for pouring metal | 731,062 | June 16 | 2807 | 625<br>626 | 104 | 1747 |
| Mathers, Ezra A., Washington, D. C. Excavating-machine | 717,589 | Jan. 6 | 125 | 32 | 102 | 28 |
| Mathesius, Alexander H., Brooklyn, N. Y. Guide-wheel and guide | 720,454 | Feb. 10 | 1914 | 436 | 102 | 1243 |
| Mathesius, Walther. (See Goldschmidt and Mathesius.) | | | | | | |
| Matheson, James H., Middletown, assignor to National Tube Company, Pittsburg, Pa. Manufacture of butt-weld pipe | 720,045 | Feb. 10 | 1165 | 267 | 102 | 1087 |
| Matheson, James H., Middletown, assignor to National Tube Company, Pittsburg, Pa. Apparatus for the manufacture of butt-weld pipe | 720,046 | Feb. 10 | 1168 | 267 | 102 | 1087 |
| Matheson, Millar, Charlottetown, Canada. Wire-stretcher | 731,716 | Mar. 3 | 118 | 25 | 103 | 26 |
| Mathews, A., *et al.* (See Tompkins, Jesse, assignor.) | | | | | | |
| Mathews, Elisha C. (See Langer, Gotthold, assignor.) | | | | | | |
| Mathews, Frank V., assignor to Rochester Plate Holder Company, Rochester, N. Y. Photographic-plate holder | 717,695 | Jan. 6 | 308 | 76 | 102 | 67 |
| Mathews, Nuton L. (See Miles, Wilmer, assignor.) | | | | | | |
| Mathews, Robert P., assignor of two-thirds to M. A. and H. E. Stafford, Harvard, Ill. Hand gaining-tool | 717,883 | Jan. 6 | 699 | 156 | 102 | 149 |
| Mathews, Walter J., Oakland, Cal. Columbarium-cell | 741,355 | Oct. 13 | 1853 | 410 | 106 | 1663 |
| Matheyer, Ferdinand, New York, N. Y. Intestine-cleaner | 722,525 | Mar. 10 | 1626 | 359 | 103 | 365 |
| Mathias, Lewis B., *et al.* (See Gould, Cornelius C., assignor.) | | | | | | |
| Mathies, Daniel, Roanoke, Ind. Farm-gate | 727,661 | May 12 | 1571 | 355 | 104 | 355 |
| Mathieu, Alfred, Worcester, Mass. Grinding or sharpening machine | 729,196 | May 26 | 4445 | 980 | 104 | 992 |
| Mathieu, Eugéne, Louvain, Belgium. Motor-cycle gear | 729,197 | May 26 | 4446 | 980 | 104 | 992 |
| Mathieu, Eugene, Louvain, Belgium. Centrifugal governor | 729,625 | June 2 | 181 | 43 | 104 | 1164 |
| Mathieu, John P. (See Lovekin, Luther D., assignor.) | | | | | | |
| Mathis, Gerhard, Brooklyn, N. Y. Guard-cap for shade-rollers | 729,881 | June 2 | 667 | 146 | 104 | 1264 |
| Mathis, Julian W., *et al.* (See Bassler, Edwin M., assignor.) | | | | | | |
| Mathot, Rodolphe, Brussels, Belgium. Variable-speed and reversing gear | 729,501 | May 26 | 4957 | 1099 | 104 | 1100 |
| Matouch, Wenzel, Pilica, Russia. Moss-harrow | 724,596 | Apr. 7 | 333 | 81 | 103 | 1240 |
| Matson, Charles H., assignor to himself and C. P. Anderson, Worcester, Mass. Ventilated shoe | 746,862 | Dec. 15 | 2837 | 654 | 107 | 1753 |
| Matson, Christ. (See Robertson and Matson.) | | | | | | |
| Matson, Frederick W., assignor of one-half to G. Kelly, Mineralpoint, Wis. Holder | 736,531 | Aug. 18 | 2787 | 610<br>611 | 105 | 1613 |
| Matson, Taylor, Philadelphia, Pa. Fluid-controlled friction-clutch device | 731,483 | June 23 | 3612 | 806 | 104 | 1929 |
| Matson, William. (See Hogan, William F., assignor.) | | | | | | |
| Mattatuck Mfg. Co. (See Judd, Henry G., assignor.) | | | | | | |
| Mattax, Oliver J., Washington, Pa. Reclining-chair | 728,264 | May 19 | 2723 | 607 | 104 | 618 |
| Mattei, Diego, Genoa, Italy. Apparatus for dyeing card-slivers | 746,863 | Dec. 15 | 2838 | 654<br>655 | 107 | 1753 |
| Mattern, George W., assignor to Crawford McGregor and Canby Co., Dayton, Ohio. Golf-ball | 727,819 | May 12 | 1889 | 421 | 104 | 420 |
| Mattes, Albert S. (See Auger, Joseph H. E., assignor.) | | | | | | |
| Matteson, Burton J., Trinidad, Colo. Coke-drawing machine | 722,599 | Mar. 10 | 1749 | 390<br>391 | 103 | 391 |
| Matteson, Clark S., *et al.* (See Farmer, Julius M., assignor.) | | | | | | |
| Matteson, Jesse E., *et al.* (See Farmer, Julius M., assignor.) | | | | | | |
| Matteson, Rufus S., Providence, R. I. Rotary expansion-engine | 734,907 | Apr. 7 | 904 | 206<br>207 | 103 | 1363 |
| Matteson, Walter C., Stockton, Cal. Lock-washer | 741,806 | Oct. 20 | 2725 | 607 | 106 | 1861 |
| Matteson, Walter C., assignor to Holt Manufacturing Company, Stockton, Cal. Traveling harvester | 723,474 | Mar. 24 | 3416 | 763 | 103 | 760 |
| Matthews, Charles, Columbia, Mo. Heating-stove | 719,827 | Feb. 3 | 758 | 178 | 102 | 984 |
| Matthews, Charles, Columbia, Mo. Heating-stove | 738,619 | Sept. 8 | 2140 | 469 | 106 | 476 |
| Matthews, Ewing, *et al.* (See Reed, William S., assignor.) | | | | | | |
| Matthews, Frank A., Eureka, Cal. Hanger attachment for picture-frames | 730,141 | June 2 | 1114 | 250 | 104 | 1354 |
| Matthews, George E., *et al.*, trustees. (See Kidder, Wellington P., assignor.) | | | | | | |
| Matthews, James F., Elreno, assignor of one-half to J. R., Jr., and C. C. Cole, Oklahoma, Okla. Ter. Cotton-bale-tie buckle | 720,166 | Feb. 10 | 1386 | 317 | 102 | 1135 |
| Matthews, Jaris W., Bridgeport, Conn. Boiler-tube extractor | 736,991 | Aug. 25 | 3674 | 815 | 105 | 1816 |
| Matthews, Joseph, Liverpool, England. Crane | 734,187 | July 21 | 2750 | 645<br>646 | 105 | 614 |
| Matthews, Joseph, Birmingham, and W. Davies, County of Worcester, England. Cathode-holder | 727,549 | May 5 | 1347 | 303 | 104 | 289 |
| Matthews, Thomas A., New York, N. Y. Lubricating-box | 719,021 | Jan. 27 | 2847 | 639 | 102 | 649 |
| Matthews, Thomas A., assignor of one-half to W. H. Ligon, Nashville, Tenn. Lamp-burner | 729,780 | June 2 | 474 | 105 | 104 | 1225 |
| Matthews, Thomas E. (See Stacey, John F., assignor.) | | | | | | |
| Matthews & Willard Manufacturing Company. (See Stevens, Frederick M., assignor.) | | | | | | |
| Matthewson, Ernest G., Upper Norwood, England. Vending apparatus | 732,766 | July 7 | 121 | 33 | 105 | 29 |
| Matthewson, Ernest G., London, England. Game apparatus | 732,952 | July 7 | 450 | 111<br>112 | 105 | 97 |
| Matthias, William C., Reading, Pa. Sparking igniter for explosive-engines | 735,674 | Aug. 4 | 1224 | 259 | 105 | 1241 |
| Matthiessen, Frederick W., Lasalle, Ill. Gas-producer | 723,224 | Mar. 17 | 2913 | 653 | 103 | 647 |
| Matthiessen, Frederick W., Lasalle, Ill. Making producer-gas | 730,941 | June 16 | 2572 | 573 | 104 | 1699 |
| Mattias, Martin, *et al.* (See Mehlferber, John, assignor.) | | | | | | |
| Mattice, Royal, Detroit, Mich. Nail and coating therefor | 731,928 | June 23 | 4423 | 986 | 104 | 2097 |
| Mattill, Hugo A., Washington, D. C. Rotary engine | 741,053 | Oct. 13 | 1230 | 279 | 106 | 1529 |
| Mattingly, Niman T. (See Ellis, William, assignor.) | | | | | | |
| Mattison, Magnus W., Beloit, Wis. Rotary cutter-head | 723,207 | Mar. 17 | 2890 | 647 | 103 | 642 |
| Mattocks, Paul R., Highpoint, and J. L. Grafflin, Wilmington, N. C. Rotary engine | 737,853 | Sept. 1 | 571 | 126 | 106 | 127 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|
| | | | Spec. | Dr'g. | Vol. | Page. |
| Mattox, Charles H., Baker City, Oreg. Roost | 742,699 | Oct. 27 | 4444 | 1003 | 106 | 2232 |
| Mattson Rubber Company. (See Cigol, Frank A., assignor.) | | | | | | |
| Mattson Rubber Company. (See Lemmermann, Henry, assignor.) | | | | | | |
| Mattson Rubber Company. (See Schultz, Frederick A., assignor.) | | | | | | |
| Matuchet, Florentin, Paris, France. Pad for hernial belts | 721,963 | Mar. 3 | 580 | 129 | 103 | 127 |
| Matz, William J. (See Erdman, Edward M., assignor.) | | | | | | |
| Mauch, John L. (See Ensminger, Peter R., assignor.) | | | | | | |
| Mauldin, William E., Grosvenor, Tex. Harrow attachment for cultivators | 747,744 | Dec. 22 | 4473 | 1009 | 107 | 2139 |
| Maum, John. (See Boyle and Maum.) | | | | | | |
| Mauntin, Jöns N., Göteborg, Sweden. Roof-tile | 720,831 | Feb. 17 | 2620 | 605 | 102 | 1405 |
| Maurer, Fred, assignor of one-half to A. MacCance, Chicago, Ill. Egg-beater | 741,586 | Oct. 13 | 2301 | 515 | 106 | 1756 |
| Maurer, George H., Washington, D. C. Bill-file and pocket attachment | 718,718 | Jan. 20 | 2287 | 504 | 102 | 517 |
| Maurer, George H., Washington, D. C. Bill-file | 744,086 | Nov. 17 | 2549 | 546 | 107 | 572 |
| Maurer, George H., assignor to A. W. Belfry, Montreal, Canada. Carbureter | 733,498 | July 14 | 1431 | 396 | 105 | 320 |
| Maurer, Hiram J., Birford, N. D. Rivet | 742,206 | Oct. 27 | 3550 | 792 | 106 | 2043 |
| Maurer, Ludwig, assignor to Nürnberger Motorfahrzenge Fabrik "Union" G. M. B. H., Nuremberg, Bavaria, Germany. Device for throwing motors into gear | 722,122 | Mar. 3 | 853 | 190 | 103 | 183 |
| Maurer, Ludwig, assignor to Nürnberger Motorfahrzenge Fabrik Union, G. M. B. H., Nuremberg, Bavaria, Germany. Friction-gearing | 730,678 | June 9 | 2104 | 468 | 104 | 1580 |
| Maurer, Martin, Pueblo, Colo. Quick-weighing attachment for scales | 729,376 | May 26 | 4756 | 1052 | 104 | 1056 |
| Maurice, Paul, St. Etienne, assignor of one-half to La Société Nouvelles des Etablissements de L'Horme et de la Buire, Lyons, France. Apparatus for washing sand, gravel, auriferous alluvia, or the like | 740,887 | Oct. 6 | 925 | 207<br>208 | 106 | 1444 |
| Maury, Dabney H., Peoria, Ill. Well-inlet. (Reissue) | 12,107 | Apr. 28 | 4520 | 1017<br>1018 | 103 | 2160 |
| Mauser, Alfons, Cologne, Germany. Packing bottles | 723,174 | Mar. 17 | 2810 | 633<br>634 | 103 | 625 |
| Mauser, Alfons, Cologne, Germany. Machine for the manufacture of casings | 733,728 | July 14 | 1823 | 432 | 105 | 402 |
| Mauser, Alfons, Cologne-Ehrenfeld, Germany. Machine for the manufacture of casings | 733,241 | July 7 | 966 | 232 | 105 | 203 |
| Mauser, Alfons, Cologne-Ehrenfeld, Germany. Packing bottles, &c | 733,242 | July 7 | 968 | 233<br>234 | 105 | 203 |
| Maussner, Friedrich, Philadelphia, Pa., assignor to American Interlaced Horse Collar Company. Interlooped fabric | 742,700 | Oct. 27 | 4445 | 1003 | 106 | 2232 |
| Maussner, Friedrich, Philadelphia, Pa., assignor to American Interlaced Horse Collar Company. Reversible pad for saddles, collars, &c | 742,701 | Oct. 27 | 4446 | 1004 | 106 | 2232 |
| Mauthey, Andrew, *et al.* (See Higgins, Thomas, assignor.) | | | | | | |
| Maverick, Lewis. (See Wenke, Frank, assignor.) | | | | | | |
| Mawhinney, Samuel, Worcester, Mass., assignor to Tyler Hinged Last Company, Charleston, W. Va., and Brockton, Mass. Last and hinge | 721,717 | Mar. 3 | 118 | 25, 26 | 103 | 26 |
| Mawson, Ernest O., Bombay, India. Automatic weir | 720,721 | Feb. 17 | 2451 | 560<br>561 | 102 | 1368 |
| Maxim, Hiram P., Pittsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Charge-indicator for secondary batteries | 731,484 | June 23 | 3615 | 806 | 104 | 1930 |
| Maxim, Hiram P., Pittsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Charging system for secondary batteries | 742,886 | Nov. 3 | 116 | 27 | 107 | 26 |
| Maxim, Hiram S., London, England. Explosive projectile | 738,621 | Sept. 8 | 2146 | 471 | 106 | 477 |
| Maxim, Hudson, London, England. Apparatus for electrothermally treating materials | 719,484 | Feb. 3 | 135 | 31 | 102 | 853 |
| Maxim, Hudson, Brooklyn, N. Y. Smokeless-powder composition | 748,200 | Dec. 29 | 5393 | ..... | 107 | 2362 |
| Maxson, Amelia, New York, N. Y. Cloth-folding device | 740,581 | Oct. 6 | 389 | 81 | 106 | 1329 |
| Maxson, James A., Cogar, Okla. Ter. Jar | 727,988 | May 12 | 2204 | 491 | 104 | 488 |
| Maxson, Lynn C., West Edmeston, and C. M. Denison, Middletown, N. Y. Cinder-guard for cars | 734,583 | July 28 | 3477 | 812<br>813 | 105 | 784 |
| Maxson, Roswell R., Charlotte, Mich. Bean-preserving device | 724,908 | Apr. 7 | 906 | 207 | 103 | 1364 |
| Maxted, William, Wernersville, Pa. Ship's-course recorder | 738,221 | Sept. 8 | 1341 | 291 | 106 | 306 |
| Maxwell, Agnes K., Baltimore, Md. Garment-form | 746,350 | Dec. 8 | 1907 | 436 | 107 | 1525 |
| Maxwell, George E., Mulberry, Kans. Baling-press | 727,401 | May 5 | 1070 | 232<br>233 | 104 | 231 |
| Maxwell, George S., Jersey City, N. J., assignor of one-half to H. D. Crippen, New York, N. Y. Punching-bag and support | 732,096 | June 30 | 4766 | 1064 | 104 | 2180 |
| Maxwell, George W., Los Angeles, Cal. Trolley-catch | 734,920 | July 28 | 4124 | 961 | 105 | 917 |
| Maxwell, James M., *et al.* (See McGuire, Peter J., assignor.) | | | | | | |
| Maxwell, John S. (See Denny and Maxwell.) | | | | | | |
| Maxwell, Joseph W., and J. W. Sawyer, Louisville, Ky. Extracting precious metals from their ores | 733,859 | July 14 | 2089 | 494 | 105 | 455 |
| Maxwell, William. (See Franz, William, assignor.) | | | | | | |
| Maxwell, William. (See Gartshore and Maxwell.) | | | | | | |
| Maxwell, William. (See Miller, William A., assignor.) | | | | | | |
| Maxwell, William, Pittsburg, Pa. Metallic pole | 724,909 | Apr. 7 | 908 | 207<br>208 | 103 | 1364 |
| Maxwell, William, Pittsburg, Pa. Metallic pole | 726,801 | Apr. 28 | 4441 | 1002 | 103 | 2142 |
| Maxwell, William, Pittsburg, Pa. Extension-tray | 729,078 | May 26 | 4238 | 936 | 104 | 948 |
| Maxwell, William, Pittsburg, Pa. Automatic weighing-scoop | 733,411 | July 14 | 1283 | 303 | 105 | 288 |
| Maxwell, William, assignor of one-half to C. Perry, Pittsburg, Pa. Game and toy | 735,789 | Aug. 11 | 1433 | 308 | 105 | 1304 |
| Maxwell, William S., assignor to W. & L. Wolf, Philadelphia, Pa. Handle-fastening for traveling bags, cases, &c | 745,286 | Nov. 24 | 4814 | 1050 | 107 | 1068 |
| May, Benjamin W., assignor to Schwartzkopff Coal Dust Firing Company, Chicago, Ill. Apparatus for burning coal-dust | 746,864 | Dec. 15 | 2842 | 655 | 107 | 1754 |
| May, Edward F. (See Curtis, Winfield, assignor.) | | | | | | |
| May, Eugene C., Chicago, Ill. Artificial fuel and making same | 732,574 | June 30 | 5711 | ..... | 104 | 2379 |
| May, Franz X., assignor to C. A. Bryant, Hamburg, Germany. Lubricator | 744,927 | Nov. 24 | 4091 | 881 | 107 | 919 |
| May, J. Walter, *et al.* (See Stevens, William G., assignor.) | | | | | | |
| May, John J., Staten Island, N. Y. Drain-valve for water-supply pipes | 731,063 | June 16 | 2809 | 626 | 104 | 1747 |
| May Knitting Machine and Needle Co. (See Mayo, George D., assignor.) | | | | | | |
| May, Michael M., assignor of one-half to H. Koehler, Rulo, Nebr. Horseshoeing-stock | 746,974 | Dec. 15 | 3054 | 700<br>701 | 107 | 1803 |
| May, Reynolds. (See Peters and May.) | | | | | | |
| May, Reynolds, Whitewright, Tex. Rotary engine | 720,598 | Feb. 17 | 2209 | 512<br>513 | 102 | 1319 |
| May, Thomas, St. Louis, Mo. Fire-escape | 727,170 | May 5 | 663 | 142 | 104 | 143 |
| May, Walter, assignor to Pulsometer Engineering Company, Limited, Reading, England. Direct-acting pumping-engine | 731,929 | June 23 | 4424 | 987 | 104 | 2097 |
| May, Walter S., Clifton, Ariz. Ter. Acetylene-gas generator | 738,827 | Sept. 15 | 2582 | 569 | 106 | 586 |
| May, William B., New Rochelle, N. Y. Shaving-glass | 723,700 | Mar. 24 | 3789 | 851 | 103 | 838 |
| May, William B., Denver, Colo. Miter-box | 727,820 | May 12 | 1890 | 421 | 104 | 420 |
| May, William J., Leonard, Tex. Stirrup and connections therefor | 740,888 | Oct. 6 | 927 | 208 | 106 | 1444 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|
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| Mayall, Lewis A., Philadelphia, Pa. Machine for cutting the corners of paper-box blanks | 718,366 | Jan. 13 | 1568 | 346 | 102 | 351 |
| Maybaum, Levy, Newark, N. J., assignor to American Calculating Machine Company. Combined writing and adding machine | 726,959 | May 5 | 244 | 56, 57, 58 | 104 | 52 |
| Maybaum, William, Whitestone, N. Y. Clasp for wearing-apparel | 734,425 | July 21 | 3189 | 750 | 105 | 707 |
| Mayberry, Henry H., Birmingham, Ala. Manager's reference system | 728,593 | May 19 | 3362 | 745 | 104 | 753 |
| Maybury, William, assignor of sixteen forty-fifths to N. Williams and A. S. C. Forbes, Los Angeles, Cal. Still | 737,756 | Sept. 1 | 368 | 79,80 | 106 | 82 |
| Mayer, August, Budapest, Austria-Hungary. Rotary pump | 727,171 | May 5 | 664 | 143 | 104 | 144 |
| Mayer, Augustus J., Homestead, Pa. Wrench | 738,738 | Sept. 8 | 2356 | 517 | 106 | 519 |
| Mayer, Ben B., Chicago, Ill. Collar-button | 719,828 | Feb. 3 | 759 | 178 | 102 | 984 |
| Mayer, D. (See Stordeur, Ferdinand, assignor.) | | | | | | |
| Mayer, Durand, (by judicial change of name now Durand Churchill,) Chicago, Ill. Locker | 726,555 | Apr. 28 | 3975 | 900 | 103 | 2047 |
| Mayer, Ernest, Westchester, Pa. Fire-hose coupling | 719,829 | Feb. 3 | 761 | 179 | 102 | 984 |
| Mayer, Ernst, and P. Wenger, New York, N. Y. Instep-supporting and insulating pad | 747,994 | Dec. 29 | 4994 | 1128 | 107 | 2276 |
| Mayer, Gabriel. (See Smalstig, Frederick C., assignor.) | | | | | | |
| Mayer, Gabriel H., Philadelphia, Pa. Eyeglasses | 746,543 | Dec. 8 | 2231 | 511 | 107 | 1597 |
| Mayer, Ignatz. (See Railton, John, assignor.) | | | | | | |
| Mayer, Isidor, and J. Hübner, Vienna, Austria-Hungary. Cut-out or isolating valve | 745,874 | Dec. 1 | 1041 | 235 | 107 | 1321 |
| Mayer, Louis, Mankato, Minn. Friction-clutch | 739,434 | Sept. 22 | 3691 | 821, 822 | 106 | 838 |
| Mayer, Louis G., Cincinnati, Ohio Carriage-spring | 732,575 | June 30 | 5712 | 1269 | 104 | 2379 |
| Mayer, Otto F., Berlin, Germany. Cash-register | 723,475 | Mar. 24 | 3419 | 764 | 103 | 761 |
| Mayer, Robert, Sontheim-Heilbronn, A. N., Germany. Film and plate camera | 746,975 | Dec. 15 | 3057 | 701 | 107 | 1804 |
| Mayer, Theodore J. (See Gates, Elmer, assignor.) | | | | | | |
| Mayes, John F., Hillsboro, Tex. Map | 730,942 | June 16 | 2574 | 573 | 104 | 1700 |
| Mayes, John L., St. Louis, Mo. Railway-joint | 740,029 | Sept. 29 | 4817 | 1080 | 106 | 1097 |
| Mayeur, Jules, Sr. (See Dewerpe, Auguste, assignor.) | | | | | | |
| Mayhew, Frank J. (See Taylor, Horace H., assignor.) | | | | | | |
| Mayhew, James A., St. Louis, Mo. Support for strainer-bags | 745,875 | Dec. 1 | 1043 | 235 | 107 | 1321 |
| Mayhew, Lewis, Whatcom, Wash. Floating fish-trap and set-net | 735,545 | Aug. 4 | 984 | 208, 209 | 105 | 1190 |
| Mayhew, Lewis and S., Whatcom, Wash. Air-tight hot-water boiler | 731,380 | June 16 | 3404 | 760, 761 | 104 | 1867 |
| Mayhew, Sanford. (See Mayhew, Lewis and S.) | | | | | | |
| Mayland, George A. (See Schmidt and Mayland.) | | | | | | |
| Mayland, Rowland H. (See Carson, Robert J., assignor.) | | | | | | |
| Maynadier, James E., trustee. (See White, Joseph C., assignor.) | | | | | | |
| Maynard, Harold B., assignor to himself and I. Hawes, Brooklyn, N. Y. Needle-threader for sewing-machines | 726,083 | Apr. 21 | 3039 | 690 | 103 | 1843 |
| Maynard, John F., Plymouth, N. H. Striking-bag support | 730,943 | June 16 | 2575 | 574 | 104 | 1700 |
| Mayo, Alice T., Boston, Mass. Cake-cooler | 728,742 | May 19 | 3626 | 805 | 104 | 809 |
| Mayo, Benjamin F., Salem, Mass., assignor to United Shoe Machinery Company, Paterson, N. J. Heel-trimming machine for boots or shoes | 735,546 | Aug. 4 | 986 | 209 | 105 | 1190 |
| Mayo, Benjamin F., Salem, Mass., assignor, by mesne assignments, to United Shoe Machinery Company. Machine for inserting heel or sole protectors | 741,522 | Oct. 13 | 2171 | 483, 484 | 106 | 1729 |
| Mayo, Daniel L., Mount Sylvan, Tex. Whiffletree | 726,722 | Apr. 28 | 4288 | 968 | 103 | 2111 |
| Mayo, George D., Franklin, N. H. Knitting-machine | 726,178 | Apr. 21 | 3211 | 728, 729, 730, 731, 732 | 103 | 1879 |
| Mayo, George D., Franklin, N. H. Thread-feeding mechanism for knitting-machines | 726,229 | Apr. 21 | 3312 | 751, 752, 753 | 103 | 1900 |
| Mayo, George D., assignor to Mayo Knitting Machine and Needle Co., Franklin, N. H. Knitting-machine | 745,449 | Dec. 1 | 257 | 60,61 | 107 | 1154 |
| Mayo Knitting Machine and Needle Co. (See Mayo, George D., assignor.) | | | | | | |
| Mayo Knitting Machine and Needle Company. (See Ames, Arthur N., assignor.) | | | | | | |
| Mayo, Samuel P., *et al.* (See Vaughan, Robert M., assignor.) | | | | | | |
| Mayo, Thomas H., Melrose Highlands, Mass. Machine for making heels | 734,584 | July 28 | 3479 | 813, 814 | 105 | 784 |
| Mayotte, Philis, assignor of one-half to J. S. Lindsay, Escanaba, Mich. Window-sash attachment | 722,526 | Mar. 10 | 1628 | 359 | 103 | 365 |
| Mayr, Walter A. (See Corlett, Robert S., assignor.) | | | | | | |
| Mays, Charles E., *et al.* (See Lasswell, William H., assignor.) | | | | | | |
| Mays, James M., Pittsburg, Pa. Curtain-fixture | 739,554 | Sept. 22 | 3878 | 869 | 106 | 878 |
| Maytag, Fred L. (See Austin, Ernest J., assignor.) | | | | | | |
| Maytag, Fred L. (See Snyder, Howard, assignor.) | | | | | | |
| Maytrott, Henry, assignor to Manhattan Brass Company, New York, N. Y. Gas heater or stove | 745,287 | Nov. 24 | 4815 | 1050 | 107 | 1068 |
| McAda, James N., Campbellton, Tex. Cotton chopper and cultivator | 723,542 | Mar. 24 | 3523 | 788 | 103 | 782 |
| McAdam, John V., St. Louis, Mo. Apparatus for making blue-prints | 730,553 | June 9 | 1875 | 419 | 104 | 1531 |
| McAdams, Sylvester L., Beaverfalls, Pa. Pressure-regulator | 746,560 | Dec. 8 | 2260 | 518 | 107 | 1603 |
| McAdams, Sylvester L., assignor to A. R. Martin and J. R. Book, Beaverfalls, and R. Herman, Crafton, Pa. Coupling for air or other ducts | 746,360 | Dec. 8 | 1921 | 439 | 107 | 1528 |
| McAdams, William A., Brooklyn, N. Y. Casting-machine | 721,381 | Feb. 24 | 3702 | 842, 843 | 102 | 1653 |
| McAfee, Morgan E., Atlanta, Ga. Tool for holding abrading material | 734,927 | July 28 | 4135 | 963 | 105 | 919 |
| McAleer, Edward J., Sharpsville, Pa. Apparatus for separating and collecting impurities from metallurgical-furnace gases | 725,352 | Apr. 14 | 1729 | 389 | 103 | 1550 |
| McAlister, A. W. (See Partington, William L., assignor.) | | | | | | |
| McAllister, Daniel B., South Boston, Mass. Tobacco-pipe | 739,101 | Sept. 15 | 3061 | 679 | 106 | 686 |
| McAllister, Edwin J., Newark, N. J. Circuit-controller | 737,949 | Sept. 1 | 781 | 171, 172 | 106 | 171 |
| McAllister, James A., assignor of fifty-one one-hundredths to R. C. Finch, Indianapolis, Ind. Smoke-consuming furnace | 727,410 | May 5 | 1086 | 238 | 104 | 234 |
| McAlpine, George A., Newport News, Va. Marking implement | 726,086 | Apr. 21 | 3045 | 692 | 103 | 1844 |
| McAnanny, Frank W. (See Chellis and McAnanny.) | | | | | | |
| McAndrews, John P. (See Hood, Hiram Q., assignor.) | | | | | | |
| McArdle, John. (See Jarrell, Edwin, assignor.) | | | | | | |
| McArthur, Cyrus W., and F. Cazin, Denver, Colo. Crushing-rolls | 737,130 | Aug. 25 | 3903 | 867 | 105 | 1864 |
| McAuley Automatic Trap Company. (See McAuley, Robert G., assignor.) | | | | | | |
| McAuley, Robert G., Pittsburg, Pa. Heating apparatus | 724,918 | Apr. 7 | 920 | 211 | 103 | 1366 |
| McAuley, Robert G., assignor to McAuley Automatic Trap Company, Pittsburg, Pa. Controlling-valve for traps | 724,318 | Mar. 31 | 5025 | 1126 | 103 | 1107 |

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| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| McAuliffe, John W., Providence, R. I. Sanitary trap | 743,094 | Nov. 3 | 532 | 115 | 107 | 112 |
| McAuliffe, Thomas, Fall River, Mass. Weft-feeler for replenishing looms | 720,457 | Feb. 10 | 1920 | 437 | 102 | 1244 |
| McAuliffe, Thomas, and J. T. Bolton, Fall River, Mass. Loom weft-feeler | 719,491 | Feb. 3 | 146 | 33 | 102 | 855 |
| McAuliffe, Thomas H., and J. W. Hogan, Lynn, Mass., assignors to United Shoe Machinery Company, Paterson, N. J., and Boston, Mass. Lasting-machine | 726,087 | Apr. 21 | 3046 | 692 | 103 | 1845 |
| McAuliffe, Timothy, Lawrence, Mass. Antisnarling-motion for spinning-mules | 735,996 | Aug. 11 | 1836 | 394 | 105 | 1392 |
| McBean, Duncan D., New York, N. Y. Sheeting-driver | 741,588 | Oct. 13 | 2306 | 516 | 106 | 1757 |
| McBean, Duncan D., New York, N. Y. Masonry water-stopper | 741,589 | Oct. 13 | 2307 | 516 | 106 | 1757 |
| McBean, Duncan D., New York, N. Y. Sheeting | 745,452 | Dec. 1 | 269 | 62, 63 | 107 | 1156 |
| McBean, Duncan D., New York, N. Y. Pilot-sheeting | 745,453 | Dec. 1 | 270 | 63 | 107 | 1156 |
| McBean, Duncan D., New York, N. Y. Subaqueous working-chamber | 745,454 | Dec. 1 | 272 | 64, 65 | 107 | 1157 |
| McBean, Duncan D., New York, N. Y. Coffer-dam and foundation | 745,455 | Dec. 1 | 274 | 65, 66 | 107 | 1157 |
| McBean, Duncan D., New York, N. Y. Subaqueous tunnel | 745,456 | Dec. 1 | 275 | 67 | 107 | 1158 |
| McBean, Duncan D., New York, N. Y. Subaqueous tunnel | 745,457 | Dec. 1 | 278 | 68 | 107 | 1158 |
| McBennett, Patrick, Marengo, Ill. Wagon-pole tip | 719,840 | Feb. 3 | 774 | 181 | 102 | 987 |
| McBerty, Frank R., Evanston, assignor to Western Electric Company, Chicago, Ill. Connection-counter for telephone-lines. (Reissue) | 12,185 | Dec. 22 | 4838 | 1092 | 107 | 2220 |
| McBerty, Frank R., Evanston, and F. H. Loveridge, assignors to Western Electric Company, Chicago, Ill. Machine for sealing incandescent lamps | 734,734 | July 28 | 3775 | 881, 882 | 105 | 844 |
| McBerty, Fred P., assignor, by mesne assignments, to Peerless Electric Company, Warren, Ohio. Armature-winding apparatus | 727,182 | May 5 | 682 | 147 | 104 | 148 |
| McBerty, Fred P., assignor to Peerless Electric Company, Warren, Ohio. Alternating-current motor | 727,411 | May 5 | 1088 | 239 | 104 | 235 |
| McBeth, Warren F., assignor of three-fourths to N. E. Crothers, J. S. Dennis, and E. C. Bogardus, Paxton, Ill. Steering-gear for traction-engines | 721,724 | Mar. 3 | 126 | 28 | 103 | 28 |
| McBride, John, Sr., Philadelphia, Pa. Machine for conveying, trimming, and transferring coal, &c | 730,554 | June 9 | 1876 | 419, 420 | 104 | 1531 |
| McBride, Miles, Braddock, Pa. Trolley | 729,957 | June 2 | 803 | 179 | 104 | 1290 |
| McBride, Robert, *et al.* (See Fender, John B., assignor.) | | | | | | |
| McBride, Thomas C., Philadelphia, Pa. Feed-water-heating system | 731,064 | June 16 | 2811 | 626 | 104 | 1748 |
| McBride, Thomas C., Philadelphia, Pa. Feed-water heater | 731,065 | June 16 | 2814 | 627 | 104 | 1748 |
| McBride, William T., Frankfort, Ind. Rail-joint and cross-tie | 721,218 | Feb. 24 | 3427 | 778 | 102 | 1594 |
| McBride, William T., Frankfort, Ind. Rail-tie | 721,219 | Feb. 24 | 3429 | 779 | 102 | 1594 |
| McCabe, Frank J., Shelton, Conn. Locking compasses | 732,106 | June 30 | 4789 | 1068 | 104 | 2186 |
| McCabe, Jeff D., and W. Hancock, assignors to said Hancock, J. Thomas, and T. M. Bryan, Woodbury, Tenn. Combined shaft-support and rein-holder | 737,762 | Sept. 1 | 380 | 81, 82 | 106 | 84 |
| McCabe, Peter, New York, N. Y. Attachment for window-sashes or sliding doors | 728,277 | May 19 | 2753 | 611 | 104 | 626 |
| McCabe, Thomas, Jr., Homestead, Pa. Nut-lock | 734,349 | July 21 | 3061 | 721 | 105 | 681 |
| McCabe, William, Mansfield, Tenn. Dump-car | 735,129 | Aug. 4 | 157 | 35 | 105 | 1015 |
| McCabe, William L., Seattle, Wash. Hoist | 721,067 | Feb. 17 | 2065 | 704 | 102 | 1500 |
| McCabe, William L., Seattle, Wash. Endless conveyer | 721,725 | Mar. 3 | 127 | 28, 29 | 103 | 28 |
| McCabe, William L., Seattle, Wash. Portable conveyer | 735,564 | Aug. 4 | 1026 | 217, 218 | 105 | 1198 |
| McCabe, William L., Seattle, Wash. Portable conveyer | 742,717 | Oct. 27 | 4471 | 1012 | 106 | 2237 |
| McCadden, George, St. Cloud, Minn. Cooling apparatus for internal-combustion engines | 748,001 | Dec. 29 | 5009 | 1132 | 107 | 2280 |
| McCaffery, David, New York, N. Y. Car sash and panel cleaner and polisher | 725,119 | Apr. 14 | 1307 | 294 | 103 | 1462 |
| McCaffery, James, *et al.* (See Traver, Philip C., assignor.) | | | | | | |
| McCaffrey, Peter W., assignor to Union Ore Extraction and Reduction Company, Denver, Colo. Precipitating apparatus | 728,126 | May 12 | 2452 | 546 | 104 | 540 |
| McCaffrey, Peter W., assignor to Union Ore Extraction and Reduction Company, Denver, Colo. Means for precipitating dissolved metals | 728,746 | May 19 | 3631 | 806 | 104 | 810 |
| McCaffrey, Peter W., assignor to Union Ore Extraction and Reduction Company, Denver, Colo. Apparatus for the precipitation of metals from solutions | 730,385 | June 9 | 1568 | 349 | 104 | 1463 |
| McCahon, Alexander, St. Joseph, Mo. Rotary explosive-engine | 746,870 | Dec. 15 | 2857 | 658 | 107 | 1758 |
| McCain, Alexander, and T. C. Grierson, Eveleth, Minn. Ore-conveyer | 745,368 | Dec. 1 | 99 | 23 | 107 | 1122 |
| McCain, Samuel S., California, Pa. Cable-grip | 720,458 | Feb. 10 | 1921 | 438 | 102 | 1245 |
| McCall, Charles S. (See Smith, Peter J., assignor.) | | | | | | |
| McCall, Florence, Washington, D. C. Safety device for bath-tubs | 730,953 | June 16 | 2604 | 579 | 104 | 1705 |
| McCall, Harry M., assignor to Pittsburg Gas Engine Company, Pittsburg, Pa. Starting-valve for explosive-engines | 718,574 | Jan. 13 | 2014 | 439 | 102 | 448 |
| McCall, Harry M., assignor to Pittsburg Gas Engine Company, Pittsburg, Pa. Electric igniter for hydrocarbon-engines | 728,747 | May 19 | 3633 | 807 | 104 | 810 |
| McCall, Harry M., assignor to Pittsburg Gas Engine Company, Pittsburg, Pa. Governor. | 728,748 | May 19 | 3634 | 807 | 104 | 811 |
| McCalley, James, and H. L. Collman, Mount Etna, Iowa. Rotary steam-engine | 725,580 | Apr. 14 | 2148 | 487 | 103 | 1641 |
| McCallum, George L., Newerf, Pa. Device for changing the angle of blades of propellers. | 734,468 | July 21 | 3266 | 768 | 105 | 723 |
| McCallum, James, Worcester, Mass. Pressing attachment for beaming-machines | 725,120 | Apr. 14 | 1309 | 295 | 103 | 1462 |
| McCallum, James, Aurora, Ill. Wagon-wheel | 727,825 | May 12 | 1899 | 424 | 104 | 422 |
| McCallum, James, Aurora, Ill. Cast-metal wheel | 727,826 | May 12 | 1900 | 424 | 104 | 422 |
| McCallum, John, Harefield, assignor to United Asbestos Company, Limited, London, England. Packing for stuffing-boxes | 732,579 | June 30 | 5723 | 1270 | 104 | 2381 |
| McCallum, William M., Amherst, Canada. Core-making machine | 736,618 | Aug. 18 | 2964 | 651, 652 | 105 | 1648 |
| McCalmont, Frederick J., Boone, Iowa. Coaling device for engine-tenders | 737,131 | Aug. 25 | 3904 | 867, 868 | 105 | 1864 |
| McCambridge, John. (See Smith and McCambridge.) | | | | | | |
| McCanless, David M., Asheville, N. C. Paper-hanging machine | 718,015 | Jan. 6 | 942 | 209 | 102 | 203 |
| McCann, Eli B., Westplains, Mo. Shuttle for use with sewing-awls | 744,595 | Nov. 17 | 3472 | 749 | 107 | 770 |
| McCann, Harry, Hamilton, Canada. Box-plate and attachment therefor | 737,950 | Sept. 1 | 787 | 172 | 106 | 173 |
| McCann, Patrick J., and J. H. Brassel, Shingleton, Mich. Rail chair and joint | 746,127 | Dec. 8 | 1497 | 334 | 107 | 1440 |
| McCargo, Grant. (See Fisher, Henry W., assignor.) | | | | | | |
| McCarley, James W. (See Kimbrough, Watkins, and McCarley.) | | | | | | |
| McCarroll, Samuel H., Providence, R. I. Plunger-elevator | 742,891 | Nov. 3 | 126 | 29 | 107 | 28 |
| McCarter, John G. (See Drake and Folsom, assignors.) | | | | | | |
| McCarter, Louis N., assignor of one-half to R. S. Newbold & Son Co., Norristown, Pa., Pipe-cutting machine | 734,427 | July 21 | 3193 | 751, 752 | 105 | 708 |
| McCarter, William A., Topeka, Kans. Dental clamp | 722,033 | Mar. 3 | 703 | 156 | 103 | 152 |
| McCarter, William C., Duluth, Minn. Check-book stub | 741,407 | Oct. 13 | 1946 | 431 | 106 | 1682 |
| McCarthy, Daniel J. (See Woodruff and McCarthy.) | | | | | | |
| McCarthy, Felix, Pottstown, Pa. Exhaust relief-valve | 737,446 | Aug. 25 | 4517 | 1012, 1013 | 105 | 1995 |
| McCarthy, James, and J. M. Palmer, Chicago, Ill. Sawing-machine | 738,623 | Sept. 8 | 2150 | 472 | 106 | 478 |
| McCarthy, James B., Detroit, Mich. Electric-fuse holder | 745,969 | Dec. 1 | 1207 | 271 | 107 | 1357 |
| McCarthy, James J., Chicago, Ill. Car-roof | 718,145 | Jan. 13 | 1163 | 258 | 102 | 265 |
| McCarthy, John B., *et al.* (See Maheu, Victor, assignor.) | | | | | | |
| McCarthy, Michael, Brockton, Mass. Brush | 735,797 | Aug. 11 | 1452 | 312 | 105 | 1308 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | Spec. | Drg. | Vol. | Page. |
| McCarthy, Mitchell F. (See Schumacher, Frederick, assignor.) | | | | | | |
| McCarthy, Morris A. (See Gambee and McCarthy.) | | | | | | |
| McCarthy, Nellie, Holyoke, Mass. Hair-crimper | 720,726 | Feb. 17 | 2459 | 563 | 102 | 1370 |
| McCarthy, William B., New Haven, Conn. Curtain-pole socket | 736,619 | Aug. 18 | 2970 | 653 | 105 | 1649 |
| McCarthy, William F., Holyoke, Mass. Dust-pan | 735,565 | Aug. 4 | 1030 | 218 | 105 | 1199 |
| McCarthy, William J., assignor of one-half to W. D. Mellen, Peshtigo, and H. J. Callaghan, Greenbay, Wis. Telegraph-pole | 719,841 | Feb. 3 | 775 | 181 | 102 | 987 |
| McCartie, Richard D., New York, N. Y. Bookbinding | 747,209 | Dec. 15 | 3500 | 794 | 107 | 1904 |
| McCartney, Albert. (See Wright and McCartney.) | | | | | | |
| McCartney, Frederick W., *et al.* (See Mouat, Laurence, Jr., assignor.) | | | | | | |
| McCartney, James, San Francisco, Cal. Water-heater | 719,356 | Jan. 27 | 3497 | 778 | 102 | 785 |
| McCartney, Robert L., Ottumwa, Iowa. Trolley for electric railways | 722,608 | Mar. 10 | 1767 | 394 | 103 | 395 |
| McCarty, Alfred L., Des Moines, Iowa. Bracket for sash-curtain rods | 726,970 | May 5 | 284 | 64 | 104 | 61 |
| McCarty, Andrew M., *et al.* (See Brigham, Isaac N., assignor.) | | | | | | |
| McCarty, Harry C., Williamsport, Pa. Journal-box | 743,653 | Nov. 10 | 1704 | 360 | 107 | 380 |
| McCarty, John, Goochland County, Va. Mattress | 717,703 | Jan. 6 | 326 | 78 | 102 | 71 |
| McCarty, Lewis C., assignor of one-half to W. S. Dalton, Portland, Ark. Non-refillable bottle | 735,130 | Aug. 4 | 158 | 36 | 105 | 1015 |
| McCarty, William F. M., Rockyridge, Md., assignor of one-third to A. Coppell, New York, N. Y. Apparatus for decomposing water by electrolysis | 721,068 | Feb. 17 | 3067 | 704 | 102 | 1501 |
| McCarty, William F. M., Rockyridge, Md., assignor of one-third to A. Coppell, New York, N. Y. Decomposing water by electrolysis | 736,868 | Aug. 18 | 3442 | 763 | 105 | 1747 |
| McCarville, Peter A., Clare, Iowa. Intermittent grip device | 717,704 | Jan. 6 | 327 | 79 | 102 | 71 |
| McCarville, Peter A., Clare, Iowa. Gate | 717,705 | Jan. 6 | 328 | 79 | 102 | 71 |
| McCarville, Peter A., Fort Dodge, Iowa. Gate | 746,871 | Dec. 15 | 2859 | 658 | 107 | 1759 |
| McCaslin, Samuel P., Haigler, Nebr. Fastener for frameless wire gates | 726,332 | Apr. 28 | 3540 | 802 | 103 | 1962 |
| McCaughey, Bernard, Pawtucket, R. I. Grate | 725,757 | Apr. 21 | 2491 | 565 | 103 | 1730 |
| McCaughey, Bernard, Pawtucket, R. I. Drip-pan | 744,785 | Nov. 24 | 3845 | 828 | 107 | 868 |
| McCaughey, David W., Chicago, Ill. Dirigible torpedo | 743,315 | Nov. 3 | 959 | 209 | 107 | 206 |
| McCaughey, Homer K., assignor of one-half to G. F. Emmert, Denver, Colo. Bucket-dumping apparatus | 748,558 | Dec. 29 | 6056 | 1371 | 107 | 2510 |
| McCaughtry, Samuel, Washington, Pa. Glass-press | 726,088 | Apr. 21 | 3050 | 692, 693 | 103 | 1845 |
| McCauley, Albert J., St. Louis, Mo. Dust-guard for railway journal-boxes | 724,919 | Apr. 7 | 922 | 211 | 103 | 1367 |
| McCauley, James E., and W. C. Renie, Hoquiam, Wash. Feed-finger for saw-sharpeners | 746,982 | Dec. 15 | 3074 | 703, 704 | 107 | 1807 |
| McCaulley, Eli S., assignor of one-half to T. U. Frantz, Montour, Iowa. Bow-facing oar | 738,695 | Sept. 8 | 2309 | 508 | 106 | 509 |
| McCausey, Joseph W., *et al.* (See Warner, Isaac M., assignor.) | | | | | | |
| McCausland, George H., Philadelphia, Pa. Baker's oven | 730,681 | June 9 | 2111 | 469 | 104 | 1582 |
| McChesney, Ellis M. (See Stone, Gardner H., assignor.) | | | | | | |
| McClain, Edward L., Greenfield, Ohio. Back-band hook | 729,387 | May 26 | 4773 | 1056 | 104 | 1060 |
| McClain, Harry O., Lincoln, Nebr. Locomotive-tender gate | 742,718 | Oct. 27 | 4473 | 1012 | 106 | 2237 |
| McClain, James B., Washington, Pa. Telephone-receiver holder | 717,895 | Jan. 6 | 719 | 161 | 102 | 153 |
| McClanahan, Joseph E., Waukomis, Okla. Ter. Animal-poke | 731,937 | June 23 | 4437 | 989 | 104 | 2100 |
| McClanahan, Walter R., and C. E. Bell, Terra Alta, W. Va. Cuspidor | 718,650 | Jan. 20 | 2147 | 468 | 102 | 489 |
| McClane, John. (See Orr, William H., assignor.) | | | | | | |
| McClaskey, Isaac O., Millvale, Pa. Railway splice-bar | 729,388 | May 26 | 4774 | 1056 | 104 | 1060 |
| McClay, David G., Santa Ana, Cal. Mail-bag | 748,209 | Dec. 29 | 5405 | 1229 | 107 | 2365 |
| McClean, Samuel N., Washington, Iowa. Magazine bolt-gun | 723,706 | Mar. 24 | 3802 | 855, 856, 857 | 103 | 841 |
| McClean, Samuel N., Washington, Iowa. Gas-operated firearm | 735,131 | Aug. 4 | 160 | 36, 37 | 105 | 1016 |
| McCleery, Martin B., Pleasantville, Ohio. Gas-stove | 731,203 | June 16 | 3072 | 682 | 104 | 1798 |
| McClellan, Charles E., Zanesville, Ohio. Bottle | 744,385 | Nov. 17 | 3125 | 671 | 107 | 698 |
| McClellan, Othie L., Woodside, N. Y. Metal-bending machine | 747,466 | Dec. 22 | 3971 | 893 | 107 | 2024 |
| McClelland, Alva R., Clinton, Mo. Mail-box | 731,804 | June 23 | 4210 | 938 | 104 | 2050 |
| McClellon, James M., Everett, Mass. Coke receiver and loader | 734,592 | July 28 | 3503 | 818 | 105 | 789 |
| McClellon, James M., Everett, Mass. Steam-boiler | 741,529 | Oct. 13 | 2191 | 487 | 106 | 1734 |
| McClellon, James M., Everett, Mass. Boiler | 742,477 | Oct. 27 | 4033 | 905 | 106 | 2144 |
| McClinchie, Uriah, Brooklyn, N. Y. Hand-strap | 744,973 | Nov. 24 | 4180 | 903 | 107 | 937 |
| McClintock, Edward, Merriam Park, Minn. Locomotive-engineer's alarm | 738,468 | Sept. 8 | 1861 | 405, 406 | 106 | 414 |
| McClintock, John N., Boston, Mass. Apparatus for the purification of water or sewage | 719,357 | Jan. 27 | 3499 | 778, 779 | 102 | 785 |
| McCloskey, William, Essex, assignor of one-half to E. I. Scully, Windsor, Ontario, Canada. Cultivator | 740,030 | Sept. 29 | 4818 | 1080, 1081 | 106 | 1098 |
| McClue, William J., *et al.* (See Johnson, Bernard F., assignor.) | | | | | | |
| McCluer, F. W., *et al.* (See Williams, Jackson, assignor.) | | | | | | |
| McCluer, Jay, assignor of one-half to A. Bilz, Springlake, Mich. Igniter for gasolene-engines | 726,971 | May 5 | 285 | 64 | 104 | 61 |
| McClune, Cassius M., Galeton, Pa. Car-coupling | 731,318 | June 16 | 3288 | 732 | 104 | 1843 |
| McClure, Albert H., Majestic, Colo. Track device for inclined ways | 745,069 | Nov. 24 | 4386 | 947 | 107 | 980 |
| McClure, Edward, assignor of one-half to F. P. Smith, Chicago, Ill. Elevator-door | 723,707 | Mar. 24 | 3811 | 857 | 103 | 842 |
| McClure, Edward, assignor of one-half to F. P. Smith, Chicago, Ill. Elevator-door | 723,708 | Mar. 24 | 3812 | 857 | 103 | 842 |
| McClure, Elmer P. (See Buchner and McClure.) | | | | | | |
| McClure, John W., Detroit, Mich. Oil-pump for cylinder lubrication | 722,184 | Mar. 3 | 969 | 215 | 103 | 205 |
| McClure, Thomas C. (See Ramsdell, Joshua, assignor.) | | | | | | |
| McCluskey, Thomas D. (See Reynolds and McCluskey.) | | | | | | |
| McColl, Francis P., Brooklyn, N. Y. Apparatus for soldering cans | 717,896 | Jan. 6 | 721 | 161 | 102 | 154 |
| McColl, Irving G. (See Klaiber and McColl.) | | | | | | |
| McColl, Jay R., Knoxville, Tenn., assignor to Wheeler & Baldwin, Chicago, Ill. Garment-supporter | 729,785 | June 2 | 481 | 107 | 104 | 1226 |
| McCollister, Irvin, Wilmington, Ohio. Onion-seeder | 723,294 | Mar. 24 | 3053 | 686 | 103 | 689 |
| McCollister, Irvin, Wilmington, Ohio. Onion-setter | 726,972 | May 5 | 287 | 65 | 104 | 62 |
| McCollough, William A., Lamoille, Iowa. Stubble-cutter attachment for corn-harvesters | 737,650 | Sept. 1 | 173 | 37 | 106 | 41 |
| McCollum, Thomas E., Toronto, Canada. Car-brake | 738,833 | Sept. 15 | 2591 | 572 | 106 | 587 |
| McComas, Charles F., Denison, Tex. Valve-stem packing | 737,447 | Aug. 25 | 4518 | 1013 | 105 | 1996 |
| McComas, Mark, Greenville, Tex. Fluid-pressure brake | 722,128 | Mar. 3 | 862 | 192, 193 | 103 | 185 |
| McComb, William, Larchmont Manor, N. Y., assignor to W. S. Elliott, Pittsburg, Pa. Water-column | 748,515 | Dec. 29 | 5962 | 1352 | 107 | 2488 |
| McComb, William L., assignor of one-third to J. E. Johnson, Windom, Minn. Folding umbrella | 739,437 | Sept. 22 | 3695 | 822 | 106 | 839 |
| McCombs, Henry W., Boston, Mass. Drain-cock-operating mechanism | 728,491 | May 19 | 3147 | 696 | 104 | 707 |
| McCombs, Henry W., Boston, Mass. Steam-cylinder drain-valve. (Reissue) | 12,136 | July 28 | 4358 | 1013 | 105 | 963 |
| McCombs, Lz, assignor of one-half to W. E. McNutt, Homer City, Pa. Dough-raiser | 728,962 | May 26 | 4026 | 895 | 104 | 905 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | Spec. | Dr'g. | Vol. | Page. |
| McConnan, Charles S., Liverpool, England. Flier for spinning, twisting, winding, balling, or like machinery | 721,457 | Feb. 24 | 3837 | 873 | 102 | 1680 |
| McConnell Asbestos Company. (See Zitt, William M., assignor.) | | | | | | |
| McConnell, Atlas F., Nashville, Tenn. Sand-car | 748,210 | Dec. 29 | 5406 | 1229, 1230 | 107 | 2365 |
| McConnell, Edward, Richmond, Va. Railway-tie | 725,758 | Apr. 21 | 2492 | 565 | 103 | 1730 |
| McConnell, Edward, Richmond, Va. Surveyor's slate and book holder | 733,415 | July 14 | 1291 | 305 | 105 | 290 |
| McConnell, Edward E., Pittsburg, assignor of two-thirds to S. D. Lauffer and J. K. Gallagher, Irwin, Pa. Mine-car wheel | 727,183 | May 5 | 683 | 147 | 104 | 148 |
| McConnell, Francis, Chicago, Ill. Glove | 730,471 | June 9 | 1737 | 389 | 104 | 1500 |
| McConnell, James H., Evanston, Ill. Ventilating and cooling apparatus | 739,438 | Sept. 22 | 3696 | 823 | 106 | 839 |
| McConnell, Niven, Donora, Pa. Water-cooled valve | 734,081 | July 21 | 2547 | 594 | 105 | 573 |
| McConnell, R., *et al.* (See Scruggs, Robert C., assignor.) | | | | | | |
| McConnell, Strubbe, Atlanta, Ga. Headlight-support and adjusting mechanism therefor | 731,938 | June 23 | 4438 | 989, 990 | 104 | 2100 |
| McConville, Daniel, *et al.* (See Born, Marion A., assignor.) | | | | | | |
| McConville, William J., Lawrence, Mass. Dyeing raw stock | 718,651 | Jan. 20 | 2149 | 469 | 102 | 490 |
| McConway & Torley Company. (See Kelso, Joseph, assignor.) | | | | | | |
| McConway and Torley Company. (See Mason, Stephen C., assignor.) | | | | | | |
| McConway and Torley Company. (See McConway, William, Jr., assignor.) | | | | | | |
| McConway & Torley Company. (See McConway and Kelso, assignors.) (Reissue.) | | | | | | |
| McConway, William, Jr., assignor to McConway and Torley Company, Pittsburg, Pa. Coupling | 738,729 | Sept. 8 | 2357 | 517, 518 | 106 | 519 |
| McConway, William, Jr., assignor to McConway & Torley Company, Pittsburg, Pa. Car-coupling | 746,561 | Dec. 8 | 2261 | 518 | 107 | 1604 |
| McConway, William, and J. Kelso, assignors to McConway & Torley Company, Pittsburg, Pa. Car-coupling. (Reissue) | 12,175 | Nov. 24 | 4893 | 1068 | 107 | 1083 |
| McCook, William T., Richmond, Va. Pneumatic hammer | 719,027 | Jan. 27 | 2858 | 641, 642 | 102 | 651 |
| McCool, Howard S., Chicago, Ill. Bar-severing machine | 717,706 | Jan. 6 | 329 | 79 | 102 | 72 |
| McCool, James M., Montgomery, Ala. Refrigerator | 724,319 | Mar. 31 | 5027 | 1126, 1127 | 103 | 1108 |
| McCool, Peter F., Butler, Pa. Locking-joint for rails | 734,130 | July 21 | 2646 | 625 | 105 | 592 |
| McCord, Alvin C., Chicago, Ill. Air-duct | 738,745 | Sept. 8 | 2399 | 527 | 106 | 529 |
| McCord & Company. (See Davis, Nathan H., assignor.) | | | | | | |
| McCord & Company. (See Denegre, Edward, assignor.) | | | | | | |
| McCord & Company. (See Weaver, William, assignor.) | | | | | | |
| McCord, Luther A., Laurens, S. C. Collapsible box | 728,749 | May 19 | 3635 | 808 | 104 | 811 |
| McCord, Wesley, and T. Gill, Lisbon, Ohio. Machine for cleaning and polishing tin plates | 721,458 | Feb. 24 | 3839 | 873 | 102 | 1680 |
| McCorkle, John C., assignor to one-half to J. R. Phelan, Alliance, Nebr. Hay-stacker | 744,932 | Nov. 24 | 4098 | 883 | 107 | 921 |
| McCormack, George E., East Bridgewater, Mass., assignor, by mesne assignments, to J. C. Rhodes & Co., Portland, Me., and New Bedford, Mass. Eyelet. (Reissue) | 12,111 | May 19 | 3775 | 842 | 104 | 839 |
| McCormack, George E., assignor of one-half to G. E. Rollins, East Bridgewater, Mass. Leather boot or shoe | 730,555 | June 9 | 1878 | 420 | 104 | 1531 |
| McCormack, Ira A., Cleveland, Ohio. Street-sweeping device | 719,492 | Feb. 3 | 148 | 33, 34 | 102 | 855 |
| McCormick, Charles H., York, Pa. Still | 723,709 | Mar. 24 | 3813 | 858 | 103 | 843 |
| McCormick, Charles J., Akron, Ohio. Automatic gas shut-off | 743,016 | Nov. 3 | 382 | 82 | 107 | 80 |
| McCormick, Charles W., Emporia, Kans., assignor to Lamson Consolidated Store Service Company, Newark, N. J. Store-service apparatus | 721,320 | Feb. 24 | 3583 | 815 | 102 | 1628 |
| McCormick, Charles W., Emporia, Kans., assignor to Lamson Consolidated Store Service Company, Newark, N. J. Store-service apparatus | 726,089 | Apr. 21 | 3052 | 693 | 103 | 1846 |
| McCormick, Charles W., Emporia, Kans., assignor to Lamson Consolidated Store Service Company, Newark, N. J. Store-service apparatus | 726,090 | Apr. 21 | 3053 | 693 | 103 | 1846 |
| McCormick, Frank J. (See Platt and Ratchford, assignors.) | | | | | | |
| McCormick, Harry T. and W. H., Winchester, Ky. Grass-seed stripper | 727,412 | May 5 | 1089 | 239 | 104 | 235 |
| McCormick Harvesting Machine Company. (See Coler, Peter P., assignor.) | | | | | | |
| McCormick Harvesting Machine Company. (See Curtiss, Charles E., assignor.) | | | | | | |
| McCormick Harvesting Machine Company. (See Haskins, James H., assignor.) | | | | | | |
| McCormick Harvesting Machine Company. (See Johnston, Edward A., assignor.) | | | | | | |
| McCormick Harvesting Machine Company. (See Macphail, James, assignor.) | | | | | | |
| McCormick Harvesting Machine Company. (See Macphail, Roland B., assignor.) | | | | | | |
| McCormick Harvesting Machine Company. (See Pridmore, John W., assignor.) | | | | | | |
| McCormick Harvesting Machine Company. (See Pridmore and Benjamin, assignors.) | | | | | | |
| McCormick, John, Wilmerding, Pa. Water-gage | 719,842 | Feb. 3 | 776 | 181 | 102 | 988 |
| McCormick, John H. (See Bush and McCormick.) | | | | | | |
| McCormick, John H., Columbus, Ohio. Draw-gear and buffing apparatus | 719,949 | Feb. 3 | 952 | 222 | 102 | 1025 |
| McCormick, John H., Columbus, Ohio. Draw-gear and buffing apparatus | 738,469 | Sept. 8 | 1867 | 406, 407 | 106 | 415 |
| McCormick, John H., Dayton, Ohio, assignor, by mesne assignments, to National Cash Register Company, Jersey City, N. J. Cash-register | 721,459 | Feb. 24 | 3841 | 874, 875 | 102 | 1681 |
| McCormick, John J., and L. H. McDaniel, Brooklyn, N. Y. Amusement device | 732,427 | June 30 | 5422 | 1203 | 104 | 2318 |
| McCormick, John M., Newton, N. C. Trace-fastener | 739,203 | Sept. 15 | 3232 | 716 | 106 | 722 |
| McCormick, Joseph L., *et al.* (See O'Brien, Dennis J., assignor.) | | | | | | |
| McCormick, Ulysses S., assignor to White Light Burner Company, Buffalo, N. Y. Gas-burner | 720,275 | Feb. 10 | 1607 | 368 | 102 | 1179 |
| McCormick, William E., assignor to International Telephone Manufacturing Company, Chicago, Ill. Coil-box for telephones | 718,371 | Jan. 13 | 1576 | 348 | 102 | 353 |
| McCormick, William E., assignor to International Telephone Manufacturing Company, Chicago, Ill. Telephone-switchboard | 730,287 | June 9 | 1395 | 307 | 104 | 1428 |
| McCormick, William H. (See McCormick, Harry T. and W. H.) | | | | | | |
| McCormick, William H., New Westminster, and R. D. Macphail, Vancouver, Canada. Bicycle coaster-brake | 721,598 | Feb. 24 | 4116 | 937 | 102 | 1741 |
| McCormick, William W., San Francisco, Cal. Hand or like containing-bag | 742,478 | Oct. 27 | 4036 | 906 | 106 | 2145 |
| McCourt, John J., Oakland, Nebr. Automatic stock-watering apparatus | 730,144 | June 2 | 1118 | 251 | 104 | 1354 |
| McCowen, William A. (See Stadel, John M., assignor.) | | | | | | |
| McCoy, Cyrus M., Stanhope, Iowa. Wagon-brake | 731,117 | June 16 | 2917 | 648 | 104 | 1768 |
| McCoy, George R., Osceola, Nebr. Harness | 741,156 | Oct. 13 | 1422 | 325 | 106 | 1568 |
| McCoy, John, Apple Valley, Ga. Cultivator | 722,319 | Mar. 10 | 1235 | 275 | 103 | 279 |
| McCoy, John, assignor to York Card and Paper Company, York, Pa. Wall-paper-printing machine | 735,285 | Aug. 4 | 482 | 96, 97 | 105 | 1084 |
| McCoy, John F., New Orleans, La. Base-ball bat | 729,639 | June 2 | 207 | 47 | 104 | 1170 |
| McCoy, William J., McKees Rocks, Pa. Rail-joint | 729,389 | May 26 | 4774 | 1057 | 104 | 1060 |
| McCracken, Adam, Dunedin, New Zealand. Manufacturing safety-explosives | 730,288 | June 9 | 1397 | ..... | 104 | 1428 |
| McCracken, Isaac E., Chicago, Ill. Boring-mill for locomotive-tires, &c | 727,413 | May 5 | 1091 | 239, 240 | 104 | 236 |
| McCracken, Isaac E., assignor of one-half to J. L. Woods, Chicago, Ill. Sliding door | 730,289 | June 9 | 1398 | 307 | 104 | 1428 |

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| McCray, Warren T., Kentland, Ind., assignor to American Grain Purifier Constructing Company, Pierre, S. D. Apparatus for purifying grain or other products | 737,855 | Sept. 1 | 578 | 127<br>128 | 106 | 128 |
| McCrea, James L., Ottawa, assignor of one-half to G. E. Richardson, Stratford, Ontario, Canada. Merry-go-round | 719,602 | Feb. 3 | 341 | 79 | 102 | 893 |
| McCready, Charles A. (See Bausset, Arthur de, assignor.) | | | | | | |
| McCready, Thomas B., Butler, Ohio. Hinge | 745,887 | Dec. 1 | 1063 | 239 | 107 | 1325 |
| McCrossin, E. J., *et al.* (See Renfroe, Thomas N., assignor.) | | | | | | |
| McCrossin, James, Fergus Falls, Minn. Cross-line buckle | 737,448 | Aug. 25 | 4519 | 1013 | 105 | 1996 |
| McCuaig, Clarence J. (See Hibshman, Henry E., assignor.) | | | | | | |
| McCue, Charles T. (See Hickok and McCue.) | | | | | | |
| McCue, Charles T., assignor to Premier Manufacturing Company, Hartford, Conn. Wheel-bearing | 748,090 | Dec. 29 | 5185 | 1173 | 107 | 2319 |
| McCulley, William J., Detroit, Mich. Car-roof | 720,949 | Feb. 17 | 2846 | 651<br>652 | 102 | 1452 |
| McCulloch, Alexander G. and D. H., Winnebago City, Minn. Exhibitor | 719,843 | Feb. 3 | 777 | 182 | 102 | 988 |
| McCulloch, Belle B., New York, N. Y. Apparel-belt | 739,902 | Sept. 29 | 4566 | 1037 | 106 | 1042 |
| McCulloch, David H. (See McCulloch, Alexander G. and D. H.) | | | | | | |
| McCulloch, Edward J., *et al.* (See Birmingham, John P., assignor.) | | | | | | |
| McCulloch, James M., Garston, England. Rotary engine | 717,897 | Jan. 6 | 722 | 162 | 102 | 154 |
| McCulloch, John H., Newville, Pa. Hypodermic syringe | 743,743 | Nov. 10 | 1859 | 392 | 107 | 413 |
| McCulloh, Thomas G., *et al.* (See O'Brien, Arthur, assignor.) | | | | | | |
| McCullough, Albert D. (See Holtz, Albert, assignor.) | | | | | | |
| McCullough, John. (See Lobenthal and McCullough.) | | | | | | |
| McCullough, John, Newark, N. J. Switching mechanism for double-filament electric lamps | 740,369 | Sept. 29 | 5424 | 1221 | 106 | 1223 |
| McCullum, James F., New York, N. Y. Fastener for tool-handles | 742,213 | Oct. 27 | 3561 | 794 | 106 | 2046 |
| McCully, Otto F., West Mansfield, Ohio. Railway-track joint | 730,556 | June 9 | 1879 | 420 | 104 | 1531 |
| McCully, Richard P., Brooklyn, N. Y. Stethoscope or the like | 717,898 | Jan. 6 | 724 | 162 | 102 | 154 |
| McCully, Richard P., Brooklyn, N. Y. Surgical instrument | 735,400 | Aug. 4 | 685 | 147 | 105 | 1126 |
| McCune, Harry T., Braddock, Pa. Dentist's spreading-screw elevator | 723,710 | Mar. 24 | 3814 | 858 | 103 | 843 |
| McCurdy, John P., assignor to J. W. Reedy Elevator Mnfg. Co., Chicago, Ill. Brake for elevators | 729,640 | June 2 | 208 | 47 | 104 | 1171 |
| McCuskey, Virgil L., Cameron, W. Va. Tiling-block for buildings | 720,727 | Feb. 17 | 2460 | 563 | 102 | 1370 |
| McCutchen, John, Jr., assignor of one-half to J. A. Dahlberg, Enid, Okla. Ter. Game apparatus | 735,132 | Aug. 4 | 172 | 37 | 105 | 1018 |
| McCutchen, John A., Heriot, S. C. Seed-planter and fertilizer-distributer | 736,425 | Aug. 18 | 2586 | 567 | 105 | 1570 |
| McCutcheon, John B., assignor to Nichols & Shepard Company, Battlecreek, Mich. Threshing-machine | 723,711 | Mar. 24 | 3815 | 858 | 103 | 843 |
| McCutcheon, John B., assignor to Nichols & Shepard Company, Battlecreek, Mich. Threshing-machine | 723,712 | Mar. 24 | 3817 | 859 | 103 | 843 |
| McCutcheon, John B., assignor to Nichols & Shepard Company, Battlecreek, Mich. Threshing-machine | 723,713 | Mar. 24 | 3819 | 859 | 103 | 844 |
| McDaniel, Edward F., assignor of one-half to A. C. Schlichter, Otisco, Ind. Animal-trap | 729,786 | June 2 | 483 | 107 | 104 | 1227 |
| McDaniel, James H., Millsap, Tex. Combined seed-planter and fertilizer-distributer | 737,856 | Sept. 1 | 581 | 128 | 106 | 128 |
| McDaniel, James H., Millsap, Tex. Combined seed-planter and fertilizer-distributer | 737,857 | Sept. 1 | 587 | 129 | 106 | 129 |
| McDaniel, Joseph A., Letts, Iowa. Air-heating radiator | 727,668 | May 12 | 1585 | 358 | 104 | 358 |
| McDaniel, Leroy H. (See McCormick and McDaniel.) | | | | | | |
| McDaniel, Milton C., St. Paul, Minn. Bolt-holding tool | 744,930 | Nov. 24 | 4096 | 883 | 107 | 920 |
| McDaniel, William A., assignor of one-half to C. W. Scherer, Fort Wayne, Ind. Carpet-beater | 738,470 | Sept. 8 | 1869 | 407 | 106 | 416 |
| McDaniels, Frank, Minneapolis, Minn. Shade-cloth trimmer | 727,667 | May 12 | 1582 | 357<br>358 | 104 | 357 |
| McDermott, John, West Berkeley, Cal. Oil-burner | 722,530 | Mar. 10 | 1635 | 361 | 103 | 367 |
| McDermott, John, West Berkeley, Cal. Oil heater and vaporizer | 725,862 | Apr. 21 | 2682 | 611 | 103 | 1770 |
| McDermott, John, West Berkeley, Cal. Air-draft heater | 741,608 | Oct. 13 | 2340 | 524 | 106 | 1765 |
| McDermott, John, West Berkeley, Cal., assignor, by mesne assignments, to American Crude Oil Burner Company. Oil-burning apparatus | 727,414 | May 5 | 1093 | 240 | 104 | 236 |
| McDermott, John, assignor to American Crude Oil Burner Co., San Francisco, Cal. Oil-burner | 727,415 | May 5 | 1094 | 240 | 104 | 236 |
| McDevitt, Nellie, Bellevue, Pa. Creasing device for garments | 721,822 | Mar. 3 | 295 | 65 | 103 | 65 |
| McDevitt, William, assignor of two-thirds to W. W. Hollingsworth and W. Devereux, Philadelphia, Pa. Means for protecting the exposed or live parts of electric switches, cut-outs, &c | 733,502 | July 14 | 1437 | 337<br>338 | 105 | 322 |
| McDole, Vernerd R., Aurora, Ill., and A. Hollenbeck, Walworth, Wis. Corn-harvesting machine | 725,759 | Apr. 21 | 2493 | 566<br>567 | 103 | 1730 |
| McDonald, Alexander, Ashley, Ohio. Folding poultry-crate | 726,333 | Apr. 28 | 3541 | 802<br>803 | 103 | 1963 |
| McDonald, Benjiman T., Jr., and J. M., Pleasanthill, Mo. Wagon-scale | 720,728 | Feb. 17 | 2461 | 563<br>564 | 102 | 1370 |
| McDonald, Charles B., Chicago, Ill. Can-body machine | 718,860 | Jan. 20 | 2537 | 564<br>565 | 102 | 569 |
| McDonald, Charles B., Chicago, Ill. Bail-ear for metallic vessels | 746,733 | Dec. 15 | 2579 | 593 | 107 | 1696 |
| McDonald, Charles C., Elyria, G. L. Brown, Lorain, and W. H. Teare, Cleveland, Ohio; said Teare assignor to said McDonald. Capping-block | 739,697 | Sept. 22 | 4156 | 929 | 106 | 938 |
| McDonald, Frances C., Chicago, Ill. Hose-supporter | 739,698 | Sept. 22 | 4157 | 929 | 106 | 939 |
| McDonald, Frances C., Chicago, Ill. Garment-supporter | 746,983 | Dec. 15 | 3075 | 704 | 107 | 1808 |
| McDonald, George, *et al.* (See Nance, Turner H., assignor.) | | | | | | |
| McDonald, James C., assignor of one-half to E. W. Gates, Sidney, N. Y. Fire-raking apparatus | 719,358 | Jan. 27 | 3502 | 779 | 102 | 786 |
| McDonald, James J. (See Auble, James H., assignor.) | | | | | | |
| McDonald, James M. (See McDonald, Benjiman T., Jr., and J. M.) | | | | | | |
| McDonald, Jno. H., *et al.* (See Reilly, Bernard J., assignor.) | | | | | | |
| McDonald, John J., Port Madison, Wash. Winch for fish-boats | 738,348 | Sept. 8 | 1636 | 354 | 106 | 368 |
| McDonald, John J., Berkeley, and A. D. McLean, San Francisco, Cal. Oil-burner | 719,686 | Feb. 3 | 485 | 110 | 102 | 924 |
| McDonald, John R. (See Vreeland and McDonald.) | | | | | | |
| McDonald, Michael, Benson, Minn. Harrow | 739,699 | Sept. 22 | 4158 | 929 | 106 | 939 |
| McDonald, Mortimer F., Omaha, Nebr. Feathering water-wheel | 744,786 | Nov. 24 | 3846 | 828 | 107 | 868 |
| McDonald, Patrick, Larimer, Pa. Four-way cock | 717,899 | Jan. 6 | 725 | 162 | 102 | 155 |
| McDonald, Patrick, Larimer, Pa. Four-way cock | 743,744 | Nov. 10 | 1861 | 392<br>393 | 107 | 414 |
| McDonald, Patrick J., Pittsburg, Pa. Conveyer and shield used in connection with crucible smelting-furnaces | 727,416 | May 5 | 1096 | 240<br>241 | 104 | 237 |
| McDonald, Samuel J., Gallatin, Mo. Farriery-machine | 718,271 | Jan. 13 | 1400 | 312 | 102 | 317 |
| McDonald, Simon J., Detour, Mich. Combined heating-drum and fuel-economizer | 730,386 | June 9 | 1570 | 349 | 104 | 1464 |
| McDonald, William H., North Platte, Nebr. Piano-pedal extension | 740,302 | Sept. 29 | 5300 | 1193 | 106 | 1197 |

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| McDonell, John L. (See Emmons, Charles W., assignor.) | | | | | | |
| McDonnell, George P., St. Louis, Mo., assignor to American Electric Company. Electrical interrupter | 720,729 | Feb. 17 | 2462 | 564<br>565 | 102 | 1371 |
| McDonnell, Hugh, Detroit, Mich. Caster | 726,447 | Apr. 28 | 3745 | 849 | 103 | 2004 |
| McDonnell, John. (See Rees and McDonnell.) | | | | | | |
| McDonner, Charley, Wausaukee, Wis. Shade and curtain-pole holder | 734,131 | July 21 | 2648 | 625 | 105 | 593 |
| McDonner, Charley, Wausaukee, Wis., assignor to J. Hrbacek, Bessemer, Mich. Metal-shearing machine | 736,536 | Aug. 18 | 2795 | 612 | 105 | 1615 |
| McDonough, John J., Schenectady, N. Y. Drill-chuck | 725,273 | Apr. 14 | 1582 | 358 | 103 | 1520 |
| McDougal, John L. (See Paul, Thomas, assignor.) | | | | | | |
| McDougal, Robert P., Yonkers, N. Y. Horseshoe-pad | 731,414 | June 16 | 3468 | 775 | 104 | 1879 |
| McDougall, Isaac S., Manchester, England. Steam-trap | 719,028 | Jan. 27 | 2864 | 642 | 102 | 652 |
| McDougall, Isaac S., Manchester, England. Apparatus for heating and moistening air | 740,303 | Sept. 29 | 5301 | 1193<br>1194 | 106 | 1197 |
| McDougall, Walter, Brooklyn, N. Y. Reel-holder | 721,460 | Feb. 24 | 3845 | 875 | 102 | 1682 |
| McDougall, William A., London, Canada. Frame for displaying lace curtains, rugs, embroideries, tapestries, or the like | 745,288 | Nov. 24 | 4817 | 1051 | 107 | 1068 |
| McDowall, Robert M., Castleford, England. Armored concrete floor | 734,593 | July 28 | 3505 | 818 | 105 | 790 |
| McDowell, Adam C., *et al.* (See Brigham, Isaac N., assignor.) | | | | | | |
| McDowell, J. Milan, *et al.* (See Winget, Marion A., assignor.) | | | | | | |
| McDowell, James L., assignor of one-half to W. C. Gordon, St. Louis, Mo. Steering-gear for vehicles | 732,025 | June 23 | 4625 | 1034 | 104 | 2139 |
| McDowell, John A., *et al.* (See Winget, Marion A., assignor.) | | | | | | |
| McDowell, Malcolm, Chicago, Ill. Means for handling puddled iron | 727,669 | May 12 | 1586 | 358<br>359 | 104 | 358 |
| McDowell, Malcolm, Chicago, Ill. Ladle-truck | 733,253 | July 7 | 990 | 238 | 105 | 207 |
| McDowell Manufacturing Company. (See Craven, James F., assignor.) | | | | | | |
| McDowell, Robert G., Anaconda, Mont. Work-box | 742,719 | Oct. 27 | 4474 | 1012 | 106 | 2237 |
| McDowell, Samuel E., *et al.* (See Smallbone, Harry E., assignor.) | | | | | | |
| McDowell, William G. (See Saxton and McDowell.) | | | | | | |
| McDuff, Edward W., *et al.* (See Bland and Gilligan, assignors.) | | | | | | |
| McDuff, Frank J., *et al.* (See Bland and Gilligan, assignors.) | | | | | | |
| McDuffie, Henry, Jr., Fayetteville, N. C. Time gas-valve | 733,254 | July 7 | 992 | 238 | 105 | 270 |
| McDuffie, William. (See Appleman and McDuffie.) | | | | | | |
| McEachern, Dougald, Rossland, assignor of one-half to W. B. Pool, Ferguson, Canada. Boot or shoe cleaner | 718,861 | Jan. 20 | 2544 | 566 | 102 | 571 |
| McEachern, Dougald, Rossland, assignor of one-half to W. B. Pool, Ferguson, British Columbia, Canada. Lamp-hanger | 737,951 | Sept. 1 | 790 | 172 | 106 | 173 |
| McElfatrick, Samuel, Princeton, Ky. Railway-tie | 730,787 | June 9 | 2280 | 506 | 104 | 1618 |
| McElfresh, Franklin P., Jackson, Iowa. Bicycle-brake | 717,900 | Jan. 6 | 726 | 162 | 102 | 155 |
| McElfresh, Franklin P., Jackson Township, Shelby county, Iowa. Hernial truss | 746,872 | Dec. 15 | 2860 | 659 | 107 | 1759 |
| McElhany, Grant, Watertown, S. D. Bucket | 737,449 | Aug. 25 | 4520 | 1013 | 105 | 1996 |
| McElney, William A. (See Allen and McElney.) | | | | | | |
| McElree, William H., Dunkirk, Ohio. Cultivator attachment | 733,734 | July 14 | 1833 | 433 | 105 | 404 |
| McElroy, George, Plain City, Utah. Automatically-operated gate | 730,290 | June 9 | 1399 | 307<br>308 | 104 | 1429 |
| McElroy, James F. (See Kelley and McElroy.) | | | | | | |
| McElroy, James F., Albany, N. Y. Electric-lighting system | 720,604 | Feb. 17 | 2218 | 514<br>515 | 102 | 1320 |
| McElroy, James F., Albany, N. Y. Electric train-lighting system | 720,605 | Feb. 17 | 2223 | 515<br>516 | 102 | 1321 |
| McElroy, James F., Albany, N. Y. Electric-lighting system | 720,606 | Feb. 17 | 2234 | 516 | 102 | 1323 |
| McElroy, James F., Albany, N. Y. Electric-lighting system | 720,607 | Feb. 17 | 2239 | 516<br>517 | 102 | 1324 |
| McElroy, James F., Albany, N. Y. Electric train-lighting | 720,608 | Feb. 17 | 2244 | 517 | 102 | 1325 |
| McElroy, James F., Albany, N. Y. Electric-lighting system | 720,609 | Feb. 17 | 2249 | 518 | 102 | 1326 |
| McElroy, James F., Albany, N. Y. Electric-lighting system | 720,610 | Feb. 17 | 2254 | 518 | 102 | 1327 |
| McElroy, James F., Albany, N. Y. Electric heater | 735,798 | Aug. 11 | 1453 | 312 | 105 | 1308 |
| McElroy, James F., assignor to Consolidated Car-Heating Company, Albany, N. Y. Device for attaching dynamos to railway-cars | 731,382 | June 16 | 3408 | 761<br>762 | 104 | 1868 |
| McElroy, James F., assignor to Consolidated Car Heating Company, Albany, N. Y. Electric-lighting system | 739,204 | Sept. 15 | 3234 | 716 | 106 | 723 |
| McElroy, James F., assignor to Consolidated Car Heating Company, Albany, N. Y. Automatic switch | 739,205 | Sept. 15 | 3236 | 716 | 106 | 723 |
| McElroy, James F., assignor to Consolidated Car Heating Company, Albany, N. Y. Electric car-heater | 743,654 | Nov. 10 | 1707 | 360 | 107 | 380 |
| McElroy, James F., assignor to Consolidated Car Heating Company, Albany, N. Y. Valve | 743,745 | Nov. 10 | 1861 | 393 | 107 | 414 |
| McElroy, James F., assignor to Consolidated Car Heating Company, Albany, N. Y. Electric heater | 744,974 | Nov. 24 | 4182 | 904 | 107 | 937 |
| McElroy, James F., assignor to Consolidated Car Heating Company, Albany, N. Y. Suspension of dynamo-electric machines | 744,975 | Nov. 24 | 4183 | 904 | 107 | 938 |
| McElroy, James F., assignor to Consolidated Car-Heating Company, Albany, N. Y. Electric heating element | 746,128 | Dec. 8 | 1498 | 335 | 107 | 1440 |
| McElroy, James F., assignor to Consolidated Car Heating Company, Albany, N. Y. Electric lighting system | 746,361 | Dec. 8 | 1923 | 439<br>440 | 107 | 1529 |
| McElroy, James F., assignor to Consolidated Car Heating Company, Albany, N. Y. Electric-lighting system | 747,889 | Dec. 22 | 4763 | 1076 | 107 | 2205 |
| McElroy, James F., assignor to Consolidated Car Heating Company, Albany, N. Y. Brush-holder for electrical machines | 747,890 | Dec. 22 | 4767 | 1077 | 107 | 2205 |
| McElroy, Patrick J., Cambridge, Mass. Hypodermic syringe | 730,557 | June 9 | 1880 | 420 | 104 | 1532 |
| McElwee, George D., Gloster, Miss. Self-acting fan for hammocks or cots | 722,034 | Mar. 3 | 704 | 157 | 103 | 152 |
| McElwee, James F., Yorkville, S. C., and C. S. Lowthorp, Hope, Ark. Sash-fastener | 745,888 | Dec. 1 | 1063 | 239 | 107 | 1325 |
| McEwan, William W., Whippany, N. J. Paper manufacture | 734,928 | July 28 | 4138 | 963 | 105 | 919 |
| McEwen, Charles E., Lowell, Wash. Gate-latch | 730,954 | June 16 | 2605 | 580 | 104 | 1705 |
| McFadyen, Daniel W. (See Howley and McFadyen.) | | | | | | |
| McFall, James R., St. Louis, Mo. Hose-coupling | 735,401 | Aug. 4 | 687 | 147 | 105 | 1127 |
| McFall, James R., assignor of one-half to W. L. Witwer, St. Louis, Mo. Railway-track | 721,907 | Mar. 3 | 462 | 101 | 103 | 102 |
| McFarland, Arthur W. (See Jones and McFarland.) | | | | | | |
| McFarland, David C., Lebanon, Oreg. Stove-support | 745,648 | Dec. 1 | 606 | 140 | 107 | 1227 |
| McFarland, George W., Wilmerding, Pa. Preparing razor-strops | 722,129 | Mar. 3 | 863 | ------ | 103 | 185 |
| McFarland, James D., Jr., Fruitvale, assignor of one-half to J. Bruckman, San Francisco, Cal. Mechanical movement | 717,901 | Jan. 6 | 727 | 163 | 102 | 155 |
| McFarland, James D., Jr., assignor of one-half to J. Bruckman, San Francisco, Cal. Gas-engine | 734,237 | July 21 | 2840 | 666 | 105 | 635 |

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| McFarland, James D., Jr., assignor of one-half to J. Bruckman, San Francisco, Cal. Igniting attachment for explosive-engines | 735,997 | Aug. 11 | 1842 | 395 | 105 | 1393 |
| McFarland, James D., Jr., Fruitvale, assignor of one-half to J. Bruckman, San Francisco, Cal. Piston-rod joint | 736,136 | Aug. 11 | 2090 | 448 | 105 | 1445 |
| McFarland, Julian, Brenham, Tex. Axle-box for vehicles | 728,597 | May 19 | 3368 | 746 | 104 | 754 |
| McFarland, Thomas A. (See Beebe and McFarland.) | | | | | | |
| McFarland, Thomas W., Chicago, Ill. Digester | 741,550 | Oct. 13 | 2196 | 487 | 106 | 1734 |
| McFarland, Walter A., assignor to Woodruff Manufacturing Company, Washington, D. C. Filing-case | 739,700 | Sept. 22 | 4159 | 929, 930 | 106 | 939 |
| McFarlane, James L., Peshtigo, Wis. Storm-protector for grain-ricks | 720,611 | Feb. 17 | 2259 | 518 | 102 | 1328 |
| McFarlane, John, and C. P. Pushaw, Washington, D. C., assignors to Brilliant Hydro-carbon Burner Company, Camden, N. J. Oil-burner | 746,562 | Dec. 8 | 2263 | 519 | 107 | 1604 |
| McFarlane, John, and C. P. Pushaw, Washington, D. C., assignors to Brilliant Hydro-carbon Burner Company, Camden, N. J. Oil-burner | 748,516 | Dec. 29 | 5963 | 1352, 1353 | 107 | 2488 |
| McFatrich, James B., Chicago, Ill. Skirt-gage | 728,598 | May 19 | 3369 | 747 | 104 | 754 |
| McFatridge, Charley M., Moravia, Iowa. Wire-bender | 734,350 | July 21 | 3064 | 721 | 105 | 682 |
| McFeaters, George H., Johnstown, Pa. Insulator hanger or bracket | 746,362 | Dec. 8 | 1928 | 440 | 107 | 1530 |
| McFerrin, John J., assignor of one-half to J. J. Valdenaire, Indianapolis, Ind. Lifting-jack | 742,126 | Oct. 20 | 3392 | 757 | 106 | 1996 |
| McFethries, John, assignor to National Loom and Wire Company, Springfield, Mass. Selvaging device for wire-looms | 745,230 | Nov. 24 | 4706 | 1027 | 107 | 1046 |
| McFetridge, John R. (See Wright, William A., assignor.) | | | | | | |
| McGahan, Frederick L., St. Louis, Mo. Nut-lock | 746,363 | Dec. 8 | 1929 | 440 | 107 | 1530 |
| McGahey, Calvert R., assignor of one-half to J. A. McGahey, Elkton, Va. Engine-governor | 730,472 | June 9 | 1738 | 389 | 104 | 1500 |
| McGahey, John A. (See McGahey, Calvert R., assignor.) | | | | | | |
| McGarrity, John R., Lansing, Iowa. Machine for polishing shoes | 721,823 | Mar. 3 | 296 | 66 | 103 | 65 |
| McGaughey, John, Clearfield, Pa. Ballot-box | 733,070 | July 7 | 658 | 159 | 105 | 139 |
| McGaughey, Samuel J., and J. Sheerer, Blackhawk, Pa. Barrel | 740,031 | Sept. 29 | 4820 | 1081 | 106 | 1098 |
| McGaw, John B. (See Bryant and McGaw.) | | | | | | |
| McGeachie, Thomas. (See Kelly, John, assignor.) | | | | | | |
| McGee, Clara. (See Elliott, Milo A., assignor.) | | | | | | |
| McGee, Joseph A., Big Spring, Ind. Sparker for gas-engines | 741,923 | Oct. 20 | 2947 | 657 | 106 | 1908 |
| McGehee, John H., and L. J. Lathwesen, San Jose, Cal. Carrier | 728,403 | May 19 | 2987 | 657 | 104 | 674 |
| McGehee, John H., and M. T. Brower, San Jose, Cal. Carton | 728,404 | May 19 | 2988 | 657 | 104 | 674 |
| McGill, George W., Riverdale-on-the-Hudson, N. Y. Fabric-pin | 718,272 | Jan. 13 | 1404 | 312, 313 | 102 | 317 |
| McGill, George W., Riverdale-on-Hudson, N. Y. Button and button-fastening | 726,448 | Apr. 28 | 3747 | 849 | 103 | 2005 |
| McGill, George W., Riverdale-on-Hudson, N. Y. Spring-clip for holding papers, &c. | 731,597 | June 23 | 3832 | 854 | 104 | 1972 |
| McGill, George W., Riverdale-on-Hudson, N. Y. Spring-clip | 731,598 | June 23 | 3834 | 854 | 104 | 1972 |
| McGill, George W., Riverdale-on-Hudson, N. Y. Spring-clip | 741,408 | Oct. 13 | 1947 | 431 | 106 | 1682 |
| McGill, George W., Riverdale-on-Hudson, N. Y. Spring-clip | 742,892 | Nov. 3 | 128 | 29 | 107 | 28 |
| McGill, George W., Riverdale-on-Hudson, N. Y. Spring-clip | 742,893 | Nov. 3 | 130 | 30 | 107 | 29 |
| McGill, George W., Riverdale-on-Hudson, N. Y. Spring-clip | 743,017 | Nov. 3 | 384 | 83 | 107 | 80 |
| McGill, George W., Riverdale-on-Hudson, N. Y. Spring-clip. (Reissue) | 12,171 | Nov. 17 | 3702 | 798, 799 | 107 | 822 |
| McGill, George W., Riverdale, N. Y. Spring-wire paper-clip | 721,069 | Feb. 17 | 3068 | 705 | 102 | 1501 |
| McGill, George W., Riverdale, N. Y. Spring wire paper-clip | 721,070 | Feb. 17 | 3070 | 705 | 102 | 1501 |
| McGill, George W., Riverdale, N. Y. Spring wire paper-clip | 721,071 | Feb. 17 | 3071 | 705 | 102 | 1502 |
| McGill, George W., Riverdale, N. Y. Fabric-pin | 734,735 | July 28 | 3780 | 882 | 105 | 844 |
| McGill, George W., Riverdale, N. Y. Wire clip | 735,566 | Aug. 4 | 1031 | 218 | 105 | 1199 |
| McGill, Michael J., Park City, Utah. Cable-lubricator | 733,255 | July 7 | 993 | 239 | 105 | 208 |
| McGill, Thomas, Paterson, N. J. Hose-handler and clamp | 735,799 | Aug. 11 | 1454 | 313 | 105 | 1308 |
| McGinn, Charles, New York, N. Y. Advertising-frame | 739,019 | Sept. 15 | 2896 | 643 | 106 | 653 |
| McGinn, Frank P., and C. H. Lee, Clinton, Iowa. Hat-fastener | 735,286 | Aug. 4 | 485 | 97 | 105 | 1084 |
| McGinnis, James, Baltimore, Md. Machine for forming can-bodies | 730,039 | June 2 | 946 | 212, 213 | 104 | 1320 |
| McGinty, Patrick. (See Batty, George, assignor.) | | | | | | |
| McGirr, Charles S., Junction City, Kans. Marking-machine | 721,522 | Feb. 24 | 3958 | 902 | 102 | 1705 |
| McGirr, Theodore G., Brooklyn, assignor to American Wrapping & Box Machine Company, New York, N. Y. Wrapping-machine | 740,457 | Oct. 6 | 140 | 28, 29 | 106 | 1276 |
| McGlashan, Charles W., East Otto, N. Y. Doubletree-clip | 734,736 | July 28 | 3781 | 883 | 105 | 845 |
| McGlaughlin, George T., *et al.* (See Wert, Martin, assignor.) | | | | | | |
| McGlaughlin, William G., *et al.* (See Wert, Martin, assignor.) | | | | | | |
| McGlinchy, John J. (See Auld, Hugh R., assignor.) | | | | | | |
| McGonagle, Arthur, East Orange, N. J., assignor of one-half to Thompson-Starrett Company, New York, N. Y. Steam-heating system | 729,390 | May 26 | 4775 | 1057 | 104 | 1060 |
| McGoron, John R., Terrace Park, Ohio. Grazing stake | 722,531 | Mar. 10 | 1636 | 361 | 103 | 367 |
| McGough, Samuel P., Chicago, Ill., assignor to Continuous Rail Joint Company of America. Railway-bumper | 725,274 | Apr. 14 | 1583 | 358 | 103 | 1520 |
| McGowan, Charles S., Desota, Iowa. Horseshoer's horse-holding machine | 735,567 | Aug. 4 | 1032 | 219 | 105 | 1199 |
| McGowan, Robert B., Cincinnati, Ohio. Governing device for steam-pumps | 730,682 | June 9 | 2113 | 469 | 104 | 1582 |
| McGowan, Robert W., Queenstown, Tasmania, Australia. Device for unstoppering aerated-water bottles | 734,929 | July 28 | 4139 | 964 | 105 | 919 |
| McGowan, Thomas, assignor of one-half to T. Sutcliffe, Stonington, Conn. Ash-sifter | 741,696 | Oct. 20 | 2520 | 563 | 106 | 1819 |
| McGowan, Thomson, *et al.* (See Frink and Lee, assignors.) | | | | | | |
| McGrath, James F., Newark, N. J. Casting crucible-steel ingots | 720,374 | Feb. 10 | 1783 | 404 | 102 | 1217 |
| McGrath, John D., Philadelphia, Pa. Dump-car | 748,299 | Dec. 29 | 5562 | 1268 | 107 | 2399 |
| McGrath, John T., Port Huron, Mich. Operating mechanism for turn-tables | 738,564 | Sept. 8 | 2043 | 445 | 106 | 454 |
| McGrath, John T., Fort Gratiot, Mich. Pneumatic flue-cutter | 747,565 | Dec. 22 | 4147 | 932 | 107 | 2065 |
| McGrath, Michael J., Brockton, Mass. Rotary edge-trimmer | 729,085 | May 26 | 4245 | 938 | 104 | 949 |
| McGrath, Peter J., Randolph, assignor to W. B. Arnold, North Abington, Mass. Stretcher or holder attachment for tree-legs | 728,750 | May 19 | 3637 | 808 | 104 | 811 |
| McGrath, Thomas J., assignor of one-half to J. Elmquist, Portland, Oreg. Indicator | 732,580 | June 30 | 5724 | 1271 | 104 | 2381 |
| McGrath, Thomas J., assignor of one-half to J. Elmquist, Portland, Oreg. Indicator | 732,581 | June 30 | 5725 | 1271 | 104 | 2382 |
| McGraw, Albert P., McGraw, N. Y. Corset | 741,697 | Oct. 20 | 2521 | 563 | 106 | 1820 |
| McGraw, James, Jr., Richmond, Va. Lock-washer | 731,599 | June 23 | 3836 | 855 | 104 | 1973 |
| McGregor, Allan L., assignor of one-half to J. C. Perry, Duluth, Minn. Vehicle-gear | 732,428 | June 30 | 5424 | 1204 | 104 | 2318 |
| McGregor, David W., Athens, Ga. Manifold device | 724,320 | Mar. 31 | 5029 | 1127 | 103 | 1108 |
| McGregor, James C., *et al.* (See Foley, James E., assignor.) | | | | | | |
| McGregor, William A., and A. C. Somers, Neame, La. Cushion device for nigger-bars | 722,320 | Mar. 10 | 1236 | 275 | 103 | 279 |
| McGrew, John N., Holton, Kans. Commode | 726,729 | Apr. 28 | 4303 | 971 | 103 | 2114 |
| McGriff, John C. F., Warren, Pa. Burial-receptacle | 735,998 | Aug. 11 | 1844 | 395 | 105 | 1394 |
| McGriff, John N., Anderson, Ind. Weather-strip | 733,071 | July 7 | 660 | 159 | 105 | 140 |
| McGuckin, Andrew, *et al.* (See Dixon, Frederic N., assignor.) | | | | | | |
| McGuiness, Benjamin F., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Loom | 737,002 | Aug. 25 | 3694 | 820 | 105 | 1821 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| McGuire, Edward P., assignor of one-half to A. W. Wishard, Indianapolis, Ind. Fruit jar holder | 719,128 | Jan. 27 | 3080 | 685 | 102 | 696 |
| McGuire, Elmer, Dayton, Ohio. Suspenders | 740,584 | Oct. 6 | 395 | 83 | 106 | 1331 |
| McGuire, Elwood W. (See McGuire, Henry I., assignor.) | | | | | | |
| McGuire, Henry I., Cincinnati, Ohio, assignor to E. W. McGuire, Richmond, Ind. Car-wheel | 722,378 | Mar. 10 | 1344 | 297 | 103 | 302 |
| McGuire, John, St. Louis, Mo. Fender | 719,029 | Jan. 27 | 2866 | 643 | 102 | 652 |
| McGuire, John F., assignor to B. F. Goodrich Company, Akron, Ohio. Wire-covered hose | 726,730 | Apr. 28 | 4304 | 972 | 103 | 2115 |
| McGuire Manufacturing Company *et al* (See Freeman, Clarence E., assignor.) | | | | | | |
| McGuire, Patrick, Chicago, and C. Wahl, West Chicago, Ill. Safety angle-cock for air-brakes | 733,503 | July 14 | 1446 | 339 | 105 | 322 |
| McGuire, Peter J., Blairsville, Pa., assignor to Champion Sanitary Enamel Ware Co. Molding-flask | 721,726 | Mar. 3 | 129 | 29 | 103 | 29 |
| McGuire, Peter J., Blairsville, Pa., assignor to Champion Sanitary Enamel Ware Co. Molding apparatus | 721,727 | Mar. 3 | 131 | 30 31 | 103 | 29 |
| McGuire, Peter J., Blairsville, Pa., assignor to Champion Sanitary Enamel Ware Co. Molding-flask | 721,728 | Mar. 3 | 134 | 31 | 103 | 30 |
| McGuire, Peter J., Blairsville, Pa., assignor to Champion Sanitary Enamel Ware Co. Ladle | 721,729 | Mar. 3 | 135 | 31 | 103 | 30 |
| McGuire, Peter J., Blairsville, Pa., assignor to Champion Sanitary Enamel Ware Co. Coring openings in the walls of cast hollow ware | 721,730 | Mar. 3 | 136 | 32 | 103 | 31 |
| McGuire, Peter J., Blairsville, assignor of three-fourths to W. H. Ritter, M. A. Berkimer, G. M. Graham, D. A. Slater, T. J. O'Brien, J. R. Baird, J. M. Maxwell, J. W. McKee, J. J. Feigel, W. M. Starr, G. N. Buckhalter, J. J. Kennelly, F. H. Goettler, A. M. Campbell, F. W. Chattin, E. C. Dodds, Butler, G. H. Hutchison, F. Neubert, E. S. Hutchison, Kittanning, E. A. Butler, Parkers Landing, H. Harkins, Homestead, F. Flanegin, Chautauqua Lake, and N. Tanner, Pittsburg, Pa. Burial-casket | 743,395 | Nov. 3 | 1145 | 242 | 107 | 242 |
| McGuire, William A., and T. D. Cobedesh, Braddock, Pa. Wrench | 738,565 | Sept. 8 | 2045 | 446 | 106 | 455 |
| McGwin, James, Washington, D. C., assignor of one-tenth to G. H. Chandlee, Chevy Chase, Md. Carpet-lining | 744,091 | Nov. 17 | 2559 | 548 | 107 | 574 |
| McHaffie, William, New York, N. Y. Power-transmitter | 719,030 | Jan. 27 | 2868 | 644 | 102 | 653 |
| McHale, Martin, Phoenix, and J. Trainner, Eholt, Canada. Clutch | 731,383 | June 16 | 3410 | 762 | 104 | 1869 |
| McIlroy, Johnston H., Chicago, Ill. Window | 735,399 | Aug. 11 | 1846 | 395<br>396 | 105 | 1394 |
| McIntire, Edward F., Salem, Mass. Shutter-fastener | 720,459 | Feb. 10 | 1923 | 438 | 102 | 1245 |
| McIntire, George A., assignor of one-half to J. A. O'Neil, Stamford, Conn. Dust-pan | 718,783 | Jan. 20 | 2406 | 534 | 102 | 542 |
| McIntire, Hervey H., South Bend, Ind. Photographic-printing apparatus | 727,679 | May 12 | 1580 | 359 | 104 | 359 |
| McIntire, Hervey H., South Bend, Ind. Photographic-printing apparatus. (Reissue) | 12,130 | July 7 | 1187 | 281<br>282 | 105 | 250 |
| McIntire, Hervey H., assignor to St. Joseph Loan & Trust Company, trustee, South Bend, Ind. Photographic-printing apparatus | 732,650 | June 30 | 5846 | 1295 | 104 | 2408 |
| McIntire, Mathilde S., Washington, D. C. Hair-waver | 748,407 | Dec. 29 | 5743 | 1311 | 107 | 2440 |
| McIntire, William H. (See Glaser and McIntire.) | | | | | | |
| McIntosh, Amos C. J. H., Eureka, Cal. Propeller | 736,137 | Aug. 11 | 2091 | 448<br>449 | 105 | 1445 |
| McIntosh, Henry, Sarnia, Canada, assignor of two-thirds to R. E. Moss, Port Huron, Mich. Brick-machine | 717,707 | Jan. 6 | 331 | 79<br>80<br>81 | 102 | 72 |
| McIntosh, Thomas A., *et al.* (See Perkins, William D., assignor.) | | | | | | |
| McIntyre, Frank, assignor to Eagle Pencil Company, New York, N. Y. Device for mounting penholders | 722,609 | Mar. 10 | 1768 | 394 | 103 | 395 |
| McIntyre, Frank, assignor to T. H. Joseph and J. J. Ehrenrich, New York, N. Y. Electric shade-holder | 737,651 | Sept. 1 | 174 | 37 | 106 | 41 |
| McIntyre, John, Davenport, Iowa. Flue-cap | 736,537 | Aug. 18 | 2798 | 612 | 105 | 1615 |
| McIntyre, John C., Hoopeston, assignor to Sprague Canning Machinery Company, Chicago, Ill. Machine for cutting green corn from the ear | 722,874 | Mar. 17 | 2286 | 512 | 103 | 515 |
| McIntyre, John C., Hoopeston, assignor to Sprague Canning Machinery Company, Chicago, Ill. Machine for removing the silk from green corn | 743,655 | Nov. 10 | 1708 | 361 | 107 | 380 |
| McIntyre, Syrenus A., Colorado Springs, Colo. Sanitary tent | 731,319 | June 16 | 3289 | 732<br>733 | 104 | 1844 |
| McIntyre, Thomas, Adelaide, South Australia, Australia. Gas-compressing machine | 740,771 | Oct. 6 | 734 | 166 | 106 | 1402 |
| McKaig, Eddy T., Chicago, Ill. Power-transmitter | 723,295 | Mar. 24 | 3055 | 687 | 103 | 690 |
| McKaig, Eddy T., Chicago, Ill. Car-seat movement | 731,204 | June 16 | 3073 | 682 | 104 | 1798 |
| McKaig, Eddy T., Chicago, Ill. Power-transmitter | 737,652 | Sept. 1 | 176 | ..... | 106 | 41 |
| McKaig, Eddy T., Chicago, Ill. Power-transmitter | 737,653 | Sept. 1 | 177 | 38 | 106 | 42 |
| McKaig, Eddy T., assignor to H. A. Wheeler, Chicago, Ill. Labeling machine | 722,035 | Mar. 3 | 706 | 157<br>158 | 103 | 152 |
| McKaig, Eddy T., assignor of one-half to J. K. Sheffy, Chicago, Ill. Car-seat movement | 731,205 | June 16 | 3075 | 682<br>683 | 104 | 1799 |
| McKay, Charles B., New York, N. Y. Swing | 718,784 | Jan. 20 | 2408 | 534 | 102 | 542 |
| McKay, Charles F., Minneapolis, Minn. Attachment for blue-flame oil-stoves | 742,214 | Oct. 27 | 3563 | 794 | 106 | 2046 |
| McKay, Gordon, Newport, R. I. Excavating apparatus | 730,558 | June 9 | 1881 | 421 | 104 | 1532 |
| McKay, Joseph, and G. L. Wenzell, Troy, N. Y. Garment-folding apparatus | 740,458 | Oct. 6 | 145 | 29, 30 | 106 | 1277 |
| McKay, Robert. (See Johnson and McKay.) | | | | | | |
| McKay, Thomas A., Ossineke, Mich. Horseshoe | 722,610 | Mar. 10 | 1769 | 394 | 103 | 395 |
| McKay, Walter G., Leadville, Colo. Hose attachment | 732,582 | June 30 | 5726 | 1271 | 104 | 2382 |
| McKay, William A. (See Bladon, James B., assignor.) | | | | | | |
| McKean, Edward, St. Louis, Mo. Sliding-door lock | 739,903 | Sept. 29 | 4567 | 1027 | 106 | 1043 |
| McKean, Frank, Guffey, Tex. Portable press for hay, &c | 741,060 | Oct. 13 | 1243 | 281<br>282 | 106 | 1533 |
| McKean, John O., assignor to Foster Machine Company, Westfield, Mass. Thread-guide for winding-machines | 748,300 | Dec. 29 | 5563 | 1269 | 107 | 2399 |
| McKechnie, James, Barrow-in-Furness, assignor to Vickers Sons & Maxim, Limited, Sheffield and London, England. Tubulous steam-generator | 740,032 | Sept. 29 | 4821 | 1081<br>1082 | 106 | 1099 |
| McKechnie, James, Barrow-in-Furness, assignor to Vickers Sons and Maxim, Limited, Sheffield, England. Tubulous steam-generator | 743,316 | Nov. 3 | 968 | 210 | 107 | 207 |
| McKechnie, Joseph F., Eleele, Hawaii. Car-stake pocket | 742,050 | Oct. 20 | 3212 | 718 | 106 | 1962 |
| McKechnie, Robert R., Cleveland, and G. H. Williams, South Brooklyn, assignors to W. F. Traves, Cleveland, Ohio. Clam-shell bucket | 747,210 | Dec. 15 | 3501 | 794<br>795 | 107 | 1904 |
| McKee, Andrew. (See Ross, McKee, Laird, and McKeown.) | | | | | | |
| McKee, Charles H., Pittsburg, Pa. Rail-joint | 741,061 | Oct. 13 | 1246 | 282 | 106 | 1533 |
| McKee, Charles H., Pittsburg, Pa. Rail-joint | 741,062 | Oct. 13 | 1247 | 282 | 106 | 1533 |
| McKee, Charles H., Pittsburg, Pa. Rail-joint | 741,063 | Oct. 13 | 1249 | 282<br>283 | 106 | 1534 |
| McKee, Clifford E. (See Andersen, Richard C., assignor.) | | | | | | |
| McKee, Emma E. (See McKee, Frank R. and E. E.) | | | | | | |
| McKee, Frank R. and E. E., Coshocton, Ohio. Well-drilling machine | 748,517 | Dec. 29 | 5966 | 1353<br>1354 | 107 | 2489 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page |
|---|---|---|---|---|---|---|
| McKee, H. M. (See Henry, Frederick, assignor.) | | | | | | |
| McKee, J. W., *et al.* (See McGuire, Peter J., assignor.) | | | | | | |
| McKee, John, Warren, Ohio. Clothes-line reel | 726,449 | Apr. 28 | 3749 | 849 | 103 | 2005 |
| McKee, John H. (See Smith and McKee.) | | | | | | |
| McKee, Joseph C. (See Foote and McKee.) | | | | | | |
| McKee, Joseph P., Allegheny, Pa. Telephone-notation register | 731,805 | June 23 | 4211 | 938 | 104 | 2051 |
| McKee, Robert S., *et al* (See Balsley, Charles H., assignor.) | | | | | | |
| McKee, Thomas M., Greenfield, Ind. Adjustable chair | 718,372 | Jan. 13 | 1577 | 348 | 102 | 353 |
| McKee, William A., Hinckley, N. Y. Acid-chamber for sulfite-works | 719,844 | Feb. 3 | 779 | 182, 183 | 102 | 988 |
| McKee, William C. (See Compliment and Robinson, assignors.) | | | | | | |
| McKeen, Thomas L., Easton, Pa. Railway-car buffer | 729,787 | June 2 | 484 | 107, 108 | 104 | 1227 |
| McKeen, Thomas L., Easton, Pa. Railway-siding buffer | 737,858 | Sept. 1 | 591 | 129 | 106 | 130 |
| McKeen, William R., Jr., Omaha, Nebr. Lever-controlling mechanism | 743,913 | Nov. 10 | 2166 | 467 | 107 | 477 |
| McKeever, George F., Allegheny, Pa. Barrel-head | 720,276 | Feb. 10 | 1609 | 368 | 102 | 1179 |
| McKellar, Charles W., Chicago, Ill. Device for the protection, preservation, and convenience in the keeping of brooms | 743,746 | Nov. 10 | 1862 | 393 | 107 | 414 |
| McKellar, Malcolm, Nesbitt, Canada. Cloth-measuring device | 746,984 | Dec. 15 | 3076 | 704 | 107 | 1808 |
| McKelvey, Samuel A., Pittsburg, Pa. Game apparatus | 724,920 | Apr. 7 | 923 | 211 | 103 | 1367 |
| McKenna, Alexander G. (See Wheeler and McKenna.) | | | | | | |
| McKenna Brothers Brass Company. (See McKenna, William H., assignor.) | | | | | | |
| McKenna, Charles E., Providence, R. I. Heel-plate | 728,751 | May 19 | 3638 | 808 | 104 | 811 |
| McKenna, William H., assignor to McKenna Brothers Brass Company, Limited, Pittsburg, Pa. Siphon filler | 742,894 | Nov. 3 | 132 | 30 | 107 | 29 |
| McKenna, William P., New York, N. Y. Safe | 723,714 | Mar. 24 | 3821 | 859 | 103 | 844 |
| McKenzie, Angus, Jamestown, N. Y. Voting-machine | 726,183 | Apr. 21 | 3239 | 734, 735 | 103 | 1884 |
| McKenzie, Angus, assignor to United States Voting Machine Company, Jamestown, N. Y. Voting-machine | 730,788 | June 9 | 2282 | 507 | 104 | 1618 |
| McKenzie, Burt, Saginaw, Mich. Horseshoe-calk | 724,489 | Apr. 7 | 134 | 32 | 103 | 1198 |
| McKenzie, Cyrus F., Storms, Ohio. Revolving rake | 718,373 | Jan. 13 | 1579 | 348 | 102 | 353 |
| McKenzie, John D., Fort Worth, Tex. Combined planter, cotton-chopper, and cultivator | 731,939 | June 23 | 4440 | 990 | 104 | 2101 |
| McKenzie, Joseph A., Brooklyn, N. Y. Game apparatus | 746,364 | Dec. 8 | 1931 | 440 | 107 | 1530 |
| McKeown, Robert. (See Ross, McKee, Laird, and McKeown.) | | | | | | |
| McKeown, T., *et al* (See Simon, William F., assignor.) | | | | | | |
| McKeown, William C., Utica, assignor of one-half to R. H. Thayer, Jr., Buffalo, N. Y. Valve | 734,351 | July 21 | 3064 | 722 | 105 | 682 |
| McKercher, George, assignor to McKercher Wrench & Tool Company, Jackson, Mich. Wrench | 729,504 | May 26 | 4963 | 1100 | 104 | 1101 |
| McKercher Wrench & Tool Company. (See McKercher, George, assignor.) | | | | | | |
| McKerrow, Charles A., Manchester, England. Reviving hydrated silicates | 726,091 | Apr. 21 | 3055 | 693 | 103 | 1847 |
| McKerry, John N., *et al.* (See Mackenzie, Herbert, assignor.) | | | | | | |
| McKethan, Alfred A., Fayetteville, N. C. Apparatus for distilling wood | 741,157 | Oct. 13 | 1423 | 325 | 106 | 1569 |
| McKibben, Charles R., Pittsburg, Pa. Machine for manipulating automatic hammers | 720,052 | Feb. 10 | 1179 | 269, 270 | 102 | 1090 |
| McKibben, Charles R., Pittsburg, Pa. Mechanism for packing pipes with sand | 720,053 | Feb. 10 | 1181 | 270 | 102 | 1090 |
| McKibben, Charles R., Pittsburg, Pa. Automatic hammer | 737,952 | Sept. 1 | 791 | 173 | 106 | 173 |
| McKibben, John F. *et al* (See Wright, William J., assignor.) | | | | | | |
| McKibben, William F., Linneus, Mo. Instrument for holding artificial teeth | 745,070 | Nov. 24 | 4388 | 947 | 107 | 980 |
| McKibben, William F., Linneus, Mo. Instrument for holding artificial teeth | 745,071 | Nov. 24 | 4390 | 947 | 107 | 980 |
| McKibbin, George N. (See Thompson, William R., assignor.) | | | | | | |
| McKiernan Drill Company. (See Pengilly, John, assignor.) | | | | | | |
| McKim, John N., Montreal, Canada. Inhaler | 743,018 | Nov. 3 | 385 | 83 | 107 | 81 |
| McKinley, Andrew. (See Donally, Melvin E., assignor.) | | | | | | |
| McKinley, Henry C., and A. Diegel, Detroit, Mich. Fountain tooth-brush | 730,040 | June 2 | 949 | 213 | 104 | 1321 |
| McKinley, Riley P., assignor of one-half to J. R. Miller, Panther, Ky. Quilting-frame | 725,353 | Apr. 14 | 1730 | 389 | 103 | 1551 |
| McKinley, Robert F., Bedford, Ind. High-speed gang stone-sawing machine | 744,092 | Nov. 17 | 2560 | 548 | 107 | 574 |
| McKinley, William, *et al* (See Monroe, Charles W., assignor.) | | | | | | |
| McKinney, Clayton A., assignor of one-half to M. P. Brumbaugh, Altoona, Pa. Mail-bag closure | 733,914 | July 14 | 2205 | 517 | 105 | 479 |
| McKinney, George T., Walla Walla, Wash. Photographic tray | 736,766 | Aug. 18 | 3238 | 715 | 105 | 1704 |
| McKinney, Joseph Y., Candler, Fla. Gate | 723,901 | Mar. 31 | 4174 | 940 | 103 | 936 |
| McKinney, Josiah C. (See Watson, Frank H., assignor.) | | | | | | |
| McKinney, Walter S., Chicago, Ill. Engine | 741,531 | Oct. 13 | 2197 | 488, 489, 490 | 106 | 1735 |
| McKinney, Walter S., Chicago, Ill. Speed-governor | 741,590 | Oct. 13 | 2308 | 517 | 106 | 1757 |
| McKinney, Walter S., assignor to C. E. Billin, Chicago, Ill. Stamp-mill | 720,054 | Feb. 10 | 1182 | 270, 271 | 102 | 1091 |
| McKinniss, Lewis. (See Lanham, Benjamin F., assignor.) | | | | | | |
| McKinniss, Lewis, Decatur, Ill. Fire-tongs | 741,816 | Oct. 20 | 2745 | 611 | 106 | 1866 |
| McKinnon, Donald J. (See Brintnell, Archibald H., assignor.) | | | | | | |
| McKinnon, Elmer L., Sheboygan Falls, Wis. Cheese-press | 735,133 | Aug. 4 | 172 | 37 | 105 | 1019 |
| McKinnon, James D., Portland, Oreg. Combination tool | 726,973 | May 5 | 288 | 65 | 104 | 62 |
| McKleroy, William H. (See Stucky, Stephen, assignor.) | | | | | | |
| McKnight, Frank H., *et al* (See Buckman, Alexander, assignor.) | | | | | | |
| McKnight, John W., assignor of one-fourth to W. F. Kintzing, Hanover, Pa. Regenerating gas burner and heater | 746,129 | Dec. 8 | 1500 | 335 | 107 | 1441 |
| McKnight, Robert, Philadelphia, Pa. Apparatus for condensing fumes formed in volatilization processes | 737,003 | Aug. 25 | 3696 | 820 | 105 | 1821 |
| McKnight, Robert, and M. Satarasky; said Satarasky assignor to F. Acker, Philadelphia, Pa. Treating refractory ores | 727,184 | May 5 | 685 | | 104 | 148 |
| McKnight, Thomas R., assignor to Western Wheeled Scraper Company, Aurora, Ill. Elevating-grader | 727,671 | May 12 | 1591 | 359, 360 | 104 | 360 |
| McLane, John. (See Durnbaugh, Joseph A., assignor.) | | | | | | |
| McLaren, Mary. (See Lawson and McLaren.) | | | | | | |
| McLaren, William H., Highgate, Canada. Cattle-guard | 746,985 | Dec. 15 | 3078 | 705 | 107 | 1808 |
| McLaughlin, Charles H., Philadelphia, Pa. Auxiliary coupling device | 742,720 | Oct. 27 | 4476 | 1012, 1013 | 106 | 2238 |
| McLaughlin, Cunningham N., assignor to New Winona Manufacturing Company, Winona, Minn. Grinding-mill | 737,953 | Sept. 1 | 792 | 173 | 106 | 174 |
| McLaughlin, David, Duluth, Minn. Retaining or releasing means for load-binding chains or cables | 730,836 | June 9 | 2363 | 522 | 104 | 1635 |
| McLaughlin, David, Duluth, Minn. Load retaining or releasing means for vehicles | 744,016 | Nov. 10 | 2406 | 517 | 107 | 529 |
| McLaughlin, David, Duluth, Minn. Load retaining or releasing means for vehicles | 745,289 | Nov. 24 | 4819 | 1051 | 107 | 1069 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date | Monthly volume. Spec. | Monthly volume. Dr'g | Official Gazette. Vol | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| McLaughlin, David, Duluth, Minn., assignor of one-half to Duluth Log Company. Load retaining or releasing means for vehicles | 736,138 | Aug. 11 | 2092 | 449 | 105 | 1445 |
| McLaughlin, Dennis W., San Francisco, Cal. Traction-wheel | 745,510 | Dec. 1 | 372 | 86 | 107 | 1178 |
| McLaughlin, Dennis W., San Francisco, Cal. Steering-wheel for traction-engines | 745,511 | Dec. 1 | 374 | 86 | 107 | 1179 |
| McLaughlin, Dorsey E., Tacoma, Wash. Freight-car door | 725,581 | Apr. 14 | 2150 | 487 | 103 | 1641 |
| McLaughlin, Dorsey E., Tacoma, Wash. Seal-lock | 739,701 | Sept. 22 | 4160 | 930 | 106 | 939 |
| McLaughlin, James, New York, N. Y. Electric-arc lamp | 744,093 | Nov. 17 | 2562 | 548 549 | 107 | 575 |
| McLaughlin, James A., Statesboro, Ga. School-desk | 731,206 | June 16 | 3077 | 683 | 104 | 1799 |
| McLaughlin, John C., assignor to Underwood Typewriter Company, New York, N. Y. Paper release device for type-writing machines | 739,102 | Sept. 15 | 3062 | 679 | 106 | 686 |
| McLaughlin, John J., Toronto, Canada. Apparatus for dispensing aerated liquids | 736,000 | Aug. 11 | 1850 | 396 | 105 | 1395 |
| McLaughlin, Patrick J., Chicago, Ill. Combined heating and illuminating lamp | 741,532 | Oct. 13 | 2202 | 490 | 106 | 1735 |
| McLaughlin, Watson A., Delta, Pa. Treating and cleaving slate | 748,518 | Dec. 29 | 5968 | 1354 | 107 | 2489 |
| McLaughlin, William J., *et al.* (See Farmer, Julius M., assignor.) | | | | | | |
| McLauthlin, Martin B., Malden, Mass. Electric hoist | 740,166 | Sept. 29 | 5046 | 1135 | 106 | 1146 |
| McLean, Andrew R., Russellville, Ky. Ratchet-wrench | 735,134 | Aug. 4 | 176 | 37 | 105 | 1019 |
| McLean, Anthony D. (See McDonald and McLean.) | | | | | | |
| McLean, Anthony D., and C. H. Picard, San Francisco, Cal. Hydrocarbon-burner | 723,010 | Mar. 17 | 2517 | 565 | 103 | 564 |
| McLean, Donald M., Boston, Mass. Buckle | 727,992 | May 12 | 2213 | 493 | 104 | 490 |
| McLean, F. J. (See Hofland, Andreas E., assignor.) | | | | | | |
| McLean, George A. (See Willing, Christenson, and McLean.) | | | | | | |
| McLean, George M., Salt Lake City, Utah. Horse-check | 741,361 | Oct. 13 | 1862 | 411 | 106 | 1664 |
| McLean, John, Montreal, Canada. Acetylene-gas generator | 735,800 | Aug. 11 | 1455 | 313 | 105 | 1309 |
| McLean, John, New York, N. Y. Elevator signaling apparatus | 748,408 | Dec. 29 | 5744 | 1312 | 107 | 2440 |
| McLean, John, New York, N. Y. Elevator signaling apparatus | 748,409 | Dec. 29 | 5750 | 1312 | 107 | 2442 |
| McLean, Joseph, South Manchester, Conn. Soil-pipe connection | 725,275 | Apr. 14 | 1584 | 358 | 103 | 1520 |
| McLellan, Alexander P., West Newton, Mass. Vehicle-gear | 724,921 | Apr. 7 | 924 | 212 | 103 | 1368 |
| McLellan, David, Bowesmont, N. D. Device for preventing the switching of cows' tails | 718,273 | Jan. 13 | 1407 | 313 | 102 | 318 |
| McLennan, John H., Gloucester City, and F. W. Wandless, Camden, N. J. Friction-clutch | 723,715 | Mar. 24 | 3825 | 860 | 103 | 845 |
| McLennan, William, Ogdensburg, N. Y. Invalid-bed | 735,135 | Aug. 4 | 178 | 38 | 105 | 1020 |
| McLennan, William, Ogdensburg, N. Y. Invalid-bed | 739,336 | Sept. 22 | 3480 | 777 | 106 | 791 |
| McLeod, Alexander, New Glasgow, Canada. Washboiler | 737,763 | Sept. 1 | 383 | 82 | 106 | 85 |
| McLeod, Clifford J., Hydepark, Mass. Game apparatus | 732,312 | June 30 | 5189 | 1153 | 104 | 2269 |
| McLeod, Robert S., Manchester, England. Mode of and apparatus for regulating the charge and discharge of storage batteries used in conjunction with dynamo-electric machinery, &c | 737,764 | Sept. 1 | 385 | 82 | 106 | 85 |
| McLeod, William S., Kingsville, Canada. Valve and valve-seat | 730,559 | June 9 | 1885 | 421 | 104 | 1532 |
| McLeran, Alvord M., Kansas City, Mo. Sharpening machine | 726,974 | May 5 | 290 | 65 | 104 | 62 |
| McLoughlin, Harry, Stapleton, assignor to B. E. Kingman, New York, N. Y. Vehicle-body | 722,611 | Mar. 10 | 1770 | 394 | 103 | 395 |
| McLoughlin, Joseph J., Milwaukee, Wis. Seam for sewed articles | 721,731 | Mar. 3 | 137 | 32 | 103 | 31 |
| McLure, Charles D., *et al.* (See Klein, John, assignor.) | | | | | | |
| McMahon, Daniel J., Taunton, Mass. Wire-drawing machine | 733,072 | July 7 | 661 | 159 | 105 | 140 |
| McMahon, James, Bemidji, Minn. Device for handling the bails of vessels | 727,417 | May 5 | 1097 | 241 | 104 | 237 |
| McMahon, James, Bemidji, Minn. Shoe-lacing | 746,563 | Dec. 8 | 2264 | 519 | 107 | 1604 |
| McMahon, Josiah C., Pittsburg, Pa., assignor to Chamberlin Metal Weather Strip Company, Detroit, Mich. Window frame and sash | 731,600 | June 23 | 3837 | 855 | 104 | 1973 |
| McMahon, Josiah C., Pittsburg, Pa., assignor to Chamberlin Metal Weather Strip Company, Detroit, Mich. Metal weather-strip | 733,991 | July 21 | 2362 | 554 | 105 | 530 |
| McMahon, Richard H., *et al.* (See Bender, Albert N., assignor.) | | | | | | |
| McManis, Fred. (See Stimson and McManis.) | | | | | | |
| McManmon, John J., Atlanta, Ga. Fender for plows | 720,173 | Feb. 10 | 1400 | 320 | 102 | 1136 |
| McManus, John A., Philadelphia, Pa. Derrick-car | 719,247 | Jan. 27 | 3280 | 733 | 102 | 737 |
| McManus, John A., Philadelphia, Pa. Dumping-car | 719,248 | Jan. 27 | 3282 | 733 734 | 102 | 738 |
| McManus, William A., Llewellyn Park, N. J. Tumbling-drum for leather | 739,613 | Sept. 22 | 3997 | 891 892 | 106 | 903 |
| McMaster, Arthur, and H. Kean, assignors of one-third to F. R. Monroe, Hammond, Wis. Tire-tightener | 720,174 | Feb. 10 | 1401 | 320 | 102 | 1137 |
| McMaster, Henry, Detroit, Mich. Cement post | 744,976 | Nov. 24 | 4185 | 904 | 107 | 938 |
| McMeeser, Eugene J., Bismarck, N. D. Napkin-holder | 747,467 | Dec. 22 | 3973 | 893 | 107 | 2025 |
| McMenimen, George A., Cambridge, Mass. Printing-frame | 725,276 | Apr. 14 | 1586 | 358 | 103 | 1521 |
| McMichael, James G., Chicago, Ill. Railway-rail joint | 724,922 | Apr. 7 | 926 | 212 | 103 | 1368 |
| McMichael, James G., Chicago, Ill. Railway-rail joint | 725,121 | Apr. 14 | 1311 | 295 | 103 | 1463 |
| McMichael, James G., Chicago, Ill. Railway-rail joint | 741,817 | Oct. 20 | 2746 | 611 | 106 | 1866 |
| McMillan, Charles, Chicago, Ill. Furnace | 738,226 | Sept. 8 | 1348 | 292 293 | 106 | 307 |
| McMillan, Charles W., Ada, Ind. Ter. Cotton-chopping attachment for cultivators | 728,405 | May 19 | 2989 | 658 | 104 | 674 |
| McMillan, Duncan, Brooklyn, N. Y. Finger-guard | 718,652 | Jan. 20 | 2150 | 469 | 102 | 490 |
| McMillan, James, Niagara Falls, N. Y., and H. H. Styll, Philadelphia, Pa. Folding ladder | 737,954 | Sept. 1 | 794 | 174 | 106 | 174 |
| McMillan, John, Brooklyn, N. Y. Marine vessel | 727,827 | May 12 | 1901 | 424 | 104 | 423 |
| McMillan, John L., Ilion, N. Y. Rotary engine | 718,653 | Jan. 20 | 2151 | 469 470 438 | 102 | 490 |
| McMillan, John L., Syracuse, N. Y. Rotary engine | 720,460 | Feb. 10 | 1925 | 439 440 | 102 | 1245 |
| McMillan, John L., Syracuse, N. Y. Loose-leaf binder | 724,599 | Apr. 7 | 337 | 82, 83 | 103 | 1241 |
| McMillan, Sophia L., Winnipeg, Canada. Self-sealing moth-bag | 720,461 | Feb. 10 | 1929 | 440 | 102 | 1246 |
| McMillen, James A., McDonald, Pa. Valve-bushing | 739,614 | Sept. 22 | 4000 | 892 | 106 | 903 |
| McMillen, William S., *et al.* (See Edney, Cartwright J., assignor.) | | | | | | |
| McMillian, George W., Ruston, La. Saw-handle | 746,130 | Dec. 8 | 1503 | 335 | 107 | 1441 |
| McMillin, Andrew T., Little Rock, Ark. Dental instrument | 738,929 | Sept. 15 | 2758 | 609 | 106 | 624 |
| McMillin, Edward A., North Adams, Mass. Box-blank cutting and creasing roll | 725,863 | Apr. 21 | 2684 | 611 | 103 | 1771 |
| McMillin, Edward A., North Adams, Mass. Packing-tube | 730,387 | June 9 | 1571 | 350 | 104 | 1464 |
| McMonagle, Bernard, Philadelphia, Pa. Sectional boat | 729,641 | June 2 | 209 | 48 | 104 | 1171 |
| McMonegal, Peter F., Jersey City, N. J. Engine | 721,908 | Mar. 3 | 463 | 101 | 103 | 102 |
| McMullen, Arthur. (See Thomson, Thomas K., assignor.) | | | | | | |
| McMullen, George, *et al.* (See Jones, Frederick A., assignor.) | | | | | | |
| McMullen, George W. (See Gathmann, Emil, assignor.) | | | | | | |
| McMullen, George W. (See Gathmann, Louis, assignor.) | | | | | | |
| McMullen, Peter, Buffalo, N. Y. Freight-car door | 738,834 | Sept. 15 | 2593 | 572 573 | 106 | 588 |
| McMullin, Frank R., Highland Park, Ill., assignor to McMullin Motive Power and Construction Company. Electric igniting device for internal-combustion engines | 717,902 | Jan. 6 | 729 | 163 | 102 | 155 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| McMullin, John H., Worcester, Mass. Sign-illuminator | 717,758 | Jan. 6 | 447 | 104 | 102 | 97 |
| McMullin Motive Power and Construction Company. (See McMullin, Frank R., assignor.) | | | | | | |
| McMunn, Samuel W. (See Woods, Edwin S., assignor.) | | | | | | |
| McMurchy, Harvey. (See Chick, Martines, assignor.) | | | | | | |
| McMurran, Robert L., Portsmouth, Va. Bottle-holder | 743,914 | Nov. 10 | 2168 | 467 | 107 | 477 |
| McMurray, William. (See Lee and McMurray.) | | | | | | |
| McMurtrie, Adnah, assignor to Thomas and Betts, New York, N. Y. Attachment for electrical conduits | 729,505 | May 26 | 4963 | 1100 | 104 | 1101 |
| McMurtrie, Adnah, assignor to Thomas & Betts, New York, N. Y. Coupling for electrical conduits | 729,506 | May 26 | 4965 | 1100 | 104 | 1102 |
| McMurtry, Alden L., New York, N. Y. Speed-indicator for vehicles | 722,532 | Mar. 10 | 1638 | 361 | 103 | 368 |
| McMyler, John. (See Saunders, Cecil L., assignor.) | | | | | | |
| McNair, John W., Siloam Springs, Ark. Hay-press | 720,055 | Feb. 10 | 1184 | 271 | 102 | 1091 |
| McNamara, Alexander, Johannesburg, Transvaal. Hoisting or hauling drum | 742,721 | Oct. 27 | 4479 | 1013 | 106 | 2239 |
| McNamara, Alexander, and J. Schanke, Johannesburg, Transvaal. Boring tube or rod for boring apparatus | 744,873 | Nov. 24 | 4000 | 863 | 107 | 900 |
| McNamara, James S., South Easton, Mass. Roller-screen for windows | 740,033 | Sept. 29 | 4822 | 1082 | 106 | 1099 |
| McNamee, Hiram M., Guysville, Ohio. Folding fishing-rod | 719,603 | Feb. 3 | 342 | 80 | 102 | 893 |
| McNamee, James A., Cambridgeport, Mass. Safety tread for stairs | 730,145 | June 2 | 1119 | 251 | 104 | 1355 |
| McNamee, James A., Cambridgeport, Mass. Mold for making articles of concrete or plastic material | 733,735 | July 14 | 1834 | 434 | 105 | 404 |
| McNary, James W., Dayton, Ohio. Respirator | 718,785 | Jan. 20 | 2410 | 535 | 102 | 543 |
| McNary, William T., San Jose, Cal. Bicycle-lock | 746,365 | Dec. 8 | 1932 | 441 | 107 | 1530 |
| McNaughton, Colon H., *et al.* (See Clover and Johnston, assignors.) | | | | | | |
| McNaughton, Fred. (See Chapman and McNaughton.) | | | | | | |
| McNaughton, Hart H., Charlotte, Mich. Tripod | 740,459 | Oct. 6 | 147 | 30 | 106 | 1277 |
| McNaul, William J., Butte, Mont. Tenoning-machine | 737,450 | Aug. 25 | 4521 | 1014 | 105 | 1997 |
| McNeal, Luther C., Rochester, N. Y. Clip | 727,418 | May 5 | 1099 | 241 | 104 | 237 |
| McNeal, Seth D., Jonesville, Mich. Monument | 729,391 | May 26 | 4777 | 1057 | 104 | 1061 |
| McNeeley, William O., *et al.* (See Hulings, James H., assignor.) | | | | | | |
| McNeil, Chester, assignor to Union Special Sewing Machine Company, Chicago, Ill. Seam for sewed articles | 718,654 | Jan. 20 | 2156 | 470 | 102 | 491 |
| McNeil, Chester, assignor to Union Special Sewing Machine Company, Chicago, Ill. Seam for sewed articles | 742,346 | Oct. 27 | 3813 | 854 | 106 | 2100 |
| McNeil, Chester, Chicago, Ill., and C. L. Sturtevant, Washington, D. C., assignors to Union Special Sewing Machine Company, Chicago, Ill. Blindstitching and trimming machine | 738,054 | Sept. 1 | 976 | 217 | 106 | 213 |
| McNeill, Alexander, *et al.* (See Miller, Martin H., assignor.) | | | | | | |
| McNeill, James H. (See Smith, William W., assignor.) | | | | | | |
| McNeill, Thomas E., New York, N. Y. Gas-radiator | 744,787 | Nov. 24 | 3848 | 829 | 107 | 869 |
| McNeill, William D. (See Ray and McNeill.) | | | | | | |
| McNeir, Forest W. (See Hutchinson and McNeir.) | | | | | | |
| McNerney, George A. W., Rochester, N. Y. Window cleaner | 747,566 | Dec. 22 | 4149 | 932 | 107 | 2066 |
| McNicol, John A. (See Snare, Triest, and McNicol.) | | | | | | |
| McNiel, Benjamin, Hoop, assignor of one-half to C. H. Friar, Ralph, Tenn. Wrench | 745,369 | Dec. 1 | 101 | 24 | 107 | 1122 |
| McNorton, Orville, Jr., Glen Jean, W. Va. Automatic switch | 727,185 | May 5 | 686 | 147 | 104 | 148 |
| McNorton, Orville, Jr., Glen Jean, W. Va. Music holder and turner | 739,904 | Sept. 29 | 4569 | 1028 | 106 | 1043 |
| McNulty, Harry B., Washington, D. C. Weighing-scale | 724,923 | Apr. 7 | 928 | 212, 213 | 103 | 1368 |
| McNulty, Harry B., Washington, D. C., assignor to McNulty Incandescent Gas Lighter Company. Electric igniting device | 738,624 | Sept. 8 | 2156 | 472, 473 | 106 | 479 |
| McNulty Incandescent Gas Lighter Company. (See McNulty, Harry B., assignor.) | | | | | | |
| McNutt, William E. (See McCombs, Lz, assignor.) | | | | | | |
| McPartland, Alfred. (See Hayes, Matthew, assignor.) | | | | | | |
| McPherson, Arthur G., and E. M. Laing, Highland Park, assignors of one-half to G. B. Foster, Chicago, Ill. Rotary engine | 719,359 | Jan 27 | 3504 | 779, 780 | 102 | 786 |
| McPherson, Charles E., assignor of one-half to C. H. Calvert, Allegheny, Pa. Water cooler and filter | 745,889 | Dec. 1 | 1064 | 240 | 107 | 1325 |
| McPherson, Charles J., South Framingham, Mass. Cotton-gin | 739,905 | Sept. 29 | 4572 | 1028 | 106 | 1044 |
| McPherson, Donald, Palmyra, N. Y. Vaginal syringe | 722,130 | Mar. 3 | 864 | 193 | 103 | 185 |
| McPherson, Donald, Palmyra, N. Y. Puzzle | 736,767 | Aug. 18 | 3239 | 715 | 105 | 1705 |
| McPherson, James H. (See Goodrich and McPherson.) | | | | | | |
| McPherson, John F., Butler, Pa. Brush for cleaning type | 722,131 | Mar. 3 | 865 | 193 | 103 | 185 |
| McPherson, Thomas, McBee, S. C. Cotton-chopper and plow | 731,601 | June 23 | 3838 | 855 | 104 | 1973 |
| McPherson, William B., Los Angeles, Cal. Apparatus for the treatment of gold or other ores | 725,864 | Apr. 21 | 2685 | 611 | 103 | 1771 |
| McPike, Curtis, assignor to Rockwell and Rupel Company, Chicago, Ill. Card-index locking device | 727,186 | May 5 | 688 | 147 | 104 | 149 |
| McPike, Curtis, Wabash, Ind., assignor to Rockwell & Rupel Company, Chicago, Ill. Card-index | 748,519 | Dec. 29 | 5969 | 1354, 1355 | 107 | 2489 |
| McQuay, James W., Valley River, Canada. Steam-engine | 719,493 | Feb. 3 | 151 | 34 | 102 | 855 |
| McQueen, William W., Bay City, Mich. Target-trap | 722,132 | Mar. 3 | 866 | 193, 194 | 103 | 185 |
| McQuown, Thomas H., Biggsville, Ill. Electric-circuit closer and breaker | 745,370 | Dec. 1 | 102 | 24 | 107 | 1122 |
| McRae, Daniel M., Cedarpark, assignor to H. B. Lee, Rutledge, Tex. Gate-latch | 745,970 | Dec. 1 | 1208 | 271 | 107 | 1357 |
| McReynolds, James D., Gillespie, Ill. Fumigating apparatus | 732,774 | July 7 | 138 | 37 | 105 | 34 |
| McRoy Clay Works. (See Waggoner, William R., assignor.) | | | | | | |
| McRuer, Duncan, assignor of one-half to S. M. Jones, Pauls Valley, Ind. Ter. Game apparatus | 738,625 | Sept. 8 | 2158 | 473 | 106 | 479 |
| McShane, Charles W., Zanesville, Ohio. Bottle for medicine. (Reissue) | 12,097 | Mar. 10 | 1855 | 413 | 103 | 414 |
| McShane, Charles W., Zanesville, Ohio. Seal-lock | 739,206 | Sept. 15 | 3238 | 717 | 106 | 724 |
| McShane, Felix J., *et al.* (See Waugh, Robert E. and E., assignors.) | | | | | | |
| McShane, James H., *et al.* (See Waugh, Robert E. and E., assignors.) | | | | | | |
| McSherry, Charles, Pittsburg, Pa. Metallic window frame and sash | 729,885 | June 2 | 672 | 148 | 104 | 1265 |
| McStravick, Duncan, New Orleans, La. Pump | 748,520 | Dec. 29 | 5972 | 1355 | 107 | 2490 |
| McTaggart, David, Worcester, Mass. Lubricating device for loom shuttles | 746,131 | Dec. 8 | 1504 | 336 | 107 | 1442 |
| McTague, James H., St. Louis, Mo. Check system recorder | 731,602 | June 23 | 3839 | 856 | 104 | 1973 |
| McTavish, Peter. (See Sibley, Vondon D., assignor.) | | | | | | |
| McTighe, Anna, *et al.*, executrices. (See McTighe, James J.) | | | | | | |
| McTighe, James J., deceased, Pittsburg, Pa.; A. and M. A. McTighe, executrices. Manufacture of lime and gas | 736,869 | Aug. 18 | 3444 | 763 | 105 | 1748 |
| McTighe, Mary A., *et al.*, executrices. (See McTighe, James J.) | | | | | | |
| McTigue, Andrew, *et al.* (See Traver, Philip C., assignor.) | | | | | | |
| McVay, A. B., *et al.* (See Martin, Samuel, assignor.) | | | | | | |
| McVey, George E., Hubble, Va., assignor to E. L. Andrews, Bristol, Tenn. Toy | 748,410 | Dec. 29 | 5756 | 1313 | 107 | 2443 |
| McVey, George E., assignor to C. D. and M. F. Carter, Roxie, Va. Box-fastener | 731,603 | June 23 | 3842 | 856 | 104 | 1977 |

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| McVicar, Alpheus. (See McVicar, Charles and A.) | | | | | | |
| McVicar, Charles and A., Syracuse, N. Y. Power-shears | 724,924 | Apr. 7 | 932 | 213 | 103 | 1369 |
| McVicker, Walter J., Rogers, Nebr. Gas-engine | 726,731 | Apr. 28 | 4305 | 972 | 103 | 2115 |
| McVicker, Walter J., Rogers, Nebr. Valve-gear for explosive-engines | 743,915 | Nov. 10 | 2169 | 468 | 107 | 478 |
| McVittie, Alexander. (See Sheldon, Mark A., assignor.) | | | | | | |
| McVoy, John M., and J. W. Sullivan, Pensacola, Fla. Window-fastener | 720,462 | Feb. 10 | 1930 | 441 | 102 | 1246 |
| McWane, Charles W., assignor of one-half to H. E. McWane, Lynchburg, Va. Collapsible core-barrel | 740,772 | Oct. 3 | 737 | 166 | 106 | 1403 |
| McWane, Henry E. (See McWane, Charles W., assignor.) | | | | | | |
| McWane, James R., Lynchburg, Va. Molding and casting apparatus | 745,649 | Dec. 1 | 607 | 141 | 107 | 1227 |
| McWeeney, John H., New Haven, Conn. Bit-brace guide | 720,950 | Feb. 17 | 2847 | 652 | 102 | 1453 |
| McWhirter, John S. (See Winters, Frederick V., assignor.) | | | | | | |
| McWhirter, William H., Algoma, Miss. Violin-bridge | 719,604 | Feb 3 | 344 | 80 | 102 | 894 |
| McWhorter, Francis S., Philadelphia, Pa., assignor to McWhorter Manufacturing Company. Potato-planter | 723,480 | Mar. 24 | 3427 | 766<br>767 | 103 | 762 |
| McWhorter Manufacturing Company. (See McWhorter, Francis S., assignor.) | | | | | | |
| McWilliams, Charles H. and G. B., Waterloo, Iowa. Adjustable skirt-fastening | 737,004 | Aug. 25 | 3699 | 821 | 105 | 1822 |
| McWilliams, Francis, Duquesne, Pa. Tube-extractor | 718,066 | Jan. 6 | 1016 | 227 | 102 | 219 |
| McWilliams, George B. (See McWilliams, Charles H. and G. B.) | | | | | | |
| McWilliams, George B., Olney, Ill. Vehicle-axle | 735,568 | Aug. 4 | 1034 | 219 | 105 | 1200 |
| McWilliams, James, Jersey City, N. J. Boiler | 740,304 | Sept. 29 | 5303 | 1194<br>1195 | 106 | 1197 |
| McWilliams, Thomas, assignor of one-half to J. J. Cusick, Kings Park, N. Y. Trolley-wheel | 720,612 | Feb. 17 | 2259 | 518<br>519 | 102 | 1328 |
| McWorkman, Willard, Indianapolis, Ind. Fireproof rolling partition | 741,698 | Oct. 20 | 2521 | 563 | 106 | 1820 |
| Mcdonald, William A., Garfield, N. J. Calipers | 745,229 | Nov. 24 | 4705 | 1027 | 107 | 1046 |
| Mead, Charles, assignor of five-eighths to M. Prager Company, Limited, L. A. Schlesinger, and L. Prager, Murray, Idaho. Rock-drill | 736,758 | Aug. 18 | 3223 | 712<br>713 | 105 | 1701 |
| Mead, Charles E. (See Tompkins and Mead.) | | | | | | |
| Mead, George A., Mansfield, Ohio. Snap-switch | 718,495 | Jan. 13 | 1849 | 406 | 102 | 414 |
| Mead, Isaac V., and J. W. Gibson, New York, N. Y. Stair-rod and fastening therefor | 726,723 | Apr. 28 | 4289 | 969 | 103 | 2111 |
| Mead, John D. (See Hardin and Mead.) | | | | | | |
| Mead, William W. (See Dembrook and Mead.) | | | | | | |
| Meade, Edward S., Philadelphia, Pa., assignor to North American Fuel Company, Camden, N. J., and Philadelphia, Pa. Manufacture of briquets | 719,830 | Feb. 3 | 762 | ------ | 102 | 984 |
| Meaders, Martin S., Solgohachia, Ark. Grapple | 744,583 | Nov. 17 | 3457 | 745 | 107 | 767 |
| Meagher, William H., assignor to Missouri Tent & Awning Company, St. Louis, Mo. Apparatus for producing prismatic effects | 718,496 | Jan. 13 | 1851 | 407 | 102 | 414 |
| Means, Porter W., Williamston, assignor, by mesne assignments, of one-half to H. A. Rhoades, Jackson, Mich. Dart-parachute | 736,759 | Aug. 18 | 3228 | 713 | 105 | 1702 |
| Mears, A. S. (See Ebersole, John M., assignor.) | | | | | | |
| Mears, Herbert G., New York, and H. W. Aylward, Brooklyn, assignors, by mesne assignments, to Auto-Igniter Company, New York, N. Y. Electric igniter | 732,364 | June 30 | 5300 | 1175 | 104 | 2291 |
| Mears, Herbert G., New York, and H. W. Aylward, Brooklyn, assignors, by mesne assignments, to Auto-Igniter Company, New York, N. Y. Igniter for internal-combustion engines | 732,365 | June 30 | 5302 | 1175 | 104 | 2291 |
| Mears, Herbert G., New York, and H. W. Aylward, Brooklyn, assignors, by mesne assignments, to Auto-Igniter Company, New York, N. Y. Electric igniter | 732,366 | June 30 | 5304 | 1175 | 104 | 2292 |
| Mears, Oswald S., Bloomtown, Va., assignor of one-half to H. C. Darbee, Seaford, Del. Ship's rudder | 717,590 | Jan. 6 | 127 | 33 | 102 | 29 |
| Mears, Robert S., Topeka, Kans. Guard and mirror for water-gages | 743,178 | Nov. 3 | 689 | 151 | 107 | 144 |
| Meats, John T., assignor to Mason Machine Works, Taunton, Mass. Beam latch or dog for looms, &c. | 718,268 | Jan. 13 | 1394 | 311 | 102 | 315 |
| Meats, John T., assignor to Mason Machine Works, Taunton, Mass. Stopping mechanism | 726,960 | May 5 | 250 | 58 | 104 | 54 |
| Meats, John T., assignor to Mason Machine Works, Taunton, Mass. Picking mechanism for looms | 729,626 | June 2 | 182 | 43 | 104 | 1164 |
| Meats, John T., assignor to Mason Machine Works, Taunton, Mass. Selvage-motion for looms | 747,201 | Dec. 15 | 3484 | 791 | 107 | 1900 |
| Meats, John T., and J. E. Greensmith, assignors to Mason Machine Works, Taunton, Mass. Dobby mechanism for looms | 729,627 | June 2 | 183 | 43 | 104 | 1165 |
| Mechanical Accountant Company. (See Turck, Joseph A., assignor.) | | | | | | |
| Mechlin, Francis O., Washington Court-House, Ohio. Feed-water purifier | 729,628 | June 2 | 185 | 44 | 104 | 1165 |
| Mechlin, William H., Greenfield, Ohio. Elevator-gate | 741,523 | Oct. 13 | 2179 | 484 | 106 | 1731 |
| Mecklenburgische Gewerkschaft Friedrich Franz. (See Buschmann, Friedrich, assignor.) | | | | | | |
| Medart, Philip, St. Louis, Mo. Belt-pulley | 722,734 | Mar. 17 | 2027 | 453 | 103 | 465 |
| Medart, Philip, St. Louis, Mo. Belt-pulley | 722,735 | Mar. 17 | 2028 | 453 | 103 | 465 |
| Medart, Philip, St. Louis, Mo. Belt-pulley | 726,961 | May 5 | 252 | 58 | 104 | 54 |
| Medart, Philip, St. Louis, Mo. Belt-pulley | 730,383 | June 9 | 1563 | 348 | 104 | 1462 |
| Meden, Elof H., Trenton, N. J. Motor road-vehicle | 741,587 | Oct. 13 | 2303 | 515<br>516 | 106 | 1756 |
| Medina, William H., San Francisco, Cal. Stovepipe-holder | 736,416 | Aug. 18 | 2567 | 563 | 105 | 1566 |
| Medley, Joseph F., Louisville, Ky. Liquid-dispensing vessel | 745,876 | Dec. 1 | 1045 | 235 | 107 | 1321 |
| Meech, Alfred H., Chatham, N. Y. Safety device for elevators | 722,736 | Mar. 17 | 2029 | 454 | 103 | 465 |
| Meech, Alfred H., Chatham, N. Y. Safety device for elevators | 722,737 | Mar. 17 | 2035 | 455 | 103 | 466 |
| Meehan, James, Covington, Ky. Brake-shoe for railway-brakes | 720,167 | Feb. 10 | 1388 | 318 | 102 | 1135 |
| Meehan, John J., Denver, Colo. Razor-guard | 736,859 | Aug. 18 | 3430 | 759 | 105 | 1745 |
| Meehan, Patrick, Lowellville, Ohio. Chimney-valve for stoves or furnaces | 738,828 | Sept. 15 | 2584 | 570 | 106 | 586 |
| Meehan, Thomas F., New York, N. Y. Packing-ring | 743,179 | Nov. 3 | 691 | 152 | 107 | 145 |
| Meek, James W., Stroud Green, London, England. Photographic developing apparatus | 728,743 | May 19 | 3627 | 805 | 104 | 809 |
| Meeker, Charles B., Westport, assignor to R. Wakeman, Saugatuck, Conn. Mattress | 728,594 | May 19 | 3365 | 746 | 104 | 754 |
| Meeker, Charles E., Ann Arbor, Mich. Weather-strip for doors | 736,286 | Aug. 11 | 2344 | 509 | 105 | 1502 |
| Meeker, William P., Newark, N. J. Appliance for forming designs with tiles | 738,051 | Sept. 1 | 972 | 216 | 106 | 211 |
| Meem, James C., assignor of two-thirds to Borough Construction Co., Brooklyn, N. Y. Tunneling | 731,198 | June 16 | 3066 | 680 | 104 | 1797 |
| Meerlender, Frederick J., Newark, N. J. Cuff button or fastener | 731,930 | June 23 | 4427 | 987 | 104 | 2098 |
| Meers, James, *et al.* (See Whatley, Alfred H., assignor.) | | | | | | |
| Meerza, Syud H., London, England. Hat or the like | 735,790 | Aug. 11 | 1434 | 309 | 105 | 1304 |
| Meese, Jacob A., Louisville, Ohio. Journal for washing-machines | 746,641 | Dec. 8 | 2416 | 552 | 107 | 1639 |
| Mefford, Robert J., Toledo, Ohio. Ore or dredging bucket | 730,280 | June 9 | 1379 | 303 | 104 | 1424 |
| Megogney, Frank M., *et al.* (See Steeb, John L., assignor.) | | | | | | |
| Mégroz, Auguste, Clarens, Switzerland. Electric traction | 729,882 | June 2 | 668 | 147 | 104 | 1264 |
| Mehlferber, John, assignor of three-fourths to A. Kosotsch, C. Arelt, and M. Mattias, Pittsburg, Pa. Folding baby-carriage | 718,056 | Jan. 6 | 998 | 223 | 102 | 215 |
| Mehring, Mary M. (See Smelker, Angeline, assignor.) | | | | | | |
| Meier, George F., Muscatine, Iowa. Adding-machine | 730,281 | June 9 | 1381 | 304<br>305 | 104 | 1425 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drgs. | Official Gazette. Vol. | Official Gazette. Page |
|---|---|---|---|---|---|---|
| Meigs, John F., South Bethlehem, assignor to Bethlehem Steel Company, Bethlehem, Pa. Breech mechanism | 724,597 | Apr. 7 | 335 | 82 | 103 | 1240 |
| Meigs, John F., and E. Gathmann, assignors to Bethlehem Steel Company, South Bethlehem, Pa. Continuous-reading range and azimuth finder and predictor | 735,547 | Aug. 4 | 992 | 210, 211 | 105 | 1191 |
| Meigs, John F., and H. G. Jakobsson, Bethlehem, assignors to Bethlehem Steel Company, South Bethlehem, Pa. Rapid-fire gun | 742,702 | Oct. 27 | 4447 | 1004, 1005 | 106 | 2232 |
| Meigs, John F., and H. R. Collins, assignors to Bethlehem Steel Company, South Bethlehem, Pa. Gun-carriage | 718,010 | Jan. 6 | 932 | 207 | 102 | 200 |
| Meigs, John F., South Bethlehem, and L. N. D. Mixsell, Bethlehem, assignors to Bethlehem Steel Company, South Bethlehem, Pa. Extractor for breech-loading ordnance | 718,719 | Jan. 20 | 2288 | 504, 505 | 102 | 517 |
| Meigs, John F., South Bethlehem, and R. P. Stout, Bethlehem, assignors to Bethlehem Steel Company, South Bethlehem, Pa. Gun-carriage | 723,617 | Mar. 24 | 3651 | 817, 818 | 103 | 808 |
| Meigs, John F., and R. P. Stout, Bethlehem, assignors to Bethlehem Steel Company, South Bethlehem, Pa. Recoil-check for guns | 748,513 | Dec. 29 | 5957 | 1351 | 107 | 2486 |
| Meigs, John F., and S. A. S. Hammar, Bethlehem, assignors to Bethlehem Steel Company, South Bethlehem, Pa. Combined recoil-check and counter-recoil check for guns | 717,884 | Jan. 6 | 701 | 157 | 102 | 149 |
| Meigs, John F., and S. A. S. Hammar, assignors to Bethlehem Steel Company, South Bethlehem, Pa. Shield-mount for guns | 746,725 | Dec. 15 | 2567 | 590, 591 | 107 | 1694 |
| Meigs, John F., S. A. S. Hammar, and L. N. D. Mixsell, Bethlehem, assignors to Bethlehem Steel Company, South Bethlehem, Pa. Electric firing-gear for breech-loading guns | 748,086 | Dec. 29 | 5178 | 1171, 1172 | 107 | 2317 |
| Meijer, Johannes W., Velp, Netherlands. Motor-bicycle | 738,559 | Sept. 8 | 2037 | 443 | 106 | 453 |
| Meikle, Wilson R., Glasgow, Scotland. Kinetoscope | 721,718 | Mar. 3 | 119 | 26 | 103 | 26 |
| Meikleham, William J., Denver, Colo. Cup-cake-dropping machine | 740,582 | Oct. 6 | 390 | 81, 82 | 106 | 1329 |
| Meiklejohn, James, Sedro Woolley, Wash. Saw-operating mechanism | 720,944 | Feb. 17 | 2832 | 649 | 102 | 1449 |
| Meilicke, Herman R., Dundurn, Canada. Snap-hook | 747,745 | Dec. 22 | 4474 | 1009 | 107 | 2139 |
| Meilink, Charles F. (See Reynolds and Meilink.) | | | | | | |
| Meilink Manufacturing Company. (See Reynolds and Meilink, assignors.) | | | | | | |
| Meinecke, Christian W. (See Hogan and Meinecke.) | | | | | | |
| Meinecke & Co. (See Hogan and Meinecke, assignors.) | | | | | | |
| Meinhard, Theodore P., Brooklyn, N. Y. Power-gear and brake apparatus for automobiles | 731,588 | June 23 | 3815 | 849, 850 | 104 | 1969 |
| Meinhardt, Adam B., Paxico, Kans. Trace-carrier | 739,694 | Sept. 22 | 4150 | 927 | 106 | 937 |
| Meinhardt, Theodore F., Charlottesville, Va. Hot-air furnace | 742,046 | Oct. 20 | 3206 | 716, 717 | 106 | 1960 |
| Meininghaus, Eduard, assignor to Deutsche Heizungs-Industrie Meininghaus Bachrodt & Co., Barmen, Prussia, Germany. Gas heating-stove | 736,860 | Aug. 18 | 3430 | 759 | 105 | 1745 |
| Meini, Julius, Vienna, Austria-Hungary. Manufacturing cocoa substitutes | 737,432 | Aug. 25 | 4492 | ..... | 105 | 1990 |
| Meinrich, Wilhelm, assignor to F. Krupp, Actiengesellschaft, Essen-on-the-Ruhr, Germany. Metallic wheel | 743,536 | Nov. 10 | 1488 | 311 | 107 | 335 |
| Meinzer, Friedrich, Cleveland, Ohio. Heating apparatus | 727,172 | May 5 | 666 | 143 | 104 | 144 |
| Meischke-Smith, Georgius F. (See Meischke-Smith, William and G. F.) | | | | | | |
| Meischke-Smith, William and G. F., Paris, France. Driving mechanism for transmitting variable speeds | 734,921 | July 28 | 4126 | 961 | 105 | 917 |
| Meischke-Smith, William and G. F., Paris, France. Mechanism for driving and reversing motion | 740,984 | Oct. 6 | 1106 | 249 | 106 | 1482 |
| Meisel, Francis, assignor to Kidder Press Company, Dover, N. H. Web-roll shaft | 728,486 | May 19 | 3141 | 695 | 104 | 706 |
| Meiss, William H., West Etna, assignor of one-half to E. J. Riffle, Allegheny, Pa. Wrench | 737,433 | Aug. 25 | 4492 | 1007 | 105 | 1990 |
| Meisselbach, August F. and W., Jr., Newark, N. J. Fishing-reel with adjustable head | 746,544 | Dec. 8 | 2231 | 512 | 107 | 1597 |
| Meisselbach, William, Jr. (See Meisselbach, August F. and W., Jr.) | | | | | | |
| Meissner, Otto W. (See Hart and Meissner.) | | | | | | |
| Meissner, Waldemar, Charlottenburg, Germany. Means for producing alternating currents of low periodicity | 745,508 | Dec. 1 | 367 | 85, 86 | 107 | 1178 |
| Meister, John C., Sterling, Ill. Radiator for stoves | 738,222 | Sept. 8 | 1342 | 291 | 106 | 306 |
| Meister, Louis P., Troy, Mo. Thermostat for incubators | 720,722 | Feb. 17 | 2453 | 562 | 102 | 1369 |
| Meister, Oscar, Baldwin, Ga. Plow attachment | 729,198 | May 26 | 4448 | 981 | 104 | 992 |
| Meister, William F., and W. S. Pattin, assignors to Pattin Brothers Company, Marietta, Ohio. Combined governor and gas and air mixer for explosive-engines | 729,377 | May 26 | 4758 | 1052 | 104 | 1056 |
| Melanson, Ranchford B., assignor of one-half to G. W. Belonga, Lynn, Mass. Skirt-supporter | 720,832 | Feb. 17 | 2621 | 605 | 102 | 1405 |
| Melaun, Franz, Charlottenburg, Germany. Rail-joint | 732,311 | June 30 | 5188 | 1153 | 104 | 2268 |
| Melcher, Alphonso M., assignor of one-half to O. F. Schumann, Oshkosh, Wis. Flue-cleaner | 739,435 | Sept. 22 | 3692 | 822 | 106 | 838 |
| Melcher, Daniel, Bonesteel, S. D. Drop-movement for trip-hammers | 739,331 | Sept. 22 | 3474 | 775 | 106 | 791 |
| Melcher, John E., Wisner, Nebr. Wrench | 739,895 | Sept. 29 | 4553 | 1022 | 106 | 1039 |
| Melchior Bros. Furniture Company. (See Kade, Otto C., assignor.) | | | | | | |
| Melchior, Hugo, Omaha, Nebr. Cork for making bottles non-refillable | 731,485 | June 23 | 3617 | 807 | 104 | 1930 |
| Meldrum, Robert, Kirkliston, Scotland. Portable boiler or heater | 741,266 | Oct. 13 | 1640 | 370 | 106 | 1616 |
| Melhuish, Alfred G., Edmonton, England. Gas or oil engine | 745,215 | Nov. 24 | 4683 | 1021, 1022, 1023 | 107 | 1041 |
| Mell, James A., assignor of one-half to J. G. Heinzmann, Moline, Mich. Nut-lock | 717,591 | Jan. 6 | 129 | 33 | 102 | 29 |
| Mellen, Edward J. (See Anderson, Frederick F., assignor.) | | | | | | |
| Mellen, George E., Chicago, Ill. Game apparatus | 720,533 | Feb. 10 | 2076 | 479 | 102 | 1275 |
| Mellen, William D., *et al.* (See McCarthy, William J., assignor.) | | | | | | |
| Mellen, William S., assignor of three-fourths to Mound City Paint & Color Company, St. Louis, Mo. Vessel or container | 743,180 | Nov. 3 | 692 | 152 | 107 | 145 |
| Mellett, Lemuel, Somerville, assignor to Microphone Transmitter Company, Boston, Mass. Telephone-transmitter | 721,817 | Mar. 3 | 288 | 64 | 103 | 64 |
| Melling, John W., Wigan, England. Cut-off valve | 742,703 | Oct. 27 | 4450 | 1005, 1006 | 106 | 2233 |
| Mellinger, Jacob, Baltimore, Md. Chemical compound | 744,584 | Nov. 17 | 3459 | ..... | 107 | 768 |
| Mellish, Frank, *et al.* (See Benns, George B., assignor.) | | | | | | |
| Mellor, John W., Sedalia, Mo. Box-opener | 735,125 | Aug. 4 | 151 | 33 | 105 | 1014 |
| Mélotte, Julés, Remicourt, Belgium. Centrifugal liquid-separator | 734,585 | July 28 | 3490 | 815 | 105 | 787 |
| Melrose, William A., assignor of one-half to J. W. Pertz, Elwood, Ind. Filler for crates | 742,704 | Oct. 27 | 4451 | 1006 | 106 | 2233 |
| Melsha, Frank C., Lynch, Nebr. Safety stove-flue | 717,592 | Jan. 6 | 130 | 33 | 102 | 29 |
| Melville, Hendricks E., New York, N. Y. Truck | 732,367 | June 30 | 5306 | 1176 | 104 | 2292 |
| Melvin, Charles H., assignor to Deere and Company, Moline, Ill. Plow-wheel | 719,831 | Feb. 3 | 763 | 179 | 102 | 985 |
| Melvin, Josiah W., Houston, Tex. Gage | 745,877 | Dec. 1 | 1046 | 236 | 107 | 1322 |
| Melvin, William H., Westminster, and A. Mann, Croydon, England. Apparatus for collecting mud, dust, or other street refuse | 730,190 | June 2 | 1188 | 266, 267 | 104 | 1369 |
| Melzer, Emil, Zella, St. Blasii, Germany. Street-car fender | 740,985 | Oct. 6 | 1108 | 249 | 106 | 1482 |
| Melzer, Joseph, assignor to Osborn Morgan Company, Cleveland, Ohio. Electric-arc lamp | 742,705 | Oct. 27 | 4452 | 1006 | 106 | 2233 |
| Melzer, Joseph, assignor to Osborn-Morgan Company, Cleveland, Ohio. Electric-arc lamp | 742,706 | Oct. 27 | 4454 | 1007 | 106 | 2234 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | Spec. | Drg. | Vol. | Page. |
| Melzer, Paul, Berlin, Germany. Paper-file | 739,332 | Sept. 22 | 3475 | 776 | 106 | 791 |
| Memmler, Arthur H., Los Angeles, Cal. Metal roofing-tile | 743,905 | Nov. 10 | 2157 | 465 | 107 | 475 |
| Menahan, Patrick J., Brooklyn, N. Y. Marking and folding garment-sections | 719,485 | Feb. 3 | 137 | 31 | 102 | 853 |
| Menahan, Patrick J., Brooklyn, N. Y. Corset-shaper | 725,979 | Apr. 21 | 2880 | 653 | 103 | 1811 |
| Menahan, Patrick J., Brooklyn, N. Y. Corset | 725,980 | Apr. 21 | 2883 | 654 | 103 | 1811 |
| Menahan, Patrick J., Brooklyn, N. Y. Pattern-plate for folding and marking garment-sections | 731,413 | June 16 | 3464 | 774 | 104 | 1879 |
| Menard, Philip P. (See Smith, Frederick H., assignor.) | | | | | | |
| Menchen, Joseph, New York, N. Y. Object-projector | 744,778 | Nov. 24 | 3832 | 826 | 107 | 865 |
| Menczarski, Alexander, New York, N. Y. Scaffolding-support | 728,595 | May 19 | 3366 | 746 | 104 | 754 |
| Menczarski, Alexander, New York, N. Y. Building construction | 745,068 | Nov. 24 | 4385 | 946 | 107 | 979 |
| Mende, Arthur, assignor to R. M. Morgan, New York, N. Y. Gas or vapor lamp | 728 265 | May 19 | 2724 | 607 | 104 | 618 |
| Mende, Arthur, New York, N. Y., assignor to Arthur Light Company, of New York. Vapor-lamp | 735,548 | Aug. 4 | 998 | 211 | 105 | 1192 |
| Mendel, Isidor, and S. Newman, Cincinnati, Ohio, assignors to said Mendel. Wardrobe-trunk and fittings | 743,537 | Nov. 10 | 1489 | 311 | 107 | 335 |
| Mendell, George, New York, N. Y., assignor to Schimper Company, Newark, N. J. Picture-frame or easel | 733,860 | July 14 | 2097 | 494 | 105 | 457 |
| Mendenhall, Amos, Unionport, assignor of one-half to J. M. Best, Winchester, and E. T. Griffith, Muncie, Ind. Bicycle | 740,156 | Sept. 29 | 5027 | 1129 | 106 | 1141 |
| Mendenhall, Hiram. (See Stocking, Bert A., assignor.) | | | | | | |
| Mendenhall, Hiram, Audubon, Iowa. Obstetrical instrument | 734,586 | July 28 | 3493 | 815 | 105 | 787 |
| Mendenhall, Walter S., Norwood, assignor to Samuel C. Tatum Company, Cincinnati, Ohio. Metal-punch | 719,947 | Feb. 3 | 949 | 221 | 102 | 1025 |
| Mendenhall, Walter S., Norwood, assignor to Samuel C. Tatum Company, Cincinnati, Ohio. Temporary binder | 725,265 | Apr. 14 | 1568 | 355 | 103 | 1517 |
| Mendenhall, Walter S., Norwood, assignor to Samuel C. Tatum Company, Cincinnati, Ohio. Paper-perforator | 736,614 | Aug. 18 | 2960 | 650 | 105 | 1647 |
| Mendham, Conrad F., London, England. Apparatus for controlling the delivery of viscous liquids, &c | 722,738 | Mar. 17 | 2041 | 456 | 103 | 468 |
| Mendham, Conrad F., London, England. Apparatus for filling vessels with liquids | 725,576 | Apr. 14 | 2142 | 485 | 103 | 1640 |
| Meneely, Charles D., and H. A. Crowe, New York, N. Y. Tag | 735,397 | Aug. 4 | 678 | 145 | 105 | 1125 |
| Mengel, Ewald, Barmen, Germany. Screw-stock | 721,719 | Mar. 3 | 120 | 26 | 103 | 27 |
| Menges, Theodore C., assignor to Cascaden Manufacturing Company, Waterloo, Iowa. Igniter-operating mechanism for explosive-engines | 723,540 | Mar. 24 | 3520 | 787 | 103 | 781 |
| Menking, Ernest A., Pittsburg, Pa. Suction-valve for compressors | 735,549 | Aug. 4 | 1001 | 211 | 105 | 1193 |
| Mensching, Carl. (See Levinstein and Mensching.) | | | | | | |
| Mensing, Carl F., Kansas City, Mo. Sound-reproducing and scene-displaying apparatus | 745,216 | Nov. 24 | 4686 | 1023 | 107 | 1042 |
| Mensing, Carl F., Kansas City, Mo. Automatic scene-displaying apparatus | 745,217 | Nov. 24 | 4688 | 1023 | 107 | 1042 |
| Mensing, Carl F., Kansas City, Mo. Combined sound-reproducing and stereopticon apparatus | 745,218 | Nov. 24 | 4691 | 1024 | 107 | 1043 |
| Mensor, Abraham W. (See Bloom and Mensor.) | | | | | | |
| Mentel, George A., and J. B. Paul, Pittsburg, Pa. Automatic valve for water-heaters | 733,861 | July 14 | 2098 | 495 | 105 | 457 |
| Mentel, George E. and S. N., Springfield, Ohio. Pneumatic-tire protector | 745,878 | Dec. 1 | 1049 | 236 | 107 | 1322 |
| Mentel, Simon N. (See Mentel, George E. and S. N.) | | | | | | |
| Mentzer, Allen, Duluth, Minn. Blind for locomotive-headlights | 743,181 | Nov. 3 | 693 | 152, 153 | 107 | 145 |
| Menze, Charles T., St. Louis, Mo. Cithern | 726,084 | Apr. 21 | 3041 | 691 | 103 | 1844 |
| Menzies, Robert C., Glens Falls, N. Y. Wheeled dirt-receptacle | 735,126 | Aug. 4 | 152 | 34 | 105 | 1014 |
| Mercàder, Camille, Pittsburg, Pa. Piling apparatus | 717,885 | Jan. 6 | 704 | 157 | 102 | 150 |
| Mercàder, Camille, Pittsburg, Pa. Coil-heating furnace | 726,556 | Apr. 28 | 3979 | 901 | 103 | 2047 |
| Mercàder, Camille, Pittsburg, Pa. Apparatus for making axles, shafts, &c | 731,486 | June 23 | 3618 | 807 | 104 | 1930 |
| Mercàder, Camille, Braddock, Pa. Charging apparatus | 739,198 | Sept. 15 | 3224 | 714 | 106 | 720 |
| Mercàder, Camille, and C. P. Byrnes, Pittsburg, Pa. Making seamless tubes or hollow articles | 717,886 | Jan. 6 | 705 | 157, 158 | 102 | 150 |
| Mercer, Allen J., Pittsburg, Pa. Spirit-level | 741,406 | Oct. 13 | 1944 | 431 | 106 | 1681 |
| Mercer, Henry C., Doylestown, Pa. Tile or other decorative device | 733,668 | July 14 | 1729 | 408 | 105 | 381 |
| Mercer, Henry H. (See Officer and Mercer.) | | | | | | |
| Mercer, John, Liscard, England. Turbine | 726,179 | Apr. 21 | 3232 | 732, 733 | 103 | 1883 |
| Mercer, John B. (See Reinhardt, Gustav E., assignor.) | | | | | | |
| Mercer, Martin, and C. Phillips, New York, N. Y. Signal-lantern | 733,243 | July 7 | 971 | 234 | 105 | 203 |
| Mercer, William A. (See Baxeres de Alzugaray and Mercer.) | | | | | | |
| Mercer, William A., Walnut, Ill. Music-leaf turner | 731,589 | June 23 | 3817 | 850 | 104 | 1969 |
| Mercié, Henri A. (See Benét and Mercié.) | | | | | | |
| Meredith, Byron W. (See Barbour and Meredith.) | | | | | | |
| Meredith, Joseph C., Kansas City, Mo. Hydrocarbon-engine | 744,380 | Nov. 17 | 3113 | 669, 670 | 107 | 695 |
| Meredith, Noah E. (See Sandifer and Meredith.) | | | | | | |
| Mereen, Arno, Minneapolis, Minn. Horizontal band-saw for resawing box-lumber | 737,434 | Aug. 25 | 4493 | 1008, 1009 | 105 | 1991 |
| Mérei, Emil. (See Marx and Mérei.) | | | | | | |
| Mergenthaler Linotype Company. (See Bates, George A., assignor.) | | | | | | |
| Mergenthaler Linotype Company. (See Briden, Samuel J., assignor.) | | | | | | |
| Mergenthaler Linotype Company. (See Champion, John W., assignor.) | | | | | | |
| Mergenthaler Linotype Company. (See Dodge, Philip T., assignor.) | | | | | | |
| Mergenthaler Linotype Company. (See Ebaugh, John L., assignor.) | | | | | | |
| Mergenthaler Linotype Company. (See Edney, Arthur F., assignor.) | | | | | | |
| Mergenthaler Linotype Company. (See Fleck, Frank X., assignor.) | | | | | | |
| Mergenthaler Linotype Company. (See Kennedy, Luther L., assignor.) | | | | | | |
| Mergenthaler Linotype Company. (See Martin, Thomas, assignor.) | | | | | | |
| Mergenthaler Linotype Company *et al.* (See Mergenthaler and Lawrenz, assignors.) | | | | | | |
| Mergenthaler Linotype Company. (See Poe and Scharf, assignors.) | | | | | | |
| Mergenthaler Linotype Company. (See Rogers, John R., assignor.) | | | | | | |
| Mergenthaler Linotype Company. (See Thompson, John S., assignor.) | | | | | | |
| Mergenthaler Linotype Company. (See Van Valkenburg, James K., assignor.) | | | | | | |
| Mergenthaler, Ottmar, and E. Lawrenz, assignors, by mesne assignments, to Ott. Mergenthaler Company, Baltimore, Md., and Mergenthaler Linotype Company, New York, N. Y. Linotype-machine | 744,087 | Nov. 17 | 2550 | 546, 547 | 107 | 572 |
| Mergler, Regina, Pueblo, Colo. Hat-pin | 740,368 | Sept. 29 | 5423 | 1221 | 106 | 1223 |
| Meriden Curtain Fixture Co. (See Harned, William D., assignor.) | | | | | | |
| Meriwether, Catherine C., Asheville, N. C. Playing-cards | 745,879 | Dec. 1 | 1050 | 236 | 107 | 1322 |
| Merk, Friedrich, Berlin, Germany. Automatic central-station telephone system | 732,874 | July 7 | 315 | 79 | 105 | 70 |
| Merk, Martin, Brooklyn, N. Y. File-cutting machine | 731,700 | June 23 | 4015 | 896, 897 | 104 | 2008 |
| Merkel, August, L. B. Sanders, and M. Hellmann, Chicago; said Merkel assignor to O. Druiding, Cook County, Ill. Sewing-machine guide | 721,590 | Feb. 24 | 4099 | 933 | 102 | 1738 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Merkel, August, L. B. Sanders, and M. Hellman, Chicago, Ill.; said Merkel assignor to O. Druiding. Tuck creaser and marker for sewing-machines | 726,322 | Apr. 28 | 3520 | 797 | 103 | 1958 |
| Merkel, Joseph F., assignor to Merkel Manufacturing Company, Milwaukee, Wis. Motor-cycle | 740,676 | Oct. 6 | 543 | 121 | 106 | 1364 |
| Merkel Manufacturing Company. (See Merkel, Joseph F., assignor.) | | | | | | |
| Merker, George W., Belleville, Ill. Gate-latch | 731,199 | June 16 | 3068 | 681 | 104 | 1797 |
| Merling, Georg, Frankfort-on-the-Main, and R. Welde, assignors to Farbwerke, vorm. Meister, Lucius & Brüning. Höchst-on-the-Main, Germany. Trimethyl-cyclohexenon-carboxylic-acid ester and making same | 743,305 | Nov. 3 | 949 | ..... | 107 | 204 |
| Mermet, François, Lyons, France. Bead-threading machine | 747,995 | Dec. 29 | 4995 | 1128, 1129 | 107 | 2277 |
| Mermod, Frères. (See Junod-Turin, Arthur, assignor.) | | | | | | |
| Mermod, Frères. (See Keller, Alfred, assignor.) | | | | | | |
| Merrell, Gaius L., assignor to Merrell-Soule Company, Syracuse, N. Y. Mask | 727,173 | May 5 | 669 | 144 | 104 | 145 |
| Merrell-Soule Company. (See Merrell, Gaius L., assignor.) | | | | | | |
| Merriam, Harry B., Dubuque, Iowa. Automatic inspection track-gage | 722,739 | Mar. 17 | 2044 | 456 | 103 | 468 |
| Merriam, Lyman W., assignor of one-half to G. O. Allen, Fitchburg, Mass. Apparatus for separating the meat of cotton-seed from the hulls | 719,948 | Feb. 3 | 950 | 221 | 102 | 1025 |
| Merriam, Nathaniel H., Lexington, Mass. Woven fabric | 742,468 | Oct. 27 | 4022 | 902 | 106 | 2142 |
| Merriam, Nathaniel H., and E. H. Sawyer, Lexington, Mass. Bobbin take-up for looms | 747,307 | Dec. 15 | 3690 | 831, 832 | 107 | 1947 |
| Merrick, Ernest, Elizabeth, N. J. Fireproof floor construction | 741,054 | Oct. 13 | 1235 | 279 | 106 | 1531 |
| Merrick, Frank A., Johnstown, Pa., assignor to Westinghouse Electric & Manufacturing Company. Electric controller | 722,527 | Mar. 10 | 1629 | 360 | 103 | 366 |
| Merrick, Frank A., Johnstown, assignor, by mesne assignments, to Westinghouse Electric and Manufacturing Company, Pittsburg, Pa. Control of electric motors | 735,893 | Aug. 11 | 1642 | 351 | 105 | 1350 |
| Merrick, Frank A., Johnstown, assignor, by mesne assignments, to Westinghouse Electric and Manufacturing Company, Pittsburg, Pa. Armature-coil | 736,417 | Aug. 18 | 2568 | 563, 564 | 105 | 1566 |
| Merrick, Frank A., Johnstown, assignor, by mesne assignments, to Westinghouse Electric and Manufacturing Company, Pittsburg, Pa. Trolley | 746,351 | Dec. 8 | 1909 | 436 | 107 | 1526 |
| Merrick, Frank A., and E. W. Stull, Johnstown, assignors, by mesne assignments, to Westinghouse Electric and Manufacturing Company, Pittsburg, Pa. Controller for electric motors | 732,875 | July 7 | 320 | 80 | 105 | 71 |
| Merrick, Franz M. (See Herrick, Bissett, and Merrick.) | | | | | | |
| Merrick, Griffith A. (See Merrick, Samuel M., assignor.) | | | | | | |
| Merrick, Lycortes D., New York, N. Y. Rear-view hat-mirror | 736,418 | Aug. 18 | 2571 | 564 | 105 | 1567 |
| Merrick, Samuel M., assignor of one-half to G. A. Merrick, Floydada, Tex. Seed-planter | 744,779 | Nov. 24 | 3833 | 826 | 107 | 866 |
| Merrill, Albert C., Grand Junction, and A. J. Belton, Bloomingdale, Mich. Sleigh | 724,910 | Apr. 7 | 909 | 208 | 103 | 1364 |
| Merrill, Ansel L., Hydepark, Mass. Hydrocarbon-burner | 745,880 | Dec. 1 | 1051 | 236 | 107 | 1322 |
| Merrill, Arthur, Avon, Ill. Stopper for paste or mucilage bottles | 726,724 | Apr. 28 | 4291 | 969 | 103 | 2112 |
| Merrill, Benjamin N., Woodford, Me. Washboard-holder | 719,022 | Jan. 27 | 2848 | 639 | 102 | 649 |
| Merrill, Charles M., *et al.* (See Taylor, Santley M., assignor.) | | | | | | |
| Merrill, Charles W., Alameda, Cal. Hydraulic classifier | 728,487 | May 19 | 3142 | 695 | 104 | 706 |
| Merrill, Charles W., Alameda, Cal. Leaching ores or tailings with solutions of alkaline cyanids | 731,590 | June 23 | 3818 | ..... | 104 | 1969 |
| Merrill, Edward W., Jr., New York, N. Y. Cotter | 733,669 | July 14 | 1731 | 409 | 105 | 382 |
| Merrill, Edwin C., Pittsburg, Pa. Gas-burner | 725,110 | Apr. 14 | 1290 | 291 | 103 | 1459 |
| Merrill, Elizabeth W., Quincy, Mass. Garment | 737,360 | Aug. 25 | 4162 | 927 | 105 | 1919 |
| Merrill, Emily L., Boston, Mass. Adjustable garment-retainer | 737,435 | Aug. 25 | 4498 | 1009 | 105 | 1992 |
| Merrill, Emory, assignor of one-half to P. Jewett, Waverly, Nebr. Cultivator | 731,591 | June 23 | 3819 | 850 | 104 | 1969 |
| Merrill, Frances B., New York, N. Y., assignor to Merrill Process Company. Binder for briquets | 733,987 | July 21 | 2355 | ..... | 105 | 528 |
| Merrill, George W., Jr., New York, N. Y., assignor to Hawthorne and Sheble Manufacturing Company. Speed-regulator for spring-motors | 728,488 | May 19 | 3143 | 695 | 104 | 707 |
| Merrill, Joseph M., East Orange, N. J. Clothes-hook | 725,111 | Apr. 14 | 1293 | 291 | 103 | 1459 |
| Merrill, Milburn M., Weedsport, N. Y. Plaiting attachment for skirts | 748,396 | Dec. 29 | 5718 | 1306 | 107 | 2434 |
| Merrill Process Company. (See Merrill, Frances B., assignor.) | | | | | | |
| Merrill, Sherburn N., trustee. (See Ellery, Robert L., assignor.) | | | | | | |
| Merrill, Ulysses G., Litchfield, Me. Electrical signal system | 746,726 | Dec. 15 | 2568 | 591 | 107 | 1694 |
| Merrill, Wilbur L., Schenectady, N. Y., assignor to General Electric Company. Electric steering-gear | 735,550 | Aug. 4 | 1003 | 212 | 105 | 1193 |
| Merriman, Isaac B. (See Rivet, Eugene, assignor.) | | | | | | |
| Merritt, Allan B., St. Louis, Mo. Fastening device for neckties | 737,436 | Aug. 25 | 4500 | 1009 | 105 | 1992 |
| Merritt, Arthur A., New York, N. Y., assignor to Union Special Sewing Machine Company, Chicago, Ill. Presser-foot for sewing-machines | 733,499 | July 14 | 1434 | 337 | 105 | 321 |
| Merritt, Benjamin F., East Orange, N. J. Grinding or polishing machine | 725,266 | Apr. 14 | 1569 | 355, 356 | 103 | 1517 |
| Merritt, Benjamin F., East Orange, N. J. Timing device for telephone-switchboards | 740,889 | Oct. 6 | 929 | 208, 209 | 106 | 1445 |
| Merritt, G. A. (See Luquire, Wiley, assignor.) | | | | | | |
| Merritt, Henry W. (See Barron and Merritt.) | | | | | | |
| Merritt, Henry W., assignor to Monarch Typewriter Company, Syracuse, N. Y. Typewriting machine | 740,890 | Oct. 6 | 932 | 209 | 106 | 1445 |
| Merritt, James M., Los Angeles, Cal. Gopher-trap | 718,853 | Jan. 20 | 2515 | 560 | 102 | 563 |
| Merritt, John F., *et al.* (See Overton, Charles A., assignor.) | | | | | | |
| Merritt, Willard A., Brooklyn, N. Y., assignor to G. F. Spencer, Newark, N. J. Illuminating device and reflector for show-cases | 733,670 | July 14 | 1732 | 409 | 105 | 382 |
| Merritt, Willard M., Ludington, Mich. Culinary vessel | 718,367 | Jan. 13 | 1570 | 347 | 102 | 352 |
| Merrow, George W., Merrow, assignor to Merrow Machine Company, Hartford, Conn. Trimming | 725,112 | Apr. 14 | 1295 | 292 | 103 | 1459 |
| Merrow, George W., Merrow, assignor to Merrow Machine Company, Hartford, Conn. Border for the edges of fabrics | 725,113 | Apr. 14 | 1296 | 292 | 103 | 1460 |
| Merrow, George W., and J. T. Collins, assignors to Merrow Machine Company, Hartford, Conn. Edging for lace | 718,139 | Jan. 13 | 1155 | 256 | 102 | 264 |
| Merrow, Joseph M., Merrow, assignor to Merrow Machine Company, Hartford, Conn. Overseaming-machine | 730,944 | June 16 | 2577 | 574 | 104 | 1700 |
| Merrow, Joseph M., Merrow, assignor to Merrow Machine Company, Hartford, Conn. Sewing-machine feed | 730,945 | June 16 | 2581 | 575 | 104 | 1701 |
| Merrow, Joseph M., Merrow, assignor to Merrow Machine Company, Hartford, Conn. Trimming device for sewing-machines | 730,946 | June 16 | 2585 | 575 | 104 | 1702 |
| Merrow, Joseph M., Merrow, assignor to Merrow Machine Company, Hartford, Conn. Trimming mechanism for sewing-machines | 730,947 | June 16 | 2588 | 576 | 104 | 1702 |
| Merrow Machine Company. (See Merrow, George W., assignor.) | | | | | | |
| Merrow Machine Company. (See Merrow, Joseph M., assignor.) | | | | | | |
| Merrow Machine Company. (See Merrow and Collins, assignors.) | | | | | | |
| Merrow Machine Company. (See Stedman, William H., assignor.) | | | | | | |
| Mershon, Ralph D., New York, N. Y. Extinguishing fires in oil-filled receptacles | 744,585 | Nov. 17 | 3459 | 745 | 107 | 768 |

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| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Mershon, Stephen L., Montclair, N. J. Purifying iron | 730,142 | June 2 | 1114 | 250 | 104 | 1354 |
| Mershon, Stephen L., Montclair, N. J. Refractory article of manufacture | 730,834 | June 9 | 2360 | ..... | 104 | 1635 |
| Mertens, Adolf L. P., *et al.* (See Mészáros, Béla G., assignor.) | | | | | | |
| Mertens & Frowein. (See Mertens, Max, assignor.) | | | | | | |
| Mertens, Max, assignor to Mertens & Frowein, Elberfeld, Germany. Machine for punching jacquard-cards | 734,729 | July 28 | 3767 | 879 | 105 | 842 |
| Mertens, Siegfried, Charlottenburg, Germany. Valve | 746,545 | Dec. 8 | 2235 | 512<br>513 | 107 | 1598 |
| Mertes, August, Emsworth, assignor to Colonial Column Company, Allegheny, Pa. Built-up column | 730,191 | June 2 | 1190 | 267 | 104 | 1370 |
| Mertsheimer, Frederick, Denver, Colo. Valve | 740,157 | Sept. 29 | 5027 | 1129<br>1130 | 106 | 1141 |
| Merwarth, Christian, *et al.* (See Gravé, Sophia O., assignor.) | | | | | | |
| Merwarth, Henry D., *et al.* (See Gravé, Sophia O., assignor.) | | | | | | |
| Merwin, Charles F., *et al.*, executors. (See Totham, James.) | | | | | | |
| Merwin, George M. D., St. Louis, Mo. Therapeutic appliance | 743,306 | Nov. 3 | 949 | 206 | 107 | 204 |
| Merz, Charles H., Westminster, England. Apparatus for measuring and indicating electricity-supply | 722,030 | Mar. 3 | 698 | 155 | 103 | 151 |
| Merziger, Franz, Trier, Germany. Tide and wave power | 729,629 | June 2 | 188 | 44 | 104 | 1166 |
| Meserole, Abraham V., New York, N. Y. Storage battery | 736,125 | Aug. 11 | 2071 | 444 | 105 | 1441 |
| Mesnard, Felix, New Glasgow, Canada. Vehicle-wheel | 726,557 | Apr. 28 | 3980 | 901 | 103 | 2048 |
| Mesquita, Jaques B. de, Amsterdam, Netherlands. Sighting device for guns or other pieces of ordnance | 723,476 | Mar. 24 | 3421 | 764 | 103 | 761 |
| Messacar, William E., Albion, Mich. Combined awning and window-shade | 736,992 | Aug. 25 | 3676 | 815<br>816 | 105 | 1817 |
| Messenger, Robert W., Federalsburg, Md. Comparative register | 735,551 | Aug. 4 | 1005 | 212 | 105 | 1193 |
| Messenger, Thomas W., Quorn, South Australia, Australia. Combined head-gear and ear-trumpet | 739,098 | Sept. 15 | 3051 | 675<br>676 | 106 | 684 |
| Messer, Burton B., assignor of one-half to M. B. Wheatley, Washington, Pa. Ice-cream freezer | 717,887 | Jan. 6 | 707 | 158 | 102 | 151 |
| Messer, Fred W., Boston, Mass. Watch-holder | 727,402 | May 5 | 1072 | 233 | 104 | 231 |
| Messer, Walter L., Philadelphia, Pa., assignor to I. R. Davis, Camden, N. J. Clamp for grinding stones or wheels | 743,307 | Nov. 3 | 950 | 207 | 107 | 204 |
| Messer, Walter L., Philadelphia, Pa., assignor to I. R. Davis, Camden, N. J. Clamp for grinding-stones | 743,308 | Nov. 3 | 951 | 207 | 107 | 204 |
| Messerly, Everett A., Santa Barbara, Cal., assignor to Troy Laundry Machinery Co., Limited, Troy, N. Y. Drying-frame | 745,641 | Dec. 1 | 596 | 138 | 107 | 1225 |
| Messick, John F., Woodruff Place, assignor of one-third to J. N. Crabb, Indianapolis, Ind. Hygienic garment-rack | 720,833 | Feb. 17 | 2623 | 605 | 102 | 1405 |
| Messinger, Charles F. (See Yeatman and Messinger.) | | | | | | |
| Messinger, Frederick H., New York, N. Y. Carbureter for internal-combustion engines | 719,486 | Feb. 3 | 140 | 32 | 102 | 853 |
| Messler, August J. (See Widman and Messler.) | | | | | | |
| Messner, David A., Akron, Ohio. Artesian or oil drilling-machine | 736,993 | Aug. 25 | 3679 | 816 | 105 | 1818 |
| Messner, Matthias, Trossingen, Germany. Shell for mouth-harmonicas | 723,701 | Mar. 24 | 3791 | 851 | 103 | 838 |
| Meston, Charles R. and T. M., assignors to Emerson Electric Manufacturing Company, St Louis, Mo. Field-magnet core | 724,484 | Apr. 7 | 117 | 29 | 103 | 1194 |
| Meston, Thomas M. (See Meston, Charles R. and T. M.) | | | | | | |
| Mészáros, Béla G., assignor to himself, I. Kahn, and A. L. P. Mertens, Hamburg, Germany. Spittoon | 740,891 | Oct. 6 | 934 | 210 | 106 | 1446 |
| Metal Stamping Company. (See Worrest, Alfred H., assignor.) | | | | | | |
| Metal Volatilization Company. (See Pohlé and Croasdale, assignors.) | | | | | | |
| Metalline-Platten-Gesellschaft M. B. H. (See Ahrle, Carl P. H., assignor.) | | | | | | |
| Metalline-Platten-Gesellschaft M. B. H. (See Huck, Fischer, Ahrle, and Schmieder, assignors.) | | | | | | |
| Metcalf, Arthur S. E., Moville, Iowa. Brace | 747,746 | Dec. 22 | 4476 | 1009 | 107 | 2139 |
| Metcalf, Charles W., San Diego, Cal. Acetylene-gas generator | 725,466 | Apr. 14 | 1947 | 436<br>437 | 103 | 1597 |
| Metcalf, Clarence E., assignor to Draper Company, Hopedale, Mass. Bobbin-retaining means for rotatable spindles | 734,922 | July 28 | 4127 | 961 | 105 | 918 |
| Metcalf Co., John S. (See Spelman, James, assignor.) | | | | | | |
| Metcalf, Foster M., and M. C. Abbey, Battlecreek, Mich. Pneumatic tool | 734,276 | July 21 | 2924 | 683 | 105 | 654 |
| Metcalf, George E., Worcester, Mass. Means for truing grinding-wheels | 730,282 | June 9 | 1387 | 305 | 104 | 1426 |
| Metcalfe, Henry W., New Brompton, England. Clip for attaching goods to ropes or rods | 724,310 | Mar. 31 | 5013 | 1123 | 103 | 1104 |
| Meth, Ben Z., Brzozdowce, Austria-Hungary. Etching glass | 736,994 | Aug. 25 | 3681 | ..... | 105 | 1818 |
| Metosh, Frank B., Savannah, N. Y. Loading apparatus | 731,316 | June 16 | 3286 | 731<br>732 | 104 | 1843 |
| Mette, William G., Oakpark, Ill. Photographic-plate washer | 733,244 | July 7 | 972 | 234<br>235 | 105 | 204 |
| Metternich, Christian, Newark, N. J. Dress-supporting pin | 736,126 | Aug. 11 | 2073 | 444 | 105 | 1442 |
| Mettler, Adolf. (See Mettler, Caspar W., A., and J.) | | | | | | |
| Mettler, Caspar W., A., and J., New Haven, assignors to F. C. Rockwell, West Hartford, Conn. Coking-kiln | 732,097 | June 30 | 4768 | 1064<br>1065 | 104 | 2180 |
| Mettler, Caspar W., A., and J., New Haven, assignors to F. C. Rockwell, West Hartford, Conn. Carbonizing-car | 741,356 | Oct. 13 | 1854 | 410 | 106 | 1663 |
| Mettler, Jacob. (See Mettler, Caspar W., A., and J.) | | | | | | |
| Metz, Herman A. (See Fourneaux, Emile A., assignor.) | | | | | | |
| Metz, John J., Meadville, Pa. Train-order holder and deliverer | 730,143 | June 2 | 1117 | 250 | 104 | 1354 |
| Metz, Leon. (See Crump and Metz.) | | | | | | |
| Metzgar, Oliver, *et al.*, admistrators. (See Metzger, Isbon.) | | | | | | |
| Metzgar, Samuel, *et al.*, administrators. (See Metzger, Isbon.) | | | | | | |
| Metzger, Alvah E., Clyde, Ohio. Storm-shield for vehicles | 726,323 | Apr. 28 | 3521 | 797 | 103 | 1958 |
| Metzger, Charles, Whittemore, Iowa. Support for conveyers | 721,215 | Feb. 24 | 3421 | 776 | 102 | 1593 |
| Metzger, Charles A. (See Skibbe, Charles A., assignor.) | | | | | | |
| Metzger, Emanuel, *et al.* (See Davis, Nathan, assignor.) | | | | | | |
| Metzger, George A., *et al.* (See Schug, Jacob, assignor.) | | | | | | |
| Metzger, Gustav, Newark, N. J. Gas-regulator | 726,962 | May 5 | 254 | 59 | 104 | 54 |
| Metzger, Hermann, Chicago, Ill. Toy | 723,292 | Mar. 24 | 3048 | 685 | 103 | 688 |
| Metzger, Isbon, deceased, Winfield, Iowa; O. and S. Metzgar, administrators. Hub-bearing | 726,324 | Apr. 28 | 3522 | 798 | 103 | 1958 |
| Metzger, Isbon, deceased, near Winfield, Iowa; O. and S. Metzgar, administrators. Journal-bearing | 734,923 | July 28 | 4129 | 962 | 105 | 918 |
| Metzger, Isbon, deceased, Winfield, Iowa; O. and S. Metzgar, administrators. Vehicle-hub | 735,552 | Aug. 4 | 1007 | 212 | 105 | 1194 |
| Metzger, Isbon, deceased, near Winfield, Iowa; O. and S. Metzgar, administrators. Journal-bearing | 736,532 | Aug. 18 | 2789 | 611 | 105 | 1614 |
| Metzger, John U., Owaneco, Ill. Trace-holder | 728,489 | May 19 | 3145 | 695 | 104 | 707 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | Spec. | Dr'g. | Vol. | Page |
| Metzner, Max A., Metuchen, assignor to C Pardee Works, Perth Amboy, N. J. Machine for removing glaze from the edges of tile | 732,767 | July 7 | 123 | 33, 34, 35 | 105 | 30 |
| Meurer, Otto, Cologne, Germany. Obtaining metal sulfates from mattes | 733,590 | July 14 | 1597 | ..... | 105 | 356 |
| Meuschel, August, assignor of one-half to G. W. Colles, Montreal, Canada Induction motor for variable speeds | 727,662 | May 12 | 1573 | 355 | 104 | 355 |
| Mexican Disinfectant Company (See Chism, George, assignor.) | | | | | | |
| Mey, Frederick H. C., Buffalo, N. Y. Malting and drying apparatus | 745,366 | Dec. 1 | 93 | 21, 22 | 107 | 1121 |
| Meyer, Andrew A., Boston, Mass. Automatic weighing-machine | 733,066 | July 7 | 650 | 157 | 105 | 138 |
| Meyer, Carl H., assignor to L. Blumer, Zwickau, Germany. Making soluble starch | 742,469 | Oct. 27 | 4023 | 903 | 106 | 2142 |
| Meyer, Carl H. E., Peoria, Ill. Fence-post | 744,688 | Nov. 17 | 3632 | 783 | 107 | 805 |
| Meyer, Charles, New York, N. Y. Collapsible gate | 730,036 | June 2 | 942 | 211 | 104 | 1319 |
| Meyer, Charles J. L., Chicago, Ill. Sectional feed and presser roll | 717,593 | Jan. 6 | 131 | 33, 34 | 102 | 30 |
| Meyer, Douglass E. (See Calhoun and Meyer.) | | | | | | |
| Meyer, Edwin O. (See Euker, George W., assignor.) | | | | | | |
| Meyer, Eugene. (See Fitzpatrick, William B., assignor.) | | | | | | |
| Meyer, Firm of H. C., Jr. (See Meyer and Besenbruch, assignors.) | | | | | | |
| Meyer, Franz. (See Neumann, Max, assignor.) | | | | | | |
| Meyer, Franz, New York, N. Y. Muffle roasting-furnace | 731,114 | June 16 | 2911 | 646, 647 | 104 | 1767 |
| Meyer, Fred J., *et al.* (See Stafford, James M., assignor.) | | | | | | |
| Meyer, Frederick, assignor of five-sixths to E. J. Kirby and Chicago American Fuel Briquetting Company, Chicago, Ill. Briquet-machine | 745,968 | Dec. 1 | 1204 | 269, 270, 271 | 107 | 1357 |
| Meyer, Frederick C., Kansas City, Mo. Quicksilver-ore-reducing apparatus | 742,887 | Nov. 3 | 117 | 27 | 107 | 27 |
| Meyer, Frederick F., Newark, N. J. Weighing-machine | 720,945 | Feb. 17 | 2833 | 649, 650 | 102 | 1450 |
| Meyer, Frederick W. A., Chicago, Ill., assignor to Crescent Company. Cord-slack take-up and adjuster | 741,154 | Oct. 13 | 1417 | 324 | 106 | 1567 |
| Meyer, George W., Sparrows Point, Md. Pump | 740,892 | Oct. 6 | 935 | 210 | 106 | 1446 |
| Meyer, Hans S., Rugby, England, assignor to General Electric Company. Induction-motor | 729,199 | May 26 | 4448 | 981 | 104 | 992 |
| Meyer, Heinrich C., and E. Besenbruch, assignors to Firm of H. C. Meyer, Jr., Harburg-on-the-Elbe, Germany. Bleaching cane | 722,869 | Mar. 17 | 2274 | 509 | 103 | 513 |
| Meyer, Herman L., St. Paul, Minn. Furnace | 718,497 | Jan. 13 | 1852 | 407 | 102 | 414 |
| Meyer, Hermann, New York, N. Y. Apparatus for punching music-sheets | 745,881 | Dec. 1 | 1053 | 237, 238 | 107 | 1323 |
| Meyer, Hermann H., Cleveland, Ohio. Sash-lock | 738,465 | Sept. 8 | 1857 | 404 | 106 | 413 |
| Meyer, Johann H., Magdeburg, Germany. Automatic conversation-counter for telephone-exchange systems | 717,755 | Jan. 6 | 438 | 102, 103 | 102 | 95 |
| Meyer, John H., *et al* (See Stafford, James M., assignor.) | | | | | | |
| Meyer, John J., New York, N. Y. Fastening device for vent-pipes | 737,437 | Aug. 25 | 4500 | 1009 | 105 | 1992 |
| Meyer, John W. (See Pries and Meyer.) | | | | | | |
| Meyer, Louis E. (See Jobin, Joseph R., assignor.) | | | | | | |
| Meyer, Paul, Pittsburg, assignor to Union Switch and Signal Company, Swissvale, Pa. Manufacture of jaws for coupling-rods | 732,876 | July 7 | 323 | 80 | 105 | 71 |
| Meyer, Ralph J., Mitchell, Colo. Mail-bag catching and delivering mechanism | 731,592 | June 23 | 3821 | 851 | 104 | 1970 |
| Meyer-Sniffen Company. (See Miller, Richard W., assignor.) | | | | | | |
| Meyer, Sophie, Chicago, Ill. Corset | 723,893 | Mar. 31 | 4163 | 937 | 103 | 933 |
| Meyer, Svend M., Brooklyn, N. Y. Vapor incandescent-lamp burner | 725,740 | Apr. 21 | 2463 | 557 | 103 | 1723 |
| Meyer, Victor, Hagen, Germany. Coil-spring | 736,333 | Aug. 11 | 2420 | 528 | 105 | 1519 |
| Meyer, William, West Hoboken, N. J. Display and vending case | 743,182 | Nov. 3 | 695 | 153 | 107 | 145 |
| Meyer, William, Chicago, Ill., assignor, by mesne assignments, to Stromberg Carlson Telephone Manufacturing Company, Rochester, N. Y. Circuit-changing apparatus | 748,397 | Dec. 29 | 5719 | 1306 | 107 | 2434 |
| Meyer, William C. (See French and Meyer.) | | | | | | |
| Meyer, William V., Chicago, Ill. Separator | 745,450 | Dec. 1 | 265 | 62 | 107 | 1155 |
| Meyercord, Herman A. (See Green, John H., assignor.) | | | | | | |
| Meyercord, Hermann. (See Green, John H., assignor.) | | | | | | |
| Meyeringh, Theodore, assignor of one-half to G. T. Johns, Grand Rapids, Mich. Composition for cleaning sinks | 725,467 | Apr. 14 | 1949 | ..... | 103 | 1597 |
| Meyerott, Louis C., Evansville, Ill. Dust-collector | 737,438 | Aug. 25 | 4502 | 1010 | 105 | 1992 |
| Meyers, Alfred M., Milwaukee, Wis. Corn-harvester | 721,216 | Feb. 24 | 3422 | 776, 777 | 102 | 1593 |
| Meyers, Harry W., Fort Wayne, Ind. Steering-wheel for automobiles | 729,079 | May 26 | 4239 | 936 | 104 | 948 |
| Meyers, Henry E., Denver, Colo. Incandescent-lamp socket | 743,906 | Nov. 10 | 2158 | 465 | 107 | 475 |
| Meyers, Jacob, Philadelphia, Pa. Drill | 739,501 | Sept. 22 | 3793 | 849, 850 | 106 | 861 |
| Meyers, John G., Washington, D. C. Construction of buildings | 723,175 | Mar. 17 | 2813 | 634 | 103 | 625 |
| Meyers, Theodore A., Buffalo, N. Y. Speed-recorder | 746,865 | Dec. 15 | 2844 | 656 | 107 | 1755 |
| Meziere, John G., Campti, La. Music-leaf turner | 728,951 | May 26 | 4008 | 891 | 104 | 902 |
| Mica Insulator Company. (See Jefferson, Charles W., assignor.) | | | | | | |
| Michael, Adolph, Eilenburg, Germany. Rotary engine | 720,834 | Feb. 17 | 2624 | 605 | 102 | 1405 |
| Michael, Frank M., and T. V. Scott, Allegheny, Pa. Curtain-pole | 738,691 | Sept. 8 | 2304 | 506 | 106 | 508 |
| Michael, John B., Knoxville, Tenn. Throttle-valve | 723,894 | Mar. 31 | 4164 | 938 | 103 | 934 |
| Michael, John B., and T. P. Roberts, Knoxville, Tenn. Grinding machine | 720,946 | Feb. 17 | 2838 | 650, 651 | 102 | 1451 |
| Michael, William, Marion, Ind. Scaffold-bracket | 740,452 | Oct. 6 | 133 | 26 | 106 | 1274 |
| Michael, William C., Springfield, Mass. Hose-supporter | 741,973 | Oct. 20 | 3061 | 684 | 106 | 1931 |
| Michaëlis, Wilhelm, Jr., Chicago, Ill. Rotary kiln | 743,538 | Nov. 10 | 1490 | 311 | 107 | 335 |
| Michaels, Mayer. (See Lampson, Robert D., assignor.) | | | | | | |
| Michaelson, Henry H. and N. O., Osseo, Minn. Grass-harvester | 738,223 | Sept. 8 | 1344 | 291, 292 | 106 | 306 |
| Michaelson, Nick O. (See Michaelson, Henry H. and N. O.) | | | | | | |
| Michalk, Wilhelm, Deuben, near Dresden, Germany. Lubricating-press | 720,047 | Feb. 10 | 1171 | 268 | 102 | 1088 |
| Michalk, Wilhelm, Deuben, Germany. Lubricating | 744,088 | Nov. 17 | 2552 | 547 | 107 | 573 |
| Michalke, Carl J. A., Charlottenburg, Germany, assignor to Siemens & Halske Electric Company of America, Chicago, Ill. Means for preventing the disturbance of telephone-circuits | 726,963 | May 5 | 259 | 59 | 104 | 56 |
| Michauck, Horst, Chemnitz, Germany. Superheater | 735,791 | Aug. 11 | 1435 | 309 | 105 | 1304 |
| Michaud & Cie., A. (See Joatton, Joseph, assignor.) | | | | | | |
| Michaud, Elzear, and E. J. Bricker, Winnipeg, Canada. Belt-controller | 733,067 | July 7 | 654 | 158 | 105 | 139 |
| Michel, Paul. (See Poirier and Michel.) | | | | | | |
| Michel, William B., Willowsprings, Ill. Railway-track layer | 744,870 | Nov. 24 | 3995 | 861 | 107 | 899 |
| Michel, William P., New York, N. Y. Street-car | 744,780 | Nov. 24 | 3835 | 827 | 107 | 866 |
| Michell, Henry C., London, England. Boiler-covering and making same | 732,207 | June 30 | 4993 | 1111 | 104 | 2229 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| Michelsen, John H., and M. L. Borglum; said Michelsen assignor to J. H. Curtis and G. Majors, Butte, Mont. Ore-concentrator | 721,591 | Feb. 24 | 4100 | 933 | 102 | 1738 |
| Michelsen, Thor, Los Angeles, Cal. Air-ship | 735,981 | Apr. 21 | 2885 | 654 | 103 | 1811 |
| Michie, John C., Durham, N. C. Meter-glass-cleaning device | 737,439 | Aug. 25 | 4507 | 1011 | 105 | 1993 |
| Michigan Engine Co. (See Masterman and Magney, assignors.) | | | | | | |
| Michigan Steel Boat Company. (See Chambers and Bullard, assignors.) | | | | | | |
| Mick, Bert A., Paterson, N. J. Casting solid metallic bodies | 736,419 | Aug. 18 | 2573 | 564 | 105 | 1568 |
| Mickey, Charles S. (See Bailey and Mickey.) | | | | | | |
| Mickley, Charles E., assignor of one-half to W. F. Myers, York, Pa. Automatic railway-gate | 718,011 | Jan. 6 | 934 | 207 | 102 | 201 |
| Microphone Transmitter Company. (See Mellett, Lemuel, assignor.) | | | | | | |
| Mid-Air Exhibition and Advertising Company. (See Ward and Young, assignors.) | | | | | | |
| Middaugh, Horace A., Seattle, Wash. Means for discharging cargoes | 747,560 | Dec. 22 | 4141 | 930 | 107 | 2064 |
| Middlebrook, William C. (See Grant and Middlebrook.) | | | | | | |
| Middleby, Joseph, Jr. (See Dooley, Thomas B., assignor.) | | | | | | |
| Middleby, Joseph, Jr., Malden, Mass., assignor to Hatch Accumulator Company, Kittery, Me., and Boston, Mass. Secondary battery | 736,420 | Aug. 18 | 2575 | 565 | 105 | 1568 |
| Middleditch, Henry H., and C. A. Gregory, assignors to J. Smedley, Limited, Matlock Bath, England. Knitted pants and their manufacture | 731,381 | June 16 | 3406 | 761 | 104 | 1868 |
| Middlemiss, Myron H., Lisbon Center, N. Y. Adjustable shade-bracket | 736,533 | Aug. 18 | 2791 | 611 | 105 | 1614 |
| Middlesworth, John J., Duffield, Mich. Windmill | 723,293 | Mar. 24 | 3050 | 686 | 103 | 689 |
| Middleton, Abram, and T. S. Pearson, assignors of one-third to N. G. Hanna, Kokomo, Ind. Attachment for mowing-machines | 730,948 | June 16 | 2593 | 576<br>577 | 104 | 1703 |
| Middleton, Arthur A., Caney, Kans. Display-front for drawers, &c. | 727,663 | May 12 | 1577 | 355 | 104 | 356 |
| Middleton, William B., London, England. Treatment of zinc or other ores | 735,894 | Aug. 11 | 1647 | 352 | 105 | 1351 |
| Middleton, William G., Augusta, Ga. Drill-chuck | 748,398 | Dec. 29 | 5721 | 1307 | 107 | 2435 |
| Middletown Car Works. (See King and Frank, assignors.) | | | | | | |
| Midgley, Edwin, London, England. Pneumatic tire | 722,600 | Mar. 10 | 1754 | 391 | 103 | 392 |
| Midgley Manufacturing Company. (See Midgley, Thomas, assignor.) | | | | | | |
| Midgley, Thomas, assignor to Midgley Manufacturing Company, Columbus, Ohio. Metallic spoke for vehicle-wheels | 743,539 | Nov. 10 | 1491 | 311 | 107 | 356 |
| Midgley, William G. (See Thompson and Midgley.) | | | | | | |
| Midgley, William G., Buffalo, N. Y. Gas-lamp | 736,287 | Aug. 11 | 2345 | 509<br>510 | 105 | 1503 |
| Midgley, William G., Buffalo, N. Y. Regulator for gas-burners | 746,546 | Dec. 8 | 2236 | 513 | 107 | 1598 |
| Mieden, Adam, Sumpter, Oreg. Garment-hanger | 742,207 | Oct. 27 | 3550 | 792 | 106 | 2043 |
| Miehle Printing Press and Manufacturing Company. (See Vance, Walter N., assignor.) | | | | | | |
| Miehle, Robert, Chicago, Ill. Bed-motion for printing-presses | 738,829 | Sept. 15 | 2585 | 570<br>571 | 106 | 586 |
| Miehle, Robert, Chicago, Ill. Sheet-delivery mechanism | 743,393 | Nov. 3 | 1141 | 241<br>242 | 107 | 241 |
| Mieleke, Paul, Oderberg i. Mark, Germany. Dough-dividing machine | 738,692 | Sept. 8 | 2306 | 506 | 106 | 509 |
| Mieroslawski, Anna, New York, N. Y. Protecting head-gear or hat | 746,976 | Dec. 15 | 3059 | 701 | 107 | 1804 |
| Mies, Eduard, Büdesheim, Germany. Mercury safety attachment for electric circuits | 736,127 | Aug. 11 | 2074 | 444 | 105 | 1442 |
| Miesse, Americus, assignor of two-thirds to E. P. Jackman and W. Carr, Lima, Ohio. Car-fender | 744,587 | July 28 | 3493 | 816 | 105 | 787 |
| Miethe, Adolph, Charlottenburg, and A. Traube, Berlin, Germany. Panchromatic dry-plate and making same | 724,311 | Mar. 31 | 5013 | ..... | 103 | 1105 |
| Mietz, August. (See Weiss, Carl W., assignor.) | | | | | | |
| Migel, Moses C. (See Wells, William S., assignor.) | | | | | | |
| Mighell, Seward N., assignor to Morgan-Gardner Electric Company, Chicago, Ill. Locomotive | 732,768 | July 7 | 125 | 35 | 105 | 30 |
| Mighell, Seward N., assignor to Morgan-Gardner Electric Company, Chicago, Ill. Mining-machine | 746,727 | Dec. 15 | 2570 | 591<br>592 | 107 | 1694 |
| Mighels, Philip V., Oakland, and C. Z. Ellis, Berkeley, Cal. Musical top | 748,087 | Dec. 29 | 5180 | 1172 | 107 | 2317 |
| Mignault, Charles. (See Barré and Mignault.) | | | | | | |
| Mikkelson, James C. (See Davis and Mikkelson.) | | | | | | |
| Milans, Joseph H., Washington, D. C., assignor to Curtain Supply Company, Jersey City, N. J., and Chicago, Ill. Friction holding device for spring-actuated shades | 729,630 | June 2 | 189 | 44,45 | 104 | 1166 |
| Milbank, Robert. (See Latham, James R., assignor.) | | | | | | |
| Milburn, John H., Detroit, Mich. Computing platform-scale | 725,468 | Apr. 14 | 1949 | 437 | 103 | 1597 |
| Milburn, John H., Detroit, Mich. Scale | 741,688 | Oct. 20 | 2499 | 557 | 106 | 1814 |
| Milde, Joseph F. (See Koehler and Milde.) | | | | | | |
| Miles, Casper W., Cincinnati, Ohio, assignor to W. S. Stuckenberg, Indianapolis, Ind. Box-forming machine | 732,769 | July 7 | 127 | 35,36 | 105 | 31 |
| Miles, Edward T., and Z. Storch, Alameda, Cal. Pump | 736,421 | Aug. 18 | 2578 | 565 | 105 | 1568 |
| Miles, Eugene E., Akron, Ohio. Package-wrapping machine | 724,485 | Apr. 7 | 119 | 29<br>30<br>31 | 103 | 1194 |
| Miles, George W., Belmont, Mass., assignor to F. L. Pierce, trustee, Brooklyn, N. Y. Making cellulose esters | 733,729 | July 14 | 1824 | ..... | 105 | 402 |
| Miles, Perry B., Jackson, Mich. Block-mold | 738,830 | Sept. 15 | 2586 | 571 | 106 | 587 |
| Miles, S. A. (See Estep, Edwin R., assignor.) | | | | | | |
| Miles, William J., Jr., Middletown, Ohio. Dental broach | 717,594 | Jan. 6 | 134 | 34 | 102 | 30 |
| Miles, William J., Jr., Middletown, Ohio. Dental instrument | 739,333 | Sept. 22 | 3476 | 776 | 106 | 791 |
| Miles, Wilmer, assignor of one-half to N. L. Mathews, Lopez, Ala. Coupling | 745,219 | Nov. 24 | 4693 | 1024 | 107 | 1043 |
| Milholland, Frederick E., Brooklyn, N. Y. Linotype-galley | 736,725 | Apr. 28 | 4292 | 969 | 103 | 2112 |
| Mill, Anton, Cincinnati, Ohio. Variable-speed mechanism | 728,266 | May 19 | 2727 | 608 | 104 | 619 |
| Millane, Annie E., Elsternwick, Victoria, Australia. Roller-blind and fixings for same | 720,372 | Feb. 10 | 1781 | 403 | 102 | 1216 |
| Millar, Earl B., Los Angeles, Cal. Top for spice-boxes | 735,280 | Aug. 4 | 476 | 95 | 105 | 1082 |
| Millard, Edgar B., Genoa, Ill. Grain-separator | 741,974 | Oct. 20 | 3062 | 684 | 106 | 1931 |
| Millard, Samuel B., Litchfield, Minn. Optician's measure | 734,730 | July 28 | 3769 | 879 | 105 | 843 |
| Millburn, Edmun W., Tecumseh, Okla. Ter. Refrigerating apparatus | 731,802 | June 23 | 4207 | 938 | 104 | 2050 |
| Millea, John D. (See Millea and Carroll.) | | | | | | |
| Millea, Thomas D., Springfield, Mass. Combination-tool | 720,168 | Feb. 10 | 1389 | 318 | 102 | 1135 |
| Millea, Thomas D. and J. D., M. J. and E. J. Carroll, Springfield, Mass., assignors to Consolidated Engine-Stop Company, New York, N. Y. Speed-indicating device | 732,953 | July 7 | 451 | 112 | 105 | 98 |
| Miller, Alan C., Newark, N. J. Combined rake and hoe | 734,078 | July 21 | 2543 | 593 | 105 | 572 |
| Miller, Albert W. (See Bryan, Edgar J., assignor.) | | | | | | |
| Miller, Albin J. (See Moses, Philo P., assignor.) | | | | | | |
| Miller, Alexander H., and F. A. England, Philadelphia, Pa. Grocer's bin | 743,009 | Nov. 3 | 362 | 78,79 | 107 | 77 |
| Miller, Alfred P. (See Frankenberg and Miller.) | | | | | | |
| Miller, Alton H., New Orleans, La. Toilet-fan | 747,996 | Dec. 29 | 4997 | 1129 | 107 | 2277 |
| Miller, Archibald B., County of Middlesex, England. Box-hinge | 719,832 | Feb. 3 | 765 | 179 | 102 | 985 |
| Miller, Arthur C., Newton, Mass. Honeycomb-stripper | 731,701 | June 23 | 4019 | 897 | 104 | 2009 |

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| Name, residence, and invention. | No. | Date. | Monthly volume | | Official Gazette. | |
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| Miller, Augustus P., assignor of one-half to A. H. Bischoff, Baltimore, Md. Wrench | 737,645 | Sept. 1 | 157 | 34 | 106 | 37 |
| Miller, Benjamin F. D., assignor of one-half to G. J. Krieger, Wooster, Ohio. Counterfeit-excluder for nickel-in-the-slot machines | 740,158 | Sept. 29 | 5029 | 1130 | 106 | 1142 |
| Miller, Benjamin F. D., assignor to G. J. Krieger and D. Heller, Wooster, Ohio. Automatic cut-off | 718,012 | Jan. 6 | 937 | 208 | 102 | 202 |
| Miller, Benjamin F. D., assignor to G. J. Kreiger, Jr., and D. Heller, Wooster, Ohio. Animal-trap | 748,201 | Dec. 29 | 5394 | 1226 | 107 | 2362 |
| Miller, Bernhard H., Mendota, Ill. Chimney | 717,696 | Jan. 6 | 309 | 76 | 102 | 67 |
| Miller, Bert, *et al.* (See Hughes, Hugh T., assignor.) | | | | | | |
| Miller, Caleb M. (See Lowry, Audy A., assignor.) | | | | | | |
| Miller, Calvin, and M. Jacobs, Wheeling, W. Va. Wrench | 747,624 | Dec. 22 | 4259 | 958 | 107 | 2091 |
| Miller, Carey W., assignor to W. D. Brundage and E. C. Lester, Albion, Mich. Electrical sparking igniter | 739,199 | Sept. 15 | 3225 | 714<br>715 | 106 | 721 |
| Miller, Charles, Binghamton, N. Y. Vehicle-wheel | 719,023 | Jan. 27 | 2849 | 640 | 102 | 648 |
| Miller, Charles, Binghamton, N. Y. Sectional cushion-tire | 735,993 | Aug 11 | 1829 | 392 | 105 | 1391 |
| Miller, Charles, Binghamton, N. Y. Tire | 737,559 | Aug. 25 | 4721 | 1059 | 105 | 2043 |
| Miller, Charles, Binghamton, N. Y. Resilient core and tire | 743,309 | Nov. 3 | 952 | 207 | 107 | 204 |
| Miller, Charles A., Reading, Pa. Fuel-feed regulator for explosive-engines | 725,741 | Apr. 21 | 2466 | 558 | 103 | 1723 |
| Miller, Charles B., Chicago, Ill., and O. D. Cotton, Detroit, Mich.; said Miller assignor to said Cotton. Furnace | 721,720 | Mar. 3 | 121 | 26 | 103 | 27 |
| Miller, Charles B., Chicago, Ill., and O. D. Cotton, Detroit, Mich.; said Miller assignor to said Cotton. Furnace | 721,818 | Mar. 3 | 289 | 64 | 103 | 64 |
| Miller, Charles B., Chicago, Ill., and O. D. Cotton, Detroit, Mich.; said Miller assignor to said Cotton. Means for stoking furnaces | 728,952 | May 26 | 4009 | 892 | 104 | 902 |
| Miller, Charles F., Pottsville, Pa. Automatic train-stop | 735,792 | Aug. 11 | 1437 | 309 | 105 | 1305 |
| Miller, Charles H., Logtown, Miss. Non-refillable bottle | 743,907 | Nov. 10 | 2160 | 465 | 107 | 476 |
| Miller, Charles O., Estherville, Iowa. Electric burglar-alarm for vaults, safes, or the like | 729,952 | June 2 | 785 | 174<br>175<br>176 | 104 | 1288 |
| Miller, Charles W., assignor to Gilliam Manufacturing Company, Canton, Ohio. Harness-saddle | 736,760 | Aug. 18 | 3230 | 713 | 105 | 1702 |
| Miller, Conrad, Leadville, Colo. Wheel | 720,048 | Feb. 10 | 1172 | 268 | 102 | 1088 |
| Miller, Conrad, Leadville, Colo. Wheel | 734,588 | July 28 | 3495 | 816 | 105 | 788 |
| Miller, Conrad, Leadville, Colo. Wheel | 734,731 | July 28 | 3771 | 880 | 105 | 843 |
| Miller, Conrad, Denver, Colo. Nut-lock | 747,459 | Dec. 22 | 3958 | 889 | 107 | 2021 |
| Miller, Constantine W., New York, N. Y. Pipe-bending tool | 740,893 | Oct. 6 | 938 | 211 | 106 | 1447 |
| Miller, David P., Cumberland, Md. Panel-work or wainscoting | 741,524 | Oct. 13 | 2181 | 485 | 106 | 1731 |
| Miller, David W., Chicago, Ill. Excavating-machine | 718,854 | Jan. 20 | 2516 | 560<br>561 | 102 | 563 |
| Miller, Dorr, assignor of eleven twenty-fourths to A. D. Rogers, G. W. Harrod, and M. Drake, Fort Wayne, Ind. Railway-switch | 747,202 | Dec. 15 | 3487 | 791 | 107 | 1901 |
| Miller, E. X., *et al.* (See Gibbs, James E., assignor.) | | | | | | |
| Miller, Edwin C., Laharpe, Kans. Attachment for drill-wrenches | 725,267 | Apr. 14 | 1571 | 356 | 103 | 1517 |
| Miller, Edwin W., Ottawa, Kans. Clutch | 721,964 | Mar. 3 | 581 | 129 | 103 | 127 |
| Miller, Emil F., assignor to F. Henning and J. Huss, Mendota, Ill. Swing | 733,913 | July 14 | 2204 | 517 | 105 | 478 |
| Miller, Francis, Bellevue, Ky. Variable-speed gear | 724,312 | Mar. 31 | 5015 | 1123<br>1124 | 103 | 1105 |
| Miller, Frederick C., Newport, Ky. Automatic cut-off for gas-stoves | 728,267 | May 19 | 2733 | 608 | 104 | 621 |
| Miller, Frederick C., Newport, Ky. Variable-speed mechanism | 728,268 | May 19 | 2734 | 608 | 104 | 621 |
| Miller, Frederick W., Milwaukee, Wis. Newspaper-holder | 717,888 | Jan. 6 | 709 | 158 | 102 | 151 |
| Miller, Fredrick W., Caledonia, N. Y. Agricultural implement | 746,547 | Dec. 8 | 2240 | 513<br>514 | 107 | 1599 |
| Miller, George E., assignor of one-half to R. L. Scott, Arlington Place, Cal. Bracket-scale | 722,374 | Mar. 10 | 1340 | 296 | 103 | 301 |
| Miller, George H. (See Thompson, John O., assignor.) | | | | | | |
| Miller, George H., Norwalk, Ohio. Earth-anchor | 736,995 | Aug. 25 | 3682 | 817 | 105 | 1818 |
| Miller, George M., Uniontown, Pa. Coke-oven | 728,953 | May 26 | 4011 | 892 | 104 | 902 |
| Miller, Gustave A. (See Conner, Abner F., assignor.) | | | | | | |
| Miller, Haidee, Fremont, Ohio. Pin for supporting skirts | 739,896 | Sept. 29 | 4554 | 1023 | 106 | 1040 |
| Miller, Halen F., Belleville, Mich. Railway-track | 747,460 | Dec. 22 | 3960 | 890 | 107 | 2021 |
| Miller, Hans A., Crockett, Cal. Domestic boiler | 733,730 | July 14 | 1828 | 432 | 105 | 402 |
| Miller, Henry, St. Louis, Mo. Hat-box | 734,235 | July 21 | 2838 | 665 | 105 | 635 |
| Miller, Henry C., Milwaukee, Wis. Loose-leaf book | 717,697 | Jan. 6 | 310 | 76 | 102 | 67 |
| Miller, Henry C., Milwaukee, Wis. Leaf for loose-leaf books | 737,261 | Aug. 25 | 4163 | 927 | 105 | 1919 |
| Miller, Henry J., assignor to A. R. and J. S. Coates, Goshen, N. Y. Road-cart | 729,080 | May 26 | 4240 | 937 | 104 | 948 |
| Miller, Herman F. (See Kurtis and Miller.) | | | | | | |
| Miller, Hiram A., Clinton, Mass. Sectional sheet-piling and means for sinking same | 727,989 | May 12 | 2205 | 492 | 104 | 488 |
| Miller, Horatio H. (See Jamison, Thomas H., assignor.) | | | | | | |
| Miller, Hugh C., Brenham, Tex. Boiler scraper and cleaner | 745,642 | Dec. 1 | 598 | 138 | 107 | 1225 |
| Miller, Isaac E., Chicago, Ill. Cooker | 745,451 | Dec. 1 | 268 | 62 | 107 | 1156 |
| Miller, Isaac L., *et al.* (See Miller, Joseph, assignor.) | | | | | | |
| Miller, Isaac L. (See Miller and Ashley, assignors.) | | | | | | |
| Miller, J. R. (See Baker and Horn, assignors.) | | | | | | |
| Miller, Jacob C. (See White and Miller.) | | | | | | |
| Miller, Jacob W. (See Huber and Miller.) | | | | | | |
| Miller, James A., San Francisco, Cal. Coin-controlled mirror-receptacle | 729,631 | June 2 | 193 | 45 | 104 | 1167 |
| Miller, James B., Kent, Ohio. Combination-lock | 717,889 | Jan. 6 | 710 | 159 | 102 | 151 |
| Miller, James E., Monroeton, Pa. Composition for removing varnish | 725,002 | Apr. 7 | 1085 | ------ | 103 | 1401 |
| Miller, James H., Richland Springs, Tex. Pencil-compasses | 731,200 | June 16 | 3069 | 681 | 104 | 1797 |
| Miller, James L., Albion, Mich. Fire-tongs | 745,882 | Dec. 1 | 1057 | 238 | 107 | 1324 |
| Miller, James M. (See Grey, Sylvester P., assignor.) | | | | | | |
| Miller, James R. (See McKinley, Riley P., assignor.) | | | | | | |
| Miller, James S., Clinton, Nebr. Railway-tie | 727,403 | May 5 | 1073 | 233 | 104 | 231 |
| Miller, James W., and M. Webb, Joliet, Ill. Twyer | 725,742 | Apr. 21 | 2467 | 558 | 103 | 1724 |
| Miller, Jefferson D., New York, N. Y. Stair-carpet holder | 745,220 | Nov. 24 | 4694 | 1024 | 107 | 1044 |
| Miller, Jessie G., *et al.* (See Howard, Edward J., assignor.) | | | | | | |
| Miller, John. (See Shafer and Miller.) | | | | | | |
| Miller, John A., Philadelphia, Pa. Steam-generator | 733,862 | July 14 | 2099 | 495 | 105 | 457 |
| Miller, John A., and C. S. Wallace, Fairhaven, Wash. Floating fish-trap | 730,949 | June 16 | 2596 | 577 | 104 | 1703 |
| Miller, John C., Camden, N. J., assignor of one-half to J. H. Geissel, Philadelphia, Pa. Belt-fastener | 725,982 | Apr. 21 | 2887 | 655 | 103 | 1812 |
| Miller, John C., assignor of one-half to J. H. Huntington, Jackson, Mich. Block-mold | 744,970 | Nov. 24 | 4174 | 902 | 107 | 936 |
| Miller, John D., San Antonio, Tex. Sash-lock | 725,577 | Apr. 14 | 2145 | 486 | 103 | 1640 |
| Miller, John D., San Antonio, Tex. Sash-lock | 731,317 | June 16 | 3287 | 732 | 104 | 1843 |
| Miller, John H., Dora, Oreg. Hopple for cows | 741,921 | Oct. 20 | 2945 | 657 | 106 | 1907 |
| Miller, John J. A., Denver, Colo. Wrench | 741,155 | Oct. 13 | 1420 | 324 | 106 | 1568 |

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| Miller, John S., Mount Vernon, N. Y. Monkey-wrench | 730,037 | June 2 | 943 | 211 | 104 | 1320 |
| Miller, Joseph, New York, N. Y., assignor of two-thirds to I. L. Miller, Paterson, N. J., and F. M. Ashley, New York, N. Y. Filtering apparatus | 741,055 | Oct. 13 | 1236 | 280 | 106 | 1531 |
| Miller, Joseph, and F. M. Ashley, New York, N. Y., assignors of one-third to I. L. Miller, Paterson, N. J. Ozonator | 742,341 | Oct. 27 | 3804 | 852 | 106 | 2098 |
| Miller, Joseph B., Sedalia, Mo. Fire-extinguishing compound | 719,833 | Feb. 3 | 765 | ------ | 102 | 985 |
| Miller, Joseph H., Duluth, Minn. Throat-brace for horse-collars | 736,128 | Aug. 11 | 2075 | 444 | 105 | 1442 |
| Miller, Joseph M., Chicago, Ill. Fire-extinguisher | 727,174 | May 5 | 670 | 144 | 104 | 145 |
| Miller, Joseph N., McHenry, Ill. Weedless fish-hook | 745,221 | Nov. 24 | 4695 | 1025 | 107 | 1044 |
| Miller, Kempster B., assignor to Kellogg Switchboard and Supply Company, Chicago, Ill. Telephone set | 718,855 | Jan. 20 | 2525 | 562 | 102 | 565 |
| Miller, Kempster B., assignor to Kellogg Switchboard and Supply Company, Chicago, Ill. Central-energy telephone system | 726,964 | May 5 | 261 | 60 | 104 | 56 |
| Miller, Kempster B., assignor to Kellogg Switchboard and Supply Company, Chicago, Ill. Central-energy telephone system | 732,098 | June 30 | 4769 | 1065 | 104 | 2181 |
| Miller, Kempster B., assignor to Kellogg Switchboard and Supply Company, Chicago, Ill. Central-energy telephone system | 741,807 | Oct. 20 | 2726 | 608 | 106 | 1861 |
| Miller, Lee R., and E. T. Richert, Akron, Ohio. Supporting-bandage | 731,201 | June 16 | 3070 | 681 | 104 | 1797 |
| Miller, Lewis A., Jerseyville, Ill. Sad-iron | 735,553 | Aug. 4 | 1009 | 213 | 105 | 1194 |
| Miller Lock Company. (See Soley, Frank, assignor.) | | | | | | |
| Miller, Louis W., assignor to Alert Manufacturing Company, Rochester, N. Y. Electric cut-out | 743,540 | Nov. 10 | 1492 | 312 | 107 | 336 |
| Miller, Ludvic M., Winneconne, Wis. Weed-cutter for the propellers of launches | 726,180 | Apr. 21 | 3234 | 733 | 103 | 1883 |
| Miller, Mallory, Indianapolis, Ind. Mop | 730,550 | June 9 | 1872 | 418 | 104 | 1530 |
| Miller, Marion M., assignor of one-half to A. B. Bellows, Pittsburg, Pa. Automatic adjustable braking device | 728,174 | May 12 | 2542 | 565 | 104 | 558 |
| Miller, Martin H., Wiarton, Canada. Sugar-making | 742,127 | Oct. 20 | 3393 | {757 / 758} | {106} | 1996 |
| Miller, Martin H., assignor of four-fifths to D. Huether, A. H. Hough, A. McNeill, and R. M. Fisher, Wiarton, Canada. Sugar making | 741,689 | Oct. 20 | 2502 | 558 | 106 | 1815 |
| Miller, Newton. (See Emmons and Miller.) | | | | | | |
| Miller, Niles M., Philadelphia, Pa. Window-ventilator | 718,140 | Jan. 13 | 1156 | 257 | 102 | 264 |
| Miller, Oliver A. (See Bostock, Edwin, Jr., assignor.) | | | | | | |
| Miller, Oliver A. (See Brown, Jonathan T., assignor.) | | | | | | |
| Miller, Oscar, Sioux City, Iowa. Clutch mechanism | 728,954 | May 26 | 4012 | 892 | 104 | 903 |
| Miller, Peter E., and J. H. Stinger, Kilgore, Ohio. Nut-lock | 733,245 | July 7 | 975 | 235 | 105 | 204 |
| Miller, Reuben L., Enon, Ohio. Handle for coal-buckets or other vessels | 735,554 | Aug. 4 | 1010 | 213 | 105 | 1194 |
| Miller, Richard, Appleton, Wis. Car-mover | 739,017 | Sept. 15 | 2892 | 642 | 106 | 653 |
| Miller, Richard W., Rutherford, N. J., assignor to Meyer-Sniffen Company, Limited, New York, N. Y. Water-closet | 725,268 | Apr. 14 | 1572 | 356 | 103 | 1518 |
| Miller, Robert E., Grandin, N. D. Scraper attachment for plow-colters | 717,698 | Jan. 6 | 316 | 77 | 102 | 68 |
| Miller, Robert R., Toledo, Ohio. Page-marker for books | 733,326 | July 7 | 1117 | 265 | 105 | 235 |
| Miller, Rudolph, Chambersburg, Pa. Micrometer-calipers | 720,947 | Feb. 17 | 2842 | 651 | 102 | 1452 |
| Miller, Samuel C., Louisville, Ky. Filling-tube for bottle-filling machines | 738,622 | Sept. 8 | 2148 | 471 | 106 | 477 |
| Miller, Sidney W., Chicago, Ill. Siphon | 727,990 | May 12 | 2207 | 492 | 104 | 489 |
| Miller, Sidney W., Chicago, Ill. Siphon | 727,991 | May 12 | 2210 | 493 | 104 | 489 |
| Miller Signal Company. (See Price, Jonathan D., assignor.) (Reissue.) | | | | | | |
| Miller, Silas E., Crockett, Cal. Toy | 737,757 | Sept. 1 | 373 | 80 | 106 | 83 |
| Miller, Simon. (See Brzykcy, Antoni, assignor.) | | | | | | |
| Miller, Thomas S. (See Temperley and Miller.) | | | | | | |
| Miller, Thomas S., South Orange, N. J. Sea-anchor | 717,890 | Jan. 6 | 711 | 159 | 102 | 151 |
| Miller, Thomas S., South Orange, N. J. Marine conveyer | 718,368 | Jan. 13 | 1571 | 347 | 102 | 352 |
| Miller, Thomas S., South Orange, N. J. Unloading device | 721,317 | Feb. 24 | 3578 | 814 | 102 | 1627 |
| Miller, Thomas S., South Orange, N. J. Sea-anchor | 727,175 | May 5 | 672 | 144 | 104 | 145 |
| Miller, Thomas S., South Orange, N. J. Cableway | 736,996 | Aug. 25 | 3683 | 817 | 105 | 1818 |
| Miller, Thomas S., South Orange, N. J. Cableway | 748,295 | Dec. 29 | 5555 | 1267 | 107 | 2397 |
| Miller, Thomas S., South Orange, N. J., and J. H. Dickinson, Atlanta, Ga.; said Dickinson assignor to Lidgerwood Manufacturing Company. Log hauling and loading machine. | 726,325 | Apr. 28 | 3525 | {798 / 799} | {103} | 1959 |
| Miller, Thomas W. (See Gregory, Thomas, assignor.) | | | | | | |
| Miller, Valentine M., *et al.* (See Wackerow, George L., assignor.) | | | | | | |
| Miller, W. R. (See Stevens, George E., assignor.) | | | | | | |
| Miller, Walter F., Brooklyn, N. Y. Railway-track connection | 734,345 | July 21 | 3051 | 718 | 105 | 679 |
| Miller, Walter H., Orange, and A. N. Pierman, Newark, assignors to National Phonograph Company, Orange, N. J. Making sound records or blanks | 726,965 | May 5 | 266 | 60 | 104 | 58 |
| Miller, Walter H., Orange, and A. N. Pierman, Newark, assignors to National Phonograph Company, Orange, N. J. Sound record or blank | 726,966 | May 5 | 268 | 60 | 104 | 58 |
| Miller, Warren H., Philadelphia, Pa. Mechanical car-refrigeration system | 742,796 | Oct. 27 | 4598 | {1042 / 1043} | {106} | 2266 |
| Miller, Warren H., New York, N. Y. Evaporative cooler or condenser | 748,296 | Dec. 29 | 5556 | 1267 | 107 | 2398 |
| Miller, William, Falkirk, Scotland. Band-saw guide | 729,200 | May 26 | 4451 | 981 | 104 | 993 |
| Miller, William A., West Newton, assignor of one-half to W. Maxwell, Pittsburg, Pa. Dolly-bar | 720,723 | Feb. 17 | 2454 | 562 | 102 | 1369 |
| Miller, William C., Pittsburg, Pa. Tack-puller | 743,183 | Nov. 3 | 699 | 153 | 107 | 146 |
| Miller, William E., Cripplecreek, Colo. Pen-cleaner | 717,595 | Jan. 6 | 135 | 34 | 102 | 30 |
| Miller, William G. (See Coad and Miller.) | | | | | | |
| Miller, William G., Cambridge, Mass. Safety device for elevators | 737,440 | Aug. 25 | 4507 | 1011 | 105 | 1993 |
| Miller, William H., *et al.* (See Full, George C., assignor.) | | | | | | |
| Miller, William H., *et al.* (See Smith, Clyde L., assignor.) | | | | | | |
| Miller, William R., New York, N. Y. Cutting and trimming machine | 737,758 | Sept. 1 | 375 | 80 | 106 | 83 |
| Miller, William S., Meyersdale, Pa. Washing-machine | 738,560 | Sept. 8 | 2038 | 444 | 106 | 453 |
| Millerick, John F., San Francisco, Cal. Sliding-door hanger | 721,819 | Mar. 3 | 290 | 64 | 103 | 64 |
| Millet, Liberty, Hagerman, Idaho. Material for the construction of buildings, &c. | 719,243 | Jan. 27 | 3275 | 732 | 102 | 737 |
| Millett, Charles W., Canajoharie, N. Y., assignor, by mesne assignments, to W. H. Honiss, W. A. Lorenz, Hartford, Conn., and Beech-Nut Packing Company, Canajoharie, N. Y. Can or jar | 747,461 | Dec. 22 | 3961 | 890 | 107 | 2022 |
| Millhausen, Louis B., Morrisville, Pa. Bolt-protector | 731,931 | June 23 | 4428 | 987 | 104 | 2098 |
| Milligan, John F., assignor of one-half to E. E. Starr, St. Louis, Mo. Attachment for spring-balance scales | 739,266 | Sept. 15 | 3358 | 746 | 106 | 753 |
| Milligan, John H., Baltimore, Md. Boat-propeller | 724,486 | Apr. 7 | 130 | 31 | 103 | 1197 |
| Milligan, Melvin L., *et al.* (See Crist, George J., assignor.) | | | | | | |
| Milligan, William. (See Christianson, Andrew, assignor.) | | | | | | |
| Milligan, William. (See Cowell, Newell P., assignor.) | | | | | | |
| Millison, Theophilus R., Indianapolis, Ind. Internal mold for burial-vaults | 723,477 | Mar. 24 | 3423 | 765 | 103 | 762 |
| Mills, Americus C., Jr., Rochester, N. Y. Savings-bank | 732,770 | July 7 | 130 | 36 | 105 | 32 |
| Mills, Anson, Washington, D. C. Carrier for small-arms fixed ammunition | 722,123 | Mar. 3 | 853 | 191 | 103 | 184 |
| Mills, Anson, Washington, D. C. Carrier for small-arms fixed ammunition | 722,124 | Mar. 3 | 854 | 191 | 103 | 184 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | Spec. | Drg. | Vol | Page |
| Mills, Anson, Washington, D. C. Magazine-firearm | 722,125 | Mar. 3 | 856 | 191, 192 | 103 | 184 |
| Mills, Anson C., Jackson, Mich. Collapsible winding-drum | 720,169 | Feb. 10 | 1392 | 318 | 102 | 1135 |
| Mills, Anson C., Jackson, Mich. Wire-working machine | 720,170 | Feb. 10 | 1393 | 318 | 102 | 1136 |
| Mills, Anson C., Jackson, Mich. Wire-fence machine | 743,740 | Nov. 10 | 1855 | 391 | 107 | 413 |
| Mills, Charles, New York, N. Y. Panoramic camera | 744,928 | Nov. 24 | 4092 | 882 | 107 | 919 |
| Mills, Charles, assignor to Saco & Pettee Machine Shops, Newton, Mass. Carding-engine | 729,632 | June 2 | 194 | 45, 46 | 104 | 1167 |
| Mills, Charles W., and W. W. Piddington, Los Angeles, Cal. Electric railway signaling system | 746,977 | Dec. 15 | 3060 | 702 | 107 | 1804 |
| Mills, Charles W., and W. W. Piddington, assignors of three eighths to J. L. Von Blom and G. C. De Garms, Los Angeles, Cal. Electric railway signaling system | 747,326 | Dec. 15 | 3726 | 840 | 107 | 1953 |
| Mills, Chester B., Wilmerding, and A. Williams, Pittsburg, Pa., assignors of one-half to S. Morse, Brattleboro, Vt. Automobile | 726,967 | May 5 | 271 | 61 | 104 | 59 |
| Mills, Daniel, Philadelphia, Pa., assignor to Standard Sewing Machine Company, Cleveland, Ohio. Stop mechanism for sewing machines | 728,269 | May 19 | 2738 | 609 | 104 | 622 |
| Mills, Daniel, Philadelphia, Pa., assignor to Standard Sewing Machine Company, Cleveland, Ohio. Stop mechanism for sewing-machines | 729,201 | May 26 | 4451 | 981, 982 | 104 | 993 |
| Mills, Francis A., Lawrence, assignor of one-half to G. B. Emmons, Methuen, Mass. Shuttle-lock for looms | 739,018 | Sept. 15 | 2894 | 642 | 106 | 653 |
| Mills, Francis A., Lawrence, assignor of one-half to G. B. Emmons, Methuen, Mass. Shuttle-binder for looms | 742,707 | Oct. 27 | 4456 | 1007 | 106 | 2234 |
| Mills, Frank B., Wilmington, Ohio. Feed or water pan for poultry | 723,895 | Mar. 31 | 4165 | 938 | 103 | 934 |
| Mills, Fredrick A., Dallas, Tex. Plow | 724,598 | Apr. 7 | 336 | 82 | 103 | 1240 |
| Mills, George. (See Feathers and Mills.) | | | | | | |
| Mills, George W., Elizabeth, N. J. Burglar-alarm | 723,478 | Mar. 24 | 3425 | 765 | 103 | 762 |
| Mills, Henry D., Fishs Eddy, assignor of one-half to P. H. Lawless, Eastbranch, N. Y. Window-screen | 733,246 | July 7 | 976 | 235 | 105 | 204 |
| Mills, Herbert S. (See Mills, Mortimer B., assignor.) | | | | | | |
| Mills, Herbert S., Chicago, Ill. Fraud-preventive for coin-controlled apparatus | 717,891 | Jan. 6 | 712 | 159 | 102 | 152 |
| Mills, Herbert S., Chicago, Ill. Vending-machine | 735,398 | Aug. 4 | 680 | 145, 146 | 105 | 1125 |
| Mills, Herbert S., Chicago, Ill. Vending-machine | 740,159 | Sept. 29 | 5031 | 1130, 1131 | 106 | 1143 |
| Mills, Herbert S., Chicago, Ill. Coin-controlled punching-bag apparatus | 740,160 | Sept. 29 | 5034 | 1131, 1132 | 106 | 1143 |
| Mills, James, Wilmington, Del. Pressure apparatus for molding-flasks | 732,576 | June 30 | 5713 | 1269 | 104 | 2379 |
| Mills, James, assignor of one-half to A. S. Smith, Cincinnati, Ohio. Speed-changing mechanism for machine-tools | 727,404 | May 5 | 1073 | 234 | 104 | 232 |
| Mills, John, Brantford, Canada. Dental matrix-retainer | 719,834 | Feb. 3 | 766 | 179 | 102 | 985 |
| Mills, John H., Galesburg, Ill. Floor and wall ventilator and register | 725,743 | Apr. 21 | 2469 | 558 | 103 | 1724 |
| Mills, Joseph, Marietta, Ohio. Lock | 748,202 | Dec. 29 | 5395 | 1226 | 107 | 2362 |
| Mills, Lucius F., Ionia, Mich. Apparatus for destroying vermin on poultry, birds, &c. | 744,781 | Nov. 24 | 3836 | 827 | 107 | 866 |
| Mills, Melvin A., Lawrence, Mass. Beating-engine | 726,726 | Apr. 28 | 4293 | 969, 970 | 103 | 2112 |
| Mills, Melvin A., Lawrence, Mass. Knife-fastening for pulp-engines | 727,176 | May 5 | 673 | 144 | 104 | 146 |
| Mills, Melvin A., Lawrence, Mass. Refining-engine for paper-pulp | 729,953 | June 2 | 788 | 176, 177, 178 | 104 | 1288 |
| Mills, Melvin A., Lawrence, Mass. Removable bed-plate for beating-engines | 729,954 | June 2 | 800 | 178 | 104 | 1290 |
| Mills, Mortimer B., Chicago, Ill. Permutation-lock | 747,625 | Dec. 22 | 4260 | 958 | 107 | 2091 |
| Mills, Mortimer B., assignor to H. S. Mills, Chicago, Ill. Blow-testing machine | 740,161 | Sept. 29 | 5037 | 1132, 1133 | 106 | 1144 |
| Mills, Thomas. (See Fair, Taylor, Mills, and Snodgrass.) | | | | | | |
| Mills, Thomas, Kalamazoo, Mich. Combined sink and wash and bath tub | 718,856 | Jan. 20 | 2530 | 562, 563 | 102 | 567 |
| Mills, Thomas B., Brooklyn, N. Y. Photographic camera | 730,468 | June 9 | 1732 | 387 | 104 | 1498 |
| Mills, Thomas W., and J. E. Cunningham, Kingston, Canada. Savings-bank | 725,858 | Apr. 21 | 2674 | 609 | 103 | 1768 |
| Mills, William A., assignor of one-half to A. S. Dunham, Baltimore, Md. Brush | 726,727 | Apr. 28 | 4299 | 970 | 103 | 2113 |
| Mills, William F., South Bend, Ind. Railway crossing | 737,759 | Sept. 1 | 376 | 80 | 106 | 84 |
| Millspaugh, William H., Salem, assignor to Sandusky Foundry and Machine Company, Sandusky, Ohio. Multiple-cylinder pump | 722,240 | Mar. 10 | 1097 | 241 | 103 | 249 |
| Milne, Charles W., *et al.* (See Haste and Wilding, assignors.) | | | | | | |
| Milne, John, New York, N. Y. Fuel-economizer | 744,929 | Nov. 24 | 4095 | 882 | 107 | 920 |
| Milne, Robert. (See Bertram and Milne.) | | | | | | |
| Milne, Robert, Edinburgh, Scotland. Machine for covering rollers with india-rubber or like materials | 727,664 | May 12 | 1578 | 356 | 104 | 356 |
| Milne, Samuel. (See Bertram and Milne.) | | | | | | |
| Milne, William A., Browns Corners, Canada. Composite peat block | 738,561 | Sept. 8 | 2039 | 444 | 106 | 453 |
| Milne, William J., Fordwich, Canada. Bobbin-winder | 744,089 | Nov. 17 | 2554 | 547 | 107 | 573 |
| Milner, Albert R., Canal Dover, Ohio. Folding chair | 732,771 | July 7 | 133 | 37 | 105 | 32 |
| Milton, William H., Stafford, Kans. Wheat-pitching machine | 726,326 | Apr. 28 | 3529 | 799 | 103 | 1960 |
| Milward, George H., Nottingham, England. Coupling for textile-roller sections | 747,561 | Dec. 22 | 4142 | 930 | 107 | 2064 |
| Milwaukee Machine Company. (See Search and Cheshire, assignors.) | | | | | | |
| Milwaukee Paper Dampening Machine Company. (See Johnson, Martin, assignor.) | | | | | | |
| Minck, Harry, Richmond, Ind. Lock-nut | 720,724 | Feb. 17 | 2455 | 562 | 102 | 1369 |
| Minck, Hermann G., assignor of two-thirds to H. Schwartz and I. Greenblatt, Chicago, Ill. Apparatus for stopping runaway horses | 727,550 | May 5 | 1347 | 303 | 104 | 290 |
| Minckemeyer, William H. (See Kenworthy and Minckemeyer.) | | | | | | |
| Mineck, Peter. (See Kunzmann, Robert A., assignor.) | | | | | | |
| Minehart, Ed A. (See Lancaster, Charles P., assignor.) | | | | | | |
| Miner, Abraham L., and S. T. West, Kankakee, Ill. Fertilizer-feeder | 722,528 | Mar. 10 | 1633 | 360 | 103 | 367 |
| Miner, Benjamin D. (See Heckard, William A., assignor.) | | | | | | |
| Miner, Benjamin F., Montague, Mass. Closure device for bottles or similar vessels | 732,877 | July 7 | 324 | 80 | 105 | 71 |
| Miner, Edward G., assignor to Pfaudler Company, Rochester, N. Y. Packing | 741,808 | Oct. 20 | 2731 | 608 | 106 | 1863 |
| Miner, George S., *et al.* (See Ding Cie Sui, assignor.) | | | | | | |
| Miner, Ida M. (See Miner, James H., assignor.) | | | | | | |
| Miner, James H., Lumberton, Miss., assignor to I. M. Miner. Saw | 725,469 | Apr. 14 | 1952 | 437 | 103 | 1598 |
| Miner, Raymond C., and H. L. Fitch, Hudson, S. D. Vehicle-loading device | 734,589 | July 28 | 3497 | 816, 817 | 105 | 788 |
| Miner, Robert J., assignor of three-fourths to W. S. Jessup and W. L. Tucker, New York, N. Y. Hydrocarbon-burner | 724,911 | Apr. 7 | 911 | 208 | 103 | 1364 |
| Miner, Robert J., Greenwich, Conn., assignor of one-half to W. S. Jessup and W. L. Tucker, New York, N. Y. Gaseous-fuel burner | 725,003 | Apr. 7 | 1086 | 247 | 103 | 1401 |
| Miner, Willard M., Plainfield, N. J. Multiplex telephony | 745,734 | Dec. 1 | 750 | 172 | 107 | 1258 |
| Miner William H., assignor to W. H. Miner Company, Chicago, Ill. Rocker side bearing for railway-cars | 725,350 | Apr. 14 | 1724 | 388 | 103 | 1550 |

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| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | Spec. | Des. | Vol. | Page. |
| Minges, Richard, Denver, assignor of one-half to S. V. Newell, Central City, Colo. Mail-crane | 724,313 | Mar. 31 | 5018 | 1124 | 103 | 1105 |
| Minick, Charles T. (See Minick, Herbert T., assignor.) | | | | | | |
| Minick, Herbert T., Nemeha, assignor of one-third to C. T. Minick, Bracken, Nebr. Corn-husking machine | 743,651 | Nov. 10 | 1700 | 358, 359 | 107 | 379 |
| Minium, Charles *et al.* (See Wilbur, John M., assignor.) | | | | | | |
| Mink, Edward, Catskill, N. Y. Hair-drying machine | 734,346 | July 21 | 3052 | 718, 719 | 105 | 679 |
| Minkler, Albert A., Mendota, Ill. Straw-stacking apparatus | 725,114 | Apr. 14 | 1297 | 292 | 103 | 1460 |
| Minney, Albert H., Russet, assignor of one-half to D. W. Shock, Staten, W. Va. Self-starting chock for vehicles | 719,353 | Jan. 27 | 3492 | 777 | 102 | 784 |
| Minnich, Ina, Sugarloaf, Pa. Letter-opener | 734,590 | July 28 | 3500 | 817 | 105 | 789 |
| Minning, Charles P., Philadelphia, Pa. Regealed-ice machine | 723,702 | Mar. 24 | 3791 | 851, 852, 853 | 103 | 839 |
| Minor, Clarence R., Sandusky, Ohio. Reversible shaft-governor | 747,626 | Dec. 22 | 4264 | 959 | 107 | 2092 |
| Minor, Newbury R. (See Galatius and Minor.) | | | | | | |
| Minor, Taylor M., Wabash, Ind. Pocket adder and subtracter | 746,352 | Dec. 8 | 1910 | 436 | 107 | 1526 |
| Minor, Wesley L., Brockton, Mass. Boiler-setting | 721,060 | Feb. 17 | 3055 | 702 | 102 | 1498 |
| Minor, William E., Kansas City, Mo. Dilator | 719,487 | Feb. 3 | 141 | 32 | 102 | 854 |
| Minter, John E., Macon, Ga. Apparatus for setting unburned ware in kilns for burning. | 726,822 | Apr. 28 | 4484 | 1012 | 103 | 2151 |
| Minton, Ogden, New York, N. Y. Vehicle brake mechanism | 743,908 | Nov. 10 | 2162 | 466 | 107 | 476 |
| Mintzer, Harry H., assignor of one-half to M. E. Breisch, Philadelphia, Pa. Razor | 729,378 | May 26 | 4759 | 1052 | 104 | 1057 |
| Miotke, Joseph, assignor of one-half to F. L. Dille, Milwaukee, Wis. Safety device for punch-presses | 733,412 | July 14 | 1285 | 303 | 105 | 288 |
| Miquel, Thomas J., Newcastle, Pa. Chimney-cap | 719,489 | Feb. 3 | 144 | 32 | 102 | 854 |
| Miracle, Orville U., and W. L. Dow, assignors of one-third to R. O. Miracle, Sioux Falls, S. D. Building-wall and concrete block for same | 730,780 | June 9 | 2267 | 504 | 104 | 1615 |
| Miracle, Ralph O. (See Miracle and Dow, assignors.) | | | | | | |
| Mischler, Peter P. (See Smock, Jasper D., assignor.) | | | | | | |
| Mishler, Frank J. (See Arend, Edward H., assignor.) | | | | | | |
| Miskell, John W. (See Boardman and Miskell.) | | | | | | |
| Misner, Jacob E. (See Florence and Misner.) | | | | | | |
| Misner, Perry, assignor of two-thirds to I. P. Hooton and F. P. Tompkins, Indianapolis, Ind. Display-stand | 718,498 | Jan. 13 | 1854 | 407 | 102 | 415 |
| Mississippi Wire Glass Company. (See Swearer and Toynbee, assignors.) | | | | | | |
| Missong, Jacob, Hochst-on-the-Main, Germany. Steam-engine | 742,888 | Nov. 3 | 119 | 27,28 | 107 | 27 |
| Missouri Belting Company. (See Williams, Frank F., assignor.) | | | | | | |
| Missouri Locovolo Company. (See Peteler, Adolph, assignor.) | | | | | | |
| Missouri Locovolo Company. (See Ruby, Charles F., assignor.) | | | | | | |
| Missouri Tent & Awning Company. (See Meagher, William H., assignor.) | | | | | | |
| Mistrot, Felix E., Galveston, Tex. Winding-indicator for watches | 724,028 | Mar. 31 | 4452 | 1001 | 103 | 991 |
| Mitchell, Albion L. F., East Boston, Mass., and C. W. Aiken, East Orange, N. J. Feeding mechanism for powdered material | 735,281 | Aug. 4 | 476 | 95 | 105 | 1082 |
| Mitchell, Alfred H., Old Charlton, assignor of one-half to A. S. Williams, London, England. Crane or like hoisting or lowering apparatus | 741,525 | Oct. 13 | 2183 | 485 | 106 | 1731 |
| Mitchell, Andrew F., Munhall, Pa. Manufacturing steel | 721,061 | Feb. 17 | 3057 | ..... | 102 | 1498 |
| Mitchell, Andrew F., assignor of one-half to A. W. Clark, New Bedford, Mass. Eyelet | 743,909 | Nov. 10 | 2163 | 466 | 107 | 476 |
| Mitchell, Brutus I. H., Onawa, Iowa. Tug attachment | 739,502 | Sept. 22 | 3796 | 850 | 106 | 862 |
| Mitchell, Charles C. (See Conkling and Mitchell.) | | | | | | |
| Mitchell, Charles M., Chattanooga, Tenn. Vending-machine | 731,593 | June 23 | 3824 | 851, 852 | 104 | 1970 |
| Mitchell, Charles T., assignor of one-half to W. E. Arrington, Washington, D. C. Combined window-shade and curtain-pole bracket | 721,062 | Feb. 17 | 3058 | 703 | 102 | 1498 |
| Mitchell, Charles V. (See Stadtmuller and Mitchell.) | | | | | | |
| Mitchell, Cornelius S. (See Walker, Louis A., assignor.) | | | | | | |
| Mitchell, David W., Niagara Falls South, Canada. Bag-holder | 733,247 | July 7 | 977 | 236 | 105 | 204 |
| Mitchell, Edward J., Mason City, Iowa. Label and lid-holder for boxes | 747,997 | Dec. 29 | 4998 | 1129 | 107 | 2277 |
| Mitchell, Frank, London, England. Variable gearing for bicycles or the like | 736,129 | Aug. 11 | 2077 | 445 | 105 | 1443 |
| Mitchell, Frederick, Redcastle, Victoria, Australia. Pressure-gage for steam-boilers or the like | 724,724 | Apr. 7 | 579 | 138 | 103 | 1292 |
| Mitchell, Garry V., Elmira, N. Y. Fluid-compressor | 728,955 | May 26 | 4013 | 892, 893 | 104 | 903 |
| Mitchell, Garryt D., Chelsea, Mass. Apparatus for purifying liquids | 732,208 | June 30 | 4996 | 1111 | 104 | 2229 |
| Mitchell Gas Generator and Burner Company. (See Mitchell, Willis, assignor.) | | | | | | |
| Mitchell, George. (See Seymour, Henry A., assignor.) | | | | | | |
| Mitchell, George, Naco, Ariz. Ter. Converting copper matte into metallic copper | 719,488 | Feb. 3 | 143 | ..... | 102 | 854 |
| Mitchell, George, Naco, Ariz. Ter. Means for preventing the overwinding of hoist-chains of cranes | 722,867 | Mar. 17 | 2272 | 509 | 103 | 513 |
| Mitchell, George, Naco, Ariz Ter. Overhead traveling crane | 722,868 | Mar. 17 | 2273 | 509 | 103 | 513 |
| Mitchell, George W., New Dorchester, Mass. Device for removing shingles from roofs or clapboards from walls | 730,781 | June 9 | 2268 | 504 | 104 | 1616 |
| Mitchell, George W., Lunenburg, Canada. Life-preserver | 741,526 | Oct. 13 | 2184 | 485 | 106 | 1732 |
| Mitchell, Harvey J., Riverton, N. J. Machine for coiling metal | 747,203 | Dec. 15 | 3489 | 792 | 107 | 1901 |
| Mitchell, Henry M. (See Hendrickx, Frans, assignor.) | | | | | | |
| Mitchell, Henry R., New York, N. Y. Guide-board for spinning-machines | 736,130 | Aug. 11 | 2079 | 445 | 105 | 1443 |
| Mitchell, Henry S., Seattle, Wash. Sawmill | 732,649 | June 30 | 5844 | 1294 | 104 | 2408 |
| Mitchell, James A., Hillsdale, Mich. Plastic gate or corner post | 722,126 | Mar. 3 | 857 | 192 | 103 | 184 |
| Mitchell, James E., Lowell, Mass., assignor to Mitchell Tongueless Buckle Company, New York, N. Y. Buckle | 732,368 | June 30 | 5307 | 1176 | 104 | 2293 |
| Mitchell, James E., assignor to Mitchell Tongueless Buckle Company, New York, N. Y. Buckle | 733,248 | July 7 | 978 | 236 | 105 | 205 |
| Mitchell, James R., *et al.* (See Mitchell, Winfield J., assignor.) | | | | | | |
| Mitchell, James R. (See Mitchell, Winfield J. and J. R.) | | | | | | |
| Mitchell, John A. (See Haskell and Mitchell.) | | | | | | |
| Mitchell, John E., St. Louis, Mo. Grain-separator | 732,577 | June 30 | 5715 | 1270 | 104 | 2379 |
| Mitchell, John P., Joliet, Ill., assignor to American Steel & Wire Company. Machine for stretching wire hoops | 748,399 | Dec. 29 | 5724 | 1307, 1308 | 107 | 2435 |
| Mitchell, Kerr M., St. Joseph, and J. Dell, St. Louis, Mo. Recuperator gas-furnace | 742,708 | Oct. 27 | 4457 | 1007, 1008 | 106 | 2234 |
| Mitchell, Kerr M., St. Joseph, and J. Dell, St. Louis, Mo. Hollow tiling-block | 742,709 | Oct. 27 | 4459 | 1009 | 106 | 2235 |
| Mitchell, Lebbeus H., Salt Lake City, Utah. Discharge means for tanks | 722,314 | Mar. 10 | 1230 | 273 | 103 | 278 |
| Mitchell, Lorenzo B., Hart, Mich. Knife-head for mowers | 736,761 | Aug. 18 | 3231 | 713 | 105 | 1703 |
| Mitchell, Parker Perryman, Md. Can-filling machine | 736,762 | Aug. 18 | 3233 | 714 | 105 | 1703 |
| Mitchell, Reuben A., and L. L. Lewis, assignors of one-sixteenth to J. F. Davis, Oil City, Pa. Gas-engine starter | 728,123 | May 12 | 2446 | 545 | 104 | 539 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| Mitchell, Robert J. C., Waterfoot, near Manchester, England. Blanket for printing or other machines | 744,090 | Nov. 17 | 2558 | 547 | 107 | 574 |
| Mitchell, Samuel E., Chicago, Ill. Combined truck and hoist | 735,399 | Aug. 4 | 683 | 146<br>147 | 105 | 1126 |
| Mitchell, Thomas, Chester, assignor to D. Eagan, Philadelphia, Pa. Bolster | 728,270 | May 19 | 2741 | 609 | 104 | 623 |
| Mitchell, Thomas, Chester, assignor to D. Eagan, Philadelphia, Pa. Hardening treads of cast-steel car-wheels | 728,271 | May 19 | 2742 | 610 | 104 | 623 |
| Mitchell, Thomas, Chester, assignor to D. Eagan, Philadelphia, Pa. Apparatus for hardening treads of car-wheels | 728,272 | May 19 | 2745 | 610 | 104 | 624 |
| Mitchell, Thomas, Chester, assignor to D. Eagan, Philadelphia, Pa. Casting steel car-wheels | 728,956 | May 26 | 4017 | 893 | 104 | 904 |
| Mitchell, Thomas, Chester, assignor to D. Eagan, Philadelphia, Pa. Bolster | 730,283 | June 9 | 1389 | 305 | 104 | 1426 |
| Mitchell, Thomas, Chester, assignor to D. Eagan, Philadelphia, Pa. Bolster | 734,188 | July 21 | 2753 | 646 | 105 | 615 |
| Mitchell, Thomas W., Omaha, Nebr. Rod-packing | 728,124 | May 12 | 2448 | 545 | 104 | 539 |
| Mitchell Tongueless Buckle Company. (See Mitchell, James E., assignor.) | | | | | | |
| Mitchell Vance Company. (See Robb, James T., assignor.) | | | | | | |
| Mitchell, Walter C., Chicago Heights, Ill., assignor of one-half to W. P. Grath, St. Louis, Mo. Heater for kilns | 735,282 | Aug. 4 | 478 | 95 | 105 | 1083 |
| Mitchell, William. (See Broadhurst and Mitchell.) | | | | | | |
| Mitchell, William C., Denver, Colo. Pocket-cuspidor | 743,394 | Nov. 3 | 1143 | 242 | 107 | 242 |
| Mitchell, William H., assignor of two-thirds to A. H. and S. B. Field, Boston, Mass. Weighing attachment for refrigerators | 748,297 | Dec. 29 | 5560 | 1268 | 107 | 2399 |
| Mitchell, William W., Anderson, Ind. Pessary | 733,068 | July 7 | 657 | 158 | 105 | 139 |
| Mitchell, Willis, Boston, Mass. Vapor-burner | 722,430 | Mar. 10 | 1432 | 317<br>318 | 103 | 321 |
| Mitchell, Willis, Malden, assignor to Mitchell Gas Generator and Burner Company, Boston, Mass. Vapor-burning lamp | 722,601 | Mar. 10 | 1755 | 392 | 103 | 392 |
| Mitchell, Willis, Malden, assignor to Mitchell Gas Generator and Burner Company, Boston, Mass. Reservoir for vapor-burners | 723,780 | Mar. 24 | 3939 | 888 | 103 | 870 |
| Mitchell, Winfield J., assignor of one-half to N. J. Tilton, Lynn, Mass. Heel-breasting machine | 717,893 | Jan. 6 | 715 | 160 | 102 | 153 |
| Mitchell, Winfield J., assignor of three-fourths to J. R. Mitchell, G. F. Summers, and W. T. Ross, Lynn, Mass. Heel-breasting machine | 717,892 | Jan. 6 | 714 | 160 | 102 | 152 |
| Mitchell, Winfield J. and J. R., assignors of one-third to N. J. Tilton, Lynn, Mass. Burnishing-machine | 718,013 | Jan. 6 | 939 | 208 | 102 | 202 |
| Mitchelsen, Ariel, Tariffville, Conn. Tenting-cloth | 718,499 | Jan. 13 | 1856 | 408 | 102 | 415 |
| Mitsch, Samuel, Woodbine, Kans. Machine for loading and stacking hay or the like | 735,555 | Aug. 4 | 1011 | 213 | 105 | 1194 |
| Mitscheunig, Carlo, Rome, Italy. Match-box | 738,343 | Sept. 8 | 1620 | 352 | 106 | 365 |
| Mittag, Carl, St. George, N. Y. Feeding device for conveyers | 733,988 | July 21 | 2355 | 553 | 105 | 528 |
| Mittelstadt, Christopher, Wynantskill, N. Y. Chicken-brooder | 738,466 | Sept. 8 | 1859 | 404<br>405 | 106 | 414 |
| Mittendorff, Max, assignor to Sutro Brothers Braid Company, New York, N. Y. Braid | 746,548 | Dec. 8 | 2242 | 514 | 107 | 1599 |
| Mittler, Carl J., Louisville, Ky. Automatic perforator and scorer | 729,633 | June 2 | 199 | 46 | 104 | 1168 |
| Mix, Edgar W., Paris, France, assignor to General Electric Company. Brush-holder | 728,273 | May 19 | 2746 | 610 | 104 | 624 |
| Mix, Edward C. (See Lewin, Martin, assignor.) | | | | | | |
| Mixsell, Leighton N. D. (See Meigs and Mixsell.) | | | | | | |
| Mixsell, Leighton N. D. (See Meigs, Hammar, and Mixsell.) | | | | | | |
| Miyabara, Jiro, Tokio, Japan. Baffle for water-tube boilers | 743,541 | Nov. 10 | 1493 | 312 | 107 | 336 |
| Miyabara, Jiro, Tokio, Japan. Water-tube boiler | 747,080 | Dec. 15 | 3262 | 742<br>743 | 107 | 1852 |
| Moad, Buren B., Webb City, Mo. Fare-register-operating device | 736,861 | Aug. 18 | 3431 | 760 | 105 | 1745 |
| Mobbs, Harry W., Kettering, England. Last for boots or shoes | 729,379 | May 26 | 4760 | 1053 | 104 | 1057 |
| Mobeck, Martin R., Chicago, Ill. Screw-cutting die | 745,222 | Nov. 24 | 4697 | 1025 | 107 | 1044 |
| Moberley, Frank. (See Robidon, John B., assignor.) | | | | | | |
| Möbius, Paul, assignor to Bürstenfabrik Erlangen A.-G., vormals Emil Kränzlein, Erlangen, Germany. Device for securing bristles in brushes | 725,269 | Apr. 14 | 1578 | 357 | 103 | 1519 |
| Mobley, Edwin H., Morton, Pa. Sound-box for sound recording and reproducing machines | 744,586 | Nov. 17 | 3460 | 746 | 107 | 768 |
| Mobley, Frank H., Allegheny, Pa. Lock for angle-cocks or the like | 724,912 | Apr. 7 | 912 | 209 | 103 | 1365 |
| Moch, Eugene W., New York, N. Y. Feather tip or plume | 731,932 | June 23 | 4429 | 988 | 104 | 2098 |
| Mock, Charles H., assignor of one-half to W. G. Cronkright, Pittsburg, Pa. Folding stool | 747,204 | Dec. 15 | 3491 | 792 | 107 | 1902 |
| Mock, John F., Philadelphia, Pa. Steam-boiler furnace | 723,541 | Mar. 24 | 3522 | 788 | 103 | 782 |
| Model Glass Works. (See Scott, Alvin B., assignor.) | | | | | | |
| Modern Electric Co. (See Wheeler, George E., assignor.) | | | | | | |
| Modern Electric Light Co. (See Forster, James W., assignor.) | | | | | | |
| Modisett, Benjamin F., Helena, Ark. Bicycle | 727,405 | May 5 | 1076 | 235<br>236<br>237 | 104 | 232 |
| Modisett, William C., Greenbay, Wis. Penholder | 721,592 | Feb. 24 | 4101 | 934 | 102 | 1738 |
| Modlin, Thomas B., and W. H. Buhl, Hurdland, Mo. Staple-driver | 746,549 | Dec. 8 | 2243 | 514 | 107 | 1599 |
| Moe, Theodore M., New York, assignor of two-thirds to J. W. Hutt and W. H. Seidel, Brooklyn, N. Y. Dry separator for metals | 736,862 | Aug. 18 | 3432 | 760 | 105 | 1746 |
| Moebeck, Hans L., Ulen, Minn. Grain-loader for cars | 740,453 | Oct. 6 | 134 | 27 | 106 | 1274 |
| Moede, Albert W., Weyauwega, Wis. Bureau or dresser trunk | 729,380 | May 26 | 4761 | 1053 | 104 | 1057 |
| Moehle, Friedrich, Mason City, Iowa. Marking instrument | 742,047 | Oct. 20 | 3208 | 717 | 106 | 1961 |
| Moehle, Friedrich, Mason City, Iowa. Marking-board | 744,587 | Nov. 17 | 3461 | 746 | 107 | 768 |
| Moehlenbrock, Frederick H. A., St. Louis, Mo. Tobacco-pipe | 719,683 | Feb. 3 | 481 | 109 | 102 | 924 |
| Moehn, Frank J., Colorado Springs, Colo. Air and gas mixer | 741,809 | Oct. 20 | 2732 | 608 | 106 | 1863 |
| Moen, Ole H., Minneapolis, Minn. Musical instrument | 727,665 | May 12 | 1579 | 356 | 104 | 357 |
| Moerscher, William, Belvidere, N. J. Harp | 722,602 | Mar. 10 | 1759 | 392 | 103 | 393 |
| Moeschl, Charles, Los Angeles, Cal. Comb | 722,315 | Mar. 10 | 1231 | 274 | 103 | 278 |
| Moesinger, Traugott, Brooklyn, assignor of one-third to G. Phillips, New York, N. Y., Cigarette-machine | 739,897 | Sept. 29 | 4554 | 1023<br>1024<br>1025 | 106 | 1040 |
| Moeslein, Valentine, New York, N. Y., assignor to American Sheet Steel Company. Metallic lath | 725,115 | Apr. 14 | 1299 | 293 | 103 | 1460 |
| Moest, Martin, assignor to Farbwerke vorm. Meister, Lucius & Brüning, Höchst-on-the-Main, Germany. Oxidizing organic compounds | 729,502 | May 26 | 4959 | ------ | 104 | 1101 |
| Moest, Martin, H. Hertlein, and E. Oppermann, assignors to Farbwerke, vorm. Meister, Lucius & Brüning, Höchst-on-the-Main, Germany. Electrolytic reduction of organic compounds by means of titanium compounds | 742,797 | Oct. 27 | 4602 | ------ | 106 | 2267 |
| Moffat, Walter A., Morrison, Colo. Rail-joint | 746,550 | Dec. 8 | 2244 | 515 | 107 | 1600 |
| Moffett, George E., Jarilla, N. Mex. Ter. Brake | 736,997 | Aug. 25 | 3685 | 818 | 105 | 1819 |
| Moffett, Marcus H. (See Fishell and Moffett.) | | | | | | |
| Moffett, Marcus H. (See Richmond and Moffett.) | | | | | | |
| Moffitt, Alexander, Elkins, W. Va. Portable shipping-stall for horses, &c | 720,725 | Feb. 17 | 2456 | 562<br>563 | 102 | 1370 |

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| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| Moffitt, Arthur C., Sheboygan, Wis. Spindle-shaping device | 740,296 | Sept. 29 | 5288 | 1191 | 106 | 1195 |
| Mogg, Millard E. (See Burnell, Harry M., assignor.) | | | | | | |
| Moh, Oswald, Görlitz, Germany. Film-camera | 723,401 | Mar. 24 | 3263 | 731 | 103 | 729 |
| Mohan, John E., Detroit, Mich. Railway-ticket | 735,744 | Apr. 21 | 2470 | 558 | 103 | 1724 |
| Mohland, Charles H., Burlington, Iowa. Rope-clamp | 738,562 | Sept. 8 | 2040 | 444 | 106 | 454 |
| Mohlenhoff, Hermann J., assignor of one-third to G. K. Wallace, New York, N. Y. Shutter fastener and setter | 721,318 | Feb. 24 | 3580 | 814 | 102 | 1628 |
| Mohlenhoff, Hermann J., assignor of one-half to C. D. Newton, New York, N. Y. Automatic engine-controlling device | 740,454 | Oct. 6 | 135 | 27 | 106 | 1275 |
| Mohler, Charles M., Kenosha, Wis. Constant-level liquid-hydrocarbon vaporizer for oil-engines | 741,810 | Oct. 20 | 2733 | 608<br>609 | 106 | 1863 |
| Mohler, George H., assignor to J. Pascoe, Fremont, Nebr. Air-pump | 742,342 | Oct. 27 | 3806 | 852 | 106 | 2099 |
| Mohler, Harvey A., *et al.* (See Kendall, William L., assignor.) | | | | | | |
| Mohler, Harvey H., Knobnoster, Mo. Cane stripper and header | 747,462 | Dec. 22 | 3963 | 890<br>891 | 107 | 2022 |
| Mohn, Albert F., and P. M. Feltwell, Sewickley, Pa. Horseshoe | 729,381 | May 26 | 4762 | 1053 | 104 | 1057 |
| Mohr, Benjamin F., Mifflinburg, Pa. Drilling-machine | 738,344 | Sept. 8 | 1624 | 352 | 106 | 365 |
| Mohr, Charles P., Freedom, Pa. Combined step-ladder and bench | 746,978 | Dec. 15 | 3066 | 702 | 107 | 1806 |
| Mohr, Ernst, Magdeburg-Sudenburg, Germany. Pruning-shears | 736,763 | Aug. 18 | 3235 | 714 | 105 | 1703 |
| Mohr, Gustave C., assignor to Hemp and Company, St. Louis, Mo. Sheet-metal cutting and shaping machine | 723,703 | Mar. 24 | 3797 | 853<br>854 | 103 | 840 |
| Mohr, John, Washington, D. C. Musical instrument | 721,063 | Feb. 17 | 3058 | 703 | 102 | 1499 |
| Mohr, Louis, Pittsburg, Pa. Vapor-bath apparatus | 739,612 | Sept. 22 | 3996 | 891 | 106 | 903 |
| Moir, William, and J. Robertson, Aberdeen, Scotland. Machine for forming seating-flanges on cans or tins | 731,202 | June 16 | 3071 | 681<br>682 | 104 | 1798 |
| Molchin, Hans, St. Louis, Mo. Composition of matter | 729,202 | May 26 | 4455 | ..... | 104 | 993 |
| Molchin, Hans, St. Louis, Mo. Composition of matter | 729,203 | May 26 | 4455 | ..... | 104 | 994 |
| Molchin, Hans, St. Louis, Mo. Forming compositions of matter | 729,204 | May 26 | 4456 | ..... | 104 | 994 |
| Molck, Emil F., Sibley, Ill. Seeder | 733,249 | July 7 | 979 | 236 | 105 | 205 |
| Moldenke, Richard G. G., Pittsburg, Pa. Producing uniformity of quality in molten metal | 736,131 | Aug. 11 | 2080 | 446 | 105 | 1443 |
| Moline Plow Company. (See Lindgren, Alexus C., assignor.) | | | | | | |
| Molkow, Ferdinand E., Washington, D. C. Range-finding device | 732,878 | July 7 | 326 | 81 | 105 | 72 |
| Molle, John E., Sturgeon Bay, Wis. Connecting-rod for type-writers | 744,931 | Nov. 24 | 4097 | 883 | 107 | 920 |
| Möller, Cai B. S., Aalborg, Denmark. Lock | 747,627 | Dec. 22 | 4268 | 959 | 107 | 2093 |
| Moller, Carl, and M. Salisbury, Pensacola, Fla. Oil-tank attachment | 724,314 | Mar. 31 | 5020 | 1124 | 103 | 1106 |
| Möller, Emanuel, Aarhus, Denmark. Apparatus for drawing parallel lines | 725,859 | Apr. 21 | 2676 | 609 | 103 | 1769 |
| Möller, Heinrich, San Francisco, Cal. Night-lamp. (Reissue) | 12,166 | Nov. 3 | 1205 | 249 | 107 | 257 |
| Möller, Max. (See Schultz, Emil, assignor.) | | | | | | |
| Möller, Oscar M. R., Copenhagen, Denmark. Water-purifier | 741,690 | Oct. 20 | 2504 | 558 | 106 | 1815 |
| Molloy, James F., Westhaven, Conn. Slide-buckle | 722,375 | Mar. 10 | 1341 | 296 | 103 | 301 |
| Molloy, James F., Westhaven, Conn. Suspender-buckle | 731,487 | June 23 | 3619 | 807 | 104 | 1931 |
| Molly, Charles F., *et al.* (See Luks, Emil C., assignor.) | | | | | | |
| Moloney, John, Jr., assignor to W. Walls and R. Pearsall, Philadelphia, Pa. Antifreezing closet | 737,441 | Aug. 25 | 4510 | 1011 | 105 | 1994 |
| Moloney, Michael J., Rochester, N. Y. Making turned welt-shoes | 744,588 | Nov. 17 | 3463 | 746<br>747 | 107 | 768 |
| Monahan, Andrew, Ironwood, Mich. Grocery-bin | 724,029 | Mar. 31 | 4454 | 1001 | 103 | 991 |
| Monahan, James, Newton, assignor to W. A. Hines and C. W. Dunaway, Wichita, Kans. Stack-anchor | 740,894 | Oct. 6 | 939 | 211 | 106 | 1447 |
| Monahan, Thomas W. (See Koehler and Monahan.) | | | | | | |
| Monarch Carriage Goods Company. (See Weiglein and Brodbeck, assignors.) | | | | | | |
| Monarch Typewriter Company. (See Merritt, Henry W., assignor.) | | | | | | |
| Monash-Younker Company. (See Leuthesser, Fred W., assignor.) | | | | | | |
| Mond, Ludwig, London, England. Making gas | 744,218 | Nov. 17 | 2820 | 602<br>603 | 107 | 631 |
| Monfort, Charles J., St. Paul, Minn. Furnace | 741,357 | Oct. 13 | 1855 | 410 | 106 | 1663 |
| Monfort, Charles J., St. Paul, Minn. Umbrella and cane rack | 741,811 | Oct. 20 | 2736 | 609 | 106 | 1864 |
| Monfort, Charles J., St. Paul, Minn. Furnace | 741,812 | Oct. 20 | 2737 | 610 | 106 | 1864 |
| Monforts, August, Munchen-Gladbach, Germany. Machine for measuring and marking fabrics or the like | 731,702 | June 23 | 4020 | 897<br>898 | 104 | 2009 |
| Monitor Drill Company *et al.* (See Ackerman, Elmer H., assignor.) | | | | | | |
| Monk, Henry, Cambridge, Mass. Centrifugal drier | 745,223 | Nov. 24 | 4698 | 1025<br>1026 | 107 | 1044 |
| Monk, Henry F. (See Rice and Monk.) | | | | | | |
| Monks, Daniel H., Fishkill-on-the-Hudson, N. Y. Valve mechanism for bottles | 746,551 | Dec. 8 | 2245 | 515 | 107 | 1600 |
| Monmouth Plow Company. (See Brunnemer, William T. M., assignor.) | | | | | | |
| Monoline Composing Company. (See Scudder, Wilbur S., assignor.) | | | | | | |
| Monongahela Foundry and Forge Company. (See Lotz, Alfred, assignor.) | | | | | | |
| Monosmith, Oney B., Lorain, Ohio. Nasal speculum | 730,284 | June 9 | 1391 | 306 | 104 | 1427 |
| Monroe, Charles E., assignor to Ericsson Telephone Company, New York, N. Y. Indicator attachment for bells | 736,616 | Aug. 18 | 2962 | 650 | 105 | 1647 |
| Monroe, Charles W., assignor of two-thirds to W. J. Baughman, Pittsfield, Mass., and W. McKinley, Jersey City, N. J. Awning | 744,971 | Nov. 24 | 4175 | 903 | 107 | 936 |
| Monroe, David M. (See Smith and Monroe.) | | | | | | |
| Monroe, David P., Attleboro, Mass. Rail-joint | 729,081 | May 26 | 4240 | 937 | 104 | 948 |
| Monroe, Festus R. (See McMaster and Kean, assignors.) | | | | | | |
| Monroe, John P., assignor of one-half to B. Leavell, Hopkinsville, Ky. Attachment for mowing-machines | 721,064 | Feb. 17 | 3060 | 703 | 102 | 1499 |
| Monroe, Joseph B., and W. E. Lee, Shelbyville, Ind. Railway-signal | 718,269 | Jan. 13 | 1395 | 311<br>312 | 102 | 316 |
| Monroe, Joseph C., Colwyn, Pa. Rotary engine | 730,679 | June 9 | 2105 | 468 | 104 | 1580 |
| Monsen, Ole C., Providence, and E. Ericksen, Cranston, assignors of one-half to A. Reuterdahl and P. Shocker, Providence, R. I. Dust-proof drawer | 740,677 | Oct. 6 | 544 | 121 | 106 | 1364 |
| Monson, Frank L., Christine, N. D. Car-door | 735,556 | Aug. 4 | 1014 | 214 | 105 | 1195 |
| Monson, Philip T. J., assignor to A. C. Evans Manufacturing Company, Springfield, Ohio. Corn-planter | 730,950 | June 16 | 2597 | 577<br>578 | 104 | 1704 |
| Monson, Philip T. J., and O. H. Smith, Springfield, Ohio. Journal-bearing | 718,141 | Jan. 13 | 1157 | 257 | 102 | 264 |
| Monson, Samuel B., San Francisco, assignor of one-third to J. H. Cadogan, Oakland, Cal. Indoor game | 748,298 | Dec. 29 | 5561 | 1268 | 107 | 2399 |
| Montague, Dwight P. (See Owens, Charles, assignor.) | | | | | | |
| Montague, John L. C., assignor of one-half to L. K. Barnett, Christiansburg, Va. Temporary binder | 732,870 | Mar. 17 | 2276 | 510 | 103 | 514 |
| Montain, Victor, Oyonnax, France. Comb | 739,898 | Sept. 29 | 4558 | 1025 | 106 | 1040 |
| Montegut, Lucien, Jr. (See Pastureau, Jules A., assignor.) | | | | | | |
| Montgomery, Alexis R., Decatur, Ill. Corn-sheller | 736,615 | Aug. 18 | 2961 | 650 | 105 | 1647 |

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| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| Montgomery Brothers. (See Montgomery, Marshall, assignor.) | | | | | | |
| Montgomery, George W., assignor of one-half to A. J. Morgan, Bellaire, Ohio. Rotary engine | 743,092 | Nov. 3 | 528 | 114<br>115 | 107 | 111 |
| Montgomery, James H., Denver, Colo. Crushing-rolls | 727,177 | May 5 | 676 | 145 | 104 | 146 |
| Montgomery, James T. (See Bartlett, George W., assignor.) | | | | | | |
| Montgomery, John J., Santa Clara, Cal. Concentrator | 742,889 | Nov. 3 | 122 | 28, 29 | 107 | 27 |
| Montgomery, John T., Charleston, Ill. Syringe-nozzle | 724,913 | Apr. 7 | 914 | 209 | 103 | 1365 |
| Montgomery, Marshall, Philadelphia, Pa. Piston-packing | 741,056 | Oct. 13 | 1238 | 280 | 106 | 1531 |
| Montgomery, Marshall, assignor to Montgomery Brothers, Philadelphia, Pa. Packing for piston-rods | 745,643 | Dec. 1 | 599 | 139 | 107 | 1226 |
| Montgomery, R. C. (See Matheney, George L., assignor.) | | | | | | |
| Montgomery, Robert J. (See Blandford and McGregor, assignors.) | | | | | | |
| Montgomery, Thomas H. (See Montgomery, William R., assignor.) | | | | | | |
| Montgomery, Walter R., Shreveport, La. Percolator for coffee or tea pots | 745,883 | Dec. 1 | 1058 | 238 | 107 | 1324 |
| Montgomery, William G., assignor of one-half to G. W. Reed, Erie, Pa. Stove-damper | 727,178 | May 5 | 677 | 145 | 104 | 147 |
| Montgomery, William R., Louisville, Ky., assignor of one-half to T. H. Montgomery, Chicago, Ill. Plug-machine | 727,666 | May 12 | 1581 | 357 | 104 | 357 |
| Montreuil, Eugene, assignor of one-half to O. Dubois, Pilot Bay, British Columbia, Canada. Oar-lock | 746,642 | Dec. 8 | 2416 | 552 | 107 | 1640 |
| Montsabrè, Philippe, Fresno, Cal. Mobile railway-track | 725,351 | Apr. 14 | 1726 | 388<br>389 | 103 | 1550 |
| Montstream, John H., W. L. Schellenbach, and W. Lodge, assignors to Lodge & Shipley Machine Tool Company, Cincinnati, Ohio. Engine-lathe | 723,704 | Mar. 24 | 3798 | 854 | 103 | 840 |
| Montupet, Antonin, Paris, France. Furnace for heating asphalt, &c | 744,871 | Nov. 24 | 3996 | 861<br>862 | 107 | 899 |
| Mood, George H., and E. R. Lyman, Colfax, Wash. Grain screen and riddle | 739,883 | June 2 | 669 | 147 | 104 | 1265 |
| Moody, Amos F., Hillsboro, Tex. Fan attachment for churn-dashers | 748,203 | Dec. 29 | 5396 | 1227 | 107 | 2363 |
| Moody, David P., Richmond, Va. Combined ash-receiver and match-safe | 727,821 | May 12 | 1891 | 422 | 104 | 420 |
| Moody, Frances E., Toronto, Canada. Shirt-waist holder and skirt-supporter | 722,316 | Mar. 10 | 1232 | 274 | 103 | 278 |
| Moody, Granville N., Afton, La. Plow-point | 724,315 | Mar. 31 | 5021 | 1125 | 103 | 1106 |
| Moody, Lula, Knight, Ky. Cradle | 747,562 | Dec. 22 | 4143 | 930 | 107 | 2065 |
| Moody, Walter S., Schenectady, N. Y., assignor to General Electric Company. Insulating high-potential apparatus | 719,600 | Feb. 3 | 337 | 78 | 102 | 893 |
| Moody, Walter S., Schenectady, N. Y., assignor to General Electric Company. Switch-regulator | 726,327 | Apr. 28 | 3530 | 800 | 103 | 1960 |
| Moody, Walter S., Schenectady, N. Y., assignor to General Electric Company. Means for connecting multiphase windings | 726,445 | Apr. 28 | 3735 | 847 | 103 | 2002 |
| Moody, Walter S., Schenectady, N. Y., assignor to General Electric Company. Connecting multiphase windings | 726,831 | Apr. 28 | 4497 | 1015 | 103 | 2154 |
| Moody & Waters Co. (See Spring, Henry H., assignor.) | | | | | | |
| Moody, William A., Waltham, Mass. Traveling-case | 722,317 | Mar. 10 | 1233 | 274 | 103 | 278 |
| Mooers, Louis P., assignor, by mesne assignments, to Peerless Motor Car Company, Cleveland, Ohio. Gas-engine igniter | 721,065 | Feb. 17 | 3061 | 703 | 102 | 1499 |
| Mooers, Louis P., assignor, by mesne assignments, to Peerless Motor Car Company, Cleveland, Ohio. Spark advancing and retarding mechanism for explosive-engine vehicles | 721,066 | Feb. 17 | 3063 | 704 | 102 | 1500 |
| Mooers, Louis P., assignor, by mesne assignments, to Peerless Motor Car Company, Cleveland, Ohio. Change-speed gearing | 737,442 | Aug. 25 | 4511 | 1011<br>1012 | 105 | 1994 |
| Mooers, Louis P., assignor, by mesne assignments, to Peerless Motor Car Company, Cleveland, Ohio. Muffler | 737,443 | Aug. 25 | 4514 | 1012 | 105 | 1995 |
| Moomaw, Henry E., Chattanooga, Tenn. Metallic roofing-shingle | 727,179 | May 5 | 678 | 146 | 104 | 147 |
| Moomaw, Henry E., Chattanooga, Tenn. Stovepipe-joint | 744,972 | Nov. 24 | 4178 | 903 | 107 | 937 |
| Moomy, Joseph G., Erie, Pa. Pneumatic tire | 732,376 | Mar. 10 | 1343 | 297 | 103 | 302 |
| Moomy, Joseph G., Erie, Pa. Pneumatic tire | 732,377 | Mar. 10 | 1343 | 297 | 103 | 302 |
| Moon, Frank D., Lockport, N. Y., assignor, by mesne assignments, to National Trolley Manufacturing Company. Trolley-wheel and holder | 729,082 | May 26 | 4241 | 937 | 104 | 949 |
| Moon, Herman, assignor of one-half to H. B. Heaslet, Grove City, Pa. Reversing-gear | 719,354 | Jan. 27 | 3493 | 777<br>778 | 102 | 784 |
| Moon, John L., Indianapolis, Ind. Garment-supporter | 737,262 | Aug. 25 | 4165 | 927 | 105 | 1919 |
| Moon, Orville P., Lorain, Ohio. Vaginal syringe | 725,270 | Apr. 14 | 1579 | 357 | 103 | 1519 |
| Moon, Richard D. (See Brown and Moon.) | | | | | | |
| Moon, William H., Muncie, Ind. Blowpipe-rest | 740,455 | Oct. 6 | 138 | 28 | 106 | 1275 |
| Mooney, Curtis S. (See Kepler, Andrew, assignor.) | | | | | | |
| Mooney, Lawrence C., Montgomery, Ala. Smoke-consuming furnace | 742,208 | Oct. 27 | 3551 | 792 | 106 | 2043 |
| Mooney, Thomas H., Dayton, Ohio. Making mosaic tile | 719,244 | Jan. 27 | 3276 | 732 | 102 | 737 |
| Mooney, William, and O. Jaeger, Philadelphia, Pa. Seal for pipe-couplings and nuts | 733,731 | July 14 | 1830 | 432 | 105 | 403 |
| Moor, Harry, Roxboro, Pa. Pulverizer | 744,381 | Nov. 17 | 3118 | 670 | 107 | 697 |
| Moor, Harry, Roxboro, Pa. Pulverizer | 744,382 | Nov. 17 | 3120 | 670 | 107 | 697 |
| Moore, Albert B., Elizabeth, N. J. Feed-pump | 722,871 | Mar. 17 | 2278 | 510 | 103 | 514 |
| Moore, Albert E., Winnipeg, Canada. Scissors-holder | 742,710 | Oct. 27 | 4462 | 1009 | 106 | 2235 |
| Moore, Alfred. (See Hill, George, assignor.) | | | | | | |
| Moore, Andrew R., assignor of one-half to W. J. Byers, Charlotte, Mich. Car-brake | 738,693 | Sept. 8 | 2306 | 506 | 106 | 509 |
| Moore, Arthur L., Springfield, Mass. Bolt-cutter | 720,835 | Feb. 17 | 2625 | 606 | 102 | 1406 |
| Moore, Calvin L., assignor of one-half to E. A. Weimer, Lebanon, Pa. Operating-valve | 723,002 | Mar. 17 | 2501 | 562 | 103 | 561 |
| Moore Carving Machine Company. (See Yarnell, Charles S., assignor.) | | | | | | |
| Moore, Chadwick H. (See Mosher, John J., assignor.) | | | | | | |
| Moore, Charles E., Holbrook, assignor to C. E. Riley, Newton, Mass. Machine for marking shoe-uppers | 747,205 | Dec. 15 | 3492 | 792 | 107 | 1902 |
| Moore, Charles H. Bolton, Ill. Ice-reducer | 740,162 | Sept. 29 | 5039 | 1133 | 106 | 1144 |
| Moore, Charles J., Westfield, Mass., assignor to "Locomobile" Company of America, Bridgeport, Conn. Vehicle-body | 740,895 | Oct. 6 | 940 | 211 | 106 | 1447 |
| Moore, Charles R., Elmira, N. Y. Pump | 741,813 | Oct. 20 | 2739 | 610 | 106 | 1864 |
| Moore, Daniel M., Newark, N. J. Sick-bed chair | 717,894 | Jan. 6 | 716 | 160<br>161 | 102 | 153 |
| Moore, Daniel M., Newark, N. J. Electrode for electric-tube lamps | 745,367 | Dec. 1 | 96 | 22 | 107 | 1122 |
| Moore, Daniel M., Newark, N. J., assignor to Moore Electrical Company, New York, N. Y. Apparatus for electric control of devices at a distance | 723,176 | Mar. 17 | 2817 | 635 | 103 | 626 |
| Moore, Daniel M., Newark, N. J., assignor to Moore Electrical Company, New York, N. Y. Fixture for vacuum-tube lighting | 726,328 | Apr. 28 | 3533 | 800 | 103 | 1961 |
| Moore, Delmar H., assignor to Moore Plow and Implement Company, Greenville, Mich. Garden-cultivator | 735,038 | July 28 | 4337 | 1008 | 105 | 960 |
| Moore, Edgar M. (See Culmer, John W., assignor.) | | | | | | |
| Moore, Edward J., Philadelphia, Pa. Header for steam-boilers | 738,563 | Sept. 8 | 2041 | 444<br>445 | 106 | 454 |
| Moore, Edward J., New York, N. Y. Pocket match-safe | 742,711 | Oct. 27 | 4461 | 1009 | 106 | 2235 |
| Moore, Edward J., assignor to Sherwin-Williams Company, Cleveland, Ohio. Side-seam can-soldering machine | 733,413 | July 14 | 1288 | 304 | 105 | 289 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|
| | | | Spec. | Drg. | Vol. | Page. |
| Moore, Edward J., assignor of one-half to Sherwin-Williams Company, Cleveland, Ohio. Friction-clutch | 742,209 | Oct. 27 | 3553 | 793 | 106 | 2044 |
| Moore, Edward Y., Cleveland, Ohio. Hoist | 747,463 | Dec. 22 | 3966 | 891<br>892 | 107 | 2023 |
| Moore, Edwin A., Philadelphia, Pa. Tractor and coke-loader | 722,031 | Mar. 3 | 700 | 155<br>156 | 103 | 151 |
| Moore, Edwin A., Philadelphia, Pa. Gas-cooler | 723,003 | Mar. 17 | 2502 | 562<br>563 | 103 | 561 |
| Moore, Edwin A., Philadelphia, Pa. Coke-pusher | 723,479 | Mar. 24 | 3426 | 765<br>766 | 103 | 762 |
| Moore, Edwin A., Philadelphia, Pa. Gas and tar separator | 724,030 | Mar. 31 | 4455 | 1002 | 103 | 991 |
| Moore, Edwin A., Philadelphia, Pa. Gas-cooler | 724,031 | Mar. 31 | 4456 | 1003 | 103 | 992 |
| Moore, Edwin A., Philadelphia, Pa. Gas-works valve | 725,470 | Apr. 14 | 1952 | 437<br>438 | 103 | 1598 |
| Moore, Edwin A., Philadelphia, Pa. Means for removing coke-oven doors | 725,471 | Apr. 14 | 1953 | 438<br>439 | 103 | 1598 |
| Moore, Edwin A., Philadelphia, Pa. Coke-oven door | 725,745 | Apr. 21 | 2472 | 559 | 103 | 1725 |
| Moore, Edwin A., Philadelphia, Pa. Water-cooled coke-oven door | 725,746 | Apr. 21 | 2474 | 559<br>560 | 103 | 1725 |
| Moore, Edwin A., Philadelphia, Pa. Water-cooled coke-oven-door frame | 725,747 | Apr. 21 | 2475 | 560 | 103 | 1726 |
| Moore, Edwin A., Philadelphia, Pa. Foundation or substructure for coke-ovens | 725,748 | Apr. 21 | 2476 | 560<br>561 | 103 | 1726 |
| Moore, Edwin A., Philadelphia, Pa. Means for protecting coke-ovens | 725,749 | Apr. 21 | 2477 | 561 | 103 | 1726 |
| Moore, Edwin A., Philadelphia, Pa. Construction of coke-ovens | 725,750 | Apr. 21 | 2478 | 562 | 103 | 1726 |
| Moore, Edwin A., Philadelphia, Pa. Ammonia-still | 740,678 | Oct. 6 | 545 | 121<br>122 | 106 | 1364 |
| Moore, Edwin F., Hydepark, Mass. Centrifugal extractor | 724,725 | Apr. 7 | 581 | 138 | 103 | 1292 |
| Moore, Edwin H., Rew City, Pa. Roasting-pan | 736,863 | Aug. 18 | 3434 | 760<br>761 | 105 | 1746 |
| Moore, Effie. (See Moore, Thomas W., assignor.) | | | | | | |
| Moore Electrical Company. (See Moore, Daniel M., assignor.) | | | | | | |
| Moore Electrolytic Company. (See Moore, Hugh K., assignor.) | | | | | | |
| Moore, Enos L., Pittsburg, Pa. Combined gas valve and burner | 718,857 | Jan. 20 | 2531 | 563 | 102 | 567 |
| Moore, Enos T., assignor of two-thirds to J. S. Barnett and W. R. Yingling, Newcomerstown, Ohio. Feed-water heater | 737,444 | Aug. 25 | 4515 | 1012 | 105 | 1995 |
| Moore, Ethelbert A., assignor to Stanley Works, New Britain, Conn. Hinge | 721,721 | Mar. 3 | 122 | 27 | 103 | 27 |
| Moore, Ethelbert A., assignor to Stanley Works, New Britain, Conn. Antifriction-washer for hinges | 724,117 | Mar. 31 | 4622 | 1041 | 103 | 1027 |
| Moore, Eugene H. (See Shade, Albert A., assignor.) | | | | | | |
| Moore, Francis B., Metamora, Ill. Ground-roller | 723,896 | Mar. 31 | 4168 | 938 | 103 | 934 |
| Moore, Francis B., Metamora, Ill. House-ventilating device | 742,470 | Oct. 27 | 4024 | 903 | 106 | 2142 |
| Moore, Frank A., Garee, Pa. Hose-coupling | 744,589 | Nov. 17 | 3465 | 747 | 107 | 769 |
| Moore, Frank A., Garee, Pa. Wrench | 747,747 | Dec. 22 | 4477 | 1009 | 107 | 2139 |
| Moore, Frank W., Maywood, Ill. Electric clock | 741,358 | Oct. 13 | 1856 | 410 | 106 | 1663 |
| Moore, Frederick T., assignor to E. Keeler Co., Williamsport, Pa. Manhole | 726,823 | Apr. 28 | 4487 | 1012 | 103 | 2152 |
| Moore, Gales P., assignor to Controller Company of America, St. Louis, Mo. Coin-controlled locking mechanism | 732,772 | July 7 | 134 | 37 | 105 | 33 |
| Moore, George, Salt Lake City, Utah. Centrifugal filter | 718,858 | Jan. 20 | 2533 | 563<br>564 | 102 | 568 |
| Moore, George, Salt Lake City, Utah. Rotary filter | 743,652 | Nov. 10 | 1701 | 359 | 107 | 379 |
| Moore, George, Salt Lake City, Utah. Revoluble filter | 746,552 | Dec. 8 | 2247 | 515<br>516 | 107 | 1600 |
| Moore, George, Salt Lake City, Utah. Filtering system | 748,088 | Dec. 29 | 5181 | 1172<br>1173 | 107 | 2318 |
| Moore, George A., Brookline, assignor to Moore Talking Scale Company, Boston, Mass. Weighing-machine | 718,500 | Jan. 13 | 1857 | 408 | 102 | 416 |
| Moore, George F., Milwaukee, Wis. Gas-regulator for burners | 740,163 | Sept. 29 | 5040 | 1133 | 106 | 1145 |
| Moore, George F., Jr., Mobile, Ala. Telephone tie-wire | 742,890 | Nov. 3 | 125 | 29 | 107 | 28 |
| Moore, George H., Norwich, Conn. Composition material | 746,553 | Dec. 8 | 2248 | | 107 | 1600 |
| Moore, Hartwell R., Cranford, N. J. Piano-pedal | 734,236 | July 21 | 2889 | 666 | 105 | 635 |
| Moore, Harvey, *et al.* (See Sanford, Isaac, assignor.) | | | | | | |
| Moore, Henry C., Atlanta, Ga. Feed-water heater and condenser | 730,285 | June 9 | 1392 | 306 | 104 | 1427 |
| Moore, Henry J. (See Eichorn, Frank G., assignor.) | | | | | | |
| Moore, Henry J. (See Hendrickson, Isaac B., assignor.) | | | | | | |
| Moore, Herbert L., and J. E. Lewis, Elizabeth, N. J. Signal-lantern | 720,271 | Feb. 10 | 1592 | 364 | 102 | 1176 |
| Moore, Herman F., Ventura, Cal. Whip | 725,004 | Apr. 7 | 1089 | 247 | 103 | 1401 |
| Moore, Hugh K., Lynn, Mass., assignor to Moore Electrolytic Company, Portland, Me., and Boston, Mass. Electrolytic cell | 728,274 | May 19 | 2749 | 610 | 104 | 625 |
| Moore, James, Hanover, Ill. Churn | 740,297 | Sept. 29 | 5290 | 1191 | 106 | 1195 |
| Moore, James, assignor of one-half to J. G. Curtis, Boston, Mass. Life-saving device | 744,590 | Nov. 17 | 3466 | 747 | 107 | 769 |
| Moore, James E. A. (See Seaver and Moore.) | | | | | | |
| Moore, James E. A. (See Wellman and Moore.) | | | | | | |
| Moore, James S., Woodbury, assignor of five-sixths to B. V. Adams, R. J. Roy, Blum, and F. L. Jack, Cleburne, Tex. Baling-press | 732,099 | June 30 | 4775 | 1066 | 104 | 2183 |
| Moore, Jehu C., London, England. Overseaming attachment for sewing-machines | 740,298 | Sept. 29 | 5290 | 1191 | 106 | 1195 |
| Moore, Jennie L., *et al.* (See Sanford, Isaac, assignor.) | | | | | | |
| Moore, Jesse J., St. Louis, Mo. Safety-gear and signal system for railways | 725,116 | Apr. 14 | 1300 | 293 | 103 | 1461 |
| Moore, John B., Washington, D. C. Breech mechanism | 734,347 | July 21 | 3054 | 719<br>720 | 105 | 680 |
| Moore, John J. (See Ausherman, Isaac S. and D. S., assignors.) | | | | | | |
| Moore, John L., Alexandria, Minn. Display-stand | 738,345 | Sept. 8 | 1631 | 353 | 106 | 367 |
| Moore, John R. (See Sherman and Moore.) | | | | | | |
| Moore, John R., Ironwood, Mich. Splint | 739,200 | Sept. 15 | 3227 | 715 | 106 | 721 |
| Moore, John W. (See Ingham, Poulson, and Moore.) | | | | | | |
| Moore, Joseph. (See Titus, Charles B., assignor.) | | | | | | |
| Moore, Joseph C., Cedar Rapids, Iowa. Truck | 728,957 | May 26 | 4020 | 893 | 104 | 904 |
| Moore, Joseph W., Newton, Mass. Electric controller for hydraulic elevators | 733,553 | July 14 | 1527 | 364 | 105 | 340 |
| Moore, Joseph W., Newton Highlands, Mass. Automatic rheostat | 741,814 | Oct. 20 | 2742 | 611 | 106 | 1865 |
| Moore, Kingman C., Macon, Ga. Bed-sunner and clothes-drier | 738,924 | Sept. 15 | 2749 | 608 | 106 | 622 |
| Moore, Leland, Brooklyn, N. Y. Party-line bell | 746,979 | Dec. 15 | 3067 | 702<br>703 | 107 | 1806 |
| Moore, Lewis E. (See Schmitt and Moore.) | | | | | | |
| Moore, Lilburn D., Colt, Ark. Combined cotton scraper, chopper, and cultivator | 720,272 | Feb. 10 | 1594 | 364<br>365 | 102 | 1177 |
| Moore, Lory M., and W. J. Irvin, Akron, Ohio. Gas-valve | 723,402 | Mar. 24 | 3265 | 732 | 103 | 729 |
| Moore, Miles F. (See Lee and Moore.) | | | | | | |
| Moore, Moses M., assignor to T. W. Snow, Chicago, Ill. Stand-pipe | 718,720 | Jan. 20 | 2291 | 505 | 102 | 518 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Moore, Nathan G., Oakpark, Ill. Vehicle-wheel | 729,634 | June 2 | 201 | 46 | 104 | 1169 |
| Moore, Orville H., Sandyhill, N. Y. Pulp or paper-stock screen | 729,382 | May 26 | 4764 | {1053<br>1054 | 104 | 1058 |
| Moore, Otho C., assignor of one-half to J. Barkley, Norfolk, Va. Rocker-joint | 733,327 | July 7 | 1118 | 265 | 105 | 236 |
| Moore, Otho C., assignor of one-half to J. Barkley, Norfolk, Va. Automatic car-coupling | 736,864 | Aug. 18 | 3435 | 761 | 105 | 1746 |
| Moore, Otto N., Indianapolis, Ind. Fare-register | 737,263 | Aug. 25 | 4166 | 928 | 105 | 1920 |
| Moore Plow and Implement Company. (See Moore, Delmar H., assignor.) | | | | | | |
| Moore, R. A., Sr., *et al.* (See Hadley, Edward W., assignor.) | | | | | | |
| Moore, R. A., *et al.* (See Smith, Clarence E., assignor.) | | | | | | |
| Moore, Ralston A., Tennille, Ga. Fertilizer-mixer | 738,925 | Sept. 15 | 2753 | 608 | 106 | 623 |
| Moore, Robert A., New York, N. Y. Running-gear for vehicles | 731,803 | June 23 | 4209 | 938 | 104 | 2050 |
| Moore, Robert E. (See Nash and Moore.) | | | | | | |
| Moore, Roswell A., Jr., Kensington, Conn. Hinge-joint | 729,083 | May 26 | 4243 | 938 | 104 | 949 |
| Moore, Roswell A., Jr., Kensington, Conn., assignor to C. and M. Scheuer, New York, N. Y. Ball-bearing holder for cords | 725,005 | Apr. 7 | 1090 | 248 | 103 | 1402 |
| Moore, Roswell A., Jr., Kensington, Conn., assignor to M. and C. Scheuer, New York, N. Y. Tape guide and fastener | 727,551 | May 5 | 1349 | 303 | 104 | 290 |
| Moore, Russell W., Orange, N. J. Perfumery-atomizer | 746,866 | Dec. 15 | 2847 | 656 | 107 | 1755 |
| Moore, Samuel E., *et al.* (See Lewis, Harry L., assignor.) | | | | | | |
| Moore, Sidney S., Crockett, Tex. Saddle | 744,591 | Nov. 17 | 3467 | 748 | 107 | 769 |
| Moore, Solon E., Putnam, Conn. Weather-strip | 724,726 | Apr. 7 | 582 | 139 | 103 | 1293 |
| Moore, Stephen W., Marion, Ind. Compound bevel-joint | 733,500 | July 14 | 1435 | 337 | 105 | 321 |
| Moore, Stewart H., Chicago, Ill. Valve | 739,334 | Sept. 22 | 3476 | 776 | 106 | 791 |
| Moore Talking Scale Company. (See Moore, George A., assignor.) | | | | | | |
| Moore, Thomas W., assignor to E. Moore, Pierceton, Ind. Automatic loading attachment for wagons | 747,748 | Dec. 22 | 4478 | 1010 | 107 | 2140 |
| Moore, Walter B., *et al.* (See Pierce, John, assignor.) | | | | | | |
| Moore, Walter W. (See Allen and Moore.) | | | | | | |
| Moore, Warner. (See Jones, Clemens C., assignor.) | | | | | | |
| Moore, William B., Chicago, Ill. Attachment for cylinder-locks | 719,684 | Feb. 3 | 482 | 109 | 102 | 924 |
| Moore, Willis L., Washington, D. C. Cooling, drying, and purifying air | 726,181 | Apr. 21 | 3235 | 733 | 103 | 1883 |
| Moorefield, Al, Stockton, Cal. Portable steam bath-tub | 724,487 | Apr. 7 | 131 | 31 | 103 | 1198 |
| Moorefield, Al, Stockton, Cal. Petroleum-burner | 737,760 | Sept. 1 | 378 | 81 | 106 | 84 |
| Moores, George W., New Orleans, La. Buckle | 730,551 | June 9 | 1873 | 418 | 104 | 1530 |
| Moorhead, Walter C., assignor of one-half to O. O. Eberly, Senecaville, Ohio. Bit | 736,998 | Aug. 25 | 3687 | 818 | 105 | 1820 |
| Mooring, Kenneth, Rockland, Ohio. Life-saving device for vehicles | 740,299 | Sept. 29 | 5294 | 1192 | 106 | 1196 |
| Moosmann, Paul, Brooklyn, N. Y. Dust-cap for balance-escapements | 718,369 | Jan. 13 | 1573 | 347 | 102 | 352 |
| Moragne, James M. (See Rickles, Louis H., assignor.) | | | | | | |
| Moran, Cornelius P., assignor of one-half to F. H. Sanker, Gallitzin, Pa. Car-brake | 742,798 | Oct. 27 | 4603 | 1043 | 106 | 2267 |
| Moran, Daniel E., Mendham, N. J., and E. S. Jarrett, New York, N. Y., assignors of one-third to F. Remington, Greenwich, Conn. Caisson or coffer-dam | 725,751 | Apr. 21 | 2479 | {562<br>563 | 103 | 1727 |
| Moran Flexible Steam Joint Company. (See Moran, Thomas W., assignor.) | | | | | | |
| Moran, James, New York, N. Y. Combination article of furniture | 721,593 | Feb. 24 | 4102 | 934 | 102 | 1739 |
| Moran, John P., Rockingham, Canada. Apparatus for removing stones | 731,933 | June 23 | 4430 | 988 | 104 | 2098 |
| Moran, Michael, and T. W. Grant, Pittsburg, Pa. Mason's plumb | 746,554 | Dec. 8 | 2250 | 516 | 107 | 1601 |
| Moran, Patrick I. (See Donohue, James S., assignor.) | | | | | | |
| Moran, Thomas F., De Young, assignor of one-half to F. J. Moser, Kane, Pa. Device for raising liquids from wells | 721,594 | Feb. 24 | 4104 | 934 | 102 | 1739 |
| Moran, Thomas F., De Young, and F. J. Moser, Kane, Pa. Apparatus for raising liquids from wells | 735,557 | Aug. 4 | 1015 | 214 | 105 | 1195 |
| Moran, Thomas F., De Young, and F. J. Moser, Kane, Pa. Flowing liquids from wells | 746,980 | Dec. 15 | 3069 | 703 | 107 | 1806 |
| Moran, Thomas W., Louisville, Ky. Pilot-light and generator | 726,558 | Apr. 28 | 3983 | 902 | 103 | 2048 |
| Moran, Thomas W., assignor to Moran Flexible Steam Joint Company, Louisville, Ky. Pipe-joint and valve in connection therewith | 721,595 | Feb. 24 | 4106 | 935 | 102 | 1740 |
| Moran, William J., Yonkers, N. Y. Bottle-closure | 731,934 | June 23 | 4431 | 988 | 104 | 2099 |
| Morch, John H. (See Weeks, John, assignor.) | | | | | | |
| Morche, Ernest W. (See Jaeger, Gebhard, assignor.) | | | | | | |
| Morcom, Philip K., and W. G. Schaffer, Denver, Colo.; said Morcom assignor of one-sixth to said Schaffer. Self-cleaning oil-burner | 739,788 | Sept. 22 | 4321 | 968 | 106 | 976 |
| Morden Frog & Crossing Works. (See Lee and Moore, assignors.) | | | | | | |
| Morden, R. B., *et al.* (See Colbert, Cassius E., assignor.) | | | | | | |
| Morden, R. P., *et al.* (See Colbert, Cassius E., assignor.) | | | | | | |
| Morden, Robert B., assignor of one-half to A. W. Franklin, Jefferson, Iowa. Rotary engine | 736,865 | Aug. 18 | 3439 | 762 | 105 | 1747 |
| Mordey, William M., Westminster, London, England. Alternate-current traction system | 719,024 | Jan. 27 | 2851 | 640 | 102 | 649 |
| Mordey, William M., and A. G. Hansard, Westminster, England. Alternate-current traction system | 746,353 | Dec. 8 | 1912 | 437 | 107 | 1526 |
| Mordey, William M., and G. C. Fricker, Westminster, England. Electricity-meter | 739,695 | Sept. 22 | 4151 | {927<br>928 | 106 | 937 |
| Mordey, William M., and G. C. Fricker, Westminster, England. Electricity-meter | 741,527 | Oct. 13 | 2185 | 486 | 106 | 1732 |
| More, Edward A. (See Friese and Gilbert, assignors.) | | | | | | |
| More, Emry, Windber, Pa. Combined lock and latch | 720,455 | Feb. 10 | 1917 | 437 | 102 | 1244 |
| Moreau, Eugene, assignor to Britelite Lamp Company, New York, N. Y. Acetylene-lamp | 737,125 | Aug. 25 | 3893 | 865 | 105 | 1862 |
| Moreau, Joseph, St. Germain de Grantham, Canada. Bark-removing machine | 735,793 | Aug. 11 | 1438 | 310 | 105 | 1305 |
| Moreau, Joseph, St. Anne Du Sault, Canada. Rossing-machine | 737,646 | Sept. 1 | 159 | 35, 36 | 106 | 37 |
| Morehouse, Eugene W., assignor to B. A. Ballou & Company, Providence, R. I. Link-button | 722,529 | Mar. 10 | 1634 | 360 | 103 | 367 |
| Morehouse, Eugene W., assignor to B. A. Ballou & Company, Providence, R. I. Hinge-joint for breastpin pin-tongues | 729,383 | May 26 | 4766 | 1054 | 104 | 1058 |
| Morehouse, Fredrick E., Lafayette, Ind. Wire-stretcher and lifting-jack | 746,123 | Dec. 8 | 1490 | 333 | 107 | 1438 |
| Morehouse, William H., Wasco, Oreg. Staple | 718,649 | Jan. 20 | 2145 | 468 | 102 | 489 |
| Moreland, Mary C., executrix. (See Moreland, William A.) | | | | | | |
| Moreland, William A., deceased; M. C. Moreland, Lumpkin, Ga., executrix. Attachment for grates | 742,210 | Oct. 27 | 3554 | 793 | 106 | 2044 |
| Morell, David, Kassel, Germany. Rotary engine | 743,010 | Nov. 3 | 364 | 79 | 107 | 77 |
| Morelock, Albert E., assignor of one-half to S. W. Lakin, Topeka, Kans. Telegraphic transmitting attachment for type-writers | 743,011 | Nov. 3 | 366 | 79, 80 | 107 | 77 |
| Morelock, Albert E., assignor of one-half to S. W. Lakin, Topeka, Kans. Telegraphic transmitter | 743,012 | Nov. 3 | 372 | 80, 81 | 107 | 78 |
| Moreno, Charles A., St. Louis, Mo. Railway-crossing | 721,129 | Feb. 17 | 3221 | 737 | 102 | 1539 |
| Moresi, Peter, assignor to Dexter, Lambert & Company, Paterson, N. J. Loom-shuttle | 734,189 | July 21 | 2755 | 646 | 105 | 615 |
| Moreton, James A. M., *et al.* (See Rock, Frederick W., assignor.) | | | | | | |
| Morey, Edward I., Telluride, assignor of one-third to G. E. Collins, Denver, Colo. Dumping-car | 746,555 | Dec. 8 | 2251 | 516 | 107 | 1601 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Morgan, Arthur J. (See Montgomery, George W., assignor.) | | | | | | |
| Morgan, Charles, assignor to Arcade Manufacturing Co., Freeport, Ill. Cork-puller | 728,806 | May 19 | 3745 | 835 | 104 | 832 |
| Morgan, Charles, assignor to Arcade Manufacturing Company, Freeport, Ill. Mop | 733,554 | July 14 | 1532 | 365 | 105 | 341 |
| Morgan, Charles, assignor to Arcade Manufacturing Company, Freeport, Ill. Mop-head | 733,555 | July 14 | 1533 | 365 | 105 | 341 |
| Morgan, Charles C. (See Wright, Gilbert, assignor.) | | | | | | |
| Morgan, Charles E., assignor of one-half to H. D. Jones, Portland, Oreg. Fastening | 735,794 | Aug. 11 | 1444 | 311 | 105 | 1307 |
| Morgan, Charles H., assignor to Morgan Construction Company, Worcester, Mass. Gas-producer | 723,897 | Mar. 31 | 4169 | 939 | 103 | 935 |
| Morgan, Charles N., South Hadley Falls, assignor of one-half to C. H. Farr, North Wilbraham, Mass. Game apparatus | 722,603 | Mar. 10 | 1762 | 392 | 103 | 394 |
| Morgan, Charles R., Akron, Ohio. Convertible stove | 747,998 | Dec. 29 | 4999 | {1129 {1130 | 107 | 2278 |
| Morgan, Christopher J., New Hartford, N. Y. Cotton-beater | 729,635 | June 2 | 204 | 46 | 104 | 1170 |
| Morgan Construction Company. (See Carroll, Elbert H., assignor.) | | | | | | |
| Morgan Construction Company. (See Edwards, Victor E., assignor.) | | | | | | |
| Morgan Construction Company. (See George, Jerome R., assignor.) | | | | | | |
| Morgan Construction Company. (See Morgan, Charles H., assignor.) | | | | | | |
| Morgan Construction Company. (See Neeland, Marvin A., assignor.) | | | | | | |
| Morgan Construction Company. (See Sieurin, George, assignor.) | | | | | | |
| Morgan Crucible Company. (See Speirs, Charles W., assignor.) | | | | | | |
| Morgan, David J., Pittsburg, Pa. Forging apparatus | 747,749 | Dec. 22 | 4480 | {1010 {1011 | 107 | 2140 |
| Morgan, Doctor F., Chicago, Ill. Steam-heating plant | 722,127 | Mar. 3 | 858 | 192 | 103 | 184 |
| Morgan, Edward B., Saginaw, Mich. Weeding-hoe | 747,206 | Dec. 15 | 3496 | 793 | 107 | 1903 |
| Morgan Engineering Company. (See Roberts, Alvin L., assignor.) | | | | | | |
| Morgan Engineering Company. (See Taylor, Clarence L., assignor.) | | | | | | |
| Morgan-Gardner Electric Company. (See Mighell, Seward N., assignor.) | | | | | | |
| Morgan, Harry C., Lagrange, Ill. Cover for third rails | 746,556 | Dec. 8 | 2254 | 517 | 107 | 1602 |
| Morgan, Henry W., Rochester, N. Y. Machine for making shooks for boxes | 726,329 | Apr. 28 | 3534 | {800 {801 | 103 | 1961 |
| Morgan, Henry W., Rochester, N. Y. Nailing-machine | 731,488 | June 23 | 3620 | 808 | 104 | 1931 |
| Morgan, James, West Philadelphia, Pa. Tongs | 732,100 | June 30 | 4777 | 1066 | 104 | 2183 |
| Morgan, James K., assignor of two-thirds to W. T. Riley and G. A. Van Horn, Baltimore, Md. Fuse-box | 721,217 | Feb. 24 | 3426 | 778 | 102 | 1594 |
| Morgan, Jasper C. (See Kyser and Morgan.) | | | | | | |
| Morgan, John B., assignor to W. D. Probst, Youngstown, Ohio. Fuse-block | 725,006 | Apr. 7 | 1091 | 248 | 103 | 1402 |
| Morgan, John G., and W. Bletso, Youngstown, Ohio. Steam-trap | 739,696 | Sept. 22 | 4154 | 928 | 106 | 938 |
| Morgan, John H., Harrogate, England. Wrench or spanner | 718,501 | Jan. 13 | 1860 | {408 {409 | 102 | 417 |
| Morgan, John J. (See Thomas, James W., assignor.) | | | | | | |
| Morgan, Lemuel H., Brampton, Canada. Fastening for leggings | 736,764 | Aug. 18 | 3236 | 714 | 105 | 1704 |
| Morgan, Lucy W., Auburn, Me. Dressmaker's guide | 731,115 | June 16 | 2913 | 647 | 104 | 1767 |
| Morgan, Ralph L., Worcester, Mass. Vehicle-wheel | 721,380 | Feb. 24 | 3701 | 842 | 102 | 1652 |
| Morgan, Robert L., Philadelphia, Pa. Sun-shield | 736,765 | Aug. 18 | 3237 | 715 | 105 | 1704 |
| Morgan, Rollin M. (See Mende, Arthur, assignor.) | | | | | | |
| Morgan, Stephen, Mystic, Conn. Candy-crimping machine | 719,490 | Feb. 3 | 145 | 32 | 102 | 854 |
| Morgan, Sylvester A. (See Snowden, Perry J., assignor.) | | | | | | |
| Morgan, Thomas, assignor to C. W. Hobbs, Worcester, Mass. Box-covering and corner-staying machine | 742,343 | Oct. 27 | 3808 | 853 | 106 | 2099 |
| Morgan, Thomas H. (See Gunby, Joseph H., assignor.) | | | | | | |
| Morgan, Thomas R. (See Seaver and Morgan.) | | | | | | |
| Morgan, Thomas R. (See Seaver, Wellman, and Morgan.) | | | | | | |
| Morgan, William, Durban, Natal. Automatic sprinkler | 725,271 | Apr. 14 | 1580 | 357 | 103 | 1520 |
| Morgan, William A. (See Brown, Samuel J., assignor.) | | | | | | |
| Morgan, William M. (See Bilfinger, Carl W., assignor.) | | | | | | |
| Morgaridge, Isaac D., Como, assignor of one-half to T. C. Morgaridge, Rockfalls, Ill. Sewing-awl | 718,057 | Jan. 6 | 1002 | 224 | 102 | 216 |
| Morgaridge, T. C. (See Morgaridge, Isaac D., assignor.) | | | | | | |
| Morgenroth, Isaak, assignor of one-half to D. Vandewart, New York, N. Y. Non-refillable bottle | 734,924 | July 28 | 4131 | 962 | 105 | 918 |
| Morgenthaler, John W., Joplin, Mo. Land-roller | 730,469 | June 9 | 1734 | 388 | 104 | 1499 |
| Morgenthau, Jesse, Pittsburg, Pa. Coin-operated weighing-machine | 728,275 | May 19 | 2730 | 611 | 104 | 626 |
| Moriarty, Daniel, New Orleans, La. Vase | 719,835 | Feb. 3 | 768 | 180 | 102 | 986 |
| Morin, George, Havana, Cuba. Receiver for wireless communication | 746,557 | Dec. 8 | 2255 | 517 | 107 | 1602 |
| Morin, Joseph, Seattle, Wash. Saw-set | 736,534 | Aug. 18 | 2792 | 612 | 105 | 1614 |
| Morin, Joseph H., Wilkinsonville, Mass. Shuttle | 719,685 | Feb. 3 | 483 | 109 | 102 | 924 |
| Morin, Laurent, Maisonneuve, Canada. Woodworking-machine | 726,968 | May 5 | 273 | {61 {62 {63 | 104 | 59 |
| Morin, Oliver N., assignor of two-thirds to T. F. Kilbride and A. B. Thorpe, Holyoke, Mass. Boiler-furnace | 747,207 | Dec. 15 | 3497 | 793 | 107 | 1903 |
| Morin, Oliver N., assignor of two-thirds to A. B. Thorpe and T. F. Kilbridge, Holyoke, Mass. Protective apparatus for boiler-furnace fronts | 747,464 | Dec. 22 | 3968 | 892 | 107 | 2023 |
| Morison, Alexander, assignor to C. C. Macomber, Saginaw, Mich. Manuscript-holder and line-indicator | 729,636 | June 2 | 205 | 47 | 104 | 1170 |
| Moritz, Friedrich, assignor to Voltohm Electricitats-Gesellschaft, A. G., Munich, Germany. X-ray tracer | 720,599 | Feb. 17 | 2212 | 513 | 102 | 1319 |
| Moritz, Gustav, St. Louis, Mo. Eye-shield for spectacles | 730,192 | June 2 | 1190 | 268 | 104 | 1370 |
| Morley, Albert, assignor to S. M. Sutherland, trustee, Chicago, Ill. Folding sewing-machine table | 730,680 | June 9 | 2107 | 469 | 104 | 1581 |
| Morley, Albert, assignor to S. M. Sutherland, trustee, Chicago, Ill. Folding sewing-machine table | 734,190 | July 21 | 2756 | 647 | 105 | 616 |
| Morley Button Manufacturing Company. (See Ellery, Robert L., assignor.) | | | | | | |
| Morley, Frederic A., assignor of one-half to C. A. Phelan, Brooklyn, N. Y. Non-refillable bottle | 723,004 | Mar. 17 | 2504 | 563 | 103 | 561 |
| Morningstar, Harry, Detroit, Mich. Gas-engine lubricator | 719,836 | Feb. 3 | 769 | 180 | 102 | 986 |
| Morrow, Joseph H., Virgilina, Va., assignor of one-half to W. D. Elger, New York, N. Y. Drier | 735,895 | Aug. 11 | 1648 | 352 | 105 | 1351 |
| Morphew, Enos A., Havana, Ill. Rotary engine | 741,359 | Oct. 13 | 1859 | 411 | 106 | 1664 |
| Morrell, Harry H., New Suffolk, N. Y. Submarine boat | 726,085 | Apr. 21 | 3043 | 691 | 103 | 1844 |
| Morrice, George, and C. G. Grim, Sonora, Cal. Pump | 742,471 | Oct. 27 | 4026 | 903 | 106 | 2142 |
| Morrill, Charles, deceased; S. C. Morrill, New York, N. Y., executrix. Saw-set | 728,958 | May 26 | 4021 | 894 | 104 | 904 |
| Morrill, George P., Canterbury, N. H. Wedge for ax or tool handles | 740,583 | Oct. 6 | 394 | 82 | 106 | 1330 |
| Morrill, Roland, Benton Harbor, Mich. Piston | 723,005 | Mar. 17 | 2506 | 563 | 103 | 562 |
| Morrill, Sarah C., executrix. (See Morrill, Charles.) | | | | | | |
| Morrill, William C., New York, N. Y. Liquid-discharging device | 743,092 | Nov. 3 | 531 | 115 | 107 | 111 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Morrill, William C., New York, N. Y. Saw-set | 744,383 | Nov. 17 | 3121 | 670 | 107 | 697 |
| Morrin, Elizabeth T. (See Morrin, Thomas F., assignor.) | | | | | | |
| Morrin, Thomas F., assignor to E. T. Morrin, Jersey City, N. J. Steam-boiler | 748,400 | Dec. 29 | 5726 | 1308 | 107 | 2436 |
| Morrin, Thomas F., assignor to E. T. Morrin, Jersey City, N. J. Manhole-closure | 748,514 | Dec. 29 | 5961 | 1352 | 107 | 2487 |
| Morris, Benjamin F. (See Pfeiffer and Morris.) | | | | | | |
| Morris, Calvin S., St. Louis, Mo. Traveling-case | 722,604 | Mar. 10 | 1763 | 393 | 103 | 394 |
| Morris, Charles I., *et al.* (See Morris, Ruemmler, and Kennedy, assignors.) | | | | | | |
| Morris, David J. (See Eckenwiler, George M., assignor.) | | | | | | |
| Morris, Francis E., C. Ruemmler, and C. J. Kennedy, assignors of four-sevenths to C. I., R. M., W. J., and M. Morris, St. Louis, Mo. Heel-building machine | 723,177 | Mar. 17 | 2819 | 635 | 103 | 626 |
| Morris, Frank B., Leicester, England. Cutting-out press | 732,101 | June 30 | 4778 | 1066<br>1067 | 104 | 2183 |
| Morris, Frank E., assignor to Pilling & Madeley, Philadelphia, Pa. Machine for sewing looped fabrics | 725,578 | Apr. 14 | 2146 | 486 | 103 | 1641 |
| Morris, George, Pittsburg, Pa. Bottle-closure | 738,467 | Sept. 8 | 1860 | 405 | 106 | 414 |
| Morris, George A. (See Brown, Edwin F., assignor.) | | | | | | |
| Morris, Henry B., Michigan City, Ind. Chair-seat | 719,601 | Feb. 3 | 339 | 79 | 102 | 893 |
| Morris, Henry B., Michigan City, Ind. Chair | 723,006 | Mar. 17 | 2508 | 563 | 103 | 562 |
| Morris, Henry B., Michigan City, Ind. Machine for making paper cord | 736,422 | Aug. 18 | 2579 | 565<br>566 | 105 | 1569 |
| Morris, Isaac I., Mellette, S. D. Machine for aerial navigation | 737,947 | Sept. 1 | 777 | 170 | 106 | 170 |
| Morris, James J., Cantwell, W. Va. Logging-grab | 733,989 | July 21 | 2358 | 553 | 105 | 529 |
| Morris, James W., New York, N. Y. Combined door hinge and check | 725,752 | Apr. 21 | 2482 | 563 | 103 | 1727 |
| Morris, James W., New York, N. Y. Dasher for churns | 742,712 | Oct. 27 | 4463 | 1010 | 106 | 2235 |
| Morris, John, Carlisle, Ark. Well-strainer | 725,117 | Apr. 14 | 1305 | 294 | 103 | 1462 |
| Morris, John O., Richmond, Va. Spraying attachment for furnaces | 740,986 | Oct. 6 | 1109 | 249 | 106 | 1482 |
| Morris, Joseph L., Lawrence, Kans. Movable casing for condensing-coils of refrigerator-cars | 727,180 | May 5 | 679 | 146 | 104 | 147 |
| Morris, Kennada, administrator. (See Martin, Sidney B.) | | | | | | |
| Morris, Margaret, *et al.* (See Morris, Ruemmler, and Kennedy, assignors.) | | | | | | |
| Morris, R. M., *et al.* (See Morris, Ruemmler, and Kennedy, assignors.) | | | | | | |
| Morris, Robert L. (See Vandegrift and Morris.) | | | | | | |
| Morris, Rolin G., Grice, Tex. Animal-poke | 725,579 | Apr. 14 | 2148 | 486 | 103 | 1641 |
| Morris, Samuel, Newark, assignor of one-half to M. H. Neil, Columbus, Ohio. Car-coupling | 746,728 | Dec. 15 | 2572 | 592 | 107 | 1695 |
| Morris, Samuel, Newark, assignor of one-half to M. H. Neil, Columbus, Ohio. Car-coupling | 746,729 | Dec. 15 | 2573 | 592 | 107 | 1695 |
| Morris, Samuel, Newark, assignor of one-half to M. H. Neil, Columbus, Ohio. Car-coupling | 746,730 | Dec. 15 | 2574 | 592 | 107 | 1695 |
| Morris, Seth M., Galveston, assignor to Germicide Gas Company, Austin, Tex. Formaldehyde-fumigator | 746,731 | Dec. 15 | 2575 | 593 | 107 | 1695 |
| Morris, Theodore, San Francisco, Cal. Machine for opening and cleaning fish | 735,994 | Aug. 11 | 1830 | 392<br>393 | 105 | 1391 |
| Morris, W. A., *et al.* (See Harp and Starkweather, assignors.) | | | | | | |
| Morris, W. J., *et al.* (See Morris, Ruemmler, and Kennedy, assignors.) | | | | | | |
| Morris, Walter, Dover, Del. Portable roof | 738,694 | Sept. 8 | 2308 | 507 | 106 | 509 |
| Morris, William H., Johnstown, Pa. Mine-car | 744,872 | Nov. 24 | 3998 | 862 | 107 | 900 |
| Morris, William M., and E. M. Staples, Yardville, N. J. Canvas coal-bag | 724,316 | Mar. 31 | 5022 | 1125 | 103 | 1107 |
| Morrish, Thomas I., San Francisco, Cal. Harness-saddle | 748,204 | Dec. 29 | 5398 | 1227 | 107 | 2363 |
| Morrison, Andrew M., Dubuque, Iowa. Flushing-reservoir for water-closets or the like | 747,628 | Dec. 22 | 4269 | 960 | 107 | 2094 |
| Morrison, Andrew M., Dubuque, Iowa. Siphon-reservoir for toilet-closets or the like | 748,401 | Dec. 29 | 5727 | 1308 | 107 | 2436 |
| Morrison, Burton E., Haverhill, Mass., assignor to Morrison Shoe Company, Concord, N. H. Spring-heel-seating machine | 720,171 | Feb. 10 | 1394 | 319 | 102 | 1136 |
| Morrison, Clarence E., Albany, N. Y. Sink-trap | 741,815 | Oct. 20 | 2744 | 611 | 106 | 1866 |
| Morrison, Daniel A., Winter Harbor, Me. Whiffletree | 735,558 | Aug. 4 | 1018 | 215 | 105 | 1196 |
| Morrison, David H., Peotone, Ill. Foot-rest for vehicles | 748,402 | Dec. 29 | 5729 | 1308 | 107 | 2436 |
| Morrison, Edwin, Philadelphia, Pa. Motive-power apparatus | 730,782 | June 9 | 2269 | 504<br>505 | 104 | 1616 |
| Morrison, George L., Townley, assignor to Mullen Brothers Paper Company, St. Joseph, Mich. Folding box | 742,713 | Oct. 27 | 4465 | 1010 | 106 | 2236 |
| Morrison, Harry, Forest Gate, England. Road-scarifier | 735,127 | Aug. 4 | 155 | 34, 35 | 105 | 1015 |
| Morrison, Henry C., Sandy River, and J. T. Flippen, Graystone, Va.; said Flippen assignor of one-third to said Morrison. Plow | 734,426 | July 21 | 3190 | 751 | 105 | 707 |
| Morrison, John. (See Orr and Morrison.) | | | | | | |
| Morrison, John, assignor to Universal Brush Company, Troy, N. Y. Making brushes | 734,079 | July 21 | 2544 | 593 | 105 | 572 |
| Morrison, John G., New York, N. Y. Apparatus for molding hollow articles | 737,854 | Sept. 1 | 574 | 127 | 106 | 127 |
| Morrison, John R., Petoskey, Mich. Leach-pitcher | 728,125 | May 12 | 2450 | 546 | 104 | 539 |
| Morrison, Joseph, East Schuyler, N. Y. Trace-fastener | 728,744 | May 19 | 3629 | 806 | 104 | 809 |
| Morrison, Mark L., *et al.* (See Smith, Edward P., assignor.) | | | | | | |
| Morrison, Roderick, *et al.* (See Pennell, Frank W., assignor.) | | | | | | |
| Morrison Shoe Company. (See Morrison, Burton E., assignor.) | | | | | | |
| Morrison, Thomas, Braddock, Pa. Rolling flanged sections | 722,605 | Mar. 10 | 1764 | ..... | 103 | 394 |
| Morrison, Walter G., deceased, Willimantic, H. Clark, administrator, assignor to Atwood-Morrison Company, Stonington, Conn. Swift-bracket | 729,084 | May 26 | 4244 | 938 | 104 | 949 |
| Morrison, Walter G., deceased, Willimantic, H. Clark, administrator, assignor to Atwood-Morrison Company, Stonington, Conn. Stop-motion for spinning | 729,384 | May 26 | 4767 | 1055 | 104 | 1058 |
| Morrison, William, assignor to Helios-Upton Company, Chicago, Ill. Vehicle-wheel | 729,385 | May 26 | 4769 | 1055 | 104 | 1059 |
| Morrison, William, assignor to G. R. Coryell, Chicago, Ill. Rear-axle construction for automobiles | 734,080 | July 21 | 2545 | 593<br>594 | 105 | 573 |
| Morrison, William J., and J. C. Wharton, Nashville, Tenn. Candy-machine | 717,756 | Jan. 6 | 443 | 103 | 102 | 96 |
| Morrison, William N., St. Louis, Mo. Life-preserver | 728,745 | May 19 | 3630 | 806 | 104 | 810 |
| Morrissey, James H., San Francisco, Cal. Hydrocarbon-burner | 729,205 | May 26 | 4457 | 982<br>983 | 104 | 994 |
| Morrissey, John, South Omaha, and C. P. O'Brien, Omaha, Nebr. Tankage-press | 734,591 | July 28 | 3501 | 818 | 105 | 789 |
| Morrisson, Andrew, Coleman, Tex. Windmill | 724,914 | Apr. 7 | 915 | 209 | 103 | 1365 |
| Morrow, Henry W., assignor to Perfect Fuel Company, Wilmington, Del. Fuel compound | 720,600 | Feb. 17 | 2213 | ..... | 102 | 1320 |
| Morrow, Isaac, Columbia, assignor of one-half to E. B. Horner, West Hempfield, Pa., Brooder | 733,863 | July 14 | 2101 | 495<br>496 | 105 | 468 |
| Morrow, Isaac, Manheim, assignor of one-half to C. N. Hostetter, Penn Township, Pa. Brooder | 736,423 | Aug. 18 | 2583 | 566 | 105 | 1569 |
| Morrow, Oliver A., Whitehall, Ill. Fountain-pen | 730,783 | June 9 | 2274 | 505 | 104 | 1617 |
| Morrow, William P., Woodward, Okla. Ter. Harness-snap | 731,489 | June 23 | 3621 | 808 | 104 | 1931 |
| Morse, Anna C. (See Morse, Sidney E., assignor.) | | | | | | |
| Morse, Anna C. (See Speare, Robert H., assignor.) | | | | | | |
| Morse, C. E., *et al.* (See Somes, Walter F., assignor.) | | | | | | |
| Morse Chain Company. (See Morse, Everett F., assignor.) | | | | | | |
| Morse, Charles H., Cambridge, Mass. Trolley-signal | 743,542 | Nov. 10 | 1495 | 313 | 107 | 336 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Morse, Clyde S. (See Schermerhorn, Herschel A., assignor.) | | | | | | |
| Morse, Everett F., assignor to Morse Chain Company, Trumansburg, N. Y. Chain driving-gear | 736,999 | Aug. 25 | 3687 | 818, 819 | 105 | 1820 |
| Morse, George W. (See Wakefield and Morse.) | | | | | | |
| Morse, Harry L., assignor to Chase-Shawmut Co., Boston, Mass. Electric fuse or cut-out | 719,025 | Jan. 27 | 2853 | 641 | 102 | 650 |
| Morse, Harry L., assignor to Chase-Shawmut Co., Boston, Mass. Electric fuse or cut-out | 719,026 | Jan. 27 | 2857 | 641 | 102 | 651 |
| Morse, Mira B., Indianapolis, Ind. Shoe-tongue fastener | 728,959 | May 26 | 4022 | 894 | 104 | 904 |
| Morse, Nora A., Manchester, Kans. Gage for cutting cloth | 738,224 | Sept. 8 | 1345 | 292 | 106 | 307 |
| Morse, Orville M., Jackson, Mich. Dust-collector. (Reissue) | 12,102 | Mar. 17 | 2922 | 655 | 103 | 649 |
| Morse, Rodolph F. (See Caldwell, John, assignor.) | | | | | | |
| Morse, Samuel F. B., and S. R. Tuggle, Houston, Tex. Cinder-guard | 726,330 | Apr. 28 | 3537 | 802 | 103 | 1962 |
| Morse, Sewall. (See Mills and Williams, assignors.) | | | | | | |
| Morse, Sidney E., assignor to himself and A. C. Morse, New York, N. Y. Sterilizer | 744,782 | Nov. 24 | 3838 | 827 | 107 | 866 |
| Morse Thermo-Gage Co. (See Gantt and Taylor, assignors.) | | | | | | |
| Morse Thermo-Gage Co. (See Taylor and Gantt, assignors.) | | | | | | |
| Morse, William F., assignor to S. R. Parry, Rochester, N. Y. Corner-staying machine | 741,691 | Oct. 20 | 2508 | 559, 560, 561 | 106 | 1816 |
| Morse, William H., Worcester, Mass. Mechanism for stripping ingots from molds | 735,795 | Aug. 11 | 1445 | 311, 312 | 105 | 1307 |
| Morss, Edgar D., Uniontown, Pa. Gas stove or heater | 734,732 | July 28 | 3773 | 880 | 105 | 843 |
| Morterud, Einar, Konga, Sweden. Valve and means for actuating same | 732,879 | July 7 | 327 | 81 | 105 | 72 |
| Mortimer, Samuel G., Bellefourche, S. D. Trestle | 737,000 | Aug. 25 | 3691 | 819 | 105 | 1821 |
| Morton, Albert H., and L. P. Sherman, assignors to said Morton and H. C. Perham, Lowell, Mass. Book-covering machine | 747,999 | Dec. 29 | 5001 | 1130, 1131 | 107 | 2278 |
| Morton, Ellis S., assignor of one-half to G. W. Davis, St. Louis, Mo. Educational, advertising, computing, recitation, exhibition, and display dial | 739,201 | Sept. 15 | 3228 | 715 | 106 | 722 |
| Morton, Ephraim S., Brockton, Mass. Producing roughened wire nails | 745,224 | Nov. 24 | 4700 | ..... | 107 | 1045 |
| Morton, Henry D. (See Orbison, James B., assignor.) | | | | | | |
| Morton, Henry D., San Francisco, Cal. Fusible plug | 719,245 | Jan. 27 | 3278 | 732 | 102 | 737 |
| Morton, Henry G. (See Armstrong and Morton.) | | | | | | |
| Morton, Hezekiah, Thomasville, N. C. Double-seat knockdown chair | 719,837 | Feb. 3 | 771 | 180 | 102 | 986 |
| Morton, John F., St. Louis, Mo. Construction of bridges | 725,753 | Apr. 21 | 2484 | 563 | 103 | 1738 |
| Morton Manufacturing Company. (See Voelpel, Suchert, and Oekel, assignors.) | | | | | | |
| Morton, Samuel S., York, Pa. Traction-engine | 725,860 | Apr. 21 | 2677 | 609, 610 | 103 | 1769 |
| Morton, Thomas, Birmingham, England. Buckle-fastening | 745,884 | Dec. 1 | 1059 | 238 | 107 | 1324 |
| Morton, Thomas, Birmingham, England. Dress-clip | 748,403 | Dec. 29 | 5730 | 1309 | 107 | 2437 |
| Morton Trust Company, trustee. (See Atkins, Harold B., assignor.) | | | | | | |
| Morton Trust Company, trustee. (See Law, Fred A., assignor.) | | | | | | |
| Morton Trust Company, trustee. (See Pope, Harry M., assignor.) | | | | | | |
| Morton Trust Company, trustee. (See Vanderbeek, Herbert, assignor.) | | | | | | |
| Morton, William H., Portland, Me. Stopper for nursing-bottles | 721,722 | Mar. 3 | 123 | 27 | 103 | 27 |
| Morton, William W., *et al.* (See Gould, Cornelius C., assignor.) | | | | | | |
| Morton, Wilson, deceased; S. C. Carroll, administrator, assignor to United States Sales Book Company, Chicago, Ill. Check and sales slip holder | 736,288 | Aug. 11 | 2348 | 510 | 105 | 1503 |
| Mortonfield Manufacturing Company. (See Nicholls, George T., assignor.) | | | | | | |
| Mortson, George, Hartford, Conn., assignor to Union Paper Bag Machine Company, Philadelphia, Pa. Paper-bag machine | 721,596 | Feb. 24 | 4108 | 935, 936 | 102 | 1740 |
| Mortson, George, Hartford, Conn., assignor to Union Paper Bag Machine Company, Philadelphia, Pa. Paper-bag machine | 721,597 | Feb. 24 | 4113 | 936, 937 | 102 | 1740 |
| Morwitz, Joseph. (See Schlachter, Siegmund, assignor.) | | | | | | |
| Moseley, Fredrick W., Clinton, Iowa. Calf-feeder | 718,270 | Jan. 13 | 1398 | 312 | 102 | 316 |
| Moseley, Jerome S., Syracuse, N. Y. Rotary engine | 732,880 | July 7 | 329 | 81 | 105 | 72 |
| Moseley, Lee R., Goshen Springs, assignor of one-half to B. L. Roberts and E. Levy, Canton, Miss. Machine for tamping railway-ballast | 748,089 | Dec. 29 | 5184 | 1173 | 107 | 2318 |
| Moseley, William M., Elgin, Ill. Toy | 741,360 | Oct. 13 | 1860 | 411 | 106 | 1664 |
| Moser, Elise E., Watertown, Wis. Device for facilitating the rebuilding of fires | 727,181 | May 5 | 682 | 146 | 104 | 148 |
| Moser, Fred J. (See Moran, Thomas F., assignor.) | | | | | | |
| Moser, Fred J. (See Moran and Moser.) | | | | | | |
| Moser, Jacob. (See Purper, Moser, and Boeklen.) | | | | | | |
| Moser, Jacob A., Berne, Ind. Means for operating the adjustable hoods of pneumatic straw-stackers | 722,451 | Mar. 10 | 1486 | 328, 329 | 103 | 333 |
| Moser, Leslie J., assignor to General Automatic Delivery Company, Limited, London, England. Means for mixing and delivering liquids | 730,286 | June 9 | 1394 | 306 | 104 | 1428 |
| Moses, George J. (See Marshall, William S., assignor.) | | | | | | |
| Moses, James C. (See Thyberg and Moses.) | | | | | | |
| Moses, Philo P., assignor of one-half to A. J. Miller, Cleveland, Ohio. Combined plumb, level, protractor, compass, and sun-dial | 742,472 | Oct. 27 | 4027 | 903 | 106 | 2143 |
| Mosher, Asa H., Westfield, N. J. Safety hair-pin | 720,601 | Feb. 17 | 2214 | 513 | 102 | 1320 |
| Mosher, Asa H., Westfield, N. J. Safety hair-pin. (Reissue) | 12,154 | Sept. 8 | 2410 | 528 | 106 | 531 |
| Mosher, David, San Francisco, assignor of one-half to D. Beatty, Berkeley, Cal. Ammonia-cyanid process of treating copper, nickel, or zinc ores containing precious metals | 730,835 | June 9 | 2361 | ..... | 104 | 1635 |
| Mosher, De Witt C., Colorado City, assignor to C. M. MacNeill, Colorado Springs, Colo. Chlorination-barrel | 746,867 | Dec. 15 | 2848 | 656, 657 | 107 | 1755 |
| Mosher, John A., Chicago, Ill. Electric headlight | 725,754 | Apr. 21 | 2485 | 564 | 103 | 1728 |
| Mosher, John A., Chicago, Ill., assignor to Adams & Westlake Company. Acetylene-gas generator | 742,211 | Oct. 27 | 3555 | 793, 794 | 106 | 2044 |
| Mosher, John J., assignor of one-half to C. H. Moore, Rochester, N. Y. Shoo-fly for printing-presses | 746,124 | Dec. 8 | 1492 | 333 | 107 | 1439 |
| Mosher, Peter W., assignor of one-third to F. O. Clark, Marquette, Mich. Rail-joint tie-plate | 734,925 | July 28 | 4132 | 962 | 105 | 919 |
| Mosher, William T., Marietta, Ga. Operating mechanism for ice-cream freezers | 742,473 | Oct. 27 | 4028 | 904 | 106 | 2143 |
| Mosier, Benjamin F., *et al.* (See Grubbs, Joseph W., assignor.) | | | | | | |
| Moskop, John P., Monrovia, Ill. Reversing gear mechanism for engines | 737,001 | Aug. 25 | 3693 | 819 | 105 | 1821 |
| Moskowitz, Morris, Brooklyn, assignor to J. H. Young, trustee, New York, N. Y. Self-regulating system for electric light and power | 729,206 | May 26 | 4459 | 983 | 104 | 994 |
| Moskowitz, Morris, New York, N. Y., assignor to United States Light & Heating Company, of New Jersey. System of electrical regulation | 746,558 | Dec. 8 | 2257 | 517 | 107 | 1602 |
| Mosler, Arthur R., New York, N. Y. Electric ignition device | 738,831 | Sept. 15 | 2587 | 572 | 106 | 587 |
| Mosler, Arthur R., New York, N. Y. Counterbalanced crank-shaft | 741,057 | Oct. 13 | 1239 | 280 | 106 | 1532 |
| Mosley, William, Washington, Ill. Delivery attachment for bicycles | 728,960 | May 26 | 4023 | 894 | 104 | 904 |
| Mosley, William H., Midland, Canada. Porcelain crown for teeth | 731,594 | June 23 | 3827 | 852 | 104 | 1971 |
| Mosman, Charles F., Bridgeport, Conn. Drawer-pull | 737,647 | Sept. 1 | 169 | 36 | 106 | 40 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Mosman, Charles F., Bridgeport, Conn. Draw-pull | 740,300 | Sept. 29 | 5296 | 1192 | 106 | 1196 |
| Moss, Bertie B., Pekin, Ind. Tie-plate | 732,424 | June 30 | 5419 | 1202 | 104 | 2317 |
| Moss, Bertie B., Pekin, Ind. Railroad-tie | 733,501 | July 14 | 1436 | 337 | 105 | 321 |
| Moss, Bertie B., Pekin, Ind. Nut-lock | 738,052 | Sept. 1 | 973 | 216 | 106 | 212 |
| Moss, John H., Angola, Ind. Gate | 719,838 | Feb. 3 | 772 | 180 | 102 | 987 |
| Moss, John H., Newburgh, N. Y. Clutch | 734,733 | July 28 | 3774 | 880, 881 | 105 | 844 |
| Moss, Joseph, Melbourne, Victoria, Australia. Combination top and bottom window sash and frame | 741,058 | Oct. 13 | 1240 | 280 | 106 | 1532 |
| Moss, Joseph W., Matteawan, N. Y. Twine-cutting device | 724,915 | Apr. 7 | 916 | 210 | 103 | 1366 |
| Moss, Julian, and E. R. Blanchard, Detroit, Mich. Brush | 720,051 | Feb. 10 | 1178 | 269 | 102 | 1090 |
| Moss, Leon F. (See Bell, Walter J., assignor.) | | | | | | |
| Moss, R. E. (See McIntosh, Henry, assignor.) | | | | | | |
| Moss, Robert S., assignor to L. Z. Leiter, Chicago, Ill. Coking-oven | 725,646 | Apr. 14 | 2291 | 518 | 103 | 1670 |
| Moss, Samuel A. (See Alke and Moss.) | | | | | | |
| Mossberg, Oscar F., Chicopee Falls, Mass. Breech-loading firearm | 745,885 | Dec. 1 | 1060 | 239 | 107 | 1324 |
| Mossholder, George, assignor of one-half to M. Gilliland, Massillon, Ohio. Saw-set | 720,172 | Feb. 10 | 1398 | 320 | 102 | 1136 |
| Mössner, Ernst P., Philadelphia, Pa. Dough cutter or slicer | 722,452 | Mar. 10 | 1490 | 329 | 103 | 334 |
| Mosteller, Dosier H., San Francisco, Cal. Liquid-fuel burner | 718,859 | Jan. 20 | 2535 | 564 | 102 | 568 |
| Mote, James E., Watseka, Ill. Ejecting-penholder | 725,272 | Apr. 14 | 1581 | 357 | 103 | 1520 |
| Motherwell, David M., Chicago, Ill., assignor to Whitman & Barnes Manufacturing Co., Akron, Ohio. Trip-coupling | 745,225 | Nov. 24 | 4701 | 1026 | 107 | 1045 |
| Motsinger Device Manufacturing Company. (See Motsinger, Homer N., assignor.) | | | | | | |
| Motsinger, Homer N., assignor to Motsinger Device Manufacturing Company, Pendleton, Ind. Electrical contact-brush and producing same | 722,606 | Mar. 10 | 1765 | 393 | 103 | 394 |
| Motsinger, Newell H., Indianapolis, Ind. Rotary engine | 726,969 | May 5 | 283 | 63, 64 | 104 | 61 |
| Mott, G. H., *et al.* (See Eastman, Tarleton B., assignor.) | | | | | | |
| Mott, Laurence, New York, N. Y. Automobile steering mechanism | 743,013 | Nov. 3 | 378 | 81 | 107 | 79 |
| Mott, Laurence, New York, N. Y. Controller for automobiles | 745,226 | Nov. 24 | 4702 | 1026 | 107 | 1045 |
| Motter, William H., Denver, Colo. Agitating apparatus | 730,384 | June 9 | 1565 | 348, 349 | 104 | 1463 |
| Mottu, Howard M., Baltimore, Md. Wall-plug | 742,714 | Oct. 27 | 4466 | 1010 | 106 | 2236 |
| Mouat, Laurence, Jr., assignor of one-half to F. W. M Cartney and E. S. Kassler, Denver, Colo. Fastening device for windows | 748,205 | Dec. 29 | 5399 | 1227, 1228 | 107 | 2363 |
| Mouchel, Gustave L., London, England. Structure in or adjacent to waterways | 738,346 | Sept. 8 | 1632 | 353, 354 | 106 | 367 |
| Mouck, Andrew B., Fargo, N. D. Mill for crushing ores | 743,014 | Nov. 3 | 380 | 81, 82 | 107 | 80 |
| Mougette, Emil J., Chicago, Ill. Lubricator | 730,784 | June 9 | 2275 | 505, 506 | 104 | 1617 |
| Moughler, William F., Toledo, Ohio, assignor to Caille Brothers Company, Detroit, Mich. Game | 741,528 | Oct. 13 | 2188 | 486 | 106 | $173^3$ |
| Moule, John J., San Jose, Cal. Truck | 721,820 | Mar. 3 | 291 | 65 | 103 | $6^4$ |
| Moulton, George M., and J. M. Witherspoon, Chicago, Ill. Grain-bin | 732,102 | June 30 | 4780 | 1067 | 104 | 2184 |
| Moulton, James N., Philadelphia, Pa. Boot or shoe | 744,592 | Nov. 17 | 3468 | 748 | 107 | 769 |
| Moulton, Luther V. (See Moulton, Sarah A., assignor.) | | | | | | |
| Moulton, Sarah A., assignor of one-half to L. V. Moulton, Grand Rapids, Mich. Playing-cards | 746,868 | Dec. 15 | 2849 | 657, 658 | 107 | 1756 |
| Moulton, Stillman A., Campbell, Cal. Neck and chest protector | 743,310 | Nov. 3 | 953 | 207 | 107 | 205 |
| Moulton, Stillman A., Campbell, Cal. Device for preventing snoring | 746,869 | Dec. 15 | 2855 | 658 | 107 | 1758 |
| Moulton, William A., Norwood, Mass. Leaf or sheet turner | 744,384 | Nov. 17 | 3122 | 671 | 107 | 697 |
| Mound City Paint & Color Company. (See Mellen, William S., assignor.) | | | | | | |
| Mounsey, Herbert B. (See Northcott and Mounsey.) | | | | | | |
| Mount, James H., Jamesburg, N. J. Acetylene-gas generator | 733,328 | July 7 | 1120 | 266 | 105 | 236 |
| Mount, Rolla, assignor of two-thirds to W. D. Brooks, Kansas City, Mo., and A. H. Gillespie, Pittsburg, Pa. Awning | 746,732 | Dec. 15 | 2578 | 593 | 107 | 1696 |
| Mount, Timothy S., Rhome, Tex. Automatic computing and weighing scale | 726,182 | Apr. 21 | 3237 | 734 | 103 | 1884 |
| Mountford, Sidney, Newark, N. J. Key-ring | 723,208 | Mar. 17 | 2891 | 648 | 103 | 643 |
| Mountjoy, Wiley. (See Wood, Galen, assignor.) | | | | | | |
| Mourer, Charles W., Bellevue, Pa. Car construction | 732,425 | June 30 | 5420 | 1203 | 104 | 2317 |
| Mourning, Hezekiah K., and G. K. Taylor, Altamont, Kans. Barrel-head | 740,679 | Oct. 6 | 547 | 122 | 106 | 1365 |
| Mowbray, Frank H., Balham, assignor of five-sixths to Printing Arts Company, Limited, London, and W. Black, Wandsworth Common, England. Multicolor-printing machine | 721,905 | Mar. 3 | 457 | 100 | 103 | 101 |
| Mowbray, Frank H., Balham, and W. Black, Wandsworth Common, assignors of two-thirds to Printing Arts Company, Limited, London, England. Multicolor-printing machine | 743,910 | Nov. 10 | 2164 | 466 | 107 | 476 |
| Mower, Edwin F., Boston, Mass. Fair-stitch machine | 723,898 | Mar. 31 | 4171 | 939 | 103 | 935 |
| Mower, Samuel, Springhill, Kans. Cultivator, lister, and grader | 740,456 | Oct. 6 | 139 | 28 | 106 | 1275 |
| Mowery, John N., Schenectady, N. Y. Automatic cylinder-cock | 722,872 | Mar. 17 | 2280 | 510 | 103 | 514 |
| Mowery, Lewis W., and T. E. Bishop, assignors to Anchor Manufacturing Company, Lima, Ohio. Fifth-wheel connection | 744,593 | Nov. 17 | 3469 | 748 | 107 | 769 |
| Mowry, Edward S., Middletown, Conn. Puzzle | 732,954 | July 7 | 453 | 112 | 105 | 98 |
| Mowry, Edward S., Middletown, Conn. Puzzle | 743,015 | Nov. 3 | 381 | 82 | 107 | 80 |
| Mowry, Edwin C., Degraff, Ohio. Bicycle-saddle | 737,648 | Sept. 1 | 171 | 36 | 106 | 40 |
| Moyer, Abraham L., Lancaster, Pa. Window-shade device | 723,899 | Mar. 31 | 4172 | 940 | 103 | 935 |
| Moyer, Fredellia H. (See Wellman, Ernst, and Moyer.) | | | | | | |
| Moyle, Richard L., New York, N. Y. Combination-tiles for floors, walls, &c. | 724,394 | Mar. 31 | 5189 | 1163 | 103 | 1142 |
| Mucklé, John S., assignor to Standard Elevator Interlock Company, Philadelphia, Pa. Elevator | 733,864 | July 14 | 2103 | 496 | 105 | 458 |
| Mudd, Frank X., Chicago, Ill. Cuff | 745,644 | Dec. 1 | 600 | 139 | 107 | 1226 |
| Mudd, Joseph A., Chicago, Ill. Temporary binder | 746,354 | Dec. 8 | 1914 | 437 | 107 | 1527 |
| Mudge, Benjamin C., Lynn, assignor to Linen Manufacturing Company, Boston, Mass. Flax stock and preparing same | 732,103 | June 30 | 4782 | | 104 | 2184 |
| Muehl, Johann G., Chicago, Ill. Portable wash-cabinet | 734,348 | July 21 | 3060 | 721 | 105 | 681 |
| Muehlberg, Karl O., Braddock, Pa. Drill-chuck | 728,276 | May 19 | 2751 | 611 | 104 | 626 |
| Muehle, Bernard H., Detroit, Mich. Collapsible centering | 732,881 | July 7 | 331 | 82 | 105 | 73 |
| Muehlebach, John P., Kansas City, Mo. Hose-coupling | 732,209 | June 30 | 4998 | 1111 | 104 | 2229 |
| Muehleisen, Carl, Berlin, Germany. Linotype-machine | 718,781 | Jan. 20 | 2401 | 533 | 102 | 541 |
| Muehleisen, Carl, Berlin, Germany. Linotype-machine | 725,861 | Apr. 21 | 2680 | 610 | 103 | 1770 |
| Muelhoefer, William. (See Specht, Eugene T., assignor.) | | | | | | |
| Mueller, Adolph, *et al.* (See Evans, Elmer O., assignor.) | | | | | | |
| Mueller, Andreas, Chicago, Ill. Game apparatus | 725,118 | Apr. 14 | 1306 | 294 | 103 | 1462 |
| Mueller, Anna, Knoxville, Pa. Insufflator | 743,741 | Nov. 10 | 1856 | 392 | 107 | 413 |
| Mueller, Friederick, Newark, N. J., assignor to Singer Manufacturing Company. Embroidering-machine | 735,559 | Aug. 4 | 1018 | 215, 216 | 105 | 1196 |
| Mueller, Herman R. (See Dodge, Albert N., assignor.) | | | | | | |
| Mueller, Hermann. (See Barnes and Woodford, assignors.) | | | | | | |
| Mueller, John, Georgetown, Wash. Malt-turner | 740,770 | Oct. 6 | 732 | 165 | 106 | 1402 |

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| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drgs. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Mueller, Louis J., Milwaukee, Wis. Wall-register | 746,355 | Dec. 8 | 1915 | 437 | 107 | 1527 |
| Mueller, Oscar W., Cincinnati, Ohio. Radial drill | 737,948 | Sept. 1 | 780 | 170 | 106 | 171 |
| Muellerwiess, Adolph, Sebewaing, Mich. Stovepipe-thimble | 722,607 | Mar. 10 | 1766 | 393 | 103 | 394 |
| Muenchinger, Paul G., Newport, R. I. Envelop-opener | 720,049 | Feb. 10 | 1176 | 268 | 102 | 1089 |
| Muenger, Frederick, assignor of one-half to C. von Woehrmann, Hill City, S. D. Pipe or bolt threading machine | 722,032 | Mar. 3 | 701 | 156 | 103 | 152 |
| Muenster, Hermann R., Omaha, Nebr. Potato-digger | 735,283 | Aug. 4 | 479 | 96 | 105 | 1083 |
| Muenzenberger, Charles. (See Martin, John H., assignor.) | | | | | | |
| Mueser, William, New York, N. Y. Concrete-steel sidewalk | 731,595 | June 23 | 3828 | 853 | 104 | 1971 |
| Mugford, John. (See Bennett, Albert, assignor.) | | | | | | |
| Mugfur, John, Aspen, Colo. Canopy-support | 718,370 | Jan. 13 | 1574 | 348 | 102 | 353 |
| Mugg, John S., Goodland, Ind. Double safety snap-hook | 720,050 | Feb. 10 | 1177 | 268 | 102 | 1089 |
| Muhl, Ferdinand, Pittsburg, Pa. Carpet-beating machine | 738,117 | Sept. 1 | 1118 | 247 | 106 | 242 |
| Muir, Thomas G. (See Foos and Muir.) | | | | | | |
| Muir, William, Edmonton, and C. R. E. Bell, Bromley, England. Igniting material for matches | 724,411 | Mar. 31 | 5228 | ..... | 103 | 1151 |
| Muir, William D., Vancouver, Canada. Baker's oven | 742,048 | Oct. 20 | 3209 | 717, 718 | 106 | 1961 |
| Muirhead, Alexander, Shortlands, England. Electric telegraphy | 719,355 | Jan. 27 | 3496 | 778 | 102 | 785 |
| Muirhead, Alexander, Shortlands, England. Submarine telegraphy | 733,556 | July 14 | 1535 | 365 | 105 | 342 |
| Muldoon, John F., Boston, Mass. Hose-rack | 741,922 | Oct. 20 | 2946 | 657 | 106 | 1908 |
| Muldowney, James J. (See Tomlinson and Muldowney.) | | | | | | |
| Muldowney, James J., and H. Tomlinson, Lawrence, assignors to Draper Company, Hopedale, Mass. Let-off mechanism for looms | 728,961 | May 26 | 4024 | 894 | 104 | 905 |
| Mulford, Ichabod H., East Orange, N. J. Antirattling cushion for coach-windows or the like | 724,199 | Mar. 31 | 4791 | 1074 | 103 | 1060 |
| Mulford, John F. (See Boyd, Jefferson and J. D., assignors.) | | | | | | |
| Mulford, William W., and F. C. Caldwell, Columbus, Ohio. Apparatus for heating bolt-blanks, rivets, rods, &c | 737,126 | Aug. 25 | 3895 | 865, 866 | 105 | 1862 |
| Mulhall, James J., Albany, N. Y. Gas-meter | 740,301 | Sept. 29 | 5297 | 1192, 1193 | 106 | 1196 |
| Mulherin, Herbert H., assignor to International Motor Company, St. Louis, Mo. Gas-engine | 736,132 | Aug. 11 | 2080 | 446 | 105 | 1443 |
| Mulhollan, William E., Juneau, Alaska. Camera attachment | 744,783 | Nov. 24 | 3840 | 827, 828 | 107 | 867 |
| Mulholland, John. (See Malmstrom, Peter E., assignor.) | | | | | | |
| Mulholland, Richard, Dunkirk, N. Y. Rubber-tired wheel | 728,490 | May 19 | 3146 | 696 | 104 | 707 |
| Mulkerins, Thomas M., Chicago, Ill. Drip-cup for candlesticks | 722,318 | Mar. 10 | 1234 | 274 | 103 | 279 |
| Mulkerins, Thomas M., Chicago, Ill. Garment-hanger | 724,118 | Mar. 31 | 4623 | 1041 | 103 | 1027 |
| Mullahy, William F., Fort Wayne, Ind. Way-bill | 738,832 | Sept. 15 | 2589 | 572 | 106 | 587 |
| Mullane, Dennis, Houston, Tex. Band-tightener | 732,773 | July 7 | 137 | 37 | 105 | 33 |
| Mullaney, John J., Maywood, N. J., assignor to Ideal Opening Die Company. Die-stock | 724,200 | Mar. 31 | 4792 | 1074 | 103 | 1060 |
| Mullen, Andrew A. (See Mullen, Daniel and A. A.) | | | | | | |
| Mullen Brothers Paper Company. (See Morrison, George L., assignor.) | | | | | | |
| Mullen, Daniel and A. A., New York, N. Y.; said Daniel Mullen assignor to said A. A. Mullen. Marginal protecting-strip for pavements | 739,899 | Sept. 29 | 4558 | 1026 | 106 | 1040 |
| Mullen, Daniel P., Washington, D. C. Forming wearing-surfaces for asphalt pavements | 721,906 | Mar. 3 | 460 | ..... | 103 | 101 |
| Mullen, Harker, Sycamore, Ill. Rotary engine | 741,059 | Oct. 13 | 1242 | 281 | 106 | 1532 |
| Mullen, James H., Jr., New York, N. Y. Shoe-heeling jack | 733,250 | July 7 | 983 | 237 | 105 | 205 |
| Mullen, Leonard D. (See Shannon and Mullen.) | | | | | | |
| Mullen, Peter, assignor to Edwin Harrington, Son and Company, Incorporated, Philadelphia, Pa. Chain-guard | 747,563 | Dec. 22 | 4144 | 931 | 107 | 2065 |
| Müller, August, Bridgeport, Conn. Device for cleaning beer-pipes | 718,502 | Jan. 13 | 1862 | 409 | 102 | 417 |
| Müller, Carl L., assignor to Badische Anilin & Soda Fabrik, Ludwigshafen-on-the-Rhine, Germany. Acridin dye and making same | 746,981 | Dec. 15 | 3072 | ..... | 107 | 1807 |
| Müller, Caroline H. (See Müller, Jacob, assignor.) | | | | | | |
| Muller, Edward C., New York, N. Y. Engraver's tool | 737,761 | Sept. 1 | 379 | 81 | 106 | 84 |
| Muller, Ernst J., Butte, Mont. Ore-jigger | 737,264 | Aug. 25 | 4168 | 928, 929 | 105 | 1920 |
| Müller, Eugen K., Zurich, Switzerland. Apparatus for radiotherapeutic treatment | 730,785 | June 9 | 2277 | 506 | 104 | 1617 |
| Müller, Jacob, assignor to C. H. Müller, New York, N. Y. Barrel-washing machine | 730,470 | June 9 | 1735 | 388 | 104 | 1499 |
| Müller, Jacob, assignor to C. H. Müller, New York, N. Y. Screen for hop-separating machines | 733,732 | July 14 | 1831 | 433 | 105 | 403 |
| Müller-Jacobs, Armand, Richmond Hill, assignor to himself, C. Müller-Jacobs, J. G. de Styak, and H. B. Roberts, Pelham, N. Y. Waterproof fabric | 742,212 | Oct. 27 | 3560 | ..... | 106 | 2045 |
| Müller-Jacobs, Catharina, *et al.* (See Müller-Jacobs, Armand, assignor.) | | | | | | |
| Muller, Jean L., and J. Bonnet, Paris, France. Machine for manufacturing incandescent mantles | 739,099 | Sept. 15 | 3053 | 676, 677, 678 | 106 | 685 |
| Müller, Johann. (See Huber, Müller, and Weidmann.) | | | | | | |
| Müller, John G., New York, N. Y. Lady's riding-habit | 720,602 | Feb. 17 | 2215 | 514 | 102 | 1320 |
| Müller, John P., New York, N. Y. Cautery | 718,142 | Jan. 13 | 1158 | 257 | 102 | 264 |
| Müller, John P., assignor of one-half to W. S. Lamb, Freeport, Ill. Windmill attachment | 731,935 | June 23 | 4432 | 988 | 104 | 2099 |
| Müller, Josef, assignor to Hille & Müller, Schoenau, Bohemia, Austria-Hungary. Machine for grinding or polishing sheet metal | 743,911 | Nov. 10 | 2165 | 466, 467 | 107 | 477 |
| Muller, Joseph. (See Luger and Muller.) | | | | | | |
| Müller, Josephine, New York, N. Y. Flexible bag | 735,560 | Aug. 4 | 1021 | 216 | 105 | 1197 |
| Müller, Max, Altdamm, near Stettin, Germany. Apparatus for manufacturing yarns or threads from short fibers | 747,465 | Dec. 22 | 3970 | 892 | 107 | 2024 |
| Müller, Otto P., assignor of one-half to E. J. Fuchs, New York, N. Y. Corn-knife | 729,386 | May 26 | 4771 | 1056 | 104 | 1059 |
| Müller, Robert G. O., New Haven, Conn. Adjusting device for piano key-frames | 745,509 | Dec. 1 | 371 | 86 | 107 | 1178 |
| Müller, Rudolf, and O. Schwab, assignors to Farbwerke, vorm. Meister, Lucius & Brüning, Höchst-on-the-Main, Germany. Reducing indigo | 723,007 | Mar. 17 | 2510 | ..... | 103 | 562 |
| Muller, Tage, and C. O. Thompson, New York, N. Y. Electric switch | 729,503 | May 26 | 4960 | 1099 | 104 | 1101 |
| Müller, Wilhelm, Bernburg, Germany. Tube-cleaner | 748,206 | Dec. 29 | 5401 | 1228 | 107 | 2364 |
| Mulligan, Frank, assignor to Pelouze Scale and Manufacturing Company, Chicago, Ill. Mounting for spring adjusting-rods of weighing-scales | 729,207 | May 26 | 4462 | 983 | 104 | 995 |
| Mulligan, John J., New York, N. Y. Distributer for sand or other materials | 733,733 | July 14 | 1833 | 433 | 105 | 403 |
| Mulligan, John W. (See Loveless and Mulligan.) | | | | | | |
| Mullikin, Levin H., Trappe, Md. Combined lock and latch | 717,757 | Jan. 6 | 444 | 103, 104 | 102 | 96 |
| Mulrony, John P., Plaza, Wash. Attachment for disk plows | 720,948 | Feb. 17 | 2844 | 651 | 102 | 1452 |
| Multo-Photoscope Company. (See Kayser, Charles H., assignor.) | | | | | | |
| Mulvane, Albert R., Coraopolis, Pa. Nut-lock | 738,118 | Sept. 1 | 1119 | 247 | 106 | 242 |

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| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|
| | | | Spec. | Dr'g. | Vol. | Page. |
| Mulvaney, Lewis J., Kingsbridge, N. Y. Electric cut-out | 726,331 | Apr. 28 | 3539 | 802 | 103 | 1962 |
| Mulvey, James. (See Adams and Mulvey.) | | | | | | |
| Mulvihill, Thomas E., *et al.* (See Brown, Frank S., assignor.) | | | | | | |
| Mumberg, William F., Chicago, Ill. Artificial foot | 734,926 | July 28 | 4134 | 963 | 105 | 919 |
| Mumbrauer, William, New York, N. Y. Shade-roller | 736,424 | Aug. 18 | 2585 | 566 | 105 | 1570 |
| Mumford, Arthur G., and A. Anthony, Colchester, England. Feed-water regulator | 730,951 | June 16 | 2601 | 578, 579 | 104 | 1704 |
| Mumford, Charles M., Providence, R. I. Game apparatus | 735,995 | Aug. 11 | 1834 | 393 | 105 | 1392 |
| Mumford, Joseph F., Philadelphia, Pa. Manufacture of brushes | 733,251 | July 7 | 983 | 237 | 105 | 206 |
| Mumm, Charles C., Minneapolis, Minn., and J. L. Strohm, Hankinson, N. D.; said Strohm assignor to said Mumm. Book-file | 739,436 | Sept. 22 | 3693 | 822 | 106 | 838 |
| Mumm, Claus. (See Johnson, Joseph, assignor.) | | | | | | |
| Muncey, John F., Everett, Wash. Rotary engine | 737,127 | Aug. 25 | 3898 | 866 | 105 | 1863 |
| Munch, Alfred, *et al.* (See Mack, Samuel B., assignor.) | | | | | | |
| Münch, Edward, assignor to Badische Anilin und Soda Fabrik, Ludwigshafen-on-the-Rhine, Germany. Reddish-brown azo dye | 737,445 | Aug. 25 | 4516 | ..... | 105 | 1995 |
| Munchausen, John H., Brooklyn, N. Y. Automatic audible fire-alarm transmitter and signal | 724,917 | Apr. 7 | 917 | 210 | 103 | 1366 |
| Mund, Christopher C., Cincinnati, Ohio. Hook and eye | 742,474 | Oct. 27 | 4030 | 904 | 106 | 2144 |
| Mündel, Charles, Baltimore, Md. Window-sash joint | 727,406 | May 5 | 1081 | 237 | 104 | 233 |
| Mündel, Charles, Baltimore, Md. Rotary reaction-motor | 735,561 | Aug. 4 | 1022 | 216 | 105 | 1197 |
| Munden, Joseph, Westmoreland County, Pa. Motor-propelled vehicle | 736,866 | Aug. 18 | 3440 | 762 | 105 | 1747 |
| Mundheim, Samuel. (See Hupchen, William, assignor.) | | | | | | |
| Mundorf, Emil, Aix-la-Chapelle, Germany. Preparing spinning material | 743,912 | Nov. 10 | 2166 | 467 | 107 | 477 |
| Mundorff, Theodore, New York, N. Y. Means for making bifocal optical lenses | 729,781 | June 2 | 475 | 106 | 104 | 1225 |
| Mundt, Louise, *et al.* (See Mundt, Wilhelm, assignor.) | | | | | | |
| Mundt, Wilhelm, assignor to L. Mundt and A. Eckstein, New York, N. Y. Braiding-machine | 722,183 | Mar. 3 | 967 | 214, 215 | 103 | 205 |
| Mundy, Arthur J., Boston, Mass. Automatic means for producing sound-vibrations in water | 725,755 | Apr. 21 | 2487 | 564, 565 | 103 | 1729 |
| Mundy, Charles F., Unionville, Ind. Chair foot-rest | 741,692 | Oct. 20 | 2513 | 561 | 106 | 1818 |
| Mundy, William O. (See Barry and Mundy.) | | | | | | |
| Mundy, William O., St. Louis, Mo. Street-car window | 745,645 | Dec. 1 | 601 | 139 | 107 | 1226 |
| Mundy, William O., Schenectady, N. Y., assignor to General Electric Company. Motor-control system | 733,252 | July 7 | 985 | 237 | 105 | 206 |
| Munger, William W., Herscher, Ill. Vending-machine | 746,356 | Dec. 8 | 1916 | 438 | 107 | 1527 |
| Municipal Engineering Company. (See Smith, Fred P., assignor.) | | | | | | |
| Municipal Lighting Company. (See Lovett, Albert E., assignor.) | | | | | | |
| Munn, Daniel J., *et al.* (See Kellington, John, assignor.) | | | | | | |
| Munn, Silas W., Mannington, W. Va. Casing-puller | 743,543 | Nov. 10 | 1497 | 313 | 107 | 337 |
| Munn, William, San Francisco, Cal. Fish-cutting machine | 743,742 | Nov. 10 | 1857 | 392 | 107 | 413 |
| Munro, James H., New York, N. Y., assignor of one-third to J. M. Van Orden. Tile-setting | 720,836 | Feb. 17 | 2627 | 606 | 102 | 1406 |
| Munro, William, assignor to P. & F. Corbin, New Britain, Conn. Door-knob | 748,404 | Dec. 29 | 5731 | 1309 | 107 | 2437 |
| Munroe, Charles E., Washington, D. C., assignor to Kuhn Formaldehyde Generator Company. Coating with metal | 724,317 | Mar. 31 | 5024 | ..... | 103 | 1107 |
| Munroe, John, East Jordan, Mich. Machine for trimming railway-ties | 742,715 | Oct. 27 | 4467 | 1010, 1011 | 106 | 2236 |
| Munroe, Otis M., *et al.* (See Deruntz, Eugene, assignor.) | | | | | | |
| Munroe, Theodore H., Hartford, Conn. Serving apparatus | 731,936 | June 23 | 4434 | 989 | 104 | 2099 |
| Munsell, Albert H., Brookline, Mass. Spinning-top | 717,596 | Jan. 6 | 136 | 34 | 102 | 31 |
| Munsell & Co., Eugene. (See Warren, John D., assignor.) | | | | | | |
| Munsing, George D., New York, N. Y. Cycle-mower | 733,990 | July 21 | 2359 | 554 | 105 | 530 |
| Munson, Constance L., and B. Cain, St. Louis, Mo. Hat-pin | 730,552 | June 9 | 1874 | 419 | 104 | 1531 |
| Munson, Joseph W., Carthage, Mo. Change-making apparatus | 736,133 | Aug. 11 | 2084 | 446, 447 | 105 | 1444 |
| Munson, Robert H. (See Cowles, George C., assignor.) | | | | | | |
| Munson, Samuel R., assignor to Landers, Frary and Clark, New Britain, Conn. Spring-balance | 722,740 | Mar. 17 | 2046 | 456 | 103 | 468 |
| Munson, Samuel R., assignor to C. F. Smith and G. M. Landers, New Britain, Conn. Mixing vessel | 729,884 | June 2 | 671 | 147 | 104 | 1265 |
| Munson, Sweney, Hastings, Nebr. Reducing-valve | 740,898 | Oct. 6 | 944 | 212 | 106 | 1448 |
| Munte, Emilie, Langenfelde, near Hamburg, Germany. Fender for street-vehicles | 746,357 | Dec. 8 | 1918 | 438 | 107 | 1528 |
| Munton, James. (See Hermanson, Gustaf A., assignor.) | | | | | | |
| Munzinger, Louis. (See Cody, George, assignor.) | | | | | | |
| Murch, William W., assignor of one-half to S. S. Holden, New York, N. Y. Ratchet-wrench | 747,750 | Dec. 22 | 4482 | 1012 | 107 | 2141 |
| Murchie, Sylvanus T., Kaukauna, Wis., assignor to Union Bag & Paper Company, Jersey City, N. J. Paper-bag machine | 718,143 | Jan. 13 | 1160 | 257, 258 | 102 | 264 |
| Murchie, Sylvanus T., Batavia, Ill., assignor to Union Paper Bag Machine Company, Philadelphia, Pa. Cut-off mechanism | 739,555 | Sept. 22 | 3879 | 869, 870 | 106 | 879 |
| Murchison, Neil, New York, N. Y. Boat-davit for ships | 720,274 | Feb. 10 | 1606 | 367, 368 | 102 | 1178 |
| Murden, Herbert. (See Haynes, Wiley, and Murden.) | | | | | | |
| Murdoch, Augustus P., Oswego, N. Y. Apparatus for manufacturing starch | 717,699 | Jan. 6 | 316 | 77 | 102 | 69 |
| Murdoch, Augustus P., Oswego, N. Y. Manufacturing starch | 717,700 | Jan. 6 | 321 | 77 | 102 | 70 |
| Murdoch, Lindsay, Washington, D. C. Carrying attachment for bicycles | 733,865 | July 14 | 2104 | 496, 497 | 105 | 458 |
| Murdoch, Michael J., Youngstown, Ohio. Metal-treating furnace | 726,728 | Apr. 28 | 4300 | 971 | 103 | 2114 |
| Murdoch, Michael J., Youngstown, Ohio. Revolving canopy attachment for lamps | 746,559 | Dec. 8 | 2259 | 518 | 107 | 1603 |
| Murdock, Albert J. (See Stroud, Charles M., assignor.) | | | | | | |
| Murdock, Albert J., Minneapolis, and C. M. Stroud, Hastings, Minn. Acetylene search-lamp | 731,596 | June 23 | 3830 | 853, 854 | 104 | 1972 |
| Murdock and Geb Company. (See Murdock, Thomas J., assignor.) | | | | | | |
| Murdock, George J., Newark, N. J. Circulating apparatus for internal-combustion engines | 746,358 | Dec. 8 | 1918 | 439 | 107 | 1528 |
| Murdock, Horace B., assignor to American Oar Company, Detroit, Mich. Oar or scull | 738,053 | Sept. 1 | 974 | 217 | 106 | 212 |
| Murdock, Jeannette P. and T. E., Newark, N. J. Vehicle | 721,319 | Feb. 24 | 3581 | 815 | 102 | 1628 |
| Murdock, John G., Jr. (See Hopwood and Murdock.) | | | | | | |
| Murdock, Luke S., Cincinnati, Ohio. Fire-kindler | 719,889 | Feb. 3 | 773 | 181 | 102 | 987 |
| Murdock, Robert L. (See Forster, John J., assignor.) | | | | | | |
| Murdock, Thomas E. (See Murdock, Jeannette P. and T. E.) | | | | | | |
| Murdock, Thomas J., assignor to Murdock and Geb Company, Franklin, Mass. Bobbin-holder | 736,617 | Aug. 18 | 2963 | 651 | 105 | 1648 |
| Murgatroyd, George, Providence, R. I. Drying roll or cylinder | 727,822 | May 12 | 1892 | 422 | 104 | 420 |
| Murlless, Daniel, Holyoke, Mass. Dental-dam holder | 730,038 | June 2 | 944 | 212 | 104 | 1320 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Murmann, Ernst. (See Flor and Murmann.) | | | | | | |
| Murnane, Daniel J., Kirkwood, assignor to St. Louis Plate Glass Company, Valleypark, Mo. Apparatus for supplying abrasive material to grinding or smoothing machines | 719,978 | Feb. 3 | 1010 | 235 | 102 | 1037 |
| Murnane, Daniel J., Kirkwood, assignor to St. Louis Plate Glass Company, Valleypark, Mo. Machine for grinding or polishing glass | 723,008 | Mar. 17 | 2511 | 564 | 103 | 562 |
| Murnane, Daniel J., Kirkwood, assignor to St. Louis Plate Glass Company, Valleypark, Mo. Grinding-disk | 747,208 | Dec. 15 | 3499 | 793<br>794 | 107 | 1903 |
| Murnane, Timothy H., Brookline, Mass., assignor to Wright & Ditson, Jersey City, N. J. Bat | 748,000 | Dec. 29 | 5008 | 1132 | 107 | 2279 |
| Murphey, Frank P. (See Murphey, George W., assignor.) | | | | | | |
| Murphey, George W., Butler, Pa., assignor of one-half to F. P. Murphey, Decatur, Ill. Adjustable curtain and shade support | 732,104 | June 30 | 4787 | 1068 | 104 | 2185 |
| Murphey, William, Wilmington, Del. Curtain-fixture | 735,502 | Aug. 4 | 1023 | 217 | 105 | 1197 |
| Murphey, William W., Louisville, Ky. Washing-machine | 732,105 | June 30 | 4788 | 1068 | 104 | 2185 |
| Murphy, Albert C., East St. Louis, Ill., assignor to Standard Railway Equipment Company. Pneumatic hammer | 747,751 | Dec. 22 | 4483 | 1012 | 107 | 2141 |
| Murphy, Albert C., St. Louis, Mo., assignor to Standard Railway Equipment Company. Pneumatic hammer | 747,752 | Dec. 22 | 4488 | 1012 | 107 | 2142 |
| Murphy, Alfonso F., Cleburne, Tex. Oil-burner | 737,649 | Sept. 1 | 172 | 36 | 106 | 40 |
| Murphy, Catherine, *et al.* (See Lewis, John F., assignor.) | | | | | | |
| Murphy, Charles M. (See Murphy, William R. and C. M.) | | | | | | |
| Murphy, Daniel F., Graceville, Minn. Return-flue boiler | 739,900 | Sept. 29 | 4561 | 1026 | 106 | 1041 |
| Murphy, Edward E., Chelsea, Mass., assignor to Puffer Manufacturing Company. Tumbler-washer | 723,009 | Mar. 17 | 2515 | 564 | 103 | 563 |
| Murphy, Edward E., Chelsea, assignor to Puffer Manufacturing Company, Boston, Mass. Carbonator | 724,727 | Apr. 7 | 583 | 139 | 103 | 1293 |
| Murphy, Edward J., assignor to A. B. and W. Fisher, New York, N. Y. Polishing-machine | 745,646 | Dec. 1 | 602 | 139<br>140 | 107 | 1226 |
| Murphy, Edwin J., Lynn, Mass., assignor to General Electric Company. Equalizing brush-holder | 728,596 | May 19 | 3368 | 746 | 104 | 754 |
| Murphy, Everett J., Crandull, Tenn. Adjustable bracket for telephones | 739,202 | Sept. 15 | 3231 | 716 | 106 | 722 |
| Murphy, Ewell H., Italy, Tex. Painter's elevator | 727,407 | May 5 | 1082 | 237 | 104 | 233 |
| Murphy, Herman. (See Fulcher, William H., assignor.) | | | | | | |
| Murphy, Ida M., assignor to One-Minute Churn Company, New York, N. Y. Churn | 723,900 | Mar. 31 | 4173 | 940 | 103 | 935 |
| Murphy, James J., Jersey City, N. J. Electric-current controller | 722,453 | Mar. 10 | 1491 | 329 | 103 | 334 |
| Murphy, James W., Alva, Okla. Ter. Combined bevel and square | 735,128 | Aug. 4 | 155 | 35 | 105 | 1015 |
| Murphy, John, San Francisco, Cal. Loading attachment for wagons | 717,701 | Jan. 6 | 324 | 78 | 102 | 70 |
| Murphy, John, Kanangaroa, assignor of one-half to A. Thoms, Marton, New Zealand. Animal-cover | 746,359 | Dec. 8 | 1920 | 439 | 107 | 1528 |
| Murphy, John A., St. Louis, Mo. Copy-holder | 729,955 | June 2 | 801 | 178 | 104 | 1290 |
| Murphy, John C., Chelsea, Mass. Carbonating apparatus | 721,723 | Mar. 3 | 124 | 27, 28 | 103 | 27 |
| Murphy, John J. (See Ashby, William J., assignor.) | | | | | | |
| Murphy, John N., Springfield, Ill. Heating apparatus | 739,503 | Sept. 22 | 3798 | 850<br>851 | 106 | 862 |
| Murphy, John P., Portland, Me. Stone-boring machine | 717,702 | Jan. 6 | 325 | 78 | 102 | 71 |
| Murphy, John T. (See Wheeler and Murphy.) | | | | | | |
| Murphy, Leonard, Dublin, Ireland. Liquid-level indicator | 732,578 | June 30 | 5720 | 1270 | 104 | 2381 |
| Murphy, Michael J., Akron, Ohio. Brick | 733,069 | July 7 | 657 | 158 | 105 | 139 |
| Murphy, Patrick H., assignor of one-half to J. Wolfenden, St. Paul, Minn. Attachment for grain-drills | 743,311 | Nov. 3 | 955 | 208 | 107 | 205 |
| Murphy, Peter T., *et al.* (See Farmer, Julius M., assignor.) | | | | | | |
| Murphy, Roy B., Hot Springs, Ark. Lifting-jack | 733,414 | July 14 | 1291 | 304 | 105 | 289 |
| Murphy, Solomon, assignor of one-fourth to J. Koenigstein, Norfolk, Nebr. Rule attachment | 738,225 | Sept. 8 | 1347 | 292 | 106 | 307 |
| Murphy, Thomas, Allegheny, Pa. Drilling-tool | 730,786 | June 9 | 2279 | 506 | 104 | 1617 |
| Murphy, Thomas, Detroit, Mich. Furnace | 737,128 | Aug. 25 | 3900 | 866<br>867 | 105 | 1863 |
| Murphy, Thomas F., assignor to C. P. Kleber, New York, N. Y. Automatic hydrant | 746,125 | Dec. 8 | 1494 | 333<br>334 | 107 | 1439 |
| Murphy, Thomas M., St. Louis, Mo. Dumping cart or wagon | 743,312 | Nov. 3 | 956 | 208 | 107 | 205 |
| Murphy, Thomas M., assignor of one-half to W. Ratican, St. Louis, Mo. Nozzle | 736,134 | Aug. 11 | 2087 | 447 | 105 | 1444 |
| Murphy, Thomas M., assignor of one-half to W. Ratican, St. Louis, Mo. Street-washer | 736,135 | Aug. 11 | 2088 | 448 | 105 | 1445 |
| Murphy, Walter A. S., Atchison, Kans. Washing-machine | 742,716 | Oct. 27 | 4469 | 1011 | 106 | 2236 |
| Murphy, William A., New York, N. Y. Clutch-trip | 725,756 | Apr. 21 | 2488 | 565 | 103 | 1729 |
| Murphy, William B., New York, N. Y., assignor to United States Fastener Company, Portland, Me., and Boston, Mass. Garment or placket fastener | 729,782 | June 2 | 477 | 106 | 104 | 1226 |
| Murphy, William C., Havana, N. D. Pen or pencil attachment | 717,597 | Jan. 6 | 137 | 35 | 102 | 31 |
| Murphy, William F., Boston, Mass. Hat-fastener | 718,014 | Jan. 6 | 940 | 208 | 102 | 202 |
| Murphy, William G., Yankton, S. D. Riding-stirrup | 719,246 | Jan. 27 | 3278 | 733 | 102 | 737 |
| Murphy, William H., Rochester, N. Y. Oxyhydrogen-blowpipe | 743,313 | Nov. 3 | 957 | 208 | 107 | 206 |
| Murphy, William R. and C. M., St. Louis, Mo. Automatic railway-switch | 718,503 | Jan. 13 | 1863 | 409 | 102 | 417 |
| Murr, Richard, Seattle, Wash. Propeller | 724,488 | Apr. 7 | 133 | 32 | 103 | 1198 |
| Murr, Richard, Seattle, Wash. Means for fastening jar-caps | 745,647 | Dec. 1 | 605 | 140 | 107 | 1227 |
| Murray, Charles F., Detroit, Mich. Steam-trap | 729,956 | June 2 | 802 | 178 | 104 | 1290 |
| Murray, George N. (See Haiman and Murray.) | | | | | | |
| Murray, George T., Carrington, N. D. Ticket of varied value | 741,693 | Oct. 20 | 2514 | 561<br>562 | 106 | 1818 |
| Murray, George W., Bluffton, Ohio. Wire structure | 742,475 | Oct. 27 | 4031 | 904 | 106 | 2144 |
| Murray, Jeremiah, and W. W. Havre, Utica, N. Y.; said Havre assignor, by mesne assignments, to said Murray. Tie-spacing jack | 720,603 | Feb. 17 | 2217 | 514 | 102 | 1320 |
| Murray, John B. and R., Minneapolis, Minn. Portable scaffolding | 747,564 | Dec. 22 | 4145 | 931 | 107 | 2065 |
| Murray, John D. (See Canfield and Murray.) | | | | | | |
| Murray, Kenneth S., Westminster, England. Apparatus for aerating liquids | 748,405 | Dec. 29 | 5733 | 1309<br>1310 | 107 | 2437 |
| Murray, Martin, Troy, N. Y. Ceiling-anchor | 733,671 | July 14 | 1735 | 409 | 105 | 383 |
| Murray, Michael R., assignor of one-half to R. H. Watkins, Cambridge, and W. Hagen, Troy, N. Y. Horseshoe-calk | 740,164 | Sept. 29 | 5041 | 1134 | 106 | 1145 |
| Murray, Peter, assignor of one-half to A. L. Aitcheson and J. Leach, Jersey City, N. J. Engine and power-transmitting means therefor | 728,807 | May 19 | 3747 | 835<br>836 | 104 | 833 |
| Murray, Rebecca F., Emma, Tex. Window-curtain clasp and holder | 736,867 | Aug. 18 | 3442 | 762 | 105 | 1747 |
| Murray, Robert. (See Murray, John B. and R.) | | | | | | |
| Murray, Thomas, New York, N. Y. Baby-carriage | 732,426 | June 30 | 5421 | 1203 | 104 | 2318 |
| Murray, Thomas E., New York, N. Y. Electric sign | 737,129 | Aug. 25 | 3902 | 867 | 105 | 1864 |
| Murray, Thomas E., and J. Van Vleck, New York, N. Y. Electric railway | 720,273 | Feb. 10 | 1597 | 365<br>366<br>367 | 102 | 1177 |
| Murray, Thomas H., Chicago, Ill. Toy or trick device | 719,126 | Jan. 27 | 3076 | 684 | 102 | 695 |

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| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Murray, Thompson, Des Moines, Iowa. Self-adjusting screw-cutting machine | 723,403 | Mar. 24 | 3267 | 732 | 103 | 730 |
| Murray, William A., Washington, D. C. Blotting-pad | 736,289 | Aug. 11 | 2349 | 510 | 105 | 1504 |
| Murry, Mickel, Morristown, N. J. Protector from fires | 718,782 | Jan. 20 | 2404 | 533 | 102 | 544 |
| Murry, Mickel, Morristown, N. J. Suspenders | 747,753 | Dec. 22 | 4492 | 1013 | 107 | 2143 |
| Murtha, John. (See Powell, William H., assignor.) | | | | | | |
| Muschweck, George, and J. Tudas, Carnegie, Pa. Coal-mining machine | 739,335 | Sept. 22 | 3477 | 776, 777 | 106 | 791 |
| Musgrave, Samuel M., Bells, Tenn. Brush or broom | 744,784 | Nov. 24 | 3843 | 828 | 107 | 868 |
| Musgrove, Robert G., Jackson, Miss. Railway-rail fastening | 726,559 | Apr. 28 | 3984 | 902 | 103 | 2048 |
| Muskett, Ernest A. (See Scammell and Muskett.) | | | | | | |
| Muskett, James W., Scranton, Pa. Ratchet-wrench | 720,373 | Feb. 10 | 1782 | 404 | 102 | 1216 |
| Muskett, James W., and C. Flint, Scranton, Pa.; said Flint assignor of part to said Muskett. Ratchet-wrench | 745,886 | Dec. 1 | 1061 | 239 | 107 | 1325 |
| Muskopf, Jacob, assignor of one-third to N. Feller, Beach City, Ohio. Rural-mail-box attachment | 735,284 | Aug. 4 | 481 | 96 | 105 | 1083 |
| Musselman, Alvin J., Wichita, Kans. Game apparatus | 722,241 | Mar. 10 | 1099 | 242 | 103 | 250 |
| Musso, Alfredo, New York, N. Y., assignor of three-fifths to A. Masino and L. J. Barrett, Port Reading, N. J. Electric shovel | 740,165 | Sept. 29 | 5043 | 1134, 1135 | 106 | 1145 |
| Musson, Frederick W., Philadelphia, Pa. Pencil | 729,783 | June 2 | 478 | 106 | 104 | 1226 |
| Musson, Frederick W., Philadelphia, Pa. Pencil | 732,210 | June 30 | 5001 | 1112 | 104 | 2230 |
| Mustin, Charles. (See Williams and Mustin.) | | | | | | |
| Mutch, James, Elgin, Scotland. Foldable hood for wheeled vehicles | 722,873 | Mar. 17 | 2282 | 510, 511, 512 | 103 | 515 |
| Muth, George E., Mansfield, Ohio. Washing-machine | 730,952 | June 16 | 2603 | 579 | 104 | 1705 |
| Muth, Joseph P., St. Louis, Mo. Suspender attachment | 744,594 | Nov. 17 | 3471 | 749 | 107 | 770 |
| Mutschler, Albert, assignor, by mesne assignments, to Rochester Optical Company, Rochester, N. Y. Adjustable focusing-stop for cameras | 741,694 | Oct. 20 | 2517 | 562 | 106 | 1819 |
| Mutschler, Frederick, Rochester, N. Y. Check-printer | 726,446 | Apr. 28 | 3737 | 847, 848 | 103 | 2002 |
| Mutschler, Henry G., assignor, by mesne assignments, to Rochester Optical Company, Rochester, N. Y. Camera | 741,695 | Oct. 20 | 2518 | 562, 563 | 106 | 1819 |
| Muzzy, William H., Dayton, Ohio, assignor to National Cash Register Company, Dayton, Ohio, and Jersey City, N. J. Cash-register | 748,406 | Dec. 29 | 5737 | 1310, 1311 | 107 | 2438 |
| Myer, Albert J., Lakeview, N. Y. Device for overcoming the dynamic force of bodies | 731,116 | June 16 | 2914 | 647 | 104 | 1768 |
| Myer, Peter J., Dayton, Ohio. Shoe-creaser | 745,228 | Nov. 24 | 4704 | 1027 | 107 | 1046 |
| Myers Amusement Company. (See Myers, George F., assignor.) | | | | | | |
| Myers, Andrew M. (See Powers, Robert E., assignor.) | | | | | | |
| Myers, Benjiman R., and C. A. Jacoby, Chicago, Ill. Umbrella | 742,049 | Oct. 20 | 3212 | 718 | 106 | 1962 |
| Myers & Brother, F. E. (See Myers, Philip A., assignor.) | | | | | | |
| Myers, Charles H., Leroy, Ill. Disk-marker | 747,754 | Dec. 22 | 4493 | 1013 | 107 | 2144 |
| Myers, Charles O., Perry, Iowa. Regulating-valve | 721,821 | Mar. 3 | 294 | 65 | 103 | 65 |
| Myers, Charles O., Perry, Iowa. Hot-water heating system | 735,563 | Aug. 4 | 1025 | 217 | 105 | 1198 |
| Myers, Clarence A., Atlantic City, N. J. Label-retainer for salve-boxes, ointment-boxes, &c | 745,227 | Nov. 24 | 4703 | 1026 | 107 | 1046 |
| Myers, Ed F., Akron, Ohio. Composition for cores | 729,637 | June 2 | 206 | ..... | 104 | 1170 |
| Myers, Ernst H. (See Neuendorf and Myers.) | | | | | | |
| Myers, George D. (See Myers, Orlando R., assignor.) | | | | | | |
| Myers, George F., Pittsburg, Pa. Coke-oven | 724,032 | Mar. 31 | 4458 | 1003, 1004 | 103 | 992 |
| Myers, George F., assignor to Myers Amusement Company, Pittsburg, Pa. Pleasure-railway | 739,789 | Sept. 22 | 4325 | 968 | 106 | 977 |
| Myers, Harry E., Kittanning, Pa. Trolley | 738,926 | Sept. 15 | 2755 | 609 | 106 | 623 |
| Myers, Harry J., assignor of two-thirds to S. Cummings and F. C. Perry, Rochester, N. Y. Hydrocarbon-burner | 742,344 | Oct. 27 | 3809 | 853 | 106 | 2099 |
| Myers, John F., New York, N. Y. Polish | 733,591 | July 14 | 1598 | ..... | 105 | 356 |
| Myers, John G. L., Osceola Mills, Pa. Car-coupling | 727,408 | May 5 | 1083 | 237 | 104 | 234 |
| Myers, John G. L., Osceola Mills, Pa. Washing-machine | 727,409 | May 5 | 1084 | 238 | 104 | 234 |
| Myers, John N., Wabash, Ind. Fabric-coating machine | 738,347 | Sept. 8 | 1635 | 354 | 106 | 367 |
| Myers, John T., Culmersville, assignor of one-half to A. Hartig, Tarentum, Pa. Wrench | 746,643 | Dec. 8 | 2417 | 552 | 107 | 1640 |
| Myers, John W., Vincennes, Ind. Picture-frame | 729,784 | June 2 | 479 | 107 | 104 | 1226 |
| Myers, Joseph H., New York, N. Y. Hand-strap | 733,866 | July 14 | 2106 | 497 | 105 | 459 |
| Myers, Joseph H., New York, N. Y. Hand-strap | 733,867 | July 14 | 2108 | 497 | 105 | 459 |
| Myers, Louis, Hartford, Conn., assignor to Underwood Typewriter Company, New York, N. Y. Margin paper-guide for type-writing machines | 738,927 | Sept. 15 | 2756 | 609 | 106 | 623 |
| Myers, Louis, Hartford, Conn., assignor to Underwood Typewriter Company, New York, N. Y. Adjusting device | 738,928 | Sept. 15 | 2757 | 609 | 106 | 624 |
| Myers, Louis, Hartford, Conn., assignor to Underwood Typewriter Company, New York, N. Y. Ribbon-reverse mechanism for type-writing machines | 739,100 | Sept. 15 | 3058 | 678, 679 | 106 | 685 |
| Myers, Louis, Hartford, Conn., assignor to Underwood Typewriter Company, New York, N. Y. Tabulating device for type-writers | 740,680 | Oct. 6 | 549 | 123 | 106 | 1365 |
| Myers, Louis, Hartford, Conn., assignor to Underwood Typewriter Company, New York, N. Y. Ball-retainer | 740,681 | Oct. 6 | 551 | 123 | 106 | 1366 |
| Myers, Louis, Hartford, Conn., assignor to Underwood Typewriter Company, New York, N. Y. Type-bar bearing | 740,682 | Oct. 6 | 551 | 123 | 106 | 1366 |
| Myers, Louis, Hartford, Conn., assignor to Underwood Typewriter Company, New York, N. Y. Type-bar basket for type-writers | 748,207 | Dec. 29 | 5402 | 1228 | 107 | 2364 |
| Myers, Louis, Hartford, Conn., assignor to Underwood Typewriter Company, New York, N. Y. Ribbon-reversing mechanism for type-writers | 748,208 | Dec. 29 | 5403 | 1229 | 107 | 2364 |
| Myers, Orlando R., Warsaw, Ill., assignor of one-half to G. D. Myers, Keokuk, Iowa. Cyclic bank and register | 720,456 | Feb. 10 | 1919 | 437 | 102 | 1244 |
| Myers, Paris E., Grandview, Iowa. Nut-lock | 743,544 | Nov. 10 | 1498 | 313 | 107 | 337 |
| Myers, Philip A., Ashland, Ohio. Hay-carrier | 727,823 | May 12 | 1894 | 422, 423 | 104 | 421 |
| Myers, Philip A., Ashland, Ohio. Hay-carrier | 727,824 | May 12 | 1896 | 423, 424 | 104 | 421 |
| Myers, Philip A., assignor to F. E. Myers & Brother, Ashland, Ohio. Sliding-door hanger | 729,638 | June 2 | 206 | 47 | 104 | 1170 |
| Myers, Philip A., assignor to F. E. Myers & Bro., Ashland, Ohio. Hay-tool | 739,901 | Sept. 29 | 4562 | 1026, 1027 | 106 | 1041 |
| Myers, Samuel A., Boston, Mass. Trousers | 718,144 | Jan. 13 | 1162 | 258 | 102 | 265 |
| Myers, Walter F. (See Mickley, Charles E., assignor.) | | | | | | |
| Myers, William, New Brighton, England. Envelop or the like | 743,314 | Nov. 3 | 957 | 208 | 107 | 206 |
| Myers, William L., Industry, Ill. Hose-supporter | 742,476 | Oct. 27 | 4032 | 905 | 106 | 2144 |
| Myers, William L., assignor of one-half to J. Scudder, Industry, Ill. Stirrup | 746,126 | Dec. 8 | 1496 | 334 | 107 | 1440 |
| Myers, William M., St. Joseph, Mo. Air-compressor | 719,127 | Jan. 27 | 3077 | 684 | 102 | 695 |
| Mygatt, Otis A., New York, N. Y. Shade and reflector for electric lights | 732,211 | June 30 | 5002 | 1112 | 104 | 2231 |

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| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | Spec. | Dr'g. | Vol. | Page. |
| Mygatt, Otis A., New York, N. Y. Working glass | 735,796 | Aug. 11 | 1450 | 312 | 105 | 1308 |
| Mygatt, Otis A., New York, N. Y. Shade for artificial lights | 736,535 | Aug. 18 | 2794 | 612 | 105 | 1615 |
| Mygatt, Otis A., New York, N. Y. Making glass reflectors | 742,345 | Oct. 27 | 3812 | 854 | 106 | 2100 |
| Myles, John I. (See Hooper and Myles.) | | | | | | |
| Mylius, Albert. (See Ris and Mylius.) | | | | | | |
| N. Lombard Improved Governor Company. (See Lombard, Nathaniel, assignor.) | | | | | | |
| N. Stafford Company. (See Stafford, Nelson, assignor.) | | | | | | |
| N Tire Company. (See Blodgett, John W., assignor.) | | | | | | |
| N. A. Lombard Company. (See Eddy, William H., assignor.) | | | | | | |
| Nadall, Berne, Kingston-upon-Thames, England. Tire for wheels of road-vehicles | 722,612 | Mar. 10 | 1772 | 395 | 103 | 396 |
| Nadall, Berne, Chicago, Ill., assignor to Linotype Company, Limited, London, England. Vise for machine-tools | 725,760 | Apr. 21 | 2498 | 567<br>568 | 103 | 1731 |
| Nadeau, Benno, assignor of one-half to A. Smith, Boston, Mass. Lamp | 728,599 | May 19 | 3370 | 747 | 104 | 755 |
| Naef, Paul, New York, N. Y. Means for cooling and lubricating journals | 722,875 | Mar. 17 | 2290 | 513 | 103 | 516 |
| Naef, Paul, New York, N. Y. Apparatus for treating liquids with gases | 723,011 | Mar. 17 | 2518 | 565 | 103 | 564 |
| Naef, Paul, New York, N. Y. Smelting apparatus | 734,594 | July 28 | 3505 | 819 | 105 | 790 |
| Naef, Paul, New York, N. Y. Apparatus for the manufacture of coke | 745,290 | Nov. 24 | 4821 | 1051<br>1052 | 107 | 1069 |
| Naegele, Hermann, Stuttgart, Germany. Apparatus for cleaning intestines | 719,031 | Jan. 27 | 2871 | 644 | 102 | 654 |
| Naert, Louis G., Audenarde, Belgium. Manufacturing artificial leather | 719,787 | Feb. 3 | 689 | | 102 | 969 |
| Naftel, Clarence T., Macon, Ill. Shape-retainer for hats | 731,703 | June 23 | 4022 | 898 | 104 | 2009 |
| Nageborn, William E., Detroit, Mich. Gas-engine | 733,256 | July 7 | 994 | 239<br>240 | 105 | 208 |
| Nageldinger, John, assignor of one-half to W. C. F. Boyer, New York, N. Y. Pressure-relief valve | 720,375 | Feb. 10 | 1784 | 404 | 102 | 1217 |
| Nagely, John, Toledo, Ohio. Trousers-hanger | 736,426 | Aug. 18 | 2589 | 567 | 105 | 1570 |
| Nagle, Jacob A. (See Donecker and Nagle.) | | | | | | |
| Nagley, Frank G., Lyons, N. Y. Wagon end-gate | 718,786 | Jan. 20 | 2412 | 535 | 102 | 543 |
| Nalley, George A. (See Philpott, James S., assignor.) | | | | | | |
| Nance, Turner H., Talladega, Ala., assignor to R. A. Ward, N. M. Weaver, and G. McDonald, Cuthbert, Ga. Planter or fertilizer-distributer | 721,732 | Mar. 3 | 139 | 32 | 103 | 31 |
| Nance, Turner H., Talladega, Ala., assignor to R. A. Ward, N. M. Weaver, and G. McDonald, Cuthbert, Ga. Seed or fertilizer drill | 721,733 | Mar. 3 | 142 | 33 | 103 | 32 |
| Nanney, Wiley F., assignor of one-half to J. A. Richardson, Ben Franklin, Tex. Hay-press | 746,132 | Dec. 8 | 1506 | 336 | 107 | 1442 |
| Naphtaly, Samuel L., E. C. Jones, and F. H. Varney, San Francisco, Cal. Electrical distribution | 728,752 | May 19 | 3639 | 808 | 104 | 812 |
| Napier, George R., Macon, Ga. Sausage-stuffing machine | 719,032 | Jan. 27 | 2873 | 644 | 102 | 654 |
| Napp, Charles E., Trenton, N. J. Holder for directory-leaves, &c | 732,429 | June 30 | 5425 | 1204 | 104 | 2318 |
| Nardin, Georges, Basle, Switzerland, assignor of one-half to Werkstätte für Maschinenbau, vormals Ducommun, Mulhouse, Alsace. Turning and boring apparatus | 738,471 | Sept. 8 | 1870 | 407 | 106 | 416 |
| Narloch, Bernard J. (See Rogalla, Narloch, and De Puy.) | | | | | | |
| Naschold, Wilhelm, assignor of one-half to Chemische Fabrik Uerdingen Lienau and Co., Uerdingen, Germany. Purifying pinene hydrochlorid | 747,629 | Dec. 22 | 4271 | | 107 | 2094 |
| Nash, Camillus A. (See Lewis, George W., assignor.) | | | | | | |
| Nash, Frederic J., New York, N. Y. Road, &c | 725,983 | Apr. 21 | 2888 | 655 | 103 | 1812 |
| Nash, Frederic J., Brooklyn, N. Y. Medicated plaster | 733,504 | July 14 | 1442 | 339<br>340 | 105 | 322 |
| Nash, Ira A., Kansas City, Mo. Rotating display-stand | 729,642 | June 2 | 210 | 48 | 104 | 1171 |
| Nash, John M., Milwaukee, Wis. Abrading material | 725,761 | Apr. 21 | 2502 | 568 | 103 | 1731 |
| Nash, John W., Norway, Me. Fish mezzo-rilievo | 726,184 | Apr. 21 | 3243 | 735 | 103 | 1885 |
| Nash, Lewis H., South Norwalk, Conn., assignor to National Meter Company, New York, N. Y. Gas-engine | 746,133 | Dec. 8 | 1508 | 336<br>337 | 107 | 1443 |
| Nash, Lucian B., and R. E. Moore, Chicago, Ill. Mechanism for pulverizing and feeding fuel | 740,167 | Sept. 29 | 5047 | 1136 | 106 | 1146 |
| Nash, Nathan E., Toronto, Canada. Temperature-regulator | 733,329 | July 7 | 1127 | 267 | 105 | 237 |
| Nash, Nathan E., Toronto, Canada, assignor of one-half to W. S. Shaw, Boyne City, Mich. Temperature-regulating appliance | 732,775 | July 7 | 140 | 38 | 105 | 35 |
| Nash, William C. (See Gilbert and Nash.) | | | | | | |
| Nasmith, John W., Manchester, England. Combing-machine | 724,119 | Mar. 31 | 4624 | 1042<br>1043 | 103 | 1028 |
| Nast, Martin, Munich, Germany. Means for providing cigarette-paper with tips | 725,122 | Apr. 14 | 1312 | 295 | 103 | 1463 |
| Nastvogel, Oscar, Elberfeld, Germany, assignor to Farbenfabriken of Elberfeld Co., New York, N. Y. Red dye | 738,227 | Sept. 8 | 1351 | | 106 | 308 |
| Nathan, Benjamin, New York, N. Y. Combined insole and arch-support | 738,228 | Sept. 8 | 1352 | 293 | 106 | 308 |
| Nathan, Cecil, Westminster, London, England. System of building-bricks | 740,683 | Oct. 6 | 553 | 124 | 106 | 1366 |
| Nather, Frank, Johnstown, Pa. Electric hoist | 730,955 | June 16 | 2607 | 580 | 104 | 1706 |
| Nathhorst, Chas. E., *et al.* (See Johnson, Lafayette W., assignor.) | | | | | | |
| National Acme Manufacturing Company. (See Henn, Edwin C., assignor.) | | | | | | |
| National Automatic Furnace Mills and Mining Company. (See Beam, Aron M., assignor.) | | | | | | |
| National Automatic Needle Company. (See Manwaring, George A., assignor.) | | | | | | |
| National Automatic Tool Co. (See Nutting, Frederick J., assignor.) | | | | | | |
| National Battery Company. (See Lyndon, Lamar, assignor.) | | | | | | |
| National Battery Company. (See Sperry, Elmer A., assignor.) | | | | | | |
| National Biscuit Company. (See Alfred, Clarence J., assignor.) | | | | | | |
| National Biscuit Company. (See Richter, Clarence, assignor.) | | | | | | |
| National Biscuit Company. (See Smith, Francis W., assignor.) | | | | | | |
| National Blank Book Company. (See Towne, Frank B., assignor.) | | | | | | |
| National Brass Manufacturing Company. (See Sieben, Henry, assignor.) | | | | | | |
| National Carbon Company. (See Fishell and Moffett, assignors.) | | | | | | |
| National Carbon Company. (See Richmond, Charles T., assignor.) | | | | | | |
| National Carbon Company. (See Richmond and Moffett, assignors.) | | | | | | |
| National Cash Register Company. (See Carney, Thomas, assignor.) | | | | | | |
| National Cash Register Company. (See Cleal, Joseph P., assignor.) | | | | | | |
| National Cash Register Company. (See Cleal and Macauley, assignors.) | | | | | | |
| National Cash Register Company. (See Lalor, Patrick, assignor.) | | | | | | |
| National Cash Register Company. (See Laurick, Carl, assignor.) | | | | | | |
| National Cash Register Company. (See McCormick, John M., assignor.) | | | | | | |
| National Cash Register Company. (See Muzzy, William H., assignor.) | | | | | | |
| National Cash Register Company. (See Nutting, Fred J., assignor.) | | | | | | |
| National Cash Register Company. (See Osborn, Francis C., assignor.) | | | | | | |
| National Cash Register Company. (See Pfeifer, John, assignor.) | | | | | | |
| National Cash Register Company. (See Von Pein, Edward J., assignor.) | | | | | | |
| National Cash Register Company. (See Zimmerman, William A., assignor.) | | | | | | |
| National Coal Dump Car Company. (See Hart, Harry S., assignor.) | | | | | | |
| National Coal Dump Car Company, of South Dakota. (See Maltby, George B., assignor.) | | | | | | |

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| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| National Coal Dump Car Company, of South Dakota. (See Otis, Spencer, assignor.) | | | | | | |
| National Coal Dump Car Company, of South Dakota. (See Otis and Maltby, assignors.) | | | | | | |
| National Computing Scale Company. (See Culmer and Hoyt, assignors.) | | | | | | |
| National Computing Scale Company. (See Swihart and Hoyt, assignors.) | | | | | | |
| National Cotton Compress Company. (See Reeves, William H., assignor.) | | | | | | |
| National Dairy Machine Co. (See Fleming and Anderson, assignors.) | | | | | | |
| National Dairy Machine Company. (See Anderson, Oscar, assignor.) | | | | | | |
| National Drill and Manufacturing Company. (See Gray, Thomas J., assignor.) | | | | | | |
| National Drill and Manufacturing Company. (See Krohn, John, assignor.) | | | | | | |
| National Drill and Manufacturing Company. (See Rhodes, Jay B. and B. O., assignors.) | | | | | | |
| National Dry Kiln Company. (See Gerrard, Edward, assignor.) | | | | | | |
| National Electric Company. (See Knight, Charles D., assignor.) | | | | | | |
| National Enameling & Stamping Company. (See Hobbs, George P., assignor.) | | | | | | |
| National Enameling and Stamping Company. (See Richman, Solomon, assignor.) | | | | | | |
| National Federation of American Homing Pigeon Fanciers. (See Geary, Warren C., assignor.) | | | | | | |
| National Fiber & Cellulose Co. (See Sherwood, George R., assignor.) | | | | | | |
| National Free Piston Engine Company. (See Duryea and White, assignors.) | | | | | | |
| National Free Piston Engine Company. (See White and Duryea, assignors.) | | | | | | |
| National Hotel Register Company. (See Klee, Frederick C., assignor.) | | | | | | |
| National Leather Belting Company. (See Loeb, Leo, assignor.) | | | | | | |
| National Leather Mat and Belt Company. (See Gethen, George S., assignor.) | | | | | | |
| National Light, Heat and Power Company. (See Green, John H., assignor.) | | | | | | |
| National Lock Washer Company. (See Hoyt, Daniel, assignor.) | | | | | | |
| National Lock Washer Company. (See Wilson, James E., assignor.) | | | | | | |
| National Loom and Wire Company. (See Bond, Hiram A., assignor.) | | | | | | |
| National Loom and Wire Company. (See McFethries, John, assignor.) | | | | | | |
| National Machine Company. (See Hogan, James T., assignor.) | | | | | | |
| National Machine Company. (See Quist, Thorvald O., assignor.) | | | | | | |
| National Machine Company. (See Reeves, James N. D., assignor.) | | | | | | |
| National Machine Tool Company. (See Schellenbach, William L., assignor.) | | | | | | |
| National Magnetic Mineral Separating Company. (See Campbell, Henry F., assignor.) | | | | | | |
| National Malleable Castings Company. (See Krakau, Harry T., assignor.) | | | | | | |
| National Malleable Castings Company. (See Krakau, Harry T., assignor.) (Reissue.) | | | | | | |
| National Malleable Castings Company. (See Pridmore, Henry E., assignor.) | | | | | | |
| National Malleable Castings Company. (See Stephenson, John W., assignor.) | | | | | | |
| National Malleable Castings Company. (See Tower, Clinton A., assignor.) | | | | | | |
| National Malleable Castings Company. (See Whitlock, Frederick B., assignor.) | | | | | | |
| National Malleable Castings Company. (See Willison, John, assignor.) | | | | | | |
| National Manufacturing Company. (See Brown and Collins, assignors.) | | | | | | |
| National Metal Bung Company. (See Greenwood, Edwin N., assignor.) | | | | | | |
| National Meter Company. (See Nash, Lewis H., assignor.) | | | | | | |
| National Oil Heating Company. (See Leach, John N., assignor.) | | | | | | |
| National Package Machine Company. (See Robinson, John E., assignor.) | | | | | | |
| National Package Machine Company. (See Robinson and Williams, assignors.) | | | | | | |
| National Patent Holding Company, of South Dakota. (See Otis, Spencer, assignor.) | | | | | | |
| National Phonograph Company. (See Miller and Pierman, assignors.) | | | | | | |
| National Pneumatic Service Company. (See Ash and Woltman, assignors.) | | | | | | |
| National Pneumatic Service Company. (See Churchill, William L., assignor.) | | | | | | |
| National Pneumatic Service Company. (See Steinbock, Ernest, assignor.) | | | | | | |
| National Regulator Company. (See Comfort, Edward W., assignor.) | | | | | | |
| National Rolled Steel Car Company. (See Carnahan, Cyrus M., assignor.) | | | | | | |
| National Sewing Machine Company. (See Hastings, Fred W., assignor.) | | | | | | |
| National Specialty Manufacturing Company. (See Evans, Henry O., assignor.) | | | | | | |
| National Trolley Manufacturing Company. (See Moon, Frank D., assignor.) | | | | | | |
| National Tube Company. (See Baehr, George, assignor.) | | | | | | |
| National Tube Company. (See Hock, John A. and H. W., assignors.) | | | | | | |
| National Tube Company. (See Matheson, James H., assignor.) | | | | | | |
| National Tube Company. (See Offutt, John W., assignor.) | | | | | | |
| National Tube Company. (See Patterson, Peter, assignor.) | | | | | | |
| National Tube Company. (See Patterson, Peter C., assignor.) | | | | | | |
| National Tube Company. (See Saunders, Augustus M., assignor.) | | | | | | |
| National Vaporizer Company. (See Dorment, Frank C., assignor.) | | | | | | |
| National Voting Machine Company. (See Swaren, William A., assignor.) | | | | | | |
| National Water Tube Boiler Company. (See Harvey, Charles W., assignor.) | | | | | | |
| Natural Food Company. (See Perky, Henry D., assignor.) | | | | | | |
| Naudet, Leon, Paris, France. Extracting sugar constituents | 728,600 | May 19 | 3372 | 747 | 104 | 755 |
| Naudet, Leon, Paris, France. Apparatus for the continuous carbonation of alkaline sugar-juice | 739,702 | Sept. 22 | 4162 | 930, 931 | 106 | 940 |
| Naudet, Leon, Paris, France. Extracting sugar | 746,734 | Dec. 15 | 2580 | 594 | 107 | 1697 |
| Naudet, Leon, Paris, France. Continuous carbonation of sugar-juice | 746,735 | Dec. 15 | 2584 | 594 | 107 | 1697 |
| Naudet, Leon, Paris, France. Apparatus for extracting sugar | 746,736 | Dec. 15 | 2586 | 594, 595 | 107 | 1698 |
| Naugle, Joseph F., Meyersdale, Pa. Safety-envelop | 743,317 | Nov. 3 | 969 | 210 | 107 | 208 |
| Nault, Archie, Ishpeming, Mich. Flue expander and cutter | 732,313 | June 30 | 5190 | 1153 | 104 | 2269 |
| Nauman, Gustave A. (See Eifler and Nauman.) | | | | | | |
| Naumann, Friedrich E., Los Angeles, Cal. Shade and curtain holder | 748,211 | Dec. 29 | 5408 | 1230 | 107 | 2365 |
| Nauwelaers, Alfredo, Jalapa, Mexico. Treating tobacco | 747,081 | Dec. 15 | 3263 | 743 | 107 | 1853 |
| Navarro, Julio S., Havana, Cuba. Car-strap for street-cars | 736,620 | Aug. 18 | 2971 | 653 | 105 | 1649 |
| Navascuez, Santiago N., assignor of seven-tenths to P. Elle, V. Carrera, Mexico, Mexico, F. M. Fernandez and R. V. Burriel, Mexico. Shutter for automatic photographic cameras | 738,119 | Sept. 1 | 1121 | 248 | 106 | 242 |
| Navascuez, Santiago N., assignor of seven-tenths to P. Elle, V. Carrera, Mexico, Mexico, F. M. Fernandez and R. V. H. Burriel, Mexico. Automatic photographic camera | 738,120 | Sept. 1 | 1122 | 248, 249 | 106 | 242 |
| Navoit, Eugène L. (See Avril, Marinier, and Navoit.) | | | | | | |
| Naylor, George W., Catskill, N. Y. Collapsible ladder | 740,460 | Oct. 6 | 149 | 30 | 106 | 1278 |
| Naylor, Thomas A., Baltimore, Md., assignor, by mesne assignments, to Railway Steel Spring Company. Construction of fireproof floors, &c | 727,187 | May 5 | 690 | 148 | 104 | 149 |
| Nehr, Jacob E., Buffalo, assignor, by mesne assignments, to Underwood Typewriter Company, New York, N. Y. Type-writing machine | 726,560 | Apr. 28 | 3985 | 902, 903 | 103 | 2048 |
| Neal, Frank, assignor to Acme White Lead & Color Works, Detroit, Mich. Capping-machine for friction-top cans | 746,564 | Dec. 8 | 2265 | 519 | 107 | 1604 |
| Neal, John N. (See Scheidler, John, assignor.) | | | | | | |
| Neal, Lucian, Desoto, Ohio. Hub attachment | 747,082 | Dec. 15 | 3264 | 743 | 107 | 1853 |
| Neal, Russell E., St. Louis, Mo. Slide-buckle | 737,451 | Aug. 25 | 4525 | 1014 | 105 | 1997 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | Spec. | Dr'g. | Vol. | Page. |
| Neal, William S., Brewton, Ala. Cultivator | 718,787 | Jan. 20 | 2413 | 535 | 102 | 543 |
| Nearing, George H. (See Smith and Nearing.) | | | | | | |
| Neathamer, Lawrence, Highland, Ill. Gambrel | 733,672 | July 14 | 1736 | 410 | 105 | 383 |
| Neben, Emil T., East Orange, N. J. Multicolor-printing | 718,274 | Jan. 13 | 1407 | 313 | 102 | 318 |
| Nechlediel, Stephan, Newark, and J. Pawlitschek, Orange, N. J. Motor-cycle | 731,207 | June 16 | 3078 | 683 | 104 | 1799 |
| Nederland, August, Brooklyn, N. Y. Cigar-box | 723,012 | Mar. 17 | 2521 | 565 | 103 | 565 |
| Neederman, Stephen, *et al.* (See Madas, Louis, assignor.) | | | | | | |
| Needham, Charles A., New York, N. Y. Aerial device | 720,837 | Feb. 17 | 2628 | 606 | 102 | 1406 |
| Needham, Charles A., New York, N. Y. Aerial device | 720,838 | Feb. 17 | 2629 | 606<br>607 | 102 | 1406 |
| Needham, Charles A., assignor of one-half to G. G. Needham, New York, N. Y. Aerial device | 730,956 | June 16 | 2608 | 580<br>581 | 104 | 1706 |
| Needham, Charles A., assignor of one-half to G. G. Needham, New York, N. Y. Amusement device | 732,430 | June 30 | 5426 | 1204 | 104 | 2319 |
| Needham, Charles A., assignor to himself and G. G. Needham, New York, N. Y. Bed | 736,139 | Aug. 11 | 2094 | 449 | 105 | 1446 |
| Needham, Charles A., assignor of one-half to G. G. Needham, New York, N. Y. Curtain-support | 740,684 | Oct. 6 | 554 | 124 | 106 | 1367 |
| Needham, Charles A., assignor of one-half to G. G. Needham, New York, N. Y. Amusement device | 740,685 | Oct. 6 | 554 | 124 | 106 | 1367 |
| Needham, Charles A., assignor of one-half to G. G. Needham, New York, N. Y. Amusement device | 746,986 | Dec. 15 | 3080 | 705 | 107 | 1809 |
| Needham, Edmund F., Phelps, N. Y. Fertilizer-distributer | 718,504 | Jan. 13 | 1865 | 410 | 102 | 418 |
| Needham, George G. (See Needham, Charles A., assignor.) | | | | | | |
| Needham, Ronald A., Woolton, England. Apparatus for transporting loads | 733,257 | July 7 | 997 | 240<br>241 | 105 | 208 |
| Needham, Veall and Tyzack. (See Drabble, George T., assignor.) | | | | | | |
| Needles, Joel F., Dayton, Ohio. Device for handling and measuring lard, &c | 737,452 | Aug. 25 | 4527 | 1015 | 105 | 1998 |
| Neel, Clyde N., *et al.* (See Heard, Sallie C., assignor.) | | | | | | |
| Neel, George R., *et al.* (See Heard, Sallie C., assignor.) | | | | | | |
| Neel, Lee, *et al.* (See Heard, Sallie C., assignor.) | | | | | | |
| Neel, Ralph H., *et al.* (See Heard, Sallie C., assignor.) | | | | | | |
| Neeland, Marvin A., Youngstown, Ohio, assignor to Morgan Construction Company, Worcester, Mass. Cooling-bed for metal bars or rods | 744,874 | Nov. 24 | 4001 | 863 | 107 | 901 |
| Neelings, William C., and E. J. Gay, Algona, Iowa; said Neelings assignor to said Gay. Lubricator | 738,835 | Sept. 15 | 2594 | 573 | 106 | 588 |
| Neely, Edward, Chicago, Ill. Apparatus for cleaning beer-pipes, &c | 720,613 | Feb. 17 | 2261 | 519 | 102 | 1328 |
| Neely, John R. (See Graham and Neely.) | | | | | | |
| Neely, John R. (See Graham, Carmiencke, and Neely.) | | | | | | |
| Neely, John T., Portsmouth, Va. Wrench | 719,845 | Feb. 3 | 781 | 183 | 102 | 989 |
| Neely, Sidney M., *et al.* (See Stevens, William G., assignor.) | | | | | | |
| Neely, Thomas W., Marshall, Ill. Rotary engine | 717,598 | Jan. 6 | 139 | 35 | 102 | 31 |
| Neer, Adam. (See Blue, Peter V., assignor.) | | | | | | |
| Neese, John A., Neeseton, S. C. Fertilizer-distributer | 742,051 | Oct. 20 | 3214 | 719 | 106 | 1962 |
| Neesham, John B., Monongahela, Pa. Forming sand molds | 733,868 | July 14 | 2110 | 498 | 105 | 460 |
| Neff, Edward H. (See Todd and Neff.) | | | | | | |
| Neff, F. A., *et al.* (See Donahue, Michael C., assignor.) | | | | | | |
| Neff, John, Sr., West Hoboken, N. J. Window | 733,416 | July 14 | 1292 | 305 | 105 | 290 |
| Neff, Louis C., Brooklyn, N. Y. Type-writing machine | 733,258 | July 7 | 1000 | 241 | 105 | 209 |
| Neff, Milton H., Watertown, N. Y. Gas-engine reversing-gear | 730,683 | June 9 | 2114 | 470 | 104 | 1582 |
| Neff, Milton H., Watertown, N. Y., assignor to New York Air Brake Company. Air-brake | 745,735 | Dec. 1 | 752 | 172 | 107 | 1259 |
| Neff, Richard H., Indianapolis, Ind. Conveyance for displaying advertising matter | 726,092 | Apr. 21 | 3056 | 694 | 103 | 1847 |
| Neher, John F. (See Neher, Noah N. and J. F.) | | | | | | |
| Neher, Noah N. and J. F., Topeka, Kans. Door stop and holder | 739,906 | Sept. 29 | 4575 | 1029 | 106 | 1044 |
| Nehr, Herman F., Brooklyn, N. Y. Baptismal font | 722,242 | Mar. 10 | 1100 | 242 | 103 | 250 |
| Nehr, Herman F., Brooklyn, assignor to Benziger Bros., New York, N. Y. Counterbalance for lamps or chandeliers | 729,886 | June 2 | 673 | 148 | 104 | 1265 |
| Nehr, Herman F., Brooklyn, assignor to Benziger Brothers, New York, N. Y. Means for attaching pins to metal plates | 740,305 | Sept. 29 | 5304 | 1195 | 106 | 1198 |
| Nehrbas, John G. (See Bierley and Nehrbas.) | | | | | | |
| Neider, Fred A., Augusta, Ky. Prop for carriage-tops | 744,219 | Nov. 17 | 2822 | 603 | 107 | 631 |
| Neidich, Samuel A., Philadelphia, Pa., assignor to William Mann Company. Transfer-binder | 726,093 | Apr. 21 | 3058 | 694 | 103 | 1847 |
| Neil, John W., Cincinnati, Ohio. Governor | 734,737 | July 28 | 3783 | 883 | 105 | 845 |
| Neil, Michael, Dayton, Ohio. Hedge fence | 719,605 | Feb. 3 | 344 | 80 | 102 | 894 |
| Neil, Moses H. (See Morris, Samuel, assignor.) | | | | | | |
| Neild, Harry W., deceased, (W. D. Baldwin, Washington, D. C., administrator,) and F. Campbell, County of Kent, England. Solder | 722,273 | Mar. 10 | 1161 | ..... | 103 | 262 |
| Neill, James, Orange, N. J. Glued joint for turned columns | 730,789 | June 9 | 2284 | 507 | 104 | 1618 |
| Neill, James W. (See Officer, Burfeind, and Neill.) | | | | | | |
| Neilsen, Christen. (See Ellis and Neilsen.) | | | | | | |
| Neilson, Andrew, Carleton Place, Canada. Stovepipe-elbow connection | 719,494 | Feb. 3 | 153 | 34 | 102 | 856 |
| Neiman, Alvin B., Philadelphia, Pa. Steam-generator | 733,259 | July 7 | 1008 | 242 | 105 | 210 |
| Neischl, Louis, Milwaukee, Wis. Lock | 732,431 | June 30 | 5427 | 1205 | 104 | 2319 |
| Neithercott, Ashbel P. W., Vanburen, Ind. Combined badge and boutonnière-holder | 726,975 | May 5 | 293 | 66 | 104 | 63 |
| Neligh, U. S. G. (See Seidensticker and Neligh.) | | | | | | |
| Nelke, Louis D., Brooklyn, N. Y. Fan | 725,984 | Apr. 21 | 2890 | 655 | 103 | 1812 |
| Nellans, George M., Wichita, Kans. Tender for traction-engines | 739,703 | Sept. 22 | 4165 | 931 | 106 | 940 |
| Nellis, Robert L., Earlham, Iowa. Threshing-machine tooth | 721,220 | Feb. 24 | 3430 | 779 | 102 | 1595 |
| Nelson, Albert, Quincy, Mass. Ball-cock | 737,955 | Sept. 1 | 796 | 174 | 106 | 174 |
| Nelson, Andrew S., A. Stewart, and T. J. Foster, Motherwell, Scotland. Bogie or truck for tramway-cars, railway-carriages, or the like | 732,882 | July 7 | 333 | 82 | 105 | 73 |
| Nelson, Andrew S., A. Stewart, and T. J. Foster, Motherwell, Scotland. Four-wheeled truck for tramway-cars, railway-carriages, &c | 737,132 | Aug. 25 | 3908 | 868 | 105 | 1865 |
| Nelson, Ashton T., Wilton Junction, Iowa. Hammer for tinners' use | 734,738 | July 28 | 3785 | 883 | 105 | 845 |
| Nelson, August, and F. X. Herrmann, Manitowoc; said Herrmann assignor to M. V. Cochems, Sturgeon Bay, Wis. Railway transfer-table | 731,806 | June 23 | 4212 | 939 | 104 | 2051 |
| Nelson, Baker & Company. (See Lyons, Albert B., assignor.) | | | | | | |
| Nelson, Carl L., Seattle, Wash. Gas-regulator | 722,876 | Mar. 17 | 2292 | 513 | 103 | 516 |
| Nelson, Charles, Brooklyn, N. Y. Flying target | 727,419 | May 5 | 1101 | 241 | 104 | 238 |
| Nelson, Charles H., Trinidad, Colo. Automatic air-brake | 742,722 | Oct. 27 | 4481 | 1013<br>1014 | 106 | 2239 |
| Nelson, Charles M., *et al.* (See Overton, Charles A., assignor.) | | | | | | |
| Nelson, Charles M., and J. A. Christianson, Chicago, Ill. Metallic shipping vessel | 720,277 | Feb. 10 | 1610 | 369 | 102 | 1179 |
| Nelson, Charles R., Chicago, Ill. Loose-leaf binder | 737,005 | Aug. 25 | 3700 | 821 | 105 | 1822 |

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| Nelson & Co. (See Nelson, George W., assignor.) | | | | | | |
| Nelson, David, assignor of one-half to A. Rowell, Reno, Nev. Pipe-wrench | 743,019 | Nov. 3 | 388 | 83 | 107 | 81 |
| Nelson, Edwin K., Philadelphia, Pa. Blotter | 739,704 | Sept. 22 | 4166 | 931 | 106 | 941 |
| Nelson, Eskil G., Cambridge, Mass. Liquid-holder | 729,788 | June 2 | 487 | 108 | 104 | 1227 |
| Nelson, George C., Middletown, Ohio. Variable-speed mechanism | 730,116 | June 2 | 1120 | 251<br>252 | 104 | 1355 |
| Nelson, George W., Kauffman's Station, assignor to Nelson & Co., Shippensburg, Pa. Butter-treating compound | 726,334 | Apr. 28 | 3543 | | 103 | 1963 |
| Nelson, John, assignor of one-half to M. Nelson, West Bay City, Mich. Rail-joint | 737,654 | Sept. 1 | 178 | 38 | 106 | 42 |
| Nelson, John, assignor to Illinois Malleable Iron Company, Chicago, Ill. Cistern | 737,859 | Sept. 1 | 592 | 130 | 106 | 130 |
| Nelson, John A., Owensboro, Ky. Surgical needle | 722,133 | Mar. 3 | 868 | 194 | 103 | 186 |
| Nelson, John H., Brooklyn, N. Y. Toy | 718,721 | Jan. 20 | 2293 | 505 | 102 | 518 |
| Nelson, John H., South Bethlehem, Pa. Envelop | 739,615 | Sept. 22 | 4001 | 892 | 106 | 903 |
| Nelson, Jonas A. (See Halin, John, assignor.) | | | | | | |
| Nelson, Jonathan, Warsaw, Ind. Folding square | 735,136 | Aug. 4 | 179 | 38 | 105 | 1020 |
| Nelson, Lewis W., Grand Rapids, Mich. Implement for filling wood surfaces | 747,891 | Dec. 22 | 4770 | 1077 | 107 | 2206 |
| Nelson, Martin. (See Nelson, John, assignor.) | | | | | | |
| Nelson, Meynardie, Littleton, N. C. Paper-cutter | 718,722 | Jan. 20 | 2294 | 506 | 102 | 518 |
| Nelson, Peter W., and C. Staberg, Brooklyn, N. Y. Utensil for peeling or otherwise preparing vegetables or fruits | 719,606 | Feb. 3 | 346 | 80 | 102 | 894 |
| Nelson, Scott, Brookston, and E. Wood, Reynolds, Ind. Lock | 742,052 | Oct. 20 | 3215 | 719 | 106 | 1962 |
| Nelson, Thomas J., assignor of two-thirds to M. C. Johnston and C. E. Speer, Fort Smith, Ark. Apparatus for drying steam | 724,925 | Apr. 7 | 933 | 213 | 103 | 1369 |
| Nelson, William E., New York, N. Y. Fastening device for furniture | 726,732 | Apr. 28 | 4307 | 972 | 103 | 2115 |
| Nelssen, Terkel, Hoboken, N. J. Dry-dock | 735,569 | Aug. 4 | 1035 | 219 | 105 | 1200 |
| Nemitz, Herman H. E., Waltham, Minn. Valve-truing mechanism | 722,134 | Mar. 3 | 869 | 194 | 103 | 186 |
| Nentwich, Frank, East Liverpool, Ohio. Window | 722,533 | Mar. 10 | 1640 | 361<br>362 | 103 | 368 |
| Neracher, Inozens J., Cleveland, Ohio. Loom for weaving wire | 742,053 | Oct. 20 | 3218 | 720<br>721 | 106 | 1963 |
| Neracher, Inozens J., Cleveland, Ohio. Loom for making wire-cloth | 747,630 | Dec. 22 | 4274 | 960<br>961 | 107 | 2094 |
| Nesbitt, John S. (See Jones, Orien A., assignor.) | | | | | | |
| Nesheim, Martin, Council Bluffs, Iowa. Floor-jack | 741,533 | Oct. 13 | 2204 | 490 | 106 | 1736 |
| Neslage, Herman F., and H. H. Watson, St. Louis, Mo. Telephone-wire hanger | 728,278 | May 19 | 2755 | 612 | 104 | 626 |
| Nesmith, Christopher C., and J. L. Brewer, Manchester, Ala. Animal-trap | 721,321 | Feb. 24 | 3585 | 815 | 102 | 1628 |
| Nesmith, John W. (See Rogers, Humphrey, and Nesmith.) | | | | | | |
| Nesmith, John W., assignor to Economic Asphalt Street Repairs Company, Denver, Colo. Apparatus for heating asphalt surfaces | 743,020 | Nov. 3 | 388 | 84 | 107 | 81 |
| Nesmith, John W., and F. O. Blake, Denver, Colo. Heating asphalt pavements | 743,021 | Nov. 3 | 391 | 84 | 107 | 82 |
| Nesom, Charles T. (See Nesom, Thomas and C. T.) | | | | | | |
| Nesom, Thomas and C. T., Indianapolis, Ind. Speed-regulator | 741,158 | Oct. 13 | 1424 | 326 | 106 | 1569 |
| Nesso, Anton J., Norden, Germany. Producing mussel extracts | 734,352 | July 21 | 3066 | | 105 | 682 |
| Nestestu, Henry, Nora, Wis. Tobacco-press | 720,463 | Feb. 10 | 1931 | 441 | 102 | 1247 |
| Netcott, George A., Monticello, Iowa. Fire-escape | 744,094 | Nov. 17 | 2567 | 549 | 107 | 576 |
| Neth, Clarence J., assignor of two-thirds to S. F. West and J. W. Neth, West Newton, Pa. Vending-machine | 746,134 | Dec. 8 | 1510 | 338 | 107 | 1443 |
| Neth, George J. (See Stewart and Neth.) | | | | | | |
| Neth, John W., *et al.* (See Neth, Clarence J., assignor.) | | | | | | |
| Nethery Hydraulic Valve Company. (See Nethery, Joseph W., assignor.) | | | | | | |
| Nethery, Joseph W., assignor to Nethery Hydraulic Valve Company, Indianapolis, Ind. Flush-tank-supply system | 741,818 | Oct. 20 | 2748 | 612 | 106 | 1867 |
| Nethery, Joseph W., assignor to Nethery Hydraulic Valve Company, Indianapolis, Ind. Valve | 747,468 | Dec. 22 | 3974 | 894 | 107 | 2025 |
| Nethery, Joseph W., assignor to Nethery Hydraulic Valve Company, Indianapolis, Ind. Pressure-regulating valve | 748,091 | Dec. 29 | 5188 | 1173 | 107 | 2319 |
| Nettles, Albert L., and H. S. Glenn, Ada, Ind. Ter. Work-support | 743,656 | Nov. 10 | 1712 | 362 | 107 | 381 |
| Nettleton, Frank, and E. R. Dempsey, Philadelphia, Pa. Electric cleaning-knife | 734,353 | July 21 | 3067 | 722 | 105 | 682 |
| Neu, Adolf, assignor to E. Duryee, Colton, Cal. Fuel-burner | 744,220 | Nov. 17 | 2823 | 603 | 107 | 631 |
| Neubauer, Carl E., assignor of one-fourth to I. Krause and C. Connors, Virginia, Minn. Rail-fastening | 719,950 | Feb. 3 | 954 | 222 | 102 | 1025 |
| Neubert, Armin L., and S. T. Wiedenbeck, Minneapolis, Minn. Attachment for bottle-fillers. | 719,846 | Feb. 3 | 782 | 183 | 102 | 989 |
| Neubert, Armin L., and S. T. Wiedenbeck, Minneapolis, Minn. Brewery construction | 737,453 | Aug. 25 | 4530 | 1015 | 105 | 1999 |
| Neubert, Frank, *et al.* (See McGuire, Peter J., assignor.) | | | | | | |
| Neuberth, Franklin G., assignor to Brook Company, Waterville, Conn. Collar-button | 748,411 | Dec. 29 | 5758 | 1313 | 107 | 2443 |
| Neubling, Louis W., Indianapolis, Ind., assignor of one-half to F. Berner. Valve | 741,267 | Oct. 13 | 1642 | 370 | 106 | 1616 |
| Neuendorf, Charles W., and E. H. Myers, Wyandotte, Mich.; said Myers assignor to said Neuendorf. Outside burial-case for caskets | 723,902 | Mar. 31 | 4176 | 941 | 103 | 936 |
| Neuendorff, John B., San Antonio, Tex. Oil-burner | 735,287 | Aug. 4 | 487 | 97 | 105 | 1085 |
| Neuert, Jacob, Chicago, Ill. Rotary press | 740,168 | Sept. 29 | 5052 | 1136<br>1137 | 106 | 1147 |
| Neugebauer, Otto, assignor of one-half to E. Schmidt, Hanover, Germany. Manufacturing fuel blocks or briquets | 746,366 | Dec. 8 | 1933 | | 107 | 1530 |
| Neuhaus, Fritz A., Charlottenburg, and M. Hochwald, Berlin, Germany. Valve-gear | 745,231 | Nov. 24 | 4708 | 1027<br>1028 | 107 | 1046 |
| Neukirch, Hubert V., Zwickau, Germany. Means for cutting coal, &c | 733,073 | July 7 | 665 | 159 | 105 | 141 |
| Neumann, Frank G., Paterson, N. J. Article-lifting device | 723,296 | Mar. 24 | 3057 | 687 | 103 | 690 |
| Neumann, John W., Louisville, Ky. Liquid-fuel burner | 734,930 | July 28 | 4140 | 964 | 105 | 920 |
| Neumann, Julius, New York, N. Y. Artist's outfit | 727,672 | May 12 | 1594 | 361 | 104 | 361 |
| Neumann, Julius J., Chicago, Ill. Mute for wind instruments | 738,472 | Sept. 8 | 1872 | 408 | 106 | 416 |
| Neumann, Julius J., Chicago, Ill. Music-rack | 738,473 | Sept. 8 | 1874 | 408 | 106 | 417 |
| Neumann, Max, assignor to F. Meyer, Hamborn, Germany. Making sulfuric acid | 729,643 | June 2 | 212 | 48, 49 | 104 | 1172 |
| Neumeier, William, Jr., Durant, Iowa. Vehicle-coupling | 744,875 | Nov. 24 | 4003 | 863 | 107 | 901 |
| Neumeyer, Horace F., Macungie, Pa. Chuck | 724,600 | Apr. 7 | 339 | 83 | 103 | 1241 |
| Neumeyer, Horace F., Macungie, Pa. Flushing apparatus | 732,776 | July 7 | 142 | 38 | 105 | 35 |
| Neumeyer, Horace F., Macungie, Pa. Flushing apparatus | 743,184 | Nov. 3 | 700 | 154 | 107 | 146 |
| Neustadt, Jules H. (See Pichl, John, assignor.) | | | | | | |
| Nevelson, Julius, assignor to W. E. Farrington, trustee, Boston, Mass. Box or case | 743,747 | Nov. 10 | 1863 | 393 | 107 | 415 |
| Nevens, Herbert R., Portland, Me. Attachment for locomotive air-brakes | 739,907 | Sept. 29 | 4576 | 1029 | 106 | 1045 |
| Nevill, Henry. (See Bing and Nevill.) | | | | | | |
| Neville, Robert L., San Francisco, Cal. Mowing-machine | 725,582 | Apr. 14 | 2151 | 487 | 103 | 1642 |
| Nevius, Lot, Frankfort, Mich. Record-cabinet | 742,347 | Oct. 27 | 3814 | 854 | 106 | 2100 |
| Nevins, Patrick J., Haverhill, Mass. Tide-motor | 726,733 | Apr. 28 | 4309 | 972<br>973 | 103 | 2116 |
| New, Anthony G., Woking, England. Muffler | 733,330 | July 7 | 1130 | 267 | 105 | 238 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | Spec. | Dr'g. | Vol. | Page. |
| New Britain Machine Company. (See Brown, Robert S., assignor.) | | | | | | |
| New Century Machine and Stopper Company. (See Strebel, Louis, assignor.) | | | | | | |
| New Departure Manufacturing Company. (See Redding, Jacob, assignor.) | | | | | | |
| New England Electric Manufacturing Company. (See Proctor, Guy H., assignor.) | | | | | | |
| New England Lock and Hinge Company. (See Royse, Angelo M., assignor.) | | | | | | |
| New Era Company. (See Hall, Edward W., assignor.) | | | | | | |
| New Era Machinery Company. (See Pierce, George H., assignor.) | | | | | | |
| New Haven Acme Store Service Co. (See Swezey, Moses C., assignor.) | | | | | | |
| New Haven Clock Company. (See Porter, Wilson E., assignor.) | | | | | | |
| New Jersey Patent Company. (See Weber, Peter, assignor.) | | | | | | |
| New Jersey Plumbing Specialties Co. (See Pflugh, August T., assignor.) | | | | | | |
| New Jersey Wire Cloth Company. (See Scammell, Charles H., assignor.) | | | | | | |
| New Jersey Wire Stitching Machine Company. (See Shafer, William, assignor.) | | | | | | |
| New Jersey Zinc Company. (See Schroeder, Max, assignor.) | | | | | | |
| New Process Lighting Company. (See Litle, Thomas J., Jr., assignor.) | | | | | | |
| New Process Rawhide Company. (See Grannis, Charles S., assignor.) | | | | | | |
| New Winona Manufacturing Company. (See McLaughlin, Cunningham N., assignor.) | | | | | | |
| New York Air Brake Company. (See Augur and Bickel, assignors.) | | | | | | |
| New York Air Brake Company. (See Neff, Milton H., assignor.) | | | | | | |
| New York Air Brake Company. (See Valentine, Charles W., assignor.) | | | | | | |
| New York Continental Jewell Filtration Company. (See Leopold, Frederick B., assignor.) | | | | | | |
| New York Continental Jewell Filtration Company. (See Hodkinson, George F., assignor.) | | | | | | |
| New York Labelling Machine Company. (See Hendrickson, James G., assignor.) | | | | | | |
| New York Lock Company. (See Noack, Carl O., assignor.) | | | | | | |
| New York Spring Motor Company. (See Fiske, Henry P., assignor.) | | | | | | |
| Newall, John W., Ongar, England. Limit-gage | 720,730 | Feb. 17 | 2465 | 565 | 102 | 1372 |
| Newark Chemical Company. (See Todd, Edmund N., assignor.) | | | | | | |
| Newark Rivet Works. (See Reininger, Richard, assignor.) | | | | | | |
| Newark Rivet Works. (See Rose, John, assignor.) | | | | | | |
| Newberger, Frank W., Stemper, Fla. Making charcoal and conserving the vaporous distillates thereof | 724,601 | Apr. 7 | 344 | 83 | 103 | 1243 |
| Newberry, Frederick E. (See Tate, George A., assignor.) | | | | | | |
| Newberry, John R., *et al.* (See Shepherd, Robert C., assignor.) | | | | | | |
| Newbold, John P., Cape May, N. J. Vapor-burner | 731,384 | June 16 | 3411 | 762 | 104 | 1869 |
| Newbold, Roger M., Birmingham, Ala. Electric-lighting apparatus for railway-cars | 740,461 | Oct. 6 | 151 | 31 | 106 | 1278 |
| Newbro, Dupont M., and E. E. Gallogly, Detroit, Mich. Hair-brush | 734,354 | July 21 | 3069 | 722 | 105 | 683 |
| Newburgh Reduction Company. (See Peck, Ernest S., assignor.) | | | | | | |
| Newby, Alfred J., New Rochelle, N. Y. Pedal-locking attachment for pianos | 727,673 | May 12 | 1596 | 361 | 104 | 361 |
| Newcomb, Edward W., New York, N. Y. Device for washing and drying films | 720,464 | Feb. 10 | 1933 | 441<br>442 | 102 | 1247 |
| Newcomb, George G., Denver, Colo. Device for locking ore-cars to tracks | 737,006 | Aug. 25 | 3701 | 821 | 105 | 1822 |
| Newcomb, George G., Denver, Colo. Device for locking cars to rails or tracks | 737,454 | Aug. 25 | 4533 | 1016 | 105 | 1999 |
| Newcomb, George G., Denver, Colo. Ore-car | 745,113 | Nov. 24 | 4477 | 968<br>969 | 107 | 998 |
| Newcomb, Luther S., Pomona, Kans. Rein-holder for harness | 735,137 | Aug. 4 | 181 | 38 | 105 | 1020 |
| Newcomer, Samuel A., St. Louis, Mo. Clothes-washer | 736,870 | Aug. 18 | 3445 | 763<br>764 | 105 | 1748 |
| Newell, Augustus, Pasadena, Cal. Means for joining mechanical members | 729,392 | May 26 | 4779 | 1058 | 104 | 1061 |
| Newell, Augustus, Pasadena, Cal. Wrench | 730,957 | June 16 | 2610 | 581 | 104 | 1706 |
| Newell, Arthur A., Mellette, S. D. Rope-clamp | 734,469 | July 21 | 3271 | 769 | 105 | 724 |
| Newell, Atwood M., Irwin, Pa. Boring-machine | 735,896 | Aug. 11 | 1649 | 352 | 105 | 1351 |
| Newell, Ebenezer J., *et al.* (See Bryant, John M., assignor.) | | | | | | |
| Newell, Frank C., Wilkinsburg, assignor to Westinghouse Air Brake Company, Pittsburg, Pa. Electric brake | 720,951 | Feb. 17 | 2848 | 652<br>653 | 102 | 1453 |
| Newell, Frank C., Wilkinsburg, assignor to Westinghouse Air Brake Company, Pittsburg, Pa. Electromagnetic brake | 725,985 | Apr. 21 | 2892 | 655<br>656 | 103 | 1813 |
| Newell, Frank C., Wilkinsburg, assignor to Westinghouse Air Brake Company, Pittsburg, Pa. Electric brake | 737,265 | Aug. 25 | 4171 | 929 | 105 | 1921 |
| Newell, George H., and J. H. Dean, assignors of one-third to O. C. Phelps, Grand Rapids, Mich. Manufacturing projectiles | 726,230 | Apr. 21 | 3318 | 753 | 103 | 1901 |
| Newell, Ira E., Maysville, Ky. Bottle-opener | 725,277 | Apr. 14 | 1587 | 359 | 103 | 1521 |
| Newell, Joseph P., Portland, Oreg. Sand-guard for railway-tracks | 731,320 | June 16 | 3291 | 733 | 104 | 1844 |
| Newell, Ralph O., Venus, Nebr. Corn-planter | 731,604 | June 23 | 3843 | 856<br>857 | 104 | 1974 |
| Newell, Samuel V. (See Minges, Richard, assignor.) | | | | | | |
| Newell, Willard A. J., New York, N. Y. Toilet-cabinet | 738,626 | Sept. 8 | 2161 | 474 | 106 | 480 |
| Newey, Ira A., Rome, N. Y. Spring-supported saddle | 742,479 | Oct. 27 | 4038 | 906 | 106 | 2145 |
| Newgarden, Jennie S., *et al.* (See Newgarden, Max, assignor.) | | | | | | |
| Newgarden, Max, assignor to J. S. Newgarden and W. G. Kinney, New York, N. Y. Folding attachment for calendering-machines | 732,212 | June 30 | 5003 | 1112 | 104 | 2231 |
| Newhall, George M., Philadelphia, Pa. Char-drier | 742,723 | Oct. 27 | 4483 | 1014 | 106 | 2240 |
| Newhall, Henry B. (See Cook, John H., assignor.) | | | | | | |
| Newland, Grant, assignor of one-half to A. G. Clark, Linden, Iowa. Car-wheel | 745,650 | Dec. 1 | 611 | 141 | 107 | 1228 |
| Newman, Edward, Chicago, Ill. Time light-controller | 731,208 | June 16 | 3080 | 684 | 104 | 1800 |
| Newman, Edward, Chicago, Ill. Time light-controller | 742,054 | Oct. 20 | 3219 | 721 | 106 | 1963 |
| Newman, George W., and W. H. Young, Evansville, Ind. Educational device for teaching telegraphy | 723,716 | Mar. 24 | 3827 | 860 | 103 | 846 |
| Newman, Naftaly, Chicago, Ill. Combination-tool | 730,790 | June 9 | 2285 | 507 | 104 | 1618 |
| Newman, Naftaly, Chicago, Ill. Weighing-scale | 731,807 | June 23 | 4214 | 939 | 104 | 2051 |
| Newman, Naftaly, Chicago, Ill. Nut-lock | 732,432 | June 30 | 5430 | 1205 | 104 | 2319 |
| Newman, Naftaly, Chicago, Ill. Automatic electric weighing device | 741,975 | Oct. 20 | 3063 | 684<br>685 | 106 | 1931 |
| Newman, Samuel. (See Mendel and Newman.) | | | | | | |
| Newman, William, Alexandria, S. D. Knotter for grain-binders | 729,393 | May 26 | 4781 | 1058<br>1059 | 104 | 1061 |
| Newman, William C. (See Utley and Newman.) | | | | | | |
| Newman, William C., Hagerstown, Md. Eyeglasses | 734,739 | July 28 | 3785 | 884 | 105 | 845 |
| Newman, William J., Chicago, Ill. Dumping apparatus | 731,118 | June 16 | 2919 | 648<br>649 | 104 | 1769 |
| Newman, William J., Chicago, Ill. Tramway for vehicles | 731,119 | June 16 | 2922 | 649 | 104 | 1769 |
| Newman, William L., Panaca, Nev. Game apparatus | 739,337 | Sept. 22 | 3481 | 777 | 106 | 792 |
| Newnam, Edward B., Denver, Colo. Foot-vise | 738,055 | Sept. 1 | 980 | 218 | 106 | 213 |
| Newnham, Frank. (See Bowen, Newnham, and Barnett.) | | | | | | |
| Newport, Thomas L., San Francisco, Cal. Bath-brush | 727,993 | May 12 | 2214 | 493 | 104 | 490 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Newsam, Francis E., Leamington Spa, England. Apparatus for saving life from fire or shipwreck | 726,185 | Apr. 21 | 3244 | 736 | 103 | 1885 |
| Newsom, Philip E., New York, N. Y. Automatic apparatus for extinguishing lamps | 736,538 | Aug. 18 | 2799 | 613 | 105 | 1616 |
| Newton, Albert E., assignor to Prentice Brothers Company, Worcester, Mass. Change-gearing for lathes | 728,279 | May 19 | 2756 | 612 613 | 104 | 627 |
| Newton, Albert S., Providence, R. I. Grease-trap | 723,618 | Mar. 24 | 3656 | 818 | 103 | 809 |
| Newton, Charles C., assignor to Newton Machine Tool Works, Incorporated, Philadelphia, Pa. Boring or milling machine | 735,570 | Aug. 4 | 1036 | 220 | 105 | 1201 |
| Newton, Charles D. (See Mohlenhoff, Hermann J., assignor.) | | | | | | |
| Newton Crane Gas Engine Company. (See Crane, Newton, assignor.) | | | | | | |
| Newton, Edward S. (See Wilkin and Newton.) | | | | | | |
| Newton, Lorin I., Fort Dodge, Iowa. Furnace-door-operating device | 740,987 | Oct. 6 | 1110 | 250 | 106 | 1483 |
| Newton Machine Tool Works. (See Newton, Charles C., assignor.) | | | | | | |
| Newton, Nelson A., Kalamazoo, Mich. Vehicle-wheel | 737,007 | Aug. 25 | 3703 | 822 | 105 | 1823 |
| Newton Reduction Company. (See Sutphen, John E., assignor.) | | | | | | |
| Newton, Robert W., Providence, R. I., assignor to General Fire Extinguisher Company, New York, N. Y. Automatic fire-extinguisher | 728,280 | May 19 | 2759 | 613 | 104 | 627 |
| Newton, Stephen S., New York, assignor to F. C. Palmer, Brooklyn, N. Y. Bolt-anchor | 725,278 | Apr. 14 | 1588 | 359 | 103 | 1521 |
| Newton, Stephen S., New York, assignor to F. C. Palmer, Brooklyn, N. Y. Bolt-anchor | 725,279 | Apr. 14 | 1590 | 359 | 103 | 1521 |
| Newton, William G., assignor to Peck Bros. & Co., New Haven, Conn. Siphon water-closet | 745,651 | Dec. 1 | 612 | 142 | 107 | 1228 |
| Newton, William N., Barnesville, assignor of one-half to J. J. Garland, The Rock, Ga. Hay-press | 719,495 | Feb. 3 | 153 | 35 | 102 | 856 |
| Newton, Willis E., Oakland, Cal. Stamp-affixing machine | 733,074 | July 7 | 666 | 160 | 105 | 141 |
| Ney Manufacturing Company. (See Rowland, David E., assignor.) | | | | | | |
| Niagara Hydraulic Engine Company. (See Smith, Sandie S., assignor.) | | | | | | |
| Niagara Machine & Tool Works. (See Wolfe, Arthur P., assignor.) | | | | | | |
| Niagara Machine & Tool Works. (See Zeh, Edmund, assignor.) | | | | | | |
| Niblett, Job T., Greenwich, London, England. Storage battery | 740,034 | Sept. 29 | 4823 | ..... | 106 | 1099 |
| Nichol, Peter E., Toronto, Canada. Lung and voice developer | 737,008 | Aug. 25 | 3705 | 822 | 105 | 1823 |
| Nichol, Samuel S., Kewanna, Ind. Railway-switch | 725,986 | Apr. 21 | 2896 | 657 | 103 | 1813 |
| Nicholas, Abraham R., Indianapolis, Ind. Clover-buncher | 747,469 | Dec. 22 | 3976 | 894 | 107 | 2025 |
| Nicholas, Charles E., Hawthorn, Victoria, Australia. Steam-condenser | 717,599 | Jan. 6 | 141 | 36 | 102 | 32 |
| Nicholas, Charles E., Columbus, Ohio. Lightning-arrester | 745,114 | Nov. 24 | 4479 | 969 | 107 | 999 |
| Nicholas, Cyril E., Launceston, Tasmania, Australia. Table game of cricket | 721,072 | Feb. 17 | 3073 | 705 | 102 | 1502 |
| Nicholas, John, Berkeley, Cal. Window-shade fixture | 742,724 | Oct. 27 | 4485 | 1014 | 106 | 2240 |
| Nicholas, Joseph, Guttenberg, N. J. Extension-frame for fruit-boxes | 722,534 | Mar. 10 | 1641 | 362 | 103 | 368 |
| Nicholas, William, London, England, assignor to United States Graphotype Company, New York, N. Y. Stereotyping | 732,026 | June 23 | 4626 | 1034 | 104 | 2139 |
| Nicholl, Mary E., East Oakland, Cal. Memorizer | 736,140 | Aug. 11 | 2096 | 450 | 105 | 1446 |
| Nicholls, Albert W., Chicago, Ill. Attaching-socket for gas or air tubing | 748,301 | Dec. 29 | 5565 | 1269 | 107 | 2400 |
| Nicholls, Francis V. (See Wright and Nicholls.) | | | | | | |
| Nicholls, George T., Providence, R. I., assignor to Mortonfield Manufacturing Company, Cheraw, S. C. Warp and weft knitting machine | 732,433 | June 30 | 5431 | 1205 1206 | 104 | 2320 |
| Nicholls, George T., Providence, R. I., assignor, by mesne assignments, to Mortonfield Manufacturing Company, Cheraw, S. C. Warp and weft knitting machine | 732,434 | June 30 | 5434 | 1206 1207 1208 | 104 | 2320 |
| Nicholls, John S. C., Boston, Mass. Tongue-protector | 725,354 | Apr. 14 | 1731 | 390 | 103 | 1551 |
| Nicholls, Moses, assignor to M. Hardsocg and E. A. Work, Ottumwa, Iowa. Miter-box | 738,930 | Sept. 15 | 2759 | 610 | 106 | 624 |
| Nicholls, Moses, and C. J. Smith; said Nicholls assignor to M. Hardsocg, Ottumwa, Iowa. Trolley | 738,056 | Sept. 1 | 982 | 218 | 106 | 214 |
| Nicholls, William, Holborn, London, England. Apparatus for supplying aerated liquids from bulk on draft | 721,073 | Feb. 17 | 3074 | 706 | 102 | 1502 |
| Nicholls, William T., Wellsburg, W. Va. Manufacture of glass tiles | 739,338 | Sept. 22 | 3482 | 778 | 106 | 792 |
| Nichols, Aaron S. (See Windsor, Nelson, assignor.) | | | | | | |
| Nichols, Aaron S., Chicago, Ill. Controlling mechanism for veneer-driers | 717,708 | Jan. 6 | 335 | 81, 82 | 102 | 73 |
| Nichols, Bella T., Montevista, Colo. Ore-treating process | 726,802 | Apr. 28 | 4442 | 1003 | 103 | 2142 |
| Nichols, Charles, and J. W. Spencer, Seymour, Conn. Fountain-pen | 726,561 | Apr. 28 | 3988 | 903 | 103 | 2049 |
| Nichols, Charles P., Cranston, R. I. Sweep-strap for looms | 737,266 | Aug. 25 | 4173 | 929 | 105 | 1921 |
| Nichols, Charles S. (See Nichols, Claud C. and C. S.) | | | | | | |
| Nichols, Claud C. and C. S., Roseland, Nebr. Traction-wheel | 740,035 | Sept. 29 | 4825 | 1082 | 106 | 1099 |
| Nichols, Edwin, Newark, Ohio. Sterilizing appliance | 725,123 | Apr. 14 | 1313 | 296 | 103 | 1463 |
| Nichols, Emory D. (See Davis, Michael J., assignor.) | | | | | | |
| Nichols, Emory I., San Francisco, Cal. Crude-oil burner with self-supplying steam device | 724,728 | Apr. 7 | 586 | 139 | 103 | 1293 |
| Nichols, Emory I., assignor of one-half to F. A. Huntington, San Francisco, Cal. Steam-generator | 742,480 | Oct. 27 | 4039 | 906 | 106 | 2145 |
| Nichols, Frederick M., assignor to Lamb Knitting Machine Company, Chicopee Falls, Mass. Knitting-machine | 718,951 | Jan. 20 | 2723 | 608 609 | 102 | 609 |
| Nichols, George S., Paterson, N. J., assignor to Helme & McIlhenny, Philadelphia, Pa. Locking device | 724,729 | Apr. 7 | 587 | 140 | 103 | 1294 |
| Nichols, Henry B., Philadelphia, Pa. Railway-track structure | 721,382 | Feb. 24 | 3704 | 843 | 102 | 1653 |
| Nichols, Henry B., and C. B. Voynow, Philadelphia, Pa. Rail-joint. (Reissue) | 12,074 | Jan. 27 | 3605 | 807 | 102 | 808 |
| Nichols, James M., Adelaide, Ga. Bedstead-fastener | 739,020 | Sept. 15 | 2893 | 643 | 106 | 654 |
| Nichols, Norman T., Prairie Creek Township, Logan county, Ill. Roller-harrow | 730,837 | June 9 | 2364 | 522 | 104 | 1635 |
| Nichols, Roldon O. (See Lawrence and Nichols.) | | | | | | |
| Nichols and Shepard Company. (See Flagg, Eli W., assignor.) | | | | | | |
| Nichols & Shepard Company. (See McCutcheon, John B., assignor.) | | | | | | |
| Nichols and Shepard Company. (See Payne, Victor T., assignor.) | | | | | | |
| Nichols, Warren T., Hempstead, N. Y. Faucet | 734,355 | July 21 | 3070 | 723 | 105 | 683 |
| Nichols, Warren T., Hempstead, N. Y. Supply-valve | 741,534 | Oct. 13 | 2204 | 490 | 106 | 1736 |
| Nichols, William. (See Bunnell and Nichols.) | | | | | | |
| Nicholson, Arthur H. (See Jacobs and Nicholson.) | | | | | | |
| Nicholson, Charles P., Baltimore, Md. Watch-holder | 744,933 | Nov. 24 | 4100 | 884 | 107 | 921 |
| Nicholson, Daniel L., Cleburne, Tex. Baling-press | 718,016 | Jan. 6 | 943 | 209 | 102 | 203 |
| Nicholson, Edward. (See Pettengill and Nicholson.) | | | | | | |
| Nicholson, Ezra, Cleveland, Ohio. Distance or range finder | 737,956 | Sept. 1 | 797 | 174 | 106 | 175 |
| Nicholson, Ezra, Lakewood, Ohio. Ship's log | 742,215 | Oct. 27 | 3564 | 795 796 | 106 | 2046 |
| Nicholson, Ezra, Lakewood, Ohio. Ship's log | 742,216 | Oct. 27 | 3568 | 796 797 | 106 | 2047 |
| Nicholson File Company. (See Turner, James, assignor.) | | | | | | |
| Nicholson, Henry C. & Mary A. (See Beeler, Isaac W., assignor.) | | | | | | |
| Nicholson, John, *et al.* (See Ogden, Otto G., assignor.) | | | | | | |
| Nicholson, John D., assignor to Pittsburgh Reduction Company, Pittsburg, Pa. Electric conductor | 723,717 | Mar. 24 | 3829 | 860 | 103 | 846 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Nicholson, John H., Pittsburg, Pa., assignor to Standard Seamless Tube Company. Piercing and expanding mill | 718,723 | Jan. 20 | 2295 | 506 | 102 | 518 |
| Nicholson, John L. (See Wade, Nicholson, and Smith.) | | | | | | |
| Nicholson, John L., Jersey City, N. J. Adjustable skirt-holder | 729,208 | May 26 | 4463 | 983 | 104 | 995 |
| Nicholson, John S., Elgin, Ill. Store-goods lifter | 733,260 | July 7 | 1009 | 242 | 105 | 211 |
| Nicholson, Thomas, Chicago, Ill. Loading and discharging hopper | 718,862 | Jan. 20 | 2545 | 566 | 102 | 571 |
| Nicholson, Victor R., Bellevue, Cork, Ireland. Internal-combustion engine | 733,417 | July 14 | 1293 | 305, 306 | 105 | 290 |
| Nick, Charles W. (See Doyle, John A., assignor.) | | | | | | |
| Nickel, David, Morris, Ill. Caster | 747,211 | Dec. 15 | 3502 | 795 | 107 | 1904 |
| Nickel, George D., *et al.* (See Waterbury, George H., assignor.) | | | | | | |
| Nickelson, Joseph A., New York, N. Y. Gasolene-engine | 741,064 | Oct. 13 | 1250 | 283 | 106 | 1534 |
| Nickerson, Amy, Elko, Mo. Dress-waist stay | 724,602 | Apr. 7 | 346 | 84 | 103 | 1243 |
| Nickerson, David H., Detroit, Mich. Car-wheel | 744,221 | Nov. 17 | 2824 | 603, 604 | 107 | 632 |
| Nickerson, George W., Wellfleet, Mass. Hoof boot or pad | 719,687 | Feb. 3 | 487 | 110 | 102 | 925 |
| Nickerson, Myron A., Canton, N. Y. Electric time-switch | 727,828 | May 12 | 1902 | 425 | 104 | 423 |
| Nickerson, Oscar C., Chatham, Mass. Lumber-wagon | 728,406 | May 19 | 2991 | 658 | 104 | 675 |
| Nickerson, Oscar C., Chatham, Mass. Life-boat wagon | 729,394 | May 26 | 4787 | 1059 | 104 | 1062 |
| Nickett, Horace J., Attleboro, assignor of one-half to A. R. Knox, Taunton, Mass. Hat-pin | 723,781 | Mar. 24 | 3940 | 889 | 103 | 870 |
| Nickloy, Alden C., Gloversville, N. Y. Refilled-bottle detector | 728,963 | May 26 | 4027 | 895 | 104 | 905 |
| Nickolson, Frederick J., *et al.* (See Benke, Charles A., assignor.) | | | | | | |
| Nicol, William, and J. H. Stewart, Invercargill, New Zealand. Candlestick | 744,596 | Nov. 17 | 3473 | 749 | 107 | 770 |
| Nicol, William, and J. H. Stewart, Invercargill, New Zealand. Candlestick | 744,597 | Nov. 17 | 3473 | 749 | 107 | 770 |
| Nicolaier, Arthur, and P. Hunsalz, assignors to Chemische Fabrik auf Actien, vorm. E. Schering, Berlin, Germany. Methylene-hippuric acid and making same | 743,986 | Nov. 10 | 2317 | ..... | 107 | 514 |
| Nicoll, John S. (See Nisbett, Ives, and Nicoll.) | | | | | | |
| Nicoulin, Frank L., Louisville, Ky. Dump-wagon | 724,033 | Mar. 31 | 4459 | 1004 | 103 | 993 |
| Nidever, Ruth M., Myford, Cal. Footstool | 736,427 | Aug. 18 | 2591 | 568 | 105 | 1571 |
| Niederlander, Nicholas F., St. Louis, Mo., assignor to Westinghouse Automatic Air & Steam Coupler Company, East St. Louis, Ill. Automatic pipe-coupling | 741,699 | Oct. 20 | 2523 | 564 | 106 | 1820 |
| Niedermeyer, Arthur, assignor to Filer and Stowell Co., Milwaukee, Wis. Stop for saw-mill-carriages | 745,512 | Dec. 1 | 375 | 87 | 107 | 1179 |
| Nielander, Joseph, Sterling, Ill., assignor of one-half to F. Macke, Kokomo, Ind. Combination-padlock | 718,146 | Jan. 13 | 1164 | 259 | 102 | 266 |
| Nielsen, Carl, Copenhagen, Denmark. Device for actuating shut-off valves for piston or valve movements of any kind | 722,656 | Mar. 10 | 1848 | 412 | 103 | 413 |
| Nielsen, Christian, Algona, Iowa. Driveway-gate | 742,217 | Oct. 27 | 3570 | 797, 798 | 106 | 2047 |
| Nielsen, Herman, Brooklyn, N. Y. Rotary engine | 720,952 | Feb. 17 | 2854 | 653 | 102 | 1454 |
| Nielsen, Herman, New York, N. Y. Valve mechanism for engines | 746,565 | Dec. 8 | 2267 | 519, 520 | 107 | 1605 |
| Nielsen, Jens, Cedarfalls, Iowa. Rotary pump | 739,207 | Sept. 15 | 3241 | 717, 718 | 106 | 724 |
| Nielsen, Peder, Detroit, Mich. Excavator | 724,603 | Apr. 7 | 347 | 84 | 103 | 1243 |
| Niemann, August C., Port Clinton, Ohio. Fruit-sorter | 729,395 | May 26 | 4788 | 1059, 1060 | 104 | 1062 |
| Niemeczek, Hanns, Vienna, Austria-Hungary. Hot-air box for brick or tile stoves and chimneys | 725,007 | Apr. 7 | 1091 | 248 | 103 | 1402 |
| Niemer, John. (See Cornelius and Niemer.) | | | | | | |
| Niemes, Jacque. (See Kittredge and Niemes.) | | | | | | |
| Niemeyer, Louis B. (See Dery, Louie T., assignor.) | | | | | | |
| Niemeyer, William H., Baltimore, Md., assignor to J. J. Caylor, Washington, D. C. Non-corrodible pump-piston | 734,277 | July 21 | 2925 | 683 | 105 | 654 |
| Nienstadt, John H., Liberty, N. Y. Rein-fender | 726,094 | Apr. 21 | 3059 | 695 | 103 | 1848 |
| Nientimp, John T., assignor of one-half to C. A. Leimgruber, Rochester, N. Y. Game-table | 718,147 | Jan. 13 | 1166 | 259 | 102 | 266 |
| Nieto y Abeillé, Amado, and A. Gual y S. Juan, Havana, Cuba. Extinguisher for lamps | 734,931 | July 28 | 4141 | 964 | 105 | 920 |
| Nifong, Jefferson D., St. Louis, Mo. Office-door indicator | 737,860 | Sept. 1 | 594 | 130 | 106 | 131 |
| Niggli, Emil, San Antonio, Tex. Cheese-cutter | 741,535 | Oct. 13 | 2206 | 491 | 106 | 1736 |
| Nightingale, Edward. (See Wood and Nightingale.) | | | | | | |
| Nightingale, Henry H., assignor of one-half to P. B. Jantz, Moundridge, Kans. Grain-separating device for threshing-machines | 739,908 | Sept. 29 | 4577 | 1029 | 106 | 1045 |
| Nightingale, John E., assignor to A. A. Whitely, New York, N. Y. Exercising apparatus | 726,095 | Apr. 21 | 3061 | 695 | 103 | 1848 |
| Nightingale, William H., assignor to J. E. Reyburn, Philadelphia, Pa. Duplex air-brake system | 723,297 | Mar. 24 | 3058 | 687, 688 | 103 | 690 |
| Nightingale, William H., assignor to J. E. Reyburn, Philadelphia, Pa. Governor for pneumatic pressure | 730,791 | June 9 | 2286 | 507, 508 | 104 | 1618 |
| Nightingale, William H., assignor to J. E. Reyburn, Philadelphia, Pa. Engineer's valve | 743,022 | Nov. 3 | 392 | 85 | 107 | 82 |
| Nightingale, William H., assignor to J. E. Reyburn, Philadelphia, Pa. Duplex air-brake system | 748,302 | Dec. 29 | 5565 | 1269, 1270 | 107 | 2400 |
| Nikolaisen, Hans, Earlville, Ill. Stirrup | 722,877 | Mar. 17 | 2294 | 513 | 103 | 517 |
| Niles, Bert, Croswell, Mich. Explosive-engine | 719,249 | Jan. 27 | 3284 | 734 | 102 | 738 |
| Niles, Sidney S., Oakpark, Ill. Latch | 743,545 | Nov. 10 | 1499 | 313 | 107 | 337 |
| Niles Tool Works Company. (See De Leeuw, Adolph L., assignor.) | | | | | | |
| Niles, William E., Chicago, Ill. Brace for steam-boilers | 726,450 | Apr. 28 | 3750 | 850 | 103 | 2005 |
| Nilson, Arvid, assignor to Wahl & Henius, Chicago, Ill. Manufacture of non-intoxicating beverages | 721,383 | Feb. 24 | 3706 | ..... | 102 | 1653 |
| Nilson, Nils. (See Tideman, Carl G., assignor.) | | | | | | |
| Nilson, Nils, Absaraka, N. D. Wheel for planters | 725,762 | Apr. 21 | 2503 | 568 | 103 | 1731 |
| Nilson, Nils, Chicago, Ill., assignor to International Harvester Company. Mowing-machine | 741,159 | Oct. 13 | 1426 | 326 | 106 | 1569 |
| Nilson, Oscar M., Mansfield, La. Evaporating apparatus | 720,465 | Feb. 10 | 1934 | 442 | 102 | 1247 |
| Nilson, Peter F., Jerome, Ariz. Ter., assignor, by mesne assignments, to Union Typewriter Company, Jersey City, N. J. Type-writing machine | 718,505 | Jan. 13 | 1867 | 410 | 102 | 418 |
| Nippel, Edward T. (See Brown, James W., assignor.) | | | | | | |
| Nirdlinger, Clarence D., St. Louis, Mo. Vehicle-tire and manufacturing same | 738,566 | Sept. 8 | 2046 | 446 | 106 | 455 |
| Nisbett, Adam, W. G. Ives, and J. S. Nicoll, Chicago, Ill. Die for finishing horseshoes | 726,186 | Apr. 21 | 3246 | 736 | 103 | 1885 |
| Nissen, Christian F., Winston-Salem, N. C. Wheel-hub | 717,709 | Jan. 6 | 337 | 82 | 102 | 73 |
| Nissen, George H., Brooklyn, N. Y. Feed-bag | 729,396 | May 26 | 4789 | 1060 | 104 | 1063 |
| Nistle, George W., assignor of two-thirds to E. W. Brooks and R. L. Gifford, Chicago, Ill. Elevator | 718,374 | Jan. 13 | 1580 | 349 | 102 | 353 |
| Nistle, George W., assignor of two-thirds to E. W. Brooks and R. L. Gifford, Chicago, Ill. Automatic stop device for elevators | 718,375 | Jan. 13 | 1584 | 349, 350 | 102 | 354 |
| Nistle, George W., assignor of two-thirds to E. W. Brooks and R. L. Gifford, Chicago, Ill. Cut-out switch for electric-lighting or other circuits | 724,730 | Apr. 7 | 590 | 140 | 103 | 1294 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|
| | | | Spec. | Drg. | Vol. | Page. |
| Nix, Charles H., Waynoka, Okla. Ter. Buckle for stirrup-straps | 746,873 | Dec. 15 | 2862 | 659 | 107 | 1759 |
| Nix, William M., Muskogee, Ind. Ter. Baby-jumper | 743,546 | Nov. 10 | 1501 | 314 | 107 | 338 |
| Nix, William M., Muskogee, Ind. Ter. Paper-bag holder | 743,547 | Nov. 10 | 1502 | 314 | 107 | 338 |
| Nixon, S. Fred., *et al.* (See Harris, Harry, assignor.) | | | | | | |
| Noack, Carl O., Stamford, Conn., assignor, by mesne assignments, to New York Lock Company, New York, N. Y. Knob | 736,290 | Aug. 11 | 2350 | 510 | 105 | 1504 |
| Noble, Donald, London, England, assignor to Wheeler & Wilson Manufacturing Company, Bridgeport, Conn. Trimmer for sewing-machines | 724,321 | Mar. 31 | 5030 | 1127 / 1128 | 103 | 1108 |
| Noble, Donald, assignor to Wheeler & Wilson Manufacturing Company, Bridgeport, Conn. Presser-foot for eyelet-sewing machines | 724,322 | Mar. 31 | 5033 | 1128 | 103 | 1109 |
| Noble, Donald, London, England, and H. Walden, Philadelphia, Pa. Lacing-hook | 724,731 | Apr. 7 | 592 | 140 | 103 | 1294 |
| Noble, Frank H., Chicago, Ill. Pin for badges, &c. | 748,303 | Dec. 29 | 5567 | 1270 | 107 | 2400 |
| Noble, John E., Fort Wayne, Ind. Bridle | 725,626 | Apr. 14 | 2236 | 506 | 103 | 1660 |
| Noblé-Todd, George, Los Angeles, Cal. Wave-motor | 730,560 | June 9 | 1886 | 421 / 422 | 104 | 1533 |
| Noble, William A., Hillsdale, Mich. Post | 723,013 | Mar. 17 | 2522 | 566 | 103 | 565 |
| Noble, William J., New York, N. Y. Folding table | 737,455 | Aug. 25 | 4534 | 1016 | 105 | 2000 |
| Noble, Willie, West Union, W. Va. Nut-lock | 719,847 | Feb. 3 | 784 | 184 | 102 | 989 |
| Noble, Willie, and B. L. Wigton, West Union, W. Va. Hose-pipe coupling | 744,788 | Nov. 24 | 3850 | 829 | 107 | 869 |
| Noblet, George R., Paradise, Okla. Ter. Ship's propeller | 725,280 | Apr. 14 | 1591 | 360 | 103 | 1522 |
| Nobs, Charles, Jr., Newark, N. J. Watchcase-spring | 724,604 | Apr. 7 | 348 | 84 | 103 | 1243 |
| Nock, Harold E. (See Ball and Nock.) | | | | | | |
| Nock, William A., and B. F. Petry, West Alexandria, Ohio. Cross-line buckle | 731,808 | June 23 | 4215 | 940 | 104 | 2052 |
| Noe, George L., Weiland, Nev. Keyboard and attachment therefor | 733,261 | July 7 | 1010 | 242 | 105 | 211 |
| Noel, Sylvester D., Indianapolis, Ind. Cut-off for water-conductors | 728,281 | May 19 | 2761 | 613 | 104 | 628 |
| Noelting, Bernhard H., Nebraska City, Nebr. Caster and socket | 742,218 | Oct. 27 | 3572 | 798 | 106 | 2048 |
| Noever, Carl, Berlin, Germany. Safety or buffer car for railway-trains | 724,490 | Apr. 7 | 135 | 32 | 103 | 1198 |
| Nofziger, Daniel D., Archbold, Ohio. Grain-separator for threshing-machines | 745,371 | Dec. 1 | 104 | 24 | 107 | 1123 |
| Noiseless and Draughtless Door and Window Cushion Company. (See Vose, Clifton, assignor.) | | | | | | |
| Nokes, C. W., *et al.* (See Banwell, James, assignor.) | | | | | | |
| Nolan, John F., Chicago, Ill. Molding-machine | 719,250 | Jan. 27 | 3286 | 735 | 102 | 739 |
| Nolan, Martin S., Waltham, Mass. Clothes-drier | 739,705 | Sept. 22 | 4167 | 932 | 106 | 941 |
| Noland, John. (See Wilson, Clayton L., assignor.) | | | | | | |
| Nöldner, Bruno, assignor of one-half to M. Kohl, Breslau, Germany. Apparatus for manufacturing cement pipes or the like | 745,291 | Nov. 24 | 4825 | 1052 | 107 | 1070 |
| Nollesche Werke Act. Ges. (See Löser, Franz H., assignor.) | | | | | | |
| Nolley, David D., Wilson, N. C. Hasp-fastener | 730,684 | June 9 | 2116 | 470 | 104 | 1583 |
| Nolte, George F., St. Louis, Mo. Vapor-burner | 733,075 | July 7 | 668 | 160 | 105 | 142 |
| Non-Refillable Bottle and Cork Company. (See Barnett, William S., assignor.) | | | | | | |
| Non-Refillable Bottle and Cork Company. (See Shook, George W., assignor.) | | | | | | |
| Nopper, Carl F. (See Pierce, Arthur G., assignor.) | | | | | | |
| Norcross, Daniel C., North Billerica, Mass. Rod-guide for looms | 723,903 | Mar. 31 | 4176 | 941 | 103 | 936 |
| Norcross, Levi W., Paris, Tex. Piano | 717,600 | Jan. 6 | 142 | 36, 37 | 102 | 32 |
| Norcutt, Alfred G., and A. Hussel, Henderson, Ky. Oil-filter | 719,848 | Feb. 3 | 785 | 184 | 102 | 989 |
| Nordberg, Bruno V., Milwaukee, Wis. Feed-water-heating system for multiple-expansion engines | 728,282 | May 19 | 2762 | 614 | 104 | 628 |
| Nordberg, Bruno V., Milwaukee, Wis. Fluid-operated engine | 741,536 | Oct. 13 | 2207 | 491 / 492 | 106 | 1736 |
| Nordberg, Bruno V., assignor to Nordberg Manufacturing Company, Milwaukee, Wis. Discharge-valve for compressors | 721,221 | Feb. 24 | 3432 | 779 | 102 | 1595 |
| Nordberg Manufacturing Company. (See Nordberg, Bruno V., assignor.) | | | | | | |
| Nordberg, Oscar, Lilley, Mich. Sawing-machine | 728,753 | May 19 | 3641 | 809 | 104 | 812 |
| Norddeutscher Lloyd. (See Du Bois-Reymond, Alard, assignor.) | | | | | | |
| Norddeutscher Lloyd. (See Hoppe, Paul, assignor.) | | | | | | |
| Norden-Bittner Electric Company. (See Enright, George W., assignor.) | | | | | | |
| Norden-Bittner Electric Company. (See Norden, Mortimer, assignor.) | | | | | | |
| Norden, Mortimer, New York, N. Y. Electric-lamp socket | 742,725 | Oct. 27 | 4487 | 1016 | 106 | 2240 |
| Norden, Mortimer, assignor to Norden-Bittner Electric Company, New York, N. Y. Electric-lamp socket | 720,953 | Feb. 17 | 2857 | 653 | 102 | 1455 |
| Norden, Mortimer, assignor to Norden-Bittner Electric Company, New York, N. Y. Electric-lamp socket | 741,924 | Oct. 20 | 2949 | 657 | 106 | 1908 |
| Nordquist, Gustaf A. (See Jacobsen, John, assignor.) | | | | | | |
| Nordstrom, Axel, assignor to P. A. Blomfeldt and O. Rapp, Chicago, Ill. Numbering-machine | 741,819 | Oct. 20 | 2749 | 612 | 106 | 1867 |
| Nordt, John C., West Hoboken, N. J. Setting for precious stones | 733,262 | July 7 | 1013 | 243 | 105 | 212 |
| Nordt, John C., West Hoboken, N. J. Setting for precious stones | 733,263 | July 7 | 1014 | 243 | 105 | 212 |
| Nordyke & Marmon Company. (See Thompson, George F., assignor.) | | | | | | |
| Norfolk Canopy Company. (See Childress, Benjamin F., assignor.) | | | | | | |
| Norkewitz, Max W., assignor to A. Magnus Sons Company, Chicago, Ill. Bottle-rinser | 721,824 | Mar. 3 | 301 | 66 | 103 | 66 |
| Norman, Addison, Davisville, Canada. Last | 745,652 | Dec. 1 | 613 | 142 / 143 | 107 | 1229 |
| Norman, George. (See Driver and Norman.) | | | | | | |
| Norman, Thomas C. (See Norman, William C., assignor.) | | | | | | |
| Norman, Thomas E., assignor of one-half to J. Kirkman, Fall River, Mass. Picker-stick check for looms | 731,120 | June 16 | 2923 | 649 | 104 | 1769 |
| Norman, Thomas W., Boston, Mass. Cord or rope making machine | 723,178 | Mar. 17 | 2821 | 636 | 103 | 627 |
| Norman, William C., Smithton, Ark. Wall-calendar | 730,685 | June 9 | 2117 | 470 | 104 | 1583 |
| Norman, William C., Smithton, Ark. Fan attachment | 743,548 | Nov. 10 | 1504 | 314 | 107 | 338 |
| Norman, William C., assignor of one-half to T. C. Norman, Smithton, Ark. Fan attachment | 719,688 | Feb. 3 | 488 | 110 | 102 | 925 |
| Norman, William F., and J. H. Berghauser, Nevada, Mo. Valve for bucket-bottoms | 724,605 | Apr. 7 | 349 | 85 | 103 | 1244 |
| Normand, Françoise E. (See Normand, Jacques A., F. E., and M. E.) | | | | | | |
| Normand, Jacques A., F. E., and M. E., Havre, France. Apparatus for shaking the grate-bars of furnaces | 736,768 | Aug. 18 | 3240 | 716 | 105 | 1705 |
| Normand, Joseph M., assignor to United States Tool Holder Company, Springfield, Ohio. Tool-holder and cutter | 717,601 | Jan. 6 | 145 | 37 | 102 | 33 |
| Normand, Joseph M., assignor to United States Tool Holder Company, Springfield, Ohio. Tool-holder | 735,138 | Aug. 4 | 182 | 38 | 105 | 1021 |
| Normand, Marie E. (See Normand, Jacques A., F. E., and M. E.) | | | | | | |
| Normandin, Levi P., Jackson, Mich. Supporting-stand and mold for making building-blocks | 729,887 | June 2 | 675 | 149 | 104 | 1266 |
| Normandin, Levi P., assignor of three-fourths to W. F. Cowham, Jackson, Mich. Lifter for building-blocks | 718,506 | Jan. 13 | 1871 | 410 | 102 | 419 |
| Normandin, Levi P., assignor of three-fourths to W. F. Cowham, Jackson, Mich. Machine for manufacturing buildjng-blocks | 718,507 | Jan. 13 | 1873 | 411 | 102 | 419 |

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| Name, residence, and invention | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Normandin, Levi P., assignor of three-fourths to W. F. Cowham, Jackson, Mich. Building-block | 721,825 | Mar. 3 | 303 | 67 | 103 | 67 |
| Normandin, Levi P., assignor of three-fourths to W. F. Cowham, Jackson, Mich. Roof | 732,883 | July 7 | 334 | 82 | 105 | 73 |
| Normandin, Levi P., assignor of three-fourths to W. F. Cowham, Jackson, Mich. Lifter for building-blocks | 732,884 | July 7 | 335 | 82 | 105 | 74 |
| Norrington, Henry H., West Bay City, Mich. Manifold duplicating device | 728,601 | May 19 | 3374 | 747 | 104 | 756 |
| Norrington, Henry H., West Bay City, Mich. Manifolding device | 733,736 | July 14 | 1835 | 434 | 105 | 404 |
| Norris, Albert N., Rushville, Ind. Grain-drill | 728,492 | May 19 | 3149 | 696, 697 | 104 | 707 |
| Norris, Almon E., Cambridge, Mass. Hoisting apparatus | 721,599 | Feb. 24 | 4118 | 937 | 102 | 1741 |
| Norris, Almon E., Cambridge, Mass. Hoisting apparatus | 722,613 | Mar. 10 | 1773 | 395 | 103 | 396 |
| Norris, Almon E., Cambridge, Mass. Dumping apparatus | 735,139 | Aug. 4 | 183 | 39 | 105 | 1021 |
| Norris, Almon E., Cambridge, Mass. Driving apparatus | 748,412 | Dec. 29 | 5758 | 1313, 1314 | 107 | 2444 |
| Norris, Almon E., assignor to Rawson & Morrison Manufacturing Company, Cambridge, Mass. Hoisting apparatus | 719,033 | Jan. 27 | 2874 | 645 | 102 | 654 |
| Norris, Almon E., assignor to Rawson & Morrison Manufacturing Company, Cambridge, Mass. Clutch mechanism. (Reissue) | 12,085 | Feb. 24 | 4226 | 961 | 102 | 1766 |
| Norris, Almon E., assignor to Rawson & Morrison Manufacturing Company, Cambridge, Mass. Hoisting-bucket | 745,653 | Dec. 1 | 615 | 143 | 107 | 1229 |
| Norris, Arthur B., Rochester, N. Y. Machine for making packing-rings | 718,863 | Jan. 20 | 2548 | 567, 568 | 102 | 572 |
| Norris, Benjamin G. and J., Hazelton, Pa. Railway clamp and gage | 719,034 | Jan. 27 | 2881 | 645, 646 | 102 | 656 |
| Norris, Daniel E., assignor of two-thirds to W. C. Norris, Tiona, Pa. Tool-holder | 723,718 | Mar. 24 | 3830 | 861 | 103 | 846 |
| Norris, Ernest H., Cedar Rapids, Iowa. Nail-puller | 743,318 | Nov. 3 | 970 | 210 | 107 | 208 |
| Norris, Frank H., assignor of one-half to W. C. Norris, Tiona, Pa. Drilling-jar | 723,782 | Mar. 24 | 3941 | 889 | 103 | 870 |
| Norris, Frank M., Hunterville, New Zealand. Bottle | 718,017 | Jan. 6 | 945 | 209 | 102 | 203 |
| Norris, Frank W., Brooklyn, assignor to G. S., H., and A. P. Gallagher, New York, N. Y. Apparatus for applying disinfectants to water-closets | 721,909 | Mar. 3 | 465 | 102 | 103 | 102 |
| Norris, George E., Detroit, Mich. Ironing-machine | 741,065 | Oct. 13 | 1252 | 283, 284 | 106 | 1535 |
| Norris, H. C., *et al.* (See Hubbell, Thomas J., assignor.) | | | | | | |
| Norris, Henry M., Cincinnati, Ohio. Variable-speed mechanism | 726,976 | May 5 | 293 | 66 | 104 | 63 |
| Norris, Herbert J. (See Schwier, Benjamin F., assignor.) | | | | | | |
| Norris, James. (See Norris, Benjamin G. and J.) | | | | | | |
| Norris, John B. (See Ellicott and Norris.) | | | | | | |
| Norris, Joseph R. (See George and Norris.) | | | | | | |
| Norris, Richard. (See Organ, Thomas O., assignor.) | | | | | | |
| Norris, W. C. (See Norris, Daniel E., assignor.) | | | | | | |
| Norris, W. C. (See Norris, Frank H., assignor.) | | | | | | |
| Norris, William, assignor to T. Coulthard & Company, Limited, Preston, England. Motor-vehicle | 718,213 | Jan. 13 | 1292 | 284 | 102 | 292 |
| Norstrom, Carl H. (See Wigglesworth and Norstrom.) | | | | | | |
| Norstrom, John K. (See Brownrigg and Norstrom.) | | | | | | |
| North, Albert G., Pontiac, Mich. Knockdown drop-body vehicle | 717,903 | Jan. 6 | 731 | 163 | 102 | 156 |
| North American Fuel Company. (See Meade, Edward S., assignor.) | | | | | | |
| North American Manufacturing Company. (See Reilley, John W., assignor.) | | | | | | |
| North American Scale Company. (See Verplast, Frederick, assignor.) | | | | | | |
| North Brothers Manufacturing Company. (See Furbish, Zachry T., assignor.) | | | | | | |
| North, Charles, Colorado Springs, Colo. Device for roasting and warming peanuts or coffee | 727,674 | May 12 | 1598 | 361 | 104 | 361 |
| North, Edgar M., Brooklyn, N. Y. Cut-out for electric circuits | 742,895 | Nov. 3 | 133 | 30 | 107 | 29 |
| North, James K., and J. H. Hopkins, Punxsutawney, Pa. Post-driver | 737,456 | Aug. 25 | 4536 | 1017 | 105 | 2000 |
| North & Judd Manufacturing Company. (See Smith & Nearing, assignors.) | | | | | | |
| North & Judd Manufacturing Company. (See Thomson, Judson L., assignor.) | | | | | | |
| North, Theodore S., *et al.* (See Udstadt, Sivert, assignor.) | | | | | | |
| North, Thomas K., Westminster, England. Mechanism for feeding cartridges into machine-guns | 723,719 | Mar. 24 | 3831 | 861 | 103 | 846 |
| North, Thomas K., Westminster, England. Carriage for machine or other guns | 744,222 | Nov. 17 | 2826 | 604 | 107 | 632 |
| North, Thomas M., Brooklyn, N. Y., assignor to R. Hoe and Company. Cushion for reciprocating beds or other moving parts | 733,331 | July 7 | 1132 | 267, 268 | 105 | 239 |
| North, William H., assignor to Oriental Tea Company, Boston, Mass. Stopper for jars or tanks | 735,402 | Aug. 4 | 689 | 147 | 105 | 1127 |
| Northam, Robert J., Hollywood, Cal. Wrench | 725,124 | Apr. 14 | 1314 | 296 | 103 | 1464 |
| Northcott, William P., Chicago, Ill. Machine for grooving paper, &c | 734,278 | July 21 | 2927 | 684 | 105 | 654 |
| Northcott, William P., and H. B. Mounsey, Chicago, Ill. Loose-leaf binder | 745,372 | Dec. 1 | 105 | 25 | 107 | 1123 |
| Northcraft, Ambro J., St. Louis, Mo. Shooting-gallery target | 718,864 | Jan. 20 | 2555 | 569 | 102 | 573 |
| Northcraft, Ambro J., St. Louis, Mo. Shooting-gallery target | 718,865 | Jan. 20 | 2556 | 569 | 102 | 573 |
| Northern Electrical Manufacturing Company. (See Richards, Edgar G., assignor.) | | | | | | |
| Northern, Louis J., Robinson, Kans. Horseshoeing device | 735,288 | Aug. 4 | 490 | 98 | 105 | 1085 |
| Northey, John P., Toronto, Canada. Sound-producing device suitable for sirens or like instruments | 736,428 | Aug. 18 | 2592 | 568 | 105 | 1571 |
| Northfield, Harriet G., Minneapolis, Minn. Breech-cloth supporter | 727,188 | May 5 | 690 | 148 | 104 | 149 |
| Northrop, Ella I. (See Northrop, Henry L., assignor.) | | | | | | |
| Northrop, Frank L., assignor to Union Water Meter Company, Worcester, Mass. Rotary water-meter | 738,836 | Sept. 15 | 2595 | 573 | 106 | 588 |
| Northrop, Henry L., assignor to E. I. Northrop, Syracuse, N. Y. Glove | 735,140 | Aug. 4 | 187 | 39 | 105 | 1022 |
| Northrop, Herbert N., Somerville, Mass. Placket-holder | 718,018 | Jan. 6 | 946 | 209 | 102 | 204 |
| Northrop, Homer F., Waterbury, Conn. Photographic developing apparatus | 729,789 | June 2 | 488 | 108 | 104 | 1228 |
| Northrop, Jonas, assignor to Draper Company, Hopedale, Mass. Filling-replenishing loom | 718,575 | Jan. 13 | 2015 | 439, 440 | 102 | 448 |
| Northrop, Jonas, assignor to Draper Company, Hopedale, Mass. Automatic filling-replenishing loom | 718,576 | Jan. 13 | 2023 | 440, 441 | 102 | 450 |
| Northrop, Jonas, assignor to Draper Company, Hopedale, Mass. Filling-replenishing loom | 724,120 | Mar. 31 | 4629 | 1043 | 103 | 1028 |
| Northrop, Jonas, assignor to Draper Company, Hopedale, Mass. Filling-replenishing loom | 724,121 | Mar. 31 | 4630 | 1043 | 103 | 1029 |
| Northrop, Jonas, assignor to Draper Company, Hopedale, Mass. Self-threading loom-shuttle | 726,977 | May 5 | 295 | 66 | 104 | 64 |
| Northrop, Jonas, assignor to Draper Company, Hopedale, Mass. Filling-replenishing loom | 726,978 | May 5 | 298 | 66, 67 | 104 | 64 |
| Northrop, Jonas, Hopedale, Mass., assignor to Draper Company, Portland, Me. Self-threading loom-shuttle | 729,086 | May 26 | 4246 | 938 | 104 | 950 |
| Northrop, Jonas, assignor to Draper Company, Hopedale, Mass. Take-up-arresting mechanism for looms | 729,644 | June 2 | 214 | 49 | 104 | 1172 |

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| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| Northrop, Jonas, assignor to Draper Company, Hopedale, Mass. Take-up mechanism for looms | 720,645 | June 2 | 216 | 49,50 | 104 | 1172 |
| Northrop, Jonas, assignor to Draper Company, Hopedale, Mass. Warp stop-motion for looms | 732,885 | July 7 | 336 | 83 | 105 | 74 |
| Northrop, Jonas, assignor to Draper Company, Hopedale, Mass. Filling-replenishing loom | 741,700 | Oct. 20 | 2525 | 564, 565 | 106 | 1821 |
| Northrop, Edwin F., Philadelphia, Pa. Synchronous code telegraphy | 726,735 | Apr. 28 | 4313 | 973, 974 | 103 | 2116 |
| Northrop, Edwin F., Philadelphia, Pa. Synchronous code telegraphy | 726,736 | Apr. 28 | 4318 | 974 | 103 | 2118 |
| Northrop, Edwin F., assignor to M. E. Leeds and Company, Philadelphia, Pa. Resistance-coil | 725,355 | Apr. 14 | 1732 | 390 | 103 | 1551 |
| Northrop, Edwin F., assignor to M. E. Leeds and Company, Philadelphia, Pa. Resistance set | 731,209 | June 16 | 3082 | 684 | 104 | 1800 |
| Northrop, Edwin F., assignor to M. E. Leeds and Company, Philadelphia, Pa. Resistance set | 731,210 | June 16 | 3086 | 684 | 104 | 1801 |
| Northrop, Edwin F., assignor to Rowland Telegraphic Company, Baltimore, Md. Electric circuit | 726,734 | Apr. 28 | 4311 | 973 | 103 | 2116 |
| Northwestern Furniture Company. (See Haase, Charles L., Jr., assignor.) | | | | | | |
| Northwestern Storage Battery Company. (See Gardiner, William, assignor.) | | | | | | |
| Northwestern Storage Battery Company. (See Gardiner and Macmillan, assignors.) | | | | | | |
| Norton, Bernard W., Meriden, assignor to H. J. P. Whipple, New Haven, Conn. Knob attachment | 720,056 | Feb. 10 | 1185 | 271 | 102 | 1091 |
| Norton, C. E., *et al.* (See Hubbell, Thomas J., assignor.) | | | | | | |
| Norton, Charles H., assignor to Brown and Sharpe Manufacturing Company, Providence, R. I. Steady-rest for grinding-machines | 732,314 | June 30 | 5192 | 1154 | 104 | 2269 |
| Norton, Downes E., Hampton Hill, England. Propelling-gear for cycles | 720,278 | Feb. 10 | 1611 | 369 | 102 | 1179 |
| Norton, Downes E., Hampton Hill, England. Propelling mechanism for boats | 720,534 | Feb. 10 | 2078 | 479 | 102 | 1276 |
| Norton, Edwin, New York, N. Y. Bottle cap or closure for bottles, jars, &c | 726,451 | Apr. 28 | 3751 | 850 | 103 | 2005 |
| Norton, Edwin, New York, N. Y. Bottle-cap | 730,561 | June 9 | 1892 | 422 | 104 | 1534 |
| Norton, Edwin, New York, N. Y. Bottle-cap | 736,001 | Aug. 11 | 1852 | 396 | 105 | 1395 |
| Norton, Edwin, New York, N. Y., assignor to Automatic Vacuum Canning Company, Chicago, Ill. Vacuum-sealing sheet-metal can | 717,710 | Jan. 6 | 339 | 83 | 102 | 73 |
| Norton, Edwin, New York, N. Y., assignor to Automatic Vacuum Canning Company, Chicago, Ill. Vacuum-sealing sheet-metal cans or vessels | 717,711 | Jan. 6 | 340 | 83 | 102 | 74 |
| Norton, Edwin, New York, N. Y., assignor to Automatic Vacuum Canning Company, Chicago, Ill. Vacuumizing and double-seaming machine | 737,009 | Aug. 25 | 3706 | 822, 823 | 105 | 1823 |
| Norton, Edwin, New York, N. Y., and J. G. Hodgson, Maywood, assignors to Automatic Vacuum Canning Company, Chicago, Ill. Vacuumizing and double-seaming machine | 727,675 | May 12 | 1599 | 362, 363, 364, 365 | 104 | 361 |
| Norton, Ernest C. (See MacRae, John L., assignor.) | | | | | | |
| Norton, Frederick L., Racine, Wis. Trail-vehicle and connections therefor | 719,129 | Jan. 27 | 3080 | 685 | 102 | 696 |
| Norton, George B., Denver, Colo. Book-protector | 744,598 | Nov. 17 | 3474 | 750 | 107 | 770 |
| Norton, Gerrit, assignor to M. M. Norton, New York, N. Y. Bottle-filling machine | 740,899 | Oct. 6 | 945 | 212, 213 | 106 | 1449 |
| Norton, James A., Odebolt, Iowa. Expansive-fluid motor | 729,209 | May 26 | 4464 | 984 | 104 | 995 |
| Norton, James A., Odebolt, Iowa. Expansive-fluid motor | 729,507 | May 26 | 4966 | 1100, 1101 | 104 | 1102 |
| Norton, James A., Odebolt, assignor of one-half to P. T. Flinn, Denison, Iowa. Railway signaling apparatus | 744,599 | Nov. 17 | 3475 | 750 | 107 | 770 |
| Norton, James A., Odebolt, and A. F. Rockwell, Sioux City, Iowa; said Rockwell assignor to said Norton. Expansive-fluid motor | 729,210 | May 26 | 4467 | 984 | 104 | 996 |
| Norton, Joseph C., *et al.* (See Banwell, James, assignor.) | | | | | | |
| Norton, Martha M. (See Norton, Gerrit, assignor.) | | | | | | |
| Norton, Mason S., San Francisco, Cal. Rural-delivery mail-box | 720,279 | Feb. 10 | 1613 | 369 | 102 | 1179 |
| Norton, Roger W., Chicago, Ill. Music-rack | 744,386 | Nov. 17 | 3126 | 671 | 107 | 698 |
| Norton, Wendell P., Torrington, Conn. Change-speed attachment for milling-machines | 718,866 | Jan. 20 | 2557 | 569, 570 | 102 | 573 |
| Norton, William B., assignor to Detroit Trolley & Manufacturing Company, Limited, Detroit, Mich. Trolley-stand | 722,036 | Mar. 3 | 711 | 158 | 103 | 153 |
| Norton, William C., Salem, Mass. Thermal gas-valve | 717,904 | Jan. 6 | 732 | 164 | 102 | 156 |
| Norwich Pharmacal Company. (See Bell, Oscar G., assignor.) | | | | | | |
| Norwood, Clarence H., assignor to Siemens & Halske Electric Company of America, Chicago, Ill. Circuit-breaker | 729,211 | May 26 | 4469 | 984 | 104 | 996 |
| Norwood, John E., assignor to Baltimore Ball Bearing Company, Baltimore, Md. Interlocking center bearing for cars | 719,496 | Feb. 3 | 155 | 35 | 102 | 856 |
| Norwood, John E., assignor to Baltimore Ball Bearing Co., Baltimore, Md. Side bearing for cars | 719,951 | Feb. 3 | 955 | 222, 223 | 102 | 1026 |
| Norwood, John E., assignor to Baltimore Ball Bearing Co., Baltimore, Md. Side bearing for cars | 719,952 | Feb. 3 | 959 | 223 | 102 | 1027 |
| Norwood, John E., assignor to Baltimore Ball Bearing Company, Baltimore, Md. Center-bearing | 736,539 | Aug. 18 | 2801 | 613 | 105 | 1616 |
| Norwood, Susan A., Portland, Oreg. Window shade and curtain fixture | 736,334 | Aug. 11 | 2421 | 529 | 105 | 1519 |
| Noss, Frank R., Rochester, Pa. Valve for dry-pipe fire-extinguisher systems | 737,861 | Sept. 1 | 595 | 130 | 106 | 131 |
| Nothacker, Albert J. (See Paulson, Charles J., assignor.) | | | | | | |
| Nott, William G., Toronto, Canada. Tubular skate | 729,648 | June 2 | 222 | 50 | 104 | 1174 |
| Nottelle, Marie P. S., Paris, France. Corset | 730,147 | June 2 | 1121 | 252 | 104 | 1355 |
| Nourie, Joseph C., Philadelphia, Pa. Nose-guard for eyeglasses | 739,439 | Sept. 22 | 3697 | 823 | 106 | 839 |
| Nourse, Henry M., Boston, Mass. Signal or other staff | 744,977 | Nov. 24 | 4186 | 905 | 107 | 938 |
| Nousse, Peter, Chicago, Ill. Knife-grinding machine | 741,537 | Oct. 13 | 2211 | 492 | 106 | 1737 |
| Novak, Charles J., Cedar Rapids, Iowa. Saw-frame stretcher | 732,315 | June 30 | 5197 | 1154 | 104 | 2270 |
| Novelty Appliance Company. (See Jenkins, Charles F., assignor.) | | | | | | |
| Novelty Mfg. Co. (See Kirschbaum, John, assignor.) | | | | | | |
| Novinger, Raymond, Centerview, Pa. Railway-frog | 734,132 | July 21 | 2649 | 625 | 105 | 593 |
| Nowák, Emil, assignor to J. J. Jungfermann, A. Hoffmann, Vienna, Austria-Hungary, and H. Tichsen, Schloss Buchengrund, near Lüben, Prussian Silesia, Germany. Typewriter | 737,457 | Aug. 25 | 4537 | 1017 | 105 | 2001 |
| Nowak, John W., Allegheny, Pa. Steam-engine | 724,201 | Mar. 31 | 4794 | 1074 | 103 | 1061 |
| Nowak, John W., Allegheny, Pa. Clothes-wringer-gear casing | 726,737 | Apr. 28 | 4324 | 974 | 103 | 2119 |
| Nowak, John W., Allegheny, Pa. Propeller-wheel | 729,397 | May 26 | 4790 | 1060 | 104 | 1063 |
| Nowarra, Josef. (See Reinelt and Nowarra.) | | | | | | |
| Nowell, Hallie L. (See Allan, John R., assignor.) | | | | | | |
| Nowlin, Clifford E., Battlecreek, Mich. Railway-switch | 725,008 | Apr. 7 | 1094 | 248, 249 | 103 | 1402 |
| Noxon, Charles P. L., assignor of one-half to H. H. Franklin Manufacturing Company, Syracuse, N. Y. Spark-coil | 747,755 | Dec. 22 | 4494 | 1013 | 107 | 2144 |

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| Noxon, Elwin I. (See Olsen and Noxon.) | | | | | | |
| Noxon, William, Bloomfield, Canada. Cow-tail holder | 717,712 | Jan. 6 | 341 | 83 | 102 | 74 |
| Noyes, Charles H., Decatur, Nebr. Steam-drier | 736,429 | Aug. 18 | 2593 | 568 | 105 | 1571 |
| Noyes, Horatio J., Ashtabula, Ohio. Pipe-damper | 733,737 | July 14 | 1837 | 434 | 105 | 404 |
| Noyes, La Verne W., Chicago, Ill. Manufacture of cages for roller-bearings | 725,763 | Apr. 21 | 2503 | 569 | 103 | 1732 |
| Noyes, La Verne W., Chicago, Ill. Impulse wheel | 743,023 | Nov. 3 | 393 | 85 | 107 | 82 |
| Noyes, Mayhew E., assignor to J. M. Dougherty, Cincinnati, and W. Cooper, Norwood, Ohio. Bottle-capping machine | 720,175 | Feb. 10 | 1402 | 320 | 102 | 1137 |
| Noyes, William H., Newburyport, Mass., assignor to A. L. Prescott, Passaic, N. J. Automobile carriage | 722,243 | Mar. 10 | 1102 | 242 | 103 | 250 |
| Nubson, Ole A. (See Grosland, Ole H., assignor.) | | | | | | |
| Nugent, Edgar A., Unionville, N. Y. Bottle-stopper | 736,430 | Aug. 18 | 2595 | 569 | 105 | 1571 |
| Nunamaker, Arthur S., Lexington County, assignor of one-half to G. W. Lybrand, Brookland, S. C. Measuring-wheel or traveler | 727,420 | May 5 | 1103 | 242 | 104 | 238 |
| Nunamaker, John W., Chicago, Ill. Chronometer-escapement | 731,605 | June 23 | 3845 | 857 | 104 | 1974 |
| Nunan, Clara, Cape Porpoise, Me. Grate | 723,705 | Mar. 24 | 3801 | 855 | 103 | 840 |
| Nunan, John F., Melbourne, Victoria, Australia. Bed, mattress, or cushion | 722,135 | Mar. 3 | 870 | 194<br>195 | 103 | 186 |
| Nunn, Alfred W., assignor to A. W. Nunn, Cambridge, and C. D. Lyford, Watertown, Mass., trustees, and T. C. Brinkley, Cleveland, Ohio. Spool for use with automatically-playing musical instruments | 733,738 | July 14 | 1838 | 434 | 105 | 405 |
| Nunn, Nathaniel G., assignor to American Laundry Machinery Company, Cincinnati, Ohio. Washing-machine | 729,087 | May 26 | 4248 | 939 | 104 | 950 |
| Nunnally, William A., Richmond, Va. Gage for setting crank-pins | 737,560 | Aug. 25 | 4723 | 1060 | 105 | 2043 |
| Nürnberger Motorfahrzenge Fabrik "Union" G. M. B. H. (See Maurer, Ludwig, assignor.) | | | | | | |
| Nuss, Wilhelm J., Cologne-Lindenthal, Germany. Apparatus for condensating steam | 745,513 | Dec. 1 | 376 | 87 | 107 | 1180 |
| Nuss, Winfred W. (See Roberts, George W., assignor.) | | | | | | |
| Nutry, John, New York, N. Y. Metallic box | 733,332 | July 7 | 1134 | 268 | 105 | 239 |
| Nutsch, Joseph W., Morrowville, Kans. Stalk-cutter | 719,497 | Feb. 3 | 156 | 35 | 102 | 857 |
| Nutt, John M., Gainesville, Ark. Fence | 729,646 | June 2 | 220 | 50 | 104 | 1173 |
| Nuttall, Richard M., Allegheny, Pa. Die-head for lathes | 731,121 | June 16 | 2924 | 650 | 104 | 1770 |
| Nuttall, William L., Newcastle, Ky. Hemostatic forceps | 724,034 | Mar. 31 | 4460 | 1004 | 103 | 993 |
| Nutting, Fred J., assignor to National Cash Register Company, Dayton, Ohio. Cash-register | 739,706 | Sept. 22 | 4168 | 932 | 106 | 941 |
| Nutting, Frederick J., Dayton, Ohio. Friction-clutch | 722,244 | Mar. 10 | 1103 | 243 | 103 | 251 |
| Nutting, Frederick J., Dayton, Ohio. Variable-speed-transmission mechanism | 722,245 | Mar. 10 | 1105 | 243 | 103 | 251 |
| Nutting, Frederick J., Dayton, Ohio. Multiple-drill press | 734,082 | July 21 | 2549 | 595 | 105 | 574 |
| Nutting, Frederick J., assignor to National Automatic Tool Co., Dayton, Ohio. Tap | 729,647 | June 2 | 221 | 50 | 104 | 1173 |
| Nutty, Robert, New York, N. Y. Utilization of compressed air | 745,373 | Dec. 1 | 108 | 25 | 107 | 1124 |
| Ny, Paul, Berkeley, Cal. Treating and producing metal surfaces from which prints may be taken | 739,339 | Sept. 22 | 3482 | 778 | 106 | 792 |
| Nyberg, Henry, Kenosha, Wis. Shaft connection | 729,649 | June 2 | 225 | 51 | 104 | 1174 |
| Nye, Alvin F., Rochester, N. Y., assignor to W. M. Nye. Molding-knife protractor | 731,066 | June 16 | 2820 | 627 | 104 | 1750 |
| Nye, Charles F., Warsaw, Ind. Display-stand | 736,141 | Aug. 11 | 2097 | 450 | 105 | 1447 |
| Nye, Clarence G., and F. E. Jenkins, Columbus, Ohio. Power-transmission gearing | 733,076 | July 7 | 670 | 160<br>161 | 105 | 142 |
| Nye, Frederick C., Syracuse, N. Y. Disinfecting apparatus | 748,413 | Dec. 29 | 5763 | 1314 | 107 | 2445 |
| Nye, John R., Waterville, Me. Gearing | 726,738 | Apr. 28 | 4325 | 975 | 103 | 2119 |
| Nye, Robert, Moline, Ill. Automatic dumping device for ore-buckets | 735,571 | Aug. 4 | 1039 | 221 | 105 | 1201 |
| Nye, Wales M. (See Nye, Alvin F., assignor.) | | | | | | |
| Nye, William C., Dallas, Tex. Garment-supporter | 722,741 | Mar. 17 | 2047 | 457 | 103 | 469 |
| Nysewander, David J., Toledo, Ohio. Pump-operating mechanism | 727,189 | May 5 | 691 | 148 | 104 | 149 |
| O. A. Miller Treeing Machine Company. (See Batchelder, Charles A., assignor.) | | | | | | |
| O. B. North & Co. (See Smith, Charles H., assignor.) | | | | | | |
| O. C. A. Swing Company. (See Smith, Eugene C., assignor.) | | | | | | |
| O'Bannon, Felipe B., and F. J. Chamberlain, assignors of one-third to G. E. Lewis, Albuquerque, N. Mex. Ter.; said Chamberlain assignor of his remaining one-third to said O'Bannon. Air-brake attachment | 740,306 | Sept. 29 | 5305 | 1195 | 106 | 1198 |
| O'Brien, Alexander J., assignor of one-half to C. A. Gault, Beloit, Wis. Oil-burner | 741,820 | Oct. 20 | 2752 | 613 | 106 | 1868 |
| O'Brien, Arthur, assignor to A. H. Rugg and T. G. McCulloh, Chicago, Ill. Combined pipe die and reamer | 746,136 | Dec. 8 | 1513 | 338 | 107 | 1443 |
| O'Brien, Arthur, assignor to A. H. Rugg and T. G. McCulloh, Chicago, Ill. Combined die and reamer | 746,137 | Dec. 8 | 1514 | 339 | 107 | 1444 |
| O'Brien, Cornelius P. (See Morrissey and O'Brien.) | | | | | | |
| O'Brien, Daniel P., Woburn, Mass. Ring-roll | 733,264 | July 7 | 1015 | 243 | 105 | 212 |
| O'Brien, Dennis, Limestone, N. Y. Telephone-transmitter | 739,208 | Sept. 15 | 3245 | 718 | 106 | 725 |
| O'Brien, Dennis J., San Francisco, Cal., assignor to O'Brien Electric Light Letter Company. System of electrical characters and means for forming same | 740,585 | Oct. 6 | 396 | 83 | 106 | 1331 |
| O'Brien, Dennis J., assignor of one-half to T. A. Rottanzi, San Francisco, Cal. Reflector | 744,287 | Nov. 17 | 3128 | 672 | 107 | 699 |
| O'Brien, Dennis J., assignor to J. L. McCormick, San Francisco, Cal., and O'Brien Electric Light Letter Company. Display-light | 747,212 | Dec. 15 | 3504 | 795<br>796 | 107 | 1904 |
| O'Brien Electric Light Letter Company *et al.* (See O'Brien, Dennis J., assignor.) | | | | | | |
| O'Brien, Frank P., Cincinnati, assignor of one-half to J. Dietrich, Milford, Ohio. Upholstery-spring | 720,956 | Feb. 17 | 2862 | 654 | 102 | 1456 |
| O'Brien, James H., Ilion, N. Y. Lace-fastener | 736,142 | Aug. 11 | 2098 | 450 | 105 | 1447 |
| O'Brien, John D., St. Louis, Mo. Lathing for plastering | 721,074 | Feb. 17 | 3075 | 706 | 102 | 1502 |
| O'Brien, John J., St. Louis, Mo. Draw-bar equipment | 721,523 | Feb. 24 | 3961 | 902 | 102 | 1706 |
| O'Brien, John J., assignor to John O'Brien Boiler Works Company, St. Louis, Mo. Water-tube boiler | 731,211 | June 16 | 3089 | 685 | 104 | 1801 |
| O'Brien, John T., Philadelphia, Pa. Fireproof building construction | 718,214 | Jan. 13 | 1293 | 285 | 102 | 293 |
| O'Brien, Joseph J., San Jose, Cal. Folding case | 736,871 | Aug. 18 | 3446 | 764 | 105 | 1748 |
| O'Brien, Louis. (See Weeks and O'Brien.) | | | | | | |
| O'Brien, Michael, assignor to Chicago City Railway Company, Chicago, Ill. Brake-operating device | 741,160 | Oct. 13 | 1429 | 327 | 106 | 1570 |
| O'Brien, Thomas J., *et al.* (See McGuire, Peter J., assignor.) | | | | | | |
| O'Brien, Timothy, Pittsburg, Pa. Adjustable joist for supporting fireproof floors | 737,133 | Aug. 25 | 3910 | 868<br>869 | 105 | 1866 |
| O'Brien, William. (See Edwards, Louis C., assignor.) | | | | | | |
| O'Brien, William C., Baltimore, Md. Quick-action make-and-break switch | 741,268 | Oct. 13 | 1643 | 370 | 106 | 1616 |
| O'Brien, William F., and D. S. Keith, Whitman, Mass. Machine for cutting shank-stiffeners | 740,169 | Sept. 29 | 5054 | 1137 | 106 | 1147 |
| O'Brien, William P., Indianapolis, Ind. Governor | 729,888 | June 2 | 677 | 149 | 104 | 1266 |
| O'Bryan, Francis L., assignor of one-half to W. T. Brown, Winston-Salem, N. C. Alternating-current motor | 736,292 | Aug. 11 | 2353 | 511 | 105 | 1504 |
| O'Bryan, Francis L., assignor of one-half to W. T. Brown, Winston-Salem, N. C. Electrical display system | 743,024 | Nov. 3 | 395 | 85, 86 | 107 | 83 |

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| O'Connell, James. (See Feely, John J., assignor.) | | | | | | |
| O'Connell, James E., *et al.* (See Rieske, Otto G., assignor.) | | | | | | |
| O'Connell, Joseph J., Chicago, Ill., assignor to American Telephone and Telegraph Company. Cable-terminal | 737,829 | May 12 | 1903 | 425 | 104 | 423 |
| O'Connell, Joseph J., Chicago, Ill., assignor to American Telephone and Telegraph Company. Busy-test apparatus for telephone-switchboards | 736,003 | Aug. 11 | 1853 | 397 | 105 | 1395 |
| O'Connell, Joseph J., assignor to Western Electric Company, Chicago, Ill. Telephone-exchange system | 730,291 | June 9 | 1402 | 308 | 104 | 1430 |
| O'Connor, Albert, Ennismore, Canada. Seeding-machine | 740,687 | Oct. 6 | 557 | 125 | 106 | 1367 |
| O'Connor, Charles, Manchester, N. H. Stopper-valve for casting-ladles | 743,549 | Nov. 10 | 1505 | 315 | 107 | 338 |
| O'Connor, Edward B., Courtney, Mo. Shovel attachment | 738,057 | Sept. 1 | 983 | 218 | 106 | 214 |
| O'Connor, James, New York, N. Y. Musical instrument | 743,319 | Nov. 3 | 977 | 211 | 107 | 208 |
| O'Connor, Jeremiah, Leavenworth, Kans. Nut-lock | 741,701 | Oct. 20 | 2533 | 565 | 106 | 1822 |
| O'Connor, John, *et al.* (See Maheu, Victor, assignor.) | | | | | | |
| O'Connor, John, and C. A. Turner, New York, N. Y. Alarm for water-containing vessels | 742,219 | Oct. 27 | 3573 | 798 | 106 | 2048 |
| O'Connor, John F., assignor of one-half to F. W. Coolbaugh, Easton, Pa. Draw-bar spring for railway-cars | 717,602 | Jan. 6 | 146 | 38 | 102 | 33 |
| O'Connor, John F., assignor of one-half to F. W. Coolbaugh, Easton, Pa. Railway-car truck | 717,603 | Jan. 6 | 147 | 38 | 102 | 33 |
| O'Connor, Michael, Missouri Valley, Iowa. Steam-boiler | 736,621 | Aug. 18 | 2971 | 653 | 105 | 1649 |
| O'Connor, Michael J., Brooklyn, N. Y. Pocket-knife | 748,521 | Dec. 29 | 5974 | 1355 | 107 | 2490 |
| O'Connor, Michael P., West Newton, Mass. Lace-fastener | 745,890 | Dec. 1 | 1066 | 240 | 107 | 1325 |
| O'Connor, Samuel S., assignor of one half to C. K. MacFadden, Geneva, Ind. Pipe-driving attachment | 730,838 | June 9 | 2366 | 522<br>523 | 104 | 1636 |
| O'Conor, Margaret A., Troy, N. Y. Drying-closet | 719,130 | Jan. 27 | 3082 | 685 | 102 | 696 |
| O'Donal, James C., Mexico, Mo. Device for oiling floors | 725,281 | Apr. 14 | 1592 | 360 | 103 | 1522 |
| O'Donal, James C., Mexico, Mo. Device for oiling floors | 725,282 | Apr. 14 | 1594 | 360 | 103 | 1522 |
| O'Donnell, Edmond G., Fall River, Mass., assignor, by mesne assignments, to Wheeler & Wilson Manufacturing Company, Bridgeport, Conn. Hat-sewing machine | 728,602 | May 19 | 3376 | 748 | 104 | 756 |
| O'Donnell, Edmond G., Fall River, Mass., assignor, by mesne assignments, to Wheeler & Wilson Manufacturing Company, Bridgeport, Conn. Hat-sewing machine | 734,933 | July 28 | 4145 | 965 | 105 | 921 |
| O'Donnell, Ella M., administratrix. (See O'Donnell, John B.) | | | | | | |
| O'Donnell, Emma V. (See O'Donnell, Mary F. and E. V.) | | | | | | |
| O'Donnell, John B., deceased; E. M. O'Donnell, administratrix, assignor of one-fourth to J. R. Pollard, Kansas City, Mo. Air and gas engine | 724,606 | Apr. 7 | 350 | 85 | 103 | 1244 |
| O'Donnell, John B., deceased, (E. M. O'Donnell, administratrix,) assignor of one-fourth to J. R. Pollard, Kansas City, Mo. Pump | 738,931 | Sept. 15 | 2761 | 610 | 106 | 625 |
| O'Donnell, John B., deceased, (E. M. O'Donnell, administratrix,) assignor of one-fourth to J. R. Pollard, Kansas City, Mo. Governor | 740,688 | Oct. 6 | 561 | 125 | 106 | 1368 |
| O'Donnell, John H., Waterbury, Conn. Wire-drawing machine | 725,472 | Apr. 14 | 1955 | 439<br>440 | 103 | 1599 |
| O'Donnell, John H., Waterbury, Conn. Drawing-roll or head for wire-drawing machines | 725,473 | Apr. 14 | 1957 | 440 | 103 | 1599 |
| O'Donnell, John H., assignor to Waterbury Machine Company, Waterbury, Conn. Stop mechanism for wire-drawing machines | 732,370 | June 30 | 5311 | 1177 | 104 | 2294 |
| O'Donnell, John H., assignor to Waterbury Machine Company, Waterbury, Conn. Wire-drawing machine | 738,932 | Sept. 15 | 2762 | 610<br>611 | 106 | 625 |
| O'Donnell, John H., assignor to Waterbury Machine Company, Waterbury, Conn. Wire-drawing machine | 738,933 | Sept. 15 | 2763 | 611 | 106 | 625 |
| O'Donnell, John J., Aylmer, Canada. Trolley-pole controller | 731,606 | June 23 | 3847 | 858 | 104 | 1975 |
| O'Donnell, John P. (See Irving, Ernest C., assignor.) | | | | | | |
| O'Donnell, Joseph E., Camden, N. J. Tube-bending machine | 727,676 | May 12 | 1604 | 365 | 104 | 363 |
| O'Donnell, Mary F. and E. V., Syracuse, N. Y. Skirt-pattern | 734,279 | July 21 | 2931 | 685 | 105 | 655 |
| O'Donnell, Samuel D., Cameron, Mo. Ink-well | 748,002 | Dec. 29 | 5010 | 1132 | 107 | 2280 |
| O'Donnell, Thomas. (See Ryan, Dennis, assignor.) | | | | | | |
| O'Donohue, Joseph J., Jr. (See Ryder and Qualey, assignors.) | | | | | | |
| O'Dowd, Henry W., Newark, N. J. Gas-heating sad-iron | 725,865 | Apr. 21 | 2688 | 612 | 103 | 1771 |
| O'Gorman, Michael J. (See Church and O'Gorman.) | | | | | | |
| O'Hale, Patrick F., *et al.* (See Good, John, assignor.) | | | | | | |
| O'Hanlon, Felix B., Portadown, Ireland. Automatic regulator for constant-current dynamos | 722,535 | Mar. 10 | 1642 | 362 | 103 | 369 |
| O'Hara, William E., Oldforge, Pa. Water-closet | 732,955 | July 7 | 454 | 113 | 105 | 98 |
| O'Hare, Patrick F., *et al.* (See Good, John, assignor.) | | | | | | |
| O'Keefe, William H., Lockport, N. Y. Shade-roller | 730,292 | June 9 | 1406 | 308 | 104 | 1430 |
| O'Kelly, James M., New York, N. Y. Attachment for gas-burners | 719,252 | Jan. 27 | 3290 | 737 | 102 | 740 |
| O'Leary, Clement D., Providence, R. I. Tidal elevator | 731,491 | June 23 | 3624 | 809 | 104 | 1932 |
| O'Leary, John, assignor of one-half to L. Vermilyea, Cohoes, N. Y. Convertible car | 746,987 | Dec. 15 | 3081 | 705<br>706 | 107 | 1809 |
| O'Loughlin, Dennis F., Moorhead, Minn. Metallic horse-collar | 737,459 | Aug. 25 | 4541 | 1018 | 105 | 2001 |
| O'Loughlin, Robert S., Glens Falls, and J. F. Birmingham, Brooklyn, N. Y.; said O'Loughlin assignor to said Birmingham. Garment-pattern | 726,739 | Apr. 28 | 4326 | 975 | 103 | 2119 |
| O'Malley, Edward J., McMechen, assignor of one-half to J. E. Wright, Wheeling, W. Va. Chain-tightening device | 721,635 | Feb. 24 | 4190 | 953 | 102 | 1758 |
| O'Malley, Howard M., Chagrin Falls, Ohio. Vehicle-wheel | 728,494 | May 19 | 3152 | 697 | 104 | 708 |
| O'Malley, Walter W., deceased; B. M. Scott, Coalport, Pa., administrator. Electrical traction device | 722,255 | Mar. 10 | 1121 | 247 | 103 | 354 |
| O'Mara, Joseph P., and J. S. Boa, Bridgeport, Conn. Device for striping and spotting pool-balls | 734,085 | July 21 | 2555 | 596<br>597 | 105 | 575 |
| O'Marra, Martin, Kingston, N. Y. Calendar | 726,979 | May 5 | 303 | 67 | 104 | 65 |
| O'Meara, Jeremiah, New York, N. Y., assignor to O'Meara Valve Company, Jersey City, N. J. Valve | 735,039 | July 28 | 4339 | 1008 | 105 | 960 |
| O'Meara, Matthew and M. B., San Francisco, Cal. Non-refillable bottle | 728,127 | May 12 | 2453 | 546 | 104 | 540 |
| O'Meara, Morris B. (See O'Meara, Matthew and M. B.) | | | | | | |
| O'Meara Valve Company. (See O'Meara, Jeremiah, assignor.) | | | | | | |
| O'Neil, Cornelius F., Paterson, N. J. Sprinkling-cart | 727,422 | May 5 | 1107 | 242 | 104 | 239 |
| O'Neil, Edward C., San Francisco, Cal. Attachment for horse-blankets | 720,839 | Feb. 17 | 2631 | 607 | 102 | 1407 |
| O'Neil, John A. (See McIntire, George A., assignor.) | | | | | | |
| O'Neil, John R., assignor to Draper Company, Hopedale, Mass. Thread-guide for twisters | 721,828 | Mar. 3 | 310 | 68 | 103 | 68 |
| O'Neil, Thomas F., Girard, Ohio. Nut-lock | 726,740 | Apr. 28 | 4326 | 975 | 103 | 2119 |
| O'Neill, Andrew. (See Reynolds, Aldo E., assignor.) | | | | | | |
| O'Neill, Annie, *et al.* (See O'Neill, William F., assignor.) | | | | | | |
| O'Neill, Charles J., *et al.* (See Haley, John C., assignor.) | | | | | | |
| O'Neill, Edward, Milwaukee, Wis. Window-sash lock | 736,335 | Aug. 11 | 2423 | 529 | 105 | 1520 |
| O'Neill, John. (See Arpin, Eusebe, assignor.) | | | | | | |
| O'Neill, John J., *et al.* (See O'Neill, William F., assignor.) | | | | | | |
| O'Neill, William F., assignor to G. J. Wilkinson, J. H. Kenney, J. J. O'Neill, and A. O'Neill, Boston, Mass. Liquid strainer and mixer | 737,014 | Aug. 25 | 3717 | 825 | 105 | 1826 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|
| | | | Spec. | Drg. | Vol. | Page |
| O'Reilly, Anthony J., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Needle-motion for pile-fabric looms | 740,903 | Oct. 6 | 953 | 214 | 106 | 1450 |
| O'Reilly, Anthony J., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Comb-dabbing brush mechanism | 744,389 | Nov. 17 | 3132 | 672 | 107 | 699 |
| O'Reilly, Bernard J. (See Hunt, Albert C., assignor.) | | | | | | |
| O'Reilly, Henry, Dublin, Ireland. Bearing for shafts and axles | 718,376 | Jan. 13 | 1588 | 350 | 102 | 355 |
| O'Rourke, John F., New York, N. Y. Dry-dock | 721,222 | Feb. 24 | 3433 | 780 | 102 | 1596 |
| O'Rourke, John F., New York, N. Y. Dry-dock | 721,223 | Feb. 24 | 3434 | 780 | 102 | 1596 |
| O'Rourke, John F., New York, N. Y. Tunnel construction | 742,220 | Oct. 27 | 3575 | 798, 799 | 106 | 2049 |
| O'Rourke, John F., New York, N. Y. Tunnel construction | 742,221 | Oct. 27 | 3576 | 799 | 106 | 2049 |
| O'Rourke, John F., New York, N. Y. Tunnel construction | 742,222 | Oct. 27 | 3578 | 799, 800 | 106 | 2049 |
| O'Shaughnessy, J. F. (See Holland, George N., assignor.) | | | | | | |
| O'Shea, James J. (See Wright, Charles, assignor.) | | | | | | |
| O'Shea, James J., St. Louis, Mo. Ironing-machine | 741,269 | Oct. 13 | 1645 | 371 | 106 | 1616 |
| O'Shea, John C., Washington, D. C. Packing and storing vessel | 739,021 | Sept. 15 | 2899 | 643, 644 | 106 | 654 |
| O'Shea, John C., Washington, D. C. Folded receptacle | 739,022 | Sept. 15 | 2901 | 644 | 106 | 654 |
| O'Shea, John C., Washington, D. C. Flexible receptacle | 744,391 | Nov. 17 | 3135 | 673 | 107 | 700 |
| O'Shea, John C., Washington, D. C. Purse | 744,392 | Nov. 17 | 3137 | 673 | 107 | 701 |
| O'Shea, Timothy, Chicago, Ill. Building construction | 723,483 | Mar. 24 | 3434 | 768 | 103 | 763 |
| O'Shea, Timothy, Chicago, Ill. Building construction | 741,066 | Oct. 13 | 1254 | 285 | 106 | 1535 |
| O'Toole, Timothy, Barberton, Ohio. Telltale for doors | 718,377 | Jan. 13 | 1589 | 350, 351 | 102 | 355 |
| Oakes, Francis M., Defiance, Ohio. End-gate lock | 718,788 | Jan. 20 | 2415 | 536 | 102 | 543 |
| Oakes, Lucian R., Bloomington, Ind. Lamp-burner | 720,954 | Feb. 17 | 2860 | 654 | 102 | 1455 |
| Oakes, W. F., *et al.* (See Land, Gordon, assignor.) | | | | | | |
| Oakes, William L. (See White, John C., assignor.) | | | | | | |
| Oakley, James O., assignor of one-half to J. J. Westgate and C. L. Higgins, Montreal, Canada. Grain-door | 740,686 | Oct. 6 | 556 | 125 | 106 | 1367 |
| Oaksford, Bertie. (See Clifton and Oaksford.) | | | | | | |
| Oakville Company. (See Boden, George, assignor.) | | | | | | |
| Oastler, William C. (See Hadley, Charles E., assignor.) | | | | | | |
| Oates, George P., Springfield, Ohio, assignor to American Seeding Machine Company, Jersey City, N. J. Distributer for grain-drills | 737,011 | Aug. 25 | 3713 | 824 | 105 | 1826 |
| Oates, George P., and C. E. Patric, Springfield, Ohio, assignors, by mesne assignments, to American Seeding Machine Company, Jersey City, N. J. Grain-drill | 737,010 | Aug. 25 | 3712 | 823, 824 | 105 | 1825 |
| Oates, William, Jr., Central City, S. D. Screen | 736,291 | Aug. 11 | 2352 | 511 | 105 | 1504 |
| Oatman, John C. (See Burnett, Turner, and Oatman.) | | | | | | |
| Obear-Nester Glass Company. (See Keefer, William D., assignor.) | | | | | | |
| Oberbeck, George, Jersey City, N. J., assignor to Eagle Pencil Company, New York, N. Y. Compasses | 730,388 | June 9 | 1572 | 350 | 104 | 1464 |
| Oberholtzer, Walter S., Mifflintown, assignor of one-half to H. W. Sweigart, Lewistown, Pa. Lock | 721,322 | Feb. 24 | 3586 | 816 | 102 | 1628 |
| Oberlin, Hazen, Jamaica Plain, assignor to C. A. Phelps, Boston, Mass. Burner | 720,466 | Feb. 10 | 1936 | 442 | 102 | 1248 |
| Oberreit, Paul E., assignor to Badische Anilin & Soda Fabrik, Ludwigshafen-on-the-Rhine, Germany. Indigo coloring-matter containing halogen and making same | 730,148 | June 2 | 1122 | ..... | 104 | 1356 |
| Oberreit, Paul E., assignor to Badische Anilin & Soda Fabrik, Ludwigshafen-on-the-Rhine, Germany. Making indoxyl | 731,385 | June 16 | 3412 | ..... | 104 | 1869 |
| Oberseider, John, Jr., Baltimore, Md. Hat-brush | 720,955 | Feb. 17 | 2861 | 654 | 102 | 1456 |
| Obert, Joseph F., Millcreek, Pa. Paper-making machine | 724,732 | Apr. 7 | 593 | 140 | 103 | 1295 |
| Oberwalder, William C., New York, N. Y. Nozzle | 719,849 | Feb. 3 | 788 | 184 | 102 | 989 |
| Oberwalder, William C., New York, N. Y. Nozzle | 740,900 | Oct. 6 | 948 | 213 | 106 | 1449 |
| Obetz, Charles S., Belleville, Ohio. Creaming-can | 744,789 | Nov. 24 | 3852 | 829 | 107 | 869 |
| Obiols, Frank, Winnemucca, Nev. Hitching device | 746,135 | Dec. 8 | 1512 | 338 | 107 | 1443 |
| Oblosser, Sarah M. (See Oblosser, Ulysses C., assignor.) | | | | | | |
| Oblosser, Ulysses C., assignor to S. M. Oblosser, Millville, Pa. Thill-support | 738,121 | Sept. 1 | 1124 | 249 | 166 | 243 |
| Obney, Mendel, Brilliant, Ohio. Switch | 730,041 | June 2 | 950 | 213 | 104 | 1321 |
| Ochoa, Victor L., Peekskill, N. Y. Reversible motor | 718,508 | Jan. 13 | 1877 | 411 | 102 | 420 |
| Ochschim, Rudolf, Berlin, Germany. Grinding, smoothing, roughening, and polishing machine | 723,481 | Mar. 24 | 3431 | 767 | 103 | 763 |
| Octigan, Thomas C., and W. Peacock, Chicago, Ill. Horseshoe | 724,122 | Mar. 31 | 4632 | 1043 | 103 | 1029 |
| Ocumpaugh, Charles H., Rochester, N. Y. Liquid door-check | 732,369 | June 30 | 5308 | 1176 | 104 | 2293 |
| Ocumpaugh, Charles H., Rochester, N. Y. Spring-hinge | 745,891 | Dec. 1 | 1068 | 240 | 107 | 1326 |
| Ocumpaugh, Edmund, Rochester, N. Y. Check-protector | 734,932 | July 28 | 4144 | 964 | 105 | 920 |
| Ocumpaugh, Edmund, Rochester, N. Y. Holder for game-counters | 739,209 | Sept. 15 | 3246 | 718 | 106 | 725 |
| Oddie, Philip F., Oschersleben, near Magdeburg, Germany. Pressure-regulating device for compensators of direct-acting pumps | 721,075 | Feb. 17 | 3076 | 706, 707 | 102 | 1503 |
| Oddie, Philip F., Wimbledon, England. Valve arrangement for pumps | 738,122 | Sept. 1 | 1125 | 249, 250 | 106 | 243 |
| Odell, Levi J., Chicago, Ill. Bread-cutting machine | 741,161 | Oct. 13 | 1431 | 327 | 106 | 1570 |
| Odell, Oscar H., Yates Center, Kans. Railway cross-tie | 736,293 | Aug. 11 | 2355 | 511, 512 | 105 | 1505 |
| Odell, Willard A., and T. F. Egan, Minneapolis, Minn. Cream-separator | 732,886 | July 7 | 340 | 83 | 105 | 75 |
| Odhner, Willgodt T., St. Petersburg, Russia. Voting apparatus for use with balls | 726,452 | Apr. 28 | 3753 | 850 | 103 | 2006 |
| Odom, Erastus H., Marietta, Ga. Cane-weaving machine | 729,958 | June 2 | 804 | 179 | 104 | 1290 |
| Odquist, Victor. (See Fyfe and Odquist.) | | | | | | |
| Oefinger, Jacob, Meriden, Conn. Cutlery-grinding or other machine | 747,756 | Dec. 22 | 4496 | 1013, 1014 | 107 | 2144 |
| Oehl, Frida, *et al.* (See Roberts, Henry P., assignor.) | | | | | | |
| Oehler, Anilin & Anilin Farbenfabrik, Firm of K. (See Laska, August L., assignor.) | | | | | | |
| Oehrle, Emanuel, Omaha, Nebr. Combination square and protractor. (Reissue) | 12,119 | June 9 | 2401 | 530 | 104 | 1643 |
| Oekel, Albin. (See Voelpel, Suchert, and Oekel.) | | | | | | |
| Oelkers, John B., Newark, N. J. Die or mold for forming ferrules | 717,604 | Jan. 6 | 149 | 38 | 102 | 33 |
| Oelkers, John B., Newark, N. J. Manufacturing ferrules or the like | 740,036 | Sept. 29 | 4826 | 1082 | 106 | 1099 |
| Oertel, Richard, Leipzig, Germany. Pocket-case | 720,467 | Feb. 10 | 1937 | 443 | 102 | 1248 |
| Oesterheld, Adolf, Hersfeld, Germany. Manufacturing fabrics | 722,246 | Mar. 10 | 1106 | ..... | 103 | 251 |
| Oesterle, William F. (See Brown and Oesterle.) | | | | | | |
| Oesterlein Machine Company. (See Oesterlein, William, assignor.) | | | | | | |
| Oesterlein, William, assignor to Oesterlein Machine Company, Cincinnati, Ohio. Cutter and tool-grinder | 717,605 | Jan. 6 | 151 | 39 | 102 | 34 |
| Oesterreich, Amandus J. A., Hamburg, Germany, assignor to Singer Manufacturing Company, Elizabeth, N. J. Hemstitch sewing-machine | 732,435 | June 30 | 5441 | 1208 | 104 | 2321 |
| Oesterreich, Amandus J. A., Hamburg, Germany, assignor to Singer Manufacturing Company. Trimming attachment for sewing-machines | 735,572 | Aug. 4 | 1041 | 221 | 105 | 1202 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Oesterreich, Amandus J. A., Hamburg, Germany, assignor to Singer Manufacturing Company, Elizabeth, N. J. Two-needle hemstitch sewing-machine | 737,012 | Aug. 25 | 3715 | 824 | 105 | 1826 |
| Oesterreich, Amandus J. A., Hamburg, Germany, assignor to Singer Manufacturing Company, Elizabeth, N. J. Two-needle hemstitch sewing-machine | 737,013 | Aug. 25 | 3717 | 825 | 105 | 1826 |
| Oesterreich, Amandus J. A., Hamburg, Germany, assignor to Singer Manufacturing Company. Sewing-machine hemmer | 739,210 | Sept. 15 | 3248 | 719 | 106 | 726 |
| Oesterreich, Gustav A. (See Stephens and Oesterreich.) | | | | | | |
| Oestreicher, George J., assignor of one-half to J. Keller, Cleveland, Ohio. Movable platform-ladder for buildings | 740,382 | Sept. 29 | 5448 | 1225 | 106 | 1228 |
| Ofeldt, August W., assignor, by mesne assignments, to M. Pflug, Newark, N. J. Engine | 742,481 | Oct. 27 | 4040 | 906, 907 | 106 | 2146 |
| Ofeldt, Ernest G., Brooklyn, N. Y. Liquid-fuel burner | 724,491 | Apr. 7 | 136 | 32 | 103 | 1199 |
| Offenbacher, Emil, Markt Redwitz, Germany. Manufacture of strengthened glass plates or supports | 723,014 | Mar. 17 | 2523 | 566 | 103 | 565 |
| Offenbacher, Martin, Fürth, assignor to Vereinigte Maschinenfabrik Augsburg und Maschinenbaugesellschaft Nürnberg A. G., Nuremberg, Germany. Cooling device for explosive-engines | 734,356 | July 21 | 3071 | 723 | 105 | 683 |
| Offenberg, Moses, Berlin, Germany. Apparatus for regulating the gas-pressure in burners | 724,035 | Mar. 31 | 4461 | 1005 | 103 | 993 |
| Officer, Frank H. and R. H., J. H. Burfeind, and J. W. Neill, Salt Lake City, Utah. Apparatus for use in metallurgical processes | 733,739 | July 14 | 1839 | 435 | 105 | 405 |
| Officer, Robert H. (See Officer, Burfeind, and Neill.) | | | | | | |
| Officer, Thomas, assignor to Sullivan Machinery Company, Claremont, N. H. Valve mechanism for rock-drills | 738,229 | Sept. 8 | 1354 | 293 | 106 | 308 |
| Officer, Thomas, assignor to Sullivan Machinery Company, Claremont, N. H. Piston packing-ring | 742,097 | Oct. 20 | 3345 | 746 | 106 | 1987 |
| Officer, Thomas, and H. H. Mercer, Claremont, N. H., assignors to Sullivan Machinery Co., Chicago, Ill. Engine | 728,283 | May 19 | 2765 | 614, 615 | 104 | 629 |
| Offutt, John W., Ellwood City, Pa., assignor, by mesne assignments, to National Tube Company. Rolling-mill | 741,702 | Oct. 20 | 2533 | 565 | 106 | 1823 |
| Offutt, Philip M., Hamlet, Ohio. Attachment for magazine-guns | 726,562 | Apr. 28 | 3990 | 903 | 103 | 2049 |
| Ogan, William H., Dayton, Ohio. Machine for dating and numbering mileage-tickets | 731,490 | June 23 | 3623 | 808 | 104 | 1932 |
| Ogden, Frederick H., Reading, Pa. Door-check | 730,686 | June 9 | 2118 | 471 | 104 | 1583 |
| Ogden, Frederick H., Reading, Pa. Door check and closer | 747,757 | Dec. 22 | 4500 | 1014 | 107 | 2145 |
| Ogden, George, Otto, Tex. Gate | 728,603 | May 19 | 3378 | 748 | 104 | 757 |
| Ogden, Harry L., *et al.* (See Philp, Bertil von, assignor.) | | | | | | |
| Ogden, James A., assignor of one-fourth to S. W. Russell, Deadwood, S. D. Extracting metals from cyanid solutions | 743,550 | Nov. 10 | 1507 | 315 | 107 | 339 |
| Ogden, James A., assignor of one-fourth to S. W. Russell, Deadwood, S. D. Apparatus for extracting precious metals from cyanid solutions | 743,551 | Nov. 10 | 1507 | 315 | 107 | 339 |
| Ogden, Otto G., Louisville, Ky., assignor of two-thirds to J. Nicholson and E. J. Hackett, New Albany, Ind. Fan attachment for sewing-machines | 744,600 | Nov. 17 | 3480 | 750 | 107 | 772 |
| Ogilvie, Glencairn S., Woodbridge, England. Wheel for road-vehicles | 718,275 | Jan. 13 | 1409 | 314 | 102 | 318 |
| Ogle, Charles N., and I. K. Hurt, Cleveland, Ohio. Pulley | 739,909 | Sept. 29 | 4579 | 1030 | 106 | 1045 |
| Ogle, Evens T., Marietta, Ohio. Lifting-jack | 731,704 | June 23 | 4023 | 898 | 104 | 2010 |
| Ogle, George A., Catonsville, Md. Surgical apparatus | 735,141 | Aug. 4 | 188 | 39 | 105 | 1022 |
| Ogle, Robert, assignor to Smoke Exterminator and Fume Condenser Company, Pueblo, Colo. Apparatus for condensing smoke, fumes, and gases | 736,294 | Aug. 11 | 2358 | 512 | 105 | 1505 |
| Oglevee, J. C., administrator. (See Daniel, James.) | | | | | | |
| Ohaus, Henry, Kansas City, Mo. Building-tile | 739,211 | Sept. 15 | 3249 | 719 | 106 | 726 |
| Ohaver, David W. (See Ohaver, James and D. W.) | | | | | | |
| Ohaver, James and D. W., Rockville, Ind. Subway construction | 722,247 | Mar. 10 | 1107 | 243 | 103 | 251 |
| Ohio Automobile Company. (See Packard and Hatcher, assignors.) | | | | | | |
| Ohio Brush Company. (See Loveless, Fred H., assignor.) | | | | | | |
| Ohio Cultivator Company. (See Dann and Boos, assignors.) | | | | | | |
| Ohio Cultivator Company. (See Johnston, Oman E., assignor.) | | | | | | |
| Ohio Fiber Machinery Co. (See Sweet, Frederick D., assignor.) | | | | | | |
| Ohio Hay Press Company. (See Trabue, Luther, assignor.) | | | | | | |
| Ohio Hay Press Company (See Trabue and Purcell, assignors.) | | | | | | |
| Ohio Pump & Brass Company. (See Wilkins, Charles L., assignor.) | | | | | | |
| Ohio Rake Company. (See Knaub, William R., assignor.) | | | | | | |
| Ohio Rake Company. (See Lathrop, Frank K., assignor.) | | | | | | |
| Ohleyer, Georges, Paterson, N. J. Creel | 727,190 | May 5 | 693 | 149 | 104 | 150 |
| Ohlson, Olaf J., Chicago, Ill. Hoof-protector | 745,232 | Nov. 24 | 4710 | 1028 | 107 | 1047 |
| Ohlsson, Johan A., Brooklyn, N. Y. Toothpick | 740,586 | Oct. 6 | 399 | 84 | 106 | 1331 |
| Ohlsson, Olof, Södertelge, Sweden. Centrifugal liquid-separator | 718,724 | Jan. 20 | 2297 | 506, 507 | 102 | 519 |
| Ohlsson, Olof, Södertelje, Sweden. Journaling and sustaining device for rotating parts | 719,850 | Feb. 3 | 789 | 185 | 102 | 990 |
| Ohmer, Jno. F. (See Tyler, Hiram, assignor.) | | | | | | |
| Ohmer, John F., Dayton, Ohio. Means for operating fare-registers | 718,868 | Jan. 20 | 2560 | 571 | 102 | 574 |
| Ohmer, John F., Dayton, Ohio. Fare-register | 718,869 | Jan. 20 | 2563 | 571, 572 | 102 | 574 |
| Ohmer, John F., and H. Tyler, Dayton, Ohio. Mechanism for operating fare-registers | 718,867 | Jan. 20 | 2559 | 570, 571 | 102 | 573 |
| Ohmer, Will I. (See Chase, John Q., assignor.) | | | | | | |
| Ohnstrand, Enoch, *et al.* (See Lawson, August, assignor.) | | | | | | |
| Ohnstrand, Enoch, assignor to Art Metal Construction Company, Jamestown, N. Y. Drawer-bottom | 741,362 | Oct. 13 | 1864 | 412 | 106 | 1665 |
| Ohrnstedt, Martin E., Allentown, Pa. Gas or gasolene burner | 740,307 | Sept. 29 | 5307 | 1195 | 106 | 1198 |
| Oil Blast Furnace Smelting Company. (See Pettengill, Frederick B., assignor.) | | | | | | |
| Oil Blast Furnace Smelting Company. (See Pettengill and Nicholson, assignors.) | | | | | | |
| Oil Burner Furnace Company. (See Anderson, James J., assignor.) | | | | | | |
| Oil Well Supply Company. (See Mack, Patrick H., assignor.) | | | | | | |
| Oil Well Supply Company. (See Sands, Louis C., Jr., assignor.) | | | | | | |
| Oil Well Supply Company. (See Scott, John, assignor.) | | | | | | |
| Oiler, Robin S., Los Angeles, Cal. Casing or drive-pipe screwer for well-rigs | 741,925 | Oct. 20 | 2950 | 658 | 106 | 1909 |
| Oines, Ole, Volga, S. D. Clothes-pounder | 741,409 | Oct. 13 | 1948 | 431 | 106 | 1682 |
| Okell, John R., *et al.* (See Tyson, Frank, assignor.) | | | | | | |
| Okell, John R., Scranton, Pa. Machine for packaging powdered or granular materials | 719,251 | Jan. 27 | 3288 | 735, 736 | 102 | 739 |
| Okrassa, Roberto F. E., Antigua, Guatemala. Handsaw | 737,458 | Aug. 25 | 4540 | 1017 | 105 | 2001 |
| Okun, Moses S., New York, N. Y. Means for retarding or stopping motion | 721,826 | Mar. 3 | 304 | 67 | 103 | 67 |
| Okun, Moses S., New York, N. Y. Means for retarding or stopping motion | 721,827 | Mar. 3 | 308 | 67, 68 | 103 | 68 |
| Okun, Moses S., New York, N. Y. Means for propelling boats | 730,042 | June 2 | 951 | 214 | 104 | 1321 |
| Olcott, Charles A., Pensacola, Fla. Shade-fixture | 740,308 | Sept. 29 | 5309 | 1196 | 106 | 1199 |

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| Name, residence, and invention | No. | Date. | Monthly volume. | | Official Gazette. | |
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| Olcott, John D., Norwalk, Ohio. Road-scraper | 723,619 | Mar. 24 | 3657 | 818<br>819<br>820 | 103 | 809 |
| Oldendorph, Jacob. (See Wood, John T., assignor.) | | | | | | |
| Oldendorph, John, Elizabeth, N. J. Lubricating device | 746,874 | Dec. 15 | 2863 | 659 | 107 | 1759 |
| Oldfield, Benjamin H., Leavenworth, Kans. Vehicle-tongue support | 746,367 | Dec. 8 | 1934 | 441 | 107 | 1531 |
| Oldham, Samuel, Frankford, Pa. Impact-tool | 739,440 | Sept. 22 | 3698 | 823 | 106 | 839 |
| Oldham, Samuel, and J. J. Padbury, assignors to G. Oldham & Son, Philadelphia, Pa. Pneumatic hammer | 722,614 | Mar. 10 | 1775 | 396 | 103 | 396 |
| Oldham & Son, George. (See Oldham and Padbury, assignors.) | | | | | | |
| Olds-Haight, Nettie, administratrix. (See Haight, William E.) | | | | | | |
| Olds Motor Works. (See Olds, Ransom E., assignor.) | | | | | | |
| Olds Motor Works. (See Smith, Frederick L., assignor.) | | | | | | |
| Olds, Ransom E., assignor to Olds Motor Works, Detroit, Mich. Cooler for motor-vehicles | 745,654 | Dec. 1 | 617 | 143 | 107 | 1230 |
| Olds, Warren E. (See Hall, Olds, and Buck.) | | | | | | |
| Olenin, Alexis, New York, N. Y. Electric pocket for lighting purposes | 742,348 | Oct. 27 | 3815 | 854 | 106 | 2101 |
| Oler, Charles W. (See Wehn and Oler.) | | | | | | |
| Oler, Harry P., assignor of one-half to J. Davis, Camden, N. J. Trolley-pole | 722,379 | Mar. 10 | 1345 | 297 | 103 | 302 |
| Oleson, Albert, Toledo, Ohio. Valve-coupling for air-brakes or train-pipes | 729,790 | June 2 | 490 | 109 | 104 | 1228 |
| Oleszkiewicz, Anton, Bielaia-Zerkov, Russia. Cycle | 735,573 | Aug. 4 | 1042 | 221 | 105 | 1202 |
| Olewinski, Wincenty, Lemberg, Austria-Hungary. Rotary engine | 748,522 | Dec. 29 | 5975 | 1356 | 107 | 2490 |
| Olin, Clarence W., Volga, Wis. Bag-holder | 746,988 | Dec. 15 | 3084 | 706 | 107 | 1810 |
| Olin, Franklin W., Alton, Ill. Shell-head-feeding apparatus | 736,622 | Aug. 18 | 2973 | 653<br>654 | 105 | 1649 |
| Olin, Fred C., Buffalo, N. Y. Crank and yoke connection | 734,595 | July 28 | 3508 | 819 | 105 | 790 |
| Olin, John F., Lyman, and M. Alexander, Lisbon, N. H. Railway-tie | 748,304 | Dec. 29 | 5568 | 1270 | 107 | 2400 |
| Olinger, Jacob M., Vienna Crossroads, Ohio. Trolley | 740,037 | Sept. 29 | 4827 | 1083 | 106 | 1100 |
| Oliphant, William. (See Charlier, Andrew C. J., assignor.) | | | | | | |
| Olive & Myers Mfg. Co. (See Hardtmann, Julius R., assignor.) | | | | | | |
| Oliver, Charles M., Baltimore, Md., assignor of one-third to M. Joyce, Washington, D. C. Machine for oxidizing matrices for electrotyping | 719,953 | Feb. 3 | 961 | 223 | 102 | 1027 |
| Oliver Chilled Plow Works. (See Davis, Calvin R., assignor.) | | | | | | |
| Oliver, Edward P., Boston, Mass. Ventilator | 743,987 | Nov. 10 | 2318 | 495 | 107 | 514 |
| Oliver, Ellis S., assignor of one-half to E. Gahviller, Newark, N. J. Shield for vaccination or other tumors | 728,493 | May 19 | 3151 | 697 | 104 | 708 |
| Oliver, George A., *et al.* (See Scruggs, Robert C., assignor.) | | | | | | |
| Oliver, George W., St. Louis, Mo. Bolt and nut locking device | 744,388 | Nov. 17 | 3130 | 672 | 107 | 699 |
| Oliver, James R., Decatur, Ala. Spring-motor | 732,777 | July 7 | 145 | 38,39 | 105 | 35 |
| Oliver, Joseph W. (See Gorham, Edwin T., assignor.) | | | | | | |
| Oliver, Louis, Ontario, Oreg. Combined water wheel and elevator | 745,233 | Nov. 24 | 4711 | 1029 | 107 | 1047 |
| Oliver, Nathan A., Mattapoisett, Mass. Combined biscuit and doughnut cutter | 730,792 | June 9 | 2288 | 508 | 104 | 1619 |
| Oliver, Robert S., London, England. Corset | 734,082 | July 21 | 2553 | 596 | 105 | 575 |
| Oliver, Samuel F., New York, N. Y. Door-mat holder | 726,453 | Apr. 28 | 3755 | 851 | 103 | 2006 |
| Oliver, Thomas, Brooklyn, N. Y. Rotary engine | 722,742 | Mar. 17 | 2049 | 457<br>458 | 103 | 469 |
| Oliver, Thomas, Woodstock, Ill. Tabulating attachment for type-writing machines | 731,386 | June 16 | 3413 | 762<br>763 | 104 | 1869 |
| Oliver Typewriter Company. (See Cross and Griffiths, assignors.) | | | | | | |
| Oliver Typewriter Company. (See Swindlehurst, Albert, assignor.) | | | | | | |
| Oliver, William H., Chicago, Ill. Lifting-jack | 737,655 | Sept. 1 | 179 | 38 | 106 | 42 |
| Oliver, William W. (See Svensson, Claes A., assignor.) | | | | | | |
| Olivier, Alberto, Milan, Italy. Sleeper for railway-lines | 732,213 | June 30 | 5005 | 1112 | 104 | 2231 |
| Ollagnier, Claude J., Paris, France. Automotor-carriage | 734,084 | July 21 | 2554 | 596 | 105 | 575 |
| Olloman, John, East Palestine, Ohio. Metallic cross-tie and clamp | 718,952 | Jan. 20 | 2735 | 609 | 102 | 609 |
| Olmstead, Amos C., *et al.* (See Boulding, George R., assignor.) | | | | | | |
| Olmstead, Walter, Beefcreek, Ind. Ter. Spur | 729,791 | June 2 | 492 | 109 | 104 | 1228 |
| Olney, Charles J., Jr. (See Fitch and Olney.) | | | | | | |
| Olney, Charles J., Jr., assignor to American Waltham Watch Company, Waltham, Mass. Holder for watch-movement boxes, &c. | 724,926 | Apr. 7 | 934 | 214 | 103 | 1370 |
| Olney, Henry M., New York, N. Y. Cartridge-decapping tool | 746,368 | Dec. 8 | 1936 | 441 | 107 | 1531 |
| Olofsson, Jacob P., Chicago, Ill. Traveling sprinkler | 729,650 | June 2 | 226 | 51 | 104 | 1175 |
| Olofsson, Jacob P., Chicago, Ill. Collapsible baby-carriage | 729,651 | June 2 | 229 | 51,52 | 104 | 1175 |
| Olsen, Alvin, and J. Folda, Rogers, Nebr. Wagon-box elevator and dumper | 732,107 | June 30 | 4790 | 1068<br>1069 | 104 | 2186 |
| Olsen, Anton. (See Pihl and Olsen.) | | | | | | |
| Olsen, Charles A., Pittsburg, Pa. Trolley | 724,927 | Apr. 7 | 935 | 214 | 103 | 1370 |
| Olsen, Gustav, Port Blakeley, Wash. Grubbing-machine | 737,765 | Sept. 1 | 387 | 82 | 106 | 86 |
| Olsen, Henry, assignor to Olsen & Tilgner Manufacturing Company, Chicago, Ill. Barrel-scrubbing machine | 734,280 | July 21 | 2932 | 685 | 105 | 655 |
| Olsen, Henry, assignor to Olsen & Tilgner Manufacturing Company, Chicago, Ill. Barrel-washing tank | 734,281 | July 21 | 2935 | 686 | 105 | 656 |
| Olsen, John, Jersey City, N. J. Stamp-affixer | 740,901 | Oct. 6 | 949 | 213 | 106 | 1449 |
| Olsen, John, Milwaukee, Wis., and E. I. Noxon, Chicago, Ill. Drying apparatus | 745,514 | Dec. 1 | 378 | 87 | 107 | 1180 |
| Olsen, John B., Milwaukee, Wis. Puzzle | 721,910 | Mar. 3 | 467 | 102 | 103 | 103 |
| Olsen, Ove L., Chicago, Ill. Sewing-machine needle | 738,567 | Sept. 8 | 2047 | 446 | 106 | 455 |
| Olsen, Paul. (See Hansen, Henry A., assignor.) | | | | | | |
| Olsen, Samuel N. (See Hart and Olsen.) | | | | | | |
| Olsen & Tilgner Manufacturing Company. (See Olsen, Henry, assignor.) | | | | | | |
| Olsen, Tinius, Philadelphia, Pa. Testing-machine | 741,703 | Oct. 20 | 2535 | 566<br>567 | 106 | 1823 |
| Olsen, Waldo, West Hoboken, N. J. Rail-tie | 740,309 | Sept. 29 | 5310 | 1196 | 106 | 1199 |
| Olson, Andrew, Minneapolis, Minn. Coin-actuated weighing-scale | 746,138 | Dec. 8 | 1516 | 339 | 107 | 1444 |
| Olson, Andrew J. (See Argubright and Olson.) | | | | | | |
| Olson, Bernard G., Chinook, Mont. Gate | 748,092 | Dec. 29 | 5190 | 1174 | 107 | 2320 |
| Olson, Charles, Grand Rapids, Mich. Steam-boiler | 728,284 | May 19 | 2770 | 615 | 104 | 630 |
| Olson, Charles P., Lincoln, Nebr., F. J. Angier and W. C. Lambert, Edgemont, S. D. Apparatus for handling railway-ties | 746,737 | Dec. 15 | 2589 | 595 | 107 | 1698 |
| Olson, Frederick, Calumet, Mich. Flue-scraper | 727,994 | May 12 | 2215 | 493 | 104 | 490 |
| Olson, Frederick, Calumet, Mich. Flue-cleaner | 727,995 | May 12 | 2216 | 494 | 104 | 490 |
| Olson, Louis E., Brooklyn, N. Y. Addressing-machine | 722,136 | Mar. 3 | 871 | 195 | 103 | 187 |
| Olson, Nels F., *et al.* (See Swanburg, Arthur W., assignor.) | | | | | | |
| Olson, Ole. (See France, David, assignor.) | | | | | | |
| Olson, Paul, Lawrence, Kans. Horse-collar | 723,904 | Mar. 31 | 4177 | 941<br>942 | 103 | 936 |

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| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
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| Olson, Samuel, Milwaukee, Wis. Rotary steam-engine | 727,677 | May 12 | 1606 | 365, 366 | 104 | 363 |
| Oltmanns, Hermann, and C. J. Schmidt, Peoria, Ill. Awning | 741,162 | Oct. 13 | 1432 | 327 | 106 | 1571 |
| Olund, Axel W., Richwood, Minn. Railway-signal | 727,678 | May 12 | 1608 | 366 | 104 | 364 |
| Onderdonk, Lansing, New York, N. Y., assignor to Union Special Sewing Machine Company, Chicago, Ill. Blindstitch sewing-machine | 720,731 | Feb. 17 | 2466 | 565, 566 | 102 | 1372 |
| Onderdonk, Lansing, New York, N. Y., assignor to Union Special Sewing Machine Company, Chicago, Ill. Blindstitch sewing-machine | 720,732 | Feb. 17 | 2467 | 566 | 102 | 1372 |
| Onderdonk, Lansing, New York, N. Y., assignor to Union Special Sewing Machine Company, Chicago, Ill. Looper mechanism for sewing-machines | 720,733 | Feb. 17 | 2470 | 567 | 102 | 1373 |
| Onderdonk, Lansing, Winthrop, Mass., assignor to Union Special Sewing Machine Company, Chicago, Ill. Looper mechanism for sewing-machines | 721,076 | Feb. 17 | 3078 | 707 | 102 | 1504 |
| Onderdonk, Lansing, New York, N. Y., assignor to Union Special Sewing Machine Company, Chicago, Ill. Sewing-machine | 721,077 | Feb. 17 | 3080 | 707, 708 | 102 | 1504 |
| Onderdonk, Lansing, New York, N. Y., assignor to Union Special Sewing Machine Company, Chicago, Ill. Looper mechanism for sewing-machines | 721,078 | Feb. 17 | 3084 | 708 | 102 | 1505 |
| Onderdonk, Lansing, New York, N. Y., assignor to Union Special Sewing Machine Company, Chicago, Ill. Blindstitch sewing-machine | 721,079 | Feb. 17 | 3086 | 709 | 102 | 1505 |
| Onderdonk, Lansing, New York, N. Y., assignor to Union Special Sewing Machine Company, Chicago, Ill. Looper mechanism for sewing-machines | 721,080 | Feb. 17 | 3090 | 710 | 102 | 1506 |
| Onderdonk, Lansing, New York, N. Y., assignor to Union Special Sewing Machine Company, Chicago, Ill. Blindstitch sewing-machine | 721,081 | Feb. 17 | 3091 | 710, 711 | 102 | 1507 |
| Onderdonk, Lansing, New York, N. Y., assignor to Union Special Sewing Machine Company, Chicago, Ill. Blindstitch sewing-machine | 721,082 | Feb. 17 | 3095 | 711 | 102 | 1508 |
| Onderdonk, Lansing, New York, N. Y., assignor to Union Special Sewing Machine Co., Chicago, Ill. Work-plate-operating mechanism for sewing-machines | 745,736 | Dec. 1 | 755 | 172, 173 | 107 | 1259 |
| Ondra, Frant, assignor of one-half to M. V. Kacer, C. Triski, and E. Perka, St. Louis, Mo. Non-refillable bottle | 740,773 | Oct. 6 | 739 | 166 | 106 | 1403 |
| Ondra, Frant, assignor of one-half to M. V. Kacer, C. Triski, and E. Perka, St. Louis, Mo. Non-refillable bottle | 740,774 | Oct. 6 | 740 | 167 | 106 | 1403 |
| Ondrak, Jacob A., New York, N. Y. Riding-skirt | 742,349 | Oct. 27 | 3817 | 855 | 106 | 2101 |
| Ondrey, Stephen, Braddock, Pa. Wrench | 742,055 | Oct. 20 | 3221 | 721 | 106 | 1963 |
| One-Minute Churn Company. (See Murphy, Ida M., assignor.) | | | | | | |
| One-Seed Planter Co. (See Ledbetter, William H., assignor.) | | | | | | |
| Oneida Community. (See Collins, Jerrey W., assignor.) | | | | | | |
| Ong, Harlon F., Wendling, Oreg. Air-brake attachment | 743,916 | Nov. 10 | 2171 | 468, 469 | 107 | 478 |
| Ongley, Charles E., assignor, by mesne assignments, to United States Electric Clock Company of New York, New York, N. Y. Workman's time-recorder | 720,957 | Feb. 17 | 2863 | 655 | 102 | 1456 |
| Ongley, Charles E., assignor, by mesne assignments, to United States Electric Clock Company of New York, New York, N. Y. Workman's time-recorder | 720,958 | Feb. 17 | 2866 | 655, 656 | 102 | 1457 |
| Ontario Grinder Company. (See Roberts, Charles W., assignor.) | | | | | | |
| Ontario Wind Engine and Pump Company. (See Downie, John D., assignor.) | | | | | | |
| Oostendorp, Henry W., Cincinnati, Ohio. Holder for cutting precious stones | 740,902 | Oct. 6 | 951 | 214 | 106 | 1450 |
| Opalite Tile Company. (See Sage, Henry J., assignor.) | | | | | | |
| Opitz, Arnold E. A., Oldesloe, Germany. Blackboard | 736,431 | Aug. 18 | 2596 | 569 | 105 | 1572 |
| Oplinger, George T., Slatington, Pa. Lock | 739,556 | Sept. 22 | 3880 | 870 | 106 | 879 |
| Opp, Jacob, Dansville, N. Y. Washboard | 735,801 | Aug. 11 | 1458 | 314 | 105 | 1309 |
| Oppelt, Otto, New Albany, Ind., assignor of one-half to P. N. Clarke, Louisville, Ky., and J. H. Stotsenburg, New Albany, Ind. Gas process | 719,360 | Jan. 27 | 3508 | 780 | 102 | 787 |
| Oppen, Ole K., Decatur, Ill., assignor to Decatur Harrow Works. Harrow | 730,793 | June 9 | 2289 | 508 | 104 | 1619 |
| Oppenheim, Marx, New York, N. Y. Waistband | 719,851 | Feb. 3 | 790 | 185 | 102 | 990 |
| Oppenheimer, James, Ashland, Nebr. Adjustable tension-bracket for window-shelves | 727,423 | May 5 | 1108 | 242 | 104 | 239 |
| Oppermann, Carl T. J., London, England. Electric controller | 724,928 | Apr. 7 | 936 | 214, 215 | 103 | 1370 |
| Oppermann, Ehrich. (See Moest, Hertlein, and Oppermann.) | | | | | | |
| Optenberg, John H., Sheboygan, Wis. Flanging-clamp | 729,959 | June 2 | 807 | 180 | 104 | 1291 |
| Orbison, James B., assignor to H. D. Morton, San Francisco, Cal. Melting-furnace | 739,340 | Sept. 22 | 3485 | 778 | 106 | 792 |
| Orchardson, Charles, *et al.* (See Shepler, William H., assignor.) | | | | | | |
| Orcutt, Charles D. (See Hyman and Orcutt.) | | | | | | |
| Orcutt, Frederic A., Florence, Mass. Apparatus for setting rubber tires | 718,148 | Jan. 13 | 1168 | 260 | 102 | 266 |
| Ordnance Improvement Company. (See Gerdom, Gregory, assignor.) | | | | | | |
| Ordway, Benjamin F., Peoria, Ill. Bracket for mirrors or electric lamps | 745,374 | Dec. 1 | 111 | 26 | 107 | 1124 |
| Ore Reduction and Smelting Company. (See Foster and Stringer, assignors.) | | | | | | |
| Oregon Foundry and Machine Company. (See Stratton, Frank J., assignor.) | | | | | | |
| Oregon Rafting Company. (See Ayres, John, assignor.) | | | | | | |
| Orell, Olof W., Minneapolis, Minn. Knotter | 727,424 | May 5 | 1109 | 243 | 104 | 240 |
| Orewiler, Benjamin F., Chicago, Ill., assignor of one-half to G. H. Reinberger, Cleveland, Ohio. Clasp for garment-supporters | 730,389 | June 9 | 1574 | 350 | 104 | 1464 |
| Orewiler, Benjamin F., Chicago, Ill., assignor of one-half to G. H. Reinberger, Cleveland, Ohio. Garment-supporter | 738,474 | Sept. 8 | 1876 | 408 | 106 | 417 |
| Organ, Thomas O., Philadelphia, assignor of one-half to R. Norris, Bryn Mawr, Pa. Feed-water purifier | 740,904 | Oct. 6 | 955 | 214 | 106 | 1450 |
| Orient Mfg. Co. (See Hyman and Orcutt, assignors.) | | | | | | |
| Oriental Tea Company. (See North, William H., assignor.) | | | | | | |
| Oriental Waterproof Syndicate. (See Williams, James, assignor.) | | | | | | |
| Orling, Axel. (See Armstrong and Orling.) | | | | | | |
| Ormand, David. (See Martin and Ormand.) | | | | | | |
| Orme, Frederick G. (See Bate and Orme.) | | | | | | |
| Orme, William. (See Maddock and Orme.) | | | | | | |
| Ormerod, James P. (See Scott, George L., assignor.) | | | | | | |
| Ormsbee, Margaret A., Fall River, Mass. Waistband for skirts | 720,468 | Feb. 10 | 1938 | 443 | 102 | 1248 |
| Orndorff, Thomas C., Worcester, Mass. Tension device | 718,509 | Jan. 13 | 1878 | 412 | 102 | 420 |
| Orr, Edward W., *et al.* (See Zumwalt, Joe C., assignor.) | | | | | | |
| Orr, George W., *et al.* (See Zumwalt, Joe C., assignor.) | | | | | | |
| Orr, James L. (See Herrold and Orr.) | | | | | | |
| Orr, John S., Augusta, Ky. Device for catching and holding fowls | 721,829 | Mar. 3 | 311 | 68 | 103 | 69 |
| Orr, Joseph L., Chattahoochee, Ga. Hay-press | 742,056 | Oct. 20 | 3222 | 721, 722 | 106 | 1964 |
| Orr and Lockett Hardware Company. (See Holson, Albert B., assignor.) | | | | | | |
| Orr & Locket Hardware Company. (See Sommer, Philip, assignor.) | | | | | | |
| Orr, Robert, and J. Morrison, New York, N. Y. Support for electrical conductors | 747,470 | Dec. 22 | 3977 | 894 | 107 | 2026 |
| Orr, William H., Lima, Ohio. Wall-plaster | 723,015 | Mar. 17 | 2524 | ------ | 103 | 565 |
| Orr, William H., assignor of one-half to J. McClane, Corpus Christi, Tex. Collapsible crate | 745,892 | Dec. 1 | 1069 | 240 | 107 | 1326 |

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| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| Orrick, Virginia P., Cumberland, Md. Shoe-cabinet | 736,003 | Aug. 11 | 1858 | 397 | 105 | 1397 |
| Orswell, Edmund W. (See Dyer, Silas H., assignor.) | | | | | | |
| Ortenbach & Vogel. (See Vogel, Ernst, assignor.) | | | | | | |
| Orth, Ludwig von, Berlin, Germany. Wire-holder for trolley-wires of electric railways | 721,734 | Mar. 3 | 143 | 33 | 103 | 32 |
| Orth, Ludwig von, Berlin, Germany. Device for introducing gases into bath fluids | 727,425 | May 5 | 1111 | 243 | 104 | 240 |
| Orth, Ludwig von, Berlin, Germany. Means for introducing gases into bath fluids | 743,025 | Nov. 3 | 400 | 86 | 107 | 84 |
| Ortmann, Ernst, Detroit, Mich. Photographic reproductive process | 744,223 | Nov. 17 | 2827 | 604 | 107 | 632 |
| Ortner, John E., Newark, N. J. Dumb-waiter | 719,852 | Feb. 3 | 792 | 185 | 102 | 990 |
| Orton, Guy B., Patricroft, near Manchester, England. Railway-vehicle coupling apparatus | 721,735 | Mar. 3 | 144 | 33 | 103 | 32 |
| Ortt, Rowley K., Reading, Pa. Lawn-mower | 747,758 | Dec. 22 | 4503 | 1014, 1015 | 107 | 2146 |
| Orvis, Charles W., Westplains, Mo. Vise | 723,905 | Mar. 31 | 4179 | 942 | 103 | 936 |
| Orvis, Charles W., Westplains, Mo. Vise | 727,679 | May 12 | 1610 | 366 | 104 | 364 |
| Orvis, Orel D., Jamaica, N. Y. Smokeless steam-generator | 722,321 | Mar. 10 | 1237 | 275 | 103 | 279 |
| Osborn, Alden E., New York, N. Y. Transmission mechanism | 721,736 | Mar. 3 | 145 | 33, 34 | 103 | 32 |
| Osborn, Alden E., New York, N. Y. Automatic train-controlling mechanism | 738,349 | Sept. 8 | 1637 | 354, 355 | 106 | 368 |
| Osborn, Ambrose A., assignor to California Cereal Company, San Francisco, Cal. Manufacture of starch | 746,369 | Dec. 8 | 1937 | 441, 442 | 107 | 1531 |
| Osborn, Charles D., Oakland City, Ind. Station-indicator | 722,743 | Mar. 17 | 2052 | 458 | 103 | 470 |
| Osborn, Francis C., Detroit, Mich., assignor, by mesne assignments, to National Cash Register Company, Jersey City, N. J. Cash-register | 723,906 | Mar. 31 | 4180 | 942, 943, 944, 945 | 103 | 937 |
| Osborn, George T., Atlanta, Ga. Street-railway switch | 718,510 | Jan. 13 | 1879 | 412 | 102 | 420 |
| Osborn, Guy, assignor to De Ronde-Osborn Co., New York, N. Y. Composition for removing paint and varnish | 744,095 | Nov. 17 | 2568 | ..... | 107 | 577 |
| Osborn, Henry C., Cleveland, Ohio. Engraving | 724,929 | Apr. 7 | 937 | 216 | 103 | 1370 |
| Osborn Manufacturing Company. (See Atwater, Harry R., assignor.) | | | | | | |
| Osborn-Morgan Company. (See Melzer, Joseph, assignor.) | | | | | | |
| Osborn, Samuel J., Jr. (See Estell, Daniel B., assignor.) | | | | | | |
| Osborn, William. (See Holtzmuller and Osborn.) | | | | | | |
| Osborn, William. (See Lundquist, Samuel, assignor.) | | | | | | |
| Osborne, Charles T., New York, N. Y. Motor | 729,652 | June 2 | 232 | 52 | 104 | 1176 |
| Osborne, Eugene F., assignor, by mesne assignments, to said Osborne and J. M. Martin, trustees, Chicago, Ill. Refrigerator for bottled goods | 735,403 | Aug. 4 | 690 | 148 | 105 | 1128 |
| Osborne, Eugene F., assignor, by mesne assignments, to said Osborne and J. M. Martin, trustees, Chicago, Ill. Nozzle and nozzle device for fire-hose | 735,404 | Aug. 4 | 692 | 148 | 105 | 1128 |
| Osborne, Eugene F., assignor, by mesne assignments, to said Osborne and J. M. Martin, trustees, Chicago, Ill. Automatic expansion-controlling valve | 740,170 | Sept. 29 | 5055 | 1137 | 106 | 1147 |
| Osborne, Eugene F., assignor, by mesne assignments, to said Osborne and J. M. Martin, trustees, Chicago, Ill. Indicator for valves | 741,363 | Oct. 13 | 1865 | 412 | 106 | 1665 |
| Osborne, Heman, assignor of one-half to C. P. Chase, Springfield, Mass. Shutter-worker | 722,878 | Mar. 17 | 2295 | 513, 514 | 103 | 517 |
| Osborne, Heman, assignor to C. P. Chase, Springfield, and H. D. Osborne, Monson, Mass. Transom-lifter | 723,482 | Mar. 24 | 3432 | 768 | 103 | 763 |
| Osborne, Hiram D., *et al.* (See Osborne, Heman, assignor.) | | | | | | |
| Osborne, James C., Erie, Pa. Wrench | 732,108 | June 30 | 4791 | 1069 | 104 | 2186 |
| Osborne, John H., *et al.* (See Dunn, Frank P., assignor.) | | | | | | |
| Osborne, Loyall A., Pittsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Field-magnet coil for electrical machines | 747,631 | Dec. 22 | 4276 | 961 | 107 | 2094 |
| Osborne, William S., and E. C. Bryant, St. Louis, Mo. Pneumatic grader | 744,390 | Nov. 17 | 3133 | 673 | 107 | 700 |
| Osbourn, Millard P., Camden, N. J., assignor to Warren Webster and Company. Feed-water heater, filter, and purifier | 729,088 | May 26 | 4250 | 939 | 104 | 950 |
| Osburn, Emory W., Rochester, N. Y. Kneading and mixing machine | 728,128 | May 12 | 2454 | 547 | 104 | 540 |
| Osburn, George W., Enid, Okla. Ter. Screening-machine | 741,821 | Oct. 20 | 2753 | 613 | 106 | 1868 |
| Osburn, Mary A., Auburn, N. Y. Corset | 738,058 | Sept. 1 | 984 | 219 | 106 | 214 |
| Oscar C. Rixson Co. (See Rixson, Oscar C., assignor.) | | | | | | |
| Osenbrück, August, Bremen, Germany. Absorber for ammonia-absorption refrigerating or like machines | 729,398 | May 26 | 4792 | 1061 | 104 | 1063 |
| Osgood, Isaac, Amesbury, Mass. Thill-coupling | 733,869 | July 14 | 2111 | 498 | 105 | 460 |
| Osgood, Joseph H., Peabody, Mass. Printer's inking-roller | 725,356 | Apr. 14 | 1734 | ..... | 103 | 1552 |
| Osgood, Joseph H., Peabody, Mass. Mold for casting printers' inking-rollers | 725,357 | Apr. 14 | 1735 | 390 | 103 | 1552 |
| Osgood, Miles D. (See Evans, Thomas J., assignor.) | | | | | | |
| Osgood, Ralph R., Upper Troy, N. Y. Friction-brake | 719,853 | Feb. 3 | 794 | 186 | 102 | 991 |
| Osgood, Ralph R., Troy, N. Y. Friction-brake | 731,940 | June 23 | 4443 | 991, 992 | 104 | 2101 |
| Osgood, Ralph R., Troy, N. Y. Dredge | 746,566 | Dec. 8 | 2269 | 520 | 107 | 1606 |
| Osman, Isaac E., Greensburg, Ind. Regulator for speed-governors | 721,083 | Feb. 17 | 3097 | 712 | 102 | 1508 |
| Osmanek, Firm of A. (See Hennl, Johann, assignor.) | | | | | | |
| Osmun, Alonzo M., Sunbury, Pa. Envelop-moistener | 721,911 | Mar. 3 | 468 | 102 | 103 | 103 |
| Ossenfort, John F., assignor to American Broom & Brush Co., Amsterdam, N. Y. Broom | 726,096 | Apr. 21 | 3062 | 695 | 103 | 1848 |
| Osteen, Percy C., assignor of one-third to B. Jackson, J. S. Rhodes, R. H. and S. D. Staton, Hendersonville, N. C. Rail-joint | 725,583 | Apr. 14 | 2152 | 488 | 103 | 1642 |
| Ostenberg, John A., Westminster Station, Vt., assignor to F. M. Gilbert, Walpole, N. H. Explosion-engine | 718,511 | Jan. 13 | 1880 | 412, 413 | 102 | 421 |
| Ostendorf, Henry. (See Wagner, Hofstetter, and Ostendorf.) | | | | | | |
| Ostergren, Oscar P., New York, N. Y., assignor, by mesne assignments, to Fuel Oil Power Company. Internal-combustion engine | 742,799 | Oct. 27 | 4605 | 1044 | 106 | 2267 |
| Ostergren, Otto F., assignor of one-half to J. Rutherfoord, Richmond, Va. Stop-watch | 717,606 | Jan. 6 | 152 | 39 | 102 | 34 |
| Ostiguy, Napoléon, St. Hyacinthe, Canada. Corn-shucker | 742,896 | Nov. 3 | 134 | 31 | 107 | 30 |
| Ostiguy, Napoléon, St. Hyacinthe, Canada. Corn-shucker | 742,897 | Nov. 3 | 136 | 31 | 107 | 30 |
| Ostlund, Eric M., Rochester, N. Y. Compasses | 723,720 | Mar. 24 | 3833 | 862 | 103 | 847 |
| Ostrander, Alfred I., New York, N. Y. Rotary engine | 733,265 | July 7 | 1016 | 243, 244 | 105 | 212 |
| Ostrander, Willis H., San Francisco, Cal., assignor, by mesne assignments, to Invention Promotion Company. Lemon-squeezer | 747,567 | Dec. 22 | 4149 | 932 | 107 | 2066 |
| Ostrejko, Raphael, Satkuny, Russia. Obtaining carbon of great decolorizing power | 739,104 | Sept. 15 | 3064 | 680 | 106 | 687 |
| Ostrom, Burton O. (See Gary and Ostrom.) | | | | | | |
| Ostrom, Freeland W., assignor to Wheeler & Wilson Manufacturing Company, Bridgeport, Conn. Buttonhole-sewing machine | 726,335 | Apr. 28 | 3544 | 803 | 103 | 1963 |
| Oswald, Alice M. (See Rogers, Charles, assignor.) | | | | | | |
| Otis, Charles R., and A. M. Coyle, Yonkers, N. Y.; said Coyle assignor to said Otis. Driving mechanism | 722,744 | Mar. 17 | 2054 | 459, 460 | 103 | 470 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Otis Elevator Company. (See Baldwin and Sundh, assignors.) | | | | | | |
| Otis Elevator Company. (See Bollman, George W., assignor.) | | | | | | |
| Otis Elevator Company. (See Buckelew, Albert H., assignor.) | | | | | | |
| Otis Elevator Company. (See Ennes, Charles E., assignor.) | | | | | | |
| Otis Elevator Company. (See Fassett, Francis K., assignor.) | | | | | | |
| Otis Elevator Company. (See Fraser, Ethelbert M., assignor.) | | | | | | |
| Otis Elevator Company. (See Hultgren, William H., assignor.) | | | | | | |
| Otis Elevator Company. (See Ihlder, John D., assignor.) | | | | | | |
| Otis Elevator Company. (See Magnuson and Eskilsson, assignors.) | | | | | | |
| Otis Elevator Company. (See Mailloux, Cyprien O., assignor.) | | | | | | |
| Otis Elevator Company. (See Potter, Frederic D., assignor.) | | | | | | |
| Otis Elevator Company. (See Rennerfelt, Gustaf T., assignor.) | | | | | | |
| Otis Elevator Company. (See Sundh, August, assignor.) | | | | | | |
| Otis Elevator Company. (See Venn, Isaac H., assignor.) | | | | | | |
| Otis, Frederic W. (See Bradley and Otis.) | | | | | | |
| Otis, Frederic W., Orange, Conn. Combined protractor, triangle, and curve | 727,680 | May 12 | 1611 | 366 | 104 | 365 |
| Otis, Spencer, Chicago, Ill. Draft-rigging for railway-cars | 739,912 | Sept. 29 | 4583 | 1031 | 106 | 1046 |
| Otis, Spencer, Chicago, Ill., assignor to National Patent Holding Company, Rapid City, S. D., and Chicago, Ill. Truck for cars or other vehicles | 730,687 | June 9 | 2120 | 471 | 104 | 1584 |
| Otis, Spencer, Chicago, Ill., assignor to National Patent Holding Company, Rapid City, S. D., and Chicago, Ill. Bolster and truck mechanism for vehicles | 730,688 | June 9 | 2124 | 471 / 472 | 104 | 1585 |
| Otis, Spencer, Chicago, Ill., assignor to National Patent Holding Company, Rapid City, S. D., and Chicago, Ill. Truck-bolster for railway-cars | 744,225 | Nov. 17 | 2832 | 606 | 107 | 633 |
| Otis, Spencer, Chicago, Ill., assignor to National Patent Holding Company, Rapid City, S. D., and Chicago, Ill. Railway-car truck | 744,226 | Nov. 17 | 2834 | 606 | 107 | 634 |
| Otis, Spencer, Chicago, Ill., assignor to National Patent Holding Company, of South Dakota, Rapid City, S. D., and Chicago, Ill. Car-truck | 739,910 | Sept. 29 | 4580 | 1030 | 106 | 1045 |
| Otis, Spencer, Chicago, Ill., assignor to National Patent Holding Company, of South Dakota, Rapid City, S. D., and Chicago, Ill. Truck-bolster for railway-cars | 739,911 | Sept. 29 | 4582 | 1030 | 106 | 1046 |
| Otis, Spencer, Chicago, Ill., assignor to National Patent Holding Company, of South Dakota, Rapid City, S. D., and Chicago, Ill. Body-bolster | 739,916 | Sept. 29 | 4590 | 1032 | 106 | 1048 |
| Otis, Spencer, Chicago, Ill., assignor to National Patent Holding Company, of South Dakota, Rapid City, S. D., and Chicago, Ill. Bolster and truck | 739,917 | Sept. 29 | 4593 | 1032 | 106 | 1049 |
| Otis, Spencer, Chicago, Ill., assignor to National Coal Dump Car Company, of South Dakota, Rapid City, S. D., and Chicago, Ill. Dump-car | 739,913 | Sept. 29 | 4584 | 1031 | 106 | 1047 |
| Otis, Spencer, Chicago, Ill., assignor to National Coal Dump Car Company, of South Dakota, Rapid City, S. D., and Chicago, Ill. Bottom-dumping car | 739,914 | Sept. 29 | 4586 | 1031 | 106 | 1047 |
| Otis, Spencer, and G. B. Maltby, Chicago, Ill., assignors to National Coal Dump Car Company, of South Dakota, Rapid City, S. D., and Chicago, Ill. Dump-car | 739,915 | Sept. 29 | 4588 | 1032 | 106 | 1048 |
| Otis, Spencer, and G. B. Maltby, Chicago, Ill., assignors to National Coal Dump Car Company, Rapid City, S. D., and Chicago, Ill. Metal dump-car | 744,224 | Nov. 17 | 2830 | 605 | 107 | 633 |
| Otis, William H., Peoria, assignor to T. J. Kennel, Morton, Ill. Down-spout filter | 723,783 | Mar. 24 | 3941 | 889 | 103 | 870 |
| Ott, Albert J., Indianapolis, Ind. Shaft-coupling | 726,336 | Apr. 28 | 3547 | 804 | 103 | 1964 |
| Ott, Charles A., Warren, Pa. Drilling apparatus | 741,364 | Oct. 13 | 1866 | 412 | 106 | 1665 |
| Ott, Frederick, Woonsocket, R. I. Reed for looms | 717,905 | Jan. 6 | 733 | 164 | 102 | 156 |
| Ott, Frederick, Woonsocket, R. I. Take-up roller for looms | 743,657 | Nov. 10 | 1713 | 362 | 107 | 381 |
| Ott, Georg, Ulm, Germany. Soldering apparatus for band-saws | 735,574 | Aug. 4 | 1043 | 222 | 105 | 1202 |
| Ott, Georges. (See Evslin and Ott.) | | | | | | |
| Ott, Gustav, Cleveland, Ohio. Oven | 741,704 | Oct. 20 | 2542 | 567 | 106 | 1824 |
| Ott, Mergenthaler Company *et al.* (See Mergenthaler and Lawrenz, assignors.) | | | | | | |
| Ott, Thomas. (See Coffman, Jacob H., assignor.) | | | | | | |
| Ott, Willard J., assignor to Veneer Barrel Machine Company, Chicago, Ill. Veneer-package machine | 744,876 | Nov. 24 | 4004 | 863 | 107 | 902 |
| Otte, Frank, Clarinda, Iowa. Lister plow and drill | 746,875 | Dec. 15 | 2865 | 659 / 660 | 107 | 1760 |
| Otten, Gerrit C., Ornhem, Netherlands. Gas-generating apparatus | 731,705 | June 23 | 4025 | 898 / 899 | 104 | 2010 |
| Ottenbacher, Ernst, Biberach, Germany. Axle-box | 722,380 | Mar. 10 | 1346 | 298 | 103 | 302 |
| Otterbein, Joseph, Eichstetten, Germany. Chair-seat above front wheels of cycles | 740,905 | Oct. 6 | 958 | 214 | 106 | 1451 |
| Otterman, Arthur R., assignor of one-half to Otterman Manufacturing Company, Bridgeville, Pa. Whiffletree-hook | 726,231 | Apr. 21 | 3319 | 753 | 103 | 1901 |
| Otterman, Arthur R., assignor of one-half to Otterman Manufacturing Company, Bridgeville, Pa. Hook | 731,809 | June 23 | 4216 | 940 | 104 | 2052 |
| Otterman Manufacturing Company. (See Otterman, Arthur R., assignor.) | | | | | | |
| Ottignon, Augustus W., assignor of one-half to T. T. Belknap, Seattle, Wash. Depurator | 734,238 | July 21 | 2842 | 666 | 105 | 636 |
| Otto, Albert T., assignor to H. C. Blye, New York, N. Y. Bottle-stopper | 734,191 | July 21 | 2759 | 647 | 105 | 616 |
| Otto, Edmund T., trustee. (See Otto, Gustav, assignor.) | | | | | | |
| Otto, Gustav, assignor to E. T. Otto, trustee, Jersey City, N. J. Dilating-nozzle | 728,175 | May 12 | 2543 | 565 | 104 | 559 |
| Otto, Henry A., Allegheny, Pa. Overhead traveling crane | 728,495 | May 19 | 3153 | 697 / 698 | 104 | 708 |
| Otto, Leo C., Duluth, Minn. Tripod | 743,320 | Nov. 3 | 974 | 211 | 107 | 208 |
| Otto, Marius, Paris, France. Apparatus for disinfecting | 733,673 | July 14 | 1737 | 410 | 105 | 383 |
| Otto, Marius, Paris, France. Arrangement for the support and cooling of statical ozonizers | 733,674 | July 14 | 1738 | 410 / 411 | 105 | 383 |
| Otto, Marius, Paris, France. Ozonizer | 744,096 | Nov. 17 | 2569 | 549 | 107 | 577 |
| Otto, Thomas O., and J. A. Russell, Keywest, Fla. Gaff or boom iron | 747,471 | Dec. 22 | 3978 | 895 | 107 | 2026 |
| Ours, Arnold S. (See Cross and Ours.) | | | | | | |
| Outerson, Andrew, Windsor Locks, Conn. Paper-making machinery | 726,980 | May 5 | 305 | 67 | 104 | 66 |
| Outlaw, Cecil F., Richmond, Va. Magazine-gun | 738,568 | Sept. 8 | 2048 | 446 | 106 | 456 |
| Outten, Warren B., St. Louis, Mo. Sound-box | 719,361 | Jan. 27 | 3508 | 780 | 102 | 788 |
| Overbaugh, Charles B., Brooklyn, N. Y. Pulverizing condiment-holder | 732,214 | June 30 | 5006 | 1113 | 104 | 2231 |
| Overbaugh, Charles B., New York, N. Y. Pulverizing condiment-holder | 737,267 | Aug. 25 | 4174 | 929 | 105 | 1921 |
| Overbaugh, Charles B., New York, N. Y. Closure for bottles or the like | 738,230 | Sept. 8 | 1357 | 294 | 106 | 309 |
| Overbeck, Otto G. C. L. J., Grimsby, England. Apparatus for cleaning malt, grain, seeds, &c | 728,604 | May 19 | 3380 | 748 / 749 | 104 | 757 |
| Overend, G. W. (See Sampson, Thomas, assignor.) | | | | | | |
| Overholt, Edward H. (See Wenzelmann and Overholt.) | | | | | | |
| Overholt, Elliott G., Welland, Canada. Fence-weaving machine | 746,139 | Dec. 8 | 1518 | 340 | 107 | 1444 |
| Overholt, James W., Luxor, assignor of one-half to E. H. Bailey, Greensburg, Pa. Hook for singletrees | 720,959 | Feb. 17 | 2869 | 656 | 102 | 1457 |
| Overman, Albert H. (See Clark, Philippe L., assignor.) | | | | | | |
| Overman Automobile Company. (See Bullard, James H.) (Reissue.) | | | | | | |
| Overton, Charles A., assignor of one-half to J. F. Merritt and C. M. Nelson, Dunlap, Iowa. Stovepipe-joint | 743,321 | Nov. 3 | 974 | 211 | 107 | 209 |
| Overton, William B. (See Watkins and Overton.) | | | | | | |
| Oving, Hermanus E., Rotterdam, Netherlands. Meter for air and gas mixtures | 731,607 | June 23 | 3851 | 858 | 104 | 1769 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Owatonna Mfg. Co. (See Pierce, James M., assignor.) | | | | | | |
| Owen, David A., Poultney, Vt. Rock-drill attachment | 740,906 | Oct. 6 | 958 | 215 | 106 | 1451 |
| Owen, David T., Cleveland, Ohio. Combined couch and folding bed. (Reissue) | 12,078 | Feb. 3 | 1021 | 237 | 102 | 1040 |
| Owen, David T., Cleveland, Ohio. Folding bed | 730,390 | June 9 | 1576 | 351 | 104 | 1465 |
| Owen, David T., Cleveland, Ohio. Folding bed | 730,391 | June 9 | 1578 | 351 | 104 | 1465 |
| Owen, David T., Cleveland, Ohio. Combined bed and couch | 730,392 | June 9 | 1581 | 352 | 104 | 1466 |
| Owen, David T., Cleveland, Ohio. Folding bed | 730,393 | June 9 | 1583 | 352 | 104 | 1466 |
| Owen, George A., Springfield, Mass. Fare-registering apparatus | 723,907 | Mar. 31 | 4196 | 945 | 103 | 941 |
| Owen, Handel E., and A. J. Shaw, Spokane, Wash. Nut and bolt lock | 742,057 | Oct. 20 | 3223 | 722 | 106 | 1964 |
| Owen, Henry A., assignor to Whitin Machine Works, Incorporated, Whitinsville, Mass. Warp stop-motion for looms | 729,960 | June 2 | 809 | 180 | 104 | 1291 |
| Owen, Henry A., assignor to Whitin Machine Works, Incorporated, Whitinsville, Mass. Safety-clamp for calender-rolls | 731,122 | June 16 | 2928 | 650 | 104 | 1770 |
| Owen, Henry A., assignor to Whitin Machine Works, Incorporated, Whitinsville, Mass. Warp stop-motion for looms | 733,077 | July 7 | 671 | 161 | 105 | 142 |
| Owen, Henry A. and O. L., assignors to Whitin Machine Works, Incorporated, Whitinsville, Mass. Shipper-lock for drawing-frames | 737,862 | Sept. 1 | 597 | 131 | 106 | 131 |
| Owen, Henry A. and O. L., assignors to Whitin Machine Works, Incorporated, Whitinsville, Mass. Shipper-lock for drawing-frames | 737,863 | Sept. 1 | 598 | 131 | 106 | 132 |
| Owen, Henry A. and O. L., assignors to Whitin Machine Works, Incorporated, Whitinsville, Mass. Shipper-lock for spinning-frames | 737,864 | Sept. 1 | 599 | 131 | 106 | 132 |
| Owen, Herbert W., Dover, N. H., and J. T. Kirk, Pawtucket, R. I., assignors to Draper Company, Hopedale, Mass. Warp-stop-motion apparatus | 743,748 | Nov. 10 | 1864 | 394 | 107 | 415 |
| Owen, James G., Southbend, Wash. Logging-jack | 735,897 | Aug. 11 | 1650 | 352<br>353 | 105 | 1351 |
| Owen, James M., Ukiah, Cal. Lock | 726,741 | Apr. 28 | 4327 | 975 | 103 | 2120 |
| Owen, John, Pittsburg, Pa. Rail-fastener | 746,567 | Dec. 8 | 2271 | 521 | 107 | 1606 |
| Owen, Logan, Macon, Ga. Roving-guide traverse-motion | 727,191 | May 5 | 695 | 149 | 104 | 150 |
| Owen, Oscar L. (See Owen, Henry A. and O. L.) | | | | | | |
| Owen, Oscar L., assignor to Whitin Machine Works, Incorporated, Whitinsville, Mass. Belt-shipper | 724,123 | Mar. 31 | 4635 | 1044 | 103 | 1030 |
| Owen, Oscar L., assignor to Whitin Machine Works, Incorporated, Whitinsville, Mass. Journal-bearing for the warp-beams of looms | 731,123 | June 16 | 2929 | 651 | 104 | 1771 |
| Owen, Oscar L., assignor to Whitin Machine Works, Incorporated, Whitinsville, Mass. Take-up motion for looms | 732,436 | June 30 | 5442 | 1209 | 104 | 2321 |
| Owen, Oscar L., assignor to Whitin Machine Works, Incorporated, Whitinsville, Mass. Stop-motion for combing-machines | 737,268 | Aug. 25 | 4176 | 930 | 105 | 1922 |
| Owen, William, Woking, England. Manufacturing artificial stone | 731,608 | June 23 | 3853 | | 104 | 1976 |
| Owen, William, Woking, England, assignor of one-half to W. J. Poupore, Montreal, Canada. Press for making brick, &c | 747,327 | Dec. 15 | 3730 | 840<br>841 | 107 | 1954 |
| Owen, William, Woking, England, assignor of one-half to W. J. Poupore, Montreal, Canada. Machine for shaping and pressing plastic material | 747,328 | Dec. 15 | 3732 | 841<br>842 | 107 | 1955 |
| Owens, Charles, assignor of one-half to D. P. Montague, Chattanooga, Tenn. Movement-cure apparatus | 721,737 | Mar. 3 | 147 | 34 | 103 | 33 |
| Owens, Charles, assignor of one-half to D. P. Montague, Chattanooga, Tenn. Folding, wrapping, and pasting machine | 722,879 | Mar. 17 | 2297 | 514 | 103 | 517 |
| Owens, Charles, assignor of one-half to D. P. Montague, Chattanooga, Tenn. Pamphlet-coverer | 722,880 | Mar. 17 | 2304 | 515 | 103 | 520 |
| Owens, Charles, assignor of one-half to D. P. Montague, Chattanooga, Tenn. Massage instrument | 725,987 | Apr. 21 | 2897 | 657 | 103 | 1814 |
| Owens, Charles, assignor of one-half to D. P. Montague, Chattanooga, Tenn. Pasting mechanism for wrapping and labeling machines | 735,405 | Aug. 4 | 694 | 148<br>149 | 105 | 1128 |
| Owens, Charles, assignor of one-half to D. P. Montague, Chattanooga, Tenn. Printing | 736,540 | Aug. 18 | 2803 | 613<br>614 | 105 | 1616 |
| Owens, Maria W., Hamilton, Ohio. Caster | 743,552 | Nov. 10 | 1509 | 315 | 107 | 339 |
| Owens, Maria W., Hamilton, Ohio. Fruit-jar | 745,375 | Dec. 1 | 113 | 26 | 107 | 1125 |
| Owens, Percy R., New York, N. Y. Automatic current-controlling device | 746,140 | Dec. 8 | 1520 | 340 | 107 | 1445 |
| Owens, Richard K. (See Wilson, Isaac P., assignor.) | | | | | | |
| Owens, Robert B., Montreal, Canada. Apparatus for ascertaining position relative to a prearranged guiding system | 736,432 | Aug. 18 | 2597 | 570 | 105 | 1572 |
| Owens, Samuel H., Eveleth, Minn. Card-holder | 735,802 | Aug. 11 | 1459 | 314 | 105 | 1309 |
| Owens, William E., Omaha, Nebr. Fence-post | 722,615 | Mar. 10 | 1778 | 396 | 103 | 397 |
| Owens, William R., Brooklyn, N. Y. Combination implement for desk use | 744,934 | Nov. 24 | 4101 | 884 | 107 | 921 |
| Oxlade, Robert, Redfern, near Sydney, New South Wales, assignor of two-fifths to W. J. W. Richardson, Petersham, near Sydney, New South Wales, Australia. Audible electrical telegraphy | 721,084 | Feb. 17 | 3099 | 712 | 102 | 1509 |
| Oxley, Alfred F., Detroit, Mich. Bottle | 739,616 | Sept. 22 | 4002 | 892 | 106 | 904 |
| Oxley Enos Company. (See Hopton, Lemuel R., assignor.) | | | | | | |
| Oxley, Eustace, Brooklyn, N. Y. Means for starting electrolytic or Nernst lamps | 737,460 | Aug. 25 | 4542 | 1018 | 105 | 2002 |
| Oxygen Light and Fuel Company. (See Felt, Frank B. and C. E., assignors.) | | | | | | |
| P. & F. Corbin. (See Munro, William, assignor.) | | | | | | |
| P. & F. Corbin. (See Pickop, George B., assignor.) | | | | | | |
| Pabst Brewing Company. (See Anger and Brenckle, assignors.) | | | | | | |
| Paca, William S., Erie, Pa. Telephone-toll slot-machine | 728,964 | May 26 | 4029 | 895 | 104 | 906 |
| Pace, Clifford B., Weiner, Ark. Door-bell | 723,908 | Mar. 31 | 4197 | 945 | 103 | 941 |
| Pace, Edgar J., assignor of one-half to W. G. and D. J. Hard, Salem, Ohio. Hose-coupling | 731,212 | June 16 | 3089 | 685 | 104 | 1801 |
| Pace, Harry, London, England. Wheel for vehicles | 745,893 | Dec. 1 | 1070 | 241 | 107 | 1326 |
| Pace, John H., Hurnville, Tex. Brace for furniture, &c | 738,231 | Sept. 8 | 1358 | 294 | 106 | 309 |
| Pachali, Theodore, assignor of one-half to C. L. Rolland, Reading, Pa. Umbrella | 740,988 | Oct. 6 | 1111 | 250 | 106 | 1483 |
| Pachali, Theodore, assignor of one-half to C. L. Rolland, Reading, Pa. Umbrella | 740,989 | Oct. 6 | 1112 | 250 | 106 | 1483 |
| Pacific Novelty Company. (See Kahn, Julius, assignor.) | | | | | | |
| Pacific Pine Needle Co. (See Cords, Mathilde R., assignor.) | | | | | | |
| Pacific Timber Company. (See Eby, Francis M., assignor.) | | | | | | |
| Pacific Timber Company. (See Welsh, David E., assignor.) | | | | | | |
| Packard, Alexander V., Bordentown, N. J. Rail-joint | 745,894 | Dec. 1 | 1071 | 241 | 107 | 1326 |
| Packard, James W., assignor to Packard Motor Car Company, Warren, Ohio. Hydrocarbon-motor | 722,431 | Mar. 10 | 1435 | 318 | 103 | 321 |
| Packard, James W., assignor to Packard Motor Car Company, Warren, Ohio. Electric igniter for hydrocarbon-engines | 741,365 | Oct. 13 | 1868 | 412 | 106 | 1666 |
| Packard, James W., and W. A. Hatcher, assignors to Ohio Automobile Company, Warren, Ohio. Running-gear for motor-vehicles | 721,912 | Mar. 3 | 469 | 102<br>103 | 103 | 103 |
| Packard Motor Car Company. (See Packard, James W., assignor.) | | | | | | |
| Packard, William F. (See Hayden and Packard.) | | | | | | |
| Packard, William F., Brockton, assignor of three-fourths to A. S. Hayden, L. G. Littlefield, and F. Bartlett, Avon, Mass. Boot-tree | 743,322 | Nov. 3 | 975 | 211 | 107 | 209 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | Spec. | Drgs. | Vol. | Page. |
| Packer, Charles L., Wilton Junction, Iowa. Wire-holder | 729,212 | May 26 | 4473 | 984 | 104 | 998 |
| Packer, George W., assignor to Deering Harvester Company, Chicago, Ill. Section-tempering furnace | 717,906 | Jan. 6 | 734 | 164 | 102 | 156 |
| Packer, George W., assignor to Deering Harvester Company, Chicago, Ill. Making metal wheels | 728,285 | May 19 | 2771 | 615 | 104 | 630 |
| Packer, Orla A., Springfield, Ohio. Land-roller | 718,870 | Jan. 20 | 2569 | 572 | 102 | 576 |
| Packer, Willard N., Shelby, assignor to E. L. Thurston, trustee, Cleveland, Ohio. Blow-off for incandescent-lamp bulbs | 741,822 | Oct. 20 | 2755 | 613 | 106 | 1868 |
| Packer, Willard N., Shelby, assignor to E. L. Thurston, trustee, Cleveland, Ohio. Glass-tube-contracting machine | 741,823 | Oct. 20 | 2756 | 614 | 106 | 1869 |
| Packer, Willard N., assignor to Shelby Specialty Company, Shelby, Ohio. Combined curtain and shade fixture | 745,895 | Dec. 1 | 1073 | 241 | 107 | 1327 |
| Packham, Frank R., assignor to Superior Drill Company, Springfield, Ohio. Grain-drill | 718,512 | Jan. 13 | 1886 | 413, 414 | 102 | 422 |
| Packham, Frank R., assignor to Superior Drill Company, Springfield, Ohio. Bearing for disk furrow-openers of grain-drills | 718,513 | Jan. 13 | 1888 | 414 | 102 | 422 |
| Packham, Frank R., Springfield, Ohio, assignor, by mesne assignments, to American Seeding Machine Company, Jersey City, N. J. Steering-truck for agricultural implements | 732,215 | June 30 | 5007 | 1113 | 104 | 2232 |
| Packham, Frank R., Springfield, Ohio, assignor to American Seeding Machine Company, Jersey City, N. J. Seed-tube connection for grain-drills | 734,086 | July 21 | 2557 | 597 | 105 | 576 |
| Packham, Frank R., Springfield, Ohio, assignor to American Seeding Machine Company, Jersey City, N. J. Disk drill | 745,655 | Dec. 1 | 618 | 144 | 107 | 1230 |
| Packham, Frank R., Springfield, Ohio, assignor to American Seeding Machine Company, Jersey City, N. J. Disk furrow-opener | 747,759 | Dec. 22 | 4507 | 1015 | 107 | 2147 |
| Padberg, Franz, assignor of one-half to H. A. Schoonmaker, New York, N. Y. Composition of matter | 722,536 | Mar. 10 | 1645 | ..... | 103 | 369 |
| Padbury, John J. (See Oldham and Padbury.) | | | | | | |
| Page, Albert A., Easthaven, assignor to Sargent and Company, New Haven, Conn. Padlock | 729,792 | June 2 | 493 | 109 | 104 | 1229 |
| Page, Almon D. (See Heeley, Page, and Macandrew.) | | | | | | |
| Page, Caleb D., Greeley, Colo., assignor to Page Car Company, Boston, Mass. Dumping-car | 721,323 | Feb. 24 | 3590 | 816, 817 | 102 | 1629 |
| Page Car Company. (See Page, Caleb D., assignor.) | | | | | | |
| Page, Daniel R., assignor to W. J. Whitley, Boardman, N. C. Railway-rail joint | 723,543 | Mar. 24 | 3526 | 789 | 103 | 782 |
| Page, David P., assignor to Grand Rapids Brush Company, Grand Rapids, Mich. Tuft-fastener | 730,689 | June 9 | 2126 | 472 | 104 | 1585 |
| Page, Frank C. B., assignor to E. W. Bliss Company, Brooklyn, N. Y. Drawing-press | 736,433 | Aug. 18 | 2599 | 571 | 105 | 1572 |
| Page, George H., Waterford, and J. S. Button, Schenectady, assignors to Cohoes Rolling Mill Co., Cohoes, N. Y. Adjustable skid for tube-making apparatus | 734,357 | July 21 | 3072 | 723 | 105 | 683 |
| Page, Henry J., *et al.* (See Waters, Frank J., assignor.) | | | | | | |
| Page, James F., Spartanburg, S. C. Necktie-holder | 741,705 | Oct. 20 | 2543 | 567 | 106 | 1824 |
| Page, John W., Chicago, Ill. Bascule-bridge | 731,321 | June 16 | 3292 | 733 | 104 | 1844 |
| Page, John W., Chicago, Ill. Bascule-bridge | 731,322 | June 16 | 3293 | 734 | 104 | 1845 |
| Page, Junius R. (See Sturdivant, Frank K., assignor.) | | | | | | |
| Page Machine Company. (See Joy, John M., assignor.) | | | | | | |
| Page Model Butter Company. (See Page, William B., assignor.) | | | | | | |
| Page, Robert W. (See Barrett and Page.) | | | | | | |
| Page, Robert W., assignor to R. Barrett & Son, Limited, London, England. Controller for weight-operated motors | 740,907 | Oct. 6 | 960 | 215 | 106 | 1451 |
| Page, Samuel D., Des Moines, Iowa. Temporary binder | 745,896 | Dec. 1 | 1076 | 242 | 107 | 1327 |
| Page, Thomas V., J. T. Huntington, and M. C. Walls, Indianapolis, Ind. Broadcast seed-sower | 725,474 | Apr. 14 | 1958 | 441 | 103 | 1600 |
| Page, William A., Oakpark, Ill., and F. L. O. Wadsworth, Allegheny, Pa., assignors to Pressed Prism Plate Glass Company, Morgantown, W. Va. Manufacture of sheet-glass | 742,898 | Nov. 3 | 138 | 31, 32 | 107 | 31 |
| Page, William A., Morgantown, W. Va., and F. L. O. Wadsworth, Allegheny, Pa., assignors to Pressed Prism Plate Glass Company, Morgantown, W. Va. Apparatus for the manufacture of sheet-glass | 742,899 | Nov. 3 | 140 | 32, 33 | 107 | 31 |
| Page, William B., Dixon, assignor to Page Model Butter Company, Chicago, Ill. Sanitary delivery and display package | 742,900 | Nov. 3 | 142 | 33 | 107 | 32 |
| Page, Willis A. (See Akers, Earl C., assignor.) | | | | | | |
| Page Woven Wire Fence Company. (See Lamb, Charles M., assignor.) | | | | | | |
| Page Woven Wire Fence Company. (See Lamb and Snedeker, assignors.) | | | | | | |
| Pagenhart, Charles L., assignor of four-fifths to P. P. Johnston, L. R. Ford, W. H. Davis, and W. H. Walters, Waynesboro, Ga. Attachment for boilers | 731,213 | June 16 | 3091 | 685 | 104 | 1802 |
| Paget, Leonard, assignor to C. Coster, New York, N. Y. Electrode for storage batteries | 717,607 | Jan. 6 | 154 | 39 | 102 | 34 |
| Paget, Leonard, assignor to C. Coster, New York, N. Y. Preparing storage-battery electrodes | 717,608 | Jan. 6 | 156 | 40 | 102 | 35 |
| Paget, Leonard, assignor to C. Coster, New York, N. Y. Storage-battery electrode | 717,609 | Jan. 6 | 158 | 40 | 102 | 35 |
| Paget, Leonard, assignor, by mesne assignments, to C. Coster, New York, N. Y. Storage battery and preparing electrodes therefor | 717,610 | Jan. 6 | 161 | 40 | 102 | 35 |
| Paget, Leonard, assignor, by mesne assignments, to C. Coster, New York, N. Y. Battery box or other receptacle | 724,607 | Apr. 7 | 354 | 85 | 103 | 1244 |
| Paige, Charles F., and S. H. Ullrich, Colorado Springs, Colo. Combined match box holder and safe | 739,273 | Sept. 15 | 3370 | 748 | 106 | 753 |
| Paige, David O., Detroit, Mich. Flanging-machine | 720,734 | Feb. 17 | 2471 | 567, 568, 569 | 102 | 1373 |
| Pain, Robert W., New York, N. Y. Music-roll | 734,596 | July 28 | 3512 | 819 | 105 | 791 |
| Pain, Robert W., assignor to Aeolian Co., New York, N. Y. Melody-stop for mechanically-played musical instruments | 717,907 | Jan. 6 | 737 | 165 | 102 | 157 |
| Pain, Robert W., assignor to Aeolian Company, New York, N. Y. Music-sheet for mechanical musical instruments | 725,358 | Apr. 14 | 1736 | 391 | 103 | 1552 |
| Pain, Robert W., assignor to Aeolian Company, New York, N. Y. Automatic piano | 726,981 | May 5 | 306 | 67, 68 | 104 | 66 |
| Pain, Robert W., assignor to Aeolian Co., New York, N. Y. Means for modifying the action of strikers in mechanism for playing keyboard instruments | 728,965 | May 26 | 4031 | 896 | 104 | 906 |
| Pain, Robert W., assignor to Aeolian Company, New York, N. Y. Primary pneumatic-valve in mechanism for playing musical instruments | 728,966 | May 26 | 4033 | 896 | 104 | 906 |
| Pain, Robert W., assignor to Aeolian Co., New York, N. Y. Means for modifying the action of strikers in mechanism for playing keyboard instruments | 730,958 | June 16 | 2611 | 581 | 104 | 1706 |
| Pain, Robert W., assignor to Aeolian Company, New York, N. Y. Expression mechanism for pianolas or other musical instruments | 744,227 | Nov. 17 | 2836 | 606 | 107 | 635 |
| Pain, Willard S., Meriden, Conn., assignor to Aeolian Co., New York, N. Y. Machine for cutting music-sheets for mechanical musical instruments | 717,759 | Jan. 6 | 448 | 104, 105 | 102 | 97 |
| Paine, Charles H., Englewood, N. J. Spray-hood for launches | 745,656 | Dec. 1 | 621 | 144 | 107 | 1231 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Paine, George H., Germantown, Pa., assignor to B. T. B. Hyde, New York, N. Y. Manufacture of capsule-tubes | 722,881 | Mar. 17 | 2308 | 515 | 103 | 521 |
| Painter, Daniel E., Elders Ridge, Pa. Wrench | 736,143 | Aug. 11 | 2100 | 450 | 105 | 1447 |
| Painter, George B., Schenectady, N. Y., assignor to General Electric Company. Insulating-lining and making same | 718,378 | Jan. 13 | 1590 | 351 | 102 | 355 |
| Painter, George B., Schenectady, N. Y., assignor to General Electric Company. Molding apparatus | 718,379 | Jan. 13 | 1593 | 351 | 102 | 356 |
| Painter, Gwynne E., assignor to Crown Cork & Seal Company, Baltimore, Md. Machine for making bottle-seals | 719,689 | Feb. 3 | 489 | 111 | 102 | 925 |
| Painter, Kenyon V., Cleveland, Ohio. Ball | 719,498 | Feb. 3 | 158 | 36 | 102 | 857 |
| Painter, Kenyon V., Cleveland, Ohio. Ball | 719,499 | Feb. 3 | 159 | 36 | 102 | 857 |
| Painter, Kenyon V., Cleveland, Ohio. Ball | 719,500 | Feb. 3 | 160 | 36 | 102 | 857 |
| Painter, Kenyon V., Cleveland, Ohio. Ball | 730,959 | June 16 | 2612 | 581 | 104 | 1707 |
| Painter, Kenyon V., Cleveland, Ohio. Ball | 731,406 | June 16 | 3452 | 771 | 104 | 1877 |
| Painter, Kenyon V., Cleveland, Ohio. Ball | 732,583 | June 30 | 5727 | 1272 | 104 | 2382 |
| Painter, Louis E., Louisville, Ky. Shaving-mirror | 717,611 | Jan. 6 | 163 | 40 | 102 | 36 |
| Painter, Samuel, assignor of one-half to R. P. Sult, Harriman, Tenn. Sliding extension car-step | 723,721 | Mar. 24 | 3834 | 862 | 103 | 847 |
| Paist, Benjamin F., Philadelphia, Pa. Bolt-head-milling machine | 727,426 | May 5 | 1113 | 243, 244, 245 | 104 | 240 |
| Paiste, Henry T., Philadelphia, Pa. Receptacle for incandescent lamps | 730,293 | June 9 | 1407 | 309 | 104 | 1431 |
| Paiste, Henry T., Philadelphia, Pa. Screw-attaching means for electrical devices | 738,059 | Sept. 1 | 985 | 219 | 106 | 215 |
| Paldi, Joseph D., Brockway, Mich. Fence-post | 744,790 | Nov. 24 | 3853 | 830 | 107 | 869 |
| Palen, Frederick P. (See Lovell and Palen.) | | | | | | |
| Palestini, Luigi. (See Bruno, Carlo, assignor.) | | | | | | |
| Paley, George, Preston, England. Landing-net | 723,484 | Mar. 24 | 3435 | 768 | 103 | 764 |
| Palfreyman, Will. A. (See Bryan and Palfreyman.) | | | | | | |
| Palitzsch, Julius A., Dresden, Germany. Bed-rest | 745,234 | Nov. 24 | 4714 | 1030 | 107 | 1048 |
| Palladino, Gaetano, El Paso, Tex. Extension-table | 730,473 | June 9 | 1740 | 389 | 104 | 1500 |
| Pallé, Frederic A., New York, N. Y. Rotary engine | 729,399 | May 26 | 4793 | 1061 | 104 | 1063 |
| Palm, Fredrick, Pueblo, Colo. Valve | 722,322 | Mar. 10 | 1239 | 276 | 103 | 280 |
| Palmaer, Wilhelm, Stockholm, Sweden. Manufacturing manure from apatite | 748,523 | Dec. 29 | 5977 | ------ | 107 | 2491 |
| Palmatary, John E., Wilmington, Del. Bracket attachment for bath-tubs | 743,917 | Nov. 10 | 2175 | 469 | 107 | 479 |
| Palmenberg, William F., assignor to J. R. Palmenberg's Sons, New York, N. Y. Garment-form | 739,212 | Sept. 15 | 3250 | 720 | 106 | 726 |
| Palmenberg's Sons, J. R. (See Palmenberg, William F., assignor.) | | | | | | |
| Palmer, Alfred E., San Francisco, assignor to H. E. Lamar, Oakland, and M. E. Rafael, San Francisco, Cal. Apparatus for printing on roll-paper | 741,706 | Oct. 20 | 2544 | 567, 568 | 106 | 1824 |
| Palmer, Anson N. (See Kimball and Palmer.) | | | | | | |
| Palmer, Anson N., and W. W. Kimball, assignors to Syracuse Time Recorder Company, Syracuse, N. Y. Time-recorder | 738,350 | Sept. 8 | 1642 | 355, 356 | 106 | 369 |
| Palmer, Byron G., Woodland Park, assignor of one-half to I. P. George, Colorado Springs, Colo. Cutting apparatus for mowers, &c. | 744,393 | Nov. 17 | 3138 | 674 | 107 | 701 |
| Palmer, Cassius C., New York, N. Y., assignor to Railway & Stationary Refrigerating Company. Liquid-power-transmitting apparatus | 738,837 | Sept. 15 | 2597 | 573 | 106 | 589 |
| Palmer, Cassius C., New York, N. Y., assignor to Railway & Stationary Refrigerating Company. Ice-machine | 742,482 | Oct. 27 | 4044 | 907 | 106 | 2147 |
| Palmer, Charles H., and J. W. Denmead, Akron, Ohio, assignors to Diamond Match Company, New York, N. Y. Means for feeding bags, &c., to printing-presses | 729,213 | May 26 | 4474 | 985 | 104 | 998 |
| Palmer, Charles H., and J. W. Denmead, Akron, Ohio, assignors to Diamond Match Company, New York, N. Y. Feeding mechanism for printing-presses | 729,214 | May 26 | 4476 | 985, 986 | 104 | 998 |
| Palmer, Charles M., Palmerville, N. C. Wood-distilling apparatus | 737,461 | Aug. 25 | 4543 | 1018 | 105 | 2002 |
| Palmer, Charlie C., Osceola, Iowa. Regulating means for self-feeders and band-cutters. | 732,956 | July 7 | 455 | 113 | 105 | 98 |
| Palmer, Chester M., Fond du Lac, Wis. Shearing-machine | 720,469 | Feb. 10 | 1939 | 443 | 102 | 1248 |
| Palmer, Chester M., Fond du Lac, Wis. Shearing-machine. (Reissue) | 12,131 | July 21 | 3314 | 778 | 105 | 732 |
| Palmer, Chester M., Fond du Lac, Wis. Continuous and pulsatory current electric motor. | 740,171 | Sept. 29 | 5057 | 1138 | 106 | 1148 |
| Palmer, Chester M., Fond du Lac, Wis. System of electrical distribution and transforming | 735,406 | Aug. 4 | 698 | 149 | 105 | 1129 |
| Palmer, Cornelius. (See Anderson and Palmer.) | | | | | | |
| Palmer, Emis D., Frankfort, Ill. Broom-needle | 739,023 | Sept. 15 | 2903 | 644 | 106 | 655 |
| Palmer, Ethan B., Philadelphia, Pa. Parcel-strap | 734,934 | July 28 | 4148 | 965 | 105 | 821 |
| Palmer, Francis E. (See Barnes, Leroy E., assignor.) | | | | | | |
| Palmer, Frank T., Coscob, Conn. Portable wood-sawing machine | 728,967 | May 26 | 4034 | 896 | 104 | 907 |
| Palmer, Frederick C. (See Newton, Stephen S., assignor.) | | | | | | |
| Palmer, George, Brooklyn, assignor to W. R. Hearst, New York, N. Y. Making half-tone printing-surfaces | 735,142 | Aug. 4 | 190 | 40 | 105 | 1022 |
| Palmer, George Q., Frederic, Mich. Weeding implement | 717,908 | Jan. 6 | 740 | 165 | 102 | 158 |
| Palmer, Harmon S., Washington, D. C. Machine for molding hollow concrete building-blocks | 727,428 | May 5 | 1123 | 247 | 104 | 242 |
| Palmer, Harmon S., Washington, D. C. Machine for molding hollow concrete building-blocks | 731,323 | June 16 | 3296 | 734, 735, 736 | 104 | 1845 |
| Palmer, Harmon S., Washington, D. C., assignor to Harmon S. Palmer Hollow Concrete Building Block Company, Alexandria, Va. Machine for molding hollow concrete building-blocks | 727,427 | May 5 | 1118 | 245, 246, 247 | 104 | 241 |
| Palmer, Harry R. (See Jorgensen and Palmer.) | | | | | | |
| Palmer, Henry L., Rockville Center, N. Y. Serving-tray | 724,492 | Apr. 7 | 137 | 33 | 103 | 1199 |
| Palmer, Horatio R., *et al.* (See Brady, James, assignor.) | | | | | | |
| Palmer, Isaac E., Middletown, Conn. Fish-trap | 721,913 | Mar. 3 | 472 | 103 | 103 | 104 |
| Palmer, Isaac E., Middletown, Conn. Fish-net | 721,914 | Mar. 3 | 474 | 104 | 103 | 104 |
| Palmer, Isaac E., Middletown, Conn. Turnback bedstead-canopy support | 722,882 | Mar. 17 | 2309 | 515, 516 | 103 | 521 |
| Palmer, Isaac E., Middletown, Conn. Turnback bedstead-canopy support | 722,883 | Mar. 17 | 2312 | 516 | 103 | 521 |
| [illegible] E., Middletown, Conn. Combined canopy and supporting-frame | 724,733 | Apr. 7 | 594 | 141 | 103 | 1295 |
| [illegible] E., Middletown, Conn. Hammock | 725,475 | Apr. 14 | 1960 | 441 | 103 | 1600 |
| [illegible] E., Middletown, Conn. Seine | 725,988 | Apr. 21 | 2898 | 657 | 103 | 1814 |
| [illegible] E., Middletown, Conn. Turnback bedstead-canopy support | 726,563 | Apr. 28 | 3991 | 904 | 103 | 2049 |
| [illegible] E., Middletown, Conn. Loom for cross-weaving | 737,865 | Sept. 1 | 601 | 131, 132 | 106 | 132 |
| Palmer, Isaac E., Middletown, Conn. Canopy-supporting frame | 739,024 | Sept. 15 | 2904 | 645 | 106 | 655 |
| [illegible] John. See Bockmeyer and Palmer.) | | | | | | |
| Palmer, John M. (See McCarthy and Palmer.) | | | | | | |
| Palmer, Maro V., Willimantic, Conn., assignor, by mesne assignments, to Universal Winding Company, Boston, Mass. Thread-winder | 731,609 | June 23 | 3854 | 859 | 104 | 1976 |
| Palmer, Noyes F., Brooklyn, N. Y. Machine for molding artificial stone | 724,608 | Apr. 7 | 355 | 86 | 103 | 1245 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| Palmer, Noyes F., New York, N. Y. Conveyer for artificial stone | 731,941 | June 23 | 4446 | 992 | 104 | 2102 |
| Palmer, Noyes F., New York, N. Y. Hopper | 734,740 | July 28 | 3787 | 884 | 105 | 846 |
| Palmer, Philip C., Kansas City, Mo. Adjustable chair or table | 730,690 | June 9 | 2127 | 472 | 104 | 1586 |
| Palmer, Theron R., Jeannette, Pa. Inner tube for pneumatic tires | 739,025 | Sept. 15 | 2905 | 645 | 106 | 655 |
| Palmer, Theron R., Jeannette, Pa. Making single-tube pneumatic tires | 744,394 | Nov. 17 | 3140 | 674 | 107 | 701 |
| Palmer, Walter K., Lawrence, Kans. Padlock | 718,789 | Jan. 20 | 2417 | 536 | 102 | 544 |
| Palmer, William A., Ensley, Ala. Car-coupling | 734,935 | July 28 | 4149 | 965 | 105 | 922 |
| Palmer, William E., Tonbridge, England. Electric clock | 740,038 | Sept. 29 | 4829 | 1083 | 106 | 1100 |
| Palmer, William W., Pittsburg, Pa. Scale | 738,475 | Sept. 8 | 1879 | 408<br>409 | 106 | 418 |
| Palmer, Winfield S., Glenburn, Pa. Non-refillable bottle | 736,434 | Aug. 18 | 2602 | 571 | 105 | 1573 |
| Palmetto Fibre Company. (See Fisher and Young, assignors.) | | | | | | |
| Palotai, Ödön, Budapest, Austria-Hungary. Siphon-bottle | 732,027 | June 23 | 4628 | 1034<br>1035 | 104 | 2139 |
| Panay, Karl, Milwaukee, Wis. Show-case for confections | 722,745 | Mar. 17 | 2057 | 460 | 103 | 471 |
| Pancoast, George E., Brooklyn, N. Y., assignor to American Lithographic Company. Gripper mechanism | 747,213 | Dec. 15 | 3507 | 796 | 107 | 1905 |
| Pancoast, George E., Brooklyn, N. Y., assignor to American Lithographic Company. Lithographic transferring | 748,003 | Dec. 29 | 5011 | 1132 | 107 | 2280 |
| Pancoast, George E., Brooklyn, N. Y., assignor to American Lithographic Company. Printing-form | 748,004 | Dec. 29 | 5015 | 1133 | 107 | 2281 |
| Pancoast, George E., Brooklyn, N. Y., assignor to American Lithographic Company. Device for lithographic transferring | 748,093 | Dec. 29 | 5191 | 1174 | 107 | 2320 |
| Pangburn, Edward F., Battlecreek, Mich. Adjustable window-frame | 722,037 | Mar. 3 | 713 | 158 | 103 | 154 |
| Panitschek, Heinrich, and J. Ahorn, Sarajevo, Austria-Hungary. Pattern fabric and making same | 725,627 | Apr. 14 | 2237 | 506 | 103 | 1660 |
| Panitschek, Heinrich, and J. Ahorn, Sarajevo, Austria-Hungary. Loom for weaving pile carpets | 732,216 | June 30 | 5010 | 1114<br>1115<br>1116<br>1117<br>1118 | 104 | 2232 |
| Panitschek, Heinrich, and J. Ahorn, Sarajevo, Austria-Hungary. Loom for weaving pattern fabrics | 741,366 | Oct. 13 | 1868 | 413<br>414 | 106 | 1666 |
| Panzl, Romedius, Muskegon, Mich. Acid-proof lining for boilers | 744,601 | Nov. 17 | 3482 | 751 | 107 | 772 |
| Panzl, Romedius, Muskegon, Mich. Composition for acid-proof lining of digesters | 744,689 | Nov. 17 | 3633 | ..... | 107 | 805 |
| Panzl, Romedius, Muskegon, Mich. Composition for acid-proof lining of digesters | 744,690 | Nov. 17 | 3634 | ..... | 107 | 805 |
| Pape, Fred, New York, N. Y. Composition for preventing adhesion of paper to rubber in printing-presses | 743,918 | Nov. 10 | 2176 | ..... | 107 | 480 |
| Pape, Harry W., assignor to C. Eha, Cincinnati, Ohio. Original package | 730,960 | June 16 | 2613 | 582 | 104 | 1707 |
| Paquette, Herman A., Benning, D. C. Hand-brake mechanism for cars | 734,429 | July 21 | 3197 | 752 | 105 | 709 |
| Paquette, Theophile, Webster, Mass. Shuttle-threader | 747,472 | Dec. 22 | 3979 | 895 | 107 | 2026 |
| Paradis, Frederick E., Chicago, Ill. Battery-chute | 728,968 | May 26 | 4035 | 896 | 104 | 907 |
| Parbel, Joseph, Grand Rapids, Mich. Combination-tool | 736,435 | Aug. 18 | 2603 | 572 | 105 | 1573 |
| Parcelle, Albert L., Boston, Mass. Induction-coil | 723,016 | Mar. 17 | 2525 | 566 | 103 | 565 |
| Pardon, Frank H., Owensboro, Ky. Fish-hook | 740,775 | Oct. 6 | 741 | 167 | 106 | 1404 |
| Parent, Blanche. (See Parent, Edmond, assignor.) | | | | | | |
| Parent, Edmond, assignor to B. Parent, Montreal, Canada. Implement for driving nails or tacks | 725,125 | Apr. 14 | 1316 | 296 | 103 | 1464 |
| Parfrey, William, New York, N. Y. Incandescent burner | 738,746 | Sept. 8 | 2401 | 527 | 106 | 530 |
| Parham, Horace M., Charleston, S. C. Inking-roller | 734,741 | July 28 | 3788 | 884 | 105 | 846 |
| Parham, Sion W., Monroe, N. C. Fish-transportation car | 729,653 | June 2 | 235 | 53 | 104 | 1176 |
| Paris, Bernhard, Schlackenmühle, Germany. Key wind musical instrument | 735,803 | Aug. 11 | 1460 | 314 | 105 | 1309 |
| Parish, Barton, Homer, Ill. Refrigerator | 743,323 | Nov. 3 | 976 | 212 | 107 | 209 |
| Parish, Charles E., Worthington, W. Va. Wagon-top | 741,367 | Oct. 13 | 1879 | 414 | 106 | 1668 |
| Parish, Graham C., assignor to W. G. Browne Manufacturing Company, Kingston, N. Y. Broiler | 745,376 | Dec. 1 | 114 | 26 | 107 | 1125 |
| Parish, Le Grand, Chicago, Ill. Wear-compensating device | 732,887 | July 7 | 342 | 83 | 105 | 75 |
| Parizot, Franz C. N., Bremen, Germany. Self-igniter for gas-burners | 737,462 | Aug. 25 | 4545 | 1018 | 105 | 2002 |
| Park, Albert J., Worcester, Mass., assignor to Sanford Manufacturing Company, Chicago, Ill. Mucilage-holder | 726,982 | May 5 | 308 | 68 | 104 | 67 |
| Park, Allan G., Madison, Wis. Supporting-stand | 746,141 | Dec. 8 | 1523 | 340 | 107 | 1445 |
| Park, Andrew J., Bokchito, Ind. Ter. Railway switch-signal | 738,232 | Sept. 8 | 1361 | 294 | 106 | 309 |
| Park, Arthur B., New York, N. Y. Bottle-washing machine | 728,754 | May 19 | 3643 | 810 | 104 | 812 |
| Park, Edward E., San Francisco, Cal. Photographic developing apparatus | 744,602 | Nov. 17 | 3484 | 751 | 107 | 772 |
| Park, John H., Park Quarries, Pa. Brick-kiln | 718,871 | Jan. 20 | 2570 | 572 | 102 | 576 |
| Park, Kennedy, Cambridgeport, Mass. Apparatus for forming serpentine hollow bodies. | 727,830 | May 12 | 1905 | 425 | 104 | 423 |
| Park, Kennedy, Cambridgeport, Mass. Apparatus for forming serpentine hollow bodies. | 731,124 | June 16 | 2930 | 651 | 104 | 1771 |
| Park, Kennedy, Mansfield, Ohio, assignor to Aultman & Taylor Machinery Company. Hand-hole cover | 744,015 | Nov. 10 | 2405 | 516 | 107 | 529 |
| Park, Kennedy, assignor to Aultman & Taylor Machinery Company, Mansfield, Ohio. Baffle-wall brick | 747,329 | Dec. 15 | 3734 | 842 | 107 | 1955 |
| Park, Thomas M., Darrington, Wash. Automatic loading device | 720,840 | Feb. 17 | 2632 | 607 | 102 | 1407 |
| Park, Thomas M., Darrington, Wash. Automatic ore-loader | 720,960 | Feb. 17 | 2871 | 657 | 102 | 1457 |
| Park, Thomas M., Darrington, Wash. Automatic loading device | 733,418 | July 14 | 1294 | 306 | 105 | 290 |
| Park, Thomas M., Darrington, Wash. Attachment for automatic loading-machines | 737,269 | Aug. 25 | 4178 | 930 | 105 | 1922 |
| Park, William L., Windham Township, Norfolk county, Canada. Wagon-tongue support. | 743,185 | Nov. 3 | 702 | 154 | 107 | 147 |
| Park, William R., Taunton, Mass. Pipe-coupling | 739,707 | Sept. 22 | 4171 | 932 | 106 | 942 |
| Park, William R., Chicago, Ill. Door-jamb safe | 741,368 | Oct. 13 | 1880 | 415 | 106 | 1668 |
| Parke Davis & Company. (See Clark, Ernest C., assignor.) | | | | | | |
| Parke, John Y., Philadelphia, Pa. Electric push-button | 727,996 | May 12 | 2217 | 494 | 104 | 491 |
| Parke, Peter. (See Stimson and Parke.) | | | | | | |
| Parke, Robert A., New York, N. Y. Inertia-governor for fluid-pressure brakes | 739,918 | Sept. 29 | 4595 | 1033 | 106 | 1050 |
| Parker, Alfred, assignor to F. A. and P. Hall, Methuen, Mass. Spinning-frame | 745,897 | Dec. 1 | 1077 | 242 | 107 | 1328 |
| Parker, Benjamin W., Cincinnati, Ohio. Letter-box | 722,323 | Mar. 10 | 1241 | 276 | 103 | 280 |
| Parker, Charles C., Baltimore, Md. Machine for washing and rinsing bottles | 736,769 | Aug. 18 | 3242 | 716<br>717 | 105 | 1705 |
| Parker, Charles J., Havre de Grace, Md. Toaster | 719,253 | Jan. 27 | 3291 | 737 | 102 | 740 |
| Parker, Clarence L., Los Angeles, Cal. Pump | 741,926 | Oct. 20 | 2952 | 658 | 106 | 1909 |
| Parker, Edmund A., Meriden, Conn. Fruit-jar | 723,017 | Mar. 17 | 2527 | 566 | 103 | 566 |
| Parker, Edmund A., Meriden, Conn. Safety-match holder | 747,568 | Dec. 22 | 4152 | 933 | 107 | 2067 |
| Parker, Edmund A., Meriden, Conn. Match-box holder | 747,569 | Dec. 22 | 4153 | 933 | 107 | 2067 |
| Parker, Edward L., *et al.* (See Chandler, Frank M., assignor.) | | | | | | |
| Parker, Edwin D., Springfield, Ohio. Cherry-seeder | 719,131 | Jan. 27 | 3083 | 686 | 102 | 697 |
| Parker, Ezra, Cumberland, Iowa. Tread-power motor | 726,454 | Apr. 28 | 3756 | 851<br>852 | 103 | 2006 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Des. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Parker, Francis E., Kansas City, Mo. Apparatus for separating and cleaning ores | 747,214 | Dec. 15 | 3509 | 796 | 107 | 1906 |
| Parker, Francis E., Kansas City, Mo., assignor to U. S. Ore Reduction Company. Ore-separating and concentrating apparatus | 727,997 | May 12 | 2219 | 494, 495 | 104 | 491 |
| Parker, Frederic G. W. (See Le Maitre, Parker, and Rhodes.) | | | | | | |
| Parker, George F., and M. E. M. Whiting, Boston, Mass. Pattern-chart | 740,172 | Sept. 29 | 3059 | 1138 | 106 | 1148 |
| Parker, George H., New Bedford, assignor to Draper Company, Hopedale, Mass. Shuttle-checking mechanism for looms | 732,437 | June 30 | 5444 | 1209 | 104 | 2321 |
| Parker, George H., New York, assignor to G. E. Walter, Brooklyn, N. Y. Window-bead fastener | 735,143 | Aug. 4 | 197 | 40 | 105 | 1024 |
| Parker, George P. (See Harlan, Frederic T., assignor.) | | | | | | |
| Parker, George W., *et al.* (See Wattles, Luther H., assignor.) | | | | | | |
| Parker, George W., Terre Haute, Ind. Mine-tipple | 739,341 | Sept. 22 | 3486 | 779, 780 | 106 | 793 |
| Parker, Gustavus W., Brunswick, Me. Chisel attachment | 719,607 | Feb. 3 | 347 | 81 | 102 | 894 |
| Parker, Henry, Brooklyn, N. Y. Non-refillable bottle | 735,407 | Aug. 4 | 700 | 150 | 105 | 1130 |
| Parker, Herbert C., assignor to Hipolito Screen and Sash Company, Los Angeles, Cal. Device for measuring openings | 748,094 | Dec. 29 | 5194 | 1174 | 107 | 2320 |
| Parker, Homer N., Winchendon, Mass. Toy vehicle | 725,126 | Apr. 14 | 1318 | 297 | 103 | 1464 |
| Parker, Homer N., Winchendon, Mass. Toy vehicle | 728,286 | May 19 | 2772 | 615 | 104 | 630 |
| Parker, Howard, Nashua, N. H., assignor to Improved Paper Machinery Company, Castine, Me., and Nashua, N. H. Belt-guide | 745,377 | Dec. 1 | 116 | 26, 27 | 107 | 1125 |
| Parker, Howard, Nashua, N. H., assignor to Improved Paper Machinery Company, Castine, Me., and Nashua, N. H. Paper-making roll | 747,632 | Dec. 22 | 4278 | 961, 962 | 107 | 2095 |
| Parker, James W., West Pullman, Ill. Sheaf-carrier | 738,838 | Sept. 15 | 2598 | 574 | 106 | 589 |
| Parker, John, assignor to Brown and Sharpe Manufacturing Company, Providence, R. I. Feed-tripping mechanism | 718,514 | Jan. 13 | 1889 | 414, 415 | 102 | 422 |
| Parker, John L., Aubrey, Tex. Power-plow | 729,654 | June 2 | 236 | 53 | 104 | 1177 |
| Parker, Lemuel, Leeds, England. Water-gage | 719,854 | Feb. 3 | 797 | 186 | 102 | 992 |
| Parker Match Company. (See Parker, William H., assignor.) | | | | | | |
| Parker, Orin, Rochester, N. Y. Acetylene-gas generator | 746,568 | Dec. 8 | 2272 | 521 | 107 | 1606 |
| Parker, Peter. (See Denny, David W., assignor.) | | | | | | |
| Parker, Ralzemond A., and F. Goebel, Detroit, Mich. Bottle-washing apparatus | 740,990 | Oct. 6 | 1113 | 251 | 106 | 1483 |
| Parker, Thaddeus H., *et al.* (See Carlton and Harrell, assignors.) | | | | | | |
| Parker, Thomas, Wolverhampton, England. Turbine vane or blade | 729,889 | June 2 | 679 | 150 | 104 | 1267 |
| Parker, Thomas, London, Canada. Heating apparatus for railway-cars | 740,462 | Oct. 6 | 154 | 31 | 106 | 1279 |
| Parker, Walter, Neola, Iowa. Heat-regulator | 730,043 | June 2 | 955 | 214 | 104 | 1322 |
| Parker, William E., McDonoghville, La. Cattle or stock guard | 732,007 | June 23 | 4594 | 1025 | 104 | 2132 |
| Parker, William F., Washington, D. C. Bicycle trailer package-carrier | 730,193 | June 2 | 1192 | 268 | 104 | 1370 |
| Parker, William H., *et al.* (See Schoenthaler, Edward F., assignor.) | | | | | | |
| Parker, William H., Longbranch, N. J. Punching-machine | 723,722 | Mar. 24 | 3836 | 862, 863 | 103 | 848 |
| Parker, William H., Passaic, assignor to Parker Match Company, Jersey City, N. J. Machine for making matches | 747,473 | Dec. 22 | 3980 | 895 | 107 | 2026 |
| Parker, William K., Cambridge, assignor of one-half to J. H. Sullivan, Boston, Mass. Upholstery-spring | 728,496 | May 19 | 3155 | 698 | 104 | 709 |
| Parkes, James H. (See Rodney and Parkes.) | | | | | | |
| Parkes, Samuel R., Willenhall, England. Coin-operated lock | 730,691 | June 9 | 2128 | 472 | 104 | 1586 |
| Parkes, William N., Brooklyn, N. Y. Stitch-forming mechanism for sewing-machines | 730,692 | June 9 | 2130 | 473 | 104 | 1586 |
| Parkhill Manufacturing Company. (See Dustin, John F., assignor.) | | | | | | |
| Parkhill Manufacturing Company. (See Sullivan, William E., assignor.) | | | | | | |
| Parkhurst, Edward G., deceased, Hartford, Conn., (J. E. Parkhurst, executrix,) assignor of one-half to L. E. Warren, New York, N. Y. Magazine bolt-gun | 719,254 | Jan. 27 | 3292 | 737 | 102 | 740 |
| Parkhurst, Friend T., assignor of one-half to A. L. Anderson, McLoud, Okla. Ter. Threshing-machine | 742,058 | Oct. 20 | 3225 | 722, 723 | 106 | 1964 |
| Parkhurst, Julia E., executrix. (See Parkhurst, Edward G.) | | | | | | |
| Parkin, Frank W., Chicago, Ill. Portable sheet-music pocket | 731,214 | June 16 | 3093 | 686 | 104 | 1802 |
| Parkinson, Edward, Philadelphia, Pa. Knitting-machine | 739,708 | Sept. 22 | 4172 | 933, 934 | 106 | 942 |
| Parkinson, J. F. (See Holly, George W., assignor.) | | | | | | |
| Parkinson, Jay D., Laporte, Ind. Gate-hinge | 746,142 | Dec. 8 | 1525 | 341 | 107 | 1446 |
| Parkinson, Richard, and J. Scholes, Manchester, England. Measuring device | 724,036 | Mar. 31 | 4461 | 1005 | 103 | 993 |
| Parkinson and W. & B. Cowan. (See Chubb, Arthur G., assignor.) | | | | | | |
| Parks, Albert F., Brooklyn, N. Y. Stroke-varying mechanism for explosive-engines | 719,855 | Feb. 3 | 798 | 186 | 102 | 992 |
| Parks, Frank E., Duquesne, Pa. Apparatus for handling pit-scrap | 723,723 | Mar. 24 | 3839 | 863 | 103 | 848 |
| Parks, John H., Laurens, S. C. Bill-holder | 730,562 | June 9 | 1893 | 422 | 104 | 1534 |
| Parks, John H., Laurens, S. C. Bill-holder | 734,358 | July 21 | 3073 | 723 | 105 | 684 |
| Parks, Leonard D., assignor of one-half to A. D. Honeycut, Gatesville, Tex. Non-refillable bottle | 725,283 | Apr. 14 | 1595 | 360 | 103 | 1523 |
| Parks, William, assignor of one-half to G. W. Holtz, Frazeysburg, Ohio. Bag-fastener | 739,919 | Sept. 29 | 4602 | 1033 | 106 | 1050 |
| Parks, William M. (See Pitts, Edward L., assignor.) | | | | | | |
| Parlin & Orendorff Company. (See Graham, William S., assignor.) | | | | | | |
| Parlin & Orendorff Company. (See Kirkhuff, Marshall N., assignor.) | | | | | | |
| Parlin & Orendorff Company. (See Parlin, William H., assignor.) | | | | | | |
| Parlin, William H., assignor to Parlin & Orendorff Company, Canton, Ill. Corn-planter | 734,359 | July 21 | 3075 | 724 | 105 | 684 |
| Parmelee, George H., Johnstown, Pa., assignor to Lorain Steel Company. Railway-track structure | 729,089 | May 26 | 4552 | 939 | 104 | 951 |
| Parmelee, George H., Johnstown, Pa., assignor to Lorain Steel Company. Railway-track structure | 729,090 | May 26 | 4255 | 940 | 104 | 952 |
| Parmelee, George H., Johnstown, Pa., assignor to Lorain Steel Company. Railway-track structure | 729,091 | May 26 | 4257 | 940 | 104 | 952 |
| Parmelee, John H., assignor of one-half to A. W. Wallace, Bridgeport, Conn. Hame-fastener | 723,298 | Mar. 24 | 3060 | 688 | 103 | 691 |
| Parmely, Benjamin, Jr. (See Bullock, Arthur R., assignor.) | | | | | | |
| Parmenter, James S., Woodstock, Canada. Carriage-shifter for type-writers | 722,884 | Mar. 17 | 2314 | 516 | 103 | 522 |
| Parmenter, Orville L., Racine, Wis. Cigar-case | 736,771 | Aug. 18 | 3250 | 718 | 105 | 1707 |
| Parmenter, Orville L., assignor to Racine Paper Goods Company, Racine, Wis. Cigar-case | 736,770 | Aug. 18 | 3245 | 717, 718 | 105 | 1706 |
| Parmer, John W., Edwin, Ala. Combined cotton chopper and cultivator | 743,919 | Nov. 10 | 2177 | 469 | 107 | 480 |
| Parmiter, Arthur. (See Leahy and Parmiter.) | | | | | | |
| Parmley, Walter C., Cleveland, Ohio. Concrete-arch construction | 740,039 | Sept. 29 | 4831 | 1083, 1084 | 106 | 1100 |
| Parnall, Archie E. (See Butcher and Parnall.) | | | | | | |
| Parres, Alberto, Mexico, Mexico. Machine for extracting fiber from leaves | 734,936 | July 28 | 4151 | 966 | 105 | 922 |
| Parrish, Justin E. (See Taylor and Parrish.) | | | | | | |
| Parrish, Stephen E., Ithaca, Mich. Combination show-case | 724,323 | Mar. 31 | 5036 | 1128 | 103 | 1109 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|
| | | | Spec. | Drg. | Vol. | Page. |
| Parrish, William N., Richmond, assignor of seven-eighths to A. L. and D. M. Kitselman, Muncie, C. E. Shiveley and W. H. Alford, Richmond, Ind. Wire-fence machine | 745,072 | Nov. 24 | 4391 | 947, 948, 949, 950 | 107 | 981 |
| Parrott, Elijah D., Portland, Oreg. Carbureter | 744,877 | Nov. 24 | 4007 | 864 | 107 | 902 |
| Parry, Leonard L., Mansfield, Ohio. Artificial-stone or concrete receptacle for caskets | 738,696 | Sept. 8 | 2311 | 508 | 106 | 510 |
| Parry, Samuel R. (See Morse, William F., assignor.) | | | | | | |
| Parslow, Samuel R., *et al.* (See Mack, Samuel B., assignor.) | | | | | | |
| Parson, Henry E., Brooklyn, N. Y. Grate | 740,463 | Oct. 6 | 155 | 31 | 106 | 1279 |
| Parson, Henry E., Brooklyn, N. Y. Locomotive | 741,707 | Oct. 20 | 2547 | 568 | 106 | 1824 |
| Parson, Henry E., New York, N. Y. Ash-pit for locomotive-furnaces | 742,129 | Oct. 20 | 3400 | 758 | 106 | 1998 |
| Parson, Henry E., New York, N. Y. Combustion-regulator for locomotive-furnaces | 742,130 | Oct. 20 | 3402 | 759 | 106 | 1998 |
| Parson, Henry E., Brooklyn, N. Y., assignor, by mesne assignments, to Parson Manufacturing Company of New York. Smoke-consuming furnace. (Reissue) | 12,072 | Jan. 6 | 1020 | 227, 228 | 102 | 220 |
| Parson, Henry E., Brooklyn, N. Y., assignor, by mesne assignments, to Parson Manufacturing Company of New York. Automatic forced-draft regulator | 742,128 | Oct. 20 | 3396 | 758 | 106 | 1997 |
| Parson, Henry E., Brooklyn, assignor, by mesne assignments, to Parson Manufacturing Company, New York, N. Y. Rotating steam or water valve | 731,942 | June 23 | 4447 | 992 | 104 | 2102 |
| Parson Manufacturing Company. (See Parson, Henry E., assignor.) | | | | | | |
| Parson Manufacturing Company of New York. (See Parson, Henry E., assignor.) | | | | | | |
| Parsons Band Cutter and Self Feeder Company. (See Snyder, Howard F., assignor.) | | | | | | |
| Parsons, Charles A., Newcastle-upon-Tyne, England. Steam-turbine | 729,215 | May 26 | 4478 | 986, 987, 988 | 104 | 999 |
| Parsons, Charles A., Newcastle-upon-Tyne, England. Winding of revolving magnets | 729,655 | June 2 | 237 | 53, 54, 55, 56 | 104 | 1177 |
| Parsons, Charles A., Newcastle-upon-Tyne, England. Alternator | 732,888 | July 7 | 342 | 84 | 105 | 75 |
| Parsons, Charles A., Newcastle-upon-Tyne, England. Condenser | 741,270 | Oct. 13 | 1646 | 371, 372 | 106 | 1617 |
| Parsons, Edward T., Louisville, Ky. Hose-coupling | 724,324 | Mar. 31 | 5038 | 1128 | 103 | 1110 |
| Parsons, Frank, Holdrege, Nebr. Nut-lock | 738,060 | Sept. 1 | 987 | 219 | 106 | 215 |
| Parsons, Frank, assignor of one-half to G. H. Bridges, Charleston, Mo. Passenger or baggage car | 719,362 | Jan. 27 | 3510 | 781 | 102 | 788 |
| Parsons, Fred O. (See Parsons, Guy S. and F. O.) | | | | | | |
| Parsons, Guy S. and F. O., Bondurant, Iowa. Latch and lock | 728,969 | May 26 | 4037 | 897 | 104 | 907 |
| Parsons, Harry, London, England. Armor for pneumatic tires | 723,299 | Mar. 24 | 3061 | 688 | 103 | 691 |
| Parsons, Isaac H. (See Sloper and Parsons.) | | | | | | |
| Parsons, Isaac H., Leicester, and T. Sloper, Devizes, England. Telephone system | 718,215 | Jan. 13 | 1294 | 285 | 102 | 293 |
| Parsons, Joseph N. (See Depew and Parsons.) | | | | | | |
| Parsons, La Fayette R., Detroit, Mich. Vaccine and preparing same | 737,656 | Sept. 1 | 181 | ..... | 106 | 42 |
| Parsons, Leo S., *et al.* (See Warner, Isaac M., assignor.) | | | | | | |
| Parsons, Richmond. (See Kreh and Parsons.) | | | | | | |
| Parsons, Robert L., Oakville, Ky. Check-row corn-planter | 737,134 | Aug. 25 | 3911 | 869 | 105 | 1866 |
| Partington, Charles, Newport, Ky., assignor to Weir Frog Company, Cincinnati, Ohio. Switch-bar attachment | 739,441 | Sept. 22 | 3700 | 824 | 106 | 840 |
| Partington, William L., assignor of one-fourth to A. W. McAlister, Kansas City, Mo. Pipe-clamp | 724,037 | Mar. 31 | 4463 | 1005 | 103 | 993 |
| Partlow, William H., *et al.* (See Birmingham, John P., assignor.) | | | | | | |
| Partridge & Anderson Company. (See Partridge, Charles S., assignor.) | | | | | | |
| Partridge, Charles S., assignor to Partridge & Anderson Company, Chicago, Ill. Stereotype-casting box | 735,804 | Aug. 11 | 1462 | 314 | 105 | 1310 |
| Partridge, Charles S., assignor to Partridge & Anderson Company, Chicago, Ill. Stereotype casting-box | 738,476 | Sept. 8 | 1881 | 409 | 106 | 418 |
| Partridge, Joseph R. (See Flannigan and Partridge.) | | | | | | |
| Partridge, Welles M., Peabody, Mass. Gas-stove | 747,474 | Dec. 22 | 3983 | 896 | 107 | 2027 |
| Parvin, Charles H., and M. L. Snyder, Philadelphia, Pa. Fire-escape | 748,305 | Dec. 29 | 5569 | 1270 | 107 | 2401 |
| Paschel, Henry J., *et al.* (See Waugh, Robert E. and E., assignors.) | | | | | | |
| Paschen, Frederick, and J. Duckro, Tampa, Fla. Fastening for shoes, &c | 734,360 | July 21 | 3076 | 724 | 105 | 684 |
| Pascoe, Francis A., assignor of one-half to W. A. Robertson, Salt Lake City, Utah, and W. Einbeck, Washington, D. C. Smoke and fume condenser | 746,989 | Dec. 15 | 3084 | 706, 707 | 107 | 1810 |
| Pascoe, Frank S., Allegheny, Pa. Rail-joint | 721,524 | Feb. 24 | 3963 | 903 | 102 | 1706 |
| Pascoe, Joseph. (See Mohler, George H., assignor.) | | | | | | |
| Paskell, Albert E., assignor of one-half to J. S. Hamilton, New Haven, Conn. Step-ladder | 722,409 | Mar. 10 | 1398 | 309 | 103 | 314 |
| Pass & Seymour. (See Salisbury, Bert E., assignor.) | | | | | | |
| Passburg, Emil, Berlin, Germany. Vacuum-pan | 726,742 | Apr. 28 | 4329 | 976 | 103 | 2120 |
| Passburg, Emil, Berlin, Germany. Filling or emptying apparatus for vacuum-driers | 748,414 | Dec. 29 | 5764 | 1315 | 107 | 2445 |
| Passburg, Heinrich, Moscow, Russia. Sugar-mold | 722,137 | Mar. 3 | 876 | 195, 196 | 103 | 188 |
| Passburg, Heinrich, Moscow, Russia. Apparatus for molding sugar | 724,930 | Apr. 7 | 939 | 216 | 103 | 1371 |
| Passmore, Kate S. (See Passmore, Levis, assignor.) | | | | | | |
| Passmore, Levis, assignor to K. S. Passmore, Philadelphia, Pa. Grinding-machine | 721,636 | Feb. 24 | 4191 | 953 | 102 | 1758 |
| Passow, Hermann, Hamburg, Germany, assignor to H. Edmunds, London, England. Cement and making same | 747,919 | Dec. 22 | 4827 | ..... | 107 | 2218 |
| Passow, Hermann, Hamburg, Germany, assignor to H. Edmunds, London, England. Cement and producing same | 747,920 | Dec. 22 | 4830 | 1092 | 107 | 2219 |
| Passow, Hermann, Blankense, near Hamburg, Germany, assignor to H. Edmunds, London, England. Cement and producing same | 747,921 | Dec. 22 | 4837 | ..... | 107 | 2220 |
| Pastallé, Joseph, Paterson, N. J. Window-screen | 743,324 | Nov. 3 | 978 | 212 | 107 | 209 |
| Pastureau, Jules A., assignor of one-half to L. Montegut, Jr., Laplace, La. Loading or unloading apparatus | 741,538 | Oct. 13 | 2215 | 492, 493 | 106 | 1738 |
| Patch, Asahel H., Clarksville, Tenn. Corn-sheller | 732,217 | June 30 | 5024 | 1118 | 104 | 2235 |
| Pate, D. B., *et al.* (See Everett, Looney N., assignor.) | | | | | | |
| Patenall, Frank P. J. (See Loree and Patenall.) | | | | | | |
| Patenall, Thomas H., Wilkinsburg, assignor to Union Switch & Signal Company, Swissvale, Pa. Ring and pouch for high-speed-train staff systems | 720,057 | Feb. 10 | 1187 | 272 | 102 | 1092 |
| Patenall, Thomas H., Wilkinsburg, assignor to Union Switch & Signal Company, Swissvale, Pa. Catching and delivering apparatus | 720,058 | Feb. 10 | 1188 | 272 | 102 | 1092 |
| Patenall, Thomas H., Wilkinsburg, assignor to Union Switch & Signal Company, Swissvale, Pa. High-speed-train staff-crane | 720,059 | Feb. 10 | 1190 | 272, 273 | 102 | 1092 |
| Patenall, Thomas H., Wilkinsburg, assignor to Union Switch and Signal Company, Swissvale, Pa. Staff-lock for switch-levers | 720,961 | Feb. 17 | 2872 | 657, 658 | 102 | 1458 |
| Patenall, Thomas H., Wilkinsburg, assignor to Union Switch and Signal Company, Swissvale, Pa. Staff and lever lock | 743,325 | Nov. 3 | 979 | 212, 213 | 107 | 209 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drgs. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Patent Tobacco Sample Binder Company. (See Wiseburn and Buhle, assignors.) | | | | | | |
| Paterson, Alexander, Wilkinsburg, Pa. Pack for rolling sheet metal | 741,708 | Oct. 20 | 2552 | 569 | 106 | 1825 |
| Paterson, William D., Troy, N. Y. Collar-buttoner | 719,035 | Jan. 27 | 2883 | 646 | 102 | 656 |
| Paton, James W., Liverpool, England. Metal cutting and stamping apparatus | 748,415 | Dec. 29 | 5766 | 1315, 1316 | 107 | 2445 |
| Patric, Charles E. (See Oates and Patric.) | | | | | | |
| Patric, Lewis, Springfield, Ohio. Gas mixer and injector | 734,087 | July 21 | 2558 | 597 | 105 | 576 |
| Patrick, Charles H., Chicago, Ill. Surgical chair | 717,612 | Jan. 6 | 164 | 41 | 102 | 36 |
| Patrick, George S., Waterville, N. Y. Gate | 721,600 | Feb. 24 | 4121 | 938 | 102 | 1742 |
| Patrick, Marcus A., *et al.* (See Broyles, Oliver P., assignor.) | | | | | | |
| Patrick, Marcus C., Seattle, Wash. Combined lock and latch | 728,755 | May 19 | 3645 | 810, 811 | 104 | 813 |
| Patrick, Marshall W., Niles, Cal. Steering device | 734,742 | July 28 | 3789 | 884, 885 | 105 | 846 |
| Patridge, John M., *et al.* (See Prante, Joseph E., assignor.) | | | | | | |
| Patschke, Arthur, Mülheim-on-the-Ruhr, Germany. Rotary motor | 740,908 | Oct. 6 | 961 | 215, 216 | 106 | 1452 |
| Patschke, Arthur, Mülheim-on-the-Ruhr, Germany. Rotary motor | 745,898 | Dec. 1 | 1078 | 242 | 107 | 1328 |
| Pattberg, Heinrich, Homberg-on-the-Rhine, Germany. Contrivance for actuating shaft-borers | 738,233 | Sept. 8 | 1362 | 294, 295 | 106 | 310 |
| Pattee, Herbert H., New York, N. Y. Combined couch and chair | 731,810 | June 23 | 4217 | 940 | 104 | 2052 |
| Pattee, Herbert H., New York, N. Y. Hinge | 731,811 | June 23 | 4220 | 941 | 104 | 2052 |
| Patten, Alonzo R., Auburn, R. I., assignor, by mesne assignments, to Crompton & Knowles Loom Works, Worcester, Mass. Clutch | 719,954 | Feb. 3 | 962 | 223 | 102 | 1027 |
| Patten, Frank C., Sycamore, Ill. Corn-sheller | 730,563 | June 9 | 1894 | 422 | 104 | 1534 |
| Patten, James N., Colegrove, Cal. Velocipede-harness | 742,800 | Oct. 27 | 4608 | 1044 | 106 | 2268 |
| Patten, James S. (See Wiesenfeld, Robert S., assignor.) | | | | | | |
| Patten, James S., Baltimore, Md. Sounding toy | 723,909 | Mar. 31 | 4198 | 945 | 103 | 942 |
| Patten, William A., Lesueur, Minn. Match-safe | 720,060 | Feb. 10 | 1192 | 273 | 102 | 1093 |
| Patterson, Albert E., Smithfield, W. Va. Envelop | 725,866 | Apr. 21 | 2689 | 612 | 103 | 1772 |
| Patterson, Anthony, Cardiff, England. Valve for hydraulic machinery | 738,697 | Sept. 8 | 2313 | 508 | 106 | 510 |
| Patterson, Anthony, Cardiff, England. Valve for hydraulic engines or machinery | 738,730 | Sept. 8 | 2359 | 518 | 106 | 520 |
| Patterson, Anthony, Cardiff, England. Valve for hydraulic engines or machinery | 738,731 | Sept. 8 | 2360 | 518 | 106 | 520 |
| Patterson, Anthony, Cardiff, England. Valve for hydraulic engines or machinery | 738,732 | Sept. 8 | 2361 | 519 | 106 | 520 |
| Patterson, Arthur L., Albemarle, N. C. Electric stop-motion for knitting-machines | 727,429 | May 5 | 1125 | 248 | 104 | 243 |
| Patterson, Charles M., Shrewsbury, N. J. Subirrigating device | 718,380 | Jan. 13 | 1596 | 351 | 102 | 357 |
| Patterson, Charles W. (See James and Patterson.) | | | | | | |
| Patterson, David W., Helena, Mont. Lumber-wagon attachment | 748,212 | Dec. 29 | 5410 | 1230 | 107 | 2366 |
| Patterson, Duncan W., assignor to M. H. Patterson, Philadelphia, Pa. Feed-water system | 732,438 | June 30 | 5446 | 1209, 1210 | 104 | 2322 |
| Patterson, Ebbin, Crowley, La. Rotary pump | 732,109 | June 30 | 4792 | 1069 | 104 | 2186 |
| Patterson, Edie J. (See Brunner and Patterson.) | | | | | | |
| Patterson, Edward H., *et al.* (See Rock, Frederick W., assignor.) | | | | | | |
| Patterson, Frank L., Brooklyn, N. Y. Feed-water heater | 729,400 | May 26 | 4795 | 1062 | 104 | 1064 |
| Patterson, Frank M., Winfield, Kans. Garment-support | 726,337 | Apr. 28 | 3548 | 804 | 103 | 1964 |
| Patterson, James L., Leaf River, Ill. Device for alining cutter-bars | 723,724 | Mar. 24 | 3840 | 863 | 103 | 848 |
| Patterson, James N. (See Ditch and Hawkins, assignors.) | | | | | | |
| Patterson, James W., Burlington, Iowa. Dose-measuring bottle-stopper attachment | 730,044 | June 2 | 956 | 214 | 104 | 1322 |
| Patterson, Lemuel, assignor of one-half to R. W. Lavery, Warren, Pa. Sash-lock | 718,577 | Jan. 13 | 2029 | 441 | 102 | 451 |
| Patterson, Lemuel, assignor of one-half to R. W. Lavery, Warren, Pa. Mailing-tube | 728,407 | May 19 | 2992 | 658 | 104 | 675 |
| Patterson, Miriam H. (See Patterson, Duncan W., assignor.) | | | | | | |
| Patterson, Oliver T., Bloomington, Nebr. Road-scraper | 740,909 | Oct. 6 | 964 | 216, 217 | 106 | 1453 |
| Patterson, Peter, McKeesport, assignor to National Tube Company, Pittsburg, Pa. Apparatus for making butt-weld pipe | 720,061 | Feb. 10 | 1193 | 273 | 102 | 1093 |
| Patterson, Peter, McKeesport, assignor to National Tube Company, Pittsburg, Pa. Perforated-bottom furnace | 726,338 | Apr. 28 | 3550 | 804 | 103 | 1964 |
| Patterson, Peter, McKeesport, assignor to National Tube Company, Pittsburg, Pa. Double-hearth heating-furnace | 729,092 | May 26 | 4259 | 940 | 104 | 952 |
| Patterson, Peter, McKeesport, assignor to National Tube Company, Pittsburg, Pa. Apparatus for making lapweld-tubing | 742,483 | Oct. 27 | 4045 | 907 | 106 | 2147 |
| Patterson, Peter, McKeesport, Pa., assignor to National Tube Company, New York, N. Y. Seamless-tube-drawing mechanism | 741,369 | Oct. 13 | 1881 | 415 | 106 | 1669 |
| Patterson, Peter C., McKeesport, assignor to National Tube Company, Pittsburg, Pa. Hot-saw | 742,223 | Oct. 27 | 3580 | 800, 801 | 106 | 2050 |
| Patterson, Ralph J., Waterville, Me., assignor of one-half to L. R. Wallis, Woburn, Mass. Automatic cut-out for electric-light circuits | 745,899 | Dec. 1 | 1080 | 243 | 107 | 1328 |
| Patterson, Ransom D., assignor of one-half to J. D. Richards, Okemah, Ind. Ter. Well-drilling machine | 735,898 | Aug. 11 | 1652 | 353 | 105 | 1352 |
| Patterson, Rufus L., *et al.* (See Tyberg, Oluf, assignor.) | | | | | | |
| Patterson, Rufus L., *et al.* (See Tyberg and Prescott, assignors.) | | | | | | |
| Patterson, Rufus L. (See Wojciechowski, Jakob, assignor.) | | | | | | |
| Patterson, Samuel F., Baltimore, Md. Power-loom | 722,248 | Mar. 10 | 1108 | 244, 245 | 103 | 252 |
| Patterson, Samuel F., Baltimore, Md. Power-loom. (Reissue) | 12,159 | Sept. 29 | 5450 | 1226, 1227 | 106 | 1229 |
| Patterson, Stuart H., Plainfield, N. J. Carrier | 731,125 | June 16 | 2933 | 652 | 104 | 1771 |
| Patterson, Thomas S., Flushing, N. Y. Centrifugal separator | 731,215 | June 16 | 3094 | 686 | 104 | 1802 |
| Patterson, William J., Pittsburg, Pa. Treating molding-sand | 722,885 | Mar. 17 | 2316 | 517 | 103 | 523 |
| Patterson, William J., assignor to Heyl and Patterson, Pittsburg, Pa. Chute | 727,998 | May 12 | 2227 | 495 | 104 | 492 |
| Patterson, William R., Springfield, Ohio. Shoe-holder | 731,492 | June 23 | 3625 | 809 | 104 | 1932 |
| Patterson, William W., Murrayville, Ill. Scoop-board for vehicle-bodies | 718,019 | Jan. 6 | 947 | 210 | 102 | 204 |
| Pattin Brothers Company. (See Meister and Pattin, assignors.) | | | | | | |
| Pattin, Winfield S. (See Meister and Pattin.) | | | | | | |
| Patton, Samuel L., Indianapolis, Ind. Draft-equalizer | 740,464 | Oct. 6 | 157 | 32 | 106 | 1279 |
| Patton, Albert J., assignor to E. Bement's Sons, Lansing, Mich. Weeder-tooth | 738,477 | Sept. 8 | 1885 | 410 | 106 | 419 |
| Patton, Edward W. (See Kennedy, Charles W., assignor.) | | | | | | |
| Patton, Edward W. (See Kennedy and Pocock, assignors.) | | | | | | |
| Patton, Henry, Cripplecreek, Colo. Artificial hand | 736,144 | Aug. 11 | 2101 | 451 | 105 | 1447 |
| Patton, James E., Jr., Pittsburg, Pa., and O. F. Humphreys, Milwaukee, Wis. Game-board | 717,613 | Jan. 6 | 165 | 41 | 102 | 37 |
| Patton, James L., and A. F. Hochwalt, Dayton, Ohio. Game-table | 728,756 | May 19 | 3648 | 811 | 104 | 813 |
| Patton, John E. (See Sartain, Isaac, assignor.) | | | | | | |
| Patton, John F., Macon, Ga. Photographic retouching-frame | 741,067 | Oct. 13 | 1256 | 285 | 106 | 1535 |
| Patton, Oliver C., Denver, Colo. Self-recording water-gage | 723,725 | Mar. 24 | 3841 | 864 | 103 | 849 |
| Patton, Oliver C., Denver, Colo. Fountain-pen for recording-machines | 738,839 | Sept. 15 | 2600 | 574 | 106 | 540 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|
| | | | Spec. | Drg. | Vol. | Page. |
| Patton Paint Company. (See Westfahl, Henry, assignor.) | | | | | | |
| Patton, William W., Woodsfield, Ohio. Fence-post mold | 721,224 | Feb. 24 | 3435 | 780 | 102 | 1596 |
| Paul, Alfred, Melrose Highlands, Mass. Composition of matter for use as fuel | 734,743 | July 28 | 3791 | ..... | 105 | 847 |
| Paul, Amasa C. (See White, David S., assignor.) | | | | | | |
| Paul, Archibald, Cohoes, N. Y. Thill-coupling | 720,280 | Feb. 10 | 1615 | 369 | 102 | 1180 |
| Paul, Conrad, and J. E. Hankey, Pittsburg, Pa. Account-register and desk | 717,909 | Jan. 6 | 741 | 165<br>166 | 102 | 158 |
| Paul, Irwin, trustee. (See Edwards, Alonzo L., assignor.) | | | | | | |
| Paul J. Daemicke Co. (See Heuning and Burton, assignors.) | | | | | | |
| Paul, James H., Charlton, England. Making hydrocyanic acid and cyanid salt therefrom | 746,876 | Dec. 15 | 2866 | ..... | 107 | 1760 |
| Paul, John B. (See Mentel and Paul.) | | | | | | |
| Paul, John C., Bicknell, Ind. Foundation-squaring device | 735,899 | Aug. 11 | 1654 | 353 | 105 | 1352 |
| Paul, Josef, assignor to Feinmaschinenbau G. Calberla, G. M. B. H., Dresden, Germany. Device for producing continuous strings of tobacco for cigarette-making machines | 722,746 | Mar. 17 | 2059 | 460 | 103 | 471 |
| Paul, Louis, Oswego, Kans. Wagon-box or hay-rack lifter | 736,004 | Aug. 11 | 1858 | 397 | 105 | 1397 |
| Paul, Thomas, assignor of one-half to J. L. McDougal, Yorkton, Canada. Telephone system | 725,476 | Apr. 14 | 1961 | 442 | 103 | 1600 |
| Paul, William L., assignor to David Bradley Manufacturing Company, Bradley, Ill. Plow | 731,067 | June 16 | 2822 | 627 | 104 | 1750 |
| Paulhus, Onesime, Quidnick, R. I. Guard-rail support for railways | 727,999 | May 12 | 2228 | 496 | 104 | 492 |
| Paulinetti, Philip H. T., Philadelphia, Pa. Safety-pin | 721,225 | Feb. 24 | 3437 | 781 | 102 | 1596 |
| Paulinetti, Philip H. T., Philadelphia, Pa. Heating apparatus for beds or couches | 721,226 | Feb. 24 | 3438 | 781 | 102 | 1596 |
| Pauling, Harry, Brandau, Austria-Hungary. Apparatus for treating gases | 739,920 | Sept. 29 | 4603 | 1034 | 106 | 1051 |
| Pauling, Harry, Brandau, Austria-Hungary. Apparatus for treating gases | 739,921 | Sept. 29 | 4604 | 1034 | 106 | 1051 |
| Paulini, Béla, Budapest, Austria-Hungary. Funnel | 740,689 | Oct. 6 | 562 | 126 | 106 | 1368 |
| Paulle, Leonard, Minneapolis, Minn. Base for show-cases | 717,910 | Jan. 6 | 742 | 166 | 102 | 158 |
| Paulson, Charles J., Brooklyn, N. Y. Type-writer | 738,234 | Sept. 8 | 1363 | 295 | 106 | 310 |
| Paulson, Charles J., Brooklyn, assignor to A. J. Nothacker, New York, N. Y. Type-writer | 727,552 | May 5 | 1350 | 304<br>305 | 104 | 200 |
| Paulson, Neil, *et al.* (See De France, Murry A., assignor.) | | | | | | |
| Pauly, Lina, Gross-Lichterfelde-West, Germany, assignor to Singer Manufacturing Company. Ornamenting fabrics | 735,575 | Aug. 4 | 1044 | 222 | 105 | 1202 |
| Pauthonier, Casimir, Paris, France. Incandescent electric lamp | 720,962 | Feb. 17 | 2874 | 658 | 102 | 1458 |
| Paver, Charles N., Cincinnati, Ohio. Wrapping material | 732,889 | July 7 | 344 | 84 | 105 | 75 |
| Pavoni, Desiderio. (See Bezzera, Luigi, assignor.) | | | | | | |
| Paweck, Heinrich, Vienna, Austria-Hungary. Electrolytic refining of zinc | 745,378 | Dec. 1 | 117 | 27 | 107 | 1125 |
| Pawel, Franz, Hanover, Germany. Apparatus for performing earthworks | 720,841 | Feb. 17 | 2633 | 608 | 102 | 1407 |
| Pawlitschek, John. (See Nechlediel and Pawlitschek.) | | | | | | |
| Paxson, Wallace T., Washington, D. C. Music-leaf turner | 728,000 | May 12 | 2229 | 496 | 104 | 492 |
| Paxton & O'Neill. (See Pigeon, Ernest A. and A. M., assignors.) | | | | | | |
| Paxton, William H., Birmingham, Ala. Furniture-polish | 737,015 | Aug. 25 | 3719 | ..... | 105 | 1827 |
| Payne, Charles A., assignor of one-half to H. B. Crouse, Syracuse, N. Y. Cuspidor | 721,085 | Feb. 17 | 3102 | 712 | 102 | 1509 |
| Payne, Claud L., Oolitic, Ind. Stone-cutting machine | 717,911 | Jan. 6 | 743 | 166<br>167 | 102 | 159 |
| Payne, Darius W., Minneapolis, Minn. Combined pasteurizer, cream-ripener, churn, and butter-worker | 722,886 | Mar. 17 | 2317 | 517<br>518<br>519 | 103 | 523 |
| Payne, David W., assignor to S. K. Payne, Elmira, N. Y. Engine-governor | 735,408 | Aug. 4 | 702 | 150 | 105 | 1130 |
| Payne, Fred S., Boston, Mass. Elevator indicating mechanism | 734,744 | July 28 | 3791 | 885 | 105 | 847 |
| Payne, Joseph M., Spokane, Wash. Railway-switch | 735,576 | Aug. 4 | 1045 | 222 | 105 | 1203 |
| Payne, Lewis E. (See White and Payne.) | | | | | | |
| Payne, Olen E., Newcastle, Ind. Spring lifting-jack for vehicles | 727,192 | May 5 | 697 | 149 | 104 | 151 |
| Payne, Robert M., Winchester, Tenn. Tire-tightener | 733,592 | July 14 | 1599 | 380 | 105 | 356 |
| Payne, Sarah K. (See Payne, David W., assignor.) | | | | | | |
| Payne, Victor T., assignor to Nichols and Shepard Company, Battlecreek, Mich. Clutch | 719,856 | Feb. 3 | 800 | 187 | 102 | 992 |
| Payne, William, J. H. Gillies, and A. Gondolf, Orange, New South Wales, Australia. Treating copper ores | 719,132 | Jan. 27 | 3084 | ..... | 102 | 697 |
| Payne, William H., Monrovia, Cal. Fumigating-tent | 731,610 | June 23 | 3857 | 859 | 104 | 1977 |
| Payne, William H., Camden, N. J. Incandescent gas-lamp | 743,553 | Nov. 10 | 1509 | 316 | 107 | 340 |
| Paysan, Henri, Paris, France. Motive-power engine | 720,470 | Feb. 10 | 1942 | 443<br>444 | 102 | 1249 |
| Payton, Walter, Richmond, England. Pneumatically-operated percussive tool | 745,900 | Dec. 1 | 1085 | 243 | 107 | 1330 |
| Peabody, Royal C. (See MacCormack, John, assignor.) | | | | | | |
| Peabody, Royal C., Brooklyn, N. Y. Forced-draft apparatus | 740,370 | Sept. 29 | 5426 | 1221 | 106 | 1223 |
| Peace, Charles F., *et al.* (See Hall, Edward, assignor.) | | | | | | |
| Peace, Herbert. (See Bradley and Peace.) | | | | | | |
| Peace, John G., Micanopy, Fla. Table | 720,842 | Feb. 17 | 2635 | 608 | 102 | 1408 |
| Peachey, John D., East Orange, N. J. Telephone alarm system | 738,351 | Sept. 8 | 1644 | 356 | 106 | 370 |
| Peachey, John D., East Orange, N. J. Telephone alarm system | 745,235 | Nov. 24 | 4715 | 1030 | 107 | 1048 |
| Peacock, Charles D., Jr., *et al.* (See Engwall, Oscar F., assignor.) | | | | | | |
| Peacock, Frederick E., Weybridge, England. Pump for type-casting machines | 734,597 | July 28 | 3514 | 820 | 105 | 792 |
| Peacock, George J., Buffalo, N. Y. Composition horseshoe | 717,614 | Jan. 6 | 166 | 41 | 102 | 37 |
| Peacock, George J., assignor of one-fourth to H. V. Potter, Pittsburg, Pa. Oiler | 724,493 | Apr. 7 | 138 | 33 | 103 | 1199 |
| Peacock, George J., assignor of one-fourth to H. V. Potter, Pittsburg, Pa. Making composition horseshoes | 746,143 | Dec. 8 | 1526 | 341 | 107 | 1446 |
| Peacock, Joseph V., Avon, N. Y. Shoe-polisher | 737,135 | Aug. 25 | 3914 | 869 | 105 | 1866 |
| Peacock, William. (See Octigan and Peacock.) | | | | | | |
| Peak, Edward F., Elizabeth, Pa. Hose-patch | 730,693 | June 9 | 2134 | 473 | 104 | 1587 |
| Peak, Lewis A., Washington, D. C. Trousers | 722,138 | Mar. 3 | 877 | 196 | 103 | 188 |
| Peak, Orin H., Parsons, Kans. Single-trigger mechanism for double-barrel guns | 745,657 | Dec. 1 | 622 | 144<br>145 | 107 | 1231 |
| Peak, William H., Jonesboro, Ill. Copy-holder | 736,005 | Aug. 11 | 1859 | 397 | 105 | 1397 |
| Peale, William C., *et al.* (See Verdin, Alois N., assignor.) | | | | | | |
| Pearce, Aaron A., and C. R. Gee, Gillham, Ark. Plow | 743,095 | Nov. 3 | 533 | 115 | 107 | 112 |
| Pearce Engine Company. (See Pearce, Josiah, assignor.) | | | | | | |
| Pearce, Isaac D. (See Donham and Pearce.) | | | | | | |
| Pearce, John H., assignor to H. S. Hotchkiss, New Haven, Conn. Machine for coating fabric with rubber | 720,281 | Feb. 10 | 1616 | 370 | 102 | 1180 |
| Pearce, Josiah, Swissvale, assignor to Pearce Engine Company, Pittsburg, Pa. Adjustable rotary valve | 728,808 | May 19 | 3748 | 836 | 104 | 833 |
| Pearce, Robert E., Erie, Pa. Can | 748,213 | Dec. 29 | 5411 | 1231 | 107 | 2306 |
| Pearce, Samuel, Holyoke, assignor to Draper Company, Hopedale, Mass. Unwrapping mechanism for yarn-chains | 732,439 | June 30 | 5449 | 1210 | 104 | 2323 |
| Pearce, William H. (See Johnston, Charles W., assignor.) | | | | | | |
| Pearce, William H., Chicago, Ill. Car-heating system and steam-trap therefor | 719,363 | Jan. 27 | 3512 | 781 | 102 | 788 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| Pearcy, Walter, Franklin, Ind. Coffee-mill | 718,515 | Jan. 13 | 1893 | 415 | 102 | 423 |
| Pearl, Benjamin S., Brooklyn, N. Y. Bending machine or tool | 736,145 | Aug. 11 | 2102 | 451 | 105 | 1448 |
| Pearl, Joseph L., New York, N. Y. Door check and closer | 724,325 | Mar. 31 | 5039 | 1129 | 103 | 1110 |
| Pearman, John T., Lake City, Ark. Nut-lock | 723,910 | Mar. 31 | 4200 | 946 | 103 | 942 |
| Pearsall, Robert, *et al.* (See Moloney, John, Jr., assignor.) | | | | | | |
| Pearse, Harry, and E. F. Ievers, Buenos Aires, Argentina, assignors to Francis Eyre Company, New York, N. Y. Multiple-expansion rotary engine | 718,725 | Jan. 20 | 2298 | 507<br>508 | 102 | 519 |
| Pearson, Carl F. (See Talen, Pearson, Christopher, Johnson, and Lindberg.) | | | | | | |
| Pearson, Carl F., Chicago, Ill. Vaporizer for explosive-engines | 737,463 | Aug. 25 | 4546 | 1019 | 105 | 2003 |
| Pearson, Edwin, Richmond, England. Means for securing door-knobs, &c | 722,887 | Mar. 17 | 2323 | 519 | 103 | 524 |
| Pearson, George. (See Fiedler, Lothar, assignor.) | | | | | | |
| Pearson, Henry. (See Gibbs and Pearson.) | | | | | | |
| Pearson, Jacob L., New York, N. Y. Riveting-brace | 728,605 | May 19 | 3381 | 749 | 104 | 757 |
| Pearson, James J., Tulsa, Ind. Ter. Windmill | 721,227 | Feb. 24 | 3439 | 781 | 102 | 1596 |
| Pearson, James W., Hornsea, England. Coin-freed vending-machine | 737,464 | Aug. 25 | 4547 | 1019<br>1020 | 105 | 2003 |
| Pearson, John, Chicago, Ill. Car journal-box | 724,494 | Apr. 7 | 139 | 33 | 103 | 1199 |
| Pearson, John, Somerset, Wis., and F. R. M. Cutcheon, St. Paul, Minn., assignors, by mesne assignments, to themselves and J. F. Williamson. Means for protecting electrical windings from static strains | 745,379 | Dec. 1 | 119 | 27,28 | 107 | 1126 |
| Pearson, Peter. (See Hill and Pearson.) | | | | | | |
| Pearson, Richard R., Seymour, Conn. Mop-wringer | 739,504 | Sept. 22 | 3801 | 851 | 106 | 863 |
| Pearson, Swain, Rock Island, Ill. Neck-yoke attachment | 736,146 | Aug. 11 | 2104 | 451 | 105 | 1448 |
| Pearson, Thomas S. (See Middleton and Pearson.) | | | | | | |
| Pearson, Walter B., Chicago, Ill. Hollow mill | 733,870 | July 14 | 2114 | 498 | 105 | 460 |
| Pearson, Walter B., and C. E. Roberts, Chicago, Ill. Severing bars of metal | 732,218 | June 30 | 5025 | ------ | 104 | 2235 |
| Pease, Charles, Lynn, Mass., assignor to Xpedite Machine Company, Berwick, Me. Machine for finishing heels or other parts of boots or shoes | 743,988 | Nov. 10 | 2319 | 495<br>496 | 107 | 514 |
| Pease and Company, J. F. (See Schumacher, Eberhard, assignor.) | | | | | | |
| Pease, Franklin B., assignor to Boutell Manufacturing Company, Rochester, N. Y. Feeding mechanism | 732,651 | June 30 | 5848 | 1295 | 104 | 2409 |
| Pease, Herbert M. (See Hammond, Robert O., assignor.) | | | | | | |
| Pease, Lewis A. (See Pfanstiehl, Pease, and Brady.) | | | | | | |
| Pease, William C., South Eliot, Me. Radiator | 743,749 | Nov. 10 | 1867 | 394 | 107 | 415 |
| Peavey, William S., assignor of one-half to W. A. King, Chicago, Ill. Lubricator | 742,484 | Oct. 27 | 4048 | 908 | 106 | 2148 |
| Peay, William A., Livermore, Ky. Hinge | 721,738 | Mar. 3 | 149 | 34 | 103 | 33 |
| Péchy, Andor von. (See Péchy and Rea, assignors.) | | | | | | |
| Péchy, Heinrich von, and V. Rea, Pola; said Péchy assignor to A. von Péchy, Vienna, Austria-Hungary. Automatic firing apparatus for ships' guns | 719,857 | Feb. 3 | 802 | 187<br>188 | 102 | 993 |
| Peck Bros. & Co. (See Newton, William G., assignor.) | | | | | | |
| Peck Bros. & Co. (See Totham, James, assignor.) | | | | | | |
| Peck, Caid H., Elmira, N. Y. Valve and operating means | 727,430 | May 5 | 1128 | 248 | 104 | 243 |
| Peck, Caid H., Elmira, N. Y., assignor to Imperial Pneumatic Tool Company, Athens, Pa. Motor for portable tools | 725,127 | Apr. 14 | 1320 | 297<br>298 | 103 | 1464 |
| Peck, Caid H., Elmira, N. Y., assignor to Imperial Pneumatic Tool Company, Athens, Pa. Motor for hoists or other appliances | 725,128 | Apr. 14 | 1324 | 298 | 103 | 1465 |
| Peck, Caid H., Elmira, N. Y., assignor to Imperial Pneumatic Tool Company, Athens, Pa. Reversible motor | 725,129 | Apr. 14 | 1326 | 299 | 103 | 1466 |
| Peck, Caid H., Elmira, N. Y., assignor to Imperial Pneumatic Tool Company, Athens, Pa. Motor | 725,130 | Apr. 14 | 1329 | 299 | 103 | 1466 |
| Peck, Carlton C. W., Rutherford, N. J. Ruling attachment for type-writing machines | 734,937 | July 28 | 4153 | 966 | 105 | 922 |
| Peck, Clarence W., assignor to Imperial Pneumatic Tool Company, Athens, Pa. Pneumatic tool | 727,431 | May 5 | 1129 | 249 | 104 | 244 |
| Peck, Ernest S., Newburg, Ohio. Treating garbage | 742,224 | Oct. 27 | 3582 | 801 | 106 | 2050 |
| Peck, Ernest S., Newburg, Ohio. Treating garbage | 742,225 | Oct. 27 | 3585 | 801 | 106 | 2051 |
| Peck, Ernest S., Newburg, Ohio. Disintegrator | 742,227 | Oct. 27 | 3589 | 802 | 106 | 2052 |
| Peck, Ernest S., Newburg, Ohio. Drier | 742,228 | Oct. 27 | 3590 | 802<br>803 | 106 | 2052 |
| Peck, Ernest S., assignor to Newburgh Reduction Company, Cleveland, Ohio. Drainer for garbage-digesters | 717,912 | Jan. 6 | 745 | 167 | 102 | 159 |
| Peck, Ernest S., and W. M. Scott, Newburg, Ohio. Treating garbage | 742,226 | Oct. 27 | 3587 | 801 | 106 | 2051 |
| Peck, Ezra A., Pekin, assignor to Acme Harvester Company, Peoria, Ill. Bundle-carrier | 728,408 | May 19 | 2993 | 658 | 104 | 675 |
| Peck, George W., Roselle Park, N. J. Packing and transportation carrier, trunk, or the like | 723,784 | Mar. 24 | 3942 | 889 | 103 | 870 |
| Peck, Ira F., Auburn, R. I., assignor to Draper Company, Hopedale, Mass. Weft-replenishing loom | 729,401 | May 26 | 4796 | 1062<br>1063<br>1064 | 104 | 1064 |
| Peck, Ira F., Auburn, R. I., assignor, by mesne assignments, to G. O. Draper, Hopedale, Mass. Machine for setting lacing-studs | 739,105 | Sept. 15 | 3067 | 680<br>681 | 106 | 687 |
| Peck, J. L. Webster. (See Deisher, Arthur H., assignor.) | | | | | | |
| Peck, John, Haverstraw, N. Y. Brick-kiln | 723,620 | Mar. 24 | 3662 | 821 | 103 | 810 |
| Peck, John S., Pittsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Varying the output of transformers | 728,970 | May 26 | 4039 | 897 | 104 | 907 |
| Peck, John S., Pittsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Means for varying the voltage ratio of transformers | 740,174 | Sept. 29 | 5063 | 1139 | 106 | 1149 |
| Peck, John S., Pittsburg, and H. R. Stuart, Wilkinsburg, Pa., assignors to Westinghouse Electric & Manufacturing Company. Voltage-regulating apparatus | 740,173 | Sept. 29 | 5061 | 1138 | 106 | 1148 |
| Peck, John S., Pittsburg, and K. C. Randall, Wilkinsburg, Pa., assignors to Westinghouse Electric & Manufacturing Co. Electrical heating apparatus | 722,747 | Mar. 17 | 2059 | 461 | 103 | 471 |
| Peck, John W. (See Long, Marion M., assignor.) | | | | | | |
| Peck, Maria A., executrix. (See Stack and Peck.) | | | | | | |
| Peck, Philip C. (See Callanan, William A., assignor.) | | | | | | |
| Peck, Rial S. (See Rafter, Joseph J., assignor.) | | | | | | |
| Peck, Staunton B., assignor to Link Belt Machinery Company, Chicago, Ill. Package-elevator | 744,097 | Nov. 17 | 2569 | 550 | 107 | 577 |
| Peck, Staunton B., assignor to Link Belt Machinery Company, Chicago, Ill. Roller for [illegible] | 747,215 | Dec. 15 | 3512 | 796 | 107 | 1906 |
| Peck, Wilcox & Wilcox Company. (See Hayden, Randolph, assignor.) | | | | | | |
| Peck, Walter H. (See Culley, Carl R., assignor.) | | | | | | |
| Peck, Walter R. (See Stack and Peck.) | | | | | | |
| Peckham, Edgar, New York, N. Y. Car-truck | 738,840 | Sept. 15 | 2601 | 574<br>575 | 106 | 590 |
| Peckham, Edgar, Kingston, N. Y. Truck | 738,841 | Sept. 15 | 2606 | 575 | 106 | 591 |
| Peckham, Edgar, Kingston, N. Y. Truck | 746,370 | Dec. 8 | 1938 | 442 | 107 | 1531 |
| Peckham, James M., assignor of one-half to R. Thackeray, Fall River, Mass. Warp-let-off mechanism for looms | 728,001 | May 12 | 2230 | 496 | 104 | 493 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Peckham, James O. (See Tilley, Thomas S., assignor.) | | | | | | |
| Peckham Motor Truck and Wheel Company. (See Uebelacker, Charles F., assignor.) | | | | | | |
| Peddle, William H., *et al.* (See Pierce, Arthur M., assignor.) | | | | | | |
| Peddy, Wily H. (See Martin, Henry, assignor.) | | | | | | |
| Pedersen, Johannes T., assignor to M. G. Lewis, New York, N. Y. Liquid-fuel-heater burner | 744,098 | Nov. 17 | 2572 | 550 | 107 | 578 |
| Pedersen, Laurits, Chicago, Ill. Vending-machine | 743,750 | Nov. 10 | 1868 | 394, 395 | 107 | 416 |
| Pedersen, Laurits, Chicago, Ill. Coin-controlled mechanism | 747,216 | Dec. 15 | 3513 | 797 | 107 | 1906 |
| Pedersen, Peder, Bakersville, N. J. Incubator | 735,409 | Aug. 4 | 706 | 150, 151 | 105 | 1131 |
| Pederson, Adolph. (See Fletcher and Bradley, assignors.) | | | | | | |
| Pederson, Adolph, Aurora, Ill. Traveling clothing-hanger | 744,701 | Nov. 17 | 3694 | 797 | 107 | 820 |
| Pederson, Adolph, Aurora, Ill. Disappearing-door cabinet | 746,569 | Dec. 8 | 2275 | 522 | 107 | 1607 |
| Pederson, Amund, Barrett, Minn. Equalizing device for furrow-opening disks | 721,086 | Feb. 17 | 3103 | 713 | 102 | 1510 |
| Pederson, Jacob, Roseau, Minn. Railway-spike | 719,036 | Jan. 27 | 2884 | 646 | 102 | 656 |
| Pederson, John, and M. Giswold, Grantsburg, Wis. Wrench | 718,872 | Jan. 20 | 2571 | 573 | 102 | 576 |
| Pederson, John D., Denver, Colo. Magazine-firearm | 719,955 | Feb. 3 | 963 | 224, 225 | 102 | 1027 |
| Pedrazzi, Joseph A., Carmel, Cal. Primary battery | 742,726 | Oct. 27 | 4489 | 1015 | 106 | 2241 |
| Pedrick and Ayer Company. (See Martin, George E., assignor.) | | | | | | |
| Pedrick, William R. (See Goodrich and McPherson, assignors.) | | | | | | |
| Peek, Albert. (See Durham and Peek.) | | | | | | |
| Peek, George W., Greenview, Cal. Nail-holding attachment for hammers, &c | 729,890 | June 2 | 681 | 150 | 104 | 1267 |
| Peel, Charles F., Jr., New York, N. Y. Safety brake apparatus for motor-cars | 720,376 | Feb. 10 | 1786 | 405 | 102 | 1217 |
| Peelen, Jan H., Oberlahnstein, Germany. Steam-generator | 729,402 | May 26 | 4801 | 1064 | 104 | 1065 |
| Peeler, Robert L. (See Ladley, William H., assignor.) | | | | | | |
| Peelle, Edward, Indianapolis, Ind. Fastening device | 720,735 | Feb. 17 | 2474 | 569 | 102 | 1374 |
| Peelle, John, Indianapolis, Ind. Tool | 744,228 | Nov. 17 | 2838 | 607 | 107 | 635 |
| Peeples, William A., Stewart, Miss. Gate | 741,539 | Oct. 13 | 2217 | 493 | 106 | 1739 |
| Peer, Richard W., Rochester, assignor of one-third to A. Finck, Jr., Syracuse, N. Y. Machine for lasting boots or shoes | 718,873 | Jan. 20 | 2572 | 573, 574 | 102 | 576 |
| Peer, Richard W., Rochester, assignor of one-third to A. Finck, Jr., Syracuse, N. Y. Macnhie for lasting boots or shoes | 737,766 | Sept. 1 | 389 | 83 | 106 | 86 |
| Peerless Electric Company. (See McBerty, Fred P., assignor.) | | | | | | |
| Peerless Machinery Company. (See Buteau, Alphonse, assignor.) | | | | | | |
| Peerless Machinery Company. (See Cummings, Henry H., assignor.) | | | | | | |
| Peerless Machinery Company. (See Harrigan, Michael T., assignor.) | | | | | | |
| Peerless Motor Car Company. (See Mooers, Louis P., assignor.) | | | | | | |
| Peery, James, Kansas City, Mo. Hurl-cutting machine | 746,877 | Dec. 15 | 2867 | 660 | 107 | 1760 |
| Peet, Alexander J., Brooklyn, N. Y. Compound engine | 748,559 | Dec. 29 | 6058 | 1372 | 107 | 2511 |
| Peet, Edward B. (See Peet, Walter F., assignor.) | | | | | | |
| Peet, Walter F., assignor of one-half to E. B. Peet, Philadelphia, Pa. Combined safety-pin and hook | 722,617 | Mar. 10 | 1781 | 396 | 103 | 398 |
| Peffer, Frank, assignor of one-half to C. C. Craley, Mount Joy, Pa. Can-opener | 725,131 | Apr. 14 | 1331 | 300 | 103 | 1467 |
| Peffley, Emery A., Jasper, Tex. Garment-fastening | 741,540 | Oct. 13 | 2218 | 493 | 106 | 1739 |
| Pehl, Edmund, Hartford, Conn. Machine for cleaning brewers' hose | 728,287 | May 19 | 2775 | 616 | 104 | 631 |
| Pehrsson, Olof E., Brooklyn, N. Y. Gasolene-engine | 741,824 | Oct. 20 | 2757 | 614 | 106 | 1869 |
| Peifer, John W., Sullivan, assignor of two-thirds to J. H. Thomas and W. S. Skiff, Shelby County, Ill. Broom-corn harvester | 735,805 | Aug. 11 | 1464 | 315, 316 | 105 | 1310 |
| Peirce, Jonathan F., Milwaukee, Wis. Rubbish-diverter for flume-gates | 726,564 | Apr. 28 | 3993 | 904 | 103 | 2050 |
| Peirce, Melusina F., Chicago, Ill. Dwelling-block | 734,938 | July 28 | 4155 | 967 | 105 | 923 |
| Peirson, Peter. (See Linden, Peirson, and Josephsan.) | | | | | | |
| Peiseler, Peter R., Remscheid, Germany. Feeding device for forge-hammers | 732,110 | June 30 | 4794 | 1070 | 104 | 2187 |
| Pejchar, Josef. (See Geiger, Bauer, and Pejchar.) | | | | | | |
| Pejchar, Josef, New York, N. Y. Billiard-chalk holder | 744,935 | Nov. 24 | 4102 | 884 | 107 | 922 |
| Pejchar, Josef, New York, N. Y. Observation-car | 746,371 | Dec. 8 | 1940 | 442 | 107 | 1532 |
| Pejchar, Josef, assignor to Geiger & Bauer, New York, N. Y. Fastener for jewelry | 726,983 | May 5 | 309 | 68 | 104 | 67 |
| Pell, Henry W., Rome, N. Y. Abdominal truss | 718,149 | Jan. 13 | 1169 | 260 | 102 | 266 |
| Pelle, Henry D., Ione, Cal. Double-acting nut-wrench | 743,096 | Nov. 3 | 534 | 116 | 107 | 112 |
| Pelletreau, Arthur M., Kalamazoo, Mich. Postal envelop | 723,911 | Mar. 31 | 4201 | 946 | 103 | 942 |
| Pelligreen, Nicholas, St. Louis, Mo. Fireproof construction | 731,216 | June 16 | 3096 | 686, 687 | 104 | 1803 |
| Pellington, James, Paterson, N. J. Seal-lock | 724,038 | Mar. 31 | 4465 | 1005 | 103 | 994 |
| Pellington, James, Paterson, N. J. Lock | 731,217 | June 16 | 3097 | 687 | 104 | 1803 |
| Pellington, James, Paterson, N. J. Coupling device | 747,633 | Dec. 22 | 4279 | 962 | 107 | 2095 |
| Pelmulder, Charles, Grant City, Iowa. Clasp | 732,008 | June 23 | 4595 | 1025 | 104 | 2132 |
| Peloubet, Alexander H., Newark, N. J. Suppository | 740,910 | Oct. 6 | 967 | 217 | 106 | 1453 |
| Pelouze Scale and Manufacturing Company. (See Mulligan, Frank, assignor.) | | | | | | |
| Pelouze Scale and Manufacturing Company. (See Pelouze, William N., assignor.) | | | | | | |
| Pelouze Scale & Mfg. Co. (See Triner, James M., assignor.) | | | | | | |
| Pelouze, William N., assignor to Pelouze Scale and Manufacturing Company, Chicago, Ill. Blank for sheet-metal scale-frames | 722,618 | Mar. 10 | 1782 | 397 | 103 | 398 |
| Pelstring, George J., Cincinnati, Ohio, and H. G. Pelstring, Covington, Ky. Speed-regulator for generators | 719,037 | Jan. 27 | 2885 | 646 | 102 | 656 |
| Pelstring, Henry G. (See Pelstring, George J. and H. G.) | | | | | | |
| Pelton, Abbey R., *et al.* (See Long, William J., assignor.) | | | | | | |
| Pelton, Charles H., Grand Rapids, Mich. Non-refillable bottle | 723,018 | Mar. 17 | 2528 | 567 | 103 | 566 |
| Pelton, Charles H., assignor to Thomas Manufacturing Company, Springfield, Ohio. Gearing for grain-drills | 736,436 | Aug. 18 | 2604 | 572 | 105 | 1573 |
| Pelton, Charles H., and W. Ramsey, Springfield, Ohio. Telephone-support | 748,524 | Dec. 29 | 5978 | 1356 | 107 | 2491 |
| Pelton, George W., assignor to Boepple Button Company, Muscatine, Iowa. Tool-holder for button-making machines | 718,578 | Jan. 13 | 2030 | 441 | 102 | 452 |
| Pelton, George W., assignor to Boepple Button Company, Muscatine, Iowa. Button-making machine | 740,991 | Oct. 6 | 1114 | 251, 252 | 106 | 1484 |
| Pelton, John C., San Francisco, Cal. Construction of floors and ceilings for buildings | 719,038 | Jan. 27 | 2887 | 647 | 102 | 657 |
| Pelton, Leander, Des Moines, Iowa. Broom-trimmer | 743,554 | Nov. 10 | 1512 | 316 | 107 | 340 |
| Pelton Water Wheel Company. (See Henry, George J., Jr., assignor.) | | | | | | |
| Pelton, Willis E., assignor of one-half to J. Barnard, Oklahoma, Okla. Ter. Corn-harvester | 746,738 | Dec. 15 | 2591 | 595 | 107 | 1698 |
| Pemberton, Richard. (See Hodgkin and Pemberton.) | | | | | | |
| Pembleton, William E., Wittenberg, Wis. Telephony | 726,984 | May 5 | 310 | 69 | 104 | 67 |
| Pence, Asa O., Converse, Ind. Vehicle-jack | 733,992 | July 21 | 2363 | 555 | 105 | 530 |
| Pence, Charles A. (See Tisch and Kissinger, assignors.) | | | | | | |
| Pence, Edward L., Memphis, Tenn. Switch-operating device | 739,709 | Sept. 22 | 4177 | 934, 935 | 106 | 943 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Des. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Pence, George, *et al.* (See Houlehan, John, assignor.) | | | | | | |
| Pence, Samuel A., *et al.* (See Settle, Richard S., assignor.) | | | | | | |
| Pendergast, Thomas, assignor of fifty-one one-hundredths to J. Hertzler, Lancaster, Pa. Bung-bushing | 739,557 | Sept. 22 | 3881 | 870 | 106 | 879 |
| Pendleton, John H., Jamesburg, N. J., assignor to Pendleton-Tapscott Company, New York, N. Y. Machine for scouring grain, &c | 721,649 | Feb. 24 | 4219 | 959 | 102 | 1765 |
| Pendleton-Tapscott Company. (See Pendleton, John H., assignor.) | | | | | | |
| Penfield, Charles L., Springfield, Mass. Street-car sign | 738,569 | Sept. 8 | 2050 | 447 | 106 | 456 |
| Penfold, William J., Newcastle-on-Tyne, England. Binaural stethoscope | 738,352 | Sept. 8 | 1646 | 356 | 106 | 370 |
| Pengilly, John, assignor to McKiernan Drill Company, Dover, N. J. Fluid-pressure engine | 734,282 | July 21 | 2939 | 686 | 105 | 657 |
| Peniakoff, Dmitry A., Huy, Belgium. Producing aluminium and its alloys | 728,129 | May 12 | 2456 | ..... | 104 | 541 |
| Penman, Charles E., assignor of one-half to H. D. Lamont, Hazleton, Pa. Hook and eye | 746,372 | Dec. 8 | 1941 | 443 | 107 | 1532 |
| Penn, William E., Lakemills, Wis., assignor to Creamery Package Manufacturing Company, Chicago, Ill. Centrifugal milk-tester | 742,801 | Oct. 27 | 4608 | {1044 / 1045 | {106 | 2268 |
| Penn, Winston E., Grenada, Miss. Rail-joint | 718,516 | Jan. 13 | 1894 | 415 | 102 | 423 |
| Pennell, Frank W., Ann Arbor, Mich., assignor of two-thirds to R. Morrison, Gibsonburg, and T. C. Pennell, Lima, Ohio. Portable rig for pulling oil-wells | 738,353 | Sept. 8 | 1647 | {356 / 357 | {106 | 370 |
| Pennell, Thomas C., *et al.* (See Pennell, Frank W., assignor.) | | | | | | |
| Penney, Herbert E., assignor to W. S. Nott Company, Minneapolis, Minn. Water-tube boiler | 717,913 | Jan. 6 | 746 | 167 | 102 | 159 |
| Penney, Herbert E., assignor to W. S. Nott Company, Minneapolis, Minn. Steam-generator | 717,914 | Jan. 6 | 748 | 168 | 102 | 160 |
| Penney, Herbert E., assignor to W. S. Nott Company, Minneapolis, Minn. Steam-generator | 717,915 | Jan. 6 | 749 | 168 | 102 | 160 |
| Penney, Herbert E., assignor to W. S. Nott Company, Minneapolis, Minn. Steam-generator | 719,501 | Feb. 3 | 160 | 36, 37 | 102 | 857 |
| Pennie, John C., *et al.* (See Haley, John C., assignor.) | | | | | | |
| Penniman, William O., Middleboro, Mass. Leather burnishing or finishing machine | 739,922 | Sept. 29 | 4605 | 1034 | 106 | 1051 |
| Pennington, J. H. (See Harris, Gordon D., assignor.) | | | | | | |
| Pennington, John, Camden, N. Y. Union knitted underwear | 723,912 | Mar. 31 | 4201 | 946 | 103 | 942 |
| Pennington, John, Camden, N. Y. Union undergarment | 723,913 | Mar. 31 | 4203 | {946 / 947 | {103 | 943 |
| Pennington, Orbra C., Silvercreek, Nebr. Weed-destroying attachment for cultivators | 730,394 | June 9 | 1584 | 353 | 104 | 1466 |
| Pennock, Charles B. (See Lane, Oscar A., assignor.) | | | | | | |
| Pennsylvania Fuse and Arms Company. (See Hathaway, George M. and C. F., assignors.) | | | | | | |
| Pennsylvania Globe Gas Light Company. (See Densten, Ulysses G., assignor.) | | | | | | |
| Pennsylvania Globe Gas Light Company. (See Slinack, Victor H., assignor.) | | | | | | |
| Pennsylvania Globe Gas Light Company. (See Wilson, Thomas, assignor.) | | | | | | |
| Pennsylvania Globe Gas Light Company. (See Wilson and Slinack, assignors.) | | | | | | |
| Pennsylvania Optical Company. (See Temple, Edward B., assignor.) | | | | | | |
| Penny, William, Langdon, Mo. Fruit-picker | 738,061 | Sept. 1 | 988 | 219 | 106 | 215 |
| Penobscot Chemical Fibre Company. (See Larchar, Arthur B., assignor.) | | | | | | |
| Penprase, Albert R., Duluth, Minn. Journal-bearing | 729,656 | June 2 | 239 | 56 | 104 | 1177 |
| Penrod, John F., Branch, Pa. Rein-support | 739,442 | Sept. 22 | 3701 | 824 | 106 | 840 |
| Pense, Robert J. (See Mackenzie and Pense.) | | | | | | |
| Pepin, David E., Ware, Mass., assignor to Massachusetts Street Railway and Park Association, Portland, Me. Interchangeable turnout for railways | 723,300 | Mar. 24 | 3062 | 689 | 103 | 691 |
| Pepper, James W., Philadelphia, Pa. Portable drum-rack | 726,455 | Apr. 28 | 3758 | 852 | 103 | 2007 |
| Pepperling, William, Two Harbors, Minn. Projectile | 724,326 | Mar. 31 | 5042 | 1129 | 103 | 1110 |
| Perceval, Echlin, Vancouver, Canada. Fastening device for pneumatic-tire joints | 728,002 | May 12 | 2232 | 496 | 104 | 493 |
| Perdew, John, Monaca, assignor of one-half to H. Strong, Coraopolis, Pa. Sand-blast | 731,812 | June 23 | 4221 | 941 | 104 | 2053 |
| Peregrine, Seymour W., assignor to E. T. Burrowes Company, Portland, Me. Device for securing wire fabric to frames | 739,342 | Sept. 22 | 3489 | 780 | 106 | 793 |
| Peregrine, Seymour W., assignor to E. T. Burrowes Company, Portland, Me. Machine for applying wire screen-cloth to doors | 739,343 | Sept. 22 | 3490 | 780 | 106 | 793 |
| Perfect Fuel Company. (See Morrow, Henry W., assignor.) | | | | | | |
| Perfection Broom Company. (See Lay, Frank R., assignor.) | | | | | | |
| Perfection Fixture Co. (See Lasso, John U., assignor.) | | | | | | |
| Perfection Pulley Cover Company. (See Kreisser, John D., assignor.) | | | | | | |
| Perham, Haven C. (See Morton and Sherman, assignors.) | | | | | | |
| Perham, Haven C., assignor to Kitson Machine Company, Lowell, Mass. Automatic sprinkler | 744,791 | Nov. 24 | 3855 | 830 | 107 | 870 |
| Perillat, Charles, Boston, Mass., assignor to Kitson Hydrocarbon Heating and Incandescent Lighting Company, Philadelphia, Pa. Incandescent hydrocarbon-lamp | 739,710 | Sept. 22 | 4179 | 935 | 106 | 943 |
| Perillat, Charles, Boston, Mass., assignor to Kitson Hydrocarbon Heating and Incandescent Lighting Company, Philadelphia, Pa. Hydrocarbon street-lamp | 739,711 | Sept. 22 | 4182 | 935 | 106 | 944 |
| Perin, Charles P., New York, N. Y. Freezing the ground and excavating or tunneling | 721,880 | Mar. 3 | 313 | 68, 69 | 103 | 69 |
| Perka, Emanuel, *et al.* (See Ondra, Frant, assignor.) | | | | | | |
| Perkiewicz, Max, Ludwigsberg, near Moschin, Germany. Manufacture of bricks | 740,040 | Sept. 29 | 4333 | 1084 | 106 | 1101 |
| Perkins, Alexander G., Newburyport, Mass. Column construction | 724,495 | Apr. 7 | 141 | 34 | 103 | 1200 |
| Perkins, Amos H., deceased, assignor to United States Repair & Guaranty Company, Chicago, Ill. Repairing American asphalt pavements. (Reissue) | 12,077 | Feb. 3 | 1020 | 237 | 102 | 1039 |
| Perkins, Benjamin F., deceased, (J. L. and E. M. Perkins, Holyoke, executors,) and C. E. Pope, South Hadley, Mass.; J. L. Perkins conservator of said E. M. Perkins, incapacitated. Paper-reeling machine | 739,712 | Sept. 22 | 4184 | 935 | 106 | 945 |
| Perkins, C. Win. (See Demmon, William A., assignor.) | | | | | | |
| Perkins, Charles G. (See Tregoning, William C., assignor.) | | | | | | |
| Perkins, Charles G., Hartford, Conn. Push-button electric switch | 732,890 | July 7 | 344 | 84, 85 | 105 | 76 |
| Perkins, Charles G., Hartford, Conn. Handle for electric switches | 735,577 | Aug. 4 | 1047 | 222 | 105 | 1203 |
| Perkins, Charles G., Hartford, Conn. Indicating mechanism for snap-switches | 741,825 | Oct. 20 | 2758 | 614 | 106 | 1869 |
| Perkins, Charles G., Hartford, Conn. Snap-switch-operating mechanism | 743,555 | Nov. 10 | 1515 | 316 | 107 | 341 |
| Perkins Electric Switch Manufacturing Company. (See Thomas, George B., assignor.) | | | | | | |
| Perkins, Foster W., Woodbine, Ky. Railway cattle-guard | 730,794 | June 9 | 2290 | 509 | 104 | 1619 |
| Perkins, Frank C., Buffalo, N. Y. Electrical incubator | 745,458 | Dec. 1 | 280 | 68, 69 | 107 | 1159 |
| Perkins, Franklin J., Woburn, assignor to Vaughn Machine Company, Boston, Mass. Machine for treating hides or skins | 722,888 | Mar. 17 | 2323 | {519 / 520 | {103 | 524 |
| Perkins, Franklin J., Woburn, Mass., assignor to Vaughn-Rood Machine Company, Portland, Me. Machine for treating hides or skins | 746,144 | Dec. 8 | 1527 | {341 / 342 | {107 | 1446 |
| Perkins, George C., assignor of two-thirds to T. J. Quinn, H. Haggerty, and T. J. Cronin, Detroit, Mich. Refrigerator-car | 718,874 | Jan. 20 | 2575 | 574 | 102 | 577 |
| Perkins, H. Russell. (See Green, Fred E., assignor.) | | | | | | |
| Perkins, Harry J., Grand Rapids, Mich. Cooling device for explosive-motors | 743,556 | Nov. 10 | 1516 | 317 | 107 | 341 |
| Perkins, James. (See Smart, Joseph S., assignor.) | | | | | | |
| Perkins, James J., Greenville, N. C. Lamp-chimney | 726,743 | Apr. 28 | 4332 | 976 | 103 | 2120 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|
| | | | Spec. | Drg. | Vol. | Page. |
| Perkins, James W., San Jose, Cal. Traveling connector for third-rail electric systems | 736,006 | Aug. 11 | 1861 | 398 | 105 | 1397 |
| Perkins, John L., executor and conservator. (See Perkins and Pope.) | | | | | | |
| Perkins, John W., Everett, Mass. Sled | 729,961 | June 2 | 810 | 180 | 104 | 1292 |
| Perkins, Julian L., West Springfield, Mass. Routing-cutter | 740,690 | Oct. 6 | 563 | 126 | 106 | 1369 |
| Perkins, Julius A., Omaha, Nebr. Roller-bearing | 732,111 | June 30 | 4795 | 1070 | 104 | 2187 |
| Perkins, Lindsay S., Washington, D. C., assignor of two-thirds to R. D. Keller, New York, N. Y., and W. D. Campbell, Washington, D. C. Rotary file-cabinet | 717,713 | Jan. 6 | 342 | 83, 84 | 102 | 74 |
| Perkins, Orlandow S., Newbern, N. C. Combined broom-holder, clothes-rack, and towel-hanger | 729,403 | May 26 | 4802 | 1064 | 104 | 1065 |
| Perkins, Orlandow S., Newbern, N. C. Hanger-bracket | 729,404 | May 26 | 4803 | 1065 | 104 | 1065 |
| Perkins, Oscar B., Gloucester, Mass. Vaporizer for internal-combustion engines | 731,218 | June 16 | 3099 | 687 | 104 | 1803 |
| Perkins, Thomas. (See Sejnoha and Perkins.) | | | | | | |
| Perkins, Thomas S., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Rheostat | 740,175 | Sept. 29 | 5066 | 1139 | 106 | 1149 |
| Perkins, William C., Brookline, Mass. Vacuum drying apparatus | 730,564 | June 9 | 1898 | 423, 424 | 104 | 1585 |
| Perkins, William D., Oil City, Pa., assignor of six-sevenths to G. B. Aten, F. M. Thompson, J. H. Aten, L. B. Wade, T. A. McIntosh, and J. M. Kerr, Wellsville, Ohio. Apparatus for continuous fractional distillation of petroleum | 731,943 | June 23 | 4448 | 992, 993 | 104 | 2102 |
| Perkins, William H., Manchester, England. Hanging bracket | 725,284 | Apr. 14 | 1597 | 361 | 103 | 1523 |
| Perkins, William M. (See Graham, Robert S., assignor.) | | | | | | |
| Perkins, Willis J., Grand Rapids, Mich. Exhaust-muffler | 724,124 | Mar. 31 | 4636 | 1044 | 103 | 1030 |
| Perks, Albert J., assignor to Webster & Perks Tool Company, Springfield, Ohio. Paper-trimmer | 745,515 | Dec. 1 | 380 | 87 | 107 | 1180 |
| Perks, Edwin, and F. Birch, Coventry, England. Metallic packing for pistons | 745,901 | Dec. 1 | 1087 | 243 | 107 | 1330 |
| Perks, George W., assignor to Webster & Perks Tool Co., Springfield, Ohio. Paper-cutter | 745,516 | Dec. 1 | 381 | 88 | 107 | 1181 |
| Perks, George W., assignor to Webster & Perks Tool Co., Springfield, Ohio. Paper-cutter | 745,517 | Dec. 1 | 382 | 88 | 107 | 1181 |
| Perks, George W., and F. C. Thacker, Birmingham, England, Fountain-pen | 723,726 | Mar. 24 | 3844 | 864 | 103 | 849 |
| Perky, Henry D., Niagara Falls, N. Y. Stove | 747,475 | Dec. 22 | 3984 | 896, 897 | 107 | 2027 |
| Perky, Henry D., assignor to Natural Food Company, Niagara Falls, N. Y. Continuous-motion heating and evaporating apparatus | 746,145 | Dec. 8 | 1531 | 342, 343 | 107 | 1447 |
| Perley, Allen P., *et al.* (See Stutzman, Frank, assignor.) | | | | | | |
| Perley, Mary E., Perris, Cal. Preserving-jar | 720,471 | Feb. 10 | 1943 | 444 | 102 | 1249 |
| Perotti, Louis, Newark, N. J. Wine-press | 734,939 | July 28 | 4157 | 967 | 105 | 923 |
| Perotti, Marie R., Newark, N. J. Refrigerator | 746,739 | Dec. 15 | 2595 | 596 | 107 | 1699 |
| Perrault, Norbert, Ottawa, Canada. Railway-crossing signal | 724,395 | Mar. 31 | 5190 | 1164 | 103 | 1142 |
| Perrault, Norbert, assignor of one-half to A. Simoneau, Ottawa, Canada. Railway-crossing gate | 733,419 | July 14 | 1297 | 306, 307 | 105 | 291 |
| Perreau, H. J., *et al.* (See Lewars, Lincoln H., assignor.) | | | | | | |
| Perrelet, Fritz, and K. Becker, Offenbach-on-the-Main, Germany. Decomposing tallow, &c | 736,007 | Aug. 11 | 1862 | 398 | 105 | 1398 |
| Perrett, Ernest. (See Davis and Perrett.) | | | | | | |
| Perrin, Lester B., Detroit, Mich. Automatic fastener for car-doors | 737,657 | Sept. 1 | 182 | 38 | 106 | 43 |
| Perrin, Lewis D. (See Townsend, Frank B., assignor.) | | | | | | |
| Perrine, Benjamin. (See Smith, Newton A., assignor.) | | | | | | |
| Perrine, J. H. (See Lintner, Robert E., assignor.) | | | | | | |
| Perring, Ira O., Kalamazoo, Mich. Folding boat | 736,623 | Aug. 18 | 2975 | 654 | 105 | 1650 |
| Perrins, Thomas A., Seymour, Conn. Machine for japanning small articles | 728,606 | May 19 | 3382 | 749, 750 | 104 | 757 |
| Perrot Duval & Co. *et al.* (See Schirmer, Friederich W., assignor.) | | | | | | |
| Perrottet, Marie L., New York, N. Y. Placket-closure | 727,681 | May 12 | 1612 | 367 | 104 | 365 |
| Perry, Albert W., Northville, S. D. Riding attachment for harrows | 746,146 | Dec. 8 | 1532 | 343 | 107 | 1447 |
| Perry, Algie, assignor of one-half to J. F. Barringer and B. H. Grefenkamp, St. Louis, Mo. Emergency car-brake | 720,377 | Feb. 10 | 1788 | 405 | 102 | 1217 |
| Perry, Asa B., *et al.* (See Perry, Benjamin F., assignor.) | | | | | | |
| Perry, Benjamin F., assignor of three-fourths to F. L. and A. B. Perry, Grand Junction, Colo. Bayonet | 718,150 | Jan. 13 | 1172 | 260 | 102 | 268 |
| Perry, Benjamin F., assignor of three-fourths to F. L. and A. B. Perry, Grand Junction, Colo. Magazine-rifle | 726,744 | Apr. 28 | 4333 | 976, 977 | 103 | 2121 |
| Perry, Chrissie. (See Maxwell, William, assignor.) | | | | | | |
| Perry, David. (See Raymond, Lowther, and Perry.) | | | | | | |
| Perry, Edgar, Caribou, Me. Sleigh-runner | 742,485 | Oct. 27 | 4049 | 908 | 106 | 2148 |
| Perry, Edward L., Paterson, N. J. Casing for mats | 718,517 | Jan. 13 | 1894 | 416 | 102 | 423 |
| Perry, Elton, Jr. (See Van Slyke and Perry.) | | | | | | |
| Perry, Fidelia L., *et al.* (See Perry, Benjamin F., assignor.) | | | | | | |
| Perry, Frank B. (See Perry, Oliver H. and F. B.) | | | | | | |
| Perry, Frederick C., *et al.* (See Myers, Harry J., assignor.) | | | | | | |
| Perry, George N., Fowler, assignor of one-half to J. D. Dexter, San Diego, Cal. Soil-scraper | 720,176 | Feb. 10 | 1403 | 321 | 102 | 1137 |
| Perry, Harvey, Rochester, N. Y. Boot or shoe jack | 726,745 | Apr. 28 | 4339 | 977 | 103 | 2121 |
| Perry, Hubert M., assignor to H. D. Laughlin, Chicago, Ill. Side bearing for cars | 728,757 | May 19 | 3649 | 811 | 104 | 814 |
| Perry, James B., Buffalo, N. Y. Brake-shoe | 734,745 | July 28 | 3793 | 885 | 105 | 847 |
| Perry, John C. (See McGregor, Allan L., assignor.) | | | | | | |
| Perry, John F., deceased, Chicago, Ill.; H. Barber, administrator. Bottle-closure | 745,380 | Dec. 1 | 123 | 28 | 107 | 1126 |
| Perry, Oliver H. and F. B., Manlius, N. Y. Fruit or vegetable cleaner | 745,658 | Dec. 1 | 625 | 145 | 107 | 1231 |
| Perry, Raymond A., Oakland, Cal. Dredger | 718,276 | Jan. 13 | 1410 | 314 | 102 | 318 |
| Perry, Raymond A., Oakland, Cal. Dredger | 723,485 | Mar. 24 | 3435 | 769 | 103 | 764 |
| Perry, Raymond A., Oakland, Cal. Dredger | 743,751 | Nov. 10 | 1870 | 395 | 107 | 416 |
| Perry, Robert S., and H. G. Schanche, Philadelphia, Pa. Drying sulfate of aluminium | 748,525 | Dec. 29 | 5980 | ..... | 107 | 2491 |
| Perry, Samuel R., Scranton, Pa. Piano-action | 719,690 | Feb. 3 | 493 | 111, 112 | 102 | 926 |
| Perry, Thomas O., Chicago, Ill. Tilting tower | 717,916 | Jan. 6 | 750 | 169 | 102 | 161 |
| Perry, Thomas O., Chicago, Ill. Thermostat | 726,985 | May 5 | 313 | 69 | 104 | 68 |
| Pershing, Franklin C., Kansas City, Mo. Ice-box or refrigerator | 732,440 | June 30 | 5453 | 1210 | 104 | 2324 |
| Persinger, John M. (See Persinger, Newton R. and J. M.) | | | | | | |
| Persinger, Newton R. and J. M., Central City, Nebr. Hook and eye | 727,831 | May 12 | 1908 | 426 | 104 | 424 |
| Person, William, assignor to East Rockford Mantel Company, Rockford, Ill. Sewing-machine cabinet | 737,658 | Sept. 1 | 183 | 39 | 106 | 43 |
| Persoons, Jules F., Thildonck, Belgium. Mechanism for operating cream-separators | 743,186 | Nov. 3 | 703 | 154 | 107 | 147 |
| Persson, Otto F. (See Lemp and Persson.) | | | | | | |
| Persson, Otto F., Lynn, assignor to E. Thomson, Swampscott, Mass. Motion-checking device | 725,477 | Apr. 14 | 1964 | 442, 443 | 103 | 1601 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| Persson, Otto F., Lynn, assignor to E. Thomson, Swampscott, Mass. Power-transmitting device | 729,405 | May 26 | 4804 | 1065, 1066 | 104 | 1065 |
| Pertz, John W. (See Melrose, William A., assignor.) | | | | | | |
| Pertz, John W., Elwood, Ind. Feed-water heater and purifier | 739,443 | Sept. 22 | 3701 | 824 | 106 | 840 |
| Pervier, George L., Schaghticoke, assignor of one-half to B. G. Farr, Mechanicsville, N. Y. Ice-tongs | 718,790 | Jan. 20 | 2419 | 536 | 102 | 544 |
| Peryer, Maurice, Christchurch, New Zealand. Composition for cleaning smooth surfaces | 722,454 | Mar. 10 | 1492 | ..... | 103 | 334 |
| Pessl, Adolph. (See Kirsch, Bernhard, assignor.) | | | | | | |
| Peteler, Adolph, St. Louis, Mo. Variable-speed gearing | 724,202 | Mar. 31 | 4796 | 1074, 1075 | 103 | 1061 |
| Peteler, Adolph, St. Louis, Mo. Flexible shaft-coupling | 731,813 | June 23 | 4224 | 941 | 104 | 2053 |
| Peteler, Adolph, assignor to Missouri Locovolo Company, St. Louis, Mo. Carbureter for gas-engines | 726,986 | May 5 | 319 | 69, 70 | 104 | 69 |
| Peter, Arnold H., New York, N. Y. Treating hides or skins | 727,832 | May 12 | 1909 | ..... | 104 | 424 |
| Peter, August, Chicago, Ill. Ice-machine | 727,432 | May 5 | 1133 | 249 | 104 | 244 |
| Peter, George W., St. Louis, Mo. Vending-machine | 725,867 | Apr. 21 | 2691 | 612 | 103 | 1772 |
| Peter Gerlach Company. (See Joecken, Peter J., assignor.) | | | | | | |
| Peter, Louis, Frankfort-on-the-Main, Germany. Motor-wheel | 742,486 | Oct. 27 | 4050 | 908 | 106 | 2148 |
| Peterkin, Walter G., Brooklyn, N. Y. Spring-hinge | 724,039 | Mar. 31 | 4465 | 1006 | 103 | 994 |
| Peterman, Lester O., Muscatine, Iowa. Pedal attachment | 732,957 | July 7 | 457 | 113 | 105 | 99 |
| Peters, Calvin R. (See Bishop, Joseph, assignor.) | | | | | | |
| Peters, Edna C., Eckford, Mich. Steam-cooker | 735,806 | Aug. 11 | 1471 | 316 | 105 | 1312 |
| Peters, Frank E., Fort Washington, Md. Receiver | 748,306 | Dec. 29 | 5570 | 1271 | 107 | 2401 |
| Peters, Frank M. (See Armstrong, Harry Y., assignor.) | | | | | | |
| Peters, Frank M. (See Hungerford, Henry H., assignor.) | | | | | | |
| Peters, Frank M., Chicago, Ill. Cracker or biscuit machine | 724,609 | Apr. 7 | 357 | 86, 87 | 103 | 1245 |
| Peters, Frank M., Chicago, Ill. Filling-machine | 726,565 | Apr. 28 | 3995 | 904, 905 | 103 | 2050 |
| Peters, Frederick, assignor, by mesne assignments, to C. F. Backus, Detroit, Mich. Ledger | 724,496 | Apr. 7 | 141 | 34 | 103 | 1200 |
| Peters, Frederick W. (See Atzberger and Peters.) | | | | | | |
| Peters, Harry C., Sioux City, Iowa. Fly-net holder | 722,748 | Mar. 17 | 2061 | 161 | 103 | 472 |
| Peters, Harry S., assignor of one-half to D. W. Brobeck, Allegheny, Pa. Spring and guard-lock for eyeglasses | 725,478 | Apr. 14 | 1966 | 443 | 103 | 1601 |
| Peters, Henry L., St. Louis, Mo. Window-screen | 740,587 | Oct. 6 | 399 | 84 | 106 | 1331 |
| Peters, Howard J., Chicago, Ill. Shade-holder | 745,737 | Dec. 1 | 757 | 173 | 107 | 1260 |
| Peters, Joseph M., Harrisburg, Pa. Combined sewer pit and trap | 732,778 | July 7 | 147 | 39 | 105 | 35 |
| Peters, Melville G., and J. A. Shepherd, Glasgow, Scotland. Composition for coating fabrics | 718,151 | Jan. 13 | 1173 | ..... | 102 | 268 |
| Peters, Melville G., and J. A. Shepherd, Glasgow, Scotland. Dressing for waterproof covers or tarpaulins | 719,502 | Feb. 3 | 162 | ..... | 102 | 858 |
| Peters, Michael W., Cleveland, Ohio. Sewer-inlet or basin cover | 718,277 | Jan. 13 | 1413 | 314 | 102 | 319 |
| Peters, Milton C., Omaha, Nebr. Game-carrier | 723,179 | Mar. 17 | 2832 | 636 | 103 | 631 |
| Peters, Oliver H., and D. M. Levis, Philadelphia, Pa. Reversible sign-board | 737,136 | Aug. 25 | 3914 | 870 | 105 | 1867 |
| Peters, Walter C., Ely, England. Hook or attachment device | 720,843 | Feb. 17 | 2636 | 608 | 102 | 1408 |
| Peters, William, Brooklyn, N. Y. Water-level indicator | 746,147 | Dec. 8 | 1535 | 343 | 107 | 1448 |
| Peters, William A., Bonham, and R. May, Whitewright, Tex. Expansible pulley | 745,381 | Dec. 1 | 124 | 28 | 107 | 1126 |
| Peters, William E., Allegheny, Pa. Pneumatic engine | 743,326 | Nov. 3 | 982 | 213, 214 | 107 | 210 |
| Petersen, Andreas M., Chicago, Ill. Extension-table | 745,115 | Nov. 24 | 4481 | 969, 970 | 107 | 999 |
| Petersen, Charles M., Shirley, Mass. Fire-escape | 748,526 | Dec. 29 | 5982 | 1356 | 107 | 2491 |
| Petersen, Christ, Minden, Iowa. Automatic corn-feeder and regulator for corn-shelling machines | 745,116 | Nov. 24 | 4482 | 970 | 107 | 1000 |
| Petersen, Christian F., Wilmington, Del. Port-light | 736,772 | Aug. 18 | 3252 | 719 | 105 | 1708 |
| Petersen, Edward A. C., Chicago, Ill. Baker's oven-door | 730,795 | June 9 | 2291 | 509 | 104 | 1620 |
| Petersen, Edward A. C., Chicago, Ill. Oven-door | 736,295 | Aug. 11 | 2360 | 512, 513 | 105 | 1506 |
| Petersen, Joachim H. C., Hamburg, Germany. Centrifugal suction-pump | 735,900 | Aug. 11 | 1656 | 354 | 105 | 1352 |
| Petersen, Joachim H. C., Hamburg, Germany. Centrifugal pump | 735,901 | Aug. 11 | 1658 | 354 | 105 | 1353 |
| Petersen, John, assignor to Link Belt Machinery Company, Chicago, Ill. Dump-gate for endless trough carriers | 720,963 | Feb. 17 | 2876 | 659 | 102 | 1458 |
| Petersen, Niels. (See Tetley and Petersen.) | | | | | | |
| Peterson, Albert. (See Gross and Peterson.) | | | | | | |
| Peterson, Albert, Brockton, Mass. Protractor-rule | 736,437 | Aug. 18 | 2605 | 572 | 105 | 1573 |
| Peterson, August. (See Thomsen and Peterson.) | | | | | | |
| Peterson, Axel W., Denver, Colo. Means for adjusting cross-hairs of telescopic sights | 736,541 | Aug. 18 | 2805 | 614 | 105 | 1617 |
| Peterson, Benjamen, South Chicago, Ill. Hinge | 729,406 | May 26 | 4806 | 1066 | 104 | 1066 |
| Peterson, Charles E., Minneapolis, Minn. Type-writer platen | 720,062 | Feb. 10 | 1195 | 274 | 102 | 1094 |
| Peterson, Charley J. (See Abbe, Charley J., assignor.) | | | | | | |
| Peterson, Charlotte C., Ogden, Iowa. Envelop | 739,505 | Sept. 22 | 3803 | 852 | 106 | 863 |
| Peterson, Christen J., Chicago, Ill. Fire-escape | 730,889 | June 9 | 2369 | 523 | 104 | 1636 |
| Peterson, Claus G. (See Winquist, Victor, assignor.) | | | | | | |
| Peterson, Cornelius L., and M. O. Thompson, Sioux Falls, S. D. Twine-holder | 737,957 | Sept. 1 | 800 | 175 | 106 | 176 |
| Peterson, Eric, assignor to International Time Recording Company, Binghamton, N. Y. Combined lock and latch | 719,691 | Feb. 3 | 498 | 112 | 102 | 928 |
| Peterson, Erick W., Kenosha, Wis. Apron | 742,059 | Oct. 20 | 3226 | 723 | 106 | 1965 |
| Peterson, Frank J., Sioux City, Iowa. Fence-post | 736,147 | Aug. 11 | 2105 | 452 | 105 | 1448 |
| Peterson, Fredrik. (See Anderson, Arwid, assignor.) | | | | | | |
| Peterson, Gustaf A., Sycamore, Ill. Wind-shield for hay-loaders | 726,746 | Apr. 28 | 4341 | 977 | 103 | 2122 |
| Peterson, Harriette E., Washington, D. C. Water-bag | 747,634 | Dec. 22 | 4281 | 963 | 107 | 2096 |
| Peterson, John, St. Paul, Minn. Manure gatherer and loader | 735,807 | Aug. 11 | 1472 | 316, 317 | 105 | 1312 |
| Peterson, John E., Oakville, Pa. Wrench | 748,527 | Dec. 29 | 5983 | 1357 | 107 | 2491 |
| Peterson, John G., New York, N. Y. Type-writer escapement | 727,553 | May 5 | 1358 | 305 | 104 | 293 |
| Peterson, John G., Milwaukee, Wis., assignor to Allis-Chalmers Company. Flour-bolting brush | 741,370 | Oct. 13 | 1884 | 415 | 106 | 1669 |
| Peterson, John M., Milwaukee, Wis. Automatic bicycle-brush | 719,608 | Feb. 3 | 348 | 81 | 102 | 895 |
| Peterson, Karl, assignor to W. Hjorth and Company, Jamestown, N. Y. Pipe-wrench | 735,289 | Aug. 4 | 491 | 98 | 105 | 1086 |
| Peterson, Leonard, assignor of one-half to C. B. Williams, Chicago, Ill. Abrading-machine | 737,270 | Aug. 25 | 4179 | 930, 931 | 105 | 1922 |
| Peterson, Michael W., Wright, La. Rotary pump | 730,149 | June 2 | 1123 | 252 | 104 | 1356 |
| Peterson, Oliver U., Victoria, Ill. Attachment for gates | 728,288 | May 19 | 2777 | 616 | 104 | 631 |
| Peterson, Oscar E., South Glens Falls, N. Y. Washing-machine | 730,694 | June 9 | 2135 | 474 | 104 | 1587 |
| Peterson, Otto W., Bertrand, Nebr. Necktie | 733,871 | July 14 | 2116 | 499 | 105 | 461 |

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| Peterson, Park H., Wilmerding, Pa. Hydraulic draft-gear | 720,472 | Feb. 10 | 1944 | 444 | 102 | 1249 |
| Peterson, Samuel, and C. E. Fielding, Grants Pass, Oreg. Miner's candlestick | 735,578 | Aug. 4 | 1047 | 223 | 105 | 1203 |
| Peterson, William. (See Shoecraft, Judson, assignor.) | | | | | | |
| Petertyl, Anthony J., Travers City, Mich. Nose-piece for sled-runners | 736,148 | Aug. 11 | 2106 | 452 | 105 | 1448 |
| Petit, Ademor N., Newark, N. J., assignor to International Phonograph and Indestructible Record Company, Limited, Liverpool, England. Apparatus for forming duplicate sound-record cylinders | 728,607 | May 19 | 3385 | 750 | 104 | 758 |
| Petit, Ademor N., Newark, N. J., assignor to International Phonograph and Indestructible Record Company, Limited, Liverpool, England. Metal matrix for forming duplicate sound-record cylinders | 739,713 | Sept. 22 | 4186 | 936 | 106 | 945 |
| Petit, Ademor N., assignor to International Phonograph and Indestructible Record Company, Limited, Liverpool, England. Forming duplicate sound-record cylinders | 735,579 | Aug. 4 | 1050 | 223 | 105 | 1204 |
| Petit, Ademor N., assignor to International Phonograph and Indestructible Record Company, Limited, Liverpool, England. Forming metal matrices for duplicating sound-record cylinders | 736,773 | Aug. 18 | 3254 | 719 | 105 | 1708 |
| Petit, Victor, Stryj, Austria-Hungary. Deep-boring machine | 718,876 | Jan. 20 | 2578 | 574, 575, 576 | 102 | 577 |
| Peto, Samuel A., Dover, assignor of one-half to T. M. Jarmain, Oxford, England. Swath-turning implement | 740,911 | Oct. 6 | 967 | 217, 218 | 106 | 1453 |
| Peto, William, and J. W. T. Cadett, Ashlead, England. Composition of matter for battery-electrolytes | 735,808 | Aug. 11 | 1475 | ------ | 105 | 1313 |
| Petraeus, Carl V., Iola, Kans. Treating zinc ores | 735,902 | Aug. 11 | 1660 | ------ | 105 | 1353 |
| Petraeus, Carl V., Iola, Kans. Treatment of zinc ores | 736,008 | Aug. 11 | 1864 | ------ | 105 | 1398 |
| Petraeus, Carl V., Iola, Kans. Treatment of ores containing zinc or other metals | 736,009 | Aug. 11 | 1864 | ------ | 105 | 1398 |
| Petraeus, Carl V., Iola, Kans. Smelting zinc oxid | 736,010 | Aug. 11 | 1865 | ------ | 105 | 1398 |
| Petre, Lewis D., Chicago, Ill. Seat-hinge | 723,544 | Mar. 24 | 3527 | 789 | 103 | 782 |
| Petre, Lewis D., Chicago, Ill. Seat-hinge | 741,000 | Oct. 6 | 1134 | 255 | 106 | 1487 |
| Petrelli, Joseph, New Haven, Conn. Finger-nail trimmer | 741,709 | Oct. 20 | 2553 | 569 | 106 | 1825 |
| Petri-Palmedo, David, assignor to International Text Book Company, Scranton, Pa. Repeating attachment for phonographs | 722,616 | Mar. 10 | 1779 | 396 | 103 | 397 |
| Petric Deep Sea Diving Company. (See Petrie and Martin, assignors.) | | | | | | |
| Petrie, Enos B., New York, N. Y., and J. E. Martin, assignors to Petrie Deep Sea Diving Company, Newark, N. J. Diving apparatus | 735,809 | Aug. 11 | 1476 | 317 | 105 | 1313 |
| Petrie, William H. (See Stairs and Petrie.) | | | | | | |
| Petrini, Celestino, Bakersfield, Cal. Connection for locomotive oil-burner heaters | 739,923 | Sept. 29 | 4606 | 1034 | 106 | 1051 |
| Petro, Charles W., near North Salem, Ind. Running-gear | 720,177 | Feb. 10 | 1404 | 321 | 102 | 1137 |
| Petry, Benjamin F. (See Nock and Petry.) | | | | | | |
| Petsche, Gustav B., assignor to Southwark Foundry & Machine Company, Philadelphia, Pa. Pump-valve and valve-actuating mechanism | 724,497 | Apr. 7 | 143 | 34 | 103 | 1200 |
| Petsche, Gustav B., assignor to Southwark Foundry & Machine Company, Philadelphia, Pa. Compound engine | 731,126 | June 16 | 2935 | 652 | 104 | 1772 |
| Petsche, Gustav B., assignor to Southwark Foundry and Machine Company, Philadelphia, Pa. Governor | 736,542 | Aug. 18 | 2807 | 614 | 105 | 1618 |
| Petsche, Gustav B., assignor to Southwark Foundry & Machine Company, Philadelphia, Pa. Device for actuating governor-spindles | 742,229 | Oct. 27 | 3592 | 803 | 106 | 2052 |
| Petsche, Gustav B., assignor to Southwark Foundry & Machine Company, Philadelphia, Pa. Air-pump-actuating device for steam-engines | 746,373 | Dec. 8 | 1942 | 443 | 107 | 1532 |
| Pettee, Clara M., administratrix. (See Pettee, William E.) | | | | | | |
| Pettee, Walter C., New York, N. Y. Fountain drawing or ruling pen | 727,433 | May 5 | 1134 | 249 | 104 | 245 |
| Pettee, William E., deceased, Newton, Mass.; C. M. Pettee, administratrix. Trolley-catcher | 729,657 | June 2 | 241 | 56 | 104 | 1178 |
| Pettengill, Frederick B., assignor to Oil Blast Furnace Smelting Company, Los Angeles, Cal. Burner | 745,518 | Dec. 1 | 383 | 88 | 107 | 1181 |
| Pettengill, Frederick B., and E. Nicholson, assignors to Oil Blast Furnace Smelting Company, Los Angeles, Cal. Smelting-furnace | 718,726 | Jan. 20 | 2301 | 508 | 102 | 519 |
| Pettengill, Timothy H., Amsterdam, N. Y. Motor | 727,434 | May 5 | 1135 | 250 | 104 | 245 |
| Pettersen, Ingeborg, Brandon, Minn. Knee-rest | 718,875 | Jan. 20 | 2577 | 574 | 102 | 577 |
| Petterson, Ludwig, assignor to C. W. Adams, Chicago, Ill. Convertible railway-coach chair | 735,810 | Aug. 11 | 1479 | 317, 318 | 105 | 1314 |
| Pettersson, Charles O., New York, N. Y. Dress-shield fastener | 719,039 | Jan. 27 | 2888 | 647 | 102 | 657 |
| Pettibone, Mulliken & Company. (See Hibbard, Maury W., assignor.) | | | | | | |
| Pettie, Charles A., Brooklyn, N. Y. Vehicle-tire | 744,099 | Nov. 17 | 2574 | 551 | 107 | 578 |
| Pettie, Charles A., Brooklyn, N. Y. Vehicle-tire | 744,100 | Nov. 17 | 2577 | 551 | 107 | 578 |
| Pettijohn, John W., Montesano, Wash. Attachment for handcuffs | 727,193 | May 5 | 698 | 150 | 104 | 151 |
| Pettingell, George D., Jefferson, assignor of one-half to H. C. Laub, Denison, Iowa. Automatic railway steam and air pipe coupling or the like | 733,993 | July 21 | 2364 | 555, 556 | 105 | 530 |
| Pettinos, George F., *et al.* (See Good, Israel F., assignor.) | | | | | | |
| Pettis, Lester G., Platea, Pa. Fire-escape ladder | 719,364 | Jan. 27 | 3516 | 781, 782 | 102 | 789 |
| Pettit, Edward A., Moseley, assignor to Hydraulic Joint Syndicate, Limited, London, England. Cast jointing | 717,917 | Jan. 6 | 756 | 169 | 102 | 162 |
| Pettit, George, Jr. (See Robertson, Harry A., assignor.) | | | | | | |
| Pettit, Wilson M., Lockport, N. Y. Tuft-making machine | 723,914 | Mar. 31 | 4204 | 947 | 103 | 943 |
| Peugeot, Pierre, and G. A. Shoemaker, assignors to Baker-Vawter Company, Chicago, Ill. Temporary binder | 741,710 | Oct. 20 | 2555 | 569 | 106 | 1826 |
| Pevear, Jesse S., Schenectady, N. Y., assignor to General Electric Company. Electric railway | 729,216 | May 26 | 4481 | 988 | 104 | 1000 |
| Pevey, Benjamin M. (See Goodwin, Harry L., assignor.) | | | | | | |
| Peycke, Edmund, and L. Sonnenschein, Chicago, Ill. Calculating-machine | 731,944 | June 23 | 4452 | 993 | 104 | 2103 |
| Peyton, George W., Colorado Springs, Colo. Carpenter's gage | 722,381 | Mar. 10 | 1347 | 298 | 103 | 303 |
| Pfaff, Albert, assignor to Ideal Cash Register Company, New Boundbrook, N. J. Cash-register | 721,915 | Mar. 3 | 475 | 104, 105, 106, 107 | 103 | 104 |
| Pfaff, Albert, assignor to Ideal Cash Register Company, New Boundbrook, N. J. Cash-register | 721,916 | Mar. 3 | 490 | 107, 108, 109 | 103 | 108 |
| Pfaff, Georg M., Kaiserslautern, Germany. Screw-threading machine | 727,194 | May 5 | 699 | 150 | 104 | 151 |
| Pfaffenbach, Rudolf, assignor to A. Bleichert & Co., Leipzig, Germany. Lubricating-trolley for wire-rope railways | 724,203 | Mar. 31 | 4799 | 1075 | 103 | 1062 |
| Pfaffenbach, Rudolf, Leipzig, assignor to A. Bleichert & Co., Leipzig-Gohlis, Germany. Rope railway | 745,659 | Dec. 1 | 626 | 145, 146 | 107 | 1231 |
| Pfahl, George J., Patterson, N. Y. Column | 730,150 | June 2 | 1125 | 252 | 104 | 1356 |
| Pfanschmidt, Charles, and J. Siefert, Chicago, Ill. Massage-cup | 728,003 | May 12 | 2233 | 497 | 104 | 493 |
| Pfanschmidt, Charles, and J. Siefert, Chicago, Ill. Massage-machine. (Reissue) | 12,133 | July 21 | 3320 | 778 | 105 | 733 |

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| Pfanschmidt, Charles, and J. Siefert, Chicago, Ill. Massage-machine | 737,465 | Aug. 25 | 4550 | 1020 | 105 | 2004 |
| Pfanstiehl, Carl A., Highland Park, L. A. Pease and J. A. Brady, Highwood, Ill. Railway mail-collection device | 727,833 | May 12 | 1911 | 426, 427 | 104 | 425 |
| Pfau, Otto R., Chicago, Ill. Liquid-meter | 745,236 | Nov. 24 | 4716 | 1030, 1031 | 107 | 1048 |
| Pfaudler Company. (See Miner, Edward G., assignor.) | | | | | | |
| Pfautz, Daniel M., Germantown, Pa. Motor-vehicle | 734,283 | July 21 | 2942 | 687 | 105 | 657 |
| Pfautz, Daniel M., Germantown, Pa. Water-filtering system | 748,095 | Dec. 29 | 5197 | 1175 | 107 | 2321 |
| Pfeffle, Henry. (See Purcell, Malcolm, assignor.) | | | | | | |
| Pfeifer, John, assignor to Mast, Foos & Company, Springfield, Ohio. Change-maker | 737,958 | Sept. 1 | 801 | 175, 176, 177 | 106 | 176 |
| Pfeifer, John, Springfield, Ohio, assignor, by mesne assignments, to National Cash Register Company, Jersey City, N. J. Cash register, indicator, and recorder | 742,060 | Oct. 20 | 3227 | 723, 724, 725 | 106 | 1965 |
| Pfeifer, Rudolf, Charlottenburg, Germany. Frame for dynamo-electric machines | 723,019 | Mar. 17 | 2530 | 567 | 103 | 567 |
| Pfeiffer, Charles, Milwaukee, Wis. Wire twisting and weaving machine | 742,230 | Oct. 27 | 3593 | 803, 804 | 106 | 2053 |
| Pfeiffer, Jacob, Akron, Ohio. Seamless rubber glove | 723,301 | Mar. 24 | 3063 | 689 | 103 | 692 |
| Pfeiffer, John P., Marsh, assignor of one-half to G. Willis, Henry, Iowa. Washing-machine | 745,660 | Dec. 1 | 628 | 146 | 107 | 1232 |
| Pfeiffer, John P., and B. F. Morris, Marsh, Iowa. Harrow | 725,359 | Apr. 14 | 1737 | 391 | 103 | 1552 |
| Pfeil, George H., Edgewood, assignor to Union Switch & Signal Company, Swissvale, Pa. Wheel-stand | 739,344 | Sept. 22 | 3491 | 781 | 106 | 794 |
| Pfeil, Philip, Chicago, Ill. Car or vehicle propulsion | 723,727 | Mar. 24 | 3846 | 864, 865 | 103 | 850 |
| Pfennighausen, Gothard E. (See Crecelius and Pfennighausen.) | | | | | | |
| Pfingst, Louis, Dorchester, Mass. Rail-bond | 740,912 | Oct. 6 | 970 | 218 | 106 | 1453 |
| Pfirmann, Hubert, Frankfort-on-the-Main, Germany. Electric signaling device for railways | 742,487 | Oct. 27 | 4051 | 908, 909, 910 | 106 | 2148 |
| Pfirsch, John H., Martel, Ohio. Building-block | 723,404 | Mar. 24 | 3268 | 732 | 103 | 730 |
| Pfister, Josef, Vienna, Austria-Hungary. Apparatus for impregnating or staining wood | 735,019 | July 28 | 4306 | 1001 | 105 | 954 |
| Pfister, Theophil, Chicago, Ill. Manufacture of tiles, bricks, panels, &c | 718,381 | Jan. 13 | 1597 | ------ | 102 | 357 |
| Pfleghar, Frank P., assignor to English & Mersick Co., New Haven, Conn. Coach-hinge | 729,407 | May 26 | 4806 | 1066 | 104 | 1066 |
| Pfleiderer, Paul. (See Harris, William W., assignor.) | | | | | | |
| Pflueger, Joseph E., Akron, Ohio. Side plate for fishing-reels | 720,063 | Feb. 10 | 1197 | 274 | 102 | 1094 |
| Pflug, Max. (See Ofeldt, August W., assignor.) | | | | | | |
| Pflüger, Heinrich, Frankfort-on-the-Main, Germany. Disinfectant vessel | 744,978 | Nov. 24 | 4188 | 905 | 107 | 938 |
| Pflugh, August T., assignor to New Jersey Plumbing Specialties Co., Hoboken, N. J. Testing-plug | 724,396 | Mar. 31 | 5193 | 1164 | 103 | 1144 |
| Pfortner, Gustave A. (See Pfortner, Ignatz and G. A.) | | | | | | |
| Pfortner, Ignatz and G. A., New York, N. Y. Smoking-pipe | 738,235 | Sept. 8 | 1365 | 295 | 106 | 310 |
| Pfouts, Leroy S., Canton, Ohio. Pulverizing-machine | 719,503 | Feb. 3 | 162 | 37 | 102 | 858 |
| Pfouts, Leroy S., Canton, Ohio. Electric motor | 747,217 | Dec. 15 | 3515 | 797, 798 | 107 | 1906 |
| Pfouts, Low C. (See Decker, Frank L., assignor.) | | | | | | |
| Pfrom, John M. E., Morristown, Minn. Mechanical movement | 739,213 | Sept. 15 | 3251 | 720 | 106 | 726 |
| Ph. J. Bender & Sons. (See Mallett, Francis W., assignor.) | | | | | | |
| Phail, George A., Flushing, assignor to A. A. Low, Horseshoe, N. Y. Kerosene-engine | 743,097 | Nov. 3 | 536 | 116 | 107 | 112 |
| Pharr, Sallie S., Marshallville, Ga. Planter | 743,026 | Nov. 3 | 401 | 86, 87 | 107 | 84 |
| Pheils, Isaac F., Woodville, assignor to Pheils Universal Clock Company, Toledo, Ohio. Geographical clock | 718,579 | Jan. 13 | 2033 | 442 | 102 | 452 |
| Pheils Universal Clock Company. (See Pheils, Isaac F., assignor.) | | | | | | |
| Phelan, Clarence A. (See Morley, Frederic A., assignor.) | | | | | | |
| Phelan, J. R. (See McCorkle, John C., assignor.) | | | | | | |
| Phelan, John, and L. Braund, Jackson, Mich. Mustache-curler | 741,711 | Oct. 20 | 2556 | 569 | 106 | 1826 |
| Phelps, Augustus, Newark, N. J. Badge-button | 720,473 | Feb. 10 | 1946 | 444, 445 | 102 | 1249 |
| Phelps, Augustus, Newark, N. J. Medallion or button making machine | 738,062 | Sept. 1 | 989 | 220 | 106 | 215 |
| Phelps, Byron, Seattle, Wash. Lock | 722,619 | Mar. 10 | 1784 | 397 | 103 | 398 |
| Phelps, Byron, Seattle, Wash. Lock | 722,620 | Mar. 10 | 1786 | 397 | 103 | 399 |
| Phelps, Byron, Seattle, Wash. Lock | 722,621 | Mar. 10 | 1787 | 398 | 103 | 399 |
| Phelps, Byron, Seattle, Wash. Lock | 722,622 | Mar. 10 | 1789 | 398 | 103 | 400 |
| Phelps, Byron, Seattle, Wash. Lock | 722,623 | Mar. 10 | 1790 | 398 | 103 | 400 |
| Phelps, Chandley E., Boonville, N. Y. Snow-shoe | 735,290 | Aug. 4 | 492 | 98 | 105 | 1086 |
| Phelps, Charles, Oskaloosa, Iowa. Molder's flask | 721,831 | Mar. 3 | 316 | 69 | 103 | 70 |
| Phelps, Charles A. (See Oberlin, Hazen, assignor.) | | | | | | |
| Phelps, Edward W., Toronto, Canada. Incandescent gas-burner | 741,068 | Oct. 13 | 1258 | 285 | 106 | 1536 |
| Phelps, Edwin P. (See Worden, Dudley, assignor.) | | | | | | |
| Phelps, Frederick A., Jr., Newark, N. J. Shelving | 718,152 | Jan. 13 | 1174 | 260, 261 | 102 | 268 |
| Phelps, George L., Chicago, Ill. Self-alining cutter-bar section | 731,068 | June 16 | 2823 | 628 | 104 | 1751 |
| Phelps, George L., assignor to Plano Manufacturing Company, Chicago, Ill. Grain-harvester | 732,219 | June 30 | 5026 | 1119 | 104 | 2235 |
| Phelps, George N., Brookline, Mass. Instep-supporter for boots or shoes | 741,826 | Oct. 20 | 2759 | 614 | 106 | 1869 |
| Phelps, Jerome B., Mendota, Ill. Store-front sash | 736,774 | Aug. 18 | 3256 | 719, 720 | 105 | 1708 |
| Phelps, John L., Eunola, Ala. Seed-planter | 732,316 | June 30 | 5197 | 1154, 1155 | 104 | 2270 |
| Phelps, Leonard M., Blackstone, Mass. Cloth-measuring device for looms | 743,989 | Nov. 10 | 2323 | 496 | 107 | 516 |
| Phelps, Lucius J., Melrose, Mass. Pump | 722,749 | Mar. 17 | 2062 | 461, 462 | 103 | 472 |
| Phelps, Neil I., *et al.* (See Knell, William F., assignor.) | | | | | | |
| Phelps, Orson C. (See Newell and Dean, assignors.) | | | | | | |
| Phelps, Walter F., Dayton, Ohio. Electrical motor for ceiling-fans | 724,498 | Apr. 7 | 145 | 34, 35 | 103 | 1200 |
| Phelps, William P., Merchantsville, N. J., assignor to Western Union Telegraph Company, New York, N. Y. Printing-telegraph system | 726,566 | Apr. 28 | 4000 | 905, 906, 907 | 103 | 2051 |
| Philadelphia Lubricator Manufacturing Company. (See Lewis, John F., assignor.) | | | | | | |
| Philadelphia Paper Company. (See Read, Frederick A., assignor.) | | | | | | |
| Philadelphia Pneumatic Tool Company. (See Keller, Julius, assignor.) | | | | | | |
| Philadelphia Pneumatic Tool Company. (See Tierney, John W., assignor.) | | | | | | |
| Philadelphia Steel & Iron Company. (See Hardie, Thomas, assignor.) | | | | | | |
| Philbrick, Charles P., assignor of one-half to J. A. Reuling, Wymore, Nebr. Electrical regulator | 717,918 | Jan. 6 | 757 | 170 | 102 | 162 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drgs. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Philbrick, John M., Macon, Ga. Cotton-harvester | 747,760 | Dec. 22 | 4508 | 1015, 1016 | 107 | 2147 |
| Philbrick, Samuel M., and L. C. Coulter, Portland, Oreg. Bag-turning machine | 742,061 | Oct. 20 | 3235 | 725 | 106 | 1967 |
| Philipp, Edwin B. (See Roekel, August, assignor.) | | | | | | |
| Philipp, Otto, Köthen, Germany. Ship-railway | 731,945 | June 23 | 4456 | 994 | 104 | 2104 |
| Philipps, Johann D., Frankfort-on-the-Main, Germany. Pneumatic-action for musical instruments | 730,565 | June 9 | 1906 | 424 | 104 | 1537 |
| Philippsohn and Leschziner. (See Buchwald, Fritz, assignor.) | | | | | | |
| Philips, Ferdinand, Philadelphia, Pa. Pulley-rim section | 721,228 | Feb. 24 | 3440 | 781 | 102 | 1597 |
| Philips, Ferdinand, Philadelphia, Pa. Wheel and wheel-rim | 743,098 | Nov. 3 | 537 | 116 | 107 | 113 |
| Philips, James J. E., New York, assignor of one-third to J. C. Weider, Flushing, and W. A. Gibson, Brooklyn, N. Y. Engine | 736,438 | Aug. 18 | 2606 | 572, 573 | 105 | 1574 |
| Philips, William H., *et al.* (See Johnson, Bernard F., assignor.) | | | | | | |
| Phillabaum, Frank M., Lakeside, Ohio. Guard-rail clamp | 730,151 | June 2 | 1126 | 253 | 104 | 1356 |
| Phillimore, Walter N., Atlanta, Ga. Combined pad-moistener and letter-copying press | 727,834 | May 12 | 1917 | 427 | 104 | 426 |
| Phillip, Charles A. (See Reilly and Phillip.) | | | | | | |
| Phillip, Rebecca L., administratrix. (See Reilly and Phillip.) | | | | | | |
| Phillipps, Louis, Columbus, Nebr. Drag-saw | 732,958 | July 7 | 458 | 114 | 105 | 99 |
| Phillips, Adelbert H., Philadelphia, Pa., assignor, by mesne assignments, to Automatic Packing and Weighing Machine Company. Bag making and filling machine | 727,554 | May 5 | 1360 | 305, 306, 307 | 104 | 293 |
| Phillips, Allen W., assignor to Animal Automobile and Novelty Company, Incorporated, Providence, R. I. Animal-trap | 724,931 | Apr. 7 | 941 | 216 | 103 | 1371 |
| Phillips, Augustus K., St. Louis, Mo. Spool-bluing | 728,608 | May 19 | 3387 | 750 | 104 | 759 |
| Phillips, Benjamin, Lynn, Mass. Sole-leveling machine | 722,889 | Mar. 17 | 2326 | 520 | 103 | 524 |
| Phillips, Charles. (See Mercer and Phillips.) | | | | | | |
| Phillips, Charles, New Bushey, England. Driving-gear for engines | 725,285 | Apr. 14 | 1598 | 361 | 103 | 1523 |
| Phillips, Charles B. (See Smith, Floyd J., assignor.) | | | | | | |
| Phillips, Cornelius R., Philadelphia, Pa. Brush for electric machines | 738,478 | Sept. 8 | 1886 | 410 | 106 | 420 |
| Phillips, Darius T., Chicago, Ill., assignor to International Harvester Company. Shocking attachment for corn-harvesters | 746,148 | Dec. 8 | 1535 | 344 | 107 | 1448 |
| Phillips, David, Pony, Mont. Tunnel construction | 737,466 | Aug. 25 | 4553 | 1020, 1021 | 105 | 2004 |
| Phillips, Dixon L. (See Elrod, Thomas, assignor.) | | | | | | |
| Phillips, Elwood C., Chicago, Ill. Barrel | 718,020 | Jan. 6 | 948 | 210 | 102 | 204 |
| Phillips, Elwood C., assignor to Standard Development Company, Incorporated, Chicago, Ill. Curtain pole or rod | 718,021 | Jan. 6 | 949 | 210 | 102 | 204 |
| Phillips, Frederick W., London, England. Sleeve-link | 733,266 | July 7 | 1019 | 244 | 105 | 213 |
| Phillips, George. (See Moesinger, Traugott, assignor.) | | | | | | |
| Phillips and Harmon. (See Hall, Cassius L., assignor.) | | | | | | |
| Phillips, Henry H., Philadelphia, Pa. Broiler for gas-stoves | 739,214 | Sept. 15 | 3253 | 720 | 106 | 727 |
| Phillips, Henry M., Spearville, Kans. Cultivator | 736,872 | Aug. 18 | 3448 | 764 | 105 | 1749 |
| Phillips, Hiram D., Chattanooga, Tenn. Grinding-mill cleaner | 728,289 | May 19 | 2779 | 616, 617 | 104 | 631 |
| Phillips, Jacob P., Yantley, Ala. Trace-end-supporting device | 745,738 | Dec. 1 | 758 | 173 | 107 | 1260 |
| Phillips, James E. (See Smith, Phillips, and Smith.) | | | | | | |
| Phillips, James F. (See Cave and Phillips.) | | | | | | |
| Phillips, James M., Mason, Tex. Vermin-destroyer | 720,282 | Feb. 10 | 1617 | 370 | 102 | 1180 |
| Phillips, James R., and C. W. Bray, Pittsburg, Pa., assignors to American Tin Plate Company, Orange, N. J. Rolling black plates or sheets | 740,176 | Sept. 29 | 5067 | ..... | 106 | 1149 |
| Phillips, John B., Stamford, Conn. Parcel-carrier | 728,004 | May 12 | 2234 | 497 | 104 | 493 |
| Phillips, John D. (See Phillips, Samuel J. and J. D.) | | | | | | |
| Phillips, John L., Washington, N. C. Baby-walker | 734,940 | July 28 | 4159 | 968 | 105 | 924 |
| Phillips, John M., St. Louis, Mo. Veterinary dental instrument | 735,580 | Aug. 4 | 1052 | 223 | 105 | 1204 |
| Phillips, John R. (See Bullock, Edmund L., assignor.) | | | | | | |
| Phillips, Joseph, Toronto, Canada. Child's bank | 740,776 | Oct. 6 | 742 | 167 | 106 | 1404 |
| Phillips, Loren R., Palisades, Colo. Oscillating water-motor | 718,153 | Jan. 13 | 1177 | 261, 262 | 102 | 269 |
| Phillips, Marcus. (See Garvin, Samuel S., assignor.) | | | | | | |
| Phillips, Maurice T., Pomeroy, Pa. Suckling-feeder | 721,384 | Feb. 24 | 3708 | 843 | 102 | 1654 |
| Phillips, Norvel L., Syracuse, N. Y. Dump-wagon | 742,350 | Oct. 27 | 3818 | 855 | 106 | 2101 |
| Phillips, Ralph M., assignor to T. H. Smith, Jamestown, N. Y. Friction-clutch | 735,811 | Aug. 11 | 1483 | 318 | 105 | 1315 |
| Phillips, Ross M. G., assignor to Ideal Holster Company, Los Angeles, Cal. Army equipment | 723,545 | Mar. 24 | 3528 | 789 | 103 | 783 |
| Phillips, Ross M. G., assignor to Ideal Holster Company, Los Angeles, Cal. Attachment for firearms | 724,327 | Mar. 31 | 5044 | 1129, 1130 | 103 | 1111 |
| Phillips, Ross M. G., assignor to Ideal Holster Company, Los Angeles, Cal. Holster for firearms | 726,824 | Apr. 28 | 4488 | 1012 | 103 | 2152 |
| Phillips, Sam, Sherrill, N. Y. Swivel snap-hook | 720,378 | Feb. 10 | 1789 | 405 | 102 | 1218 |
| Phillips, Samuel J. and J. D., New York, N. Y. Runner for wheeled vehicles | 736,439 | Aug. 18 | 2609 | 573 | 105 | 1575 |
| Phillips, Thomas H., St. Davids, Pa. Impact-tool | 743,920 | Nov. 10 | 2178 | 470, 471 | 107 | 480 |
| Phillips, Thomas J., W. G. Hodge, and W. White, Ottumwa, Iowa. Loading-machine | 734,088 | July 21 | 2560 | 598 | 105 | 576 |
| Phillips, Walter P. (See Martin, Horace G., assignor.) | | | | | | |
| Phillips, William J., assignor of one-half to M. W. Benjamin, Cheboygan, Mich. Bolt-holder | 729,508 | May 26 | 4970 | 1101 | 104 | 1103 |
| Phillis, Solomon H., Pana, Ill. Truss | 738,842 | Sept. 15 | 2608 | 575 | 106 | 592 |
| Phillis, Solomon H., Pana, Ill. Hernial truss | 743,187 | Nov. 3 | 705 | 155 | 107 | 147 |
| Philp, Bertil von, Philadelphia, Pa., assignor of two-thirds to J. W. Thorn, Trenton, N. J., and H. L. Ogden, Philadelphia, Pa. Brake for cars | 729,658 | June 2 | 243 | 57 | 104 | 1178 |
| Philp, Casimir von. (See Leibert and Philp.) | | | | | | |
| Philp, Frederick D., Buffalo, N. Y. Gage-cock | 727,195 | May 5 | 700 | 150 | 104 | 151 |
| Philp, James, New York, N. Y. Fusible plug for steam-boilers | 726,567 | Apr. 28 | 4008 | 907 | 103 | 2053 |
| Philp, James, New York, N. Y. Leak-stopper | 746,990 | Dec. 15 | 3087 | 707 | 107 | 1811 |
| Philpott, James S., assignor of one-half to G. A. Nalley, Windsor, Cal. Acetylene-gas generator | 733,740 | July 14 | 1842 | 435 | 105 | 405 |
| Philpott, Thomas S., Newtown, New Zealand. Device for oiling axles | 733,420 | July 14 | 1300 | 307 | 105 | 292 |
| Philpott, Thomas S., Newtown, New Zealand. Non-refillable bottle | 746,374 | Dec. 8 | 1943 | 443 | 107 | 1533 |
| Philpott, Thomas S., Newtown, and R. Hutchinson, Wellington, New Zealand. Fire-alarm and fire-escape | 742,727 | Oct. 27 | 4490 | 1015 | 106 | 2241 |
| Phinney, William A., Manchester, N. H. Brush | 721,601 | Feb. 24 | 4123 | 938 | 102 | 1743 |
| Phipps, Abner A., New York, N. Y. Air-pump | 717,760 | Jan. 6 | 452 | 105 | 102 | 98 |
| Phipps, Abner A., New York, N. Y. Branding-iron | 736,149 | Aug. 11 | 2107 | 452 | 105 | 1449 |
| Phipps, Charles D., and H. F. Chatfield, Fenton, Mich. Ladder | 741,541 | Oct. 13 | 2219 | 494 | 106 | 1739 |
| Phipps, Edward H., New York, N. Y., assignor to Phipps Road Car Company. Vehicle-wheel | 735,812 | Aug. 11 | 1484 | 318 | 105 | 1315 |

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| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Phipps, Edward L., Milford, Mich. Corner-fastening for vehicle-boxes | 731,946 | June 23 | 4458 | 994 | 104 | 2104 |
| Phipps Road Car Company. (See Phipps, Edward H., assignor.) | | | | | | |
| Phipps Road Car Company. (See Reynolds, Frank A., assignor.) | | | | | | |
| Phoenix Cap Company. (See Weissenthanner, Alfred L., assignor.) | | | | | | |
| Phoenix Caster Company. (See Rentschler and Kaefer, assignors.) | | | | | | |
| Phönix Maschinenbau Gesellschaft M. B. H. (See Krüger, Ferdinand, assignor.) | | | | | | |
| Pianko, Mendel, New York, N. Y. Producing grain-leather | 748,099 | Nov. 3 | 538 | ..... | 107 | 113 |
| Piatt, Richard F., Louisville, Ky. Condenser and heater | 720,614 | Feb. 17 | 2263 | 519 | 102 | 1329 |
| Piatt, William M., West Liberty, Ohio. Ejector attachment for harvesters | 745,902 | Dec. 1 | 1089 | 243 | 107 | 1330 |
| Picard, Charles H. (See McLean and Picard.) | | | | | | |
| Picha, Adolphe, Ghent, Belgium. Paving-tiles | 739,345 | Sept. 22 | 3492 | 781 | 106 | 794 |
| Picher Lead Company. (See Picher and Boss, assignors.) | | | | | | |
| Picher, Oliver H., Joplin, Mo. Manufacturing spelter from zinc ores | 735,903 | Aug. 11 | 1661 | 354 | 105 | 1354 |
| Picher, William H., and J. P. Boss, assignors to Picher Lead Company, Joplin, Mo. Screen system | 735,904 | Aug. 11 | 1662 | 354 | 105 | 1354 |
| Pichl, John, assignor to J. H. Neustadt, St. Louis, Mo. Hood for automobiles | 737,467 | Aug. 25 | 4555 | 1021 | 105 | 2005 |
| Pick, John H., assignor to Pick Motor Company, Limited, Stamford, Lincoln, England. Brake | 744,792 | Nov. 24 | 3856 | 830 | 107 | 870 |
| Pick Motor Company. (See Pick, John H., assignor.) | | | | | | |
| Pickard, Addie C., Perry, Okla. Ter. Roller-bearing for drawers, &c | 728,071 | May 26 | 4041 | 897 | 104 | 908 |
| Pickard, Greenleaf W. (See Shoemaker and Pickard.) | | | | | | |
| Pickard, William S. (See Keller, Michael, assignor.) | | | | | | |
| Picker, Bernhard. (See Johnson and Picker.) | | | | | | |
| Pickerill, Bert K., Kansas City, Kans., assignor, by mesne assignments, of one-half to W. H. Fisher, Richhill, Mo. Oil-burning device | 730,395 | June 9 | 1585 | 353 | 104 | 1467 |
| Pickin, George W., Eau Claire, Wis. Fireproof wall or building | 729,408 | May 26 | 4807 | 1066 | 104 | 1066 |
| Pickles, Charles K., assignor to S. G. Scarrett, St. Louis, Mo. Car-seat | 724,610 | Apr. 7 | 359 | 87 | 103 | 1245 |
| Pickles, Thomas, and B. Blakey, Burnley, England. Weft-fork | 748,096 | Dec. 29 | 5198 | 1175 | 107 | 2321 |
| Pickop, George B., assignor to P. & F. Corbin, New Britain, Conn. Sash fastener and lock | 721,385 | Feb. 24 | 3710 | 844 | 102 | 1654 |
| Pickop, George B., assignor to P. & F. Corbin, New Britain, Conn. Detachable hinge | 722,624 | Mar. 10 | 1791 | 398 | 103 | 400 |
| Pickop, George B., assignor to P. & F. Corbin, New Britain, Conn. Drilling-machine | 744,395 | Nov. 17 | 3141 | 674 | 107 | 701 |
| Pickop, George B., assignor to P. & F. Corbin, New Britain, Conn. Mechanical drill | 744,396 | Nov. 17 | 3143 | 675 | 107 | 702 |
| Pickop, George B., assignor to P. & F. Corbin, New Britain, Conn. Drilling-machine | 744,397 | Nov. 17 | 3144 | 675 | 107 | 702 |
| Pickop, George B., assignor to P. & F. Corbin, New Britain, Conn. Stop for detachable spring-hinges | 747,570 | Dec. 22 | 4155 | 933 | 107 | 2068 |
| Pickrell, James M. (See Woodruff, William W., assignor.) | | | | | | |
| Piddington, William W. (See Mills and Piddington.) | | | | | | |
| Pidgeon, Francis P., Brooklyn, N. Y. Envelop | 722,038 | Mar. 3 | 714 | 159 | 103 | 154 |
| Pidgeon, Winter R. (See Bradley and Pidgeon.) | | | | | | |
| Pidgin, Charles F., Boston, Mass. Compiling statistics | 719,365 | Jan. 27 | 3518 | 782, 783 | 102 | 789 |
| Pidgin, Charles F., Boston, Mass. Schedule-holder | 721,386 | Feb. 24 | 3712 | 844 | 102 | 1654 |
| Pidgin, Charles F., Boston, Mass. Calculating-machine | 735,291 | Aug. 4 | 493 | 98, 99 | 105 | 1086 |
| Pidgin, Charles F., Boston, Mass. Schedule for compiling statistics | 740,041 | Sept. 29 | 4834 | 1084, 1085 | 106 | 1101 |
| Pidgin, Charles F., Boston, Mass. Keyboard for tabulating-machines | 740,042 | Sept. 29 | 4836 | 1085 | 106 | 1102 |
| Pidgin, Charles F., Boston, Mass. Indicator | 746,570 | Dec. 8 | 2278 | 522 | 107 | 1608 |
| Piel Bros. Mnfg. Co. (See Schuehle and Horn, assignors.) | | | | | | |
| Pielicke, Rudolf, New York, N. Y. Graphite lubricator | 744,101 | Nov. 17 | 2580 | 551 | 107 | 579 |
| Pieper, Alphonse F. (See Pieper, Oscar H. and A. F.) | | | | | | |
| Pieper, Oscar H. and A. F., Rochester, N. Y. Motor | 721,229 | Feb. 24 | 3441 | 782 | 102 | 1597 |
| Pierce, Aaron H., Tampa, Fla., assignor of five-eighths to A. A. De Loach, J. P. and C. W. Stevens. Rotary engine | 742,901 | Nov. 3 | 144 | 33 | 107 | 32 |
| Pierce, Arthur G., assignor of one-half to C. F. Nopper, Toledo, Ohio. Aeolian-hummer | 729,891 | June 2 | 682 | 150 | 104 | 1267 |
| Pierce, Arthur M., Brooklyn, assignor to B. L. Gilbert and W. H. Peddle, New York, N. Y. Fireproofing wood | 737,468 | Aug. 25 | 4556 | ..... | 105 | 2005 |
| Pierce Bros. (See Loop, Admah I., assignor.) | | | | | | |
| Pierce, Charles E., Buffalo, N. Y. Bicycle | 723,486 | Mar. 24 | 3437 | 769 | 103 | 764 |
| Pierce, Charles S. (See Harlow and Lindgren, assignors.) | | | | | | |
| Pierce, Frank L., trustee. (See Miles, George W., assignor.) | | | | | | |
| Pierce, Franklin B., Ridgefarm, Ill. Corn harvester and husker | 731,493 | June 23 | 3627 | 809, 810 | 104 | 1933 |
| Pierce, George A., assignor of one-half to A. N. Clark, Walpole, Mass. Folding scaffold-bracket | 732,584 | June 30 | 5728 | 1272 | 104 | 2383 |
| Pierce, George H., Malden, assignor to New Era Machinery Company, Boston, Mass. Printing-press | 720,064 | Feb. 10 | 1198 | 274, 275, 276 | 102 | 1094 |
| Pierce, George H., Malden, assignor to New Era Machinery Company, Boston, Mass. Cutting and punching mechanism for printing-presses | 723,302 | Mar. 24 | 3065 | 689, 690 | 103 | 692 |
| Pierce, George H., Quincy, assignor to New Era Machinery Company, Boston, Mass. Ink-distributing mechanism for printing-presses | 733,078 | July 7 | 672 | 162, 163, 164, 165 | 105 | 142 |
| Pierce, George L., New York, N. Y., assignor to A. G. Spalding & Bros., New York, N. Y., and Jersey City, N. J. Caddy-bag | 725,764 | Apr. 21 | 2506 | 569 | 103 | 1732 |
| Pierce, George M. (See Jackson and Pierce.) | | | | | | |
| Pierce, George M., Brodhead, Wis. Duplicate-whist tray | 742,728 | Oct. 27 | 4492 | 1016 | 106 | 2242 |
| Pierce, George M., Brodhead, Wis. Duplicate-whist tray | 742,729 | Oct. 27 | 4493 | 1016 | 106 | 2242 |
| Pierce, George M., Brodhead, Wis. Duplicate-whist tray | 742,730 | Oct. 27 | 4494 | 1017 | 106 | 2242 |
| Pierce, Henry N., New York, N. Y. Calculating instrument | 748,566 | Dec. 29 | 6070 | 1375 | 107 | 2513 |
| Pierce, James H. (See Guiley, Pierce, and Wright.) | | | | | | |
| Pierce, James M. (See Dynes and Pierce.) | | | | | | |
| Pierce, James M., assignor to Owatonna Mfg. Co., Owatonna, Minn. Single-disk drill | 736,440 | Aug. 18 | 2611 | 573 | 105 | 1575 |
| Pierce, John, Milton, assignor of two-thirds to J. H. Chadbourne, Watertown, and W. B. Moore, Swampscott, Mass. Stop for lacing-hook-setting machines | 739,106 | Sept. 15 | 3070 | 681 | 106 | 687 |
| Pierce, John A., Miami, Ind. Ter. Ironing-board | 734,941 | July 28 | 4161 | 968 | 105 | 924 |
| Pierce, John D., Philadelphia, Pa. Atomizer | 744,603 | Nov. 17 | 3485 | 752 | 107 | 772 |
| Pierce, Joseph, Tumwater, Wash. Undercutter | 747,083 | Dec. 15 | 3265 | 743 | 107 | 1853 |
| Pierce, La Fayette, Moundville, Mo. Self-locking pin | 733,994 | July 21 | 2367 | 556 | 105 | 531 |
| Pierce, Richard P., Mountcalm, Tex. Gate-operating device | 748,214 | Dec. 29 | 5411 | 1231 | 107 | 2366 |
| Pierce, Walter C., Waukon, Iowa. Sleigh | 736,543 | Aug. 18 | 2808 | 615 | 105 | 1618 |
| Pierce, Zachariah L., Hanna City, Ill. Railway-rail | 719,040 | Jan. 27 | 2890 | 647, 648 | 102 | 657 |
| Pierman, Alexander N. (See Miller and Pierman.) | | | | | | |
| Pierpont, Frank H., Horley, England, assignor to Lanston Monotype Machine Company, New York, N. Y. Type-mold | 720,736 | Feb. 17 | 2475 | 570 | 102 | 1374 |

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| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Pierron, Léon. (See Raynaud and Pierron.) | | | | | | |
| Pierson, A. N. (See Lenholt, John E., assignor.) | | | | | | |
| Pierson, Alfred M., *et al.* (See Hardinge, George F., assignor.) | | | | | | |
| Pierson, Paul M., Ossining, N. Y. Bench for greenhouses | 737,469 | Aug. 25 | 4556 | 1021 | 105 | 2005 |
| Pierson, Paul M., Ossining, N. Y., assignor to Pierson-Sefton Company. Sash-bar for greenhouses, &c. (Reissue) | 12,129 | June 30 | 5929 | 1315 | 104 | 2425 |
| Pierson-Sefton Company. (See Pierson, Paul M., assignor.) (Reissue.) | | | | | | |
| Pieser, Isaac, *et al.* (See Beardsley, Robert F. W., assignor.) | | | | | | |
| Pieser, Isaac, *et al.* (See Cormack, George H., assignor.) | | | | | | |
| Pieser, Isaac, *et al.* (See Redd, Charlie, assignor.) | | | | | | |
| Pieser, Isaac, *et al.* (See Redd and Cormack, assignors.) | | | | | | |
| Pietsch, Max, New York, N. Y. Shuttle-operating means for sewing-machines | 747,084 | Dec. 15 | 3266 | 744 | 107 | 1853 |
| Pietzner, Carl, Vienna, Austria-Hungary. Photomechanical process of producing finished and plastic casts | 727,435 | May 5 | 1138 | 250 | 104 | 246 |
| Piez, Charles, Philadelphia, Pa., assignor to Dodge Coal Storage Company, Naugatuck, Conn. Storage structure | 719,366 | Jan. 27 | 3520 | 783, 784 | 102 | 790 |
| Pifer, George N., assignor to American Automatic Photograph Company, Cleveland, Ohio. Combined finder and means for determining focal distances | 720,615 | Feb. 17 | 2265 | 519 | 102 | 1329 |
| Pigeon, Albert M. (See Pigeon, Ernest A. and A. M.) | | | | | | |
| Pigeon, Ernest A. and A. M., assignors to Paxton & O'Neill, Philadelphia, Pa. Knitting-machine attachment | 731,494 | June 23 | 3630 | 810, 811 | 104 | 1933 |
| Piggott, Lewis. (See Smith and Piggott.) | | | | | | |
| Pignolet, Louis M., Orange, N. J. Volt-ampere meter | 725,765 | Apr. 21 | 2507 | 569 | 103 | 1732 |
| Pigrenet, Joseph P., New Orleans, La. Faucet | 737,767 | Sept. 1 | 393 | 84 | 106 | 87 |
| Pihl, Carl J., Cambridgeport, Mass., assignor to United States Dairy Manufacturing and Machine Company. Centrifugal separator | 725,868 | Apr. 21 | 2693 | 612, 613 | 103 | 1772 |
| Pihl, William R., and A. Olsen, Christiania, Norway. Machine for making nets | 738,479 | Sept. 8 | 1887 | 410, 411, 412, 413 | 106 | 420 |
| Pike Adding Machine Company. (See Pike, William H., Jr., assignor.) | | | | | | |
| Pike, Arthur S., Crouch End, England. Means for creasing trousers | 718,939 | Jan. 20 | 2700 | 604 | 102 | 604 |
| Pike, Benjamin, New York, N. Y. Clasp for hose-supporters | 729,659 | June 2 | 245 | 57 | 104 | 1179 |
| Pike, Charles A., *et al.* (See French, Ira G., assignor.) | | | | | | |
| Pike, Charles F., Philadelphia, Pa. Indicator for locating sunken metals | 737,866 | Sept. 1 | 603 | 132 | 106 | 133 |
| Pike, Daniel, assignor of three-fifths to E. J. Thilborger and J. W. Duffy, New Orleans, La. Street-sweeper | 720,474 | Feb. 10 | 1947 | 445 | 102 | 1250 |
| Pike, George B. M., New York, N. Y. Nut-lock | 733,915 | July 14 | 2207 | 517 | 105 | 479 |
| Pike, Irwin W., Keyport, N. J. Apparatus for cooling coke, &c | 720,065 | Feb. 10 | 1200 | 276 | 102 | 1094 |
| Pike, Mary E., New Rochelle, N. Y. Garment-hanger | 736,150 | Aug. 11 | 2109 | 452 | 105 | 1449 |
| Pike, Oscar, Sr., Princeton, Me., assignor of one-half to Oscar Pike, Jr., Dawson, Yukon Territory, Canada. Meat-tenderer | 719,858 | Feb. 3 | 805 | 188 | 102 | 993 |
| Pike, Otto S., Malden, Mass. Pneumatic carrier | 726,097 | Apr. 21 | 3063 | 696 | 103 | 1848 |
| Pike, William H., Jr., assignor to Pike Adding Machine Company, St. Louis, Mo. Printing attachment for calculating-machines | 738,934 | Sept. 15 | 2765 | 612 | 106 | 626 |
| Pike, William H., Jr., assignor to Pike Adding Machine Company, St. Louis, Mo. Ribbon-feeding mechanism for type-writing machines | 738,935 | Sept. 15 | 2766 | 612, 613 | 106 | 626 |
| Pilcher, John V., Louisville, Ky. Garment and watch-chain support | 730,566 | June 9 | 1907 | 425 | 104 | 1537 |
| Pilkington, Herbert M., New York, N. Y. Adjustable securing means | 744,604 | Nov. 17 | 3486 | 752 | 107 | 773 |
| Pilkington, Joseph H., Waterbury, Conn. Hose-supporter | 725,360 | Apr. 14 | 1738 | 391 | 103 | 1552 |
| Pilkington, Joseph H., Waterbury, Conn. Clasp | 734,089 | July 21 | 2562 | 598 | 105 | 577 |
| Pilkington, William W., Prescot, England. Manufacture of sheet-glass | 737,470 | Aug. 25 | 4558 | 1022 | 105 | 2005 |
| Piller, Anton, Trenton, N. J. Land and water vehicle | 728,758 | May 19 | 3651 | 812 | 104 | 814 |
| Pilling, James L., Port Huron, Mich. Traveling receiver for motor fluids | 743,921 | Nov. 10 | 2183 | 471 | 107 | 481 |
| Pilling, James L., and R. J. Kruse, Port Huron, Mich. Motor | 735,675 | Aug. 4 | 1225 | 259, 260 | 105 | 1241 |
| Pilling & Madeley. (See Morris, Frank E., assignor.) | | | | | | |
| Pillmore, William F., and D. Anderegg, Westernville, N. Y. Pea-hulling machine | 728,759 | May 19 | 3652 | 812, 813 | 104 | 814 |
| Pillsbury, Edwin S., St. Louis, Mo. Electric motor | 718,518 | Jan. 13 | 1896 | 416 | 102 | 424 |
| Pillsbury, George M. (See Webb and Pillsbury.) | | | | | | |
| Pilz, Otto, Frankenthal, Germany. Platen-press | 727,436 | May 5 | 1139 | 251 | 104 | 246 |
| Pimlott, George R., Chicago, Ill., assignor of one-half to W. G. Rice, Houghton, Mich. Guard for flexible conductors | 734,090 | July 21 | 2563 | 598 | 105 | 577 |
| Pincin, James, Altoona, Pa. Eccentric | 719,133 | Jan. 27 | 3085 | 686 | 102 | 697 |
| Pinder, Joseph W., San Francisco, Cal. Ore-concentrator | 744,229 | Nov. 17 | 2839 | 607 | 107 | 635 |
| Pindstofte, Anders A., Copenhagen, Denmark. Machine for soaking bottles previous to cleaning and rinsing | 724,499 | Apr. 7 | 146 | 35 | 103 | 1201 |
| Pindstofte, Anders A., Copenhagen, Denmark. Conveying and draining device for bottles after having been washed | 724,734 | Apr. 7 | 595 | 141 | 103 | 1295 |
| Pindstofte, Anders A., Copenhagen, Denmark. Corking-machine | 727,437 | May 5 | 1140 | 251 | 104 | 246 |
| Pine, Dudley J., St. Louis, Mo. Starting-gate | 723,915 | Mar. 31 | 4206 | 947 | 103 | 943 |
| Pine, Joseph A., Marlboro, Mass. Buffing-machine | 718,154 | Jan. 13 | 1178 | 262 | 102 | 269 |
| Pine, Joseph A., Marlboro, Mass. Buffing-machine | 718,155 | Jan. 13 | 1179 | 262 | 102 | 269 |
| Pinel, Joseph, Altrincham, England. Mechanical controller for automatic type casting and composing machines | 744,230 | Nov. 17 | 2841 | 608 | 107 | 636 |
| Piner, John W. H., Cincinnati, Ohio. School-desk | 727,438 | May 5 | 1143 | 251 | 104 | 247 |
| Piniec-Mallet, Adrian de, Brooklyn, N. Y. Extension-bed or couch-bed | 734,726 | July 28 | 3760 | 877 | 105 | 841 |
| Pinion, Alfred, Clarion, Iowa. Ditching-plow | 721,230 | Feb. 24 | 3443 | 782 | 102 | 1597 |
| Pinkert, Georg, Hamburg, Germany. Screw-propeller | 735,905 | Aug. 11 | 1663 | 355 | 105 | 1354 |
| Pinner, Henry. (See Samter and Pinner.) | | | | | | |
| Pinney, Adam. (See Armitage and Pinney.) | | | | | | |
| Pintsch, Julius. (See Gerdes, Heinrich, assignor.) | | | | | | |
| Pioch, Frank J., Creston, Iowa. Hot-air furnace | 742,062 | Oct. 20 | 3240 | 726 | 106 | 1967 |
| Pipe Machine and Manufacturing Company. (See Hunker, Martin L., assignor.) | | | | | | |
| Piper, Denton C. (See Brown, Jasper M., assignor.) | | | | | | |
| Piper, James I. (See Piper, John C. and J. I.) | | | | | | |
| Piper, John C. and J. I., Buffalo, N. Y. Horseshoe | 727,835 | May 12 | 1918 | 427 | 104 | 426 |
| Piper, Joseph W. (See Goodfellow and Piper.) | | | | | | |
| Piper, Micajah A., Lagan, La. Middle cultivator | 720,066 | Feb. 10 | 1202 | 276 | 102 | 1095 |
| Piper, William M., assignor to M. S. Chalfant, Allegheny, Pa. Draft-rigging | 717,615 | Jan. 6 | 167 | 41, 42 | 102 | 37 |
| Piqua Bracket Company. (See Tittle, Reuben D., assignor.) | | | | | | |
| Pira, Oscar F., and C. F. Salomonson, Oakland, Cal. Ore-separator | 735,813 | Aug. 11 | 1485 | 319 | 105 | 1315 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | Spec. | Drg. | Vol. | Page. |
| Piso Company. (See Taylor and Shiley, assignors.) | | | | | | |
| Pitblado, Isaac, *et al.* (See Maloney, William, assignor.) | | | | | | |
| Pitblado, Isaac, *et al.* (See Maloney and Doré, assignors.) | | | | | | |
| Pitcher, George C., *et al.* (See Marshall, Edwin, assignor.) | | | | | | |
| Pitcher, Henry C., *et al.* (See Marshall, Edwin, assignor.) | | | | | | |
| Pitcher, Lester D., Dixon, Ill. Guy-anchor | 728,609 | May 19 | 3389 | 751 | 104 | 759 |
| Pitchford, John B., Randfontein, Transvaal, South Africa. Conveyer | 726,098 | Apr. 21 | 3064 | 696 | 103 | 1849 |
| Pitel, Conrad M., Meriden, Conn. Suspending device | 737,659 | Sept. 1 | 184 | 39 | 106 | 43 |
| Pitel, Conrad M., assignor to Edward Miller & Company, Meriden, Conn. Hanging lamp. | 723,405 | Mar. 24 | 3269 | 732 | 103 | 730 |
| Pitel, Conrad M., assignor to Edward Miller & Company, Meriden, Conn. Hanging lamp. | 729,093 | May 26 | 4260 | 941 | 104 | 953 |
| Pitkethly, David T., and J. C. Hayes, New York, N. Y. Clamp or device for stopping leaks in pipes | 736,624 | Aug. 18 | 2976 | 654 | 105 | 1650 |
| Pitkethly, David T., and J. C. Hayes, assignors of one-fourth to J. E. Starr, New York, N. Y. Apparatus for stopping leaks in pipes and fittings | 739,107 | Sept. 15 | 3072 | 681 | 106 | 688 |
| Pitkin, Arthur F., Schenectady, N. Y. Means for connecting tools to sockets | 722,324 | Mar. 10 | 1242 | 276 | 103 | 280 |
| Pitkin, Julian H., Chicago, Ill. Rotary engine | 736,011 | Aug. 11 | 1866 | 398 | 105 | 1398 |
| Pitman, Annie P., Melrose Highlands, Mass. Shoestring-fastener | 722,891 | Mar. 17 | 2329 | 520 | 103 | 525 |
| Pitner, Marion W., Chicago, Ill. Fabric-turfing machine | 730,152 | June 2 | 1127 | 253 | 104 | 1356 |
| Pitney, Arthur H., assignor to Pitney Postal Machine Company, Chicago, Ill. Envelop-sealing device | 735,814 | Aug. 11 | 1488 | 319 | 105 | 1316 |
| Pitney Postal Machine Company. (See Pitney, Arthur H., assignor.) | | | | | | |
| Pitt, Richard C. (See Brunt and Pitt.) | | | | | | |
| Pitt, William C. (See Romwall and Pitt.) | | | | | | |
| Pitt, William R., New Rochelle, N. Y. Swinging door | 731,407 | June 16 | 3454 | 771, 772 | 104 | 1877 |
| Pittenger, Elmer O., assignor of one-half to E. C. Swarthout, La Crosse, Wis. Banana-shipping case | 722,890 | Mar. 17 | 2327 | 520 | 103 | 525 |
| Pittman, James I., Longwood, Fla. Turpentine-distilling apparatus | 742,351 | Oct. 27 | 3820 | 856 | 106 | 2102 |
| Pittman, John L., Dubach, La. Conveyer-chain link | 728,972 | May 26 | 4042 | 897 | 104 | 908 |
| Pittman, Moses S., Independence, Mo. Railway-switch | 719,134 | Jan. 27 | 3086 | 686 | 102 | 697 |
| Pittman, Moses S., Independence, Mo. Railway-switch | 745,237 | Nov. 24 | 4719 | 1031 | 107 | 1049 |
| Pittman, Reinhart W., and G. C. Andrews, New York, N. Y. Holder for printing-plates. | 718,519 | Jan. 13 | 1899 | 417 | 102 | 425 |
| Pittman, Reinhart W., and G. C. Andrews, New York, N. Y. Holder for printing-plates. | 740,310 | Sept. 29 | 5311 | 1196 | 106 | 1199 |
| Pitts, Edward L., assignor of one-half to W. M. Parks, Jerome, Ariz. Ter. Attachment for garment-supporters | 718,278 | Jan. 13 | 1414 | 314, 315 | 102 | 319 |
| Pittsburg Gas Engine Company. (See McCall, Harry M., assignor.) | | | | | | |
| Pittsburg Light & Manufacturing Company. (See Leese, Thaddeus S., assignor.) | | | | | | |
| Pittsburgh Blue Print Company. (See Clark, Edward B., assignor.) | | | | | | |
| Pittsburgh Blue Print Company. (See Whinery, Samuel B., assignor.) | | | | | | |
| Pittsburgh Brake Shoe Company. (See Kinzer, John J., assignor.) | | | | | | |
| Pittsburgh Lamp, Brass & Glass Company. (See Blair, George W., assignor.) | | | | | | |
| Pittsburgh Meter Company. (See Chrisman, Horace, assignor.) | | | | | | |
| Pittsburgh Reduction Company. (See Nicholson, John D., assignor.) | | | | | | |
| Pitzer, Thomas H., Gaylord, Kans. Tender for traction-engines | 747,635 | Dec. 22 | 4283 | 963, 964 | 107 | 2096 |
| Pivert, Maurice, New Orleans, La. Mixing-valve for explosion-engines | 724,328 | Mar. 31 | 5048 | 1130 | 103 | 1112 |
| Pivert, Maurice, New Orleans, La. Explosion-engine | 730,695 | June 9 | 2136 | 474 | 104 | 1587 |
| Pixley, John F., *et al.* (See De Vilbiss, Allen, Jr., assignor.) | | | | | | |
| Pixley, Orla C., Chicago, Ill. Hollow tile or brick | 722,249 | Mar. 10 | 1112 | 245 | 103 | 252 |
| Pixley, Orla C., Chicago, Ill. Cutting and delivery table for tile-forming machines | 734,942 | July 28 | 4162 | 968, 969 | 105 | 925 |
| Pizor, Harry, Wilmington, Del. Finger-ring | 744,605 | Nov. 17 | 3488 | 752 | 107 | 773 |
| Place, Iphegenia Z. (See Livor, Henry M., assignor.) | | | | | | |
| Place, James F., Glenridge, N. J., assignor of two-thirds to S. M. Gardenhire and A. P. Jetmore, New York, N. Y. Refrigerating apparatus | 741,591 | Oct. 13 | 2311 | 517, 518 | 106 | 1758 |
| Place, John W., Tuckahoe, N. Y. Dental crown-holder | 723,546 | Mar. 24 | 3530 | 790 | 103 | 783 |
| Plagman, Adolph, Davenport, Iowa. Mechanical movement | 730,961 | June 16 | 2614 | 582 | 104 | 1707 |
| Plano Manufacturing Company. (See Dennis, Samuel K., assignor.) | | | | | | |
| Plano Manufacturing Company. (See Holland-Letz, Louis, assignor.) | | | | | | |
| Plano Manufacturing Company. (See Phelps, George L., assignor.) | | | | | | |
| Plano Manufacturing Company. (See Van Loan, Frank E., assignor.) | | | | | | |
| Plant, Alfred, Keyport, N. J. Floor-tile | 728,290 | May 19 | 2781 | 617 | 104 | 632 |
| Plant, Alice J., *et al.* (See Wilson, Robert, assignor.) | | | | | | |
| Plant, Benjamin, *et al.* (See Wilson, Robert, assignor.) | | | | | | |
| Planters Compress Company. (See Cowley, James T., assignor.) | | | | | | |
| Planters Compress Company. (See Rheem, William M., assignor.) | | | | | | |
| Plants, David V., Long Lake, Minn. Device for covering bush fruits | 747,218 | Dec. 15 | 3517 | 798 | 107 | 1907 |
| Plassmann, August W., New York, N. Y., assignor to Richmond Electric Manufacturing Company. Electric push-button | 730,567 | June 9 | 1908 | 425 | 104 | 1537 |
| Platner, Cyrus, Ellsworth, Kans. Fountain-brush | 737,471 | Aug. 25 | 4559 | 1022 | 105 | 2006 |
| Plato, Robert, New York, N. Y. Hat | 740,913 | Oct. 6 | 971 | 218 | 106 | 1454 |
| Plato, Robert, New York, N. Y. Folding hat | 742,731 | Oct. 27 | 4495 | 1017 | 106 | 2242 |
| Platt, Chauncey B., Vanmeter, Iowa. Brick-kiln | 718,022 | Jan. 6 | 950 | 210, 211 | 102 | 204 |
| Platt, Clarence D., assignor to Bryant Electric Company, Bridgeport, Conn. Electrical contact for cartridge-fuses | 719,859 | Feb. 3 | 806 | 188 | 102 | 993 |
| Platt, Clarence D., assignor to Bryant Electric Company, Bridgeport, Conn. Clip for electrical knife-switches | 720,475 | Feb. 10 | 1950 | 446 | 102 | 1250 |
| Platt, Clarence D., assignor to Bryant Electric Company, Bridgeport, Conn. Electrical rosette cut-out | 730,696 | June 9 | 2138 | 475 | 104 | 1588 |
| Platt, Cyrus W., assignor of one-half to E. P. Schell, Windfall, Ind. Coin-controlled vending apparatus | 742,732 | Oct. 27 | 4496 | 1017, 1018 | 106 | 2243 |
| Platt, Frank J., and J. Ratchford, assignors to F. J. McCormick, Dayton, Ohio. Valve and operating means | 746,149 | Dec. 8 | 1538 | 344 | 107 | 1449 |
| Platt, Henry. (See Platt, John, W., and H.) | | | | | | |
| Platt, John, W., and H., Oldham, England. Twist or like drill | 719,860 | Feb. 3 | 807 | 188 | 102 | 993 |
| Platt, Robert H. (See Blake and Platt.) | | | | | | |
| Platt, William. See Platt, John, W., and H.) | | | | | | |
| Platt, William, Allegheny, Pa. Door-stop | 741,410 | Oct. 13 | 1949 | 432 | 106 | 1682 |
| Plattenburg, Joseph, McKeesport, Pa. Lawn-swing | 719,135 | Jan. 27 | 3088 | 686 | 102 | 697 |
| Plato, Hermann, Karlsruhe, Germany. Enveloped projectile | 740,914 | Oct. 6 | 972 | 218 | 106 | 1454 |
| Player, John, River Forest, Ill. Brake-shoe for railway-brakes | 726,339 | Apr. 28 | 3552 | 805 | 103 | 1965 |
| Player, John, Dunkirk, assignor to American Locomotive Company, New York, N. Y. Guide-support for locomotive-engines | 722,892 | Mar. 17 | 2330 | 521 | 103 | 525 |
| Player, John, Dunkirk, assignor to American Locomotive Company, New York, N. Y. Locomotive | 744,398 | Nov. 17 | 3146 | 675 | 107 | 702 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Player, John, Dunkirk, assignor to American Locomotive Company, New York, N. Y. Locomotive | 744,399 | Nov. 17 | 3148 | 676 | 107 | 703 |
| Player, John, Dunkirk, assignor to American Locomotive Company, New York, N. Y. Locomotive-frame | 744,400 | Nov. 17 | 3151 | 676 | 107 | 704 |
| Player, John, Topeka, Kans., and G. G. Floyd, St. Louis, Mo., assignors, by mesne assignments, to American Steel Foundries. Car-truck | 718,580 | Jan. 13 | 2037 | 442 | 102 | 453 |
| Playford, Sterling T., Cassopolis, Mich. Tile | 738,627 | Sept. 8 | 2162 | 474 | 106 | 480 |
| Pleasanton, Frank R., Philadelphia, Pa. Rotary valve | 726,568 | Apr. 28 | 4009 | 908 | 103 | 2053 |
| Plecher, Andrew, Bristow, Va. Receiver for wireless telegraphs or telephones | 744,936 | Nov. 24 | 4103 | 884, 885 | 107 | 922 |
| Plecher, Andrew, Bristow, Va. Alternating-current telephone | 745,292 | Nov. 24 | 4826 | 1053 | 107 | 1070 |
| Plimpton, Henry R., 2d, Newton Center, Mass. Folding and creasing device | 734,943 | July 28 | 4165 | 969 | 105 | 925 |
| Ploss, Adam, assignor of one-half to M. F. Lepper, Menomonee Falls, Wis. Seeding-machine | 745,903 | Dec. 1 | 1091 | 244 | 107 | 1331 |
| Plowden, Arthur D., Alcolu, S. C. Lock | 722,325 | Mar. 10 | 1243 | 277 | 103 | 281 |
| Plowman, Harry, London, England. Automatic fire-alarm apparatus | 719,504 | Feb. 3 | 164 | 37, 38 | 102 | 858 |
| Plucker, Catherine A., *et al.* (See Plucker, Jacob J., assignor.) | | | | | | |
| Plucker, Howard W., *et al.* (See Plucker, Jacob J., assignor.) | | | | | | |
| Plucker, Jacob J., assignor, by mesne assignments, to J. S. Johnson, Philadelphia, Pa. Fireproof casing for elevator-shafts | 734,598 | July 28 | 3516 | 820, 821 | 105 | 792 |
| Plucker, Jacob J., assignor, by mesne assignments, to J. S. Johnson, Philadelphia, Pa. Fireproof casing for elevator-shafts | 734,599 | July 28 | 3518 | 821, 822 | 105 | 793 |
| Plucker, Jacob J., assignor, by mesne assignments, to J. S. Johnson, Philadelphia, Pa. Fireproof casing for elevator-shafts | 734,600 | July 28 | 3520 | 822 | 105 | 793 |
| Plucker, Jacob J., assignor, by mesne assignments, to J. S. Johnson, Philadelphia, Pa. Fireproof casing for elevator-shafts | 734,601 | July 28 | 3521 | 822, 823 | 105 | 793 |
| Plucker, Jacob J., assignor, by mesne assignments, to J. S. Johnson, Philadelphia, Pa. Fireproof casing for elevator-shafts | 734,602 | July 28 | 3522 | 823 | 105 | 794 |
| Plucker, Jacob J., assignor to C. A. Plucker, Philadelphia, Pa. Fire-wagon | 735,410 | Aug. 4 | 708 | 151 | 105 | 1131 |
| Plucker, Jacob J., assignor to C. A. and H. W. Plucker, Philadelphia, Pa. Fire-shield | 733,916 | July 14 | 2208 | 518 | 105 | 479 |
| Plucker, Jacob J., Philadelphia, Pa., assignor to C. A. and H. W. Plucker. Fireproof casing | 734,603 | July 28 | 3523 | 823, 824 | 105 | 794 |
| Plucker, Jacob J., Philadelphia, Pa., assignor to C. A. and H. W. Plucker. Fireproof casing | 734,604 | July 28 | 3526 | 824 | 105 | 794 |
| Plucker, Jacob J., Philadelphia, Pa., assignor to C. A. and H. W. Plucker. Fireproof casing | 734,605 | July 28 | 3526 | 825 | 105 | 795 |
| Plucker, Jacob J., Philadelphia, Pa., assignor to C. A. and H. W. Plucker. Casing or housing for elevators, stairways, &c. | 734,606 | July 28 | 3527 | 825 | 105 | 795 |
| Plucker, Jacob J., Philadelphia, Pa., assignor to C. A. and H. W. Plucker. Shutter | 734,607 | July 28 | 3528 | 825 | 105 | 795 |
| Plue, William D., Rainier, Oreg. Manufacture of doors | 721,231 | Feb. 24 | 3443 | 782 | 102 | 1597 |
| Plume and Atwood Manufacturing Company. (See Bradley, William W., assignor.) | | | | | | |
| Plume and Atwood Manufacturing Company. (See Wirth, Charles E., assignor.) | | | | | | |
| Plumley, Gardner L., New York, N. Y. Knife-sharpening device | 719,861 | Feb. 3 | 808 | 189 | 102 | 994 |
| Plumley, Gardner L., New York, N. Y. Fish-net | 719,862 | Feb. 3 | 809 | 189 | 102 | 994 |
| Plumley, Raymond L., assignor to Trump Brothers Machine Company, Wilmington, Del. Overseam sewing-machine | 732,959 | July 7 | 460 | 11, 115 | 105 | 99 |
| Plumley, Raymond L., assignor to Trump Brothers Machine Company, Wilmington, Del. Buttonhole-sewing machine | 733,267 | July 7 | 1020 | 245, 246 | 105 | 213 |
| Plummer, Eugene R., Los Angeles, Cal. Alcohol-heater | 731,069 | June 16 | 2825 | 628 | 104 | 1751 |
| Plummer, George C., assignor to Main Belting Company, Philadelphia, Pa. Conveyer-belt | 722,039 | Mar. 3 | 715 | 159 | 103 | 154 |
| Plummer, George C., assignor to Main Belting Company, Philadelphia, Pa. Conveyer-belt | 722,040 | Mar. 3 | 717 | 159 | 103 | 155 |
| Plummer, George C., assignor to Main Belting Company, Philadelphia, Pa. Conveyer-belt | 722,041 | Mar. 3 | 719 | 160 | 103 | 155 |
| Plummer, George C., assignor to Main Belting Company, Philadelphia, Pa. Support for conveyer-belts | 728,005 | May 12 | 2235 | 497, 498 | 104 | 494 |
| Plummer, Henry L., Jr., and C. D. Witherspoon, Petersburg, Va. Machine for creasing leather | 746,150 | Dec. 8 | 1541 | 345 | 107 | 1449 |
| Plummer, Joseph F., Swampscott, Mass. Last | 742,902 | Nov. 3 | 146 | 34 | 107 | 32 |
| Plummer, Leroy I. (See Hudson, Richard W., assignor.) | | | | | | |
| Plummer, Mark, Mineralspring, Mo. Wagon-body hoist | 721,832 | Mar. 3 | 317 | 69 | 103 | 70 |
| Plummer, Samuel W., and F. Davis, Salem, Oreg. Non-refillable bottle | 720,476 | Feb. 10 | 1950 | 446 | 102 | 1250 |
| Plunkett, Michael B. (See Flannery and Plunkett.) | | | | | | |
| Pneumatic Cyanide Process Company. (See Webb, Jean F., assignor.) | | | | | | |
| Pneumatic Railway Equipment Company. (See Tomb, George R., assignor.) | | | | | | |
| Pneumatic Scale Corporation. (See Doble, William H., assignor.) | | | | | | |
| Pneumatic Scale Corporation. (See Turner, George F., assignor.) | | | | | | |
| Pneumatic Signal Company. (See Dodgson, Frank L., assignor.) | | | | | | |
| Pneumatic Textile Machinery Company. (See Blundell, John C., assignor.) | | | | | | |
| Pocher, Edmund, Herne, Germany. Stop-latch for elevator-cages | 725,584 | Apr. 14 | 2153 | 488 | 103 | 1642 |
| Pocock, Francis A. (See Kennedy and Pocock.) | | | | | | |
| Podlich, Georg, Berlin, Germany. Type-writing machine | 722,625 | Mar. 10 | 1793 | 399 | 103 | 401 |
| Poe, David A., and W. H. Scharf, Montreal, Canada, assignors to Mergenthaler Linotype Company. Linotype-machine | 734,746 | July 28 | 3794 | 885, 886, 887 | 105 | 847 |
| Poeffel, Arthur, Losoncz, Austria-Hungary. Incandescent lamp for liquid fuel | 726,747 | Apr. 28 | 4343 | 977, 978 | 103 | 2122 |
| Poeppel, Frederick W. (See Lippincott, Oliver S., assignor.) | | | | | | |
| Poggensee, Edward B., Chicago, Ill. Bottle-washing machine | 728,006 | May 12 | 2238 | 498 | 104 | 494 |
| Pohl, Frank W., St. Cloud, Minn. Job-printing press | 730,396 | June 9 | 1587 | 353, 354 | 104 | 1467 |
| Pohlé, Edwin C., and S. Croasdale, Denver, Colo., assignors to Metal Volatilization Company, Philadelphia, Pa. Treating refractory ores | 741,712 | Oct. 20 | 2557 | ..... | 106 | 1826 |
| Pohlig, John, New Orleans, La. Wagon-top | 742,733 | Oct. 27 | 4499 | 1018 | 106 | 2243 |
| Pohlig, John, New Orleans, La. Wagon-top | 745,904 | Dec. 1 | 1092 | 244 | 107 | 1331 |
| Pohlit, Carl. (See Dreger and Pohlit.) | | | | | | |
| Pohlmann, Frederick L., assignor of one-half to C. L. Ferner, St. Louis, Mo. Machine for making bandages | 739,267 | Sept. 15 | 3359 | 746 | 106 | 753 |
| Pohorzeleck, Arno, Oschatz, Germany. Machine for making wicker-work | 726,188 | Apr. 21 | 3248 | 737, 738 | 103 | 1886 |
| Poidatz, Alfred, assignor to Société des Voitures Automobiles des Etablissements Decauville Ainé, Paris, France. Motor-car frame | 727,682 | May 12 | 1614 | 367 | 104 | 365 |
| Poidatz, Alfred, assignor to Société Nouvelle des Etablissements Decauville Ainé, Paris, France. Universal joint | 731,495 | June 23 | 3634 | 811 | 104 | 1933 |
| Poillon, Clara L., New York, N. Y. Tray-carrier | 733,268 | July 7 | 1028 | 247 | 105 | 215 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| Poindexter, Robert E., Indianapolis, Ind. Combined saw jointer and gage | 731,947 | June 23 | 4459 | 995 | 104 | 2104 |
| Points, John W. (See Brown, Stuart A., assignor.) | | | | | | |
| Poirier, Octave A., Gladstone, Minn. Cleaning device for disk drills | 733,593 | July 14 | 1600 | 380 | 105 | 356 |
| Poirier, Octave A., Gladstone, Minn. Bearing for drill devices | 735,815 | Aug. 11 | 1492 | 320 | 105 | 1318 |
| Poirier, Paul, and P. Michel, Paris, France. Gastroscope | 731,496 | June 23 | 3634 | 811, 812 | 104 | 1933 |
| Poirrier, Alcide F., assignor to Sté. Ame des Matières Colorantes et Produits Chimiques de St. Denis, Paris, France. Substantive black dye and making same | 740,465 | Oct. 6 | 158 | ------ | 106 | 1279 |
| Pol y Aguirre, Angel, Havana, Cuba. Electromagnetic motor | 722,042 | Mar. 3 | 720 | 160 | 103 | 156 |
| Polak, Henry, Brooklyn, N. Y. Whip | 744,401 | Nov. 17 | 3153 | 677 | 107 | 704 |
| Pold, Ole P. R., Copenhagen, Denmark. Artificial leg | 741,411 | Oct. 13 | 1950 | 432 | 106 | 1683 |
| Polk, Ralph B., Greenwood, Ind. Apparatus for treating canned goods | 742,488 | Oct. 27 | 4053 | 910, 911, 912 | 106 | 2149 |
| Polk, Robert H., Birmingham, Ala. Insulator | 724,329 | Mar. 31 | 5050 | 1130 | 103 | 1112 |
| Polkowski, John, New York, N. Y. Tailor's shears | 743,658 | Nov. 10 | 1714 | 362 | 107 | 382 |
| Pollacsek, Adrian, and B. Beer, Vienna, Austria-Hungary. Therapeutical apparatus | 735,581 | Aug. 4 | 1054 | 223 | 105 | 1204 |
| Pollák, Anton, Budapest, Austria-Hungary. Apparatus for punching strips | 736,775 | Aug. 18 | 3258 | 720, 721 | 105 | 1709 |
| Pollak, Anton, Budapest, Austria-Hungary. Registering apparatus | 738,480 | Sept. 8 | 1891 | 413, 414 | 106 | 421 |
| Pollak, Eli, Philadelphia, Pa. Oil-burner | 735,202 | Aug. 4 | 497 | 100 | 105 | 1087 |
| Pollard, Charles E., Brooklyn, assignor to E. W. Bliss Company, New York, N. Y. Clutch | 727,683 | May 12 | 1614 | 367 | 104 | 365 |
| Pollard, Edward C., Austin, Ill. Geared driving attachment for meat-choppers | 738,409 | May 19 | 2994 | 659 | 104 | 675 |
| Pollard, Edwin, Silsden, England. Kindling-block | 733,675 | July 14 | 1739 | 411 | 105 | 383 |
| Pollard, Frederick, Cleveland, Ohio. Show-case | 730,294 | June 9 | 1408 | 309 | 104 | 1431 |
| Pollard, George H., Egypt, Mass. Indexing device | 747,761 | Dec. 22 | 4511 | 1016, 1017 | 107 | 2148 |
| Pollard, James B., Roanoke, Va. Rotary engine | 718,791 | Jan. 20 | 2420 | 537 | 102 | 544 |
| Pollard, James R. (See O'Donnell, John B., assignor.) | | | | | | |
| Pollard, Louis E., Denison, Tex. Washing-machine | 741,542 | Oct. 13 | 2220 | 494 | 106 | 1739 |
| Polley, David F., Plymouth, Mich. Air-gun | 742,734 | Oct. 27 | 4500 | 1019 | 106 | 2233 |
| Polleys, Charles G., Moncton, Canada. Railway-rail joint | 731,706 | June 23 | 4027 | 899 | 104 | 2011 |
| Pollock, Calvin J., Kirksville, Mo. Motor | 721,461 | Feb. 24 | 3848 | 876 | 102 | 1682 |
| Pollock, Charles N., Corinth, Miss. Broom-holder | 737,472 | Aug. 25 | 4560 | 1022 | 105 | 2006 |
| Pollock, Frederick W., Kirkville, Mo. Badge | 725,585 | Apr. 14 | 2154 | 488 | 103 | 1642 |
| Pollock, Henry G. (See Fisher, Jerry C., assignor.) | | | | | | |
| Pollock, John A., Peekskill, N. Y. Acoustic alarm for oil-cans | 736,441 | Aug. 18 | 2612 | 573 | 105 | 1575 |
| Polson, John, *et al.* (See Anderson, James W. and R. M., assignors.) | | | | | | |
| Polson, Robert G., Leadville, Colo. Shoe-polishing stand | 726,748 | Apr. 28 | 4346 | 978 | 103 | 2123 |
| Polson, W. R., *et al.* (See Anderson, James W. and R. M., assignors.) | | | | | | |
| Polst, Henry. (See Koehler, Frank G., assignor.) | | | | | | |
| Polster, Rudolf G., and A. Loew, Worms-Pfifflingheim, Germany. Combined rail-fastening and tie-plate | 744,606 | Nov. 17 | 3489 | 752, 753 | 107 | 773 |
| Polte, Eugen, Magdeburg-Sudenourg, Germany. Making articles of wolfram and lead | 735,293 | Aug. 4 | 499 | ------ | 105 | 1087 |
| Polya, Julius, New York, N. Y. Carriage-door | 729,409 | May 26 | 4809 | 1067 | 104 | 1066 |
| Polzeniusz, Ferdinand E., Frankfort-on-the-Main, Germany. Making nitrogen compounds | 725,361 | Apr. 14 | 1739 | 391 | 103 | 1553 |
| Poméon, Antoine. (See Coulet and Poméon.) | | | | | | |
| Poméon, Joseph. (See Coulet and Poméon.) | | | | | | |
| Poméon, Pierre. (See Coulet and Poméon.) | | | | | | |
| Pomeroy, Henry C., Chicago, Ill. Shoe holder and stretcher | 746,151 | Dec. 8 | 1542 | 345 | 107 | 1450 |
| Pomeroy, Julian. (See Gay, Chauncey W., assignor.) | | | | | | |
| Pomeroy, Silas H. (See Voigtmann and Pomeroy.) | | | | | | |
| Pompili, Riccardo. (See Garuti and Pompili.) | | | | | | |
| Ponath, Emil F., Greatbend, N. D. Grain-shocker | 723,020 | Mar. 17 | 2531 | 567, 568, 569 | 103 | 567 |
| Pond, Harry S., Chicago, Ill. Cuff-holder | 717,919 | Jan. 6 | 759 | 170 | 102 | 163 |
| Pool, Gaberiel L., Bonus, N. C. Tobacco-clamp | 725,586 | Apr. 14 | 2155 | 488 | 103 | 1642 |
| Pool Game Register Company. (See Wells, Elmer J., assignor.) | | | | | | |
| Pool, Norman T., Topeka, Kans. Device for printing merchants' advertising-cards on wrapping-paper | 723,785 | Mar. 24 | 3944 | 890 | 103 | 871 |
| Pool, Robert C., Lindale, Tex. Buckle | 738,063 | Sept. 1 | 991 | 221 | 106 | 216 |
| Pool, William B. (See McEachern, Dougald, assignor.) | | | | | | |
| Pool, William T., Columbus, Ga. Combined coffer dam and caisson | 728,497 | May 19 | 3156 | 698, 699 | 104 | 709 |
| Poole, Alva P. (See Hayward, Martin A., assignor.) | | | | | | |
| Poole, Burton E., Hamilton, Canada. Pruning apparatus | 730,295 | June 9 | 1409 | 309 | 104 | 1431 |
| Poole, James A., Akron, Ohio. Chaplet-pointer | 718,023 | Jan. 6 | 951 | 211 | 102 | 205 |
| Poole, John, Winnipeg, Canada. Revolving case | 743,557 | Nov. 10 | 1518 | 317 | 107 | 341 |
| Poole, Robert J., Burnet, Tex. Churn-cover | 740,691 | Oct. 6 | 564 | 126 | 106 | 1369 |
| Poole, Staley D., assignor to Deere & Company, Moline, Ill. Disk listed cultivator | 719,863 | Feb. 3 | 810 | 189 | 102 | 994 |
| Poole, Staley D., assignor to Deere & Company, Moline, Ill. Bedding-plow | 739,617 | Sept. 22 | 4002 | 893, 894 | 106 | 904 |
| Poole, William J., Glasgow, Scotland. Valve | 720,477 | Feb. 10 | 1952 | 446 | 102 | 1251 |
| Poole, William J., High Shawlands, Scotland. Steam-trap | 735,294 | Aug. 4 | 500 | 100 | 105 | 1087 |
| Poorter, Charles L., Marshall, Tex. Spur attachment for stirrups | 744,607 | Nov. 17 | 3490 | 753 | 107 | 773 |
| Popcke, Emil A., New York, N. Y. Hand-press for printing wall-paper | 746,152 | Dec. 8 | 1545 | 345 | 107 | 1450 |
| Pope, Alfred T., Louisville, Ky. Machine or tool for applying holding-cleats to barrels, &c. | 733,743 | July 14 | 1850 | 437 | 105 | 407 |
| Pope, Charles E. (See Perkins and Pope.) | | | | | | |
| Pope, Frederick B., Augusta, Ga. Apparatus for separating kernels from hulls of seeds | 732,779 | July 7 | 148 | 39 | 105 | 36 |
| Pope, Harry M., Hartford, Conn. Vehicle | 725,766 | Apr. 21 | 2510 | 570 | 103 | 1733 |
| Pope, Harry M., Hartford, Conn., assignor, by mesne assignments, to Morton Trust Company, trustee. Motor-vehicle | 739,924 | Sept. 29 | 4608 | 1035 | 106 | 1052 |
| Pope, Joseph W., East St. Louis, Ill. Measure | 735,582 | Aug. 4 | 1055 | 224 | 105 | 1205 |
| Pope Manufacturing Company. (See Copeland, James S., assignor.) | | | | | | |
| Pope Manufacturing Company. (See Seymour, Herbert P., assignor.) | | | | | | |
| Pope, William C., St. Louis, Mo. Effervescent laundry bluing | 738,481 | Sept. 8 | 1895 | ------ | 106 | 422 |
| Pope, William W., Jackson, Pa. Ladder | 733,269 | July 7 | 1029 | 247 | 105 | 215 |
| Popenhagen, Joseph B., Chicago, Ill. Toy gun | 720,478 | Feb. 10 | 1953 | 446 | 102 | 1251 |
| Popkey, Samuel, Wilkesbarre, Pa. Hoisting-jack | 729,410 | May 26 | 4810 | 1067 | 104 | 1067 |
| Popoff, Alexandre, Cronstadt, Russia. Self-decohering coherer system | 722,139 | Mar. 3 | 878 | 196 | 103 | 188 |
| Poppe, Oscar. (See Klic and Poppe.) | | | | | | |
| Poppenburg, Johannes von der, Charlottenburg, near Berlin, Germany. Accumulator plate or grid | 743,188 | Nov. 3 | 706 | 155 | 107 | 147 |

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| Poppenhusen, Herman A., Chicago, Ill. Fire-arch for furnaces | 720,964 | Feb. 17 | 2879 | 659 | 102 | 1459 |
| Poppenhusen, Herman A., Evanston, Ill. Fire-gate for furnaces | 725,362 | Apr. 14 | 1740 | 392 | 103 | 1553 |
| Porsch, Frederick W., Ottawa, Ill. Light-transmitter | 726,340 | Apr. 28 | 3552 | 805 | 103 | 1965 |
| Porsch, Frederick W., Summitville, Ind. Apparatus for the manufacture of carbon-black | 726,341 | Apr. 28 | 3554 | 805 806 | 103 | 1965 |
| Porta, Giovanni, Milan, Italy. Covering for demijohns or similar receptacles | 736,626 | Aug. 18 | 2979 | 655 | 105 | 1651 |
| Portchester Chemical Company. (See Thurlow, Nathaniel, assignor.) | | | | | | |
| Porteck, Max. Lawrence, Mass. Jeweler's ring-tray | 734,091 | July 21 | 2564 | 598 | 105 | 577 |
| Porteous, Christopher F., Wilkinsburg, Pa. Pipe-carrier | 724,735 | Apr. 7 | 596 | 141 | 103 | 1295 |
| Porter, Albert B., Evanston, Ill. Apparatus for producing colored-light effects | 734,133 | July 21 | 2650 | 625 | 105 | 593 |
| Porter, Albert B., Evanston, Ill. Decorated surface and producing same | 734,134 | July 21 | 2652 | 626 | 105 | 594 |
| Porter, Albert B., Evanston, Ill. Decorated surface | 734,135 | July 21 | 2655 | 626 | 105 | 594 |
| Porter, Albert B., Evanston, Ill. Angular decorated surface | 734,361 | July 21 | 3077 | 724 | 105 | 685 |
| Porter, Alonzo B., Grand Rapids, Mich. Basket-crate | 730,153 | June 2 | 1129 | 253 | 104 | 1357 |
| Porter, Augustus G., Niagara Falls, N. Y. Hydrocarbon-burner | 745,025 | Nov. 24 | 4293 | 928 | 107 | 959 |
| Porter, Bertrand R., Detroit, Mich., assignor to Rockwell & Rupel Company, Chicago, Ill. Document-file | 736,776 | Aug. 18 | 3264 | 721 | 105 | 1710 |
| Porter, Charles H., Rockford, assignor, by mesne assignments, to C. S. Harmon, Chicago, Ill. Broom-handle tumbling-barrel | 723,180 | Mar. 17 | 2833 | 636 | 103 | 632 |
| Porter, David W., Sewickley, Pa. Automatic steam-governor for pumps | 735,144 | Aug. 4 | 198 | 40 | 105 | 1024 |
| Porter, Edwin F., Boston, Mass., assignor to Bay State Electric Heat & Light Company, Jersey City, N. J. Electric heater | 728,973 | May 26 | 4043 | 898 | 104 | 908 |
| Porter, Edwin F., Boston, Mass., assignor to Bay State Electric Heat & Light Company, Jersey City, N. J. Electric heater | 741,927 | Oct. 20 | 2956 | 658 | 106 | 1910 |
| Porter, Edwin H., and B. Currier, Philadelphia, Pa. Turbine electric generator | 741,271 | Oct. 13 | 1648 | 372 373 | 106 | 1617 |
| Porter, Edwin H., and B. Currier, Philadelphia, Pa. Electric induction-motor | 741,272 | Oct. 13 | 1650 | 373 | 106 | 1618 |
| Porter, Edwin H., and B. Currier, Philadelphia, Pa. Turbine electric generator | 748,215 | Dec. 29 | 5413 | 1231 1232 | 107 | 2367 |
| Porter, Elbert B., Penn Yan, N. Y. Rotary engine | 734,944 | July 28 | 4166 | 969 970 | 105 | 925 |
| Porter, Elsie A., West Superior, Wis. Curtain-pole support | 744,691 | Nov. 17 | 3635 | 783 | 107 | 805 |
| Porter, Frank J., and E. D. Stevenson, Wadsworth, Ohio. Transmission-gearing for motor-vehicles | 740,777 | Oct. 6 | 744 | 167 168 | 106 | 1404 |
| Porter, George, San Francisco, Cal. Apparatus for removing surplus metal from coated articles | 720,283 | Feb. 10 | 1619 | 371 | 102 | 1181 |
| Porter, Harrison B., Buda, Tex. Adjustable arch for cultivators | 742,735 | Oct. 27 | 4504 | 1019 | 106 | 2244 |
| Porter, Henry H., Jr., assignor to Swanitz Company, Chicago, Ill. Traction-wheel | 734,608 | July 28 | 3529 | 826 | 105 | 795 |
| Porter, Henry H., Jr., assignor to Swanitz Company, Chicago, Ill. Wheel | 734,609 | July 28 | 3530 | 826 | 105 | 796 |
| Porter, Henry H., Jr., assignor to Swanitz Company, Chicago, Ill. Railway transfer apparatus | 734,610 | July 28 | 3531 | 826 | 105 | 796 |
| Porter, Henry K., Chelsea, Mass. Bolt-clipper | 721,232 | Feb. 24 | 3444 | 782 | 102 | 1598 |
| Porter, Henry K., Chelsea, Mass. Bolt-clipper | 745,905 | Dec. 1 | 1092 | 244 | 107 | 1331 |
| Porter, James R., Richmond, Ill. Mechanism for relief of headache and insomnia | 737,473 | Aug. 25 | 4561 | 1022 | 105 | 2006 |
| Porter, John W., Williamstown, Victoria, Australia. Apparatus for operating moving targets | 724,330 | Mar. 31 | 5051 | 1130 | 103 | 1112 |
| Porter, Joseph W., Ponca, Nebr. Incubator | 733,270 | July 7 | 1030 | 247 | 105 | 215 |
| Porter, Moses E., Riverside, Utah. Bicycle-gearing | 721,739 | Mar. 3 | 150 | 35 | 103 | 34 |
| Porter Safety Seal Company. (See Porter, Thomas I., assignor.) | | | | | | |
| Porter, Thomas I., Chicago, Ill., assignor to Porter Safety Seal Company. Seal | 719,864 | Feb. 3 | 812 | 190 | 102 | 994 |
| Porter, Thomas I., Chicago, Ill., assignor to Porter Safety Seal Company. Seal | 719,865 | Feb. 3 | 813 | 190 | 102 | 995 |
| Porter, Thomas I., Chicago, Ill., assignor to Porter Safety Seal Company. Seal | 719,866 | Feb. 3 | 814 | 190 | 102 | 995 |
| Porter, William A. V., New York, N. Y. Holder for match-boxes | 726,569 | Apr. 28 | 4010 | 908 | 103 | 2053 |
| Porter, William E., *et al.* (See Houlehan, John, assignor.) | | | | | | |
| Porter, Wilson E., New Haven, Conn. Pedometer | 718,792 | Jan. 20 | 2422 | 537 | 102 | 545 |
| Porter, Wilson E., New Haven, Conn. Pedometer | 738,482 | Sept. 8 | 1896 | 414 | 106 | 422 |
| Porter, Wilson E., New Haven, Conn. Pendant for pedometers | 740,915 | Oct. 6 | 973 | 219 | 106 | 1454 |
| Porter, Wilson E., assignor to New Haven Clock Company, New Haven, Conn. Stem-winding watch | 737,474 | Aug. 25 | 4562 | 1023 | 105 | 2006 |
| Porterfield, Alexander, Dumbarton, Scotland. Pump attachment for drilling or boring machinery | 730,045 | June 2 | 957 | 214 | 104 | 1322 |
| Porterfield, Alexander, Dumbarton, Scotland. Pump attachment for drilling or boring machinery | 730,154 | June 2 | 1130 | 254 | 104 | 1357 |
| Porterfield, Alexander, Dumbarton, Scotland. Gearing for motor-driven tools | 731,948 | June 23 | 4460 | 995 | 104 | 2104 |
| Portis, John W., Buies Creek, N. C. Electric program-clock | 744,608 | Nov. 17 | 3491 | 753 754 | 107 | 774 |
| Ports, Anna. (See Furrow, Annie M., assignor.) | | | | | | |
| Posner, Abraham, New York, N. Y. Ankle-supporting shoe | 737,959 | Sept. 1 | 808 | 177 | 106 | 177 |
| Posno, Victor, assignor to Compagnie des Récipients et Lampes Inexplosibles, Paris, France. Safety device for vessels containing inflammable liquids | 728,610 | May 19 | 3390 | 751 | 104 | 759 |
| Possons, Minard A., Cleveland, Ohio. Talking-machine | 741,543 | Oct. 13 | 2221 | 494 | 106 | 1740 |
| Post, Alva W., Havensville, Kans. Wire-fence tool | 726,749 | Apr. 28 | 4349 | 978 | 103 | 2124 |
| Post, Edward M. (See Van Gilder and Post.) | | | | | | |
| Post, Frederick S., *et al.* (See Rowell, William L., Jr., assignor.) | | | | | | |
| Post, George E. (See Anderson and Post.) | | | | | | |
| Post, Vernon B. (See Costello and Post.) | | | | | | |
| Post, William E., *et al.* (See Rowell, William L., Jr., assignor.) | | | | | | |
| Post, William L., Coldspring, N. Y. Vehicle-brake | 720,965 | Feb. 17 | 2881 | 660 | 102 | 1460 |
| Potstada, Georg, Holyoke, Mass. Split collar for shafts | 718,727 | Jan. 20 | 2302 | 508 | 102 | 520 |
| Pott, Gideon, and R. Williamson, Motherwell, Scotland. Brake for centrifugal machines | 728,974 | May 26 | 4046 | 898 | 104 | 909 |
| Pott, Gideon, J. H. and D. Y. Cassels, R. Williamson, and A. M. Stuart, Motherwell, Scotland. Centrifugal machine | 732,220 | June 30 | 5027 | 1119 | 104 | 2235 |
| Potter, Berdena A., and E. D. Blodgett, Chicago, Ill.; said Blodgett assignor to said Potter. Mirror for ladies' hats | 738,936 | Sept. 15 | 2768 | 613 | 106 | 626 |
| Potter, Frank C. (See Roberts and Potter.) | | | | | | |
| Potter, Frank E., Indianapolis, Ind. Machine for hoisting, conveying, or excavating | 727,836 | May 12 | 1919 | 428 | 104 | 426 |
| Potter, Frank W., Melrose, Mass. Suspenders | 719,505 | Feb. 3 | 165 | 38 | 102 | 858 |
| Potter, Frederic D., Linden, N. J. Elevator | 741,827 | Oct. 20 | 2759 | 615 | 106 | 1870 |
| Potter, Frederic D., Linden, N. J. Safety device for elevators | 743,923 | Nov. 10 | 2185 | 471 472 | 107 | 481 |
| Potter, Frederic D., Linden, assignor to Otis Elevator Company, East Orange, N. J. Safety device for elevators | 722,893 | Mar. 17 | 2331 | 521 | 103 | 525 |
| Potter, Frederic D., Linden, assignor to Otis Elevator Company, East Orange, N. J. Safety-clutch for elevators | 722,894 | Mar. 17 | 2332 | 522 | 103 | 526 |
| Potter, Frederic D., Linden, N. J., and R. D. Jeffreys, New Windsor, N. Y. Protective means for superheaters | 743,027 | Nov. 3 | 402 | 87 | 107 | 84 |

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| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| Potter, George D., Spokane, Wash. Breech-loading breakdown gun | 741,273 | Oct. 13 | 1654 | 374 | 106 | 1619 |
| Potter, Henry N., Pittsburg, Pa. Operating electric lamps | 743,396 | Nov. 3 | 1146 | 242 | 107 | 243 |
| Potter, Henry N., New Rochelle, N. Y., assignor to G. Westinghouse, Pittsburg, Pa. Electric lamp | 719,506 | Feb. 3 | 166 | 38 | 102 | 858 |
| Potter, Henry N., New Rochelle, N. Y., assignor to G. Westinghouse, Pittsburg, Pa. Electric furnace | 719,507 | Feb. 3 | 167 | 38 | 102 | 859 |
| Potter, Henry N., New Rochelle, N. Y., assignor to G. Westinghouse, Pittsburg, Pa. Terminal for electric-lamp glowers | 743,030 | Nov. 3 | 408 | 88 | 107 | 85 |
| Potter, Henry N., Göttingen, Germany, assignor to G. Westinghouse, Pittsburg, Pa. Heater cut-out for electric lamps | 721,387 | Feb. 24 | 3714 | 844, 845 | 102 | 1655 |
| Potter, Henry N., Göttingen, Germany, assignor to G. Westinghouse, Pittsburg, Pa. Heater cut-out for electric lamps | 721,602 | Feb. 24 | 4124 | 938 | 102 | 1743 |
| Potter, Henry N., Göttingen, Germany, assignor to G. Westinghouse, Pittsburg, Pa. Steadying resistance for electric lamps | 743,028 | Nov. 3 | 403 | 87 | 107 | 84 |
| Potter, Henry N., assignor to G. Westinghouse, Pittsburg, Pa. Electric lamp | 730,216 | June 2 | 1253 | 279 | 104 | 1380 |
| Potter, Henry N., assignor to G. Westinghouse, Pittsburg, Pa. Ballast device for electric-lamp circuits | 743,029 | Nov. 3 | 406 | 87 | 107 | 85 |
| Potter, Henry V. (See Peacock, George J., assignor.) | | | | | | |
| Potter, James B., New York, N. Y. Sleeve-cuff | 730,697 | June 9 | 2139 | 475 | 104 | 1588 |
| Potter, James C., Providence, R. I. Screw cap or closure | 743,189 | Nov. 3 | 708 | 155 | 107 | 147 |
| Potter, James C., assignor to American Spindle Company, Pawtucket, R. I. Spinning-spindle | 736,544 | Aug. 18 | 2809 | 615 | 105 | 1618 |
| Potter, James C., and J. Johnston, assignors to Potter and Johnston Machine Company, Pawtucket, R. I. Work-table for shaping-machines | 719,255 | Jan. 27 | 3296 | 738 | 102 | 741 |
| Potter, James C., and J. Johnston, assignors to Potter & Johnston Machine Company, Pawtucket, R. I. Scroll-chuck | 726,099 | Apr. 21 | 3065 | 696, 697 | 103 | 1849 |
| Potter, James C., and J. Johnston, assignors to Potter & Johnston Machine Company, Pawtucket, R. I. Friction-clutch | 730,962 | June 16 | 2616 | 583 | 104 | 1708 |
| Potter, James C., and J. Johnston, assignors to Potter and Johnston Machine Company, Pawtucket, R. I. Lathe | 735,583 | Aug. 4 | 1056 | 224 | 105 | 1205 |
| Potter, James C., and J. Johnston, assignors to Potter and Johnston Machine Company, Pawtucket, R. I. Double-turret lathe | 748,097 | Dec. 29 | 5199 | 1176, 1177 | 107 | 2322 |
| Potter, James E., Providence, R. I. Locket | 727,555 | May 5 | 1366 | 307 | 104 | 294 |
| Potter, John A., Philadelphia, Pa. Making coke and gas | 731,949 | June 23 | 4461 | 995 | 104 | 2105 |
| Potter, John A., Pittsburg, Pa. Coke-oven and gas-producer | 731,950 | June 23 | 4464 | 996 | 104 | 2105 |
| Potter, John G., and E. C. Swank, Riverside, Cal. Water-meter | 739,215 | Sept. 15 | 3254 | 721 | 106 | 727 |
| Potter & Johnston Machine Company. (See Potter and Johnston, assignors.) | | | | | | |
| Potter, Joseph W. (See Rickel and Potter.) | | | | | | |
| Potter Level Company. (See Potter, William, assignor.) | | | | | | |
| Potter, Thomas O., Somerville, Mass. Lavatory apparatus | 745,661 | Dec. 1 | 629 | 146 | 107 | 1232 |
| Potter, William, New York, N. Y. Combination carpenter's tool | 730,568 | June 9 | 1910 | 425 | 104 | 1538 |
| Potter, William, assignor to Potter Level Company, New York, N. Y. Carpenter's level and quadrant | 743,100 | Nov. 3 | 540 | 117 | 107 | 113 |
| Potter, William B., Schenectady, N. Y., assignor to General Electric Company. Controlling device for electric motors | 724,611 | Apr. 7 | 361 | 87, 88 | 103 | 1246 |
| Potter, William B., Schenectady, N. Y., assignor to General Electric Company. System of control for electrically-propelled vehicles | 725,767 | Apr. 21 | 2512 | 570 | 103 | 1733 |
| Potter, William B., Schenectady, N. Y., assignor to General Electric Company. Motor-controller | 726,987 | May 5 | 322 | 70 | 104 | 70 |
| Potter, William B., Schenectady, N. Y., assignor to General Electric Company. Electric-motor system | 727,684 | May 12 | 1616 | 367 | 104 | 365 |
| Potter, William B., Schenectady, N. Y., assignor to General Electric Company. System of motor control | 728,611 | May 19 | 3391 | 751 | 104 | 759 |
| Potter, William B., Schenectady, N. Y., assignor to General Electric Company. Surface-contact railway system | 729,411 | May 26 | 4812 | 1067 | 104 | 1067 |
| Potter, William B., Schenectady, N. Y., assignor to General Electric Company. Electric brake | 738,271 | July 7 | 1032 | 247, 248 | 105 | 216 |
| Potter, William B., Schenectady, N. Y., assignor to General Electric Company. Surface-contact railway system | 735,584 | Aug. 4 | 1057 | 225 | 105 | 1205 |
| Potter, William B., Schenectady, N. Y., assignor to General Electric Company. Electric railway | 745,382 | Dec. 1 | 125 | 29 | 107 | 1127 |
| Potter, William B., Schenectady, N. Y., assignor to General Electric Company. Sectional third-rail system | 745,383 | Dec. 1 | 127 | 29 | 107 | 1127 |
| Potter, William B., and C. D. Clark, Schenectady, N. Y., assignors to General Electric Company. Combined power and brake system | 731,814 | June 23 | 4224 | 942 | 104 | 2053 |
| Potter, William B., Schenectady, N. Y., and C. D. Clark, Berkeley, Cal., assignors to General Electric Company. Circuit-breaker-operating system | 732,009 | June 23 | 4596 | 1026 | 104 | 2132 |
| Potter, William M., assignor to E. C. Stearns & Co., Syracuse, N. Y. Saw-jointer | 738,354 | Sept. 8 | 1648 | 357 | 106 | 371 |
| Potter, William M., assignor to E. C. Stearns & Co., Syracuse, N. Y. Auger | 740,692 | Oct. 6 | 565 | 126 | 106 | 1369 |
| Pottlitzer, Herman, *et al.* (See Headson, Frank A., assignor.) | | | | | | |
| Pottlitzer, Julius, *et al.* (See Headson, Frank A., assignor.) | | | | | | |
| Pottlitzer, Leo, *et al.* (See Headson, Frank A., assignor.) | | | | | | |
| Pottlitzer, Max, *et al.* (See Headson, Frank A., assignor.) | | | | | | |
| Potts, George E. (See Bernauer, Albert, assignor.) | | | | | | |
| Potts, Louis M., assignor to Rowland Telegraphic Company, Baltimore, Md. Means for producing synchronous motion | 726,750 | Apr. 28 | 4349 | 979 | 103 | 2124 |
| Potvin, Alphonse F., Plaistow, N. H. Transferring device for brick-machines | 732,221 | June 30 | 5028 | 1119 | 104 | 2236 |
| Poulin, Lucien, Butte, Mont. Music-leaf turner | 746,991 | Dec. 15 | 3089 | 707 | 107 | 1811 |
| Poulson, Britton, Fort Wayne, Ind. Automatic oiler | 740,992 | Oct. 6 | 1119 | 252 | 106 | 1484 |
| Poulson, Joseph. (See Ingham, Poulson, and Moore.) | | | | | | |
| Poulson, Niels, Brooklyn, N. Y. Device for illuminating rooms opening on light-wells | 729,660 | June 2 | 246 | 57 | 104 | 1179 |
| Poulson, Niels, Brooklyn, N. Y. Fireproof flooring | 730,963 | June 16 | 2618 | 583 | 104 | 1708 |
| Poulson, Niels, Brooklyn, N. Y. Fireproof structure | 741,544 | Oct. 13 | 2223 | 495 | 106 | 1740 |
| Poulson, Niels, Brooklyn, N. Y. Metallic finish for buildings, &c | 741,545 | Oct. 13 | 2224 | 495 | 106 | 1740 |
| Pound, Arnold R. (See Pound, Wesley E., E. A., and A. R.) | | | | | | |
| Pound, Edward A. (See Pound, Wesley E., E. A., and A. R.) | | | | | | |
| Pound, Wesley E., E. A., and A. R., Dixon, Ill. Vehicle-hub | 735,145 | Aug. 4 | 199 | 40 | 105 | 1025 |
| Poupore, William J. (See Owen, William, assignor.) | | | | | | |
| Powell, Harford W. H., Newport, R. I. Draftsman's pen-inking device | 733,594 | July 14 | 1601 | 381 | 105 | 356 |
| Powell, Albert E., Monmouth, Ill. Indicator for furnaces, &c | 723,303 | Mar. 24 | 3067 | 690 | 103 | 692 |
| Powell, Daniel P., assignor of one-half to S. W. Cantril and G. L. Rice, Denver, Colo. Safety device for trolley-car fenders | 723,916 | Mar. 31 | 4208 | 947 | 103 | 943 |
| Powell, Edward, assignor of one-half to G. O. Redpath, Frankfort, Ky. Loom | 733,333 | July 7 | 1134 | 268, 269, 270, 271 | 105 | 239 |
| Powell, Frederick T., Toledo, Ohio. Scraper | 722,250 | Mar. 10 | 1114 | 245 | 103 | 252 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|
| | | | Spec. | Dr'g. | Vol. | Page. |
| Powell, George G., New York, N. Y. Receiving apparatus for tubular despatch systems. | 737,271 | Aug. 25 | 4181 | 931 | 105 | 1923 |
| Powell, George W., Philadelphia, Pa. Punch or blow testing machine | 737,960 | Sept. 1 | 809 | 177<br>178 | 106 | 177 |
| Powell, Glenn E. (See Etherton and Powell.) | | | | | | |
| Powell, Guy C., and A. D. Smith, Peoria, Ill. Apparatus for the treatment of defective hearing | 741,371 | Oct. 13 | 1885 | 415<br>416 | 106 | 1669 |
| Powell, Henry J., and O. H. Schneider, Frostburg, Md. Car-brake | 725,286 | Apr. 14 | 1600 | 361 | 103 | 1523 |
| Powell, Henry S., New York, N. Y. Water-heater | 729,793 | June 2 | 494 | 109 | 104 | 1229 |
| Powell, Herman L., Utica, assignor to Remington Arms Company, Ilion, N. Y. Ejector for firearms | 732,891 | July 7 | 346 | 85 | 105 | 76 |
| Powell, Luther P., Long Island City, N. Y. Acetylene-gas generator | 746,571 | Dec. 8 | 2280 | 522<br>523 | 107 | 1608 |
| Powell, Thomas, Swissvale, Pa. Railway-rail joint | 732,317 | June 30 | 5199 | 1155 | 104 | 2270 |
| Powell, Thomas, Newhope, Cal. Thresher | 735,146 | Aug. 4 | 201 | 41 | 105 | 1025 |
| Powell, William H., assignor, by mesne assignments, to Keystone Electric Company, Erie, Pa. System of motor control | 728,975 | May 26 | 4047 | 899 | 104 | 909 |
| Powell, William H., Ampere, N. J., assignor, by mesne assignments, to Keystone Electric Company, Erie, Pa. System of motor control | 728,976 | May 26 | 4051 | 899 | 104 | 911 |
| Powell, William H., assignor of one-half to J. Murtha, Pittsburg, Pa. Steam-trap | 729,509 | May 26 | 4971 | 1101 | 104 | 1103 |
| Power, James A. G., Joplin, Mo. Water-closet-seat protector | 723,021 | Mar. 17 | 2536 | 569 | 103 | 569 |
| Power and Speed Controller Company. (See Hoffman, William D., assignor.) | | | | | | |
| Powers, Alonzo G., St. James, Nebr. Vent-controller | 736,012 | Aug. 11 | 1868 | 399 | 105 | 1399 |
| Powers, Frank B., Springfield, Mass. Envelop-machine | 725,479 | Apr. 14 | 1967 | 443 | 103 | 1601 |
| Powers, James, assignor to H. P. Childress, New York, N. Y. Pad-support | 748,005 | Dec. 29 | 5019 | 1133 | 107 | 2282 |
| Powers, James, assignor to H. P. Childress, New York, N. Y. Pad-holder | 748,006 | Dec. 29 | 5020 | 1133 | 107 | 2283 |
| Powers, James H., Providence, R. I. Massage appliance | 730,569 | June 9 | 1913 | 425 | 104 | 1539 |
| Powers, John P. (See Hayden and Powers.) | | | | | | |
| Powers, Maurice D., Watertown, N. Y. Combined curtain shade and pole hanger | 733,272 | July 7 | 1035 | 248 | 105 | 216 |
| Powers, Milton F., Winchester, Mass. Handle-securing device for hammers or other tools | 747,636 | Dec. 22 | 4287 | 964 | 107 | 2097 |
| Powers, Richard J. (See Saffell, Frederick, assignor.) | | | | | | |
| Powers, Robert E., Johnstown, Pa., assignor of one-half to A. M. Myers, Roanoke, Va. Car truck and bolster | 748,007 | Dec. 29 | 5021 | 1133<br>1134 | 107 | 2283 |
| Powers, Seth H., Stanberry, Mo. Combined well-boring and rock-drilling machine | 738,843 | Sept. 15 | 2611 | 576 | 106 | 592 |
| Powers, William J. (See Speckman and Powers.) | | | | | | |
| Powers, William P., Chicago, Ill. Means for regulating the temperature in heating systems | 722,251 | Mar. 10 | 1115 | 245<br>246 | 103 | 252 |
| Powers, William P., Chicago, Ill. Temperature-regulating apparatus | 723,728 | Mar. 24 | 3848 | 865 | 103 | 850 |
| Powles, Henry, Sr., Brooklyn, N. Y. Spoon-holder | 723,729 | Mar. 24 | 3852 | 866 | 103 | 851 |
| Powter Company. (See Powter, Nathaniel B., assignor.) | | | | | | |
| Powter, Nathaniel B., Brooklyn, assignor to Powter Company, New York, N. Y. Treating oil-bearing materials | 725,363 | Apr. 14 | 1744 | 392 | 103 | 1553 |
| Poynor, Septimus F. (See Robbins and Poynor.) | | | | | | |
| Poyser, William F., and C. B. Bowen, Fort Wayne, Ind. Journal-lubricator | 732,318 | June 30 | 5201 | 1155 | 104 | 2271 |
| Pozzo, Mario. (See Georgiewitz-Weitzer and Pozzo.) | | | | | | |
| Practical Gas Construction Company. (See Bower, John A., assignor.) | | | | | | |
| Practical Gas Construction Company. (See Tenney, Charles I., assignor.) | | | | | | |
| Prager, Lewis, *et al.* (See Mead, Charles, assignor.) | | | | | | |
| Prager, Samuel, New York, N. Y. Transparent-slide folding box | 734,945 | July 28 | 4171 | 970 | 105 | 926 |
| Prahar, Louis B., New York, N. Y. Handle for toilet articles | 734,946 | July 28 | 4173 | 970 | 105 | 926 |
| Prall, Anning S., Port Richmond, N. Y. Protracting device | 717,920 | Jan. 6 | 759 | 170 | 102 | 163 |
| Prame, Frank J., Shiloh, Ohio. Seed-cleaner | 722,140 | Mar. 3 | 880 | 197 | 103 | 188 |
| Prange, Henry T., Kalamazoo, Mich. Truss | 721,603 | Feb. 24 | 4126 | 938 | 102 | 1743 |
| Prangemeier, Caspar, Munster, Germany. Apparatus for measuring and drawing off liquids | 739,925 | Sept. 29 | 4612 | 1035 | 106 | 1053 |
| Prann, Chester W. (See Colman, George E., assignor.) | | | | | | |
| Prante, Joseph E., Chillicothe, assignor of two-thirds to J. M. Patridge and H. Holberg, Wellston, Ohio. Self-playing organ and pneumatic-action therefor | 733,917 | July 14 | 2209 | 518 | 105 | 480 |
| Prasky, James W., Allegheny, Pa. Folding box or crate | 735,906 | Aug. 11 | 1666 | 355 | 105 | 1354 |
| Prather, Joseph A. (See Keim and Prather.) | | | | | | |
| Pratt, Albert K., Whitinsville, Mass. Warp stop-motion for looms | 733,079 | July 7 | 677 | 165 | 105 | 144 |
| Pratt, Allison A., New York, N. Y., assignor to F. D. Warner, Newcastle, Ind. Gas-burner and regulator for same | 724,612 | Apr. 7 | 366 | 88 | 103 | 1248 |
| Pratt, Ashton H., Chicago, Ill. Tread-piece or sole | 740,311 | Sept. 29 | 5314 | 1197 | 106 | 1200 |
| Pratt, Charles T., Frankfort, N. Y. Chaplet | 735,147 | Aug. 4 | 204 | 41 | 105 | 1026 |
| Pratt, Charles T., assignor to Pratt Chuck Company, Frankfort, N. Y. Apparatus for electroplating | 742,131 | Oct. 20 | 3403 | 759 | 106 | 1998 |
| Pratt Chuck Company. (See Pratt, Charles T., assignor.) | | | | | | |
| Pratt, Clayton A., South Omaha, Nebr., assignor to W. S. Elliott, Pittsburg, Pa. Tube-cleaner | 722,750 | Mar. 17 | 2065 | 462 | 103 | 472 |
| Pratt, Edwin, Kankakee, Ill. Hat and coat rack | 736,442 | Aug. 18 | 2613 | 574 | 105 | 1575 |
| Pratt, Frank M., Decatur, Ill. Extracting oil from cotton-seed | 734,239 | July 21 | 2844 | 667 | 105 | 636 |
| Pratt, George E., Winfield, Iowa. Breast-collar | 721,388 | Feb. 24 | 3718 | 845 | 102 | 1655 |
| Pratt, George L., Atlanta, Ga. Dump-car | 747,762 | Dec. 22 | 4512 | 1017 | 107 | 2148 |
| Pratt, George T., Westbrook, Me. Insulating material | 743,031 | Nov. 3 | 409 | 88 | 107 | 86 |
| Pratt, John E., Philadelphia, Pa. Garment-fastener | 737,475 | Aug. 25 | 4563 | 1023 | 105 | 2007 |
| Pratt, Lee S., Galesburg, Ill. Educational apparatus | 723,022 | Mar. 17 | 2537 | 569 | 103 | 569 |
| Pratt & Letchworth Company. (See Bradley and Gilbert, assignors.) | | | | | | |
| Pratt & Letchworth Company. (See Hennicke, Charles A., assignor.) | | | | | | |
| Pratt, Leverett A., Bay City, Mich. Cement fence-post | 726,751 | Apr. 28 | 4354 | 979 | 103 | 2124 |
| Pratt Manufacturing Company. (See Pratt, Walter C., assignor.) | | | | | | |
| Pratt, Nathaniel P., Atlanta, Ga. Valve | 730,796 | June 9 | 2292 | 509 | 104 | 1620 |
| Pratt, Samuel L., Hingham, Mass. Shoe-bow | 743,924 | Nov. 10 | 2187 | 472 | 107 | 482 |
| Pratt, Walter C., assignor to Pratt Manufacturing Company, Lansing, Mich. Wire-and-slat-weaving machine | 725,989 | Apr. 21 | 2899 | 658 | 103 | 1814 |
| Pratt & Whitney Company. (See Echols, Francis G., assignor.) | | | | | | |
| Pratt & Whitney Company. (See Goodrich, Clarence L., assignor.) | | | | | | |
| Pratt & Whitney Company. (See Hanson, Bengt M. W., assignor.) | | | | | | |
| Pratt, William H., Lynn, Mass., assignor to General Electric Company. Power-factor indicator | 719,609 | Feb. 3 | 349 | 81 | 102 | 895 |
| Pratt, William H., Lynn, Mass., assignor to General Electric Company. Means for compensating temperature changes in electrical measuring instruments | 728,612 | May 19 | 3393 | 751 | 104 | 760 |
| Pratt, William H., Lynn, Mass., assignor to General Electric Company. Power-factor indicator | 730,397 | June 9 | 1588 | 354 | 104 | 1467 |
| Pratt, William H., Lynn, Mass., assignor to General Electric Company. Electrical measuring instrument | 730,698 | June 9 | 2140 | 475 | 104 | 1588 |

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| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| Pratt, William H., Lynn, Mass., assignor to General Electric Company. Magnetic suspension device | 730,840 | June 9 | 2370 | 523 | 104 | 1637 |
| Pratt, William H., Lynn, Mass., assignor to General Electric Company. Registering mechanism | 747,763 | Dec. 22 | 4516 | 1018 | 107 | 2150 |
| Pratt, Wilson R., Topeka, Kans. Compressed-air-locomotive heater | 732,892 | July 7 | 347 | 85 | 105 | 76 |
| Pratz, Friedrich, Vienna, Austria-Hungary. Garment-hanger | 719,041 | Jan. 27 | 2891 | 648 | 102 | 658 |
| Pravicha, Eugéne, and E. Douillet, La Garenne-Colombes, France. Apparatus for separating oil from water | 745,519 | Dec. 1 | 385 | 88, 89 | 107 | 1181 |
| Pray, Cyrus M., Belgrade Lakes, Me. Oar-lock | 742,490 | Oct. 27 | 4061 | 912 | 106 | 2150 |
| Pray, Stuart H., Norwood, Mass. Signature-bundling machine | 736,627 | Aug. 18 | 2980 | 655<br>656 | 105 | 1651 |
| Preater, William J., Elizabeth, N. J. Ship's table | 726,752 | Apr. 28 | 4355 | 979<br>980 | 103 | 2125 |
| Prebble, Stephen, Brixton, England. Sun-blind fascia | 740,916 | Oct. 6 | 974 | 219 | 106 | 1454 |
| Precht, Julius. (See Eichengrün and Precht.) | | | | | | |
| Prechtel, Charles A., *et al.* (See Decker, William A., assignor.) | | | | | | |
| Prehn, Charles T., assignor of one-half to D. Chubb, Ludington, Mich. Grease-feeder | 739,714 | Sept. 22 | 4188 | 936 | 106 | 946 |
| Prehoda, Rudolph. (See Hlavacek, John, assignor.) | | | | | | |
| Preisler, Ernst. (See Ruth and Preisler.) | | | | | | |
| Prejean, Silver, and G. C. Bellocq, Belle Alliance, La. Harrow | 744,609 | Nov. 17 | 3496 | 755 | 107 | 774 |
| Premier Manufacturing Company. (See McCue, Charles T., assignor.) | | | | | | |
| Premo-Hall Manufacturing Company. (See Hall, George F., assignor.) | | | | | | |
| Prendergast, David N. (See Dement and Prendergast.) | | | | | | |
| Prendergast Electric Typewriter Company. (See Harrison, John S., assignor.) | | | | | | |
| Prendergast Electric Typewriter Company. (See Harrison and Hill, assignors.) | | | | | | |
| Prendergast Electric Typewriter Company. (See Hill, Hermann, assignor.) | | | | | | |
| Prendergast, William F. (See Breen, Cornelius M., assignor.) | | | | | | |
| Prentice Brothers Company. (See Newton, Albert E., assignor.) | | | | | | |
| Prentice, Hugh, Cleveland, Ohio. Mandrel | 726,456 | Apr. 28 | 3759 | 852 | 103 | 2007 |
| Prentice, Hugh, and F. J. Deemer, Cleveland, Ohio. Water-sealed reversing-valve for regenerative furnaces | 738,236 | Sept. 8 | 1366 | 296<br>297 | 106 | 311 |
| Prentice, Lewis N., Fort Hunt, Va. Brace for stools, chairs, or the like | 737,660 | Sept. 1 | 185 | 39 | 106 | 43 |
| Prentiss, Spencer B., Washington, D. C. Circuits and apparatus for telephone-switchboards | 741,713 | Oct. 20 | 2559 | 570 | 106 | 1826 |
| Prentiss Vise Company. (See Blake, John A., assignor.) | | | | | | |
| Prescott, Amos L. (See Noyes, William H., assignor.) | | | | | | |
| Prescott, Amos L., New York, N. Y. Vehicle | 735,816 | Aug. 11 | 1494 | 320 | 105 | 1318 |
| Prescott, Arthur T. (See Eggers, Calvin C., assignor.) | | | | | | |
| Prescott, Daniel P., Brattleboro, Vt. Clothes-drying apparatus | 736,777 | Aug. 18 | 3265 | 721<br>722 | 105 | 1710 |
| Prescott, De Witt C., Chicago, Ill. Sawmill set-works | 721,965 | Mar. 3 | 582 | 130 | 103 | 127 |
| Prescott, De Witt C., Chicago, Ill. Balanced valve | 730,699 | June 9 | 2142 | 476 | 104 | 1588 |
| Prescott, De Witt C., Chicago, Ill. Steam set-works for sawmills | 734,947 | July 28 | 4174 | 971 | 105 | 927 |
| Prescott, De Witt C., Chicago, Ill., assignor of three-fourths to L. L., E. L., and S. K. Prescott, Marinette, Wis. Valve for steam-engines | 745,520 | Dec. 1 | 386 | 89 | 107 | 1182 |
| Prescott, De Witt C., Chicago, Ill., and I. M. Thurlow, Menominee, Mich., assignors to D. Clint Prescott Company. Band-saw mill | 721,966 | Mar. 3 | 585 | 130 | 103 | 128 |
| Prescott, Edward L., *et al.* (See Prescott, De Witt C., assignor.) | | | | | | |
| Prescott, Edwin, Arlington, Mass. Wagon-jack | 737,016 | Aug. 25 | 3719 | 825 | 105 | 1827 |
| Prescott, Frederick M., Milwaukee, Wis. Multiple-expansion engine | 719,136 | Jan. 27 | 3089 | 687 | 102 | 698 |
| Prescott, Frederick M., Milwaukee, Wis. Triple-expansion engine | 719,367 | Jan. 27 | 3522 | 785 | 102 | 790 |
| Prescott, Loren L., *et al.* (See Prescott, De Witt C., assignor.) | | | | | | |
| Prescott, Sumner K., *et al.* (See Prescott, De Witt C., assignor.) | | | | | | |
| Prescott, Sydney I. (See Tyberg and Prescott.) | | | | | | |
| Prescott, Sydney I., assignor to American Cigar Company, New York, N. Y. Marking-machine | 746,376 | Dec. 8 | 1946 | 444<br>445 | 107 | 1533 |
| Preslar, Charles F., Cincinnati, Ohio. Subterranean anchor | 747,219 | Dec. 15 | 3518 | 798 | 107 | 1907 |
| Presnell, Charles L., Mount Airy, N. C. Cylinder relief-valve | 741,828 | Oct. 20 | 2761 | 615 | 106 | 1870 |
| Pressed Prism Plate Glass Company. (See Page and Wadsworth, assignors.) | | | | | | |
| Pressed Prism Plate Glass Company. (See Wadsworth, Frank L. O., assignor.) | | | | | | |
| Pressed Steel Car Company. (See Flinn, Christopher, assignor.) | | | | | | |
| Pressed Steel Car Company. (See Lindström, Charles A., assignor.) | | | | | | |
| Pressed Steel Car Company. (See Rapley, Frederick H., assignor.) | | | | | | |
| Pressed Steel Car Company. (See Stucki, Arnold, assignor.) | | | | | | |
| Pressler, Caswell. (See Wallis, George L., assignor.) | | | | | | |
| Prest, Edward J., Uxbridge, Mass. Clothes-line prop | 726,457 | Apr. 28 | 3761 | 852 | 103 | 2007 |
| Preston, Almon E., Battlecreek, Mich. Hinge | 719,137 | Jan. 27 | 3090 | 687 | 102 | 698 |
| Preston, Burton E., Denver, Colo. Green-pea sheller | 722,895 | Mar. 17 | 2334 | 522 | 103 | 526 |
| Preston, George A., Monroe, La. Cattle-guard | 722,043 | Mar. 3 | 722 | 160<br>161 | 103 | 156 |
| Preston, George E., Chicago, Ill. Machinery-belt | 723,917 | Mar. 31 | 4209 | 948 | 103 | 944 |
| Preston, James T., Filley, Mo. Cloth-cutter | 737,768 | Sept. 1 | 394 | 84 | 106 | 87 |
| Preston, John B. (See Smith, Sebastian, assignor.) | | | | | | |
| Preston, Leonidas A., Cheapside, Tex. Wire-stretcher | 745,662 | Dec. 1 | 630 | 146 | 107 | 1232 |
| Preston, Lewis C., Weston, Oreg. Fastening device | 737,769 | Sept. 1 | 397 | 84 | 106 | 87 |
| Preston, Thomas R. (See Rodgers, Jasper C., assignor.) | | | | | | |
| Preston, Willard B., Chicago, Ill. Churn | 726,753 | Apr. 28 | 4358 | 980 | 103 | 2125 |
| Preston, William H., Valley Junction, assignor to P. M. Knippenberg, Portage, Wis. Wrench | 728,007 | May 12 | 2240 | 498 | 104 | 494 |
| Prestwich, John A., Tottenham, London, England. Means for exhibiting kinematographic pictures | 730,964 | June 16 | 2619 | 584 | 104 | 1708 |
| Prestwich, John E., Farnworth, England. Treating yarns, &c., with volatile liquids | 740,778 | Oct. 6 | 747 | 168 | 106 | 1405 |
| Preuitt, James, and C. W. F. Glander, Wahpeton, N. D. Reach or coupling-pole for vehicles | 735,585 | Aug. 4 | 1059 | 225 | 105 | 1206 |
| Preuss, Andrew, and F. Jansson, Chicago, Ill. Mechanical foot-cleaner or door-mat | 732,373 | June 30 | 5320 | 1178 | 104 | 2296 |
| Prevear, Herbert, Leominster, Mass. Comb | 745,073 | Nov. 24 | 4399 | 950 | 107 | 982 |
| Preville, Louis C. de, Paris, France. Construction of locks having rocking chambers | 722,537 | Mar. 10 | 1645 | 363 | 103 | 369 |
| Prevost, August P., Monitor Township, Mich. Weeding-tool | 725,768 | Apr. 21 | 2520 | 571 | 103 | 1735 |
| Price, Abel F., U. S. Navy. Bicycle | 737,017 | Aug. 25 | 3721 | 825<br>826 | 105 | 1827 |
| Price, Albert C., Russellville, and W. J. Conner, Bart, Pa. Operating device for window-blinds | 737,476 | Aug. 25 | 4564 | 1023 | 105 | 2007 |
| Price, Allen C., Renfrew, Pa. Pump-rod adjuster for oil-wells | 733,505 | July 14 | 1444 | 340 | 105 | 323 |
| Price, Bennett. (See Kirby, Jerry W., assignor.) | | | | | | |
| Price, Darling & Company. (See Mahoney, Joseph N., assignor.) (Reissue.) | | | | | | |
| Price, David B., Mount Union, Pa. Brick-machine | 729,094 | May 26 | 4262 | 941 | 104 | 953 |

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| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | Spec. | Drg. | Vol. | Page. |
| Price, Edgar F., assignor to Union Carbide Company, Niagara Falls, N. Y. Preparing carbid of calcium | 731,070 | June 16 | 2826 | ..... | 104 | 1751 |
| Price, Edson C., Goshen, N. Y. Copy-holder for type-writing machines | 728,613 | May 19 | 3395 | 752 | 104 | 760 |
| Price, Edward H., Sioux City, Iowa. Safety device for elevators | 719,692 | Feb. 3 | 498 | 112<br>113 | 102 | 928 |
| Price, Edward H., Sioux City, Iowa. Safety device for elevators | 725,132 | Apr. 14 | 1331 | 300 | 103 | 1467 |
| Price, Eugene C., Eureka, Cal. Bevel-siding head | 745,906 | Dec. 1 | 1094 | 244 | 107 | 1331 |
| Price, Frank L., Hoskins, Oreg. Swinging gate | 724,933 | Apr. 7 | 944 | 217 | 103 | 1372 |
| Price, George F., Hegewisch, Ill. Bracket-holder | 734,948 | July 28 | 4176 | 971 | 105 | 927 |
| Price, Harold G. (See Luckenbach, Harry, assignor.) | | | | | | |
| Price, Henry C., assignor to S. S. Shears, New York, N. Y. Water-cooler | 735,295 | Aug. 4 | 501 | 100 | 105 | 1087 |
| Price, James E., Temple Hill, Ill. Wire-stretcher | 717,616 | Jan. 6 | 168 | 42 | 102 | 38 |
| Price, John, Westminster, England. Tunnel-boring machinery | 741,829 | Oct. 20 | 2762 | 615<br>616 | 106 | 1870 |
| Price, John D., Cleveland, Ohio. Car-fender | 734,362 | July 21 | 3078 | 725 | 105 | 685 |
| Price, John R., Fond du Lac, Wis. Floor and hardwood scraper | 725,480 | Apr. 14 | 1970 | 443 | 103 | 1602 |
| Price, Jonathan D., Aurora, assignor to Miller Signal Company, Chicago, Ill. Railway-signal. (Reissue) | 12,113 | May 19 | 3777 | 843 | 104 | 840 |
| Price, Otto. (See Ryden, Axel, assignor.) | | | | | | |
| Price, Stephen C., Pittsburg, Kans. Cabinet | 730,046 | June 2 | 958 | 215 | 104 | 1323 |
| Price, William A., Peakesville, Mo. Traction-wheel | 747,764 | Dec. 22 | 4518 | 1018 | 107 | 2150 |
| Price, William W. (See Friend and Price.) | | | | | | |
| Price, William W., Dayton, Ohio. Pipe-coupling | 742,352 | Oct. 27 | 3821 | 856 | 106 | 2102 |
| Price, William W., assignor of one-half to T. B. Marshall, Toronto, Canada. Cover for centrifugal clarifiers | 720,479 | Feb. 10 | 1954 | 447 | 102 | 1251 |
| Price, William W., Poughkeepsie, N. Y., assignor to De Laval Separator Company. Cream-regulating device for separators | 733,273 | July 7 | 1036 | 248<br>249 | 105 | 216 |
| Priddat, Ernst F., Chicago, Ill. Tie | 736,628 | Aug. 18 | 2982 | 656 | 105 | 1651 |
| Priddat, Ernst F., Chicago, Ill. Tie-fastener | 736,629 | Aug. 18 | 2983 | 656 | 105 | 1652 |
| Priddat, Ernst F., Chicago, Ill. Package fastener and carrier | 736,630 | Aug. 18 | 2985 | 657 | 105 | 1652 |
| Priddat, Ernst F., Chicago, Ill. Package-carrier | 736,631 | Aug. 18 | 2986 | 657 | 105 | 1652 |
| Priddat, Ernst F., Chicago, Ill. Package-carrier | 736,632 | Aug. 18 | 2987 | 657 | 105 | 1653 |
| Priddat, Ernst F., Chicago, Ill. Tie-fastener. (Reissue) | 12,147 | Aug. 18 | 3530 | 784 | 105 | 1766 |
| Pridham, Samuel S., Newark, N. J. Apparatus for the purification of water | 735,817 | Aug. 11 | 1495 | 320<br>321 | 105 | 1318 |
| Pridmore, Henry E., Chicago, Ill., assignor to National Malleable Castings Company, Cleveland, Ohio. Core-making machine | 727,556 | May 5 | 1367 | 307<br>308 | 104 | 294 |
| Pridmore, John W., assignor to International Harvester Company, Chicago, Ill. Molding-machine | 730,398 | June 9 | 1590 | 354 | 104 | 1468 |
| Pridmore, John W., assignor to International Harvester Company, Chicago, Ill. Spring-clip for the cutting apparatus of mowers, reapers, &c. | 731,611 | June 23 | 3858 | 859<br>860 | 104 | 1977 |
| Pridmore, John W., assignor to McCormick Harvesting Machine Company, Chicago, Ill. Grain-divider | 742,489 | Oct. 27 | 4060 | 912 | 106 | 2150 |
| Pridmore, John W., and B. R. Benjamin, assignors to International Harvester Company, Chicago, Ill. Harvester-truck | 730,700 | June 9 | 2143 | 476 | 104 | 1589 |
| Pridmore, John W., and B. R. Benjamin, Chicago, Ill., assignors to McCormick Harvesting Machine Company. Corn-harvesting machine | 732,222 | June 30 | 5031 | 1120 | 104 | 2236 |
| Pridmore, John W., and G. G. Barker, assignors to International Harvester Company, Chicago, Ill. Machine for testing rake-teeth | 717,761 | Jan. 6 | 453 | 105<br>106 | 102 | 98 |
| Priebe, Herman C., Bradford, Ill. Device for catching fowl | 721,917 | Mar. 3 | 499 | 110 | 103 | 111 |
| Priebe, Herman C., Bradford, Ill. Draft-rigging | 740,779 | Oct. 6 | 749 | 168 | 106 | 1405 |
| Priebe, Herman C., Bradford, Ill. Draft-rigging | 747,637 | Dec. 22 | 4292 | 964 | 107 | 2098 |
| Pries, Herman. (See Williamson and Pries.) | | | | | | |
| Pries, Herman, Michigan City, Ind. Brake-beam | 735,296 | Aug. 4 | 503 | 101 | 105 | 1088 |
| Pries, Herman, and J. W. Meyer, Michigan City, Ind. Grain-door for cars | 737,018 | Aug. 25 | 3723 | 826 | 105 | 1827 |
| Priest, Edward D., Schenectady, N. Y., assignor to General Electric Company. Cooling dynamo-electric machines | 727,685 | May 12 | 1617 | 368 | 104 | 366 |
| Priest, Edward D., Schenectady, N. Y., assignor to General Electric Company. Means for cooling dynamo-electric machines | 727,686 | May 12 | 1619 | 368<br>369 | 104 | 367 |
| Priest, Edward D., Schenectady, N. Y., assignor to General Electric Company. Current-collector | 728,614 | May 19 | 3397 | 752 | 104 | 761 |
| Priest, Edward D., Schenectady, N. Y., assignor to General Electric Company. Railway-motor | 747,765 | Dec. 22 | 4519 | 1018 | 107 | 2150 |
| Priest, Edward D., Schenectady, N. Y., assignor to General Electric Company. System for controlling fluid-pressure | 748,098 | Dec. 29 | 5203 | 1178 | 107 | 2322 |
| Priest, George E., Orange, Mass. Machine for cutting box-corners | 738,483 | Sept. 8 | 1897 | 414<br>415 | 106 | 422 |
| Priest, Henry H. (See Hopson and Priest.) | | | | | | |
| Priest, Irvin M., Lincoln, Nebr. Rein-support | 723,918 | Mar. 31 | 4210 | 948 | 103 | 944 |
| Priest, Joseph K., assignor to American Shearer Manufacturing Company, Nashua, N. H. Shearing and clipping device | 743,190 | Nov. 3 | 709 | 155 | 107 | 148 |
| Priest, Joseph K., assignor to American Shearer Manufacturing Company, Nashua, N. H. Hair-clipper | 748,416 | Dec. 29 | 5768 | 1316 | 107 | 2446 |
| Priest, Louis, Flint, Mich. Vehicle-body | 733,676 | July 14 | 1740 | 411<br>412 | 105 | 383 |
| Prieto, Manuel, Mexico, Mexico. Machine for cleaning fibers | 730,701 | June 9 | 2146 | 476 | 104 | 1589 |
| Prieto, Manuel, Mexico, Mexico. Machine for cleaning fiber | 733,080 | July 7 | 679 | 165<br>166 | 105 | 144 |
| Prieto, Manuel, Mexico, Mexico. Fiber-preparing machine | 733,595 | July 14 | 1604 | 381 | 105 | 357 |
| Prikryl, Bartolomej, Chicago, Ill. Composition of ingredients for improving storage eggs | 748,099 | Dec. 29 | 5206 | ..... | 107 | 2323 |
| Primat, Alexandre, Paris, France. Rotary explosive-motor | 736,151 | Aug. 11 | 2111 | 453 | 105 | 1449 |
| Prince, Frank N., Fulton, N. Y. Attachment for can-soldering machines | 732,780 | July 7 | 149 | 40 | 105 | 36 |
| Prince, George E., Northwood, England. Machine for recording music | 726,754 | Apr. 28 | 4359 | 980<br>981<br>982 | 103 | 2126 |
| Prince, James H. (See Stokoe, John M., assignor.) | | | | | | |
| Prince, John A., New York, N. Y. Machine for washing bottles | 721,233 | Feb. 24 | 3446 | 783 | 102 | 1598 |
| Prince, John A., New York, N. Y. Machine for coating sun-print paper | 734,949 | July 28 | 4177 | 972 | 105 | 928 |
| Prince, John A., New York, N. Y. Machine for washing bottles | 738,937 | Sept. 15 | 2769 | 613 | 106 | 627 |
| Prince, Napoléon, Lovette, Canada. Voting-machine | 746,572 | Dec. 8 | 2281 | 523 | 107 | 1608 |
| Prince, Walter F., Elizabeth, N. J. Molding-machine | 745,293 | Nov. 24 | 4827 | 1053 | 107 | 1070 |
| Princen, August, Minneota, Minn. Automatic blowpipe | 725,769 | Apr. 21 | 2521 | 571 | 103 | 1735 |
| Prindle, Farrand C., Hornellsville, N. Y. Apparatus for mixing bark extracts | 723,304 | Mar. 24 | 3068 | 690 | 103 | 692 |
| Prindle, Gilbert H., Washington, D. C. Combined cabinet and examining or operating table | 724,125 | Mar. 31 | 4638 | 1044 | 103 | 1031 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | Spec. | Des. | Vol. | Page. |
| Prindle, Harold A. R., and J. U. Adolph, Philadelphia, Pa. Pneumatic tool | 724,736 | Apr. 7 | 598 | 141 | 103 | 1296 |
| Prindle, Henry U., Sacramento, Cal. Crushing-mill | 720,480 | Feb. 10 | 1956 | 447 | 102 | 1252 |
| Pringle, Eugene, Gloversville, N. Y., assignor, by mesne assignments, to United States Fastener Company, Portland, Me., and Boston, Mass. Stud | 720,616 | Feb. 17 | 2265 | 520 | 102 | 1329 |
| Printing Arts Company *et al.* (See Mowbray, Frank H., assignor.) | | | | | | |
| Printing Arts Company. (See Mowbray and Black, assignors.) | | | | | | |
| Printz, Carl J., Milwaukee, Wis. Pumping-engine | 736,443 | Aug. 18 | 2614 | 574 | 105 | 1575 |
| Printz, Emanuel. (See Roeske, Henry, assignor.) | | | | | | |
| Printz, Emanuel, Philadelphia, Pa. Leather-staking machine | 729,412 | May 26 | 4815 | 1068 | 104 | 1068 |
| Prinz, Faustin, Milwaukee, Wis. Dust-collector | 727,439 | May 5 | 1147 | 252 | 104 | 248 |
| Prinzhorn, Adolf, Hanover, Germany. Vehicle-tire | 738,064 | Sept. 1 | 992 | 221 | 106 | 216 |
| Prioletta, Giovanni, assignor to V. Campana and F. Martucci, Jersey City, N. J. Combined match-box and cigar-cutter | 730,841 | June 9 | 2371 | 523, 524 | 104 | 1637 |
| Prior, Jackson L., Fayetteville, N. C. Non-refillable bottle | 737,137 | Aug. 25 | 3915 | 870 | 105 | 1867 |
| Prior, Matthew, Watertown, assignor to J. M. Hunt, Boston, Mass. Device for opening swinging windows | 741,830 | Oct. 20 | 2763 | 617 | 106 | 1871 |
| Prister, August, Gradisca, Austria-Hungary. Precipitating gold from cyanid solutions | 722,455 | Mar. 10 | 1492 | ------ | 103 | 334 |
| Pritchard, Albert R., Rochester, N. Y. Screw-cap | 720,380 | Feb. 10 | 1791 | 406 | 102 | 1218 |
| Pritchard, Albert R., Rochester, N. Y. Apparatus for electroplating | 741,274 | Oct. 13 | 1657 | 374 | 106 | 1619 |
| Pritchard, Albert R., Rochester, N. Y. Faucet or cock | 746,740 | Dec. 15 | 2596 | 596 | 107 | 1699 |
| Pritchard, Edward W., Dallas, Tex. Vapor-burner | 736,013 | Aug. 11 | 1869 | 399 | 105 | 1399 |
| Pritchard, Theodore J., Sunshine, La. Grate-bar | 741,546 | Oct. 13 | 2225 | 495 | 106 | 1741 |
| Pritchard, William H., Indianapolis, Ind. Car-replacer | 734,611 | July 28 | 3532 | 827 | 105 | 796 |
| Pritzkow, Louis W., New York, N. Y. Envelop | 736,014 | Aug. 11 | 1870 | 399 | 105 | 1399 |
| Prizer, Harry A. (See Deckert, Joseph O., assignor.) | | | | | | |
| Prizer, Harry A. (See Deckert, Mann, and Prizer.) | | | | | | |
| Probasco, Abraham B., Warren County, Ohio. Composite post | 725,770 | Apr. 21 | 2522 | 571 | 103 | 1736 |
| Probst, Frank. (See Heinrich and Probst.) | | | | | | |
| Probst, Harry C., Chicago, Ill. Combined ruler and blotter | 722,141 | Mar. 3 | 881 | 197 | 103 | 188 |
| Probst, William D. (See Morgan, John B., assignor.) | | | | | | |
| Prochaska, Franz, Neutitschein, Austria-Hungary. Railway-brake | 747,638 | Dec. 22 | 4293 | 965 | 107 | 2098 |
| Prochaska, Jerry G. (See Malizan and Prochaska.) | | | | | | |
| Proctor, Augusta, Viroqua, Wis. Holder for lacework | 744,610 | Nov. 17 | 3498 | 755 | 107 | 775 |
| Proctor, Guy H., Somerville, assignor to New England Electric Manufacturing Company, Boston, Mass. Electric-incandescent-lamp socket | 725,133 | Apr. 14 | 1334 | 301 | 103 | 1467 |
| Proctor, Guy H., Somerville, assignor to New England Electric Manufacturing Company, Boston, Mass. Incandescent-lamp socket | 745,294 | Nov. 24 | 4829 | 1053 | 107 | 1070 |
| Procunier, Henry E., Oakpark, Ill. Railway-bond | 743,101 | Nov. 3 | 541 | 117 | 107 | 113 |
| Procunier, Henry E., Oakpark, Ill. Insulating draw-bar or draft-link for railway-trains | 743,925 | Nov. 10 | 2188 | 472 | 107 | 482 |
| Proeger, Julius, Pittsburg, Pa., assignor, by mesne assignments, to Toledo Glass Company, Toledo, Ohio. Apparatus for the manufacture of glassware | 744,006 | Nov. 10 | 2373 | 510, 511 | 107 | 524 |
| Proeger, Julius, Greensburg, Pa., assignor, by mesne assignments, to Toledo Glass Company, Toledo, Ohio. Manufacture of glassware | 744,007 | Nov. 10 | 2382 | 512, 513 | 107 | 525 |
| Proeger, Julius, Greensburg, Pa., assignor to Toledo Glass Company, Toledo, Ohio. Apparatus for making hollow glass articles | 744,008 | Nov. 10 | 2390 | 514 | 107 | 526 |
| Proeger, Julius, Greensburg, Pa., assignor, by mesne assignments, to Toledo Glass Company, Toledo, Ohio. Apparatus for making glassware | 744,009 | Nov. 10 | 2393 | 514 | 107 | 526 |
| Proeger, Julius, Greensburg, Pa., assignor to Toledo Glass Company, Toledo, Ohio. Machine for making glassware | 744,010 | Nov. 10 | 2395 | 515 | 107 | 527 |
| Profitlich, Alexander, and H. Günster, Unkel-on-the-Rhine, Germany. Pipe-coupling | 733,995 | July 21 | 2368 | 553 | 105 | 532 |
| Prokofiew, George, North Kensington, England. Automatic weighing-machine | 739,216 | Sept. 15 | 3255 | 721, 722, 723 | 106 | 727 |
| Prometheus Electric Company. (See Bölling, Johann F., assignor.) | | | | | | |
| Prometheus Electric Company. (See Loewenthal, Max, assignor.) | | | | | | |
| Proper, John, Oceanpark, Cal. Nebulizing oil-burner | 725,134 | Apr. 14 | 1335 | 301 | 103 | 1468 |
| Propfe, Georg C., Hamburg, Germany. Pulverizing and cleaning minerals | 734,240 | July 21 | 2845 | ------ | 105 | 636 |
| Prosch Manufacturing Company. (See Klaiber, Maximilian, assignor.) | | | | | | |
| Proskey Light Company. (See Proskey, Winfield S., assignor.) | | | | | | |
| Proskey, Winfield S., Ocala, Fla. Incandescent gas-lamp | 721,650 | Feb. 24 | 4221 | 960 | 102 | 1765 |
| Proskey, Winfield S., Ocala, Fla., assignor, by mesne assignments, to Proskey Light Company, Jersey City, N. J. Hydrocarbon-vapor lamp | 734,470 | July 21 | 3273 | 769 | 105 | 724 |
| Pross, John A., Canastota, assignor to American Mutoscope & Biograph Company, New York, N. Y. Animated-picture apparatus | 722,382 | Mar. 10 | 1348 | 298 | 103 | 303 |
| Prosser, James H., Mahanoy City, Pa. Educational frame | 718,520 | Jan. 13 | 1903 | 417 | 102 | 425 |
| Proudfit, Alexander C., assignor to Thomas & Betts, New York, N. Y. Insulating fixture-stud | 742,098 | Oct. 20 | 3346 | 747 | 106 | 1987 |
| Proulx, Joseph A., assignor of one-half to A. W. C. Finbow, Vancouver, Canada. Lino-type-leader | 744,102 | Nov. 17 | 2582 | 551, 552 | 107 | 580 |
| Prouty, George W., Boston, Mass., assignor to Imperial Press Company, Kittery, Me., and Boston, Mass. Printing-press | 731,497 | June 23 | 3638 | 812 | 104 | 1934 |
| Prouty, George W., Boston, Mass., assignor to Imperial Press Company, Kittery, Me., and Boston, Mass. Ink-distributing apparatus for printing-presses | 735,818 | Aug. 11 | 1498 | 321 | 105 | 1319 |
| Prouty, James R., Chicago, Ill. Fire-escape | 740,917 | Oct. 6 | 975 | 219, 220 | 106 | 1455 |
| Prouty, Theodore C., Midland, Mich. Sliding-door track and hanger | 725,135 | Apr. 14 | 1337 | 301, 302 | 103 | 1468 |
| Prouty, Theodore C., Albion, Mich. Track for rolling doors | 725,136 | Apr. 14 | 1339 | 302 | 103 | 1468 |
| Prouvost, Alphonse, Tourcoing, France. Spring-spoke for wheels | 722,432 | Mar. 10 | 1437 | 318 | 103 | 322 |
| Providence Gas Burner Company. (See Casey, Joseph E., assignor.) | | | | | | |
| Providence Engineering Works. (See Sargent, Rice, and Tourgee, assignors.) | | | | | | |
| Providence Tipping Machine Company. (See Dennis, John R., assignor.) | | | | | | |
| Provost, Peter, Menominee, Mich. Apparatus for steaming grain | 741,831 | Oct. 20 | 2765 | 617 | 106 | 1871 |
| Prugh, John H. (See Spence, Prugh, and Zimmer.) | | | | | | |
| Pruyn, Charles L., Albany, N. Y. Child's block | 738,570 | Sept. 8 | 2052 | 447 | 106 | 457 |
| Pryibil, Oscar, St. Louis, Mo. Game and game-table | 724,934 | Apr. 7 | 946 | 217 | 103 | 1372 |
| Przedecki, Josef and L., Breslau, Germany. Mouthpiece for cigars or cigarettes | 722,383 | Mar. 10 | 1350 | 298 | 103 | 303 |
| Przedecki, Ludwig. (See Przedecki, Josef and L.) | | | | | | |
| Psilander, Charles A. (See Knape, Charles, assignor.) | | | | | | |
| Psota, Anton, Westpoint, Nebr. Cultivator | 719,138 | Jan. 27 | 3092 | 687 | 102 | 698 |
| Puddefoot, Charles, assignor to Briscoe Manufacturing Company, Detroit, Mich. Can forming and seaming machine | 727,837 | May 12 | 1924 | 428, 429 | 104 | 427 |
| Puddefoot, Charles, assignor to Briscoe Manufacturing Company, Detroit, Mich. Corrugating-machine | 744,231 | Nov. 17 | 2843 | 608 | 107 | 636 |
| Puddington, Arthur W., assignor to United States Fuel-Saving and Smoke Consuming Company, Providence, R. I. Smoke-preventing furnace | 741,069 | Oct. 13 | 1259 | 285, 286 | 106 | 1536 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | Spec. | Dr'g. | Vol. | Page. |
| Puerner, Arthur D., assignor of one-third to T. G. Heine, Butte, Mont. Shoe | 725,771 | Apr. 21 | 2523 | 572 | 103 | 1736 |
| Puerner, Arthur D., and T. G. Heine, Butte, Mont. Channeling-tool | 738,355 | Sept. 8 | 1649 | 357 | 106 | 371 |
| Puffer, Alvin D., Jr. (See Shaw, Henry F., assignor.) | | | | | | |
| Puffer Manufacturing Company. (See Murphy, Edward E., assignor.) | | | | | | |
| Pugh, John V., Coventry, England. Fastening for wheels and cranks | 738,065 | Sept. 1 | 992 | 221 | 106 | 216 |
| Pugh, Milton E. (See Rettich and Pugh.) | | | | | | |
| Pugh, Milton E., Dayton, assignor to E. Rettich, Germantown, and G. Berger, Cincinnati, Ohio. Cigar-trimmer | 740,693 | Oct. 6 | 567 | 127 | 106 | 1369 |
| Pugh, William W., Washington, D. C. Cigar-case | 743,926 | Nov. 10 | 2190 | 472 | 107 | 483 |
| Pugsley, William S., London, Canada. Wire-fence machine | 738,356 | Sept. 8 | 1650 | 357 / 358 | 106 | 371 |
| Puhl, Albert J., Joliet, Ill. Cushion-tread horseshoe | 719,693 | Feb. 3 | 500 | 113 | 102 | 928 |
| Pulbrook, Anthony, Hammersmith, London, England. Elastic support for vehicles | 720,966 | Feb. 17 | 2883 | 660 | 102 | 1460 |
| Pullar, Charles, Hartford, Conn. Dumping-wagon | 722,896 | Mar. 17 | 2336 | 522 / 523 | 103 | 527 |
| Pullen, L. G. (See Smith, Joseph B., assignor.) | | | | | | |
| Pulliam, Jarrett T. (See Aikin and Pulliam.) | | | | | | |
| Pulliam, Oswald S., St. Louis, Mo. Car-coupling | 732,441 | June 30 | 5455 | 1211 | 104 | 2324 |
| Pulliam, Oswald S., St. Louis, Mo. Center sill for railway-cars | 732,442 | June 30 | 5456 | 1211 | 104 | 2324 |
| Pulman, Peter R., Washington, D. C. Cart and harness saddle | 734,471 | July 21 | 3274 | 769 | 105 | 724 |
| Puls, Charles H., Hoboken, N. J. Flooring or paving tile | 725,364 | Apr. 14 | 1745 | 393 | 103 | 1554 |
| Pulsifer, Harry B., assignor to Pulsifer & Larson Co., Worcester, Mass. Illuminated sign | 739,926 | Sept. 29 | 4613 | 1036 | 106 | 1053 |
| Pulsifer, James P., Philadelphia, assignor of two-thirds to F. J. Johns and J. N. Garrett, Scranton, Pa. Railway-switch | 746,644 | Dec. 8 | 2419 | 553 | 107 | 1640 |
| Pulsifer & Larson Co. (See Pulsifer, Harry B., assignor.) | | | | | | |
| Pulsometer Engineering Company. (See Adcock, Edward A., assignor.) | | | | | | |
| Pulsometer Engineering Company. (See Hodgkin and Pemberton, assignors.) | | | | | | |
| Pulsometer Engineering Company. (See Kenney, George E., assignor.) | | | | | | |
| Pulsometer Engineering Company. (See May, Walter, assignor.) | | | | | | |
| Pulver Chemical Manufacturing Company. (See Pulver, Frank F., assignor.) | | | | | | |
| Pulver, Frank F., Rochester, N. Y. Calendar | 725,869 | Apr. 21 | 2695 | 613 | 103 | 1773 |
| Pulver, Frank F., assignor, by mesne assignments, to Pulver Chemical Manufacturing Company, Rochester, N. Y. Vending-machine | 742,063 | Oct. 20 | 3242 | 726 | 106 | 1968 |
| Pulverized Coal Stoker Company. (See Baldwin, James E., assignor.) | | | | | | |
| Pumphrey, Edward M., Indianapolis, assignor of one-half to N. E. Loutt, Lawrence, Ind. Feed-box | 738,938 | Sept. 15 | 2771 | 614 | 106 | 627 |
| Purcell, Charles E. (See Trabue and Purcell.) | | | | | | |
| Purcell, John J., Allegheny, assignor to Lockhart Iron and Steel Company, McKees Rocks, Pa. Feed mechanism for rolling-mills | 719,694 | Feb. 3 | 501 | 113 | 102 | 928 |
| Purcell, Malcolm, assignor of one-half to H. Pfeffle, St. Louis, Mo. Nose-band for horses | 742,736 | Oct. 27 | 4505 | 1020 | 106 | 2245 |
| Purcell, Patrick, Providence, R. I. Yarn-guide-controlling mechanism for bobbin or cop builders | 726,570 | Apr. 28 | 4011 | 908 | 103 | 2053 |
| Purdin, Mahlon, and G. H. Haskins, Medford, Oreg. Apparatus for printing paper bags and wrapping-paper | 720,481 | Feb. 10 | 1958 | 447 | 102 | 1252 |
| Purdum, Samuel E., assignor of one-half to L. N. Rost, Macomb, Ill. Top-spinning toy spring-gun | 739,506 | Sept. 22 | 3804 | 852 | 106 | 864 |
| Purdy, Charles S., Somerville, Mass., assignor of one-half to Dutton & McLean. Hook | 718,216 | Jan. 13 | 1297 | 286 | 102 | 293 |
| Purdy, Corydon T., New York, N. Y. Furring | 741,412 | Oct. 13 | 1951 | 432 | 106 | 1683 |
| Purdy, Frank B., *et al.* (See Galbreath, Israel B., assignor.) | | | | | | |
| Purdy, Robert, Philadelphia, Pa. Combined cooking-stove and hot-water heater | 726,189 | Apr. 21 | 3250 | 738 | 103 | 1886 |
| Purper, Gustav, J. Moser, New York, and R. Boeklen, Brooklyn, N. Y. Gem cutting and polishing machine | 726,458 | Apr. 28 | 3762 | 853 | 103 | 2008 |
| Purrington, Charles, Plymouth, Conn. Blind or shutter hinge | 744,232 | Nov. 17 | 2845 | 608 | 107 | 637 |
| Pursell, Benjamin H., Napa Junction, Cal. Farm-gate | 745,663 | Dec. 1 | 631 | 147 | 107 | 1232 |
| Pursell, Harry D., Washington Court-House, Ohio. Frame for displaying drawings or prints | 740,466 | Oct. 6 | 160 | 32 | 106 | 1280 |
| Purves, John A. and W. T., Edinburgh, Scotland. Lighthouse or similar apparatus | 718,217 | Jan. 13 | 1299 | 286 | 102 | 294 |
| Purves, William T. (See Purves, John A. and W. T.) | | | | | | |
| Purvine, Smiley, Salem, Oreg. Farm-gate | 741,832 | Oct. 20 | 2767 | 617 | 106 | 1871 |
| Purvis, George H. (See Ellis and Purvis.) | | | | | | |
| Puschel, Paul H., Chicago, Ill. Sliding door | 728,008 | May 12 | 2241 | 499 | 104 | 494 |
| Puschnerus, Franz, Brooklyn, N. Y. Burglar-alarm | 717,921 | Jan. 6 | 761 | 171 | 102 | 163 |
| Pushaw, Charles P. (See McFarlane and Pushaw.) | | | | | | |
| Pusterla, Attilio, Philadelphia, Pa. Pleasure-waterway | 724,040 | Mar. 31 | 4466 | 1006 | 103 | 994 |
| Putman, John E. (See Winchel and Putman.) | | | | | | |
| Putnam, Douia C., Lyons, N. Y. Machine for sizing and crozing staves | 743,032 | Nov. 3 | 410 | 88, 89 | 107 | 86 |
| Putnam, Doura C., Lyons, N. Y. Propelling mechanism for boats | 718,156 | Jan. 13 | 1180 | 262 | 102 | 269 |
| Putnam, Israel C., assignor to himself and F. H. Comstock, East Hartford, Conn. Tobacco-lath | 741,163 | Oct. 13 | 1433 | 328 | 106 | 1571 |
| Putnam, William H., Wayne, Nebr. Coupling for traction-engines | 731,707 | June 23 | 4028 | 899 | 104 | 2011 |
| Putney, Charles G., *et al.* (See Barber, Cyrus, assignor.) | | | | | | |
| Putzeys, Jules E. C. I., Brussels, Belgium. Purifying water | 736,444 | Aug. 18 | 2616 | 574 | 105 | 1576 |
| Py, Georges, Paris, France. Treatment of peat fiber | 730,155 | June 2 | 1131 | 254 | 104 | 1357 |
| Pyburn, H. E. (See Gray, John W., assignor.) | | | | | | |
| Pye, Charles N., Stoughton, Mass. Last | 737,770 | Sept. 1 | 398 | 84 | 106 | 88 |
| Pyle, Abner W., Hopkinsville, Ky. Folding bed | 734,363 | July 21 | 3079 | 725 / 726 | 105 | 685 |
| Pyle Electric Headlight Company. (See Stogsdill and Schatz, assignors.) | | | | | | |
| Pyle, Howard L., Wilmington, Del. Acetylene-gas generator | 729,510 | May 26 | 4972 | 1102 | 104 | 1103 |
| Pyle-National Electric Headlight Company. (See Bayley, Harry P., assignor.) | | | | | | |
| Pym, Charles F., Essex, Canada. Last | 726,755 | Apr. 28 | 4366 | 982 | 103 | 2127 |
| Pynchon, Lauriston F. L., Philadelphia, Pa. Necktie-holder | 746,573 | Dec. 8 | 2284 | 524 | 107 | 1609 |
| Pyrisolith Isolating Material Manufacturing Company. (See Biehn, Hans, assignor.) | | | | | | |
| Pywell, Edwin F., assignor to Automatic Railway Mail Pouch Delivery Company, Washington, D. C. Apparatus for delivering mail from cars | 721,234 | Feb. 24 | 3447 | 783 / 784 | 102 | 1598 |
| Quaas, Edward E., assignor to V. W. Flowerree and J. B. Keister, Kansas City, Mo. Table | 739,618 | Sept. 22 | 4006 | 894 | 106 | 905 |
| Quackenbush, George, Brooklyn, N. Y. Adjustable bracket for curtain-poles | 732,652 | June 30 | 5851 | 1295 | 104 | 2410 |
| Quackenbush, John J., Lakeview, N. J. Blind-fastener | 729,892 | June 2 | 683 | 150 | 104 | 1267 |
| Quackenbush, Marshall G., Colorado Springs, Colo. Fluid-pressure coupling | 743,659 | Nov. 10 | 1716 | 362 / 363 | 107 | 382 |
| Quaker Shade Roller Company. (See Flagler, Claude, assignor.) | | | | | | |
| Qualey, John A. (See Ryder and Qualey.) | | | | | | |
| Quambusch, Arthur, Barmen, Germany. Coin-delivery apparatus | 729,794 | June 2 | 496 | 110 | 104 | 1229 |
| Quanonne, Gustave, Houdeng-Goegnies, Belgium. Air-ejecting apparatus for vessels | 725,137 | Apr. 14 | 1340 | 302 | 103 | 1469 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | Spec. | Des. | Vol. | Page. |
| Quarnberg, Andrew A., Vancouver, Wash. Fruit-drier | 740,588 | Oct. 6 | 400 | 84, 85 | 106 | 1331 |
| Quay, Carpenter J., Meadville, Pa. Train-order-holding device | 742,353 | Oct. 27 | 3823 | 856 | 106 | 2102 |
| Quedenfeldt, Erwin, Duisburg, assignor to Chemische Fabrik Greisheim Electron, Frankfort-on-the-Main, Germany. Manufacture of peroxid of lead | 734,950 | July 28 | 4180 | 973 | 105 | 928 |
| Queen, Joseph E., Stockerts, W. Va. Grip mechanism for operating sawmill set-wheels | 726,571 | Apr. 28 | 4014 | 908 | 103 | 2054 |
| Queen, William T., assignor to S. M. Marks, Anacostia, D. C. Machine for polishing cutlery | 726,100 | Apr. 21 | 3067 | 697 | 103 | 1850 |
| Quella, Joseph L. C., Menasha, Wis. Loading or unloading device | 717,617 | Jan. 6 | 170 | 42, 43 | 102 | 38 |
| Quenell, David D., Riparia, Wash. Rail-brace | 732,653 | June 30 | 5852 | 1296 | 104 | 2410 |
| Quern, John, Brooklyn, N. Y. Car-fender | 719,256 | Jan. 27 | 3298 | 738 | 102 | 741 |
| Quetsch, Otto H., Chicago, Ill. Holding and registering hook for color-plates, &c | 726,572 | Apr. 28 | 4015 | 909 | 103 | 2054 |
| Quick, Edgar, Columbus, Ga. Pump or filling device | 718,382 | Jan. 13 | 1597 | 352 | 102 | 357 |
| Quick, George, Bournemouth, England. Propeller | 724,935 | Apr. 7 | 947 | 218 | 103 | 1372 |
| Quick, Hiram M., assignor of one-half to H. B. King, Paterson, N. J. Engine-piston | 725,138 | Apr. 14 | 1344 | 303 | 103 | 1469 |
| Quickel, Allen E. (See Quickel, Edwin G. and A. E.) | | | | | | |
| Quickel, Edwin G. and A. E., York, Pa. Weeder | 731,219 | June 16 | 3100 | 687 | 104 | 1804 |
| Quiggle, Michael S., Owatonna, Minn. Cow or calf weaner | 728,291 | May 19 | 2782 | 617 | 104 | 632 |
| Quigley, William C., Marion, Ohio. Flat-wick lamp-burner | 736,545 | Aug. 18 | 2811 | 615 | 105 | 1619 |
| Quigley, William D. (See Gay and Quigley.) | | | | | | |
| Quigley, William D., and J. H. Gay, Newark, N. J. Leather-splitting machine | 718,655 | Jan. 20 | 2157 | 471, 472, 473 | 102 | 491 |
| Quigley, William D., and J. H. Gay, Newark, N. J. Sharpening device for moving knife-blades | 731,127 | June 16 | 2937 | 652, 653 | 104 | 1772 |
| Quigley, William D., and J. H. Gay, Newark, N. J. Sharpening device for moving knife-blades | 747,476 | Dec. 22 | 3986 | 897, 898 | 107 | 2028 |
| Quigley, William D., Newark, and J. H. Gay, East Orange, N. J. Spring-roll for leather-splitting machines | 727,838 | May 12 | 1926 | 429 | 104 | 428 |
| Quilling, Elias, Enterprise, Kans. Apparatus for forming circular trenches | 730,156 | June 2 | 1132 | 254, 255 | 104 | 1358 |
| Quilling, Julius W., Ursa, Ill. Combined carpet stretcher and tacker | 736,873 | Aug. 18 | 3449 | 765 | 105 | 1749 |
| Quimby, Albert G. (See Lewis, Shields, and Quimby.) | | | | | | |
| Quimby, Albert G. (See Lewis, Quimby, Harlow, and Shields.) | | | | | | |
| Quimby, Charles H., Philadelphia, Pa. Metal and concrete railway-tie | 748,307 | Dec. 29 | 5572 | 1271 | 107 | 2401 |
| Quimby, Henry G., Toledo, Ohio. Collar-button | 717,714 | Jan. 6 | 345 | 84 | 102 | 74 |
| Quin, Robert A., Shamokin, assignor of two-thirds to M. Williams, Wilkesbarre, W. R. Reinhardt, Shamokin, and I. D. West, Danville, Pa. Valve | 731,220 | June 16 | 3101 | 688 | 104 | 1804 |
| Quincy Electric Drill Company. (See Reinhalter, Peter, assignor.) | | | | | | |
| Quincy Elevator Gate Company. (See Fogal, John E. W., assignor.) | | | | | | |
| Quinlan, John J., Boston, Mass., assignor to United States Manufacturing Company. Wrench | 728,410 | May 19 | 2995 | 659 | 104 | 675 |
| Quinn, Charles C. (See Quinn, Charles J. and C. C.) | | | | | | |
| Quinn, Charles J. and C. C., Scranton, Iowa. Calf-weaner | 723,919 | Mar. 31 | 4211 | 948 | 103 | 944 |
| Quinn, Edwin L., Los Angeles, Cal. Joining metallic roofing-tiles | 721,967 | Mar. 3 | 590 | 132 | 103 | 129 |
| Quinn, James E., Stamford, Conn. Portable fire-escape | 731,708 | June 23 | 4029 | 899 | 104 | 2011 |
| Quinn, Martin, Blackrock, Ark. Tongs | 736,874 | Aug. 18 | 3451 | 765 | 105 | 1749 |
| Quinn, Michael, Milwaukee, Wis. Hat-die | 744,402 | Nov. 17 | 3153 | 677 | 107 | 704 |
| Quinn, Patrick H., Corydon, Pa. Railway-tie and rail-fastening | 739,217 | Sept. 15 | 3261 | 723 | 106 | 728 |
| Quinn, Thomas. (See Dix and Quinn.) | | | | | | |
| Quinn, Thomas J., *et al.* (See Perkins, George C., assignor.) | | | | | | |
| Quintal, Wilfred, Holyoke, Mass. Railway-switch | 720,067 | Feb. 10 | 1203 | 276, 277 | 102 | 1095 |
| Quirk, Thomas J., Buffalo, N. Y. Air-brake mechanism | 726,459 | Apr. 28 | 3765 | 853 | 103 | 2008 |
| Quirk, Thomas J., Buffalo, N. Y. Air-brake mechanism. (Reissue) | 12,158 | Sept. 22 | 4358 | 978 | 106 | 985 |
| Quirk, Thomas J., Buffalo, N. Y. Air-brake and signal system | 742,491 | Oct. 27 | 4062 | 913 | 106 | 2150 |
| Quisenberry, Edward A., Lexington, Va. Stove | 719,139 | Jan. 27 | 3093 | 687 | 102 | 699 |
| Quist, Thorvald O., Brooklyn, assignor to National Machine Company, Mamaroneck, N.Y. Cutter-controlling mechanism for buttonhole-sewing machines | 742,492 | Oct. 27 | 4065 | 913, 914 | 106 | 2151 |
| Quittmeyer, George E. (See Wiggins and Quittmeyer.) | | | | | | |
| R. Barrett & Son. (See Page, Robert W., assignor.) | | | | | | |
| R. Friedlander & Co. (See Friedlander, Theodor, assignor.) | | | | | | |
| R. Neumann Hardware Company. (See Goerk, Gustav, assignor.) | | | | | | |
| R. Wallace & Sons Mfg. Co. (See Allen, Charles E., assignor.) | | | | | | |
| R. A. Kelly Company. (See Chambliss, Smith G., assignor.) | | | | | | |
| R. E. Dietz Company. (See Betts, Charles L., assignor.) | | | | | | |
| R. F. Simmons Company. (See Baker, Henry R., assignor.) | | | | | | |
| R. F. Simmons Company. (See Smith, Ezra S., assignor.) | | | | | | |
| R. G. Marcy Mfg. Co. (See Schneider, Gottlieb, assignor.) | | | | | | |
| R. K. Le Blond Machine Tool Company. (See Le Blond and Groene, assignors.) | | | | | | |
| R. S. Newbold & Son Co. (See McCarter, Louis N., assignor.) | | | | | | |
| Raab, Edward H. (See Weisell, David D., assignor.) | | | | | | |
| Rabbe, William H., E. W. Harden, and M. E. Dempsey, Hamilton, Ohio. Spring rail-frog | 729,661 | June 2 | 247 | 57 | 104 | 1179 |
| Rabbeth, Francis J., Redlands, Cal. Means for connecting spools or bobbins to spindles | 729,095 | May 26 | 4263 | 942 | 104 | 953 |
| Rabbeth, Francis J., Redlands, Cal. Flier | 729,096 | May 26 | 4264 | 942 | 104 | 953 |
| Rabbeth, Francis J., Redlands, Cal. Spinning-spindle | 734,747 | July 28 | 3806 | 888 | 105 | 849 |
| Rabe, Hermann, St. Petersburg, Russia. Purifying gases containing sulfurous acid | 739,108 | Sept. 15 | 3074 | 682 | 106 | 688 |
| Rabe, Theodore, New Bremen, Ohio. Display-rack | 736,296 | Aug. 11 | 2361 | 513 | 105 | 1506 |
| Rabenalt, Gustav H., Buffalo, assignor to Gould Storage Battery Company, New York, N. Y. Battery-grid | 743,102 | Nov. 3 | 545 | 117 | 107 | 113 |
| Rabenowitz, Charles, Charleroi, Pa. Garment-support | 719,368 | Jan. 27 | 3523 | 785 | 102 | 791 |
| Rabie, Zéphire, Two Harbors, Minn. Saw | 735,586 | Aug. 4 | 1061 | 225 | 105 | 1206 |
| Rabiger, Emil H. and R. G., Philadelphia, Pa. Cutting-tool for lathes | 727,440 | May 5 | 1151 | 252 | 104 | 249 |
| Rabiger, Robert G. (See Rabiger, Emil H. and R. G.) | | | | | | |
| Rabin, Frederick P., Colma, Cal. Display-holder for ladies' hats | 748,008 | Dec. 29 | 5024 | 1134 | 107 | 2283 |
| Rabone, Frank, Birmingham, England. Bangle-fastening | 748,417 | Dec. 29 | 5769 | 1316 | 107 | 2446 |
| Raby, Richard, assignor of two-thirds to M. G. Collins and C. C. Frick, York, Pa. Combined curb and conduit | 746,153 | Dec. 8 | 1546 | 346 | 107 | 1450 |
| Racine Machinery Manufacturing Company. (See Foster, William S., assignor.) | | | | | | |
| Racine Paper Goods Company. (See Parmenter, Orville L., assignor.) | | | | | | |
| Radax Pneumatic Tyre Company. (See Johnstone, Lewis, assignor.) | | | | | | |
| Radcliffe, Carlton R. (See Riotte and Radcliffe.) | | | | | | |
| Radcliffe, Charles H., Elgin, Ill. Water-gun | 740,371 | Sept. 29 | 5426 | 1222 | 106 | 1223 |
| Radcliffe, Harry M., Irvington, N. J. Automatic feed for button-attaching or other machines | 740,177 | Sept. 29 | 5068 | 1139, 1140 | 106 | 1150 |
| Radcliffe, James, Herne Hill, London, England. Drying apparatus | 723,547 | Mar. 24 | 3531 | 790 | 103 | 783 |

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| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | Spec. | Drg. | Vol. | Page. |
| Radebaugh, Joseph F., Danville, Ill. Fly-wheel | 737,477 | Aug. 25 | 4566 | 1023 1024 | 105 | 2007 |
| Radebaugh, Joseph F., Danville, Ill. Fly-wheel | 742,737 | Oct. 27 | 4506 | 1020 | 106 | 2245 |
| Rademacher, Frank. (See George and Rademacher.) | | | | | | |
| Rademacher, Frank, assignor of one-half to J. Maier and G. Zobelein, Los Angeles, Cal. Apparatus for broiling meat or flesh of animals or other foodstuffs | 722,897 | Mar. 17 | 2337 | 523 | 103 | 527 |
| Rademacher, Peter, Kaukauna, Wis. Gas-light controller | 743,191 | Nov. 3 | 711 | 156 | 107 | 148 |
| Rader, August C., Montclair, N. J. Mold for making partition-blocks | 719,867 | Feb. 3 | 815 | 190 191 | 102 | 995 |
| Rader, Gustave, Montclair, N. J. Partition for mold-flasks | 725,481 | Apr. 14 | 1972 | 444 | 103 | 1602 |
| Radick, Emil C., Menasha, Wis. Armor for pneumatic tires | 741,714 | Oct. 20 | 2562 | 570 | 106 | 1827 |
| Radnedge, William S., Paducah, Ky. Garment-supporter | 719,369 | Jan. 27 | 3524 | 785 | 102 | 791 |
| Radovanovic, Andreas, Zurich, Switzerland. Pump | 722,142 | Mar. 3 | 882 | 197 | 103 | 189 |
| Radtke, Arthur R., Beaverdam, Wis. Composition for destroying and removing carbon or soot from stoves, ranges, &c | 728,176 | May 12 | 2544 | ------ | 104 | 559 |
| Rady, John, Blue Island, Ill., assignor to Gilbert & Bennett Manufacturing Company, Georgetown, Conn. Wire-netting machine | 726,342 | Apr. 28 | 3557 | 806 | 103 | 1966 |
| Rae, Frank B. assignor to J. A. Roche, Chicago, Ill. Electric elevator | 728,292 | May 19 | 2783 | 617 | 104 | 632 |
| Rae, John C., *et al.* (See Bentley, Thomas, assignor.) | | | | | | |
| Raemisch, Henry D., Newark, N. J. Self-heating sad-iron | 726,343 | Apr. 28 | 3559 | 806 807 | 103 | 1966 |
| Raettig, Alfred W. H., New London, Wis. Wood-carving machine | 733,744 | July 14 | 1851 | 437 438 | 105 | 407 |
| Rafael, Manuel E., *et al.* (See Palmer, Alfred E., assignor.) | | | | | | |
| Raferty, Thomas J. (See Weber, Cyrus J., assignor.) | | | | | | |
| Rafferty, William C., Governors Island, N. Y. Depression-position finder | 720,844 | Feb. 17 | 2637 | 609 610 | 102 | 1408 |
| Raflovich, Gus H., Boston, Mass. Tire | 728,009 | May 12 | 2243 | 499 | 104 | 495 |
| Rafter, Joseph J , assignor of one-half to R. S. Peck, Hartford, Conn. Inking-roller | 741,275 | Oct. 13 | 1658 | 374 | 106 | 1619 |
| Ragland, William A., Texarkana, Ark. Land-index | 733,677 | July 14 | 1742 | 412 | 105 | 384 |
| Ragot, Henry, Brunswick, assignor of fifty-one one-hundredths to H. L. Shepherd, Rockport, Me. Limekiln | 724,936 | Apr. 7 | 949 | 218 | 103 | 1372 |
| Ragot, Jules, and H. Tourneur, Paris, France. Mixing apparatus for sugar | 736,875 | Aug. 18 | 3453 | 765 766 | 105 | 1750 |
| Raht, C. A. (See Weeks, Samuel V., assignor.) | | | | | | |
| Rahtjen, Arnold, Hamburg, Germany. Making brom indigo | 729,217 | May 26 | 4484 | ------ | 104 | 1000 |
| Railroad Supply Company. (See Jones, Willis S., assignor.) | | | | | | |
| Railton, John, Cheboygan, assignor to I. Mayer, Detroit, Mich. Truss | 731,709 | June 23 | 4031 | 900 | 104 | 2011 |
| Railton, William, and R. Campbell, assignors of one-third to J. F. Crawford, Liverpool, England. Furnace | 728,411 | May 19 | 2996 | 659 | 104 | 676 |
| Railway Appliance Company. (See Sill, John J., assignor.) | | | | | | |
| Railway Appliances Company. (See Thompson, James S., assignor.) | | | | | | |
| Railway-Commercial Cabinet and File Company. (See Athey, Isaac H., assignor.) | | | | | | |
| Railway Journal Lubricating Company *et al* (See Busenbenz and Lange, assignors.) | | | | | | |
| Railway & Stationary Refrigerating Company. (See Palmer, Cassius C., assignor.) | | | | | | |
| Railway Steel Spring Company. (See Naylor, Thomas A., assignor.) | | | | | | |
| Rainess, Abraham, New York, N. Y. Device for securing pins | 739,756 | Sept. 22 | 4255 | 953 | 106 | 961 |
| Rainforth, William. (See Lane and Rainforth.) | | | | | | |
| Rainforth, William, Upper Armley, Leeds, England. Apparatus for the manufacture of corrugated furnaces | 743,192 | Nov. 3 | 713 | 156 157 | 107 | 149 |
| Rainforth, William, Upper Armley, Leeds, England. Manufacturing corrugated furnace flues or tubes | 743,193 | Nov. 3 | 720 | 157 158 | 107 | 150 |
| Rains, Jesse H., McPherson, Kans. Band-cutter and self-feeder | 721,740 | Mar. 3 | 152 | 35, 36 | 103 | 34 |
| Rait, David, Jr., Larchmont Manor, N. Y. Bouquet-holder | 740,178 | Sept. 29 | 5071 | 1140 | 106 | 1150 |
| Raitz, Gustave E., Toledo, Ohio. Rail-chair | 739,026 | Sept. 15 | 2906 | 645 | 106 | 655 |
| Rakowitzky, Selman S. D. (See Rakowitzky, Srul D. S. and S. S. D.) | | | | | | |
| Rakowitzky, Srul D. S. and S. S. D., Vilna, Russia, assignors, by mesne assignments, to American Tobacco Company, New York, N. Y. Machine for making cigarette-wrappers with mouthpieces | 721,087 | Feb. 17 | 3104 | 713 714 | 102 | 1510 |
| Ralph, Stephen H., Marion, Ind. Low-water alarm for steam-boilers | 724,613 | Apr. 7 | 368 | 88, 89 | 103 | 1248 |
| Ralston, Gavin C., London, assignor to J. Stone and Company, Deptford, England. Mechanism for operating bulkhead or other doors | 733,745 | July 14 | 1855 | 438 439 | 105 | 408 |
| Ralston, John B., Rockford, Ill. Eaves-trough | 737,138 | Aug. 25 | 3916 | 870 | 105 | 1867 |
| Ralston, William L., Westchester, Iowa. Telephone cut-out | 744,103 | Nov. 17 | 2584 | 552 | 107 | 580 |
| Ramacciotti, Albert D., New York, N. Y. Bass string for pianos or other musical instruments | 740,918 | Oct. 6 | 978 | 220 | 106 | 1455 |
| Ramage, Alexander S., Cleveland, Ohio. Producing from milk a food product | 730,702 | June 9 | 2148 | ------ | 104 | 1589 |
| Ramage, Alexander S., Cleveland, Ohio. Producing lactose from whey | 730,703 | June 9 | 2149 | ------ | 104 | 1589 |
| Ramage, Alexander S., Cleveland, Ohio. Producing food products from whey | 735,148 | Aug. 4 | 205 | ------ | 105 | 1026 |
| Ramage, Alexander S., Cleveland, Ohio. Producing food products | 735,149 | Aug. 4 | 206 | ------ | 105 | 1026 |
| Ramage, Alexander S., Cleveland, Ohio. Pigment and producing it | 739,444 | Sept. 22 | 3703 | ------ | 106 | 840 |
| Rambeaud, René F. C., Parthenay, France. Coupling for railway-wagons or the like | 726,825 | Apr. 28 | 4490 | 1012 1013 | 103 | 2152 |
| Ramsay, Allan, assignor to E. E. Hendrick, Carbondale, Pa. Bearing | 717,715 | Jan. 6 | 346 | 84 | 102 | 75 |
| Ramsay, Erskine, Birmingham, Ala. Car handling and dumping device | 721,089 | Feb. 17 | 3116 | 715 716 717 | 102 | 1512 |
| Ramsay, Erskine, Birmingham, Ala. Self-oiling wheel | 722,044 | Mar. 3 | 724 | 161 | 103 | 156 |
| Ramsay, Erskine, and J. J. Shannon, Birmingham, Ala. Furnace charging, controlling, and distributing mechanism | 721,088 | Feb. 17 | 3112 | 714 715 | 102 | 1511 |
| Ramsay, George S., St. Marys, Pa. Coke-oven | 733,872 | July 14 | 2117 | 499 | 105 | 461 |
| Ramsay, Thomas, Invercargill, New Zealand. Ruler | 719,257 | Jan. 27 | 3299 | 739 | 102 | 741 |
| Ramsay, Thomas M., Thorndale, Canada. Adjustable driver's seat | 746,154 | Dec. 8 | 1548 | 346 | 107 | 1451 |
| Ramsay, William A. (See Hall and Ramsay.) | | | | | | |
| Ramsear, William H., Cornwall-on-the-Hudson, N. Y. Brake for baby-carriages | 717,922 | Jan. 6 | 764 | 171 | 102 | 163 |
| Ramsdell, Alonzo, Chicago, Ill. Alloy and making same | 735,819 | Aug. 11 | 1500 | ------ | 105 | 1319 |
| Ramsdell, Chauncey, Forestville, N. Y. Threshing-machine and grain-separator | 734,241 | July 21 | 2846 | 667 | 105 | 636 |
| Ramsdell, Frederick M., Worcester, Mass. Steam-boiler | 719,140 | Jan. 27 | 3094 | 688 | 102 | 699 |
| Ramsdell, Joshua, Springfield, assignor to T. C. McClure, New York, N. Y. Producing surfaces for color-printing | 742,354 | Oct. 27 | 3824 | ------ | 106 | 2102 |
| Ramsden, Thomas H., Bramhope, near Leeds, England. Apparatus in connection with sewage or like tanks | 733,746 | July 14 | 1859 | 439 440 | 105 | 409 |
| Ramsey, Deloss, Jamestown, Kans. Band-cutter and feeder | 731,498 | June 23 | 3640 | 812 | 104 | 1935 |
| Ramsey, James F., Dover, N. H. Bridle for piano-actions | 737,961 | Sept. 1 | 811 | 178 | 106 | 178 |
| Ramsey, John W. (See Conkle, Samuel, assignor.) | | | | | | |
| Ramsey, Joseph, *et al.* (See Teamer, William H. B., assignor.) | | | | | | |
| Ramsey, Joseph A., Beatrice, Nebr. Combined door-closer and insect-excluder | 718,581 | Jan. 13 | 2038 | 443 | 102 | 453 |

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| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| Ramsey, Samuel C., Evans City, Pa. Nut-lock | 748,009 | Dec. 29 | 5024 | 1134 | 107 | 2283 |
| Ramsey, W. A., *et al.* (See Williams, Jackson, assignor.) | | | | | | |
| Ramsey, Wade H., Wedgefield, S. C. Combined rule and blotter | 717,618 | Jan. 6 | 171 | 43 | 102 | 38 |
| Ramsey, William. (See Pelton and Ramsey.) | | | | | | |
| Rancoule, Louis, Paris, France. Combined camera, stereoscope, and opera-glass | 728,977 | May 26 | 4054 | 899 | 104 | 911 |
| Rancourt, Napoleon W., assignor of one-half to O. Rancourt, Lewiston, Me. Lewis-bolt | 718,582 | Jan. 13 | 2041 | 443 | 102 | 454 |
| Rancourt, Odule. (See Rancourt, Napoleon W., assignor.) | | | | | | |
| Rand, Charles A. A., assignor to Deering Harvester Company, Chicago, Ill. Draft device for harvesters | 721,525 | Feb. 24 | 3964 | 903 | 102 | 1707 |
| Rand, Charles A. A., Chicago, Ill., assignor to International Harvester Company. Reel-rake for reapers | 741,715 | Oct. 20 | 2564 | 570, 571 | 106 | 1827 |
| Rand, Charles A. A., Chicago, Ill., assignor to International Harvester Company. Grain-binder | 746,155 | Dec. 8 | 1549 | 347 | 107 | 1451 |
| Rand Drill Company. (See Conrad, Hugh V., assignor.) | | | | | | |
| Rand, George C., Dickey, N. D. Attachment for smoke-stacks | 744,403 | Nov. 17 | 3155 | 677 | 107 | 705 |
| Rand, Jackson A., Hickory Grove, and W. H. Castles, Mayhews Station, Miss. Motor-wheel | 726,344 | Apr. 28 | 3562 | 807 | 103 | 1967 |
| Rand, James H., North Tonawanda, N. Y. Card-index | 730,399 | June 9 | 1591 | 355 | 104 | 1468 |
| Rand, James H., North Tonawanda, N. Y. Stop-payment check-register | 737,478 | Aug. 25 | 4568 | 1024 | 105 | 2008 |
| Rand, James H., North Tonawanda, N. Y. Account-book | 746,156 | Dec. 8 | 1552 | 347 | 107 | 1452 |
| Rand, James H., North Tonawanda, N. Y. Bank-ledger or similar book | 746,157 | Dec. 8 | 1555 | 348 | 107 | 1452 |
| Rand, James H., Newtonville, Mass. Account-book | 744,793 | Nov. 24 | 3857 | 831 | 107 | 870 |
| Rand, Oscar R., Jr., Smithfield, N. C. Heater and steam-generator | 733,747 | July 14 | 1862 | 440 | 105 | 419 |
| Rand, William B. (See Burnham, Arthur M., assignor.) | | | | | | |
| Randall, George M., *et al.* (See Wackerow, George L., assignor.) | | | | | | |
| Randall, Henry G., Bridgeport, Conn., assignor to W. A. Sweetzer and H. S. Elliott, New York, N. Y. Ice-making machine | 734,748 | July 28 | 3808 | 888 | 105 | 849 |
| Randall, John E., Malden, assignor of one-half to T. S. Very, trustee, Boston, Mass. Boot or shoe | 725,009 | Apr. 7 | 1098 | 249, 250 | 103 | 1403 |
| Randall, Karl C. (See Peck and Randall.) | | | | | | |
| Randall, Lucius R., Elza, Ga. Combined cultivator, cotton-planter, and fertilizer-distributer | 733,873 | July 14 | 2121 | 500 | 105 | 462 |
| Randall, Lucius R., Elza, Ga. Shovel-plow | 735,297 | Aug. 4 | 504 | 101 | 105 | 1088 |
| Randall, Victor E., Burlington, Mich. Fence-post | 731,612 | June 23 | 3860 | 860 | 104 | 1977 |
| Randall, William G., Greensboro, N. C., assignor of twenty-five one-hundredths to O. E. Edwards, Jr., New York, N. Y. Ocular camera | 730,965 | June 16 | 2622 | 584 | 104 | 1709 |
| Randel, Ivar A. (See Field and Randel.) | | | | | | |
| Randel, Ivar A., Berwick, Pa., assignor to American Car & Foundry Company, St. Louis, Mo. Hopper-bottom car | 719,868 | Feb. 3 | 816 | 191, 192 | 102 | 995 |
| Randle, Alexander E., Grayville, Ill. Door-hanger | 726,190 | Apr. 21 | 3252 | 738 | 103 | 1887 |
| Randle, Edwin T., Springfield, Mo. Account-file | 735,907 | Aug. 11 | 1667 | 355 | 105 | 1355 |
| Randolph, Alfred, assignor to W. J. Clark Company, Salem, Ohio. Post-cap | 734,192 | July 21 | 2761 | 648 | 105 | 616 |
| Randolph, Amandus H., Corry, Pa. Dumping-wagon | 739,715 | Sept. 22 | 4190 | 937 | 106 | 946 |
| Randolph, Charles A. F., *et al.* (See Kelley, Charles C., assignor.) | | | | | | |
| Randolph, Leonard M., Newark, N. J. Rail-insulator | 747,477 | Dec. 22 | 3988 | 898 | 107 | 2028 |
| Randolph, Oliver W., McClure, Ohio. Incubator | 736,015 | Aug. 11 | 1871 | 400 | 105 | 1400 |
| Ranger, John N., Evansville, Ind. Hypodermic syringe | 720,381 | Feb. 10 | 1792 | 406 | 102 | 1218 |
| Rangnow, Otto, Philadelphia, Pa. Trunk-tray lift | 725,870 | Apr. 21 | 2696 | 613 | 103 | 1773 |
| Rank, Harry W., McDonald, Pa. Pneumatic balancing rope-tension attachment | 719,370 | Jan. 27 | 3525 | 785 | 102 | 791 |
| Rank, Harry W., McDonald, Pa. Pneumatic well-drilling apparatus | 719,371 | Jan. 27 | 3527 | 786 | 102 | 791 |
| Rankin, Arthur, *et al.* (See Jones, Frederick A., assignor.) | | | | | | |
| Rankin, Daniel W. (See Horne, Edward G., assignor.) | | | | | | |
| Rankin, Thomas I., assignor to Abram Cox Stove Company, Philadelphia, Pa. Gas heating apparatus for cooking stoves or ranges | 718,793 | Jan. 20 | 2423 | 537 | 102 | 545 |
| Rankin, Thomas L., Sacket Harbor, N. Y. Apparatus for treating ores | 727,441 | May 5 | 1152 | 252, 253, 254 | 104 | 249 |
| Ranney, Joseph B., Bellefontaine, Ohio. Poultry-brooder | 730,296 | June 9 | 1410 | 309 | 104 | 1431 |
| Ransdell, John B., *et al.* (See Hall, Joel B., assignor.) | | | | | | |
| Rantine, Daniel W., Brooklyn, N. Y. Steering apparatus | 719,869 | Feb. 3 | 820 | 192 | 102 | 997 |
| Rantine, Daniel W., New York, N. Y. Rotary valve | 746,574 | Dec. 8 | 2286 | 524 | 107 | 1609 |
| Ranz, Jacob, assignor of one-third to A. Vogler, St. Louis, Mo. Bed-bottom | 732,112 | June 30 | 4798 | 1070 | 104 | 2187 |
| Raper, Alfred, Battlecreek, Mich. Metal fastener | 734,951 | July 28 | 4182 | 973 | 105 | 928 |
| Raphael, Robert H., Los Angeles, Cal. Bar for holding together portions of sheets of glass or other materials | 732,028 | June 23 | 4629 | 1035 | 104 | 2139 |
| Rapley, Frederick H., Allegheny, assignor to Pressed Steel Car Company, Pittsburg, Pa. Railway-car | 732,113 | June 30 | 4801 | 1070, 1071 | 104 | 2188 |
| Rapp, John W., New York, N. Y. Studding | 717,923 | Jan. 6 | 765 | 171 | 102 | 164 |
| Rapp, John W., New York, N. Y. Fire-extinguishing apparatus | 733,421 | July 14 | 1301 | 307 | 105 | 292 |
| Rapp, John W., New York, N. Y. Fireproof window-sash | 738,939 | Sept. 15 | 2771 | 614 | 106 | 627 |
| Rapp, Oscar, *et al.* (See Nordstrom, Axel, assignor.) | | | | | | |
| Rapson, Frederick W., Badaxe, Mich. Pea-harvester | 722,326 | Mar. 10 | 1245 | 277 | 103 | 281 |
| Rarden, Joseph. (See Blank, Charles B., assignor.) | | | | | | |
| Rariden, Orville W., *et al.* (See Dameron, Warren P., assignor.) | | | | | | |
| Rarie, Calvin W. (See Whitlock, William, assignor.) | | | | | | |
| Rasch, William G., assignor to Burlington Blanket Company, Burlington, Wis. Fastening attachment | 730,400 | June 9 | 1593 | 355 | 104 | 1468 |
| Raschig, Carl, Berlin, Germany. Gilding-machine | 747,639 | Dec. 22 | 4295 | 965 | 107 | 2099 |
| Rasck, George P., Des Moines, Iowa. Tank-lug | 744,794 | Nov. 24 | 3859 | 831 | 107 | 871 |
| Rashkin, Joseph, New York, N. Y. Mechanism for opening or closing gates of elevator-wells | 745,384 | Dec. 1 | 129 | 29, 30 | 107 | 1128 |
| Rasmussen, Andrew, assignor of one-half to H. F. Herrick, Racine, Wis. Conveyer-belt and fastener therefor | 744,979 | Nov. 24 | 4189 | 906 | 107 | 939 |
| Rasmussen, Carl C., Harlan, and H. P. Rasmussen, Callender, Iowa. Automatic circuit opener or closer for electric bells, &c | 725,010 | Apr. 7 | 1100 | 250 | 103 | 1404 |
| Rasmussen, Charles, Racine, Wis. Conveyer | 745,739 | Dec. 1 | 759 | 173 | 107 | 1260 |
| Rasmussen, Hans P. (See Rasmussen, Carl C. and H. P.) | | | | | | |
| Rasmussen, Paul A., Beresford, S. D. Ironing-board | 745,907 | Dec. 1 | 1095 | 245 | 107 | 1332 |
| Rasmussen, Peter, assignor of one-third to J. Russell, Iron Mountain, Mich. Grapple | 726,826 | Apr. 28 | 4491 | 1013 | 103 | 2153 |
| Rasmussen, Rasmus P., Integral, Cal. Miner's candlestick | 738,571 | Sept. 8 | 2053 | 447 | 106 | 457 |
| Rasmussen, Richardt V. E., Emdrup, Denmark. Double plow | 728,010 | May 12 | 2245 | 499 | 104 | 495 |
| Rast, John H. Charleston, S. C. Bicycle-seat-post clamp | 718,528 | Jan. 13 | 1914 | 420 | 102 | 427 |
| Rastall, Benjamin, Viola, Wis. Flood-gate | 729,962 | June 2 | 811 | 181 | 104 | 1292 |
| Raster, Edwin O. (See Raster, Walther, assignor.) | | | | | | |
| Raster, Walther, assignor of one-half to E. O. Raster, Chicago, Ill. Garbage or other receptacle | 721,604 | Feb. 24 | 4127 | 939 | 102 | 1743 |

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| Ratchford, John. (See Platt and Ratchford.) | | | | | | |
| Ratcliff, Moses C., Muncie, Ind. Bread, meat, or vegetable slicer | 720,617 | Feb. 17 | 2267 | 520 | 102 | 1329 |
| Ratcliffe, Henry T. (See Hipple and Ratcliffe.) | | | | | | |
| Rateau, Auguste C. E., Paris, France. Mechanical ventilation of electric machines | 730,401 | June 9 | 1594 | 355, 356 | 104 | 1469 |
| Rateau, Auguste C. E., Paris, France. Centrifugal pump | 730,842 | June 9 | 2372 | 524 | 104 | 1637 |
| Rateau, Auguste C. E., Paris, France. Centrifugal pump | 742,231 | Oct. 27 | 3596 | 804, 805 | 106 | 2054 |
| Rateau, Auguste C. E., and G. Sautter, Paris, France. Multicellular turbine | 748,216 | Dec. 29 | 5415 | 1232, 1233 | 107 | 2367 |
| Rath, Jay H., New York, N. Y., assignor to Rath Light Company, Wilmington, Del. Gas-burner | 739,558 | Sept. 22 | 3883 | 870 | 106 | 879 |
| Rath, John A., Jackson, Mich. Harp | 744,104 | Nov. 17 | 2585 | 552 | 107 | 580 |
| Rath, John A., Jackson, Mich. Harp | 744,105 | Nov. 17 | 2587 | 552 | 107 | 581 |
| Rath Light Company. (See Rath, Jay H., assignor.) | | | | | | |
| Rath, Michael, Two Rivers, Wis. Hoisting device | 727,442 | May 5 | 1156 | 254, 255 | 104 | 250 |
| Rathbone, Alfred D., Jr. (See Cummings, John, assignor.) | | | | | | |
| Rathbun, Frank W., assignor to G. C. Dallamore, San Francisco, Cal. Sewer-gas and backwater trap and tide and flushing gate | 733,748 | July 14 | 1863 | 441 | 105 | 410 |
| Rathbun, George J., Toledo, Ohio. Gas-engine electric igniter | 746,377 | Dec. 8 | 1949 | 445 | 107 | 1534 |
| Rathbun, Henry E., and W. H. Lonergan, assignors to International Burglar Proof Sash Balance and Lock Company, Incorporated, Providence, R. I. Sash-balance | 737,867 | Sept. 1 | 605 | 132, 133 | 106 | 133 |
| Rathmell, Leonard V., Columbus, Ohio. Nut-lock | 722,751 | Mar. 17 | 2066 | 462 | 103 | 473 |
| Ratican, William. (See Murphy, Thomas M., assignor.) | | | | | | |
| Ratignier, Marius, and M. Clerc-Renaud, Lyons, France. Machine for finishing fabrics | 727,443 | May 5 | 1157 | 255 | 104 | 250 |
| Rattenbury, William H. (See Frantzen and Rattenbury.) | | | | | | |
| Raub, Mahlon J. (See Mackey and Raub.) | | | | | | |
| Rauber, Jacob. (See Farrell, William A., assignor.) | | | | | | |
| Rauch, Philip, Bradford, Pa. Noise-muffler | 734,749 | July 28 | 3809 | 888, 889 | 105 | 850 |
| Raudnitz & Pollitz. (See Greenbaum and Kroll, assignors.) | | | | | | |
| Rauh, Leopold. (See Yoe, Philip, assignor.) | | | | | | |
| Rauhauser, Louis, Brooklyn, N. Y. Steam-generator | 739,445 | Sept. 22 | 3704 | 824, 825 | 106 | 841 |
| Rauhauser, Louis, Brooklyn, N. Y. Hand-hole plate | 739,790 | Sept. 22 | 4325 | 969 | 106 | 977 |
| Raulet, Louis V., *et al.* (See Benke, Charles A., assignor.) | | | | | | |
| Raum, George W., Greenville, Tex. Display-stand for doors, &c | 739,027 | Sept. 15 | 2907 | 645 | 106 | 655 |
| Rauschenberg, Owen N., Birmingham, Ala. Gas-reversing valve | 723,801 | Mar. 24 | 3971 | 895 | 103 | 877 |
| Rauschenberg, Owen N., Birmingham, Ala. Pinion-housing for rolling-mills | 728,615 | May 19 | 3398 | 752 | 104 | 761 |
| Raven, Levi A. (See Ruggles and Hower, assignors.) | | | | | | |
| Ravich, Nathan, Pittsburg, Pa. Overalls or nether garment | 724,204 | Mar. 31 | 4800 | 1076 | 103 | 1062 |
| Ravlin, Frederick J., Chicago, Ill. Junction-box, conduit, and electric-wiring mechanism | 737,661 | Sept. 1 | 186 | 39, 40 | 106 | 43 |
| Rawles, John, East Galesburg, assignor of two-thirds to W. D. Godfrey and S. R. Hazen, Galesburg, Ill. Street-car fender | 724,937 | Apr. 7 | 951 | 219 | 103 | 1373 |
| Rawlings, Samuel, Kearney, N. J. Impact water-meter | 740,919 | Oct. 6 | 979 | 220 | 106 | 1456 |
| Rawson, Edward, Moscow, Idaho. Driving-gear for automobiles | 720,967 | Feb. 17 | 2885 | 660 | 102 | 1460 |
| Rawson, George O., and G. W. Atterbury, assignors to W. S. Elliott, Pittsburg, Pa. Tube-cleaner | 717,619 | Jan. 6 | 172 | 43, 44 | 102 | 38 |
| Rawson & Morrison Manufacturing Company. (See Norris, Almon E., assignor.) | | | | | | |
| Rawson & Morrison Manufacturing Company. (See Norris, Almon E., assignor.) (Reissue.) | | | | | | |
| Rawstron, Donald, Harvey, assignor to J. F. Hill, Chicago, Ill. Brake-shoe | 725,587 | Apr. 14 | 2156 | 489 | 103 | 1643 |
| Rawstron, Donald, Harvey, and H. Rawstron, assignors to J. F. Hill, Chicago, Ill. Brake-shoe | 717,620 | Jan. 6 | 174 | 44 | 102 | 39 |
| Rawstron, Henry. (See Rawstron, Donald and H.) | | | | | | |
| Ray, Albert D., assignor to Ray Automatic Machine Co., Cleveland, Ohio. Fastening for fenders | 726,345 | Apr. 28 | 3564 | 807 | 103 | 1967 |
| Ray Automatic Machine Co. (See Ray, Albert D., assignor.) | | | | | | |
| Ray, Forest A., assignor to Standard Light Company, Boston, Mass. Burner | 735,298 | Aug. 4 | 505 | 101 | 105 | 1088 |
| Ray, Forest A., assignor to Standard Light Company, Boston, Mass. Apparatus for increasing and regulating gas-pressure | 743,103 | Nov. 3 | 546 | 117 | 107 | 114 |
| Ray, Frank A., Columbus, Ohio. Self-dumping mine-cage | 719,258 | Jan. 27 | 3301 | 739 | 102 | 742 |
| Ray, Gabriel F., Meeker, Colo. Heating apparatus for vehicles | 736,633 | Aug. 18 | 2988 | 657 | 105 | 1653 |
| Ray, Henry T., Forsythe, Ill. Wagon | 744,980 | Nov. 24 | 4190 | 906 | 107 | 939 |
| Ray, James A., Wichita, Kans. Boiler-cleaner and water-purifier | 726,346 | Apr. 28 | 3565 | 807 | 103 | 1968 |
| Ray, James K. S., and W. D. McNeill, Whitmire, S. C. Dry valve | 719,259 | Jan. 27 | 3302 | 739 | 102 | 742 |
| Ray, James P., Grand Rapids, Mich. Locking device for wrenches, clamps, &c | 741,716 | Oct. 20 | 2568 | 572 | 106 | 1828 |
| Ray, Laura T. (See Jones, Lilian B., assignor.) | | | | | | |
| Ray, Miles H. (See Richardson, Frederick, assignor.) | | | | | | |
| Rayburn, Charles, Visalia, Cal. Fruit-grader | 726,756 | Apr. 28 | 4369 | 982, 983 | 103 | 2127 |
| Rayburn, Charles, Lindsay, Cal. Apparatus for sorting and distributing fruit | 741,928 | Oct. 20 | 2958 | 659 | 106 | 1911 |
| Raymond, Albert, deceased, Chicago, Ill.; M. M. Bartelme, administratrix. Journal-bearing | 737,962 | Sept. 1 | 812 | 178, 179 | 106 | 178 |
| Raymond, Alfred A., Chicago, Ill. Truss | 724,500 | Apr. 7 | 147 | 35 | 103 | 1201 |
| Raymond, Alfred A., Chicago, Ill. Railway-tie | 738,940 | Sept. 15 | 2772 | 614 | 106 | 627 |
| Raymond, Alphonso, T. Lowther, and D. Perry, Bobrik, Russia. Incrustation preventive and method of manufacture | 724,331 | Mar. 31 | 5052 | ..... | 103 | 1113 |
| Raymond, Austin H., Kellogg, Iowa. Cooking utensil | 731,613 | June 23 | 3861 | 860 | 104 | 1977 |
| Raymond Button Company of Baltimore City. (See Gwinn and Smith, assignors.) | | | | | | |
| Raymond, Charles M., and L. E. Hoffman, Cleveland, Ohio. Steam-boiler | 725,772 | Apr. 21 | 2524 | 572 | 103 | 1736 |
| Raymond, Charles W., Dayton, Ohio, and D. Brown, Chicago, Ill. Brick-cutting machine | 723,181 | Mar. 17 | 2835 | 637 | 103 | 632 |
| Raymond, Emmet B., Dallas, Tex., assignor to Raymond Oil Burner Company. Oil-burner | 742,064 | Oct. 20 | 3244 | 727 | 106 | 1968 |
| Raymond, Freeborn F., 2d, Newton, Mass., assignor, by mesne assignments, to United Shoe Machinery Company. Heel-attaching machine | 745,971 | Dec. 1 | 1209 | 271, 272 | 107 | 1358 |
| Raymond, Henry E., Schenectady, N. Y., assignor to General Electric Company. Lightning-arrester | 727,687 | May 12 | 1624 | 369 | 104 | 367 |
| Raymond, Henry E., Schenectady, N. Y., assignor to General Electric Company. Lightning-arrester | 727,688 | May 12 | 1625 | 369 | 104 | 368 |
| Raymond, Henry E., Schenectady, N. Y., assignor to General Electric Company. Lightning-arrester | 744,106 | Nov. 17 | 2588 | 553 | 107 | 581 |
| Raymond, Henry S., Alliance, Nebr. Insect-trap | 722,143 | Mar. 3 | 884 | 197, 198 | 103 | 189 |
| Raymond Oil Burner Company. (See Raymond, Emmet B., assignor.) | | | | | | |
| Raymond, Oliver T., Mill Hill, England. Packing | 727,839 | May 12 | 1927 | 429 | 104 | 428 |
| Raymond, Prosper J., Detroit, Mich. Excavator | 733,422 | July 14 | 1303 | 308 | 105 | 262 |

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| Raymond, Ward. (See Sergeant and Raymond.) | | | | | | |
| Raynaud, Emile, Spy, and L. Pierron, Jette St. Pierre, Belgium. Making sulfuric anhydrid | 736,876 | Aug. 18 | 3454 | 766 | 105 | 1750 |
| Rayner, Edwin B., Piqua, Ohio. Pneumatic tire | 730,474 | June 9 | 1741 | 390 | 104 | 1500 |
| Rayner, Edwin B., Piqua, assignor of one-half to W. H. Rayner, Springfield, Ohio. Diaphragm for pumps, air-brakes, compressors, or the like | 721,324 | Feb. 24 | 3598 | 817 | 102 | 1631 |
| Rayner, William H. (See Rayner, Edwin B., assignor.) | | | | | | |
| Raysik, Paul, Boston, Mass. Folding floral-design frame | 745,295 | Nov. 24 | 4881 | 1053 | 107 | 1071 |
| Rea, Edmund K., Ovid, Mo. Seeding attachment | 729,893 | June 2 | 684 | 151 | 104 | 1268 |
| Rea, Edmund K., Ovid, Mo. Nose-ring for animals | 735,150 | Aug. 4 | 206 | 41 | 105 | 1026 |
| Rea, Thomas H., Cambridge, Ohio. Lock | 737,479 | Aug. 25 | 4570 | 1024 | 105 | 2008 |
| Rea, Victor. (See Péchy and Rea.) | | | | | | |
| Rea, Wm. T. S. (See Jones, Robert W., assignor.) | | | | | | |
| Reach, George A. (See Gamble, John, assignor.) | | | | | | |
| Reach, Robert, Philadelphia, Pa. Striking-bag | 728,177 | May 12 | 2545 | 566 | 104 | 559 |
| Reach, Robert, and G. B. Staples, Philadelphia, Pa. Golf-ball | 731,614 | June 23 | 3862 | 860 | 104 | 1978 |
| Read, Berton C. (See Read, James W. and B. C.) | | | | | | |
| Read, Charles H., Pittsburg, Pa. Lateral-motion arch-bar truck | 743,558 | Nov. 10 | 1519 | 317, 318 | 107 | 341 |
| Read, Charles H., Pittsburg, Pa. Lateral-motion arch-bar truck | 743,559 | Nov. 10 | 1520 | 318 | 107 | 342 |
| Read, Frederick A., West Haddonfield, N. J., assignor to Philadelphia Paper Company, Philadelphia, Pa. Paper bag | 717,621 | Jan. 6 | 176 | 44 | 102 | 39 |
| Read, George F., assignor to R. Hoe, New York, N. Y. Delivery mechanism for printing-machines | 745,385 | Dec. 1 | 131 | 30 | 107 | 1128 |
| Read, George F., assignor to R. Hoe, New York, N. Y. Bed-movement | 746,741 | Dec. 15 | 2596 | 596, 597 | 107 | 1700 |
| Read, George F., assignor to R. Hoe and C. W. Carpenter, New York, N. Y. Printing-machine | 742,232 | Oct. 27 | 3599 | 805, 806 | 106 | 2054 |
| Read, George W. and W. W., Amite City, La. Inking attachment for printing-presses | 729,097 | May 26 | 4266 | 942 | 104 | 954 |
| Read, Isaiah W. (See Connelly and Read.) | | | | | | |
| Read, James W. and B. C., Wooster, Ohio. Dish-cleaner | 747,220 | Dec. 15 | 3519 | 799 | 107 | 1907 |
| Read, Matthew H., Woolubar, Western Australia, Australia. Safety device for hoisting apparatus | 744,233 | Nov. 17 | 2847 | 608, 609 | 107 | 637 |
| Read, Robert H. (See Knight, Arthur F., assignor.) | | | | | | |
| Read, Robert H., Schenectady, N. Y., assignor to General Electric Company. Circuit-breaker | 723,183 | Mar. 17 | 2842 | 638 | 103 | 633 |
| Read, Robert H., Schenectady, N. Y., assignor to General Electric Company. Circuit-breaker | 728,293 | May 19 | 2789 | 618 | 104 | 633 |
| Read, Robert H., Schenectady, N. Y., assignor to General Electric Company. Circuit-breaker for electric circuits | 730,704 | June 9 | 2149 | 477 | 104 | 1590 |
| Read, Robert H., Schenectady, N. Y., assignor to General Electric Company. Globe-holder for arc-lamps | 733,596 | July 14 | 1607 | 381 | 105 | 357 |
| Read, Robert H., Schenectady, N. Y., assignor to General Electric Company. Snap-switch | 738,941 | Sept. 15 | 2774 | 614 | 106 | 628 |
| Read, Walter G., Davisville, Cal. Separator | 743,752 | Nov. 10 | 1872 | 396 | 107 | 417 |
| Read, William W. (See Read, George W. and W. W.) | | | | | | |
| Reade, John A., Jr., assignor to H. J. Tillotson, Chicago, Ill. Massage apparatus | 734,952 | July 28 | 4182 | 973, 974 | 105 | 928 |
| Reade, John A., Jr., and C. F. Birtman, Chicago, Ill. Massage apparatus | 738,357 | Sept. 8 | 1653 | 358 | 106 | 372 |
| Reader, George, *et al.* (See Whatley, Alfred H., assignor.) | | | | | | |
| Reader, Thomas A., Ann Arbor, Mich. Automatic street-indicator and advertiser | 723,182 | Mar. 17 | 2839 | 638 | 103 | 633 |
| Readle, William, Elmira, N. Y. Vaporizing-valve for explosive-engines | 726,191 | Apr. 21 | 3254 | 739 | 103 | 1887 |
| Ready, Bert, Hartingdon, Nebr. Liquid-transfer apparatus | 731,071 | June 16 | 2827 | 628 | 104 | 1751 |
| Reagan, Dominick A., assignor of one-third to F. Hesser, Altoona, Pa. Safety device for steam-boilers | 738,844 | Sept. 15 | 2615 | 577 | 106 | 593 |
| Reagan, Jeremiah B., Mount Savage, Md. Railway-signal | 737,662 | Sept. 1 | 191 | 40 | 106 | 45 |
| Ream, Frank C., Butler, Mo. Computing-measure | 722,045 | Mar. 3 | 726 | 161 | 103 | 157 |
| Reames, John T., New Orleans, La. Labeling-machine | 736,546 | Aug. 18 | 2812 | 615 | 105 | 1619 |
| Reardon, Kate M., *et al.* (See Reardon, Thomas B., assignor.) | | | | | | |
| Reardon, Mary A., *et al.* (See Reardon, Thomas B., assignor.) | | | | | | |
| Reardon, Thomas B., San Jose, assignor of one-half to M. A. and K. M. Reardon, San Francisco, Cal. Bias-cutter | 723,305 | Mar. 24 | 3069 | 690 | 103 | 693 |
| Reardon, Timothy. (See Schmidt, Rudolph, assignor.) | | | | | | |
| Reardon, William, Beachmont, Mass. Sales-recording device | 744,937 | Nov. 24 | 4105 | 885 | 107 | 922 |
| Rearick, Charles B., New York, N. Y. Steam-boiler furnace | 739,218 | Sept. 15 | 3262 | 723 | 106 | 729 |
| Rearwin, Wilber D., Chicago, Ill. Car-brake | 744,981 | Nov. 24 | 4192 | 906, 907 | 107 | 939 |
| Reaser, Lewis, Reading, Pa. Handle for sheet-metal vessels | 718,656 | Jan. 20 | 2164 | 474 | 102 | 493 |
| Reason, Walter M., Pontiac, Mich. Air-pump | 736,778 | Aug. 18 | 3267 | 722 | 105 | 1710 |
| Reaves, Frank J., Rockford, Ill., assignor to Rockford Watch Company, Limited. Double roller for balance-escapements | 740,179 | Sept. 29 | 5071 | 1140 | 106 | 1150 |
| Reavley, Richard C., Penarth, England. Hawser attachment for vessels | 721,465 | Feb. 24 | 3858 | 878 | 102 | 1684 |
| Reck, Anders B., Copenhagen, Denmark. Hot-water heating system | 741,070 | Oct. 13 | 1262 | 286 | 106 | 1537 |
| Reck, Emile and J. P., Claude, Tex. Cattle-stanchion | 733,874 | July 14 | 2122 | 500 | 105 | 463 |
| Reck, John P. (See Reck, Emile and J. P.) | | | | | | |
| Recklinghausen, Max von, New York, N. Y., assignor, by mesne assignments, to Cooper Hewitt Electric Company. Protecting device for gas or vapor electric lamps | 721,741 | Mar. 3 | 155 | 36 | 103 | 35 |
| Recklinghausen, Max von, New York, N. Y., assignor to Cooper Hewitt Electric Company. Electric vapor appliance | 733,423 | July 14 | 1304 | 308 | 105 | 293 |
| Record, George J., Conneaut, Ohio, assignor to American Can Company, Jersey City, N. J. Can heading and double-seaming machine | 737,868 | Sept. 1 | 607 | 133, 134 | 106 | 134 |
| Record, Josiah, Mankato, Minn. Suspension carrier apparatus | 728,294 | May 19 | 2791 | 618 | 104 | 634 |
| Recordon, Emile, Geneva, Switzerland. Life-preserver | 727,444 | May 5 | 1159 | 255 | 104 | 251 |
| Rector, Alcorn, New York, N. Y. Incandescent burner | 720,618 | Feb. 17 | 2268 | 520 | 102 | 1329 |
| Rector, Enoch J., New York, N. Y., assignor to American Panograph Company, Parkersburg, W. Va. Kinetoscope | 734,136 | July 21 | 2656 | 626, 627 | 105 | 594 |
| Rector, Enoch J., assignor to American Panograph Company, Parkersburg, W. Va. Apparatus for exhibiting pictures of moving objects | 734,242 | July 21 | 2849 | 668 | 105 | 637 |
| Rector, James A., Kansas City, Kans. Cream-separator | 737,139 | Aug. 25 | 3917 | 870 | 105 | 1867 |
| Red Cross Mfg. Co. (See Schneider, Gottlieb, assignor.) | | | | | | |
| Red Jacket Manufacturing Company. (See Stebbins, Timothy, assignor.) | | | | | | |
| Redd, Charlie, assignor, by mesne assignments, to I. Pieser and C. G. Livingston, Chicago, Ill. Machine for closing and sealing up the ends of cartons | 733,506 | July 14 | 1445 | 340, 341, 342, 343 | 105 | 323 |
| Redd, Charlie, assignor to C. G. Livingston and I. Pieser, Chicago, Ill. End-closing machine for paper boxes | 733,507 | July 14 | 1450 | 343, 344 | 105 | 324 |

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| Redd, Charlie, assignor, by mesne assignments, to I. Pieser and C. G. Livingston, Chicago, Ill. Gluing-wheel | 733,508 | July 14 | 1454 | 345 | 105 | 325 |
| Redd, Charlie, Rockford, assignor to I. Pieser and C. G. Livingston, Chicago, Ill. Block for machines for forming the ends of cartons | 733,509 | July 14 | 1455 | 345, 346 | 105 | 325 |
| Redd, Charlie, and G. H. Cormack, Rockford, assignors, by mesne assignments, to I. Pieser and C. G. Livingston, Chicago, Ill. Flap-folder for carton-closing machines | 733,510 | July 14 | 1457 | 346, 347 | 105 | 326 |
| Redd, D. P., *et al.* (See Farmer, Julius M., assignor.) | | | | | | |
| Redding, Jacob, Carthage, Ind., assignor, by mesne assignments, to New Departure Manufacturing Company, Bristol, Conn. Back-pedaling coaster-brake | 728,295 | May 19 | 2793 | 618, 619 | 104 | 634 |
| Redell, Alvin B., assignor to C. R. Lindsay, Jr., Chicago, Ill. Bunsen burner | 728,296 | May 19 | 2796 | 619 | 104 | 635 |
| Redell, Alvin B., assignor to C. R. Lindsay, Jr., Chicago, Ill. Bunsen burner | 733,424 | July 14 | 1305 | 308 | 105 | 293 |
| Redetzke, Louis H., Echo, Minn. Power-transmitting mechanism | 742,738 | Oct. 27 | 4508 | 1020, 1021 | 106 | 2246 |
| Redfearn, Edward C., Galena, Ill. Lactometer | 745,521 | Dec. 1 | 387 | 89 | 107 | 1182 |
| Redfield, Charles H., West Hampton Beach, N. Y. Protective covering for drive-well points | 746,378 | Dec. 8 | 1951 | 446 | 107 | 1535 |
| Redfield, Charles T., Glenhaven, N. Y. Bucksaw | 731,324 | June 16 | 3300 | 736 | 104 | 1846 |
| Redfield, Edward E., Grants Pass, assignor to Ashland Iron Works, Ashland, Oreg. Drag-saw frame | 733,749 | July 14 | 1865 | 441 | 105 | 410 |
| Redfield, Fred C., assignor to American Otophone Company, Nashua, N. H. Telephone | 732,443 | June 30 | 5456 | 1211 | 104 | 2324 |
| Redfield, John H., Spokane, Wash. Explosive-engine | 739,220 | Sept. 15 | 3270 | 724 | 106 | 731 |
| Redfield, John H., assignor of one-half to C., E., and F. Grutt, Spokane, Wash. Explosive-engine | 739,219 | Sept. 15 | 3264 | 724 | 106 | 729 |
| Redifer, Andrew P., Narberth, Pa. Shoe-tree | 730,475 | June 9 | 1742 | 390 | 104 | 1501 |
| Redlich, Henry, Chicago, Ill. Tincture-extractor | 731,615 | June 23 | 3863 | 861 | 104 | 1978 |
| Redlinger, Mathias, Jr., Freeport, Ill. Lemon-squeezer | 722,898 | Mar. 17 | 2338 | 523 | 103 | 527 |
| Redmon, Frederick A., assignor of one-half to A. W. Holmes, Chicago, Ill. Storage battery | 738,942 | Sept. 15 | 2775 | 615 | 106 | 628 |
| Redmond, Edward J. (See Lintern, William, assignor.) | | | | | | |
| Redmond, James, *et al.* (See Wheelhouse, George E., assignor.) | | | | | | |
| Redmond, John, Fairchance, Pa. Combination wheel and rail brake | 728,130 | May 12 | 2458 | 547 | 104 | 541 |
| Redpath, George O. (See Powell, Edward, assignor.) | | | | | | |
| Redpath, George O., New York, N. Y. Can-opener | 741,276 | Oct. 13 | 1659 | 375 | 106 | 1619 |
| Reece Button Hole Machine Company. (See Dimond, John E., assignor.) | | | | | | |
| Reece Button Hole Machine Company. (See Dixon, William W., assignor.) | | | | | | |
| Reece Buttonhole Machine Company. (See Dahl and Hill, assignors.) | | | | | | |
| Reece Folding Machine Company. (See Dixon, Walter L., assignor.) | | | | | | |
| Reed, Adam, St. Joseph, Mo. Game apparatus | 727,196 | May 5 | 702 | 151 | 104 | 152 |
| Reed, Adam, Middletown, Del. Collar-fastener | 746,575 | Dec. 8 | 2288 | 524 | 107 | 1610 |
| Reed, Adelbert C. (See King, Phineas F., assignor.) | | | | | | |
| Reed, Albert S., assignor of one-half to F. Harris, Chicago, Ill. Sprocket-band | 747,478 | Dec. 22 | 3989 | 898 | 107 | 2028 |
| Reed, Charles A., assignor of one-half to E. J. Cress, Payne, Ohio. Fence-post | 730,966 | June 16 | 2624 | 585 | 104 | 1710 |
| Reed, Charles J., Philadelphia, Pa. Composite metal roll | 741,413 | Oct. 13 | 1952 | 432, 433 | 106 | 1683 |
| Reed, Charles J., Philadelphia, Pa., assignor to Security Investment Company. Electrolytic apparatus | 719,870 | Feb. 3 | 822 | 192 | 102 | 997 |
| Reed, Charles J., Philadelphia, Pa., assignor to Security Investment Company. Electrolytic apparatus | 719,871 | Feb. 3 | 824 | 193 | 102 | 998 |
| Reed, Charles J., Philadelphia, Pa., assignor to Security Investment Company. Electrolytic apparatus | 719,872 | Feb. 3 | 827 | 193 | 102 | 998 |
| Reed, Charles J., Philadelphia, Pa., assignor to Security Investment Company. Electrolytic apparatus | 719,873 | Feb. 3 | 830 | 194, 195 | 102 | 999 |
| Reed, Charles J., Philadelphia, Pa., assignor to Security Investment Company. Rheostat | 728,978 | May 26 | 4056 | 900 | 104 | 912 |
| Reed, Charles J., Philadelphia, Pa., assignor to Security Investment Company. Treating lead plates for use in secondary batteries | 735,820 | Aug. 11 | 1501 | 321 | 105 | 1319 |
| Reed, Charles J., Philadelphia, Pa., assignor to Security Investment Company. Rheostat and resistance element therefor | 736,297 | Aug. 11 | 2362 | 513 | 105 | 1507 |
| Reed, Charles J., Philadelphia, Pa., assignor of one-half to Security Investment Company. Means for separating magnetic particles from paper-pulp | 736,298 | Aug. 11 | 2364 | 514 | 105 | 1507 |
| Reed, Edwin A. (See Little and Reed.) | | | | | | |
| Reed, Elwood M., Rochester, N. Y. Safety-holder for packages | 736,779 | Aug. 18 | 3270 | 722 | 105 | 1711 |
| Reed, Frederick H., Claremont, assignor of thirty-five one-hundredths to R. H. F. Variel, Los Angeles, Cal. Wave-motor | 721,090 | Feb. 17 | 3123 | 717, 718 | 102 | 1514 |
| Reed, George W. (See Montgomery, William G., assignor.) | | | | | | |
| Reed, Herbert K., Winsted, Conn. Toy | 723,023 | Mar. 17 | 2539 | 570 | 103 | 569 |
| Reed, Hiram E., Erie, Pa. Grate for furnaces | 724,938 | Apr. 7 | 953 | 219 | 103 | 1373 |
| Reed, Hugh T., Chicago, Ill. Game and game-board | 734,092 | July 21 | 2565 | 599 | 105 | 577 |
| Reed, James J., New Philadelphia, Ohio. Vending apparatus | 728,412 | May 19 | 2997 | 659, 660 | 104 | 676 |
| Reed, John A., Gulfport, Miss. Engine for steam-pumps | 746,158 | Dec. 8 | 1557 | 348 | 107 | 1452 |
| Reed, John A., Gulfport, Miss. Steam-power crosscut-saw | 747,766 | Dec. 22 | 4521 | 1018, 1019 | 107 | 2150 |
| Reed, John C., Allegheny, Pa. Mold-emptying apparatus | 718,279 | Jan. 13 | 1417 | 315 | 102 | 320 |
| Reed, John C., Allegheny, Pa. Flask for molding and casting | 728,011 | May 12 | 2245 | 499 | 104 | 495 |
| Reed, John D., assignor of one-half to M. E. Reed, Boston, Mass. Nut-lock | 745,522 | Dec. 1 | 388 | 90 | 107 | 1182 |
| Reed, Lucius N., Fulton, Ill. Combined rail-joint and nut-lock | 735,908 | Aug. 11 | 1668 | 356 | 105 | 1355 |
| Reed, Mary E. (See Reed, John D., assignor.) | | | | | | |
| Reed, Samuel G., Portland, Oreg., assignor to Crosby Steam Gage and Valve Company, Boston, Mass. Pressure-weighing machine | 748,010 | Dec. 29 | 5025 | 1134, 1135 | 107 | 2284 |
| Reed, Sylvanus A., New York, N. Y. Selective system | 737,869 | Sept. 1 | 616 | 135 | 106 | 136 |
| Reed, Sylvanus A., New York, N. Y. Selective system | 737,870 | Sept. 1 | 626 | 135, 136 | 106 | 137 |
| Reed, William R. (See Tippett, George, assignor.) | | | | | | |
| Reed, William S., Turtlecreek, assignor of five-eighths to J. D. Fry, Pittsburg, and E. Matthews, Agnew, Pa. Wire-stretcher | 742,903 | Nov. 3 | 148 | 34 | 107 | 33 |
| Reeder, Charles H., St. Louis, Mo. Pneumatic hoist | 744,611 | Nov. 17 | 3499 | 755, 756 | 107 | 775 |
| Reeder, Clinton V. B., San Jose, Cal. Handle for tools | 722,899 | Mar. 17 | 2340 | 523 | 103 | 528 |
| Reedy, William H., *et al.* (See Rice, Joseph, assignor.) | | | | | | |
| Reedy, William I., *et al.* (See Rice, Joseph, assignor.) | | | | | | |
| Reel, Daniel. (See Craft, Reel, and Hawes.) | | | | | | |
| Reel, David M., Brooklyn, N. Y., assignor to Under-Feed Stoker Company of America, Chicago, Ill. Furnace | 738,358 | Sept. 8 | 1656 | 359 | 106 | 372 |
| Reely, William M., Missoula, Mont. Outside-sash-securing device | 726,192 | Apr. 21 | 3257 | 739 | 103 | 1888 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | Spec. | Drg. | Vol. | Page. |
| Reenstierna, Gustaf L., assignor to R. F. Stahl and J. Fennell, Boston, Mass. Carpet-sweeper | 748,560 | Dec. 29 | 6060 | 1373 | 107 | 2511 |
| Rees, Edmund S. G., Wolverhampton, England. Locomotive and car for use on single-rail elevated railways | 723,024 | Mar. 17 | 2540 | 570, 571 | 103 | 569 |
| Rees, Thomas E., St. Louis, Mo. Ingot-mold | 745,117 | Nov. 24 | 4484 | 970 | 107 | 1000 |
| Rees, Thomas H., and J. McDonnell, Louisville, Ky.; said McDonnell assignor to said Rees. Awning | 740,920 | Oct. 6 | 980 | 221 | 106 | 1456 |
| Rees, Thomas H., and J. McDonnell, Louisville, Ky.; said McDonnell assignor to said Rees. Awning | 740,921 | Oct. 6 | 983 | 221, 222 | 106 | 1457 |
| Rees, William H., Worcester, Mass. Pneumatic selecting mechanism for musical instruments | 734,193 | July 21 | 2762 | 648 | 105 | 617 |
| Reese, Clarence H., Gwynnbrook, Md. Cleaner for type-writing machines | 745,238 | Nov. 24 | 4732 | 1031 | 107 | 1049 |
| Reese, Elmer E., Rolling Prairie, Ind. Mail-box | 743,660 | Nov. 10 | 1719 | 363 | 107 | 383 |
| Reese, Henry D., and L. Blount, assignors of one-third to M. B. Reese, Abbeville, S. C. Baling-press | 728,760 | May 19 | 3654 | 813 | 104 | 815 |
| Reese, Jacob, Sharonhill, Pa. Communicating language for deaf mutes and blind mutes | 720,068 | Feb. 10 | 1204 | 277 | 102 | 1095 |
| Reese, Louis C., London, England. Extracting matter from liquids by solvents | 744,795 | Nov. 24 | 3860 | 831 | 107 | 871 |
| Reese, Milton B. (See Reese and Blount, assignors.) | | | | | | |
| Reese, Thomas, Jr. (See Bowers and Reese.) | | | | | | |
| Reeser, Phillip, McConnell, Ill. Metallic tie | 746,742 | Dec. 15 | 2601 | 597 | 107 | 1701 |
| Reeve, Charles R., Index, assignor of one-half to M. J. Reeve, Morris, N. Y. Match-box | 728,131 | May 12 | 2459 | 547 | 104 | 541 |
| Reeve, Martin J. (See Reeve, Charles R., assignor.) | | | | | | |
| Reeves, Albert S., assignor of two-thirds to J. D. and M. H. Cox, Bridgeton, N. J. Bottle-making machine | 738,845 | Sept. 15 | 2617 | 577 | 106 | 593 |
| Reeves, Clifton, Trenton, N. J. Piston-valve or similar structure | 738,237 | Sept. 8 | 1368 | 297 | 106 | 311 |
| Reeves & Company. (See Clay, Harry C., assignor.) | | | | | | |
| Reeves & Company. (See Kailor, John N., assignor.) | | | | | | |
| Reeves & Company. (See Kailor and Clay, assignors.) | | | | | | |
| Reeves & Company. (See Kailor and Reeves, assignors.) | | | | | | |
| Reeves, Frank N., New York, N. Y., assignor to Electromechanical Improvement Company, Charleston, W. Va. Trouble-test for automatic telephone systems | 721,742 | Mar. 3 | 156 | 36 | 103 | 35 |
| Reeves, Frederick W., Allegheny, Pa. Reciprocating rotary engine | 720,845 | Feb. 17 | 2643 | 610, 611 | 102 | 1410 |
| Reeves, James E., assignor to J. R. Smith, Philadelphia, Pa. Stretcher | 722,456 | Mar. 10 | 1493 | 329 | 103 | 334 |
| Reeves, James N. D., assignor to National Machine Company, Columbus, Ind. Band-cutter and feeder | 727,840 | May 12 | 1928 | 429, 430 | 104 | 428 |
| Reeves, Marshal T. (See Kailor and Reeves.) | | | | | | |
| Reeves, Mary G., assignor to C. R. Glazier, Lake Arthur, La. Dish-drainer | 746,159 | Dec. 8 | 1558 | 349 | 107 | 1453 |
| Reeves, Paul S. (See Decker, Edward J., assignor.) | | | | | | |
| Reeves, William H. (See Johnson and Reeves.) | | | | | | |
| Reeves, William H., Chicago, Ill., assignor to National Cotton Compress Company, Pierre, S. D. Cotton-baling press | 721,325 | Feb. 24 | 3599 | 817, 818, 819 | 102 | 1631 |
| Regan, John, New York, N. Y. Horseshoe | 731,616 | June 23 | 3864 | 861 | 104 | 1978 |
| Regan, Michael C., U. S. Army, assignor of seven-tenths to W. H. Gannett, Augusta, Me., and W. H. Gilman, Boston, Mass. Projectile | 728,012 | May 12 | 2247 | 500 | 104 | 495 |
| Regan, Timothy, New York, N. Y. Balanced water-heater | 731,072 | June 16 | 2828 | 628, 629 | 104 | 1752 |
| Regensteiner, Theodore, New York, N. Y. Apparatus for printing in colors | 718,877 | Jan. 20 | 2580 | 576 | 102 | 578 |
| Reger, Edward, Hutchinson, Kans. Sunshade | 739,446 | Sept. 22 | 3706 | 825 | 106 | 841 |
| Regester, Robert A., assignor to Acme Heel Protector Manufacturing Company, Baltimore, Md. Protector for heels and soles of shoes | 738,484 | Sept. 8 | 1899 | 415 | 106 | 422 |
| Regina Music Box Company. (See Brachhausen, Gustav A., assignor.) | | | | | | |
| Regina Music Box Company. (See Gleason, Edward D., assignor.) | | | | | | |
| Regner, Franz, Pfersec, near Augsburg, Germany. Machine for planing key-grooves | 718,728 | Jan. 20 | 2303 | 509 | 102 | 520 |
| Regnier, Eugene S., assignor of one-half to L. M. Richards, Galesburg, Ill. Slicer | 744,107 | Nov. 17 | 2589 | 553 | 107 | 582 |
| Rehfuss, John G. and M. O., Philadelphia, Pa., assignors to Bureau Can and Manufacturing Company, of Delaware. Apparatus for conveying tops and bottoms of cans | 725,588 | Apr. 14 | 2158 | 489 | 103 | 1643 |
| Rehfuss, John G. and M. O., Philadelphia, Pa., assignors to Bureau Can and Manufacturing Company, of Delaware. Can-testing apparatus | 725,589 | Apr. 14 | 2160 | 489, 490 | 103 | 1644 |
| Rehfuss, John G. and M. O., Philadelphia, Pa., assignors to Bureau Can and Manufacturing Company, of Delaware. Pneumatic passage-way | 735,909 | Aug. 11 | 1669 | 356 | 105 | 1355 |
| Rehfuss, Martin O. (See Rehfuss, John G. and M. O.) | | | | | | |
| Rehlin, Charles J., Allegheny, assignor of seven-sixteenths to A. Alston, Jr., Bellevue, Pa. Mechanical toy | 732,374 | June 30 | 5321 | 1178 | 104 | 2296 |
| Rehmert, William H., Asherville, Kans. Rail-joint | 742,739 | Oct. 27 | 4509 | 1021 | 106 | 2246 |
| Rehner, Richard A., Lacon, Ill. Nut-lock | 744,108 | Nov. 17 | 2593 | 553 | 107 | 582 |
| Rehnquist, Lawrence M., Chicago, Ill. Water-heater | 737,771 | Sept. 1 | 400 | 85 | 106 | 88 |
| Reibetanz, Richard, Mittelbach, Germany. Pin | 718,218 | Jan. 13 | 1300 | 286 | 102 | 294 |
| Reich, Frederick W., and M. B. Clason, Columbus, Ga. Sight-testing apparatus | 726,101 | Apr. 21 | 3070 | 697 | 103 | 1850 |
| Reich, Herman, and O. M. Coate, Des Moines, Iowa. Headlight for locomotives | 721,235 | Feb. 24 | 3449 | 784 | 102 | 1598 |
| Reich, Philip, New York, N. Y. Mail-distributing system | 737,963 | Sept. 1 | 815 | 179 | 106 | 179 |
| Reichard, Forrest, assignor of one-half to G. F. Kichline, Easton, Pa. Device for operating skylights | 725,871 | Apr. 21 | 2697 | 613 | 103 | 1773 |
| Reichardt, Ferdinand A., New York, N. Y. Pyrographic burner | 724,397 | Mar. 31 | 5194 | 1164 | 103 | 1144 |
| Reichardt, Reinhold. (See Gilliland, Lee O., assignor.) | | | | | | |
| Reichel, Karl G. M., Hanover, assignor to Wagenbauanstalt und Waggonfabrik für Elektrische Bahnen (vorm. W. C. F. Busch) Actiengesellschaft, Bautzen, Germany. Auxiliary fluid-pressure apparatus for instantly starting steam-engines | 730,157 | June 2 | 1134 | 255 | 104 | 1358 |
| Reichelt, Charles F., Chicago, Ill. Support for vessel-covers | 746,878 | Dec. 15 | 2868 | 660 | 107 | 1761 |
| Reichenau, Ernst von, Düsseldorf-Oberkassel, Germany. Armored shield for traveling artillery | 726,988 | May 5 | 326 | 70, 71 | 104 | 71 |
| Reichenau, Ernst von, Dusseldorf-Oberkassel, Germany. Shell | 735,299 | Aug. 4 | 507 | 102 | 105 | 1089 |
| Reichenbach, Fritz, Berlin, Germany. Regulating device for internal-combustion engines | 728,297 | May 19 | 2797 | 619 | 104 | 635 |
| Reichenbach, Henry M., New York, N. Y. Stereoscopic camera | 738,066 | Sept. 1 | 994 | 222 | 106 | 216 |
| Reichenbach, William F., Rochester, N. Y. Trolley guard and finder | 746,160 | Dec. 8 | 1559 | 349 | 107 | 1453 |
| Reichert, John, assignor of one-half to L. J. Elliott, Racine, Wis. Harness-clip | 727,841 | May 12 | 1931 | 430 | 104 | 429 |
| Reichert, John, assignor of one-half to L. J. Elliott, Racine, Wis. Harness-hanger | 736,877 | Aug. 18 | 3456 | 766, 767 | 105 | 1750 |
| Reichelm, Edward P., Bayonne, assignor to American Gas Furnace Company, Elizabeth, N. J. Gas-furnace | 733,274 | July 7 | 1039 | 249 | 105 | 218 |
| Reichmann, Joseph, River Forest, Ill. Fluid-pressure brake apparatus | 732,375 | June 30 | 5322 | 1178, 1179 | 104 | 2296 |
| Reid, Alban H., Philadelphia, Pa. Shaft-bearing | 717,924 | Jan. 6 | 766 | 172 | 102 | 164 |
| Reid, Charlie R., and C. F. Heidelberg, Heidelberg, Miss. Store-bin | 738,572 | Sept. 8 | 2054 | 448 | 106 | 457 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Reid, Ella M. (See Reid, Samuel D. and E. M.) | | | | | | |
| Reid, Frances L., New York, N. Y. Diaper | 723,306 | Mar. 24 | 3070 | 691 | 103 | 693 |
| Reid, James, Jr., assignor to Holyoke Machine Company, Worcester, Mass. Founder's molding-machine | 723,548 | Mar. 24 | 3532 | 790, 791 | 103 | 783 |
| Reid, James B., *et al.* (See Shepard, Chester, assignor.) | | | | | | |
| Reid, James H., East Orange, N. J. Generating electricity | 736,016 | Aug. 11 | 1875 | 400, 401 | 105 | 1400 |
| Reid, James H., Newark, N. J. Gas-battery | 736,017 | Aug. 11 | 1877 | 401 | 105 | 1401 |
| Reid, John, Belfast, Ireland. Means for preventing refilling of bottles | 738,238 | Sept. 8 | 1375 | 297 | 106 | 313 |
| Reid, John, London, England. Acetylene-gas burner | 740,043 | Sept. 29 | 4838 | 1085 | 106 | 1102 |
| Reid, John, Yonkers, N. Y., and L. M. Hooper, Rutherford, N. J., assignors to J. L. Mott Iron Works, New York, N. Y. Stationary washtub | 725,365 | Apr. 14 | 1746 | 393 | 103 | 1554 |
| Reid, John K., assignor of one-half to J. E. Hardman, Montreal, Canada. Signal system | 728,616 | May 19 | 3400 | 752 | 104 | 761 |
| Reid, John L., Akron, Ohio. Device for administering medicine to horses | 726,460 | Apr. 28 | 3769 | 854 | 103 | 2009 |
| Reid, Marcellus, Cleveland, Ohio. Machine for making type-bars | 721,389 | Feb. 24 | 3720 | 845, 846 | 102 | 1656 |
| Reid, Marcellus, Cleveland, Ohio. Spacer and matrix | 724,332 | Mar. 31 | 5054 | 1131 | 103 | 1113 |
| Reid, Marcellus, Providence, R. I. Ball-bearing | 728,132 | May 12 | 2460 | 547 | 104 | 541 |
| Reid, Marcellus, Providence, R. I., assignor, by mesne assignments, to Iroquois Machine Company, Bedford, N. Y. Frame for wire-drawing machines | 717,622 | Jan. 6 | 177 | 45 | 102 | 39 |
| Reid, Marcellus, Providence, R. I., assignor to himself, trustee. Nut-lock | 739,716 | Sept. 22 | 4191 | 937 | 106 | 947 |
| Reid, Marcellus, Providence, R. I., assignor to himself, trustee. End-thrust ball-bearing | 739,717 | Sept. 22 | 4193 | 937 | 106 | 947 |
| Reid, Morris. (See Bone and Reid.) | | | | | | |
| Reid, Pettis A. (See Kelley and Reid.) | | | | | | |
| Reid, Pettis A., J. Kelley, and W. V. Reid, Richmond, Ind.; said W. V. Reid and J. Kelley assignors to P. A. Reid. Wire-fabric-making machine | 721,605 | Feb. 24 | 4128 | 939, 940, 941 | 102 | 1743 |
| Reid, Samuel D. and E. M., Burlington, Kans. Combined lap-robe and storm-apron | 746,743 | Dec. 15 | 2602 | 598 | 107 | 1701 |
| Reid, Thomas J., Chicago, Ill. Ore-separator | 731,815 | June 23 | 4227 | 942 | 104 | 2054 |
| Reid, Walter V. (See Kelley and Reid.) | | | | | | |
| Reid, Walter V. (See Reid, Kelley, and Reid.) | | | | | | |
| Reid, William G. (See Barnard and Reid.) | | | | | | |
| Reidy, Thomas A., Chicago, Ill. Transom-lifter | 738,123 | Sept. 1 | 1127 | 250 | 106 | 244 |
| Reif, Nicolaus, Wunstorf, Germany. Manufacturing plastic objects from peat | 722,626 | Mar. 10 | 1793 | 399 | 103 | 401 |
| Reiff, William H., Philadelphia, Pa. Animal-trap | 745,118 | Nov. 24 | 4485 | 971 | 107 | 1000 |
| Reiffarth, Oscar. (See Crandall, Jesse A., assignor.) | | | | | | |
| Reifgraber, Joseph J., St. Louis, Mo. Automatic firearm | 729,413 | May 26 | 4817 | 1068, 1069 | 104 | 1069 |
| Reigard, Robert A. E., Kittanning, Pa. Curtain-pole hanger | 720,069 | Feb. 10 | 1205 | 277 | 102 | 1695 |
| Reiger, Charles, assignor to Welle-Boettler Bakery Company, St. Louis, Mo. Lock | 745,664 | Dec. 1 | 632 | 147 | 107 | 1233 |
| Reiling, Herman J. (See Hunt and Reiling.) | | | | | | |
| Reilley, John W., East Lynn, Mass., assignor to North American Manufacturing Company, of District of Columbia. Shoe-top fastener | 743,194 | Nov. 3 | 732 | 158 | 107 | 151 |
| Reilly, Bernard J., Riverton, assignor of one-half to C. J. Whitney and J. H. McDonald, Athens, Ill. Cross-head | 722,900 | Mar. 17 | 2341 | 524 | 103 | 528 |
| Reilly, Edward E., and M. Burke, Peru, Ind. Facing-block | 723,730 | Mar. 24 | 3853 | 866 | 103 | 851 |
| Reilly, George W., and C. A. Phillip, deceased, (R. L. Phillip, administratrix,) Wichita, Kans. Safety-lamp | 744,612 | Nov. 17 | 3503 | 756 | 107 | 776 |
| Reilly, John. (See Gastaldi, Bernard, assignor.) | | | | | | |
| Reilly, John J., Louisville, Ky. Steam-engine | 743,927 | Nov. 10 | 2191 | 473 | 107 | 483 |
| Reilly, Michael E., Tacoma, Wash. Window-shade | 733,996 | July 21 | 2369 | 556 | 105 | 532 |
| Reilly, William, Waltham, Mass. Calipers or gage | 744,796 | Nov. 24 | 3863 | 832 | 107 | 871 |
| Reimann, Carl, Hamburg, Germany. Improving tobacco | 729,218 | May 26 | 4484 | ..... | 104 | 1000 |
| Reimann, Hugo, Racine, Wis. Curtain-roller bracket | 721,833 | Mar. 3 | 319 | 70 | 103 | 70 |
| Reimann, Jacques, Plasmarl, near Swansea, England. Die for the manufacture of metal tubes or pipes | 732,960 | July 7 | 463 | 115, 116 | 105 | 100 |
| Reimann, Jacques, Plasmarl, near Swansea, England. Machine for profiling non-circular tubes or rods | 738,067 | Sept. 1 | 998 | 222 | 106 | 217 |
| Reimard, Charles H., assignor of one-half to J. P. Welsh, Bloomsburg, Pa. Garment-clasp | 718,794 | Jan. 20 | 2425 | 537 | 102 | 545 |
| Reimers, Gerhard, New York, N. Y. Grease-cup | 723,209 | Mar. 17 | 2892 | 648 | 103 | 643 |
| Reimold, William F., Philadelphia, Pa. Ophthalmometer or other tables | 744,613 | Nov. 17 | 3504 | 756 | 107 | 776 |
| Reinberger, George H. (See Orewiler, Benjamin F., assignor.) | | | | | | |
| Reinecke, William A., Heizer, Kans. Oil-can | 721,606 | Feb. 24 | 4144 | 941 | 102 | 1747 |
| Reinelt, Johann, Zawodzie, near Kattowitz, and J. Nowarra, Borsigwerk, Germany. Apparatus for inflaming rock-powder | 731,499 | June 23 | 3641 | 813 | 104 | 1935 |
| Reiner, John M., *et al.* (See Good, John, assignor.) | | | | | | |
| Reiners, Charles A., assignor of one-half to Elevator Supply & Repair Company, Chicago, Ill. Signaling apparatus for elevator-cars | 733,750 | July 14 | 1866 | 441, 442 | 105 | 411 |
| Reinert, Henrik J., Stavanger, Norway. Machine for seaming sheet-metal boxes | 733,678 | July 14 | 1743 | 412 | 105 | 384 |
| Reinforced Cement Construction Company. (See Ellinger, Julian O., assignor.) | | | | | | |
| Reingardt, Louie, Colo, Iowa. Stock-pen | 739,507 | Sept. 22 | 3806 | 852 | 106 | 864 |
| Reinhalter, Peter, Philadelphia, Pa., assignor to Quincy Electric Drill Company. Rock-drill | 734,364 | July 21 | 3084 | 726 | 105 | 686 |
| Reinhalter, Peter, Philadelphia, Pa., assignor to Quincy Electric Drill Company. Rock-drill | 734,365 | July 21 | 3086 | 726 | 105 | 686 |
| Reinhard, Frederick, Jersey City, N. J. Tailpiece and bridge for zithers | 718,383 | Jan. 13 | 1599 | 352 | 102 | 358 |
| Reinhardt, Arthur J., City View, Pa. Combined washbench and ironing-board | 732,585 | June 30 | 5730 | 1272 | 104 | 2383 |
| Reinhardt, Charles C., New York, N. Y. Toy shooting-gallery | 719,141 | Jan. 27 | 3095 | 688 | 102 | 699 |
| Reinhardt, Charles C., New York, N. Y. Actuating mechanism for phonographs or similar exhibitors | 742,233 | Oct. 27 | 3605 | 807 | 106 | 2056 |
| Reinhardt, Franz, Waltershausen, Germany. Doll, puppet, or the like | 738,628 | Sept. 8 | 2163 | 474 | 106 | 480 |
| Reinhardt, Gustav E., Leipzig-Connewitz, Germany, assignor to J. B. Mercer, London, England. Apparatus for gathering sheets or signatures of books | 731,221 | June 16 | 3102 | 688 | 104 | 1804 |
| Reinhardt, James H., East Orange, N. J. Printing-machine | 721,236 | Feb. 24 | 3451 | 784, 785 | 102 | 1599 |
| Reinhardt, Leonard J., Orange, N. J. Incandescent gas-burner | 742,234 | Oct. 27 | 3606 | 807 | 106 | 2056 |
| Reinhardt, William R., *et al.* (See Quin, Robert A., assignor.) | | | | | | |
| Reinhold, Alexander H. (See Reinhold, Frank J. and A. H.) | | | | | | |
| Reinhold, Frank J. and A. H., assignors to L. Reinhold, Detroit, Mich. Ice-cutting machine | 739,718 | Sept. 22 | 4193 | 938 | 106 | 947 |
| Reinhold, Henry L., Jr., Philadelphia, Pa. Boot blacking or polishing appliance | 747,640 | Dec. 22 | 4296 | 966 | 107 | 2099 |
| Reinhold, Lina. (See Reinhold, Frank J. and A. H., assignors.) | | | | | | |
| Reinhold, Wilhelm, Berlin-Reinickendorf, Germany. Packing | 719,042 | Jan. 27 | 2892 | 648 | 102 | 658 |
| Reinicke, Paul, Köthen, Germany. Pulp-strainer | 721,390 | Feb. 24 | 3722 | 846 | 102 | 1656 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Reinicke, Paul, Köthen, Germany. Axle-bearing for strainers | 735,411 | Aug. 4 | 710 | 151 | 105 | 1132 |
| Reininger, Henry, New Orleans, La. Counter-pressure racking and bunging apparatus | 737,480 | Aug. 25 | 4571 | 1025 | 105 | 2008 |
| Reininger, Richard, assignor to Newark Rivet Works, Newark, N. J. Geat for umbrellas | 732,781 | July 7 | 151 | 40 | 105 | 36 |
| Reinisch, Paul A. H., Milwaukee, Wis. Electrotyper's builder-iron | 735,587 | Aug. 4 | 1061 | 225 | 105 | 1206 |
| Reinke, August L., Lyons, Iowa. Fastener for neck-yokes | 739,508 | Sept. 22 | 3807 | 853 | 106 | 864 |
| Reinlein, Fred, Mount Vernon, Ill. Gasolene-torch | 739,221 | Sept. 15 | 3272 | 725 | 106 | 731 |
| Reintges, John B., Elsah, Ill. Mail-box | 727,445 | May 5 | 1159 | 256 | 104 | 251 |
| Reis, Joseph L. M. A., Antwerp, Belgium. Manhole or other cover | 724,939 | Apr. 7 | 954 | 219 | 103 | 1373 |
| Reis, Korbinian, assignor to A. Klumpp, Munich, Germany. Rake | 736,878 | Aug. 18 | 3459 | 767 | 105 | 1751 |
| Reis, Theodor, Cincinnati, Ohio. Metal-flanging machine | 745,665 | Dec. 1 | 634 | 147 | 107 | 1233 |
| Reise, Charles J., Mineral, Ill. Derrick | 723,731 | Mar. 24 | 3853 | 866 867 | 103 | 851 |
| Reisert, Hans, Cologne, Germany. Apparatus for the removal of sulfuric acid from water | 748,308 | Dec. 29 | 5573 | 1271 | 107 | 2402 |
| Reisert, Michael E., assignor to Hennefer Maschinenfabrik, C. Reuther & Reisert, mit Beschränkter Haftung, Hennef, Germany. Railway-scale | 723,184 | Mar. 17 | 2845 | 638 639 | 103 | 634 |
| Reisinger, Hugo, *et al.* (See Coomber, James, assignor.) | | | | | | |
| Reisky, Emil, Buffalo, assignor to Brunswick-Balke-Collender Company, New York, N. Y. Bowling-alley | 732,444 | June 30 | 5458 | 1211 | 104 | 2325 |
| Reisner, William H., Hagerstown, Md. Retinoscope | 718,384 | Jan. 13 | 1600 | 352 | 102 | 358 |
| Reissmann, Frederick, Westpoint, N. Y. Self-oiling whetstone | 734,137 | July 21 | 2665 | 627 | 105 | 597 |
| Reissmann, Frederick, Westpoint, N. Y. Sandpaper-holder | 734,953 | July 28 | 4185 | 974 | 105 | 929 |
| Reissmann, Frederick, Westpoint, N. Y. Sandpaper-holder | 734,954 | July 28 | 4187 | 974 | 105 | 929 |
| Reissner, William. (See Jensen and Reissner.) | | | | | | |
| Reist, Henry G., Schenectady, N. Y., assignor to General Electric Company. Rotating field-magnet for alternating-current generators | 725,773 | Apr. 21 | 2525 | 573 | 103 | 1736 |
| Reist, Henry G., Schenectady, N. Y., assignor to General Electric Company. Fastening field-magnets to spiders | 726,347 | Apr. 28 | 3566 | 808 | 103 | 1968 |
| Reist, Henry G., Schenectady, N. Y., assignor to General Electric Company. Magnetic clutch | 727,689 | May 12 | 1626 | 369 | 104 | 368 |
| Reist, Henry G., Schenectady, N. Y., assignor to General Electric Company. Dynamo-electric machine | 729,219 | May 26 | 4485 | 988 | 104 | 1000 |
| Reist, Henry G., Schenectady, N. Y., assignor to General Electric Company. Field-magnet structure | 729,414 | May 26 | 4820 | 1069 | 104 | 1069 |
| Reist, Henry G., Schenectady, N. Y., assignor to General Electric Company. Regulating dynamo-electric machines | 729,795 | June 2 | 498 | 110 | 104 | 1230 |
| Reist, Henry G., Schenectady, N. Y., assignor to General Electric Company. Dynamo-electric machine | 730,967 | June 16 | 2625 | 585 | 104 | 1710 |
| Reist, Henry G., Schenectady, N. Y., assignor to General Electric Company. Centrifugal starting-switch for induction-motors | 735,151 | Aug. 4 | 207 | 41, 42 | 105 | 1027 |
| Reist, Henry G., Schenectady, N. Y., assignor to General Electric Company. Means for attaching turbine-buckets to wheels | 746,161 | Dec. 8 | 1560 | 349 | 107 | 1453 |
| Reist, Henry G., Schenectady, N. Y., assignor to General Electric Company. Detachable bucket for turbines | 746,162 | Dec. 8 | 1562 | 350 | 107 | 1454 |
| Reist, Henry G., Schenectady, N. Y., assignor to General Electric Company. Detachable bucket for turbines | 746,163 | Dec. 8 | 1563 | 350 | 107 | 1454 |
| Reiter, Lues, New York, N. Y. Suspender-belt | 731,951 | June 23 | 4467 | 996 | 104 | 2106 |
| Reiter, Lues, New York, N. Y. Fastener | 739,222 | Sept. 15 | 3272 | 725 | 106 | 732 |
| Reiterman, Josiah M., Findley, Mich. Wire-stretcher for gates | 724,940 | Apr. 7 | 955 | 220 | 103 | 1373 |
| Reliable Non-Refillable Bottle Company. (See Irvin and Jackson, assignors.) | | | | | | |
| Reliance Ball Bearing Door Hanger Company. (See Cossey, Myron assignor.) | | | | | | |
| Rembert, Henry, Houston, Tex. Cleaning ginned cotton | 730,158 | June 2 | 1134 | 255 | 104 | 1358 |
| Reminger, Theodore, New Washington, Ohio. Pie-trimmer | 719,043 | Jan. 27 | 2894 | 648 | 102 | 658 |
| Remington Arms Company. (See Bartholmes, Charles W., assignor.) | | | | | | |
| Remington Arms Company. (See Humphreys, George E., assignor.) | | | | | | |
| Remington Arms Company. (See Powell, Herman L., assignor.) | | | | | | |
| Remington, Charles H., Roswell, N. Mex. Ter. Railway-signal | 718,385 | Jan. 13 | 1602 | 353 | 102 | 358 |
| Remington, Franklin. (See Moran and Jarrett, assignors.) | | | | | | |
| Remington Machine Company. (See Baker, Frank L., assignor.) | | | | | | |
| Remington, Wolcott, assignor to International Power Vehicle Company, Stamford, Conn. Ignition device for explosive-engines | 743,327 | Nov. 3 | 984 | 214 | 107 | 211 |
| Remington, Wolcott, assignor to International Power Vehicle Company, Stamford, Conn. Feeding and igniting device for explosive-engines | 748,011 | Dec. 29 | 5027 | 1135 | 107 | 2284 |
| Remmele, Louis J., Newark, N. J. Rotary broom or brush | 743,195 | Nov. 3 | 722 | 158 | 107 | 151 |
| Remmele, Louis J., Newark, N. J. Table for filling rotary brooms | 743,328 | Nov. 3 | 987 | 214 215 | 107 | 211 |
| Rempe, Henry, Danville, Pa. Electric clock | 734,366 | July 21 | 3088 | 727 | 105 | 687 |
| Rempe, Henry, Danville, Pa. Self-winding electric clock | 737,019 | Aug. 25 | 3725 | 826 827 | 105 | 1828 |
| Remy, Benjamin P., assignor to Remy Electric Company, Anderson, Ind. Electric ignition-generator | 729,662 | June 2 | 249 | 58 | 104 | 1180 |
| Remy, Benjamin P., assignor to Remy Electric Company, Anderson, Ind. Electric ignition-generator | 734,955 | July 28 | 4188 | 974 975 | 105 | 929 |
| Remy Electric Company. (See Remy, Benjamin P., assignor.) | | | | | | |
| Renas, John T., Petaluma, Cal. Baling-press | 725,872 | Apr. 21 | 2699 | 614 | 103 | 1774 |
| Renaud, Ernest, Holyoke, Mass., assignor of one-half to H. Beauchemin, St. Johns, and F. Beauchemin, Farnham, Canada. Safety device for railway-switches | 737,481 | Aug. 25 | 4576 | 1025 1026 | 105 | 2010 |
| Renaud, Ernest, Montreal, assignor of one-half to H. Beauchemin, St. Jean, and F. Beauchemin, Farnham, Canada. Automatic railway-signal | 737,482 | Aug. 25 | 4579 | 1026 1027 | 105 | 2010 |
| Renault, Louis, Paris, France. Speed-changing and clutch mechanism for motor-vehicles | 725,482 | Apr. 14 | 1973 | 444 445 | 103 | 1602 |
| Renault, Louis, Billancourt, France. Lubricating device for high-speed and explosion motors | 747,767 | Dec. 22 | 4522 | 1019 | 107 | 2151 |
| Renaux, Prosper A., Paris, France. Apparatus for indicating the water-level in boilers | 723,621 | Mar. 24 | 3663 | 821 | 103 | 810 |
| Rendall, George F., New York, N. Y. Producing carbonates and chlorids | 721,091 | Feb. 17 | 3126 | ..... | 102 | 1515 |
| Rendall, George F., New York, N. Y. Making metal oxids | 721,092 | Feb. 17 | 3127 | 718 719 | 102 | 1515 |
| Rendall, George F., New York, N. Y. Furnace | 724,941 | Apr. 7 | 956 | 220 | 103 | 1374 |
| Rendall, George F., New York, N. Y. Ore-roasting furnace | 724,942 | Apr. 7 | 959 | 221 | 103 | 1374 |
| Renfer, Fred, Jr. (See Veith and Renfer.) | | | | | | |
| Renfrew Crusher Company. (See Wegerif, Johannes C., assignor.) | | | | | | |
| Renfrow, Thomas N., Woodlawn, assignor of two-thirds to J. W. Jeter, E. J. McCrossin, B. J. Saunders, and J. Sweet & Son, Birmingham, Ala. Car-replacer | 731,387 | June 16 | 3421 | 763 | 104 | 1871 |
| Renfrow, Elden R., St. Joseph, Mo. Safety door-switch | 733,997 | July 21 | 2370 | 557 | 105 | 532 |
| Rentzer, Wilhelm, Armstadt, Germany. Vehicle for transportation of animal-bodies | 719,372 | Jan. 27 | 3528 | 786 | 102 | 792 |
| Renwick, Frederick E., Mammoth Spring, Ark., assignor to C. G. Eno and J. B. Wheatley, Kansas City, Mo. Self-heating soldering-iron | 739,719 | Sept. 22 | 4195 | 938 | 106 | 947 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| Renie, William C. (See McCauley and Renie.) | | | | | | |
| Renken, Frederick, New York, N. Y. Gluing articles together | 729,220 | May 26 | 4487 | ..... | 104 | 1001 |
| Renken, Frederick, Brooklyn, N. Y. Stand for bottles | 731,710 | June 23 | 4031 | 900 | 104 | 2011 |
| Renn, Charles L., Feagaville, Md. Railway screw-spike | 743,329 | Nov. 3 | 989 | 215 | 107 | 212 |
| Renn, Charles L., Feagaville, Md. Metallic railway-tie | 743,330 | Nov. 3 | 990 | 215 | 107 | 212 |
| Rennell, Thornton B., Denver, Colo. Variable-speed-transmission gearing | 747,221 | Dec. 15 | 3520 | 799<br>800 | 107 | 1907 |
| Renner, John, Burlington, Iowa. Shade-roller support | 724,041 | Mar. 31 | 4469 | 1007 | 103 | 995 |
| Renner, Peter, Cincinnati, Ohio. Coffee-cooker | 741,547 | Oct. 13 | 2227 | 496 | 106 | 1741 |
| Renner, Wolfgang, Kansas City, Mo. Combined automatic signal and cut-off for tank-filling apparatus | 736,152 | Aug. 11 | 2112 | 453<br>454 | 105 | 1450 |
| Rennerfelt, Gustaf, Brooklyn, assignor to Kockum, Jr., & Ohlsson, New York, N. Y. Centrifugal liquid-separator | 739,927 | Sept. 29 | 4615 | 1036 | 106 | 1054 |
| Rennerfelt, Gustaf, assignor to Kockum, Jr., & Ohlsson, New York, N. Y. Centrifugal liquid-separator | 744,938 | Nov. 24 | 4107 | 885 | 107 | 923 |
| Rennerfelt, Gustaf T., Brooklyn, N. Y., assignor to Otis Elevator Company, East Orange, N. J. Safety device for electric elevators | 732,586 | June 30 | 5731 | 1272 | 104 | 2383 |
| Rennerfelt, Gustav T., Brooklyn, N. Y., assignor to Electrite Company. Self-adjusting friction-gear | 726,461 | Apr. 28 | 3770 | 854 | 103 | 2009 |
| Rennolds, A. B. (See Hall, Henry L., assignor.) | | | | | | |
| Reno, Jesse W., New York, N. Y. Tunnel construction | 723,307 | Mar. 24 | 3071 | 691 | 103 | 693 |
| Reno, Jesse W., New York, N. Y. Hydraulic dredge | 724,501 | Apr. 7 | 148 | 35, 36 | 103 | 1201 |
| Reno, Jesse W., New York, N. Y. Cyclorama | 734,093 | July 21 | 2566 | 599 | 105 | 577 |
| Reno, Jesse W., New York, N. Y. Fire-curtain | 744,404 | Nov. 17 | 3157 | 677<br>678 | 107 | 705 |
| Reno, Marshall H. (See Shobert and Reno.) | | | | | | |
| Reno, Perry A., Reynoldsville, Pa. Packing or shipping box | 744,405 | Nov. 17 | 3159 | 678 | 107 | 706 |
| Renoy, Louis J., Auch, France. Boiler for cooking purposes | 738,698 | Sept. 8 | 2314 | 509 | 106 | 510 |
| Renshaw, Alfred H., Troy, N. Y. Car-coupling | 737,772 | Sept. 1 | 402 | 85 | 106 | 88 |
| Renshaw, Frederick W., *et al.* (See Kuhlman and Woodman, assignors.) | | | | | | |
| Renstrom, Nils A., Omaha, Nebr. Acetylene-gas generator | 725,366 | Apr. 14 | 1748 | 393<br>394 | 103 | 1554 |
| Renton, Herbert S., New York, N. Y. Floor-joint for water-closets | 748,418 | Dec. 29 | 5770 | 1316 | 107 | 2446 |
| Renton, Herbert S., assignor of one-half to J. Manneschmidt, Jr., Brooklyn, N. Y. Air-inlet valve | 718,657 | Jan. 20 | 2165 | 474 | 102 | 491 |
| Rentsch, Henry, Bacon, Mo. Furrow-opener attachment for corn-planters | 730,797 | June 9 | 2295 | 509<br>510 | 104 | 1621 |
| Rentschler, Georg A., and J. Kaefer, Hamilton, Ohio, assignors to Phoenix Caster Company, Indianapolis, Ind. Caster | 718,521 | Jan. 13 | 1904 | 418 | 102 | 425 |
| Repath, Charles H., and F. E. Marcy, Anaconda, Mont. Roasting-furnace | 740,589 | Oct. 6 | 404 | 85 | 106 | 1332 |
| Repp, Ephraim B., Washington, D. C. Silo | 745,666 | Dec. 1 | 637 | 148 | 107 | 1233 |
| Reppenhagen, Henry P. F., New York, N. Y. Vehicle-jack | 729,415 | May 26 | 4822 | 1069 | 104 | 1069 |
| Republic Railway Appliance Company. (See Shallenberger, Charles S., assignor.) | | | | | | |
| Requard, Wilhelm, Krefeld, Germany. Automatically-acting anchor connection for uniting objects of every description | 747,768 | Dec. 22 | 4524 | 1019<br>1020 | 107 | 2151 |
| Rese, John H., Allegheny, Pa. Magazine torpedo-cane | 732,587 | June 30 | 5733 | 1273 | 104 | 2384 |
| Resek, Simon, Cleveland, Ohio. Stop and waste cock | 722,752 | Mar. 17 | 2067 | 462 | 103 | 473 |
| Resor, Edward E., Vanwert, Ohio. Flue-cutter | 723,025 | Mar. 17 | 2544 | 572 | 103 | 570 |
| Resow, Adolf, and O. Lauber, assignors to F. Krupp, Essen-on-the-Ruhr, Germany. Fluid-brake for guns | 724,398 | Mar. 31 | 5195 | 1164<br>1165 | 103 | 1144 |
| Ress, Frank L., Cleveland, Ohio. Combination square and bevel | 729,663 | June 2 | 250 | 58 | 104 | 1180 |
| Ressler, George S., Lansing, Mich. Cake-turner and culinary article | 725,628 | Apr. 14 | 2239 | 506 | 103 | 1660 |
| Ressler, John L., Salem, Ohio. Reversible combined poultry-perch, feed-trough, and vermin-exterminator | 734,956 | July 28 | 4189 | 975 | 105 | 930 |
| Restein, Clement, Philadelphia, Pa. Packing | 721,391 | Feb. 24 | 3724 | 847 | 102 | 1656 |
| Retallack, Joseph, Victor, assignor of one-half to A. Trevarthen, Colorado Springs, Colo. Drill shaper and sharpener | 719,874 | Feb. 3 | 837 | 196 | 102 | 1000 |
| Retallack, Joseph, Victor, assignor of one-half to R. A. Trevarthen, Colorado Springs, Colo. Drill-sharpening machine | 731,222 | June 16 | 3104 | 688 | 104 | 1805 |
| Retort Coke Oven Company. (See Wilcox, John F., assignor.) | | | | | | |
| Rettich, Edward, *et al.* (See Pugh, Milton E., assignor.) | | | | | | |
| Rettich, Edward, Germantown, and M. E. Pugh, Dayton, Ohio; said Pugh assignor to said Rettich. Sizing-machine | 740,180 | Sept. 29 | 5073 | 1140<br>1141 | 106 | 1150 |
| Rettich, Victor A., assignor to Kern Incandescent Gas Light Company, New York, N. Y. Regulating-valve for gas-burners | 739,346 | Sept. 22 | 3493 | 781 | 106 | 794 |
| Rettig, Charles, Closter, N. J. Car-buffer | 720,619 | Feb. 17 | 2270 | 521 | 102 | 1330 |
| Rettig, John K., assignor of one-half to C. Hatfield, Denver, Colo. Device for lifting fruit-jars or similar articles | 719,956 | Feb. 3 | 974 | 225 | 102 | 1030 |
| Rettig, John M., Chanute, Kans. Cultivator | 737,272 | Aug. 25 | 4183 | 931 | 105 | 1923 |
| Retzko, Gustav, Wallingford, Conn. Shade and curtain fixture | 736,018 | Aug. 11 | 79 | 401 | 105 | 1401 |
| Reubold, Friedrich. (See Julius and Reubold.) | | | | | | |
| Reuleaux, Josef. (See Laughlin and Reuleaux.) | | | | | | |
| Reuleaux, Josef, Wilkinsburg, assignor to A. Laughlin, Sewickley, Pa. Gas-producer | 726,757 | Apr. 28 | 4371 | 983 | 103 | 2128 |
| Reuleaux, Josef, Wilkinsburg, assignor to A. Laughlin, Sewickley, Pa. Air-heating apparatus for reverberatory furnaces | 742,740 | Oct. 27 | 4510 | 1021<br>1022 | 106 | 2246 |
| Reuling, John A. (See Philbrick, Charles P., assignor.) | | | | | | |
| Reuter, John C., St. Louis, Mo. Motor-vehicle | 728,499 | May 19 | 3158 | 699 | 104 | 709 |
| Reuter, Theodor, Winterthur, Switzerland. Controlling-valve | 732,588 | June 30 | 5734 | 1273 | 104 | 2384 |
| Reuterdahl, Arvid, *et al.* (See Monsen and Ericksen, assignors.) | | | | | | |
| Reuterdahl, Arvid, Providence, R. I. Reducing aluminium by hydrocarbons | 738,733 | Sept. 8 | 2362 | 519 | 106 | 521 |
| Reuther, Friedrich B., Geyer, Germany. Needle for knitting, &c. | 726,758 | Apr. 28 | 4372 | 983 | 103 | 2128 |
| Revere Rubber Company. (See Kent, William J., assignor.) | | | | | | |
| Revoir, Battese, assignor of two-thirds to E. B. Goodrich, Syracuse, N. Y. Lock | 729,098 | May 26 | 4267 | 943 | 104 | 954 |
| Reyburn, John E. (See Nightingale, William H., assignor.) | | | | | | |
| Reyburn, John E. (See Sheets, Joshua S., assignor.) | | | | | | |
| Reyer, Gus W., Stroud, Okla. Ter. Hame-fastener | 727,197 | May 5 | 703 | 151 | 104 | 152 |
| Reynet, Isidore, Montauban, France. Automatically-operated railway-signal | 736,445 | Aug. 18 | 2618 | 575 | 105 | 1576 |
| Reynolds, Aldo E., assignor of one-half to A. O'Neill, Peoria, Ill. Friction-brake | 731,128 | June 16 | 2939 | 653<br>654 | 104 | 1773 |
| Reynolds, Aldo E., assignor of one-half to A. O'Neill, Peoria, Ill. Friction-brake | 745,386 | Dec. 1 | 133 | 30, 31 | 107 | 1129 |
| Reynolds, Charles E., Woodson, and W. E. Reynolds, Modesto, Ill. Rotary engine | 734,430 | July 21 | 3199 | 753 | 105 | 710 |
| Reynolds, Charles J., and O. E. Chapman, Boston, Mass., assignors to Universal Car Seal Company, Kittery, Me., and Boston, Mass. Seal for seal-locks | 744,234 | Nov. 17 | 2849 | 609 | 107 | 638 |
| Reynolds, Charles J., and O. E. Chapman, Boston, Mass., assignors to Universal Car Seal Company, Kittery, Me., and Boston, Mass. Seal for seal-locks | 744,235 | Nov. 17 | 2850 | 610 | 107 | 638 |
| Reynolds, Charles L. (See Ryder and Reynolds.) | | | | | | |
| Reynolds, Earl H., Sterling, Ill. Car-loader | 728,298 | May 19 | 2799 | 620 | 104 | 635 |

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| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| Reynolds, Edwin, and C. Robinson, Milwaukee, Wis. Compressor and valve for same | 719,142 | Jan. 27 | 3097 | 688<br>689 | 102 | 699 |
| Reynolds Electric Flasher Manufacturing Company. (See Ziegler, Christian F., assignor.) | | | | | | |
| Reynolds, Elias, Valley Center, Kans. Railway-switch-operating mechanism | 734,367 | July 21 | 3092 | 728 | 105 | 687 |
| Reynolds, Frank, St. Louis, Mo. Shaft-support | 734,368 | July 21 | 3093 | 728 | 105 | 688 |
| Reynolds, Frank A., Lewiston, Me., assignor to Phipps Road Car Company, Jersey City, N. J. Attachment for hydrocarbon-burners | 736,153 | Aug. 11 | 2114 | 454 | 105 | 1450 |
| Reynolds, Frank A., Lewiston, Me., assignor, by mesne assignments, to F. A. Thomson, trustee, New York, N. Y. Hydrocarbon-burner | 737,020 | Aug. 25 | 3728 | 827 | 105 | 1829 |
| Reynolds, Frank A., Lewiston, Me., assignor, by mesne assignments, to F. A. Thomson, trustee, New York, N. Y. Valve for boiler and pump connections | 737,273 | Aug. 25 | 4185 | 932 | 105 | 1923 |
| Reynolds, Frederic W., *et al.* (See Tichon, Joseph E., assignor.) | | | | | | |
| Reynolds, George E., Pueblo, Colo. Roofing compound | 733,597 | July 14 | 1608 | ------ | 105 | 357 |
| Reynolds, George E., Scranton, Pa. Check or ticket holder | 747,222 | Dec. 15 | 3524 | 800 | 107 | 1908 |
| Reynolds, George H., assignor of fifty-one one-hundredths to R. A. Bower and C. B. Coon, Chicago, Ill. Vacuum heating system | 741,548 | Oct. 13 | 2228 | 496 | 106 | 1741 |
| Reynolds, Harry S., New Haven, Conn. Order-indicator | 743,397 | Nov. 3 | 1148 | 243 | 107 | 243 |
| Reynolds, Henry E., Braintree, Mass., and H. S. Reynolds, Columbus, Ga. Portable hand-stamp | 730,968 | June 16 | 2628 | 586 | 104 | 1711 |
| Reynolds, Henry L., Jersey City, N. J. Excavating-bucket | 747,479 | Dec. 22 | 3990 | 898 | 107 | 2028 |
| Reynolds, Henry L., Jersey City, N. J., assignor to Lidgerwood Manufacturing Company, New York, N. Y. Excavating-bucket | 747,480 | Dec. 22 | 3992 | 899 | 107 | 2029 |
| Reynolds, Henry L., Jersey City, N. J., assignor to Lidgerwood Manufacturing Company, New York, N. Y. Excavating-bucket | 747,481 | Dec. 22 | 3995 | 899 | 107 | 2030 |
| Reynolds, Henry L., Jersey City, N. J., assignor to Lidgerwood Manufacturing Company, New York, N. Y. Excavating-bucket | 747,482 | Dec. 22 | 3998 | 900 | 107 | 2031 |
| Reynolds, Henry L., Jersey City, N. J., assignor to Hayward Company, New York, N. Y. Suspension device for two-rope buckets | 748,419 | Dec. 29 | 5771 | 1317 | 107 | 2446 |
| Reynolds, Herman M., Oneida, N. Y. Drill-chuck | 724,737 | Apr. 7 | 600 | 142 | 103 | 1296 |
| Reynolds, Howard S. (See Reynolds, Henry E. and H. S.) | | | | | | |
| Reynolds, James E., and G. R. Grubb, Dublin, Ireland. Production of films on plate-glass or other transparent bodies | 722,901 | Mar. 17 | 2342 | ------ | 103 | 528 |
| Reynolds, John H. (See Gerdom, Gregory, assignor.) | | | | | | |
| Reynolds, Leven G., Uniontown, Ky. Baling-press | 738,068 | Sept. 1 | 1000 | 222<br>223 | 106 | 217 |
| Reynolds, Lewis G., Dayton, Ohio. Machine for lining paper cartons | 736,780 | Aug. 18 | 3272 | 723 | 105 | 1711 |
| Reynolds, Miron G., Anderson, Ind. Fluid-pressure regulator | 746,879 | Dec. 15 | 2869 | 661 | 107 | 1761 |
| Reynolds, Richard W., Kittanning, Pa. Ice-breaker | 721,326 | Feb. 24 | 3604 | 819 | 102 | 1632 |
| Reynolds, Sydney G., Louisville, Ky. Mucilage-jar | 744,939 | Nov. 24 | 4109 | 885 | 107 | 923 |
| Reynolds, Thomas H. (See Tomassek, Romeo P., assignor.) | | | | | | |
| Reynolds, William C., Springfield, assignor of one-half to G. H. Fouts, Dayton, Ohio. Hot-air furnace | 723,308 | Mar. 24 | 3073 | 692 | 103 | 694 |
| Reynolds, William E. (See Reynolds, Charles E. and W. E.) | | | | | | |
| Reynolds, William G., Chicago, and T. D. McCluskey, Harvey, Ill. Letter-embossing machine | 725,139 | Apr. 14 | 1344 | 303<br>304 | 103 | 1469 |
| Reynolds, William H., and C. F. Meilink, assignors to Meilink Manufacturing Company, Toledo, Ohio. Closing and locking device for safes, &c | 718,878 | Jan. 20 | 2583 | 577 | 102 | 578 |
| Reynolds, William H., and C. F. Meilink, assignors to Meilink Manufacturing Company, Toledo, Ohio. Safe | 735,588 | Aug. 4 | 1062 | 226 | 105 | 1206 |
| Reynolds, Willie H., assignor to M. and P. Co. of Chicago, Chicago, Ill. Mechanism for compressing air or other gases | 728,413 | May 19 | 2999 | 660 | 104 | 676 |
| Reyscher, Karl, Bielefeld, Germany. Drying-room | 743,196 | Nov. 3 | 725 | 159 | 107 | 151 |
| Reznick, Rachel E., Philadelphia, Pa. Combination-garment | 742,904 | Nov. 3 | 149 | 35 | 107 | 33 |
| Rhea, Robert L. (See Jones and Rhea.) | | | | | | |
| Rhea, Thielens Implement Company. (See Jones and Rhea, assignors.) | | | | | | |
| Rheem, William M., Boston, Mass., assignor, by mesne assignments, to Planters Compress Company. Feeder mechanism for presses | 734,750 | July 28 | 3811 | 889 | 105 | 850 |
| Rheinheimer, Albert B., Cleveland, Ohio. Guide for the design of ladies' gowns | 728,498 | May 19 | 3157 | 699 | 104 | 709 |
| Rheubottom, William M., Correctionville, Iowa. Overcheck crown-piece attachment | 728,979 | May 26 | 4058 | 900 | 104 | 912 |
| Rheutan, Garrett H., Boston, assignor of one-half to R. B. Lincoln, Waltham, Mass. Steam-boiler | 740,922 | Oct. 6 | 985 | 222<br>223 | 106 | 1457 |
| Rheutan, Garrett H., Boston, assignor of one-half to R. B. Lincoln, Waltham, Mass. Boiler tube-sheet | 740,923 | Oct. 6 | 987 | 223 | 106 | 1457 |
| Rhinelander, James J., Butler, Pa. Pipe-wrench | 722,144 | Mar. 3 | 886 | 198 | 103 | 189 |
| Rhinesmith, Edwin A., Kempton, Ill. Buggy-top | 719,044 | Jan. 27 | 2895 | 649 | 102 | 659 |
| Rhinow, Arthur B., Cincinnati, Ohio. Shoe-lace clasp | 724,502 | Apr. 7 | 150 | 36 | 103 | 1202 |
| Rhoades, Alonzo E., Hopedale, Mass., assignor to Draper Company, Portland, Me., and Hopedale, Mass. Spinning-frame | 722,145 | Mar. 3 | 887 | 198<br>199 | 103 | 190 |
| Rhoades, Alonzo E., Hopedale, Mass., assignor to Draper Company, Portland, Me., and Hopedale, Mass. Filling-replenishing loom | 741,717 | Oct. 20 | 2569 | 572 | 106 | 1828 |
| Rhoades, Alonzo E., assignor to Draper Company, Hopedale, Mass. Spinning-spindle | 729,221 | May 26 | 4488 | 989 | 104 | 1001 |
| Rhoades, Alonzo E., assignor to Draper Company, Hopedale, Mass. Bobbin-holder | 731,617 | June 23 | 3866 | 861 | 104 | 1978 |
| Rhoades, Alonzo E., assignor to Draper Company, Hopedale, Mass. Bobbin-holder | 731,618 | June 23 | 3867 | 861 | 104 | 1979 |
| Rhoades, Alonzo E., assignor to Draper Company, Hopedale, Mass. Device for plumbing spinning-spindles | 732,223 | June 30 | 5034 | 1120 | 104 | 2237 |
| Rhoades, Alonzo E., assignor to Draper Company, Hopedale, Mass. Spooler | 744,797 | Nov. 24 | 3865 | 832 | 107 | 872 |
| Rhoades, Charles E., assignor to Grocers' Specialty Manufacturing Company, Limited, Battlecreek, Mich. Feed mechanism | 725,873 | Apr. 21 | 2701 | 614 | 103 | 1774 |
| Rhoades, Harry A. (See Means, Porter W., assignor.) | | | | | | |
| Rhoades, James W., Fostoria, Ohio. Gripping attachment for oil-well pump-rods | 723,026 | Mar. 17 | 2545 | 572 | 103 | 570 |
| Rhoades, Martin, Rockford, Ill. Pin | 736,547 | Aug. 18 | 2814 | 616 | 105 | 1619 |
| Rhoads, Charles B., and C. Deckert, Kinmundy, Ill. Hay-stacker | 718,879 | Jan. 20 | 2584 | 577 | 102 | 578 |
| Rhoads, Charles E., Norwich, Kans. Draw-bar | 726,759 | Apr. 28 | 4373 | 983 | 103 | 2128 |
| Rhoads, Gilbert T., Plainfield, N. J. Belt-supporter | 728,414 | May 19 | 3004 | 660 | 104 | 677 |
| Rhode Island Elevator and Machine Company. (See Handy, Arthur E., assignor.) | | | | | | |
| Rhodes, Bert O. (See Rhodes, Jay B. and B. O.) | | | | | | |
| Rhodes, Charles H., *et al.* (See Martin, Charles P., assignor.) | | | | | | |
| Rhodes, Edgar. (See Le Maitre, Parker, and Rhodes.) | | | | | | |
| Rhodes, George H., Healdsburg, Cal. Washing-machine | 726,827 | Apr. 28 | 4492 | 1013<br>1014 | 103 | 2153 |
| Rhodes, James B., Grand Rapids, Mich. Pruning-shears | 729,894 | June 2 | 686 | 151 | 104 | 1268 |
| Rhodes, Jay B., Harvey, Ill. Dumping-car | 723,920 | Mar. 31 | 4214 | 948 | 103 | 945 |
| Rhodes, Jay B., Harvey, Ill. Dump-car | 723,921 | Mar. 31 | 4218 | 949 | 103 | 946 |
| Rhodes, Jay B. and B. O., Barberton, Ohio, assignors to National Drill and Manufacturing Company, Chicago, Ill. Machine for making and repairing roads | 724,042 | Mar. 31 | 4470 | 1007<br>1008 | 103 | 995 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Rhodes, Jessee S., *et al.* (See Osteen, Percy C., assignor.) | | | | | | |
| Rhodes, Seth A., Chicago, Ill. Ophthalmoscope | 725,483 | Apr. 14 | 1976 | 446 | 103 | 1603 |
| Rhodes, William S., and W. J. Trump, Lincoln, Nebr. Combined sidestick and quoin | 722,753 | Mar. 17 | 2068 | 463 | 103 | 473 |
| Ribaud, Auguste, Lyons, France. Hat-guard | 730,969 | June 16 | 2631 | 586 | 104 | 1711 |
| Riber, George C., Dayton, Ohio. Pipe flange or coupling | 718,157 | Jan. 13 | 1182 | 263 | 102 | 270 |
| Riblet, Byron C. (See Riblet, Royal N., assignor.) | | | | | | |
| Riblet, Byron C., Spokane, Wash. Rope-sheave support and adjustment for rope-tramway towers | 730,402 | June 9 | 1596 | 356 | 104 | 1469 |
| Riblet, Byron C., Spokane, Wash. Discharge-terminal for wire-rope tramways | 742,235 | Oct. 27 | 3608 | 807 808 | 106 | 2057 |
| Riblet, Byron C., Spokane, Wash. Grip for aerial wire-rope tramways | 742,236 | Oct. 27 | 3613 | 808 | 106 | 2058 |
| Riblet, Byron C., Spokane, Wash. Rope-clip | 744,406 | Nov. 17 | 3161 | 678 679 | 107 | 706 |
| Riblet, Royal N., assignor to B. C. Riblet, Nelson, British Columbia, Canada. Bucket-grip for rope tramways | 744,109 | Nov. 17 | 2593 | 554 | 107 | 582 |
| Rice, Albert J. (See Adams and Rice.) | | | | | | |
| Rice, Charles D., Hartford, Conn. Gear-cutting machine | 744,110 | Nov. 17 | 2596 | 554 555 556 | 107 | 583 |
| Rice, Charles D., Hartford, Conn., assignor to Underwood Typewriter Company, New York, N. Y. Type-bar guide for type-writers or like machines | 735,152 | Aug. 4 | 210 | 42 | 105 | 1027 |
| Rice, Charles W., Columbus, Ohio. Gas-burner | 746,992 | Dec. 15 | 3091 | 708 | 107 | 1812 |
| Rice, Claude H. (See Clark, Victor E., assignor.) | | | | | | |
| Rice, Delos E., Detroit, Mich. Balanced piston for steam-engines | 736,781 | Aug. 18 | 3273 | 723 724 | 105 | 1711 |
| Rice, Edward C., and H. F. Monk, Cripplecreek, Colo. Solder | 724,503 | Apr. 7 | 151 | ------ | 103 | 1202 |
| Rice, Edwin W., Jr., Schenectady, N. Y., assignor to General Electric Company. Electric-arc lamp | 727,690 | May 12 | 1628 | 370 | 104 | 369 |
| Rice, Edwin W., Jr., Schenectady, N. Y., assignor to General Electric Company. System of electrical distribution | 728,299 | May 19 | 2802 | 620 | 104 | 636 |
| Rice, Edwin W., Jr., Schenectady, N. Y., assignor to General Electric Company. Electric regulator | 728,300 | May 19 | 2804 | 621 | 104 | 636 |
| Rice, Edwin W., Jr., and E. J. Berg, Schenectady, N. Y., assignors to General Electric Company. Maintaining synchronous rotation of dynamo-electric machines | 732,114 | June 30 | 4802 | 1071 | 104 | 2189 |
| Rice, Edwin W., Jr., and E. J. Berg, Schenectady, N. Y., assignors to General Electric Company. Means for maintaining synchronous rotation of dynamo-electric machines | 732,654 | June 30 | 5853 | 1296 | 104 | 2410 |
| Rice, Frank H., Chicago, Ill. Dry-pipe valve | 740,467 | Oct. 6 | 162 | 32 | 106 | 1280 |
| Rice, George L., *et al.* (See Powell, Daniel P., assignor.) | | | | | | |
| Rice, George M., Worcester, Mass. Mechanism for treating ores | 748,528 | Dec. 29 | 5984 | 1357 | 107 | 2492 |
| Rice, James, Pueblo, Colo. Coin-bunching machine | 720,070 | Feb. 10 | 1207 | 277 278 | 102 | 1096 |
| Rice, James, Detroit, Mich. Disintegrating emery-wheels | 747,483 | Dec. 22 | 4000 | ------ | 107 | 2032 |
| Rice, James N., deceased, Scranton, Pa.; S. E. Rice, administratrix. Automatic water and fuel feed | 743,661 | Nov. 10 | 1721 | 363 | 107 | 383 |
| Rice, James T., Cleveland, Ohio. Bowling-ball | 746,576 | Dec. 8 | 2289 | 525 | 107 | 1610 |
| Rice, Joel T., Hot Springs, Ark. Trolley | 718,024 | Jan. 6 | 952 | 212 | 102 | 205 |
| Rice, John H. (See Dodge and Rice.) | | | | | | |
| Rice, John W., Atlanta, Ga. Combined communication-sheet and envelop | 738,943 | Sept. 15 | 2776 | 615 | 106 | 628 |
| Rice, Joseph, assignor of two-thirds to W. H. and W. I. Reedy, Chicago, Ill. Elevator | 724,504 | Apr. 7 | 152 | 36 | 103 | 1202 |
| Rice, Mark A., Los Angeles, Cal. Rotary engine | 744,614 | Nov. 17 | 3505 | 756 757 | 107 | 776 |
| Rice, Mary, Blairstown, N. J. Dust-pan | 732,445 | June 30 | 5461 | 1212 | 104 | 2325 |
| Rice, Milo E., Los Angeles, Cal. Adjustable window-shade fixture | 741,609 | Oct. 13 | 2341 | 524 | 106 | 1765 |
| Rice, Percy F., Tustin, Cal. Vehicle-nut wrench | 737,110 | Aug. 25 | 3919 | 871 | 105 | 1868 |
| Rice, Richard H. (See Sargent, Rice, and Tourgee.) | | | | | | |
| Rice, Sarah E., administratrix. (See Rice, James N.) | | | | | | |
| Rice, William G. (See Pimlott, George R., assignor.) | | | | | | |
| Rice, William S., Adams, N. Y. Hernial truss | 741,929 | Oct. 20 | 2959 | 659 | 106 | 1911 |
| Rich, Evert. (See Barton, Robert W., assignor.) | | | | | | |
| Rich, Frank E., Chicago, Ill. Motor-bracket for printing-presses | 728,301 | May 19 | 2806 | 621 | 104 | 637 |
| Rich, Frederick S., Marion, Ohio. Feeding and band-cutting mechanism | 720,846 | Feb. 17 | 2648 | 611 612 | 102 | 1411 |
| Rich, Frederick S., Canton, Ohio. Feeding and band-cutting mechanism | 746,379 | Dec. 8 | 1952 | 446 | 107 | 1535 |
| Rich, George R., assignor to George R. Rich Manufacturing Company, Chicago, Ill. Boring-tool | 728,013 | May 12 | 2249 | 500 | 104 | 496 |
| Rich, Henry M. (See Bancroft, Frank H., assignor.) | | | | | | |
| Rich, Jerome, Jackson, Mich. Heat-retaining pad | 738,573 | Sept. 8 | 2055 | 448 | 106 | 457 |
| Rich, Lester M., Cedar Rapids, Iowa. Postal car, &c | 738,846 | Sept. 15 | 2618 | 577 578 | 106 | 594 |
| Richard, Alfred L., assignor of two-thirds to T. W. Carter, Denison, Iowa. Clothes-line | 728,761 | May 19 | 3656 | 813 | 104 | 815 |
| Richard, Eugene. (See Weir, Roderick, assignor.) | | | | | | |
| Richard, Eugene C., assignor to Buick Manufacturing Company, Detroit, Mich. Electric sparker for explosion-engines | 740,924 | Oct. 6 | 988 | 223 224 | 106 | 1458 |
| Richard, Lucien, assignor to Manufacture Dijonnaise des Biscuits Pernot, Dijon, (Côte-d'Or,) France. Sheet-metal box | 747,770 | Dec. 22 | 4527 | 1020 | 107 | 2152 |
| Richard, Montrose R. (See Tobin, John, assignor.) | | | | | | |
| Richardi, Robert, Richmond, Va. Clothes-pin machinery | 734,957 | July 28 | 4190 | 975 | 105 | 930 |
| Richards, Alanson L., Auburn, Ohio. Automatic valve | 747,769 | Dec. 22 | 4525 | 1020 | 107 | 2151 |
| Richards, Charles B., *et al.* (See Day, William C., assignor.) | | | | | | |
| Richards, Charles B., assignor to Cleveland Pneumatic Tool Company, Cleveland, Ohio. Impact-tool | 735,589 | Aug. 4 | 1064 | 226 | 105 | 1207 |
| Richards, Charles B., assignor to Cleveland Pneumatic Tool Company, Cleveland, Ohio. Pneumatic tool | 745,239 | Nov. 24 | 4724 | 1032 | 107 | 1049 |
| Richards, Charles E. (See Richards, Franklin E. and C. E.) | | | | | | |
| Richards, Charles L., assignor of one-half to J. Y. Hudson, Falun, Kans. Threshing-machine attachment | 734,751 | July 28 | 3817 | 889 890 | 105 | 851 |
| Richards, Charles W., assignor to Acme Machinery Company, Cleveland, Ohio. Bolt-heading machine | 733,998 | July 21 | 2371 | 557 | 105 | 532 |
| Richards, David J., New Baltimore, Mich. Synchronizer | 735,676 | Aug. 4 | 1228 | 260 | 105 | 1241 |
| Richards, Edgar G., assignor to Northern Electrical Manufacturing Company, Madison, Wis. Electric motor | 729,664 | June 2 | 251 | 58 | 104 | 1180 |
| Richards, Francis H., Hartford, Conn. Manufacture of playing-balls | 721,462 | Feb. 24 | 3851 | 876 877 | 102 | 1683 |
| Richards, Francis H., Hartford, Conn. Golf-ball | 721,463 | Feb. 24 | 3855 | 877 | 102 | 1684 |
| Richards, Francis H., Hartford, Conn. Playing-ball | 725,011 | Apr. 7 | 1101 | 250 | 103 | 1404 |
| Richards, Francis H., Hartford, Conn. Playing-ball | 737,773 | Sept. 1 | 404 | 86 | 106 | 89 |

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| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Richards, Francis H., Hartford, Conn. Playing-ball | 737,774 | Sept. 1 | 406 | 86 | 106 | 89 |
| Richards, Francis H., Hartford, Conn., assignor to Kempshall Manufacturing Company, Arlington, N. J. Making shells for playing-balls | 720,482 | Feb. 10 | 1960 | 448 | 102 | 1252 |
| Richards, Francis H., Hartford, Conn., assignor to Kempshall Manufacturing Company, Arlington, N. J. Playing-ball | 720,737 | Feb. 17 | 2477 | 570 | 102 | 1374 |
| Richards, Francis H., Hartford, Conn., assignor to Kempshall Manufacturing Company, Arlington, N. J. Playing-ball | 727,198 | May 5 | 704 | 151 | 104 | 152 |
| Richards, Francis H., Hartford, Conn., assignor to Kempshall Manufacturing Company, Arlington, N. J. Playing-ball | 727,199 | May 5 | 705 | 151 | 104 | 153 |
| Richards, Francis H., Hartford, Conn., assignor to Kempshall Manufacturing Company, Arlington, N. J. Playing-ball | 727,200 | May 5 | 707 | 152 | 104 | 153 |
| Richards, Francis H., Hartford, Conn., assignor to Kempshall Manufacturing Company, Arlington, N. J. Playing-ball | 727,201 | May 5 | 708 | 152 | 104 | 154 |
| Richards, Francis H., Hartford, Conn., assignor to Kempshall Manufacturing Company, Arlington, N. J. Playing-ball | 727,202 | May 5 | 710 | 152 | 104 | 154 |
| Richards, Frank R., assignor to J. B. Hinthorn, Hiawatha, Kans., and W. M. Clary, Kansas City, Mo. Newspaper-file | 730,297 | June 9 | 1411 | 310 | 104 | 1432 |
| Richards, Franklin E. and C. E., Oakland, Iowa. Stock-watering tank | 728,133 | May 12 | 2461 | 548 | 104 | 541 |
| Richards, George C., Berkeley, Cal. Stamp-mill | 735,590 | Aug. 4 | 1066 | 226 | 105 | 1207 |
| Richards, George C., Berkeley, Cal. Pump | 737,274 | Aug. 25 | 4186 | 932 | 105 | 1924 |
| Richards, George C., Oakland, Cal. Deep-well pump attachment | 747,223 | Dec. 15 | 3525 | 800 | 107 | 1908 |
| Richards, George L. (See Agnew, Lee A., assignor.) | | | | | | |
| Richards, Harry D., Suttercreek, Cal. Conveyer-belt | 722,252 | Mar. 10 | 1118 | 246 | 103 | 253 |
| Richards, Ira B., and G. H. Gilman, Tacoma, Wash. Car-unloading plow | 733,999 | July 21 | 2374 | 557, 558 | 105 | 533 |
| Richards, James, Grand Rapids, Mich. Knockdown furniture | 731,223 | June 16 | 3106 | 689 | 104 | 1805 |
| Richards, John, San Francisco, Cal. Steam-turbine | 740,780 | Oct. 6 | 750 | 169 | 106 | 1405 |
| Richards, John D. (See Patterson, Ransom D., assignor.) | | | | | | |
| Richards, Joseph, New York, N. Y. Asphalt-cutting attachment for steam-rollers | 719,260 | Jan. 27 | 3304 | 740 | 102 | 743 |
| Richards, Joseph I., San Francisco, Cal. Hot-air syringe | 720,071 | Feb. 10 | 1209 | 278 | 102 | 1096 |
| Richards, Lloyd H., El Paso, Tex. Depurator | 735,591 | Aug. 4 | 1068 | 227 | 105 | 1208 |
| Richards, Louisa M. (See Regnier, Eugene S., assignor.) | | | | | | |
| Richards, Lucius J., Springfield, Mass. Volumetric gas-governor | 730,047 | June 2 | 959 | 215 | 104 | 1323 |
| Richards, Marcius C., Aurora, Ill. Door-hanger | 723,922 | Mar. 31 | 4220 | 949 | 103 | 947 |
| Richards, Peter B., Nathalia, Victoria, Australia. Harvesting-machine | 717,925 | Jan. 6 | 767 | 172 | 102 | 164 |
| Richards, Thomas C., Winsted, Conn. Picture-nail | 721,464 | Feb. 24 | 3857 | 877 | 102 | 1684 |
| Richards, Thomas C., Winsted, Conn. Candle-lamp | 737,141 | Aug. 25 | 3920 | 871 | 105 | 1868 |
| Richards, Thomas C., Winsted, Conn. Sash-rod | 737,142 | Aug. 25 | 3921 | 871 | 105 | 1868 |
| Richards, Thomas C., Winsted, Conn. Stair-rod fastener | 737,143 | Aug. 25 | 3922 | 871 | 105 | 1868 |
| Richards, Thomas C., Winsted, Conn. Hook | 740,044 | Sept. 29 | 4839 | 1086 | 106 | 1102 |
| Richards, Thomas J., Franklin, Pa. Carbureting device for explosive-engines | 723,487 | Mar. 24 | 3438 | 769 | 103 | 764 |
| Richards, Willard F., Buffalo, assignor to Gould Coupler Company, New York, N. Y. Operating mechanism for railway-car couplings | 741,277 | Oct. 13 | 1661 | 375 | 106 | 1620 |
| Richards, Willard F., Buffalo, assignor to Gould Coupler Company, New York, N. Y. Car-buffer | 745,667 | Dec. 1 | 639 | 148 | 107 | 1234 |
| Richards, Wilton L. (See Campbell and Richards.) | | | | | | |
| Richards, Wilton L., Malden, Mass., assignor to American Telephone and Telegraph Company. Protective-fuse apparatus | 736,019 | Aug. 11 | 1880 | 402 | 105 | 1401 |
| Richardson, Charles A., Kansas City, Mo. Heating-stove | 726,462 | Apr. 28 | 3772 | 854 | 103 | 2009 |
| Richardson, Charles G., Springfield, Vt., assignor to De Laval Steam Turbine Company. Lathe-chuck | 725,774 | Apr. 21 | 2527 | 573 | 103 | 1737 |
| Richardson, Charles G., Springfield, Vt., assignor to De Laval Steam Turbine Company. Back-rest for turret-lathes | 725,775 | Apr. 21 | 2528 | 573, 574 | 103 | 1737 |
| Richardson, Columbus J., Caldwell, Tex. Cattle-guard | 718,795 | Jan. 20 | 2426 | 538 | 102 | 546 |
| Richardson and Company, C. (See Richardson, Hendricks, and Markey, assignors.) | | | | | | |
| Richardson, Edwin J., *et al.* (See Joly, Céleste, assignor.) | | | | | | |
| Richardson, Frank M., *et al.* (See Hurd, George H., assignor.) | | | | | | |
| Richardson, Frank M., and J. F. Field, Chicago, Ill. Apparatus for administering anesthetics | 746,380 | Dec. 8 | 1956 | 447 | 107 | 1536 |
| Richardson, Frederick, Providence, assignor of one-third to M. H. Ray, East Providence, R. I. Lacing-tip | 722,902 | Mar. 17 | 2344 | 524 | 103 | 529 |
| Richardson, Frederick, J. J. Hendricks, and F. Markey, assignors to C. Richardson and Company, St. Marys, Canada. Combined churn and butter-worker | 730,159 | June 2 | 1136 | 256 | 104 | 1358 |
| Richardson, George E. (See McCrea, James L., assignor.) | | | | | | |
| Richardson, George L., and H. S. Wilcox, Chicago, Ill., assignors to Troy Laundry Machinery Co., Limited, Troy, N. Y. Ink-fountain | 745,668 | Dec. 1 | 641 | 148 | 107 | 1234 |
| Richardson, George L., and H. S. Wilcox, Chicago, Ill., assignors to Troy Laundry Machinery Company, Limited. Marking-machine | 748,529 | Dec. 29 | 5986 | 1357 | 107 | 2492 |
| Richardson, George W., Sparta, Wis. Window-sash | 737,144 | Aug. 25 | 3923 | 872 | 105 | 1868 |
| Richardson, John A. (See Nanney, Wiley F., assignor.) | | | | | | |
| Richardson, John S., Boston, Mass. Bridge-guard | 726,348 | Apr. 28 | 3567 | 808 | 103 | 1968 |
| Richardson, Levant M., Chicago, Ill. Roller for roller-skates | 726,463 | Apr. 28 | 3774 | 854 | 103 | 2010 |
| Richardson, M. E., trustee. (See Lundquist, Frank A., assignor.) | | | | | | |
| Richardson Manufacturing Company. (See Brown, Theophilus, assignor.) | | | | | | |
| Richardson, Marcia M., *et al.* (See Walter, William L., assignor.) | | | | | | |
| Richardson, Millard F., assignor of one-half to L. M. Elliott, Holton, Kans. Draft-equalizer | 742,741 | Oct. 27 | 4512 | 1022 | 106 | 2247 |
| Richardson, Myron H., Chicago, Ill. Automatic door-sign | 731,129 | June 16 | 2942 | 654 | 104 | 1773 |
| Richardson, Myron H., and G. F. Wright, Chicago, Ill. Comb | 748,420 | Dec. 29 | 5774 | 1317 | 107 | 2447 |
| Richardson, Presstman J., Broken Bow, Nebr. Bottle | 723,210 | Mar. 17 | 2894 | 648 | 103 | 643 |
| Richardson, Samuel L., New York, N. Y. Clothes-drying attachment for steam-radiators | 726,349 | Apr. 28 | 3568 | 808 | 103 | 1968 |
| Richardson, William C., Mystic, Conn. Type-writing machine | 721,392 | Feb. 24 | 3725 | 847, 848 | 102 | 1657 |
| Richardson, William J., London, England. Letter or similar file | 725,484 | Apr. 14 | 1980 | 446, 447 | 103 | 1604 |
| Richardson, William J. W. (See Oxlade, Robert, assignor.) | | | | | | |
| Richardson, William P., New York, N. Y. Appliance for open fireplaces | 730,798 | June 9 | 2296 | 510 | 104 | 1621 |
| Richemond, Pierre, assignor to Société Anonyme des Etablissements Weyher et Richemond, Pantin, France. Governor for steam-engines | 723,185 | Mar. 17 | 2850 | 640 | 103 | 635 |
| Richert, Emanuel T. (See Miller and Richert.) | | | | | | |
| Richert, Johan G., Stockholm, Sweden. Draining or sewerage system | 727,446 | May 5 | 1160 | 256 | 104 | 251 |
| Riches, Arthur W., assignor of one-half to J. H. Griebling, Denver, Colo. Fire-escape | 737,145 | Aug. 25 | 3924 | 872 | 105 | 1868 |
| Richey, Browne & Donald. (See Browne, Richard B., assignor.) | | | | | | |
| Richey, Jesse N., Lonetree, Iowa. Scale-rack | 734,094 | July 21 | 2568 | 599, 600 | 105 | 578 |

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| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Richi, Jakob, Berne, Switzerland. Speed-indicator | 730,298 | June 9 | 1412 | 310 | 104 | 1432 |
| Richman, Charles, New York, N. Y. Coat-stay | 743,928 | Nov. 10 | 2195 | 473 | 107 | 483 |
| Richman, Solomon, assignor to National Enameling and Stamping Company, New York, N. Y. Composition of matter | 724,043 | Mar. 31 | 4475 | ..... | 103 | 996 |
| Richmond, Benedict, assignor to J. B. Corcoran and P. M. Daleiden, Aurora, Ill. Carriage-curtain fastener | 735,153 | Aug. 4 | 211 | 42 | 105 | 1028 |
| Richmond, Charles T., assignor to National Carbon Company, Cleveland, Ohio. Electric brush | 736,154 | Aug. 11 | 2115 | 454 | 105 | 1451 |
| Richmond, Charles T., and M. H. Moffett, assignors to National Carbon Company, Cleveland, Ohio. Voltaic cell | 733,751 | July 14 | 1874 | 442 | 105 | 412 |
| Richmond Electric Manufacturing Company. (See Plassmann, August W., assignor.) | | | | | | |
| Richmond, George E., Houston, Tex. Pneumatic cotton-conveyer | 721,743 | Mar. 3 | 158 | 36, 37 | 103 | 35 |
| Richmond, Henry E., Westwood, N. J. Stereoscope | 724,044 | Mar. 31 | 4476 | 1008 | 103 | 996 |
| Richmond, John R., Glasgow, Scotland. Steam surface condenser | 722,627 | Mar. 10 | 1795 | 399, 400 | 103 | 401 |
| Richmond, John R., Glasgow, Scotland. Steam surface condenser | 722,628 | Mar. 10 | 1796 | 400 | 103 | 401 |
| Richmond, Joseph M., Fairgrove, Mo. Corn-cultivator | 734,095 | July 21 | 2569 | 600 | 105 | 578 |
| Richmond Safety Gate Company. (See Colby, Clarence L., assignor.) | | | | | | |
| Richmond, Theodore L., assignor to Buffalo Scale Company, Buffalo, N. Y. Scale | 742,742 | Oct. 27 | 4513 | 1022 | 106 | 2247 |
| Richmond Wood Working Company. (See Betty, Thomas H., assignor.) | | | | | | |
| Richter, Clarence, Syracuse, N. Y., assignor to National Biscuit Company, Jersey City, N. J., and Chicago, Ill. Collapsible box or crate | 728,617 | May 19 | 3402 | 753 | 104 | 762 |
| Richter, Friedrich A. (See Schütze, August, assignor.) | | | | | | |
| Richter, Friedrich A., Rudolstadt, Germany. Star-wheel for music-boxes | 740,925 | Oct. 6 | 989 | 224 | 106 | 1458 |
| Richter, Friedrich A., Rudolstadt, Germany. Star-wheel | 740,926 | Oct. 6 | 990 | 224 | 106 | 1458 |
| Richter, Hans, Nuremberg, Germany. Means for supplying water to the pistons of gas-engines | 745,669 | Dec. 1 | 643 | 148 | 107 | 1235 |
| Richter, Hans, assignor to Vereinigte Maschinenfabrik Augsburg und Maschinenbaugesellschaft Nürnberg A. G., Nuremberg, Germany. Steam-turbine | 738,574 | Sept. 8 | 2056 | 448 | 106 | 457 |
| Richter, Philipp G., assignor of one-half to B. G. Hartmann, St. Louis, Mo. Hydrometer | 721,744 | Mar. 3 | 160 | 37 | 103 | 36 |
| Richter, Rudolf, Mahlow, Germany. Machine for harvesting potatoes or similar root crops | 747,771 | Dec. 22 | 4529 | 1020 | 107 | 2152 |
| Richter, Walther, Allegheny, Pa. Meat-chopping machine | 743,753 | Nov. 10 | 1874 | 396 | 107 | 417 |
| Richter, Wolfgang D., Philadelphia, Pa. Machine for making needle-bars for straight-knitting machines | 733,425 | July 14 | 1306 | 309, 310 | 105 | 293 |
| Richter, Wolfgang D., Philadelphia, Pa. Bearing | 742,905 | Nov. 3 | 151 | 35 | 107 | 33 |
| Rick, Wm. F., *et al.* (See Anderson, Alfred, assignor.) | | | | | | |
| Rickards, Frank H., Centralia, Ill. Stamping-machine | 730,970 | June 16 | 2632 | 587 | 104 | 1711 |
| Rickards, William, Los Angeles, Cal. Electric heating-pad | 729,222 | May 26 | 4489 | 989 | 104 | 1001 |
| Rickards, William, Los Angeles, Cal. Electric heating-pad | 748,309 | Dec. 29 | 5574 | 1271 | 107 | 2402 |
| Ricke, George H., assignor to W. T. Hill, Cincinnati, Ohio. Fruit-jar | 723,406 | Mar. 24 | 3271 | 733 | 103 | 731 |
| Rickel, George E., and J. W. Potter, Oketo, Kans. Gate-hinge | 721,327 | Feb. 24 | 3604 | 819 | 102 | 1632 |
| Ricker, Ella E., Grinnell, Iowa. Cake-beater | 723,407 | Mar. 24 | 3272 | 733 | 103 | 731 |
| Rickerd, Daniel H., Muscatine, Iowa. Air-heating attachment for stoves | 731,224 | June 16 | 3108 | 689 | 104 | 1805 |
| Rickersberg, Simon, Chicago, Ill. Fly-trap | 723,027 | Mar. 17 | 2547 | 572 | 103 | 571 |
| Rickert, F. M. (See Sturgeon, Benjamin F., assignor.) | | | | | | |
| Ricketts, John L., Philadelphia, Pa. Signaling mechanism | 740,312 | Sept. 29 | 5315 | 1197 | 106 | 1200 |
| Ricketts, William M., assignor to A. T. Stutson, Columbus, Ohio. Draft connection for vehicles | 744,236 | Nov. 17 | 2851 | 610 | 107 | 638 |
| Rickey, William H., East Orange, N. J. Seam-dampener | 734,000 | July 21 | 2375 | 558 | 105 | 533 |
| Rickles, Louis H., Attalla, assignor of one-half to J. M. Moragne, Gadsden, Ala. Mail-crane | 724,943 | Apr. 7 | 960 | 221, 222 | 103 | 1374 |
| Rickman, Robert L., assignor of one-half to C. O. White, Vancouver, British Columbia, Canada. Compound brake-cylinder | 747,772 | Dec. 22 | 4530 | 1021 | 107 | 2152 |
| Ricksecker, Alva C. (See Smith, Frank L., assignor.) | | | | | | |
| Ridderhof, Corneil, assignor to Wilmarth & Morman Company, Grand Rapids, Mich. Drill-grinding machine | 743,033 | Nov. 3 | 413 | 89, 90 | 107 | 87 |
| Riddle, Laura H., Council Bluffs, Iowa. Game | 745,387 | Dec. 1 | 137 | 31 | 107 | 1130 |
| Ridenour, Charles H. (See Mahony, William F., assignor.) | | | | | | |
| Rider, Charles H., St. Louis, Mo. Apparatus for dissolving organic or inorganic substances | 748,217 | Dec. 29 | 5420 | 1233, 1234 | 107 | 2368 |
| Rider, Granville S., assignor to H. E. Rider, New York, N. Y. Electromedical apparatus | 720,483 | Feb. 10 | 1961 | 448 | 102 | 1253 |
| Rider, Herbert E. (See Rider, Granville S., assignor.) | | | | | | |
| Rider, Jay G. Rockford, Ill. Fountain-pen | 739,720 | Sept. 22 | 4196 | 938, 939 | 106 | 948 |
| Ridgely, Charles T., assignor to Ridgely Trimmer Co., Springfield, Ohio. Cutting-tool | 733,511 | July 14 | 1460 | 347 | 105 | 326 |
| Ridgely and Johnson Tool Company. (See Vaughan, Henry H., assignor.) | | | | | | |
| Ridgely Trimmer Co. (See Ridgely, Charles T., assignor.) | | | | | | |
| Ridgway, Elzie L., and D. H. Bailey, Denison, Tex. Surgical applicator | 728,980 | May 26 | 4058 | 900 | 104 | 912 |
| Ridgway, Herbert N., Winthrop, assignor to Automotous Boat Company, Boston, Mass. Submarine-boat structure | 731,500 | June 23 | 3642 | 813 | 104 | 1935 |
| Ridgway, Thomas J., and J. F. Dixon, Carthage, Mo. Bed-spring | 744,237 | Nov. 17 | 2852 | 610 | 107 | 638 |
| Riebe, August, assignor to Deutsche Waffen Munitionsfabriken, Berlin, Germany. Ball-bearing | 734,194 | July 21 | 2764 | 648 | 105 | 617 |
| Riecké, John C. A., assignor, by mesne assignments, to Commercial Manufacturing Company, Incorporated, Baltimore, Md. Coin-controlled picture-exhibitor | 724,126 | Mar. 31 | 4640 | 1045 | 103 | 1031 |
| Riecké, John C. A., assignor to Commercial Manufacturing Company, Incorporated, Baltimore, Md. Coin-controlled apparatus | 732,115 | June 30 | 4805 | 1072 | 104 | 2189 |
| Ried, George M., assignor of one-third to W. D. Culbreath, Meridian, Miss. Piston-rod packing | 745,908 | Dec. 1 | 1096 | 245 | 107 | 1332 |
| Riedel, Arthur E., New York, N. Y. Snow-melting apparatus | 734,195 | July 21 | 2765 | 648, 649 | 105 | 617 |
| Riedel, Ernest, and J. Fulhaber, Paterson, N. J. Heating apparatus | 735,412 | Aug. 4 | 711 | 152 | 105 | 1132 |
| Riedel, Henry J., Brooklyn, N. Y. Ram for hydraulic jacks | 744,616 | Nov. 17 | 3509 | 757 | 107 | 777 |
| Riedinger, Jacob P., Oberlin, Ohio. Telephone attachment | 723,309 | Mar. 24 | 3074 | 692 | 103 | 694 |
| Riedler, Frederick W., Thurston, Nebr. Draft attachment | 727,447 | May 5 | 1163 | 256 | 104 | 251 |
| Riedmiller, Otto J., Scranton, Pa. Wrench | 737,483 | Aug. 25 | 4583 | 1027 | 105 | 2011 |
| Rieffel, August, Philadelphia, Pa. Micrometer-gage | 747,224 | Dec. 15 | 3526 | 800 | 107 | 1909 |
| Rieffel, Joseph V., Buffalo, N. Y. Sheet-folding device | 747,085 | Dec. 15 | 3268 | 744 | 107 | 1854 |
| Rieg, Jacob, Wilkesbarre, Pa. Sidewalk-elevator | 724,205 | Mar. 31 | 4801 | 1076 | 103 | 1062 |
| Riegel, Sebastian, Philadelphia, Pa. Horse-detacher | 737,146 | Aug. 25 | 3925 | 872 | 105 | 1869 |
| Rieger, Erwin, Vienna, Austria-Hungary. Fastening device for screws | 722,046 | Mar. 3 | 727 | 162 | 103 | 157 |
| Riegner, Austin H. (See Stauffer and Riegner.) | | | | | | |
| Riehle, Frederick A. (See Grist, Benjamin W., assignor.) | | | | | | |
| Riel, George and W., Manchester, N. H. Guide for sole-sewing machines | 747,225 | Dec. 15 | 3527 | 801 | 107 | 1909 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Riel, William. (See Riel, George and W.) | | | | | | |
| Riely, Frank C., assignor to R. E. L. White, Washington, D. C. Closure for jars or bottles | 725,590 | Apr. 14 | 2164 | 490 | 103 | 1645 |
| Riemenschneider, Ernest, State Center, Iowa. Harrow | 724,505 | Apr. 7 | 154 | 37 | 103 | 1203 |
| Riemer, Louis F., Milwaukee, Wis. Shoe-heel protector | 730,971 | June 16 | 2633 | 587 | 104 | 1711 |
| Ries, Elias E., New York, N. Y. Means for removing sleet, &c., from electrical conductors | 743,331 | Nov. 3 | 993 | 215 | 107 | 212 |
| Rieske, Otto G., Dayton, Ky., assignor of two-thirds to J. J. Grogan and J. E. O'Connell, Cincinnati, Ohio. Rotary gas-engine | 719,045 | Jan. 27 | 2897 | 649 | 102 | 659 |
| Rieske, Otto G., Dayton, Ky., assignor of two-thirds to J. J. Grogan and J. E. O'Connell, Cincinnati, Ohio. Rotary engine | 719,046 | Jan. 27 | 2899 | 650 | 102 | 660 |
| Riester, Joseph, Newtown, Ind. Blower-pipe for grain-separators | 718,522 | Jan. 13 | 1905 | 418 | 102 | 426 |
| Rieth, Julius C., Sandwich, Ill. Pneumatic grain-elevator | 717,926 | Jan. 6 | 769 | 173 | 102 | 165 |
| Rietzel, Adolph F., assignor to Thomson Electric Welding Company, Lynn, Mass. Clamp device for electric welding-machines | 719,508 | Feb. 3 | 168 | 39 | 102 | 859 |
| Rietzel, Adolph F., assignor to Thomson Electric Welding Company, Lynn, Mass. Clamping device for electric metal-working apparatus | 735,821 | Aug. 11 | 1503 | 322 | 105 | 1320 |
| Rife, Archie H., and J. R. Carper, Dallas City, Ill. Carbureter | 720,968 | Feb. 17 | 2887 | 661 | 102 | 1461 |
| Riffle, E. J. (See Meiss, William H., assignor.) | | | | | | |
| Riffle, Frederick, assignor of one-half to L. F. Waters, Hull, Ill. Nut-lock | 727,448 | May 5 | 1164 | 257 | 104 | 252 |
| Rifkin, Louis, New York, N. Y., and D. Getzoff, East Orange, N. J. Baking-iron for wafers | 736,155 | Aug. 11 | 2116 | 454 | 105 | 1451 |
| Rigdon, Stephen D. (See Ingram, James J., assignor.) | | | | | | |
| Riggle, Clark H., Pleasant Valley, Ohio. Fish-plate | 726,760 | Apr. 28 | 4374 | 984 | 103 | 2128 |
| Riggs, Elwood, assignor to American Optical Company, Southbridge, Mass. Wrapper for lenses | 718,523 | Jan. 13 | 1906 | 418 | 102 | 426 |
| Riggs, Stephen A., and T. J. Haworth, assignors of one-third to C. F. Haworth, Jonesboro, Ind. Time apparatus for car-despatchers | 720,484 | Feb. 10 | 1962 | 448 | 102 | 1253 |
| Riggs, William H., assignor of one-half to C. A. Bird, Lapel, Ind. Windmill-regulator | 721,328 | Feb. 24 | 3605 | 820 | 102 | 1632 |
| Riglander, Jacob W., and B. H. Blank, New York, N. Y. Opera-glass | 730,972 | June 16 | 2634 | 587 | 104 | 1712 |
| Rigney, James W. (See Yeager and Rigney.) | | | | | | |
| Rignon, Joseph A., Berlin, Germany. Electric-arc lamp | 731,711 | June 23 | 4032 | 900 | 104 | 2012 |
| Riker, Andrew L., Shorthills, N. J., assignor to "Locomobile" Company of America, New York, N. Y. Transmission-gear for motor-vehicles | 725,629 | Apr. 14 | 2240 | 507, 508 | 103 | 1661 |
| Riker, Andrew L., Shorthills, N. J., assignor to "Locomobile" Company of America, New York, N. Y. Internal-combustion engine | 725,990 | Apr. 21 | 2903 | 658, 659 | 103 | 1815 |
| Riker, Andrew L., New York, N. Y., assignor, by mesne assignments, to Electric Vehicle Company, Jersey City, N. J., and Hartford, Conn. Electric igniter for explosive-engines | 734,138 | July 21 | 2667 | 627 | 105 | 597 |
| Riker, Charles B., Jersey City, N. J., assignor to Thomas W. Houchin Company, New York, N. Y. Powder-gun | 727,449 | May 5 | 1165 | 257 | 104 | 252 |
| Riles, Ira M., Montbrook, Fla. Water-arch | 728,762 | May 19 | 3657 | 814 | 104 | 815 |
| Riley, Charles, San Francisco, Cal. Plumber's clamp for wiping joints | 725,874 | Apr. 21 | 2702 | 614 | 103 | 1775 |
| Riley, Charles E. (See Moore, Charles E., assignor.) | | | | | | |
| Riley, Charles W., Lynchburg, Va. Supporting-drum for electric lights | 745,670 | Dec. 1 | 644 | 149 | 107 | 1235 |
| Riley, James E., assignor of one-fourth to J. L. Deatherage, Kansas City, Mo. Sash lock and lift | 732,754 | Mar. 17 | 2069 | 463 | 103 | 473 |
| Riley, John, Minneapolis, Minn. Grain-door for freight-cars | 719,875 | Feb. 3 | 840 | 196, 197 | 102 | 1001 |
| Riley, John, Minneapolis, Minn. Gang-plank | 733,598 | July 14 | 1609 | 382 | 105 | 357 |
| Riley, John J. (See Fairhurst, William S., assignor.) | | | | | | |
| Riley, Justain H. (See Siler and Riley.) | | | | | | |
| Riley, Levi. (See Heath, John W., assignor.) | | | | | | |
| Riley, Robert J., Zion City, Ill. Eraser-cleaner | 721,237 | Feb. 24 | 3456 | 786 | 102 | 1600 |
| Riley, William B., assignor of one-half to J. A. Teamer, Palestine, Tex. Operating device for air-brake angle-cocks | 732,384 | Mar. 10 | 1350 | 299 | 103 | 303 |
| Riley, William T., *et al.* (See Morgan, James K., assignor.) | | | | | | |
| Rimbey, Isaiah, Deerfield, Mo. Cattle-guard | 719,509 | Feb. 3 | 170 | 39 | 102 | 859 |
| Rinaldi, Leonida L., Somerville, Mass. Submarine construction | 728,014 | May 12 | 2250 | 500, 501 | 104 | 496 |
| Rinderknecht, Charles J., Indianapolis, Ind. Broadcast seeder | 737,484 | Aug. 25 | 4584 | 1027, 1028 | 105 | 2011 |
| Rindge Manufacturing Company. (See Bowen, Calvin C., assignor.) | | | | | | |
| Rindge Manufacturing Company. (See Bowen, Newnham, and Barnett, assignors.) | | | | | | |
| Rinehardt, Henry, Monroe, Wis. Running attachment for vehicles | 734,612 | July 28 | 3533 | 827 | 105 | 797 |
| Rinehart, Erwin S., Anaconda, Mont. Dental dam-holder | 747,484 | Dec. 22 | 4001 | 900 | 107 | 2032 |
| Ring, Annie E., *et al.* (See Ring, Francis C., assignor.) | | | | | | |
| Ring, Francis C., assignor of three-fourths to E. W. Blossom, D. A. Lakin, and A. E. Ring, Concord, Mass. Game apparatus | 734,752 | July 28 | 3818 | 890 | 105 | 852 |
| Ring, George S., St. Paul, Minn. Bookbinder | 722,903 | Mar. 17 | 2345 | 524 | 103 | 529 |
| Ringhdahl, Sigrid. (See Emmé, Mary, assignor.) | | | | | | |
| Ringheim, Knute, Radcliffe, Iowa. Binder and mower pitman | 740,045 | Sept. 29 | 4840 | 1086 | 106 | 1102 |
| Ringrose, Charles E., Alma Center, Wis. Barrel holding and dumping apparatus | 746,164 | Dec. 8 | 1565 | 350 | 107 | 1454 |
| Ringset Company. (See Ford, William H., assignor.) | | | | | | |
| Rinker, Fredrick, Toledo, Ohio. Greenhouse construction | 739,559 | Sept. 22 | 3884 | 871 | 106 | 880 |
| Rinker, Robert S., Rinkerton, Va. Grain-separator | 738,699 | Sept. 8 | 2315 | 509 | 106 | 511 |
| Rinne, Hermann, Essen-on-the-Ruhr, Germany. Machine for rolling tube ends | 748,100 | Dec. 29 | 5207 | 1178 | 107 | 2323 |
| Rinsche, Frank C., assignor to Universal Accountant Machine Company, St. Louis, Mo. Electrically-operated calculating-machine | 717,762 | Jan. 6 | 455 | 106 | 102 | 99 |
| Rinsche, Frank C., assignor to Universal Accountant Machine Company, St. Louis, Mo. Counting mechanism | 723,213 | Mar. 17 | 2898 | 649 | 103 | 644 |
| Rinsche, Frank C., assignor to Universal Accountant Machine Company, St. Louis, Mo. Calculating-machine | 726,803 | Apr. 28 | 4444 | 1004, 1005 | 103 | 2143 |
| Rinsche, Frank C., assignor to Universal Accountant Machine Company, St. Louis, Mo. Governing mechanism | 729,416 | May 26 | 4823 | 1070 | 104 | 1070 |
| Rinsche, Frank C., assignor to Universal Accountant Machine Company, St. Louis, Mo. Driving mechanism | 731,501 | June 23 | 3644 | 813, 814 | 104 | 1936 |
| Rinsche, Frank C., assignor to Universal Accountant Machine Company, St. Louis, Mo. Counting mechanism | 744,407 | Nov. 17 | 3162 | 679 | 107 | 706 |
| Rintoul, William. (See Robertson and Rintoul.) | | | | | | |
| Riordan, Timothy G., Chicago, Ill. Razor-strop holder | 739,928 | Sept. 29 | 4618 | 1036 | 106 | 1054 |
| Riotte, Carl C., New York, N. Y., assignor to United States Long Distance Automobile Company, Jersey City, N. J. Speed changing and reversing mechanism | 721,093 | Feb. 17 | 3129 | 719 | 102 | 1515 |
| Riotte, Carl C. and E. A., New York, N. Y. Valve mechanism for connected parts | 717,623 | Jan. 6 | 179 | 45 | 102 | 39 |
| Riotte, Carl C., and C. R. Radcliffe, New York, N. Y., assignors, by mesne assignments, to United States Long Distance Automobile Company, Jersey City, N. J. Internal-combustion engine | 722,629 | Mar. 10 | 1797 | 401 | 103 | 402 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drgs. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Riotte, Eugene A. (See Riotte, Carl C. and E. A.) | | | | | | |
| Rioux, Alfred C., Toronto, Canada. Mower-bar | 738,944 | Sept. 15 | 2778 | 615 | 106 | 629 |
| Ripley, Harrie A., Westdale, Mass. Trolley-harp | 739,223 | Sept. 15 | 3274 | 725 | 106 | 732 |
| Ripley, Henry, Keene, N. H. Carpet-stretcher | 732,446 | June 30 | 5462 | 1212 | 104 | 2325 |
| Ripley, Robert A., Stamford, Conn., assignor to C. G. Burke, Brooklyn, N. Y., and J. O. A. Whittemore, Boston, Mass. Electric system of transmission | 736,548 | Aug. 18 | 2814 | 616 | 105 | 1620 |
| Rippley, Frank, Grafton, Ill. Spraying apparatus | 737,485 | Aug. 25 | 4586 | 1028 | 105 | 2012 |
| Ripson, John D., Shelbourne Falls, assignor of one-half to L. J. Bird, Boston, Mass. Casket | 739,509 | Sept. 22 | 3808 | 853 | 106 | 864 |
| Ris, Christopher, and A. Mylius, assignors to Anilin Color and Extract Works, formerly John R. Geigy, Basle, Switzerland. Yellow sulfur dye and making same | 722,630 | Mar. 10 | 1803 | ..... | 103 | 403 |
| Ris, Christopher, and A. Mylius, assignors to Aniline Colour and Extract-Works, formerly John R. Geigy, Basle, Switzerland. Acridin dye and making same | 740,468 | Oct. 6 | 165 | ..... | 106 | 1281 |
| Risbridger, John, Northeast, Pa., and M. W. Risbridger, Cleveland, Ohio. Bond for railway-rails | 730,403 | June 9 | 1598 | 356 | 104 | 1469 |
| Risbridger, Milton W. (See Risbridger, John and M. W.) | | | | | | |
| Rishel, Elias C., Athens, Pa. Neck-yoke and pole connection | 724,738 | Apr. 7 | 601 | 142 | 103 | 1296 |
| Rishel, Elias C., Athens, Pa. Neck-yoke wear-plate | 735,154 | Aug. 4 | 213 | 42 | 105 | 1628 |
| Risien, Edmund E., San Saba, Tex. Regulating growth | 741,833 | Oct. 20 | 2768 | 618 | 106 | 1852 |
| Risley, Charles B., Princeton, Ind. Boiler-tube cleaner | 734,613 | July 28 | 3534 | 827 | 105 | 797 |
| Risley, Charles B., Princeton, Ind. Rod-packing | 745,459 | Dec. 1 | 285 | 69 | 107 | 1160 |
| Risse, Emile, St. Louis, Mo. Non-refillable bottle | 741,372 | Oct. 13 | 1887 | 416 | 106 | 1670 |
| Rissman, Lillian O., Chicago, Ill. Apparatus for recording music | 722,904 | Mar. 17 | 2346 | 525 | 103 | 529 |
| Ritchel, Charles F., Bridgeport, Conn., assignor to F. J. and C. F. Ritchel, Jr. Locking device | 726,832 | Apr. 28 | 4499 | 1015 | 103 | 2154 |
| Ritchel, Fred J., *et al.* (See Ritchel, Charles F., assignor.) | | | | | | |
| Ritchie, David A., *et al.* (See Braddock, Edward I., assignor.) | | | | | | |
| Ritchie, David A., assignor to Lamb & Ritchie, Cambridge, Mass. Apparatus for manufacturing composite pipe | 718,158 | Jan. 13 | 1183 | 263 | 102 | 270 |
| Ritchie, David A., assignor to Lamb & Ritchie, Cambridge, Mass. Manufacturing composite pipe | 729,796 | June 2 | 500 | 110, 111 | 104 | 1230 |
| Ritchie, Enoch E., Howard Lake, Minn. Voting-machine | 723,923 | Mar. 31 | 4222 | 949, 950, 951 | 103 | 947 |
| Ritchie, Gaines G., Sangamon, Ill. Bicycle-wheel | 722,433 | Mar. 10 | 1438 | 319 | 103 | 322 |
| Riter, John L., and E. W. Carlos, Brownsville, Ind. Gate | 730,570 | June 9 | 1914 | 426 | 104 | 1539 |
| Rites, Francis M., Ithaca, N. Y. Governor | 737,275 | Aug. 25 | 4188 | 932, 933 | 105 | 1924 |
| Rites, Francis M., Ithaca, N. Y. Governor | 737,486 | Aug. 25 | 4587 | 1028 | 105 | 2012 |
| Rites, Francis M., Ithaca, N. Y. Valve and igniting gear for explosive or internal-combustion engines | 741,164 | Oct. 13 | 1435 | 328 | 106 | 1571 |
| Rites, Francis M., Ithaca, N. Y. Valve and igniting gear for explosive or internal-combustion engines | 741,165 | Oct. 13 | 1438 | 328, 329 | 106 | 1572 |
| Rites, Francis M., Ithaca, N. Y. Valve-gear for explosive or internal-combustion engines | 741,166 | Oct. 13 | 1443 | 329 | 106 | 1573 |
| Rites, Francis M., Ithaca, N. Y. Governing-valve gear for explosive and internal-combustion engines | 741,976 | Oct. 20 | 3065 | 685 | 106 | 1932 |
| Rites, Francis M., Ithaca, N. Y. Valve-gear for explosive and internal-combustion engines | 741,977 | Oct. 20 | 3069 | 686 | 106 | 1932 |
| Rites, Francis M., Ithaca, N. Y. Fluid-compressor | 747,773 | Dec. 22 | 4532 | 1021 | 107 | 2153 |
| Rites, Francis M., Ithaca, N. Y., assignor to R. Baggaley, Pittsburg, Pa. Blowing-engine | 746,744 | Dec. 15 | 2604 | 598 | 107 | 1702 |
| Rites, Francis M., Ithaca, N. Y., assignor to R. Baggaley, Pittsburg, Pa. Valve-gear for fluid-compressors | 746,745 | Dec. 15 | 2605 | 599 | 107 | 1702 |
| Ritsch, John F. W., Fairchild, Wis. Lumber-rule | 728,763 | May 19 | 3658 | 814 | 104 | 816 |
| Ritsert, Eduard, Frankfort-on-the-Main, Germany. Closing bottles or vessels | 744,617 | Nov. 17 | 3510 | 757 | 107 | 777 |
| Ritsert, Eduard, Frankfort-on-the-Main, Germany. Aromatic esters and making same | 748,101 | Dec. 29 | 5209 | ..... | 107 | 2324 |
| Rittel, Henry, Milwaukee, Wis. Auxiliary saddle for harness | 720,178 | Feb. 10 | 1406 | 321 | 102 | 1138 |
| Ritter, Abraham, and M. Halpern, New York, N. Y. Handle for bags or other articles | 748,012 | Dec. 29 | 5029 | 1135 | 107 | 2284 |
| Ritter, Adam, Cincinnati, Ohio. Door | 742,355 | Oct. 27 | 3825 | 857 | 106 | 2102 |
| Ritter, Benjamin. (See Ritter, William and B.) | | | | | | |
| Ritter, Frederic W. (See Schraubstadter, Richard T., assignor.) | | | | | | |
| Ritter, Georg, Stuttgart, Germany. Telephone system | 745,388 | Dec. 1 | 137 | 31, 32 | 107 | 1130 |
| Ritter, Georg, Stuttgart, Germany. Telephone system | 745,523 | Dec. 1 | 389 | 90, 91 | 107 | 1182 |
| Ritter, George, Pinckneyville, Ill. Rain-water purifier | 748,102 | Dec. 29 | 5211 | 1179 | 107 | 2324 |
| Ritter, Gilbert P. (See Buhoup and Ritter.) | | | | | | |
| Ritter, Gilbert P., Chicago, Ill. Draft-rigging for railway-cars | 719,610 | Feb. 3 | 352 | 82 | 102 | 895 |
| Ritter, Gilbert P., Chicago, Ill. Car-coupling | 720,738 | Feb. 17 | 2478 | 570, 571 | 102 | 1375 |
| Ritter, Gilbert P., Chicago, Ill. Coupling-release rigging | 743,560 | Nov. 10 | 1522 | 318, 319 | 107 | 342 |
| Ritter, Gilbert P., Chicago, Ill. Coupling-release rigging | 743,561 | Nov. 10 | 1525 | 319 | 107 | 343 |
| Ritter, Henry, assignor to Lunkenheimer Company, Cincinnati, Ohio. Valve | 717,927 | Jan. 6 | 771 | ..... | 102 | 165 |
| Ritter, Isaac B., Philadelphia, Pa. Switch | 747,774 | Dec. 22 | 4536 | 1021, 1022 | 107 | 2154 |
| Ritter, W. H., *et al.* (See McGuire, Peter J., assignor.) | | | | | | |
| Ritter, William and B., Philadelphia, Pa. Cushion for chairs, &c | 718,524 | Jan. 13 | 1907 | 419 | 102 | 426 |
| Rivenburgh, Alvin, Greenfield, Iowa. Electric switch | 746,577 | Dec. 8 | 2290 | 525 | 107 | 1610 |
| Riveroll, Elfego, Los Angeles, Cal. Smelting-furnace | 737,487 | Aug. 25 | 4590 | 1028, 1029 | 105 | 2012 |
| Riveroll, Elfego, Los Angeles, Cal. Smelting-furnace | 748,561 | Dec. 29 | 6061 | 1373 | 107 | 2511 |
| Rivers, Charles N. (See Godfrey and Rivers.) | | | | | | |
| Rivers, Edward G., Richmond, assignor of one-half to Electric and Ordnance Accessories Company, Limited, Birmingham, England. Electric heater or radiator | 738,734 | Sept. 8 | 2363 | 519 | 106 | 521 |
| Rivers, Julian H., St. Louis, Mo. Lock-nut | 737,488 | Aug. 25 | 4595 | 1029 | 105 | 2014 |
| Rivers, Julian H., assignor to United States Fiber Stopper Company, St. Louis, Mo. Stopper | 726,761 | Apr. 28 | 4375 | 984 | 103 | 2129 |
| Rivers, Julian H., assignor to United States Fiber Stopper Company, St. Louis, Mo. Stopper | 726,762 | Apr. 28 | 4376 | 984 | 103 | 2129 |
| Rivers, Julian H., assignor to United States Fiber Stopper Company, St. Louis, Mo. Closure for receptacles | 734,753 | July 28 | 3819 | 890 | 105 | 852 |
| Rivers, Julian H., assignor to United States Fibre Stopper Company, St. Louis, Mo. Closure for receptacles | 737,147 | Aug. 25 | 3929 | 873 | 105 | 1869 |
| Rivers, Julian H., assignor to United States Fiber Stopper Company, St. Louis, Mo. Machine for manufacturing pulp articles | 748,013 | Dec. 29 | 5030 | 1136, 1137 | 107 | 2285 |
| Rivers, Julian H., assignor to United States Fiber Stopper Company, St. Louis, Mo. Treating pulp | 748,014 | Dec. 29 | 5038 | 1137 | 107 | 2286 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | Spec. | Dr'g. | Vol. | Page. |
| Rivers, William G., Attleboro, Mass. Shaving-mug | 729,417 | May 26 | 4825 | 1070 | 104 | 1070 |
| Rivet, Eugene, Woonsocket, assignor to I. B. Merriman, Providence, R. I. Picker-stick connection for looms | 729,797 | June 2 | 504 | 111 | 104 | 1231 |
| Rivkin, Bert, New York, N. Y. Car-gate-operating apparatus | 717,928 | Jan. 6 | 772 | 173 | 102 | 165 |
| Rix, Benjamin F., Kalamazoo, Mich., assignor to Howard Elastic Wheel Company, Wabash, Ind. Knockdown sled | 734,431 | July 21 | 3201 | 753 | 105 | 710 |
| Rix, Milton H. (See Holley and Rix.) | | | | | | |
| Rixson, Oscar C., Oakpark, assignor to Oscar C. Rixson Co., Chicago, Ill. Door check and spring | 735,822 | Aug. 11 | 1506 | 322, 323 | 105 | 1320 |
| Rixstine, Elmer R. (See Yeager and Rixstine.) | | | | | | |
| Roach, Albert C. (See Roach, William G. and A. C.) | | | | | | |
| Roach, Christopher J., Hartford, Conn. Lock | 728,134 | May 12 | 2462 | 548 | 104 | 542 |
| Roach, Christopher J., Hartford, Conn. Commutator | 742,743 | Oct. 27 | 4515 | 1023 | 106 | 2247 |
| Roach, John R., Cale, Ind. Horse-collar pad | 732,961 | July 7 | 464 | 116 | 105 | 100 |
| Roach, Laura E., Bathbeach, N. Y. Device for preventing hosiery from shrinking | 743,034 | Nov. 3 | 416 | 90 | 107 | 88 |
| Roach, Lindsay G., Fredericksburg, Va. Shell | 737,964 | Sept. 1 | 817 | 179 | 106 | 179 |
| Roach, William G. and A. C., assignors of three-fifths to H. C. Yeiser and O. H. L. Wernicke, Cincinnati, Ohio. Artificial stone | 720,739 | Feb. 17 | 2481 | ------ | 102 | 1375 |
| Roach, William H., Gilliam, W. Va., assignor of one-fourth to J. T. Adams, Graham, Va. Mine-car | 734,958 | July 28 | 4192 | 976 | 105 | 930 |
| Roads, E. Clinton, trustee. (See Teal, Charles A., assignor.) | | | | | | |
| Roake, John S., Brooklyn, N. Y. Ventilating apparatus | 735,823 | Aug. 11 | 1509 | 323 | 105 | 1321 |
| Roake, John S., New York, N. Y. Soap-holder | 740,469 | Oct. 6 | 166 | 32 | 106 | 1281 |
| Roark, Mortimer B., Denton, Tex. Violin-bow | 738,945 | Sept. 15 | 2780 | 615 | 106 | 629 |
| Roat, Harry A., Jr., Harrisburg, Pa. Game-board | 746,993 | Dec. 15 | 3092 | 708 | 107 | 1812 |
| Robb, Aaron B. (See Douden and Robb.) | | | | | | |
| Robb, Clifford D., Allegheny, Pa. Whistling toy | 736,782 | Aug. 18 | 3274 | 723 | 105 | 1712 |
| Robb, James T., Brooklyn, assignor to Mitchell Vance Company, New York, N. Y. Ceiling or wall box | 727,842 | May 12 | 1933 | 431 | 104 | 429 |
| Robb, James T., assignor to Mitchell Vance Company, New York, N. Y. Insulating-joint | 728,015 | May 12 | 2252 | 501 | 104 | 496 |
| Robb, James T., assignor to Mitchell Vance Company, New York, N. Y. Electric switch | 742,906 | Nov. 3 | 153 | 36 | 107 | 34 |
| Robbe, Jefferson G., Canon City, Colo. Reversible window-sash | 729,665 | June 2 | 253 | 58, 59 | 104 | 1181 |
| Robbins, Benjamin L., Pregnalls, S. C. Cotton-planter and fertilizer-distributer | 737,489 | Aug. 25 | 4596 | 1029 | 105 | 2014 |
| Robbins, Benton, Cassville, Mo. Gun-barrel protector | 728,302 | May 19 | 2808 | 621 | 104 | 637 |
| Robbins, Charles W., and S. F. Poynor, Leicester, England. School or other desk | 730,973 | June 16 | 2637 | 587 | 104 | 1712 |
| Robbins, Cordilleras L., Pekin, Ill. Grain-car door | 742,744 | Oct. 27 | 4517 | 1023 | 106 | 2248 |
| Robbins, Elias, Pittsburg, Pa. Device for operating street-railway switches | 731,952 | June 23 | 4468 | 997 | 104 | 2106 |
| Robbins, Frank A., Worcester, Mass. Combination-tool | 717,716 | Jan. 6 | 347 | 85 | 102 | 75 |
| Robbins, Frank A., Worcester, Mass. Tripod-head for photographic instruments | 729,520 | May 26 | 4993 | 1109 | 104 | 1108 |
| Robbins, Joseph H., assignor of one-half to W. J. Boyce, Owosso, Mich. Table-leg fastening | 738,124 | Sept. 1 | 1128 | 250, 251 | 106 | 244 |
| Robbins, Richard B., Adrian, Mich. Corn-harvester | 734,614 | July 28 | 3585 | 828 | 105 | 797 |
| Robbins, William H., Greub, Wyo. Hay-stacker | 737,663 | Sept. 1 | 192 | 40 | 106 | 45 |
| Robbins, Zenas C., Washington, D. C. Railway-tie | 721,745 | Mar. 3 | 162 | 37 | 103 | 36 |
| Robby, William C., assignor to M. Rumely Company, Laporte, Ind. Clover hulling and threshing machine | 747,226 | Dec. 15 | 3528 | 801 | 107 | 1909 |
| Robby, William C., and W. N. Rumely, Laporte, assignors to Indiana Manufacturing Company, Indianapolis, Ind. Pneumatic straw-stacker | 720,486 | Feb. 10 | 1965 | 449 | 102 | 1254 |
| Robedeau, Nazire J., assignor of one-half to C. E. L. Weber, Toledo, Ohio. Hair-planer | 737,775 | Sept. 1 | 408 | 86 | 106 | 90 |
| Röber, Bernhard, Dresden, Germany. Device for cooling or warming the human body | 743,562 | Nov. 10 | 1529 | 320 | 107 | 344 |
| Roberson, Robert, administrator. (See Roberson, William A. L.) | | | | | | |
| Roberson, William A. L., deceased, Thacker, W. Va.; R. Roberson, administrator. Mining-machine | 727,843 | May 12 | 1934 | 431 | 104 | 429 |
| Roberts, Albert E., Norwalk, assignor of one-half to Noadiah P. Bowler, Cleveland, Ohio. Overshoe | 736,156 | Aug. 11 | 2118 | 455 | 105 | 1451 |
| Roberts, Albert E., assignor of one-half to N. P. Bowler, Cleveland, Ohio. Overshoe | 744,798 | Nov. 24 | 3869 | 832 | 107 | 873 |
| Roberts, Alfred, F. Young, London, and J. C. Smith, Eastbourne, England. Window-cleaner | 725,287 | Apr. 14 | 1601 | 362 | 103 | 1524 |
| Roberts, Alfred E., San Francisco, Cal. Combination Scotch and water-tube marine boiler | 718,525 | Jan. 13 | 1908 | 419 | 102 | 426 |
| Roberts, Alvin L., assignor to Morgan Engineering Company, Alliance, Ohio. Chain-block for overhead cranes and derricks | 722,755 | Mar. 17 | 2070 | 463, 464 | 103 | 473 |
| Roberts, Amearicus C., J. C. Baker, and J. H. Ross, Searcy, Ark. Baling-press | 741,718 | Oct. 20 | 2572 | 572 | 106 | 1829 |
| Roberts, Amos W. (See Eames and Roberts.) | | | | | | |
| Roberts Battery Company. (See Roberts, Isaiah L., assignor.) | | | | | | |
| Roberts Battery Company. (See Tweedy, Edmund, assignor.) | | | | | | |
| Roberts Battery Company. (See Tweedy, Roberts, and Tweedy, assignors.) | | | | | | |
| Roberts, Beauregard, Mobile, Ala. Submarine-cable-laying device | 734,615 | July 28 | 3537 | 828 | 105 | 798 |
| Roberts, Beauregard, Mobile, Ala. Submarine-cable-laying device | 737,021 | Aug. 25 | 3729 | 827, 828 | 105 | 1829 |
| Roberts, Benj. L., *et al.* (See Moseley, Lee R., assignor.) | | | | | | |
| Roberts, Carlton W., Chicago, Ill. Galvanic battery | 742,802 | Oct. 27 | 4611 | 1045 | 106 | 2268 |
| Roberts, Charles C., Ansonia, Conn. Driver for drill-sockets | 727,450 | May 5 | 1166 | 257 | 104 | 252 |
| Roberts, Charles E. (See Pearson and Roberts.) | | | | | | |
| Roberts, Charles E., Oakpark, Ill. Automobile | 748,015 | Dec. 29 | 5040 | 1137, 1138, 1139 | 107 | 2286 |
| Roberts, Charles E., Oakpark, Ill. Vehicle-brake | 748,016 | Dec. 29 | 5043 | 1139 | 107 | 2288 |
| Roberts, Charles E., assignor to Winchester Repeating Arms Co., New Haven, Conn. Display-package for powder, shot, &c. | 719,876 | Feb. 3 | 842 | 197 | 102 | 1001 |
| Roberts, Charles W., Carthage, assignor to Ontario Grinder Company, Lockport, N. Y. Wood-pulp machine | 719,695 | Feb. 3 | 502 | 114 | 102 | 929 |
| Roberts, Clarence P. and G. P., assignors of one-half to S. Berdan, Toledo, Ohio. Furnace-grate | 723,622 | Mar. 24 | 3666 | 822 | 103 | 811 |
| Roberts & Co., A. Boake. (See Berry, Albert E., assignor.) | | | | | | |
| Roberts, David, Grantham, England. Water-tube boiler | 725,875 | Apr. 21 | 2703 | 615 | 103 | 1775 |
| Roberts, David, Lincoln, England. Machine-tool | 742,356 | Oct. 27 | 3826 | 857 | 106 | 2103 |
| Roberts, Edward F. F., Baltimore, Md. Piston-packing | 739,721 | Sept. 22 | 4201 | 939 | 106 | 948 |
| Roberts, Frank C., Philadelphia, Pa. Ore-roaster | 720,969 | Feb. 17 | 2889 | 661, 662 | 102 | 1461 |
| Roberts, Frank C., Philadelphia, Pa. Transfer stock-car | 735,300 | Aug. 4 | 508 | 102 | 105 | 1089 |
| Roberts, Frank C., Philadelphia, Pa. Transfer stock-car | 746,381 | Dec. 8 | 1957 | 447, 448 | 107 | 1537 |
| Roberts, Frank E., Toledo, Ohio. Filter | 724,944 | Apr. 7 | 962 | 222 | 103 | 1375 |
| Roberts, Frank K., assignor to S. A. Roberts, Buffalo, N. Y. Acetylene-gas generator | 734,616 | July 28 | 3538 | 828, 829 | 105 | 798 |

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| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Roberts, Fred H., Wilmington, Mass. Merchandise-package | 740,927 | Oct. 6 | 991 | 224 | 106 | 1458 |
| Roberts, George C., and H. S. Wilcox, Chicago, Ill., assignors to Troy Laundry Machinery Company, Limited, Troy, N. Y. Starching-machine | 739,722 | Sept. 22 | 4202 | 940 | 106 | 949 |
| Roberts, George I., New Rochelle, N. Y. Feed-water heater | 720,740 | Feb. 17 | 2482 | 571 | 102 | 1375 |
| Roberts, George I., New Rochelle, N. Y. Exhaust-head | 731,816 | June 23 | 4229 | 942 | 104 | 2054 |
| Roberts, George I., New Rochelle, N. Y. Steam-separator | 731,953 | June 23 | 4469 | 997 | 104 | 2106 |
| Roberts, George P. (See Roberts, Clarence P. and G. P.) | | | | | | |
| Roberts, George W., Wilmington, Del. Dumping-wagon | 726,989 | May 5 | 327 | 71,72 | 104 | 71 |
| Roberts, George W., assignor of one-half to W. W. Nuss, Philadelphia, Pa. Knob-fastening | 719,261 | Jan. 27 | 3305 | 740 | 102 | 743 |
| Roberts, George W., assignor of one-half to W. W. Nuss, Philadelphia, Pa. Knob-fastening | 730,705 | June 9 | 2152 | 477 | 104 | 1590 |
| Roberts, Guy T., San Diego, Cal. Trolley-finder | 731,954 | June 23 | 4470 | 997 | 104 | 2107 |
| Roberts, Harold B., *et al.* (See Müller-Jacobs, Armand, assignor.) | | | | | | |
| Roberts, Henry P., assignor to W. L. Haines, Boston, Mass., and A. H. Stetson, Detroit, Mich. Curtain pole and hanger | 724,506 | Apr. 7 | 155 | 37 | 103 | 1203 |
| Roberts, Henry P., assignor of one-half to F. Oehl and B. M. Beck, New York, N. Y. Hydrocarbon-burner | 741,834 | Oct. 20 | 2769 | 618 | 106 | 1872 |
| Roberts, Isaiah L. (See Tweedy, Roberts, and Tweedy.) | | | | | | |
| Roberts, Isaiah L., Brooklyn, N. Y., assignor to Roberts Battery Company. Making zinc and chromium hydrates | 738,239 | Sept. 8 | 1376 | ..... | 106 | 313 |
| Roberts, Isaiah L., New York, N. Y., assignor to Roberts Battery Company. Electrolytic diaphragm | 741,592 | Oct. 13 | 2317 | 518 | 106 | 1760 |
| Roberts, Isaiah L., Brooklyn, assignor of one-third to E. N. Dickerson, New York, N. Y. Current and propulsion wheel | 747,775 | Dec. 22 | 4539 | 1022 | 107 | 2155 |
| Roberts, Jacob, Catasauqua, Pa. Kiln, furnace, &c | 723,310 | Mar. 24 | 3077 | 692 | 103 | 695 |
| Roberts, James, *et al.* (See Bower, Almond P., assignor.) | | | | | | |
| Roberts, James. (See Hampton and Roberts.) | | | | | | |
| Roberts, James H., New York, N. Y. Electrical appliance for elevators | 722,756 | Mar. 17 | 2072 | 464, 465 | 103 | 474 |
| Roberts, James T., Anderson, S. C. Fabric-tufting machine | 739,447 | Sept. 22 | 3709 | 825 | 106 | 842 |
| Roberts, John D., St. Paul, Minn. Furnace | 744,238 | Nov. 17 | 2854 | 610, 611 | 107 | 638 |
| Roberts, John G., assignor to H. J. Fox, trustee, Detroit, Mich. Device for maintaining constant speed in electric motors | 725,140 | Apr. 14 | 1347 | 304 | 103 | 1470 |
| Roberts, John L., St. Louis, Mo. Time-register | 739,224 | Sept. 15 | 3275 | 725, 726 | 106 | 732 |
| Roberts, Luke L., Brunner, Tex. Stilt | 738,240 | Sept. 8 | 1377 | 297, 298 | 106 | 313 |
| Roberts, Middleton H., Rolfe, Iowa. Explosive-engine | 743,332 | Nov. 3 | 1001 | 216 | 107 | 214 |
| Roberts, Odin B., Dedham, assignor to Automatic Hammer Company, Boston, Mass. Automatic hammer | 729,666 | June 2 | 254 | 59 | 104 | 1181 |
| Roberts, Palmedus D., *et al.* (See Bower, Almond P., assignor.) | | | | | | |
| Roberts, Samuel C., and F. C. Potter, Springfield, Mass. Bridge for stringed instruments | 727,203 | May 5 | 711 | 152, 153 | 104 | 154 |
| Roberts, Sarah A. (See Roberts, Frank K., assignor.) | | | | | | |
| Roberts, Thomas P. (See Michael and Roberts.) | | | | | | |
| Roberts, W. B., *et al.* (See Bryant, William P., assignor.) | | | | | | |
| Roberts, Walter H., Portland, Me. Vulcanization | 736,336 | Aug. 11 | 2424 | 529 | 105 | 1520 |
| Roberts, William B., Washington, D. C. Wheel | 743,197 | Nov. 3 | 726 | 159 | 107 | 152 |
| Roberts, William E., Newark, N. J., assignor to Wyckoff, Seamans & Benedict, Ilion, N. Y. Electrical type-writing machine | 747,485 | Dec. 22 | 4002 | 900, 901 | 107 | 2033 |
| Robertson, Alonzo P., assignor, by mesne assignments, to Ewell Plastic Post Co., Rochester, Mich. Cement fence-post | 732,447 | June 30 | 5463 | 1212 | 104 | 2325 |
| Robertson, Andrew R. (See Macfarlane and Robertson.) | | | | | | |
| Robertson, Archibald J., Chicago, Ill. Piston-head | 722,146 | Mar. 3 | 897 | 199 | 103 | 192 |
| Robertson, Charles B., Ottumwa, Iowa. Trolley-catcher | 740,313 | Sept. 29 | 5317 | 1198 | 106 | 1200 |
| Robertson, Charles B. and J. J., Ottumwa, Iowa. Insulator | 740,314 | Sept. 29 | 5319 | 1198 | 106 | 1200 |
| Robertson, Chastine C., assignor of one-half to C. L. Franklin, Fordyce, Ark. Power-motor | 721,834 | Mar. 3 | 320 | 70 | 103 | 71 |
| Robertson, Cullen A., Sparta, Ga. Coffee-pot | 746,165 | Dec. 8 | 1566 | 350, 351 | 107 | 1455 |
| Robertson, Frank L., Omaha, Nebr. Pumping device | 736,549 | Aug. 18 | 2816 | 616 | 105 | 1620 |
| Robertson, George F., Paris, Tex. Machine for perforating checks and printing thereon | 748,421 | Dec. 29 | 5776 | 1317 | 107 | 2447 |
| Robertson, Harry A., assignor of one-half to G. Pettit, Jr., Princeton, Ky. Prepayment attachment for electric meters | 742,745 | Oct. 27 | 4518 | 1023 | 106 | 2248 |
| Robertson, Ivy B., Manchester, assignor of one-fourth to A. Sayles, Chesterfield County, Va. Pump | 744,618 | Nov. 17 | 3511 | 758 | 107 | 778 |
| Robertson, James, Glasgow, Scotland. Handle-bar | 729,418 | May 26 | 4825 | 1070 | 104 | 1070 |
| Robertson, John. (See Moir and Robertson.) | | | | | | |
| Robertson, John A. (See Hutchings and Robertson.) | | | | | | |
| Robertson, John A., assignor to Rochester Optical & Camera Co., Rochester, N. Y. Photographic-film camera | 743,563 | Nov. 10 | 1530 | 320 | 107 | 344 |
| Robertson, John J. (See Robertson, Charles B. and J. J.) | | | | | | |
| Robertson, Le Roy, assignor of two-thirds to J. Yule and L. W. Forsting, Oakland, Cal. Combination-cane | 741,373 | Oct. 13 | 1888 | 416 | 106 | 1670 |
| Robertson, Le Roy, assignor of two-thirds to J. Yule and L. W. Forsting, Oakland, Cal. Cane-display attachment | 746,880 | Dec. 15 | 2871 | 661 | 107 | 1762 |
| Robertson, Michael J., Geelong, Victoria, Australia. Cash-carrier and apparatus therefor | 722,905 | Mar. 17 | 2348 | 525 | 103 | 529 |
| Robertson, Peter, and C. Matson, Racine, Wis. Gas-engine | 718,658 | Jan. 20 | 2168 | 474 | 102 | 494 |
| Robertson, Robert, and W. Rintoul, Waltham Abbey, England. Manufacture of explosives, celluloid, or the like | 723,311 | Mar. 24 | 3078 | 692, 693 | 103 | 695 |
| Robertson, S. A. (See Martin, Anthony S., assignor.) | | | | | | |
| Robertson, Thomas J., Oakhill, assignor of one-half to L. Haneke, Eureka Springs, Ark. Monkey-wrench | 746,382 | Dec. 8 | 1958 | 448 | 107 | 1537 |
| Robertson, William A., *et al.* (See Pascoe, Francis A., assignor.) | | | | | | |
| Robertson, William A., Alameda, Cal. Acetylene-gas generator | 719,373 | Jan. 27 | 3529 | 787 | 102 | 792 |
| Robidon, John B., assignor of one-third to F. Moberley, St. Louis, Mo. Car-fender | 718,025 | Jan. 6 | 956 | 212 | 102 | 206 |
| Robin, Jacob I., Mount Vernon, N. Y. Package for incandescent mantles | 746,645 | Dec. 8 | 2420 | 553 | 107 | 1640 |
| Robinett, William. (See Hemphill, Henry B., assignor.) | | | | | | |
| Robins, Thomas, Jr., New York, N. Y. Conveyer apparatus | 735,301 | Aug. 4 | 509 | 102, 103 | 105 | 1089 |
| Robinson, Albert E., Covington, Ky., and C. F. Laur, assignors to American Tool Works Company, Cincinnati, Ohio. Speed-changing mechanism | 725,141 | Apr. 14 | 1349 | 304, 305 | 103 | 1470 |
| Robinson, Arthur W., Montreal, Canada. Cutter-head for dredges | 727,691 | May 12 | 1630 | 370 | 104 | 369 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | Spec. | Drg. | Vol. | Page. |
| Robinson, Arthur W., Montreal, Canada. Suction-pipe for hydraulic dredges | 746,994 | Dec. 15 | 3093 | 708 | 107 | 1812 |
| Robinson, Arthur W., Montreal, Canada. Floating discharge-pipe for hydraulic dredges and means for connecting same to dredges | 746,995 | Dec. 15 | 3095 | 709 | 107 | 1812 |
| Robinson, Arthur W., Montreal, Canada. Apparatus for hydraulic dredging and distributing the dredged material | 746,996 | Dec. 15 | 3099 | 710 | 107 | 1813 |
| Robinson, Arthur W., Montreal, Canada. Placer-mining dredge | 747,086 | Dec. 15 | 3269 | 745 | 107 | 1854 |
| Robinson, Benjamin F., Camphill, Ala. Grain or fertilizer drill or distributer | 733,512 | July 14 | 1462 | 348 | 105 | 327 |
| Robinson, Cecil A. (See Hannan and Robinson.) | | | | | | |
| Robinson, Charles W., Washington, D. C. Furnace | 721,329 | Feb. 24 | 3607 | 820 | 102 | 1633 |
| Robinson, Charley E. (See Robinson, Matthias W., assignor.) | | | | | | |
| Robinson, Clarence. (See Kunkel and Robinson.) | | | | | | |
| Robinson, Clark, Hartley, Iowa. Carbureter | 720,485 | Feb. 10 | 1963 | 449 | 102 | 1253 |
| Robinson, Cyrus. (See Reynolds and Robinson.) | | | | | | |
| Robinson, Cyrus R., Concord, N. H. Hose-nozzle | 721,746 | Mar. 3 | 163 | 38 | 103 | 36 |
| Robinson, David, Pawtucket, R. I., assignor to Draper Company, Hopedale, Mass. Multiple-harness loom | 743,333 | Nov. 3 | 1004 | 217 | 107 | 215 |
| Robinson, David M., Greenville, Tex. Triple valve for air-brakes | 737,022 | Aug. 25 | 3730 | 828 | 105 | 1829 |
| Robinson, Edward L. (See Easter and Robinson.) | | | | | | |
| Robinson, Eliza R., Woodburn, Ky. Fastening device for ironing-boards | 718,026 | Jan. 6 | 957 | 212 | 102 | 206 |
| Robinson, Eugene M., Chicago, Ill. Lifting-jack | 739,619 | Sept. 22 | 4008 | 894, 895 | 106 | 905 |
| Robinson, Fawcett, assignor of one-half to E. M. Bayliss, St. Louis, Mo. Amusement apparatus | 721,094 | Feb. 17 | 3132 | 719, 720 | 102 | 1516 |
| Robinson, Fayette S., Boston, assignor to F. E. Borges, Brookline, Mass. Device for grooving or tapping rubber or other sap-yielding trees | 730,299 | June 9 | 1414 | 310, 311 | 104 | 1432 |
| Robinson, Forster, Sistersville, W. Va. Nut-lock | 743,334 | Nov. 3 | 1008 | 217 | 107 | 216 |
| Robinson, Frank A., Syracuse, N. Y. Machine for filling and sealing conceals | 745,972 | Dec. 1 | 1210 | 272 | 107 | 1358 |
| Robinson, Franklin J. (See Gilbert, Henry K., assignor.) | | | | | | |
| Robinson, George, Perrypark, Colo. Wire-tightener | 728,764 | May 19 | 3658 | 814 | 104 | 816 |
| Robinson, George N. (See Lyne, Lewis F., assignor.) | | | | | | |
| Robinson, Harry C., Williamsport, Pa. Middlings-purifier | 719,877 | Feb. 3 | 843 | 197 | 102 | 1001 |
| Robinson, James, assignor of one-half to J. A. Stratton, Elberon, N. J. Rotary pump | 722,185 | Mar. 3 | 973 | 215, 216 | 103 | 206 |
| Robinson, James B., Chattanooga, Tenn. Band-hook and blank therefor | 726,763 | Apr. 28 | 4377 | 984 | 103 | 2129 |
| Robinson, James O. (See Compliment and Robinson.) | | | | | | |
| Robinson, John E. (See Sloan and Robinson.) | | | | | | |
| Robinson, John E., Philadelphia, Pa., assignor to National Package Machine Company. Soap-wrapping machine | 736,634 | Aug. 18 | 2990 | 658, 659 | 105 | 1653 |
| Robinson, John E., Philadelphia, and D. S. Williams, Glenside, Pa., assignors to National Package Machine Company. Paper-blank-cutting mechanism | 736,783 | Aug. 18 | 3275 | 723, 724 | 105 | 1712 |
| Robinson, John E., Philadelphia, and D. S. Williams, Glenside, Pa.; said Williams assignor to said Robinson. Paper-roll adapted to be cut into blanks | 736,784 | Aug. 18 | 3277 | 724 | 105 | 1712 |
| Robinson, John J., New York, N. Y. Quill-tip finish | 746,578 | Dec. 8 | 2292 | 525 | 107 | 1611 |
| Robinson, Joseph W., assignor to H. G. and F. R. Dalton, Aurora, Ill. Device for keeping boilers clean | 744,619 | Nov. 17 | 3513 | 758 | 107 | 778 |
| Robinson, Lawrence E., assignor of one-fourth to P. E. Daubenspeck, Butler, Pa. Reversing mechanism | 725,991 | Apr. 21 | 2906 | 659 | 103 | 1816 |
| Robinson, Marion L., Atlanta, Ga. Horse-detacher | 725,367 | Apr. 14 | 1752 | 394 | 103 | 1555 |
| Robinson, Matthias W., Lonoke, assignor of one-half to C. E. Robinson, Milton, Tenn. Motor attachment for cradles | 746,166 | Dec. 8 | 1568 | 351 | 107 | 1455 |
| Robinson, Milton J., Denver, Colo. Pass-book rack | 736,879 | Aug. 18 | 3460 | 767 | 105 | 1751 |
| Robinson, Nathaniel G., Woolstock, Iowa. Band-cutter and feeder for corn shredders and huskers | 733,275 | July 7 | 1041 | 249 | 105 | 218 |
| Robinson, Philip W., Lakewood, Ill. Gate | 741,167 | Oct. 13 | 1447 | 329 | 106 | 1574 |
| Robinson, Richard, Mobile, Ala. Dough-mixer | 717,929 | Jan. 6 | 774 | 174 | 102 | 166 |
| Robinson, Robert, and J. H. Ball, Mystic, Iowa. Coal-mining machine | 748,530 | Dec. 29 | 5991 | 1357, 1358 | 107 | 2494 |
| Robinson, Samuel, Monmouth, Ill. Animal-trap | 726,350 | Apr. 28 | 3570 | 809 | 103 | 1968 |
| Robinson, Stillman W., Columbus, Ohio. Angle shaft-coupling | 730,225 | June 16 | 3109 | 689 | 104 | 1805 |
| Robinson, Stillman W., Columbus, Ohio, and C. H. Tilton, near Freeport, Me. Angle-shaft coupling | 719,611 | Feb. 3 | 354 | 82 | 102 | 896 |
| Robinson, Sylvanus E., Buffalo, N. Y. Shower bath-brush | 735,592 | Aug. 4 | 1070 | 227 | 105 | 1208 |
| Robinson, Theodore W. (See Foote and Robinson.) | | | | | | |
| Robinson, Thomas, Bradford, Mass. Buffing-pad holder | 743,035 | Nov. 3 | 418 | 90 | 107 | 88 |
| Robinson, Thomas, Bradford, assignor of one-half to M. L. Whitcomb and H. L. Clark, Haverhill, Mass. Buffer | 727,557 | May 5 | 1368 | 308 | 104 | 295 |
| Robinson, Thomas F., C. E. Smethurst, and W. M. Gilbert, Salford, England; said Smethurst and Gilbert assignors to said Robinson. Stop mechanism | 748,103 | Dec. 29 | 5212 | 1179, 1180 | 107 | 2324 |
| Robinson, Thomas M., Brooklyn, N. Y. Shears for cutting corrugated sheet metal | 724,206 | Mar. 31 | 4802 | 1076 | 103 | 1062 |
| Robinson, William, Brooklyn, N. Y. Bicycle | 723,408 | Mar. 24 | 3273 | 733 | 103 | 731 |
| Robinson, William, Brooklyn, N. Y. Vehicle brake and coaster for cycles or other wheeled vehicles | 724,739 | Apr. 7 | 604 | 142 | 103 | 1297 |
| Robinson, William E., Wichita, Kans. Fruit-seeder | 740,315 | Sept. 29 | 5319 | 1198 | 106 | 1201 |
| Robinson, William T., assignor, by mesne assignments, to C. I. Chubbuck, San Francisco, Cal. Cuff-holder | 728,415 | May 19 | 3005 | 661 | 104 | 677 |
| Robinson, William V., Detroit, Mich. Grinding-machine | 725,142 | Apr. 14 | 1354 | 305, 306 | 103 | 1471 |
| Robinson, William V., Detroit, Mich. Grinding-machine | 729,667 | June 2 | 256 | 59, 60 | 104 | 1181 |
| Robischung, Henry B. (See Huntoon and Robischung.) | | | | | | |
| Robischung, Henry B., Kalamazoo, Mich. Stove | 745,909 | Dec. 1 | 1097 | 245 | 107 | 1332 |
| Robison, Lee, and J. Shafer, Huntington, Ind. Alarm safety-valve | 722,047 | Mar. 3 | 728 | 162 | 103 | 157 |
| Roblin, William J., *et al.* (See Banwell, James, assignor.) | | | | | | |
| Robson, John L. (See Eccles and Robson.) | | | | | | |
| Robson, Philip A., London, England. Combined ash-receiver and paper-weight | 747,227 | Dec. 15 | 3530 | 801 | 107 | 1909 |
| Roby, Henry W. (See Knight and Roby.) | | | | | | |
| Roby, Luther E., Decatur, Ill. Seed-tube for grain-drills | 745,671 | Dec. 1 | 645 | 149 | 107 | 1235 |
| Roche, Charles H., Tonbridge, England. Exercising apparatus | 725,876 | Apr. 21 | 2705 | 615, 616 | 103 | 1775 |
| Roche, David R., Chicago, Ill. Metal folding bed | 729,895 | June 2 | 687 | 152 | 104 | 1268 |
| Roche, James, assignor to Eagle Lock Co., Terryville, Conn. Padlock | 723,549 | Mar. 24 | 3534 | 791 | 103 | 784 |
| Roche, James, assignor to Eagle Lock Co., Terryville, Conn. Padlock | 723,550 | Mar. 24 | 3536 | 791 | 103 | 784 |
| Roche, James, assignor to Eagle Lock Co., Terryville, Conn. Case for padlocks | 723,551 | Mar. 24 | 3538 | 792 | 103 | 785 |
| Roche, James, assignor to Eagle Lock Co., Terryville, Conn. Permutation-lock | 724,207 | Mar. 31 | 4803 | 1077 | 103 | 1063 |
| Roche, James P., Louisville, Ky. Preparing food products | 745,074 | Nov. 24 | 4399 | 950 | 107 | 982 |
| Roche, James P., Louisville, Ky. Apparatus for heating liquor | 748,531 | Dec. 29 | 5992 | 1358 | 107 | 2494 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Roche, Jno. A. (See Rae, Frank B., assignor.) | | | | | | |
| Roche, John. (See Hughes and Roche.) | | | | | | |
| Roche, Timothy, Boston, Mass., assignor of one-half to J. A. Shannon, New York, N. Y. Spring-hinge | 723,186 | Mar. 17 | 2853 | 641 | 103 | 636 |
| Roche, William, Jersey City, N. J. Ignition-plug for explosive-engines | 724,945 | Apr. 7 | 964 | 222 | 103 | 1375 |
| Roche, William, Jersey City, N. J. Electric lighter | 725,992 | Apr. 21 | 2908 | 660 | 103 | 1816 |
| Rocheleau, Melina F., Providence, R. I. Sleeve-form | 739,620 | Sept. 22 | 4010 | 896 | 106 | 906 |
| Rochester Optical & Camera Co. (See Hutchings and Robertson, assignors.) | | | | | | |
| Rochester Optical & Camera Co. (See Robertson, John A., assignor.) | | | | | | |
| Rochester Optical Company. (See Hutchings, Charles E., assignor.) | | | | | | |
| Rochester Optical Company. (See Mutschler, Albert, assignor.) | | | | | | |
| Rochester Optical Company. (See Mutschler, Henry G., assignor.) | | | | | | |
| Rochester Plate Holder Company. (See Mathews, Frank V., assignor.) | | | | | | |
| Rochester Steam Motor Works. (See Fox, William T., assignor.) | | | | | | |
| Rochester Wringer Company. (See Schrader, George F., assignor.) | | | | | | |
| Rochford, Mark D., Los Angeles, Cal. Well construction | 731,130 | June 16 | 2944 | 654, 655 | 104 | 1774 |
| Rochford, Mark D., Los Angeles, Cal. Dam construction | 740,590 | Oct. 6 | 406 | 85, 86 | 106 | 1333 |
| Rochler, Frederick W., New York, N. Y. Electric railway | 741,719 | Oct. 20 | 2574 | 573 | 106 | 1830 |
| Rock, Frederick W., assignor of one-half to E. H. Patterson and J. A. M. Moreton, Detroit, Mich. Car-brake | 727,451 | May 5 | 1167 | 258 | 104 | 252 |
| Rockafellow, George F., and J. P. Squires, Canon City, Colo. Entry-book | 721,835 | Mar. 3 | 321 | 70, 71 | 103 | 71 |
| Rockaway Automobile Company. (See Coleman, Clyde J., assignor.) | | | | | | |
| Rockdale Powder Co. (See Wasbers, Henry, assignor.) | | | | | | |
| Rocke, John. Meadows, Ill. Portable grain dump and elevator | 721,466 | Feb. 24 | 3859 | 878 | 102 | 1685 |
| Rockford Watch Company. (See Reaves, Frank J., assignor.) | | | | | | |
| Rockstroh, Wilhelm M., Klein-Sedlitz, near Pirna, Germany. Cutting and stamping apparatus | 724,614 | Apr. 7 | 370 | 89 | 103 | 1249 |
| Rockstroh, Wilhelm M., Klein-Sedlitz, Germany. Printing, stamping, and embossing press | 744,239 | Nov. 17 | 2855 | 611 | 107 | 639 |
| Rockstroh, Wilhelm M., Klein-Sedlitz, Germany. Pneumatic laying-off apparatus for cylinder printing-machines | 746,651 | Dec. 8 | 2430 | 555, 556 | 107 | 1643 |
| Rockstroh, Wilhelm M., Dresden-Heidenau, Germany. Platen-printing press | 729,223 | May 26 | 4490 | 989, 990 | 104 | 1002 |
| Rockwell, Albert F. (See Norton and Rockwell.) | | | | | | |
| Rockwell, Albert F., Bristol, Conn. Driving and brake mechanism for cycles | 745,524 | Dec. 1 | 393 | 91 | 107 | 1183 |
| Rockwell, Albert F., Bristol, Conn. Lubricating device for vehicle-hubs | 745,525 | Dec. 1 | 397 | 91 | 107 | 1184 |
| Rockwell, Albert F., Bristol, Conn. Coaster-brake | 745,672 | Dec. 1 | 646 | 149 | 107 | 1236 |
| Rockwell, Augustus B. (See Rockwell and Christian, assignors.) | | | | | | |
| Rockwell, Byrd C., Perla, Ark. Adjustable window-screen | 720,419 | May 26 | 4826 | 1070 | 104 | 1070 |
| Rockwell, Edward D., assignor to Liberty Bell Company, Bristol, Conn. Fishing-reel | 724,208 | Mar. 31 | 4805 | 1077 | 103 | 1063 |
| Rockwell, Edward D., assignor to Liberty Bell Company, Bristol, Conn. Fish-line reel | 731,226 | June 16 | 3110 | 689 | 104 | 1806 |
| Rockwell, Edward D., assignor to Liberty Bell Company, Bristol, Conn. Fish-line reel | 734,959 | July 28 | 4195 | 976 | 105 | 931 |
| Rockwell, Edward D., assignor to Liberty Bell Company, Bristol, Conn. Fish-line reel | 736,880 | Aug. 18 | 3461 | 768 | 105 | 1751 |
| Rockwell, Frederick C. (See Mettler, Caspar W., A., and J., assignors.) | | | | | | |
| Rockwell, Frederick C., West Hartford, Conn. Composition fuel | 737,023 | Aug. 25 | 3732 | 828 | 105 | 1830 |
| Rockwell, James D., New York, N. Y. Attachment for water-closet flushing-tanks | 724,209 | Mar. 31 | 4808 | 1077, 1078 | 103 | 1064 |
| Rockwell, Larkin A., and J. H. Christian, Chicago; said Rockwell assignor to A. B. Rockwell, Alhambra, Ill. Portable drop-light | 724,615 | Apr. 7 | 372 | 89 | 103 | 1249 |
| Rockwell & Rupel Company. (See McPike, Curtis, assignor.) | | | | | | |
| Rockwell & Rupel Company. (See Porter, Bertrand R., assignor.) | | | | | | |
| Rockwood, Aaron W., Hydepark, assignor to J. G. McCarter Company, Boston, Mass. Vamp-stay | 721,393 | Feb. 24 | 3726 | 848 | 102 | 1657 |
| Roclandt, John, New York, N. Y. Car-fender | 721,607 | Feb. 24 | 4145 | 941, 942 | 102 | 1748 |
| Rocole, William F., Crane Creek Township, Ill. Broom and dusting-utensil holder | 732,448 | June 30 | 5464 | 1212 | 104 | 2326 |
| Rodabaugh, Samuel P., Bethany, and J. Carr, Lincoln, Nebr. Thill-coupling | 742,237 | Oct. 27 | 3617 | 808 | 106 | 2059 |
| Rodde, Carl F., Berlin, Germany, assignor to Siemens & Halske Electric Company of America, Chicago, Ill. Means for transmission of motion of rotating parts | 734,369 | July 21 | 3094 | 728 | 105 | 688 |
| Rodenberger, John, Brazil, Ind. Rail bending and breaking device | 738,946 | Sept. 15 | 2780 | 616 | 106 | 629 |
| Roderick Lean Manufacturing Company. (See Lean, Emerson O., assignor.) | | | | | | |
| Roderwald, Otto, Chicago, Ill. Liquid-cooler | 744,111 | Nov. 17 | 2604 | 556 | 107 | 584 |
| Roderwald, Otto, Chicago, Ill. Liquid-cooler | 747,641 | Dec. 22 | 4298 | 966 | 107 | 2099 |
| Rodger Ballast Car Company. (See Hart, Harry S., assignor.) | | | | | | |
| Rodgers, David G., Paterson, N. J. Loom-picker | 730,476 | June 9 | 1744 | 390 | 104 | 1501 |
| Rodgers, George B. (See Rodgers, James T., W. R., and G. B.) | | | | | | |
| Rodgers, James F., Monroe City, Mo. Field-drag | 744,112 | Nov. 17 | 2605 | 557 | 107 | 584 |
| Rodgers, James G., Springfield, Ohio. Gas-heater | 745,673 | Dec. 1 | 649 | 150 | 107 | 1236 |
| Rodgers, James T., W. R., and G. B., Memphis, Tenn. Baling-press | 736,550 | Aug. 18 | 2819 | 617 | 105 | 1620 |
| Rodgers, Jasper C., assignor of one-half to T. R. Preston, Chattanooga, Tenn. Machine for feeding pamphlets, &c., to stitching-machines | 727,692 | May 12 | 1632 | 370 | 104 | 369 |
| Rodgers, Louis E., and J. O. Trautwein, Chicago, Ill. Drying-furnace | 731,619 | June 23 | 3869 | 862 | 104 | 1979 |
| Rodgers, Myron K. (See Jones, Gomer P., assignor.) | | | | | | |
| Rodgers, William R. (See Rodgers, James T., W. R., and G. B.) | | | | | | |
| Rodman, Alfred A., Washington, Iowa. Cuff-holder | 737,664 | Sept. 1 | 194 | 41 | 106 | 45 |
| Rodman, Hugh, Philadelphia, Pa. Electrolytic diaphragm and making same | 720,741 | Feb. 17 | 2483 | ..... | 102 | 1375 |
| Rodman, Hugh, assignor to Electric Storage Battery Company, Philadelphia, Pa. Secondary-battery separator | 747,892 | Dec. 22 | 4771 | 1077 | 107 | 2206 |
| Rodney, Robert W. H., Thornbury, and J. H. Parkes, Willenhall, England. Lock and latch | 720,284 | Feb. 10 | 1622 | 371 | 102 | 1182 |
| Rodriguez-y-Arce, Everardo. (See Romero and Rodriguez-y-Arce.) | | | | | | |
| Roe, John P., assignor to Ropeways Syndicate, Limited, London, England. Aerial ropeway | 737,871 | Sept. 1 | 636 | 136 | 106 | 139 |
| Roebuck, Alva C., *et al.* (See Smith, Lewis C., assignor.) | | | | | | |
| Roedde, Gustav A., Vancouver, Canada. Loose-leaf binder | 730,160 | June 2 | 1138 | 256 | 104 | 1359 |
| Roedde, Gustav A., Vancouver, Canada. Loose-leaf binder | 730,161 | June 2 | 1140 | 256 | 104 | 1359 |
| Roedel, Frederick W., *et al.* (See Krotz, Linford E., assignor.) | | | | | | |
| Roedel, Louis, Passaic, N. J. Internal-combustion engine | 742,493 | Oct. 27 | 4068 | 914, 915 | 106 | 2152 |
| Roeder, Hans, Berlin, Germany. Penholder | 740,181 | Sept. 29 | 5075 | 1141 | 106 | 1151 |
| Roeder, Mary G., Manchester, Md. Garment-hook | 747,486 | Dec. 22 | 4012 | 902 | 107 | 2036 |
| Roedmann, Carl, Philadelphia, Pa. Tube-expanding tool | 746,579 | Dec. 8 | 2292 | 526 | 107 | 1611 |
| Roehm, Anna, Chicago, Ill. Clasp | 723,028 | Mar. 17 | 2548 | 573 | 103 | 571 |
| Roehm, Anna, and H. Schirmer, Chicago, Ill. Comb for holding false hair | 739,560 | Sept. 22 | 3887 | 871 | 106 | 880 |
| Roehm, Louis, and P. Walther, Chicago, Ill. Composition for artificial stone | 737,024 | Aug. 25 | 3733 | ..... | 105 | 1830 |

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| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Roekel, August, Findlay, assignor of one-half to E. B. Philipp, Columbus, Ohio. Flushing device | 722,757 | Mar. 17 | 2078 | 465 | 103 | 475 |
| Roemer, Ernst, Gleiwitz, Germany. Manufacture of wheels and pulleys | 736,551 | Aug. 18 | 2821 | 617 | 105 | 1621 |
| Roemer, Joseph, Santa Maria, Cal. Construction of buildings | 721,747 | Mar. 3 | 164 | 38 | 103 | 36 |
| Roepper, Charles W., Philadelphia, Pa. Apparatus for the electrolysis of fused substances | 736,020 | Aug. 11 | 1883 | 402 | 105 | 1402 |
| Roesch, Alfred, Bridgeport, Conn., assignor to Davis & Roesch Temperature Controlling Company, New York, N. Y. Thermostat | 731,620 | June 23 | 3871 | 862 | 104 | 1980 |
| Roesch, Alfred, Bridgeport, Conn., assignor to Davis & Roesch Temperature Controlling Company, New York, N. Y. Thermostat | 742,494 | Oct. 27 | 4072 | 916 | 106 | 2152 |
| Roesch, Alfred, Bridgeport, Conn., assignor, by mesne assignments, to J. B. Erwin, Milwaukee, Wis. Jar-holder | 742,238 | Oct. 27 | 3618 | 809 | 106 | 2059 |
| Roesch, George E., Aurora, Ill. Mail-box | 743,104 | Nov. 3 | 548 | 118 | 107 | 114 |
| Roesen, Oscar, assignor to R. Hoe, New York, N. Y. Cylinder for printing-machines | 733,276 | July 7 | 1042 | 249 | 105 | 219 |
| Roesen, Oscar, assignor to R. Hoe, New York, N. Y. Cylinder for printing-machines | 733,277 | July 7 | 1044 | 250 | 105 | 219 |
| Roesen, Oscar, assignor to R. Hoe, New York, N. Y. Device for preventing smearing | 746,746 | Dec. 15 | 2610 | 600 | 107 | 1703 |
| Roeske, Henry, assignor to E. Printz, Philadelphia, Pa. Leather-staking machine | 719,878 | Feb. 3 | 847 | 198 | 102 | 1002 |
| Roessle, Theophilus E., *et al.* (See Mahon, Charles, assignor.) | | | | | | |
| Rofe, John C. W., Leytonstone, assignor to F. W. Ingram, London, England. Squeegee | 734,370 | July 21 | 3096 | 728 | 105 | 689 |
| Rogalla, Larry F., B. J. Narloch, and H. C. De Puy, Minto, N. D. Wheel-scraper | 748,218 | Dec. 29 | 5421 | 1234 | 107 | 2368 |
| Rogan, Daniel H., Athol, Mass. Pencil-sharpening machine | 722,631 | Mar. 10 | 1804 | 402 | 103 | 403 |
| Rogan, Ole. (See Forsberg and Rogan.) | | | | | | |
| Roger, James H., Glasgow, Scotland. Golf-ball | 743,105 | Nov. 3 | 549 | 118 | 107 | 114 |
| Roger, John, Denver, Colo. Separator | 730,162 | June 2 | 1142 | 257 | 104 | 1359 |
| Roger, John, Denver, Colo. Ore-roasting furnace | 741,549 | Oct. 13 | 2229 | 496, 497 | 106 | 1742 |
| Roger, John, London, England, and M. K. Bamber, Colombo, Ceylon. Obtaining extract of tea | 726,102 | Apr. 21 | 3071 | | 103 | 1850 |
| Rogers, Andrew W., Fort Myers, Fla. Spectacle-holder | 727,204 | May 5 | 714 | 153 | 104 | 155 |
| Rogers, Arthur D., *et al.* (See Miller, Dorr, assignor.) | | | | | | |
| Rogers, Arthur R., Jonesport, Me. Fish cutting and cleaning apparatus | 732,376 | June 30 | 5326 | 1180 | 104 | 2297 |
| Rogers, Burt T., Springfield, Mass. Seam for base-balls | 732,962 | July 7 | 465 | 116 | 105 | 100 |
| Rogers, C. B., *et al.* (See Decker, Lucious E., assignor.) | | | | | | |
| Rogers, Charles, Kew, assignor of two-thirds to A. M. Oswald, Caulfield, Victoria, Australia. Extracting zinc from sulfid ores, &c | 740,372 | Sept. 29 | 5429 | | 106 | 1224 |
| Rogers, Charles E. (See Little and Rogers.) | | | | | | |
| Rogers, Charles L., Berwick, and M. S. Shotwell, Milton, Pa., assignors to American Car & Foundry Company, St. Louis, Mo. Tank-car | 723,312 | Mar. 24 | 3080 | 693 | 103 | 695 |
| Rogers, Charles W., *et al.* (See Bassler, Edwin M., assignor.) | | | | | | |
| Rogers, Charles W., Newmarket, N. H. Electric switch | 723,732 | Mar. 24 | 3855 | 867 | 103 | 851 |
| Rogers, Edward B., and F. P. Hanson, San Francisco, Cal. Ore-concentrator | 732,319 | June 30 | 5202 | 1156 | 104 | 2271 |
| Rogers, Edward F., Gloversville, N. Y. Pocket pencil-holder | 744,799 | Nov. 24 | 3869 | 833 | 107 | 873 |
| Rogers, Ephraim, and C. W. Sagee, Philadelphia, Pa. Glass-shearing device | 729,963 | June 2 | 813 | 181, 182 | 104 | 1293 |
| Rogers, Ephraim, and C. W. Sagee, Philadelphia, Pa., assignors to S. B. Rowley. Glass-press | 737,490 | Aug. 25 | 4597 | 1030 | 105 | 2014 |
| Rogers, Francis E., and E. Hosking, Mount Gambier, South Australia, Australia. Spark-arrester | 739,225 | Sept. 15 | 3279 | 726 | 106 | 733 |
| Rogers, Fred W., Denver, Colo., R. K. Humphrey, Santa Barbara, Mexico, and J. W. Nesmith, Denver, Colo. Vibrating screen | 738,485 | Sept. 8 | 1900 | 415, 416 | 106 | 422 |
| Rogers, Frederick S. (See Herrick and Rogers.) | | | | | | |
| Rogers, George O. (See Wright, Benjamin, assignor.) | | | | | | |
| Rogers, J. Franklin. (See Westmark, Hans O., assignor.) | | | | | | |
| Rogers, James J., Lincoln, Nebr. Punch and lacing-awl | 743,335 | Nov. 3 | 1009 | 217 | 107 | 216 |
| Rogers, James S., Boston, Mass. Moistening device for hot-air pipes | 724,045 | Mar. 31 | 4477 | 1008 | 103 | 996 |
| Rogers, John, Kansas City, Kans. Dust-proof journal-box for cars | 721,836 | Mar. 3 | 324 | 71 | 103 | 71 |
| Rogers, John R., Brooklyn, N. Y., assignor to Mergenthaler Linotype Company. Linotype-machine | 734,096 | July 21 | 2570 | 601, 602, 603, 604, 605 | 105 | 578 |
| Rogers, John R., Brooklyn, N. Y., assignor to Mergenthaler Linotype Company. Linotype-machine | 740,470 | Oct. 6 | 167 | 33 | 106 | 1281 |
| Rogers, Knight E., South Manchester, Conn. Machine for glassing paper | 735,824 | Aug. 11 | 1512 | 323, 324 | 105 | 1322 |
| Rogers, Lebbeus H., New York, N. Y. Box or receptacle | 736,021 | Aug. 11 | 1884 | 403 | 105 | 1402 |
| Rogers, Lewis E., Logansport, Ind. Filter | 738,486 | Sept. 8 | 1904 | 416 | 106 | 423 |
| Rogers, Lou R., assignor of one-half to B. H. Smith and J. M. Bollinger, Boone, Iowa. Railway-switch protector | 726,990 | May 5 | 330 | 72, 73 | 104 | 72 |
| Rogers, Moses J., Kansas City, Mo. Journal-bearing shell | 722,327 | Mar. 10 | 1246 | 277 | 103 | 281 |
| Rogers Paper Manufacturing Company. (See Dart, Samuel E., assignor.) | | | | | | |
| Rogers, Ralph. (See Greer, William N., assignor.) | | | | | | |
| Rogers, Star H., Macon, Ga. Bottle-stopper | 737,025 | Aug. 25 | 3734 | 828 | 105 | 1830 |
| Rogers, Thomas C., assignor of one-half to Carter Oil Company, Sistersville, W. Va. Rope-cutter | 745,526 | Dec. 1 | 399 | 92 | 107 | 1184 |
| Rogers, Winfield S., Keene, N. H. Motor-vehicle | 738,241 | Sept. 8 | 1379 | 298 | 106 | 314 |
| Roggenkamp, Otto F., Seneca, Kans. Heater | 728,618 | May 19 | 3404 | 753 | 104 | 762 |
| Rogler, Fredrick W., assignor of one-half to H. Hoerbiger, Budapest, Austria-Hungary. Engine or motor | 724,333 | Mar. 31 | 5056 | 1131 | 103 | 1113 |
| Rogozea, Sava, Brussels, Belgium. Safety device for railways | 726,351 | Apr. 28 | 3573 | 809, 810, 811 | 103 | 1969 |
| Rohde, Frederick W., New York, N. Y. Cluster-setting for rings, brooches, or the like | 736,022 | Aug. 11 | 1885 | 403 | 105 | 1402 |
| Rohde, William and W. M., assignors of one-third to O. H. Holderer, Sandusky, Ohio. Mail-bag | 733,081 | July 7 | 681 | 166 | 105 | 145 |
| Rohde, William M. (See Rohde, William and W. M.) | | | | | | |
| Rohr, Frederick, Irwin, Pa. Fruit-picker | 743,754 | Nov. 10 | 1875 | 396 | 107 | 417 |
| Rohrbacher, William, Duquesne, Pa. Combination steel car | 728,016 | May 12 | 2254 | 501 | 104 | 497 |
| Rohret, John H., Oxford, Iowa. Rasp | 735,825 | Aug. 11 | 1515 | 324 | 105 | 1322 |
| Rohwedder, Emil R. (See Thiessen, Henry, assignor.) | | | | | | |
| Roitman, Natan, and S. Ruby, St. Louis, Mo. Initial attachment for jewelry | 738,700 | Sept. 8 | 2316 | 509 | 106 | 511 |
| Rolfe, Charles A., assignor to Rolfe Electric Company, Chicago, Ill. Electrical protector | 724,507 | Apr. 7 | 156 | 37 | 103 | 1203 |
| Rolfe Electric Company. (See Rolfe, Charles A., assignor.) | | | | | | |
| Rolfe, Ernest C., Belleville, Ill. Trolley-wheel | 725,485 | Apr. 14 | 1983 | 447 | 103 | 1605 |
| Rolfe, Henry H., San Francisco, Cal. Game-board | 730,571 | June 9 | 1917 | 426 | 104 | 1539 |

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| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drgs. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Rolland, Charles L. (See Pachali, Theodore, assignor.) | | | | | | |
| Rolland, Frederick W., Jr., Chicago, Ill. Doctor for regulating and controlling the feed of paper to printing-presses | 745,240 | Nov. 24 | 4728 | 1032 | 107 | 1050 |
| Roller, John, Manchester, Mich. Overweight-register | 723,733 | Mar. 24 | 3856 | 867 | 103 | 852 |
| Roller Stencil Company. (See Horan and Winston, assignors.) | | | | | | |
| Rollins, Charles H. (See Knapp and Rollins.) | | | | | | |
| Rollins, Charles H., Watertown, assignor of one-half to E. W. Anthony, Brookline, Mass. Valve mechanism for shower-baths | 747,487 | Dec. 22 | 4013 | 902 | 107 | 2036 |
| Rollins, George D., Philadelphia, Pa. Metallic packing | 725,368 | Apr. 14 | 1753 | 394 | 103 | 1555 |
| Rollins, George E. (See McCormack, George E., assignor.) | | | | | | |
| Rollins, George E., East Bridgewater, Mass. Welting for welt boots or shoes | 747,642 | Dec. 22 | 4299 | 967 | 107 | 2099 |
| Rollins, George L., Bridgewater, Mass. Apparatus for applying cement to soles | 743,920 | Nov. 10 | 2196 | 474 | 107 | 484 |
| Rollins, John O., assignor of one-half to J. B. Ferguson, Tuolumne, Cal. Abrading-tool | 739,028 | Sept. 15 | 2908 | 646 | 106 | 656 |
| Rollman, Michael A., Mount Joy, Pa. Food-chopper | 726,991 | May 5 | 334 | 73 | 104 | 72 |
| Rolls, Charles S., *et al.* (See Smith, Allison D., assignor.) | | | | | | |
| Roloson, Byron A. (See Downard and Roloson.) | | | | | | |
| Rolph, Benjamin M., Dixon, assignor to F. C. Austin, Chicago, Ill. Ditching-machine | 735,677 | Aug. 4 | 1229 | 260, 261 | 105 | 1242 |
| Rolph, Legrand B., Windom, Minn. Weather-strip for doors | 723,029 | Mar. 17 | 2549 | 573 | 103 | 571 |
| Rolph, William T., and H. R. Kuersten, Chicago, Ill.; said Kuersten assignor to said Rolph. Tuft-cleaning brush | 738,487 | Sept. 8 | 1905 | 416 | 106 | 423 |
| Roltair, Henry, Detroit, Mich. Pleasure-waterway | 728,303 | May 19 | 2809 | 622 | 104 | 637 |
| Romano, Eugene J., Seattle, Wash. Instrument for recording and reproducing sound-vibrations | 729,798 | June 2 | 505 | 111, 112 | 104 | 1231 |
| Romans, Harvey. (See Romans, Melvin and H.) | | | | | | |
| Romans, John G. W. (See Van Guysling and Romans.) | | | | | | |
| Romans, Melvin and H., Oakley, Idaho. Shampooing attachment for barbers' chairs | 727,452 | May 5 | 1170 | 258 | 104 | 253 |
| Romans, Melvin and H., Oakley, Idaho. Oil-lamp | 728,765 | May 19 | 3659 | 814 | 104 | 816 |
| Romans, Melvin and H., assignors of one-half to M. Romans, Oakley, Idaho. Stand for supporting shampoo-bowls | 746,167 | Dec. 8 | 1572 | 351 | 107 | 1456 |
| Romans, Millard. (See Romans, Melvin and H., assignors.) | | | | | | |
| Romanze, Otto, Enfield, assignor of two-thirds to F. S. Elliott, London, England. Electric clock | 731,621 | June 23 | 3873 | 862, 863 | 104 | 1980 |
| Rombach, John L., *et al.* (See Hoff, Charles, assignor.) | | | | | | |
| Romero, Luis, and E. Rodriguez-y-Arce, Mexico, Mexico. Apparatus for producing and preparing certain articles of food | 738,242 | Sept. 8 | 1380 | 298, 299 | 106 | 314 |
| Romero, Luis, and E. Rodriguez-y-Arce, Mexico, Mexico. Forming articles composed of plastic material | 738,243 | Sept. 8 | 1383 | 299 | 106 | 315 |
| Romme, William S. (See Katz and Romme.) | | | | | | |
| Rommeney, Albert, Muskegon, Mich. Mixing and bleaching engine | 725,877 | Apr. 21 | 2706 | 616 | 103 | 1776 |
| Romünder, Hermann, Newark, N. J. Convertible car | 743,198 | Nov. 3 | 727 | 159 | 107 | 152 |
| Romwall, Charles J., and W. C. Pitt, Lovelock, Nev. Hay-loader | 740,316 | Sept. 29 | 5320 | 1198, 1199 | 106 | 1201 |
| Ronan, Anson G., Toronto, Canada. Motor-vehicle construction | 744,011 | Nov. 10 | 2397 | 515 | 107 | 527 |
| Rondet, Maurice F., Paris, France. Gearing | 731,502 | June 23 | 3649 | 814 | 104 | 1937 |
| Ronell, August L., Humboldt, Iowa. Time-controlled electric alarm | 737,965 | Sept. 1 | 819 | 179, 180 | 106 | 180 |
| Roney, Alexander B., Chicago, Ill. Motor | 717,624 | Jan. 6 | 181 | 45, 46 | 102 | 40 |
| Roney, Alexander B., Chicago, Ill. Elevator | 720,487 | Feb. 10 | 1967 | 449, 450 | 102 | 1254 |
| Roney, John, *et al.* (See Bentley, Thomas, assignor.) | | | | | | |
| Roney, William R. (See Stranahan, Churchill, and Roney.) | | | | | | |
| Rongger, Niklaus, assignor to Corporation of Chemical Works, formerly Sandoz, Basle, Switzerland. Blue sulfur dyestuff and making same | 747,643 | Dec. 22 | 4301 | ..... | 107 | 2100 |
| Ronsdorf, August, assignor to J. H. Van Eghen and I. Da Costa, Amsterdam, Netherlands. Loom for making laces | 733,426 | July 14 | 1310 | 310 | 105 | 294 |
| Rooch, John W. (See Craigie, Henry, assignor.) | | | | | | |
| Rood, Charles W. (See Rood, Edwin O. and C. W.) | | | | | | |
| Rood, Edgar, *et al.* (See Harris, Harry, assignor.) | | | | | | |
| Rood, Edwin O. and C. W., assignors to Interstate Drainage and Investment Company, Britt, Iowa. Crane-arm | 746,168 | Dec. 8 | 1573 | 352 | 107 | 1456 |
| Rood, Grenville H., Washington, D. C. Boat | 738,359 | Sept. 8 | 1657 | 359 | 106 | 373 |
| Rood, Lloyd V., Marietta, Ohio. Filter | 722,906 | Mar. 17 | 2350 | 525 | 103 | 530 |
| Rood, William C., Chicago, Ill. Smoke-guard support | 740,182 | Sept. 29 | 5075 | 1141 | 106 | 1151 |
| Rooke, Thomas, Newtown, and J. Thrush, Dulwich Hill, New South Wales, Australia. Garbage-destructor | 747,488 | Dec. 22 | 4016 | 902, 903 | 107 | 2037 |
| Rooney, Henry F., Randolph, Mass. Cushion-heel | 726,464 | Apr. 28 | 3775 | 855 | 103 | 2010 |
| Rooney, Henry F., Randolph, assignor to M. Bray, trustee, Newton, Mass. Cushion-tread for heels, &c. | 718,526 | Jan. 13 | 1910 | 419 | 102 | 427 |
| Root, Albert A., Buffalo, N. Y. Combined advertising and check-protecting device | 742,495 | Oct. 27 | 4075 | 916, 917 | 106 | 2153 |
| Root, Albert A., Buffalo, N. Y. Combined toilet and advertising device | 742,496 | Oct. 27 | 4078 | 917 | 106 | 2154 |
| Root, Charles F., and B. O. Conn, Mansfield, Ohio. Paper turning-in and pasting machine | 741,550 | Oct. 13 | 2232 | 497, 498 | 106 | 1742 |
| Root, Corydon A., Andover, Ohio. Quarter-boot | 720,970 | Feb. 17 | 2891 | 662 | 102 | 1461 |
| Root, Edward S., and C. S. Demarest, New York, N. Y. Valve for gas or other pipes | 727,205 | May 5 | 715 | 153 | 104 | 155 |
| Root, Fred N., Kalamazoo, Mich. Hulling-machine | 746,881 | Dec. 15 | 2873 | 661 | 107 | 1762 |
| Root, Huber, assignor to A. I. Root Company, Medina, Ohio. Bee-smoker | 739,510 | Sept. 22 | 3809 | 853 | 106 | 864 |
| Root, John G., and J. C. Westervelt, Shelbyville, Ill. Apparatus for disposing of waste from baling-presses | 731,955 | June 23 | 4471 | 997, 998 | 104 | 2107 |
| Root, Orlando J., East Moline, Ill. Sparking-device governor for gasolene-engines | 733,752 | July 14 | 1875 | 442, 443 | 105 | 412 |
| Rope, Robert B., *et al.* (See Hammond, Robert O., assignor.) | | | | | | |
| Roper, Charles F., assignor to Draper Company, Hopedale, Mass. Warp stop-motion for looms | 719,879 | Feb. 3 | 849 | 198 | 102 | 1003 |
| Roper, Charles F., Hopedale, Mass., assignor to Draper Company, Portland, Me., and Hopedale, Mass. Shuttle-controlling mechanism for looms | 726,573 | Apr. 28 | 4018 | 909 | 103 | 2055 |
| Roper, Charles F., assignor to Draper Company, Hopedale, Mass. Filling-replenishing loom | 726,574 | Apr. 28 | 4021 | 909 | 103 | 2055 |
| Roper, Charles F., assignor to Draper Company, Hopedale, Mass. Take-up control for looms | 729,668 | June 2 | 259 | 60 | 104 | 1182 |
| Roper, Charles F., assignor to Draper Company, Hopedale, Mass. Take-up mechanism for looms | 729,669 | June 2 | 261 | 60 | 104 | 1182 |
| Roper, Charles F., assignor to Draper Company, Hopedale, Mass. Speed-changer | 731,503 | June 23 | 3650 | 814 | 104 | 1937 |
| Roper, Charles F., assignor to Draper Company, Hopedale, Mass. Means for preventing warp breakage in looms | 731,622 | June 23 | 3875 | 863 | 104 | 1980 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Roper, Charles F., assignor to Draper Company, Hopedale, Mass. Shed-forming mechanism for looms | 737,148 | Aug. 25 | 3930 | 873 | 105 | 1870 |
| Roper, Charles F., assignor to Draper Company, Hopedale, Mass. Shed-forming mechanism for looms | 737,149 | Aug. 25 | 3932 | 873, 874 | 105 | 1870 |
| Roper, Charles F., assignor to Draper Company, Hopedale, Mass. Warp stop-motion for looms | 744,940 | Nov. 24 | 4110 | 886 | 107 | 923 |
| Roper, Charles F., assignor to Draper Company, Hopedale, Mass. Let-off mechanism for looms | 744,941 | Nov. 24 | 4113 | 886 | 107 | 924 |
| Roper, Fred D., Indianapolis, Ind. Portable car-mover | 726,764 | Apr. 28 | 4378 | 985 | 103 | 2129 |
| Roper, John H., Waterbury, Conn. Drawers-supporter | 734 097 | July 21 | 2580 | 605 | 105 | 580 |
| Roper, Walter L., Billingsley, Ala. Lock-nut | 720,620 | Feb. 17 | 2273 | 522 | 102 | 1330 |
| Ropeways Syndicate. (See Roe, John P., assignor.) | | | | | | |
| Roraback, Ernest, Springfield, Mass. Shoe-creasing device | 744,620 | Nov. 17 | 3515 | 759 | 107 | 779 |
| Rorty, Malcolm C., Dedham, and A. M. Bullard, Somerville, assignors to American Bell Telephone Company, Boston, Mass. Automatic telephone-exchange | 743,564 | Nov. 10 | 1531 | 320, 321 | 107 | 345 |
| Rosa, Leopold A. de, Philadelphia, Pa. Dental appliance | 741,071 | Oct. 13 | 1263 | 286 | 106 | 1537 |
| Rosback, Frederick P., Chicago, Ill. Perforating-machine | 732,893 | July 7 | 348 | 85, 86 | 105 | 76 |
| Rosback, Joshua A., Hermon, N. Y. Combined cream-separator and churn | 748,104 | Dec. 29 | 5214 | 1180 | 107 | 2325 |
| Rose Brothers & Co. (See Rose, James, assignor.) | | | | | | |
| Rose, Garrett F., *et al.* (See Clifford, Thomas G., assignor.) | | | | | | |
| Rose, George W. (See Spargo and Rose.) | | | | | | |
| Rose, Israel M., Philadelphia, Pa. Grinding or sharpening device | 719,880 | Feb. 3 | 851 | 199 | 102 | 1003 |
| Rose, Israel M., Philadelphia, Pa. Grinding or sharpening device | 730,706 | June 9 | 2153 | 477 | 104 | 1590 |
| Rose, James, assignor to Rose Brothers & Co., Lancaster, Pa. Umbrella-stick | 741,978 | Oct. 20 | 3072 | 686 | 106 | 1933 |
| Rose, John, Philadelphia, Pa., assignor to Newark Rivet Works, Newark, N. J. Gear for umbrellas | 732,782 | July 7 | 153 | 40 | 105 | 37 |
| Rose, John B., New York, N. Y. Tag-holder | 736,299 | Aug. 11 | 2365 | 514 | 105 | 1507 |
| Rose, John H., Shreveport, La. Cheese-cutter and slice-discharger | 724,334 | Mar. 31 | 5059 | 1132 | 103 | 1114 |
| Rose, John H., Shreveport, La. Packing-box | 725,143 | Apr. 14 | 1356 | 306 | 103 | 1472 |
| Rose, John H., Shreveport, La. Shutter-worker | 725,144 | Apr. 14 | 1357 | 306 | 103 | 1472 |
| Rose, John H., Shreveport, La. Water cooler or heater | 725,145 | Apr. 14 | 1359 | 306 | 103 | 1473 |
| Rose, John J. (See Sheppard and Rose.) | | | | | | |
| Rose, John R., Ruthven, Iowa. Horse-collar fastener | 748,017 | Dec. 29 | 5046 | 1139 | 107 | 2288 |
| Rose, Joseph F., Tiverton, R. I. Stove-lid lifter | 741,835 | Oct. 20 | 2771 | 618 | 106 | 1873 |
| Rose, Samuel L., Mancelona, Mich. Hoof-trimmer | 718,796 | Jan. 20 | 2428 | 538 | 102 | 546 |
| Rose, William, Gainsborough, England, assignor to Wright's Automatic Tobacco Packing Machine Company, Lynchburg, Va. Feed of packing-machines | 719,374 | Jan. 27 | 3530 | 787 | 102 | 792 |
| Rose, William H., Baltimore, Md., and J. A. Watson, Washington, D. C., assignors to Marine Torch Company of Baltimore City, Baltimore, Md. Marine torch | 740,317 | Sept. 29 | 5323 | 1199 | 106 | 1201 |
| Rose, William L., Brooklyn, N. Y. Closure for bottles or similar receptacles | 728,981 | May 26 | 4059 | 901 | 104 | 912 |
| Rose, William L., Curtis, Okla. Ter. Heating-stove | 738,069 | Sept. 1 | 1002 | 223 | 106 | 218 |
| Rosebush, John, assignor of one-third to W. D. Williams, Minneapolis, Minn. Combined mop-wringer and scrubbing-pail | 726,352 | Apr. 28 | 3578 | 811, 812 | 103 | 1970 |
| Rosecrans, Charles, Philadelphia, Pa. Beveling-tool | 730,163 | June 2 | 1145 | 257 | 104 | 1360 |
| Roseland, Carl A., Rockford, Ill. Toaster | 741,720 | Oct. 20 | 2575 | 573 | 106 | 1830 |
| Rosell, Claude A. O. (See Leet and Rosell.) | | | | | | |
| Rosell, Claude A. O., New York, N. Y., assignor to Composite Stone and Brick Company. Making composite stone | 747,228 | Dec. 15 | 3531 | ------ | 107 | 1910 |
| Rosell, Claude A. O., New York, N. Y., assignor to Composite Stone and Brick Company. Indurated stone | 747,229 | Dec. 15 | 3532 | ------ | 107 | 1910 |
| Rosemond, Albert L., Oberlin, Ohio. Rail-joint | 732,907 | Mar. 17 | 2352 | 526 | 103 | 530 |
| Rosemont Electric Transmitter Company. (See Rosenberger, Julius, assignor.) | | | | | | |
| Rosenaw, Edward C., Fennimore, Wis. Boat | 732,908 | Mar. 17 | 2354 | 526 | 103 | 530 |
| Rosenaw, Edward C., Fennimore, Wis. Non-refillable bottle | 741,374 | Oct. 13 | 1889 | 416 | 106 | 1670 |
| Rosenaw, Edward C., Fennimore, Wis. Tedder | 748,532 | Dec. 29 | 5996 | 1358 | 107 | 2495 |
| Rosenbaum, Josef, Nuremberg, Germany. Apparatus for sawing wood | 733,278 | July 7 | 1046 | 250 | 105 | 219 |
| Rosenbaum, Ralph, Atlanta, Ga. Broom | 720,488 | Feb. 10 | 1968 | 450 | 102 | 1255 |
| Rosenbaum, William A., New Rochelle, N. Y. Apparatus for electromagnetically recording speech | 720,621 | Feb. 17 | 2274 | 522 | 102 | 1330 |
| Rosenbeck, Andrew K., Stamford, Conn. Clothes-line holder | 735,593 | Aug. 4 | 1072 | 227 | 105 | 1208 |
| Rosenberg, Augustus, assignor to International Oxy-Generator Syndicate, Limited, London, England. Portable oxygen-generating apparatus | 739,723 | Sept. 22 | 4204 | 940, 941 | 106 | 949 |
| Rosenberg, David, Providence, and R. Chartier, Centerdale, R. I.; said Chartier assignor to said Rosenberg. Hat-polishing machine | 718,280 | Jan. 13 | 1419 | 315 | 102 | 321 |
| Rosenberg, Herman, assignor to Standard Varnish Works, New York, N. Y. Vessel for containing varnish or the like | 747,644 | Dec. 22 | 4301 | 967 | 107 | 2100 |
| Rosenberg, John G., Seattle, Wash. Jar-cap tool | 724,399 | Mar. 31 | 5197 | 1165 | 103 | 1144 |
| Rosenberg, Max, Fürth, Germany. Folding rest | 732,116 | June 30 | 4807 | 1072 | 104 | 2190 |
| Rosenberger, Julius, assignor to Rosemont Electric Transmitter Company, New York, N. Y. Electric motor sewing-machine transmitter | 725,776 | Apr. 21 | 2530 | 574, 575 | 103 | 1738 |
| Rosenbluth, Edwin M., Philadelphia, Pa. Carriage-lamp | 723,488 | Mar. 24 | 3440 | 770 | 103 | 765 |
| Rosenbusch, Andrew, Quincy, Ill. Universal clock | 723,489 | Mar. 24 | 3442 | 770 | 103 | 765 |
| Rosencrantz, Isidor B., Chicago, Ill. Cover for piano tuning-pins | 736,552 | Aug. 18 | 2821 | 617 | 105 | 1621 |
| Rosenfeld, Alfred. (See Hohmann and Rosenfeld.) | | | | | | |
| Rosenfeld, Hans B. K., Lynn, Mass. Automatic stirrup-detacher | 734,960 | July 28 | 4197 | 977 | 105 | 931 |
| Rosenfeld, Maurice, New York, N. Y., assignor of one-half to H. W. Solfleisch, Homestead, N. J. Printing-machine | 728,982 | May 26 | 4060 | 901 | 104 | 913 |
| Rosenfeld, Mortimer C., Buffalo, N. Y. Wall, floor, or ceiling plate for steam or other pipes | 734,139 | July 21 | 2668 | 627 | 105 | 598 |
| Rosenfield, William W., New York, N. Y. Vending-machine | 728,619 | May 19 | 3404 | 754 | 104 | 762 |
| Rosenfield, William W., New York, N. Y. Picture-exhibiting machine | 743,930 | Nov. 10 | 2197 | 474 | 107 | 484 |
| Rosenfield, William W., New York, N. Y. Coin-controlled machine | 743,931 | Nov. 10 | 2199 | 474, 475 | 107 | 484 |
| Rosenheim, Charles, Brussels, Belgium. Fastening for casement-windows, fan-lights, or the like | 747,776 | Dec. 22 | 4541 | 1023 | 107 | 2156 |
| Rosenkranz, John C., Brooklyn, N. Y. Non-refillable bottle | 725,146 | Apr. 14 | 1359 | 307 | 103 | 1473 |
| Rosenleaf, Gustaf O., Muscatine, Iowa. Fireproof compound | 735,155 | Aug. 4 | 214 | ------ | 105 | 1028 |
| Rosenthal, Adolph. (See Griffin, Patrick J., assignor.) | | | | | | |
| Rosenthal, Alida L., administratrix. (See Rosenthal, Sigmund A.) | | | | | | |
| Rosenthal, August, assignor to Rosenthal Corn Husker Company, Milwaukee, Wis. Corn husking and shredding machine | 738,488 | Sept. 8 | 1907 | 416 | 106 | 423 |
| Rosenthal, August, assignor to Rosenthal Corn-Husker Company, Milwaukee, Wis. Sectional and adjustable discharge-spout | 744,408 | Nov. 17 | 3164 | 679 | 107 | 706 |
| Rosenthal Corn-Husker Company. (See Rosenthal, August, assignor.) | | | | | | |
| Rosenthal, James H., London, England, assignor to Babcock & Wilcox Company, New York, N. Y. Tube connection | 720,622 | Feb. 17 | 2275 | 522 | 102 | 1331 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|
| | | | Spec. | Dr'g. | Vol. | Page. |
| Rosenthal, James H., London, England, assignor to Babcock & Wilcox Company, New York, N. Y. Automatic feed-water regulator | 723,313 | Mar. 24 | 3082 | 694 | 103 | 696 |
| Rosenthal, Sigmund A., London, England. Burner | 744,800 | Nov. 24 | 3870 | 833 | 107 | 873 |
| Rosenthal, Sigmund A., deceased; A. L. Rosenthal, London, England, administratrix. Active material for electric accumulators | 733,918 | July 14 | 2210 | ------ | 105 | 480 |
| Rosenthal, William U., New Orleans, La. Nut-lock | 723,030 | Mar. 17 | 2550 | 573 | 103 | 571 |
| Rosentreter, Albert J. (See Bardsley and Rosentreter.) | | | | | | |
| Rosentreter, Albert J., Boonton, assignor to J. Bardsley, Montclair, N. J. Door closer and check | 720,489 | Feb. 10 | 1969 | 450, 451 | 102 | 1255 |
| Rosentreter, Frank L., Rochester, N. Y., assignor to Caldwell Manufacturing Company. Check for closures | 719,510 | Feb. 3 | 171 | 40 | 102 | 859 |
| Rosenzweig, Moritz, Allegheny, Pa. Cuspidor | 744,621 | Nov. 17 | 3516 | 759 | 107 | 779 |
| Rosmann, Alois L., and F. Barthold, Milwaukee, Wis. Bottle-washing machine | 737,150 | Aug. 25 | 3936 | 874, 875 | 105 | 1871 |
| Rosmann, Alois L., and F. Barthold, Milwaukee, Wis. Bottle-carrier | 745,674 | Dec. 1 | 650 | 150 | 107 | 1236 |
| Ross, Archia L., New York, N. Y. Garment-hanger | 723,031 | Mar. 17 | 2552 | 574 | 103 | 572 |
| Ross, Beauregard. (See Truitt and Temple, assignors.) | | | | | | |
| Ross, Charles H. A. F. L., County of Ross, Scotland. Cartridge-packet | 724,127 | Mar. 31 | 4641 | 1045 | 103 | 1031 |
| Ross, Charles H. A. F. L., Balnagowan Castle, Ross-Shire, Scotland. Magazine for fire-arms | 747,777 | Dec. 22 | 4543 | 1023 | 107 | 2156 |
| Ross, Charles K. D., *et al.* (See Webber and Davis, assignors.) | | | | | | |
| Ross, Donald W., Chicago, Ill. Attachment for gas-stoves | 729,670 | June 2 | 264 | 61 | 104 | 1183 |
| Ross, Herman B. (See Hills and Ross.) | | | | | | |
| Ross, Hugh R., A. McKee, A. Laird, and R. McKeown, Belfast, Ireland; said McKee, Laird, and McKeown assignors to said Ross. Weft-replenishing mechanism for looms | 748,105 | Dec. 29 | 5215 | 1180, 1181 | 107 | 2325 |
| Ross, James, and A. W. MacKenzie, assignors of one-third to J. Gill, Edinburgh, Scotland. Bung, stopper, or the like for casks or other storage-receptacles | 739,929 | Sept. 29 | 4619 | 1036 | 106 | 1054 |
| Ross, James H. (See Jessen and Ross.) | | | | | | |
| Ross, John, Wessington, S. D. Sash-lock | 739,109 | Sept. 15 | 3076 | 682 | 106 | 689 |
| Ross, John H. (See Roberts, Baker, and Ross.) | | | | | | |
| Ross, John H., Aston, near Birmingham, England. Acetylene-gas generator | 738,070 | Sept. 1 | 1004 | 223, 224 | 106 | 218 |
| Ross, John I. (See Cruzan, Albert O., assignor.) | | | | | | |
| Ross, John K., and L. Singer, Allegheny, Pa. Apparatus for increasing speed of vessels | 744,622 | Nov. 17 | 3517 | 759 | 107 | 779 |
| Ross, John M., Venetia, assignor of one-fourth to S. Kennedy, Riverview, Pa. Emergency car-brake | 730,048 | June 2 | 960 | 215 | 104 | 1323 |
| Ross, John R., Jonesville, La. Broom-bridle | 723,490 | Mar. 24 | 3443 | 770 | 103 | 766 |
| Ross, Joseph, assignor of one-half to A. J. Bennett, Vincennes, Ind. Hay-press | 747,230 | Dec. 15 | 3533 | 802 | 107 | 1910 |
| Ross, Joseph, assignor of one-half to A. J. Bennett, Vincennes, Ind. Reamer | 747,330 | Dec. 15 | 3735 | 842 | 107 | 1956 |
| Ross, Joseph P. (See Smith, John F., Jr., assignor.) | | | | | | |
| Ross, Joshua V., Jackson Township, Boone county, Ind. Ear-agitating guide for corn-huskers | 736,785 | Aug. 18 | 3278 | 725 | 105 | 1712 |
| Ross, K. D., *et al.* (See Webber and Davis, assignors.) | | | | | | |
| Ross, Mary E. (See Berry, James E., assignor.) | | | | | | |
| Ross, Monroe L., Paris, France. Burner | 732,224 | June 30 | 5035 | 1120 | 104 | 2237 |
| Ross, Samuel A., Erie, Pa. Net-lifting machine | 726,465 | Apr. 28 | 3777 | 855 | 103 | 2010 |
| Ross, Walter, Sr., Opelika, Ala. Rail-joint | 743,036 | Nov. 3 | 419 | 90 | 107 | 88 |
| Ross, Walter D., Woodlawn, Ala. Core-bar | 721,837 | Mar. 3 | 325 | 71, 72 | 103 | 71 |
| Ross, William, Montreal, Canada. Cutting-machine | 733,427 | July 14 | 1311 | 310 | 105 | 294 |
| Ross, William L., and D. C. Tollinger, Philadelphia, Pa. Mixing-faucet | 736,023 | Aug. 11 | 1886 | 403 | 105 | 1402 |
| Ross, William S., Salem, Ill. Harrow | 728,304 | May 19 | 2811 | 622 | 104 | 638 |
| Ross, William T., *et al.* (See Mitchell, Winfield J., assignor.) | | | | | | |
| Rossetter, James R., assignor to Ground Hog Plow & Foundry Company, Clarksville, Tenn. Plow | 740,373 | Sept. 29 | 5429 | 1222 | 106 | 1224 |
| Rossetter, William, and R. Talbot, Blackburn, England. Weft-replenishing loom | 744,240 | Nov. 17 | 2857 | 612, 613 | 107 | 639 |
| Rossi, Auguste J., New York, assignor of one-half to J. MacNaughton, Tahawus, N. Y. Alloy of iron and titanium | 721,467 | Feb. 24 | 3862 | ------ | 102 | 1685 |
| Rossi, John, Joliet, Ill. Refrigerator | 728,017 | May 12 | 2255 | 502 | 104 | 497 |
| Rossi, Louis M. (See Figuccia, Pietro, assignor.) | | | | | | |
| Rossie, Giacinto, Philadelphia, Pa. Musical instrument | 745,241 | Nov. 24 | 4730 | 1032 | 107 | 1051 |
| Rossiter, James T., Chiswick, England. Speed-governor | 725,591 | Apr. 14 | 2165 | 490, 491 | 103 | 1645 |
| Rossler, Charles, Buffalo, N. Y. Gas-engine | 731,956 | June 23 | 4474 | 998 | 104 | 2108 |
| Rossman, Grant B., New York, N. Y. Developing, recording, or transmitting graphic processes | 742,065 | Oct. 20 | 3245 | 727, 728, 729, 730 | 106 | 1969 |
| Rossman, Grant B., New York, N. Y. Geometric telegraph | 742,066 | Oct. 20 | 3265 | 730, 731, 732, 733, 734 | 106 | 1970 |
| Rost, Louis N. (See Purdum, Samuel E., assignor.) | | | | | | |
| Rostek, John G., Decatur, Ill. Window-drier | 730,843 | June 9 | 2374 | 525 | 104 | 1637 |
| Röstel, Carl, Charlottenburg, Germany. Means for setting the time-fuses of cartridges, &c | 741,836 | Oct. 20 | 2771 | 618 | 106 | 1873 |
| Rostin, Heliodor, O. Thielbeule, and H. Warschauer, Berlin, Germany. Gas-lighting apparatus | 748,310 | Dec. 29 | 5575 | 1272 | 107 | 2402 |
| Rote, Charles V., assignor, by mesne assignments, to J. F. Brimmer, Lancaster, Pa., and J. F. Cullman, New York, N. Y. Combined rail and wheel car-brake | 724,508 | Apr. 7 | 158 | 37, 38, 39 | 103 | 1203 |
| Rote, Charles W., Bellefonte, Pa. Combined swing and chair | 737,276 | Aug. 25 | 4191 | 933, 934 | 105 | 1925 |
| Roth, Alfred P., assignor to Roth & Engelhardt, New York, N. Y. Music-sheet feed mechanism | 741,072 | Oct. 13 | 1265 | 287 | 106 | 1537 |
| Roth, Charles E., Richmond, Va. Combined lifting-jack and propelling means therefor | 748,311 | Dec. 29 | 5577 | 1272 | 107 | 2402 |
| Roth, Charles H., Chicago, Ill. Motor | 722,328 | Mar. 10 | 1247 | 278 | 103 | 281 |
| Roth, Edward B., St. Louis, Mo. Die | 723,314 | Mar. 24 | 3083 | 694 | 103 | 696 |
| Roth, Edward N. (See Keane, James P., assignor.) | | | | | | |
| Roth, Emil, Vienna, Austria-Hungary. Automatically-cocking firearm | 727,453 | May 5 | 1171 | 258 | 104 | 253 |
| Roth & Engelhardt. (See Roth, Alfred P., assignor.) | | | | | | |
| Roth, George. (See Shambeck, George, assignor.) | | | | | | |
| Roth, Henry G., Minneapolis, Minn. Detachable cover for boxes | 737,776 | Sept. 1 | 409 | 86, 87 | 106 | 90 |
| Roth, Henry G., Minneapolis, Minn. Box-counter | 737,777 | Sept. 1 | 410 | 87 | 106 | 90 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| Roth, John G., Columbus, Ind. Pump | 738,244 | Sept. 8 | 1384 | 299, 300 | 106 | 315 |
| Roth, Julius, *et al.* (See Lewis, John F., assignor.) | | | | | | |
| Roth, Leonhard, Kanth, assignor of one-half to W. R. Gentzen, Gühlichen, near Gross, Rinnersdorf, Germany. Making glucose | 745,675 | Dec. 1 | 651 | 150 | 107 | 1236 |
| Rothberg, Mathew E., Lebanon, Pa. Coke-oven | 718,027 | Jan. 6 | 958 | 213 | 102 | 206 |
| Rothberg, Mathew E., Lebanon, Pa. Coke-oven | 720,971 | Feb. 17 | 2892 | 662, 663 | 102 | 1462 |
| Rothchild, Joseph, assignor to W. E. Caldwell and W. E. Caldwell Co., Louisville, Ky. Valve | 726,575 | Apr. 28 | 4024 | 910 | 103 | 2056 |
| Rothe, Ernst K., Eisenach, Germany. Recoil apparatus for guns | 724,335 | Mar. 31 | 5063 | 1133 | 103 | 1114 |
| Rothe, Ernst K., Eisenach, Germany. Bearing for the elevating-screw apparatus of field or other guns | 724,946 | Apr. 7 | 965 | 222 | 103 | 1376 |
| Rothe, Ernst K., Eisenach, Germany. Field-gun | 736,881 | Aug. 18 | 3464 | 768 | 105 | 1752 |
| Rothe, Ernst K., Eisenach, Germany. Field-gun | 738,629 | Sept. 8 | 2165 | 474 | 106 | 481 |
| Rothe, Fritz, Billwärder, Germany. Filter | 722,632 | Mar. 10 | 1809 | 402 | 103 | 404 |
| Rothschild, Sidney, New York, N. Y. Fuse-plug | 723,032 | Mar. 17 | 2553 | 574 | 103 | 572 |
| Rothschild, Sophie. (See Joachimson, Martin, assignor.) | | | | | | |
| Rothwell, William H., London, England. Releasing device for ships' boats | 746,169 | Dec. 8 | 1576 | 352, 353 | 107 | 1457 |
| Rotman, George. (See Beecher, Thomas, assignor.) | | | | | | |
| Rottanzi, Tullio A. (See O'Brien, Dennis J., assignor.) | | | | | | |
| Rottenburg, Louis, Paisley, Scotland. Belt-gearing | 721,394 | Feb. 24 | 3727 | 848, 849 | 102 | 1657 |
| Rotz, Warren H., Reading, Pa. Shoe-lace fastener | 743,106 | Nov. 3 | 550 | 118 | 107 | 115 |
| Rouault, Louis, Jersey City, N. J., assignor to S. Bache & Co., New York, N. Y. Machine for cutting glass | 725,288 | Apr. 14 | 1602 | 362 | 103 | 1524 |
| Roudil, Joseph A., Paris, France. Bottle-basket | 728,018 | May 12 | 2256 | 502 | 104 | 497 |
| Roudybush, Clinton H. (See Trett and Roudybush.) | | | | | | |
| Rougé, Raymond, Paris, France. Winding for electrical machines and appliances | 728,766 | May 19 | 3661 | 815 | 104 | 816 |
| Rouget, Paul, assignor to Cie Ame Continentale pour la Fabrication des Compteurs á Gaz et Autres Appareils, Paris, France. Time gas-lighting apparatus | 743,565 | Nov. 10 | 1542 | 321 | 107 | 346 |
| Roughley, George R., Detroit, Mich. Extension-table | 734,961 | July 28 | 4199 | 977 | 105 | 932 |
| Round, Louis D., assignor to D. Round and Son, Cleveland, Ohio. Hoist | 721,968 | Mar. 3 | 591 | 132 | 103 | 129 |
| Round and Son, David. (See Round, Louis D., assignor.) | | | | | | |
| Rounds, Howard A., Chicago, Ill. T-square head | 720,179 | Feb. 10 | 1407 | 322 | 102 | 1138 |
| Rounds, Myron, Boston, Mass. Electric car | 747,489 | Dec. 22 | 4017 | 903 | 107 | 2037 |
| Rountree, Harrison H., and A. W. Straight, Chicago, Ill. Gas-lamp | 742,803 | Oct. 27 | 4611 | 1045 | 106 | 2269 |
| Rountree, Joseph R., Chicago, Ill. Picture-frame | 718,281 | Jan. 13 | 1420 | 316 | 102 | 321 |
| Rourke, John, New London, Conn. Paddle-wheel | 728,620 | May 19 | 3409 | 754 | 104 | 764 |
| Rouse, Richard, Jr. (See Marshall, Rouse, and Kniffin.) | | | | | | |
| Roush, Henry. (See Roush, Peter, Jr., and H.) | | | | | | |
| Roush, Peter, Jr., and H., Greenfield, Ohio. Curtain-exhibitor | 731,504 | June 23 | 3652 | 815 | 104 | 1938 |
| Rousseau, Edwin H., Port Eads, La. Vapor-feeder and throttle for gas-engines | 721,238 | Feb. 24 | 3457 | 786 | 102 | 1601 |
| Roussel, Willis J., New Orleans, La. Briquet | 719,047 | Jan. 27 | 2901 | ..... | 102 | 660 |
| Roux, Charles F., Stryker, assignor of one-half to R. H. Betts, Archbold, Ohio. Hog-nose cutter | 723,033 | Mar. 17 | 2555 | 574 | 103 | 572 |
| Row, William T., Lower Edmonton, England. Pan-ring for coppers | 718,219 | Jan. 13 | 1300 | 287 | 102 | 294 |
| Rowan, Andy, Steamboat Springs, Colo. Machine for grubbing sage-brush | 741,979 | Oct. 20 | 3073 | 687 | 106 | 1933 |
| Rowan, James. (See Hennessey, James, assignor.) | | | | | | |
| Rowand, Lewis G., East Orange, N. J. Expansible pulley | 742,497 | Oct. 27 | 4079 | 917, 918 | 106 | 2154 |
| Rowcliff, Montague C., assignor to himself and G. B. Coryell, Osceola, Wis. Grain-door | 723,034 | Mar. 17 | 2556 | 574 | 103 | 573 |
| Rowe, Agnes F. (See Smith, Charles H., assignor.) | | | | | | |
| Rowe, Conie J., Cincinnati, Ohio. Bottle attachment | 734,754 | July 28 | 3820 | 890 | 105 | 852 |
| Rowe, Conie J., Cincinnati, Ohio. Work and tool holder | 748,018 | Dec. 29 | 5047 | 1140 | 107 | 2289 |
| Rowe, David H. (See Gilson and Rowe.) | | | | | | |
| Rowe, Frank M., Rockford, Ill. Snuff or tobacco box | 717,717 | Jan. 6 | 349 | 85 | 102 | 75 |
| Rowe, George H., Ennis, Tex. Hammer | 726,466 | Apr. 28 | 3778 | 855 | 103 | 2010 |
| Rowe, John W., Centertown, Ky. Vehicle-brake | 732,783 | July 7 | 154 | 40, 41 | 105 | 37 |
| Rowe, Norman, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Co. System of electrical distribution | 725,777 | Apr. 21 | 2533 | 575 | 103 | 1738 |
| Rowe, Willard C., assignor to Union Iron Works, Decatur, Ill. Separating-screen | 748,562 | Dec. 29 | 6065 | 1373 | 107 | 2512 |
| Rowe, William J., and A. L. Witbeck, Cleveland, Ohio. Rotary engine | 748,533 | Dec. 29 | 5998 | 1359 | 107 | 2495 |
| Rowell, Alonzo. (See Nelson, David, assignor.) | | | | | | |
| Rowell, Benton C., Chicago, Ill., assignor to Rowell Potter Safety Stop Company, Portland, Me. Interlocking-machine for railways | 724,947 | Apr. 7 | 966 | 223, 224 | 103 | 1376 |
| Rowell, John S., Beaverdam, Wis. Disk-drill seeding-machine | 746,383 | Dec. 8 | 1959 | 448 | 107 | 1537 |
| Rowell Potter Safety Stop Company. (See Rowell, Benton C., assignor.) | | | | | | |
| Rowell, Samuel W., Beaverdam, Wis. Vehicle | 739,347 | Sept. 22 | 3495 | 781 | 106 | 794 |
| Rowell, William L., Jr., Milton, assignor of seven-eighths to W. E. Post, Melrose, and F. S. Post and J. M. Atwood, Boston, Mass. Machine for sealing and applying stamps to envelops | 723,315 | Mar. 24 | 3084 | 694, 695 | 103 | 696 |
| Rowland, David E., assignor to Ney Manufacturing Company, Canton, Ohio. Hay-elevator | 744,409 | Nov. 17 | 3168 | 679, 680 | 107 | 707 |
| Rowland, George H., New York, N. Y. Overflow-alarm | 730,572 | June 9 | 1918 | 427 | 104 | 1539 |
| Rowland, Henry A., assignor to Rowland Telegraphic Company, Baltimore, Md. Telegraphy | 725,592 | Apr. 14 | 2169 | 491, 492 | 103 | 1646 |
| Rowland, Henry A., assignor to Rowland Telegraphic Company, Baltimore, Md. Telegraphy | 729,420 | May 26 | 4828 | 1071 | 104 | 1070 |
| Rowland, Horace B., Philadelphia, Pa., assignor to Electric Motor and Generator Ventilating Company. Ventilator for electric motors for cars | 724,948 | Apr. 7 | 968 | 224 | 103 | 1376 |
| Rowland, Horace B., Philadelphia, Pa., assignor to Electric Motor and Generator Ventilating Company. Ventilating device for electric motors for cars | 724,949 | Apr. 7 | 969 | 225 | 103 | 1376 |
| Rowland, Horace B., Philadelphia, Pa., assignor to Electric Motor and Generator Ventilating Company. Ventilator for motors for cars | 724,950 | Apr. 7 | 971 | 225 | 103 | 1377 |
| Rowland, John F., and G. D. Hull, Asheville, N. C. Powder-puff | 736,786 | Aug. 18 | 3281 | 725 | 105 | 1713 |
| Rowland, Milton H., Gladstone, assignor to F. H. Van Cleve, Escanaba, and W. L. Marble, Gladstone, Mich. Hunting-knife | 728,416 | May 19 | 3007 | 661 | 104 | 678 |
| Rowland Telegraphic Company. (See Northrup, Edwin F., assignor.) | | | | | | |
| Rowland Telegraphic Company. (See Potts, Louis M., assignor.) | | | | | | |
| Rowland Telegraphic Company. (See Rowland, Henry A., assignor.) | | | | | | |
| Rowland, Thomas F., New York, N. Y. Corrugator | 737,277 | Aug. 25 | 4193 | 934, 935 | 105 | 1925 |
| Rowland, Thomas F., Jr., and W. H. Deming, assignors to Thomas F. Rowland, Sr., New York, N. Y. Flanging-machine | 722,186 | Mar. 3 | 974 | 216 | 103 | 206 |

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| Rowlands, Erroll G. (See Saunders and Rowlands.) | | | | | | |
| Rowles, Eli, *et al.* (See Winget, Marion A., assignor.) | | | | | | |
| Rowley, A. B. (See Barcus, George N., assignor.) | | | | | | |
| Rowley, Charles O., Toledo, Ohio. Discharge-valve for tank-cars, &c | 723,409 | Mar. 24 | 3275 | 734 | 103 | 731 |
| Rowley, James F., Chicago, Ill. Stump-protector | 721,239 | Feb. 24 | 3459 | 786 | 102 | 1601 |
| Rowley, James F., Chicago, Ill. Artificial limb | 744,801 | Nov. 24 | 3872 | 833 | 107 | 873 |
| Rowley, Salmon B. (See Rogers and Sagee, assignors.) | | | | | | |
| Rowley, Walter J., Allegheny, Pa. Trolley | 748,422 | Dec. 29 | 5780 | 1318 | 107 | 2448 |
| Rowley, Willson H., St. Louis, Mo. Apparatus for atomizing metals | 720,382 | Feb. 10 | 1793 | 407 | 102 | 1218 |
| Rowntree, Harold, assignor to Burdett-Rowntree Manufacturing Company, Chicago, Ill. Automatic electric elevator | 724,951 | Apr. 7 | 972 | 225, 226 | 103 | 1377 |
| Rowntree, Harold, assignor to Burdett-Rowntree Manufacturing Company, Chicago, Ill. Electrical motor | 732,377 | June 30 | 5329 | 1181, 1182 | 104 | 2298 |
| Rowray, J. B. (See Stelle, Herbert D., assignor.) | | | | | | |
| Rowse, Frank J., Pawtucket, R. I., assignor to American Vending Machine Company, Saco, Me. Coin-controlled vending-machine | 743,037 | Nov. 3 | 420 | 91 | 107 | 88 |
| Rowse, Frank J., Pawtucket, R. I., assignor to American Vending Machine Company, Saco, Me. Coin-controlled vending-machine | 744,410 | Nov. 17 | 3170 | 680 | 107 | 708 |
| Roy, Edward H., Nashville, Tenn. Game | 742,498 | Oct. 27 | 4081 | 918 | 106 | 2154 |
| Roy, Ransom J., *et al.* (See Moore, James S., assignor.) | | | | | | |
| Roy, Thomas P., Seattle, Wash. Universal square | 746,384 | Dec. 8 | 1961 | 449 | 107 | 1538 |
| Royal, George S., *et al.* (See Benke, Charles A., assignor.) | | | | | | |
| Royal, Henry W., Chicago, Ill., assignor to Welsbach Light Company, Philadelphia, Pa. Shade-clip for incandescent gas-burners | 739,110 | Sept. 15 | 3077 | 682 | 106 | 689 |
| Royal Milling and Manufacturing Company. (See Welch, Rosia W., assignor.) | | | | | | |
| Royal Packing Company. (See Latchford, William J., assignor.) | | | | | | |
| Royal Pattern Company. (See White, Elizabeth A. C., assignor.) | | | | | | |
| Royalty, G. W., *et al.* (See Tompkins, Jesse, assignor.) | | | | | | |
| Royce, Ezra, North Yamhill, Oreg. Chicken-roost | 727,454 | May 5 | 1172 | 259 | 104 | 253 |
| Royer, Clement L., St. Joseph, Mo. Combined pincushion and paper-weight | 734,962 | July 28 | 4201 | 977 | 105 | 932 |
| Royer, John H., Cedarville, Ill. Checkrein-hook | 732,963 | July 7 | 466 | 116 | 105 | 101 |
| Royle, Vernon, Paterson, N. J. Electric switch | 727,206 | May 5 | 717 | 153, 154 | 104 | 156 |
| Royle, Vernon, Paterson, N. J. Cutter-head for routing-machines | 729,896 | June 2 | 688 | 152 | 104 | 1268 |
| Royle, Vernon, Paterson, N. J. Machine for cutting or punching jacquard-cards | 729,897 | June 2 | 689 | 152, 153 | 104 | 1269 |
| Royle, Vernon, Paterson, N. J. Machine for cutting jacquard-cards | 740,694 | Oct. 6 | 568 | 127, 128, 129 | 106 | 1370 |
| Royse, Angelo M., assignor to New England Lock and Hinge Company, Winchendon, Mass. Toy boat | 731,227 | June 16 | 3111 | 690 | 104 | 1806 |
| Royse, William A. (See Wood and Royse.) | | | | | | |
| Rozár, Coloman, Nuremberg, Germany. Device for casting justifying-spaces in combined type casting and setting machines | 717,763 | Jan. 6 | 457 | 106, 107 | 102 | 99 |
| Rozár, Coloman, Nuremberg, Germany. Keyboard for type-setting machines | 719,375 | Jan. 27 | 3533 | 788 | 102 | 793 |
| Ruark, Josiah P., Decatur, Ill. Self-locking bolt | 725,147 | Apr. 14 | 1361 | 307 | 103 | 1473 |
| Rubber Balloon Company of America. (See Harris, David, assignor.) | | | | | | |
| Rubber Balloon Company of America. (See Whisler, Arrah J., assignor.) | | | | | | |
| Rübel, Walter, Berlin, Germany. Alloy | 743,566 | Nov. 10 | 1544 | ------ | 107 | 347 |
| Rubens, Harriet, Chicago, Ill. Hair-pin and manicure implement | 729,898 | June 2 | 690 | 153 | 104 | 1269 |
| Rubenstein, Nathan, New York, N. Y. Bed-spring | 737,278 | Aug. 25 | 4198 | 936 | 105 | 1926 |
| Rubin, Max, New York, N. Y. Hose and garment supporter | 720,742 | Feb. 17 | 2484 | 571 | 102 | 1376 |
| Rubin, William, South Omaha, Nebr. Round-can-floating machine | 743,567 | Nov. 10 | 1544 | 322, 323 | 107 | 347 |
| Rubin, William, South Omaha, Nebr. Mechanism for preparing and applying solder to vessels | 743,568 | Nov. 10 | 1547 | 323, 324 | 107 | 347 |
| Rubitschung, Carl, Frankfort-on-the-Main, Germany. Manufacture of artificial asphalt, stone, &c | 748,019 | Dec. 29 | 5049 | ------ | 107 | 2289 |
| Rubly, Charles P., assignor of one-half to H. Davis, Scranton, Pa. Linotype-matrix cleaner | 740,471 | Oct. 6 | 168 | 33 | 106 | 1281 |
| Rubrecht, Luther W., Riverton, N. J. Vending-machine | 730,707 | June 9 | 2154 | 478 | 104 | 1591 |
| Ruby, Charles F., assignor to Missouri Locovolo Company, St. Louis, Mo. Feed-water heater | 737,026 | Aug. 25 | 3735 | 829 | 105 | 1830 |
| Ruby, Charles F., assignor to Missouri Locovolo Company, St. Louis, Mo. Steam-generator | 737,279 | Aug. 25 | 4199 | 936, 937 | 105 | 1926 |
| Ruby, Charles F., assignor to Missouri Locovolo Company, St. Louis, Mo. Apparatus for controlling temperature of substances to be heated | 740,472 | Oct. 6 | 169 | 33 | 106 | 1281 |
| Ruby, John E., Indianapolis, Ind. Railway-switch-operating mechanism | 728,621 | May 19 | 3410 | 754, 755 | 104 | 764 |
| Ruby, Solomon. (See Roitman and Ruby.) | | | | | | |
| Ruch, George W. (See Ferguson, Richard H., assignor.) | | | | | | |
| Ruch, John H., and L. A. Baker, Elgin, Ill. Pump mechanism | 722,385 | Mar. 10 | 1351 | 299 | 103 | 304 |
| Ruckstuhl, Charles S., St. Louis, Mo. Syringe | 743,662 | Nov. 10 | 1725 | 364 | 107 | 384 |
| Rudd, Ole, Duluth, Minn. Stop-collar for power-shafts | 743,932 | Nov. 10 | 2201 | 475 | 107 | 485 |
| Rudd, Thomas W., Belfast, Ireland. Water-gage for steam-boilers | 722,410 | Mar. 10 | 1399 | 309 | 103 | 314 |
| Ruddell, Charles W., Kokomo, Ind. Machine for cleaning and coating nails | 740,183 | Sept. 29 | 5076 | 1142 | 106 | 1151 |
| Ruddick, John J., Newton, Mass., assignor to United States Electric Signal Company. Electric switch | 734,098 | July 21 | 2581 | 606 | 105 | 580 |
| Rude Brothers Manufacturing Company. (See Ham, Henry C., assignor.) | | | | | | |
| Rudolph, Frank, Lincoln, Ill. Sulky | 742,067 | Oct. 20 | 3297 | 734 | 106 | 1978 |
| Rudolph, Paul, assignor to Firm of C. Zeiss, Jena, Germany. Photographic objective | 721,240 | Feb. 24 | 3460 | 786 | 102 | 1601 |
| Rudolph, Wilhelm. (See Bieger, Wilhelm, assignor.) | | | | | | |
| Rudometoff, Michael, Gattschina, Russia. Multiple-color and text printing machine | 741,375 | Oct. 13 | 1890 | 417 | 106 | 1670 |
| Rudometoff, Michael, Gattschina, Russia, assignor to F. von Bressensdorf, Leipzig, Germany. Producing positive chromatized colloid designs on plates for printing purposes | 741,278 | Oct. 13 | 1663 | 376 | 106 | 1620 |
| Rue, Albert C. S., Northwood, Iowa. Lantern-holder for vehicles | 734,432 | July 21 | 3202 | 754 | 105 | 710 |
| Rue, Albert C. S., Northwood, Iowa. Hoisting-bucket | 739,561 | Sept. 22 | 3887 | 871, 872 | 106 | 880 |
| Rueckert, George C. (See Lenzen, Bertram, assignor.) | | | | | | |
| Ruegg, Werner, Sömmerda, Germany. Percussion-fuse for shells | 718,282 | Jan. 13 | 1421 | 316 | 102 | 321 |
| Ruehs, Charles L. (See Streich and Ruehs.) | | | | | | |
| Ruemmler, Clemens. (See Morris, Ruemmler, and Kennedy.) | | | | | | |
| Ruff, William J., Quincy, Ill. Pasteurizer | 731,131 | June 16 | 2947 | 655 | 104 | 1774 |
| Ruffin, Stanley. (See Barnes and Ruffin.) | | | | | | |
| Ruffin, Stanley, Boston, Mass. Wood stopper | 718,659 | Jan. 20 | 2169 | 475 | 102 | 494 |
| Ruffner, Thomas W., McKeesport, Pa. Acid-vat | 745,242 | Nov. 24 | 4731 | 1033 | 107 | 1051 |

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| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Ruger, James W., assignor of one-half to J. W. Ruger Manufacturing Company, Buffalo, N. Y. Dough mixing and kneading machine | 735,678 | Aug. 4 | 1232 | 261 | 105 | 1242 |
| Ruger, John L., Brooklyn, N. Y. Bottle-stopper | 721,330 | Feb. 24 | 3609 | 820 | 102 | 1633 |
| Rugg, Arthur H., *et al.* (See O'Brien, Arthur, assignor.) | | | | | | |
| Rugg, De Leonard, Catskill, N. Y. Ice-cream freezer | 747,490 | Dec. 22 | 4021 | 904 | 107 | 2038 |
| Rugg, Harrison W. (See Hill, Alfred H., assignor.) | | | | | | |
| Ruggles, Constant M. (See Ruggles, Reginald S. and C. M.) | | | | | | |
| Ruggles, Emma L., Bayonne, N. J. Safety attachment for locks | 721,468 | Feb. 24 | 3865 | 878 | 102 | 1685 |
| Ruggles, Harry A., Milwaukee, Wis., and C. T. Hower, Rhodes, Iowa, assignors to L. A. Raven, Chicago, Ill. Flue-cleaner | 721,608 | Feb. 24 | 4146 | 942 | 102 | 1748 |
| Ruggles, Hibbert B., Brooklyn, N. Y. Motor-cycle | 743,755 | Nov. 10 | 1876 | 397 | 107 | 417 |
| Ruggles, Horatio B., Boston, Mass., assignor to Boston Automatic Bed Company. Door-bedstead | 748,563 | Dec. 29 | 6066 | 1374 | 107 | 2512 |
| Ruggles, Reginald S. and C. M., Ravenswood, Ill. Flue-cleaner | 734,617 | July 28 | 3541 | 829 | 105 | 799 |
| Rugh, Harry O., assignor to Illinois Electric Specialty Company, Chicago, Ill. Telephony | 747,491 | Dec. 22 | 4023 | 904 | 107 | 2038 |
| Rule, James R., Central City, Colo. Door-closing and bucket-tilting device | 739,111 | Sept 15 | 3078 | 682, 683 | 106 | 689 |
| Ruliancih, John J. O. R., Clayton, Mass. Rotary explosive-engine | 736,787 | Aug. 18 | 3282 | 726 | 105 | 1713 |
| Rulofson, William R., *et al.* (See Clover and Johnston, assignors.) | | | | | | |
| Rulon, Watson B. (See Scott, Gordon J., assignor.) | | | | | | |
| Rumely, William N. (See Robby and Rumely.) | | | | | | |
| Rumely, William N., Laporte, Ind. Straw-stacker | 740,695 | Oct. 6 | 575 | 129 | 106 | 1371 |
| Rumely, William N., Laporte, Ind. Sieve and riddle for separators | 747,231 | Dec. 15 | 3535 | 802 | 107 | 1910 |
| Rumely, William N., Laporte, Ind. Finger-ring | 747,232 | Dec. 15 | 3536 | 803 | 107 | 1911 |
| Rumford, Frederick D., Sioux City, Iowa. Storm-window fastener | 741,721 | Oct. 20 | 2576 | 573 | 106 | 1830 |
| Rumley, Frank O. (See Hartzell, Robert H., assignor.) | | | | | | |
| Rummel, Jacob P., Sioux Falls, S. D. Filter | 738,630 | Sept. 8 | 2166 | 475 | 106 | 481 |
| Rummel, William L., South Sioux City, Nebr. Bracket for picture-molding | 738,847 | Sept. 15 | 2619 | 578 | 106 | 594 |
| Rummelin, Pauline, Portland, Oreg. Candle-holder for Christmas trees | 737,966 | Sept. 1 | 822 | 180 | 106 | 180 |
| Rummler, Eugene A., *et al.* (See Biehn, Frank A., assignor.) | | | | | | |
| Rummler, William R., *et al.* (See Biehn, Frank A., assignor.) | | | | | | |
| Rumpel, Anton C. (See Babbitt and Rumpel.) | | | | | | |
| Rumpf, Martin H., Paris, France. Explosion-engine | 727,455 | May 5 | 1172 | 259, 260 | 104 | 253 |
| Rumpf, William, Eden, assignor to Frederick Rumpf's Sons, Langhorne, Pa. Woven fabric and producing same | 736,635 | Aug. 18 | 2993 | 660 | 105 | 1654 |
| Rumple, James F., Temple, Tex. Oil-burner | 731,505 | June 23 | 3655 | 815 | 104 | 1938 |
| Rumrill, George E., Carrollton, Ill. Tire-fastener | 723,316 | Mar. 24 | 3089 | 696 | 103 | 697 |
| Rundqvist, Carl G., Atlantic City, N. J. Folding cot | 718,159 | Jan. 13 | 1187 | 264 | 102 | 271 |
| Rundle, Fred A., Harvey, Ill. Ladle-crane | 718,160 | Jan. 13 | 1189 | 264 | 102 | 271 |
| Rundorff, Theodore, Burlington, Iowa. Switch-operating mechanism | 735,826 | Aug. 11 | 1515 | 324 | 105 | 1322 |
| Rundorff, Theodore, Burlington, Iowa. Switch-operating mechanism | 746,170 | Dec. 8 | 1578 | 353 | 107 | 1457 |
| Runge, Frederick C., Jr., Houghton, Mich. Silk-floss holder | 745,296 | Nov. 24 | 4831 | 1054 | 107 | 1071 |
| Runge, Walter C., London, England. Graphophone, phonograph, or the like | 725,878 | Apr. 21 | 2708 | 616 | 103 | 1776 |
| Runge, Walter C., London, England. Speed-regulator | 738,125 | Sept. 1 | 1129 | 251 | 106 | 244 |
| Runge, William, assignor to Seneca Falls Manufacturing Company, Seneca Falls, N. Y. Wheel-attaching device | 722,909 | Mar. 17 | 2354 | 526 | 103 | 531 |
| Runkel, Friedrich, Elberfeld, Germany, assignor to Farbenfabriken of Elberfeld Co., New York, N. Y. Yellow azo dye and making same | 719,048 | Jan. 27 | 2902 | ------ | 102 | 660 |
| Runkel, Friedrich, Elberfeld, Germany, assignor to Farbenfabriken of Elberfeld Co., New York, N. Y. Yellow azo dye and making same | 719,049 | Jan. 27 | 2903 | ------ | 102 | 660 |
| Runkle, John F., Wooster, Ohio, assignor of one-half to E. P. Frink, Seattle, Wash. Brush | 740,696 | Oct. 6 | 576 | 129 | 106 | 1372 |
| Runolfson, Runolfur, and E. Johnson, deceased, (J. C. Johnson, administrator,) Spanish Fork, Utah. Railway-rail joint | 722,457 | Mar. 10 | 1495 | 330 | 103 | 335 |
| Runtz, Henry, Chicago, Ill. Paper box | 748,020 | Dec. 29 | 5050 | 1140 | 107 | 2289 |
| Runyon, Calvin C., Middlepoint, Ohio. Convertible hay-rack | 738,071 | Sept. 1 | 1006 | 224 | 106 | 218 |
| Rupert, Justus, Geneva, N. Y. Staple | 733,679 | July 14 | 1744 | 412 | 105 | 384 |
| Rupley, George, assignor to Vending Machine Company, Duluth, Minn. Vending-machine | 737,665 | Sept. 1 | 195 | 41, 42 | 106 | 45 |
| Rupley, George, assignor to Vending Machine Company, Duluth, Minn. Vending-machine | 742,804 | Oct. 27 | 4614 | 1045, 1046 | 106 | 2269 |
| Rupp, Charles, assignor to J. S. Thorn Company, Philadelphia, Pa. Automatically-operating window-sashes | 728,135 | May 12 | 2465 | 548 | 104 | 542 |
| Rupp, John, and A. Loehr, New York, N. Y. Clothes-line clamp | 744,241 | Nov. 17 | 2860 | 613 | 107 | 640 |
| Ruppel, Henry, and C. E. Weaver, Cleveland, Ohio, assignors to American Stove Co., St. Louis, Mo. Handle-bar for bicycles | 742,357 | Oct. 27 | 3829 | 858 | 106 | 2103 |
| Ruppert, John. (See Marugg and Ruppert.) | | | | | | |
| Rüsager, Henrik E., Frederiksberg, near Copenhagen, Denmark. Making cement | 718,729 | Jan. 20 | 2304 | ------ | 102 | 520 |
| Rusby, Joseph H., Nutley, N. J. Extensible or extension angle-brace | 719,050 | Jan. 27 | 2904 | 650 | 102 | 660 |
| Rusby, Joseph H., Nutley, N. J. Electric switch | 741,168 | Oct. 13 | 1449 | 330 | 106 | 1574 |
| Rusby, Joseph H., Nutley, N. J. Express or other annunciator | 747,778 | Dec. 22 | 4544 | 1024 | 107 | 2156 |
| Rusche, John, Grand Crossing, Wis. Centering-chuck | 733,753 | July 14 | 1877 | 443 | 105 | 413 |
| Rush, Charles B., Magic, Pa. Packing | 731,228 | June 16 | 3113 | 690 | 104 | 1806 |
| Rush, Charles B., Magic, Pa. Nut-lock for rail-joints | 747,233 | Dec. 15 | 3537 | 803 | 107 | 1911 |
| Rush, Joseph K., Canandaigua, N. Y. Acetylene-gas generator | 720,180 | Feb. 10 | 1409 | 322 | 102 | 1138 |
| Rush, William J., Milwaukee, Wis. Vending-machine | 727,207 | May 5 | 720 | 154 | 104 | 156 |
| Rusher, Lorenzo D. (See James and Rusher.) | | | | | | |
| Rushton, Kenneth, assignor to Burnham, Williams & Company, Philadelphia, Pa. Ventilator for cabs of locomotives | 722,539 | Mar. 10 | 1648 | 363 | 103 | 370 |
| Rushton, Kenneth, assignor to Burnham, Williams & Company, Philadelphia, Pa. Throttle-valve | 723,734 | Mar. 24 | 3857 | 867 | 103 | 852 |
| Rushton, Kenneth, assignor to Burnham, Williams & Company, Philadelphia, Pa. Reel attachment for mine-locomotives | 737,491 | Aug. 25 | 4602 | 1031 | 105 | 2016 |
| Rushton, Thomas H., Bolton, England. Stop-motion for winding-machines | 728,983 | May 26 | 4063 | 902 | 104 | 913 |
| Rushworth, Finch, Bradford, England. Apparatus for waterproofing textile fabrics | 718,527 | Jan. 13 | 1911 | 419, 420 | 102 | 427 |
| Rushworth, William M. (See Beckwith, William, assignor.) | | | | | | |
| Russ, Harry O. (See Hudson, Frank H., assignor.) | | | | | | |
| Russell, [illegible], U. S. Army. Telephone attachment for telegraph-lines | 724,336 | Mar. 31 | 5064 | 1133 | 103 | 1115 |
| Russell, Howland, Milwaukee, Wis. Combined cap and girder-support | 720,623 | Feb. 17 | 2377 | 522 | 102 | 1331 |
| Russell, Alexander, Noblestown, Pa. Rail-joint | 722,538 | Mar. 10 | 1647 | 363 | 103 | 369 |
| Russell, Alexander, Hawksnest, W. Va. Wheel | 727,456 | May 5 | 1176 | 260 | 104 | 254 |
| Russell Car and Snow-Plow Company. (See Russell, James W., assignor.) | | | | | | |
| Russell, Charles A., Providence, R. I. Button-badge fastener | 729,671 | June 2 | 265 | 61 | 104 | 1183 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | Spec. | Dr'g. | Vol. | Page. |
| Russell, Charles W., Providence, R. I., assignor to Draper Company, Hopedale, Mass. Take-up mechanism for looms | 730,404 | June 9 | 1599 | 357 | 104 | 1470 |
| Russell, Clifton B., assignor of one-half to H. E. Ryder, Marlboro, Mass. Electrical switch-operating mechanism. (Reissue) | 12,079 | Feb. 3 | 1023 | 238 | 102 | 1040 |
| Russell, Daniel H., Louisville, Ky. Packing for bottles or glasses | 719,612 | Feb. 3 | 357 | 82 | 102 | 896 |
| Russell & Erwin Manufacturing Company. (See Caley, Charles J., assignor.) | | | | | | |
| Russell & Erwin Manufacturing Company. (See Crandall, Nathan W., assignor.) | | | | | | |
| Russell & Erwin Manufacturing Company. (See Voight, Henry G., assignor.) | | | | | | |
| Russell & Erwin Manufacturing Company. (See Wetmore, Charles P., assignor.) | | | | | | |
| Russell, Francis E., assignor of one-half to T. H. Gardiner, Hoffman, Mont. Tug-buckle | 723,317 | Mar. 24 | 3091 | 696 | 103 | 697 |
| Russell, Frank J., New York, N. Y. Electrical connection | 746,580 | Dec. 8 | 2295 | 527 | 107 | 1612 |
| Russell, Frank N. (See Russell, Wilber D. and F. N.) | | | | | | |
| Russell, Frank R., *et al.* (See Mannooch, Charles W., assignor.) | | | | | | |
| Russell, Frederick V. (See Holden and Russell.) | | | | | | |
| Russell, George E., Passaic, N. J., assignor to American Car & Foundry Company, St. Louis, Mo. Hopper-bottom car | 731,817 | June 23 | 4230 | 943 | 104 | 2055 |
| Russell, George E., assignor of one-fourth to A. L. Kunz, Leavenworth, Kans. Extension-table | 737,492 | Aug. 25 | 4603 | 1031<br>1032 | 105 | 2016 |
| Russell, James H., Philadelphia, Pa., assignor to Welsbach Light Company, Gloucester City, N. J. Machine for stringing blanks | 745,389 | Dec. 1 | 144 | 33 | 107 | 1130 |
| Russell, James R., Danville, Ky. Carpet-fastener | 728,767 | May 19 | 3665 | 816 | 104 | 817 |
| Russell, James W., Boston, Mass., assignor to Russell Car and Snow-Plow Company. Snow-plow | 721,241 | Feb. 24 | 3461 | 787<br>788 | 102 | 1601 |
| Russell, James W., Boston, Mass., assignor to Russell Car and Snow-Plow Company. Snow-removing flanger | 722,187 | Mar. 3 | 975 | 216<br>217 | 103 | 206 |
| Russell, James W., Boston, Mass., assignor to Russell Car and Snow Plow Company. Coupling device for snow-plows | 739,348 | Sept. 22 | 3497 | 782 | 106 | 795 |
| Russell, John. (See Rasmussen, Peter, assignor.) | | | | | | |
| Russell, John A. (See Otto and Russell.) | | | | | | |
| Russell, John J., Jr., Deepwater, Mo. Curtain-securer | 725,778 | Apr. 21 | 2534 | 575 | 103 | 1739 |
| Russell, John J., Deepwater, Mo. Storm-shield attachment for vehicles | 727,844 | May 12 | 1936 | 431 | 104 | 430 |
| Russell, John J., Milton, assignor to J. Channon, Pakenham, Hornsby, near Sydney, New South Wales, Australia. Seal-lock | 736,024 | Aug. 11 | 1888 | 404 | 105 | 1403 |
| Russell, Leonard J., Manchester, N. H. Pump | 731,623 | June 23 | 3879 | 863 | 104 | 1981 |
| Russell Manufacturing Company. (See Frissell, Frank H., assignor.) | | | | | | |
| Russell, Richard, Stephen, Minn. Weed-puller | 722,048 | Mar. 3 | 729 | 162 | 103 | 157 |
| Russell, Richard, Stephen, Minn. Road-grading and ditching machine | 727,693 | May 12 | 1634 | 371 | 104 | 370 |
| Russell, Robert C., assignor of one-half to A. W. Siegel, Williamsport, Pa. Index | 719,143 | Jan. 27 | 3099 | 689 | 102 | 700 |
| Russell, Robert W. (See Hunt and Russell.) | | | | | | |
| Russell, S. W. (See Ogden, James A., assignor.) | | | | | | |
| Russell, Thomas W., assignor of one-half to R. Sayler, Union Bridge, Frederick county, Md. Mail-transportation system | 742,068 | Oct. 20 | 3298 | 734 | 106 | 1978 |
| Russell, Wilber D. and F. N., Streator, Ill. Convertible chair | 742,069 | Oct. 20 | 3301 | 735 | 106 | 1979 |
| Russell, William M., Walsh Station, Cal. Grain-separator | 739,349 | Sept. 22 | 3499 | 782 | 106 | 795 |
| Russell, William S., Toledo, Ohio. Steam-shovel | 745,676 | Dec. 1 | 652 | 151<br>152 | 107 | 1237 |
| Russi, Charles F., and C. Cadena, San Antonio, Tex. Artificial fuel | 727,694 | May 12 | 1635 | ..... | 104 | 370 |
| Rust, Clifford G., Herbst, Ind. Machine for feeding clay or other material to brick, tile, or other machines | 731,073 | June 16 | 2832 | 629 | 104 | 1752 |
| Rust, Edwin G., Pueblo, Colo. Mechanical water-purifying device for boilers | 726,193 | Apr. 21 | 3258 | 739 | 103 | 1888 |
| Rust, Edwin G., Pueblo, Colo. Blast-furnace-charging apparatus | 730,799 | June 9 | 2297 | 510<br>511<br>512 | 104 | 1621 |
| Rust, George M., and E. J. Faulkner, Dayton, Ohio. Window-shade stop | 728,984 | May 26 | 4064 | 902 | 104 | 914 |
| Ruston, Benjamin. (See Ruston, Samuel S. and B.) | | | | | | |
| Ruston, Samuel S. and B., Syracuse, N. Y. Water-paint | 732,894 | July 7 | 350 | ..... | 105 | 77 |
| Ruston, Samuel S. and B., Syracuse, N. Y. Water-paint and producing same | 732,895 | July 7 | 351 | ..... | 105 | 77 |
| Ruston, Samuel S. and B., Syracuse, N. Y. Water-paint and producing same | 732,896 | July 7 | 352 | ..... | 105 | 77 |
| Ruth Automatic Knitting Machine Company. (See Ruth, George W., assignor.) | | | | | | |
| Ruth, George W., Norristown, Pa., assignor to Ruth Automatic Knitting Machine Company. Belt-shipping device | 719,262 | Jan. 27 | 3306 | 740 | 102 | 743 |
| Ruth, George W., assignor to Ruth Automatic Knitting Machine Company, Norristown, Pa. Friction-clutch | 728,622 | May 19 | 3412 | 755 | 104 | 765 |
| Ruth, George W., assignor to Ruth Automatic Knitting Machine Company, Norristown, Pa. Automatic rib-knitting machine | 735,910 | Aug. 11 | 1670 | 356<br>357 | 105 | 1355 |
| Ruth, John F., and E. Preisler, St. Louis, Mo. Range | 743,933 | Nov. 10 | 2202 | 475<br>476 | 107 | 485 |
| Ruth, Matthew, New Edinburg, Ark. Cotton-cleaner attachment for gins | 723,035 | Mar. 17 | 2557 | 575 | 103 | 573 |
| Ruth, Samuel D., Beatrice, Nebr. Paper cutting and folding machine | 730,974 | June 16 | 2638 | 588 | 104 | 1712 |
| Ruth, Samuel D., Beatrice, Nebr. Paper cutting and folding machine | 731,624 | June 23 | 3881 | 863<br>864 | 104 | 1982 |
| Ruth, Samuel D., Beatrice, Nebr. Envelop or paper fastener | 747,087 | Dec. 15 | 3271 | 745 | 107 | 1855 |
| Ruth, Thomas D., Newark, N. J. Window-screen | 722,653 | Mar. 10 | 1841 | 411 | 103 | 412 |
| Ruthenburg, Marcus, Philadelphia, Pa. Reducing ores | 720,490 | Feb. 10 | 1972 | 451 | 102 | 1255 |
| Ruthenburg, Marcus, Philadelphia, Pa. Reducing iron from its ore | 722,253 | Mar. 10 | 1119 | 246 | 103 | 253 |
| Ruthenburg, Marcus, Philadelphia, Pa. Reducing iron from its ore | 722,254 | Mar. 10 | 1120 | 247 | 103 | 253 |
| Ruthenburg, Marcus, Harrisburg, Pa. Making bleaching compounds | 739,448 | Sept. 22 | 3710 | ..... | 106 | 842 |
| Ruthenburg, Marcus, Harrisburg, Pa. Bleaching process | 747,234 | Dec. 15 | 3538 | 803 | 107 | 1911 |
| Rutherfoord, John. (See Ostergren, Otto F., assignor.) | | | | | | |
| Rutherford, James R., *et al.* (See Stanifer, William D., assignor.) | | | | | | |
| Rutherford, Robert W., *et al.* (See Tyson, Frank, assignor.) | | | | | | |
| Ruthven, John, Chicago, Ill. Carbureter | 725,148 | Apr. 14 | 1362 | 307 | 103 | 1473 |
| Rutledge, William G., Brown Valley, Minn. Insulator | 737,027 | Aug. 25 | 3737 | 829 | 105 | 1831 |
| Rutschow, Herman. (See Chaplin, Manley J., assignor.) | | | | | | |
| Rutter, John F., Blair, Nebr., assignor of one-half to D. W. Archer, Chicago, Ill. Combined corn cooker and mixer | 739,350 | Sept. 22 | 3501 | 782<br>783 | 106 | 796 |
| Ruud, Edwin. (See Westinghouse and Ruud.) | | | | | | |
| Ryall, Charles A. (See Buchanan, Thomas, assignor.) | | | | | | |
| Ryan, Dennis, assignor of one-half to T. O'Donnell, Denver, Colo. Combined rail-brace and tie-plate | 723,214 | Mar. 17 | 2900 | 649 | 103 | 644 |
| Ryan, Edward H., Philadelphia, Pa. Vehicle-jack | 741,414 | Oct. 13 | 1953 | 433 | 106 | 1683 |
| Ryan, George F., Chicago, Ill. Water-closet and apparatus connection | 728,985 | May 26 | 4066 | 903 | 104 | 914 |
| Ryan, James H. (See Knopf, George J., assignor.) | | | | | | |
| Ryan, Michael B., Cologne, Germany. Exercising-machine | 730,477 | June 9 | 1745 | 391 | 104 | 1501 |
| Ryan, Michael J., Reading, Pa. Straightening and tempering device | 747,779 | Dec. 22 | 4545 | 1024 | 107 | 2157 |

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| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| Ryan, Peter. (See Charlton, Alfred W., assignor.) | | | | | | |
| Ryan, Thomas, Germantown, Pa. Yielding hoof-pad | 718,386 | Jan. 13 | 1604 | 353 | 102 | 358 |
| Ryan, Thomas, Buxton, England. Economizer for limekilns | 727,845 | May 12 | 1938 | 431<br>432 | 104 | 430 |
| Ryan, Thomas J. (See Beerwald, Benjamin, assignor.) | | | | | | |
| Ryan, Thomas J. (See Maguire, Joseph H., assignor.) | | | | | | |
| Ryan, Walter D., Lynn, Mass., assignor of two-thirds to L. L. Sagendorph, Philadelphia, Pa., and H. P. Lloyd, Cincinnati, Ohio. Ceiling construction | 744,692 | Nov. 17 | 3636 | 784 | 107 | 805 |
| Ryan, Walter D., Lynn, Mass., and L. L. Sagendorph, Philadelphia, Pa., assignors of one third to H. P. Lloyd, Cincinnati, Ohio. Ceiling construction | 741,593 | Oct. 13 | 2319 | 519 | 106 | 1760 |
| Ryan, William M., Pullman, Ill. Dust-guard | 742,907 | Nov. 3 | 155 | 36 | 107 | 34 |
| Ryberg, Charles O., Brockton, Mass. Heel-rand cutting and counting machine | 726,467 | Apr. 28 | 3779 | 855<br>856 | 103 | 2011 |
| Ryden, Axel, assignor of two-thirds to O. Price, Chicago, Ill. Tool for planers or shapers | 731,388 | June 16 | 3422 | 764 | 104 | 1871 |
| Ryder, Frank H., Cobleskill, N. Y. Silo | 746,997 | Dec. 15 | 3101 | 710 | 107 | 1814 |
| Ryder, Herbert E. (See Russell, Clifton B., assignor.) (Reissue.) | | | | | | |
| Ryder, Malcolm P., Whiteplains, N. Y. Electric generator for intermittent currents | 748,534 | Dec. 29 | 6000 | 1359 | 107 | 2496 |
| Ryder, Watson, and J. A. Qualey, Philadelphia, Pa., assignors, by mesne assignments, to J. J. O'Donohue, Jr., New York, N. Y. Still for petroleum-oil or hydrocarbon fluids | 739,757 | Sept. 22 | 4256 | 954 | 106 | 961 |
| Ryder, William B., and C. L. Reynolds, Redding, Cal. Tooth-brush | 741,722 | Oct. 20 | 2577 | 573 | 106 | 1830 |
| Ryding, Herbert C., Elyria, Ohio. Heating-furnace | 719,613 | Feb. 3 | 358 | 83 | 102 | 896 |
| Ryding, Herbert C., Elyria, Ohio. Boiler-tube cleaner | 721,609 | Feb. 24 | 4148 | 942 | 102 | 1748 |
| Rydquist, Adolph, Rochester, N. Y. Seat-post | 741,376 | Oct. 13 | 1893 | 417 | 106 | 1671 |
| Rye, Alford M., assignor of one-half to E. E. Davis, Georgetown, Ohio. Buggy attachment | 744,113 | Nov. 17 | 2606 | 557 | 107 | 584 |
| Ryer, Walter E., Olean, N. Y. Trolley-wheel | 729,421 | May 26 | 4831 | 1071 | 104 | 1071 |
| Ryland, Thomas J. F., London, England. Burner for incandescent gas-lighting | 722,147 | Mar. 3 | 899 | 199 | 103 | 192 |
| Ryon, Eppa H., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Knife-sled motion for pile-fabric looms | 720,285 | Feb. 10 | 1623 | 371 | 102 | 1182 |
| Ryon, Eppa H., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Needle-loom for weaving narrow-ware fabrics | 741,279 | Oct. 13 | 1665 | 376 | 106 | 1620 |
| Ryon, Eppa H., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Needle-loom | 743,107 | Nov. 3 | 551 | 118<br>119 | 107 | 115 |
| Ryon, Eppa H., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Take-up mechanism | 745,026 | Nov. 24 | 4295 | 928<br>929 | 107 | 960 |
| Ryon, Eppa H., Waltham, Mass., and C. N. Waite, Lansdowne, Pa., assignors to General Artificial Silk Company. Apparatus for producing artificial-silk filaments | 732,784 | July 7 | 157 | 41 | 105 | 37 |
| Rypinski, Maurice C., Schenectady, N. Y., assignor to General Electric Company. Hot-wire instrument | 730,405 | June 9 | 1600 | 357 | 104 | 1470 |
| Rypinski, Maurice C., and J. L. Davis, Schenectady, N. Y., assignors to General Electric Company. Volt-ampere meter | 729,422 | May 26 | 4832 | 1071 | 104 | 1072 |
| Ryther, Frank A., assignor to Deering Harvester Company, Chicago, Ill. Harvesting-machine | 720,624 | Feb. 17 | 2278 | 523 | 102 | 1331 |
| S. Galeski Optical Company. (See Shreiner and Tucker, assignors.) | | | | | | |
| S. Karpen & Bros. (See Weyer, Theodore G., assignor.) | | | | | | |
| S. Twitchell Company. (See Weed, Jacob K., assignor.) | | | | | | |
| S. A. Woods Machine Company. (See Blood, Charles W. H., assignor.) | | | | | | |
| S. F. Bowser and Company. (See Bowser, Allen A., assignor.) | | | | | | |
| S. H. Howe Shoe Company. (See Duplessis, Paul, assignor.) | | | | | | |
| S. S. Hepworth Company. (See Mackintosh, Edward D., assignor.) | | | | | | |
| S. S. Wenzell Machine Company. (See Vogel, Henry C., assignor.) | | | | | | |
| S. S. White Dental Manufacturing Company. (See Arndt, Louis, assignor.) | | | | | | |
| S. S. White Dental Manufacturing Company. (See Browne, Arthur W., assignor.) | | | | | | |
| S. S. White Dental Manufacturing Company. (See Gilbert, Virgil W., assignor.) | | | | | | |
| Sabel, Wilhelm, Berlin, Germany. Instrument-core of rhombic or lens-shaped section | 728,500 | May 19 | 3160 | 700 | 104 | 710 |
| Sabey, Alfred L., assignor of one-half to F. F. Sabey, Rochester, N. Y. Awning | 737,666 | Sept. 1 | 197 | 42 | 106 | 46 |
| Sabey, Frederick F. (See Sabey, Alfred L., assignor.) | | | | | | |
| Sachs, Heinrich, Friedenau, near Berlin, Germany. Holder for medicated substances | 723,552 | Mar. 24 | 3539 | 792 | 103 | 785 |
| Sachs, Joseph, Hartford, Conn. Safety-fuse | 718,797 | Jan. 20 | 2429 | 538 | 102 | 546 |
| Sachs, Joseph, Hartford, Conn. Controlling device for motor-vehicles | 741,837 | Oct. 20 | 2773 | 619 | 106 | 1873 |
| Sachs, Joseph, assignor to Johns-Pratt Company, Hartford, Conn. Safety-fuse | 737,280 | Aug. 25 | 4203 | 937 | 105 | 1927 |
| Sachs, Joseph, assignor to Johns-Pratt Company, Hartford, Conn. Safety-fuse | 737,281 | Aug. 25 | 4205 | 938 | 105 | 1928 |
| Sachs, Joseph, assignor to Johns-Pratt Company, Hartford, Conn. Safety-fuse | 737,282 | Aug. 25 | 4207 | 938 | 105 | 1928 |
| Sachs, Joseph, assignor to Johns-Pratt Company, Hartford, Conn. Fuse-block | 737,283 | Aug. 25 | 4210 | 938 | 105 | 1929 |
| Sachs, Joseph, assignor to Johns-Pratt Company, Hartford, Conn. Safety-fuse | 737,284 | Aug. 25 | 4213 | 938 | 105 | 1929 |
| Sachs, Joseph, assignor to Johns-Pratt Company, Hartford, Conn. Electric fuse switch-box | 742,499 | Oct. 27 | 4082 | 918 | 106 | 2155 |
| Sachse, Ernest C., St. Louis, Mo. Manufacture of fire-kindlers | 725,993 | Apr. 21 | 2909 | 660 | 103 | 1816 |
| Sachse, Ernest C., St. Louis, Mo. Mold for making fire-kindlers | 741,169 | Oct. 13 | 1451 | 330 | 106 | 1575 |
| Sachse, Ernest C., St. Louis, Mo. Fire-kindler | 748,312 | Dec. 29 | 5578 | 1272 | 107 | 2403 |
| Sachse, Otto, Lüneburg, Germany. Brine-evaporator | 718,798 | Jan. 20 | 2432 | 539 | 102 | 547 |
| Sachse, Otto, Luneburg, Germany. Apparatus for evaporating brine | 747,645 | Dec. 22 | 4303 | 967<br>968 | 107 | 2100 |
| Sachsenröder, Gustav H., Barmen-Unterbarmen, Germany. Manufacturing tubes of paper | 747,332 | Dec. 15 | 3741 | 843 | 107 | 1957 |
| Sack, August A., Providence, R. I. Bobbin | 733,557 | July 14 | 1536 | 365 | 105 | 342 |
| Sack, August A., Providence, R. I. Spring-holder for top rollers | 744,114 | Nov. 17 | 2607 | 557 | 107 | 585 |
| Sack, Louis R., South St. Joseph, Mo. Valve-wrench | 729,672 | June 2 | 266 | 61 | 104 | 1183 |
| Sackett, Augustus J., Baltimore, Md. Carrier for manufacturing fertilizer | 731,132 | June 16 | 2948 | 655<br>656 | 104 | 1775 |
| Sackett, Homer M. (See Sackett, Orrin M., assignor.) | | | | | | |
| Sackett, Joseph S., Newport, Ky. Bread-cutter | 731,818 | June 23 | 4233 | 943 | 104 | 2056 |
| Sackett, Orrin M., assignor to H. M. Sackett, Telluride, Colo. Grip for cables or the like | 725,486 | Apr. 14 | 1984 | 447 | 103 | 1605 |
| Sackville, James A., Manchester, England. Manufacture of book-cloth, leather-cloth, or the like | 724,616 | Apr. 7 | 373 | ..... | 103 | 1249 |
| Saco & Pettee Machine Shops. (See Mills, Charles, assignor.) | | | | | | |
| Sadler & Company, F. H. (See Sadler, Louis E., assignor.) | | | | | | |
| Sadler, Junius E. (See Wilson, Craven, assignor.) | | | | | | |
| Sadler, Louis E., assignor to F. H. Sadler & Company, Attleboro, Mass. Ornamental ring | 728,501 | May 19 | 3161 | 700 | 104 | 710 |
| Saecker, Herman G. (See Van Ryzin and Saecker.) | | | | | | |
| Saecker, Herman G., Appleton, Wis. Paper-stock-refining engine | 717,718 | Jan. 6 | 350 | 85 | 102 | 75 |
| Saegmuller, George N. (See Searle and Saegmuller.) | | | | | | |
| Saegmuller, George N., Washington, D. C. Gun-sight telescope | 722,910 | Mar. 17 | 2356 | 526 | 103 | 531 |

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| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| Saegmuller, George N., Washington, D. C. Telescope | 737,872 | Sept. 1 | 637 | 136 | 106 | 140 |
| Saegmuller, George N., and G. M. Searle, Washington, D. C. Distance instrument | 738,631 | Sept. 8 | 2168 | 475 | 106 | 481 |
| Saenger, William, Elmendorf, Tex. Follower for packing sauer-kraut, &c | 735,149 | Apr. 14 | 1365 | 308 | 103 | 1474 |
| Sæter, Hallvard B., Gothenburg, Sweden. Automatic telescope-valve | 745,527 | Dec. 1 | 401 | 92 | 107 | 1184 |
| Safety Baggage Handler Company. (See Wall, George H., assignor.) | | | | | | |
| Safety Car Heating & Lighting Company. (See Dixon, Robert M., assignor.) | | | | | | |
| Safety Kerosene Stove and Light Company. (See Wister, Jones, assignor.) | | | | | | |
| Saffell, Frederick, Fresno, assignor of one-half to R. J. Powers, San Leandro, Cal. Oil-burner | 731,133 | June 16 | 2950 | 656 | 104 | 1775 |
| Saffell, Silas B. (See Stewart, Saffell, and Andrews.) | | | | | | |
| Saffold, Reuben E., Rochester, N. Y. Skirt and waist adjuster | 730,478 | June 9 | 1746 | 391 | 104 | 1501 |
| Sage, Henry J., Beaver, Pa. Glass-cutting apparatus | 728,417 | May 19 | 3008 | 661 / 662 | 104 | 678 |
| Sage, Henry J., Beaver, assignor to Opalite Tile Company, Pittsburg, Pa. Manufacture of glass tile | 719,511 | Feb. 3 | 173 | 40 | 102 | 860 |
| Sage, Michael, McLean, Ill. Hog-trap | 730,049 | June 2 | 961 | 216 | 104 | 1323 |
| Sage, Ralph V., Westmont, Pa. Hopper gondola car and door therefor | 746,385 | Dec. 8 | 1962 | 449 | 107 | 1538 |
| Sagee, Charles W. (See Rogers and Sagee.) | | | | | | |
| Sagendorph, Longley L., *et al.* (See Ryan, Walter D., assignor.) | | | | | | |
| Sagendorph, Longley L. (See Ryan and Sagendorph.) | | | | | | |
| Sagendorph, Longley L., Philadelphia, Pa., assignor of one-half to H. P. Lloyd, Cincinnati, Ohio. Metal ceiling or wall plate | 735,679 | Aug. 4 | 1234 | 262 | 105 | 1243 |
| Sagerdahl, Charles F. (See Martin, William E., assignor.) | | | | | | |
| Saginaw Whistle Co. (See Anderson, Isaac, assignor.) | | | | | | |
| Sague, George. (See Clapp and Sague.) | | | | | | |
| Sague, James E., Schenectady, N. Y. Compound steam-engine | 741,838 | Oct. 20 | 2775 | 619 | 106 | 1874 |
| Saighman, William, Longmont, Colo. Hay-stacker | 717,625 | Jan. 6 | 183 | 46, 47 | 102 | 40 |
| Sainsbury, William D., Dublin, Ireland. Antiskidding device for vehicle-wheels | 740,184 | Sept. 29 | 5078 | 1142 | 106 | 1152 |
| Sainsevain, Paul C., assignor of one-half to A. G. Col, San Jose, Cal. Rotary explosive-engine | 726,353 | Apr. 28 | 3579 | 812 | 103 | 1970 |
| Saint Seine, Bernard de. (See Thofehrn and Saint Seine.) | | | | | | |
| Saker, William J. (See Delzeit and Saker.) | | | | | | |
| Sakurai, Keizo, San Francisco, Cal. Compound for abrading-tools | 733,082 | July 7 | 682 | ..... | 105 | 145 |
| Salaman, Frederick A., assignor of one-half to F. Hahn, New York, N. Y. Shoe sole and heel | 738,735 | Sept. 8 | 2364 | 519 | 106 | 521 |
| Salamon, Alfred G., London, and P. Williams, Rochester, assignors to British Uralite Company, Limited, London, England. Manufacture of refractory material | 735,594 | Aug. 4 | 1073 | ..... | 105 | 1209 |
| Saliger, Alois B., New York, N. Y. Automatic rheostat | 741,839 | Oct. 20 | 2777 | 620 | 106 | 1874 |
| Saliger, Alois B., New York, N. Y., assignor of one-half to M. V. Gehring, Philadelphia, Pa. Article of apparel | 727,695 | May 12 | 1636 | 371 | 104 | 370 |
| Salin, Per E., Chicago, Ill. Cloth-cutter for custom tailors | 741,930 | Oct. 20 | 2961 | 659 | 106 | 1911 |
| Saling, Thomas W., assignor of one-fourth to R. A. Bell, Marshall, Tex. Draft-rigging for railway-cars | 735,302 | Aug. 4 | 510 | 103 | 105 | 1090 |
| Salisbury, Bert E., assignor to Pass & Seymour, Incorporated, Syracuse, N. Y. Electric sign | 738,489 | Sept. 8 | 1908 | 417 | 106 | 424 |
| Salisbury, Edgar E., Chicago, Ill. Wire-stringing apparatus | 728,768 | May 19 | 3666 | 816 | 104 | 817 |
| Salisbury, Levi E., Providence, R. I. Multiple-shuttle loom | 720,181 | Feb. 10 | 1412 | 322 / 323 / 324 / 325 | 102 | 1139 |
| Salisbury, Mathias. (See Moller and Salisbury.) | | | | | | |
| Salisbury, William C., South Sioux City, assignor to A. J. Kramper, Dakota, Nebr. Defecating saccharine juices | 748,313 | Dec. 29 | 5579 | ..... | 107 | 2403 |
| Salisbury, William C., assignor to A. J. Kramper, Dakota, Nebr. Making sugar | 748,314 | Dec. 29 | 5580 | ..... | 107 | 2403 |
| Salom, Pedro G., Philadelphia, Pa. Apparatus for the continuous practice of electrolytic processes | 727,457 | May 5 | 1178 | 260 | 104 | 254 |
| Salomon, Rudolph G. (See Hoyt, William A., assignor.) | | | | | | |
| Salomonsohn, Ernst. (See Schrader, Rudolph, assignor.) | | | | | | |
| Salomonson, Carl F. (See Pira and Salomonson.) | | | | | | |
| Salomonson, Nels A. H., Norway, Mich. Ore-dumping apparatus | 736,882 | Aug. 18 | 3465 | 768 | 105 | 1752 |
| Salstrom, Axel F., Paxton, Ill. Picture-molding fastener | 740,046 | Sept. 29 | 4841 | 1086 | 106 | 1102 |
| Saltiel, John T., Denver, Colo. Manufacture of artificial stone | 730,479 | June 9 | 1747 | ..... | 104 | 1502 |
| Saltiel, John T., Denver, Colo. Making artificial stone, &c | 730,480 | June 9 | 1748 | ..... | 104 | 1502 |
| Salts Textile Manufacturing Company. (See Cutting, Samuel B., assignor.) | | | | | | |
| Saltsman, David B., assignor to Dowagiac Manufacturing Co., Dowagiac, Mich. Disk furrow-opener for grain-drills | 737,151 | Aug. 25 | 3940 | 876 | 105 | 1872 |
| Saltsman, David B., assignor to Dowagiac Manufacturing Company, Dowagiac, Mich. Grain-drill | 737,152 | Aug. 25 | 3941 | 876 | 105 | 1873 |
| Saltsman, David B., assignor to Dowagiac Manufacturing Company, Dowagiac, Mich. Grain-drill | 737,153 | Aug. 25 | 3942 | 876 | 105 | 1873 |
| Saltsman, David B., assignor to Dowagiac Manufacturing Company, Dowagiac, Mich. Grain-drill | 744,802 | Nov. 24 | 3873 | 833 | 107 | 874 |
| Saltsman, Ralph, Avoca, N. Y. Brake | 723,036 | Mar. 17 | 2558 | 575 | 103 | 573 |
| Salviolo, Carmino, New York, N. Y. Trunk-lock | 721,838 | Mar. 3 | 327 | 72 | 103 | 72 |
| Salway, William, Winton Place, Ohio. Attachment for steam-rollers | 743,336 | Nov. 3 | 1010 | 218 | 107 | 216 |
| Salwén, Anders E. (See Eriksson, Knut V. A., assignor.) | | | | | | |
| Salwén, Anders E. (See Forsgren, Abraham E., assignor.) | | | | | | |
| Salyer, Harry M., New York, N. Y. Automatic playing attachment for mechanical musical instruments | 734,964 | July 28 | 4207 | 978 | 105 | 933 |
| Salyer, Harry M., assignor to Ludwig & Company, New York, N. Y. Playing attachment for key musical instruments | 734,963 | July 28 | 4202 | 978 | 105 | 932 |
| Salzberger, Carl G. E., Burgsteinfurt, Germany. Ring-spindle bearing | 729,673 | June 2 | 267 | 61, 62 | 104 | 1184 |
| Salzer, Bruno, and G. Walther, Chemnitz, Germany. Knitting-machine | 719,376 | Jan. 27 | 3535 | 788 | 102 | 794 |
| Salzer, Bruno, and G. Walther, Chemnitz, Germany. Knitting-machine | 723,037 | Mar. 17 | 2559 | 575 / 576 | 103 | 573 |
| Sameck, Franz, Tann, near Dürnten, assignor to Maschinenfabrik Rüti, vormals Caspar Honegger, Rüti, Canton of Zurich, Switzerland. Weft-operated controlling device for looms | 718,529 | Jan. 13 | 1915 | 420 | 102 | 428 |
| Samen, Edward W., Lasalle, Ill. Car-truck | 743,756 | Nov. 10 | 1878 | 397 | 107 | 418 |
| Sammons, Hugh G., Canton, Ohio. Toy | 724,617 | Apr. 7 | 373 | 90 | 103 | 1249 |
| Sammons, Oliver P., Denison, Tex. Telephone transmitter and receiver | 732,449 | June 30 | 5464 | 1213 | 104 | 2326 |
| Sampson, Albert E., Penketh, England. Can for blacking | 722,911 | Mar. 17 | 2357 | 527 | 103 | 531 |
| Sampson, Frank E., Creston, Iowa. Instrument for intubation of the larynx | 724,046 | Mar. 31 | 4478 | 1009 | 103 | 996 |
| Sampson, Robert W., Quebec, Canada, assignor to L. Schwab, Newark, N. J. Detachable valve and implement for attaching same | 736,025 | Aug. 11 | 1889 | 404 | 105 | 1403 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|
| | | | Spec. | Drg. | Vol. | Page. |
| Sampson, Thomas, assignor of one-half to G. W. Overend, Waterville, Me. Spinning or twisting machine | 747,893 | Dec. 22 | 4772 | 1078 | 107 | 2206 |
| Sampson, William P., Kansas City, Mo. Clothes-line holder | 746,171 | Dec. 8 | 1580 | 353 | 107 | 1458 |
| Sams, Jacob B., Philadelphia, Mo. Gate-latch | 724,952 | Apr. 7 | 984 | 227 | 103 | 1379 |
| Sams, Walter, Chicago, Ill. Atomizing and carbureting device | 736,157 | Aug. 11 | 2120 | 455 | 105 | 1451 |
| Sams, Walter, Chicago, Ill. Atomizing device | 738,848 | Sept. 15 | 2620 | 578 | 106 | 594 |
| Sams, Walter, Chicago, Ill. Atomizing device. (Reissue) | 12,176 | Nov. 24 | 4894 | 1068 | 107 | 1083 |
| Samson Cordage Works. (See Tolman, James P., assignor.) | | | | | | |
| Samter, Louis and S. L., and H. Pinner, San Francisco, Cal. Combination-necktie | 722,633 | Mar. 10 | 1810 | 403 | 103 | 405 |
| Samter, Samuel L. (See Samter and Pinner.) | | | | | | |
| Samuel C. Tatum Company. (See Mendenhall, Walter S., assignor.) | | | | | | |
| Samuel, Ernst, Elberfeld, Germany. Box-fastener | 738,490 | Sept. 8 | 1909 | 417 | 106 | 424 |
| Samuel, Thomas B., Hiawatha, Kans. Chimney-cowl | 737,493 | Aug. 25 | 4606 | 1032 | 105 | 2016 |
| Samuelson, Charles A., and J. A. Lynn, Chicago, Ill. Soap-granulator | 719,881 | Feb. 3 | 852 | 199 | 102 | 1004 |
| Sanborn, Charles D., Detroit, Mich., and E. C. Fox, Cleveland, Ohio. Radiator | 737,494 | Aug. 25 | 4608 | 1032 | 105 | 2017 |
| Sanborn, Cora A., Chicago, Ill. Railway-rail clamp | 744,623 | Nov. 17 | 3518 | 759 | 107 | 779 |
| Sanborn, H. R., *et al.* (See Frink and Lee, assignors.) | | | | | | |
| Sanborn, Joshua N., Brainerd, Minn. Valve | 721,748 | Mar. 3 | 165 | 38 | 103 | 37 |
| Sanborn, Nathaniel H. (See Hornung, Charles W., assignor.) | | | | | | |
| Sanborn, Osmer W., Hewins, Kans. Safety snap-hook | 739,226 | Sept. 15 | 3280 | 727 | 106 | 733 |
| Sanborn, William G., Rockford, Ill. Groove-cutting machine | 718,530 | Jan. 13 | 1917 | 421 | 102 | 428 |
| Sandage, William L., Indianapolis, Ind., assignor of two-thirds to T. Taggart and W. W. Spencer. Counter | 728,502 | May 19 | 3162 | 700 | 104 | 710 |
| Sandahl, Victor, Boston, Mass., assignor, by mesne assignments, to Excelsior Slugger & Tacker Machine Company. Nailing-machine | 748,535 | Dec. 29 | 6003 | 1360 | 107 | 2497 |
| Sandbo, Anton I., assignor of two-thirds to S. H. Eddy and E. Schukei, Waukon, Iowa. Hydrant | 724,741 | Apr. 7 | 609 | 143 | 103 | 1298 |
| Sandbo, Anton I., assignor of two-thirds to S. H. Eddy and E. Schukei, Waukon, Iowa. Hydrant | 724,742 | Apr. 7 | 610 | 143 | 103 | 1299 |
| Sandell, Axel W., assignor of one-half to J. Lauth, Chicago, Ill. Speed regulating and controlling mechanism for self-propelled vehicles | 718,531 | Jan. 13 | 1918 | 421 | 102 | 428 |
| Sandell, Axel W., assignor of one-half to J. Lauth, Chicago, Ill. Motor-vehicle | 741,931 | Oct. 20 | 2962 | 660 | 106 | 1911 |
| Sander, Edgar J., Stoke Newington, assignor of one-half to A. J. Hawes, London, England. Device for stretching trousers | 721,749 | Mar. 3 | 166 | 38 | 103 | 37 |
| Sanders, Burrus L., Dalton, Ga., assignor of five-eighths to A. B. Mason, Florence, Ala., and W. S. Sanders, Dalton, Ga. Pneumatic spring | 727,696 | May 12 | 1637 | 371 | 104 | 371 |
| Sanders, Charles C., Griffin, Ga. Grate | 739,724 | Sept. 22 | 4206 | 941 | 106 | 950 |
| Sanders, David H., Flint, Mich. Case | 718,387 | Jan. 13 | 1605 | 353 | 102 | 359 |
| Sanders, David P., Williamsport, Pa. Motor-vehicle | 740,591 | Oct. 6 | 409 | 86, 87, 88 | 106 | 1233 |
| Sanders, Frank, assignor to Wetter Numbering Machine Company, Brooklyn, N. Y. Numbering-machine | 743,569 | Nov. 10 | 1551 | 324 | 107 | 348 |
| Sanders, George A., Laconia, N. H. Fancy-knitting machine | 742,358 | Oct. 27 | 3830 | 858, 859, 860 | 106 | 2104 |
| Sanders, John M. (See Stewart, Ruben W. J., assignor.) | | | | | | |
| Sanders, Lewis, Melrose, Idaho. Variable friction-gearing | 748,021 | Dec. 29 | 5051 | 1140 | 107 | 2289 |
| Sanders, Lina B. (See Merkel, Sanders, and Hellmann.) | | | | | | |
| Sanders, Louis, New York, N. Y. Waist-belt | 730,050 | June 2 | 962 | 216 | 104 | 1324 |
| Sanders, Louis, New York, N. Y. Belt-buckle | 740,928 | Oct. 6 | 993 | 225 | 106 | 1459 |
| Sanders, Newell, Chattanooga, Tenn. Wheel-plow | 719,696 | Feb 3 | 504 | 114 | 102 | 929 |
| Sanders, Newell, Chattanooga, Tenn. Disk or rotary plow | 742,908 | Nov. 3 | 156 | 36 | 107 | 34 |
| Sanders, W. S., *et al.* (See Sanders, Burrus L., assignor.) | | | | | | |
| Sanders, William H., Susquehanna, Pa. Car-coupling | 721,095 | Feb. 17 | 3133 | 720 | 102 | 1517 |
| Sanders, William W., Independence, La. Mower | 747,492 | Dec. 22 | 4025 | 904 | 107 | 2039 |
| Sanderson, Charles V., Streator, Ill. Coupon-book | 717,930 | Jan. 6 | 776 | 174 | 102 | 166 |
| Sanderson, Edward F., *et al.* (See Woodbury, Hezekiah O., assignor.) | | | | | | |
| Sanderson, James G., Scranton, Pa. Automatic fuel-feeding device for gas-producers | 725,369 | Apr. 14 | 1754 | 394 | 103 | 1556 |
| Sanderson, John F., Minneapolis, Minn. Elevator. (Reissue) | 12,157 | Sept. 15 | 3374 | 749, 750 | 106 | 754 |
| Sanderson, John G., assignor to Mather & Platt, Limited, Manchester, England. Fabric-printing machine | 743,038 | Nov. 3 | 425 | 91, 92 | 107 | 89 |
| Sanderson, William H., Dayton, Ohio. Scale | 728,418 | May 19 | 3012 | 662 | 104 | 679 |
| Sandhop, Theodore, and E. Diemar, New York, N. Y. Thermometer-case | 717,764 | Jan. 6 | 467 | 107 | 102 | 100 |
| Sandifer, William H., and N. E. Meredith, Indianapolis, Ind. Planter attachment | 736,300 | Aug. 11 | 2366 | 514 | 105 | 1507 |
| Sandlin, Pleasant H. (See Bryant, George, assignor.) | | | | | | |
| Sandoz, Numa, Geneva, Switzerland. Combined advertising and playing board | 728,986 | May 26 | 4068 | 903 | 104 | 914 |
| Sands, Louis C., Jr., assignor to Oil Well Supply Company, Pittsburg, Pa. Combined cable and rotary rig for drilling deep wells | 732,785 | July 7 | 160 | 41, 42 | 105 | 38 |
| Sands, Louis C., Jr., assignor to Oil Well Supply Company, Pittsburg, Pa. Center-iron for walking-beams and samson-posts | 744,624 | Nov. 17 | 3520 | 760 | 107 | 780 |
| Sandstrom, Carl E. (See Sandstrom, Theodore, assignor.) | | | | | | |
| Sandstrom, Charles E., Chicago, Ill. Apparatus for assembling sections of picture-frames | 739,930 | Sept. 29 | 4621 | 1037 | 106 | 1055 |
| Sandstrom, Edward, Philadelphia, Pa. Game apparatus | 747,646 | Dec. 22 | 4305 | 968 | 107 | 2100 |
| Sandstrom, Theodore, assignor of one-half to C. E. Sandstrom, Connersville, Ind. Short-turn wagon-gear | 728,809 | May 19 | 3750 | 837 | 104 | 834 |
| Sandusky Cooperage & Lumber Company. (See Schimansky, Otto, assignor.) | | | | | | |
| Sandusky Foundry and Machine Company. (See Millspaugh, William H., assignor.) | | | | | | |
| Sandvig, Charles R., Canton, Ohio. Lamp-stove | 720,182 | Feb. 10 | 1424 | 325 | 102 | 1141 |
| Sandy, Edward M., assignor of five-twelfths to C. A. Granger and H. Timothy, Greeley, Colo. Dumping-wagon | 720,183 | Feb. 10 | 1425 | 326 | 102 | 1141 |
| Sandy, James A., Minneapolis, Minn. Carpet-stretcher | 723,924 | Mar. 31 | 4229 | 952 | 103 | 948 |
| Saner, Basil, Haledon, N. J. Needle-loom | 746,581 | Dec. 8 | 2298 | 527 | 107 | 1612 |
| Sanford, Edelbert L., Roxbury, Conn. Scale and chord indicator | 727,846 | May 12 | 1939 | 432, 433 | 104 | 431 |
| Sanford, Isaac, assignor to J. L. and H. Moore, Naugatuck, Conn. Revolving grate for stove-ovens | 736,301 | Aug. 11 | 2368 | 515 | 105 | 1508 |
| Sanford, James D., Lometa, Tex. Post-auger | 727,847 | May 12 | 1943 | 433 | 104 | 431 |
| Sanford, Joseph R., Winsted, Conn. Brush | 720,847 | Feb. 17 | 2653 | 613 | 102 | 1412 |
| Sanford, Leslie M. (See Goetze and Sanford.) | | | | | | |
| Sanford Manufacturing Company. (See Park, Albert J., assignor.) | | | | | | |
| Sanftleben, John, Quincy, Ill. Harness-saddletree | 736,026 | Aug. 11 | 1892 | 404 | 105 | 1404 |
| Sang, Alfred, Pittsburg, Pa. T-square clamp | 733,279 | July 7 | 1047 | 250 | 105 | 220 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Sangamo Electric Company. (See Gutmann, Ludwig, assignor.) | | | | | | |
| Sangamo Electric Company. (See Gutmann and Lanphier, assignors.) | | | | | | |
| Sanger, Samuel F. (See Vaniman and Sanger.) | | | | | | |
| Sanguinet, Edward A., assignor of one-half to H. C. Brenner, St. Louis, Mo. Toy | 741,932 | Oct. 20 | 2963 | 660 | 106 | 1912 |
| Sanitary Compressed Air and Suction Dust Removing Co. (See Lotz, Augustus, assignor.) | | | | | | |
| Sanker, Francis H. (See Moran, Cornelius P., assignor.) | | | | | | |
| Sanker, Sylvester. (See Griffin, Sanker, and Keith.) | | | | | | |
| Sanoden, Halvor, *et al.* (See Sanoden, Olaf, assignor.) | | | | | | |
| Sanoden, Olaf, assignor of one-half to H. Sanoden, Leeston, and E. G. Borgen, Melvin, Minn. Draft-equalizer | 724,047 | Mar. 31 | 4482 | 1009 | 103 | 996 |
| Sanor, George W., Effingham, Ill. Folding bed | 731,506 | June 23 | 3656 | 815<br>816 | 104 | 1938 |
| Sansone, Antonio, assignor of one-half to J. Charles and F. Sansone, Keokuk, Iowa. Banana-crate | 741,551 | Oct. 13 | 2237 | 498 | 106 | 1744 |
| Sansone, Frank, *et al.* (See Sansone, Antonio, assignor.) | | | | | | |
| Santee, Charles L., Plymouth, Wis. Rocking-chair | 729,674 | June 2 | 269 | 62 | 104 | 1184 |
| Santee, Elmer V., Watertown, N. Y. Cooking utensil | 721,750 | Mar. 3 | 167 | 39 | 103 | 37 |
| Santee, Jacob, and E. G. Hines, Drums, Pa. Rail-joint | 744,803 | Nov. 24 | 3875 | 834 | 107 | 874 |
| Santemma, John, New York, N. Y. Picture-frame | 739,112 | Sept. 15 | 3079 | 683 | 106 | 689 |
| Santmyers, Charles A., Philadelphia, Pa. Knitting-machine | 748,219 | Dec. 29 | 5423 | 1234 | 107 | 2369 |
| Sapp, Charles S., Wilmington, Del. Closure for street-cars | 740,929 | Oct. 6 | 994 | 225 | 106 | 1459 |
| Sappington, Joseph W., T. A. Kendrick, and C. Wright, Jr., Carthage, Mo., assignors to Carthage Sand Machine Company. Sand-sifting machine | 723,187 | Mar. 17 | 2854 | 641 | 103 | 636 |
| Sarasin, Huldege, Amesbury, Mass. Clothes-stick | 741,933 | Oct. 20 | 2967 | 661 | 106 | 1912 |
| Sarasin, Huldege, Amesbury, Mass. Spokeshave | 744,411 | Nov. 17 | 3174 | 680 | 107 | 708 |
| Sarason, David, Berlin, Germany. Construction of hospitals, sanatoriums, or other buildings | 736,158 | Aug. 11 | 2122 | 455 | 105 | 1453 |
| Sarfert, Alexander T., Chemnitz, Germany, assignor to D. Gessner, Worcester, Mass. Steaming-machine | 730,164 | June 2 | 1146 | 258 | 104 | 1360 |
| Sargeant, Edward W. (See Gwynne and Sargeant.) | | | | | | |
| Sargeant, Walter C., Melrose, and J. J. Barker, Arlington Heights, Mass. Machine for forming tapered tubes | 733,428 | July 14 | 1314 | 311 | 105 | 294 |
| Sargent, Allan C., Graniteville, Mass. Speed-changing and reversing mechanism | 722,458 | Mar. 10 | 1496 | 330 | 103 | 335 |
| Sargent, Charles E., Chicago, Ill., assignor of three-fourths to O. S. Lyford, New York, N. Y., and C. W. Hillard, trustee, Chicago, Ill. Electrical igniter for explosive-engines | 731,134 | June 16 | 2951 | 656 | 104 | 1775 |
| Sargent, Charles E., assignor of one-half to E. B. Ellicott, W. H. Baker, and J. I. Connery, Chicago, Ill. Steam-meter | 729,511 | May 26 | 4974 | 1102<br>1103 | 104 | 1104 |
| Sargent Company. (See Davis, James C., assignor.) | | | | | | |
| Sargent and Company. (See Page, Albert A., assignor.) | | | | | | |
| Sargent & Company. (See Sargent, Henry B., assignor.) | | | | | | |
| Sargent, Henry B., assignor to Sargent & Company, New Haven, Conn. Spring-hinge | 727,697 | May 12 | 1639 | 371 | 104 | 371 |
| Sargent, Howard R., Schenectady, N. Y., assignor to General Electric Company. Insulator | 720,184 | Feb. 10 | 1428 | 326 | 102 | 1142 |
| Sargent, Howard R., Schenectady, N. Y., assignor to General Electric Company. Ceiling-switch | 730,573 | June 9 | 1921 | 427 | 104 | 1540 |
| Sargent, Howard R., Schenectady, N. Y., assignor to General Electric Company. Contact device | 730,975 | June 16 | 2641 | 588 | 104 | 1713 |
| Sargent, Howard R., Schenectady, N. Y., assignor to General Electric Company. Quick-break switch | 744,115 | Nov. 17 | 2608 | 557 | 107 | 585 |
| Sargent, Isaac C., Somerville, assignor of one-half to H. W. Seward, Watertown, Mass. Window-blind operator and lock | 731,408 | June 16 | 3457 | 772 | 104 | 1878 |
| Sargent, John W., R. H. Rice, and W. O. Tourgee, assignors to Providence Engineering Works, Providence, R. I. Valve-gear for steam-engines | 737,495 | Aug. 25 | 4609 | 1032 | 105 | 2017 |
| Sargent, William D., assignor to American Brake Shoe & Foundry Company, New York, N. Y. Making brake-shoes | 739,791 | Sept. 22 | 4327 | 969 | 106 | 978 |
| Sargent, William D., assignor to American Brake Shoe & Foundry Company, New York, N. Y. Brake-shoe and making same | 746,172 | Dec. 8 | 1581 | 354 | 107 | 1458 |
| Sargent, William D., assignor to American Brake Shoe & Foundry Company, New York, N. Y. Brake-head | 748,106 | Dec. 29 | 5216 | 1181 | 107 | 2325 |
| Sargent, William D., assignor to American Brake Shoe & Foundry Company, New York, N. Y. Separable brake block and shoe | 748,220 | Dec. 29 | 5425 | 1235 | 107 | 2369 |
| Sargent, William D., Chicago, Ill., assignor to American Brake Shoe & Foundry Company, New York, N. Y. Making castings | 741,377 | Oct. 13 | 1896 | 418 | 106 | 1671 |
| Sargent, Willis H. (See Taylor and Sargent.) | | | | | | |
| Saris, Joseph H., Beloit, Wis. Carbureter for liquid-fuel engines | 747,235 | Dec. 15 | 3539 | 803 | 107 | 1911 |
| Sarr, Della. (See Sarr, Ora E., assignor.) | | | | | | |
| Sarr, Ora E., assignor of one-half to D. Sarr, Ceylon, Ohio. Propeller-wheel | 718,881 | Jan. 20 | 2586 | 578 | 102 | 579 |
| Sarsfield, Michael, Chicago, Ill. Time stock-feeder | 729,675 | June 2 | 270 | 62 | 104 | 1184 |
| Sartain, Isaac, assignor of one-half to J. E. Patton, Tracy City, Tenn. Wagon-brake | 724,509 | Apr. 7 | 164 | 40 | 103 | 1205 |
| Sartain, Louis M., assignor to W. P. Stone, Tracy City, Tenn. Air-compressor | 739,792 | Sept. 22 | 4329 | 969 | 106 | 978 |
| Sartori, Graziano, Berlin, Germany. Apparatus for massaging | 732,897 | July 7 | 353 | 86, 87 | 105 | 77 |
| Sarver, Edward, Ogden, Utah. Equalizing and by-pass valve | 736,302 | Aug. 11 | 2369 | 515 | 105 | 1508 |
| Sarver, Edward, Deadwood, S. D. Locomotive-lubricator | 744,625 | Nov. 17 | 3521 | 760 | 107 | 780 |
| Sass, Emil O. H. H. (See Baird and Sass.) | | | | | | |
| Satarasky, Moses. (See McKnight and Satarasky.) | | | | | | |
| Sato, Ruji, San Francisco, Cal. Device for locating shipwrecks | 735,595 | Aug. 4 | 1074 | 228 | 105 | 1209 |
| Sattley, Frederick L., assignor to Sattley Stacker Company, Indianapolis, Ind. Straw-stacker | 741,378 | Oct. 13 | 1897 | 418<br>419 | 106 | 1672 |
| Sattley Manufacturing Company. (See Warner, Thomas S., assignor.) | | | | | | |
| Sattley Manufacturing Company. (See Weaver, Ira A., assignor.) | | | | | | |
| Sattley Stacker Company. (See Heineke, Martin, assignor.) | | | | | | |
| Sattley Stacker Company. (See Heineke, Martin, assignor.) (Reissue.) | | | | | | |
| Sattley Stacker Company. (See Sattley, Frederick L., assignor.) | | | | | | |
| Sauer, Curt, Königsberg, Germany. Playing-pieces | 738,701 | Sept. 8 | 2317 | 509 | 106 | 511 |
| Sauer, Frank, Cleveland, Ohio. Print-mounting device | 736,027 | Aug. 11 | 1893 | 405 | 105 | 1404 |
| Sauer, George L. (See Fairbanks and Sauer.) | | | | | | |
| Sauer, John W., Tortwood, Ohio. Incubator | 719,614 | Feb. 3 | 359 | 83, 84 | 102 | 897 |
| Saulles, Arthur B. de. (See Convers and Saulles.) | | | | | | |
| Sault, Thomas, assignor to C. Gay, New Haven, Conn. Chaplet and shrine of the holy rosary | 719,263 | Jan. 27 | 3308 | 741 | 102 | 744 |
| Sault, Thomas, New Haven, Conn., assignor to L. R. Alberger, New York, N. Y. Apparatus for purifying boiler feed-water | 745,297 | Nov. 24 | 4832 | 1054 | 107 | 1071 |
| Saum, Henry, Brooklyn, N. Y. Attachment for men's or boys' waists | 722,049 | Mar. 3 | 731 | 163 | 103 | 158 |
| Saunders, Augustus M., McKeesport, assignor to National Tube Company, Pittsburg, Pa. Apparatus for the manufacture of lapweld-pipes | 742,500 | Oct. 27 | 4086 | 919 | 106 | 2155 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| Saunders, B. J., *et al.* (See Renfroe, Thomas N., assignor.) | | | | | | |
| Saunders, Cecil L., assignor to J. McMyler, Cleveland, Ohio. Hoisting-bucket | 734,433 | July 21 | 3203 | 754<br>755 | 105 | 711 |
| Saunders, Charles R., Richmond, Va. Combined hatchet, hammer, and nail-extractor | 744,804 | Nov. 24 | 3876 | 834 | 107 | 875 |
| Saunders, John, and E. G. Rowlands, Peoria, Ill. Traction-engine attachment | 741,379 | Oct. 13 | 1898 | 419 | 106 | 1672 |
| Saunders, John H., Olympia, Wash. Jar-closure | 732,655 | June 30 | 5856 | 1297 | 104 | 2411 |
| Saunders, William, Oakland, Cal. Loose-leaf binder | 733,599 | July 14 | 1610 | 382 | 105 | 358 |
| Saunders, William W., assignor of one-half to W. R. Granger, Washington, D. C. Piano attachment | 726,354 | Apr. 28 | 3581 | 813 | 103 | 1971 |
| Saunderson, Herbert P., Bedford, England. Pump | 724,048 | Mar. 31 | 4483 | 1009 | 103 | 997 |
| Sautter, Charles F., Brooklyn, N. Y. Propelling vessels | 745,910 | Dec. 1 | 1098 | 245 | 107 | 1333 |
| Sautter, Gaston. (See Rateau and Sautter.) | | | | | | |
| Sauvage Duplex Air Brake Company. (See Mallinckrodt, John F., assignor.) | | | | | | |
| Sauvage, William H., Denver, Colo., assignor to C. A. Tripp, Salt Lake City, Utah. Slack-adjuster | 718,799 | Jan. 20 | 2433 | 539 | 102 | 547 |
| Sauveur, Albert, Cambridge, Mass. Making metal castings | 735,303 | Aug. 4 | 512 | 103 | 105 | 1090 |
| Sauveur, Albert, Cambridge, and J. Whiting, Lexington, Mass. Casting ingots | 735,596 | Aug. 4 | 1077 | 228<br>229 | 105 | 1209 |
| Sauveur, Albert, Cambridge, and J. Whiting, Lexington, Mass. Apparatus for detecting the temperature of metals | 748,107 | Dec. 29 | 5217 | 1181<br>1182 | 107 | 2326 |
| Savacool, George H., Newton, N. J. Folding box | 732,964 | July 7 | 467 | 117 | 105 | 101 |
| Savage, Edward S., Brooklyn, N. Y. Toy | 743,570 | Nov. 10 | 1554 | 324 | 107 | 348 |
| Savage, Giles C., Nashville, Tenn. Fluid-controlling valve | 732,010 | June 23 | 4598 | 1026 | 104 | 2133 |
| Savage, Julia A., Boston, Mass. Skirt-hook | 728,769 | May 19 | 3668 | 816 | 104 | 817 |
| Savaria, Louis, assignor of one-half to J. B. A. Martin, Montreal, Canada. Nut-lock | 732,898 | July 7 | 355 | 87 | 105 | 78 |
| Savaria, Napoleon, Chicago, Ill., assignor to G. Cramer Dry Plate Company, St. Louis, Mo. Implement for opening boxes or the like | 718,882 | Jan. 20 | 2588 | 578 | 102 | 580 |
| Savelsberg, Joseph, Papenburg, Germany. Extracting the heavy metals by the use of chlorin | 741,840 | Oct. 20 | 2779 | ..... | 106 | 1874 |
| Savery, Benjamin F. (See Webb, William, assignor.) | | | | | | |
| Savery, Thomas H., Wilmington, Del. Paper-making machine | 742,239 | Oct. 27 | 3619 | 809 | 106 | 2060 |
| Savidge, William, Greenfield, Ill. Ironing-board | 722,758 | Mar. 17 | 2080 | 466 | 103 | 475 |
| Saviers, C. D. (See Thatcher, Thomas J., assignor.) | | | | | | |
| Savill, Joseph H., Camden, N. J., assignor to H. H. Fleck, Philadelphia, Pa. Bib-cock | 730,165 | June 2 | 1150 | 259 | 104 | 1362 |
| Savin Ice Pad Company. (See Johnson, Edward G., assignor.) | | | | | | |
| Savitz, Wilson, Sayre, Pa. Weather-strip | 719,377 | Jan. 27 | 3537 | 789 | 102 | 794 |
| Savoie, Anatole J., Crawford, La. Cane-loader | 745,911 | Dec. 1 | 1099 | 246 | 107 | 1333 |
| Savoie, Joseph, Central Falls, assignor of one-half to E. C. Glines, Providence, R. I. Bottle | 726,992 | May 5 | 338 | 73 | 104 | 73 |
| Savoie, Leo L., Amite, La. Chair for rail-joints | 747,647 | Dec. 22 | 4306 | 968 | 107 | 2101 |
| Savory, Ernest W., Bristol, England. Table for relief-stamping presses, &c | 730,306 | June 9 | 1417 | 311 | 104 | 1433 |
| Savoye, Emile, Paris, France. Corset | 740,930 | Oct. 6 | 995 | 225 | 106 | 1459 |
| Savy, Alfred H. (See Magniez, Ernest P. F., assignor.) | | | | | | |
| Sawtelle, Henry F., Leominster, Mass. Hydraulic motor | 728,987 | May 26 | 4069 | 903<br>904 | 104 | 915 |
| Sawyer, Charles H., assignor of one-half to M. E. Sawyer, Minneapolis, Minn. Wheel-scraper | 726,993 | May 5 | 340 | 74 | 104 | 74 |
| Sawyer, Charles H., assignor of one-half to M. E. Sawyer, Minneapolis, Minn. Wheeled scraper | 727,208 | May 5 | 722 | 155<br>156 | 104 | 157 |
| Sawyer, Charles H., assignor of one-half to H. A. Smith, Minneapolis, Minn. Wheeled scraper or self-loading cart | 728,136 | May 12 | 2467 | 548<br>549 | 104 | 543 |
| Sawyer, Charles H., assignor of one half to H. A. Smith, Minneapolis, Minn. Wheeled scraper | 730,301 | June 9 | 1419 | 311<br>312 | 104 | 1433 |
| Sawyer, Edmund H. (See Merriam and Sawyer.) | | | | | | |
| Sawyer, John W. (See Maxwell and Sawyer.) | | | | | | |
| Sawyer, M. E. (See Sawyer, Charles H., assignor.) | | | | | | |
| Sawyer, Nelson, Cleveland, Ohio. Die-stock | 730,166 | June 2 | 1151 | 259 | 104 | 1362 |
| Sawyer, Orren A., Lowell, assignor to Draper Company, Hopedale, Mass. Filling-replenishing loom | 726,576 | Apr. 28 | 4026 | 910 | 103 | 2056 |
| Sawyer, Orren A., Lowell, assignor to Draper Company, Hopedale, Mass. Take-up mechanism for looms | 738,245 | Sept. 8 | 1385 | 300 | 106 | 315 |
| Sawyer, Orren A., Lowell, assignor to Draper Company, Hopedale, Mass. Filling-replenishing loom | 739,113 | Sept. 15 | 3080 | 683 | 106 | 690 |
| Sawyer, Orren A., Lowell, assignor to Draper Company, Hopedale, Mass. Picker-stick motion for looms | 741,170 | Oct. 13 | 1453 | 330 | 106 | 1575 |
| Sawyer, Pickens A., Memphis, Tenn. Automatic railway block-signal | 746,582 | Dec. 8 | 2300 | 528 | 107 | 1613 |
| Sawyer Spindle Company. (See Kilburn, John, assignor.) | | | | | | |
| Sawyer Spindle Company. (See Lovejoy, Charles E., assignor.) | | | | | | |
| Sawyer Spindle Company. (See Sullivan, Michael E., assignor.) | | | | | | |
| Saxon, Frank, Worthington, Minn. Gear-wheel | 746,583 | Dec. 8 | 2302 | 528 | 107 | 1613 |
| Saxton, Abigail E., Pomona, Mich. Strainer | 747,088 | Dec. 15 | 3272 | 745 | 107 | 1855 |
| Saxton, Thomas G., and W. G. McDowell, Lexington, Ky. Rule | 745,243 | Nov. 24 | 4733 | 1033 | 107 | 1051 |
| Sayer, Eugene Y. (See Box and Sayer.) | | | | | | |
| Sayer, Robert C., Bristol, England. Conductor, conduit, and collector for electricity on railways | 718,220 | Jan. 13 | 1301 | 287<br>288 | 102 | 294 |
| Sayer, Robert C., Bristol, England. Apparatus for boiling water | 724,049 | Mar. 31 | 4483 | 1010 | 103 | 997 |
| Sayer, Robert C., Bristol, England. Apparatus for boiling by electricity | 737,848 | May 12 | 1944 | 433 | 104 | 432 |
| Sayer, Robert C., Bristol, England. Convolute pressure-bearing | 737,154 | Aug. 25 | 3944 | 876<br>877 | 105 | 1873 |
| Sayer, William E. (See Flood, Sayer, and Campbell.) | | | | | | |
| Sayler, Reuben. (See Russell, Thomas W., assignor.) | | | | | | |
| Sayles, Alvin. (See Robertson, Ivy B., assignor.) | | | | | | |
| Saylor, Charles F., Murphysboro, Ill. Apparatus for reversing steam-engines | 742,070 | Oct. 20 | 3302 | 735 | 106 | 1979 |
| Sayre, Charles E., St. Paul, Minn. Carbureter | 746,173 | Dec. 8 | 1582 | 354 | 107 | 1458 |
| Sayre, Charles R., Hampton, Va. Steam-boiler | 717,931 | Jan. 6 | 778 | 174<br>175 | 102 | 166 |
| Sayre, Charlton H., Camden, N. J. Pavement | 744,878 | Nov. 24 | 4008 | 864 | 107 | 902 |
| Sayre & Co., L. A. (See Cottrell, Herbert, assignor.) | | | | | | |
| Scaife, William B., Pittsburg, Pa. Car-truck | 745,119 | Nov. 24 | 4486 | 971 | 107 | 1001 |
| Scales, Charles H., assignor of one-half to W. H. Steele, Toronto, Canada. Self-feeding match holder and igniter | 728,019 | May 12 | 2258 | 502 | 104 | 498 |
| Scales, Joseph, Niagara Falls, N. Y., assignor to Union Carbide Company. Subdividing blocks or ingots of carbid | 719,882 | Feb. 3 | 853 | 200 | 102 | 1004 |
| Scales, Joseph, assignor to Union Carbide Company, Niagara Falls, N. Y. Subdividing blocks or ingots | 722,759 | Mar. 17 | 2081 | 466 | 103 | 475 |
| Scales, Richard, Newark-upon-Trent, England. Means for securing busks to corsets | 728,305 | May 19 | 2812 | 622 | 104 | 638 |

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| Scales, William S., Boston, Mass. Clock | 730,302 | June 9 | 1421 | 313 | 104 | 1434 |
| Scales, William S., Boston, assignor to H. W. Doble, Quincy, Mass. Gluing mechanism for paper boxes | 732,225 | June 30 | 5039 | 1121 | 104 | 2238 |
| Scammell, Charles H., New [illegible] assignor to New Jersey Wire Cloth Company, Trenton, N. J. Fireproof con[illegible]truction | 741,934 | Oct. 20 | 2967 | 661 | 106 | 1912 |
| Scammell, Joseph B., and E. A. Muskett, London, England. Solidifying and toughening oils | 724,618 | Apr. 7 | 374 | | 103 | 1250 |
| Scanlan, James M., Indianapolis, Ind. Furnace construction | 747,648 | Dec. 22 | 4307 | 968<br>969 | 107 | 2101 |
| Scanlan, John, Chicago, Ill. Street-railway track | 719,512 | Feb. 3 | 174 | 40 | 102 | 860 |
| Scanlan, Patrick M., Brooklyn, N. Y. Butter-cutter | 724,050 | Mar. 31 | 4484 | 1010 | 103 | 997 |
| Scanlan, Robert M., Brownstown, Ind. Water-extractor for paper-making machines | 741,980 | Oct. 20 | 3076 | 687 | 106 | 1934 |
| Scanlan, Sam G., Chicago, Ill. Heater | 743,571 | Nov. 10 | 1555 | 324 | 107 | 349 |
| Scannell, John, Helena, Mont. Carriage-wheel joint-support | 732,899 | July 7 | 356 | 87 | 105 | 78 |
| Scannell, Robert, Cleveland, Ohio. Composition of matter for use in polishing gold, silver, brass, or other metals | 740,697 | Oct. 6 | 578 | | 106 | 1372 |
| Scantlebury, William, Washington, D. C. Multicylinder rotary engine | 719,513 | Feb. 3 | 175 | 40, 41 | 102 | 860 |
| Scantlin, Thomas E., Lafayette, Ind. Thermal electric cut-out | 718,660 | Jan. 20 | 2170 | 475 | 102 | 494 |
| Scarbau, Hermann, Magdeburg, Germany. Grinding-mill | 733,875 | July 14 | 2124 | 501 | 105 | 463 |
| Scarber, James M. (See Elison, Robert B., assignor.) | | | | | | |
| Scarborough, Daniel, Meridian, Miss. Folding bookcase | 722,760 | Mar. 17 | 2082 | 466 | 103 | 476 |
| Scarborough, Edwin. (See Hoyle and Scarborough.) | | | | | | |
| Scarborough, Walter C. (See Bullard, Paul R., assignor.) | | | | | | |
| Scarbrough, Levi, Xenia, Ill. Fruit-gatherer | 736,028 | Aug. 11 | 1894 | 405 | 105 | 1404 |
| Scarr, Abraham C., Harriston, assignor of one-half to D. D. Smith, Hamilton, Ontario, Canada. Whiffletree | 732,320 | June 30 | 5205 | 1156 | 104 | 2272 |
| Scarrett, Sanford G. (See Pickles, Charles K., assignor.) | | | | | | |
| Scatchard, Harry W., Bridgton, Me. Bobbin-holder | 745,528 | Dec. 1 | 402 | 92 | 107 | 1184 |
| Scetrini, George H. (See Bridger and Scetrini.) | | | | | | |
| Schaab, Franz, Trier, Germany. Printing cotton | 722,050 | Mar. 3 | 732 | 163 | 103 | 158 |
| Schaad, John, Knoxville, Tenn. Drawer-guide | 742,132 | Oct. 20 | 3404 | 759 | 106 | 1999 |
| Schaaf, Albert E., Toledo, Ohio. Fountain-pen | 732,117 | June 30 | 4808 | 1073 | 104 | 2190 |
| Schaar, Wilhelm, Berlin, Germany. Window | 723,038 | Mar. 17 | 2561 | 576 | 103 | 574 |
| Schabacker, Charles H. (See Kamke, Schmidt, and Schabacker.) | | | | | | |
| Schacht, Gustave A., assignor to Schacht Manufacturing Company, Cincinnati, Ohio. Vehicle-wheel hub | 726,103 | Apr. 21 | 3072 | 698 | 103 | 1850 |
| Schacht Manufacturing Company. (See Schacht, Gustave A., assignor.) | | | | | | |
| Schacht, William F., Goshen, Ind. Pneumatic tire | 734,434 | July 21 | 3206 | 755 | 105 | 711 |
| Schachtel, Max. (See Lawrence, William, assignor.) | | | | | | |
| Schade, Carl H., Cedar Rapids, and G. T. Strite, Tama, Iowa. Counterboring-tool | 740,047 | Sept. 29 | 4843 | 1086 | 106 | 1103 |
| Schade, Edmund A. (See Stanley and Schade.) | | | | | | |
| Schade, Erich. (See Beschorner, Karl E., assignor.) | | | | | | |
| Schaefer, Andrew, Louisville, Ky. Machine for making brooms for street-sweeping machines | 729,676 | June 2 | 272 | 62 | 104 | 1185 |
| Schaefer, John C., New York, N. Y. Pressure-regulating valve | 726,355 | Apr. 28 | 3585 | 813 | 103 | 1972 |
| Schaefer, Joseph A., Chicago, Ill. Power-transmission mechanism | 747,236 | Dec. 15 | 3542 | 804 | 107 | 1912 |
| Schaefer, Oscar, London, England. Tire for vehicles | 722,459 | Mar. 10 | 1498 | 330 | 103 | 335 |
| Schaefer, Wilhelm, Hamburg, Germany. Incandescent gas-lamp | 726,765 | Apr. 28 | 4380 | 985 | 103 | 2130 |
| Schaefer, Wilhelm, Hagen, Germany. Flower-pot | 726,766 | Apr. 28 | 4381 | 985 | 103 | 2130 |
| Schaeffer, Charles H., assignor of one-half to G. Eckert, Reading, Pa. Umbrella notch-piece | 719,144 | Jan. 27 | 3101 | 689 | 102 | 700 |
| Schaeffer, Jessee, Berlinsville, Pa. File | 720,972 | Feb. 17 | 2893 | 663 | 102 | 1462 |
| Schaeffler, Joseph C., New York, N. Y. Automatic reversing mechanism | 747,649 | Dec. 22 | 4310 | 969 | 107 | 2102 |
| Schäfer, Adolf. (See Dieffenbach and Schäfer.) | | | | | | |
| Schafer, Edward J., *et al.* (See Schoch, Leonard E., assignor.) | | | | | | |
| Schafer, Edward J. (See Schoch and Schafer.) | | | | | | |
| Schaffer, John T. (See Walder and Schaffer.) | | | | | | |
| Schäffer, Theodor, Hellerup, Denmark. Hand-setting mechanism for clocks | 726,994 | May 5 | 343 | 74 | 104 | 74 |
| Schaffer, William G. (See Morcom and Schaffer.) | | | | | | |
| Schäfferkötter, Karl, Prüm, Germany. Explosion-engine | 731,507 | June 23 | 3660 | 816 | 104 | 1939 |
| Schaffner, Clarence E., Cincinnati, Ohio. Hose-supporter | 736,788 | Aug. 18 | 3283 | 726 | 105 | 1713 |
| Schaffner, Clarence E., Cincinnati, Ohio. Clasp for garters or the like | 748,423 | Dec. 29 | 5780 | 1318 | 107 | 2448 |
| Schaible, John. (See Gravé and Schaible.) | | | | | | |
| Schalitz, Carl L., San Francisco, Cal. Racking-bung | 746,386 | Dec. 8 | 1967 | 449 | 107 | 1539 |
| Schalitz, Carl L., San Francisco, Cal. Means for coiling pipes | 746,387 | Dec. 8 | 1967 | 450 | 107 | 1539 |
| Schalk, David, Hamilton, Ohio. Combined bed and couch | 746,584 | Dec. 8 | 2303 | 528 | 107 | 1614 |
| Schalk, John, Twentymile Stand, Ohio. Cultivator | 725,487 | Apr. 14 | 1986 | 448 | 103 | 1606 |
| Schall, Joseph, Evergreen Park, Ill. Roofing-tile | 719,514 | Feb. 3 | 176 | 41 | 102 | 861 |
| Schaller, John C., Hastings-upon-Hudson, N. Y. Fire-ladder | 724,953 | Apr. 7 | 985 | 227 | 103 | 1379 |
| Schalt, Peter, Paterson, N. J. Pipe-clearing apparatus | 747,089 | Dec. 15 | 3273 | 746 | 107 | 1855 |
| Schambers, Charles H., Warren, Pa. Toy bank | 729,899 | June 2 | 691 | 153 | 104 | 1269 |
| Schanamen, Joseph, and W. J. Davis, Pittsburg, Pa. Lubricating device for railway-cars | 743,934 | Nov. 10 | 2205 | 476 | 107 | 486 |
| Schanche, Herman G. (See Perry and Schanche.) | | | | | | |
| Schanke, John. (See McNamara and Schanke.) | | | | | | |
| Schantz, Edwin M., Zimmerman, Ohio. Marking-machine | 734,755 | July 28 | 3821 | 891 | 105 | 852 |
| Schanzlin, Henry J. J., Buffalo, N. Y. Device for surfacing razor-strops | 735,156 | Aug. 4 | 215 | 43 | 105 | 1028 |
| Schapiro, Aisik. (See Hurwitz and Schapiro.) | | | | | | |
| Schapler, Richard, Frankfort-on-the-Main, Germany. Fire-escape ladder | 723,925 | Mar. 31 | 4230 | 952 | 103 | 948 |
| Scharbach, Peter J. (See Dorff, Conrad J., assignor.) | | | | | | |
| Scharf, William H. (See Poe and Scharf.) | | | | | | |
| Scharnweber, William, Seattle, Wash. Combined match-stick making and racking machine | 744,693 | Nov. 17 | 3639 | 785 | 107 | 806 |
| Schatz, Alonzo C., Wheaton, Ill. Ironing-board | 728,306 | May 19 | 2813 | 623 | 104 | 638 |
| Schatz, Edward J. (See Stogsdill and Schatz.) | | | | | | |
| Schauer, Sherman C., assignor to Cincinnati Machine Tool Co., Cincinnati, Ohio. Drill-press | 738,246 | Sept. 8 | 1387 | 300 | 106 | 316 |
| Schauli, Georges, and D. Loewenstein, London, England. Battery | 743,337 | Nov. 3 | 1013 | 218 | 107 | 217 |
| Schauman, Bror M., Philadelphia, Pa., assignor to Union Bristle and Fiber Company, New York, N. Y. Machine for combing bristles | 747,650 | Dec. 22 | 4312 | 969<br>970 | 107 | 2102 |
| Schauman, Bror M., Philadelphia, Pa., assignor to Union Bristle and Fiber Company, New York, N. Y. Machine for preparing bristles for brush-making | 747,651 | Dec. 22 | 4313 | 970 | 107 | 2102 |
| Schayer, Max S., Denver, Colo. Mosquito-bar holder for beds | 719,957 | Feb. 3 | 975 | 225 | 102 | 1030 |
| Scheble, Eugene S., Fort Worth, Tex. Coin-controlled feeding apparatus for coin-controlled machines | 742,909 | Nov. 3 | 158 | 36 | 107 | 35 |
| Scheble, Eugene S., Fort Worth, Tex., assignor, by mesne assignments, to S. E. Wilmore, New York, N. Y. Vending-machine | 732,786 | July 7 | 162 | 42 | 105 | 39 |

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| Scheble, Eugene S., Cleburne, Tex., assignor, by mesne assignments, to S. E. Wilmore, New York, N. Y. Vending-machine | 744,412 | Nov. 17 | 3175 | 681 | 107 | 708 |
| Scheck, Wilhelm W. E., Kassel, Germany. Elastic tire | 747,237 | Dec. 15 | 3545 | 804 | 107 | 1913 |
| Scheele, Walter T., assignor to W. J. Hooper, Baltimore, Md. Manufacturing varnishes | 744,413 | Nov. 17 | 3176 | ..... | 107 | 709 |
| Scheer, Johannes K. C., Beaverfalls, Pa. Wall-papering machine | 746,585 | Dec. 8 | 2304 | 529 | 107 | 1614 |
| Scheer, John C. C., Beaverfalls, Pa. Shoe-shining machine | 737,496 | Aug. 25 | 4609 | 1033 | 105 | 2017 |
| Scheffer, Harry, Aix-la-Chapelle, Germany. Wrench | 741,841 | Oct. 20 | 2781 | 620 | 106 | 1875 |
| Scheffler, Frederick A. (See Scheffler, Theodore, assignor.) | | | | | | |
| Scheffler, Theodore, Paterson, N. J. Power-transmitting device | 730,481 | June 9 | 1749 | 391<br>392 | 104 | 1502 |
| Scheffler, Theodore, Paterson, assignor to himself, and F. A. Scheffler, Glenridge, N. J. Steam-turbine | 746,388 | Dec. 8 | 1968 | 450 | 107 | 1534 |
| Scheiber, Eugen, and E. Kwaysser, Vienna, Austria-Hungary. Compression stop-cock | 729,423 | May 26 | 4835 | 1071 | 104 | 1072 |
| Scheibling, John, New York, N. Y. Coin-controlled garment-hook | 729,900 | June 2 | 693 | 153<br>154 | 104 | 1269 |
| Scheidl, Johann, Filiale Baden, near Vienna, Austria-Hungary. Surgical device for setting fractured legs | 743,663 | Nov. 10 | 1726 | 364 | 107 | 389 |
| Scheidler, John, assignor of one-half to J. N. Neal, Coldwater, Mich. Barn | 732,787 | July 7 | 165 | 43 | 105 | 39 |
| Scheif, Charles A., Wilkinsburg, Pa. Window-shade adjuster | 722,912 | Mar. 17 | 2358 | 527 | 103 | 531 |
| Scheif, Charles A., Wilkinsburg, Pa. Window-shade adjuster | 735,157 | Aug. 4 | 216 | 43 | 105 | 1028 |
| Scheinert, John, assignor of one-half to C. E. Calm, Chicago, Ill. Lard compound | 738,702 | Sept. 8 | 2318 | ..... | 106 | 511 |
| Schell, Elmer P. (See Platt, Cyrus W., assignor.) | | | | | | |
| Schell, Jacob, Savannah, Mo. Lock | 719,883 | Feb. 3 | 854 | 200 | 102 | 1004 |
| Schell, Jacob, Savannah, Mo. Lock | 746,174 | Dec. 8 | 1585 | 354 | 107 | 1459 |
| Schell, Martin, Rochester, N. Y. Camera | 725,488 | Apr. 14 | 1987 | 448 | 103 | 1606 |
| Schell, Martin, Rochester, N. Y. Focusing device for cameras | 738,072 | Sept. 1 | 1008 | 225 | 106 | 219 |
| Schell, Martin, Rochester, N. Y. Camera | 738,073 | Sept. 1 | 1009 | 225 | 106 | 219 |
| Schellenbach, Charles O., Newport, Ky. Expanding-tool | 735,413 | Aug. 4 | 712 | 152 | 105 | 1132 |
| Schellenbach, William L. (See Montstream, Schellenbach, and Lodge.) | | | | | | |
| Schellenbach, William L., assignor to National Machine Tool Company, Cincinnati, Ohio. Speed-changer | 723,926 | Mar. 31 | 4232 | 952<br>953 | 103 | 948 |
| Schellenbach, William L., assignor to National Machine Tool Company, Cincinnati, Ohio. Screw mechanism | 725,779 | Apr. 21 | 2536 | 575<br>576 | 103 | 1739 |
| Schellenger, Silas A., Gridley, Cal. Ball-and-socket knuckle | 728,419 | May 19 | 3016 | 662 | 104 | 680 |
| Schemmel, Robert C., Union City, Ind. Prop-block for vehicle-tops | 720,625 | Feb. 17 | 2279 | 523 | 102 | 1331 |
| Schemmel, Robert C., Union City, Ind. Valance for carriage-tops | 732,589 | June 30 | 5735 | 1273 | 104 | 2384 |
| Schemnitzky, Carl von, Vienna, Austria-Hungary. Lead-pencil | 726,767 | Apr. 28 | 4383 | 986 | 103 | 2130 |
| Schenck, Alexander, New York, N. Y. Turbine | 727,698 | May 12 | 1640 | 372 | 104 | 371 |
| Schenck, August, Austin, Tex. Barrel-press | 737,778 | Sept. 1 | 412 | 88 | 106 | 90 |
| Schenck, Claud H. E., Cleveland, Ohio. Wheel-fender | 741,171 | Oct. 13 | 1454 | 331 | 106 | 1575 |
| Schenck, Eisengiesserei und Maschinenfabrik Darmstadt, G. M. B. H., Carl. (See Schenck, Emil, assignor.) | | | | | | |
| Schenck, Emil, assignor to C. Schenck, Eisengiesserei und Maschinenfabrik Darmstadt, G. M. B. H., Darmstadt, Germany. Automatic weighing-machine | 721,469 | Feb. 24 | 3866 | 879 | 102 | 1685 |
| Schenck, Ernest G. H., Orange, N. J. Machine for cutting precious stones | 732,118 | June 30 | 4809 | 1073 | 104 | 2190 |
| Schenck, Ernest G. H., Orange, N. J. Cutting precious stones | 732,119 | June 30 | 4811 | 1073 | 104 | 2191 |
| Schenck, George A., assignor to Hooker & Co., San Francisco, Cal. Pole and shaft | 723,492 | Mar. 24 | 3447 | 771 | 103 | 766 |
| Schenck, John F., Lawndale, N. C. Thread-winding machine | 747,238 | Dec. 15 | 3547 | 804<br>805 | 107 | 1913 |
| Schenck, Peirce D., Dayton, Ohio. Brake-wheel | 725,780 | Apr. 21 | 2539 | 576 | 103 | 1739 |
| Schenebeck, Barney W., Bolinger, La. Balanced slide-valve | 742,501 | Oct. 27 | 4088 | 919<br>920 | 106 | 2156 |
| Schenk, Henry H., Memphis, Mo. Corn-shock frame | 720,072 | Feb. 10 | 1213 | 278 | 102 | 1097 |
| Schenk, Henry H., Memphis, Tenn. Traction-truck | 737,779 | Sept. 1 | 414 | 88 | 106 | 91 |
| Schenker, Francis. (See Williams, James F., assignor.) | | | | | | |
| Schenker, Francis. (See Williams and Mustin, assignors.) | | | | | | |
| Scherer, Albert G., assignor to Excelsior Steel Furnace Company, Chicago, Ill. Hot-air pipe | 724,210 | Mar. 31 | 4810 | 1078 | 103 | 1064 |
| Scherer, Albert G., assignor to A. W. Glessner, Chicago, Ill. Shaping-wheel for sheet-metal-pipe-crimping machines | 728,020 | May 12 | 2260 | 502 | 104 | 498 |
| Scherer, Albert G., assignor to A. W. Glessner, Chicago, Ill. Machine for cutting sheet metal | 729,964 | June 2 | 816 | 183 | 104 | 1293 |
| Scherer, Charles W. (See McDaniel, William A., assignor.) | | | | | | |
| Scherer, John, Marinette, Wis. Governor | 740,473 | Oct. 6 | 172 | 33 | 106 | 1282 |
| Scherer, John, Marinette, Wis. Sawmill set-works | 740,477 | Oct. 6 | 178 | 35 | 106 | 1283 |
| Scherer, John, Marinette, Wis., assignor of one-half to D. Clint Prescott Company. Log-turner | 730,574 | June 9 | 1922 | 427 | 104 | 1540 |
| Scherf, Theodore, Elizabeth, assignor of two-thirds to J. H. and E. L. White, Englewood, N. J. Consecutive-view apparatus | 740,318 | Sept. 29 | 5325 | (1199<br>1200<br>1201 | 106 | 1202 |
| Scherhag, Franz, Vienna, Austria-Hungary. Coloring glass or glassware | 743,338 | Nov. 3 | 1014 | ..... | 107 | 217 |
| Schermerhorn, Herschel A., Waterman, assignor of one-half to C. S. Morse, Shabbona, Ill. Fastening for wagon end-gates | 732,965 | July 7 | 469 | 117 | 105 | 101 |
| Scherrer, Franz, Bonn, Germany. Ladder for life-saving | 743,199 | Nov. 3 | 730 | 160 | 107 | 153 |
| Scherzer, Albert H., and C. F. T. Kandeler, assignors to Scherzer Rolling Lift Bridge Company, Chicago, Ill. Bascule-bridge | 721,918 | Mar. 3 | 500 | 110<br>111 | 103 | 111 |
| Scherzer, Albert H., and C. F. T. Kandeler, assignors to Scherzer Rolling Lift Bridge Company, Chicago, Ill. Bascule-bridge | 735,414 | Aug. 4 | 714 | 152<br>153 | 105 | 1132 |
| Scherzer Rolling Lift Bridge Co. (See Smetters, Samuel T., assignor.) | | | | | | |
| Scherzer Rolling Lift Bridge Company. (See Scherzer and Kandeler, assignors.) | | | | | | |
| Scheuber, August W., Hoboken, N. J. Safety-razor frame | 739,029 | Sept. 15 | 2909 | 646 | 106 | 656 |
| Scheuber, August W., Hoboken, N. J., assignor to M. Zinn, New York, N. Y. Stropping-machine | 724,337 | Mar. 31 | 5065 | 1133 | 103 | 1115 |
| Scheuer, Charles, *et al.* (See Crandall, Herman E., assignor.) | | | | | | |
| Scheuer, Charles, *et al.* (See Moore, Roswell A., Jr., assignor.) | | | | | | |
| Scheuer, Maurice, *et al.* (See Crandall, Herman E., assignor.) | | | | | | |
| Scheuer, Maurice, *et al.* (See Moore, Roswell A., Jr., assignor.) | | | | | | |
| Scheuer, Maurice, New York, N. Y. Hose-supporter | 719,884 | Feb. 3 | 855 | 200 | 102 | 1004 |
| Scheuer, Max, New York, N. Y. Apparel-belt | 742,746 | Oct. 27 | 4520 | 1024 | 106 | 2248 |
| Scheuer, William, New York, N. Y. Muffler | 718,730 | Jan. 20 | 2305 | 509<br>510 | 102 | 520 |
| Scheurle, Anton M., Kiel, Wis. Window-screen | 727,209 | May 5 | 725 | 156 | 104 | 157 |
| Schey, Max. (See Sheridan and Behrendt, assignors.) | | | | | | |
| Schick, Jacob, Greenfield, Mass. Lock-hinge | 744,626 | Nov. 17 | 3524 | 760 | 107 | 780 |
| Schick, Murray, Salt Lake City, Utah. Carpet-fastener | 738,074 | Sept. 1 | 1011 | 225 | 106 | 219 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Schick, Philip, Dubois, Nebr. Match-box | 744,627 | Nov. 17 | 3525 | 760, 761 | 107 | 780 |
| Schickerling, Alfred, Jersey City, N. J. Trap for catching mice or rats | 741,935 | Oct. 20 | 2969 | 661 | 106 | 1913 |
| Schiefer, Edward L., St. Louis, Mo. Garbage can or receptacle | 719,515 | Feb. 3 | 178 | 41 | 102 | 861 |
| Schiefer, Edward L., St. Louis, Mo. Garbage vault or receptacle | 723,318 | Mar. 24 | 3092 | 696 | 103 | 698 |
| Schiek, George H., Joliet, Ill. Separable hinge | 726,577 | Apr. 28 | 4028 | 910 | 103 | 2056 |
| Schiele, Josepha, Brussels, Belgium. Silver-plating or gilding process | 723,148 | Mar. 3 | 900 | ------ | 103 | 193 |
| Schierhorst, Henry, New York, N. Y. Thimble puzzle | 731,957 | June 23 | 4475 | 998 | 104 | 2108 |
| Schiermeyer, Henry W., Daykin, Nebr. Latch | 732,450 | June 30 | 5466 | 1213 | 104 | 2326 |
| Schies, John, Anderson, Ind. Glass-blowing machine | 722,634 | Mar. 10 | 1811 | 403 | 103 | 405 |
| Schiff, Benjamin J. (See Cantor, Abraham, assignor.) | | | | | | |
| Schiffer, John N., Turtlecreek, Pa. Hernial truss | 737,155 | Aug. 25 | 3945 | 877 | 105 | 1873 |
| Schild, Charles C., Ionia, Mich. Self-locking leg-band for poultry or birds | 720,286 | Feb. 10 | 1624 | 371 | 102 | 1182 |
| Schildback, Oscar H., South Bend, Ind. Motor-vehicle | 718,161 | Jan. 13 | 1191 | 264, 265 | 102 | 272 |
| Schildhauer, Edward. (See Eastman, George N., assignor.) | | | | | | |
| Schill, Charles H., Manchester, and H. G. Hills, Hyde, England. Water-gas generator | 736,636 | Aug. 18 | 2994 | 660, 661 | 105 | 1654 |
| Schill, Emil, Kingsland, N. J. Brooder | 735,827 | Aug. 11 | 1517 | 325 | 105 | 1323 |
| Schillberg, Torsten, Glasgow, Scotland. Massage appliance | 723,735 | Mar. 24 | 3858 | 868 | 103 | 852 |
| Schilling, Charles B., Chicago, Ill. Window frame and sash | 738,491 | Sept. 8 | 1910 | 417 | 106 | 424 |
| Schilling, George W. (See Huss and Schilling.) | | | | | | |
| Schilling, Louis F., Salem, Ohio. Drawing-board trestle | 721,637 | Feb. 24 | 4193 | 954 | 102 | 1759 |
| Schilling, Robert P., Utica, N. Y. Collar-retainer | 733,680 | July 14 | 1744 | 413 | 105 | 385 |
| Schillinger, Gustav A., Chicago, Ill. Interchangeable asphalt, concrete, and mastic mixer | 747,652 | Dec. 22 | 4315 | 971, 972, 973, 974, 975, 976 | 107 | 2103 |
| Schillinger, Gustav A., Chicago, Ill. Mixer for plastic material | 747,653 | Dec. 22 | 4322 | 976, 977 | 107 | 2105 |
| Schillinger, Gustav A., Chicago, Ill., assignor to Jones National Fence Company, Columbus, Ohio. Fireproof construction | 722,460 | Mar. 10 | 1501 | 331 | 103 | 336 |
| Schimansky, Otto, assignor to Sandusky Cooperage & Lumber Company, Sandusky, Ohio. Grate-bar | 737,156 | Aug. 25 | 3946 | 877 | 105 | 1873 |
| Schimmel, Fridolin, Faribault, Minn. Bridge-bearing for piano-strings | 725,781 | Apr. 21 | 2540 | 576 | 103 | 1740 |
| Schimper Company. (See Mendell, George, assignor.) | | | | | | |
| Schimpf, William, New York, N. Y. Candelabrum | 747,780 | Dec. 22 | 4546 | 1024 | 107 | 2157 |
| Schindler, George, *et al.* (See Smith, Edward P., assignor.) | | | | | | |
| Schinharl, Joseph, New York, N. Y. Mold | 732,966 | July 7 | 470 | 117 | 105 | 101 |
| Schinneller, Jacob, Pittsburg, Pa. Construction of ordnance | 734,965 | July 28 | 4208 | 978 | 105 | 934 |
| Schirmacher, Carl, Soden, assignor to Farbwerke, vorm. Meister, Lucius & Brüning, Höchst-on-the-Main, Germany. Red azo dye and making same | 724,743 | Apr. 7 | 613 | ------ | 103 | 1299 |
| Schirmacher, Karl, Soden, assignor to Farbwerke, vorm. Meister, Lucius & Brüning, Höchst-on-the-Main, Germany. Red azo dye and making same | 733,280 | July 7 | 1047 | ------ | 105 | 220 |
| Schirmer, Baldwin F., Cleveland, Ohio. Pasteurizer | 725,489 | Apr. 14 | 1990 | 449 | 103 | 1607 |
| Schirmer, Baldwin F., Cleveland, Ohio. Bottle-holder for bottle-washing machines | 733,558 | July 14 | 1537 | 366 | 105 | 342 |
| Schirmer, Friedrich W., Aubonne, assignor to Perrot Duval & Co., Geneva, and Comptoir Industriel de Berne A. Schopfer, Berne, Switzerland. Drive-chain | 724,400 | Mar. 31 | 5199 | 1165 | 103 | 1145 |
| Schirmer, Friederich W., Aubonne, assignor to Perrot Duval & Co., Geneva, and Comptoir Industriel de Berne, A. Schopfer, Berne, Switzerland. Steam-generator | 735,597 | Aug. 4 | 1079 | 229 | 105 | 1210 |
| Schirmer, Helene. (See Roehm and Schirmer.) | | | | | | |
| Schirra, Julius, Pittsburg, Pa. Tree-protector | 730,575 | June 9 | 1924 | 427 | 104 | 1541 |
| Schissel, Edmund and M., Brooklyn, N. Y. Filter | 745,972 | Dec. 1 | 1102 | 247 | 107 | 1334 |
| Schissel, Minnie. (See Schissel, Edmund and M.) | | | | | | |
| Schissel, Paul. (See Loch, Joseph, assignor.) | | | | | | |
| Schlachter, Carl, Rockwell City, Iowa. Roofing-tile | 746,747 | Dec. 15 | 2612 | 600 | 107 | 1704 |
| Schlachter, Siegmund, assignor of one-third to J. Morwitz, Philadelphia, Pa. Grave-filler | 741,594 | Oct. 13 | 2320 | 519 | 106 | 1761 |
| Schlaegel, Hans, Metz, Germany. Device for lighting gun-sights | 731,712 | June 23 | 4034 | 900 | 104 | 2012 |
| Schlafly, Julius H. (See Good and Schlafly.) | | | | | | |
| Schlangen, Simon, assignor to Economical Beer Bung Company, Chicago, Ill. Bung-bushing and bung | 742,071 | Oct. 20 | 3304 | 736 | 106 | 1979 |
| Schlegel, August A., *et al.* (See Aurnhamer, George, assignor.) | | | | | | |
| Schlehr, Joseph A. (See Grandchamp and Schlehr.) | | | | | | |
| Schlehr, Joseph A., assignor of one-fourth to W. Eichers, Frazee, Minn. Nut-lock | 744,242 | Nov. 17 | 2860 | 613 | 107 | 640 |
| Schleich, Frank X., Sandusky, Ohio. Bung-hole stave | 744,879 | Nov. 24 | 4009 | 864 | 107 | 902 |
| Schleicher, Erhart, and A. Dorrer, assignors to Badische Anilin & Soda Fabrik, Ludwigshafen-on-the-Rhine, Germany. Disazo coloring-matter | 741,936 | Oct. 20 | 2970 | ------ | 106 | 1913 |
| Schleicher, John C., Mount Vernon, assignor to J. A. Britton, New York, N. Y. Alarm-bell | 717,626 | Jan. 6 | 185 | 47 | 102 | 40 |
| Schleicher, William A., Cleveland, Ohio. Hub-band cap | 728,988 | May 26 | 4072 | 904 | 104 | 915 |
| Schleicher, William A., Cleveland, Ohio. Snap-hook | 744,628 | Nov. 17 | 3527 | 761 | 107 | 781 |
| Schlesinger, Leo. (See Goldberg, Samuel, assignor.) | | | | | | |
| Schlesinger, Louis, Milwaukee, Wis. Spacing mechanism for type-writing machines | 738,492 | Sept. 8 | 1912 | 418, 419 | 106 | 425 |
| Schlesinger, Louis A., *et al.* (See Mead, Charles, assignor.) | | | | | | |
| Schleuning, Wilhelm, Freihung-Oberpfalz, Germany. Table device for sick-beds, &c | 725,593 | Apr. 14 | 2172 | 492 | 103 | 1646 |
| Schlichter, Arnie C. (See McDaniel, Edward F., assignor.) | | | | | | |
| Schlicker, Christian, assignor of one-half to F. Heisler, Rochester, N. Y. Coat and hat hanger | 718,731 | Jan. 20 | 2307 | 510 | 102 | 521 |
| Schlicker, Ernest, Pittsburg, Pa. Trolley-pole | 732,967 | July 7 | 472 | 118 | 105 | 102 |
| Schlickeÿsen, Carl, Rixdorf, near Berlin, Germany. Brick-column die | 720,973 | Feb. 17 | 2894 | 663 | 102 | 1462 |
| Schlickeÿsen, Carl, Steglitz, near Berlin, Germany. Peat digging or excavating machine | 744,805 | Nov. 24 | 3878 | 834 | 107 | 875 |
| Schlickeÿsen, Carl F., Steglitz, Germany. Machine for digging and conveying peat | 736,446 | Aug. 18 | 2619 | 575 | 105 | 1576 |
| Schlieper, Albert C., and H. G. Steinbock, Allegheny, Pa. Stud | 722,540 | Mar. 10 | 1649 | 363 | 103 | 370 |
| Schlosser, George D., Sunnyside, Wash. Harrow | 738,361 | Sept. 8 | 1662 | 360 | 106 | 374 |
| Schlosser, Henry W., assignor of one-half to J. F. Earnshaw, Washington, D. C. Storm apron or curtain for wagons | 729,677 | June 2 | 274 | 63 | 104 | 1185 |
| Schlosser, John, Philadelphia, Pa. Packing implement | 737,873 | Sept. 1 | 640 | 137 | 106 | 140 |
| Schlotfeldt, Heinrich W., Kiel, Germany. Rotary speed-indicator | 740,698 | Oct. 6 | 578 | 130 | 106 | 1372 |
| Schlueter, William, Yonkers, N. Y. Lock | 721,470 | Feb. 24 | 3869 | 880 | 102 | 1686 |
| Schlumberger, Robert, Allegheny, Pa. Hot-air furnace | 721,471 | Feb. 24 | 3870 | 880 | 102 | 1686 |
| Schlüssel, Max, Dusseldorf, Germany. Machine for straining food products or the like | 732,900 | July 7 | 357 | 87 | 105 | 78 |
| Schmahl, John H., and A. Zimmermann, Buffalo, N. Y. Double-acting valve for beer-vats | 725,782 | Apr. 21 | 2541 | 577 | 103 | 1740 |

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| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Schmalfuss, Gottfried, Cologne, Germany, assignor of one-half to H. Lierz, Philadelphia, Pa. Adhesive tablet | 738,703 | Sept. 8 | 2320 | ..... | 106 | 511 |
| Schmaltz, Michael, Duluth, Minn. Log-loading machine | 727,849 | May 12 | 1946 | 434 | 104 | 432 |
| Schmand, Charles C., Winlock, Wash. Vehicle running-gear and brake | 740,048 | Sept. 29 | 4844 | 1087 | 106 | 1103 |
| Schmeding, John H. (See Jack, Charles, assignor.) | | | | | | |
| Schmeltzer, Samuel M., assignor to Canton Machine and Manufacturing Company, Canton, Ohio. Sheet-metal-pipe former | 728,178 | May 12 | 2546 | 566 | 104 | 559 |
| Schmid, Charles, assignor of one-half to W. P. Greenhill, Chicago, Ill. Valve mechanism for steam-engines | 739,449 | Sept. 22 | 3711 | 826 | 106 | 842 |
| Schmid, George J., assignor of one-half to J. Schmid, Toledo, Ohio. Oven | 726,828 | Apr. 28 | 4494 | 1014 | 103 | 2153 |
| Schmid, Henry, Buffalo, N. Y. Mail-box indicator | 738,849 | Sept. 15 | 2624 | 578 / 579 | 106 | 595 |
| Schmid, Jacob. (See Schmid, George J., assignor.) | | | | | | |
| Schmidt, Albert G., Springfield, Ohio. Molder's sponge | 735,158 | Aug. 4 | 217 | 43 | 105 | 1029 |
| Schmidt, Albrecht, assignor to Farbwerke, vorm. Meister, Lucius & Brüning, Höchst-on-the-Main, Germany. Black azo dye and making same | 728,021 | May 12 | 2261 | ..... | 104 | 499 |
| Schmidt, Albrecht, and F. Bethmann, assignors to Farbwerke, vorm. Meister, Lucius & Brüning, Höchst-on-the-Main, Germany. Blue sulfur dye and making same | 728,623 | May 19 | 3413 | ..... | 104 | 765 |
| Schmidt, Arno, Weimar, Germany. Hypodermic syringe | 748,424 | Dec. 29 | 5782 | 1318 | 107 | 2448 |
| Schmidt, Arthur, Warsaw-Praga, Russia. Making axes, hatchets, or the like | 736,637 | Aug. 18 | 2997 | 661 | 105 | 1654 |
| Schmidt, August J., assignor to Diamond Whip Company, Chicago, Ill. Whip | 739,351 | Sept. 22 | 3501 | 783 | 106 | 796 |
| Schmidt, Carl C. F., New York, N. Y. Gas-burner | 743,757 | Nov. 10 | 1880 | 397 | 107 | 418 |
| Schmidt, Carl H., North St. Paul, Minn. Sandpapering-machine | 740,319 | Sept. 29 | 5332 | 1201 | 106 | 1203 |
| Schmidt, Charles F. (See Sebald and Schmidt.) | | | | | | |
| Schmidt, Charles G., and J. A. F. Heine, assignors to Cincinnati Butchers Supply Company, Cincinnati, Ohio. Refrigerator | 726,995 | May 5 | 345 | 75 | 104 | 74 |
| Schmidt, Charles G., and P. F. Werner, assignors to Cincinnati Butchers' Supply Co., Cincinnati, Ohio. Switch for overhead-trolley tracks | 744,629 | Nov. 17 | 3527 | 761 | 107 | 781 |
| Schmidt, Charles J. (See Oltmanns and Schmidt.) | | | | | | |
| Schmidt, David H. (See Bornhoeft, Edward, assignor.) | | | | | | |
| Schmidt, Emil. (See Neugebauer, Otto, assignor.) | | | | | | |
| Schmidt, Frank M., Farmville, Va. Fastening device for the fly-fronts of trousers | 741,280 | Oct. 13 | 1667 | 376 | 106 | 1321 |
| Schmidt, Frederick, Philadelphia, Pa. Bedstead-fastener | 729,424 | May 26 | 4836 | 1072 | 104 | 1072 |
| Schmidt, Frederick M., New York, assignor to Self Winding Clock Co., Brooklyn, N. Y., Program-clock | 746,998 | Dec. 15 | 3103 | 710 / 711 | 107 | 1814 |
| Schmidt, Friedrich, assignor to Farbwerke, vorm. Meister, Lucius & Brüning, Höchst-on-the-Main, Germany. Violet-red azo dye and making same | 737,967 | Sept. 1 | 823 | ..... | 106 | 180 |
| Schmidt, Fritz G., New York, N. Y. Nose-clip for eyeglasses | 741,842 | Oct. 20 | 2782 | 620 | 106 | 1875 |
| Schmidt, George A., Jr., Chicago, Ill. Receptacle for feeding liquid soap | 741,981 | Oct. 20 | 3078 | 688 | 106 | 1934 |
| Schmidt, Godfrey P., Brooklyn, N. Y. Ribbon-holder | 720,287 | Feb. 10 | 1625 | 372 | 102 | 1182 |
| Schmidt, Gustave, Sr., Colmar, Germany. Yarn-controller and clearer for spinning-machines | 729,901 | June 2 | 695 | 154 | 104 | 1270 |
| Schmidt, Henry A. (See Kamke, Schmidt, and Schabacker.) | | | | | | |
| Schmidt, Henry W., Honolulu, Hawaii. Machine for cutting sugar-cane or similar crops in the field | 724,620 | Apr. 7 | 376 | 90 | 103 | 1250 |
| Schmidt, Ida W., New York, N. Y. Bath-tub | 746,389 | Dec. 8 | 1972 | 450 | 107 | 1540 |
| Schmidt, Ida W., New York, N. Y. Bath-tub | 746,390 | Dec. 8 | 1973 | 451 | 107 | 1540 |
| Schmidt, Jacob C., Lebanon, Pa. Eyeglass-fitting | 746,175 | Dec. 8 | 1586 | 354 | 107 | 1459 |
| Schmidt, John, Ubet, Mont. Sack-holder | 736,553 | Aug. 18 | 2822 | 618 | 105 | 1621 |
| Schmidt, John D., Davenport, Iowa. Pedocycle | 732,120 | June 30 | 4812 | 1073 | 104 | 2191 |
| Schmidt, Joseph, Jr., assignor to J. L. Flannery, Chicago, Ill. Saw | 717,719 | Jan. 6 | 351 | 86 | 102 | 76 |
| Schmidt, Joseph, Jr., assignor, by mesne assignments, to J. L. Flannery, Chicago, Ill. Making boxes | 744,414 | Nov. 17 | 3177 | 681 | 107 | 709 |
| Schmidt, Julius E., Schloppenhof, Austria-Hungary. Spinning apparatus with rotating head | 724,954 | Apr. 7 | 987 | 227 | 103 | 1380 |
| Schmidt, Leonhard. (See Schramm, Heinrich, assignor.) | | | | | | |
| Schmidt, Max E., New York, and G. A. Mayland, Brooklyn, N. Y.; said Mayland assignor to said Schmidt. Carrier | 747,090 | Dec. 15 | 3275 | 746 | 107 | 1855 |
| Schmidt, Nicholas. (See Holtmann, Lindewirth, and Schunk, assignors.) | | | | | | |
| Schmidt, Paul C., Elizabeth, N. J. Match lighter and box | 728,989 | May 26 | 4073 | 904 | 104 | 915 |
| Schmidt-Predari, Albert, Weimar, Germany. Electric accumulator | 724,619 | Apr. 7 | 375 | ..... | 103 | 1250 |
| Schmidt, Robert E., Elberfeld, Germany, assignor to Farbenfabriken of Elberfeld Co., New York, N. Y. Making anthraquinone alpha disulfonic acids | 742,910 | Nov. 3 | 159 | ..... | 107 | 35 |
| Schmidt, Robert E., Elberfeld, Germany, assignor to Farbenfabriken of Elberfeld Co., New York, N. Y. Anthraquinone-alpha-sulfonic acid | 743,664 | Nov. 10 | 1728 | ..... | 107 | 385 |
| Schmidt, Rudolph, assignor of one-half to T. Reardon, Cincinnati, Ohio. Liquid fly-catcher | 741,937 | Oct. 20 | 2971 | 661 | 106 | 1913 |
| Schmidt, Theodore A., St. Paul, Minn. Jar-cover | 741,595 | Oct. 13 | 2321 | 519 | 106 | 1761 |
| Schmidt, Wilhelm, Wilhelmshöhe, near Cassel, Germany. Superheater for tubular boilers | 721,242 | Feb. 24 | 3469 | 789 | 102 | 1603 |
| Schmidt, William C., East Orange, N. J. Floor for stalls | 747,239 | Dec. 15 | 3553 | 805 | 107 | 1914 |
| Schmidt, William L., assignor to Hartman Mfg. Co., Vincennes, Ind. Cultivator attachment | 719,885 | Feb. 3 | 857 | 201 | 102 | 1005 |
| Schmidting, John, Vienna, Austria-Hungary. Producing printing-clichés and high-reliefs | 725,879 | Apr. 21 | 2709 | ..... | 103 | 1776 |
| Schmieder, Emil. (See Huck, Fischer, Ahrle, and Schmieder.) | | | | | | |
| Schmiedl, Anton J., Philadelphia, Pa. Fabric-marking machine | 719,516 | Feb. 3 | 179 | 42 | 102 | 861 |
| Schmitt, Edward D., Baltimore, Md. Device for sealing bottles or jars | 747,333 | Dec. 15 | 3742 | 843 | 107 | 1957 |
| Schmitt, Edward D., Baltimore, Md., assignor, by mesne assignments, to Universal Seal & Stopper Company, Camden, N. J. Machine for filling and sealing bottles | 735,911 | Aug. 11 | 1676 | 357 / 358 | 105 | 1357 |
| Schmitt, Edward D., Baltimore, Md., assignor, by mesne assignments, to Universal Seal and Stopper Company, Camden, N. J. Bottle or jar sealing device | 741,843 | Oct. 20 | 2784 | 620 | 106 | 1875 |
| Schmitt, Edward D., Baltimore, Md., assignor, by mesne assignments, to Universal Seal & Stopper Company, Camden, N. J. Bottle or jar sealing device | 741,844 | Oct. 20 | 2787 | 621 | 106 | 1876 |
| Schmitt, Edward D., Baltimore, Md., assignor, by mesne assignments, to Universal Seal & Stopper Company, Camden, N. J. Bottle-seal | 747,240 | Dec. 15 | 3556 | 805 | 107 | 1914 |
| Schmitt, Frederick E., New York, N. Y., and L. E. Moore, Phœnixville, Pa. Brake-valve | 733,429 | July 14 | 1316 | 311 | 105 | 295 |
| Schmitt, George, Pittsburg, Pa. Garment-fastener | 724,211 | Mar. 31 | 4811 | 1078 | 103 | 1064 |
| Schmitt, Henry J., Wyndmoor, Pa. Valve | 738,362 | Sept. 8 | 1663 | 360 | 106 | 374 |
| Schmitt, Nikolaus, Kupperstey, and J. Krannichfeldt, Cologne, Germany. Electrical fuse-head and fuse | 720,073 | Feb. 10 | 1214 | 279 | 102 | 1097 |
| Schmitt, Nikolaus, and J. Krannichfeldt, Cologne, Germany. Electric ignition device | 722,913 | Mar. 17 | 2359 | 527 | 103 | 532 |
| Schmitt, Wilhelm, Stuttgart, Germany. Apparatus for ruling parallel lines | 723,039 | Mar. 17 | 2562 | 576 | 103 | 574 |
| Schmitt, Wilhelm, Schwelm, Germany. Apparatus for pouring out liquids | 733,083 | July 7 | 683 | 166 | 105 | 145 |
| Schmitthenner, Carlos, assignor to J. M. Voith, Maschinenfabrik, Heidenheim-on-Brenz, Germany. Indirectly-acting centrifugal regulator | 718,221 | Jan. 13 | 1304 | 288 / 289 | 102 | 295 |

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| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Schmitthenner, Carlos, assignor to J. M. Voith, Heidenheim, Germany. Wood-pulp-grinding machine | 727,458 | May 5 | 1181 | 261 | 104 | 255 |
| Schmitz, Charles A., New York, N. Y. Instrument-case | 746,999 | Dec. 15 | 3106 | 711 | 107 | 1815 |
| Schmitz, Constanz, Berlin, Germany. Manometric gage | 723,040 | Mar. 17 | 2563 | 577 | 103 | 574 |
| Schmitz, Frank, Chicago, Ill. Banana-shipping case | 726,578 | Apr. 28 | 4028 | 910<br>911 | 103 | 2057 |
| Schmitz, Frank, Chicago, Ill. Coaster-brake | 732,121 | June 30 | 4814 | 1074 | 104 | 2191 |
| Schmitz, Frank, Chicago, Ill. Banana-shipping case | 735,828 | Aug. 11 | 1518 | 325 | 105 | 1323 |
| Schmitz, Margaret, Tipton, Mo. Composition for coating yeast | 725,370 | Apr. 14 | 1756 | | 103 | 1556 |
| Schmoldt, Barney F., and F. C. Walter, Cleveland, Ohio. Wheel-fender | 723,927 | Mar. 31 | 4237 | 953 | 103 | 950 |
| Schmucker, Alfred P., Franklin, Pa., assignor to E. M. Helm, Cleveland, Ohio, and W. J. Hunkin, Ridgeway, Pa. Rotary engine | 747,894 | Dec. 22 | 4774 | 1078<br>1079 | 107 | 2206 |
| Schnabel, Herman E., Chicago, Ill., assignor to American Steel & Wire Company of New Jersey. Barbed-wire machine | 727,210 | May 5 | 727 | 157 | 104 | 158 |
| Schnaier, Milton, New York, N. Y. Testing and fumigating apparatus | 745,913 | Dec. 1 | 1103 | 247 | 107 | 1334 |
| Schnapp, Friedrich, Berlin, Germany. Conveying vessels or the like from one water-level to another in waterways | 737,968 | Sept. 1 | 824 | 180<br>181 | 106 | 180 |
| Schneible, Joseph, New York, N. Y. Power-transmitting device | 733,600 | July 14 | 1611 | 382 | 105 | 358 |
| Schneible, Joseph, New York, N. Y. Manufacture of fermented liquors | 734,756 | July 28 | 3825 | 891 | 105 | 853 |
| Schneider, Adolph, Chicago, Ill. Bottle-filler | 717,627 | Jan. 6 | 187 | 47 | 102 | 41 |
| Schneider, Adolph, Chicago, Ill. Filling-valve | 717,628 | Jan. 6 | 190 | 48 | 102 | 41 |
| Schneider, Adolph, Chicago, Ill. Filling-valve | 728,307 | May 19 | 2814 | 623 | 104 | 638 |
| Schneider, Adolph, Chicago, Ill. Bottling-machine | 732,123 | June 30 | 4820 | 1075 | 104 | 2192 |
| Schneider, Adolph, Trinidad, Colo. Barrel-tap | 732,122 | June 30 | 4816 | 1075 | 104 | 2192 |
| Schneider, Albert C., Peoria, Ill. Game apparatus | 719,145 | Jan. 27 | 3102 | 690 | 102 | 700 |
| Schneider, Carl, assignor of one-half to W. D. Elger, New York, N. Y. Sewing-machine attachment for sewing on buttons | 722,188 | Mar. 3 | 979 | 217 | 103 | 207 |
| Schneider, Carl O., Chicago, Ill. Lens for spectacles or the like | 744,982 | Nov. 24 | 4195 | 907 | 107 | 940 |
| Schneider, Charles, Sr., New Comerstown, Ohio. Axle-brace | 744,116 | Nov. 17 | 2609 | 558 | 107 | 585 |
| Schneider, Charles P. E., Le Creusot, France. Armor for ships, turrets, &c | 727,699 | May 12 | 1643 | 372 | 104 | 372 |
| Schneider, Charles P. E., Le Creusot, and J. B. G. A. Canet, Paris, France. Sighting apparatus for guns | 728,990 | May 26 | 4074 | 905 | 104 | 916 |
| Schneider, Eugene W., assignor to Dorticus Manufacturing Company, New York, N. Y. Photographic washing-machine | 747,241 | Dec. 15 | 3559 | 806 | 107 | 1915 |
| Schneider, Friedrich W., Frankfort-on-the-Main, Germany. Electric time-controller | 741,723 | Oct. 20 | 2577 | 574 | 106 | 1830 |
| Schneider, Friedrich W., Soest, Germany. Bearing for the spindles of latches | 746,176 | Dec. 8 | 1588 | 355 | 107 | 1460 |
| Schneider, George, assignor to C. Schoening Eisengiesserei & Werkzeugmaschinenfabrik Aktiengesellschaft, Berlin, Germany. Color-printing machine | 723,736 | Mar. 24 | 3859 | 868 | 103 | 853 |
| Schneider, George, Baltimore, Md., assignor to George Schneider Manufacturing Company of Baltimore City. Pneumatic toy | 744,630 | Nov. 17 | 3531 | 762 | 107 | 782 |
| Schneider, Gottlieb, assignor to R. G. Marcy Mfg. Co., Bluffton, Ind. Metal post | 722,635 | Mar. 10 | 1814 | 404 | 103 | 406 |
| Schneider, Gottleib, assignor to R. G. Marcy Mfg. Co., Bluffton, Ind. Air-valve | 728,810 | May 19 | 3752 | 837 | 104 | 834 |
| Schneider, Gottlieb, assignor to R. G. Marcy Manufacturing Company, Bluffton, Ind. Lubricator | 730,482 | June 9 | 1751 | 392 | 104 | 1502 |
| Schneider, Gottlieb, assignor to Red Cross Mfg. Co., Bluffton, Ind. Swinging guide for windmill-pump rods | 742,911 | Nov. 3 | 159 | 37 | 107 | 35 |
| Schneider, Henry C., North Milwaukee, Wis. Machine for making joints | 722,197 | Mar. 3 | 996 | 221 | 103 | 210 |
| Schneider, Henry P., Peoria, Ill. Street-car fender | 731,508 | June 23 | 3661 | 816<br>817 | 104 | 1939 |
| Schneider, Jacob P. (See Dixon, Albert S., assignor.) | | | | | | |
| Schneider, John C., Hamburg, Germany. Valve for hydraulic air-compressors | 741,172 | Oct. 13 | 1456 | 331 | 106 | 1575 |
| Schneider, John F., New York, N. Y. Bottle-tin-foiling machine | 732,656 | June 30 | 5857 | 1297<br>1298<br>1299<br>1300 | 104 | 2411 |
| Schneider, John G., Boston, assignor of one-half to W. M. Clark, Brookline, Mass. Burnishing-machine | 728,503 | May 19 | 3165 | 701 | 104 | 711 |
| Schneider, Oscar H. (See Powell and Schneider.) | | | | | | |
| Schneider, Vincent, Trimountain, Mich. Rock-drill | 722,914 | Mar. 17 | 2361 | 528 | 103 | 532 |
| Schnek, Alois, Vienna, Austria-Hungary. Racket for playing lawn-tennis, &c | 739,450 | Sept. 22 | 3713 | 827 | 106 | 843 |
| Schnelbach, Harry A., Pittsburg, and H. A. Heupel, Charleroi, assignors to Macbeth Evans Glass Company, Pittsburg, Pa. Grinding-machine | 745,677 | Dec. 1 | 657 | 152 | 107 | 1238 |
| Schnell, John, Macon, Ga. Fly-catcher | 745,914 | Dec. 1 | 1106 | 248 | 107 | 1335 |
| Schnell, John A., Hampstead, Md. Mechanical movement | 724,955 | Apr. 7 | 988 | 227 | 103 | 1380 |
| Schnetzer, Karl, Aussig, Austria-Hungary. Soap-molding machine | 735,304 | Aug. 4 | 514 | 104 | 105 | 1090 |
| Schniewind, Frederic W. C., assignor to United Coke and Gas Company, New York, N. Y. Double coke-pusher | 723,493 | Mar. 24 | 3448 | 771<br>772 | 103 | 766 |
| Schniewind, Frederic W. C., Everett, Mass., assignor to United Coke & Gas Company, Charleston, W. Va., and Philadelphia, Pa. Enriching gas | 728,991 | May 26 | 4077 | 905 | 104 | 916 |
| Schober, Charles W., Burlington, Wis., assignor to Eastman Kodak Company, Rochester, N. Y. Camera | 726,356 | Apr. 28 | 3586 | 814<br>815 | 103 | 1972 |
| Schoch, Leonard E., assignor of seven-twelfths to E. J. Schafer and J. M. Spiller, Chicago, Ill. Suspenders | 737,497 | Aug. 25 | 4612 | 1033 | 105 | 2018 |
| Schoch, Leonard E., and E. J. Schafer, Chicago, Ill. Combination muffler and chest-protector | 746,586 | Dec. 8 | 2307 | 529 | 107 | 1615 |
| Schock, George W., South Bend, Ind. Paper-folding machine | 740,592 | Oct. 6 | 412 | 88 | 106 | 1334 |
| Schock, George W., South Bend, Ind. Paper-folding machine | 740,593 | Oct. 6 | 413 | 88, 89 | 106 | 1334 |
| Schock, George W., South Bend, Ind. Means for preventing lost motion | 740,594 | Oct. 6 | 415 | 89 | 106 | 1335 |
| Schoder, Charles E. (See Kupfer and Schoder.) | | | | | | |
| Schoeffler, Ida, Louisville, Ky. Fire-grate | 731,229 | June 16 | 3113 | 690 | 104 | 1806 |
| Schoeller, Gustav A., Mülheim-on-the-Ruhr, assignor to F. Krupp, Essen-on-the-Ruhr, Germany. Sighting attachment for guns | 722,761 | Mar. 17 | 2085 | 467 | 103 | 476 |
| Schoellhorn, August, and H. S. Albrecht, St. Louis, Mo. Drier | 732,451 | June 30 | 5467 | 1213 | 104 | 2326 |
| Schoellhorn, August, and H. S. Albrecht, St. Louis, Mo. Pulverizer | 748,536 | Dec. 29 | 6005 | 1360<br>1361 | 107 | 2498 |
| Schoellkopf, Hartford & Hanna Company. (See Culmann, Edward, assignor.) | | | | | | |
| Schoen, Carl, New York, N. Y. Shuttle-box-operating mechanism for looms | 721,130 | Feb. 17 | 3223 | 738 | 102 | 1539 |
| Schoen, Charles T. (See Loss, Henrik V., assignor.) | | | | | | |
| Schoenfelder, Paul E., Newark, assignor to M. Bauer, Montclair, N. J. Combined printing and toning compound | 730,800 | June 9 | 2302 | | 104 | 1622 |
| Schoenhut, Albert, Philadelphia, Pa. Musical instrument | 718,388 | Jan. 13 | 1607 | 354 | 102 | 359 |
| Schoenhut, Albert, Philadelphia, Pa. Jointed figure | 725,594 | Apr. 14 | 2173 | 492<br>493 | 103 | 1646 |
| Schoening Eisengiesserei & Werkzeugmaschinenfabrik Aktiengesellschaft, Carl. (See Schneider, George, assignor.) | | | | | | |
| Schoenmehl, Charles B., Waterbury, Conn. Battery element | 737,285 | Aug. 25 | 4215 | 939 | 105 | 1930 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|
| | | | Spec. | Drgs. | Vol. | Page. |
| Schoenmehl, Charles B., Waterbury, Conn. Galvanic battery | 737,286 | Aug. 25 | 4216 | 939 | 105 | 1930 |
| Schoenner, Georg. (See Schwarzer, Wilhelm, assignor.) | | | | | | |
| Schoenstein, Felix F., San Francisco, Cal. Pneumatic self-playing musical instrument | 740,993 | Oct. 6 | 1120 | 253 | 106 | 1485 |
| Schoenthaler, Edward F., assignor of two-thirds to W. H. Parker and J. F. Finn, Long-branch, N. J. Insulator | 744,631 | Nov. 17 | 3532 | 762 | 107 | 782 |
| Schoenthaler, Frank C., Jr., Chicago, Ill. Bushing for barrels | 723,553 | Mar. 24 | 3540 | 792 | 103 | 785 |
| Schoenthaler Manufacturing Company. (See Haas, Knight, and Kochs, assignors.) | | | | | | |
| Schoeppl, Joseph F., Baltimore, Md. Hook and eye | 728,770 | May 19 | 3669 | 816 | 104 | 817 |
| Schoettel, Edward A., New York, N. Y. Incandescent-mantle lamp | 722,915 | Mar. 17 | 2363 | 528 | 103 | 532 |
| Schoettl, Josef, *et al.* (See Selg and Guntrum, assignors.) | | | | | | |
| Schofield, Albert B., assignor to Keystone Seal & Press Company, New York, N. Y. Seal-press | 740,185 | Sept. 29 | 5081 | 1142 | 106 | 1153 |
| Schofield, Charles A., Los Angeles, Cal. General ledger | 721,969 | Mar. 3 | 592 | 132 | 103 | 129 |
| Schofield, Eugene H., Toledo, Ohio. Bottle-filling machine | 717,720 | Jan. 6 | 352 | 86 | 102 | 76 |
| Schofield, Eugene H., Toledo, Ohio. Diffusion apparatus | 728,308 | May 19 | 2818 | 623<br>624 | 104 | 639 |
| Schofield, Laura D. (See Schofield, William A. and L. D.) | | | | | | |
| Schofield, William A. and L. D., Indianapolis, Ind. Extensible telescopic leg | 719,146 | Jan. 27 | 3104 | 690 | 102 | 701 |
| Scholer, August, Pittsburg, Pa. Lock-nut | 732,590 | June 30 | 5736 | 1273 | 104 | 2384 |
| Scholes, John. (See Parkinson and Scholes.) | | | | | | |
| Scholfield, Joseph J., Providence, R. I. Presser-wheel for the chains of cloth-drying machines | 743,990 | Nov. 10 | 2325 | 497 | 107 | 516 |
| Scholl, Albert, Mannheim, Germany. Apparatus for raising liquids | 724,051 | Mar. 31 | 4486 | 1011 | 103 | 998 |
| Scholl, Albert, Mannheim, Germany. Heating-boiler | 742,359 | Oct. 27 | 3833 | 860 | 106 | 2104 |
| Scholl, Charles. (See Gates, Louis W., assignor.) | | | | | | |
| Scholl & Company, Julian. (See Brown, J Grove, assignor.) | | | | | | |
| Scholl & Company, Julian. (See Fawcett, William M., assignor.) | | | | | | |
| Scholl and Company, Julian. (See Fawcett and Heisler, assignors.) | | | | | | |
| Scholl, Franz. (See Ernst and Scholl.) | | | | | | |
| Scholl, Franz, assignor to Farbwerke, vorm Meister, Lucius & Brüning, Höchst-on-the-Main, Germany. Making azo dyes | 741,552 | Oct. 13 | 2239 | ..... | 106 | 1744 |
| Scholl, Phillip J. (See Scott and Scholl.) | | | | | | |
| Scholz, Charles O. (See Scholz, John A., assignor.) | | | | | | |
| Scholz, John A., assignor of one-half to C. O. Scholz, Pittsburg, Pa. Gas-burner | 729,224 | May 26 | 4491 | 990 | 104 | 1002 |
| Scholz, Samuel G., Billings, Mo. Rotary fly-brush attachment for screen-doors | 724,052 | Mar. 31 | 4487 | 1011 | 103 | 998 |
| Schönert, Carl, Newark, N. J. Bottle stopper or seal | 731,509 | June 23 | 3663 | 817 | 104 | 1940 |
| Schonfeld, William A., and A. Stenhouse, Chicago, Ill. Umbrella | 744,415 | Nov. 17 | 3178 | 681 | 107 | 709 |
| Schönhals, Edmund. (See Lehmann and Schönhals.) | | | | | | |
| Schoof, Ernst, Chemnitz, Germany. Feed apparatus for steam-boilers | 738,247 | Sept. 8 | 1388 | 301 | 106 | 316 |
| Schooley, Clayton M., Leesburg, Va. Pliers | 720,974 | Feb. 17 | 2895 | 664 | 102 | 1463 |
| Schoonmaker, Harry A. (See Padberg, Franz, assignor.) | | | | | | |
| Schopbach, Charles H., Aurora, Ill., assignor to Chicago Corset Company. Abdominal corset | 732,378 | June 30 | 5333 | 1182 | 104 | 2298 |
| Schopfer, A., *et al.* (See Schirmer, Friederich W., assignor.) | | | | | | |
| Schossow, Charles and F. A., Detroit, Mich. Automatic flushing-valve | 729,965 | June 2 | 818 | 183 | 104 | 1294 |
| Schossow, Frederick A. (See Schossow, Charles and F. A.) | | | | | | |
| Schoth, Arthur, Beason, Ill. Wheel-hub | 720,185 | Feb. 10 | 1430 | 327 | 102 | 1142 |
| Schott, Andrew C. (See Lattard and Schott.) | | | | | | |
| Schott & Gen. (See Schott, Otto, assignor.) | | | | | | |
| Schott, Hugo, assignor of one-half to A. J. Bubolz, Chicago, Ill. Cornice-brake machine | 722,149 | Mar. 3 | 901 | 199 | 103 | 193 |
| Schott, Otto, assignor to Schott & Gen, Jena, Sax-Weimar, Germany. Manufacturing hollow glass bodies | 722,386 | Mar. 10 | 1352 | 299 | 103 | 304 |
| Schott, Otto, assignor to Schott & Gen, Jena, Germany. Lamp-chimney | 735,598 | Aug. 4 | 1080 | 229 | 105 | 1210 |
| Schott, William, and W. Ewer, Flint, Mich. Car-replacer | 738,632 | Sept. 8 | 2173 | 475 | 106 | 482 |
| Schottlander, Theodore, assignor to George C. Batcheller & Company, Bridgeport, Conn. Corset | 736,029 | Aug. 11 | 1895 | 405 | 105 | 1405 |
| Schou, Cecil V., Copenhagen, Denmark. Smoke-generator for shrapnel, shells, &c | 723,737 | Mar. 24 | 3862 | ..... | 103 | 853 |
| Schou, Cecil V., Copenhagen, Denmark. Projectile | 734,966 | July 28 | 4211 | 979 | 105 | 934 |
| Schou, Mathias, Wymore, Nebr. Conveyer | 731,713 | June 23 | 4036 | 901 | 104 | 2012 |
| Schouboe, Jens T. S., Rungsted, Denmark. Recoil-firearm | 730,801 | June 9 | 2303 | 512 | 104 | 1623 |
| Schouboe, Jens T. S., Rungsted, Denmark. Automatic firearm | 733,681 | July 14 | 1745 | 413 | 105 | 385 |
| Schouler, William W., Glenridge, N. J. Sliding door | 738,075 | Sept. 1 | 1012 | 226 | 106 | 219 |
| Schoup, Emil, Lima, Ohio. Magazine for heating-stoves | 727,459 | May 5 | 1182 | 261 | 104 | 255 |
| Schrader, Ernest C., Pittsburg, Pa., assignor of one-half to H. C. Wood, Toledo, Ohio. Grinding-machine for glassware | 731,230 | June 16 | 3115 | 690<br>691 | 104 | 1807 |
| Schrader, George F., assignor of one-half to Rochester Wringer Company, Rochester, N. Y. Clothes-drier | 743,758 | Nov. 10 | 1881 | 397 | 107 | 418 |
| Schrader, George H. F., New York, N. Y. Tire-valve and cap | 724,128 | Mar. 31 | 4643 | 1046 | 103 | 1031 |
| Schrader, George H. F., New York, N. Y. Ferruling hose and product thereof | 724,129 | Mar. 31 | 4646 | 1046 | 103 | 1032 |
| Schrader, George H. F., New York, N. Y. Machine for applying ferrules | 741,073 | Oct. 13 | 1266 | 287 | 106 | 1537 |
| Schrader, Harry B., Alliance, Nebr. Line-pipe coupling | 743,935 | Nov. 10 | 2206 | 476 | 107 | 486 |
| Schrader, Hermann, Hönningen, Germany. Mordanting wool, &c | 735,599 | Aug. 4 | 1080 | ..... | 105 | 1210 |
| Schrader, Hugo E., Chicago, Ill. Oscillating pump | 725,595 | Apr. 14 | 2175 | 493 | 103 | 1647 |
| Schrader, Jean F. D., Paris, France. Mapping instrument | 735,829 | Aug. 11 | 1519 | 325<br>326 | 105 | 1323 |
| Schrader, Rudolph, assignor to E. Salomonsohn, Hamburg, Germany. Machine for the manufacture of molasses fodder | 740,699 | Oct. 6 | 580 | 130 | 106 | 1372 |
| Schram, Alexander L., Woodstock, Canada. Cover for jars or analogous vessels | 734,140 | July 21 | 2669 | 628 | 105 | 598 |
| Schramberger Uhrfedernfabrik Gesellschaft mit Beschraenkter Haftung. (See Klingler, Matthäus, assignor.) | | | | | | |
| Schramm, Adolph W. (See Wilford and Schramm.) | | | | | | |
| Schramm, Adolph W., assignor of one-half to E. B. Wilford, Philadelphia, Pa. Alternating-current motor | 723,786 | Mar. 24 | 3945 | 890 | 103 | 871 |
| Schramm, Adolph W., assignor to Electro Dental Manufacturing Company, Philadelphia, Pa. Alternating-current motor | 725,596 | Apr. 14 | 2178 | 493 | 103 | 1648 |
| Schramm, Heinrich, assignor of one-half to L. Schmidt, Nuremberg, Germany. Cross-bow | 728,504 | May 19 | 3167 | 701 | 104 | 711 |
| Schratwieser Fireproof Construction Company. (See Schratwieser, Jacob, assignor.) | | | | | | |
| Schratwieser, Jacob, assignor to Schratwieser Fireproof Construction Company, Brooklyn, N. Y. Floor and ceiling construction | 719,378 | Jan. 27 | 3538 | 789 | 102 | 794 |
| Schratwieser, Jacob, assignor to Schratwieser Fireproof Construction Company, Brooklyn, N. Y. Floor and ceiling construction | 719,379 | Jan. 27 | 3540 | 789 | 102 | 795 |
| Schratwieser, Jacob, assignor to Schratwieser Fireproof Construction Company, Brooklyn, N. Y. Floor and ceiling construction | 719,380 | Jan. 27 | 3541 | 790 | 102 | 795 |
| Schratwieser, Jacob, Brooklyn, assignor to Schratwieser Fireproof Construction Company, New York, N. Y. Fireproof wall, &c | 724,744 | Apr. 7 | 613 | 143 | 103 | 1299 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Schratwieser, Jacob, Brooklyn, assignor to Schratwieser Fireproof Construction Company, New York, N. Y. Floor and ceiling construction | 729,799 | June 2 | 510 | 112 | 104 | 1232 |
| Schraube, Conrad, and W. Voigtländer-Tetzner, assignors to Badische Anilin & Soda Fabrik, Ludwigshafen-on-the-Rhine, Germany. Mixed disazo dye and making same | 718,028 | Jan. 6 | 959 | ..... | 102 | 207 |
| Schraube, Conrad, and W. Voigtlaender-Tetzner, assignors to Badische Anilin & Soda Fabrik, Ludwigshafen-on-the-Rhine, Germany. Red azo dye | 718,389 | Jan. 13 | 1608 | ..... | 102 | 360 |
| Schraubstadter, Richard T., St. Louis, Mo., assignor to F. W. Ritter, Jr., Washington, D. C. Concentrator-table | 738,493 | Sept. 8 | 1923 | 419 | 106 | 428 |
| Schraudner, Frederick. (See Cramer and Schraudner.) | | | | | | |
| Schreck, Peter, Pittsburg, Pa. Lining for refrigerators or the like | 742,072 | Oct. 20 | 3306 | 736 | 106 | 1979 |
| Schreder, John C., Tecumseh, Mich. Silo | 725,289 | Apr. 14 | 1605 | 362<br>363 | 103 | 1525 |
| Schreiber, Charles W. (See Jecklin, Jacob, assignor.) | | | | | | |
| Schreiber, Montz O., Niedergoseln, near Mügeln, Germany. Agricultural implement | 727,460 | May 5 | 1184 | 261 | 104 | 256 |
| Schreidt, Frank, Mansfield, Ohio. Relief-valve | 730,167 | June 2 | 1152 | 259 | 104 | 1362 |
| Schreiner, Jacob, *et al.* (See Smallbone, Harry E., assignor.) | | | | | | |
| Schrenk, Barbara E., Philadelphia, Pa. Book-cover | 737,969 | Sept. 1 | 825 | 181 | 106 | 181 |
| Schreuder, Andrew M., Germantown, Pa., assignor to himself and F. D. Herbert, New York, N. Y. Water-cooling tower | 727,461 | May 5 | 1185 | 261<br>262 | 104 | 256 |
| Schreuder, Jens G., Edgewood, assignor to Union Switch and Signal Company, Swissvale, Pa. Railway-signal | 736,554 | Aug. 18 | 2823 | 618 | 105 | 1621 |
| Schridde, William. (See Alexa, Victor, assignor.) | | | | | | |
| Schriefer, Edward G., Cincinnati, Ohio. Catch | 727,462 | May 5 | 1188 | 262 | 104 | 257 |
| Schriefer, Edward G., Cincinnati, Ohio. Extensible case | 739,725 | Sept. 22 | 4208 | 941<br>942 | 106 | 950 |
| Schriltz, James B. von, *et al.* (See Wolf and Williams, assignors.) | | | | | | |
| Schriver & Company, O. P. (See Webster, John M., assignor.) | | | | | | |
| Schrock, Amos, San Francisco, Cal. Detachable collapsible couch-frame | 735,600 | Aug. 4 | 1081 | 230 | 105 | 1210 |
| Schrödel, Georg, Nuremberg, Germany. Projectile | 735,415 | Aug. 4 | 720 | 154 | 105 | 1134 |
| Schroder, Anson A., Vanhorn, Iowa. Eaves-trough hanger | 720,743 | Feb. 17 | 2485 | 572 | 102 | 1376 |
| Schroeder, Charles, Bridgeport, Conn. Fireproof window casing and sash | 732,901 | July 7 | 358 | 88 | 105 | 78 |
| Schroeder, Charles F., and F. E. Lauffer, Toledo, Ohio. Coloring-screen for white-light rays | 720,491 | Feb. 10 | 1973 | 451 | 102 | 1256 |
| Schroeder, Conrad, Milwaukee, Wis. Candle-holder for Christmas trees | 737,157 | Aug. 25 | 3947 | 878 | 105 | 1874 |
| Schroeder, Emil, New York, N. Y. Fleshing and shaving machine | 741,553 | Oct. 13 | 2239 | 499 | 106 | 1744 |
| Schroeder, Ernst and H. V., Minier, Ill. Portable grain dump and elevator | 733,430 | July 14 | 1320 | 311<br>312 | 105 | 296 |
| Schroeder, Harry F., Reading, Pa. Lawn-mower | 728,992 | May 26 | 4078 | 905 | 104 | 916 |
| Schroeder, Henry V. (See Schroeder, Ernst and H. V.) | | | | | | |
| Schroeder, Max, Hamborn, Germany, assignor to New Jersey Zinc Company, New York, N. Y. Making sulfuric anhydrid and sulfuric acid by the contact process | 742,502 | Oct. 27 | 4089 | 920 | 106 | 2156 |
| Schroeder, Richard F., Sacramento, Cal. Oil-burner | 724,053 | Mar. 31 | 4489 | 1011 | 103 | 998 |
| Schroeder, William S., and A. P. Lindholm, Chicago, Ill. Car-coupling | 723,410 | Mar. 24 | 3276 | 734 | 103 | 732 |
| Schroeder, William S., and A. P. Lindholm, Chicago, Ill. Car-coupling | 725,150 | Apr. 14 | 1365 | 308 | 103 | 1474 |
| Schroeder, William S., and A. P. Lindholm, Chicago, Ill. Car-coupling | 725,151 | Apr. 14 | 1368 | 308 | 103 | 1475 |
| Schroedter, August, Charlottenburg, near Berlin, Germany. Apparatus for filling bottles or jugs with aerated liquids | 740,931 | Oct. 6 | 996 | 225<br>226 | 106 | 1459 |
| Schroeter Brothers Hardware Company. (See Schroeter, Oscar J., assignor.) | | | | | | |
| Schroeter, Oscar J., assignor to Schroeter Brothers Hardware Company, St. Louis, Mo., Grater | 744,416 | Nov. 17 | 3179 | 681<br>682 | 107 | 709 |
| Schröter, Max, Breslau, Germany. Apparatus for rescuing persons from buildings in case of fire | 724,745 | Apr. 7 | 614 | 144 | 103 | 1300 |
| Schrotz, Carl, Cologne, Germany. Rebound-preventing device for gas-engines | 735,912 | Aug. 11 | 1681 | 358 | 105 | 1358 |
| Schryburt, Francois O., Quebec, Canada. Sole-blocking machine | 726,768 | Apr. 28 | 4384 | 986<br>987 | 103 | 2130 |
| Schuarzschild, Solomon, Rochester, N. Y. Electric burglar-alarm | 734,967 | July 28 | 4213 | 979 | 105 | 934 |
| Schubbert, Mary, Los Angeles, Cal. Flat-iron stand | 734,243 | July 21 | 2853 | 668 | 105 | 637 |
| Schubbert, Wilhelm, Berlin, Germany. Manufacturing wigs | 737,780 | Sept. 1 | 415 | ..... | 106 | 91 |
| Schubert, Bernhard F. (See Simms, Rudolph, assignor.) | | | | | | |
| Schubert, Bernhard F., assignor of one-half to R. Simms, Washington, D. C. Electric burglar-alarm | 742,073 | Oct. 20 | 3306 | 736 | 106 | 1979 |
| Schubert, Franz, Ganstadt, near Bamberg, assignor to J. G. Held, Bamberg, Germany. Manufacture of substance for filling hollow brake-beams | 723,319 | Mar. 24 | 3093 | ..... | 103 | 698 |
| Schubert, George, Rushing, Tex. Plunger for baling-presses | 727,850 | May 12 | 1950 | 435 | 104 | 432 |
| Schuch, John P., Jr., Cripplecreek, Colo. Separating precious metals from solvent solutions | 722,762 | Mar. 17 | 2087 | 467 | 103 | 477 |
| Schuehle, Frederick A., and H. K. Horn, assignors to Piel Bros. Mnfg. Co., Indianapolis, Ind. Automatic hinged-leaf support | 734,757 | July 28 | 3827 | 892 | 105 | 853 |
| Schueler, Frederick, Columbus, Ohio. Faucet | 729,678 | June 2 | 276 | 63 | 104 | 1186 |
| Schuessler, Henry, Peru, Ill. Polishing-machine | 732,657 | June 30 | 5865 | 1300<br>1301 | 104 | 2412 |
| Schuett, Henry. (See Englerth and Schuett.) | | | | | | |
| Schuette, Frederick, G. Fleischer, and W. S. Thellman, Homestead, Pa. Hose-coupling | 747,242 | Dec. 15 | 3561 | 806 | 107 | 1916 |
| Schuette, Herman G., Manitowoc, Wis. Canopy-support for beds | 739,352 | Sept. 22 | 3502 | 783 | 106 | 796 |
| Schufflay, Joseph, New York, N. Y. Corset | 732,591 | June 30 | 5737 | 1274 | 104 | 2385 |
| Schug, Jacob, assignor of one-half to J. H. Anderson and G. A. Metzger, Cleveland, Ohio. Base for porch-pillars or similar uprights | 738,850 | Sept. 15 | 2625 | 579 | 106 | 595 |
| Schuh, Frank, Albany, N. Y. Water-closet | 728,624 | May 19 | 3415 | 756 | 104 | 765 |
| Schukei, Emil, *et al.* (See Sandbo, Anton I., assignor.) | | | | | | |
| Schule, Friedrich H., Hamburg, Germany. Reciprocating conveyer | 724,054 | Mar. 31 | 4492 | 1011<br>1012 | 103 | 999 |
| Schule, Friedrich H., Hamburg, Germany. Separating-machine | 726,996 | May 5 | 347 | 75 | 104 | 75 |
| Schuler, Dominic F., Louisville, Ky. Boiler-cleaner | 729,425 | May 26 | 4837 | 1072 | 104 | 1073 |
| Schüler, geb. Paessler, Anna. (See Schüler, Otto, assignor.) | | | | | | |
| Schuler, Ludwig, and J. Ericson, Telluride, Colo. Cable grip or clutch device | 734,435 | July 21 | 3208 | 755 | 105 | 712 |
| Schüler, Otto, assignor to A. Schüler, geb. Paessler, Berlin, Germany. Elevator | 734,371 | July 21 | 3097 | 729 | 105 | 689 |
| Schulhoff, Henry. (See Haas, Max, assignor.) | | | | | | |
| Schuller, Lawrence, Chicago, Ill. Plasterer's corner-bead | 727,463 | May 5 | 1190 | 262 | 104 | 257 |
| Schult, Lars G., assignor to E. L. Krag, Chicago, Ill. Transfer-file | 720,975 | Feb. 17 | 2897 | 664 | 102 | 1463 |
| Schulte, August K., Philadelphia, Pa. Inhaler | 723,738 | Mar. 24 | 3863 | 869 | 103 | 853 |
| Schulte, John A., Cincinnati, Ohio. Stove | 720,626 | Feb. 17 | 2280 | 523 | 102 | 1332 |
| Schulte, Wilhelm, Overpelt-lez-Neerpelt, near Limburg, Belgium. Reducing zinc from its oxids, &c | 718,222 | Jan. 13 | 1305 | ..... | 102 | 295 |
| Schultheiss, William F., San Diego, Cal. Adjustable metal basin-plug | 732,452 | June 30 | 5468 | 1214 | 104 | 2327 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | Spec. | Drg. | Vol. | Page. |
| Schultz, Charles L. and R. A., Chicago, Ill. Autotruck | 733,084 | July 7 | 684 | 166, 167, 168 | 105 | 145 |
| Schultz, Charles P., Pawtucket, R. I. Dental mixing-mortar | 737,287 | Aug. 25 | 4218 | 939 | 105 | 1931 |
| Schultz, Clarence B. (See Goldschmidt, Hans, assignor.) | | | | | | |
| Schultz, Emil, Potsdam, assignor to M. Möller, Altona, Germany. Self-winding electric clock | 737,781 | Sept. 1 | 416 | 88, 89 | 106 | 91 |
| Schultz, Frederick. (See Benoit, Fredrick, assignor.) | | | | | | |
| Schultz, Frederick A., Hasbrouck Heights, N. J., assignor to Mattson Rubber Company, New York, N. Y. Dress-shield | 726,357 | Apr. 28 | 3590 | 815 | 103 | 1973 |
| Schultz, Frederick A., Hasbrouck Heights, N. J., assignor to Mattson Rubber Company, New York, N. Y. Rubber eraser | 732,658 | June 30 | 5866 | 1301 | 104 | 2412 |
| Schultz, George W., St. Davids, Pa. Rod-packing | 736,303 | Aug. 11 | 2371 | 515 | 105 | 1509 |
| Schultz, John C. W. (See Woelfel and Schultz.) | | | | | | |
| Schultz, Robert A. (See Schultz, Charles L. and R. A.) | | | | | | |
| Schultz, Wilbur, assignor of one-half to A. W. Lindquist, Wilmot, S. D. Corn-husking machine | 727,851 | May 12 | 1951 | 435, 436 | 104 | 433 |
| Schultze, Gustav F. W., Berkeley, Cal. Registering means for coin-controlled weighing-machines | 725,371 | Apr. 14 | 1757 | 395 | 103 | 1556 |
| Schultze, Paul, Berlin, Germany. Device for automatically recording the amount of carbonic acid in products of combustion | 728,022 | May 12 | 2262 | 503 | 104 | 499 |
| Schulz, Adolph C., Detroit, Mich., assignor of two-thirds to G. A. Ficke and F. Wilhelm, Cincinnati, Ohio. Cement and artificial-stone composition | 723,494 | Mar. 24 | 3449 | ..... | 103 | 766 |
| Schulz, Albert. (See Steenken and Schulz.) | | | | | | |
| Schulz, Frank J., Pratt, Minn. Draft-evener | 742,747 | Oct. 27 | 4520 | 1024 | 106 | 2249 |
| Schulz, Frank L., Chicago, Ill. Time-stamp | 745,244 | Nov. 24 | 4734 | 1033 | 107 | 1052 |
| Schulz, George, New York, N. Y. Guard for gas-burners | 731,510 | June 23 | 3665 | 817 | 104 | 1940 |
| Schulz, Herman H. (See Kirmse, Oscar, assignor.) | | | | | | |
| Schulz, Richard, Berlin, Germany. Steam-turbine | 718,661 | Jan. 20 | 2173 | 475, 476 | 102 | 494 |
| Schulz, Richard, Berlin, Germany. Compound turbine | 725,880 | Apr. 21 | 2711 | 617 | 103 | 1776 |
| Schulz, Richard, Berlin, Germany. Steam-generator | 737,782 | Sept. 1 | 418 | 89, 90, 91 | 106 | 92 |
| Schulz, Richard, Berlin, Germany. Steam-boiler | 746,882 | Dec. 15 | 2874 | 662, 663, 664, 665 | 107 | 1762 |
| Schulze, Leon F. and R., Cleveland, Ohio. Metal-working machine | 732,453 | June 30 | 5469 | 1214, 1215 | 104 | 2327 |
| Schulze, Louis A., San Francisco, Cal. Molder's tool | 745,678 | Dec. 1 | 660 | 153 | 107 | 1238 |
| Schulze, Louis A., San Francisco, Cal. Molder's slick | 745,679 | Dec. 1 | 661 | 153 | 107 | 1238 |
| Schulze, Oscar H. R., Chicago, Ill. Fire-arrester for electric-incandescent-light wires | 733,876 | July 14 | 2125 | 501 | 105 | 463 |
| Schulze, Paul, Erfurt, Germany. Self-closing and changeable case for postal boxes | 741,724 | Oct. 20 | 2580 | 574 | 106 | 1831 |
| Schulze, Robert. (See Schulze, Leon F. and R.) | | | | | | |
| Schulze, Wilhelm, Gera, Germany. Support for rubber-tired wheels | 719,615 | Feb. 3 | 363 | 84 | 102 | 898 |
| Schumacher, Carl R., and D. Speelman, Providence, R. I. Non-refillable bottle | 737,498 | Aug. 25 | 4613 | 1034 | 105 | 2018 |
| Schumacher, Charles F. W., Kalamazoo, Mich. Paper-coating machine | 726,358 | Apr. 28 | 3591 | 815 | 103 | 1973 |
| Schumacher, Eberhard, assignor to J. F. Pease and Company, Limited, Darlington, England. Pulley | 733,877 | July 14 | 2125 | 501 | 105 | 463 |
| Schumacher, Eduard, Strassburg, Germany. Register for bookkeeping purposes | 728,625 | May 19 | 3416 | 756 | 104 | 765 |
| Schumacher, Frederick, assignor, by mesne assignments, to M. F. McCarthy, Chicago, Ill. Roller-bearing | 747,895 | Dec. 22 | 4777 | 1079 | 107 | 2207 |
| Schumacher, George J. (See Beardsley, William J., assignor.) | | | | | | |
| Schumacher, Henry, San Francisco, Cal. Geographical clock | 745,680 | Dec. 1 | 662 | 153 | 107 | 1239 |
| Schumacher, Walter J., Chicago, Ill. Ventilator | 748,315 | Dec. 29 | 5581 | 1273 | 107 | 2403 |
| Schumaker, Charles P., *et al.* (See Waterbury, George H., assignor.) | | | | | | |
| Schuman, Alexander C., assignor to S. Coleman, Louisville, Ky. Type-writing machine | 718,390 | Jan. 13 | 1609 | 354 | 102 | 360 |
| Schuman, Alexander C., assignor to S. Coleman, Louisville, Ky. Steam-engine | 727,558 | May 5 | 1370 | 308, 309 | 104 | 295 |
| Schuman, Alexander C., assignor to S. Coleman, Louisville, Ky. Adding attachment for type-writing machines | 731,958 | June 23 | 4476 | 999 | 104 | 2169 |
| Schuman, Alexander C., assignor to R. W. Bingham, Louisville, Ky. Clock striking mechanism | 724,956 | Apr. 7 | 989 | 228 | 103 | 1380 |
| Schuman, Alexander C., assignor to R. W. Bingham, Louisville, Ky. Clock striking mechanism | 748,108 | Dec. 29 | 5221 | 1182, 1183 | 107 | 2326 |
| Schuman, James B., Indianapolis, Ind. Grain-elevator | 728,771 | May 19 | 3671 | 817 | 104 | 818 |
| Schuman, James B., Columbia City, assignor of one-half to J. K. Sharpe, Jr., Indianapolis, Ind. Shock-loader | 720,383 | Feb. 10 | 1795 | 407 | 102 | 1219 |
| Schumann, O. F. (See Melcher, Alphonso M., assignor.) | | | | | | |
| Schumann, Richard, Greiz, Germany. Cattle-mark | 726,104 | Apr. 21 | 3075 | 698 | 103 | 1851 |
| Schunck, Louis R., Milwaukee, Wis. Lock for stop-boxes | 737,667 | Sept. 1 | 198 | 42 | 106 | 46 |
| Schunk, John. (See Holtmann, Lindewirth, and Schunk.) | | | | | | |
| Schupp, Johann F., Astoria, N. Y. Weather-strip for window-sashes | 741,415 | Oct. 13 | 1954 | 433 | 106 | 1683 |
| Schüpphaus, Robert C., Brooklyn, N. Y. Pyroxylin compound | 741,554 | Oct. 13 | 2242 | ..... | 106 | 1745 |
| Schur, Schlioma, Kiew, Russia. Device for delivering news to and receiving such from the guards of trains running at full speed | 748,425 | Dec. 29 | 5783 | 1318, 1319 | 107 | 2449 |
| Schurek, Joseph, and F. B. Giesler, Milwaukee, Wis. Electric welding | 728,023 | May 12 | 2264 | 503 | 104 | 499 |
| Schurman, Norman, and E. F. Whited, Carterville, Mo. Lubricator | 746,883 | Dec. 15 | 2877 | 665 | 107 | 1763 |
| Schustek, Daniel, assignor to H. L. Andrews, Chicago, Ill. Piano or organ bench | 744,243 | Nov. 17 | 2861 | 613, 614 | 107 | 640 |
| Schuster, Albert, Tegel, near Berlin, Germany. Match-box-filling machine | 747,781 | Dec. 22 | 4548 | 1025, 1026, 1027 | 107 | 2157 |
| Schuster, Wenzel, and H. Ast, Vienna, Austria-Hungary. Electromagnetic friction-clutch | 736,789 | Aug. 18 | 3285 | 726 | 105 | 1714 |
| Schütt, Alfred, Charlottenburg, Germany. Stuffing-box for flexible steam or gas turbine shafts | 724,510 | Apr. 7 | 165 | 40 | 103 | 1205 |
| Schütt, Alfred, Charlottenburg, Germany. Heater | 724,511 | Apr. 7 | 166 | 40 | 103 | 1205 |
| Schutt, Duny A., Peru, Ind. Lamp-socket. (Reissue) | 12,099 | Mar. 10 | 1866 | 415 | 103 | 418 |
| Schutt, Owen. (See Denyes and Schutt.) | | | | | | |
| Schutte, Herman. (See Krall, Philip, assignor.) | | | | | | |
| Schütte, Johann, Bremerhaven, Germany. Steam-generator | 737,288 | Aug. 25 | 4219 | 939 | 105 | 1931 |
| Schutte, Louis, Philadelphia, Pa. Valve construction | 740,186 | Sept. 29 | 5082 | 1142 | 106 | 1153 |
| Schütte, Otto, Czersk, Germany. Blank cartridge | 726,579 | Apr. 28 | 4030 | 911 | 103 | 2057 |

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| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Schutte, William, *et al.* (See Burson, Amos, assignor.) | | | | | | |
| Schutz, Emile, San Francisco, Cal. Concentrator | 741,725 | Oct. 20 | 2581 | 575 | 106 | 1831 |
| Schütz, Gustav A., Wurzen, Germany. Utilizing the products of combustion of steam-boiler furnaces | 740,700 | Oct. 6 | 581 | 130 | 106 | 1373 |
| Schutz, Joseph M., assignor to Schutz-O'Neill Company, Minneapolis, Minn. Disintegrator | 739,227 | Sept. 15 | 3281 | 727 | 106 | 733 |
| Schutz, Joseph M., assignor to Schutz-O'Neill Company, Minneapolis, Minn. Power-feeder | 739,228 | Sept. 15 | 3284 | 727, 728 | 106 | 734 |
| Schutz, Joseph M., assignor to Schutz-O'Neill Company, Minneapolis, Minn. Corrugated lining for pulverizers | 745,075 | Nov. 24 | 4401 | 950, 951 | 107 | 982 |
| Schutz, Joseph M., assignor to Schutz-O'Neill Company, Minneapolis, Minn. Dust-collector | 745,076 | Nov. 24 | 4403 | 951 | 107 | 982 |
| Schutz-O'Neill Company. (See Schutz, Joseph M., assignor.) | | | | | | |
| Schutz, Rudolph G., Providence, R. I. Hair-pin | 719,697 | Feb. 3 | 506 | 114 | 102 | 930 |
| Schütze, August, assignor to F. A. Richter, Rudolstadt, Germany. Rolling-stock for toy railways | 741,982 | Oct. 20 | 3079 | 688 | 106 | 1934 |
| Schuyler, James R. (See Crossley, William H., assignor.) | | | | | | |
| Schuyler, William B., St. Louis, Mo. Sack-cleaner | 724,055 | Mar. 31 | 4494 | 1012 | 103 | 1000 |
| Schwaab, Frederick, and A. MacNeill, Boston, Mass. Self-closing nozzle | 725,152 | Apr. 14 | 1370 | 309 | 103 | 1475 |
| Schwab, Gustave, New York, N. Y. Stand or support for albums | 741,555 | Oct. 13 | 2244 | 499 | 106 | 1745 |
| Schwab, Louis. (See Sampson, Robert W., assignor.) | | | | | | |
| Schwab, Martin C., Baltimore, Md. Conveyer | 728,626 | May 19 | 3417 | 757, 758 | 104 | 766 |
| Schwab, Otto. (See Müller and Schwab.) | | | | | | |
| Schwab, Richard A. (See Conger, John B., assignor.) | | | | | | |
| Schwahn, Heinrich F. D., St. Louis, Mo. Producing aluminium | 719,698 | Feb. 3 | 506 | 115 | 102 | 930 |
| Schwanebeck, Carl, Glückstadt, Germany. Automatically-lowering mast | 720,074 | Feb. 10 | 1218 | 279, 280 | 102 | 1098 |
| Schwanenberg, Erich, Hanover, Germany. Producing artificial stones | 720,848 | Feb. 17 | 2654 | ------ | 102 | 1412 |
| Schwaner, Christian C., Winterset, Iowa. Jointed hame-tug | 734,001 | July 21 | 2376 | 558 | 105 | 533 |
| Schwaninger, Vitus, Oggersheim, Germany. Apparatus for raising liquids | 726,359 | Apr. 28 | 3592 | 815 | 103 | 1973 |
| Schwaninger, Vitus, Oggersheim, Germany. Steam-trap | 729,679 | June 2 | 277 | 63 | 104 | 1186 |
| Schwaninger, Vitus, Oggersheim, near Mannheim, Germany. Apparatus for raising liquids | 745,529 | Dec. 1 | 403 | 92 | 107 | 1185 |
| Schwark, Frederick H., Bonfield, Ill. Corn-shock compressor | 735,159 | Aug. 4 | 217 | 44 | 105 | 1028 |
| Schwartz, Charles H. (See Campbell and Schwartz.) | | | | | | |
| Schwartz, Edward H., assignor to Hawley Down Draft Furnace Company, Chicago, Ill. Furnace | 725,490 | Apr. 14 | 1992 | 449 | 103 | 1607 |
| Schwartz, Frank J., Longview, Ill. Chest for tools | 739,451 | Sept. 22 | 3715 | 827 | 106 | 843 |
| Schwartz, George. (See Shocklin and Schwartz.) | | | | | | |
| Schwartz, George W. (See Campbell and Schwartz.) | | | | | | |
| Schwartz, Harry, *et al.* (See Smith, George A., assignor.) | | | | | | |
| Schwartz, Henry, *et al.* (See Minck, Hermann G., assignor.) | | | | | | |
| Schwartz, Herman M., assignor to Florence Manufacturing Company, Northampton, Mass. Brush | 737,970 | Sept. 1 | 826 | 181 | 106 | 181 |
| Schwartz, Josef, Milwaukee, Wis. Implement-handle | 733,919 | July 14 | 2211 | 519 | 105 | 480 |
| Schwartz, Martin, Passaic, N. J. Horseshoe | 730,483 | June 9 | 1753 | 392 | 104 | 1503 |
| Schwartz, Michael, Chicago, Ill. Scale | 731,625 | June 23 | 3884 | 864 | 104 | 1982 |
| Schwartz, Wilhelm, Hanover, Germany. Nicotin-absorber | 729,680 | June 2 | 278 | 64 | 104 | 1186 |
| Schwartzkopff Coal Dust Firing Company. (See May, Benjamin W., assignor.) | | | | | | |
| Schwarz, Alfred, assignor to General Metals Refining Company, New York, N. Y. Apparatus for refining metals | 746,748 | Dec. 15 | 2614 | 600, 601 | 107 | 1704 |
| Schwarz, Arthur, Steglitz, near Berlin, Germany. Stereoscope | 720,849 | Feb. 17 | 2654 | 613 | 102 | 1412 |
| Schwarz, Arthur, Berlin, Schöneberg, Germany. Apparatus for developing, toning, and fixing photographs | 721,839 | Mar. 3 | 328 | 72, 73 | 103 | 72 |
| Schwarz, Charles L., Philadelphia, Pa. Spoke for vehicle-wheels | 743,665 | Nov. 10 | 1728 | 364 | 107 | 385 |
| Schwarz, Ernest G., New York, N. Y. Station-indicator | 723,739 | Mar. 24 | 3864 | 869 | 103 | 853 |
| Schwarz, Johann M., Eiken, Switzerland. Manufacturing coal bricks, particularly from bituminous brown coal | 734,002 | July 21 | 2377 | ------ | 105 | 533 |
| Schwarz, John, Jr., *et al.* (See Barling, Joseph A., assignor.) | | | | | | |
| Schwarz, Wilhelm. (See Witzenmann and Schwarz.) | | | | | | |
| Schwarzer, Wilhelm, assignor to G. Schoenner, Nuremberg, Germany. Compass | 723,041 | Mar. 17 | 2565 | 577 | 103 | 575 |
| Schwarzschild, Solomon, Rochester, N. Y. Electric burglar-alarm | 723,320 | Mar. 24 | 3094 | 696, 697 | 103 | 698 |
| Schwarzschild, Solomon, Rochester, N. Y. Electric alarm system | 730,576 | June 9 | 1925 | 428 | 104 | 1541 |
| Schwechler, John, Philadelphia, Pa., assignor, by mesne assignments, to R. W. Cavenaugh, New York, N. Y. Apparatus for manufacturing soap | 720,535 | Feb. 10 | 2078 | 480 | 102 | 1276 |
| Schwechler, John, assignor of one-half to O. J. S. Gaige, Philadelphia, Pa. Soap-supplier | 742,912 | Nov. 3 | 160 | 37 | 107 | 35 |
| Schwedtmann, Ferdinand. (See Layman and Schwedtmann.) | | | | | | |
| Schweer, George W., Windsor, Mo. Combined stamp, stationery, and cash box | 727,211 | May 5 | 734 | 157 | 104 | 159 |
| Schweigerer, John F., Camden, Ind. Coupling-pin | 726,829 | Apr. 28 | 4495 | 1014 | 103 | 2154 |
| Schweitzer, Albert, assignor to Keystone Electric & Manufacturing Co., Pittsburg, Pa. Electric-arc lamp | 737,668 | Sept. 1 | 199 | 43 | 106 | 46 |
| Schweitzer, Albert, Pittsburg, and A. Hausold, assignors to Keystone Electric & Manufacturing Co., Allegheny, Pa. Coiling-machine | 742,360 | Oct. 27 | 3834 | 860, 861 | 106 | 2104 |
| Schweitzer, August, Glendora, Cal. Acetylene-gas generator | 723,411 | Mar. 24 | 3279 | 734 | 103 | 732 |
| Schweitzer, Frederick J. (See Feiten, Philip, assignor.) | | | | | | |
| Schweitzer, Jacques O., Paris, France. Making sugar | 746,177 | Dec. 8 | 1589 | 355 | 107 | 1460 |
| Schwenck, Henry, New York, N. Y. Vehicle-brake | 746,391 | Dec. 8 | 1974 | 451 | 107 | 1541 |
| Schwerin, Botho, Berlin, Germany. Apparatus for electro-endosmotically freeing materials from fluids | 720,186 | Feb. 10 | 1430 | 327 | 102 | 1142 |
| Schwerin, Botho, Berlin, Germany. Electro-endosmotic process of extracting sugar | 723,928 | Mar. 31 | 4239 | 953 | 103 | 950 |
| Schwerin, Silas, Belleville, N. J., assignor to Hardman Rubber Company. Valve for syringes, atomizers, &c | 723,042 | Mar. 17 | 2566 | 577 | 103 | 575 |
| Schwidetzky, Oskar, New York, N. Y. Bowling game | 718,391 | Jan. 13 | 1611 | 354 | 102 | 360 |
| Schwier, Benjamin F., Cleveland, assignor of one-half to H. J. Norris, Wellington, Ohio. Composition of matter | 740,994 | Oct. 6 | 1124 | ------ | 106 | 1485 |
| Schwinger, Fred, Jr., Ackley, Iowa. Wheel-fender for railway-cars | 734,968 | July 28 | 4215 | 979 | 105 | 935 |
| Schwitalla, Friedrich, Schwientochlowitz, and P. Fiebig, Antonienhütte, Germany. Air-door | 743,572 | Nov. 10 | 1557 | 325 | 107 | 349 |
| Schyia, Arnold, assignor to Eisenhütten und Emaillirwerk, Neusalz-on-the-Oder, Prussia, Germany. Chopping-machine | 737,783 | Sept. 1 | 421 | 91 | 106 | 92 |
| Scism, John N., Schenectady, N. Y. Shoe attachment | 738,851 | Sept. 15 | 2626 | 579 | 106 | 595 |
| Scofield, Walter P., assignor of one-half to R. B. Livingston, Gainesville, Fla. Tire | 736,638 | Aug. 18 | 2998 | 661 | 105 | 1655 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| Scofield, William E., Long Island City, assignor to Sunlight Gas Machine Company, New York, N. Y. Acetylene-gas generator | 720,976 | Feb. 17 | 2898 | 664 | 102 | 1463 |
| Scofield, Winfred C., Greenwich, Conn. Rail-joint | 736,883 | Aug. 18 | 3466 | 769 | 105 | 1752 |
| Scotti, Leopoldo, Legnano, Italy. Moistening, cooling, or heating the air in factories, workrooms, or the like | 728,772 | May 19 | 3672 | 817 | 104 | 818 |
| Scothorn, John D., *et al.* (See Kendall, William L., assignor.) | | | | | | |
| Scott, Alexander A., Knoxville, Tenn. Curtain or canopy for drying-racks | 743,039 | Nov. 3 | 427 | 92, 93 | 107 | 90 |
| Scott, Alexander A., Knoxville, Tenn. Brick-truck | 743,040 | Nov. 3 | 428 | 93 | 107 | 90 |
| Scott, Allen E., San Francisco, Cal. Dress-form | 727,464 | May 5 | 1191 | 262, 263 | 104 | 257 |
| Scott, Alvin B., assignor to Model Glass Works, Summitville, Ind. Glass-mold | 736,790 | Aug. 18 | 3287 | 727 | 105 | 1714 |
| Scott, Arthur H., Philadelphia, Pa. Toilet-paper-serving fixture | 733,281 | July 7 | 1048 | 250, 251 | 105 | 220 |
| Scott, Arthur H., Philadelphia, Pa. Toilet-paper | 733,282 | July 7 | 1051 | 251 | 105 | 220 |
| Scott, Arthur H., Philadelphia, Pa. Toilet-paper | 733,283 | July 7 | 1052 | 251 | 105 | 221 |
| Scott, Boyd M., administrator. (See O'Malley, Walter W.) | | | | | | |
| Scott, Braxton L., Washington, D. C., assignor of one-half to S. Scott, Newark, N. J. Oil-filter | 732,659 | June 30 | 5867 | 1301 | 104 | 2412 |
| Scott, Charles F., Winthrop, Cal. Pump | 737,499 | Aug. 25 | 4615 | 1034 | 105 | 2018 |
| Scott, Charles H., Chicago, Ill. Ventilated bustle and hip-form | 723,495 | Mar. 24 | 3449 | 772 | 103 | 766 |
| Scott, Charles W., Saratoga, Wyo., C. E. Shipley, Denver, Colo., and H. Hughes, Saratoga, Wyo. Bottle-closure | 725,153 | Apr. 14 | 1371 | 309 | 103 | 1475 |
| Scott, Elmer D., Glenville, assignor of one-half to J. R. Blakeslee, Cleveland, Ohio. Brick construction | 721,751 | Mar. 3 | 169 | 39 | 103 | 37 |
| Scott, Elwood, Marion, Ind. Monument | 728,993 | May 26 | 4080 | 905 | 104 | 917 |
| Scott, Elwood, Marion, Ind. Radiant stove | 739,726 | Sept. 22 | 4212 | 942 | 106 | 951 |
| Scott, Eugene, Toyah, Tex. Pump-plunger | 724,512 | Apr. 7 | 167 | 40, 41 | 103 | 1206 |
| Scott, Fife J., South Croydon, England. Street cleansing or scavengering apparatus | 748,109 | Dec. 29 | 5224 | 1183, 1184 | 107 | 2327 |
| Scott, George L., Rochdale, assignor to J. P. Ormerod, Castleton, near Manchester, England. Friction-clutch | 722,150 | Mar. 3 | 902 | 200 | 103 | 193 |
| Scott, George W., Pullman, Ill. System of underframing for railway-cars | 740,187 | Sept. 29 | 5084 | 1143 | 106 | 1153 |
| Scott, Gerard C., Columbus, Ohio. Amalgamating device | 726,997 | May 5 | 348 | 75 | 104 | 75 |
| Scott, Gerard C., Columbus, Ohio. Sidehill building construction | 726,998 | May 5 | 349 | 75 | 104 | 75 |
| Scott, Gerard C., Columbus, Ohio. Amalgamator | 734,618 | July 28 | 3542 | 829 | 105 | 799 |
| Scott, Gerard C., Columbus, Ohio. Poultry-house construction | 734,619 | July 28 | 3544 | 830 | 105 | 799 |
| Scott, Gerard C., Columbus, Ohio. Poultry-house | 747,243 | Dec. 15 | 3563 | 806 | 107 | 1916 |
| Scott, Gordon J., assignor of one-half to W. B. Rulon, Philadelphia, Pa. Rotary engine | 724,056 | Mar. 31 | 4496 | 1012, 1013 | 103 | 1000 |
| Scott, Gordon J., assignor to C. H. Graham and G. D. Bouton, Philadelphia, Pa. Motor-vehicle | 722,916 | Mar. 17 | 2364 | 528, 529 | 103 | 533 |
| Scott, Gordon J., assignor to C. H. Graham and G. D. Bouton, Philadelphia, Pa. Forming accumulator-electrodes | 726,468 | Apr. 28 | 3781 | 856 | 103 | 2011 |
| Scott, Henry P. (See Scott, Joseph D. and H. P.) | | | | | | |
| Scott, Horace V., San Francisco, Cal. Refilled-bottle detector | 732,592 | June 30 | 5739 | 1274 | 104 | 2385 |
| Scott, Isabella, Jacksonville, Fla. Garment-hanger | 736,030 | Aug. 11 | 1895 | 405 | 105 | 1405 |
| Scott, James A., assignor of one-half to C. E. Fuller, Somerville, Mass. Paper box | 738,633 | Sept. 8 | 2174 | 476 | 106 | 483 |
| Scott, James A., assignor of one-half to C. E. Fuller, Somerville, Mass. Paper box. (Reissue) | 12,153 | Sept. 8 | 2409 | 528 | 106 | 531 |
| Scott, James C., assignor of one-half to N. Booth, Alexandria, Ind. Combined neck and ear muffler | 731,135 | June 16 | 2952 | 657 | 104 | 1775 |
| Scott, James E., Louisville, Ky. Weather-strip for sashes | 739,931 | Sept. 29 | 4624 | 1037 | 106 | 1056 |
| Scott, James E., Louisville, Ky., assignor of two-thirds to B. E. Brown and H. K. White, Jr., Detroit, Mich. Street-railway switch | 732,011 | June 23 | 4599 | 1026 | 104 | 1233 |
| Scott, James E., Louisville, Ky., assignor of two-thirds to B. E. Brown and H. K. White, Jr., Detroit, Mich. Window-sash | 734,436 | July 21 | 3210 | 756 | 105 | 712 |
| Scott, John, San Francisco, Cal. Lever-vehicle | 728,811 | May 19 | 3753 | 837 | 104 | 834 |
| Scott, John, Oil City, assignor to Oil Well Supply Company, Pittsburg, Pa. Elevator for casing and tubing | 729,902 | June 2 | 696 | 154 | 104 | 1270 |
| Scott, John A., Kansas City, Mo. Window-shade bracket | 732,387 | Mar. 10 | 1353 | 299 | 103 | 304 |
| Scott, John F., Evansville, Ind., assignor to St. Louis Car Company, St. Louis, Mo. Door-check | 736,639 | Aug. 18 | 2999 | 662 | 105 | 1655 |
| Scott, John F., Evansville, Ind., and T. M. Gallagher, St. Louis, Mo. Brake-beam | 741,380 | Oct. 13 | 1900 | 419 | 106 | 1672 |
| Scott, John G., Girardville, Pa. Elevator | 725,491 | Apr. 14 | 1996 | 450, 451 | 103 | 1609 |
| Scott, John H., Nottingham, England. Machine for covering wires, cords, &c. | 742,913 | Nov. 3 | 161 | 37 | 107 | 36 |
| Scott, John M. (See Tuttle, Henry W., assignor.) | | | | | | |
| Scott, John S., Greenville, assignor to W. R. Allen, Dallas, Tex. Fishing-bob | 740,474 | Oct. 6 | 173 | 34 | 106 | 1282 |
| Scott, Joseph D., South Shields, and H. P. Scott, Poplar, London, England. Boiler-cleaning compound | 728,627 | May 19 | 3419 | ------ | 104 | 766 |
| Scott Leather Machine Company. (See Scott, Rufus D., assignor.) | | | | | | |
| Scott, Oliver L., San Francisco, Cal. Fruit-pitter | 720,288 | Feb. 10 | 1626 | 372 | 102 | 1182 |
| Scott, Oliver P., Laporte, Ind. Incubator-heater | 726,999 | May 5 | 351 | 76 | 104 | 76 |
| Scott, Orion M., Aurora, Nebr. Husking glove or mitt | 730,051 | June 2 | 964 | 216 | 104 | 1324 |
| Scott, Robert, Honolulu, Hawaii. Machine for conveying and loading crops or merchandise | 718,732 | Jan. 20 | 2308 | 510 | 102 | 521 |
| Scott, Robert, Waipukurau, New Zealand. Caster attachment for bedsteads | 721,610 | Feb. 24 | 4148 | 942 | 102 | 1749 |
| Scott, Robert L. (See Miller, George E., assignor.) | | | | | | |
| Scott, Robert W. (See Williams, Louis N. D., assignor.) | | | | | | |
| Scott, Robert W., Philadelphia, assignor of one-half to L. N. D. Williams, Ashbourne, Pa. Projectile | 733,920 | July 14 | 2213 | 519 | 105 | 480 |
| Scott, Robert W., Philadelphia, and L. N. D. Williams, Ashbourne, Pa. Take-up mechanism for knitting-machines | 727,465 | May 5 | 1192 | 263, 264 | 104 | 257 |
| Scott, Robert W., Philadelphia, and L. N. D. Williams, Ashbourne, Pa. Split collar for shaft | 736,304 | Aug. 11 | 2372 | 515 | 105 | 1509 |
| Scott, Robert W., Philadelphia, L. N. D. Williams, Ashbourne, and H. Swinglehurst, Philadelphia, Pa., assignors to said Scott and Williams. Mechanical movement for use in knitting-machines | 743,398 | Nov. 3 | 1149 | 243, 244 | 107 | 243 |
| Scott, Rufus D., Beverly, Mass., assignor to Scott Leather Machine Company. Apparatus for treating skins or hides | 741,381 | Oct. 13 | 1900 | 420 | 106 | 1673 |
| Scott, Samuel. (See Scott, Braxton L., assignor.) | | | | | | |
| Scott-Snell, Charles, London, England. Incandescent gas-burner | 718,532 | Jan. 13 | 1921 | 421 | 102 | 429 |
| Scott-Snell, Charles, London, England. Advertising or the like | 731,075 | June 16 | 2834 | 629, 630 | 104 | 1753 |
| Scott-Snell, Charles, London, England. Antivibrator for incandescent gas or vapor lighting | 743,573 | Nov. 10 | 1558 | 325 | 107 | 349 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | Spec. | Drgs. | Vol. | Page. |
| Scott-Snell, Charles, Westminster, England. Caloric-engine for supplying gas-lamps with fuel | 725,372 | Apr. 14 | 1758 | 395<br>396 | 103 | 1557 |
| Scott-Snell, Charles, Saltash, England. Draft-producing device | 733,339 | July 7 | 1150 | 272<br>273 | 105 | 242 |
| Scott, Theodore, Union Township, White county, Ind. Safe | 732,660 | June 30 | 5868 | 1301<br>1302 | 104 | 2412 |
| Scott, Thomas V. (See Michael and Scott.) | | | | | | |
| Scott, Walker A., Evansville, Ind. Weather-strip | 735,913 | Aug. 11 | 1681 | 358 | 105 | 1358 |
| Scott, Walter, Plainfield, N. J. Delivery mechanism for printing-presses | 721,840 | Mar. 3 | 329 | 73 | 103 | 72 |
| Scott, Walter, Plainfield, N. J. Driving mechanism | 722,388 | Mar. 10 | 1354 | 300 | 103 | 304 |
| Scott, Walter, Plainfield, N. J. Paper cutting and feeding device for printing-presses | 730,976 | June 16 | 2645 | 589 | 104 | 1714 |
| Scott, Walter L., San Francisco, Cal., assignor to Stanley Rule & Level Company, New Britain, Conn. Plane | 719,051 | Jan. 27 | 2905 | 650 | 102 | 661 |
| Scott, Walter M. (See Peck and Scott.) | | | | | | |
| Scott, Wesley M., Columbus, Ohio. Rotatably-mounted wheel | 737,289 | Aug. 25 | 4220 | 940 | 105 | 1931 |
| Scott, Wilfred, Uniontown, Pa. Spike-puller | 731,074 | June 16 | 2833 | 629 | 104 | 1753 |
| Scott, William A., Quincy, Fla. Drinking vessel | 727,212 | May 5 | 736 | 158 | 104 | 159 |
| Scott, William A., Quincy, Fla. Nut-lock | 729,966 | June 2 | 821 | 184 | 104 | 1295 |
| Scott, William D., *et al.* (See Hammond, Robert O., assignor.) | | | | | | |
| Scott, William H., St. Louis, Mo. Bolster | 737,158 | Aug. 25 | 3949 | 878 | 105 | 1874 |
| Scott, William H., St. Louis, Mo. Bolster | 737,159 | Aug. 25 | 3952 | 878 | 105 | 1875 |
| Scott, William H., St. Louis, Mo. Trussed bolster | 737,160 | Aug. 25 | 3953 | 879 | 105 | 1876 |
| Scott, William H., Holmes, Pa. Hook and eye | 739,727 | Sept. 22 | 4215 | 942 | 106 | 952 |
| Scott, William H., assignor to Controller Company of America, St. Louis, Mo. Telephone-lock | 728,994 | May 26 | 4082 | 906 | 104 | 917 |
| Scott, William H., assignor to Controller Company of America, St. Louis, Mo. Coin-controlled locking mechanism | 728,995 | May 26 | 4083 | 906 | 104 | 917 |
| Scott, William H., assignor to Controller Company of America, St. Louis, Mo. Telephone-lock | 732,788 | July 7 | 167 | 43 | 105 | 39 |
| Scott, William H., assignor to Controller Company of America, St. Louis, Mo. Telephone-lock | 739,114 | Sept. 15 | 3083 | 684 | 106 | 690 |
| Scott, William J., Rockfalls, Ill. Rein spread-roller | 725,154 | Apr. 14 | 1373 | 309 | 103 | 1476 |
| Scott, William J., Rockfalls, Ill. Rein-roll | 747,000 | Dec. 15 | 3107 | 712 | 107 | 1815 |
| Scott, William M. (See Braun and Scott.) | | | | | | |
| Scott, William M., Philadelphia, Pa., assignor to Cutter Electrical and Manufacturing Company. Electric switch | 736,447 | Aug. 18 | 2623 | 576 | 105 | 1577 |
| Scott, William M., Philadelphia, Pa., assignor to Cutter Electrical & Manufacturing Company. Multicircuit-controller | 746,587 | Dec. 8 | 2309 | 529 | 107 | 1615 |
| Scott, Wilson A., and P. J. Scholl, Paul, Nebr. Car-door | 730,289 | Feb. 10 | 1628 | 372<br>373 | 102 | 1183 |
| Scott, Winfield, and J. G. Gardner, Senecaville, Ohio. Mounting for vertically-adjustable shade-rollers | 718,283 | Jan. 13 | 1422 | 316 | 102 | 321 |
| Scott, Zaccheus, Blythesdale, Pa. Coal-digger | 739,426 | May 26 | 4838 | 1072 | 104 | 1073 |
| Scovill, James P., Chicago, Ill. Peeling tomatoes, &c | 719,616 | Feb. 3 | 363 | 84 | 102 | 898 |
| Scovill, James P., Chicago, Ill. Apparatus for peeling tomatoes, &c | 719,617 | Feb. 3 | 364 | 84 | 102 | 898 |
| Scovill, James P., Chicago, Ill. Shelling peas, beans, &c | 719,618 | Feb. 3 | 366 | 85 | 102 | 898 |
| Scovill Manufacturing Company. (See Ashley, Edward L., assignor.) | | | | | | |
| Scovill Manufacturing Company. (See Hyde, Theophilus R., Jr., assignor.) | | | | | | |
| Scovill Manufacturing Company. (See Stanley, Frederick E., assignor.) | | | | | | |
| Scovill, William H., Kalamazoo, Mich. Printer's quoin | 744,806 | Nov. 24 | 3880 | 835 | 107 | 876 |
| Screeton, William H. (See Watkins and Screeton.) | | | | | | |
| Scribner, Charles E., assignor to Western Electric Company, Chicago, Ill. Spring-jack for telephone-switchboards | 726,105 | Apr. 21 | 3076 | 698 | 103 | 1851 |
| Scribner, Charles E., assignor to Western Electric Company, Chicago, Ill. Coin-collector for telephone pay-stations | 728,309 | May 19 | 2822 | 624 | 104 | 640 |
| Scribner, Charles E., assignor to Western Electric Company, Chicago, Ill. Telephone-switchboard | 734,099 | July 21 | 2584 | 606 | 105 | 580 |
| Scribner, George H. T., Emporia, Kans., assignor to Chattanooga Medicine Company, Chattanooga, Tenn. Calendar | 729,427 | May 26 | 4839 | 1072 | 104 | 1073 |
| Scruggs, Loyd, Omaha, Nebr. Compressed-air spray | 721,752 | Mar. 3 | 171 | 40 | 103 | 38 |
| Scruggs, Robert C., assignor to S. W. Wallace, R. McConnell, J. M. Cartwright, Birmingham, Ala., G. A. Oliver and F. G. Brewster. Swivel-coupling | 747,493 | Dec. 22 | 4027 | 905 | 107 | 2039 |
| Scrymser, Lewis C., New York, N. Y. Fuse-block or cut-out for electric circuits | 734,969 | July 28 | 4216 | 979<br>980 | 105 | 935 |
| Scudder, Charles, Trenton, N. J. Filter | 717,932 | Jan. 6 | 779 | 175 | 102 | 166 |
| Scudder, Charles, assignor to H. G. Hough and G. B. La Barre, Trenton, N. J. Overshoe for horseshoes | 718,392 | Jan. 13 | 1612 | 354<br>355 | 102 | 361 |
| Scudder, James. (See Myers, William L., assignor.) | | | | | | |
| Scudder, Wilbur S., Brooklyn, N. Y., assignor to Monoline Composing Company, Washington, D. C. Line-casting machine | 733,559 | July 14 | 1539 | 366 | 105 | 343 |
| Scudder, Wilbur S., Brooklyn, N. Y., assignor to Monoline Composing Company, Washington, D. C. Line-casting machine | 734,437 | July 21 | 3211 | 756 | 105 | 712 |
| Scullin, Harry. (See Shaw and Knight, assignors.) | | | | | | |
| Scully, Alexander B., trustee. (See Sumner, George F., assignor.) | | | | | | |
| Scully, Edmund I. (See McCloskey, William, assignor.) | | | | | | |
| Scully, John, Minneapolis, Minn. Fireproof building | 745,915 | Dec. 1 | 1108 | 248 | 107 | 1335 |
| Scully Steel & Iron Company. (See Lingenfelter, Carl E., assignor.) | | | | | | |
| Seabury, Cora B. (See Allen, Anderson D., assignor.) | | | | | | |
| Seabury, Gorham T., *et al.* (See Krotz, Linford E., assignor.) | | | | | | |
| Seadler, Bernard F. (See Watkins, Alfred E., assignor.) | | | | | | |
| Seager, George B. M., *et al.* (See Gorman, Edward J., assignor.) | | | | | | |
| Seagrave, Frederic S., Columbus, Ohio. Aerial ladder | 734,513 | Apr. 7 | 169 | 41 | 103 | 1206 |
| Seagrave, Frederic S., Columbus, Ohio. Side frame for ladder-trucks | 743,936 | Nov. 10 | 2208 | 477 | 107 | 486 |
| Seaman, Alonzo D., Milwaukee, Wis. Golf-ball | 730,303 | June 9 | 1423 | 313 | 104 | 1434 |
| Seaman, Billopp, Oakwood, N. Y. Dumping-scow | 736,640 | Aug. 18 | 3000 | 662 | 105 | 1655 |
| Seaman, David J. (See Graham, Henry, assignor.) | | | | | | |
| Seaman, David J., New York, N. Y. Spraying-nozzle | 733,334 | July 7 | 1142 | 271 | 105 | 240 |
| Seaman, Elizabeth C., assignor to Iron Clad Manufacturing Company, New York, N. Y. Garbage-bucket | 723,215 | Mar. 17 | 2901 | 650 | 103 | 645 |
| Seaman, Harry J. (See Hurry and Seaman.) | | | | | | |
| Seaman, John H., Chicago, Ill. Cord-shortening device | 746,178 | Dec. 8 | 1590 | 355 | 107 | 1460 |
| Seamans, Edward W., Grand Rapids, Mich. Mold for concrete blocks | 720,536 | Feb. 10 | 2079 | 480 | 102 | 1276 |
| Seanor, William E., Hope, Idaho. Wrench | 742,240 | Oct. 27 | 3621 | 810 | 106 | 2060 |
| Search, Charles E., and E. Cheshire, assignors to Milwaukee Machine Company, Milwaukee, Wis. Gearing for turret-lathes | 728,179 | May 12 | 2547 | 567 | 104 | 569 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drgs. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Search, Charles E., and E. Cheshire, assignors to Milwaukee Machine Company, Milwaukee, Wis. Lathe | 736,791 | Aug. 18 | 3288 | 727, 728 | 105 | 1714 |
| Search, Charles E., and E. Cheshire, assignors to Milwaukee Machine Company, Milwaukee, Wis. Turret-lathe | 736,792 | Aug. 18 | 3290 | 728, 729, 730 | 105 | 1715 |
| Searchmont Motor Company. (See Gallaher, Edward B., assignor.) | | | | | | |
| Searing, Lewis, Denver, Colo. Head-motion for ore-concentrating tables | 734,758 | July 28 | 3828 | 892 | 105 | 854 |
| Searle, George M. (See Saegmuller and Searle.) | | | | | | |
| Searle, George M., and G. N. Saegmuller, Washington, D. C. Telescope | 742,241 | Oct. 27 | 3623 | 810 | 106 | 2060 |
| Searle, Joseph M., Pittsburg, Pa. Underfeed-stoker | 747,091 | Dec. 15 | 3282 | 747 | 107 | 1858 |
| Searles, Charles P., and J. R. Greenaway, assignors to J. Arzonia, Columbus, Ohio. Curtain-pole bracket and shade-holder | 730,304 | June 9 | 1424 | 314 | 104 | 1435 |
| Searles, Walter E., Marlboro, assignor to J. S. Holt, Boston, Mass. Machine for attaching heels | 731,511 | June 23 | 3666 | 817, 818 | 104 | 1940 |
| Searls Manufacturing Company. (See Dickinson, William A., assignor.) | | | | | | |
| Sears, Andrew T., Portland, Me. Scaffold-binder | 734,620 | July 28 | 3545 | 830 | 105 | 799 |
| Sears, Franklin M., Charlevoix, Mich. Adjustable handle for umbrellas | 721,331 | Feb. 24 | 3610 | 820 | 102 | 1633 |
| Sears, Willam T., Onslow Iowa. Metal-working machine | 721,841 | Mar. 3 | 333 | 74 | 103 | 73 |
| Sears, Willard T., Boston, Mass. Safety emergency-brake | 719,699 | Feb. 3 | 508 | 115 | 102 | 930 |
| Seastrunk, Thomas P., and J. P. Archer, Dallas, Tex. Trolley | 736,641 | Aug. 18 | 3000 | 662 | 105 | 1655 |
| Seaver, John W. (See Wellman, Seaver, and Street.) | | | | | | |
| Seaver, John W., Cleveland, Ohio. Apparatus for making briquets for circular coke-ovens | 722,151 | Mar. 3 | 904 | 200, 201 | 103 | 193 |
| Seaver, John W., Cleveland, Ohio. Body-bolster for railway-cars | 734,372 | July 21 | 3098 | 729 | 105 | 689 |
| Seaver, John W., assignor to Wellman-Seaver Engineering Company, Cleveland, Ohio. Delivery mechanism for ore-bins | 738,076 | Sept. 1 | 1013 | 226, 227 | 106 | 220 |
| Seaver, John W., assignor, by mesne assignments, to Wellman-Seaver-Morgan Company, Cleveland, Ohio. Ship-building plant | 747,782 | Dec. 22 | 4552 | 1027 | 107 | 2158 |
| Seaver, John W., assignor, by mesne assignments, to Wellman-Seaver-Morgan Company, Cleveland, Ohio. Grab-bucket | 747,783 | Dec. 22 | 4553 | 1027, 1028 | 107 | 2158 |
| Seaver, John W., and J. E. A. Moore, assignors to Wellman-Seaver-Morgan Engineering Company, Cleveland, Ohio. Metallic framing for concrete tanks | 737,500 | Aug. 25 | 4616 | 1034, 1035 | 105 | 2018 |
| Seaver, John W., and T. R. Morgan, assignors to Wellman-Seaver-Morgan Engineering Company, Cleveland, Ohio. Gas-producer | 734,472 | July 21 | 3275 | 769, 770 | 105 | 725 |
| Seaver, John W., C. H. Wellman, and T. R. Morgan, assignors to Wellman Seaver Engineering Company, Cleveland, Ohio. Wharf-crane | 731,231 | June 16 | 3117 | 691 | 104 | 1807 |
| Seaverns, John A., Boston, assignor of two-thirds to A. T. Thompson, West Newton, Mass. Stereopticon | 729,225 | May 26 | 4492 | 990, 991, 992 | 104 | 1002 |
| Seavolt, Willis J., Attica, Ohio. Attachment for engine fire-boxes | 720,744 | Feb. 17 | 2486 | 572 | 102 | 1376 |
| Sebald, George J., and C. F. Schmidt, Milwaukee, Wis. Water-heater | 737,784 | Sept. 1 | 422 | 91 | 106 | 92 |
| Sébillot, Amédée M. G., Paris, France. Treatment of sulfid ores | 740,701 | Oct. 6 | 582 | ..... | 106 | 1373 |
| Seblom, Charles F., Brooklyn, N. Y. Extension-bit | 737,501 | Aug. 25 | 4621 | 1035 | 105 | 2020 |
| Sebring, William L., Colorado Springs, Colo. Seal-lock | 732,593 | June 30 | 5740 | 1274 | 104 | 2385 |
| Sebring, William L., Colorado Springs, Colo. Seal-lock | 732,594 | June 30 | 5741 | 1274 | 104 | 2385 |
| Sechler & Company. (See Knapp, Jacob, assignor.) | | | | | | |
| Seckner, Albert J., Longmont, Colo. Twine-holder | 741,074 | Oct. 13 | 1268 | 287 | 106 | 1538 |
| Secor, Peter C., San Francisco, Cal. Nut-lock | 733,754 | July 14 | 1879 | 443 | 105 | 413 |
| Secord, Frederick H., Chicago, Ill. Lunch-counter | 723,043 | Mar. 17 | 2568 | 578 | 103 | 575 |
| Secord, William N., Unionville, Mo. Wagon-brake | 724,057 | Mar. 31 | 4498 | 1013 | 103 | 1001 |
| "Secretary." (See Clark, Daniel J., assignor.) | | | | | | |
| "Secretary." (See Eldridge, Hilliary, assignor.) | | | | | | |
| Security Investment Company. (See Reed, Charles J., assignor.) | | | | | | |
| Security Match Company. (See Hutchinson, William F., assignor.) | | | | | | |
| Security Paper Specialty Company. (See West, James, assignor.) | | | | | | |
| Sedberry, Walter H., Shreveport, La. Device for filling cans | 720,492 | Feb. 10 | 1975 | 452 | 102 | 1256 |
| Seddelmeyer, George W., Epsom, Ind. Combined bolt-holder, wrench, and bolt-extractor | 742,914 | Nov. 3 | 163 | 38 | 107 | 36 |
| Seddon, Edward H., Brooklands, England. Pneumatic tire | 747,001 | Dec. 15 | 3108 | 712 | 107 | 1815 |
| Sederholm, Edward T., assignor to Allis-Chalmers Company, Chicago, Ill. Governor | 727,466 | May 5 | 1195 | 264, 265 | 104 | 258 |
| Sedgwick, Alonzo, Poughkeepsie, N. Y., and J. I. Wakelee, Englewood, N. J. Automatic friction-brake | 744,632 | Nov. 17 | 3533 | 762 | 107 | 782 |
| Sedgwick, Frederick, Chicago, Ill. Cipher type-writer | 727,213 | May 5 | 737 | 158 | 104 | 159 |
| Sedgwick, Frederick, Chicago, Ill. Automatic governor for acetylene-generators | 728,024 | May 12 | 2265 | 503 | 104 | 499 |
| Sedgwick, Hiram G., New York, N. Y. Automatic safety train-stop | 738,947 | Sept. 15 | 2781 | 616 | 106 | 629 |
| Sedgwick, Richard. (See Doan, Walter J., assignor.) | | | | | | |
| Sedivy, Frank, Globe, Ariz. Ter. Power-transmitting mechanism | 724,338 | Mar. 31 | 5067 | 1123, 1134 | 103 | 1115 |
| Sedlack, Edmund J., Chicago, Ill. Advertising device | 720,977 | Feb. 17 | 2902 | 665 | 102 | 1464 |
| See, Alonzo B., *et al.* (See Cowperthwait, Allan, assignor.) | | | | | | |
| See, Alonzo B., *et al.* (See Lindstrom, Nils O., assignor.) | | | | | | |
| See, Corliss. (See See, James W. and C.) | | | | | | |
| See, Horace, New York, N. Y. Water-tube steam-boiler | 728,996 | May 26 | 4085 | 906 | 104 | 918 |
| See, James W. and C., Hamilton, Ohio. Detonating-machine | 747,245 | Dec. 15 | 3566 | 807 | 107 | 1917 |
| Seebold, William J., and J. M. Hurwitz, Denver, Colo. Pencil-holder | 743,399 | Nov. 3 | 1152 | 244 | 107 | 244 |
| Seed, Leonard F., and L. Harper, Millet, Tex. Rotary drill | 717,630 | Jan. 6 | 195 | 48 | 102 | 42 |
| Seeds, Louis B., Indiana Harbor, Ind. Wheel | 742,503 | Oct. 27 | 4091 | 921 | 106 | 2156 |
| Seeds, Robert L., Columbus, Ohio. Range | 737,785 | Sept. 1 | 423 | 91 | 106 | 93 |
| Seegar, Robert H. (See Bray and Seegar.) | | | | | | |
| Seeger, Ludwig, Voralberg, Austria-Hungary. Collapsible sun or rain shade | 728,505 | May 19 | 3167 | 701, 702 | 104 | 711 |
| Seegmiller, Wilhelmina, Indianapolis, Ind. Educational art text-sheet | 720,187 | Feb. 10 | 1434 | 327 | 102 | 1143 |
| Seegmiller, Wilhelmina, Indianapolis, Ind. Educational material | 736,448 | Aug. 18 | 2625 | 576 | 105 | 1578 |
| Seeley, George M. (See Allison, James E., assignor.) | | | | | | |
| Seeley, Isaac B., New York, N. Y. Truss-pad | 747,247 | Dec. 15 | 3568 | 808 | 107 | 1917 |
| Seelig, Adolf. (See Deppert and Seelig.) | | | | | | |
| Seelinger, Henry, Norfolk, Va. Billiard-cue tip | 743,041 | Nov. 3 | 430 | 93 | 107 | 90 |
| Seely, Fred L., St. Louis, Mo. Machine for washing, filling, and corking bottles | 740,320 | Sept. 29 | 5334 | 1201, 1202 | 106 | 1204 |
| Seely, Samuel F., Toledo, Ohio. Railway structure | 746,179 | Dec. 8 | 1591 | 355, 356 | 107 | 1461 |
| Seely, Thad J., and C. Hemsing, Milwaukee, Wis. Private telephone system | 744,117 | Nov. 17 | 2610 | 558 | 107 | 586 |
| Seemann, Samuel, Sharpsburg, Pa. Loose-leaf book | 719,886 | Feb. 3 | 858 | 201 | 102 | 1005 |
| Seemer, John R., Norfolk, Va. Piston-head packing | 730,168 | June 2 | 1154 | 260 | 104 | 1362 |

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| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| Seery, Thomas A., Keene, N. H. Instantaneous release for the air-brake cylinders of engines and tenders | 718,533 | Jan. 13 | 1922 | 422 | 102 | 429 |
| Seeser, Ludwig W., Delmenhorst, Germany. Producing linoleum having patterns resembling wood or fabric | 720,627 | Feb. 17 | 2281 | ..... | 102 | 1332 |
| Seeser, Ludwig W., Delmenhorst, Germany. Making double-layered linoleum products | 727,214 | May 5 | 743 | 159 | 104 | 160 |
| Seeser, Ludwig W., Delmenhorst, Germany. Making linoleum products | 728,997 | May 26 | 4087 | 907 | 104 | 918 |
| Seewald, Christian, *et al.* (See Stutzman, Frank, assignor.) | | | | | | |
| Seewald, Christian, Williamsport, Pa. Cutter-head | 742,242 | Oct. 27 | 3625 | 810 | 106 | 2061 |
| Seewald, Jacob, *et al.* (See Stutzman, Frank, assignor.) | | | | | | |
| Segal, Mordecai, Waco, Tex. Detachable draft appliance | 726,769 | Apr. 28 | 4388 | 987 | 103 | 2131 |
| Seibel, Richard M., Kansas City, Mo. Tip for shoestrings | 742,074 | Oct. 20 | 3307 | 736<br>737 | 106 | 1980 |
| Seiberling, Frank A. (See Smith, Uzziel P., assignor.) | | | | | | |
| Seiberling, Frank A., Akron, Ohio. Apparatus for manufacturing and vulcanizing rubber tires | 725,155 | Apr. 14 | 1373 | 309<br>310<br>311 | 103 | 1476 |
| Seidel, Bruno. (See Wishart and Seidel.) | | | | | | |
| Seidel, Christian, and C. W. Dahlhaus, assignors of one-third to C. E. Hertlein, New York, N. Y. Spooling-machine | 721,472 | Feb. 24 | 3873 | 880<br>881 | 102 | 1687 |
| Seidel, Ernst, Maulburg, near Schopfheim, Germany. Pottery-tissue and producing same | 745,390 | Dec. 1 | 147 | ..... | 107 | 1131 |
| Seidel, George E., Richmond, Ind. Nasal medicator | 746,749 | Dec. 15 | 2616 | 601 | 107 | 1705 |
| Seidel, Heinrich L. A., Hamburg, Germany. Suspenders | 728,025 | May 12 | 2266 | 503 | 104 | 499 |
| Seidel, John, Milwaukee, Wis. Sanitary urinal | 741,173 | Oct. 13 | 1457 | 331 | 106 | 1576 |
| Seidel, Paul, assignor to Badische Anilin & Soda Fabrik, Ludwigshafen-on-the-Rhine, Germany. Light indigo powder | 744,417 | Nov. 17 | 3181 | 682 | 107 | 709 |
| Seidel, William H., *et al.* (See Moe, Theodore M., assignor.) | | | | | | |
| Seidener, Josef, Vienna, Austria-Hungary. Apparatus for measuring the flow of steam | 720,188 | Feb. 10 | 1434 | 327<br>328 | 102 | 1143 |
| Seidensticker, Charles J., and U. S. G. Neligh, Sioux City, Iowa. Index-book | 736,159 | Aug. 11 | 2123 | 455 | 105 | 1452 |
| Seidl, Frank W., Manitowoc, Wis. Harvester attachment | 737,028 | Aug. 25 | 3738 | 829 | 105 | 1831 |
| Seifert, Bruno R., and F. R. Engelhardt, assignors to Chemische Fabrik von Heyden, Actiengesellschaft, Radebeul, Germany. Acetylsalicylate of sodium | 740,702 | Oct. 6 | 583 | ..... | 106 | 1373 |
| Seifert, John W., Columbus, Ga. Gin-feeder and separator | 727,700 | May 12 | 1645 | 373 | 104 | 372 |
| Seiffert, Max, Leipzig, Germany. Sealing-cap for bottles | 739,932 | Sept. 29 | 4625 | 1038 | 106 | 1056 |
| Seifried, Samuel J., assignor to Chicago Writing Machine Company, Chicago, Ill. Paper-carriage for type-writers | 725,492 | Apr. 14 | 1999 | 451 | 103 | 1609 |
| Seifried, Samuel J., assignor to Chicago Writing Machine Company, Chicago, Ill. Type-writer | 725,493 | Apr. 14 | 2001 | 451<br>452 | 103 | 1609 |
| Seifried, Samuel J., assignor to Chicago Writing Machine Company, Chicago, Ill. Folding bracket for telephones, &c. | 741,382 | Oct. 13 | 1904 | 421 | 106 | 1673 |
| Seigh, John W., Johnstown, Pa. Reversing-valve for furnaces | 730,708 | June 9 | 2156 | 478<br>479 | 104 | 1591 |
| Seigle, Adolphe, Lyons, France. Manufacture of artificial building material | 740,188 | Sept. 29 | 5086 | ..... | 106 | 1154 |
| Seile, Louis, Vienna, Austria-Hungary. Automatic railway-brake | 737,029 | Aug. 25 | 3739 | 829 | 105 | 1831 |
| Seiling, Frank, Allegheny, Pa. Bearing and support for universal mills | 730,802 | June 9 | 2304 | 512 | 104 | 1623 |
| Seim, William F. (See Brewington, Henry S., assignor.) | | | | | | |
| Seipp, Henry C., Pittsburg, Pa. Mechanism for operating elevator-doors | 744,118 | Nov. 17 | 2613 | 558 | 107 | 586 |
| Seips, Michael. (See Chapman and Seips.) | | | | | | |
| Seisler, Philip, assignor of one-half to A. E. Leinbach, Reading, Pa. Lock | 724,746 | Apr. 7 | 616 | 144 | 103 | 1300 |
| Seitz, Charles S., Tiffin, Ohio. Metallic railway-tie | 725,373 | Apr. 14 | 1762 | 396 | 103 | 1557 |
| Seitz, Charles S., Tiffin, Ohio. Metallic railway-tie | 728,026 | May 12 | 2267 | 504 | 104 | 500 |
| Seitz, Clinton H., Shrewsbury, Pa. Automatic air-brake coupling | 730,484 | June 9 | 1754 | 392 | 104 | 1503 |
| Seitz, Jeremiah L., McPherson, Kans. Coat-holder | 738,575 | Sept. 8 | 2057 | 448 | 106 | 458 |
| Seitz, Theodore A., Grand Rapids, Mich. Electric motor | 735,160 | Aug. 4 | 218 | 44 | 105 | 1029 |
| Seitzman, Issak, New York, N. Y. Head-protector | 745,530 | Dec. 1 | 404 | 93 | 107 | 1185 |
| Sejnoha, Frank, and T. Perkins, assignors to themselves and C. H. Emery, Chicago, Ill. Can-painting machine | 728,998 | May 26 | 4089 | 907 | 104 | 918 |
| Sejnoha, Frank, and T. Perkins, Chicago, Ill., assignors to themselves and C. H. Emery, Eastport, Me. Apparatus for painting cans | 729,512 | May 26 | 4977 | 1103<br>1104 | 104 | 1105 |
| Selander, Jonas W., New Athens, Ohio. Match-safe | 728,027 | May 12 | 2269 | 504 | 104 | 500 |
| Selden, Arthur R. (See Ward and Selden.) | | | | | | |
| Selden, Arthur R., assignor of one-half to F. S. Macomber, Rochester, N. Y. Photographic-printing frame | 719,264 | Jan. 27 | 3310 | 741 | 102 | 744 |
| Self Winding Clock Co. (See Schmidt, Frederick M., assignor.) | | | | | | |
| Selfridge, Bert, Butte, Mont. Packing device for drill-rods or the like | 723,740 | Mar. 24 | 3865 | 869 | 103 | 854 |
| Selg, Otto, Brooklyn, N. Y. Mashing apparatus | 719,052 | Jan. 27 | 2906 | 651 | 102 | 661 |
| Selg, Otto, and C. Guntrum, Brooklyn, N. Y. Converting wort into beer | 733,284 | July 7 | 1054 | 251 | 105 | 221 |
| Selg, Otto, and C. Guntrum, New York, N. Y. Liquid-filter | 739,562 | Sept. 22 | 3889 | 872 | 106 | 881 |
| Selg, Otto, and C. Guntrum, New York, assignors of one-third to C. Jaeger and J. Schoettl, Brooklyn, N. Y. Liquid-filter | 739,621 | Sept. 22 | 4011 | 896 | 106 | 906 |
| Seligman, David A., Providence, R. I. Combination dress waist and skirt retaining band | 745,245 | Nov. 24 | 4735 | 1033 | 107 | 1052 |
| Selkovits, Max. (See Fischer, Adolph, assignor.) | | | | | | |
| Sell, Andrew, Mora, Minn. Traction wheel or runner | 741,938 | Oct. 20 | 2972 | 662 | 106 | 1913 |
| Sell, Emanuel M., Cameron, Mo. Corn-planter | 719,887 | Feb. 3 | 860 | 201 | 102 | 1005 |
| Sell, William E., assignor to Gilliam Manufacturing Company, Canton, Ohio. Toe-weight | 728,506 | May 19 | 3170 | 702 | 104 | 712 |
| Sellar, John L., Baltimore, Md. Automatic paper-feeder | 721,970 | Mar. 3 | 594 | 133 | 103 | 130 |
| Selleck, Allen C., Chicago, Ill. Heating-drum | 732,454 | June 30 | 5476 | 1215 | 104 | 2328 |
| Selleck, Theodore G., assignor to Acme Steel Company, Chicago, Ill. Furnace | 729,681 | June 2 | 279 | 64 | 104 | 1186 |
| Selleck, Theodore G., assignor to Acme Steel Company, Chicago, Ill. Truck | 729,682 | June 2 | 282 | 65 | 104 | 1187 |
| Selleck, William J., Riverside, Conn. Apparatus for loading or unloading vessels | 719,517 | Feb. 3 | 181 | 42 | 102 | 862 |
| Selleck, William J., Riverside, Conn. Storage and reloading apparatus | 719,518 | Feb. 3 | 184 | 42, 43 | 102 | 862 |
| Sellergren, Carl, assignor of one-half to A. Benson, Chicago, Ill. Car-step | 745,916 | Dec. 1 | 1110 | 249 | 107 | 1335 |
| Sellers, John M., Chicago, Ill. Making tie-plates | 722,152 | Mar. 3 | 908 | 202 | 103 | 194 |
| Sellers, Morris, Chicago, Ill. Means for preventing the spreading of rails | 731,512 | June 23 | 3667 | 818 | 104 | 1940 |
| Sellers, William, Philadelphia, Pa., assignor to William Sellers and Company, Incorporated. Machine-tool | 724,514 | Apr. 7 | 171 | 41, 42 | 103 | 1206 |
| Selwig, Johannes, Brunswick, Germany. Apparatus for steaming guncotton | 738,077 | Sept. 1 | 1014 | 227 | 106 | 220 |
| Selz, Adolf, assignor of one-half to D. Selz, Flemingsburg, Ky. Trolley-wheel for electric tram-cars | 722,189 | Mar. 3 | 982 | 217 | 103 | 207 |
| Selz, Dora. (See Selz, Adolf, assignor.) | | | | | | |
| Sembdner, Richard A., Porz, Germany. Making lampblack | 741,726 | Oct. 20 | 2583 | 575 | 106 | 1831 |
| Semet-Solvay Company. (See Ladd, James B., assignor.) | | | | | | |
| Semler, Otis T., Youngstown, assignor of one-half to G. Wise, Akron, Ohio. Device for closing openings in tire-casings | 719,147 | Jan. 27 | 3105 | 690 | 102 | 701 |
| Semmer, Phillip, Pittsburg, Pa. Mosaic | 738,704 | Sept. 8 | 2320 | 510 | 106 | 511 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Semmer, Phillip, assignor to Assembled Tile and Slab Company, Pittsburg, Pa. Apparatus for breaking tile strips | 744,244 | Nov. 17 | 2863 | 614 | 107 | 640 |
| Semmer, Phillip, Pittsburg, Pa., assignor to Assembled Tile and Slab Company. Breaking tile strips | 744,245 | Nov. 17 | 2864 | 614 | 107 | 640 |
| Semprun, Eduardo. (See Fortun and Semprun.) | | | | | | |
| Sena, Timoteo, Las Vegas, N. Mex. Ter. Attachment for riding-saddles | 734,100 | July 21 | 2587 | 606, 607 | 105 | 581 |
| Seneca Camera Company. (See Case, Frank B., assignor.) | | | | | | |
| Seneca Camera Company. (See La May and Whitlock, assignors.) | | | | | | |
| Seneca Falls Manufacturing Company. (See Darling, Henry M., assignor.) | | | | | | |
| Seneca Falls Manufacturing Company. (See Runge, William, assignor.) | | | | | | |
| Senechal, Edward H., Pierre, S. D. Flour-sifter | 747,092 | Dec. 15 | 3284 | 747 | 107 | 1859 |
| Senez, Charles, assignor to Ste. Industrielle des Telephones, (Constructions Electriques Caoutchouc Cables,) Paris, France. Electric-arc lamp | 735,161 | Aug. 4 | 220 | 44, 45 | 105 | 1030 |
| Senft, Johann, Vienna, Austria-Hungary. Composition of painting-cement | 732,226 | June 30 | 5042 | ..... | 104 | 2239 |
| Sengbusch, Gustav J., Milwaukee, Wis. Inkstand | 726,194 | Apr. 21 | 3259 | 740 | 103 | 1888 |
| Sengbusch, Gustav J., Milwaukee, Wis. Ink-well | 726,195 | Apr. 21 | 3261 | 740 | 103 | 1889 |
| Senger, George, San Francisco, Cal. Baling-press | 729,903 | June 2 | 698 | 154 | 104 | 1270 |
| Senkbeil, Friedrich W., Offenbach-on-the-Main, Germany. Microphone or microphone-transmitter for electrical sound transmission | 726,360 | Apr. 28 | 3593 | 816 | 103 | 1974 |
| Sennett, Walter C., Portland, Me. Invalid-bed | 727,467 | May 5 | 1199 | 265 | 104 | 259 |
| Senour, Charles H., Dripping Springs, Tex. Wire-fence stay | 730,406 | June 9 | 1602 | 357 | 104 | 1470 |
| Sensenschmidt, Max, Frankfort-on-the-Main, Germany. Means or apparatus for molding metal tubes | 745,246 | Nov. 24 | 4737 | 1034 | 107 | 1052 |
| Senter, John F. (See Bradley and Senter.) | | | | | | |
| Serfass, Josiah, Hazelton, Pa. Nailless horseshoe | 728,773 | May 19 | 3674 | 817 | 104 | 818 |
| Serfoss, Aaron and E. C., Ashley, Pa. Skirt-holder | 721,096 | Feb. 17 | 3135 | 720 | 102 | 1517 |
| Serfoss, Ellen C. (See Serfoss, Aaron and E. C.) | | | | | | |
| Sergeant, Henry C., Westfield, N. J., assignor to Ingersoll-Sergeant Drill Company, New York, N. Y. Governor | 738,634 | Sept. 8 | 2175 | 476 | 106 | 483 |
| Sergeant, Henry C., Westfield, N. J., and W. Raymond, Easton, Pa., assignors to Ingersoll-Sergeant Drill Company, New York, N. Y. Compressor for air or other aeriform bodies | 745,298 | Nov. 24 | 4840 | 1055 | 107 | 1073 |
| Sergeson, James C., Philadelphia, Pa. Shuttle | 743,937 | Nov. 10 | 2208 | 477 | 107 | 487 |
| Serley, Chris, Wilbur, Wash. Hoisting device for sacks, boxes, &c | 740,475 | Oct. 6 | 174 | 34 | 106 | 1282 |
| Servis, David, New York, N. Y. Spike | 723,554 | Mar. 24 | 3542 | 792 | 103 | 786 |
| Sessions, Henry H., Chicago, Ill., A. P. Dennis and R. D. Gallagher, Jr., assignors to Standard Coupler Company, New York, N. Y. Radial buffing and draft rigging for railway-cars | 719,519 | Feb. 3 | 187 | 43, 44 | 102 | 863 |
| Sessums, Alice G., New Orleans, La. Bodkin | 741,556 | Oct. 13 | 2244 | 499 | 106 | 1745 |
| Sester, Charles P., and F. J. Feldt, assignors to Eagle Manufacturing Company, Peoria, Ill. Yielding driving mechanism | 719,619 | Feb. 3 | 367 | 85 | 102 | 899 |
| Sester, Charles P., and F. J. Feldt, assignors to Eagle Manufacturing Company, Peoria, Ill. Broadcast seeder | 719,620 | Feb. 3 | 368 | 85 | 102 | 899 |
| Setter, Micheal, assignor to American Electric Telephone Company, Chicago, Ill. Machine for applying elastic bands to articles of manufacture | 720,493 | Feb. 10 | 1977 | 452 | 102 | 1256 |
| Settino, Pietro, Steelton, Pa. Valve | 735,162 | Aug. 4 | 222 | 45 | 105 | 1030 |
| Settle, Richard S., assignor of three-fourths to Edwards and Sloane Jewelry Company and S. A. Pence, Kearney, Mo. Watch-barrel | 732,321 | June 30 | 5207 | 1156 | 104 | 2272 |
| Setzler, Louis P., Kansas City, Mo. Siphon-filling apparatus | 725,494 | Apr. 14 | 2003 | 453 | 103 | 1610 |
| Sévène, Henri, and E. D. Cahen, Paris, France. Apparatus for boxing articles | 737,502 | Aug. 25 | 4623 | 1035, 1036, 1037 | 105 | 2021 |
| Seveney, Mark, Fall River, Mass. Catch for spindles | 724,747 | Apr. 7 | 618 | 144 | 103 | 1300 |
| Severance, William E., Greenfield, Mass. Measuring-rule | 728,137 | May 12 | 2469 | 549 | 104 | 543 |
| Severns, Crispen, Mohawk Village, Ohio. Breast-bow for harness | 746,180 | Dec. 8 | 1593 | 356 | 107 | 1461 |
| Severson, Harry A. (See Tichon and Foster, assignors.) | | | | | | |
| Severy, Melvin L., Arlington Heights, Mass., assignor to Automatic Tympan Company. Printing-press | 743,759 | Nov. 10 | 1882 | 398 | 107 | 419 |
| Severy, Melvin L., Arlington Heights, Mass., assignor to Automatic Tympan Company. Printing-press | 743,760 | Nov. 10 | 1884 | 398 | 107 | 419 |
| Severy, Melvin L., Arlington Heights, Mass., assignor to Automatic Tympan Company. Printing-press | 743,761 | Nov. 10 | 1886 | 398, 399 | 107 | 420 |
| Severy, Melvin L., Arlington Heights, and G. S. Heath, Revere, Mass., assignors to Automatic Tympan Company. Printing-press | 729,683 | June 2 | 283 | 65, 66 | 104 | 1187 |
| Seville, Algernon S., Memphis, Tenn. Perforation-spacing device for automatic-piano-player tune-sheets | 720,075 | Feb. 10 | 1219 | 280 | 102 | 1098 |
| Seville, Algernon S., Memphis, Tenn. Perforation-spacing device | 738,852 | Sept. 15 | 2626 | 579, 580 | 106 | 596 |
| Sewall, Minott W., Roselle, N. J. Superheating apparatus | 736,793 | Aug. 18 | 3297 | 730 | 105 | 1716 |
| Sewall, Minott W., Roselle, N. J. Steam-generator | 747,093 | Dec. 15 | 3285 | 747 | 107 | 1859 |
| Sewall, Robert H. F., assignor of one-half to L. B. Jordan, New Orleans, La. Oil reservoir or tank | 744,694 | Nov. 17 | 3640 | 785 | 107 | 806 |
| Seward, Ernest R., assignor to Hartford Machine Screw Company, Hartford, Conn. Variable-speed mechanism | 742,361 | Oct. 27 | 3836 | 861, 862 | 106 | 2105 |
| Seward, Henry W. (See Sargent, Isaac C., assignor.) | | | | | | |
| Seward, Joseph H. (See Seward, Marion F. and J. H.) | | | | | | |
| Seward, Marion F. and J. H., Elmendorf, Tex. Cotton cleaner and feeder | 744,807 | Nov. 24 | 3881 | 835 | 107 | 876 |
| Sewell, Colin J. (See Weston, Henry, assignor.) | | | | | | |
| Sewell, Delos, Hillsdale, Mich. Separating and grading machine | 743,574 | Nov. 10 | 1559 | 325, 326 | 107 | 350 |
| Sewell, James H., Kountze, Tex. Insect-destroyer | 748,110 | Dec. 29 | 5227 | 1185 | 107 | 2327 |
| Sexton, Arthur E. (See Casterline, Sexton, Stockwell, and Swalm.) | | | | | | |
| Sexton, Arthur E., assignor to Single-Sheet Paper Company, Los Angeles, Cal. Paper-holder | 718,058 | Jan. 6 | 1003 | 224 | 102 | 216 |
| Sexton, Arthur E., assignor to Single Sheet Paper Company, Los Angeles, Cal. Paper-holder | 744,119 | Nov. 17 | 2614 | 550 | 107 | 586 |
| Sexton, Isaac E., Somerville, Mass. Sheet-metal can | 737,971 | Sept. 1 | 828 | 181 | 106 | 181 |
| Sexton-Stubinger Range Company. (See Stubinger, William F., assignor. | | | | | | |
| Seybold, Charles, Dayton, Ohio. Paper-cutting machine | 724,130 | Mar. 31 | 4649 | 1046 | 103 | 1032 |
| Seybold, Charles, Dayton, Ohio. Clamp-coupling device for automatic paper-cutters | 731,232 | June 16 | 3118 | 691 | 104 | 1807 |
| Seybold, Charles, Dayton, Ohio. Embossing-press | 735,830 | Aug. 11 | 1523 | 326, 327 | 105 | 1324 |
| Seydel, Moritz J. (See Gumnitz and Seydel.) | | | | | | |
| Seyfang, George, Buffalo, N. Y., assignor to A. W. Underwood, Evanston, Ill. Bicycle | 730,194 | June 2 | 1193 | 268 | 104 | 1370 |
| Seyfried, August, San Francisco, Cal. Amusement device | 736,305 | Aug. 11 | 2373 | 516 | 105 | 1509 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | Spec. | Drg. | Vol. | Page. |
| Seyfried, August, and F. W. Sheelor, San Francisco, Cal. Amusement device | 725,156 | Apr. 14 | 1379 | 311 | 103 | 1477 |
| Seymour, Albert P., Syracuse, N. Y. Electric socket | 719,265 | Jan. 27 | 3312 | 741 | 102 | 745 |
| Seymour, Andrew J., Buffalo, N. Y. Playing-cards | 746,750 | Dec. 15 | 2618 | 601 | 107 | 1705 |
| Seymour, Charles, assignor to Defiance Machine Works, Defiance, Ohio. Lathe | 717,933 | Jan. 6 | 781 | 175, 176 | 102 | 167 |
| Seymour, Charles, assignor to Defiance Machine Works, Defiance, Ohio. Wabble-saw | 722,541 | Mar. 10 | 1650 | 364 | 103 | 370 |
| Seymour, Charles, assignor to Defiance Machine Works, Defiance, Ohio. Copying-lathe | 723,044 | Mar. 17 | 2569 | 578, 579 | 103 | 576 |
| Seymour, Charles, assignor to Defiance Machine Works, Defiance, Ohio. Hydraulic press | 728,628 | May 19 | 3420 | 758, 759 | 104 | 766 |
| Seymour, Frederick S., Manchester, Iowa. Stock-waterer | 741,557 | Oct. 13 | 2245 | 500 | 106 | 1746 |
| Seymour, Henry A., Washington, D. C., assignor to G. Mitchell, Los Angeles, Cal. Apparatus for generating steam from hot slag | 719,520 | Feb. 3 | 191 | 44,45 | 102 | 864 |
| Seymour, Henry E., San Francisco, Cal. Compass or scriber | 719,381 | Jan. 27 | 3542 | 790 | 102 | 795 |
| Seymour, Herbert P., Hartford, Conn., assignor to Pope Manufacturing Company, Jersey City, N. J. Bicycle | 740,703 | Oct. 6 | 585 | 131 | 106 | 1373 |
| Seymour, John E., Columbus, Ohio. Automatic gas cut-off | 732,124 | June 30 | 4826 | 1076 | 104 | 2193 |
| Seymour, John S., *et al.* (See Fouché, Edmond, assignor.) | | | | | | |
| Seymour, Ralph C., South Orange, N. J., assignor to C. B. Cottrell & Sons Company, New York, N. Y., and Stonington, Conn. Machinery for folding paper or other fabrics | 736,031 | Aug. 11 | 1896 | 406 | 105 | 1405 |
| Sgal, Ludwig. (See Ladislaw and Sgal.) | | | | | | |
| Shabley, Charles, Wessington Springs, S. D. Harrow | 731,325 | June 16 | 3302 | 736 | 104 | 1846 |
| Shackleton, Sugden, assignor to P. Smith & Son, Keighley, England. Yarn-controller for spinning machinery | 731,409 | June 16 | 3458 | 772, 773 | 104 | 1878 |
| Shade, Albert A., assignor of one-half to E. H. Moore, Chicago, Ill. Electric furnace | 722,411 | Mar. 10 | 1401 | 310 | 103 | 314 |
| Shade, Archie G., Joplin, Mo. Cigar-box-lid supporter | 739,563 | Sept. 22 | 3891 | 872 | 106 | 881 |
| Shade, George W., and P. S. Knapp, Pittsburg, Pa. Cuspidor | 733,431 | July 14 | 1324 | 312 | 105 | 296 |
| Shade, George W., and P. S. Knapp, Pittsburg, Pa. Vault-cover | 742,075 | Oct. 20 | 3308 | 737 | 106 | 1980 |
| Shadel, Albert F., Lopez, Wash. Means for lifting fish-trap pots or spillers | 735,601 | Aug. 4 | 1082 | 230 | 105 | 1211 |
| Shadforth, John T., Walker-on-Tyne, England. High-temperature furnace | 741,727 | Oct. 20 | 2584 | 575 | 106 | 1831 |
| Shaeffer, Nohae, Pittsburg, Pa. Burner | 724,957 | Apr. 7 | 991 | 228 | 103 | 1381 |
| Shaen, Michael. (See Elliott and Shaen.) | | | | | | |
| Shafer, Clarence M. (See Shallenberger, John W., assignor.) | | | | | | |
| Shafer, Harry L., Salem, Ohio, and G. M. Howe, Buffalo, N. Y., assignors, by mesne assignments, to Chicola Manufacturing Company, St. Louis, Mo. Vending-machine | 721,971 | Mar. 3 | 595 | 133 | 103 | 130 |
| Shafer, James. (See Robison and Shafer.) | | | | | | |
| Shafer, Joseph, and J. Miller, Ripley, Okla. Ter. Self-waiting table | 732,227 | June 30 | 5042 | 1121 | 104 | 2239 |
| Shafer, Matthew P., Vandergrift, Pa. Welding compound | 729,428 | May 26 | 4840 | ------ | 104 | 1074 |
| Shafer, Samuel F., Findlay, Ohio, assignor to American Stove & Furnace Company. Heating-stove | 733,432 | July 14 | 1325 | 312, 313 | 105 | 297 |
| Shafer, William, Camden, N. J., assignor to New Jersey Wire Stitching Machine Company. Feed device for wire-stitching machines | 745,917 | Dec. 1 | 1112 | 249 | 107 | 1336 |
| Shaffer Boiler & Engine Manufacturing Company. (See Shaffer, Richard M., assignor.) | | | | | | |
| Shaffer, Charles C., Alliance, Ohio. Artificial bait | 723,045 | Mar. 17 | 2572 | 579 | 103 | 576 |
| Shaffer, Charles E., Hallton, Pa. Toy figure | 718,662 | Jan. 20 | 2175 | 476 | 102 | 495 |
| Shaffer, Charles E., and G. B. Johnson, Quincy, Ill.; said Johnson assignor to said Shaffer. Hoof-trimmer | 729,226 | May 26 | 4500 | 992 | 104 | 1003 |
| Shaffer, David L., Pittsburg, Pa. Fire-flue boiler | 731,513 | June 23 | 3669 | 818 | 104 | 1941 |
| Shaffer, Frank L., Allegheny, Pa. Bag-punching toy | 742,504 | Oct. 27 | 4092 | 921 | 106 | 2157 |
| Shaffer, Henry E., Rochester, N. Y. Acetylene-burner | 732,125 | June 30 | 4827 | 1076 | 104 | 2194 |
| Shaffer, J. Albert, *et al.* (See Shaffer, Richard M., assignor.) | | | | | | |
| Shaffer, Kent, Evanston, Ill. Electric fixture | 743,991 | Nov. 10 | 2326 | 497 | 107 | 516 |
| Shaffer, Richard M., Baltimore, Md. Burner | 732,455 | June 30 | 5481 | 1215 | 104 | 2329 |
| Shaffer, Richard M., Baltimore, Md., assignor to Shaffer Boiler & Engine Manufacturing Company. Packing | 743,666 | Nov. 10 | 1730 | 365 | 107 | 385 |
| Shaffer, Richard M., Baltimore, Md., assignor to P. Hines and J. A. Shaffer, Washington, D. C. Aural instrument | 723,929 | Mar. 31 | 4241 | 954 | 103 | 951 |
| Shaffer, William F., *et al.* (See Joseph, Sheldon, assignor.) | | | | | | |
| Shaiffer, Harry D., Philadelphia, Pa. Spring-frame | 747,002 | Dec. 15 | 3109 | 712 | 107 | 1815 |
| Shailor, Frank E., assignor to G. H. Ford, New Haven, Conn. Harness-rosette | 735,602 | Aug. 4 | 1084 | 230 | 105 | 1211 |
| Shakespeare, William, Jr., and W. E. Marhoff, Kalamazoo, Mich.; said Marhoff assignor to said Shakespeare. Brake mechanism for fishing-reels | 734,970 | July 28 | 4217 | 980 | 105 | 935 |
| Shakespeare, William, Jr., and W. E. Marhoff, Kalamazoo, Mich.; said Marhoff assignor to said Shakespeare. Click mechanism for fishing-reels | 734,971 | July 28 | 4218 | 980 | 105 | 935 |
| Shakespeare, William, Jr., and W. E. Marhoff, Kalamazoo, Mich.; said Marhoff assignor to said Shakespeare. Click mechanism for fishing-reels | 734,972 | July 28 | 4220 | 980 | 105 | 936 |
| Shallenberger, Charles S., Milwaukee, Wis., assignor to Republic Railway Appliance Company, St. Louis, Mo. Pressed-metal draft-sill | 723,046 | Mar. 17 | 2573 | 579, 580 | 103 | 577 |
| Shallenberger, John W., Canal Fulton, Ohio, assignor to Warwood Tool Company, Wheeling, W. Va. Coal-drilling machine | 722,412 | Mar. 10 | 1405 | 310 | 103 | 315 |
| Shallenberger, John W., assignor of one-half to C. M. Shafer, Canal Fulton, Ohio. Mail-bag fastener | 735,914 | Aug. 11 | 1682 | 359 | 105 | 1358 |
| Shallenberger, Mary W., executrix. (See Shallenberger, Oliver B.) | | | | | | |
| Shallenberger, Oliver B., Rochester, assignor, by mesne assignments, to Westinghouse Electric & Manufacturing Company, Pittsburg, Pa. System of electrical distribution | 740,189 | Sept. 29 | 5087 | 1143 | 106 | 1154 |
| Shallenberger, Oliver B., deceased, Rochester, Pa.; M. W. Shallenberger, executrix, assignor to Westinghouse Electric & Manufacturing Company. Phase-adjusting method and means for alternating-current apparatus | 740,190 | Sept. 29 | 5089 | 1143 | 106 | 1154 |
| Shaller, Harry J., St. Louis, Mo. Vending-machine | 740,374 | Sept. 29 | 5431 | 1222 | 106 | 1224 |
| Shambeck, George, assignor of one-half to G. Roth, Salt Lake City, Utah. Polishing compound | 747,003 | Dec. 15 | 3111 | ------ | 107 | 1816 |
| Shanafelt, George W. (See Hornaday, Edson, assignor.) | | | | | | |
| Shanahan, Stephen, Charleston, W. Va. Street-box for underground mains for water, gas, meter, and valve boxes | 734,621 | July 28 | 3546 | 830 | 105 | 799 |
| Shanaman, John K., Annville, Pa. Artificial limb | 740,476 | Oct. 6 | 177 | 34,35 | 106 | 1283 |
| Shank, Samuel N., assignor of one-half to J. H. Biddle, St. Paris, Ohio. Door-check | 723,216 | Mar. 17 | 2902 | 650 | 103 | 645 |
| Shank, Simon H., Chicago, Ill. Holder for shears | 746,392 | Dec. 8 | 1975 | 451 | 107 | 1541 |
| Shanklin, Alexander L., and J. G. Hausam, Kansas City, Mo. Refrigerator-door | 725,783 | Apr. 21 | 2543 | 577 | 103 | 1740 |
| Shanklin, Alexander L., and J. G. Hausam, Kansas City, Mo. Drawer for refrigerators | 736,449 | Aug. 18 | 2626 | 576 | 105 | 1578 |
| Shanks, Hubert A., *et al.* (See Lemle, Jacob, assignor.) | | | | | | |
| Shanley, Michael H., Granbury, Tex. Kitchen-cabinet | 744,808 | Nov. 24 | 3884 | 835, 836 | 107 | 877 |
| Shannen, Harry J., Atlanta, Ga. Refrigerator | 727,215 | May 5 | 745 | 159 | 104 | 160 |

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| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
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| Shannon, James A. (See Roche, Timothy, assignor.) | | | | | | |
| Shannon, John J. (See Ramsay and Shannon.) | | | | | | |
| Shannon, Peter, Chicago, Ill. Hydraulic street-cleaning apparatus | 726,580 | Apr. 28 | 4031 | 911, 912 | 103 | 2057 |
| Shannon, William C., and L. D. Mullen, Selma, Ala. Automatic air-brake | 735,603 | Aug. 4 | 1084 | 230, 231 | 105 | 1211 |
| Shannon, William J. (See Ward, Daniel, assignor.) | | | | | | |
| Shannon, Young, Norwich, Conn. Photographic apparatus | 747,784 | Dec. 22 | 4554 | 1028 | 107 | 2158 |
| Sharkey, James, Eaton, Ohio. Foldable seat | 743,938 | Nov. 10 | 2209 | 477 | 107 | 487 |
| Sharp, Alonzo, assignor to Adams Laundry Machine Company, Troy, N. Y. Valve | 746,884 | Dec. 15 | 2878 | 665 | 107 | 1763 |
| Sharp, Charles L., and J. R. Williams, Sharon, Pa. Curtain-pole hanger | 727,852 | May 12 | 1958 | 436 | 104 | 434 |
| Sharp, Edward A., Chicago, Ill. File-binder | 719,888 | Feb. 3 | 861 | 202 | 102 | 1005 |
| Sharp, George S. (See Dearden and Sharp.) | | | | | | |
| Sharp, H. V., *et al.* (See Glenn, Austin H., assignor.) | | | | | | |
| Sharp, Isaac A., assignor of one-half to G. P. Kemp, Montezuma, Ind. Match-box for miners' lamps | 719,622 | Feb. 3 | 375 | 86 | 102 | 900 |
| Sharp, John, Jr. (See Jackson and Sharp.) | | | | | | |
| Sharp, John, Portland, Oreg. Wire-holder | 745,918 | Dec. 1 | 1113 | 249 | 107 | 1336 |
| Sharp, John C. (See Sharp, William C. and J. C.) | | | | | | |
| Sharp, Lee C., Omaha, Nebr. Can-header | 723,047 | Mar. 17 | 2575 | 580, 581 | 103 | 577 |
| Sharp, Thomas, Bedford, Pa. Lamp-holder | 731,233 | June 16 | 3119 | 692 | 104 | 1808 |
| Sharp, Warren M., Binghamton, N. Y. Core for casting molds for tooth-caps | 726,771 | Apr. 28 | 4391 | 987 | 103 | 2132 |
| Sharp, Warren M., Binghamton, N. Y. Device for drawing metal tooth-caps | 726,772 | Apr. 28 | 4392 | 988 | 103 | 2132 |
| Sharp, William C., Parkersburg, W. Va., and J. C. Sharp, Winamac, Ind. Roofing-shingle | 718,284 | Jan. 13 | 1424 | 317 | 102 | 322 |
| Sharp, William E., assignor to Armour Car Lines, Chicago, Ill. Ventilator for refrigerator-cars | 725,994 | Apr. 21 | 2910 | 660, 661 | 103 | 1817 |
| Sharpe, Edith M., Ottawa, Canada. Buckle | 738,948 | Sept. 15 | 2784 | 617 | 106 | 629 |
| Sharpe, John E., assignor of two-fifths to J. Beal, Oneida, N. Y. Match-lighter | 719,889 | Feb. 3 | 863 | 202 | 102 | 1006 |
| Sharpe, Joseph K., Jr. (See Schuman, James B., assignor.) | | | | | | |
| Sharpe, Joseph K., Jr., Indianapolis, Ind. Clover-buncher | 736,450 | Aug. 18 | 2627 | 577 | 105 | 1578 |
| Sharpe, Joseph K., Jr., assignor to Indiana Manufacturing Company, Indianapolis, Ind. Pneumatic stacker | 721,243 | Feb. 24 | 3470 | 789 | 102 | 1603 |
| Sharpe, Joseph K., Jr., assignor to Indiana Manufacturing Company, Indianapolis, Ind. Pneumatic straw-stacker | 747,896 | Dec. 22 | 4779 | 1079 | 107 | 2207 |
| Sharples, David T., Westchester, Pa. Milking apparatus | 737,669 | Sept. 1 | 202 | 43, 44 | 106 | 47 |
| Sharples, William E., Fall River, Mass. Automatic thread-board lifter | 737,161 | Aug. 25 | 3955 | 879 | 105 | 1876 |
| Sharpneck, William S., assignor to E. W. Brooks, Chicago, Ill. Rotary pump | 725,784 | Apr. 21 | 2544 | 577 | 103 | 1740 |
| Sharpneck, William S., assignor to E. W. Brooks, Chicago, Ill. Rotary pump | 730,052 | June 2 | 965 | 217 | 104 | 1324 |
| Sharrard, James W., Atchison, Kans. Folding gate | 719,621 | Feb. 3 | 371 | 86 | 102 | 899 |
| Shatto, Curtis C., East Toledo, Ohio. Railway-tie | 733,878 | July 14 | 2127 | 501 | 105 | 464 |
| Shattuc, Smith M., Denver, Colo. Receptacle for matches, tickets, or the like | 729,429 | May 26 | 4841 | 1073 | 104 | 1074 |
| Shattuck, George H., and H. R. Farnsworth, Turners Falls, Mass. Expansible mandrel | 737,000 | May 5 | 352 | 76 | 104 | 76 |
| Shaughnessy, Emma, Tomah, Wis. Check-row planter | 734,101 | July 21 | 2589 | 607 | 105 | 581 |
| Shaul, Albert J., Quimby, Iowa. Account-book holder | 740,321 | Sept. 29 | 5338 | 1203 | 106 | 1205 |
| Shauman, Mary A., Benton Harbor, Mich. Steamer for culinary purposes | 722,153 | Mar. 3 | 910 | 202 | 103 | 194 |
| Shaver, William M. (See Wilson and Shaver.) | | | | | | |
| Shaw, Albert L., Whitecastle, assignor of sixty one-hundredths to R. H. Downman, New Orleans, La. Machine for sawing, beveling, and chamfering wood | 720,628 | Feb. 17 | 2282 | 523, 524 | 102 | 1332 |
| Shaw, Anna, Chicago, Ill. Washboiler | 732,968 | July 7 | 473 | 118 | 105 | 102 |
| Shaw, Arthur D., Philadelphia, Pa., assignor to Stair Lift Company, Camden, N. J. Conveyer | 719,890 | Feb. 3 | 864 | 202, 203 | 102 | 1006 |
| Shaw, Arthur J. (See Owen and Shaw.) | | | | | | |
| Shaw, Campbell B., Kirkwood, assignor to Shaw Manufacturing Company, St. Louis, Mo. Automatic valve | 746,393 | Dec. 8 | 1977 | 451, 452 | 107 | 1541 |
| Shaw, Campbell B., Kirkwood, and W. B. Knight; said Knight assignor to H. Scullin, St. Louis, Mo. Fusible link | 725,495 | Apr. 14 | 2005 | 453 | 103 | 1610 |
| Shaw, Charles H., Denver, Colo. Pneumatic tool | 736,555 | Aug. 18 | 2825 | 618, 619 | 105 | 1621 |
| Shaw, Clifford. (See Clark, Matthew J., assignor.) | | | | | | |
| Shaw, Daniel C. (See Little, Breymann, and Shaw.) | | | | | | |
| Shaw, Edward, London, England. Vending-machine | 728,774 | May 19 | 3675 | 817, 818, 819, 820, 821 | 104 | 818 |
| Shaw, Edward, London, England. Vending-machine | 737,503 | Aug. 25 | 4625 | 1037, 1038, 1039 | 105 | 2021 |
| Shaw, Edward, London, England. Making sweetmeats | 739,229 | Sept. 15 | 3286 | | 106 | 734 |
| Shaw, Elton R., Ontario, Cal. Evaporating-pan | 732,636 | Mar. 10 | 1815 | 404 | 103 | 406 |
| Shaw, Everett B., and M. T. Carroll, Kane, Pa. Injector-burner | 719,382 | Jan. 27 | 3543 | 790 | 102 | 796 |
| Shaw, Francis E. (See Heath, Amasa C., assignor.) | | | | | | |
| Shaw, Francis E., Evart, Mich. Potato-planter | 743,200 | Nov. 3 | 731 | 160, 161 | 107 | 153 |
| Shaw, Frank J., Leominster, Mass. Paper reed | 731,714 | June 23 | 4038 | 901 | 104 | 2013 |
| Shaw, Frank J., Leominster, Mass. Paper reed | 731,715 | June 23 | 4039 | 901 | 104 | 2013 |
| Shaw, Harry M., Newark, N. J. Lightning-arrester | 724,339 | Mar. 31 | 5070 | 1134 | 103 | 1116 |
| Shaw, Henry F., Boston, assignor of one-half to A. D. Puffer, Jr., Lexington, Mass. Engine | 719,053 | Jan. 27 | 2907 | 651 | 102 | 661 |
| Shaw, Henry F., Boston, assignor of one-half to A. D. Puffer, Jr., Lexington, Mass. Valve | 724,212 | Mar. 31 | 4812 | 1078, 1079 | 103 | 1065 |
| Shaw, Henry W., assignor to F. W. De Voe and C. T. Raynolds Company, New York, N. Y. Cabinet for exhibiting and advertising paints | 718,953 | Jan. 20 | 2727 | 609 | 102 | 609 |
| Shaw, Irvin A., assignor of one-third to L. A. Bunker, Hutchinson, Kans. Sash-fastener | 740,322 | Sept. 29 | 5339 | 1203 | 106 | 1205 |
| Shaw, Jesse T., Chicago, Ill. Railway-tie | 728,028 | May 12 | 2271 | 504 | 104 | 501 |
| Shaw, John, Franklin, Pa., assignor of two-thirds to W. G. Shaw, Cleveland, Ohio, and A. G. Kritch, Franklin, Pa. Reamer | 725,374 | Apr. 14 | 1764 | 396 | 103 | 1558 |
| Shaw, John E. (See Hutchinson, William F., assignor.) | | | | | | |
| Shaw, John W. W. (See Floquet and Bonnet, assignors.) | | | | | | |
| Shaw, Leonard, Westminster, England. Photographic-printing apparatus | 742,243 | Oct. 27 | 3627 | 810, 811 | 106 | 2061 |
| Shaw Manufacturing Company. (See Shaw, Campbell B., assignor.) | | | | | | |
| Shaw, Nathaniel H., Boston, Mass. Automatic lighter or extinguisher for gas-lamps | 737,030 | Aug. 25 | 3739 | 830 | 105 | 1812 |
| Shaw, Nathaniel H., Boston, Mass. Bobbin-rougher | 740,191 | Sept. 29 | 5091 | 1144 | 106 | 1155 |

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| Shaw, Philip B. (See Hill, Jeremiah C., assignor.) | | | | | | |
| Shaw, Robert W., Stamford, Conn. Propeller | 747,654 | Dec. 22 | 4325 | 977 | 107 | 2105 |
| Shaw, Solomon, Milwaukee, Wis. Molding apparatus | 717,631 | Jan. 6 | 197 | 49 | 102 | 42 |
| Shaw-Walker Company. (See Fry, John H., assignor.) | | | | | | |
| Shaw, William G., *et al.* (See Shaw, John, assignor.) | | | | | | |
| Shaw, William S. (See Nash, Nathan E., assignor.) | | | | | | |
| Shawver, Elmer F. (See Holman and Shawver.) | | | | | | |
| Shea, Christopher A., Philadelphia, Pa. Device for guiding ledger-footings | 743,762 | Nov. 10 | 1887 | 399 | 107 | 420 |
| Shea, Christopher A., Philadelphia, Pa., assignor to Automatic Train Controller Company of New Jersey. Electrical switch-lock | 726,361 | Apr. 28 | 3595 | 816 | 103 | 1974 |
| Shea, Daniel F., assignor to United Shoe Machinery Company, Boston, Mass. Rounding-machine tool | 721,395 | Feb. 24 | 3731 | 849 | 102 | 1658 |
| Shea, Daniel T., North Bellingham, Mass. Lug-strap holder | 743,575 | Nov. 10 | 1562 | 327 | 107 | 350 |
| Shea, David J., Marianna, Ark. Drag-sawing machine | 741,174 | Oct. 13 | 1458 | 331<br>332 | 106 | 1576 |
| Shea, Smith & Company. (See Kell, William H., assignor.) | | | | | | |
| Shea, Thomas A., assignor to G. B. Sloan, Jr., Oswego, N. Y. Leaf-spring | 718,733 | Jan. 20 | 2311 | 511 | 102 | 522 |
| Shea, Thomas A., assignor to G. B. Sloan, Jr., Oswego, N. Y. Elliptic spring | 718,734 | Jan. 20 | 2312 | 511 | 102 | 522 |
| Shead, Frank J. (See Shead, Lorrin J. and F. J.) | | | | | | |
| Shead, Lorrin J., Defiance, Ohio, and F. J. Shead, Chicago, Ill. Lathe | 730,053 | June 2 | 967 | 217 | 104 | 1325 |
| Sheahan, John J., Buffalo, N. Y. Electromagnetic bell-ringing mechanism | 723,048 | Mar. 17 | 2581 | 581<br>582 | 103 | 579 |
| Shearer, Arthur. (See Spence, Shearer, and Craig.) | | | | | | |
| Shearer, Andrew, Frankfort, Kans. Combined lister-plow and planter | 718,663 | Jan. 20 | 2176 | 477 | 102 | 495 |
| Shearer, Andrew, Frankfort, Kans. Combined lister-plow and planter | 718,664 | Jan. 20 | 2179 | 477 | 102 | 495 |
| Shearer, John C., and L. Frank, Dayton, Ohio. Meat-holder | 723,412 | Mar. 24 | 3281 | 734 | 103 | 733 |
| Shearn, Joseph H., Leeds, Mass. Skeining-machine | 728,775 | May 19 | 3682 | 821<br>822<br>823 | 104 | 819 |
| Shears, Newton W. (See Grant and Shears.) | | | | | | |
| Shears, Sumner S. (See Price, Henry C., assignor.) | | | | | | |
| Sheble, Horace, *et al.* (See Gleason, Edward D., assignor.) | | | | | | |
| Sheble, Horace, Philadelphia, Pa. Gramophone-needle box | 730,169 | June 2 | 1155 | 260 | 104 | 1363 |
| Shedd, Charles W., Canastota, N. Y. Tool or implement | 718,534 | Jan. 13 | 1924 | 422 | 102 | 429 |
| Shedd, Joel H., Providence, R. I., assignor to W. C. Carr, New York, N. Y. Hydraulic air-compressor | 738,576 | Sept. 8 | 2058 | 449 | 106 | 458 |
| Shedenhelm, Robert, Des Moines, Iowa. Band-cutter and feeder | 718,665 | Jan. 20 | 2181 | 477<br>478 | 102 | 496 |
| Shedenhelm, Robert, Des Moines, Iowa. Mail delivering and receiving apparatus for railway-cars | 721,332 | Feb. 24 | 3611 | 821 | 102 | 1634 |
| Shedenhelm, Robert, Des Moines, Iowa. Band-cutter and feeder | 724,621 | Apr. 7 | 377 | 90, 91 | 103 | 1250 |
| Shedenhelm, Robert, Des Moines, Iowa. Band-cutter and feeder | 724,622 | Apr. 7 | 384 | 91, 92 | 103 | 1251 |
| Shedenhelm, Robert, Des Moines, Iowa. Flexible power-transmitting shaft | 735,020 | July 28 | 4307 | 1002 | 105 | 954 |
| Shedlock, Alfred, Jersey City, N. J., assignor to Cushman and Denison, New York, N. Y. Cover or holder for balls of twine or similar cordage | 724,623 | Apr. 7 | 389 | 92 | 103 | 1252 |
| Sheehan, Edmund J., Chicago, Ill. Bottler's protective device | 725,881 | Apr. 21 | 2714 | 617 | 103 | 1777 |
| Sheehan, George W., Salem, Ohio. Horse-hitching device | 724,340 | Mar. 31 | 5071 | 1134 | 103 | 1116 |
| Sheehan, John B., Atchison, Kans. Hernial truss | 733,879 | July 14 | 2128 | 502 | 105 | 464 |
| Sheehan, Thomas C., Nashville, Tenn., assignor to R. C. Williams, Richmond, Va. Manifolding-register | 721,097 | Feb. 17 | 3136 | 720<br>721 | 102 | 1517 |
| Sheehy, Robert J., New York, N. Y. Attachment for range-finders | 720,076 | Feb. 10 | 1221 | 280<br>281 | 102 | 1099 |
| Sheehy, Robert J., New York, N. Y. Engine-controlling apparatus | 722,917 | Mar. 17 | 2365 | 529 | 103 | 533 |
| Sheehy, Robert J., New York, N. Y. Engine-controlling apparatus | 723,413 | Mar. 24 | 3284 | 735 | 103 | 733 |
| Sheehy, William E., Boston, Mass. Power-hammer | 743,763 | Nov. 10 | 1888 | 399<br>400 | 107 | 420 |
| Sheeler, Harvey, Cleveland, Ohio. Moving heavy buildings or other structures | 722,256 | Mar. 10 | 1123 | 248 | 103 | 254 |
| Sheeler, Harvey, Cleveland, Ohio. Double claw or grip device | 722,257 | Mar. 10 | 1125 | 248 | 103 | 254 |
| Sheelor, Forrest W. (See Seyfried and Sheelor.) | | | | | | |
| Sheen, Daniel R. (See Sheen, Morris N. and D. R.) | | | | | | |
| Sheen, Daniel R., Peoria, Ill. Propelling mechanism for boats | 718,162 | Jan. 13 | 1193 | 265 | 102 | 272 |
| Sheen, Daniel R. and M. N., Peoria, Ill. Outrigger for boats | 731,515 | June 23 | 3675 | 819 | 104 | 1942 |
| Sheen, Morris N. (See Sheen, Daniel R. and M. N.) | | | | | | |
| Sheen, Morris N. and D. R., Peoria, Ill. Propelling mechanism for boats | 731,514 | June 23 | 3671 | 819 | 104 | 1941 |
| Sheer, Henry M., Quincy, Ill. Regulator-disk | 731,959 | June 23 | 4482 | 1000 | 104 | 2110 |
| Sheerer, Jacob. (See McGaughey and Sheerer.) | | | | | | |
| Sheets, Brady M., Eureka, W. Va. Automatic gas shut-off | 730,977 | June 16 | 2646 | 589 | 104 | 1714 |
| Sheets, Charles K., and W. L. Hill, Montgomery City, Mo. Boring-tool | 730,709 | June 9 | 2159 | 479 | 104 | 1591 |
| Sheets, John H., New York, N. Y. Syringe | 730,054 | June 2 | 970 | 217 | 104 | 1325 |
| Sheets, Joshua S., assignor to J. E. Reyburn, Philadelphia, Pa. Hoisting-machine | 721,396 | Feb. 24 | 3732 | 850 | 102 | 1658 |
| Sheets, William P., Princeton, Mo. Incubator | 735,305 | Aug. 4 | 515 | 104 | 105 | 1091 |
| Shefferd, Charles, Coon Rapids, Iowa. Clothes-draining device | 724,131 | Mar. 31 | 4652 | 1046 | 103 | 1032 |
| Sheffield, George H., and J. D. Twinberrow, Newcastle-upon-Tyne, England. Bogie for railway-cars | 731,626 | June 23 | 3886 | 864<br>865 | 104 | 1982 |
| Sheffield, George H., and J. D. Twinberrow, Newcastle-upon-Tyne, England. Door for self-discharging hoppers of railway or other freight-cars | 741,075 | Oct. 13 | 1269 | 288<br>289<br>290<br>291 | 106 | 1538 |
| Sheffield, George H., and J. D. Twinberrow, Newcastle-upon-Tyne, England. Door and apparatus therefor for use upon hopper-wagons | 748,221 | Dec. 29 | 5426 | 1235<br>1236<br>1237 | 107 | 2370 |
| Sheffield, William H., Hobart, N. Y. Filling apparatus | 724,341 | Mar. 31 | 5073 | 1135 | 103 | 1117 |
| Sheffy, Jay K. (See McKaig, Eddy T., assignor.) | | | | | | |
| Shekey, Joseph C., and F. H. Shephard, Johnson Creek, Wis. Feeder for corn-huskers | 743,576 | Nov. 10 | 1564 | 327<br>328 | 107 | 351 |
| Shelby Specialty Company. (See Packer, Willard N., assignor.) | | | | | | |
| Sheldon, Edward P., Brooklyn, N. Y. Machine for wrapping pamphlets or similar articles | 718,735 | Jan. 20 | 2314 | 511<br>512 | 102 | 522 |
| Sheldon, Harry E., Aspinwall, Pa. Adjustable bench for rolls | 725,157 | Apr. 14 | 1380 | 311 | 103 | 1477 |
| Sheldon, Mark A., Detroit, Mich. Pinch-bar | 717,632 | Jan. 6 | 198 | 49 | 102 | 43 |
| Sheldon, Mark A., assignor of one-third to A. McVittie, Detroit, Mich. Match-machine | 718,393 | Jan. 13 | 1615 | 355<br>356 | 102 | 361 |
| Sheldon, Samuel B., Joliet, Ill., assignor to Illinois Steel Company. Manufacturing railway-rail-joint plates | 733,085 | July 7 | 691 | 169 | 105 | 147 |
| Shelhamer, Charles K. (See Swan and Shelhamer.) | | | | | | |
| Shelhamer, Charles K., Auburn, Nebr. Feeding-trough for stock | 737,504 | Aug. 25 | 4629 | 1039 | 105 | 2022 |
| Shell, William H., Glencoe, Okla. Ter. Draft-equalizer | 727,853 | May 12 | 1959 | 436 | 104 | 434 |

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| Shell, William H., Glencoe, Okla. Ter. Draft-equalizer | 745,681 | Dec. 1 | 663 | 153 | 107 | 1239 |
| Shellaberger, George H., Bartow, Fla. Fruit-harvester | 722,413 | Mar. 10 | 1406 | 310<br>311 | 103 | 315 |
| Shellman, Abraham J., Grand Rapids, Mich. Optometer | 746,394 | Dec. 8 | 1980 | 452 | 107 | 1542 |
| Shelly, Paris G. (See Kline, Jacob Y., assignor.) | | | | | | |
| Shelters, Ernest E., and H. T. Hunnewell, Lowell, Mass. Thin-place-detector mechanism for looms | 723,049 | Mar. 17 | 2585 | 582<br>583 | 103 | 579 |
| Shelton, John, Denver, Colo. Car-brake mechanism | 722,154 | Mar. 3 | 911 | 202<br>203 | 103 | 194 |
| Shelton, John, Denver, Colo., assignor of one-half to E. P. Becker, St. Louis, Mo. Car-brake mechanism | 719,148 | Jan. 27 | 3105 | 691 | 102 | 701 |
| Shelton, John F., Fort Worth, Tex. Hydrocarbon-vapor generator | 735,831 | Aug. 11 | 1526 | 327 | 105 | 1325 |
| Shelton, John F., Fort Worth, Tex. Apparatus for electroplating small metallic articles | 737,162 | Aug. 25 | 3956 | 879 | 105 | 1877 |
| Shelton, John M., Ardmore, Ind. Ter. Vending-cabinet | 741,939 | Oct. 20 | 2974 | 662 | 106 | 1913 |
| Shelton, Robert H., Celeste, Tex. Bed-slat fastener and brace | 731,326 | June 16 | 3303 | 737 | 104 | 1846 |
| Shelton, William J., assignor of one-half to C. M. Browning, Van Vleck, Tex. Holder for poison | 738,363 | Sept. 8 | 1664 | 361 | 106 | 374 |
| Shelton, Zelda G., Ottumwa, Iowa. Spool, thimble, and cushion rack | 723,930 | Mar. 31 | 4242 | 954 | 103 | 951 |
| Shely, Richard W., Lexington, Ky. Propelling apparatus | 735,163 | Aug. 4 | 225 | 45, 46 | 105 | 1031 |
| Shem, George W., Alliance, Ohio, assignor to Camden Iron Works, Camden, N. J. Hydraulic-power machine | 720,494 | Feb. 10 | 1979 | 452<br>453 | 102 | 1257 |
| Shem, George W., Alliance, Ohio, assignor to Camden Iron Works, Camden, N. J. Hydraulic shearing-machine | 729,430 | May 26 | 4842 | 1073 | 104 | 1074 |
| Shepard, Charles H., Brooklyn, assignor to Wyckoff, Seamans & Benedict, Ilion, N. Y. Type-writing machine | 727,001 | May 5 | 353 | 76, 77 | 104 | 76 |
| Shepard, Charles H., Brooklyn, assignor to Wyckoff, Seamans & Benedict, Ilion, N. Y. Type-writing machine | 727,216 | May 5 | 746 | 159<br>160 | 104 | 160 |
| Shepard, Charles H., Brooklyn, assignor to Wyckoff, Seamans & Benedict, Ilion, N. Y. Type-writing machine | 737,163 | Aug. 25 | 3958 | 880 | 105 | 1877 |
| Shepard, Charles H., Brooklyn, assignor to Wyckoff, Seamans & Benedict, Ilion, N. Y. Type-writing machine | 737,786 | Sept. 1 | 425 | 92 | 106 | 93 |
| Shepard, Charles H., New York, assignor to Wyckoff, Seamans & Benedict, Ilion, N. Y. Type-writing machine | 748,111 | Dec. 29 | 5228 | 1185 | 107 | 2327 |
| Shepard, Chester, Johnstown, assignor of two-thirds to J. Lebenheim & Sons and J. B. Reid, Gloversville, N. Y. Leather-finishing machine | 736,160 | Aug. 11 | 2125 | 456 | 105 | 1453 |
| Shepard, Frank P., and D. K. Stauffer, Edmond, Okla. Ter. Slide-trombone | 739,353 | Sept. 22 | 3504 | 783 | 106 | 796 |
| Shepard, Louis A., New York, N. Y. Truck-bolster | 728,030 | May 12 | 2274 | 505 | 104 | 501 |
| Shepard, Louis A., Brooklyn, assignor to C. Vanderbilt, New York, N. Y. Brake-beam | 727,217 | May 5 | 750 | 160 | 104 | 161 |
| Shepard, Louis A., Brooklyn, assignor to C. Vanderbilt, New York, N. Y. Brake-beam | 727,218 | May 5 | 752 | 161 | 104 | 162 |
| Shepard, Louis A., Brooklyn, assignor to C. Vanderbilt, New York, N. Y. Brake-beam | 727,219 | May 5 | 753 | 161 | 104 | 163 |
| Shepard, Louis A., Brooklyn, assignor to C. Vanderbilt, New York, N. Y. Center-plate for railway-cars | 729,967 | June 2 | 823 | 184 | 104 | 1295 |
| Shepard, Louis A., Brooklyn, assignor to C. Vanderbilt, New York, N. Y. Railway-car | 733,285 | July 7 | 1055 | 252 | 105 | 221 |
| Shepard, Louis A., Brooklyn, assignor to C. Vanderbilt, New York, N. Y. Brake-beam | 733,433 | July 14 | 1327 | 313 | 105 | 297 |
| Shepard, Louis A., assignor to C. Vanderbilt, New York, N. Y. Railway-car | 728,029 | May 12 | 2272 | 505 | 104 | 501 |
| Shepard, Marshall, Edgartown, Mass. Safety-alarm device for marine vessels | 743,939 | Nov. 10 | 2212 | 477 | 107 | 487 |
| Shepard, Stephen R., Louisville, Ky. Combined body-brace and truss | 748,426 | Dec. 29 | 5785 | 1319 | 107 | 2449 |
| Shepard, Sylvander C., assignor to H. K. Logan, G. L. Benson, and J. Logan, Hannibal, Mo. Shoe-lace-tipping machine | 735,040 | July 28 | 4341 | 1009<br>1010 | 105 | 960 |
| Shepard, William E., Paris, France. Compound steam-turbine | 741,940 | Oct. 20 | 2978 | 663 | 106 | 1914 |
| Sheperd, William B., assignor of one-half to H. Craig, Urbana, Ohio. Machine for making cell-cases or egg-trays | 722,329 | Mar. 10 | 1250 | 278<br>279 | 103 | 282 |
| Shephard, Francis J., Concord, Wis. Snap-hook | 725,158 | Apr. 14 | 1381 | 312 | 103 | 1478 |
| Shephard, Frank H. (See Shekey and Shephard.) | | | | | | |
| Shephard, William N., Philadelphia, Pa. Auxiliary connection for car-couplings | 746,588 | Dec. 8 | 2312 | 530 | 107 | 1616 |
| Shepherd, Benjamin F., Carlock, Ill. Box-loop for harness | 744,809 | Nov. 24 | 3887 | 836 | 107 | 877 |
| Shepherd, Charles, Providence, R. I. Treating wool-washing suds | 730,305 | June 9 | 1426 | ------ | 104 | 1435 |
| Shepherd, Edward S., and O. M. Bartlett, London, England. Photographic printing | 728,310 | May 19 | 2826 | ------ | 104 | 641 |
| Shepherd, Frank D., Salt Lake City, Utah. Steam-turbine | 728,138 | May 12 | 2470 | 549<br>550 | 104 | 544 |
| Shepherd, Herbert L. (See Ragot, Henry, assignor.) | | | | | | |
| Shepherd, James A. (See Peters and Shepherd.) | | | | | | |
| Shepherd, James A., Glasgow, Scotland. Composition for use in the manufacture of linoleum or like coated fabrics | 728,507 | May 19 | 3171 | ------ | 104 | 712 |
| Shepherd, James H., Denver, Colo. Wrench | 732,126 | June 30 | 4828 | 1076 | 104 | 2194 |
| Shepherd, James H., Denver, Colo. Umbrella runner and holder | 737,787 | Sept. 1 | 431 | 92 | 106 | 95 |
| Shepherd, James H., Denver, Colo. Wrench | 744,120 | Nov. 17 | 2616 | 559 | 107 | 587 |
| Shepherd, Murray, Salt Lake City, Utah. Electric curling-iron | 727,468 | May 5 | 1202 | 266 | 104 | 259 |
| Shepherd, Robert C., assignor to J. R. Newberry and R. J. Waters, Los Angeles, Cal. Muffler for explosive-engines | 744,418 | Nov. 17 | 3182 | 682 | 107 | 710 |
| Shepler, William H., assignor of five-eighths to A. Ahrens and C. Orchardson, Chicago, Ill. Air-brush | 734,473 | July 21 | 3277 | 770 | 105 | 725 |
| Shepley, Benjamin A., Lesterville, Mo. Spoke-brace for vehicle-hubs | 720,745 | Feb. 17 | 2487 | 572 | 102 | 1376 |
| Sheppard, Dudley. (See Bullis, Benson S., assignor.) | | | | | | |
| Sheppard, James B., and J. J. Rose, Toronto, Canada. Train-stopper | 729,227 | May 26 | 4501 | 993 | 104 | 1003 |
| Sheppard, William F., Washington, D. C. Convertible harrow and cultivator | 741,076 | Oct. 13 | 1272 | 291 | 106 | 1539 |
| Sheppard, William F., Washington, D. C. Harrow or similar implement | 741,596 | Oct. 13 | 2322 | 520 | 106 | 1761 |
| Sherburne, James C., Des Moines, Iowa. Machine for producing hot-air currents and liquid spray | 742,244 | Oct. 27 | 3628 | 811 | 106 | 2062 |
| Sherer, Samuel J., Chicago, Ill. Display-counter | 729,684 | June 2 | 287 | 66 | 104 | 1188 |
| Sheridan, Francis M., and E. Behrendt, assignors of fifty-five one-hundredths to M. Schey, New York, N. Y. Electric display-sign | 723,321 | Mar. 24 | 3096 | 697 | 103 | 698 |
| Sheridan, Frank, assignor of one-half to T. Sullivan, Covington, Ky. Meter-coupling | 746,181 | Dec. 8 | 1594 | 356 | 107 | 1461 |
| Sheridan, George W., and W. A. Wheeler, Bridgeport, Conn. Loose-leaf binder | 734,474 | July 21 | 3279 | 770 | 105 | 726 |
| Sheridan, William H., Pittsfield, Mass. Cleaner for winding-machines | 737,164 | Aug. 25 | 3963 | 881 | 105 | 1878 |
| Sheridon, William, Toledo, Ohio. Safety-guard for elevator-shafts | 736,642 | Aug. 18 | 3002 | 663 | 105 | 1655 |
| Sheriff, James E. (See Young and Sheriff.) | | | | | | |
| Sheriff, James E., assignor of one-half to J. Lane, New York, N. Y. Turbine-motor | 729,513 | May 26 | 4982 | 1105 | 104 | 1105 |
| Sheriff, Samuel, Pueblo, Colo., assignor of two-thirds to J. E. Jones and W. Van Hook, Pittsburg, Pa. Steam-engine | 734,475 | July 21 | 3281 | 770 | 105 | 726 |
| Sherlock, Walter A., San Francisco, Cal. Rheostat | 745,077 | Nov. 24 | 4404 | 951 | 107 | 983 |
| Sherman, Adolf, and J. R. Moore, Bridgeport, Conn. Adjustable miter-box | 722,051 | Mar. 3 | 733 | 163 | 103 | 158 |
| Sherman, Charles E., Union, Oreg. Wagon-brake | 740,595 | Oct. 6 | 416 | 89 | 106 | 1335 |
| Sherman, Clark, Frankville, Iowa. Grain-weigher | 719,700 | Feb. 3 | 511 | 115 | 102 | 930 |
| Sherman, Daniel F., Chicago, Ill., assignor to California Concentrated Fruit Company. Preserving fruit | 744,810 | Nov. 24 | 3890 | 836 | 107 | 878 |

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| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| Sherman, Edward C., Lawrence, N. Y. Plant-support | 731,960 | June 23 | 4484 | 1000 | 104 | 2111 |
| Sherman, Frederic W., Park City, Utah. Ore-slime settling and classifying apparatus | 743,201 | Nov. 3 | 737 | 161<br>162 | 107 | 154 |
| Sherman, Howard B., Battlecreek, Mich. Machine for expanding ferrules or rings of metal | 743,400 | Nov. 3 | 1153 | 244 | 107 | 244 |
| Sherman, Howard B., Battlecreek, Mich. Means for attaching hose to couplings | 743,401 | Nov. 3 | 1154 | 245 | 107 | 244 |
| Sherman, Howard B., assignor to H. B. Sherman Manufacturing Company, Battlecreek, Mich. Nozzle | 742,133 | Oct. 20 | 3405 | 759 | 106 | 1999 |
| Sherman, James M., Columbia, Mo. Merry-go-round | 736,643 | Aug. 18 | 3003 | 663 | 105 | 1656 |
| Sherman, James M., Columbia, Mo. Flue-cutter | 742,915 | Nov. 3 | 164 | 38 | 107 | 36 |
| Sherman, John M. (See Beylik, Marc W., assignor.) | | | | | | |
| Sherman, John S., and G. H. Harms, Detroit, Mich. Hydrocarbon-burner | 743,764 | Nov. 10 | 1891 | 400 | 107 | 421 |
| Sherman, Layton O. (See Burwell and Sherman.) | | | | | | |
| Sherman, Lewis P. (See Morton and Sherman.) | | | | | | |
| Sherman, Louis A., Detroit, Mich. Tool for truing abrading-wheels | 745,120 | Nov. 24 | 4488 | 972 | 107 | 1001 |
| Sherman, Oscar, Jersey City, N. J. Pin-protector | 727,220 | May 5 | 754 | 161 | 104 | 163 |
| Sherman, William H., New York, N. Y. Bottle-stopper | 723,741 | Mar. 24 | 3866 | 869 | 103 | 854 |
| Sherman, William H., New York, N. Y. Bottle-stopper | 747,004 | Dec. 15 | 3112 | 712 | 107 | 1816 |
| Sherman, William H., Newport, R. I. Paper-holding device for telephones | 736,556 | Aug. 18 | 2828 | 619 | 105 | 1622 |
| Sherman, William P., Willoughby, Ohio. Apparatus for automatically discharging buckets | 721,333 | Feb. 24 | 3615 | 821<br>822 | 102 | 1634 |
| Sherrard, Joseph A., Boston, Mass. Bottle-tap | 718,163 | Jan. 13 | 1197 | 265 | 102 | 273 |
| Sherriff, Robert R. (See Duncan and Sherriff.) | | | | | | |
| Sherrouse, John M. (See Turnbull, Walter J., assignor.) | | | | | | |
| Sherry, John, Rochester, N. Y. Tile-forming apparatus | 729,431 | May 26 | 4843 | 1073 | 104 | 1074 |
| Sherwin-Williams Company. (See Hain, Henry J., assignor.) | | | | | | |
| Sherwin-Williams Company. (See Holton, Edward C., assignor.) | | | | | | |
| Sherwin-Williams Company. (See Moore, Edward J., assignor.) | | | | | | |
| Sherwood, Alfred H., Grand Rapids, Mich. Printing and graining machine | 720,629 | Feb. 17 | 2286 | 524 | 102 | 1333 |
| Sherwood, Alfred H., Grand Rapids, Mich. Printing or graining machine | 721,244 | Feb. 24 | 3472 | 789 | 102 | 1603 |
| Sherwood, Arthur L., Edgerton, Minn. Car-coupling | 717,633 | Jan. 6 | 200 | 49 | 102 | 43 |
| Sherwood, George R., Chicago, Ill. Manufacturing products from cornstalks or analogous plants | 720,850 | Feb. 17 | 2655 | ..... | 102 | 1412 |
| Sherwood, George R., Oakpark, assignor to National Fiber & Cellulose Co., Chicago, Ill. Manufacturing products from cornstalks or analogous plants | 720,851 | Feb. 17 | 2656 | ..... | 102 | 1412 |
| Sherwood, George R., Oakpark, assignor to National Fiber & Cellulose Co., Chicago, Ill. Husking-machine | 738,248 | Sept. 8 | 1389 | 301 | 106 | 316 |
| Sherwood, George R., Oakpark, assignor to National Fiber & Cellulose Co., Chicago, Ill. Husking-machine | 740,596 | Oct. 6 | 417 | 89,90 | 106 | 1335 |
| Sherwood, Harley L., Oakland, Cal. Hydrocarbon-burner | 722,155 | Mar. 3 | 912 | 203 | 103 | 195 |
| Sherwood, Harley L., Oakland, Cal. Oil-burner | 742,916 | Nov. 3 | 166 | 38,39 | 107 | 36 |
| Sherwood, Harley L., Oakland, Cal. Oil-burner | 743,940 | Nov. 10 | 2213 | 478 | 107 | 488 |
| Sherwood Manufacturing Company. (See Hart, Thomas J., assignor.) | | | | | | |
| Sherwood, William. (See Smith and Sherwood.) | | | | | | |
| Sherwood, William E., Oneida, N. Y. Thill-coupling | 738,494 | Sept. 8 | 1924 | 420 | 106 | 428 |
| Sherwood, William E., Oneida, N. Y. Thill-coupling | 738,495 | Sept. 8 | 1925 | 420 | 106 | 429 |
| Sherwood, William S., Macon, Ga. Window-platform | 735,915 | Aug. 11 | 1684 | 359 | 105 | 1358 |
| Shevill, Julia C. (See Shevill, Thomas E. and J. C.) | | | | | | |
| Shevill, Thomas E. and J. C., Brooklyn, N. Y. Window-curtain-hanging apparatus | 731,410 | June 16 | 3459 | 773 | 104 | 1878 |
| Shevlin, George F. (See Baker, Shevlin, and Baker.) | | | | | | |
| Shewry, William M., Chicago, Ill. Collar-fastener | 724,342 | Mar. 31 | 5076 | 1135 | 103 | 1117 |
| Shick, Robert P., *et al.* (See Luks, Emil C., assignor.) | | | | | | |
| Shick, Steward, Clearfield, Pa. Furniture-drawer | 723,050 | Mar. 17 | 2587 | 583 | 103 | 580 |
| Shickluna, Joseph J., Buffalo, N. Y. Means for preventing bending strains in wires | 733,755 | July 14 | 1880 | 443 | 105 | 413 |
| Shiek, Daniel W., assignor to A. Bybee, Chicago, Ill. Telephone-receiver support | 723,742 | Mar. 24 | 3868 | 870 | 103 | 854 |
| Shields, Hattie M., assignor of one-half to F. W. Tuve, Indianapolis, Ind. Stovepipe for flue-cleaning | 728,508 | May 19 | 3172 | 702 | 104 | 712 |
| Shields, James C. (See Lewis, Shields, and Quimby.) | | | | | | |
| Shields, James C. (See Lewis, Quimby, Harlow, and Shields.) | | | | | | |
| Shields, James W. (See Harris and Shields.) | | | | | | |
| Shields, James W. (See Shields, Joseph A. and J. W.) | | | | | | |
| Shields, John, Dallas, Tex. Adjustable brace for doors or gates and cover for same | 740,383 | Sept. 29 | 5449 | 1225 | 106 | 1228 |
| Shields, Joseph A. and J. W., Lake Linden, Mich. Stamp-mill | 728,999 | May 26 | 4093 | 908 | 104 | 920 |
| Shields, Patrick T., San Antonio, Tex. Fireproof floor construction | 738,496 | Sept. 8 | 1927 | 420 | 106 | 429 |
| Shier, William. (See Bunt, Alfred E., assignor.) | | | | | | |
| Shiflet, Samuel P., Versailles, Pa. Monkey-wrench | 740,049 | Sept. 29 | 4846 | 1087 | 106 | 1103 |
| Shigley, Cyrus C., Hart, Mich. Phonograph | 727,002 | May 5 | 361 | 77,78 | 104 | 78 |
| Shiley, Richard G. (See Taylor and Shiley.) | | | | | | |
| Shilling, Edward C., Columbus, Ohio. Non-refillable bottle | 724,958 | Apr. 7 | 992 | 228 | 103 | 1381 |
| Shilling, John L., Chicago, Ill. Making relief-effect printing-plates | 718,883 | Jan. 20 | 2589 | 578 | 102 | 580 |
| Shimer, Elmer S., Milton, Pa. Cutter-head | 719,266 | Jan. 27 | 3315 | 742 | 102 | 746 |
| Shimer, Elmer S., Milton, Pa. Expansion cutter-head | 724,959 | Apr. 7 | 995 | 228<br>229 | 103 | 1381 |
| Shimer, Elmer S., Milton, Pa. Carriage-feed mechanism for type-writers | 739,728 | Sept. 22 | 4216 | 943 | 106 | 952 |
| Shimer, Herbert M., *et al.* (See Blessing, Edgar F., assignor.) | | | | | | |
| Shimer & Sons, Samuel J. (See Ettinger, Joel, assignor.) | | | | | | |
| Shimer, Will A., Moravia, N. Y. Sectional bookcase | 746,589 | Dec. 8 | 2315 | 530 | 107 | 1617 |
| Shimper, Rudolf J., St. Paul, Minn. Fuel for heating railway freight-cars, warehouses, &c. | 741,728 | Oct. 20 | 2586 | ..... | 106 | 1832 |
| Shinn, Luther E., Pittsburg, Pa. Mixing device | 732,661 | June 30 | 5869 | 1302 | 104 | 2412 |
| Shinn, Nathaniel M., assignor to R. and T. B. Dornan, Philadelphia, Pa. Loom | 733,434 | July 14 | 1328 | 313<br>314 | 105 | 298 |
| Shinnick, Daisy B., Richmond, Ind. Jar-closure | 733,880 | July 14 | 2129 | 502 | 105 | 464 |
| Shipley, Charles E. (See Scott, Shipley, and Hughes.) | | | | | | |
| Shipman, Glenn L. (See Hill, Warren W., assignor.) | | | | | | |
| Shipman, Madison D., Dekalb, Ill., assignor to United States Fastener Company, Portland, Me. Fastener | 737,874 | Sept. 1 | 642 | 137 | 106 | 141 |
| Shipman, Madison D., Dekalb, Ill., assignor to United States Fastener Company, Portland, Me. Fastener | 737,875 | Sept. 1 | 643 | 137 | 106 | 141 |
| Shipp, Abijah T., Renner, Tex. Machine for grinding disks | 723,051 | Mar. 17 | 2588 | 583<br>584 | 103 | 580 |
| Shireman, Lewis, Martinsville, Ind. Carpenter's gage | 732,379 | June 30 | 5335 | 1182 | 104 | 2299 |
| Shirley, Charles. (See Skirrow, John F., assignor.) | | | | | | |
| Shirley, Jasper N. (See Smith, Frank E., assignor.) | | | | | | |
| Shiveley, Charles E., *et al.* (See Parrish, William N., assignor.) | | | | | | |
| Shively, Joseph M., Alfred, Kans., assignor to Deering Harvester Company, Chicago, Ill. Corn-shocker | 723,623 | Mar. 24 | 3667 | 822 | 103 | 811 |

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| Shively, Joseph M., Alfred, Kans., assignor to Deering Harvester Company. Corn-shocker | 724,515 | Apr. 7 | 172 | 42, 43 | 103 | 1207 |
| Shively, Joseph M., Alfred, Kans., assignor to Deering Harvester Company. Corn-shocker | 734,973 | July 28 | 4221 | 981 | 105 | 936 |
| Shobe, Abraham A. (See Embley and Shobe.) | | | | | | |
| Shobe, Abraham A., and W. Embley, Jerseyville, Ill. Electric-railway system | 744,246 | Nov. 17 | 2865 | 614, 615 | 107 | 641 |
| Shobe, Abraham A., and W. Embley, Jerseyville, Ill. Electric-railway system | 744,247 | Nov. 17 | 2867 | 615 | 107 | 641 |
| Shobe, Abraham A., and W. Embley, Jerseyville, Ill. Current-collecting device for electric-railway systems | 746,751 | Dec. 15 | 2619 | 601, 602 | 107 | 1705 |
| Shobert, Charles H., Brookville, Pa. Rail-joint | 744,633 | Nov. 17 | 3537 | 763 | 107 | 783 |
| Shobert, Frederic C., Pittsburg, and M. H. Reno, Allegheny, Pa. Copy-holder | 748,537 | Dec. 29 | 6006 | 1361 | 107 | 2498 |
| Shock, Dwight W. (See Minney, Albert H., assignor.) | | | | | | |
| Shocker, Paul, *et al.* (See Monsen and Ericksen, assignors.) | | | | | | |
| Shocklin, Dwight T., and G. Schwartz, Cripplecreek, Colo. Shipping-crate | 719,891 | Feb. 3 | 865 | 203 | 102 | 1006 |
| Shoecraft, Fred W., and H. L. Allard, Sturgis, Mich. Piano-truck | 737,165 | Aug. 25 | 3965 | 881 | 105 | 1879 |
| Shoecraft, Judson, Eskridge, assignor of one-half to W. Peterson, Topeka, Kans. Railway signaling system | 744,248 | Nov. 17 | 2869 | 615, 616 | 107 | 642 |
| Shoemaker, Charles J., Indianapolis, Ind. Smoke-consuming furnace | 717,934 | Jan. 6 | 783 | 176 | 102 | 167 |
| Shoemaker, Daniel N., Cainsville, Mo. Combination stovepipe thimble and collar | 747,334 | Dec. 15 | 3744 | 843, 844 | 107 | 1958 |
| Shoemaker, George A. (See Peugeot and Shoemaker.) | | | | | | |
| Shoemaker, Harry, Philadelphia, Pa., assignor, by mesne assignments, to Consolidated Wireless Telegraph and Telephone Company. Wireless telegraphy. (Reissue) | 12,073 | Jan. 13 | 2057 | 447 | 102 | 458 |
| Shoemaker, Harry, assignor of one-half to M. V. Gehring, Philadelphia, Pa. Transmitting intelligence | 734,476 | July 21 | 3283 | 771 | 105 | 726 |
| Shoemaker, Harry, assignor of one-half to M. V. Gehring, Philadelphia, Pa. Electrical range-finder | 736,557 | Aug. 18 | 2829 | 619, 620 | 105 | 1622 |
| Shoemaker, Harry, assignor to G. P. Gehring, Philadelphia, Pa., and Consolidated Wireless Telegraph and Telephone Company. Wireless signaling system | 717,766 | Jan. 6 | 470 | 108 | 102 | 100 |
| Shoemaker, Harry, assignor to G. P. Gehring, Philadelphia, Pa., and Consolidated Wireless Telegraph & Telephone Company. Multiplex wireless signaling system | 717,767 | Jan. 6 | 472 | 108 | 102 | 101 |
| Shoemaker, Harry, assignor to M. V. Gehring and Consolidated Wireless Telegraph and Telephone Company, Philadelphia, Pa. Synchronizer | 717,768 | Jan. 6 | 474 | 108, 109 | 102 | 101 |
| Shoemaker, Harry, assignor to M. V. Gehring and Consolidated Wireless Telegraph and Telephone Company, Philadelphia, Pa. Wireless signaling system | 717,769 | Jan. 6 | 485 | 109 | 102 | 105 |
| Shoemaker, Harry, assignor to M. V. Gehring and Consolidated Wireless Telegraph and Telephone Company, Philadelphia, Pa. Wireless signaling system | 717,770 | Jan. 6 | 487 | 109, 110 | 102 | 105 |
| Shoemaker, Harry, assignor to M. V. Gehring, Philadelphia, Pa., and Consolidated Wireless Telegraph and Telephone Company. Oscillator | 717,774 | Jan. 6 | 497 | 111 | 102 | 107 |
| Shoemaker, Harry, assignor to M. V. Gehring and Consolidated Wireless Telegraph and Telephone Company, Philadelphia, Pa. Wireless-telegraph repeater | 718,535 | Jan. 13 | 1927 | 422 | 102 | 430 |
| Shoemaker, Harry, assignor to Consolidated Wireless Telegraph and Telephone Company and M. V. Gehring, Philadelphia, Pa. Signaling system | 717,771 | Jan. 6 | 490 | 110 | 102 | 106 |
| Shoemaker, Harry, assignor to Consolidated Wireless Telegraph and Telephone Company and M. V. Gehring, Philadelphia, Pa. Signaling system | 717,772 | Jan. 6 | 492 | 110 | 102 | 106 |
| Shoemaker, Harry, assignor to Consolidated Wireless Telegraph and Telephone Company and M. V. Gehring, Philadelphia, Pa. Signaling system | 717,773 | Jan. 6 | 494 | 110, 111 | 102 | 107 |
| Shoemaker, Harry, and H. C. Snook, assignors of one-third to M. V. Gehring, Philadelphia, Pa. Electrical signaling | 736,884 | Aug. 18 | 3467 | 769 | 105 | 1753 |
| Shoemaker, Harry, Philadelphia, Pa., and G. W. Pickard, Boston, Mass., assignors to G. P. Gehring, Philadelphia, Pa., and Consolidated Wireless Telegraph and Telephone Company. Wireless signaling system | 717,765 | Jan. 6 | 467 | 107 | 102 | 100 |
| Shoemaker, Marshall N. (See Simpson and Shoemaker.) | | | | | | |
| Shoemaker, Orlando P., Clay Center, Nebr. Heater and ventilator for incubators | 748,538 | Dec. 29 | 6011 | 1362 | 107 | 2499 |
| Shoemaker, Reginald H., Jr., Chicago, Ill. Fruit-box | 718,666 | Jan. 20 | 2185 | 478 | 102 | 496 |
| Shoenberg, Milton H., San Francisco, Cal. Electrical water-heater | 745,682 | Dec. 1 | 664 | 154 | 107 | 1239 |
| Shoettle, Charles, Chicago, Ill. Stump-puller or lifting-machine | 726,581 | Apr. 28 | 4034 | 912 | 103 | 2058 |
| Shogren, Louis E., Vermilion, S. D. Non-refillable bottle | 720,746 | Feb. 17 | 2488 | 572 | 102 | 1376 |
| Sholes, Frederick, Chicago, Ill. Gage for paper-cutters, &c | 745,531 | Dec. 1 | 405 | 93 | 107 | 1185 |
| Sholty, Benjamin W., Decatur, Ind. Cabinet | 739,729 | Sept 22 | 4217 | 943, 944 | 106 | 952 |
| Sholty, Benjamin W., Decatur, Ind. Cabinet | 739,730 | Sept. 22 | 4219 | 944 | 106 | 953 |
| Shonnard, Ludlow. (See Boyce and Shonnard.) | | | | | | |
| Shontz, Neri E., Chicago, Ill. Fuel-feeding device | 717 935 | Jan. 6 | 786 | 177 | 102 | 168 |
| Shontz, Neri E., Chicago, Ill. Automatic stoker | 745,247 | Nov. 24 | 4739 | 1035 | 107 | 1053 |
| Shook, George W., assignor, by mesne assignments, to Non-Refillable Bottle and Cork Company, Jacksonville, Fla. Non-refillable bottle | 744,695 | Nov. 17 | 3643 | 785 | 107 | 806 |
| Shoop, Ira, Manorville, Pa. Wrench | 746,590 | Dec. 8 | 2318 | 530 | 107 | 1617 |
| Shoop, Saul W., Front Royal, Va. Limekiln | 745,248 | Nov. 24 | 4740 | 1035 | 107 | 1053 |
| Shoop, Saul W., Front Royal, Va. Limekiln-door | 745,249 | Nov. 24 | 4741 | 1035 | 107 | 1053 |
| Shoosmith, Harry, Erith, England. Apparatus for charging or discharging vessels | 734,974 | July 28 | 4223 | 981, 982 | 105 | 936 |
| Shoosmith, Harry, Erith, England. Apparatus for opening, closing, raising, or lowering grabs | 743,577 | Nov. 10 | 1566 | 328 | 107 | 351 |
| Shore, Albert F., assignor of two-thirds to D. N. Hurlbut, New York, N. Y. Electric-arc lamp | 719,149 | Jan. 27 | 3107 | 691, 692 | 102 | 701 |
| Shore, Edward L., Eldon, Iowa. Reversing-gear | 744,249 | Nov. 17 | 2875 | 616 | 107 | 643 |
| Short, Charles. (See Stimpson and Short.) | | | | | | |
| Short, Robert L., Cleveland, assignor of one-half to N. G. Copley, Fostoria, Ohio. Water-level regulator | 743,108 | Nov. 3 | 553 | 119 | 107 | 115 |
| Short, Samuel F., New York, N. Y., assignor to Western Electric Company, Chicago, Ill. Power-wrench | 729,685 | June 2 | 288 | 66 | 104 | 1188 |
| Short, Samuel F., New York, N. Y., assignor to Western Electric Company, Chicago, Ill. Power-wrench | 729,686 | June 2 | 289 | 66 | 104 | 1188 |
| Short, Thomas M., New Lewisville, Ark. Cotton-chopper | 723,931 | Mar. 31 | 4244 | 954 | 103 | 951 |
| Short, Wilfrid M., Beckenham, England. Golf-ball | 737,031 | Aug. 25 | 3741 | 830 | 105 | 1831 |
| Shortt, Edward G., Carthage, N. Y., assignor to International Air Brake Company. High-speed brake mechanism | 725,995 | Apr. 21 | 2912 | 661, 662 | 103 | 1817 |
| Shortt, Edward G., Carthage, N. Y., assignor to International Air Brake Company, Jersey City, N. J. Graduating-release appliance for air-brakes | 726,469 | Apr. 28 | 3783 | 856 | 103 | 2011 |
| Shortt, Edward G., Carthage, N. Y., assignor to International Air Brake Company, Jersey City, N. J. Means for supplying fluid-pressure to the auxiliary reservoirs and brake-cylinders of air-brakes while brakes are set | 727,469 | May 5 | 1205 | 266 | 104 | 260 |
| Shortt, Edward G., Carthage, N. Y., assignor to International Air Brake Company, Jersey City, N. J. Air-brake valve mechanism | 731,234 | June 16 | 3121 | 692, 693, 694 | 104 | 1808 |
| Shortt, Edward G., Carthage, assignor to C. G. Emery, Clayton, N. Y. Differential buffer | 741,558 | Oct. 13 | 2247 | 500 | 106 | 1746 |

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| Shortt, Edward G., Carthage, N. Y., assignor to International Air Brake Company, Jersey City, N. J. Slack-take-up mechanism | 748,112 | Dec. 29 | 5231 | {1186 1187 | {107 | 2328 |
| Shortt, Edward G. and H. G., Carthage, N. Y., assignors to International Air Brake Company, Jersey City, N. J. Slack-adjuster | 725,496 | Apr. 14 | 2007 | 453 | 103 | 1611 |
| Shortt, Howard G. (See Shortt, Edward G. and H. G.) | | | | | | |
| Shotwell, Melancthon S. (See Rogers and Shotwell.) | | | | | | |
| Shough, Jacob L. (See Levitt and Shough.) | | | | | | |
| Shouldier, James A., *et al.* (See Galbreath, Israel B., assignor.) | | | | | | |
| Shoupe, Samuel W., Hagerstown, Md. Gas-saving attachment for stoves | 725,882 | Apr. 21 | 2715 | 617 | 103 | 1777 |
| Shourek, John, Pittsburg, Pa. Coupling for air-brakes | 739,793 | Sept. 22 | 4331 | 970 | 106 | 978 |
| Shourek, John, Pittsburg, Pa. Motorman's valve for air-brakes | 740,375 | Sept. 29 | 5434 | {1222 1223 | {106 | 1225 |
| Shouvlin, Patrick J., Springfield, Ohio. Clutch | 727,003 | May 5 | 369 | 78 | 104 | 80 |
| Showalter, Ezra, Massillon, Ohio. Car-replacer | 747,655 | Dec. 22 | 4326 | 977 | 107 | 2106 |
| Showalter, Vincent A., Latrobe, Pa. Metallic tie and rail-fastening | 736,885 | Aug. 18 | 3469 | 769 | 105 | 1753 |
| Shrader, William F. (See Kifer and Shrader.) | | | | | | |
| Shreeve, Herbert E. (See Barrett, Falk, and Shreeve.) | | | | | | |
| Shreffler, Samuel, Joliet, Ill. Wagon-jack | 742,917 | Nov. 3 | 168 | 39 | 107 | 37 |
| Shreiner, Elmer E., and B. R. Tucker, assignors to S. Galeski Optical Company, Richmond, Va. Eyeglasses | 735,164 | Aug. 4 | 229 | 46 | 105 | 1031 |
| Shrivell, Arthur. (See Shrivell, William and A.) | | | | | | |
| Shrivell, William and A., Chiswick, England. Window frame and sash | 726,362 | Apr. 28 | 3597 | 816 | 103 | 1974 |
| Shriver, Frank W. (See Williamson, Edward H., Jr., assignor.) | | | | | | |
| Shriver, Samuel D., St. Louis, Mo. Gage | 730,407 | June 9 | 1602 | 357 | 104 | 1470 |
| Shrodes, George H., Excelsior, Minn. Lantern-holder | 743,578 | Nov. 10 | 1567 | 329 | 107 | 351 |
| Shrum, Peter J., assignor to K. J. Hendricks, Pittsburg, Pa. Metallic mat | 740,478 | Oct. 6 | 180 | 35, 36 | 106 | 1283 |
| Shrum, Peter J., assignor to K. J. Hendricks, Pittsburg, Pa. Mat | 742,918 | Nov. 3 | 169 | 39, 40 | 107 | 37 |
| Shryock, Leonard D., Marietta, Ohio. Well-drilling apparatus | 737,505 | Aug. 25 | 4631 | 1039 | 105 | 2023 |
| Shuart Grader Company. (See Heusner, Dudley, and Graves, assignors.) | | | | | | |
| Shue, Philip H., Ouray, Colo. Expansible pulley | 718,800 | Jan. 20 | 2435 | {539 540 | {102 | 547 |
| Shue, Philip H., Ouray, Colo. Centrifugal ore-concentrator | 723,932 | Mar. 31 | 4245 | {954 955 | {103 | 951 |
| Shull, Robert, Guernsey, Iowa. Clothes-drier | 734,622 | July 28 | 3547 | 831 | 105 | 800 |
| Shults, Rosa, Des Moines, Iowa. Griddle | 740,050 | Sept. 29 | 4847 | 1087 | 106 | 1103 |
| Shults, William G., Knoxville, Tenn. Fan | 720,630 | Feb. 17 | 2289 | 525 | 102 | 1333 |
| Shultz, Charles H., assignor to J. L. Zeidler, St. Joseph, Mo. Arc-lamp hanger | 730,844 | June 9 | 2375 | 525 | 104 | 1637 |
| Shultz, Eugene D. (See Shultz, Joseph C. and E. D.) | | | | | | |
| Shultz, Eugene D., Batavia, N. Y. Hat-fastener | 717,629 | Jan. 6 | 194 | 48 | 102 | 42 |
| Shultz, George D., Kansas City, Mo. Aerial vessel | 729,800 | June 2 | 511 | {112 113 | {104 | 1232 |
| Shultz, Joseph C. and E. D., Batavia, N. Y. Hat-fastener | 738,949 | Sept. 15 | 2785 | 617 | 106 | 630 |
| Shuman, Arno. (See Shuman, Frank and A.) | | | | | | |
| Shuman, Frank, Philadelphia, Pa. Removable pile for forming concrete piling | 733,286 | July 7 | 1056 | 252 | 105 | 222 |
| Shuman, Frank, Philadelphia, Pa. Making concrete piles | 733,287 | July 7 | 1059 | 252 | 105 | 222 |
| Shuman, Frank, Philadelphia, Pa. Removable pile for forming concrete piling | 733,288 | July 7 | 1060 | 253 | 105 | 223 |
| Shuman, Frank, Philadelphia, Pa. Forming openings in the ground | 733,335 | July 7 | 1144 | 271 | 105 | 241 |
| Shuman, Frank, Philadelphia, Pa. Forming concrete piles | 733,336 | July 7 | 1145 | 271 | 105 | 241 |
| Shuman, Frank, Philadelphia, Pa. Forming concrete piles | 733,337 | July 7 | 1146 | 272 | 105 | 241 |
| Shuman, Frank, Philadelphia, Pa. Making concrete piles | 735,680 | Aug. 4 | 1236 | 262 | 105 | 1243 |
| Shuman, Frank, Philadelphia, Pa. Making concrete piles | 739,268 | Sept. 15 | 3361 | 746 | 106 | 751 |
| Shuman, Frank and A., assignors to Continuous Glass Press Company, Philadelphia, Pa. Meshed wire for wire-glass manufacture | 727,004 | May 5 | 371 | 78 | 104 | 81 |
| Shuman, Frank and A., assignors to Continuous Glass Press Company, Philadelphia, Pa. Manufacture of wire-glass | 727,005 | May 5 | 373 | 79 | 104 | 81 |
| Shuman, Frank and A., assignors to Continuous Glass Press Company, Philadelphia, Pa. Manufacturing wire-glass | 727,006 | May 5 | 374 | 79 | 104 | 82 |
| Shuman, Frank and A., assignors to Continuous Glass Press Company, Philadelphia, Pa. Manufacturing wire-glass | 727,007 | May 5 | 376 | 79 | 104 | 82 |
| Shumway, Herbert H. (See Caswell, Arthur F., assignor.) | | | | | | |
| Shupert, Frank W. and H. L., Spokane, Wash. Gravity boiler-feeder | 744,250 | Nov. 17 | 2876 | 617 | 107 | 643 |
| Shupert, Henry L. (See Shupert, Frank W. and H. L.) | | | | | | |
| Shupp, Harry G. (See Garrison, Harry H., assignor.) | | | | | | |
| Shute, Peter W., Ypsilanti, Mich. Support for street-lamps | 726,773 | Apr. 28 | 4393 | 988 | 103 | 2133 |
| Shutt, William F., Onward, assignor of one-half to D. K. Snyder, Walton, Ind. Well-cap | 738,126 | Sept. 1 | 1130 | 251 | 106 | 244 |
| Shutts, John M., Potter, N. Y. Feed-rack | 741,175 | Oct. 13 | 1463 | 332 | 106 | 1577 |
| Shych, Charles S., Chicago, Ill. Combined mop and wringer | 719,383 | Jan. 27 | 3544 | 790 | 102 | 796 |
| Sias, John M., Myra, W. Va. Box-fastener | 724,343 | Mar. 31 | 5077 | {1135 1136 | {103 | 1117 |
| Sibley, Clarence C., Perth Amboy, N. J. Regulator for timepieces | 731,819 | June 23 | 4235 | 943 | 104 | 2056 |
| Sibley, Frank J., assignor of one-half to R. Crocker, Fostoria, Ohio. Railway-tie | 721,919 | Mar. 3 | 507 | 111 | 103 | 112 |
| Sibley, Vondon D., Port Hammond, assignor of one-half to P. McTavish, Vancouver, Canada. Snap-hook | 733,921 | July 14 | 2214 | 519 | 105 | 481 |
| Sibold, Charles T., Keenan, W. Va. Tellurian | 735,165 | Aug. 4 | 231 | 46 | 105 | 1032 |
| Sicard, Henry, Paris, France. Transfer | 748,427 | Dec. 29 | 5786 | 1319 | 107 | 2449 |
| Sicilian Asphalt Paving Company. (See Bolze, Henry, assignor.) | | | | | | |
| Sicke, Louis J., New York, N. Y. Construction of columns or posts | 743,765 | Nov. 10 | 1893 | 400 | 107 | 421 |
| Sickenberger, John F., Manzanola, Colo. Attachment for reapers or mowers | 728,629 | May 19 | 3422 | 759 | 104 | 767 |
| Sicklesteel, Charles S. (See Haviland and Sicklesteel.) | | | | | | |
| Sicklesteel, Frank A., and C. W. Ballard, Northbranch, Mich. Mold for concrete blocks | 737,032 | Aug. 25 | 3741 | 831 | 105 | 1831 |
| Sidaway, Joseph, assignor of one-fourth to E. A. Batt, Cleveland, Ohio. Ventilating-door for furnaces | 731,235 | June 16 | 3129 | 694 | 104 | 1809 |
| Siddall, Charles J. (See Wright and Siddall.) | | | | | | |
| Side Delivery Buncher Company. (See Fagan, Thomas B., assignor.) (Reissue.) | | | | | | |
| Sidway, Henry T. (See Sidway, Leverett B. and H. T.) | | | | | | |
| Sidway, Leverett B. and H. T., Chicago, Ill. Table or stand | 729,432 | May 26 | 4845 | 1074 | 104 | 1075 |
| Siebelist, Arthur, Philadelphia, Pa. Inner containing vessel for cooking utensils | 748,316 | Dec. 29 | 5583 | 1273 | 107 | 2403 |
| Sieben, Henry, assignor, by mesne assignments, to National Brass Manufacturing Company, Kansas City, Mo. House and running trap | 747,005 | Dec. 15 | 3113 | 713 | 107 | 1816 |
| Siebenhaar, Louis E., Rosendale, Wis. Cream-separator | 717,936 | Jan. 6 | 789 | 177 | 102 | 169 |
| Siebenhaar, Otto W., assignor of one-half to E. Falbe, Princeton, Wis. Horseshoe | 726,196 | Apr. 21 | 3262 | 740 | 103 | 1889 |
| Sieber & Trussell Mfg. Company. (See Trussell, Emory A., assignor.) | | | | | | |
| Siebert, Alfred, St. Louis, Mo. Apparatus for supplying cool air for buildings | 734,975 | July 28 | 4225 | 982 | 105 | 937 |
| Siebert, Charles L., Wildwood, N. J. Refrigerator | 737,506 | Aug. 25 | 4632 | 1039 | 105 | 2023 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | Spec. | Drg. | Vol. | Page. |
| Siebert, Otto. (See Gley and Siebert.) | | | | | | |
| Siefert, John. (See Pfanschmidt and Siefert.) | | | | | | |
| Siefert, John. (See Pfanschmidt and Siefert.) (Reissue.) | | | | | | |
| Siefken, George R., Chicago, Ill. Gas-regulating system | 721,972 | Mar. 3 | 600 | 133, 134 | 103 | 131 |
| Siegel, Andrew W. (See Russell, Robert C., assignor.) | | | | | | |
| Siegel, Hilmar J., Monaca, Pa. Mantle-support for gas-burners | 731,961 | June 23 | 4485 | 1000 | 104 | 2111 |
| Siegel, Hilmar J., Monaca, Pa. Mantle and smoke-bell support | 731,962 | June 23 | 4486 | 1001 | 104 | 2111 |
| Siegel, John E., Corona, N. Y. Car-seat | 725,996 | Apr. 21 | 2915 | 662, 663 | 103 | 1818 |
| Siegel, Joseph, assignor to American Lady Corset Company, Detroit, Mich. Corset | 734,623 | July 28 | 3548 | 831 | 105 | 800 |
| Siegel, Julius E. (See Tobin, John, assignor.) | | | | | | |
| Siegrist, Frank, Coopersburg, Pa. Attachment for rocking-chairs | 718,394 | Jan. 13 | 1620 | 356 | 102 | 363 |
| Siegwart, Hans, Lucerne, Switzerland. Manufacture of concrete beams, girders, &c., with iron bars inlaid for building purposes | 720,747 | Feb. 17 | 2489 | 573 | 102 | 1376 |
| Siekert, Ferdinand J. (See Graun, Charles F. W., assignor.) | | | | | | |
| Siemens, Alexander, Milford, assignor to Siemens Brothers & Co., Limited, Westminster, England. Apparatus for controlling the working of electrically-driven cars | 736,794 | Aug. 18 | 3298 | 730, 731 | 105 | 1716 |
| Siemens Brothers & Co. (See Siemens, Alexander, assignor.) | | | | | | |
| Siemens & Halske Aktiengesellschaft. (See Uslar and Erlwein, assignors.) | | | | | | |
| Siemens & Halske Electric Company of America. (See Hundhausen, Rudolf, assignor.) | | | | | | |
| Siemens & Halske Electric Company of America. (See Kahlenberg, Ernst L. K. F., assignor.) | | | | | | |
| Siemens & Halske Electric Company of America. (See Leichtenschlag, Carl, assignor.) | | | | | | |
| Siemens & Halske Electric Company of America. (See Michalke, Carl J. A., assignor.) | | | | | | |
| Siemens & Halske Electric Company of America. (See Norwood, Clarence H., assignor.) | | | | | | |
| Siemens & Halske Electric Company of America. (See Rodde, Carl F., assignor.) | | | | | | |
| Siemsen, Jurgen, Valparaiso, Nebr. Combined lister plow and planter | 745,250 | Nov. 24 | 4742 | 1036 | 107 | 1054 |
| Sieurin, George, assignor to Morgan Construction Company, Worcester, Mass. Charger for gas-producers | 746,591 | Dec. 8 | 2319 | 531 | 107 | 1618 |
| Sieurin, Paul W., Gothenburg, Sweden. Apparatus for collecting and hoisting goods | 739,933 | Sept. 29 | 4626 | 1038 | 106 | 1056 |
| Sievert, Charles W., Los Angeles, Cal. Oil-burner | 720,495 | Feb. 10 | 1981 | 453 | 102 | 1257 |
| Sievert, Charles W., Los Angeles, Cal. Oil-burner | 726,106 | Apr. 21 | 3078 | 698 | 103 | 1851 |
| Sievert, Charles W., Los Angeles, Cal. Oil-burner | 738,635 | Sept. 8 | 2176 | 476 | 106 | 483 |
| Sievert, Frank. (See Hauptmann, Alexis, assignor.) | | | | | | |
| Sievert, Louis, Fort Wayne, Ind. Handle for umbrellas | 730,577 | June 9 | 1928 | 428 | 104 | 1542 |
| Sievert, Paul T., Dresden, Germany. Manufacturing sheet-glass | 725,497 | Apr. 14 | 2010 | 454 | 103 | 1611 |
| Sievert, Paul T., Dresden, Germany. Apparatus for manufacturing sheet-glass | 725,498 | Apr. 14 | 2012 | 454 | 103 | 1611 |
| Sievert, Paul T., Dresden, Germany. Glass-blowing apparatus | 742,505 | Oct. 27 | 4093 | 921, 922 | 106 | 2157 |
| Sievert, Paul T., Dresden, Germany. Manufacturing hollow glass articles | 742,506 | Oct. 27 | 4096 | 922, 923 | 106 | 2157 |
| Sievert, Paul T., and E. Klein, Dresden, Germany; said Klein assignor to said Sievert. Apparatus for producing hollow glass articles | 745,391 | Dec. 1 | 148 | 33, 34 | 107 | 1131 |
| Sieverts, Richard C. H., assignor to Firm of J. Hardt, Hamburg, Germany. Bunsen burner | 734,244 | July 21 | 2854 | 669 | 105 | 637 |
| Sieverts, Wilhelm C. A. (See Sieverts, Wilhelm H. A. and W. C. A.) | | | | | | |
| Sieverts, Wilhelm H. A. and W. C. A., Hamburg, Germany. Incandescent gas-light burner | 739,934 | Sept. 29 | 4627 | 1039 | 106 | 1056 |
| Siewerts, Richard C. H., assignor to Firm of J. Hardt, Hamburg, Germany. Incandescent gas-burner | 743,339 | Nov. 3 | 1016 | 218 | 107 | 217 |
| Sigafoos, Josiah J., Garneill, Mont. Farm-gate | 719,150 | Jan. 27 | 3109 | 692 | 102 | 702 |
| Sigfridson, David J., Isanti, Minn. Combined corn and potato planter | 746,592 | Dec. 8 | 2321 | 532 | 107 | 1618 |
| Signalphone Company. (See Yurgae, Robert H., assignor.) | | | | | | |
| Signor, Alfred J., Elkhart, Ind. Window-shade bracket | 744,419 | Nov. 17 | 3184 | 682 | 107 | 710 |
| Sigrist, Justin, assignor of one-half to H. W. Williams, Battlecreek, Mich. End for vehicle-shafts | 731,627 | June 23 | 3887 | 866 | 104 | 1983 |
| Silberstein, Emil, *et al.* (See Kremer, Michael J., assignor.) | | | | | | |
| Silberstein, Julius, Chicago, Ill. Carpet-cutting machine | 736,644 | Aug. 18 | 3004 | 663 | 105 | 1656 |
| Silberstein, Louis, *et al.* (See Kremer, Michael J., assignor.) | | | | | | |
| Silberstein, Martin, *et al.* (See Kremer, Michael J., assignor.) | | | | | | |
| Silberstein, Max, *et al.* (See Kremer, Michael J., assignor.) | | | | | | |
| Silberzahn Manufacturing Company. (See Brown, Frank S., assignor.) | | | | | | |
| Silent Motor Car Syndicate. (See Crawford, Middleton, assignor.) | | | | | | |
| Siler, Aaron V., and J. H. Riley, Newark, Ohio. District messenger-box | 743,941 | Nov. 10 | 2215 | 478 | 107 | 488 |
| Sill, John J., assignor to Railway Appliance Company, Albany, N. Y. Colored-signal lamp | 723,414 | Mar. 24 | 3286 | 735 | 103 | 734 |
| Sill Stove Works. (See Clunies, Arthur B., assignor.) | | | | | | |
| Silliman, Benjamin F. (See Edson and Silliman.) | | | | | | |
| Sills-Eddy Mica Company. (See Cooper, Edward, assignor.) | | | | | | |
| Silver & Co. (See Ferdon, Guy W., assignor.) | | | | | | |
| Silver & Company. (See Frey, John S., assignor.) | | | | | | |
| Silver & Company. (See Silver, William H., assignor.) | | | | | | |
| Silver, Emmor W., assignor to Silver Manufacturing Company, Salem, Ohio. Ensilage-machine | 733,289 | July 7 | 1063 | 253 | 105 | 224 |
| Silver Manufacturing Company. (See Silver, Emmor W., assignor.) | | | | | | |
| Silver, William H., assignor to Silver & Company, Brooklyn, N. Y. Bath-seat | 736,032 | Aug. 11 | 1900 | 407 | 105 | 1406 |
| Silvera, George I., Cresecnt, Ora Cabessa, Jamaica. Insect-catcher | 732,595 | June 30 | 5743 | 1275 | 104 | 2386 |
| Silverman, Louis. (See Dawson and Silverman.) | | | | | | |
| Silverman, Louis, New York, N. Y. Gas-stove | 746,752 | Dec. 15 | 2620 | 602 | 107 | 1705 |
| Silvestri, Giulio, Vienna, Austria-Hungary. Motor with rotating piston | 728,630 | May 19 | 3424 | 759, 760 | 104 | 767 |
| Silvestri, Giulio, Vienna, Austria-Hungary. Water-tube boiler | 736,451 | Aug. 18 | 2629 | 577 | 105 | 1579 |
| Silvey, William H. (See Werner and Silvey.) | | | | | | |
| Silvis, Frank A., Millvale Station, Pa. Hose-coupling | 744,634 | Nov. 17 | 3539 | 763 | 107 | 783 |
| Silvis, Harry J., Mansfield, and H. White, Marion, Ohio, assignors of one-fourth to Z. T. Silvis, Greensburg, Pa. Grain-separator | 744,696 | Nov. 17 | 3645 | 786 | 107 | 807 |
| Silvis, Zachariah T. (See Silvis and White, assignors.) | | | | | | |
| Simcoe, Harry, Louisville, Ky. Danger-signal-torpedo-placing machine | 733,086 | July 7 | 693 | 169 | 105 | 147 |
| Simeral, Clarence J., and F. A. Wiggins, Salem, Oreg. Rear-wheel controller for disk plows | 739,731 | Sept. 22 | 4221 | 944 | 106 | 953 |
| Simmerman, Jacob, Dunkirk, Ind. Glass shingle | 734,976 | July 28 | 4228 | 982 | 105 | 937 |
| Simmons, Cornelius J., *et al.* (See Davenport, Frederick S., assignor.) | | | | | | |
| Simmons, Eleazer P. (See Boykin, Claud W., assignor.) | | | | | | |
| Simmons Hardware Company. (See Connor, Albert W., assignor.) | | | | | | |
| Simmons, James W., Cincinnati, Ohio. Buggy-boot | 742,748 | Oct. 27 | 4522 | 1024 | 106 | 2249 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | Spec. | Drgs. | Vol. | Page. |
| Simmons, Jessie W., Alvarado, Tex. Pumping apparatus | 720,748 | Feb. 17 | 2490 | 573, 574 | 102 | 1377 |
| Simmons, John C., Henderson, Tenn. Portable fence | 720,077 | Feb. 10 | 1225 | 282 | 102 | 1099 |
| Simmons, Joseph, Chicago, Ill. Line-lock | 731,327 | June 16 | 3304 | 737 | 104 | 1847 |
| Simmons, Joseph C., Martinsville, Ohio. Fence-post | 740,933 | Oct. 6 | 1001 | 226 | 106 | 1460 |
| Simmons Manufacturing Company. (See Hunt, Ozello R., assignor.) | | | | | | |
| Simmons, Walter E., Duquoin, Ill. Pick-lock | 742,507 | Oct. 27 | 4099 | 923 | 106 | 2157 |
| Simms, Frank R., Columbus, Miss. Dust-guard for windows | 739,115 | Sept. 15 | 3087 | 684 | 106 | 691 |
| Simms, Rudolph. (See Schubert, Bernhard F., assignor.) | | | | | | |
| Simms, Rudolph, assignor of one-half to B. F. Schubert, Washington, D. C. Furnace for consuming smoke | 740,323 | Sept. 29 | 5341 | 1203 | 106 | 1205 |
| Simon, Benjamin F., *et al.* (See Hachmann, Frederick, assignor.) | | | | | | |
| Simon, Carl F., Stollberg, assignor to Chemische Fabrik Rhenania, Aachen, Germany. Pump for raising liquids by compressed air | 723,743 | Mar. 24 | 3871 | 871 | 103 | 855 |
| Simon, Carl F., Stollberg, assignor to Chemische Fabrik Rhenania, Aachen, Germany. Pump for raising liquids by compressed air | 723,744 | Mar. 24 | 3872 | 871 | 103 | 855 |
| Simon, Caspar, Jersey City, N. J., assignor to American Tobacco Company, New York, N. Y. Cigarette-wrapping tube | 739,935 | Sept. 29 | 4629 | 1039 | 106 | 1056 |
| Simon, Charles, Avilla, Ind. Liquid-measuring device | 733,290 | July 7 | 1064 | 254 | 105 | 224 |
| Simon, Charles, and I. Eisler, New York, N. Y. Loop for incandescent lamp-mantles | 718,223 | Jan. 13 | 1306 | 289 | 102 | 295 |
| Simon, Ernest, Vienna, Austria-Hungary. Producing from amber, ambroid, or the like, in mass, cigarette-holders, pipe-stems, &c | 742,245 | Oct. 27 | 3630 | 811 | 106 | 2062 |
| Simon, Frank, assignor of one-half to J. A. Burtanger, Cincinnati, Ohio. Display-stand | 721,245 | Feb. 24 | 3473 | 789 | 102 | 1604 |
| Simon, Joseph, *et al.* (See Howard, Edward J., assignor.) | | | | | | |
| Simon, Moses S., Cincinnati, Ohio. Registering attachment for bottles | 737,290 | Aug. 25 | 4221 | 940 | 105 | 1931 |
| Simon, William F., assignor of two-thirds to C. W. Trostel and T. McKeown, Galion, Ohio. Trace-holder | 719,521 | Feb. 3 | 193 | 45 | 102 | 864 |
| Simonds, Frank M., and A. L. Butler, Ansley, Nebr. Attachment for listers | 738,364 | Sept. 8 | 1665 | 361 | 106 | 374 |
| Simonds, Mack B. J., Corry, Pa. Sash-lock | 738,577 | Sept. 8 | 2059 | 449 | 106 | 458 |
| Simone, Michele G. de, Spezia, Italy. Differential gear for motor-vehicles | 728,420 | May 19 | 3017 | 663 | 104 | 680 |
| Simoneau, Amable. (See Perrault, Norbert, assignor.) | | | | | | |
| Simoneton, Emmanuel, Paris, France. Disk filter | 730,485 | June 9 | 1755 | 393 | 104 | 1503 |
| Simons, David C., Trenton, Tenn. Fireplace | 746,182 | Dec. 8 | 1597 | 357 | 107 | 1461 |
| Simonson, Abraham, New York, N. Y. Pasting-machine | 748,428 | Dec. 29 | 5787 | 1319, 1320 | 107 | 2449 |
| Simonson, Niels, Cleveland, Ohio. Pile-driver | 736,452 | Aug. 18 | 2630 | 577, 578 | 105 | 1579 |
| Simonsson, Knut A. (See Hydén and Simonsson.) | | | | | | |
| Simonton, Glenn E., Vanwert, Ohio. Dumping box-car | 734,977 | July 28 | 4229 | 982, 983, 984 | 105 | 937 |
| Simonton, William W., Jackson, Miss. Lifting-jack | 740,597 | Oct. 6 | 418 | 90 | 106 | 1335 |
| Simplex Electric Heating Company. (See Ayer, James I., assignor.) | | | | | | |
| Simplex Electrical Company. (See Ayer, James I., assignor.) | | | | | | |
| Simplex Railway Appliance Company. (See Lamont, Robert P., assignor.) | | | | | | |
| Simpson, Alexander, Scranton, and M. Speicher, Archbald, assignors to said Speicher, W. B. Culver, Carbondale, and E. R. Simpson, Scranton, Pa. Injector | 747,006 | Dec. 15 | 3114 | 713 | 107 | 1816 |
| Simpson, Alexander B., New York, assignor to H. Krantz Manufacturing Company, Brooklyn, N. Y. Push-button switch | 742,508 | Oct. 27 | 4100 | 923 | 106 | 2158 |
| Simpson, Alfred J., Jr., assignor of one-half to J. L. Wicks, Baltimore, Md. Vapor-lamp | 728,506 | May 19 | 3173 | 702 | 104 | 712 |
| Simpson, Cassius M., Cincinnati, Ohio. Clasp for garters or the like | 730,710 | June 9 | 2160 | 479 | 104 | 1592 |
| Simpson, Charles E., Chicago, Ill. Fire-door | 727,854 | May 12 | 1960 | 437 | 104 | 434 |
| Simpson, Charles E., Chicago, Ill. Safety-gate | 735,306 | Aug. 4 | 516 | 104, 105 | 105 | 1091 |
| Simpson, Charles E., Chicago, Ill. Fire-door | 746,885 | Dec. 15 | 2879 | 666 | 107 | 1763 |
| Simpson, David A., assignor of one-half to J. Simpson, Dealtown, Canada. Self-feeder for threshing-machines | 724,748 | Apr. 7 | 619 | 145 | 103 | 1301 |
| Simpson, Ellis R., *et al.* (See Simpson and Speicher, assignors.) | | | | | | |
| Simpson, George, Richmond, Victoria, Australia. Sash-fastener | 720,496 | Feb. 10 | 1982 | 453 | 102 | 1257 |
| Simpson, George A., assignor of one-fourth to W. A. Kessler, Pittsburg, Pa. Gas-range | 722,414 | Mar. 10 | 1409 | 311 | 103 | 316 |
| Simpson, John H., Providence, R. I. Extinguisher | 731,963 | June 23 | 4487 | 1001 | 104 | 2111 |
| Simpson, John H., assignor to F. Gibson, Providence, R. I. Garment-fastener | 737,507 | Aug. 25 | 4633 | 1040 | 105 | 2024 |
| Simpson, John T., and M. N. Shoemaker, Newark, N. J. Fireproof building | 737,670 | Sept. 1 | 206 | 44 | 106 | 47 |
| Simpson, John T., and M. N. Shoemaker, Newark, N. J. Construction of buildings | 739,030 | Sept. 15 | 2911 | 646 | 106 | 657 |
| Simpson, John T., and M. N. Shoemaker, assignors to American Concrete-Steel Company, Newark, N. J. Fireproof floor and ceiling construction | 719,892 | Feb. 3 | 866 | 204 | 102 | 1007 |
| Simpson, John T., and M. N. Shoemaker, Newark, N. J., assignors to Cemental Fireproofing Company, New York, N. Y. Fireproof floor and ceiling construction | 738,950 | Sept. 15 | 2787 | 617 | 106 | 630 |
| Simpson, Joseph. (See Simpson, David A., assignor.) | | | | | | |
| Simpson, Joseph A. (See Cochran, James K., assignor.) | | | | | | |
| Simpson, Marietta F., Pittsburg, Pa. Salt-receptacle | 740,324 | Sept. 29 | 5342 | 1203 | 106 | 1205 |
| Simpson, Robert D., assignor to Hallwood Cash Register Company, Columbus, Ohio. Paper-bag holder and printer | 725,785 | Apr. 21 | 2546 | 578 | 103 | 1741 |
| Simpson, Thomas, Abbeville, La. Valve mechanism | 734,978 | July 28 | 4235 | 984 | 105 | 938 |
| Simpson, Thomas W., Methley, England. Machine for manufacturing glass bottles | 723,933 | Mar. 31 | 4247 | 955, 956 | 103 | 952 |
| Simpson, Thomas W., Methley, England. Machine for manufacturing glass bottles | 732,902 | July 7 | 360 | 88, 89 | 105 | 79 |
| Simpson, William M., *et al.* (See Marshall, Cloyd, assignor.) | | | | | | |
| Simpson, William R., *et al.* (See Whitnight, Charles F., assignor.) | | | | | | |
| Simpson, William S., London, England, assignor of one-half to S. G. B. Cook, Baltimore, Md. Recoil-minimizer for firearms | 743,042 | Nov. 3 | 431 | 94 | 107 | 91 |
| Sims, Courtland, San Jose, Cal. Gopher-gun | 725,883 | Apr. 21 | 2716 | 618 | 103 | 1777 |
| Sims, Forest F., assignor of one-half to L. E. Webb, St. Bethlehem, Tenn. Churn-power | 725,597 | Apr. 14 | 2179 | 493 | 103 | 1648 |
| Simundt, Percy, Charlottenburg, near Berlin, Germany. Disinfecting apparatus | 743,340 | Nov. 3 | 1017 | 219 | 107 | 217 |
| Sinclair, Charles S., Cincinnati, Ohio. Mechanism for displaying advertising-cards, display-signs, &c | 745,532 | Dec. 1 | 406 | 93 | 107 | 1185 |
| Sinclair, Duncan, Coalbrookdale, England. Radiator for heating buildings | 741,845 | Oct. 20 | 2791 | 621 | 106 | 1877 |
| Sinclair, Henry, Ridgely, Md. Steam-generator | 724,960 | Apr. 7 | 995 | 229 | 103 | 1382 |
| Sinclair, Jessie. (See Fraser, Peter, assignor.) | | | | | | |
| Sinclair, John, Balmain, New South Wales, Australia. Screw-propeller for the propulsion and steering of ships | 719,958 | Feb. 3 | 976 | 225, 226 | 102 | 1031 |
| Sinclair, John E., Worcester, Mass. Ratchet-wrench | 743,942 | Nov. 10 | 2216 | 478 | 107 | 488 |
| Sinclair, Matthew. (See Smith, Harry M., assignor.) | | | | | | |
| Sinclair, Russell, Sydney, New South Wales, Australia. Submarine vessel or diving apparatus | 728,031 | May 12 | 2275 | 506 | 104 | 502 |
| Sinclair, William, Jersey City, and H. S. Benson, Bayonne, N. J.; said Benson assignor to said Sinclair. Change-receiver | 744,635 | Nov. 17 | 3541 | 763 | 107 | 784 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Sincock, John, Dunbar, Pa. Pipe-cleaner | 723,745 | Mar. 24 | 3873 | 871 | 103 | 856 |
| Sines, John, Charloe, Ohio. Pneumatic lock | 722,258 | Mar. 10 | 1126 | 249 | 103 | 255 |
| Sines, John, Charloe, assignor of one-half to H. T. Kohn, Paulding, Ohio. Car-coupling | 726,197 | Apr. 21 | 3263 | 741 | 103 | 1889 |
| Singer, Charles, Grand Rapids, Mich. Furniture construction | 740,192 | Sept. 29 | 5093 | 1144 | 106 | 1155 |
| Singer, Charles A., Larchmont, N. Y. Underrunning trolley for electric railways | 746,395 | Dec. 8 | 1981 | 452 | 107 | 1542 |
| Singer, Herbert M., Dereham, England. Ball | 728,311 | May 19 | 2827 | 625 | 104 | 641 |
| Singer, Lawrence. (See Ross and Singer.) | | | | | | |
| Singer Manufacturing Company. (See Allen, Edward B., assignor.) | | | | | | |
| Singer Manufacturing Company. (See Diehl, Philip, assignor.) | | | | | | |
| Singer Manufacturing Company. (See Douglas, John, assignor.) | | | | | | |
| Singer Manufacturing Company. (See Greene, James G., assignor.) | | | | | | |
| Singer Manufacturing Company. (See Hemleb, Martin, assignor.) | | | | | | |
| Singer Manufacturing Company. (See Hochstrasser, Arnold, assignor.) | | | | | | |
| Singer Manufacturing Company. (See Mueller, Friederick, assignor.) | | | | | | |
| Singer Manufacturing Company. (See Oesterreich, Amandus J. A., assignor.) | | | | | | |
| Singer Manufacturing Company. (See Pauly, Lina, assignor.) | | | | | | |
| Singer Manufacturing Company. (See Sullivan and Allen, assignors.) | | | | | | |
| Singer, Samuel S., Greatfalls, Mont. Suspender-buckle | 725,997 | Apr. 21 | 2916 | 663 | 103 | 1818 |
| Singer, William F., Philadelphia, Pa., assignor of one-half to G. P. Carroll, Bridgeport, Conn. Valve | 740,704 | Oct. 6 | 586 | 131 | 106 | 1373 |
| Single, John, Syracuse, N. Y. Paper vessel | 717,775 | Jan. 6 | 499 | 111, 112 | 102 | 107 |
| Single Sheet Paper Company. (See Casterline, Sexton, Stockwell, and Swalm, assignors.) | | | | | | |
| Single-Sheet Paper Company. (See Sexton, Arthur E., assignor.) | | | | | | |
| Single Tube Transmission Company. (See Davis, Wilbur G., assignor.) | | | | | | |
| Singleton, George W., assignor to Jewett Typewriter Company, Des Moines, Iowa. Card-holding platen for type-writing machines | 731,076 | June 16 | 2836 | 630 | 104 | 1753 |
| Singleton, George W., assignor to Jewett Typewriter Company, Des Moines, Iowa. Carriage-escapement for type-writing machines | 738,365 | Sept. 8 | 1667 | 361 | 106 | 375 |
| Sink, Burt J., Buffalo, assignor to Barber Asphalt Paving Company, New York, N. Y. Apparatus for repairing asphalt pavements | 734,141 | July 21 | 2670 | 628 | 105 | 598 |
| Sinnamon, William G., Syracuse, N. Y. Collapsible piston-valve | 723,052 | Mar. 17 | 2589 | 584 | 103 | 580 |
| Sinnott, Edward J., Erie, Pa. Elastic horseshoe | 742,362 | Oct. 27 | 3839 | 862 | 106 | 2106 |
| Siple, Simon F., Petersburg, Ind. Injector | 726,770 | Apr. 28 | 4390 | 987 | 103 | 2132 |
| Sipp, Grant, Paterson, N. J. Reeling-machine | 723,624 | Mar. 24 | 3669 | 822, 823 | 103 | 811 |
| Sipperley, Alvinza F., assignor to S. H. Sipperley, Denver, Colo. Nether garment | 741,281 | Oct. 13 | 1668 | 377 | 106 | 1621 |
| Sipperley, Susan H. (See Sipperley, Alvinza F., assignor.) | | | | | | |
| Sipple, George. (See Hancock and Sipple.) | | | | | | |
| Sirrine, William G., Greenville, S. C. Combined paper-weight and pen-holder | 735,832 | Aug. 11 | 1529 | 327 | 105 | 1326 |
| Sisson, Harry D., Pittsfield, Mass., assignor to M. D. Knowlton and F. H. Beach, Rochester, N. Y. Gumming-machine | 723,053 | Mar. 17 | 2591 | 584 | 103 | 580 |
| Sisson, Harry D., Pittsfield, Mass., assignor to M. D. Knowlton and F. H. Beach, Rochester, N. Y. Gumming-machine | 726,363 | Apr. 28 | 3598 | 816, 817 | 103 | 1974 |
| Sisson, Isaac H., assignor to J. C. Hall Company, Providence, R. I. Locking device for transfer-binders | 721,098 | Feb. 17 | 3138 | 721 | 102 | 1517 |
| Sisson, Isaac H., assignor to J. C. Hall Company, Providence, R. I. Temporary or loose-leaf binder | 721,099 | Feb. 17 | 3139 | 721, 722 | 102 | 1518 |
| Sisson, Isaac H., assignor to J. C. Hall Company, Providence, R. I. Leaf-holder for transfer-binders | 721,100 | Feb. 17 | 3142 | 722 | 102 | 1518 |
| Sites, Edwin S., Apollo, Pa. Ingot-tongs | 748,222 | Dec. 29 | 5429 | 1237 | 107 | 2370 |
| Sivenson, John A., *et al.* (See Spangler, Samuel C., assignor.) | | | | | | |
| Sivenson, Oloff P., *et al.* (See Spangler, Samuel C., assignor.) | | | | | | |
| Sivertson, Andrew, Auburndale, Wis. Shingle-guide | 723,746 | Mar. 24 | 3874 | 871 | 103 | 856 |
| Sjogren, Carl A. T., Stockholm, Sweden. Automatic gun | 739,732 | Sept. 22 | 4223 | 945 | 106 | 954 |
| Sjöstedt, Ernst A., assignor to Lake Superior Power Company, Sault Ste. Marie, Canada. Electric furnace | 726,364 | Apr. 28 | 3600 | 817 | 103 | 1975 |
| Sjöstedt, Ernst A., and J. H. James, assignors to F. H. Clerque, Sault Ste. Marie, Canada. Electrolytic separation of copper and nickel from mattes or ores | 725,998 | Apr. 21 | 2917 | ..... | 103 | 1818 |
| Sjöstedt, Ernst A., and W. M. Goodwin, assignors to Lake Superior Power Company, Sault Ste. Marie, Canada. Rabble-arm and connecting device for central shafts in ore-roasters | 727,008 | May 5 | 378 | 79 | 104 | 82 |
| Sjostrom, Jonas, Kingsbridge, assignor to J. L. Delafield, New York, N. Y. Measuring-faucet | 719,151 | Jan. 27 | 3111 | 692, 693 | 102 | 702 |
| Skahen, Patrick D., Syracuse, N. Y. Rough box for burial-caskets | 734,196 | July 21 | 2766 | 649 | 105 | 618 |
| Skaife, Lewis, Montreal, Canada. Catch-basin | 720,290 | Feb. 10 | 1630 | 373 | 102 | 1183 |
| Skeele, Henry B., Chicago Heights, Ill. Tile-fastener | 721,246 | Feb. 24 | 3475 | 790 | 102 | 1604 |
| Skeele, Henry B., Savannah, Ga. Roofing-tile | 722,918 | Mar. 17 | 2367 | 529 | 103 | 533 |
| Skeels, John Y., Storm Lake, Iowa. Foot warmer and rest | 746,753 | Dec. 15 | 2621 | 602 | 107 | 1705 |
| Skeffington, Francis P., Spokane, Wash. Pressure-retaining valve | 747,656 | Dec. 22 | 4327 | 978 | 107 | 2106 |
| Skelton, Horace T., Cambridge, Mass. Pneumatic-action for musical instruments | 734,979 | July 28 | 4236 | 984, 985 | 105 | 939 |
| Skelton, James. (See Germiner, Henry W., assignor.) | | | | | | |
| Skelton, John, Barnum, Minn. Stake-holder release | 727,009 | May 5 | 379 | 80 | 104 | 82 |
| Skibbe, Charles A., assignor of one-third to C. A. Metzger, Fruithurst, Ala. Metallic railway-tie | 737,508 | Aug. 25 | 4635 | 1040 | 105 | 2024 |
| Skidmore, Charles, Homer, Nebr. Weighing-wagon | 732,228 | June 30 | 5044 | 1122 | 104 | 2239 |
| Skidmore, John C., and A. Tyer, Grapeland, Tex. Door-check | 721,334 | Feb. 24 | 3617 | 822 | 102 | 1635 |
| Skiff, William S., *et al.* (See Peifer, John W., assignor.) | | | | | | |
| Skinner, Ado D., Grand Forks, N. D. Bag-holder | 731,101 | Feb. 17 | 3143 | 722 | 102 | 1518 |
| Skinner, Arthur J., Springfield, Mass. Shoe-holding device | 729,228 | May 26 | 4506 | 993 | 104 | 1004 |
| Skinner, Arthur J., Springfield, Mass. Shoe-holding device | 735,833 | Aug. 11 | 1530 | 328 | 105 | 1326 |
| Skinner, Charles E., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Voltage-regulator | 734,438 | July 21 | 3213 | 757 | 105 | 712 |
| Skinner, Edward J., New Britain, Conn. Chuck | 721,753 | Mar. 3 | 173 | 40 | 103 | 38 |
| Skinner, Ernest M., Dorchester, Mass. Electric-circuit-closing mechanism for keyed musical instruments | 725,598 | Apr. 14 | 2180 | 494 | 103 | 1649 |
| Skinner, Frederick W., Valley Falls, R. I. Cleaning attachment for oil-cans | 727,855 | May 12 | 1962 | 437 | 104 | 435 |
| Skinner, John, *et al.* (See Donahue, Michael C., assignor.) | | | | | | |
| Skinner, John C., Frontenac, Kans. Banana-swing | 730,408 | June 9 | 1604 | 358 | 104 | 1471 |
| Skinner, John J., Paso Robles, Cal., assignor to Stockton Manufacturing Company. Thresher | 722,919 | Mar. 17 | 2368 | 529, 530 | 103 | 533 |
| Skinner, Le Grand, and J. C. Glenn, Erie, Pa.; said Glenn assignor to said Skinner. Governor-adjusting mechanism | 748,223 | Dec. 29 | 5430 | 1238 | 107 | 2371 |
| Skinner, Lewis B., Colorado Springs, Colo. Filter | 735,834 | Aug. 11 | 1531 | 328 | 105 | 1326 |

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| | | | Spec. | Dr'g. | Vol. | Page. |
| Skinner, Lewis B., Colorado Springs, Colo. Filter | 735,835 | Aug. 11 | 1532 | 328, 329 | 105 | 1326 |
| Skinner, Manford, Listie, Pa. Electric-circuit breaker | 734,824 | July 28 | 3548 | 831 | 105 | 800 |
| Skinner, William, and C. Lindsey, Wellington, Kans. Means for constructing cisterns or the like | 748,224 | Dec. 29 | 5432 | 1238 | 107 | 2371 |
| Skinner, William I., Richfield, N. Y. Potato-digger | 738,951 | Sept. 15 | 2790 | 618 | 106 | 630 |
| Skirrow, John F., East Orange, N. J. Quadruplex telegraph system | 717,776 | Jan. 6 | 500 | 112 | 102 | 108 |
| Skirrow, John F., East Orange, N. J., assignor of one-half to C. Shirley, Brooklyn, N. Y. Switchboard | 732,012 | June 23 | 4601 | 1027 | 104 | 2133 |
| Sklenske, Frank, San Francisco, Cal. Grave-protector | 726,470 | Apr. 28 | 3786 | 857 | 103 | 2012 |
| Skow, Niels K., Newton, Iowa. Sand cutting, sifting, lump-crushing, and mixing machine | 725,884 | Apr. 21 | 2717 | 618 | 103 | 1778 |
| Slack, John R. (See Martineau, William C., assignor.) | | | | | | |
| Slack, Robert, Rochdale, England. Weft-detecting loom-shuttle | 733,601 | July 14 | 1614 | 383 | 105 | 359 |
| Slack, William F., Wellington, New Zealand. Ventilator | 740,598 | Oct. 6 | 419 | 90 | 106 | 1336 |
| Slade, Samuel, and R. Goldstein, Chicago, Ill. Ornamenting leather | 735,836 | Aug. 11 | 1533 | 329 | 105 | 1327 |
| Slater, Adam W. (See Slater, Robert A., M., and A. W.) | | | | | | |
| Slater, Daniel A., *et al.* (See McGuire, Peter J., assignor.) | | | | | | |
| Slater, George E., Unionville, Ind. Gate | 731,716 | June 23 | 4041 | 902 | 104 | 1320 |
| Slater, James, assignor to S. Mason, Ashton-under-Lyne, England. Drawing-motion of cotton-combing machines | 730,711 | June 9 | 2162 | 479, 480 | 104 | 1592 |
| Slater, Mathias. (See Slater, Robert A., M., and A. W.) | | | | | | |
| Slater, Robert A., M., and A. W., McKeesport, Pa. Pipe heating and welding apparatus | 719,522 | Feb. 3 | 194 | 45,46 | 102 | 865 |
| Slater, W. W., *et al.* (See Cutting, Edwin M., assignor.) | | | | | | |
| Slattery, John, Brooklyn, assignor to Chrome Steel Works, New York, N. Y. Wheel and casting same or other metal objects | 725,999 | Apr. 21 | 2918 | 663 | 103 | 1818 |
| Slattery, John, Brooklyn, assignor to Chrome Steel Works, New York, N. Y. Separator | 726,000 | Apr. 21 | 2920 | 663, 664 | 103 | 1819 |
| Slattery, William H., assignor to Deitsch Brothers, New York, N. Y. Bag-fastener | 734,980 | July 28 | 4238 | 985 | 105 | 939 |
| Slaughter, Charles A., Jacksonville, Ill. Road scraper and grader | 718,029 | Jan. 6 | 961 | 213 | 102 | 207 |
| Slaughter, Robert K., Brooklyn, assignor to Elliott & Hatch Book Typewriter Company, New York, N. Y. Card-controlling attachment for type-writing machines | 724,401 | Mar. 31 | 5200 | 1165, 1166 | 103 | 1145 |
| Slavin, James J., Cleveland, Ohio. Indicator | 741,176 | Oct. 13 | 1465 | 333 | 106 | 1577 |
| Sleeman, James B., Huntingdon, Pa. Counting-machine | 743,579 | Nov. 10 | 1569 | 329 | 107 | 352 |
| Sleeper, Charles W., Lancaster, N. H., assignor to American Can Company, Chicago, Ill. Ejector for side-seaming machines | 734,759 | July 28 | 3830 | 893 | 105 | 854 |
| Sleeper, Charles W., Lancaster, N. H., assignor to American Can Company. Feeding mechanism for side-seaming machines | 734,760 | July 28 | 3832 | 893 | 105 | 854 |
| Sleeper, Frank H., Montreal, Canada. Engine | 722,259 | Mar. 10 | 1128 | 249 | 103 | 255 |
| Sleeper, Frank H., Montreal, Canada. Engine-valve | 725,885 | Apr. 21 | 2720 | 619 | 103 | 1778 |
| Sleeper, Joseph J. (See Gordon, Thomas, assignor.) | | | | | | |
| Sleeper, Joseph J. (See Harmstead, Martin E., assignor.) | | | | | | |
| Sleeper, Joseph J., Philadelphia, Pa. Vending-machine | 747,248 | Dec. 15 | 3569 | 808 | 107 | 1918 |
| Sleeth, George C., Newark, N. J. Garment-supporting device | 719,152 | Jan. 27 | 3114 | 693 | 102 | 703 |
| Sleght, Annie J., Newark, N. J. Book handle or carrier | 745,251 | Nov. 24 | 4745 | 1037 | 107 | 1054 |
| Slentz, Albertus O., assignor of one-half to E. A. Langenbach, Canton, Ohio. Mine-curtain | 732,903 | July 7 | 365 | 89 | 105 | 80 |
| Slick, Edwin E., Pittsburg, Pa. Repeater for rolling-mills | 726,774 | Apr. 28 | 4394 | 988 | 103 | 2133 |
| Slick, Edwin E., Pittsburg, Pa. Metal-transferring apparatus | 745,252 | Nov. 24 | 4746 | 1037 | 107 | 1054 |
| Slick, Edwin E., Pittsburg, Pa. Rolling-mill feed-table | 746,886 | Dec. 15 | 2882 | 666 | 107 | 1764 |
| Slinack, Victor H. (See Wilson and Slinack.) | | | | | | |
| Slinack, Victor H., assignor to Pennsylvania Globe Gas Light Company, Philadelphia, Pa. Incandescent gas-light | 748,225 | Dec. 29 | 5433 | 1238 | 107 | 2371 |
| Slinack, Victor H., assignor to Pennsylvania Globe Gas Light Company, Philadelphia, Pa. Incandescent gas-light | 748,226 | Dec. 29 | 5435 | 1239 | 107 | 2371 |
| Slingluff, Harry G., Hartford City, Ind. Making sheet-glass | 724,344 | Mar. 31 | 5077 | 1136 | 103 | 1118 |
| Slingluff, Harry G., Hartford City, Ind. Making fire-polished sheet-glass | 747,335 | Dec. 15 | 3745 | 844 | 107 | 1958 |
| Sloan, Edward D., Denver, Colo. Barrel-filter | 740,193 | Sept. 29 | 5095 | 1145 | 106 | 1156 |
| Sloan, Francis E., Baltimore, Md. Friction-hinge. (Reissue) | 12,139 | Aug. 4 | 1256 | 266 | 105 | 1248 |
| Sloan, Geo. B., Jr. (See Carroll, John, assignor.) | | | | | | |
| Sloan, George, Wilber, Nebr. Harrow | 726,775 | Apr. 28 | 4395 | 989 | 103 | 2133 |
| Sloan, George B., Jr. (See Shea, Thomas A., assignor.) | | | | | | |
| Sloan, James W., assignor of two-thirds to J. S. Cullinan and H. G. Johnston, Corsicana, Tex. Compressed-air elevator for fluids | 728,180 | May 12 | 2549 | 567 | 104 | 560 |
| Sloan, Samuel J., Jersey City, N. J. Portable daylight developing-box for photo-plates | 722,052 | Mar. 3 | 735 | 164 | 103 | 159 |
| Sloan, William, and J. E. Robinson, assignors of one-third to J. P. Feran, Jr., and G. Hummell, Cleveland, Ohio. Fraud-preventive device for vending-machines | 746,183 | Dec. 8 | 1598 | 357 | 107 | 1462 |
| Sloan, William A., Cincinnati, Ohio. Hair-fastener | 722,260 | Mar. 10 | 1129 | 249 | 103 | 255 |
| Sloane, Thomas W., East Bundaberg, Queensland, Australia. Machine for cutting cane | 724,345 | Mar. 31 | 5081 | 1137 | 103 | 1118 |
| Slocomb, Frank F., and J. Craig, Wilmington, Del. Leather-staking machine | 722,461 | Mar. 10 | 1504 | 332 | 103 | 337 |
| Slocum, Ebenezer N., Springfield, Mo. Spring-saddle and driving-box | 723,322 | Mar. 24 | 3097 | 697, 698 | 103 | 699 |
| Slocum, Fitzroy M., assignor of one-half to H. V. Ashby, Erie, Pa. Cigar-perforator | 719,267 | Jan. 27 | 3315 | 742 | 102 | 746 |
| Slocum, George S., Newport, R. I. Reversing-propeller gear | 747,785 | Dec. 22 | 4555 | 1028, 1029 | 107 | 2158 |
| Slocum, John C., assignor to J. A. Jeffrey, Columbus, Ohio. Clam-shell bucket | 736,795 | Aug. 18 | 3301 | 732 | 105 | 1717 |
| Slocum, John C., assignor to J. A. Jeffrey, Columbus, Ohio. Clam-shell bucket | 736,796 | Aug. 18 | 3302 | 732 | 105 | 1717 |
| Sloper, Thomas. (See Parsons and Sloper.) | | | | | | |
| Sloper, Thomas, Wilts, and I. H. Parsons, Leicester, England. Intercommunication telephone system | 718,224 | Jan. 13 | 1307 | 289 | 102 | 296 |
| Slough, Everett S., Quincy, Kans. Wheel-cultivator | 725,159 | Apr. 14 | 1382 | 312 | 103 | 1478 |
| Slover, Enoch A. (See Fry, Henry O., assignor.) | | | | | | |
| Slusser, H. L., *et al.* (See Willower, Guy F., assignor.) | | | | | | |
| Slutz, Thomas W., Crowley, La. Pneumatic stacker | 718,395 | Jan. 13 | 1621 | 356 | 102 | 363 |
| Slyder, William J., assignor of one-half to H. F. Douglass, Troy, Ohio. Canopy-support | 719,268 | Jan. 27 | 3316 | 742 | 102 | 746 |
| Slyder, William J., assignor of one-half to H. F. Douglass, Troy, Ohio. Umbrella-cover fastener | 719,269 | Jan. 27 | 3317 | 742 | 102 | 746 |
| Smaill, John, Port Chalmers, New Zealand. Means for determining the quantity of liquid in refrigerating apparatus | 744,121 | Nov. 17 | 2618 | 559 | 107 | 587 |
| Small, Dexter M., Providence, R. I. Bicycle | 723,934 | Mar. 31 | 4251 | 956 | 103 | 953 |
| Small, Edward, deceased; M. Small, Baltimore, Md., administratrix. Can-making machine | 725,886 | Apr. 21 | 2723 | 619, 620 | 103 | 1779 |
| Small, Henry J., San Francisco, Cal. Locomotive-tender | 745,392 | Dec. 1 | 152 | 35 | 107 | 1132 |
| Small, Lewis F., Braintree, Mass. Shoe-heel | 745,393 | Dec. 1 | 153 | 35 | 107 | 1133 |
| Small, Madison L., Medford, Okla. Ter. Weighing-machine | 744,420 | Nov. 17 | 3185 | 683 | 107 | 711 |
| Small, Mary, administratrix. (See Small, Edward.) | | | | | | |
| Small, Perry, Oroville, Cal. Bearing for dredging-machines | 744,636 | Nov. 17 | 3542 | 764 | 107 | 784 |

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| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drgs. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Small, Peter. (See Small, Thomas W., assignor.) | | | | | | |
| Small, Samuel W., *et al.* (See Lester, James S., assignor. | | | | | | |
| Small, Thomas W., assignor to P. Small, Cleveland, Ohio. Street-indicating device | 738,366 | Sept. 8 | 1670 | 361, 362 | 106 | 375 |
| Small, Wily, Dallas, assignor of one-half to J. W. Brock, Grapevine, Tex. Anchor-post | 744,421 | Nov. 17 | 3187 | 683 | 107 | 711 |
| Smallbone, Harry E., assignor of three-eighths to S. E. McDowell, Chicago, Ill., and J. Schreiner, St. Louis, Mo. Rotary engine | 737,876 | Sept. 1 | 645 | 137, 138 | 106 | 141 |
| Smalley, William H., London, England. Photographic film | 723,054 | Mar. 17 | 2593 | 585 | 103 | 581 |
| Smallman, James W., Nuneaton, England. Haulage-clip | 728,421 | May 19 | 3019 | 663 | 104 | 681 |
| Smalstig, Frederick C., assignor of one-half to G. Mayer, Allegheny, Pa. Cigar-bunching machine | 740,934 | Oct. 6 | 1002 | 227 | 106 | 1460 |
| Smart, Albert G., Melrose Highlands, Mass. Fork and spoon | 721,247 | Feb. 24 | 3476 | 790 | 102 | 1604 |
| Smart, Joseph S., assignor of one-half to J. Perkins, Wait, Mich. Air-brake for vehicles. | 732,789 | July 7 | 170 | 43, 44 | 105 | 40 |
| Smart, Robert H. (See Lang, Blake, and Smart.) | | | | | | |
| Smart, Samuel H. (See Harris, John, assignor.) | | | | | | |
| Smead, Isaac D., Cincinnati, Ohio. Heating apparatus | 717,634 | Jan. 6 | 201 | 49, 50 | 102 | 43 |
| Smead, Isaac D., Cincinnati, Ohio. Wood pipe | 717,635 | Jan. 6 | 202 | 50 | 102 | 44 |
| Smead, Isaac D., Cincinnati, Ohio. Grate | 718,536 | Jan. 13 | 1928 | 422 | 102 | 430 |
| Smead, Isaac D., Cincinnati, Ohio. Hot-water heating apparatus | 725,160 | Apr. 14 | 1383 | 312, 313 | 103 | 1478 |
| Smedley, John. (See Middleditch and Gregory, assignors.) | | | | | | |
| Smedley, Nathan J., Chicago, Ill. Surgical instrument | 722,542 | Mar. 10 | 1651 | 364 | 103 | 370 |
| Smelker, Angeline, Greenville, Ohio, assignor of one-third to M. M. Mehring, Indianapolis, Ind. Jar neck and closure | 727,470 | May 5 | 1207 | 266 | 104 | 260 |
| Smellie, Ebenezer, Glasgow, Scotland. Electric belt for medical purposes | 738,078 | Sept. 1 | 1016 | 227 | 106 | 220 |
| Smelser Engine Company. (See Smelser, James M., assignor.) | | | | | | |
| Smelser, James M., Pendleton, assignor to Smelser Engine Company, Frankton, Ind. Gas-engine | 731,236 | June 16 | 3131 | 694, 695 | 104 | 1810 |
| Smetana, Henry, New York, N. Y., assignor to International Tide Power Company. Tide-water apparatus | 725,887 | Apr. 21 | 2726 | 620, 621 | 103 | 1780 |
| Smethers, James A., assignor to Dempster Mill Manufacturing Company, Beatrice, Nebr. Wheel-cultivator | 721,335 | Feb. 24 | 3619 | 822, 823 | 102 | 1635 |
| Smethers, James A., assignor to Dempster Mill Manufacturing Company, Beatrice, Nebr. Drag-bar-adjusting device for cultivators | 741,729 | Oct. 20 | 2586 | 575, 576 | 106 | 1832 |
| Smethurst, Charles E. (See Robinson, Smethurst, and Gilbert.) | | | | | | |
| Smethurst, William, Dolgelly, England. Treating substances with nascent carbon dioxid | 725,786 | Apr. 21 | 2548 | 578 | 103 | 1741 |
| Smetters, Samuel T., assignor to Scherzer Rolling Lift Bridge Co., Chicago, Ill. Rolling lift-bridge | 719,153 | Jan. 27 | 3116 | 693, 694 | 102 | 703 |
| Smidth & Co., F. L. (See Lindhard, Povl T., assignor.) | | | | | | |
| Smillie, George W., Newark, N. J. Car-coupling | 730,978 | June 16 | 2647 | 589, 590 | 104 | 1714 |
| Smith, Adam L., Pittsburg, Pa. Peep-hole attachment for blast-furnaces | 742,919 | Nov. 3 | 170 | 40 | 107 | 37 |
| Smith, Alba P., Jr., Brockton, assignor to Specialty Manufacturing Company, Boston, Mass. Roller chafe-iron | 733,513 | July 14 | 1463 | 348 | 105 | 327 |
| Smith, Albert E., Brooklyn, N. Y. Kinetoscope | 744,251 | Nov. 17 | 2878 | 617 | 107 | 643 |
| Smith, Albert S. (See Mills, James, assignor.) | | | | | | |
| Smith, Albert W., Cleveland, Ohio. Extracting bromin | 725,161 | Apr. 14 | 1384 | | 103 | 1478 |
| Smith, Alfred, S. Jackson, and C. Hudson, Keighley, England. Weft-replenishing mechanism for looms | 745,078 | Nov. 24 | 4406 | 972, 973 | 107 | 983 |
| Smith, Alfred M., Beebe, Ala. Fence-post | 743,580 | Nov. 10 | 1573 | 330 | 107 | 353 |
| Smith, Allen D. (See Powell and Smith.) | | | | | | |
| Smith, Allen H., Tremont, La. Lace and cord fastener | 723,055 | Mar. 17 | 2594 | 585 | 103 | 581 |
| Smith, Allen H., Tremont, La. Trolling-hook | 729,435 | May 26 | 4850 | 1074 | 104 | 1076 |
| Smith, Allison D., Edinburgh, Scotland, assignor of two-thirds to C. S. Rolls, South Lodge, Knightsbridge, England, and N. D. Macdonald, Edinburgh, Scotland. Steam-boiler for motor-vehicles | 718,954 | Jan. 20 | 2729 | 610, 611 | 102 | 609 |
| Smith, Alvene H., assignor to Winsor & Jerauld Manufacturing Company, Providence, R. I. Tentering-machine | 746,887 | Dec. 15 | 2883 | 666, 667 | 107 | 1764 |
| Smith, Amour C., New York, N. Y., assignor to Marine Engine and Machine Company, Harrison, N. J. Elevator | 729,433 | May 26 | 4848 | 1074 | 104 | 1075 |
| Smith, Amour C., New York, N. Y., assignor to Marine Engine and Machine Company, Harrison, N. J. Elevator | 729,434 | May 26 | 4849 | 1074 | 104 | 1076 |
| Smith, Andrew Y. (See Barnes and Smith.) | | | | | | |
| Smith and Anthony Company. (See Barber, William M., assignor.) | | | | | | |
| Smith, Augustus. (See Nadeau, Benno, assignor.) | | | | | | |
| Smith, Augustus, Bradford, R. I. Gate-valve | 724,346 | Mar. 31 | 5083 | 1138 | 103 | 1118 |
| Smith, Augustus J., *et al.* (See Brantley, Thomas, assignor.) | | | | | | |
| Smith, Avery A., Evart, Mich. Folding crate | 719,893 | Feb. 3 | 869 | 204 | 102 | 1007 |
| Smith, B. H., *et al.* (See Rogers, Lou R., assignor.) | | | | | | |
| Smith, Barton C., Omaha, Nebr. Gasolene-generating apparatus | 747,786 | Dec. 22 | 4557 | 1029 | 107 | 2159 |
| Smith, Benjamin F., *et al.* (See Burleigh, Joseph A., assignor.) | | | | | | |
| Smith, Benjamin F., Seattle, Wash. Machine for painting shingles | 745,919 | Dec. 1 | 1114 | 249, 250 | 107 | 1336 |
| Smith, Benjamin F., Thurston, assignor of one-half to W. G. Smith, Columbus, Ohio. Grain separator and grader | 734,761 | July 28 | 3833 | 894 | 105 | 855 |
| Smith, Benjamin R., Gadsden, Ala. Saw-swage | 747,094 | Dec. 15 | 3286 | 748 | 107 | 1859 |
| Smith, Benjamin W., *et al.* (See Witzel, Charles J., assignor.) | | | | | | |
| Smith, Benjamin W. (See Witzel, Helm, and Smith.) | | | | | | |
| Smith, Budd, Austin, Minn. Weed-exterminator | 728,312 | May 19 | 2828 | 625 | 104 | 641 |
| Smith, Burt A., Tacoma, Wash. Rein-holder | 721,754 | Mar. 3 | 174 | 40 | 103 | 38 |
| Smith, Charles A., assignor of one-half to I. Goldstein, Boston, Mass. Faucet attachment. | 733,881 | July 14 | 2130 | 502 | 105 | 464 |
| Smith, Charles B., New York, N. Y. Telephone system | 727,701 | May 12 | 1648 | 373, 374, 375 | 104 | 373 |
| Smith, Charles B., New York, N. Y. Electrical signaling or calling system | 727,702 | May 12 | 1674 | 375 | 104 | 378 |
| Smith, Charles B., New York, N. Y. Electrical signaling or calling system | 727,703 | May 12 | 1677 | 375 | 104 | 379 |
| Smith, Charles B., New York, N. Y. Electrical signaling or calling system | 727,704 | May 12 | 1680 | 375 | 104 | 379 |
| Smith, Charles B., New York, N. Y. Telephone-exchange system | 729,801 | June 2 | 515 | 113 | 104 | 1233 |
| Smith, Charles B., New York, N. Y. Telephone system | 741,282 | Oct. 13 | 1669 | 377, 378 | 106 | 1621 |
| Smith, Charles B., New York, N. Y. Telephone | 741,283 | Oct. 13 | 1686 | 378 | 106 | 1624 |
| Smith, Charles B., New York, N. Y. Telephone system | 741,284 | Oct. 13 | 1693 | 379 | 106 | 1625 |
| Smith, Charles B., New York, N. Y. Telephone system | 741,285 | Oct. 13 | 1697 | 379 | 106 | 1626 |
| Smith, Charles D. W., Hassel, Mont. Dam for irrigating-ditches | 731,077 | June 16 | 2838 | 631 | 104 | 1754 |
| Smith, Charles E., Rochester, Minn. Laundry-tag | 724,624 | Apr. 7 | 390 | 93 | 103 | 1252 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | Spec. | Dr'g. | Vol. | Page. |
| Smith, Charles E., deceased, Goffstown, (S. M. Smith, administratrix,) assignor of one-half to H. W. Hopkins, Hillsboro, N. H. Extension-table | 738,367 | Sept. 8 | 1671 | 362 | 106 | 376 |
| Smith, Charles F., *et al.* (See Garrigus and Warner, assignors.) | | | | | | |
| Smith, Charles F. (See Hertzler and Smith.) | | | | | | |
| Smith, Charles F., *et al.* (See Munson, Samuel R., assignor.) | | | | | | |
| Smith, Charles F., New Britain, Conn. Meat-cutter | 745,079 | Nov. 24 | 4409 | 953 | 107 | 984 |
| Smith, Charles H., Jackson, Mich. Protector for axle-spindles | 727,010 | May 5 | 379 | 80 | 104 | 83 |
| Smith, Charles H., Woonsocket, R. I. Graduate | 747,249 | Dec. 15 | 3570 | 808 | 107 | 1918 |
| Smith, Charles H., assignor to O. B. North & Co., New Haven, Conn. Coupling device for chains | 721,397 | Feb. 24 | 3733 | 850 | 102 | 1658 |
| Smith, Charles H., assignor of one-half to A. F. Rowe, New Haven, Conn. Drinking-fountain | 731,517 | June 23 | 3679 | 820 | 104 | 1943 |
| Smith, Charles H., assignor to M. D. Bixby, Kalamazoo, Mich. Wheel or pulley | 747,250 | Dec. 15 | 3571 | 808 | 107 | 1918 |
| Smith, Charles M., Los Angeles, Cal. Curved momentum gravity-track | 727,221 | May 5 | 754 | 162 | 104 | 163 |
| Smith, Charles M., Los Angeles, Cal. Steering apparatus for vehicles on loop-tracks | 727,222 | May 5 | 757 | 162 | 104 | 163 |
| Smith, Charles M., and A. Smyth, Brooklyn, N. Y. Binding | 719,154 | Jan. 27 | 3118 | 694 | 102 | 704 |
| Smith, Charles R. (See Avery and Smith.) | | | | | | |
| Smith, Charles R., Paterson, N. J. Upright boiler | 738,853 | Sept. 15 | 2629 | 580 | 106 | 596 |
| Smith, Charles R., assignor to Star Trade Register Company, Montpelier, Vt. Coin-vending-machine | 740,935 | Oct. 6 | 1004 | 227, 228 | 106 | 1461 |
| Smith, Charles S., Milwaukee, Wis., assignor to Federal Manufacturing Company, Cleveland, Ohio. Tubular vehicle-axle | 725,787 | Apr. 21 | 2549 | 578 | 103 | 1741 |
| Smith, Charles W. (See Huston and Smith.) | | | | | | |
| Smith, Charles W., Chicago, Ill. Fishing-line attachment | 729,687 | June 2 | 290 | 67 | 104 | 1189 |
| Smith, Charles W., Renton, Wash. Nailless horseshoe | 742,509 | Oct. 27 | 4101 | 924 | 106 | 2158 |
| Smith, Charles W., Norwalk, Ohio. Extensible grille | 747,095 | Dec. 15 | 3288 | 748 | 107 | 1860 |
| Smith, Chester L., Philadelphia, Pa. Inkstand | 719,384 | Jan. 27 | 3545 | 791 | 102 | 796 |
| Smith, Chris N., Elgin, Ill. Extension-table | 724,961 | Apr. 7 | 998 | 229, 230 | 103 | 1382 |
| Smith, Christopher C., Kingsley, Iowa. Rotary engine | 721,611 | Feb. 24 | 4149 | 943 | 102 | 1749 |
| Smith, Clair W., New York, N. Y. Machine for placing material in brush-backs | 734,625 | July 28 | 3549 | 831, 832, 833 | 105 | 800 |
| Smith, Clarence E., New Britain, assignor to R. A. and R. A. Moore, Jr., Kensington, Conn. Ribbon-tie | 717,777 | Jan. 6 | 505 | 112 | 102 | 109 |
| Smith, Clarence E., and G. H. Nearing, assignors to North & Judd Manufacturing Company, New Britain, Conn. Snap-hook | 729,802 | June 2 | 517 | 113 | 104 | 1233 |
| Smith, Clarence W., Cambridge, Mass. Smoke-preventing furnace | 747,007 | Dec. 15 | 3117 | 713, 714 | 107 | 1817 |
| Smith, Clark J. (See Nicholls and Smith.) | | | | | | |
| Smith, Clement, Topeka, Kans. Vehicle | 740,051 | Sept. 29 | 4848 | 1088 | 106 | 1104 |
| Smith, Clyde L., assignor of one-half to W. H. Miller and H. S. Enck, Leipsic, Ohio. Puzzle | 729,000 | May 26 | 4095 | 908 | 104 | 920 |
| Smith and Company, H. D. (See Ward, William S., assignor.) | | | | | | |
| Smith, Cyrus, Irwin, Pa. Apparatus for saving fuel | 734,626 | July 28 | 3559 | 833 | 105 | 802 |
| Smith, Cyrus E., Fall River, Mass. Harness-finding machine for use in manually drawing in warps | 732,229 | June 30 | 5045 | 1122 | 104 | 2239 |
| Smith, Daniel D. (See Scarr, Abraham C., assignor.) | | | | | | |
| Smith, David L., assignor of one-half to L. L. Cole, Millerstown, Ky. Bench-vise | 732,013 | June 23 | 4604 | 1027 | 104 | 2134 |
| Smith, Dorothy M. (See Smith, Wilfred R., assignor.) | | | | | | |
| Smith, Dwight L., and J. J. Buchanan, assignors to Waterbury Buckle Co., Waterbury, Conn. Suspender-buckle | 741,416 | Oct. 13 | 1957 | 433 | 106 | 1684 |
| Smith, Dwight L., and J. J. Buchanan, assignors to Waterbury Buckle Co., Waterbury, Conn. Garment-supporter clasp | 741,417 | Oct. 13 | 1958 | 434 | 106 | 1684 |
| Smith, Edgar M., Denver, Colo. Bumper for railway-cars | 740,325 | Sept. 29 | 5343 | 1204 | 106 | 1206 |
| Smith, Edson J., Boston, assignor to J. Carter, Newton, Mass. Paper-cutter | 735,166 | Aug. 4 | 233 | 46, 47 | 105 | 1032 |
| Smith, Edward, Bradford, England. Measuring device | 726,198 | Apr. 21 | 3265 | 741 | 103 | 1889 |
| Smith, Edward C., St. Louis, Mo. Broadcast hand seed-sower | 721,473 | Feb. 24 | 3876 | 881 | 102 | 1687 |
| Smith, Edward C., Meadville, Pa. Wrench | 722,920 | Mar. 17 | 2370 | 530 | 103 | 534 |
| Smith, Edward D., Ludington, Mich. Shoe-lace fastener | 736,306 | Aug. 11 | 2375 | 516 | 105 | 1509 |
| Smith, Edward F., Bradford, Pa. Rotary pump | 724,132 | Mar. 31 | 4654 | 1047 | 103 | 1033 |
| Smith, Edward F., assignor to J. Anstice, Rochester, N. Y. Slicing-machine | 731,516 | June 23 | 3676 | 819, 820 | 104 | 1942 |
| Smith, Edward I. (See Wilmoth, Smith, and Golliek.) | | | | | | |
| Smith, Edward P., assignor of two-thirds to M. L. Morrison and G. Schindler, Chattanooga, Tenn. Making composition of matter | 726,582 | Apr. 28 | 4039 | ------ | 103 | 2059 |
| Smith, Edward P., assignor of two-thirds to M. L. Morrison and G. Schindler, Chattanooga, Tenn. Composition of matter | 726,776 | Apr. 28 | 4397 | ------ | 103 | 2133 |
| Smith, Edwin R., Buffalo, N. Y. Core-cutting machine | 723,935 | Mar. 31 | 4252 | 956, 957 | 103 | 953 |
| Smith, Elmer S., Boundbrook, and H. Giles, South Boundbrook, assignors to Ideal Cash Register Company, New Boundbrook, N. J. Cash-register | 724,516 | Apr. 7 | 176 | 43, 44, 45 | 103 | 1207 |
| Smith, Emmet L., Chicago, Ill. Framed picture or mirror hanging device | 730,055 | June 2 | 972 | 217 | 104 | 1326 |
| Smith, Ernest G., Lorimer Lake, Canada. Saw-tool | 744,811 | Nov. 24 | 3893 | 837 | 107 | 878 |
| Smith, Ernst G., Columbia, Pa. Ironing-machine | 719,385 | Jan. 27 | 3547 | 791 | 102 | 796 |
| Smith, Ernst G., Columbia, Pa. Drying-machine | 747,787 | Dec. 22 | 4558 | 1029, 1030 | 107 | 2159 |
| Smith, Eugene C., assignor to O. C. A. Swing Company, New York, N. Y. Hand-actuated vehicle | 726,001 | Apr. 21 | 2922 | 664 | 103 | 1819 |
| Smith, Eugene C., assignor to O. C. A. Swing Company, New York, N. Y. Bracket for baby-jumpers | 732,127 | June 30 | 4829 | 1077 | 104 | 2194 |
| Smith, Ezra B., Cincinnati, Ohio. Spring for upholstered cushions | 719,155 | Jan. 27 | 3120 | 695 | 102 | 704 |
| Smith, Ezra B., and E. Funk, Cincinnati, Ohio. Elliptical spring | 724,213 | Mar. 31 | 4815 | 1079 | 103 | 1066 |
| Smith, Ezra S., Attleboro, Mass., assignor to R. F. Simmons Company. Safety device | 734,142 | July 21 | 2671 | 628 | 105 | 598 |
| Smith, Ferdinand A., Los Angeles, Cal. Atomizer | 748,237 | Dec. 29 | 5436 | 1239 | 107 | 2372 |
| Smith, Finley M., Salubria, Idaho. Nut-lock | 728,032 | May 12 | 2276 | 506 | 104 | 502 |
| Smith, Floyd J., Toledo, Ohio, assignor of one-half to C. B. Phillips, Blissfield, Mich. Skirt-supporter and shirt-waist holder | 722,921 | Mar. 17 | 2372 | 530 | 103 | 534 |
| Smith, Francis, and E. W. Check, Cedar Rapids, Iowa. Pig-rearing device | 729,688 | June 2 | 291 | 67 | 104 | 1189 |
| Smith, Francis W., Cambridge, Mass., assignor, by mesne assignments, to National Biscuit Company, Jersey City, N. J., and Chicago, Ill. Display-box | 731,237 | June 16 | 3133 | 695 | 104 | 1810 |
| Smith, Frank E., Hartford, Conn. Die | 734,762 | July 28 | 3834 | 894 | 105 | 855 |
| Smith, Frank E., Webster City, Iowa. Office-tickler | 737,166 | Aug. 25 | 3966 | 881 | 105 | 1879 |
| Smith, Frank E., Hazelrigg, assignor of one-half to J. N. Shirley, Lebanon, Ind. Fence-machine | 741,177 | Oct. 13 | 1469 | 333 | 106 | 1579 |

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| Smith, Frank J. (See Black and Smith.) | | | | | | |
| Smith, Frank J., Los Angeles, Cal. Combined heating and cooking stove | 740,705 | Oct. 6 | 587 | 131 | 106 | 1374 |
| Smith, Frank L., assignor of one-half to A. C. Ricksecker, Chicago, Ill. Tool-holder for machines for cutting valve-disks | 738,854 | Sept. 15 | 2629 | 580 | 106 | 596 |
| Smith, Frank N., Bradford, Pa. Pipe-coupling | 726,777 | Apr. 28 | 4397 | 989 | 103 | 2133 |
| Smith, Frank P. (See Socks and Smith.) | | | | | | |
| Smith, Frank S., Vancouver, Canada. Broom-clasp | 739,230 | Sept. 15 | 3288 | 728 | 106 | 734 |
| Smith, Franklin P. (See McClure, Edward, assignor.) | | | | | | |
| Smith, Fred C., Holyoke, Mass. Calender-roll | 722,100 | Mar. 3 | 983 | 218 | 103 | 208 |
| Smith, Fred P., Albany, assignor to Municipal Engineering Company, New York, N. Y. Crematory for garbage or like substances | 727,011 | May 5 | 380 | 80, 81 | 104 | 83 |
| Smith, Frederic J., Elizabeth, N. J., assignor to W. H. Bowker, Boston, Mass. Bordeaux mixture and making same | 718,537 | Jan. 13 | 1929 | ------ | 102 | 430 |
| Smith, Frederic J., Elizabeth, N. J., assignor to W. H. Bowker, Boston, Mass. Bordeaux mixture and preparing same | 718,538 | Jan. 13 | 1930 | ------ | 102 | 430 |
| Smith, Frederick D., New York, N. Y. Exercising apparatus | 722,462 | Mar. 10 | 1509 | 332 | 103 | 338 |
| Smith, Frederick H., San Francisco, Cal. Calendar-support | 722,763 | Mar. 17 | 2089 | 467 | 103 | 477 |
| Smith, Frederick H., Datchet, near Windsor, England. Explosion-engine | 741,559 | Oct. 13 | 2250 | 501 | 106 | 1746 |
| Smith, Frederick H., Datchet, near Windsor, England. Carbureter for explosion-engines. | 742,920 | Nov. 3 | 172 | 40 | 107 | 38 |
| Smith, Frederick H., assignor to P. P. Menard, Chicago, Ill. Belt-fastener | 745,533 | Dec. 1 | 409 | 94 | 107 | 1186 |
| Smith, Frederick H., and J. H. McKee, Denver, Colo. Metal railway-tie and means for connecting the rails thereto | 731,238 | June 16 | 3135 | 696 | 104 | 1811 |
| Smith, Frederick L., assignor to Olds Motor Works, Detroit, Mich. Vehicle-spring | 743,402 | Nov. 3 | 1156 | 245 | 107 | 245 |
| Smith, Frederick S., South Bend, Ind. Steam-generator | 746,593 | Dec. 8 | 2324 | 532 | 107 | 1619 |
| Smith, Frederick W., Cleveland, Ohio. Self-locking pulley | 729,968 | June 2 | 824 | 184 | 104 | 1295 |
| Smith, Friend W., Jr., Bridgeport, Conn., assignor to Holdrege Company, New York, N. Y. Golf-ball | 720,852 | Feb. 17 | 2657 | 613 | 102 | 1413 |
| Smith, Friend W., Jr., Bridgeport, Conn., assignor to Holdrege Company, New York, N. Y. Golf-ball | 726,471 | Apr. 28 | 3787 | 857 | 103 | 2012 |
| Smith, Furman J., Springfield, Mo. Bicycle-tire cleaner | 737,509 | Aug. 25 | 4636 | 1040 | 105 | 2024 |
| Smith, Gary B., Cleveland, Ohio. Spring bed-bottom | 738,368 | Sept. 8 | 1673 | 362 | 106 | 376 |
| Smith, George, Jersey City, N. J. Clip for detector-bars | 721,975 | Mar. 3 | 604 | 134 | 103 | 131 |
| Smith, George, London, England. Money-saving box or purse | 723,415 | Mar. 24 | 3289 | 735, 736 | 103 | 734 |
| Smith, George A., assignor of one-half to W. F. Deal and H. Schwartz, Belfield, Va. Machine for sawing and assorting box stuff | 725,630 | Apr. 14 | 2246 | 508 | 103 | 1662 |
| Smith, George A., Cottonwood, J. E. Phillips, Minneapolis, and J. P. Smith, Cottonwood, Minn. Device for preventing side draft in harvesters | 734,439 | July 21 | 3214 | 757 | 105 | 713 |
| Smith, George B., Fremont, Ohio. Dental medicine-receptacle | 732,662 | June 30 | 5870 | 1302 | 104 | 2413 |
| Smith, George E., trustee. (See Ladd, Hermon W., assignor.) | | | | | | |
| Smith, George E., Pasadena, Cal. Railway-car | 720,291 | Feb. 10 | 1632 | 373 | 102 | 1184 |
| Smith, George E., Exeter, N. H. Trolley | 728,313 | May 19 | 2829 | 625 | 104 | 641 |
| Smith, George G., Florence, Italy. Gas-drying apparatus | 729,514 | May 26 | 4983 | 1105 | 104 | 1105 |
| Smith, George H., Webster, W. Va. Hub for vehicle-wheels | 721,612 | Feb. 24 | 4152 | 944 | 102 | 1749 |
| Smith, George H., Baldwinsville, Mass. Nursery-chair | 730,306 | June 9 | 1427 | 314 | 104 | 1435 |
| Smith, George H., New Burlington, Ohio. Gate | 732,128 | June 30 | 4831 | 1077 | 104 | 2194 |
| Smith, George H., assignor to Beaman & Smith Company, Providence, R. I. Adjustable attachment for horizontal spindle drilling and boring machines | 718,955 | Jan. 20 | 2730 | 611 | 102 | 610 |
| Smith, George H., assignor to Beaman & Smith Company, Providence, R. I. Horizontal spindle drilling and boring machine | 718,956 | Jan. 20 | 2731 | 611 | 102 | 610 |
| Smith, George J., assignor to St. Louis Car Company, St. Louis, Mo. Car-truck | 744,983 | Nov. 24 | 4196 | 907 | 107 | 940 |
| Smith, George L., Brooklyn, N. Y. Shade-roller holder for windows | 746,396 | Dec. 8 | 1983 | 452 | 107 | 1543 |
| Smith, George M., assignor of one-half to C. H. Collins, Berkeley, R. I. Picker-stick check for looms | 729,229 | May 26 | 4507 | 993 | 104 | 1005 |
| Smith, George W., Worcester, Mass. Thill-coupling | 733,291 | July 7 | 1067 | 254 | 105 | 225 |
| Smith, George W., Krug, Md. Conveying apparatus | 745,253 | Nov. 24 | 4748 | 1038 | 107 | 1055 |
| Smith, Gustav E. (See Lockwood, Charles R., assignor.) | | | | | | |
| Smith, Guy, Des Moines, Iowa. Arm-rest | 736,886 | Aug. 18 | 3470 | 770 | 105 | 1753 |
| Smith, Guy, Girard, Ohio. Tanning and tawing compound | 744,252 | Nov. 17 | 2880 | ------ | 107 | 643 |
| Smith, Guy W., San Jose, Cal. Oil-burner | 717,937 | Jan. 6 | 790 | 178 | 102 | 169 |
| Smith, H. A. (See Sawyer, Charles H., assignor.) | | | | | | |
| Smith, Hamilton, *et al.* (See Gary, Jefferson, assignor.) | | | | | | |
| Smith, Harbert B., Langley, Kans. Windmill | 737,788 | Sept. 1 | 433 | 93 | 106 | 95 |
| Smith, Harley, Buffalo, Mo. Measuring device | 718,396 | Jan. 13 | 1622 | 357 | 102 | 363 |
| Smith, Harry, and W. Wright, Franklin, Pa. Wall-packer for oil-wells | 746,184 | Dec. 8 | 1602 | 358 | 107 | 1462 |
| Smith, Harry B., *et al.* (See Smith, Philip S., assignor.) | | | | | | |
| Smith, Harry E., Roslyn, Wash. Hose-coupling | 747,008 | Dec. 15 | 3120 | 714 | 107 | 1818 |
| Smith, Harry J., Philadelphia, Pa. Car-conveyer | 721,336 | Feb. 24 | 3321 | 823 | 102 | 1636 |
| Smith, Harry M., Chicago, Ill., assignor of one-third to M. Sinclair, Westfield, N. J. Mechanical musical instrument | 721,248 | Feb. 24 | 3476 | 790, 791 | 102 | 1604 |
| Smith, Harry W. and M. F., Glanford Township, Wentworth county, Canada, assignors to Indiana Manufacturing Company, Indianapolis, Ind. Pneumatic straw-stacker | 747,251 | Dec. 15 | 3572 | 809 | 107 | 1918 |
| Smith, Harvey E., assignor of one-half to D. J. Le Vasseur, Missoula, Mont. Fire-escape | 734,440 | July 21 | 3216 | 757 | 105 | 713 |
| Smith, Henry C. (See Gwinn and Smith.) | | | | | | |
| Smith, Henry C., Blue Island, Ill. Sliding-door track | 730,712 | June 9 | 2163 | 480 | 104 | 1592 |
| Smith, Henry C., Chicago, Ill. Door-hanger | 743,341 | Nov. 3 | 1018 | 219 | 107 | 217 |
| Smith, Henry C., Cambridge, assignor to Smith-Warren Company, Boston, Mass. Metallic window frame and sash | 724,133 | Mar. 31 | 4655 | 1047 | 103 | 1033 |
| Smith, Henry C., Cambridge, assignor to Smith-Warren Company, Boston, Mass. Metallic window frame and sash | 724,134 | Mar. 31 | 4658 | 1048 | 103 | 1034 |
| Smith, Henry C., Cambridge, assignor to Smith-Warren Company, Boston, Mass. Window | 724,135 | Mar. 31 | 4663 | 1049 | 103 | 1035 |
| Smith, Henry C., assignor to Smith-Warren Company, Boston, Mass. Window | 724,136 | Mar. 31 | 4665 | 1049 | 103 | 1035 |
| Smith, Henry C., assignor to Smith-Warren Company, Boston, Mass. Window | 724,137 | Mar. 31 | 4669 | 1050 | 103 | 1036 |
| Smith, Henry C., assignor to Smith-Warren Company, Boston, Mass. Metal window | 724,138 | Mar. 31 | 4673 | 1050, 1051 | 103 | 1038 |
| Smith, Henry C., assignor to Smith-Warren Company, Boston, Mass. Metal window-frame | 724,139 | Mar. 31 | 4675 | 1051 | 103 | 1038 |
| Smith, Henry C., assignor to Smith-Warren Company, Boston, Mass. Casement-window | 741,560 | Oct. 13 | 2251 | 501, 502, 503 | 106 | 1747 |
| Smith, Henry C., assignor to Smith-Warren Company, Boston, Mass. Machine for assembling window-frames | 745,299 | Nov. 24 | 4842 | 1055, 1056, 1057 | 107 | 1074 |
| Smith, Henry D. (See Smith, John W. E., assignor.) | | | | | | |
| Smith, Henry D., Newbern, Va. Corn-planter | 728,510 | May 19 | 3174 | 703 | 104 | 713 |

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| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drgs. | Official Gazette. Vol. | Official Gazette. Page. |
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| Smith, Henry H. (See Dittbenner, Hermann G., assignor.) | | | | | | |
| Smith, Henry P., Canaan, Ohio. Reversible bridle-bit | 718,539 | Jan. 13 | 1931 | 423 | 102 | 430 |
| Smith, Herbert W. (See Bell, George A., assignor.) | | | | | | |
| Smith Herman B., Falls Village, Conn. Nut-lock | 741,941 | Oct. 6 | 2982 | 664 | 106 | 1916 |
| Smith Hiram B., Sr., Atlanta, Ga. Book-holder | 719,386 | Jan. 27 | 3549 | 792 | 102 | 797 |
| Smith, Horace G., assignor of one-third to J. J. Alley, Detroit, Mich. Brick-machine | 733,338 | July 7 | 1148 | 272 | 105 | 242 |
| Smith, Horace R., Altoona, Pa. Desk for X-ray apparatus or the like | 725,499 | Apr. 14 | 2013 | 454 | 103 | 1612 |
| Smith, Horace R., Altoona, Pa. Combined electrolytic and mechanical interrupter | 727,471 | May 5 | 1209 | 267 | 104 | 261 |
| Smith, Horatio A. (See Sawyer, Charles H., assignor.) | | | | | | |
| Smith Hudson, *et al.* (See Laist, Frederick, assignor.) | | | | | | |
| Smith, Irving T., Brooklyn, N. Y. Carriage-call box | 721,337 | Feb. 24 | 3623 | 824 | 102 | 1636 |
| Smith, Ivan W., assignor to Ford Auger Bit Company, Holyoke, Mass. Die for auger-blanks | 740,936 | Oct. 6 | 1008 | 228 | 106 | 1461 |
| Smith, J. H. (See Brown, Charles H., assignor.) | | | | | | |
| Smith, Jacob, Des Moines, Iowa. Boiler-furnace | 730,409 | June 9 | 1605 | 358 | 104 | 1471 |
| Smith, James, Pittsburg, Pa. Apparatus for straightening rails or bars | 743,766 | Nov. 10 | 1894 | 401 | 107 | 421 |
| Smith, James A. and O. J., Lincolnville, Kans. Hay rake, stacker, and loader | 736,558 | Aug. 18 | 2832 | 620, 621 | 105 | 1623 |
| Smith, James B., San Saba, Tex. Plow | 737,167 | Aug. 25 | 3967 | 881 | 105 | 1879 |
| Smith, James D. (See Herrick and Rogers, assignors.) | | | | | | |
| Smith, James D., Arlington, S. D. Wheel-holding machine | 721,613 | Feb. 24 | 4154 | 944 | 102 | 1750 |
| Smith, James D., Arlington, S. D. Tire-bolt wrench | 722,637 | Mar. 10 | 1818 | 405 | 103 | 407 |
| Smith, James D., McDonoghville, La. Sand-blower and brake attachment | 745,394 | Dec. 1 | 154 | 35 | 107 | 1133 |
| Smith, James E., New York, N. Y. Oven | 734,245 | July 21 | 2855 | 669 | 105 | 638 |
| Smith, James E., New York, N. Y. Cigar-bunching machine | 738,636 | Sept. 8 | 2177 | 476, 477 | 106 | 484 |
| Smith, James F., Akron, Ohio. Washing-machine | 730,170 | June 2 | 1156 | 260 | 104 | 1363 |
| Smith, James G., Covington, Ky., assignor to Ideal Journal Lubricator Company, Cincinnati, Ohio. Journal-lubricator | 728,777 | May 19 | 3690 | 824 | 104 | 820 |
| Smith, James H., Brooklyn, N. Y. Display-tray | 731,964 | June 23 | 4488 | 1001 | 104 | 2111 |
| Smith, James H., Chicago, Ill. Camera-stand | 734,763 | July 28 | 3835 | 894 | 105 | 855 |
| Smith, James H., Chicago, Ill., and J. A. Smith, Huntington, N. Y. Camera-stand | 734,764 | July 28 | 3836 | 895 | 105 | 855 |
| Smith, James J. (See Ghiglieri, William, assignor.) | | | | | | |
| Smith, James J., Marshall, Okla. Ter. Feed-trough | 725,162 | Apr. 14 | 1385 | 313 | 103 | 1478 |
| Smith, James J., Enid, Okla. Ter. Indicator for bath-rooms or water-closets | 747,252 | Dec. 15 | 3575 | 809 | 107 | 1919 |
| Smith, James J., assignor of one-half to J. R. Conklin, Marshall, Okla. Ter. Feed-trough | 718,540 | Jan. 13 | 1932 | 423 | 102 | 430 |
| Smith, James M., Farmland, Ind. Windmill mechanism | 718,667 | Jan. 20 | 2186 | 478, 479 | 102 | 496 |
| Smith, James P., St. Marys, Ohio. Shifting-rail for carriages | 738,497 | Sept. 8 | 1928 | 420, 421 | 106 | 429 |
| Smith, James T., assignor of one-half to M. K. and R. V. Cathell, Baltimore, Md. Water-tube boiler | 717,636 | Jan. 6 | 203 | 50, 51 | 102 | 44 |
| Smith, Jane C. (See Roberts, Young, and Smith.) | | | | | | |
| Smith, Jay A. (See Smith, James H. and J. A.) | | | | | | |
| Smith, Jay B., Vinton, La. Spindle-nut | 740,052 | Sept. 29 | 4849 | 1088 | 106 | 1104 |
| Smith, Jerome T., Scotland, S. D. Heat-indicator | 745,740 | Dec. 1 | 760 | 174 | 107 | 1260 |
| Smith, Jesse L., Lima, Ohio. Ground-anchor | 734,373 | July 21 | 3099 | 729, 730 | 105 | 689 |
| Smith, Jesse L., and J. McCambridge, Lima, Ohio. Rope-clamp | 725,599 | Apr. 14 | 2183 | 494 | 103 | 1649 |
| Smith, John, Nationa, Pa. Sight for guns | 723,747 | Mar. 24 | 3875 | 875 | 103 | 856 |
| Smith, John, Tacoma, Wash. Switch | 727,223 | May 5 | 759 | 162 | 104 | 164 |
| Smith, John A. (See Laganke and Smith.) | | | | | | |
| Smith, John A., Black Rock, Conn. Type-writing machine | 721,102 | Feb. 17 | 3144 | 722, 723 | 102 | 1519 |
| Smith, John A., Combs, Ark. Fish-hook | 722,922 | Mar. 17 | 2373 | 530 | 103 | 534 |
| Smith, John A., Bridgeport, Conn. Type-bar for type-writers | 736,887 | Aug. 18 | 3472 | 770 | 105 | 1753 |
| Smith, John A., Baltimore, Md., assignor to Smith Lyraphone Company. Automatic attachment for pianos | 723,056 | Mar. 17 | 2595 | 585 | 103 | 581 |
| Smith, John A., Athens, Tenn., assignor to Fisher Book Typewriter Company, Cleveland, Ohio. Ribbon feeding and controlling mechanism for type-writing machines | 723,936 | Mar. 31 | 4253 | 957, 958 | 103 | 953 |
| Smith, John A., Athens, Tenn., assignor, by mesne assignments, to Elliott-Fisher Company. Billing-platen for type-writing machines | 737,877 | Sept. 1 | 647 | 138, 139 | 106 | 142 |
| Smith, John A., assignor to Fisher Book Typewriter Company, Cleveland, Ohio. Tabulating mechanism for type-writing machines | 723,937 | Mar. 31 | 4263 | 958, 959 | 103 | 956 |
| Smith, John C., Des Moines, Iowa. Smoke-consuming furnace | 724,058 | Mar. 31 | 4499 | 1013 | 103 | 1001 |
| Smith, John D., Dunedin, New Zealand. Hair-curler | 728,422 | May 19 | 3020 | 664 | 104 | 681 |
| Smith, John D., Bonham, Tex. Saw-set | 734,981 | July 28 | 4240 | 985, 986 | 105 | 940 |
| Smith, John D., Bonham, Tex. Advertising device | 734,982 | July 28 | 4242 | 986 | 105 | 940 |
| Smith, John D., Bonham, Tex. Saw-filing machine | 737,033 | Aug. 25 | 3742 | 831 | 105 | 1832 |
| Smith, John E., *et al.* (See Wood, James B., assignor.) | | | | | | |
| Smith, John F., Chicago, Ill. Paint compound | 735,604 | Aug. 4 | 1087 | ------ | 105 | 1212 |
| Smith, John F., Jr., assignor of one-third to J. P. Ross, Eau Claire, Wis. Self-lubricating journal-box | 725,888 | Apr. 21 | 2727 | 621 | 103 | 1780 |
| Smith, John G., Wahoo, Nebr. Rein fastener and button | 742,921 | Nov. 3 | 174 | 41 | 107 | 39 |
| Smith, John H., Meadville, Pa. Clamp for removing tubing | 730,486 | June 9 | 1757 | 394 | 104 | 1504 |
| Smith, John J., Boston, Mass., assignor to American Condensing Drier Company, Kittery, Me. Drying apparatus | 747,788 | Dec. 22 | 4561 | 1030 | 107 | 2160 |
| Smith, John M., *et al.* (See Bryar, George, assignor.) | | | | | | |
| Smith, John P. (See Smith, Phillips, and Smith.) | | | | | | |
| Smith, John R. (See Reeves, James E., assignor.) | | | | | | |
| Smith, John R., Des Moines, Iowa. Hospital-bed | 726,472 | Apr. 28 | 3788 | 857 | 103 | 2012 |
| Smith, John T., Heron Lake, Minn. Machine for loading or unloading grain | 734,983 | July 28 | 4246 | 986, 987 | 105 | 940 |
| Smith, John T., Heron Lake, Minn. Machine for breaking flax-balls and preserving the seeds | 737,510 | Aug. 25 | 4638 | 1041 | 105 | 2024 |
| Smith, John T., Heron Lake, Minn. Apparatus for spreading and thinning flax or hemp straw | 737,511 | Aug. 25 | 4640 | 1041 | 105 | 2025 |
| Smith, John T., Heron Lake, Minn. Machine for threshing flax or hemp | 737,512 | Aug. 25 | 4642 | 1041, 1042 | 105 | 2026 |
| Smith, John T., Heron Lake, Minn. Artificial fuel | 739,936 | Sept. 29 | 4632 | 1039, 1040 | 106 | 1057 |
| Smith, John T., Heron Lake, Minn. Machine for making artificial fuel | 739,937 | Sept. 29 | 4634 | 1040 | 106 | 1058 |
| Smith, John T., Heron Lake, Minn. Band-cutter and feeder | 745,741 | Dec. 1 | 760 | 174 | 107 | 1260 |
| Smith, John W. (See Elliott, Nathaniel L., assignor.) | | | | | | |
| Smith, John W., Ottawa, Canada. Car-coupling | 732,790 | July 7 | 172 | 44 | 105 | 40 |
| Smith, John W., Ottawa, Canada. Car-coupling | 732,791 | July 7 | 173 | 44 | 105 | 40 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | Spec. | Des. | Vol. | Page. |
| Smith, John W., Ottawa, Canada. Car-coupling | 743,767 | Nov. 10 | 1896 | 401, 402 | 107 | 421 |
| Smith, John W., Sewellsville, Ohio. Sieve | 740,194 | Sept. 29 | 5097 | 1145 | 106 | 1156 |
| Smith, John W., Amsterdam, N. Y. Loom for weaving figured double-pile fabrics | 743,943 | Nov. 10 | 2217 | 479, 480 | 107 | 489 |
| Smith, John W., and G. U. Harn, Jr., Columbus, Ohio. Printing-machine | 747,009 | Dec. 15 | 3122 | 714, 715 | 107 | 1818 |
| Smith, John W., and G. U. Harn, Jr., Columbus, Ohio. Printing-roll | 747,096 | Dec. 15 | 3289 | 748 | 107 | 1860 |
| Smith, John W. E., assignor of one-half to H. D. Smith, Florence, Ala. Bed-brace | 738,079 | Sept. 1 | 1017 | 227 | 106 | 220 |
| Smith, Jonathan O., *et al.* (See Donnell, Junius S., assignor.) | | | | | | |
| Smith, Joseph B., assignor of one-half to L. G. Pullen, Havana, Ill. Tire-tightener | 728,776 | May 19 | 3689 | 823 | 104 | 820 |
| Smith, Joseph K., Pittsburg, Pa. Manufacture of pipes | 729,099 | May 26 | 4268 | 943 | 104 | 954 |
| Smith, Joseph S., assignor to M. A., J. W., and W. A. Smith, Philadelphia, Pa. Bathing sandal, slipper, &c | 726,778 | Apr. 28 | 4399 | 989 | 103 | 2134 |
| Smith, Joseph W., *et al.* (See Smith, Joseph S., assignor.) | | | | | | |
| Smith, Justus J., New York, N. Y. Cable-hanger | 740,326 | Sept. 29 | 5345 | 1204 | 106 | 1206 |
| Smith, Kline & French Company. (See Hart, Albert, assignor.) | | | | | | |
| Smith, Leander C., Nashua, Iowa. Boot or shoe cleaner | 719,894 | Feb. 3 | 870 | 204 | 102 | 1007 |
| Smith, Leonard, London, England. Isochromatic photographic plate and film | 746,594 | Dec. 8 | 2327 | 533 | 107 | 1620 |
| Smith, Lewis C., assignor to J. C. Cameron and A. C. Roebuck, Chicago, Ill. Tone-modifier | 729,230 | May 26 | 4508 | 994 | 104 | 1005 |
| Smith, Lewis J., and S. J. Brown, Denver, Colo. Vending apparatus | 717,721 | Jan. 6 | 354 | 86, 87 | 102 | 76 |
| Smith, Louis, Chicago, Ill. Combination-tool | 726,365 | Apr. 28 | 3602 | 817 | 103 | 1975 |
| Smith, Louis B., Jamestown, N. Y. Flushing-valve | 718,225 | Jan. 13 | 1309 | 289, 290 | 102 | 296 |
| Smith, Louis L., New York, N. Y. Combined lighting, heating, and cooking apparatus | 747,010 | Dec. 15 | 3125 | 715 | 107 | 1818 |
| Smith, Louis L., New York, N. Y. Heating and cooking device | 747,011 | Dec. 15 | 3127 | 715 | 107 | 1819 |
| Smith Lyraphone Company. (See Smith, John A., assignor.) | | | | | | |
| Smith, Marshall E., Dallas, Tex. Illusion-boat | 744,880 | Nov. 24 | 4010 | 865 | 107 | 902 |
| Smith, Marshall S., assignor of two-thirds to G. W. Bullard and W. A. Epling, Tacoma, Wash. Scaffold-bracket | 718,164 | Jan. 13 | 1198 | 266 | 102 | 273 |
| Smith, Martha A., *et al.* (See Smith, Joseph S., assignor.) | | | | | | |
| Smith, Martin F. (See Smith, Harry W. and M. F.) | | | | | | |
| Smith, Morris, and W. Sherwood, New York, N. Y. Egg-beater | 736,161 | Aug. 11 | 2127 | 456 | 105 | 1453 |
| Smith, Nellie F. (See Hurd, Charles L., assignor.) | | | | | | |
| Smith, Newton A., Johnston City, assignor of one-half to B. Perrine, Lakecreek, Ill. Ore or coal washer | 721,103 | Feb. 17 | 3147 | 723 | 102 | 1519 |
| Smith, Newton H., Bonaparte, Iowa. Chisel | 740,937 | Oct. 6 | 1009 | 228 | 106 | 1461 |
| Smith, Norman. (See Edwards, Nathaniel, assignor.) | | | | | | |
| Smith, Oberlin, Bridgeton, N. J. Permutation-lock | 745,080 | Nov. 24 | 4411 | 953, 954 | 107 | 984 |
| Smith, Oberlin, Bridgeton, N. J. Permutation-lock | 745,081 | Nov. 24 | 4415 | 955 | 107 | 985 |
| Smith, Oliver H. (See Monson and Smith.) | | | | | | |
| Smith, Orville J. (See Smith, James A. and O. J.) | | | | | | |
| Smith, Otto E. (See Gaines, Edward P., assignor.) | | | | | | |
| Smith Paper Machinery Company. (See Smith, Richard, assignor.) | | | | | | |
| Smith, Peter J., *et al.* (See Tyndall, Charles A., assignor.) | | | | | | |
| Smith, Peter J., assignor of one-half to C. S. McCall, Covington, S. C. Cotton or pea planter | 728,139 | May 12 | 2473 | 550 | 104 | 544 |
| Smith, Philip S., Philadelphia, Pa. Box-covering machine | 744,122 | Nov. 17 | 2619 | 559, 560 | 107 | 587 |
| Smith, Philip S., Philadelphia, Pa. Machine for pressing necks in boxes | 748,429 | Dec. 29 | 5790 | 1320 | 107 | 2450 |
| Smith, Philip S., Philadelphia, Pa. Neck-gluing machine | 748,430 | Dec. 29 | 5793 | 1320 | 107 | 2450 |
| Smith, Philip S., Philadelphia, Pa., assignor of three-fourths to J. S. Stokes, Moorestown, N. J., H. B. Smith, Brooklyn, N. Y., and W. S. Smith, Pawtucket, R. I. Machine for gluing blanks | 726,473 | Apr. 28 | 3790 | 857, 858 | 103 | 2012 |
| Smith, Philip S., Philadelphia, Pa., assignor of three-fourths to J. S. Stokes, Moorestown, N. J.; H. B. Smith, Brooklyn, N. Y., and W. S. Smith, Pawtucket, R. I. Form-block for box-covering machines | 748,022 | Dec. 29 | 5052 | 1141 | 107 | 2289 |
| Smith, Phineas, *et al.* (See Gary, Jefferson, assignor.) | | | | | | |
| Smith Premier Typewriter Company. (See Stillman, George F., assignor.) | | | | | | |
| Smith, Prince, and S. Ambler, assignors to P. Smith & Son, Keighley, England. Pressure-applying device for rolls of combing-machines | 718,285 | Jan. 13 | 1428 | 317 | 102 | 323 |
| Smith, Putnam D., Waterloo, Iowa. Spirit-level | 730,487 | June 9 | 1761 | 394 | 104 | 1505 |
| Smith, Putnam D., Waterloo, Iowa. Optical toy | 741,730 | Oct. 20 | 2588 | 576 | 106 | 1832 |
| Smith, R. Harry, *et al.* (See Tubbs, Nelson J., assignor.) | | | | | | |
| Smith, Reuben H., Nuneaton, England. Game apparatus | 741,846 | Oct. 20 | 2792 | 621 | 106 | 1877 |
| Smith, Richard, Bellows Falls, Vt., assignor to Smith Paper Machinery Company, Portland, Me. Feed mechanism for calender-rolls of paper-making machines | 743,403 | Nov. 3 | 1158 | 245, 246 | 107 | 245 |
| Smith, Richard H., Springfield, Mass. Molding and vulcanizing apparatus | 718,286 | Jan. 13 | 1429 | 318 | 102 | 323 |
| Smith, Richard H., Springfield, Mass. Inking-pad | 721,474 | Feb. 24 | 3878 | 881 | 102 | 1688 |
| Smith, Robert D., Chicago, Ill. Metallic packing | 729,001 | May 26 | 4096 | 909 | 104 | 920 |
| Smith, Robert E., *et al.* (See House, Harry A., assignor.) | | | | | | |
| Smith, Robert L., and J. Warhurst, Jr., Berwyn, Ill. Gas-fixture | 735,837 | Aug. 11 | 1535 | 329 | 105 | 1327 |
| Smith, Robert T., and D. M. Monroe, Baltimore, Md., assignors to American Can Company. Sheet-metal-lock-seaming machine | 725,163 | Apr. 14 | 1386 | 313, 314 | 103 | 1479 |
| Smith, Robert T., and D. M. Monroe, Baltimore, Md., assignors to American Can Company. Horn for soldering the side seams of sheet-metal bodies | 725,164 | Apr. 14 | 1392 | 314 | 103 | 1480 |
| Smith, Robert W. (See Boyd, Hugh, assignor.) | | | | | | |
| Smith, Robert W. (See Fargue and Smith.) | | | | | | |
| Smith, Roger D., Dedham, Mass., H. A. Craigie and W. H. Holston, Cumberland Mills, Me. Manufacture of paper | 744,422 | Nov. 17 | 3188 | ..... | 107 | 711 |
| Smith, Rose, Cleveland, Ohio. Water-heater | 739,938 | Sept. 29 | 4636 | 1040 | 106 | 1058 |
| Smith, Roy H., Rialto, assignor of one-half to G. S. Dyer, Alvarado, Cal. Inscriber | 726,002 | Apr. 21 | 2923 | 664, 665 | 103 | 1819 |
| Smith, Rudolph C., Yonkers, N. Y. Electrical elevator | 745,534 | Dec. 1 | 409 | 94 | 107 | 1186 |
| Smith, Rudolph C., Yonkers, N. Y. Calculating-scale | 746,888 | Dec. 15 | 2891 | 667, 668 | 107 | 1767 |
| Smith, Rudolph C., Yonkers, N. Y. Calculating-scale | 746,889 | Dec. 15 | 2894 | 668 | 107 | 1767 |
| Smith, Sam, Thunder, Ga. Friction-feed for sawmills | 733,514 | July 14 | 1465 | 348 | 105 | 327 |
| Smith, Samuel, Providence, R. I. Swivel water-displacer for drying-cylinders | 739,354 | Sept. 22 | 3506 | 784 | 106 | 797 |
| Smith, Samuel, Brooklyn, assignor to Languages Printing Company, New York, N. Y. Linotype-machine and matrix therefor | 719,270 | Jan. 27 | 3318 | 743 | 102 | 746 |
| Smith, Samuel C. (See Wade, Nicholson, and Smith.) | | | | | | |
| Smith, Samuel W., *et al.* (See Walter, William L., assignor.) | | | | | | |
| Smith, Sandie S., assignor to Niagara Hydraulic Engine Company, Chester, Pa. Hydraulic ram | 748,113 | Dec. 29 | 5234 | 1188 | 107 | 2329 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | Spec. | Drg. | Vol. | Page. |
| Smith, Sarah M., administratrix. (See Smith, Charles E.) | | | | | | |
| Smith, Scott A., Providence, R. I. Automatic mixer for fluids | 721,973 | Mar. 3 | 602 | 134 | 103 | 131 |
| Smith, Scott A., Providence, R. I. Apparatus for mixing liquids | 721,974 | Mar. 3 | 603 | 134 | 103 | 131 |
| Smith, Scott A., Providence, R. I. Lubricant and making same | 736,162 | Aug. 11 | 2129 | ..... | 105 | 1453 |
| Smith, Scott A., Providence, R. I. Lubricant and making same | 748,317 | Dec. 29 | 5584 | ..... | 107 | 2404 |
| Smith, Sebastian, assignor of one-half to J. B. Preston, Rushville, Ill. Tire setter and cooler | 734,003 | July 21 | 2378 | 558 | 105 | 533 |
| Smith, Seth E., Elliott, assignor of one-half to E. P. Bennett, Grant, Iowa. Gage | 717,938 | Jan. 6 | 791 | 178 | 102 | 169 |
| Smith, Solomon P., Waterford, N. Y. Furnace | 719,271 | Jan. 27 | 3320 | 743 | 102 | 747 |
| Smith & Son, Prince. (See Shackleton, Sugden, assignor.) | | | | | | |
| Smith & Son, Prince (See Smith and Ambler, assignors.) | | | | | | |
| Smith & Sons Manufacturing Company. (See Livengood, Winfield S., assignor.) | | | | | | |
| Smith, Stephen R., and E. J. Badgley, Belleville, Ill. Combined shade-adjuster, lock, and pull | 741,561 | Oct. 13 | 2253 | 503 | 106 | 1747 |
| Smith, Stewart K., Red Lodge, Mont. Car-loader | 739,939 | Sept. 29 | 4638 | 1041 | 106 | 1059 |
| Smith, Stewart K., Roslyn, Wash. Loading cars | 741,731 | Oct. 20 | 2589 | 576 | 106 | 1833 |
| Smith, T. K. (See Campbell, Carl T., assignor.) | | | | | | |
| Smith, Thomas, Geebung, Queensland, Australia. Measuring and filling machine | 733,682 | July 14 | 1747 | 413 | 105 | 385 |
| Smith, Thomas B. and T. E., Handsworth, England. Inverted incandescent lamp | 743,342 | Nov. 3 | 1019 | 220 | 107 | 218 |
| Smith, Thomas E. (See Smith, Thomas B. and T. E.) | | | | | | |
| Smith, Thomas H. (See Phillips, Ralph M., assignor.) | | | | | | |
| Smith, Thomas H., Kendallville, Ind. Adjustable vehicle-seat | 741,077 | Oct. 13 | 1274 | 291 | 106 | 1539 |
| Smith, Thomas J., Manassas, Va. Receptacle for poultry | 747,494 | Dec. 22 | 4029 | 905 | 107 | 2039 |
| Smith, Thomas T., near Warrenton, Va. Automatic spring pan-lifter | 729,231 | May 26 | 4511 | 994 | 104 | 1005 |
| Smith, Uzziel P., Chicago, Ill. Machine for making pneumatic tires | 745,300 | Nov. 24 | 4846 | 1057, 1058, 1059 | 107 | 1075 |
| Smith, Uzziel P., Chicago, Ill., assignor to F. A. Seiberling, Akron, Ohio. Manufacturing pneumatic tires | 723,057 | Mar. 17 | 2597 | 585 | 103 | 581 |
| Smith, Valerius Y., Globe, Ariz. Ter. Hand rock-drill | 728,314 | May 19 | 2830 | 626 | 104 | 642 |
| Smith, Vivian D., *et al.* (See Burleigh, Joseph A., assignor.) | | | | | | |
| Smith, W. Charles. (See Beugler, Hugh M., assignor.) | | | | | | |
| Smith, Walter A., *et al.* (See Smith, Joseph S., assignor.) | | | | | | |
| Smith, Walter M., Newcastle-upon-Tyne, England. Steam-engine | 736,888 | Aug. 18 | 3473 | 770, 771, 772 | 105 | 1754 |
| Smith, Walter M., Newcastle-upon-Tyne, England. Valve-gear for compound locomotive-engines | 736,889 | Aug. 18 | 3475 | 772 | 105 | 1754 |
| Smith, Walthall R., Napa, Cal. Camera attachment | 733,292 | July 7 | 1068 | 254 | 105 | 225 |
| Smith, Walton D., Prophetstown, Ill. Fastener for posters, &c | 747,253 | Dec. 15 | 3576 | 810 | 107 | 1920 |
| Smith-Warren Company. (See Smith, Henry C., assignor.) | | | | | | |
| Smith, Warren M., Borough of Prospect Park, assignor to J. A. Brill, Philadelphia, Pa. Semiconvertible car | 739,794 | Sept. 22 | 4333 | 970 | 106 | 979 |
| Smith, Washington, and L. Piggott, Belleville, W. Va. Fishing implement for oil-wells | 720,078 | Feb. 10 | 1226 | 282 | 102 | 1099 |
| Smith, Watson R., Jackson, Mich. Cushion-spring | 718,541 | Jan. 13 | 1933 | 423 | 102 | 431 |
| Smith, Wilber K., Denver, Colo. Switch-operating device | 738,637 | Sept. 8 | 2187 | 478 | 106 | 485 |
| Smith, Wilber K., Denver, Colo. Railway-switch | 738,638 | Sept. 8 | 2188 | 478 | 106 | 485 |
| Smith, Wilfred R., assignor to D. M. Smith, Cedar Rapids, Iowa. Hydrocarbon-burner | 746,890 | Dec. 15 | 2896 | 668 | 107 | 1768 |
| Smith, Willard A., Portsmouth, N. H. Means for securing shoe-uppers preparatory to lasting | 740,938 | Oct. 6 | 1010 | 229 | 106 | 1461 |
| Smith, William, La Crescent, Minn. Anchoring device for stump-pullers | 746,595 | Dec. 8 | 2328 | 533 | 107 | 1620 |
| Smith, William, Des Moines, assignor of one-half to J. O. Waldo, Grimes, Iowa. Apparatus for handling and cooling cans | 734,441 | July 21 | 3217 | 757, 758 | 105 | 713 |
| Smith, William A., Coshocton, Ohio. Animal-trap | 721,614 | Feb. 24 | 4156 | 944 | 102 | 1750 |
| Smith, William B. (See Sobotka and Smith.) | | | | | | |
| Smith, William B., Stacy, Tex. Farming implement | 718,226 | Jan. 13 | 1313 | 290 | 102 | 297 |
| Smith, William B., Plainfield, assignor of one-half to H. P. Brown, Montclair, N. J. Artificial fuel | 724,214 | Mar. 31 | 4816 | ..... | 103 | 1066 |
| Smith, William B., Warrensburg, Mo., assignor of one-half to J. Stern, trustee, Chicago, Ill. Door-hanger. (Reissue) | 12,181 | Dec. 8 | 2435 | 556 | 107 | 1644 |
| Smith, William E., Birmingham, Ala. Coat | 746,185 | Dec. 8 | 1603 | 358 | 107 | 1463 |
| Smith, William G. (See Hall and Smith.) | | | | | | |
| Smith, William G. (See Smith, Benjamin F., assignor.) | | | | | | |
| Smith, William G., Cinclare, La. Plant-protector | 745,395 | Dec. 1 | 156 | 36 | 107 | 1133 |
| Smith, William H., Allegheny, Pa. Photographic-printing frame | 719,523 | Feb. 3 | 196 | 46 | 102 | 865 |
| Smith, William J., Seattle, Wash. Marine signaling apparatus | 740,939 | Oct. 6 | 1011 | 229 | 106 | 1462 |
| Smith, William J., assignor to Wm. J. Smith Company, New Haven, Conn. Milling machine and tool | 735,605 | Aug. 4 | 1089 | 231, 232 | 105 | 1212 |
| Smith, William M., near Durant, Miss. Plant-propagating frame | 721,104 | Feb. 17 | 3148 | 723 | 102 | 1520 |
| Smith, William R. (See Halliwell, Henry V., assignor.) | | | | | | |
| Smith, William R., Bridgeport, Conn. Belt-idler | 719,895 | Feb. 3 | 872 | 205 | 102 | 1008 |
| Smith, William R., Terrell, Tex. Shoe-paste applier | 720,079 | Feb. 10 | 1227 | 282 | 102 | 1100 |
| Smith, William R., Boston, Mass. Rack or holder for vulcanizing apparatus | 727,856 | May 12 | 1963 | 437 | 104 | 435 |
| Smith, William R., Buffalo, N. Y. Oil-burner | 746,596 | Dec. 8 | 2330 | 533 | 107 | 1620 |
| Smith, William R., Boston, Mass., assignor to Clifton Manufacturing Company. Vulcanizing apparatus | 720,631 | Feb. 17 | 2291 | 525 | 102 | 1334 |
| Smith, William R., Boston, Mass., assignor of one-half to J. D. Larkin, Buffalo, N. Y. Making patent-leather | 732,129 | June 30 | 4833 | 1078 | 104 | 2195 |
| Smith, William R., assignor of one-half to F. A. Houdlette, Boston, Mass. Pipe-bending machine | 735,307 | Aug. 4 | 518 | 105 | 105 | 1091 |
| Smith, William T., Ames, Iowa. Loading or unloading apparatus | 740,940 | Oct. 6 | 1013 | 229, 230 | 106 | 1462 |
| Smith, William W., assignor of one-half to J. H. McNeill, Browns Summit, N. C. Tobacco-leaf hanger | 721,615 | Feb. 24 | 4158 | 944 | 102 | 1750 |
| Smith, Williard, assignor of two-thirds to G. and S. E. Babson, Seward, Nebr. Harness-pad | 727,857 | May 12 | 1964 | 438 | 104 | 435 |
| Smith, Willie, Albertville, Ala. Canning apparatus | 729,689 | June 2 | 292 | 67 | 104 | 1189 |
| Smith, Willis A., New York, N. Y. Feeding mechanism for sewing-machines | 748,431 | Dec. 29 | 5795 | 1321 | 107 | 2451 |
| Smith, Wilson R., Beloit, Wis. Fire-escape | 748,114 | Dec. 29 | 5236 | 1188 | 107 | 2329 |
| Smith, Winfield S., *et al.* (See Smith, Philip S., assignor.) | | | | | | |
| Smithline, John A., Los Angeles, Cal. Device for assembling springs in jointed members | 725,788 | Apr. 21 | 2550 | 578 | 103 | 1742 |
| Smithline, John A., Los Angeles, Cal. Pouch | 725,889 | Apr. 21 | 2728 | 621, 622 | 103 | 1780 |
| Smithline, John A., Burlington, Iowa. Pouch | 730,171 | June 2 | 1157 | 260 | 104 | 1363 |
| Smithpeter, Ely Z., Bogard, Mo. Breast and pole strap fastener | 747,012 | Dec. 15 | 3129 | 716 | 107 | 1198 |
| Smoak, Daniel E., Wilkesboro, N. C. Water-heater | 720,497 | Feb. 10 | 1983 | 454 | 102 | 1257 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drgs. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Smock, Jasper D., assignor of one-half to P. P. Mischler, Terre Haute, Ind. Head-rest | 723,323 | Mar. 24 | 3098 | 698 | 103 | 699 |
| Smoke Exterminator and Fume Condenser Company. (See Jackson, William B., assignor.) | | | | | | |
| Smoke Exterminator and Fume Condenser Company. (See Ogle, Robert, assignor.) | | | | | | |
| Smokeless Combustion Company. (See Wolfe, Wiltsie F., assignor.) | | | | | | |
| Smolley, Wayne, Brookville, assignor of one-half to G. E. Vanness, Bath, Ind. Corn-harvester | 731,717 | June 23 | 4043 | 902 | 104 | 2013 |
| Smurr, Samuel P. (See Weimar and Smurr.) | | | | | | |
| Smylie, Arthur E., Brooklyn, N. Y. Fastening device | 722,923 | Mar. 17 | 2374 | 531 | 103 | 535 |
| Smyth, Albert. (See Smith and Smyth.) | | | | | | |
| Smyth, David G. (See Smyth and Hastings.) | | | | | | |
| Smyth, David M., Pasadena, Cal., D. G. Smyth, Hartford, Conn., and H. Hastings, Orange, N. J., assignors to Smyth Machine Company, Hartford, Conn. Book-sewing machine. | 735,606 | Aug. 4 | 1092 | 232, 233 | 105 | 1213 |
| Smyth Machine Company. (See Hastings, Herbert, assignor.) | | | | | | |
| Smyth Machine Company. (See Smyth and Hastings, assignors.) | | | | | | |
| Smyth Manufacturing Company. (See Taylor, Frederick D., assignor.) | | | | | | |
| Smyth, Thomas A. (See Ackerman, Edwin T., assignor.) | | | | | | |
| Smyth, William H., Berkeley, Cal. Can-body machine | 737,291 | Aug. 25 | 4222 | 940 | 105 | 1931 |
| Smyth, William H., Berkeley, Cal. Machine for heading cans | 740,599 | Oct. 6 | 420 | 91 | 106 | 1336 |
| Smyth, William H., Berkeley, Cal. Machine for heading cans | 740,600 | Oct. 6 | 423 | 91, 92, 93 | 106 | 1337 |
| Smythe, Amos P., Oletha, and T. P. Bryant, Kosse, Tex.; said Bryant assignor to said Smythe. Means for securing tools to handles | 729,690 | June 2 | 293 | 67 | 104 | 1189 |
| Smythe, John J. R. (See Alford and Smythe.) | | | | | | |
| Smythe, John J. R., Johannesburg, Transvaal, South Africa. Hanging up or throwing out of operation the stamps of stamp-mills | 728,631 | May 19 | 3425 | 761 | 104 | 767 |
| Smythe, Thomas D., Santiago, Chile. Heavy field artillery | 737,972 | Sept. 1 | 829 | 182 | 106 | 181 |
| Snapper, Rebecca, South Melbourne, Victoria, Australia. Boot or shoe fastening | 722,638 | Mar. 10 | 1820 | 405 | 103 | 407 |
| Snare, Frederick, W. G. Triest, and J. A. McNicol, New York, N. Y. Coaling-station or storehouse for coal, &c | 731,965 | June 23 | 4490 | 1001, 1002 | 104 | 2112 |
| Snavely, Clarence O., Lebanon, Pa. Postage or other stamp | 746,397 | Dec. 8 | 1984 | 453 | 107 | 1543 |
| Sneddon, James P., Barberton, Ohio, assignor to Stirling Company, Chicago, Ill. Water-tube boiler | 725,600 | Apr. 14 | 2184 | 494 | 103 | 1650 |
| Sneddon, James P., Barberton, Ohio, assignor, by mesne assignments, to Stirling Company, Jersey City, N. J. Superheater for steam-boilers. (Reissue) | 12,128 | June 30 | 5926 | 1314, 1315 | 104 | 2424 |
| Sneddon, James P., Barberton, Ohio, assignor to Stirling Company, Chicago, Ill. Making tubular articles provided with diaphragms | 745,254 | Nov. 24 | 4749 | 1038 | 107 | 1055 |
| Sneddon, James P., Barberton, Ohio, assignor to Stirling Company, Chicago, Ill. Corrugating-press | 745,255 | Nov. 24 | 4751 | 1038, 1039 | 107 | 1055 |
| Sneddon, James P., Barberton, Ohio, assignor to Stirling Company, Chicago, Ill. Steam-boiler | 746,186 | Dec. 8 | 1604 | 358, 359 | 107 | 1463 |
| Snedeker, Elbert, Brooklyn, N. Y., assignor to Marvel Patents Company. Door-bell attachment and burglar-alarm | 726,366 | Apr. 28 | 3603 | 817 | 103 | 1975 |
| Snedeker, James W. (See Lamb and Snedeker.) | | | | | | |
| Snedeker, James W., Adrian, Mich. Mail-box | 732,964 | July 7 | 366 | 90 | 105 | 80 |
| Snedekor, Charles T., Chicago, Ill. Disintegrating ores | 739,116 | Sept. 15 | 3088 | ..... | 106 | 691 |
| Sneden, Freeland C., assignor of one-half to C. M. Kelly, Grand Rapids, Mich. Fastener for slate roofs | 718,165 | Jan. 13 | 1200 | 266 | 102 | 274 |
| Snee, John A. (See Snee, William, assignor.) | | | | | | |
| Snee, William, West Elizabeth, assignor of three-fourths to J. A. Snee, Pittsburg, Pa. Gold-separator | 739,231 | Sept. 15 | 3289 | 728 | 106 | 735 |
| Sneer, Philetus E., Ellensburg, Wash. Hay-stacker drum | 721,616 | Feb. 24 | 4159 | 945 | 102 | 1751 |
| Snell, Charles S., assignor of one-half to J. H. Weber, Lewiston, Me. Combined shade and curtain support | 736,559 | Aug. 18 | 2834 | 621 | 105 | 1623 |
| Snell, George, Thompsonville, Mich. Sleigh | 727,472 | May 5 | 1211 | 267 | 104 | 262 |
| Snell, Harvey, *et al.* (See Sutton, Charles R., assignor.) | | | | | | |
| Snell, Harvey, and C. Hatfield, Union, Ohio. Ink-well | 725,165 | Apr. 14 | 1394 | 314 | 103 | 1480 |
| Snell, John. (See Martin, Thomas L., assignor.) | | | | | | |
| Snell, John H., assignor to Snell and Meharg, Hamburg, Pa. Engine-governor | 725,500 | Apr. 14 | 2014 | 454, 455 | 103 | 1612 |
| Snell and Meharg. (See Snell, John H., assignor.) | | | | | | |
| Snell, Oscar, assignor of one-half to A. E. Keith, Chicago, Ill. Instrument for locating overbalance in revolving bodies | 728,315 | May 19 | 2832 | 626, 627 | 104 | 642 |
| Snelus, George J., Frizington, England. Purifying blast-furnace gases | 721,617 | Feb. 24 | 4160 | 945 | 102 | 1751 |
| Snider, Charles A., New York, N. Y., assignor of one-half to J. B. Huff, Columbus, Ga. Rail-joint | 720,498 | Feb. 10 | 1985 | 454 | 102 | 1258 |
| Snider, Gabriel F., Abingdon, Iowa. Hog-snout holder | 722,434 | Mar. 10 | 1441 | 319 | 103 | 323 |
| Snigo, James J., Pittsburg, Pa. Ice-cream-packing can | 731,518 | June 23 | 3680 | 820 | 104 | 1943 |
| Snigo, James J., Pittsburg, Pa. Ice-cream-brick mold | 731,519 | June 23 | 3681 | 821 | 104 | 1943 |
| Snively, Samuel F. (See Crowley, John H., assignor.) | | | | | | |
| Snodgrass, Robert E. L. (See Fair, Taylor, Mills, and Snodgrass.) | | | | | | |
| Snook, Homer C. (See Shoemaker and Snook.) | | | | | | |
| Snook, Homer C., Philadelphia, Pa. Stereoscopic apparatus | 733,756 | July 14 | 1882 | 444 | 105 | 414 |
| Snoor, Lars H., Shelby, Ohio. Smoke-consumer | 742,363 | Oct. 27 | 3841 | 862 | 106 | 2106 |
| Snorin, Andrew, Olivia, Minn. Door-strip | 745,396 | Dec. 1 | 157 | 36 | 107 | 1133 |
| Snow, Charles H., Stockton, Cal. Concentrator | 742,510 | Oct. 27 | 4102 | 924 | 106 | 2158 |
| Snow, Isaac, Lawrence, assignor to Draper Company, Hopedale, Mass. Shuttle-detecting means for looms | 738,249 | Sept. 8 | 1391 | 302 | 106 | 317 |
| Snow, Isaac W., Marquette, Mich. Convertible rack for wagons | 728,316 | May 19 | 2838 | 627, 628 | 104 | 643 |
| Snow, Jacob H., Indianapolis, Ind. Feed-trough for animals | 718,287 | Jan. 13 | 1433 | 318 | 102 | 324 |
| Snow, Karl F., assignor to C. O. Bartlett & Company, Cleveland, Ohio. Conveying and coiling apparatus | 719,524 | Feb. 3 | 198 | 46, 47 | 102 | 865 |
| Snow, Karl F., Cleveland, Ohio, assignor to C. O. Bartlett & Co. Drier | 737,292 | Aug. 25 | 4225 | 941 | 105 | 1933 |
| Snow, Levi T., New Haven, Conn., assignor to John S. Bushnell Company, New York, N. Y. Planimeter | 718,166 | Jan. 13 | 1202 | 266 | 102 | 274 |
| Snow, Levi T., New Haven, Conn., assignor to J. S. Bushnell Co., Incorporated, New York, N. Y. Steam-engine indicator | 743,944 | Nov. 10 | 2221 | 480 | 107 | 489 |
| Snow, Theodore W. (See Moore, Moses M., assignor.) | | | | | | |
| Snow, Theodore W. (See Winters, David L., assignor.) | | | | | | |
| Snowden, Lewis W., San Antonio, Tex. Transplanter | 742,922 | Nov. 3 | 176 | 41 | 107 | 39 |
| Snowden, Perry J., Elwood, assignor of one-half to S. A. Morgan, Indianapolis, Ind. Feed-water heater | 739,355 | Sept. 22 | 3507 | 784, 785 | 106 | 797 |
| Snowdon, Richard W., assignor to L. C. Bliss & Company, Boston, Mass. Shoe-holder | 746,187 | Dec. 8 | 1609 | 359 | 107 | 1464 |
| Snyder, Abraham B., Louisville, Ohio. Combined tie and rail-joint | 734,102 | July 21 | 2593 | 607 | 105 | 582 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| Snyder, Albert W., Farmington, assignor of one-fourth to G. S. Basnett, Amos, W. Va. Pipe-wrench | 747,013 | Dec. 15 | 3130 | 716 | 107 | 1820 |
| Snyder, August, and J. B. Connolly, assignors to A. Snyder, Pittsburg, Pa. Condenser | 723,324 | Mar. 24 | 3100 | 698 | 103 | 699 |
| Snyder, Charlie R., Cadiz, Ohio. Padlock | 719,054 | Jan. 27 | 2910 | 652 | 102 | 662 |
| Snyder, Daniel K. (See Shutt, William F., assignor.) | | | | | | |
| Snyder, David B. (See Dickey, Johnathan A., assignor.) | | | | | | |
| Snyder, David M., assignor of one-fourth to F. S. Marshall, Abingdon, Ill. Railway-signal | 724,347 | Mar. 31 | 5084 | 1138 | 103 | 1119 |
| Snyder, Horace P., and E. S. Bedford, Grand Rapids, Mich.; said Bedford assignor of one-half to said Snyder. Folding cot | 739,940 | Sept. 29 | 4641 | 1041<br>1042 | 106 | 1059 |
| Snyder, Howard, assignor to F. L. Maytag, Newton, Iowa. Driving mechanism for mechanical stokers | 748,539 | Dec. 29 | 6012 | 1362<br>1363 | 107 | 2499 |
| Snyder, Howard F., assignor to Parsons Band Cutter and Self Feeder Company, Newton, Iowa. Corn shredder and husker | 735,308 | Aug. 4 | 519 | 105<br>106 | 105 | 1092 |
| Snyder, James R., Colorado Springs, Colo. Vehicle-wheel | 746,754 | Dec. 15 | 2622 | 602<br>603 | 107 | 1706 |
| Snyder, Lambert, Rochelle Park, N. J. Acetylene-gas generator | 738,855 | Sept. 15 | 2632 | 580 | 106 | 597 |
| Snyder, Lloyd C., Farmington, assignor of one-fourth to G. F. Wadsworth, Upton, W. Va. Reversible ratchet-wrench | 745,397 | Dec. 1 | 158 | 36 | 107 | 1134 |
| Snyder, Mahlon L. (See Parvin and Snyder.) | | | | | | |
| Snyder, Simon, assignor to Sprout, Waldron and Company, Muncy, Pa. Quick-release device for grinding-mills | 740,479 | Oct. 6 | 181 | 36 | 106 | 1284 |
| Snyder, Simon, assignor to Sprout, Waldron and Company, Muncy, Pa. Quick-release device for grinding-mills | 740,480 | Oct. 6 | 184 | 36 | 106 | 1284 |
| Snyder, Thomas A. (See Kester, Thomas W., assignor.) | | | | | | |
| Snyder, Ward H., Kalamazoo, Mich. Game | 723,058 | Mar. 17 | 2598 | 586 | 103 | 581 |
| Snyder, William R., Seattle, Wash. Apparatus for controlling movement of cars upon inclines | 737,513 | Aug. 25 | 4645 | 1042 | 105 | 2027 |
| Soames, Alfred. (See Langdon-Davies and Soames.) | | | | | | |
| Sobey, William, assignor to J. I. Case Plow Works, Racine, Wis. Combined check-row and drill planter | 736,307 | Aug. 11 | 2377 | 517<br>518 | 105 | 1510 |
| Sobinski, Charles O., St. Louis, Mo. Game apparatus | 728,317 | May 19 | 2840 | 628 | 104 | 643 |
| Sobotka, Robert, and W. B. Smith, Hartsells, Ala. Cotton-separator | 739,733 | Sept. 22 | 4224 | 946 | 106 | 954 |
| Sobrero, Barone C. (See Brunacci, Richard E., assignor.) | | | | | | |
| Sochurek, Frank, Sr., Milwaukee, Wis. Steaming-tray | 746,597 | Dec. 8 | 2332 | 533 | 107 | 1620 |
| Société Alsacienne de Constructions Mecanigues. (See Wenning and Bicking, assignors.) | | | | | | |
| Société Anonyme Celestin Martin. (See Tasté, Albert, assignor.) | | | | | | |
| Société Anonyme d'Epuration des Eaux-Vannes et d'Extraction des Matières Grasses par les Procédés Delattre. (See Delattre, Jules, assignor.) | | | | | | |
| Société Anonyme d'Etudes d'Exploitations des Brevets A. Castelin pour Machines Agricoles Automobiles. (See Castelin, André, assignor.) | | | | | | |
| Société Anonyme des Anciens Etablissements Panhard et Levassor. (See Krebs, Arthur C., assignor.) | | | | | | |
| Société Anonyme des Appareils de Contrôle et de Comptabilite Automatique. (See Frydmane, Jules, assignor.) | | | | | | |
| Société Anonyme des Etablissements Weyher et Richemond. (See Richemond, Pierre, assignor.) | | | | | | |
| Société Anonyme des Forges de Douai. (See Arbel, Pierre, assignor.) | | | | | | |
| Société Anonyme des Produits Photographigues M. Y. (See Armandy, Léon M. J., assignor.) | | | | | | |
| Société Anonyme le Carbone. (See Bair, Michael M., assignor.) | | | | | | |
| Société Anonyme le Carbone. (See Street, Ernest A. G., assignor.) | | | | | | |
| Société Anonyme pour la Production et l'Emploide la Vapeur Surchauffée. (See Leclere, André, assignor.) | | | | | | |
| Société des Inventions Jan Szczepanik & Cie. (See Klein, Adolf, assignor.) | | | | | | |
| Société des Inventions Jan Szczepanik & Cie. (See Szczepanik, Jan, assignor.) | | | | | | |
| Société des Voitures Automobiles des Etablissements Decauville Aîné. (See Poidatz, Alfred, assignor.) | | | | | | |
| Société Francaise des Tondeuses Électriques. (See Cornu, Jean, assignor.) | | | | | | |
| Société Francaise pour la Conservation des Beurres. (See Iscovesco, Henri, assignor.) | | | | | | |
| Société Generale des Freins Lipkowski. (See Lipkowski, Joseph, assignor.) | | | | | | |
| Société Nouvelle des Etabiissements Decauville Aîné. (See Poidatz, Alfred, assignor.) | | | | | | |
| Société Suisse du Bouchege par le Bois. (See Le Franc, Louis, assignor.) | | | | | | |
| Society Akciová Spolecnost Strojirny Dříve Breitfeld, Daněk I Spol, (Maschinenfabrik-Actiengesellschaft, vormals Breitfeld, Daněk & Co.) (See Koštálek, Josef, assignor.) | | | | | | |
| Society Chemische Fabrik Griesheim Electron. (See Hickmann, Wilhelm, assignor.) | | | | | | |
| Society of Chemical Industry in Basle. (See Bertschmann, Albert, assignor.) | | | | | | |
| Society of Chemical Industry in Basle. (See Jedlicka, Karl, assignor.) | | | | | | |
| Society of Chemical Industry in Basle. (See Kraus, Emil, assignor.) | | | | | | |
| Socks, Raymond, and F. P. Smith, Shelbyville, Ind. Wire-stretcher clamp | 736,453 | Aug. 18 | 2632 | 578 | 105 | 1580 |
| Soden, Thomas J., Brooklyn, N. Y. Package-carrier handle | 743,945 | Nov. 10 | 2223 | 480 | 107 | 490 |
| Soderling, Alfred, Chicago, Ill. Friction-clutch | 724,749 | Apr. 7 | 620 | 145 | 103 | 1301 |
| Soderlund, Gustive A., Somerville, assignor to Union Brass Works Company, Boston, Mass. Faucet | 748,115 | Dec. 29 | 5237 | 1188 | 107 | 2330 |
| Soderstrom, Frank O., Chicago, Ill. Cover for receptacles | 728,318 | May 19 | 2842 | 628<br>629 | 104 | 644 |
| Soeldner, Henry, East Williamsburg, N. Y. Oil-engine | 740,195 | Sept. 29 | 5099 | 1145<br>1146 | 106 | 1156 |
| Soennecken, Friedrich, Bonn, Germany. Copying-machine | 721,338 | Feb. 24 | 3625 | 824 | 102 | 1637 |
| Soennecken, Friedrich, Bonn, Germany. Paper-cutting device | 744,637 | Nov. 17 | 3543 | 764 | 107 | 784 |
| Soety, William F., Erie, Pa. Folding carpenter's and joiner's jack | 741,562 | Oct. 13 | 2254 | 503 | 106 | 1747 |
| Sohmer, Hugo, New York, N. Y. Agraffe attachment for pianos | 729,232 | May 26 | 4512 | 904 | 104 | 1005 |
| Sohn, Edward O. (See Hjermestad and Sohn.) | | | | | | |
| Söhnlein, Heinrich, Wiesbaden, Germany. Explosive-engine | 744,881 | Nov. 24 | 4012 | 866 | 107 | 903 |
| Sohst, Otto, assignor to Farbwerke, vorm. Meister, Lucius & Brüning, Höchst-on-the-Main, Germany. Yellow acridinium dye and making same | 739,117 | Sept. 15 | 3088 | ------ | 106 | 691 |
| Sohst, Otto, assignor to Farbwerke, vorm. Meister, Lucius & Brüning, Höchst-on-the-Main, Germany. Monoazo dye and making same | 739,118 | Sept. 15 | 3090 | ------ | 106 | 692 |
| Solar Furnace and Power Company. (See Allen, James M., assignor.) | | | | | | |
| Solberg, Christopher, Minneapolis, Minn. Tire-heating device | 737,034 | Aug. 25 | 3748 | 832 | 105 | 1833 |
| Solberg, Julius, Mason, Wis. Detachable connection for chains | 738,498 | Sept. 8 | 1929 | 421 | 106 | 429 |
| Soley, Frank, assignor to Miller Lock Company, Philadelphia, Pa. Padlock | 723,059 | Mar. 17 | 2601 | 586 | 103 | 582 |
| Soley, Frank, assignor to Miller Lock Company, Philadelphia, Pa. Padlock | 727,705 | May 12 | 1683 | 376 | 104 | 380 |
| Soley, William H., Philadelphia, Pa., assignor, by mesne assignments, to Chicago Pneumatic Tool Company. Tool | 718,542 | Jan. 13 | 1935 | 423 | 102 | 431 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|
| | | | Spec. | Drg. | Vol. | Page. |
| Soley, William H., Philadelphia, Pa., assignor of one-half to T. H. Dallett and Company. Pneumatic tool | 734,765 | July 28 | 3839 | 895, 896 | 105 | 856 |
| Soley, William H., assignor, by mesne assignments, of one-half to Thomas H. Dallett Company, Philadelphia, Pa. Pneumatic tool | 747,336 | Dec. 15 | 3747 | 844 | 107 | 1958 |
| Solfleisch, Henry W. (See Rosenfeld, Maurice, assignor.) | | | | | | |
| Solley, John W. (See Downing, William H., assignor.) | | | | | | |
| Sollmann, Ekko, Hoboken, N. J., assignor to George Borgfeldt & Company, New York, N. Y. Toy | 725,012 | Apr. 7 | 1103 | 250 | 103 | 1404 |
| Sollmann, Ekko, Hoboken, N. J., and J. A. Issmayer, Nuremberg, Germany, assignors to George Borgfeldt & Company, New York, N. Y. Toy car | 737,514 | Aug. 25 | 4647 | 1042 | 105 | 2027 |
| Solomon, Emmett G., assignor of one-half to H. Eldridge, Omaha, and C. F. Way, Lincoln, Nebr. Folding crate | 734,477 | July 21 | 3286 | 771 | 105 | 727 |
| Solvay Process Company. (See Brichaux, Arthur, assignor.) | | | | | | |
| Solvay Process Company. (See Hannon, Edouard, assignor.) | | | | | | |
| Somerby, Lorenzo B., assignor to George N. Pierce Company, Buffalo, N. Y. Bicycle or like vehicle | 747,789 | Dec. 22 | 4565 | 1030, 1031 | 107 | 2160 |
| Somers, Alexander C. (See McGregor and Somers.) | | | | | | |
| Somers, Frank P., Cleveland, Ohio. Automatic cut-off for gas-pipes | 729,969 | June 2 | 825 | 185 | 104 | 1295 |
| Somerville, George B. (See Bolsinger, Milton H., assignor.) | | | | | | |
| Somerville, William. (See Allen, Benjamin F., assignor.) | | | | | | |
| Somes, Walter F., Malden, assignor of two-thirds to C. E. Morse, Somerville, and G. W. Banister, Dorchester, Mass. Metallic packing | 729,904 | June 2 | 699 | 155 | 104 | 1271 |
| Sommer, Gustav A., Vienna, Austria-Hungary. Photographic-shutter-operating mechanism | 718,736 | Jan. 20 | 2319 | 512 | 102 | 524 |
| Sommer, John L., Newark, N. J. Button-hook | 725,166 | Apr. 14 | 1395 | 315 | 103 | 1480 |
| Sommer, Philip, assignor, by mesne assignments, to Orr & Locket Hardware Company, Chicago, Ill. Slicing-machine | 745,398 | Dec. 1 | 159 | 37 | 107 | 1134 |
| Sommer, Wilhelm, Furth, assignor to Filter- & Brau-Technische Maschinen-Fabrik, Actien Gesellschaft, formerly L. A. Enzinger, Worms, Germany. Filter-press | 718,397 | Jan. 13 | 1624 | 357 | 102 | 364 |
| Sommers, Adolph H., Hazleton, Pa. Bed attachment | 739,452 | Sept. 22 | 3717 | 827 | 106 | 844 |
| Sommers, Edward, Washington, D. C. Game-counter | 742,076 | Oct. 20 | 3310 | 737 | 106 | 1980 |
| Sommerville, Maxwell, *et al.* (See Gould, Cornelius C., assignor.) | | | | | | |
| Sonderegger, Conrad, Zurich, Switzerland. Dredging-machine | 720,749 | Feb. 17 | 2491 | 574 | 102 | 1377 |
| Sonne, Thomas, Jr., Montreal, Canada. Game | 743,343 | Nov. 3 | 1020 | 220 | 107 | 218 |
| Sonnenschein, Leopold. (See Peycke and Sonnenschein.) | | | | | | |
| Sonsthagen, Andrew, Trail, Canada. Bracket or clamp | 746,188 | Dec. 8 | 1611 | 359 | 107 | 1464 |
| Sooysmith, Charles, New York, N. Y. Solidifying and excavating the soil and constructing tunnels | 720,384 | Feb. 10 | 1795 | 408 | 102 | 1219 |
| Sooysmith, Charles, New York, N. Y. Freezing the ground | 736,308 | Aug. 11 | 2383 | 518, 519 | 105 | 1511 |
| Sooysmith, Charles, New York, N. Y. Constructing foundations and tunnels or other structures | 736,560 | Aug. 18 | 2835 | 621 | 105 | 1623 |
| Soper, Lewis N., Guelph, Canada. Piano-action | 747,790 | Dec. 22 | 4569 | 1031 | 107 | 2161 |
| Sorensen, Hans, Grand Island, Nebr. Hay loader or stacker | 738,080 | Sept. 1 | 1018 | 228 | 106 | 221 |
| Sörensen, Henry, Christiania, Norway. Digging-machine | 734,766 | July 28 | 3841 | 896, 897 | 105 | 857 |
| Sörensen, Johan P., Copenhagen, Denmark. Distance-meter or range-finder | 722,435 | Mar. 10 | 1441 | 319 | 103 | 323 |
| Sorensen, Julius O., Frederiksberg, Denmark. Awning | 742,246 | Oct. 27 | 3632 | 811 | 106 | 2062 |
| Sorg, Fredrich W., Englewood, N. J. Telephone-circuit | 731,239 | June 16 | 3136 | 696 | 104 | 1811 |
| Sorg, Harmond D., Oakharbor, Ohio. Implement for forming post-holes | 736,645 | Aug. 18 | 3005 | 663 | 105 | 1656 |
| Sorge, Adolph, Jr., Chicago, Ill. Apparatus for purifying water | 739,758 | Sept. 22 | 4258 | 954 | 106 | 962 |
| Soria y Hernandez, Luis, Madrid, Spain. Wind-motor | 717,939 | Jan. 6 | 793 | 178 | 102 | 169 |
| Sosenheimer, Jacob, Galion, Ohio. Heating apparatus | 730,578 | June 9 | 1929 | 428, 429 | 104 | 1542 |
| Soss, Joseph, New York, N. Y. Hinge | 746,398 | Dec. 8 | 1985 | 453 | 107 | 1543 |
| Soss, Joseph, New York, N. Y., assignor of one-fourth to C. K. Cole, Helena, Mont. Hinge | 724,962 | Apr. 7 | 1000 | 230 | 103 | 1383 |
| Soss, Joseph, assignor of one-fourth to C. K. Cole, New York, N. Y. Building brick or tile | 747,495 | Dec. 22 | 4030 | 905 | 107 | 2040 |
| Sossna, Adolph O., near Bowie, Montague county, Tex. Hatching and brooding body | 743,581 | Nov. 10 | 1574 | 330 | 107 | 353 |
| Souder, Frank P., Bridgeton, N. J. Reamer | 745,399 | Dec. 1 | 160 | 37 | 107 | 1134 |
| Souder, Howell W., Tamaqua, assignor of one-half to W. D. Zehner, Lansford, Pa. Electric signaling apparatus | 735,416 | Aug. 4 | 721 | 154, 155 | 105 | 1134 |
| Souder, Howell W., Tamaqua, assignor of one-half to W. D. Zehner, Lansford, Pa. Electric signaling apparatus | 735,417 | Aug. 4 | 728 | 156 | 105 | 1135 |
| Souder, Howell W., Tamaqua, assignor of one-half to W. D. Zehner, Lansford, Pa. Signal apparatus | 735,418 | Aug. 4 | 733 | 156 | 105 | 1136 |
| Souder, Howell W., Tamaqua, assignor of one-half to W. D. Zehner, Lansford, Pa. Trolley-contact | 735,419 | Aug. 4 | 735 | 157 | 105 | 1136 |
| Souder, Howell W., Tamaqua, assignor of one-half to W. D. Zehner, Lansford, Pa. Semaphore-operating device | 735,420 | Aug. 4 | 736 | 157 | 105 | 1137 |
| Souder, Leamon G., Philadelphia, Pa. Moving spiral stairway or elevator | 723,325 | Mar. 24 | 3102 | 698, 699 | 103 | 700 |
| Souder, Paul G., J. Bittner, and O. Berger, Philadelphia, Pa. Adjustable mattress-section | 743,344 | Nov. 3 | 1022 | 220 | 107 | 218 |
| Souders, Hunter B., C. C. Cotter, and C. S. Wilson, McKees Rocks, Pa. Gage-cock | 740,941 | Oct. 6 | 1018 | 230 | 106 | 1463 |
| Soule, George H. S., Wollaston, Mass. Dust-guard | 741,383 | Oct. 13 | 1906 | 421 | 106 | 1674 |
| Sourek, Joseph S., Ghent, Ohio. Buckle. (Reissue) | 12,086 | Feb. 24 | 4229 | 961 | 102 | 1767 |
| Sourek, Joseph S., Ghent, Ohio. Buckle | 740,706 | Oct. 6 | 591 | 132 | 106 | 1374 |
| South, Albert H., and J. C. Bostwick, Orson, Iowa. Saw-tightener | 729,436 | May 26 | 4852 | 1075 | 104 | 1076 |
| Southard, Frank E., Toledo, Ohio. Go-cart | 746,189 | Dec. 8 | 1612 | 359, 360 | 107 | 1464 |
| Southard, Frank E., Toledo, Ohio. Go-cart | 746,190 | Dec. 8 | 1615 | 360 | 107 | 1465 |
| Southard, Frank E., assignor to Toledo Metal Wheel Company, Toledo, Ohio. Perambulator | 725,167 | Apr. 14 | 1396 | 315 | 103 | 1480 |
| Southerland, James W. (See Cox and Southerland.) | | | | | | |
| Southerland, Robert W., Mobile, Ala. Dust-collector | 734,627 | July 28 | 3561 | 833 | 105 | 802 |
| Southey, Alfred W., London, England. Device for measuring fluids | 741,732 | Oct. 20 | 2590 | 576 | 106 | 1833 |
| Southgate, Louis W., Worcester, Mass., assignor, by mesne assignments, to Detroit Trust Co., trustee, Detroit, Mich. Printing-machine | 729,691 | June 2 | 294 | 68, 69 | 104 | 1189 |
| Southington Foundry & Machine Company. (See Petsche, Gustav B., assignor.) | | | | | | |
| Southwick, George W. (See Frost and Southwick.) | | | | | | |
| Southwick, George W., Franklin, Mass. Vehicle-tire | 743,043 | Nov. 3 | 432 | 94 | 107 | 91 |
| Southwood, Walter E. W., London, England. Manufacture of metallic printing-surfaces | 747,791 | Dec. 22 | 4570 | ------ | 107 | 2162 |
| Southwood, William E., Jackson, Mich. Potato-bug catcher | 740,481 | Oct. 6 | 187 | 37 | 106 | 1285 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Soutters Patent Bottle Syndicate. (See Jagger, Peter B., assignor.) | | | | | | |
| Sovelius, Otto, Hancock, Mich. Axle or shaft marker | 742,077 | Oct. 20 | 3311 | 737, 738 | 106 | 1980 |
| Sowden, Albert B., assignor of one-third to E. E. Walker, Covington, Ky. Combined milling and boring machine | 734,628 | July 28 | 3562 | 833, 834 | 105 | 802 |
| Soyster, Samuel. (See Spencer, Harvey, assignor.) | | | | | | |
| Spadone, Alfred A., New York, N. Y. Cushion-tread horseshoe | 738,639 | Sept. 8 | 2189 | 478 | 106 | 486 |
| Spafford, George H., Chicago, Ill. Non-refillable bottle | 733,293 | July 7 | 1069 | 255 | 105 | 225 |
| Spafford, George H., Chicago, Ill. Toy bank | 746,598 | Dec. 8 | 2332 | 534 | 107 | 1620 |
| Spahr, Otto, New York, N. Y. Driving-gear for presses or other machinery | 747,792 | Dec. 22 | 4571 | 1031, 1032 | 107 | 2162 |
| Spahr, Otto, Kingsbridge, assignor of one-fourth to L. Zamboni, New York, N. Y. Machine for rolling metal balls | 719,959 | Feb. 3 | 979 | 227 | 102 | 1031 |
| Spake, William H., Anaheim, Cal. Fly-escape attachment for window-screens | 720,080 | Feb. 10 | 1228 | 282 | 102 | 1100 |
| Spalckhaver, William, Brooklyn, assignor to R. Hoe, New York, N. Y. Ink-fountain | 729,002 | May 26 | 4096 | 909 | 104 | 921 |
| Spalckhaver, William, assignor to R. Hoe, New York, N. Y. Delivery mechanism for printing-machines | 732,322 | June 30 | 5208 | 1157 | 104 | 2272 |
| Spalckhaver, William, assignor to R. Hoe, New York, N. Y. Feed-guard for printing-machines | 732,792 | July 7 | 175 | 45 | 105 | 41 |
| Spalckhaver, William, assignor to R. Hoe, New York, N. Y. Multicolor and perfecting printing-machine | 742,247 | Oct. 27 | 3633 | 812 | 106 | 2063 |
| Spalckhaver, William, assignor to R. Hoe, New York, N. Y. Web-printing machine | 742,248 | Oct. 27 | 3636 | 812, 813 | 106 | 2063 |
| Spalckhaver, William, assignor to R. Hoe, New York, N. Y. Controlling device for liquid-supply rolls | 742,249 | Oct. 27 | 3640 | 813, 814 | 106 | 2064 |
| Spalding, Frank, assignor to Brown & Sharpe Manufacturing Company, Providence, R. I. Micrometer-calipers | 729,970 | June 2 | 826 | 185 | 104 | 1296 |
| Spalding, Henry W. (See Dietz and Spalding.) | | | | | | |
| Spalding Manufacturing Company. (See Cunningham, William J., assignor.) | | | | | | |
| Spalt, George, Albany, N. Y. Combined dining and other table for playing games | 747,097 | Dec. 15 | 3290 | 749 | 107 | 1860 |
| Spang, Fred C., La Crosse, Wis. Candy-dipper | 719,896 | Feb. 3 | 873 | 205 | 102 | 1008 |
| Spangenberg, Robert F., New Orleans, La. System for operating light effects | 726,199 | Apr. 21 | 3266 | 741 | 103 | 1889 |
| Spangler, George M., Peoria, Ill. Gas-heated flat-iron | 742,134 | Oct. 20 | 3408 | 760 | 106 | 1999 |
| Spangler, John C., Gowrie, Iowa. Rotatable grain-distributer for elevators | 747,897 | Dec. 22 | 4782 | 1080 | 107 | 2208 |
| Spangler, Samuel C., Clyde, assignor of one-half to O. P. and J. A. Sivenson, Medford, Okla. Ter. Pitching apparatus | 724,348 | Mar. 31 | 5087 | 1138, 1139 | 103 | 1119 |
| Spargo, John D., and G. W. Rose, Doble, Cal. Concave for rock-crushers | 720,853 | Feb. 17 | 2659 | 613 | 102 | 1413 |
| Sparks, Frederick W. (See Keenan, Thomas P., assignor.) | | | | | | |
| Sparks, Herbert, Hastings, England. Gas lighter or extinguisher | 747,014 | Dec. 15 | 3131 | 716 | 107 | 1820 |
| Sparks, Robert W., Nevins, Wis. Neck-yoke | 728,033 | May 12 | 2277 | 506 | 104 | 502 |
| Spatig, Charles W. (See Hewitt and Spatig.) | | | | | | |
| Spatz, Ed., *et al.* (See Huntley, Stephen A., assignor.) | | | | | | |
| Spatz, John, *et al.* (See Huntley, Stephen A., assignor.) | | | | | | |
| Spaulding, Alfred G., Norfolk, Va. Calipers | 724,963 | Apr. 7 | 1002 | 230 | 103 | 1383 |
| Spaulding, Almon M., New Era, Mich. Voting-machine | 726,779 | Apr. 28 | 4400 | 989 | 103 | 2134 |
| Spaulding, Charles, Boston, Mass. Photographic-printing machine | 738,578 | Sept. 8 | 2060 | 449, 450 | 106 | 458 |
| Spaulding, Charles H., Brilliant, Ohio. Wrench | 727,012 | May 5 | 385 | 81 | 104 | 84 |
| Spaulding, Edmund P., Munson, Ohio. Bridge or culvert | 743,946 | Nov. 10 | 2224 | 481 | 107 | 490 |
| Spaulding, George H., assignor of one-half to H. F. Chappell, Chicago, Ill. Apparatus for drilling wells or like purposes | 723,555 | Mar. 24 | 3544 | 793 | 103 | 786 |
| Spaulding, Russell, New York, N. Y., assignor, by mesne assignments, to Trust Company of America, trustee. Electric conducting-cable | 717,778 | Jan. 6 | 506 | 113 | 102 | 109 |
| Spaull, Barnard A., *et al.* (See Joly, Céleste, assignor.) | | | | | | |
| Spear, Anson R., St. Paul, Minn. Golf-ball | 723,938 | Mar. 31 | 4268 | 959 | 103 | 957 |
| Spear, Arthur, assignor to J. P. Gardner, Chicago, Ill. Shuttle-driving mechanism for sewing-machines | 745,256 | Nov. 24 | 4754 | 1040 | 107 | 1056 |
| Spear, Frank R., Chicago, Ill. Car-brake shoe | 719,897 | Feb. 3 | 874 | 205 | 102 | 1008 |
| Spear, Furman D., Brooklyn, assignor to Armspear Manufacturing Company, New York, N. Y. Switch-lamp socket | 718,583 | Jan. 13 | 2041 | 443 | 102 | 455 |
| Spear, John J., Wilmette, assignor to American Radiator Company, Chicago, Ill. Radiator | 747,254 | Dec. 15 | 3578 | 810 | 107 | 1920 |
| Spear, Lawrence Y., Greenport, N. Y., assignor to Electric Boat Company. Submarine boat | 739,734 | Sept. 22 | 4226 | 946 | 106 | 954 |
| Spear, Lawrence Y., Greenport, N. Y., assignor to Electric Boat Company. Compensating device for submarine or submergible boats | 739,735 | Sept. 22 | 4227 | 946 | 106 | 955 |
| Spear, William H. (See Cunningham and Spear.) | | | | | | |
| Speare, Robert H., Lewisburg, Pa., assignor, by mesne assignments, of one-half to A. C. Morse, New York, N. Y. Sterilizer | 724,964 | Apr. 7 | 1002 | 231 | 103 | 1383 |
| Spears, Henry H., Louisville, Ky. Mold for concrete blocks | 747,496 | Dec. 22 | 4031 | 906 | 107 | 2040 |
| Specht, Charles J., and C. R. Krueger, New York, N. Y. Electric vehicle-brake | 720,978 | Feb. 17 | 2903 | 665 | 102 | 1464 |
| Specht, Eugene T., assignor of one-half to W. Muelhoefer, Chicago, Ill. Cuff-holder | 737,878 | Sept. 1 | 655 | 139 | 106 | 144 |
| Specialty Manufacturing Company. (See Mancha, Raymond, assignor.) | | | | | | |
| Specialty Manufacturing Company. (See Smith, Alba P., Jr., assignor.) | | | | | | |
| Speck, David B., Holton, Kans. Traction-wheel | 743,768 | Nov. 10 | 1898 | 402 | 107 | 422 |
| Specketer, Heinrich. (See Suchy and Specketer.) | | | | | | |
| Specketer, Heinrich, Griesheim-on-the-Main, assignor to Chemische Fabrik Griesheim Electron, Frankfort-on-the-Main, Germany. Production of chromium compounds and alkalies | 728,778 | May 19 | 3691 | 824 | 104 | 821 |
| Specketer, Heinrich, and O. H. Weber, Griesheim-on-the-Main, assignors to Chemische Fabrik Griesheim Electron, Frankfort-on-the-Main, Germany. Manufacture of alkali metals | 730,979 | June 16 | 2652 | ------ | 104 | 1715 |
| Speckman, George W., and W. J. Powers, Columbus, Ohio. Interlocking switch and signal | 725,601 | Apr. 14 | 2186 | 495 | 103 | 1650 |
| Speed, Austin P., Louisville, Ky. Vehicle draft attachment | 722,639 | Mar. 10 | 1822 | 405 | 103 | 407 |
| Speegle, Emanuel A., Stockton, Cal. Current water-wheel | 720,750 | Feb. 17 | 2493 | 575 | 102 | 1378 |
| Speelman, Dirk. (See Schumacher and Speelman.) | | | | | | |
| Speer, Clifford E., *et al.* (See Nelson, Thomas J., assignor.) | | | | | | |
| Speer, Darius B., Bluegrass, Iowa. Swing | 721,339 | Feb. 24 | 3626 | 825 | 102 | 1637 |
| Speer, John, Pittsburg, Pa. Lock | 725,290 | Apr. 14 | 1606 | 363 | 103 | 1525 |
| Speer, Robert G., St. Louis, Mo. Air-pump for carbureters | 731,136 | June 16 | 2953 | 657 | 104 | 1776 |
| Speer, Robert G., St. Louis, Mo. Carbureting apparatus | 731,137 | June 16 | 2955 | 657 | 104 | 1776 |
| Speer, Robert G., assignor of one-sixteenth to J. W. Grinsell, St. Louis, Mo. Oil-burner | 731,078 | June 16 | 2839 | 631 | 104 | 1754 |
| Speer, William M. (See Weiss, Louis T., assignor.) | | | | | | |
| Speicher, Mathias. (See Simpson and Speicher.) | | | | | | |
| Speirs, Charles W., assignor to Morgan Crucible Company, Limited, London, England. Apparatus for mixing mineral or other dry substances | 743,202 | Nov. 3 | 740 | 162 | 107 | 155 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|
| | | | Spec. | Dr'g. | Vol. | Page. |
| Speiser, Henri, Paris, France. Sorting-machine | 739,736 | Sept. 22 | 4229 | 947 | 106 | 955 |
| Spellacy, Timothy. (See Landers, George B., assignor.) | | | | | | |
| Spelman, James, assignor to J. S. Metcalf Co., Chicago, Ill. Metallic building | 733,435 | July 14 | 1330 | 314 | 105 | 298 |
| Spena, Joseph, Lilly, Pa. Trolley | 720,633 | Feb. 17 | 2293 | 526 | 102 | 1334 |
| Spena, Joseph, and C. Behe, Lilly, Pa. Nut-lock | 720,632 | Feb. 17 | 2292 | 525 | 102 | 1334 |
| Spence, Aaron T., Alameda, J. H. Prugh, and S. B. Zimmer, Oakland, Cal. Floor surfacer, cleaner, and polisher | 728,423 | May 19 | 3021 | 664 | 104 | 681 |
| Spence, Cary F. (See Martin, James M., assignor.) | | | | | | |
| Spence, David D. (See Spence, Craig, and Hood.) | | | | | | |
| Spence, David D. (See Spence, Shearer, and Craig.) | | | | | | |
| Spence, Francis M. and D. D., T. J. I. Craig, Manchester, and J. J. Hood, London, assignors to P. Spence & Sons, Limited, Manchester, England. Making sodium bichromate | 725,501 | Apr. 14 | 2015 | ------ | 103 | 1612 |
| Spence, Francis M. and D. D., A. Shearer, and T. J. I. Craig, assignors to P. Spence & Sons, Limited, Manchester, England. Making chromates of the alkaline metals | 747,255 | Dec. 15 | 3580 | ------ | 107 | 1920 |
| Spence, Fred, assignor of one-half to Goodall Worsted Company, Sanford, Me. Flier for spinning-machines | 745,400 | Dec. 1 | 162 | 37 | 107 | 1134 |
| Spence, George, Toronto, Canada. Carbon-copy letter-book | 737,035 | Aug. 25 | 3749 | 832 | 105 | 1833 |
| Spence, Gideon, Newport, R. I. Bicycle supporting-bar | 727,473 | May 5 | 1213 | 267 | 104 | 232 |
| Spence, Howard, Manchester, England. Manufacture of titanous chlorid | 723,217 | Mar. 17 | 2903 | 650 | 103 | 645 |
| Spence, James F., Liberty, Nebr. Fountain-brush | 719,156 | Jan. 27 | 3121 | 695 | 102 | 704 |
| Spence, James F., Liberty, Nebr. Brush attachment | 741,733 | Oct. 20 | 2592 | 577 | 106 | 1833 |
| Spence, John D., Somerville, assignor to C. L. Cotton, Dedham, Mass. Dynamo | 743,044 | Nov. 3 | 434 | 95 | 107 | 91 |
| Spence, Robert, Richmond, England. Ejection mechanism for oil-cans or other vessels | 737,515 | Aug. 25 | 4647 | {1042<br>{1043 | 105 | 2027 |
| Spence & Sons, Peter. (See Lamb, Morris C., assignor.) | | | | | | |
| Spence & Sons, Peter. (See Spence, Craig, and Hood, assignors.) | | | | | | |
| Spence & Sons, Peter. (See Spence, Shearer, and Craig, assignors.) | | | | | | |
| Spencer, Alexander, London, England. Relief-valve arrangement for locomotive or other engines | 720,499 | Feb. 10 | 1987 | {454<br>455<br>456<br>457 | 102 | 1258 |
| Spencer, Andrew J., Indianapolis, Ind. Straw-baler attachment for threshing-machines | 721,105 | Feb. 17 | 3149 | 724 | 102 | 1520 |
| Spencer Elevator Safety Guard Company. (See Fisk and Spencer, assignors.) | | | | | | |
| Spencer, Eli R., Chicago, Ill. Suspender-trimming | 738,081 | Sept. 1 | 1019 | 228 | 106 | 221 |
| Spencer, Francis W., Albuquerque, N. Mex. Ter. Building construction | 739,737 | Sept. 22 | 4230 | 947 | 106 | 955 |
| Spencer, Gardener A. B., San Francisco, and H. H. Fisher, East Oakland, Cal. Mercury test-gage | 718,167 | Jan. 13 | 1204 | 267 | 102 | 275 |
| Spencer, George F. (See Merritt, Willard A., assignor.) | | | | | | |
| Spencer, George F., Newark, N. J. Reflector | 740,196 | Sept. 29 | 5103 | {1146<br>{1147 | 106 | 1156 |
| Spencer, George F., Thompson, Pa. Steam-boiler | 746,646 | Dec. 8 | 2421 | {553<br>{554 | 107 | 1641 |
| Spencer, Harvey, assignor to S. Soyster, New York, N. Y. Baby-comforter | 745,920 | Dec. 1 | 1117 | 250 | 107 | 1337 |
| Spencer, Ira H., Hartford, Conn. Pressure-regulator | 746,755 | Dec. 15 | 2624 | 603 | 107 | 1706 |
| Spencer, James W. (See Nichols and Spencer.) | | | | | | |
| Spencer, Jesse W., Lagrande, Oreg. Brake for cream-separators | 731,628 | June 23 | 3888 | 866 | 104 | 1983 |
| Spencer, John E., Salem, Mass. Pressure-regulator | 723,060 | Mar. 17 | 2602 | {586<br>{587 | 103 | 582 |
| Spencer, John E., Moodus, Conn. Axle | 734,629 | July 28 | 3565 | 834 | 105 | 803 |
| Spencer, John S., assignor of one-third to J. M. Wright, Cripplecreek, Colo. Front cylinder-head for rock-drills | 747,015 | Dec. 15 | 3132 | 717 | 107 | 1820 |
| Spencer, Leroy, Island City, Oreg. Harvester | 742,078 | Oct. 20 | 3313 | {738<br>{739 | 106 | 1981 |
| Spencer, Lilly C., New York, N. Y. Toy | 742,250 | Oct. 27 | 3642 | 814 | 106 | 2065 |
| Spencer, Lorenzo. (See Barrett, Noah, assignor.) | | | | | | |
| Spencer, Robert C., Jr., River Forest, Ill. Latch | 747,657 | Dec. 22 | 4328 | 978 | 107 | 2106 |
| Spencer, Thomas, assignor to Helios Upton Company, Philadelphia, Pa. Regulator for electric currents | 728,034 | May 12 | 2278 | 506 | 104 | 502 |
| Spencer, Thomas J., Falls City, Nebr. Window-shade fixture | 723,748 | Mar. 24 | 3876 | 872 | 103 | 856 |
| Spencer, Thomas R., Oregonia, Ohio. Device for use in constructing arches | 740,197 | Sept. 29 | 5106 | 1147 | 106 | 1157 |
| Spencer, William E., Wexford, Pa. Wedge-grip | 739,511 | Sept. 22 | 3810 | 853 | 106 | 865 |
| Spencer, William L. (See Boedefeld, Franz S., assignor.) | | | | | | |
| Spencer, William W., *et al.* (See Sandage, William L., assignor.) | | | | | | |
| Spencer, William W. C. (See Fisk and Spencer.) | | | | | | |
| Spengler, Carl, Davos-Platz, Switzerland. Manufacturing disinfectants | 739,941 | Sept. 29 | 4643 | ------ | 106 | 1060 |
| Sperling, Jacob T. (See MacDowell and Sperling.) | | | | | | |
| Sperry, Elmer A. (See Davis, Charles E., assignor.) | | | | | | |
| Sperry, Elmer A., agent. (See Burwell, Arthur W., assignor.) | | | | | | |
| Sperry, Elmer A., Cleveland, Ohio, assignor to National Battery Company, Cleveland, Ohio, and Jersey City, N. J. Armored element for electric batteries | 723,326 | Mar. 24 | 3104 | 699 | 103 | 700 |
| Sperry, Elmer A., Cleveland, Ohio, assignor to National Battery Company, Cleveland, Ohio, and Jersey City, N. J. Storage battery | 723,327 | Mar. 24 | 3106 | ------ | 103 | 700 |
| Sperry, Elmer A., Cleveland, Ohio, assignor to National Battery Company, Cleveland, Ohio, and Jersey City, N. J. Storage battery | 723,328 | Mar. 24 | 3106 | ------ | 103 | 701 |
| Sperry, Elmer A., Cleveland, Ohio, assignor to National Battery Company, Cleveland, Ohio, and Jersey City, N. J. Manufacture of envelops for storage batteries | 723,329 | Mar. 24 | 3107 | ------ | 103 | 701 |
| Sperry, Elmer A., Cleveland, Ohio, assignor to National Battery Company, Jersey City, N. J., and Cleveland, Ohio. Separator for storage batteries | 729,100 | May 26 | 4271 | 944 | 104 | 955 |
| Sperry, Elmer A., Cleveland, Ohio, assignor to General Electric Company. System of control for electrically-propelled trains | 732,130 | June 30 | 4834 | {1078<br>{1079 | 104 | 2195 |
| Sperry Manufacturing Co. (See Sperry, Willis, assignor.) | | | | | | |
| Sperry, Willis, assignor to Sperry Manufacturing Co., Owatonna, Minn. Fanning-mill | 735,041 | July 28 | 4344 | 1010 | 105 | 961 |
| Sperry, Willis, assignor to Sperry Manufacturing Co., Owatonna, Minn. Fanning-mill | 735,042 | July 28 | 4346 | 1011 | 105 | 961 |
| Spetmann, Ernst O., Hamburg, Germany. Boat-lowering apparatus | 723,416 | Mar. 24 | 3291 | 736 | 103 | 734 |
| Spheropolar Engineering Company. (See Follett, Joseph L., assignor.) | | | | | | |
| Spicer, Charles W., Washington, D. C. Time-lock | 718,668 | Jan. 20 | 2189 | 479 | 102 | 497 |
| Spicer, Clarence W., Ithaca, N. Y. Liquid-fuel burner | 728,140 | May 12 | 2474 | {550<br>{551 | 104 | 544 |
| Spicer, Clarence W., Ithaca, N. Y. Casing for universal joints | 728,779 | May 19 | 3693 | 824 | 104 | 821 |
| Spicer, Thomas J. (See Kindig and Spicer.) | | | | | | |
| Spicer, William A., assignor to Barstow Stove Company, Providence, R. I. Tea-shelf for cooking stoves or ranges | 737,671 | Sept. 1 | 207 | 44 | 106 | 48 |
| Spiegel, Harry F., Kulm, N. D. Horse-detacher | 740,198 | Sept. 29 | 5108 | 1147 | 106 | 1157 |
| Spiegler, Frederick J., Chicago, Ill. Spout for cans | 720,854 | Feb. 17 | 2660 | 614 | 102 | 1413 |
| Spielmann, Charles. (See Wicht and Spielmann.) | | | | | | |
| Spietschka, Vinzenz, Cleveland, Ohio. Liquid-testing device | 744,122 | Nov. 17 | 2623 | 560 | 107 | 538 |

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| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Spillane, William T., Redlake Falls, Minn. Shovel attachment | 720,500 | Feb. 10 | 1991 | 457 | 102 | 1259 |
| Spillane, William T., Redlake Falls, Minn. Clasp | 734,984 | July 28 | 4251 | 988 | 105 | 942 |
| Spillane, William T., Redlake Falls, Minn. Car-door | 736,890 | Aug. 18 | 3476 | 772 | 105 | 1754 |
| Spiller, John M., *et al.* (See Schoch, Leonard E., assignor.) | | | | | | |
| Spiller, Philip S., assignor of one-fourth to H. P. Haldeman, Austin, Tex. Generating oil-burner | 721,755 | Mar. 3 | 175 | 40 | 103 | 38 |
| Spiller, Philip S., assignor of one-half to H. P. Haldeman, Austin, Tex. Heating or cooking stove | 721,756 | Mar. 3 | 176 | 41 | 103 | 39 |
| Spiller, William H., Holyoke, assignor to Coburn Trolley Track Manufacturing Company, Willimansett, Mass. Electric switch | 738,952 | Sept. 15 | 2792 | 618, 619 | 106 | 631 |
| Spindler, Charles, Jersey City, N. J. Apparatus for cooling beer or other liquids | 724,750 | Apr. 7 | 621 | 145 | 103 | 1301 |
| Spindler, Charles, Jersey City, N. J. Apparatus for converting wort into beer | 734,985 | July 28 | 4252 | 988 | 105 | 942 |
| Spinney, Charles H., 2d, Chestnuthill, Mass. Non-reusable bottle | 728,319 | May 19 | 2844 | 629 | 104 | 644 |
| Spinney, Walter W., assignor to V. P. Travers, Jr., New York, N. Y. Valve-governing mechanism | 733,757 | July 14 | 1884 | 444, 445 | 105 | 414 |
| Spinney, Walter W., assignor to V. P. Travers, Jr., New York, N. Y. Valve | 733,758 | July 14 | 1885 | 445 | 105 | 415 |
| Spiral Belt Separator Co. (See Jessup, Robert W., assignor.) | | | | | | |
| Spiro, Charles, New York, N. Y. Type-bar hanger | 744,253 | Nov. 17 | 2880 | 617 | 107 | 644 |
| Spiro, Charles, New York, N. Y. Paper-guide for type-writer carriages | 744,254 | Nov. 17 | 2883 | 618 | 107 | 644 |
| Spiro, Charles, New York, N. Y. Shift-key for type-writers | 744,255 | Nov. 17 | 2885 | 618 | 107 | 645 |
| Spitzenberg, Georg K., Forsthaus Linzmühle, near Pfaffendorf, Germany. Cultivator | 719,898 | Feb. 3 | 876 | 205, 206 | 102 | 1009 |
| Splavec, John. (See Vtipil and Splavec.) | | | | | | |
| Spliralo, Caesar R. (See Williams, Thomas, assignor.) | | | | | | |
| Splitdorf, Charles F., New York, N. Y. Contact-breaker | 728,632 | May 19 | 3427 | 760, 761 | 104 | 768 |
| Splitdorf, Charles F., New York, N. Y. Condenser | 728,780 | May 19 | 3695 | 824, 825 | 104 | 821 |
| Splitdorf, Charles F., New York, N. Y. Electric switch | 731,966 | June 23 | 4492 | 1002 | 104 | 2112 |
| Splitdorf, Charles F., New York, N. Y. Induction-coil | 734,197 | July 21 | 2767 | 649 | 105 | 618 |
| Splitdorf, John, New York, N. Y. Induction-coil | 732,014 | June 23 | 4605 | 1027 | 104 | 2134 |
| Splitt, Louis F., Layton Park, Wis. Explosion-engine | 725,789 | Apr. 21 | 2551 | 579 | 103 | 1742 |
| Spofford, Sally S., Peabody, Mass. Garment-fastener | 717,940 | Jan. 6 | 794 | 179 | 102 | 170 |
| Spohn, Hermann H., assignor to Carter's Ink Company, Boston, Mass. Ink | 719,623 | Feb. 3 | 376 | ..... | 102 | 900 |
| Spohn, Hermann H., assignor to Carter's Ink Company, Boston, Mass. Ink | 741,734 | Oct. 20 | 2593 | ..... | 106 | 1833 |
| Sponenburg, Hiram. (See Laas and Sponenburg.) | | | | | | |
| Sponenburg, Hiram H., Wadsworth, assignor of one-half to E. Laas, Elgin, Ill. Railway-rail stay | 738,499 | Sept. 8 | 1930 | 421 | 106 | 430 |
| Sponsel, Charles W., Hartford, Conn. Explosive-engine | 741,178 | Oct. 13 | 1471 | 334 | 106 | 1579 |
| Spoor, Charles E. (See Stevens, Frank A., assignor.) | | | | | | |
| Spore, William M., Argenta, Ill. Chlorate powder | 739,356 | Sept. 22 | 3510 | ..... | 106 | 798 |
| Sporrong, Carl A., Stockholm, Sweden. Apparatus for teaching gun practice | 732,596 | June 30 | 5744 | 1275 | 104 | 2386 |
| Sprague Canning Machinery Company. (See McIntyre, John C., assignor.) | | | | | | |
| Sprague Electric Company. (See Carichoff, Eugene R., assignor.) | | | | | | |
| Sprague Electric Company. (See Darlington, Philip J., assignor.) | | | | | | |
| Sprague, Franklin S., Saugus, Mass. Spring bed-bottom | 729,692 | June 2 | 297 | 69 | 104 | 1190 |
| Sprague, George W., Moline, Ill., assignor of one-half to G. J. Barker, Davenport, Iowa. Wrench | 738,082 | Sept. 1 | 1020 | 228 | 106 | 221 |
| Sprague, Henry H., Bridgeport, Conn. Gas-meter | 722,389 | Mar. 10 | 1356 | 300, 301 | 103 | 305 |
| Sprague, Henry H., Saugatuck, Conn. Gas-meter | 722,390 | Mar. 10 | 1360 | 301, 302 | 103 | 305 |
| Sprague, James H., Norwalk, Ohio. Vehicle-top | 723,749 | Mar. 24 | 3877 | 872 | 103 | 856 |
| Sprague, James H., Norwalk, Ohio. Umbrella | 728,035 | May 12 | 2280 | 507 | 104 | 503 |
| Spreckels, Claus, San Francisco, Cal. Topping-machine for beets or like crops | 722,156 | Mar. 3 | 915 | 204 | 103 | 195 |
| Spreckels, Claus A., and C. A. Kern, New York, N. Y., assignors, by mesne assignments, to Federal Sugar Refining Company, Jersey City, N. J. Purifying sugar and solutions thereof | 722,157 | Mar. 3 | 919 | ..... | 103 | 196 |
| Spreckels, Claus A., and C. A. Kern, New York, N. Y., assignors, by mesne assignments, to Federal Sugar Refining Company, Jersey City, N. J. Purifying sugar and solutions thereof | 722,158 | Mar. 3 | 921 | ..... | 103 | 196 |
| Spreckels, Claus A., and C. A. Kern, New York, N. Y., assignors to Federal Sugar Refining Company, Jersey City, N. J. Purifying sugar | 746,891 | Dec. 15 | 2898 | ..... | 107 | 1768 |
| Spreckels, Claus A., and C. A. Kern, New York, N. Y., assignors to Federal Sugar Refining Company, Jersey City, N. J. Cleansing sugar-crystals and recovery of cleansing compositions employed | 747,256 | Dec. 15 | 3582 | ..... | 107 | 1920 |
| Sprenger, Robert J. (See Becker and Sprenger.) | | | | | | |
| Spring Beater Manufacturing Company. (See Askin, Jennie V., assignor.) | | | | | | |
| Spring, Daniel T., A. Long, and G. H. Ebeling, Wheeling, W. Va. Circuit-breaker for fire-alarm systems | 725,602 | Apr. 14 | 2187 | 495 | 103 | 1650 |
| Spring, Daniel T., A. Long, and G. H. Ebeling, Wheeling, W. Va. Regulator for fire-alarm systems | 725,603 | Apr. 14 | 2189 | 496 | 103 | 1651 |
| Spring, Henry H., Chicago, Ill., assignor to Moody & Waters Co. Pie-making machine | 744,638 | Nov. 17 | 3544 | 764 | 107 | 784 |
| Spring, S. O. (See Weatherby, Joseph, Jr., assignor.) | | | | | | |
| Springard, Joseph, Trenton, N. J. Awning-support | 726,583 | Apr. 28 | 4041 | 913 | 103 | 2059 |
| Springborn, Albert J., Cleveland, Ohio. Selective party-line telephone system | 732,131 | June 30 | 4843 | 1079, 1080 | 104 | 2197 |
| Springborn, Albert J., Cleveland, Ohio. Telephone registration system | 740,053 | Sept. 29 | 4850 | 1088 | 106 | 1104 |
| Springer, Clifton F., Chicago, Ill. Car-coupling | 731,415 | June 16 | 3469 | 775 | 104 | 1879 |
| Springer, Clifton F., Chicago, Ill. Car-coupling | 731,416 | June 16 | 3471 | 776 | 104 | 1880 |
| Springer, Ernest C., assignor of one-half to J. J. Clark, Mason City, Iowa. Machine for tamping railway ties | 727,013 | May 5 | 387 | 81, 82 | 104 | 84 |
| Springer, Henry J., Edwardsville, Ill. Potato-planter | 744,984 | Nov. 24 | 4196 | 908 | 107 | 940 |
| Springer, John H. (See Clark, Frank T., assignor.) | | | | | | |
| Sproat, George C., Terrace, Pa. Poultry feed-box | 719,387 | Jan. 27 | 3550 | 792 | 102 | 797 |
| Sproehnle, Frank, Philadelphia, Pa. Explosive-engine | 741,179 | Oct. 13 | 1475 | 335 | 106 | 1579 |
| Sproul, Lark A., Edmond, Kans. Machine for harvesting broom-corn or the like | 729,971 | June 2 | 827 | 185, 186 | 104 | 1296 |
| Sproul, William E., Guatemala, Guatemala. Pile-driver | 726,780 | Apr. 28 | 4402 | 990, 991, 992, 993 | 103 | 2134 |
| Sproule, Robert F., London, England. Appliance for balancing end pressure in lengths of pipe | 718,288 | Jan. 13 | 1435 | 318 | 102 | 324 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | Spec. | Dr'g. | Vol. | Page. |
| Sprout, Waldron & Company. (See Burner, Daniel E., assignor.) | | | | | | |
| Sprout, Waldron and Company. (See Snyder, Simon, assignor.) | | | | | | |
| Sprow, George A., Paulding, Ohio. Feed-trough | 737,789 | Sept. 1 | 434 | 93 | 106 | 96 |
| Spuck, John, St. Louis, Mo. Fire-escape | 729,437 | May 26 | 4854 | 1075 | 104 | 1077 |
| Spühl, Heinrich, St. Gall, Switzerland. Explosive-motor | 742,079 | Oct. 20 | 3318 | 739<br>740 | 106 | 1981 |
| Spurgeon, Walter C., Milroy, Ind. Baling-press | 737,516 | Aug. 25 | 4649 | 1043<br>1044 | 105 | 2028 |
| Spurgin, Robert, Chicago, Ill. Letter-copying bath | 718,669 | Jan. 20 | 2191 | 479 | 102 | 497 |
| Spurlock, David S., assignor to N. G. Spurlock, Tyty, Ga. Cane-stripper | 735,309 | Aug. 4 | 525 | 107 | 105 | 1093 |
| Spurlock, N. G. (See Spurlock, David S., assignor.) | | | | | | |
| Spurr, Henry F., Jr., Boston, Mass. Electric danger and safety signal for railways | 719,388 | Jan. 27 | 3551 | 792 | 102 | 797 |
| Spurrier, Harry, Montreal, Canada, assignor to General Electric Company. Trolley | 734,442 | July 21 | 3221 | 758 | 105 | 714 |
| Spurrier, Henry, Jr., St. Annes-on-the-Sea, England. Traction-wheel | 738,369 | Sept. 8 | 1675 | 363 | 106 | 376 |
| Squire, Charles L., Elmira, N. Y. Bag-holder for grain-chutes, &c | 726,584 | Apr. 28 | 4041 | 913 | 103 | 2059 |
| Squires, Charles W. and J. B., Springfield, Mass. Switch-controlling apparatus | 719,055 | Jan. 27 | 2913 | 652<br>653 | 102 | 663 |
| Squires, Henry G., Pittsburg, Pa. Ink-well | 731,240 | June 16 | 3137 | 696 | 104 | 1811 |
| Squires, James B. (See Squires, Charles W. and J. B.) | | | | | | |
| Squires, John P. (See Rockafellow and Squires.) | | | | | | |
| Squires, John P., assignor of one-half to H. B. Alden, Canon City, Colo. Envelop-sealing machine | 732,905 | July 7 | 369 | 90 | 105 | 80 |
| Squyars, Alexander E., Eldora, Ga. Plow | 748,318 | Dec. 29 | 5584 | 1273 | 107 | 2404 |
| Ssiway, Paul, St. Petersburg, Russia. Steam-boiler | 722,415 | Mar. 10 | 1411 | 311 | 103 | 316 |
| St. Amand, John, Brockton, assignor to W. B. Arnold, North Abington, Mass. Hinge | 731,389 | June 16 | 3424 | 764 | 104 | 1872 |
| St. Amand, John, Brockton, assignor to W. B. Arnold, North Abington, Mass. Last | 731,390 | June 16 | 3425 | 764 | 104 | 1872 |
| St. Clair, Murray M., *et al.* (See Beer and Crane, assignors.) | | | | | | |
| St. John, Thomas M., New York, N. Y. Mechanically-printed photographic negative | 729,803 | June 2 | 518 | 114 | 104 | 1234 |
| St. John, William G., Sunderland, Canada. Feed-cutter | 718,289 | Jan. 13 | 1435 | 319 | 102 | 325 |
| St. John, William I., Detroit, Mich. Surgical chair | 744,126 | Nov. 17 | 2630 | 561 | 107 | 589 |
| St. Johns Table Company. (See Beach, Thaddeus C., assignor.) | | | | | | |
| St. Joseph Iron Works. (See Brown, Norman E., assignor.) | | | | | | |
| St. Joseph Loan & Trust Company, trustee. (See McIntire, Hervey H., assignor.) | | | | | | |
| St. Legier, John de, and E. Herbage, Hicksville, N. Y. Rifle-range | 731,967 | June 23 | 4493 | 1002 | 104 | 2113 |
| St. Louis Adjustable Sliding Screen Company. (See Kolf, Max, assignor.) | | | | | | |
| St. Louis Car Company. (See Baggerman, Peter C., assignor.) | | | | | | |
| St. Louis Car Company. (See Kohout, Ferdinand, assignor.) | | | | | | |
| St. Louis Car Company. (See Scott, John F., assignor.) | | | | | | |
| St. Louis Car Company. (See Smith, George J., assignor.) | | | | | | |
| St. Louis Car Company. (See Vordemfelde, William, assignor.) | | | | | | |
| St. Louis Car Company. (See Witte, Hubert, assignor.) | | | | | | |
| St. Louis, Francis X., Colusa, Cal. Sash-fastener | 722,162 | Mar. 3 | 928 | 205 | 103 | 198 |
| St. Louis, Francis X., and A. M. Jackson, Colusa, Cal. Independent-vote mechanism for voting-machines | 740,057 | Sept. 29 | 4860 | 1089 | 106 | 1106 |
| St. Louis, Francis X., and A. M. Jackson, Colusa, Cal. Straight-ticket mechanism for voting-machines | 740,058 | Sept. 29 | 4861 | 1089 | 106 | 1106 |
| St. Louis, Francis X., and A. M. Jackson, Colusa, Cal. Interlocking mechanism for voting-machines | 740,059 | Sept. 29 | 4862 | 1090 | 106 | 1106 |
| St. Louis Plate Glass Company. (See Gow, Alexander M., assignor.) | | | | | | |
| St. Louis Plate Glass Company. (See Murnane, Daniel J., assignor.) | | | | | | |
| St. Louis Register Company. (See Kirchhoff, William G., assignor.) | | | | | | |
| Staaff, Charles, assignor of one-half to W. S. Fuhrman, Peapack, N. J. Brooder | 727,474 | May 5 | 1213 | 268 | 104 | 262 |
| Staberg, Carl. (See Nelson and Staberg.) | | | | | | |
| Stabler, Herman. (See Test and Stabler.) | | | | | | |
| Stacey, Cromwell, U. S. Army. Combined cape, blanket, and shelter-tent | 719,899 | Feb. 3 | 877 | 206 | 102 | 1009 |
| Stacey, John F., assignor of one-half to T. E. Matthews, Nashville, Tenn. Producing gas | 718,884 | Jan. 20 | 2591 | 579 | 102 | 580 |
| Stacey Manufacturing Company. (See Kaiser, Oliver B., assignor.) | | | | | | |
| Stach, Friedrich von. (See Hofmann and Stach.) | | | | | | |
| Stack, Carl, Windfall, Ind. Checkrein-hook for gig-saddles | 724,751 | Apr. 7 | 622 | 146 | 103 | 1301 |
| Stack, Thomas M., and W. R. Peck, New Milford, Conn.; M. A. Peck, executrix of said W. R. Peck, deceased, assignor to said Stack. Composition of matter for removing varnish | 747,898 | Dec. 22 | 4783 | | 107 | 2208 |
| Stackpole, Charles F., Lynn, Mass. Sole-edge-burnishing machine | 740,601 | Oct. 6 | 428 | 93, 94 | 106 | 1338 |
| Stackpole, Charles F., Lynn, Mass. Sole-edge-burnishing machine | 740,602 | Oct. 6 | 432 | 94 | 106 | 1339 |
| Stackpole, Charles F., Lynn, assignor to Wellman Sole Cutting Machine Company, Medford, Mass. Staking-machine | 734,143 | July 21 | 2672 | 628<br>629 | 105 | 598 |
| Stackpole, Ralph D., Harrisburg, Pa., assignor to Elliott & Hatch Book Typewriter Company. Type-writer | 733,087 | July 7 | 694 | 169 | 105 | 147 |
| Stackpole, Ralph D., Harrisburg, Pa., assignor, by mesne assignments, to Elliott-Fisher Company. Type-writing machine | 736,646 | Aug. 18 | 3007 | 664 | 105 | 1656 |
| Stackpole, Ralph D., Harrisburg, Pa., assignor, by mesne assignments, to Elliott-Fisher Company. Type-writing machine | 737,168 | Aug. 25 | 3968 | 882 | 105 | 1879 |
| Stacy, James N., Portland, Oreg. Letter sealing and stamping machine | 728,036 | May 12 | 2281 | 507<br>508 | 104 | 503 |
| Stade, George, Gross Wusterwitz, Germany. Apparatus for evaporating liquids | 745,921 | Dec. 1 | 1118 | 250 | 107 | 1337 |
| Stadel, John M., assignor of one-half to W. A. McCowen, Wilmington, Del. Generator for gas-engines | 734,986 | July 28 | 4254 | 988 | 105 | 942 |
| Stadelman, George M. (See Frost and Stadelman.) | | | | | | |
| Stadig, Olof L., St. Francis, Me. Manure-spreader | 727,475 | May 5 | 1214 | 268 | 104 | 262 |
| Stadler, Chris, Menominee, Mich. Neck-yoke | 726,585 | Apr. 28 | 4043 | 913 | 103 | 2060 |
| Stadtegger, George E., San Francisco, Cal. Crystallizing | 723,496 | Mar. 24 | 3451 | 772 | 103 | 767 |
| Stadtmuller, Max F., Pomeroy, Iowa. Machine for cutting and bending metal strips | 740,054 | Sept. 29 | 4854 | 1088 | 106 | 1105 |
| Stadtmuller, Max F., Pomeroy, Iowa. Window putty-protector | 740,055 | Sept. 29 | 4856 | 1089 | 106 | 1105 |
| Stadtmuller, Max F., and C. V. Mitchell, Pomeroy, Iowa. Head-rest | 730,488 | June 9 | 1763 | 394 | 104 | 1505 |
| Staehle, Gustav, Stuttgart, Germany. Worm-gear | 718,398 | Jan. 13 | 1625 | 357 | 102 | 364 |
| Stafford, Alfred E., assignor to Draper Company, Hopedale, Mass. Filling-replenishing loom | 727,014 | May 5 | 389 | 82 | 104 | 85 |
| Stafford, Flora L., Hazleton, Ind. Holder for picture-frames or the like | 730,713 | June 9 | 2164 | 480 | 104 | 1592 |
| Stafford, Frank R., Providence, R. I. Gem-setting | 739,759 | Sept. 22 | 4259 | 954 | 106 | 962 |
| Stafford, George W., Warwick, R. I. Shedding mechanism for looms | 734,767 | July 28 | 3845 | 897 | 105 | 857 |
| Stafford, Harry E., *et al.* (See Mathews, Robert P., assignor.) | | | | | | |
| Stafford, Henry L., Marquette, Mich. Mailing-tube | 739,232 | Sept. 15 | 3291 | 729 | 106 | 735 |
| Stafford, James M., Petersburg, assignor of four-fifths to I. Mail, F. J. and J. H. Meyer, and M. J. Stafford, Vincennes, Ind. Non-refillable bottle | 740,995 | Oct. 6 | 1125 | 253 | 106 | 1485 |
| Stafford, Joseph Z., Canyon Ferry, Mont. Ditching-plow | 721,920 | Mar. 3 | 508 | 111 | 103 | 112 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | Spec. | Drg. | Vol. | Page. |
| Stafford, Mahlon J., *et al.* (See Stafford, James M., assignor.) | | | | | | |
| Stafford, Martin A., *et al.* (See Mathews, Robert P., assignor.) | | | | | | |
| Stafford, Nelson, assignor to N. Stafford Company, New York, N. Y. Filter | 724,752 | Apr. 7 | 623 | 146 | 103 | 1302 |
| Stage, George J., Rochester, N. Y. Photographic developing apparatus | 729,003 | May 26 | 4097 | 909 | 104 | 921 |
| Stage, George J., Rochester, N. Y. Photographic-dry-plate releaser | 745,922 | Dec. 1 | 1120 | 251 | 107 | 1338 |
| Stagg, Thomas, assignor to Kilbourne & Jacobs Manufacturing Company, Columbus, Ohio. Mine-car | 736,561 | Aug. 18 | 2887 | 622 | 105 | 1624 |
| Stahl, Felix, Munich, Germany, assignor to Trenail Société Anonyme pour l'Exploitation Du Trenail et ses Applications, Paris, France. Tool for boring holes for screw-pins or dowels in wooden railway-sleepers, &c | 733,340 | July 7 | 1153 | 273 | 105 | 243 |
| Stahl, John P., Johnstown, assignor of one-half to E. H. Wise, Borough of Westmont, Pa. Stair-rod fastening | 744,639 | Nov. 17 | 3545 | 764 | 107 | 785 |
| Stahl, R. F., *et al.* (See Reenstierna, Gustaf L., assignor.) | | | | | | |
| Stahlberg, Charles, St. Louis, Mo. Calculating-machine | 744,697 | Nov. 17 | 3649 | 786, 787, 788, 789, 790, 791 | 107 | 808 |
| Stahmer, Henry, Owatonna, Minn. Display-stand. (Reissue) | 12,140 | Aug. 4 | 1257 | 267 | 105 | 1249 |
| Stahr, Bernhard H., Minneapolis, Minn. Elevator or storage bin construction | 727,706 | May 12 | 1685 | 376 | 104 | 380 |
| Staiger, Godfrey, Toledo, Ohio. Bushing-expander | 736,647 | Aug. 18 | 3009 | 664 | 105 | 1657 |
| Stair, John H., Akron, Ohio. Horseshoe | 734,374 | July 21 | 3102 | 730 | 105 | 690 |
| Stair Lift Company. (See Dodge, James M., assignor.) | | | | | | |
| Stair Lift Company. (See Shaw, Arthur D., assignor.) | | | | | | |
| Stairs, James, and W. H. Petrie, assignors to R. MacKinnon & Co., Littlefalls, N. Y. Ruffling attachment for sewing-machines | 747,257 | Dec. 15 | 3585 | 810 | 107 | 1920 |
| Stakes, David F., assignor to Keystone Telephone Company, Philadelphia, Pa. Telephone system | 741,847 | Oct. 20 | 2793 | 622 | 106 | 1877 |
| Staley, Harrison L., Martinsville, Ind. Multiple bark-splitting machine | 734,768 | July 28 | 3847 | 897 | 105 | 858 |
| Staley, Harrison L., Martinsville, Ind. Slitting-machine | 741,418 | Oct. 13 | 1958 | 434 | 106 | 1684 |
| Staley, Joseph L., Martin, Mich. Convertible hay and stock rack | 742,364 | Oct. 27 | 3842 | 863 | 106 | 2106 |
| Stallard, Francis L., Macy, assignor to Indiana Manufacturing Company, Indianapolis, Ind. Pneumatic stacker | 728,511 | May 19 | 3177 | 703, 704 | 104 | 713 |
| Stallcop, Charles E., Sac City, Iowa. Mounting for rifle-telescopes | 740,327 | Sept. 29 | 5346 | 1204 | 106 | 1206 |
| Stallsmith, Walter A., and M. G. Beard, Hanover, Pa. Clinometer | 730,579 | June 9 | 1931 | 429 | 104 | 1543 |
| Stambach, Arthur, Wilkinsburg, Pa. Fastening device | 725,375 | Apr. 14 | 1764 | 396 | 103 | 1558 |
| Stamford Gas Stove Company. (See Collins, Warren, assignor.) | | | | | | |
| Stamper, James I., Meade, Kans. Combined rein holder and guide | 746,599 | Dec. 8 | 2334 | 534 | 107 | 1621 |
| Stan, James, Pittsburg, Pa. Burial-casket | 739,357 | Sept. 22 | 3510 | 785 | 106 | 798 |
| Stancliffe, Cecil W., Mirfield, England. Gearing for ironing-machines | 748,540 | Dec. 29 | 6024 | 1363, 1364 | 107 | 2503 |
| Standard Automatic Lubricator Company. (See Freeman, Albert A., assignor.) | | | | | | |
| Standard Bottle Closure Company. (See Chapman, Earle E., assignor.) | | | | | | |
| Standard Caster and Wheel Company. (See Daniels, Merwin G., assignor.) | | | | | | |
| Standard Coupler Company. (See Gallagher, Richard D., Jr., assignor.) | | | | | | |
| Standard Coupler Company. (See Sessions, Dennis, and Gallagher, assignors.) | | | | | | |
| Standard Development Company. (See Phillips, Elwood C., assignor.) | | | | | | |
| Standard Dry Kiln Company. (See Hussey, William P., assignor.) | | | | | | |
| Standard Elevator Interlock Company. (See Mucklé, John S., assignor.) | | | | | | |
| Standard Equipment Company. (See Allen, William W., assignor.) | | | | | | |
| Standard Fire Alarm Company. (See Long and Cofran, assignors.) | | | | | | |
| Standard Light Company. (See Ray, Forest A., assignor.) | | | | | | |
| Standard Oil Company of New York. (See Gregory, Joseph, assignor.) | | | | | | |
| Standard Packing Manufacturing Company. (See Cole, Albert L., assignor.) | | | | | | |
| Standard Railway Equipment Company. (See Murphy, Albert C., assignor.) | | | | | | |
| Standard Right Company. (See Fyfe, Paul P. I., assignor.) | | | | | | |
| Standard Seamless Tube Company. (See Nicholson, John H., assignor.) | | | | | | |
| Standard Seamless Tube Company. (See Stiefel and Brown, assignors.) | | | | | | |
| Standard Separator Company. (See Hartmann, William C., assignor.) | | | | | | |
| Standard Sewing Machine Company. (See Diehl, Jacob, assignor.) | | | | | | |
| Standard Sewing Machine Company. (See Mack, William A., assignor.) | | | | | | |
| Standard Sewing Machine Company. (See Mills, Daniel, assignor.) | | | | | | |
| Standard Steel Car Company. (See Anderson, Harry T., assignor.) | | | | | | |
| Standard Steel Car Company. (See Christianson, Andrew, assignor.) | | | | | | |
| Standard Steel Car Company. (See Goodell, George H., assignor.) | | | | | | |
| Standard Table Oil Cloth Company. (See Leisel, Albert, assignor.) | | | | | | |
| Standard Turpentine Company. (See Krug, William H., assignor.) | | | | | | |
| Standard Underground Cable Company. (See Fisher, Henry W., assignor.) | | | | | | |
| Standard Varnish Works. (See Rosenberg, Herman, assignor.) | | | | | | |
| Standard Water Purifying Company. (See Boucher, Pierre J., assignor.) | | | | | | |
| Standidge, Harry W., Chicago, Ill. Keyless locking device | 717,941 | Jan. 6 | 795 | 179 | 102 | 170 |
| Standish, Albert S., Pittsburg, Pa. Link-forming machine | 728,320 | May 19 | 2846 | 629 | 104 | 645 |
| Standish, William S., East Las Vegas, N. Mex. Ter. Mixing device | 742,749 | Oct. 27 | 4524 | 1024 | 106 | 2249 |
| Stanford, Arthur L., Chicago, Ill. Friction-clutch | 730,580 | June 9 | 1932 | 429 | 104 | 1543 |
| Stang, Frank, Burlington, Wis. Pincushion | 735,916 | Aug. 11 | 1685 | 359 | 105 | 1359 |
| Stange, Max, Chicago, Ill. Pneumatic-despatch-tube system | 743,109 | Nov. 3 | 554 | 119, 120 | 107 | 115 |
| Stanhope, John B., Philadelphia, Pa., assignor to Stanhope Patent Slack Barrel Heading Machine Company, New York, N. Y. Barrel-heading machine | 732,793 | July 7 | 177 | 45 | 105 | 41 |
| Stanhope Patent Slack Barrel Heading Machine Company. (See Stanhope, John B., assignor.) | | | | | | |
| Stanhope, Philip W. (See Hutchings, Charles H., assignor.) | | | | | | |
| Stanicek, Joseph, Chicago, Ill. Horse-holder | 737,036 | Aug. 25 | 3750 | 832, 833 | 105 | 1833 |
| Stanifer, William D., Durant, Ind. Ter., assignor of two-thirds to F. I. Williams and J. R. Rutherford, Paris, Tex. Gin-saw cleaner | 730,803 | June 9 | 2305 | 513 | 104 | 1623 |
| Stanley, Alix W., assignor to Stanley Rule & Level Company, New Britain, Conn. Plane | 738,500 | Sept. 8 | 1931 | 421 | 106 | 430 |
| Stanley, Alix W., assignor to Stanley Rule & Level Company, New Britain, Conn. Scale | 747,098 | Dec. 15 | 3293 | 749 | 107 | 1861 |
| Stanley, Alix W., and E. A. Schade, assignors to Stanley Rule & Level Company, New Britain, Conn. Plane | 738,501 | Sept. 8 | 1932 | 422 | 106 | 430 |
| Stanley, Arthur, Lee County, Ill. Queen-cell shield and queen-bee nursery | 732,794 | July 7 | 179 | 46 | 105 | 42 |
| Stanley Automobile Company. (See Stanley, Frank E. and F. O., assignors.) | | | | | | |
| Stanley, Charles E., Chicago, Ill. Ink-well | 719,525 | Feb. 3 | 201 | 47 | 102 | 866 |
| Stanley, Charles E., Canton, Ohio. Self-lubricating bearing for trolley-wheels | 727,015 | May 5 | 393 | 82 | 104 | 85 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Stanley Electric Manufacturing Company. (See Acly, Harry M., assignor.) | | | | | | |
| Stanley Electric Manufacturing Company. (See Andrews, Leonard, assignor.) | | | | | | |
| Stanley Electric Manufacturing Company. (See Babcock, Allen H., assignor.) | | | | | | |
| Stanley Electric Manufacturing Company. (See Baum, Frank G., assignor.) | | | | | | |
| Stanley Electric Manufacturing Company. (See Colt, Samuel G., assignor.) | | | | | | |
| Stanley Electric Manufacturing Company (See Creighton, Elmer E. F., assignor.) | | | | | | |
| Stanley Electric Manufacturing Company. (See Davison, George R., assignor.) | | | | | | |
| Stanley Electric Manufacturing Company. (See Deri, Max, assignor.) | | | | | | |
| Stanley Electric Manufacturing Company. (See Hawkins, Laurence A., assignor.) | | | | | | |
| Stanley Electric Manufacturing Company. (See Henry, John C., assignor.) | | | | | | |
| Stanley Electric Manufacturing Company. (See Kelly and Chesney, assignors.) | | | | | | |
| Stanley Electric Manufacturing Company. (See Kilbourn, Washington H., assignor.) | | | | | | |
| Stanley Electric Manufacturing Company. (See Laird, Wesley E., assignor.) | | | | | | |
| Stanley Electric Manufacturing Company. (See Lloyd, William J., assignor.) | | | | | | |
| Stanley Electric Manufacturing Company. (See Wilson, Leonard, assignor.) | | | | | | |
| Stanley Electric Manufacturing Company. (See Wright, Gilbert, assignor.) | | | | | | |
| Stanley Electric Manufacturing Company. (See Wright and Acly, assignors.) | | | | | | |
| Stanley Electric Manufacturing Company. (See Wright and Nicholls, assignors.) | | | | | | |
| Stanley, Francis E., Newton, Mass. Water-level indicator | 728,512 | May 19 | 3180 | 704 | 104 | 714 |
| Stanley, Francis E., Newton, Mass. Steam motor-vehicle | 730,307 | June 9 | 1428 | 314<br>315 | 104 | 1435 |
| Stanley, Francis E., assignor of one-half to F. O. Stanley, Newton, Mass. Boiler | 737,517 | Aug. 25 | 4651 | 1044 | 105 | 2028 |
| Stanley, Francis E. and F. O., Newton, Mass. Steam-superheater | 733,088 | July 7 | 695 | 169<br>170 | 105 | 148 |
| Stanley, Francis E. and F. O., Newton, Mass. Means for volatilizing gasolene | 737,879 | Sept. 1 | 656 | 139 | 106 | 144 |
| Stanley, Frank E. and F. O., Newton, Mass., assignors to Stanley Automobile Company. Steam-generator | 735,021 | July 28 | 4308 | 1002 | 105 | 954 |
| Stanley, Frank J., assignor of one-half to M. Heller, Philadelphia, Pa. Self-chalking line | 747,497 | Dec. 22 | 4032 | 906 | 107 | 2040 |
| Stanley, Frederick E., assignor to Scovill Manufacturing Company, Waterbury, Conn. Button-setting machine | 732,230 | June 30 | 5048 | 1123 | 104 | 2240 |
| Stanley, Freelan O. (See Stanley, Francis E., assignor.) | | | | | | |
| Stanley, Freelan O. (See Stanley, Francis E. and F. O.) | | | | | | |
| Stanley, Freelan O. (See Stanley, Frank E. and F. O.) | | | | | | |
| Stanley, Freelan O., Newton, Mass. Low-water alarm for steam-boilers | 722,330 | Mar. 10 | 1255 | 280 | 103 | 283 |
| Stanley, Henry F., New Orleans, La. Refrigerator-car | 732,597 | June 30 | 5746 | 1275 | 104 | 2386 |
| Stanley Instrument Company. (See Stanley, William, assignor.) | | | | | | |
| Stanley, James, Newark, N. J. Flexible tubular covering | 738,250 | Sept. 8 | 1393 | 302 | 106 | 317 |
| Stanley, James J., Vallejo, Cal. Pen-wiper | 734,769 | July 28 | 3850 | 898 | 105 | 858 |
| Stanley, James R., and F. S. Howard, Boulder, Colo. Magazine cap-exploding cane | 723,218 | Mar. 17 | 2905 | 650 | 103 | 645 |
| Stanley, John C. W., assignor to Cotton Seed Company, Limited, London, England. Attachment for cotton-gins | 738,370 | Sept. 8 | 1676 | 363 | 106 | 376 |
| Stanley Rule & Level Company. (See Fox, Charles H., assignor.) | | | | | | |
| Stanley Rule & Level Company. (See Scott, Walter L., assignor.) | | | | | | |
| Stanley Rule & Level Company. (See Stanley, Alix W., assignor.) | | | | | | |
| Stanley Rule & Level Company. (See Stanley and Schade, assignors.) | | | | | | |
| Stanley Rule & Level Company. (See Traut, Justus A., assignor.) | | | | | | |
| Stanley, S. M., *et al.* (See Cox, Jefferson L., assignor.) | | | | | | |
| Stanley, William, assignor to Stanley Instrument Company, Great Barrington, Mass. Meter | 720,979 | Feb. 17 | 2905 | 666 | 102 | 1465 |
| Stanley, William, assignor to Stanley Instrument Company, Great Barrington, Mass. Meter | 720,980 | Feb. 17 | 2907 | 666<br>667 | 102 | 1465 |
| Stanley, William, assignor to Stanley Instrument Company, Great Barrington, Mass. Apparatus for measuring the energy of electric currents | 720,981 | Feb. 17 | 2909 | 667 | 102 | 1466 |
| Stanley, William, assignor to Stanley Instrument Company, Great Barrington, Mass. Indicating system and time-beater | 741,735 | Oct. 20 | 2594 | 577 | 106 | 1834 |
| Stanley, William, Pittsfield, Mass., assignor to General Electric Company. Rectifier | 728,812 | May 19 | 3754 | 838 | 104 | 835 |
| Stanley, William L., Cambridge, Ohio. Rolling-pin | 745,923 | Dec. 1 | 1121 | 251 | 107 | 1338 |
| Stanley Works. (See Christ, Ernest W., assignor.) | | | | | | |
| Stanley Works. (See Moore, Ethelbert A., assignor.) | | | | | | |
| Stannard, Glyny B., *et al.* (See Curtis, Homer P., assignor.) | | | | | | |
| Stannard, Robert R., assignor to Blake and Johnson, Waterbury, Conn. Hoop-fastening | 739,512 | Sept. 22 | 3811 | 854 | 106 | 865 |
| Stansbury, George F., Weedsport, assignor of one-half to J. E. Madden, Port Byron, N. Y. Metallic railway-tie | 719,900 | Feb. 3 | 878 | 206 | 102 | 1009 |
| Stansbury, George F., Weedsport, assignor of one-half to J. E. Madden, Port Byron, N. Y. Folding step for cars or other vehicles | 724,753 | Apr. 7 | 626 | 146 | 103 | 1302 |
| Stanton, Albert H., Huntington, Mass. Adding-machine | 726,586 | Apr. 28 | 4044 | 913<br>914 | 103 | 2060 |
| Stanton, Charles S., Hartwick, N. Y. Trolley-wheel | 726,587 | Apr. 28 | 4049 | 914 | 103 | 2061 |
| Stanton, Charles W., Mobile, Ala. Drier | 735,607 | Aug. 4 | 1099 | 234 | 105 | 1214 |
| Stanton, Charles W., Mobile, Ala. Apparatus for steaming wood | 735,608 | Aug. 4 | 1099 | 234 | 105 | 1214 |
| Stanton, Charles W., Mobile, Ala. Drier | 735,609 | Aug. 4 | 1100 | 234 | 105 | 1214 |
| Stanton, Charles W., Mobile, Ala. Drier | 735,610 | Aug. 4 | 1102 | 235 | 105 | 1214 |
| Stanton, Charles W., Mobile, Ala. Apparatus for drying earthy substances | 746,892 | Dec. 15 | 2900 | 668 | 107 | 1768 |
| Stanton, Charles W., Mobile, Ala. Trap | 746,893 | Dec. 15 | 2901 | 669 | 107 | 1768 |
| Stanton, Charles W., Mobile, Ala. Smoke-consuming furnace | 748,432 | Dec. 29 | 5802 | 1322 | 107 | 2452 |
| Stanton, Horace C., Phelps, N. Y. Individualized keyboard for type-writing machines | 726,107 | Apr. 21 | 3079 | 699 | 103 | 1852 |
| Stanton, Joseph, *et al.* (See Bolen, Harry B., assignor.) | | | | | | |
| Stanton, Milo, *et al.* (See Bolen, Harry B., assignor.) | | | | | | |
| Stanton, Ray, Portland, Oreg. Joint-support | 724,349 | Mar. 31 | 5090 | 1139 | 103 | 1120 |
| Stanton, Ray, assignor of one-half to T. Taylor, Portland, Oreg. Joint-support. (Reissue) | 12,161 | Oct. 13 | 2345 | 525 | 106 | 1766 |
| Stanwood, Frank H. (See King, John Q. A., assignor.) | | | | | | |
| Staples, Charles W. (See Boone and Staples.) | | | | | | |
| Staples, Elial M. (See Morris and Staples.) | | | | | | |
| Staples, Elisha S., Hartford, Conn. Nut-lock | 719,157 | Jan. 27 | 3122 | 695 | 102 | 704 |
| Staples, George B. (See Reach and Staples.) | | | | | | |
| Staples, George B., Philadelphia, Pa. Tile | 746,399 | Dec. 8 | 1987 | 453 | 107 | 1543 |
| Staples & Hanford Company. (See Staples, John A., assignor.) | | | | | | |
| Staples, John A., Newburgh, N. Y. Springwork | 748,433 | Dec. 29 | 5803 | 1322 | 107 | 2453 |
| Staples, John A., assignor to Staples & Hanford Company, Newburgh, N. Y. Springwork | 742,251 | Oct. 27 | 3643 | 814<br>815 | 106 | 2065 |
| Staples, John A., assignor to Staples & Hanford Company, Newburgh, N. Y. Furniture | 742,252 | Oct. 27 | 3647 | 815 | 106 | 2065 |
| Staples, John E. (See Brown and Staples.) | | | | | | |
| Staples, William A., Indianapolis, Ind. Concrete-column mold | 724,754 | Apr. 7 | 627 | 146 | 103 | 1302 |
| Stapleton, William J. (See Earl, Charles M., assignor.) | | | | | | |
| Stapley, William S., assignor to Bridgeport Brass Company, Bridgeport, Conn. Electric socket | 733,759 | July 14 | 1886 | 445 | 105 | 415 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| Stapp, John M., assignor to himself and N. A. La Beaume, Alamogordo, N. Mex. Ter. Lubricating-cup | 734,443 | July 21 | 3222 | 758 | 105 | 714 |
| Star Brass Manufacturing Company. (See Bosworth, Charles B., assignor.) | | | | | | |
| Star Brass Works. (See Crockett and Johnson, assignors.) | | | | | | |
| Star Electric Company. (See Doughty and Beach, assignors.) | | | | | | |
| Star Trade Register Company. (See Smith, Charles R., assignor.) | | | | | | |
| Stare, Burton R., Chicago, Ill. Journal-lubricator | 740,482 | Oct. 6 | 188 | 37 | 106 | 1285 |
| Stark, Benjamin F., Homestead, assignor of three-fourths to R. D. Davis, F. Fuehr, Pittsburg, Pa., and J. Starkey, Minerva, Ohio. Window | 732,456 | June 30 | 5182 | 1216 | 104 | 2329 |
| Stark, Frank G., New York, N. Y. Nut-lock | 740,056 | Sept. 29 | 4857 | 1089 | 106 | 1106 |
| Stark, Frank O., Deer River, Minn. Sled-knee | 725,502 | Apr. 14 | 2017 | 455 | 103 | 1612 |
| Stark, Lars J., Harris, Minn. Potato-digger shaker | 741,286 | Oct. 13 | 1701 | 380 | 106 | 1626 |
| Stark, Thomas. (See Gottlander, John, assignor.) | | | | | | |
| Stark, Thomas D., Redbluff, Cal. Pump-lifter | 722,463 | Mar. 10 | 1510 | 333 | 103 | 338 |
| Starke, George H., *et al.* (See Brammer, James H., assignor.) | | | | | | |
| Starkey, John, *et al.* (See Stark, Benjamin F., assignor.) | | | | | | |
| Starkey, Ollie B., Ladonia, Tex. Rail-joint | 737,037 | Aug. 25 | 3751 | 883 | 105 | 1833 |
| Starks, Elmer C., Sheridan, Wis. Loading or unloading device | 719,526 | Feb. 3 | 202 | 47 | 102 | 866 |
| Starks, Nils O., Madison, Wis. Store, library, office, or warehouse apparatus | 718,543 | Jan. 13 | 1938 | 424, 425, 426 | 102 | 432 |
| Starkweather, John F., Sr. (See Harp and Starkweather.) | | | | | | |
| Starley, William. (See Accles, Veulle, and Starley.) | | | | | | |
| Starling, Miles H., Browns Mill, Ohio. Postless wire fence | 732,231 | June 30 | 5049 | 1123 | 104 | 2240 |
| Starr, Carrie T., Wilbur, Wash. Spool-holder | 736,562 | Aug. 18 | 2838 | 622 | 105 | 1624 |
| Starr, Eugene E. (See Milligan, John F., assignor.) | | | | | | |
| Starr, George W., and J. H. Cogswell, Havana, Ill. Mixer for explosive-gasolene engines | 727,476 | May 5 | 1215 | 268 | 104 | 262 |
| Starr, George W., and J. H. Cogswell, Havana, Ill. Frictional clutch apparatus | 727,477 | May 5 | 1217 | 269 | 104 | 263 |
| Starr, George W., and J. H. Cogswell, Havana, Ill. Valve-gear for explosive-engines | 741,848 | Oct. 20 | 2796 | 622 | 106 | 1878 |
| Starr, Hillyard A., East Chattanooga, Tenn. Means for fastening shades to shade-rollers | 718,737 | Jan. 20 | 2321 | 512 | 102 | 524 |
| Starr, Hillyard A., East Chattanooga, Tenn. Automatic window-shade stop and release | 718,738 | Jan. 20 | 2322 | 513 | 102 | 524 |
| Starr, John E. (See Pitkethly and Hayes, assignors.) | | | | | | |
| Starr, John E., St. Louis, Mo., assignor to International Cooling Company, New York, N. Y. Pressure and temperature regulator for the absorbers and return-lines of refrigerating apparatus | 742,253 | Oct. 27 | 3649 | 815 | 106 | 2066 |
| Starr, W. M., *et al.* (See McGuire, Peter J., assignor.) | | | | | | |
| Starrett, Harry E., Chicago, Ill., assignor to Hanson & Van Winkle Company. Metal anode | 733,602 | July 14 | 1616 | 383 | 105 | 359 |
| Starrett, Laroy S., Athol, Mass. Inside micrometer | 726,003 | Apr. 21 | 2925 | 665 | 103 | 1819 |
| Starrett, Laroy S., assignor to L. S. Starrett Company, Athol, Mass. Screw-driver | 729,004 | May 26 | 4100 | 910 | 104 | 921 |
| Starrett, Laroy S., assignor to L. S. Starrett Company, Athol, Mass. Screw-driver | 730,804 | June 9 | 2306 | 513 | 104 | 1623 |
| Starrett, Laroy S., assignor to L. S. Starrett Company, Athol, Mass. Case for tape-measures | 739,738 | Sept. 22 | 4232 | 947 | 106 | 956 |
| Starrett, Laroy S., assignor to L. S. Starrett Co., Athol, Mass. Hammer | 745,973 | Dec. 1 | 1214 | 273 | 107 | 1359 |
| Stasch, Emil R., Corning, N. Y. Gas-bell for furnaces | 735,421 | Aug. 4 | 738 | 157 | 105 | 1137 |
| State, Joseph E., East St. Louis, Ill. Safety-match | 737,672 | Sept. 1 | 208 | 45 | 106 | 48 |
| Static Carbonating Company. (See Carmichael, Henry, assignor.) | | | | | | |
| Stationery Patents Company. (See Kittredge, Anson O. and E. R., assignors.) | | | | | | |
| Staton, Reubin H., *et al.* (See Osteen, Percy C., assignor.) | | | | | | |
| Staton, Samuel D., *et al.* (See Osteen, Percy C., assignor.) | | | | | | |
| Staude, Edwin G., Minneapolis, Minn. Pasting and folding machine for box-blanks | 730,410 | June 9 | 1606 | 358, 359, 360 | 104 | 1472 |
| Stauffen, Charles F. (See Falkenwalde, Oscar, assignor.) | | | | | | |
| Stauffer, Don K. (See Shepard and Stauffer.) | | | | | | |
| Stauffer, Henry W., Reading, and A. H. Riegner, Mohns Store, Pa. Split collar | 727,707 | May 12 | 1687 | 376 | 104 | 381 |
| Stauffer, Peter S., Springfield, Mass. Register | 721,106 | Feb. 17 | 3151 | 724 | 102 | 1520 |
| Stauffer, Peter S., Springfield, Mass. Wall-register | 739,795 | Sept. 22 | 4334 | 970, 971 | 106 | 979 |
| Stauft, Daniel B., Scottdale, Pa. Apparatus for watering coke-ovens | 724,350 | Mar. 31 | 5091 | 1140 | 103 | 1120 |
| Stauss, Carl W., Berlin, Germany. Construction of heating-stoves | 738,640 | Sept. 8 | 2191 | 478 | 106 | 486 |
| Ste. Ame des Anciens Établissements Panhard et Levassor. (See Krebs, Arthur, assignor.) | | | | | | |
| Sté. Ame des Matières Colorantes et Produits Chimiques de St. Denis. (See Poirrier, Alcide F., assignor.) | | | | | | |
| Sté. Electro Metallurgique Francaise. (See Héroult, Paul L. T., assignor.) | | | | | | |
| Ste. Industrielle des Telephones, (Constructions Electriques Caoutchouc Cables.) (See Senez, Charles, assignor.) | | | | | | |
| Steadman, Frank M., Puebla, Mexico. Sighting device for cameras | 745,258 | Nov. 24 | 4760 | 1040 | 107 | 1057 |
| Steadman, Frank M., assignor of one-half to G. E. Trager, Puebla, Mexico. Measuring device | 745,257 | Nov. 24 | 4756 | 1040 | 107 | 1056 |
| Stearman, Robert A., Jet, Okla. Ter. Latch | 721,921 | Mar. 3 | 509 | 112 | 103 | 113 |
| Stearn, Charles H., Westminster, and F. T. Woodley, Plumstead, England. Manufacture of filaments, sheets, or films from cellulose | 725,016 | Apr. 7 | 1111 | ..... | 103 | 1406 |
| Stearns & Co., E. C. (See Potter, William M., assignor.) | | | | | | |
| Stearns, Henry O., assignor to T. L. Barber, Framingham, Mass. Crown-die for forming hats | 743,045 | Nov. 3 | 435 | 95 | 107 | 92 |
| Stearns, Robert B., and F. D. Ward, Chicago, Ill. Car-coupling | 737,673 | Sept. 1 | 209 | 45 | 106 | 48 |
| Stearns, William B., Marblehead, Mass. Skylight for vessels | 731,138 | June 16 | 2958 | 657 | 104 | 1776 |
| Stebbins, Edwin W., Abbeville, La. Water-pipe attachment | 742,511 | Oct. 27 | 4104 | 924 | 106 | 2159 |
| Stebbins, Frank E. (See Wright and Stebbins.) | | | | | | |
| Stebbins, Timothy, assignor to Red Jacket Manufacturing Company, Davenport, Iowa. Wrapping-machine | 726,474 | Apr. 28 | 3793 | 858, 859, 860 | 103 | 2013 |
| Steber, Bernard T., Utica, N. Y. Knitting-machine | 729,005 | May 26 | 4101 | 910 | 104 | 922 |
| Stebler, Fred, *et al.* (See Strain, Robert, assignor.) | | | | | | |
| Stebler, Fred, Riverside, Cal. Fruit or vegetable brusher | 734,284 | July 21 | 2944 | 687, 688 | 105 | 658 |
| Stecher, Charles, Point Edward, Canada, assignor of two-thirds to P. Fulford, North Port Huron, Mich., and W. S. Cumming, Chicago, Ill. Machine for fastening the heads of cans to the bodies thereof | 740,199 | Sept. 29 | 5108 | 1147, 1148 | 106 | 1158 |
| Stecher, Charles, Point Edward, Canada, assignor of two-thirds to P. Fulford, North Port Huron, Mich., and W. S. Cumming, Chicago, Ill. Machine for double-seaming cans | 741,942 | Oct. 20 | 2984 | 664, 665 | 106 | 1916 |

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| | | | Spec. | Drg. | Vol. | Page. |
| Stecher, Charles, Point Edward, Canada, and P. Fulford, Port Huron, assignors of one-third to W. S. Cumming, North Port Huron, Mich. Machine for connecting can-heads with the bodies thereof | 744,698 | Nov. 17 | 3679 | 791 792 793 794 795 | 107 | 817 |
| Steck, Ernst F., Chicago, Ill., assignor to International Fire Engine Company, Chicago, Ill., and New York, N. Y. Fire apparatus | 731,718 | June 23 | 4045 | 902 903 | 104 | 2014 |
| Steckel, Abram P., Buffalo, N. Y. Electrical clutch and brake mechanism | 744,423 | Nov. 17 | 3190 | 683 684 | 107 | 712 |
| Steckenreiter, John F., Chicago, Ill. Attaching device for drill-braces or the like | 729,905 | June 2 | 701 | 155 | 104 | 1271 |
| Steckman, Martha J., Pittsburg, Pa. Curtain-pole attachment | 727,016 | May 5 | 394 | 83 | 104 | 86 |
| Stedman, Arthur, Cincinnati, Ohio. Bedstead | 726,108 | Apr. 21 | 3082 | 699 | 103 | 1852 |
| Stedman, William H., Hartford, Conn. Overseam sewing-machine | 725,168 | Apr. 14 | 1397 | 315 316 317 | 103 | 1481 |
| Stedman, William H., Hartford, Conn. Feeding and edge-controlling device for sewing-machines | 725,631 | Apr. 14 | 2250 | 509 | 103 | 1663 |
| Stedman, William H., assignor to Merrow Machine Company, Hartford, Conn. Overseaming sewing-machine | 732,457 | June 30 | 5483 | 1216 | 104 | 2330 |
| Stedman, William H., assignor to Merrow Machine Company, Hartford, Conn. Thread-guide for sewing-machines | 732,458 | June 30 | 5487 | 1217 | 104 | 2330 |
| Stedman, William H., assignor to Merrow Machine Company, Hartford, Conn. Trimming mechanism for sewing-machines | 733,760 | July 14 | 1887 | 446 | 105 | 415 |
| Stedman, William H., assignor to Merrow Machine Company, Hartford, Conn. Feeding mechanism for sewing-machines | 733,922 | July 14 | 2215 | 519 | 105 | 481 |
| Stedman, William H., assignor to Merrow Machine Company, Hartford, Conn. Overseaming-machine | 734,987 | July 28 | 4255 | 989 | 105 | 943 |
| Steeb, John L., Butler, assignor of two-thirds to W. M. Carnahan, Pittsburg, and F. M. Megogney, Elizabeth, Pa. Electric switch | 727,478 | May 5 | 1219 | 269 | 104 | 263 |
| Steeb, Rudolph A., Roselle, N. J. Vacuum-pump | 734,988 | July 28 | 4257 | 989 | 105 | 943 |
| Steedman, George F. (See Willett and Steedman.) | | | | | | |
| Steedman, George F., St. Louis, Mo. Pressure-fluid feed for sawmill-carriages | 721,842 | Mar. 3 | 336 | 74,75 | 103 | 74 |
| Steel, David H., Oronoque, Kans. Device for handling wire | 740,328 | Sept. 29 | 5347 | 1204 | 106 | 1207 |
| Steel, Harry L., Dayton, Ind., assignor to Indiana Development Company, Augusta, Me. Snapping-roll for corn-harvesters | 729,438 | May 26 | 4855 | 1075 1076 | 104 | 1077 |
| Steel Heddle Manufacturing Company. (See Fehr, William, assignor.) | | | | | | |
| Steel, John W., Portsmouth, Va. Protector for bottles, jars, or the like | 719,527 | Feb. 3 | 203 | 48 | 102 | 866 |
| Steele, Alexis P., Statesville, N. C. Brick cutting and delivering apparatus | 720,751 | Feb. 17 | 2494 | 575 | 102 | 1378 |
| Steele, Alfred, Denver, Colo. Brush | 729,515 | May 26 | 4985 | 1105 | 104 | 1106 |
| Steele, Alva G., Pidcock, Ga. Plow | 733,761 | July 14 | 1891 | 446 | 105 | 416 |
| Steele, Andrew, Ridgefield, N. J. Safety attachment for faucets | 739,031 | Sept. 15 | 2914 | 647 | 106 | 657 |
| Steele, Benjamin M., Peoria, Ill. Grain-weigher | 747,258 | Dec. 15 | 3586 | 810 811 | 107 | 1921 |
| Steele, Charles L., *et al.* (See Way, George C., assignor.) | | | | | | |
| Steele, David R., Curtis Bay, assignor of one-half to H. D. Harvey, Baltimore, Md. Furnace | 743,947 | Nov. 10 | 2224 | 481 | 107 | 490 |
| Steele, Edwin G. (See Sutton and Steele.) | | | | | | |
| Steele, Elijah F., assignor of two-thirds to R. H. Cowles and G. M. Hallenbeck, Wallingford, Conn. Steam-engine | 729,972 | June 2 | 839 | 187 | 104 | 1298 |
| Steele, Francis E., *et al.* (See Horton, Peter D., assignor.) | | | | | | |
| Steele, George H., Spearville, Kans. Snap-hook | 737,790 | Sept. 1 | 437 | 93 | 106 | 96 |
| Steele, George J., Canby, Cal. Hammer | 736,797 | Aug. 18 | 3304 | 732 | 105 | 1717 |
| Steele, John L. (See Browne, Herbert J., assignor.) | | | | | | |
| Steele, John M., Princeton, Ill. Calculator | 719,701 | Feb. 3 | 513 | 116 117 | 102 | 931 |
| Steele, Joseph P., Clarksville, Tenn. Detachable sole for shoes | 737,880 | Sept. 1 | 658 | 140 | 106 | 145 |
| Steele, Robert M., *et al.* (See Boulding, George R., assignor.) | | | | | | |
| Steele, Walter L. (See Sutton and Steele.) | | | | | | |
| Steele, Walter L. (See Sutton, Steele, and Coerver.) | | | | | | |
| Steele, Wilbur F., assignor to Acme Gas Company, New York, N. Y. Apparatus for indicating the thermal quality of gases | 723,751 | Mar. 24 | 3880 | 873 | 103 | 857 |
| Steele, William H. (See Scales, Charles H., assignor.) | | | | | | |
| Steen, Theodor, Berlin, assignor to A. Borsig, Tegel, near Berlin, Germany. Pipe-coupling for deep-boring devices | 722,764 | Mar. 17 | 2090 | 467 468 | 103 | 475 |
| Steenbergen, Jacob V., Harrisburg, S. D. Dividers | 724,625 | Apr. 7 | 391 | 93 | 103 | 1252 |
| Steenbock, Henry, New York, N. Y. Stringed musical instrument | 730,581 | June 9 | 1933 | 430 | 104 | 1543 |
| Steenken, Johann A., Bremen, and A. Schulz, Osterholz-Scharmbeck, Germany. Prevention from drowning | 747,793 | Dec. 22 | 4573 | 1032 | 107 | 2162 |
| Steenrod, George E., Freeport, Ill. Regulator for windmills | 728,513 | May 19 | 3181 | 704 705 | 104 | 714 |
| Steep, James, Clinton, Canada. Grain-drill | 719,272 | Jan. 27 | 3322 | 743 | 102 | 747 |
| Steers, William, Sr., Chicago, Ill. Scrub-woman's knee-pad | 736,648 | Aug. 18 | 3011 | 665 | 105 | 1657 |
| Steffee, George W., and M. J. Beeney, Newark, Ohio. Machine for trimming window-shades | 728,424 | May 19 | 3024 | 664 | 104 | 682 |
| Steffen, Carl, Vienna, Austria-Hungary. Process of diffusion | 718,030 | Jan. 6 | 963 | ------ | 102 | 207 |
| Stehley, Frazer P. (See Stehley and Hulings, assignors.) | | | | | | |
| Stehley, Paul H., and J. H. Hulings, Parsons, assignors of one-third to F. P. Stehley, Keyser, W. Va. Pneumatic apparatus for dentists or physicians | 730,714 | June 9 | 2166 | 480 481 | 104 | 1593 |
| Stehmann, Dora. (See Stehmann, Harry, assignor.) | | | | | | |
| Stehmann, Harry, assignor to D. Stehmann, Whitecliffs, Ark. Kiln | 724,965 | Apr. 7 | 1005 | 231 | 103 | 1383 |
| Steiger, Andrew W., Bridgeport, Conn., assignor to Union Typewriter Company, Jersey City, N. J. Ruling and erasing implement | 722,160 | Mar. 3 | 924 | 205 | 103 | 197 |
| Steiger, Andrew W., Bridgeport, Conn., assignor to Yost Writing Machine Company, Ilion, N. Y. Type-writing machine | 747,259 | Dec. 15 | 3590 | 811 812 | 107 | 1922 |
| Steiger, Andrew W., Boston, Mass., assignor, by mesne assignments, to A. L. Hoffman, F. S. Converse, and F. J. Leach, trustees, Lyons, N. Y. Retarding device for type-writer carriages | 744,424 | Nov. 17 | 3192 | 684 685 | 107 | 712 |
| Steiger, Andrew W., Boston, Mass., assignor, by mesne assignments, to A. L. Hoffman, F. S. Converse, and F. J. Leach, trustees, Lyons, N. Y. Device for adjusting the platen to line-spacing mechanism | 744,425 | Nov. 17 | 3194 | 685 | 107 | 712 |
| Steigerwalt, Andrew S., Philadelphia, Pa. Dentist's flask | 722,765 | Mar. 17 | 2091 | 468 | 103 | 478 |
| Steilberg, Reinhard, Charlottenburg, Germany. Gas-burner | 729,516 | May 26 | 4987 | 1106 | 104 | 1106 |
| Stein, Benjamin. (See Lauferty and Stein.) | | | | | | |
| Stein, Christine M., Chicago, Ill. Cape | 723,750 | Mar 24 | 3879 | 873 | 103 | 857 |
| Stein, Emil G. H., and J. Mandel, New York, N. Y. Coupling for air-conduits | 726,004 | Apr. 21 | 2925 | 665 | 103 | 1820 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | Spec. | Drg. | Vol. | Page. |
| Stein, Frederick W., Jersey City, N. J. Chimney-cowl | 733,762 | July 14 | 1892 | 446 | 105 | 416 |
| Stein, George, New York, N. Y. Electric lamp | 729,906 | June 2 | 703 | 155<br>156 | 104 | 1271 |
| Stein, George J., Mount Carmel, Pa. Time stock-feeder | 717,637 | Jan. 6 | 204 | 51 | 102 | 44 |
| Stein, John B., Morgantown, W. Va. Mold | 729,439 | May 26 | 4856 | 1076 | 104 | 1077 |
| Stein, John H., Detroit, Mich. Metal kite-frame | 724,402 | Mar. 31 | 5203 | 1166 | 103 | 1146 |
| Stein, Louis N., Rochester, N. Y. Sleeve-head | 734,198 | July 21 | 2769 | 649 | 105 | 618 |
| Stein, William S., Lincoln, Nebr. Tooth-brush | 743,582 | Nov. 10 | 1576 | 330 | 107 | 353 |
| Steinback, Gustaf A., Elkpoint, S. D. Cultivator | 730,980 | June 16 | 2652 | 590<br>591 | 104 | 1715 |
| Steinberg, Isaac, Nashville, Tenn. Automatic feeder for stock | 735,167 | Aug. 4 | 236 | 47 | 105 | 1033 |
| Steinberger, Louis, Brooklyn, N. Y. Insulated strain | 724,351 | Mar. 31 | 5093 | 1140 | 103 | 1121 |
| Steinberger, Louis, Brooklyn, N. Y. Locking-hanger | 729,449 | May 26 | 4858 | 1076 | 104 | 1077 |
| Steinberger, Louis, Brooklyn, N. Y. Clip | 732,598 | June 30 | 5748 | 1276 | 104 | 2387 |
| Steinberger, Louis, New York, N. Y. Turnbuckle-strain | 732,599 | June 30 | 5750 | 1276 | 104 | 2387 |
| Steinberger, Louis, New York, N. Y. Spheroidal strain | 735,611 | Aug. 4 | 1103 | 235 | 105 | 1215 |
| Steinberger, Louis, New York, N. Y. Single-link strain | 735,612 | Aug. 4 | 1105 | 235 | 105 | 1215 |
| Steinberger, Louis, New York, N. Y. Suspension-fixture | 735,613 | Aug. 4 | 1107 | 235 | 105 | 1216 |
| Steinbock, Ernest, assignor to National Pneumatic Service Company, Chicago, Ill. Terminal for pneumatic-despatch tubes | 730,715 | June 9 | 2167 | 481 | 104 | 1593 |
| Steinbock, Henry G. (See Schlieper and Steinbock.) | | | | | | |
| Steinborg, John, assignor to Fox River Valley Knitting Company, Menasha, Wis. Article of apparel | 733,603 | July 14 | 1617 | 383 | 105 | 359 |
| Steinbrecher, Willi, Berlin, Germany. Dough kneading and forming machine | 739,513 | Sept. 22 | 3813 | 854 | 106 | 865 |
| Steinbrecker, John, assignor of one-half to R. M. Hessel, Francis Creek, Wis. Gate | 748,023 | Dec. 29 | 5055 | 1141 | 107 | 2290 |
| Steinbrenner, Andrew G., St. Louis, Mo. Roller side bearing | 727,017 | May 5 | 395 | 83 | 104 | 86 |
| Steinbrenner, Andrew G., St. Louis, Mo. Side bearing | 734,989 | July 28 | 4259 | 989<br>990 | 105 | 944 |
| Steinbrenner, Andrew G., St. Louis, Mo. Roller side bearing | 734,990 | July 28 | 4261 | 990 | 105 | 944 |
| Steinbrenner, Andrew G., St. Louis, Mo. Grain-car door | 745,259 | Nov. 24 | 4762 | 1040 | 107 | 1057 |
| Steinbrenner, Andrew G., St. Louis, Mo. Grain-car door | 746,400 | Dec. 8 | 1988 | 453<br>454 | 107 | 1543 |
| Steiner, Arnold, assignor to Chemical Works, formerly Sandoz, Basle, Switzerland. Sulfo-acid of aromatic aldehyde and making same | 731,139 | June 16 | 2960 | ------ | 104 | 1777 |
| Steiner, John G., Bluffton, Ohio. Pumping system | 731,241 | June 16 | 3138 | 696<br>697 | 104 | 1811 |
| Steiner, John G., assignor of one-half to A. Klay, Bluffton, Ohio. Derrick for raising smoke-stacks | 731,079 | June 16 | 2840 | 631 | 104 | 1754 |
| Steinhauser, William E., Allegheny, Pa. Brake-shoe | 727,224 | May 5 | 760 | 162 | 104 | 164 |
| Steinhoff, Henry C., Union, N. J. Gas-burning attachment for coal cooking-stoves | 729,233 | May 26 | 4512 | 995 | 104 | 1006 |
| Steinkamp, Joseph G. (See Weitzel, Jacob F., assignor.) | | | | | | |
| Steinkoenig, Adam, Cincinnati, Ohio. Filter | 729,693 | June 2 | 298 | 69 | 104 | 1190 |
| Steinmetz, Charles P., Schenectady, N. Y., assignor to General Electric Company. Generating alternating currents | 723,061 | Mar. 17 | 2606 | 587 | 103 | 583 |
| Steinmetz, Charles P., Schenectady, N. Y., assignor to General Electric Company. System of electrical distribution | 728,321 | May 19 | 2848 | 630 | 104 | 645 |
| Steinmetz, Charles P., Schenectady, N. Y., assignor to General Electric Company. System of electrical distribution | 728,322 | May 19 | 2851 | 630 | 104 | 646 |
| Steinmetz, Charles P., Schenectady, N. Y., assignor to General Electric Company. System of electrical distribution | 729,234 | May 26 | 4513 | 995 | 104 | 1006 |
| Steinmetz, Charles P., Schenectady, N. Y., assignor to General Electric Company. System of electrical distribution | 729,235 | May 26 | 4515 | 995 | 104 | 1006 |
| Steinmetz, Charles P., Schenectady, N. Y., assignor to General Electric Company. Electric protective device | 729,236 | May 26 | 4517 | 995 | 104 | 1007 |
| Steinmetz, Charles P., Schenectady, N. Y., assignor to General Electric Company. Alternating-current motor | 729,441 | May 26 | 4860 | 1077 | 104 | 1078 |
| Steinmetz, Charles P., Schenectady, N. Y., assignor to General Electric Company. Armature for dynamo-electric machines | 730,582 | June 9 | 1935 | 430 | 104 | 1544 |
| Steinmetz, Charles P., Schenectady, N. Y., assignor to General Electric Company. Dynamo-electric machine | 732,906 | July 7 | 371 | 90, 91 | 105 | 81 |
| Steinmetz, Charles P., Schenectady, N. Y., assignor to General Electric Company. Variable-speed induction-motor | 733,341 | July 7 | 1154 | 274 | 105 | 243 |
| Steinmetz, Charles P., Schenectady, N. Y., assignor to General Electric Company. Synchronizing alternator | 733,515 | July 14 | 1468 | 349 | 105 | 328 |
| Steinmetz, Charles P., Schenectady, N. Y., assignor to General Electric Company. System of distribution | 745,460 | Dec. 1 | 286 | 69 | 107 | 1160 |
| Steinmetz, Joseph A., Philadelphia, Pa. Money-box | 738,736 | Sept. 8 | 2365 | 520 | 106 | 521 |
| Steinmetz, Joseph A., Philadelphia, Pa. Coin-receptacle | 742,512 | Oct. 27 | 4105 | 925 | 106 | 2159 |
| Steinmetz, Joseph A., Philadelphia, Pa. Pile-shoe | 744,256 | Nov. 17 | 2887 | 618 | 107 | 645 |
| Steinmiller, Jacob. (See Emrich and Krautter, assignors.) | | | | | | |
| Steinwitz, Ignatz. (See Gross, Max, assignor.) | | | | | | |
| Steljes, Walter S., London, England. Printing-telegraph | 743,948 | Nov. 10 | 2227 | 481 | 107 | 491 |
| Stelle, Clifford F. (See Dungan and Stelle.) | | | | | | |
| Stelle, Herbert D., Denver, Colo., assignor of one-third to J. B. Rowray, Los Angeles, Cal. Switch-operating mechanism for railways | 742,080 | Oct. 20 | 3320 | 740<br>741 | 106 | 1982 |
| Stellner, William, Carlton, assignor to S. G. Dickson, Melbourne, Victoria, Australia. Machine for making horseshoes | 744,640 | Nov. 17 | 3547 | 765 | 107 | 785 |
| Stelter, Francis C. W., Long Island City, N. Y. Calendar | 722,924 | Mar. 17 | 2375 | 531 | 103 | 535 |
| Stelter, Francis C. W., Long Island City, N. Y. Calendar. (Reissue) | 12,163 | Oct. 20 | 3427 | 764 | 106 | 2003 |
| Stelter, Francis C. W., Astoria, N. Y. Ash-cart | 732,459 | June 30 | 5488 | 1217 | 104 | 2330 |
| Steltz, Franklin, assignor to M. K. Steltz, Pottstown, Pa. Meat-tenderer | 747,260 | Dec. 15 | 3594 | 812 | 107 | 1923 |
| Steltz, Mary K. (See Steltz, Franklin, assignor.) | | | | | | |
| Stem, William H. (See Wright and Stem.) | | | | | | |
| Stem, William H. (See Wright, Stem, and Farlow.) | | | | | | |
| Stemme, Alwin H., assignor to himself and J. Furgeson, New Haven, Conn. Collar or cuff button | 718,168 | Jan. 13 | 1206 | 267 | 102 | 275 |
| Stempel, Edward, Buffalo, N. Y. Combined button and tie-holder | 748,434 | Dec. 29 | 5805 | 1322 | 107 | 2453 |
| Stempel, Omar A., assignor of one-fourth to H. J. Drane, Lakeland, Fla. Applying protective composition | 732,663 | June 30 | 5871 | ------ | 104 | 2413 |
| Stempel, Omar A., assignor of one-half to C. M. Marsh, Lakeland, Fla. Protecting submerged devices | 736,891 | Aug. 18 | 3477 | 773 | 105 | 1755 |
| Stempel, Omar A., assignor of one-half to C. M. Marsh, Lakeland, Fla. Protective covering for piles or the like | 737,518 | Aug. 25 | 4652 | 1044 | 105 | 2028 |
| Stendebach, Carl F. P., Möckern, near Leipzig, Germany. Projectile for smooth and rifled bores | 730,308 | June 9 | 1429 | 315 | 104 | 1435 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| Stendebach, John P. (See Casey and Stendebach.) | | | | | | |
| Stender, Herman, Los Angeles, Cal., assignor to Automatic Focusing Camera Company. Automatic focusing solar printer | 730,583 | June 9 | 1936 | 430 | 104 | 1544 |
| Stender, William, Milwaukee, Wis. Combined bottle and stopper | 722,053 | Mar. 3 | 738 | 164 | 103 | 159 |
| Stengard, John E. (See Berrye, Kane, and Stengard.) | | | | | | |
| Stengel, Charles, Hamilton, Ohio. Caster | 735,838 | Aug. 11 | 1536 | 329 | 105 | 1327 |
| Stenger, Samuel, and J. C. Mallory, Altoona, Pa. Goods-exhibitor | 734,444 | July 21 | 3223 | 759 | 105 | 715 |
| Stenhouse, Alexander. (See Schonfeld and Stenhouse.) | | | | | | |
| Stenvall, Bruno, New York, N. Y. Trolley | 740,707 | Oct. 6 | 592 | 132 | 106 | 1375 |
| Stephan, August J., assignor of one-half to S. T. Swalum, Salt Lake City, Utah. Measuring-faucet | 738,737 | Sept. 8 | 2366 | 520 | 106 | 521 |
| Stephan, Karl, assignor to Chemische Fabrik auf Actien, vorm. E. Schering, Berlin, Germany. Making camphene | 725,890 | Apr. 21 | 2730 | ..... | 103 | 1781 |
| Stephens, Anson P. (See Balch, David M., assignor.) | | | | | | |
| Stephens, Arthur J., and C. A. Goodale, assignors to Electric Floor Finishing Company, Pasadena, Cal. Machine for planing floors | 721,922 | Mar. 3 | 510 | 112 | 103 | 113 |
| Stephens, Clayton T., Reno, Mich. Whiffletree | 732,015 | June 23 | 4607 | 1028 | 104 | 2135 |
| Stephens, Harvey B., Eaton, Ohio. Building-block grapple | 725,169 | Apr. 14 | 1401 | 317 | 103 | 1481 |
| Stephens, James G., London, England, and G. A. Oesterreich, Berlin, Germany; said Oesterreich assignor to said Stephens. Mustache-trainer | 725,632 | Apr. 14 | 2253 | 509 | 103 | 1664 |
| Stephens, John, J. G. Danks, and R. J. Beatty, Muncie, Ind. Furnace for heating metal sheets | 729,101 | May 26 | 4272 | 944 | 104 | 955 |
| Stephens, John H. (See Beard and Stephens.) | | | | | | |
| Stephens, John N., Houghton, Mich. Feed-water-regulating means | 727,018 | May 5 | 397 | 83 | 104 | 86 |
| Stephens, Noble A., Marion, Ind. Vault-trap | 732,925 | Mar. 17 | 2376 | 531<br>532 | 103 | 535 |
| Stephens, Samuel, Somerville, assignor to Wickersham Quoin Company, Boston, Mass. Printer's furniture | 747,794 | Dec. 22 | 4574 | 1032 | 107 | 2162 |
| Stephens, William G. (See Bartholomew, Phineas L., assignor.) | | | | | | |
| Stephenson, Charles H., Lynn, Mass. Garbage-receptacle container | 732,766 | Mar. 17 | 2093 | 468<br>469 | 103 | 478 |
| Stephenson, Clement L., New York, N. Y. Skirt and shirt-waist holder | 727,479 | May 5 | 1220 | 269 | 104 | 264 |
| Stephenson, Effie L., *et al.* (See Stephenson, Levi T., assignor.) | | | | | | |
| Stephenson, Henry J., Lynn, Mass. Holder for rolls of paper | 722,159 | Mar. 3 | 923 | 205 | 103 | 197 |
| Stephenson, John W., Toledo, assignor to National Malleable Castings Company, Cleveland, Ohio. Journal-box | 718,584 | Jan. 13 | 2042 | 443<br>444 | 102 | 455 |
| Stephenson, John W., Toledo, assignor to National Malleable Castings Company, Cleveland, Ohio. Journal-box | 718,585 | Jan. 13 | 2043 | 444 | 102 | 455 |
| Stephenson, John W., Toledo, assignor to National Malleable Castings Company, Cleveland, Ohio. Dust-guard for journal-boxes | 742,750 | Oct. 27 | 4525 | 1025 | 106 | 2250 |
| Stephenson, Levi T., Trinidad, Colo. Rail-joint | 744,812 | Nov. 24 | 3894 | 837 | 107 | 878 |
| Stephenson, Levi T., Trinidad, Colo., assignor of three-fourths to O. M. Jorndt and E. L. Stephenson, Kansas City, Kans., and C. G. Jorndt, San Francisco, Cal. Nut-locking washer | 728,323 | May 19 | 2853 | 630 | 104 | 646 |
| Stephenson, Miner A., assignor of one-half to T. A. Brandes, Taylor, Tex. Means for equalizing the distribution of cotton in cotton-boxes | 732,969 | July 7 | 474 | 118 | 105 | 102 |
| Stephenson, Rees B. (See Bucher and Stephenson.) | | | | | | |
| Stephenson, Thomas S. (See Knapp, Stephenson, and Vroom.) | | | | | | |
| Stephenson, Thomas S. (See Knapp, Vroom, Stephenson, and Arbuckle.) | | | | | | |
| Stephenson, William, St. Louis Park, Minn. Scraper for disk seed-drills | 718,885 | Jan. 20 | 2593 | 579 | 102 | 581 |
| Steppe, John P., Brooklyn, N. Y., assignor to S. Sternau & Co. Alcohol-burner | 720,634 | Feb. 17 | 2295 | 526 | 102 | 1335 |
| Steppe, John P., assignor to S. Sternau & Co., Brooklyn, N. Y. Alcohol-lamp | 736,454 | Aug. 18 | 2633 | 578 | 105 | 1580 |
| Stepzinski, Albert A., Peoria, Ill., assignor to Union Hardware Company, Torrington, Conn. Skate-sharpener | 721,843 | Mar. 3 | 341 | 75 | 103 | 75 |
| Stereopticon and Film Exchange. (See Amet, Edward H., assignor.) | | | | | | |
| Stereopticon and Film Exchange. (See Edmonds, Fredric C., assignor.) | | | | | | |
| Sterki, Victor, New Philadelphia, Ohio. Reminder | 734,991 | July 28 | 4263 | 990 | 105 | 945 |
| Sterling, Charles O., Washington, D. C. Curling-iron | 744,426 | Nov. 17 | 3196 | 686 | 107 | 713 |
| Sterling Manufacturing Company. (See Lincoln, Ward, assignor.) | | | | | | |
| Stern, Alexander F., Marine City, Mich. Water-filter | 742,254 | Oct. 27 | 3651 | 816 | 106 | 2066 |
| Stern, George, Charlottenburg, Germany, assignor to General Electric Company. Electric meter | 744,124 | Nov. 17 | 2625 | 560<br>561 | 107 | 589 |
| Stern, George, and A. Lotz, Charlottenburg, Germany, assignors to General Electric Company. Alternating-current meter | 745,461 | Dec. 1 | 288 | 69 | 107 | 1160 |
| Stern, Julius, trustee. (See Smith, William B., assignor.) (Reissue.) | | | | | | |
| Sternau & Co., S. (See Steppe, John P., assignor.) | | | | | | |
| Sternberger, Charles, and J. C. Busch, Milwaukee, Wis. Centering device for cutter and boring bars | 746,894 | Dec. 15 | 2902 | 669 | 107 | 1769 |
| Sterne, Albert E., Indianapolis, Ind. Photochemical and electrotherapeutical apparatus. | 719,901 | Feb. 3 | 879 | 206 | 102 | 1009 |
| Sterne, Albert E., Indianapolis, Ind. Photochemical and electrotherapeutical apparatus. | 724,215 | Mar. 31 | 4817 | 1079<br>1080 | 103 | 1066 |
| Sterne Bros. Co. (See Sterne, Charles E., assignor.) | | | | | | |
| Sterne, Charles E., assignor to Sterne Bros. Co., San Diego, Cal. Speed-governor | 723,417 | Mar. 24 | 3292 | 736 | 103 | 735 |
| Sterne, Davey, assignor of two-thirds to J. W. Brown and J. A. Konsey, Washington, D. C. Wrench | 747,261 | Dec. 15 | 3595 | 812 | 107 | 1923 |
| Sternheimer, Leonard H., Jonesboro, Ark. Measuring-funnel and device for supporting same | 733,294 | July 7 | 1071 | 255 | 105 | 225 |
| Sterrett, Robert H. (See Knibbs and Sterrett.) | | | | | | |
| Stetson, Almon B., Malden, Mass., assignor to American Telephone and Telegraph Company. Substation telephone-circuit | 732,795 | July 7 | 180 | 46 | 105 | 42 |
| Stetson, Almon B., Malden, Mass., assignor to American Telephone and Telegraph Company. Means for protecting telephone circuits and apparatus | 736,033 | Aug. 11 | 1901 | 407 | 105 | 1406 |
| Stetson, Arthur H., *et al.* (See Roberts, Henry P., assignor.) | | | | | | |
| Stetson, Myron J., New York, N. Y. Rotary churn-dasher | 718,227 | Jan. 13 | 1313 | 290 | 102 | 297 |
| Stetson, Thomas R., New York, N. Y. Bottle-stopper | 747,498 | Dec. 22 | 4033 | 906 | 107 | 2040 |
| Stetter, John M., Muncie, Ind. Die | 734,199 | July 21 | 2769 | 650 | 105 | 618 |
| Stetter, John M., Muncie, Ind. Trimming-machine | 734,992 | July 28 | 4264 | 990<br>991<br>992 | 105 | 945 |
| Stetter, John M., Muncie, Ind. Feeder for headed articles | 735,310 | Aug. 4 | 527 | 107 | 105 | 1093 |
| Steude, Edward E., Newcastle, Cal. Irrigator | 718,739 | Jan. 20 | 2324 | 513 | 102 | 524 |
| Steuer, Frederick W. (See Tagliabue and Steuer.) | | | | | | |
| Steuer, Herman. (See White and Steuer.) | | | | | | |
| Steven, Henri, Jr., Charleroi, Belgium. Steam-engine | 730,309 | June 9 | 1430 | 315 | 104 | 1436 |
| Stevens, Albert G., Cape May, N. J. Non-refillable bottle | 718,031 | Jan. 6 | 964 | 214 | 102 | 208 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| Stevens, Albert G., Cape May, N. J. Chemical-mixer | 748,319 | Dec. 29 | 5585 | 1273 | 107 | 2404 |
| Stevens, Ansel, Westbrooke, Me. Cutting apparatus | 742,923 | Nov. 3 | 177 | 41 | 107 | 39 |
| Stevens, Benjamin A., Toledo, Ohio. Bowling-pin | 720,982 | Feb. 17 | 2912 | 668 | 102 | 1466 |
| Stevens, Benjamin A., Toledo, Ohio. Bowling-pin | 721,976 | Mar. 3 | 606 | 135 | 103 | 132 |
| Stevens, Byron, Schoharie, N. Y. Turbine-motor | 748,228 | Dec. 29 | 5437 | 1239 | 107 | 2372 |
| Stevens, Carlos W., *et al.* (See Pierce, Aaron H., assignor.) | | | | | | |
| Stevens, Charles W., Harvey, Ill. Manufacture of artificial stone | 722,464 | Mar. 10 | 1512 | 333 | 103 | 338 |
| Stevens, Charles W., Harvey, Ill. Manufacture of artificial stone | 742,924 | Nov. 3 | 179 | 41 | 107 | 40 |
| Stevens, Egbert, Modesto, Cal., and C. Terborg, Chicago, Ill. Railway-gate signal | 726,367 | Apr. 28 | 3604 | 818 | 103 | 1976 |
| Stevens, Ervin W., Philadelphia, Pa. Machine for molding plastic material | 726,475 | Apr. 28 | 3802 | 860, 861, 862 | 103 | 2015 |
| Stevens, Ervin W., Norristown, Pa. Machine for molding artificial stone | 737,169 | Aug. 25 | 3969 | 882, 883 | 105 | 1879 |
| Stevens, Frank A., Randolph, N. Y., assignor of one-half to C. E. Spoor, Galeton, Pa. Corner-shield | 734,445 | July 21 | 3225 | 759 | 105 | 715 |
| Stevens, Frederick A., assignor of one-half to A. E. Lenz, Providence, R. I. Bridge for rimless spectacles | 724,755 | Apr. 7 | 628 | 147 | 103 | 1303 |
| Stevens, Frederick M., assignor to Matthews & Willard Manufacturing Company, Waterbury, Conn. Tubular lantern | 730,981 | June 16 | 2654 | 591 | 104 | 1715 |
| Stevens, George E., Lynn, Mass., assignor to General Electric Company. Globe-holder for arc-lamps | 733,342 | July 7 | 1156 | 274 | 105 | 243 |
| Stevens, George E., assignor of one-half to W. R. Miller, Auburn, Me. Ventilator | 747,658 | Dec. 22 | 4329 | 978 | 107 | 2106 |
| Stevens, George W., San Francisco, Cal. Fruit-carrier | 733,683 | July 14 | 1748 | 414 | 105 | 385 |
| Stevens, George W., Boston, Mass. Device for decreasing the noise upon railways or other rolling machinery | 734,200 | July 21 | 2770 | 650 | 105 | 618 |
| Stevens, Henry, Denver, Colo. Toe-clip | 726,804 | Apr. 28 | 4453 | 1005 | 103 | 2145 |
| Stevens, Herbert E., Windber, and B. Gellatly, Pittsburg, Pa.; said Gellatly assignor to said Stevens. Wire-suspending device | 741,563 | Oct. 13 | 2255 | 504 | 106 | 1748 |
| Stevens, James F., Port Chester, N. Y. Bread mixer and kneader | 733,763 | July 14 | 1893 | 447 | 105 | 416 |
| Stevens, James F., Port Chester, N. Y. Bread mixer and kneader. (Reissue) | 12,167 | Nov. 3 | 1206 | 249 | 170 | 258 |
| Stevens, James S., Barberton, Ohio. Valve | 719,528 | Feb. 3 | 205 | 48 | 102 | 867 |
| Stevens, James S., Barberton, Ohio. Tube-expander | 721,340 | Feb. 24 | 3627 | 825 | 102 | 1637 |
| Stevens, James S., Pueblo, Colo. Tubular boiler | 727,480 | May 5 | 1221 | 270 | 104 | 264 |
| Stevens, John F., Philadelphia, Pa. Electrical measuring instrument | 735,168 | Aug. 4 | 238 | 47, 48 | 105 | 1033 |
| Stevens, John F., Philadelphia, Pa. Dial-plate | 746,600 | Dec. 8 | 2335 | 534 | 107 | 1621 |
| Stevens, John H., Newark, N. J., assignor to Celluloid Company, New York, N. Y. Pyroxylin compound | 718,670 | Jan. 20 | 2192 | ..... | 102 | 497 |
| Stevens, Josiah P., *et al.* (See Pierce, Aaron H., assignor.) | | | | | | |
| Stevens, Josiah P., Atlanta, Ga. Combined seed-planter and fertilizer-distributer | 743,949 | Nov. 10 | 2229 | 482 | 107 | 491 |
| Stevens, Matthew J., Ruby, Mich. Stove attachment | 736,649 | Aug. 18 | 3012 | 665 | 105 | 1658 |
| Stevens, Richard H. (See Dunning, James L., assignor.) | | | | | | |
| Stevens, Richard H., Munhall, Pa. Ladle-car | 719,389 | Jan. 27 | 3553 | 793 | 102 | 798 |
| Stevens, Robert A., assignor of one-half to B. B. Watkins, Dyersburg, Tenn. Display-case | 735,614 | Aug. 4 | 1110 | 236 | 105 | 1217 |
| Stevens, Samuel D., Chandler, Tex. Mechanical movement | 748,024 | Dec. 29 | 5055 | 1141 | 107 | 2290 |
| Stevens, Sylvanus, Grayling, Mich. Salt-cellar | 735,169 | Aug. 4 | 241 | 48 | 105 | 1034 |
| Stevens, Thomas G. (See Facer and Stevens.) | | | | | | |
| Stevens, Thomas G., Gravesend, England. Spring for vehicles | 721,107 | Feb. 17 | 3153 | 725 | 102 | 1521 |
| Stevens, Thomas G., Greenhithe, England. Weighing-truck | 746,895 | Dec. 15 | 2903 | 669 | 107 | 1769 |
| Stevens, William B., St. Marys, Canada. Veterinary forceps | 739,453 | Sept. 22 | 3718 | 828 | 106 | 844 |
| Stevens, William E., Newark, N. J., assignor of one-half to S. C. Hirschberg, New York, N. Y. Combined lorgnette and opera-glass | 731,820 | June 23 | 4236 | 943, 944 | 104 | 2056 |
| Stevens, William G., assignor of one-half to S. M. Neely and J. W. May, Memphis, Tenn. Alloy | 726,588 | Apr. 28 | 4050 | ..... | 103 | 2061 |
| Stevenson, Charles E., Manaimo, Canada, and R. Watson, assignors to 20th Century Fire Escape Co., Seattle, Wash. Hoisting apparatus | 738,705 | Sept. 8 | 2321 | 510 | 106 | 512 |
| Stevenson, Charles M., assignor of one-half to A. Beck, Harvard, Ill. Corn-planter | 743,583 | Nov. 10 | 1577 | 330, 331 | 107 | 353 |
| Stevenson, Clarence H. (See Hills, Richard C., assignor.) | | | | | | |
| Stevenson, Edwin D. (See Porter and Stevenson.) | | | | | | |
| Stevenson, Henry W., *et al.* (See Fosnaugh, Harrison W., assignor.) | | | | | | |
| Stevenson, John, Jr., Sharon, Pa. Rephosphorizing steel | 724,140 | Mar. 31 | 4676 | ..... | 103 | 1039 |
| Stevenson, John, Jr., Sharon, Pa. Alloy | 724,141 | Mar. 31 | 4678 | ..... | 103 | 1039 |
| Stevenson, John, Jr., Sharon, Pa. Making alloys | 724,142 | Mar. 31 | 4679 | ..... | 103 | 1039 |
| Stevenson, John, Edinburgh, Scotland. Changeable picture | 736,034 | Aug. 11 | 1907 | 407 | 105 | 1407 |
| Stevenson, John, Edinburgh, Scotland. Changeable picture | 736,035 | Aug. 11 | 1908 | 407 | 105 | 1407 |
| Stevenson, John H., *et al.* (See Fosnaugh, Harrison W., assignor.) | | | | | | |
| Stevenson, John S., Detroit, Mich., assignor to American Car & Foundry Company, St. Louis, Mo. Multiple punching-machine | 741,180 | Oct. 13 | 1477 | 335, 336 | 106 | 1580 |
| Stevenson, John S., Detroit, Mich., assignor to American Car & Foundry Company, St. Louis, Mo. Multiple punching-machine | 741,181 | Oct. 13 | 1480 | 336 | 106 | 1581 |
| Stevenson, Sim J., Chicago, Ill. Filling for mattresses | 720,292 | Feb. 10 | 1633 | ..... | 102 | 1184 |
| Stevenson, Thomas B., Madison Township, Columbiana county, Ohio. Nut-lock | 721,844 | Mar. 3 | 342 | 76 | 103 | 75 |
| Stevenson, William B., Witwatersrand Gold Fields, Transvaal. Safety-gear for mine skips, cages, &c | 740,942 | Oct. 6 | 1019 | 230 | 106 | 1463 |
| Stevick, Hiram E., Evans City, Pa. Nut-lock | 729,442 | May 26 | 4863 | 1077 | 104 | 1079 |
| Stevick, Hiram E., Evans City, Pa. Locking hat-pin | 730,310 | June 9 | 1431 | 316 | 104 | 1436 |
| Steward, Anna J., administratrix. (See Steward, Aurelius.) | | | | | | |
| Steward, Aurelius, deceased; A. J. Steward, administratrix, assignor to Wheeler & Wilson Manufacturing Company, Bridgeport, Conn. Bobbin-controlling mechanism for sewing-machines | 723,330 | Mar. 24 | 3108 | 700 | 103 | 701 |
| Steward, John A., Rutland, Vt. Can-soldering machine | 732,970 | July 7 | 476 | 118, 119 | 105 | 102 |
| Steward, John F., Chicago, Ill. Grain-harvester | 720,635 | Feb. 17 | 2209 | 527 | 102 | 1335 |
| Steward, John F., Chicago, Ill. Windrowing attachment for mowing-machines | 723,418 | Mar. 24 | 3294 | 737 | 103 | 735 |
| Steward, John F., Chicago, Ill. Bunching attachment for mowers | 742,255 | Oct. 27 | 3652 | 816 | 106 | 2066 |
| Steward, John F., Chicago, Ill. Photographic-film-developing apparatus | 746,756 | Dec. 15 | 2626 | 603 | 107 | 1707 |
| Steward, John F., assignor to International Harvester Company, Chicago, Ill. Mowing-machine | 738,371 | Sept. 8 | 1678 | 363 | 106 | 377 |
| Steward, John F., Chicago, Ill., assignor to International Harvester Company. Harvesting-machine | 742,256 | Oct. 27 | 3654 | 816 | 106 | 2067 |
| Steward, Nathan H., Philadelphia, Pa. Expansion-bolt | 724,216 | Mar. 31 | 4819 | 1080 | 103 | 1066 |
| Steward, Nathan H., Philadelphia, Pa. Expansion-bolt | 741,983 | Oct. 20 | 3082 | 689 | 106 | 1935 |
| Stewart, Albert. (See Nelson, Stewart, and Foster.) | | | | | | |
| Stewart, Alexander, Jr. (See Stewart, William C., assignor.) | | | | | | |
| Stewart, Alexander S., Neche, N. D. Grain-treating apparatus | 732,132 | June 30 | 4853 | 1080 | 104 | 2198 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|
| | | | Spec. | Drg. | Vol. | Page. |
| Stewart, Alfred C., Santa Paula, Cal. Automatic regulator for liquid-fuel burners | 736,563 | Aug. 18 | 2839 | 622 | 105 | 1624 |
| Stewart, Burdick A., Pittsfield, Mass. Motor-vehicle steering apparatus | 745,401 | Dec. 1 | 164 | 37 | 107 | 1135 |
| Stewart, Daniel M. (See Bonner and Euchenhofer, assignors.) | | | | | | |
| Stewart, David, Govan, Scotland. Nut or pipe wrench | 730,311 | June 9 | 1432 | 316 | 104 | 1436 |
| Stewart, David, Pittsburg, Pa. Tombstone | 734,770 | July 28 | 3851 | 898 | 105 | 859 |
| Stewart, David M., Greenfield, S. B. Saffell, Indianapolis, and E. J. Andrews, Greenfield, Ind. Knockdown adjustable chair | 728,141 | May 12 | 2477 | 551 | 104 | 544 |
| Stewart, Frederick H., and G. J. Neth, Milwaukee, Wis. Card-clamp | 742,805 | Oct. 27 | 4618 | 1047 | 106 | 2270 |
| Stewart, George H. (See Johnson, Joseph A., assignor.) | | | | | | |
| Stewart, George W., assignor of one-half to F. T. Locke, Ticonderoga, N. Y. Hydrocarbon-filter | 723,556 | Mar. 24 | 3548 | 794 | 103 | 787 |
| Stewart, Harry B. (See Turner and Stewart.) | | | | | | |
| Stewart, Henry A., Dundee, Mich. Game device | 739,942 | Sept. 29 | 4644 | 1042 | 106 | 1060 |
| Stewart, Hugh R., Chicago, Ill. Guide for fishing hooks or bait | 744,942 | Nov. 24 | 4115 | 887 | 107 | 924 |
| Stewart, James A., Pittsburg, Pa. Folding crate | 722,161 | Mar. 3 | 927 | 205 | 103 | 197 |
| Stewart, James H. (See Nicol and Stewart.) | | | | | | |
| Stewart, James T. (See Martin, Walter N., assignor.) | | | | | | |
| Stewart, John C., assignor of one-half to A. S. Burt, Fort Myer, Va. Pressure-regulator | 734,993 | July 28 | 4268 | 992 | 105 | 946 |
| Stewart, John H., Waterloo, Iowa. Machine for forming concrete building-blocks | 737,881 | Sept. 1 | 659 | 140 | 106 | 145 |
| Stewart, John K., Chicago, Ill. Flexible shaft | 729,694 | June 2 | 299 | 69 | 104 | 1190 |
| Stewart, Mack, New Cambria, Mo. Nut-lock | 727,019 | May 5 | 399 | 84 | 104 | 87 |
| Stewart, Otis H., Middleport, Ohio. Cabinet for sheet-music | 725,170 | Apr. 14 | 1403 | 317 | 103 | 1481 |
| Stewart, Richard C., Jr., and W. A., Covington, Ky. Fence-rail | 743,046 | Nov. 3 | 436 | 95 | 107 | 92 |
| Stewart, Richard M. (See Lyon and Davis, assignors.) | | | | | | |
| Stewart, Robert W., Findlay, Ohio. Kiln | 746,757 | Dec. 15 | 2627 | 603, 604 | 107 | 1707 |
| Stewart, Ruben W. J., assignor to J. M. Sanders, Dalton, Ga. Pea-thresher | 747,099 | Dec. 15 | 3294 | 749, 750 | 107 | 1861 |
| Stewart, Samuel, Brighton, and H. Hughes, Woodward, Ala. Metallurgical furnace | 737,519 | Aug. 25 | 4653 | 1044, 1045 | 105 | 2029 |
| Stewart, Samuel, Brighton, and H. Hughes, Woodward, Ala. Gas-seal for metallurgical furnaces | 737,520 | Aug. 25 | 4655 | 1045 | 105 | 2030 |
| Stewart, Samuel B., Jr., Schenectady, N. Y., assignor to General Electric Company. Third-rail insulator | 723,062 | Mar. 17 | 2608 | 588 | 103 | 583 |
| Stewart, Samuel B., Jr., Schenectady, N. Y., assignor to General Electric Company. Third-rail electric railway | 728,324 | May 19 | 2855 | 630 | 104 | 646 |
| Stewart, Samuel B., Jr., Schenectady, N. Y., assignor to General Electric Company. Electromagnetic switch for electric railways | 735,170 | Aug. 4 | 241 | 48 | 105 | 1034 |
| Stewart, Samuel B., Jr., Schenectady, N. Y., assignor to General Electric Company. System of electrical distribution | 735,171 | Aug. 4 | 245 | 48 | 105 | 1034 |
| Stewart, Samuel B., Jr., Schenectady, N. Y., assignor to General Electric Company. Circuit-breaker | 744,125 | Nov. 17 | 2627 | 561 | 107 | 589 |
| Stewart, Samuel B., Jr., Schenectady, N. Y., assignor to General Electric Company. Air-pump governor | 745,683 | Dec. 1 | 666 | 154 | 107 | 1240 |
| Stewart, Samuel R., Cooper Heights, Ga. Combined harrow and cultivator | 722,261 | Mar. 10 | 1129 | 249 | 103 | 255 |
| Stewart, Scott, Rievesville, W. Va. Shade-fixture | 721,341 | Feb. 24 | 3629 | 825 | 102 | 1637 |
| Stewart, Thomas B., W. H. Turner, and R. E. Dixon, Leeds, England. Automatic apparatus for controlling and operating the points of electric railways or tramways | 747,795 | Dec. 22 | 4576 | 1032, 1033 | 107 | 2163 |
| Stewart, Thomas B., W. H. Turner, and R. E. Dixon, Leeds, England. Apparatus for controlling and operating the points of electric railways or tramways | 747,796 | Dec. 22 | 4577 | 1033 | 107 | 2163 |
| Stewart, Timothy B., Hartford, Conn. Roof | 725,291 | Apr. 14 | 1608 | 363 | 103 | 1525 |
| Stewart, Wallace A. (See Stewart, Richard C., Jr., and W. A.) | | | | | | |
| Stewart, William, Moundsville, W. Va., assignor of one-half to W. P. Clark, Muncie, Ind. Glass-shearing machine | 737,791 | Sept. 1 | 438 | 94 | 106 | 97 |
| Stewart, William A., Wolcottville, Ind. Animal-crate | 744,641 | Nov. 17 | 3549 | 765 | 107 | 785 |
| Stewart, William C., assignor to A. Stewart, Jr., Lynn, Mass. Counter-skiving machine | 740,483 | Oct. 6 | 190 | 37, 38 | 106 | 1286 |
| Stewart, William J., Hammond, Ind. Barrel-lifter | 744,813 | Nov. 24 | 3896 | 837 | 107 | 879 |
| Stewart, Willis N., asssignor of one-half to H. E. Dick, London, England. Electric railway | 739,032 | Sept. 15 | 2915 | 647 | 106 | 657 |
| Steyermark, Ben. (See Belz, John H., assignor.) | | | | | | |
| Stickel, William C., Harmony, Pa. Nut-lock | 722,640 | Mar. 10 | 1823 | 405 | 103 | 408 |
| Sticker, Francis, New York, N. Y. Work-holder for grinding or other machines | 740,329 | Sept. 29 | 5348 | 1205 | 106 | 1207 |
| Sticker, Francis, assignor to C. A. Drucklieb, New York, N. Y. Steam-injector | 723,752 | Mar. 24 | 3882 | 873 | 103 | 857 |
| Stickler, Elias, Marengo, Iowa. Gate | 737,038 | Aug. 25 | 3752 | 833 | 105 | 1833 |
| Stickles, Fred G., *et al.* (See Wackerow, George L., assignor.) | | | | | | |
| Stickles, George A. (See Keith, Thomas K., assignor.) | | | | | | |
| Stickney, Burnham C., Elizabeth, assignor to Union Typewriter Company, Jersey City, N. J. Type-writing machine | 739,622 | Sept. 22 | 4012 | 896, 897 | 106 | 906 |
| Stickney, Charles A., St. Paul, Minn. Sparking igniter for explosive-engines | 730,056 | June 2 | 974 | 218 | 104 | 1326 |
| Stiefel, Henry C., Pittsburg, Pa. Fire-shovel | 736,798 | Aug. 18 | 3306 | 733 | 105 | 1718 |
| Stiefel, Ralph C., and R. T. Brown, Ellwood City, Pa., assignors to Standard Seamless Tube Company. Tube-drawing device | 718,671 | Jan. 20 | 2194 | 480 | 102 | 498 |
| Stiegelmann, Armand J., assignor to Badische Anilin & Soda Fabrik, Ludwigshafen-on-the-Rhine, Germany. Increasing the fastness of indigo dyeings | 720,501 | Feb. 10 | 1993 | ------ | 102 | 1260 |
| Stiegler, Oscar M., Boston, Mass. Clamp for use in connection with socket carbon-brush holders | 733,436 | July 14 | 1332 | 314 | 105 | 298 |
| Stiegler, Oscar W., New York, N. Y. Bridle | 734,004 | July 21 | 2380 | 559 | 105 | 534 |
| Stier, Henry A., Warren, Pa. Hose or pipe coupling | 727,858 | May 12 | 1965 | 438 | 104 | 436 |
| Stierle, John E., Marshfield, Wis. Strabismus-goggle | 742,081 | Oct. 20 | 3323 | 741 | 106 | 1982 |
| Stiffey, Stewart S., *et al.* (See Laughridge, William H., assignor.) | | | | | | |
| Stiggins, Edward A., Beverly, Mass., assignor to United Shoe Machinery Company, Paterson, N. J., and Boston, Mass. Edge-gage | 718,586 | Jan. 13 | 2044 | 445 | 102 | 455 |
| Stiggleman, James H., Wabash, Ind. Folding chair | 742,082 | Oct. 20 | 3325 | 741, 742 | 106 | 1982 |
| Stiggleman, James H., Wabash, Ind. Cabinet | 746,758 | Dec. 15 | 2628 | 604, 605 | 107 | 1707 |
| Stiles, Alexander, Martinsville, Ind. Noise and lightning arrester for telephone-wires | 735,839 | Aug. 11 | 1537 | 330 | 105 | 1328 |
| Stiles, Edward, New York, N. Y. Railway | 730,312 | June 9 | 1434 | 316 | 104 | 1436 |
| Stiles, George A., Somerville, Mass. Eyeglasses | 730,716 | June 9 | 2169 | 482 | 104 | 1593 |
| Stiles, George A., Somerville, Mass. Eyeglasses | 747,262 | Dec. 15 | 3596 | 812 | 107 | 1924 |
| Stiles, George W., Smithmill, Pa. Churn-motor | 719,056 | Jan. 27 | 2920 | 653 | 102 | 664 |
| Stiles, Harvey, *et al.* (See Clark, Alexander L., assignor.) | | | | | | |
| Stiles, Luther H., *et al.* (See Hachmann, Frederick, assignor.) | | | | | | |
| Stiles, Pearly, *et al.* (See Clark, Alexander L., assignor.) | | | | | | |
| Stiles, Thomas G., Arlington, N. J. Detector-bar clip and link | 748,329 | Dec. 29 | 5439 | 1240 | 107 | 2373 |
| Still, Henry, Baltimore, Md. Horse-feeding device | 734,103 | July 21 | 2594 | 608 | 105 | 582 |

*Alphabetical list of patentees*—Continued.

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| Still, Mentley F., Lapanza, Cal. Churn | 730,172 | June 2 | 1159 | 261 | 104 | 1363 |
| Stillfried, Rudolf C., Greifswald, Germany. Contrivance for actuating handsaws in cutting down trees | 746,191 | Dec. 8 | 1616 | 360 | 107 | 1466 |
| Stillman, Augustus M., Hartford, Conn. Metal-working machine | 725,292 | Apr. 14 | 1609 | 363<br>364 | 103 | 1526 |
| Stillman, George F., assignor to Smith Premier Typewriter Company, Syracuse, N. Y. Type-writing machine | 739,623 | Sept. 22 | 4020 | 897 | 106 | 909 |
| Stillman, Herbert L., Westerly, R. I. Carriage-railway | 722,641 | Mar. 10 | 1824 | 406 | 103 | 408 |
| Stillson, Byron, Jackson, Mich. Adjustable skirt | 723,063 | Mar. 17 | 2611 | 588 | 103 | 584 |
| Stillwell, Joseph W., New York, N. Y. Steam-boiler furnace | 747,797 | Dec. 22 | 4578 | 1033<br>1034 | 107 | 2163 |
| Stimpson, Edward S., assignor to Draper Company, Hopedale, Mass. Filling-replenishing loom | 718,587 | Jan. 13 | 2045 | 445 | 102 | 455 |
| Stimpson, Edward S., assignor to Draper Company, Hopedale, Mass. Thread-parting mechanism for looms | 718,957 | Jan. 20 | 2732 | 611<br>612 | 102 | 610 |
| Stimpson, Edward S., assignor to Draper Company, Hopedale, Mass. Tip-support for automatic filling-replenishing looms | 720,189 | Feb. 10 | 1435 | 328 | 102 | 1143 |
| Stimpson, Edward S., assignor to Draper Company, Hopedale, Mass. Filling-replenishing mechanism for looms | 725,790 | Apr. 21 | 2554 | 579 | 103 | 1743 |
| Stimpson, Edward S., assignor to Draper Company, Hopedale, Mass. Stopping mechanism for looms | 726,589 | Apr. 28 | 4051 | 914<br>915 | 103 | 2061 |
| Stimpson, Edward S., assignor to Draper Company, Hopedale, Mass. Filling-replenishing loom | 729,006 | May 26 | 4104 | 910 | 104 | 922 |
| Stimpson, Edward S., assignor to Draper Company, Hopedale, Mass. Loom harness mechanism | 729,102 | May 26 | 4273 | 944<br>945 | 104 | 956 |
| Stimpson, Edward S., assignor to Draper Company, Hopedale, Mass. Protector mechanism for looms | 731,391 | June 16 | 3427 | 764 | 104 | 1872 |
| Stimpson, Edward S., assignor to Draper Company, Hopedale, Mass. Thread-parting mechanism for looms | 732,460 | June 30 | 5490 | 1217 | 104 | 2331 |
| Stimpson, Edward S., assignor to Draper Company, Hopedale, Mass. Loom harness mechanism | 733,089 | July 7 | 696 | 170 | 105 | 148 |
| Stimpson, Edward S., Hopedale, Mass., and C. Short, Montreal, Canada, assignors to Draper Company, Hopedale, Mass. Clamping device for heddle bars or supports | 746,401 | Dec. 8 | 1989 | 454 | 107 | 1544 |
| Stimpson, Edwin B., New York, N. Y. Eyeleting-machine | 736,163 | Aug. 11 | 2130 | 457 | 105 | 1454 |
| Stimpson, Edwin B., New York, N. Y. Eyelet-setting machine | 736,164 | Aug. 11 | 2132 | 457<br>458 | 105 | 1454 |
| Stimpson, Edwin B., New York, N. Y. Fastener | 736,165 | Aug. 11 | 2134 | 458 | 105 | 1455 |
| Stimpson, Edwin B., New York, N. Y. Machine for trimming books or the like | 736,166 | Aug. 11 | 2136 | 459 | 105 | 1455 |
| Stimpson, Edwin B., New York, N. Y. Punching-machine | 736,167 | Aug. 11 | 2137 | 459 | 105 | 1455 |
| Stimpson, Edwin B., New York, N. Y. Button-setting machine | 740,200 | Sept. 29 | 5113 | 1148<br>1149 | 106 | 1158 |
| Stimpson, Edwin B., New York, N. Y. Slitting-machine or the like | 740,201 | Sept. 29 | 5115 | 1149 | 106 | 1159 |
| Stimpson, Moses, Stowupland, assignor of one-half to J. R. Turner, Stowmarket, England. Self-binding harvesting-machine | 725,633 | Apr. 14 | 2254 | 509 | 103 | 1664 |
| Stimpson, Wallace I., assignor to Draper Company, Hopedale, Mass. Take-up mechanism for looms | 743,584 | Nov. 10 | 1579 | 331 | 107 | 354 |
| Stimpson, Walter F. (See Finn, Edwin, assignor.) | | | | | | |
| Stimpson, Walter F., Detroit, Mich. Spring-scale | 745,684 | Dec. 1 | 668 | 155 | 107 | 1240 |
| Stimson, Annie W., Los Angeles, Cal. Needle | 727,020 | May 5 | 400 | 84 | 104 | 87 |
| Stimson, Martin V. B., Groton, Conn. Table-fork | 721,249 | Feb. 24 | 3482 | 791 | 102 | 1606 |
| Stimson, Oscar M., and P. Parke, Chicago, Ill. Brake-shoe | 721,526 | Feb. 24 | 3966 | 903<br>904 | 102 | 1707 |
| Stimson, Robert W., and F. McManis, assignors to Century Manufacturing Company, Indianapolis, Ind. Feed-box | 743,950 | Nov. 10 | 2231 | 482 | 107 | 492 |
| Stine, Joseph A., Manistee, Mich. Chimney-flue cleaner | 730,717 | June 9 | 2170 | 482 | 104 | 1593 |
| Stine, Wilbur M., Swarthmore, Pa. Self-playing musical instrument | 733,764 | July 14 | 1896 | 447 | 105 | 417 |
| Stineman, William H. H., assignor of one-half to H. S. Brewington, Baltimore, Md. Shipping-package | 734,994 | July 28 | 4270 | 993 | 105 | 946 |
| Stiner, Clarence M., New York, N. Y., assignor to Auto Ticker-Tape Display Company. Attachment for printing-telegraphs or other strip-delivering apparatus | 735,311 | Aug. 4 | 529 | 108 | 105 | 1094 |
| Stiner, Frank, Lawrence, Mass. Filter | 718,886 | Jan. 20 | 2595 | 579<br>580 | 102 | 581 |
| Stinger, John H. (See Miller and Stinger.) | | | | | | |
| Stinson, Arthur G., West Superior, Wis. Mail-box | 723,939 | Mar. 31 | 4268 | 959 | 103 | 957 |
| Stinson, David W., St. Louis, Mo. Spacing instrument | 736,168 | Aug. 11 | 2139 | 460 | 105 | 1456 |
| Stinson, William, assignor of one-half to J. L. Love and D. D. Cooper, Toronto, Canada. Nut-lock | 723,419 | Mar. 24 | 3295 | 737 | 103 | 735 |
| Stirckler, John D., East Boston, Mass., assignor to Wire Ball Fastener Company. Wire ball-and-socket fastener | 732,461 | June 30 | 5492 | 1218 | 104 | 2331 |
| Stirckler, John D., Boston, Mass., assignor to Wire Ball Fastener Company. Wire ball-and-socket fastener | 732,462 | June 30 | 5493 | 1218 | 104 | 2331 |
| Stirewalt, Luther M., Toledo, Ohio. Hat | 740,330 | Sept. 29 | 5351 | 1205<br>1206 | 106 | 1208 |
| Stirling Company. (See Sneddon, James P., assignor.) | | | | | | |
| Stirling Company. (See Sneddon, James P., assignor.) (Reissue.) | | | | | | |
| Stites, Simeon S., Ripley, Okla. Ter. Weather-strip | 733,295 | July 7 | 1072 | 255 | 105 | 226 |
| Stites, Townsend, Gloucester City, N. J., J. H. Goss and A. J. Wolff, Waterbury, Conn., assignors to Welsbach Light Company, Gloucester City, N. J. Burner | 731,392 | June 16 | 3428 | 765 | 104 | 1872 |
| Stitt, Levi G., Vandergrift, Pa. Ingot-stripper | 735,615 | Aug. 4 | 1111 | 236 | 105 | 1217 |
| Stitt, Levi G., Vandergrift, Pa. Ingot-mold dog or grapple | 735,616 | Aug. 4 | 1114 | 236 | 105 | 1218 |
| Stitts, Sylvester, assignor to himself and M. G. and R. N. Fearon, Ironton, Ohio. Trolley | 740,331 | Sept. 29 | 5353 | 1206 | 106 | 1208 |
| Stitzer, David, Louisville, Ky. Portable stall | 732,232 | June 30 | 5050 | 1123 | 104 | 2240 |
| Stobbs, Frank L. (See Green and Stobbs.) | | | | | | |
| Stobbs, William H. (See Green and Stobbs.) | | | | | | |
| Stock, Friedrich. (See Lauber and Stock.) | | | | | | |
| Stock, G. J., *et al.* (See Coleman, Lucius E., assignor.) | | | | | | |
| Stock, Robert, and F. F. Boegner, Bridgeport, Conn. Strength-testing device | 740,708 | Oct. 6 | 594 | 132 | 106 | 1375 |
| Stockall, James J., Jr., London, England. Electric time-switch | 719,390 | Jan. 27 | 3554 | 794 | 102 | 798 |
| Stockamp, George, Hooper, Nebr. Lifting-jack | 742,083 | Oct. 20 | 3326 | 742 | 106 | 1983 |
| Stocker, Anthony, Des Moines, Iowa. Front-sheet-delivery apparatus for printing-presses | 739,233 | Sept. 15 | 3292 | 729 | 106 | 735 |
| Stocker, Eva E., administratrix. (See Stocker, John.) | | | | | | |
| Stocker, George P., Evansville, Ind. Valve mechanism for steam-traps | 734,144 | July 21 | 2673 | 629 | 105 | 598 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| Stocker, John, deceased, St. Louis, Mo.; E. E. Stocker, administratrix. Distilling apparatus | 748,564 | Dec. 29 | 6067 | 1374 | 107 | 2512 |
| Stocking, Amy M., West New Brighton, N. Y. Culinary device | 720,293 | Feb. 10 | 1633 | 373 | 102 | 1184 |
| Stocking, Bert A., assignor of one-half to H. Mendenhall, Audubon, Iowa. Fastener for stovepipes and collars | 740,376 | Sept. 29 | 5438 | 1223 | 106 | 1226 |
| Stocking, Edgar B., Washington, D. C. Match-machine | 722,331 | Mar. 10 | 1256 | 280<br>281 | 103 | 284 |
| Stocking, Henry W., Avalon, Cal. Tackle-block | 739,119 | Sept. 15 | 3091 | 684 | 106 | 692 |
| Stockon, Mason, Tampa, Fla. Charcoal-stove | 747,100 | Dec. 15 | 3295 | 750 | 107 | 1861 |
| Stocks, Lucy H., Leeds, England. Means or apparatus for frying fish or other articles | 734,630 | July 28 | 3566 | 835 | 105 | 803 |
| Stockstrom, Louis, St. Louis, Mo., assignor to American Stove Company, Jersey City, N. J. Lighting device for hydrocarbon-burners | 744,427 | Nov. 17 | 3197 | 686 | 107 | 713 |
| Stockstrom, Louis, St. Louis, Mo., assignor to American Stove Company, Jersey City, N. J. Hydrocarbon-burner | 747,799 | Dec. 22 | 4582 | 1034 | 107 | 2164 |
| Stockstrom, Louis, assignor to American Stove Company, St. Louis, Mo. Cut-off for vapor-stoves | 747,798 | Dec. 22 | 4580 | 1034 | 107 | 2163 |
| Stockton Manufacturing Company. (See Skinner, John J., assignor.) | | | | | | |
| Stockton, William E., Alexandria, Ind. Bicycle attachment | 727,708 | May 12 | 1687 | 377 | 104 | 381 |
| Stockton, William S., Philadelphia, Pa. Trolley | 727,021 | May 5 | 401 | 84 | 104 | 87 |
| Stockton, William W., and W. Helfenstein, Bakersfield, Cal. Casing-spear | 739,454 | Sept. 22 | 3719 | 828 | 106 | 844 |
| Stockwell, Herbert C. (See Casterline, Sexton, Stockwell, and Swalm.) | | | | | | |
| Stocoum, Rollin H., Ionia, Mich. Photographic ray-filter | 740,484 | Oct. 6 | 194 | 38 | 106 | 1287 |
| Stocquart, Alphonse, Paris, France. Device for the suspension of vehicles by means of springs with compressed air | 721,475 | Feb. 24 | 3880 | 882 | 102 | 1688 |
| Stoddard, Charles F., Boston, Mass., assignor to American Pneumatic Service Company, Dover, Del. Pneumatic-despatch apparatus | 742,513 | Oct. 27 | 4106 | 925 | 106 | 2159 |
| Stoddard, Charles F., Boston, Mass., assignor to American Pneumatic Service Company, Dover, Del. Pneumatic-despatch apparatus | 742,514 | Oct. 27 | 4108 | 925 | 106 | 2159 |
| Stoddard, Charles F., Boston, Mass., assignor to American Pneumatic Service Company, Dover, Del. Pneumatic-despatch apparatus | 742,515 | Oct. 27 | 4110 | 925<br>926 | 106 | 2160 |
| Stoddard, Charles F., Boston, Mass., assignor to American Pneumatic Service Company, Dover, Del. Pneumatic-despatch apparatus | 742,516 | Oct. 27 | 4113 | 926 | 106 | 2161 |
| Stoddard, Charles F., Boston, Mass., assignor to American Pneumatic Service Company, Dover, Del. Pneumatic-despatch apparatus | 742,517 | Oct. 27 | 4115 | 926<br>927 | 106 | 2162 |
| Stoddard, Elliott J., assignor to C. F. Burton, trustee, Detroit, Mich. Electric igniter | 739,943 | Sept. 29 | 4644 | 1042 | 106 | 1060 |
| Stoddard, Elliott J., assignor to C. F. Burton, trustee, Detroit, Mich. Sparking coil for gas-engines | 743,405 | Nov. 3 | 1191 | 247 | 107 | 254 |
| Stoddard Manufacturing Company. (See Brown and Holtvoigt, assignors.) | | | | | | |
| Stoddard Manufacturing Company. (See Kinsey, Isaac, assignor.) | | | | | | |
| Stoddard, Merritt L., Cleveland, Ohio. Washing-machine | 723,420 | Mar. 24 | 3296 | 737 | 103 | 735 |
| Stoddard, Milo, Tampa, Fla. Piano-tuning key | 729,804 | June 2 | 519 | 114 | 104 | 1234 |
| Stoddard, Oscar, Detroit, Mich., assignor to Battle Creek Novelty Company, Limited. Calipers and dividers | 732,463 | June 30 | 5494 | 1218 | 104 | 2331 |
| Stoddart, Ann. (See Burgess, Neilson, assignor.) | | | | | | |
| Stoddart, Daniel A. B., Emerson, Canada. Revolving bookcase | 720,190 | Feb. 10 | 1437 | 328 | 102 | 1144 |
| Stoeffler, Adolph, Jersey City, N. J. Drawer-lock | 732,971 | July 7 | 479 | 119 | 105 | 103 |
| Stoeklé, Otto, Brussels, Belgium. Coupling for the trail and limber of field-guns | 738,953 | Sept. 15 | 2796 | 619 | 106 | 632 |
| Stoermer, William J., Los Angeles, Cal. Hydrocarbon-burner | 722,163 | Mar. 3 | 929 | 206 | 103 | 198 |
| Stogsdill, Marion A., Indianapolis, and E. J. Schatz, Greenfield, assignors to Pyle Electric Headlight Company, Indianapolis, Ind. Electric-arc lamp | 746,601 | Dec. 8 | 2336 | 535 | 107 | 1621 |
| Stoianoff, Stefan, Galatz, Roumania. Locomotive-boiler | 727,481 | May 5 | 1223 | 270<br>271 | 104 | 264 |
| Stokely, Wells R., St. Augustine, Fla. Fruit-box | 729,973 | June 2 | 840 | 187 | 104 | 1299 |
| Stoker, Francis M. (See Head, Robert T., assignor.) | | | | | | |
| Stokes, Anson P., New York, N. Y. Centerboard | 724,217 | Mar. 31 | 4820 | 1080<br>1081 | 103 | 1066 |
| Stokes, Anson P., New York, N. Y. Floating battery | 724,756 | Apr. 7 | 629 | 147 | 103 | 1303 |
| Stokes, J. Stogdel, *et al.* (See Smith, Philip S., assignor.) | | | | | | |
| Stokes, John N., Bentonville, Ark. Adjustable desk | 735,312 | Aug. 4 | 534 | 109 | 105 | 1095 |
| Stokes, John N., Bentonville, Ark. Churn | 730,944 | Sept. 29 | 4647 | 1043 | 106 | 1061 |
| Stokes, Marston E., Worcester, Mass. Fireplace-damper | 732,380 | June 30 | 5336 | 1182 | 104 | 2299 |
| Stokoe, John M., Canandaigua, N. Y., assignor of one-half to J. H. Prince, Boston, Mass. Combined lamp globe and chimney | 727,709 | May 12 | 1689 | 377 | 104 | 381 |
| Stoll, Jacob W., *et al.* (See Leikem, Anton, assignor.) | | | | | | |
| Stoll, Oswald, Cardiff, England. Stage or platform appliance for producing scenic or other displays | 748,116 | Dec. 29 | 5239 | 1189 | 107 | 2330 |
| Stollberg, Charles, Toledo, Ohio, assignor to American Can Company, Jersey City, N. J. Sheet-metal cabinet | 723,940 | Mar. 31 | 4270 | 960 | 103 | 957 |
| Stollberg, Charles, Toledo, Ohio, assignor to American Can Company, Jersey City, N. J. Sheet-metal carton-cabinet | 723,941 | Mar. 31 | 4273 | 960 | 103 | 958 |
| Stolle, Albert A. (See Landauer, Isidor N., assignor.) | | | | | | |
| Stollewerk, Christian, Aix-la-Chapelle, Germany. Adjustable thumb-board for combination organ stop-actions | 731,080 | June 16 | 2842 | 631 | 104 | 1755 |
| Stollewerk, Christian, Aix-la-Chapelle, Germany. Driving mechanism | 736,564 | Aug. 18 | 2842 | 623 | 105 | 1625 |
| Stollewerk, Christian, Aix-la-Chapelle, Germany. Driving mechanism for chainless bicycles | 744,428 | Nov. 17 | 3198 | 686 | 107 | 713 |
| Stolp, Frank H., Chicago, Ill., assignor to F. K. Hoover, Kansas City, Mo., and A. J. Mason, Chicago, Ill. Dredge | 720,983 | Feb. 17 | 2913 | 668 | 102 | 1467 |
| Stoltz, Otto. (See Barz, Paul H., assignor.) | | | | | | |
| Stone, Albert H., Boston, Mass. Depilatory and making it | 732,323 | June 30 | 5210 | ..... | 104 | 2272 |
| Stone, Albert L., assignor of two-thirds to A. G. Holt and W. A. Gardner, Philadelphia, Pa. Toy | 723,557 | Mar. 24 | 3549 | 794 | 103 | 787 |
| Stone, Allison R., Chicago, Ill. Faucet | 745,027 | Nov. 24 | 4297 | 929 | 107 | 960 |
| Stone, Charles C., Kansas City, Mo. Eyeglasses | 731,081 | June 16 | 2844 | 632 | 104 | 1755 |
| Stone, Charles E., Port Townsend, Wash. Artificial leg | 741,849 | Oct. 20 | 2797 | 622 | 106 | 1878 |
| Stone, Charles F., assignor of one-half to E. R. Clough, Lebanon, Mo. Sash-fastener | 737,039 | Aug. 25 | 3753 | 833 | 105 | 1834 |
| Stone, Charles W., Schenectady, N. Y., assignor to General Electric Company. System of electrical distribution | 728,325 | May 19 | 2856 | 631 | 104 | 647 |
| Stone, Clarence. (See Grever and Stone.) | | | | | | |
| Stone, Columbus, Manchester, Tenn. Grain scourer and cleaner | 742,518 | Oct. 27 | 4118 | 927 | 106 | 2163 |
| Stone, David K., Bloomingdale, Mich. Vehicle-pole tip | 735,172 | Aug. 4 | 248 | 49 | 105 | 1035 |
| Stone, Frank J., Somerville, Mass. Match case or holder | 725,791 | Apr. 21 | 2557 | 579 | 103 | 1744 |
| Stone, Frank P., Chicago, Ill. Fastening device for vehicle-tires | 732,164 | Mar. 3 | 930 | 206 | 103 | 198 |
| Stone, Gardner H., Jamesville, assignor of one-half to E. M. McChesney, Syracuse, N. Y. Horseshoe | 725,792 | Apr. 21 | 2558 | 580 | 103 | 1744 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | Spec. | Dr'g. | Vol. | Page. |
| Stone, George S. (See Torrance and Stone.) | | | | | | |
| Stone, Gustin B. (See Straight and Stone.) | | | | | | |
| Stone, Gustin B., Chicago, Ill. Molding and biscuiting articles from porcelain, &c | 747,800 | Dec. 22 | 4583 | 1034 | 107 | 2164 |
| Stone, Gustin B., Chicago, Ill. Swager | 748,565 | Dec. 29 | 6069 | 1374 | 107 | 2513 |
| Stone, Harry W., Brooklyn, N. Y., assignor to A. A. Waterman, Cambridge, and A. Erlebach, Boston, Mass. Fountain-pen | 719,529 | Feb. 3 | 206 | 48 | 102 | 867 |
| Stone, Harry W., New York, N. Y., assignor to A. A. Waterman, Winchester, Mass., W. G. Frazer and H. W. Geyer, New York, N. Y. Fountain-pen | 744,642 | Nov. 17 | 3550 | 765 | 107 | 786 |
| Stone, John H., Toronto, Canada. Wick attachment for lamps | 725,376 | Apr. 14 | 1766 | 397 | 103 | 1558 |
| Stone, John S., Cambridge, Mass., assignor to Stone Telegraph and Telephone Company, Portland, Me. Wireless or space telegraphy | 725,634 | Apr. 14 | 2255 | 510 | 103 | 1664 |
| Stone, John S., Cambridge, Mass., assignor to Stone Telegraph and Telephone Company, Portland, Me. Apparatus for selective electric signaling | 737,170 | Aug. 25 | 3975 | 884 | 105 | 1880 |
| Stone, John S., Cambridge, assignor to Stone Telegraph and Telephone Company, Boston, Mass. Apparatus for selective electric signaling. (Reissue) | 12,141 | Aug. 4 | 1258 | 267 | 105 | 1249 |
| Stone, John S., Boston, Mass., assignor to Stone Telegraph and Telephone Company, Portland, Me. Space telegraphy | 725,635 | Apr. 14 | 2260 | 511 | 103 | 1665 |
| Stone, John S., Boston, Mass., assignor to Stone Telegraph and Telephone Company, Portland, Me. Space telegraphy | 725,636 | Apr. 14 | 2265 | 511<br>512 | 103 | 1666 |
| Stone, John S., Boston, Mass., assignor, by mesne assignments, to Stone Telegraph and Telephone Company, Portland, Me. Apparatus for selective electric signaling. (Reissue) | 12,149 | Aug. 25 | 4727 | 1060<br>1061 | 105 | 2044 |
| Stone, John S., Boston, Mass., assignor, by mesne assignments, to Stone Telegraph and Telephone Company, Portland, Me., and Boston, Mass. Determining the direction of space-telegraph signals. (Reissue) | 12,148 | Aug. 18 | 3531 | 784 | 105 | 1766 |
| Stone, John S., Boston, Mass., assignor, by mesne assignments, to Stone Telegraph and Telephone Company, Portland, Me., and Boston, Mass. Apparatus for amplifying electromagnetic signal-waves. (Reissue) | 12,151 | Sept. 8 | 2402 | 528 | 106 | 530 |
| Stone, John S., Boston, Mass., assignor, by mesne assignments, to Stone Telegraph and Telephone Company, Portland, Me., and Boston, Mass. Amplifying electromagnetic signal-waves. (Reissue) | 12,152 | Sept. 8 | 2406 | 528 | 106 | 530 |
| Stone, John S., assignor to American Bell Telephone Company, Boston, Mass. Electrical distribution and selective distribution | 726,368 | Apr. 28 | 3605 | 818 | 103 | 1976 |
| Stone, John S., Cambridge, Mass., assignor to American Bell Telephone Company. Electrical distribution and selective distribution | 726,476 | Apr. 28 | 3809 | 862 | 103 | 2016 |
| Stone, John S., Cambridge, Mass., assignor to American Bell Telephone Company. Electrical distribution and selective distribution | 729,103 | May 26 | 4276 | 945 | 104 | 956 |
| Stone, John S., Cambridge, Mass., assignor to American Bell Telephone Company. Electrical apparatus and circuits for electrical distribution and selective distribution | 729,104 | May 26 | 4279 | 945<br>946 | 104 | 957 |
| Stone, Julia, Chicago, Ill. Cover for culinary vessels | 736,169 | Aug. 11 | 2140 | 460 | 105 | 1456 |
| Stone, Nathaniel B., Outlook, Wash. Convertible game-board | 718,290 | Jan. 13 | 1436 | 319 | 102 | 325 |
| Stone, Nathaniel B., Outlook, Wash. Key-ring | 726,781 | Apr. 28 | 4408 | 993 | 103 | 2135 |
| Stone, Nathaniel B., Outlook, Wash. Wrench | 726,782 | Apr. 28 | 4409 | 993 | 103 | 2135 |
| Stone, Nathaniel B., Outlook, Wash. Vehicle-dash brace | 746,192 | Dec. 8 | 1617 | 360 | 107 | 1466 |
| Stone, Nathaniel B., Outlook, Wash. Puzzle | 746,193 | Dec. 8 | 1618 | 361 | 107 | 1466 |
| Stone, Roy, Washington, D. C. Carriage-body | 720,294 | Feb. 10 | 1634 | 374 | 102 | 1184 |
| Stone, Roy, New York, N. Y. Motor-vehicle | 722,262 | Mar. 10 | 1130 | 250 | 103 | 256 |
| Stone, Rufus G., Garden City, Kans. Tank | 728,037 | May 12 | 2285 | 508 | 104 | 504 |
| Stone Telegraph and Telephone Company. (See Stone, John S., assignor.) | | | | | | |
| Stone Telegraph and Telephone Company. (See Stone, John S., assignor.) (Reissue.) | | | | | | |
| Stone, William P. (See Sartain, Louis M., assignor.) | | | | | | |
| Stonebridge, Charles H., New York, N. Y. Collapsible lantern-casing | 735,681 | Aug. 4 | 1237 | 262 | 105 | 1243 |
| Stonebridge, Charles H., New York, N. Y. Collapsible lantern | 740,377 | Sept. 29 | 5439 | 1223 | 106 | 1226 |
| Stoneburn, Frederick H., Mansfield, Conn., assignor to Cornell Incubator Mfg. Co., Ithaca, N. Y. Incubator | 729,695 | June 2 | 301 | 70 | 104 | 1191 |
| Stoneburner, John. (See Hayward, Richard D., assignor.) | | | | | | |
| Stoner, Earl B., Astoria, Oreg. Acetylene-gas generator | 719,391 | Jan. 27 | 3557 | 794 | 102 | 798 |
| Stoner, Earl B., Astoria, Oreg. Gas-jet-holder attachment for lamps of locomotive-headlights | 741,736 | Oct. 20 | 2596 | 577 | 106 | 1834 |
| Stoner, Lewis H., Albany, Ind. Mold for cement posts | 723,064 | Mar. 17 | 2611 | 588 | 103 | 584 |
| Stoolfire, Charles, Coyle, Okla. Ter. Wire-working tool | 739,455 | Sept. 22 | 3720 | 828 | 106 | 845 |
| Stoolfire, Charles, Stillwater, Okla. Ter., assignor to H. J. Whittier, Kansas City, Mo. Wire-stretcher and wire-splicing tongs | 732,972 | July 7 | 481 | 119 | 105 | 104 |
| Stoop, Gustav E. (See Bremer, Carl A. G., assignor.) | | | | | | |
| Stopple, John J., Goliad, Tex. Baling-press | 737,521 | Aug. 25 | 4657 | 1046 | 105 | 2030 |
| Storch, Valentin. (See Storch, William B. and V.) | | | | | | |
| Storch, William B. and V., Knoxville, Pa. Emergency car-brake | 732,600 | June 30 | 5755 | 1276 | 104 | 2389 |
| Storch, Zdeny. (See Miles and Storch.) | | | | | | |
| Storch, Zdeny, Alameda, Cal. Pump | 739,234 | Sept. 15 | 3294 | 730 | 106 | 736 |
| Stordeur, Ferdinand, Buenos Aires, Argentina. Verifying apparatus for dressing tubes | 725,293 | Apr. 14 | 1612 | 364 | 103 | 1527 |
| Stordeur, Ferdinand, assignor of one-half to D. Mayer, Buenos Aires, Argentina. Wire-stretcher for fencing purposes | 737,040 | Aug. 25 | 3754 | 834 | 105 | 1834 |
| Storer, Simon B., Syracuse, N. Y. Magnetic speed-indicator | 743,585 | Nov. 10 | 1580 | 331 | 107 | 354 |
| Storer, Simon B., Syracuse, N. Y. Magnetic speed-indicator | 743,586 | Nov. 10 | 1582 | 331 | 107 | 354 |
| Storey, Bradford W., Mount Holly, assignor of eleven-twentieths to R. B. Lamb, Burlington, N. J., and J. A. Wiedersheim, Philadelphia, Pa. Wood-carving machine | 721,108 | Feb. 17 | 3154 | 725<br>726 | 102 | 1521 |
| Storey, Edward K. (See Waite, Mary M., assignor.) | | | | | | |
| Storey, James W., Beauregard, Miss. Plow attachment | 742,925 | Nov. 3 | 180 | 42 | 107 | 40 |
| Storey, John. (See Taylor, Charles W. A., assignor.) | | | | | | |
| Storey, John F., London, England. Stocking-suspenders | 746,194 | Dec. 8 | 1620 | 361 | 107 | 1467 |
| Stork, Frederick L., Dayton, Ohio. Tool for removing screw-caps from jars | 736,455 | Aug. 18 | 2634 | 579 | 105 | 1580 |
| Stork, Frederick L., Dayton, Ohio. Adjustable can-opener | 746,195 | Dec. 8 | 1621 | 361 | 107 | 1467 |
| Storle, Ole O., assignor to Burlington Brass Works, Burlington, Wis. Pipe-wrench | 720,385 | Feb. 10 | 1798 | 408 | 102 | 1220 |
| Storm, Bernhard, Grand Rapids, Mich. Sander-drum | 732,796 | July 7 | 183 | 46 | 105 | 42 |
| Storm, Edwin R., New York, N. Y. Telegraph system | 718,544 | Jan. 13 | 1951 | 426<br>427 | 102 | 435 |
| Storm Railway Signal Company. (See Campbell, Charles B., assignor.) | | | | | | |
| Storm Railway Signal Company. (See Doty, Roy A., assignor.) | | | | | | |
| Storm, Sylvester, Los Angeles, Cal. Locking attachment | 722,926 | Mar. 17 | 2377 | 532 | 103 | 535 |
| Stormer, Harry, Johnstown, Pa. Steam-separator | 745,924 | Dec. 1 | 1122 | 251 | 107 | 1338 |
| Storms, Isaac K., Duluth, Minn. Bob-sleigh | 740,603 | Oct. 6 | 436 | 95 | 106 | 1339 |
| Storms, Jordan E., Jr., Yonkers, N. Y. Tooth-cleaning appliance | 736,650 | Aug. 18 | 3013 | 665 | 105 | 1658 |
| Storms, Jordan E., Jr., Yonkers, N. Y. Death-determining instrument | 745,685 | Dec. 1 | 671 | 155 | 107 | 1241 |
| Storr, Burt E., Missoula, Mont. Roller | 732,907 | July 7 | 375 | 91 | 105 | 82 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| Storrs, Aaron P., Owego, N. Y. Gas-lighter | 723,331 | Mar. 24 | 3112 | 700, 701 | 103 | 701 |
| Storrs, Charles P., *et al.* (See Henderson, Thomas M., assignor.) | | | | | | |
| Storvik, Paul I., Sterling, Ark. Governor for windmills | 723,332 | Mar. 24 | 3114 | 701 | 103 | 702 |
| Story, Harry T. (See Field, Sjonne, assignor.) | | | | | | |
| Story, Joseph M., Owosso, Mich. Boat propelling mechanism | 723,333 | Mar. 24 | 3115 | 701 | 103 | 702 |
| Storz, Hermann G. (See Humphrey and Storz.) | | | | | | |
| Stotsenburg, John H., *et al.* (See Oppelt, Otto, assignor.) | | | | | | |
| Stott, Alfred H. (See Wilding and Stott.) | | | | | | |
| Stott, James, London, England. Valve or tap | 746,896 | Dec. 15 | 2904 | 670 | 107 | 1769 |
| Stouder, Jacob M., Fort Wayne, Ind. Nozzle | 729,974 | June 2 | 842 | 187 | 104 | 1299 |
| Stout, Edward W., Steelton, Pa. Railway-frog-plate clamp | 748,435 | Dec. 29 | 5806 | 1322 | 107 | 2453 |
| Stout, Franklin B., Baltic, S. D. Protector for knotters for binders | 732,464 | June 30 | 5496 | 1218 | 104 | 2332 |
| Stout, Franklin B., Baltic, S. D. Draft-equalizer | 732,465 | June 30 | 5497 | 1219 | 104 | 2332 |
| Stout, George H., assignor of one-half to L. A. Turner, Denver, Colo. Gravity-lock | 739,945 | Sept. 29 | 4648 | 1043 | 106 | 1061 |
| Stout, George H., assignor of one-half to L. A. Turner, Denver, Colo. Gravity-lock | 740,061 | Sept. 29 | 4866 | 1090, 1091 | 106 | 1107 |
| Stout, George H., assignor of two-thirds to L. A. Turner and J. E. Brendlinger, Denver, Colo. Lock | 740,060 | Sept. 29 | 4864 | 1090 | 106 | 1107 |
| Stout, John G. (See Henkel, George H., assignor.) | | | | | | |
| Stout, Robert P. (See Meigs and Stout.) | | | | | | |
| Stout, Robert P., Bethlehem, assignor to Bethlehem Steel Company, South Bethlehem, Pa. Ammunition-chest | 730,411 | June 9 | 1611 | 361 | 104 | 1473 |
| Stout, Robert P., and F. G. Hughes, Bethlehem, assignors to Bethlehem Steel Company, South Bethlehem, Pa. Firing mechanism | 734,005 | July 21 | 2382 | 559, 560 | 105 | 534 |
| Stout, Stephen, assignor of one-half to H. K. Harness, Axtell, Kans. Water screen and filter | 748,230 | Dec. 29 | 5440 | 1240 | 107 | 2373 |
| Stoutenburgh, Robert V. D., New York, N. Y. Stock | 719,392 | Jan. 27 | 3559 | 795 | 102 | 798 |
| Stoveken, John, Cripplecreek, and L. Stoveken, Florence, Colo. Apparatus for extracting metals from ores | 729,805 | June 2 | 520 | 114, 115 | 104 | 1234 |
| Stoveken, John, Cripplecreek, and L. Stoveken, Florence, Colo. Agitation-tank | 729,806 | June 2 | 525 | 115 | 104 | 1235 |
| Stoveken, John, Cripplecreek, and L. Stoveken, Florence, Colo. Filter-press | 729,807 | June 2 | 527 | 116 | 104 | 1235 |
| Stoveken, John, Cripplecreek, and L. Stoveken, Florence, Colo. Metallurgical filter | 730,195 | June 2 | 1195 | 269 | 104 | 1370 |
| Stoveken, Leo. (See Stoveken, John and L.) | | | | | | |
| Stover, Daniel C., Freeport, Ill. Apparatus for cooling the cylinders of gasolene-engines | 722,767 | Mar. 17 | 2095 | 469 | 103 | 478 |
| Stover, George B., Amsterdam, N. Y. Fire-extinguisher for card or picker machines | 726,200 | Apr. 21 | 3267 | 741 | 103 | 1890 |
| Stovin, Charles J., Liberty Mills, Va. Shock-loader | 719,158 | Jan. 27 | 3123 | 696 | 102 | 704 |
| Stow, Audley H., Hunter, W. Va. Automatic firearm | 726,109 | Apr. 21 | 3085 | 699, 700 | 103 | 1852 |
| Stowe, Aaron F., assignor to A. F. Stowe Manufacturing Company, Worcester, Mass. Machine for treating shin or shank leather | 740,709 | Oct. 6 | 595 | 133 | 106 | 1375 |
| Stowe, Bernard A., assignor to Jandus Electric Company, Cleveland, Ohio. Alternating-current electric motor | 728,038 | May 12 | 2286 | 508 | 104 | 504 |
| Stowe, Bernard A., assignor to Jandus Electric Company, Cleveland, Ohio. Electric motor | 728,039 | May 12 | 2289 | 508, 509 | 104 | 505 |
| Stowe, Dennis L., Chicago, Ill. Advertising paper-holder | 748,117 | Dec. 29 | 5240 | 1189 | 107 | 2330 |
| Stowe, Ernest, Coreys, N. Y. Spirit-level | 720,855 | Feb. 17 | 2661 | 614 | 102 | 1413 |
| Stowell, Byron F., assignor of one-third to C. E. Van Norman, Springfield, Mass. Device for playing keyboord musical instruments | 743,992 | Nov. 10 | 2327 | 498 | 107 | 516 |
| Stowell, Ellery, Denver, Colo. Hoisting device | 729,443 | May 26 | 4864 | 1077 | 104 | 1079 |
| Strader, E. J., *et al.* (See Goode, Frank R., assignor.) | | | | | | |
| Strahan, Arthur R., New York, N. Y. Door-alarm | 746,196 | Dec. 8 | 1622 | 361 | 107 | 1467 |
| Strahle, Albert, Brooklyn, N. Y. Game apparatus | 731,968 | June 23 | 4495 | 1003 | 104 | 2113 |
| Straight, Asa W. (See Rountree and Straight.) | | | | | | |
| Straight, Asa W., and G. B. Stone, Chicago, Ill. Furnace | 723,802 | Mar. 24 | 3973 | 896 | 103 | 877 |
| Strain, Robert, Fullerton, assignor to F. Stebler and A. A. Gamble, Riverside, Cal. Fruit-grader | 730,412 | June 9 | 1613 | 362 | 104 | 1473 |
| Straker, Stanley C., London, England. Book mark or indicator | 726,005 | Apr. 21 | 2927 | 665 | 103 | 1820 |
| Stranahan, Olin A., Chicago, Ill., W. W. Churchill and W. R. Roney, New York, N. Y., assignors to Westinghouse Machine Company, Pittsburg, Pa. Furnace | 746,759 | Dec. 15 | 2630 | 605 | 107 | 1708 |
| Strandberg, Frank. (See Anderson, John, assignor.) | | | | | | |
| Strandberg, Fridolf, Bruno, Minn. Water-gage for steam-boilers | 718,228 | Jan. 13 | 1315 | 290 | 102 | 297 |
| Strandh, Hans I. F., Forserum, Sweden. Device for stoppering bottles, jars, or like vessels | 725,294 | Apr. 14 | 1614 | 364 | 103 | 1527 |
| Strang, Albert E., Canton, Ohio. Door-hook | 718,169 | Jan. 13 | 1206 | 267 | 102 | 275 |
| Strüng, Henrik C., Chicago, Ill. Gas-engine | 725,295 | Apr. 14 | 1614 | 364, 365, 366 | 103 | 1527 |
| Strasburger, Frank C. H. (See Glab, Nicholas, assignor.) | | | | | | |
| Strasburger, Frank C. H., assignor to Bottlers' Specialty Manufacturing Co., Chicago, Ill. Labeling-machine | 720,295 | Feb. 10 | 1636 | 374 | 102 | 1185 |
| Strasser, Friedrich, Zurich, Switzerland. Dust-van | 744,127 | Nov. 17 | 2630 | 561 | 107 | 589 |
| Strasser, Sylvester H., Columbus, Ohio. Gun for shooting marbles | 729,444 | May 26 | 4865 | 1078 | 104 | 1079 |
| Strater, Herman, Boston, Mass. Pressure-regulating valve | 745,402 | Dec. 1 | 165 | 38 | 107 | 1135 |
| Stratton, Frank J. (See Carter and Stratton.) | | | | | | |
| Stratton, Frank J., Lagrange, assignor to Oregon Foundry and Machine Company, Oregon, Ill. Mechanism for operating molding-machines | 730,313 | June 9 | 1437 | 316, 317 | 104 | 1437 |
| Stratton, Frank J., Lagrange, assignor to Oregon Foundry and Machine Company, Oregon, Ill. Operating-lever for molding-machines | 731,629 | June 23 | 3889 | 866 | 104 | 1983 |
| Stratton, Franklin, Buffalo, N. Y. Vehicle | 726,590 | Apr. 28 | 4054 | 915 | 103 | 2062 |
| Stratton, Josiah A. (See Robinson, James, assignor.) | | | | | | |
| Stratton, Sadie, Threeoaks, Mich., assignor of two-thirds to G. A. Knight and W. W. Swarts, Balbec, Ind. Skirt-former | 744,882 | Nov. 24 | 4015 | 866 | 107 | 904 |
| Straub, Alfred H. F., Portland, Oreg. Tackle-block | 720,984 | Feb. 17 | 2915 | 668 | 102 | 1467 |
| Straub, Ambrose W., Philadelphia, Pa. Mill for grinding peanuts for butter | 721,651 | Feb. 24 | 4223 | 960 | 102 | 1766 |
| Straub, Christopher, Long Island City, N. Y. Drill | 739,946 | Sept. 29 | 4650 | 1043 | 106 | 1061 |
| Straub, Constantine L., Perth Amboy, N. J. Internal-combustion engine | 720,752 | Feb. 17 | 2498 | 576 | 102 | 1379 |
| Straub, Emil, Bayonne, N. J. Razor-strop | 734,771 | July 28 | 3852 | 898 | 105 | 859 |
| Straub, Eugen, Nuremberg, Germany. Producing and refining metals, metalloids, and alloys | 721,638 | Feb. 24 | 4195 | 954 | 102 | 1759 |
| Straub, Frederick, Flatiron, S. D. Hose-clamp | 720,296 | Feb. 10 | 1638 | 374 | 102 | 1185 |
| Straub, Frederick, Flatiron, S. D. Safety-fastening for hammer-handles | 720,297 | Feb. 10 | 1639 | 375 | 102 | 1186 |
| Straub, George G. (See Wallis and Straub.) | | | | | | |
| Strauch, Edward, New York, N. Y. Casting-machine | 738,372 | Sept. 8 | 1680 | 364 | 106 | 377 |

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| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| Straughn, Charles R., Philadelphia, Pa. Grain-binder | 745,082 | Nov. 24 | 4420 | 955, 956, 957 | 107 | 985 |
| Straus, David J. (See Straus, Jacob D. and D. J.) | | | | | | |
| Straus, Jacob D., St. Louis, Mo., and D. J. Straus, San Antonio, Tex. Spur-leather for securing in position the rowel-frames of spurs | 725,604 | Apr. 14 | 2190 | 496 | 103 | 1651 |
| Strauss, Charles H., Port Gamble, Wash. Adjustable picture-frame | 723,497 | Mar. 24 | 3452 | 772, 773 | 103 | 767 |
| Strauss, Emil A., Chicago, Ill. Safety deposit-box | 738,251 | Sept. 8 | 1395 | 302 | 106 | 317 |
| Strauss, Ernest H., Chicago, Ill. Telephone | 733,296 | July 7 | 1073 | 255, 256 | 105 | 226 |
| Strauss, Ferdinand, Yonkers, N. Y. Toy | 730,584 | June 9 | 1938 | 431 | 104 | 1544 |
| Strauss, Gustavus E. (See Klahn, Emil, assignor.) | | | | | | |
| Strauss, Joseph, U. S. Navy. Gun-bearing | 725,503 | Apr. 14 | 2019 | 455 | 103 | 1613 |
| Strauss, Joseph B., Chicago, Ill. Bridge | 738,954 | Sept. 15 | 2796 | 619, 620 | 106 | 632 |
| Strauss, Joseph B., Chicago, Ill. Car-coupling | 743,110 | Nov. 3 | 558 | 120 | 107 | 116 |
| Strauss, William L., New York, N. Y. Dropping-mouthpiece for bottles | 718,801 | Jan. 20 | 2436 | 540 | 102 | 548 |
| Straw, Wilfred, assignor to De Long Hook and Eye Company, Philadelphia, Pa. Drying apparatus | 744,429 | Nov. 17 | 3199 | 686, 687 | 107 | 713 |
| Strawed Pipe Syndicate. (See Watson, Edwin B., assignor.) | | | | | | |
| Strawn, Jacob L., Jacksonville, Ill. Pump-rod coupling | 730,173 | June 2 | 1160 | 261 | 104 | 1364 |
| Strayer, George D., Phillipsburg, N. J. Marking-stamp | 732,601 | June 30 | 5756 | 1277 | 104 | 2389 |
| Strba, Samuel. (See Strba, Thomas and S.) | | | | | | |
| Strba, Thomas and S., Allegheny, Pa. Hose-coupling | 727,482 | May 5 | 1226 | 271, 272 | 104 | 264 |
| Streater, Lewis E. (See Hale, Oscar F., assignor.) | | | | | | |
| Strebel, Louis, New York, N. Y. Bottle-filling machine | 723,065 | Mar. 17 | 2613 | 588, 589 | 103 | 584 |
| Strebel, Louis, New York, N. Y. Sight-feed housing for bottle-filling machines | 725,504 | Apr. 14 | 2020 | 455, 456 | 103 | 1613 |
| Strebel, Louis, New York, N. Y. Head for bottle-stoppers | 725,505 | Apr. 14 | 2021 | 456 | 103 | 1613 |
| Strebel, Louis, assignor, by mesne assignments, to New Century Machine and Stopper Company, New York, N. Y. Head for bottle-stoppers | 728,142 | May 12 | 2478 | 551 | 104 | 545 |
| Strecker, Otto C., Darmstadt, Germany. Preparing metals or alloys for lithographic printing | 731,082 | June 16 | 2846 | | 104 | 1755 |
| Strecker, Otto C., Darmstadt, Germany. Electrolytically preparing lithographic plates | 737,882 | Sept. 1 | 660 | 140 | 106 | 145 |
| Street, Alexander G., *et al.* (See Campbell, Edward, assignor.) | | | | | | |
| Street, Christopher S., Philadelphia, Pa. Dental mouth-mirror | 727,483 | May 5 | 1227 | 272 | 104 | 265 |
| Street, Clement F. (See Wellman and Street.) | | | | | | |
| Street, Clement F. (See Wellman, Seaver, and Street.) | | | | | | |
| Street, Clement F., Cleveland, Ohio. Tandem-spring draft-rigging for railway-cars | 728,781 | May 19 | 3696 | 825 | 104 | 821 |
| Street, Edgar L., New York, N. Y. Oscillating steam-engine | 726,110 | Apr. 21 | 3088 | 700, 701 | 103 | 1853 |
| Street, Ernest A. G., Paris, assignor to Société Anonyme le Carbone, Levallois-Perret, near Paris, France. Composition for insulating and waterproofing various articles | 739,514 | Sept. 22 | 3815 | 854 | 106 | 865 |
| Streeter, Alfred L., Chicago, Ill. Brake-shoe key | 737,674 | Sept. 1 | 212 | 45 | 106 | 49 |
| Streeter, Alfred L., Chicago, Ill., assignor to J. D. Gallagher, Glenridge, N. J. Brake-shoe | 723,334 | Mar. 24 | 3116 | 701 | 103 | 702 |
| Streeter, Alfred L., Chicago, Ill., assignor to American Brake Shoe & Foundry Company, New York, N. Y. Brake-shoe | 738,856 | Sept. 15 | 2633 | 581 | 106 | 597 |
| Streeter, Herbert A., Chicago, Ill. Metal clip for use in steel building constructions | 718,545 | Jan. 13 | 1955 | 427 | 102 | 436 |
| Streeter, Herbert A., Chicago, Ill. Means for clamping and securing cross metal beams together | 729,445 | May 26 | 4866 | 1078 | 104 | 1079 |
| Streetman, Willard, Cleburne, Tex. Dental mold | 723,942 | Mar. 31 | 4276 | 960 | 103 | 959 |
| Strehl, Joseph B., Owosso, Mich. Beet-weeder | 735,296 | Apr. 14 | 1618 | 366 | 103 | 1528 |
| Strehli, John W., Cincinnati, Ohio. Pulley | 730,413 | June 9 | 1614 | 362 | 104 | 1473 |
| Streich, Frank, and C. L. Ruehs, assignors to S. Karpen & Bros., Chicago, Ill. Mechanical movement | 717,942 | Jan. 6 | 796 | 179, 180 | 102 | 170 |
| Streich, Gabreil, Oshkosh, Wis. Dump cart or wagon | 722,165 | Mar. 3 | 933 | 206 | 103 | 198 |
| Streitwieser, Herman C., Plattsmouth, Nebr. Corn-harvester | 747,263 | Dec. 15 | 3597 | 813 | 107 | 1924 |
| Strelitzer, Julius, New York, N. Y. Dish-washer | 735,840 | Aug. 11 | 1538 | 330 | 105 | 1328 |
| Strenitz, Alexander, assignor of one-half to A. Duffek, Vienna, Austria-Hungary. Toy | 723,421 | Mar. 24 | 3297 | 738 | 103 | 736 |
| Strickland, Elwin, Los Angeles, Cal. Union cable and drill-tool socket | 730,414 | June 9 | 1616 | 362 | 104 | 1474 |
| Strickland, Elwin, Los Angeles, Cal. Underreamer | 730,415 | June 9 | 1618 | 362, 363 | 104 | 1474 |
| Strickland, Joseph C., Clearfield, Pa. Garment-supporter | 717,722 | Jan. 6 | 356 | 87 | 102 | 77 |
| Strickland, Melvin G., Lynchburg, Va. Stovepipe-boiler | 717,943 | Jan. 6 | 799 | 180 | 102 | 171 |
| Strickland, William, Brighton, England. Galvanic cell | 742,365 | Oct. 27 | 3843 | 863 | 106 | 2107 |
| Strickler, Alvin S. and W. H., Keokuk, Iowa. Display-rack | 728,040 | May 12 | 2292 | 509 | 104 | 505 |
| Strickler, Emerson H., Baltimore, Md. Manufacturing trisodium phosphate | 744,128 | Nov. 17 | 2632 | | 107 | 590 |
| Strickler, Frank B., assignor to Janesville Hay Tool Company, Janesville, Wis. Hay-sling lock | 746,197 | Dec. 8 | 1623 | 362 | 107 | 1467 |
| Strickler, William H. (See Strickler, Alvin S. and W. H.) | | | | | | |
| Strickler, William R., Jewell, Kans. Hoist, raised track, and dumping device | 735,617 | Aug. 4 | 1116 | 237 | 105 | 1219 |
| Stringer, Stephen A. D. (See Foster and Stringer.) | | | | | | |
| Stringfellow, Howard C., Shreveport, La. Cotton-chopper | 745,925 | Dec. 1 | 1124 | 251, 252 | 107 | 1338 |
| Strite, George T. (See Davidson and Strite.) | | | | | | |
| Strite, George T. (See Schade and Strite.) | | | | | | |
| Strnad, Ferdinand, Schmargendorf, near Berlin, Germany. Valve | 727,484 | May 5 | 1228 | 272, 273 | 104 | 265 |
| Strobel, August, Chicago, Ill., assignor to American Metal Ware Co. Fastening for bedsteads | 732,133 | June 30 | 4855 | 1081 | 104 | 2198 |
| Stroemer, Arthur H. (See Gentry and Stroemer.) | | | | | | |
| Stroh, Jane F., Pittston, Pa. Mail-delivery bag | 733,765 | July 14 | 1898 | 447, 448 | 105 | 417 |
| Stroh, William G., Hume, Ill. Insulator | 730,805 | June 9 | 2308 | 513 | 104 | 1624 |
| Strohm, John L. (See Mumm and Strohm.) | | | | | | |
| Strohmenger, Carl F., New York, and J. R. Clancy, Syracuse, N. Y. Nut-lock | 736,456 | Aug. 18 | 2635 | 579 | 105 | 1580 |
| Ström, Albert. (See Ström, Gustave A. and A.) | | | | | | |
| Strom, Carl E., *et al.* (See Strom, Victor A., assignor.) | | | | | | |
| Ström, Gustave A. and A., Paris, France. Traveler's rug | 721,250 | Feb. 24 | 3483 | 791 | 102 | 1606 |
| Ström, Ossian J. R., Stockholm, Sweden. Centrifugal liquid-separator | 747,499 | Dec. 22 | 4035 | 906 | 107 | 2040 |
| Strom, Victor A., assignor of three-fourths to C. E. Strom, E. R. Taber, and F. H. Farmer, Alameda, Cal. Automatic gas-extinguisher | 738,579 | Sept. 8 | 2062 | 450 | 106 | 459 |

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| Strombeck, Charles G., St. Louis, Mo. Shoe-cleaner | 726,201 | Apr. 21 | 3269 | 742 | 103 | 1890 |
| Stromberg, Alfred, Chicago, Ill., assignor to Stromberg-Carlson Telephone Manufacturing Company, Rochester, N. Y. Telephone-transmitter | 743,951 | Nov. 10 | 2233 | 482 | 107 | 492 |
| Stromberg-Carlson Telephone Manufacturing Company. (See Babcock, Garrison, assignor.) | | | | | | |
| Stromberg-Carlson Telephone Manufacturing Company. (See Cragg, George L., assignor.) | | | | | | |
| Stromberg-Carlson Telephone Manufacturing Company. (See Davis, William M., assignor.) | | | | | | |
| Stromberg-Carlson Telephone Manufacturing Company. (See Engstrom, Nels A., assignor.) | | | | | | |
| Stromberg-Carlson Telephone Manufacturing Company. (See Goldberg, John S., assignor.) | | | | | | |
| Stromberg-Carlson Telephone Manufacturing Company. (See Hedman, Carl M., assignor.) | | | | | | |
| Stromberg-Carlson Telephone Manufacturing Company. (See Hoglund, Gustavus E., assignor.) | | | | | | |
| Stromberg-Carlson Telephone Manufacturing Company. (See Kaisling, William, assignor.) | | | | | | |
| Stromberg-Carlson Telephone Manufacturing Company. (See Malthauer, John C. F., assignor.) | | | | | | |
| Stromberg-Carlson Telephone Manufacturing Company. (See Meyer, William, assignor.) | | | | | | |
| Stromberg-Carlson Telephone Manufacturing Company. (See Stromberg, Alfred, assignor.) | | | | | | |
| Stromberg, Kraus & Company. (See Duggan, Charles E., assignor.) | | | | | | |
| Stromdahl, Andrew, Somerville, Mass. Jack | 726,477 | Apr. 28 | 3813 | 862 | 103 | 2016 |
| Stromdahl, Andrew, Somerville, assignor to Automatic Hammer Company, Boston, Mass. Automatic hammer | 732,466 | June 30 | 5500 | 1219, 1220 | 104 | 2332 |
| Strong, Frederick F., assignor to F. H. Sweet, Boston, Mass. Electrical apparatus for use of ultra-violet rays | 733,343 | July 7 | 1157 | 274 | 105 | 244 |
| Strong, Harvey. (See Perdew, John, assignor.) | | | | | | |
| Strong, Robert H., Galesburg, Ill. Envelop moistener and sealer | 743,667 | Nov. 10 | 1731 | 365 | 107 | 386 |
| Strootman, Gregory, Buffalo, N. Y. Shoe | 745,462 | Dec. 1 | 290 | 70 | 107 | 1161 |
| Stroppel, Rudolph. (See Kelly, Stroppel, and Wyjack.) | | | | | | |
| Stroud, Charles M. (See Murdock and Stroud.) | | | | | | |
| Stroud, Charles M., assignor of one-half to A. J. Murdock, Minneapolis, Minn. Acetylene-gas generator | 737,041 | Aug. 25 | 3755 | 834 | 105 | 1834 |
| Stroud, Harold D., Chicago, Ill. Telephone-transmitter | 738,857 | Sept. 15 | 2635 | 581 | 106 | 598 |
| Stroud, William. (See Barr and Stroud.) | | | | | | |
| Stroud, William. (See Barr, Stroud, and Becker.) | | | | | | |
| Strouss, William A., Bellevue, and S. S. Lawson, Avalon, Pa. Tile-machine | 741,078 | Oct. 13 | 1275 | 292 | 106 | 1539 |
| Strout, Robert W., Salem, assignor to Vaughn Machine Company, Boston, Mass. Machine for measuring the area of surfaces | 738,580 | Sept. 8 | 2063 | 450, 451 | 106 | 459 |
| Strout, Robert W., Salem, assignor to Vaughn Machine Company, Boston, Mass. Machine for treating hides or skins | 747,500 | Dec. 22 | 4036 | 907 | 107 | 2041 |
| Strowger Company. (See Strowger, Walter S., assignor.) | | | | | | |
| Strowger, Walter S., assignor to Strowger Company, Rochester, N. Y. Carbureting-lamp | 734,772 | July 28 | 3853 | 898, 899 | 105 | 859 |
| Strubel, Joseph M., Youngstown, Ohio. Gaining-machine | 724,966 | Apr. 7 | 1007 | 231, 232 | 103 | 1384 |
| Strubing, Wilhelm, assignor to Tengwall File & Ledger Company, Chicago, Ill. Temporary binder | 747,659 | Dec. 22 | 4331 | 978 | 107 | 2107 |
| Strubler, Charles G., Detroit, Mich. Scale-beam | 733,297 | July 7 | 1075 | 256 | 105 | 226 |
| Structural Steel Car Company. (See Hornbrook, Raymond H., assignor.) | | | | | | |
| Struhs, Frank, Grand Rapids, Mich. Flower-stand | 742,806 | Oct. 27 | 4619 | 1047 | 106 | 2270 |
| Struthers, R. B., *et al.* (See Tures, William, assignor.) | | | | | | |
| Strutz, Charles O., Washington, Mo. Pipe-shellacking machine | 740,604 | Oct. 6 | 437 | 95 | 106 | 1340 |
| Strutz, Charles O., Washington, Mo. Pipe-finishing machine | 743,345 | Nov. 3 | 1023 | 221 | 107 | 219 |
| Strutz, Charles O., Washington, Mo. Machine for turning corncob pipes | 743,587 | Nov. 10 | 1585 | 332 | 107 | 355 |
| Stuart, Alexander M. (See Pott, Cassels, Williamson, and Stuart.) | | | | | | |
| Stuart, Benjamin F., Rushville, Mo. Sickle-bar | 742,084 | Oct. 20 | 3328 | 742 | 106 | 1983 |
| Stuart, Benjamin F., Seattle, Wash. Pencil-case | 746,897 | Dec. 15 | 2905 | 671 | 107 | 1770 |
| Stuart, Charles, Paterson, N. J. Machine for lustering silk | 724,626 | Apr. 7 | 392 | 93 | 103 | 1253 |
| Stuart, Charles C., Campville, Conn. Fixed-knife smoothing-planer | 745,260 | Nov. 24 | 4763 | 1041 | 107 | 1058 |
| Stuart, Charles C., Campville, Conn. Horizontal band-saw | 748,025 | Dec. 29 | 5057 | 1142 | 107 | 2290 |
| Stuart, Charles C., Campville, Conn., assignor to Creswell & Waters Co. Automatic yielding sectional pressure-bar for sandpapering-machines | 732,134 | June 30 | 4855 | 1081 | 104 | 2199 |
| Stuart, Charles C., Campville, Conn., assignor to Creswell & Waters Co. Automatic yielding pressure-bars for sandpapering-machines | 732,381 | June 30 | 5337 | 1183 | 104 | 2299 |
| Stuart, Charles C., Campville, Conn., assignor to Creswell & Waters Co. Supplemental driving means for sandpapering-machine-pad mechanism | 738,955 | Sept. 15 | 2799 | 620 | 106 | 633 |
| Stuart, Charles C., Campville, Conn., assignor to Creswell & Waters Co. Sandpapering-machine pad | 738,956 | Sept. 15 | 2801 | 621 | 106 | 633 |
| Stuart, Francis E., London, England. Locking device for connecting tubular or other parts | 744,985 | Nov. 24 | 4198 | 908 | 107 | 941 |
| Stuart, Fredric, Milwaukee, Wis., assignor to W. A. Stuart, Sturgis, S. D. Sad-iron handle | 738,127 | Sept. 1 | 1132 | 252 | 106 | 245 |
| Stuart, Harve R. (See Peck and Stuart.) | | | | | | |
| Stuart, Harve R., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Potential-regulator for alternating-current circuits | 742,926 | Nov. 3 | 181 | 42 | 107 | 40 |
| Stuart, James A., Wollaston, Mass. Button-pad | 724,403 | Mar. 31 | 5204 | 1166 | 103 | 1146 |
| Stuart, John M., Elmo, Tex. Valve-operating mechanism for presses | 748,231 | Dec. 29 | 5442 | 1240, 1241 | 107 | 2373 |
| Stuart, Joseph, assignor to Lobdell Car Wheel Company, Wilmington, Del. Bearing for car-wheels | 729,446 | May 26 | 4868 | 1078 | 104 | 1080 |
| Stuart, Kenneth E., Philadelphia, Pa. Pneumatic-tube system | 718,740 | Jan. 20 | 2325 | 513 | 102 | 524 |
| Stuart, Kenneth E., Philadelphia, Pa. Pneumatic-despatch system | 744,814 | Nov. 24 | 3898 | 837 | 107 | 879 |
| Stuart, Kenneth E., Philadelphia, Pa. Sender for pneumatic-despatch tubes | 744,815 | Nov. 24 | 3899 | 838 | 107 | 879 |
| Stuart, Kenneth E., assignor to Batcheller Pneumatic Tube Company, Philadelphia, Pa. Apparatus for ascertaining the condition of pipe-conduits | 721,476 | Feb. 24 | 3881 | 882, 883 | 102 | 1688 |
| Stuart, W. A. (See Stuart, Fredric, assignor.) | | | | | | |
| Stuart, Walter E., Detroit, Mich. Molding apparatus | 739,235 | Sept. 15 | 3296 | 730 | 106 | 736 |
| Stuart, William H., assignor to Economy Locomotive Sander Company, Baltimore, Md. Mechanical device for receiving sand and discharging it therefrom under pressure | 734,773 | July 28 | 3857 | 899 | 105 | 860 |
| Stuart, Zebulon B., Los Angeles, Cal. Apparatus for treating ores | 719,273 | Jan. 27 | 3323 | 744 | 102 | 747 |
| Stuart, Zebulon B., Los Angeles, Cal. Extracting metals from ores | 719,274 | Jan. 27 | 3326 | 744 | 102 | 748 |

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| Stubblebine, Jacob E. and J. H., Plymouth, Pa. Car-coupling | 731,520 | June 23 | 3682 | 821 | 104 | 1943 |
| Stubblebine, John H. (See Stubblebine, Jacob E. and J. H.) | | | | | | |
| Stubbs, George M. (See Stubbs, John P. and G. M.) | | | | | | |
| Stubbs, Herbert E. C., Srinagar, India. Back-rest for cycle-saddles | 735,313 | Aug. 4 | 535 | 109 | 105 | 1095 |
| Stubbs, John P., Balham, and G. M. Stubbs, Bournemouth, England. Apparatus for weighing tea, &c | 729,007 | May 26 | 4108 | 911<br>912 | 104 | 923 |
| Stubbs, John W. (See Hargreaves, Stubbs, and Kearsley.) | | | | | | |
| Stubbs, Riley A., Day on, Ohio. Cleaning device for use in connection with bolting-machines | 721,251 | Feb. 24 | 3483 | 792 | 102 | 1606 |
| Stubbs, Riley A., Dayton, Ohio. Feeding device for bolting or other machines | 734,631 | July 28 | 3568 | 835 | 105 | 803 |
| Stubbs, Riley A., Dayton, Ohio, assignor to Wave System Bolting Company. Eccentric or cam | 738,252 | Sept. 8 | 1396 | 302 | 106 | 317 |
| Stubinger, William F., assignor to Sexton-Stubinger Range Company, St. Louis, Mo. Jacket attachment for steam cooking utensils | 745,261 | Nov. 24 | 4765 | 1041 | 107 | 1058 |
| Stuckenberg, William S. (See Miles, Casper W., assignor.) | | | | | | |
| Stucki, Arnold, Allegheny, Pa. Draft-gear for railway-cars | 727,485 | May 5 | 1229 | 273 | 104 | 265 |
| Stucki, Arnold, Allegheny, Pa. Railway-car bolster | 745,262 | Nov. 24 | 4765 | 1041 | 107 | 1058 |
| Stucki, Arnold, Allegheny, assignor to Pressed Steel Car Company, Pittsburg, Pa. Ore-car | 731,242 | June 16 | 3139 | 697 | 104 | 1812 |
| Stucky, Stephen, Oxford, assignor of one-half to W. H. McKleroy, Anniston, Ala. Pipe-wrench | 719,960 | Feb. 3 | 981 | 227 | 102 | 1031 |
| Studd, Annie, Chicago, Ill. Furniture-polish | 746,760 | Dec. 15 | 2633 | | 107 | 1708 |
| Study, Leonard, Thurman, Iowa. Cutting apparatus for mowing-machines | 748,118 | Dec. 29 | 5241 | 1189<br>1190 | 107 | 2330 |
| Stuelpnagel, William G. (See Becker and Stuelpnagel.) | | | | | | |
| Stukes, John M., Dallas, assignor of one-half to J. T. Elliott, Dallas County, Tex. Fan-blower | 748,436 | Dec. 29 | 5808 | 1323 | 107 | 2454 |
| Stull, Emmett W. (See Merrick and Stull.) | | | | | | |
| Stull, Emmett W., Johnstown, assignor, by mesne assignments, to Westinghouse Electric and Manufacturing Company, Pittsburg, Pa. Circuit-breaker | 739,947 | Sept. 29 | 4651 | 1043 | 106 | 1061 |
| Stull, Jacob H., Fremont, Ohio. Tool for closing or opening jars | 733,298 | July 7 | 1076 | 256 | 105 | 227 |
| Stults, Grace H., Roslindale Station, Mass. Game apparatus | 742,927 | Nov. 3 | 184 | 42 | 107 | 40 |
| Stults, William H., assignor of one-half to B. J. Boyle, Mulberry Grove, Ill. Railway tie | 745,686 | Dec. 1 | 674 | 155 | 107 | 1242 |
| Stump, Alexander H., Baltimore, Md. Expansible and contractible lamp-chimney | 739,447 | May 26 | 4869 | 1079 | 104 | 1080 |
| Stump, Ira E., assignor of one-half to E. E. Crook, Cleveland, Ohio. Bit-stock | 732,332 | Mar. 10 | 1262 | 281 | 103 | 284 |
| Stump, Ira E., and E. E. Crook, Cleveland, Ohio. Spinning top | 732,233 | June 30 | 5052 | 1123 | 104 | 2241 |
| Stumpf, Johann, Berlin, Germany. Regulating device for steam-turbines | 728,041 | May 12 | 2203 | 510 | 104 | 505 |
| Stumpf, Johann, Berlin, Germany. Wheel or disk for steam-engines | 737,042 | Aug. 25 | 3757 | 834 | 105 | 1834 |
| Stumpf, Johann, Berlin, Germany. Steam-engine | 737,043 | Aug. 25 | 3757 | 834 | 105 | 1834 |
| Stumpf, Johann, Berlin, Germany. Steam-turbine | 740,332 | Sept. 29 | 5355 | 1206 | 106 | 1208 |
| Stumpf, Johann, Charlottenburg, Germany. Steam or gas turbine | 730,416 | June 9 | 1620 | 363 | 104 | 1474 |
| Stumpf, Johann, Charlottenburg, Germany. Steam-turbine | 730,982 | June 16 | 2656 | 591 | 104 | 1716 |
| Stumpf, Johann, Charlottenburg, Germany. Steam-turbine | 730,983 | June 16 | 2658 | 592 | 104 | 1716 |
| Stumpf, John, Berlin, Germany. Vacuum-pump | 722,416 | Mar. 10 | 1411 | 311<br>312 | 103 | 316 |
| Stuparich Manufacturing Company. (See Stuparich, Paul J., assignor.) | | | | | | |
| Stuparich, Paul J., assignor to Stuparich Manufacturing Company, San Francisco, Cal. Manufacturing photographic mounts | 748,232 | Dec. 29 | 5445 | 1241 | 107 | 2374 |
| Sturdivant, Frank K., assignor of one-half to J. R. Page, Biscoe, N. C. Rotary engine | 748,320 | Dec. 29 | 5587 | 1274 | 107 | 2404 |
| Sturgeon, Benjamin F., assignor of one-half to F. M. Rickert, Youngstown, Ohio. Combination step-ladder | 725,377 | Apr. 14 | 1767 | 397 | 103 | 1558 |
| Sturges, Harry W., Wilton, Conn. Boat-propeller | 747,801 | Dec. 22 | 4584 | 1035 | 107 | 2164 |
| Sturges, Lee, Elmhurst, Ill. Apparatus for pasteurizing milk | 733,601 | July 14 | 1618 | 384 | 105 | 360 |
| Sturgill, Elbert, Eolia, Ky. Barrel-lock for firearms | 728,326 | May 19 | 2857 | 631 | 104 | 647 |
| Sturgis, Edwin M., assignor of one-half to C. G. Fischer, Hamilton, Ohio. Rotary engine | 744,816 | Nov. 24 | 3901 | 838 | 107 | 879 |
| Sturgis, Herbert M., assignor to Sturgis Manufacturing Company, Kansas City, Mo. Heater | 733,437 | July 14 | 1332 | 315 | 105 | 299 |
| Sturgis Manufacturing Company. (See Sturgis, Herbert M., assignor.) | | | | | | |
| Sturla, Jacob J. (See King, Charles P., assignor.) | | | | | | |
| Sturm, Friedrich, Stuttgart, Germany. Electric igniting device | 722,333 | Mar. 10 | 1263 | 281<br>282 | 103 | 284 |
| Sturm, Jacob W., *et al.* (See Johnston, Horace G., assignor.) | | | | | | |
| Sturm, William P., *et al.* (See Johnston, Horace G., assignor.) | | | | | | |
| Sturmey, John J. H., Coventry, England. Variable-speed gear | 737,675 | Sept. 1 | 213 | 45, 46 | 106 | 49 |
| Sturrock, Robert F., Dundee, Scotland. Bridge of furnaces for boilers | 724,517 | Apr. 7 | 186 | 45, 46 | 103 | 1209 |
| Sturtevant, Charles L. (See McNeil and Sturtevant.) | | | | | | |
| Sturtevant, Thomas J. (See Sturtevant, Thomas L. and T. J.) | | | | | | |
| Sturtevant, Thomas L., Quincy, and T. J. Sturtevant, Wellesley, Mass. Crank and crank connection | 736,457 | Aug. 18 | 2637 | 579 | 105 | 1581 |
| Sturtevant, Thomas L., Quincy, and T. J. Sturtevant, Wellesley, Mass. Pitman | 736,458 | Aug. 18 | 2639 | 580 | 105 | 1581 |
| Sturtevant, Thomas L., Quincy, and T. J. Sturtevant, Newton Center, Mass. Electrical sparking igniter for gas-engines | 740,781 | Oct. 6 | 752 | 169<br>170 | 106 | 1406 |
| Sturtevant, Thomas L., Quincy, and T. J. Sturtevant, Newton Center, Mass. Carbureter for explosion-engines | 744,257 | Nov. 17 | 2888 | 619 | 107 | 645 |
| Sturtevant, Thomas L., Quincy, and T. J. Sturtevant, Newton Center, Mass. Carbureter for explosion-engines | 747,264 | Dec. 15 | 3600 | 814 | 107 | 1924 |
| Sturtz, John D., Uniontown, Pa. Device for packing throttle-valves | 727,225 | May 5 | 761 | 163 | 104 | 164 |
| Stüssy, Henry H., Beresford, S. D. Cream-separator | 745,083 | Nov. 24 | 4424 | 957 | 107 | 986 |
| Stutson, Ada T. (See Ricketts, William M., assignor.) | | | | | | |
| Stutzman, Frank, assignor of one-fourth to A. Fischer, Williamsport, Pa. Cutter-head | 743,047 | Nov. 3 | 438 | 95, 96 | 107 | 92 |
| Stutzman, Frank, assignor to C. and J. Seewald and A. P. Perley, Williamsport, Pa. Cutter-head | 723,066 | Mar. 17 | 2616 | 589 | 103 | 585 |
| Stuver, Eugene E., Bluemound, Ill. Clasp for suspender-ends | 736,170 | Aug. 11 | 2141 | 460 | 105 | 1456 |
| Styak, John G. de, *et al.* (See Müller-Jacobs, Armand, assignor.) | | | | | | |
| Styer, Charles A., *et al.* (See Cloud, William H., assignor.) | | | | | | |
| Styll, Henry H. (See McMillan and Styll.) | | | | | | |
| Submarine Signal Company. (See Gray, Elisha, assignor.) | | | | | | |
| Subtarget Gun Company. (See Cummings, Henry H., assignor.) | | | | | | |
| Suchert, Ernst. (See Voelpel, Suchert, and Oekel.) | | | | | | |
| Suchy, Robert, and H. Specketer, assignors to Chemische Fabrik Griesheim Electron, Griesheim-on-the-Main, Germany. Extracting chromium from chrome-iron ore | 743,668 | Nov. 10 | 1732 | 365 | 107 | 386 |
| Suck, Frederick A., Boston, Mass. Tag-stringing machine | 738,253 | Sept. 8 | 1397 | 303<br>304<br>305 | 106 | 317 |
| Sudbrink, Charles, New York, N. Y. Water-closet seat | 722,465 | Mar. 10 | 1513 | 333 | 103 | 338 |
| Suddath, Benjamin F., Gillsville, Ga. Drainage system | 725,793 | Apr. 21 | 2560 | 580 | 103 | 1744 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | Spec. | Drg. | Vol. | Page. |
| Sudman, Henrietta D., Boyne, Mich. Composition for removing grease, &c | 731,521 | June 23 | 3682 | ..... | 104 | 1943 |
| Sudre, Charles G., and C. V. Thierry, Paris, France. Treating distillers' wash | 732,234 | June 30 | 5053 | 1124 | 104 | 2241 |
| Sueddeutsche Praecisionswerkzeugefabrik Bartholomaeus & Co. (See Bartholomäus, Rudolf, assignor.) | | | | | | |
| Sues, George W., Omaha, Nebr. Shelving | 730,984 | June 16 | 2658 | 592, 593 | 104 | 1716 |
| Suffern, John S., Corning, N. Y. Display-stand | 743,048 | Nov. 3 | 439 | 96 | 107 | 92 |
| Suffolk Nailing Machine Company of Portland, Me. (See Lang, William H., assignor.) | | | | | | |
| Suggs, Allen C., Gail, Tex. Milk cooler or refrigerator | 743,588 | Nov. 10 | 1588 | 333 | 107 | 355 |
| Sugrue, Daniel B. (See Sugrue, Timothy D., assignor.) | | | | | | |
| Sugrue, Timothy D., assignor of one-half to D. B. Sugrue, Boston, Mass. Clothing-hanger | 736,171 | Aug. 11 | 2142 | 461 | 105 | 1456 |
| Sulgrove, Edward. (See Kordick and Sulgrove.) | | | | | | |
| Sulikx, Theodor, Duquesne, Pa. Hobby-horse and merry-go-round | 724,218 | Mar. 31 | 4821 | 1081 | 103 | 1067 |
| Sulikx, Theodor, Duquesne, Pa. Window | 731,969 | June 23 | 4496 | 1003 | 104 | 2113 |
| Sullings, Henry H., Huntington, W. Va. Hose-reel for cranes | 718,672 | Jan. 20 | 2196 | 480 | 102 | 498 |
| Sullins, Cale M., assignor of one-third to D. C. Willis, Moody, Tex. Arch-bar for cultivators | 719,159 | Jan. 27 | 3126 | 696 | 102 | 705 |
| Sullivan, Annie, Toledo, Ohio. Skirt-yoke | 719,160 | Jan. 27 | 3127 | 696 | 102 | 705 |
| Sullivan, Daniel M., assignor to Thomas & Ettinger, Riovista, Cal. Doffer for fiber-machines | 720,298 | Feb. 10 | 1640 | 375 | 102 | 1186 |
| Sullivan, David J., assignor of one-half to F. H. Harper and E. I. Fish, Saginaw, Mich. Safety switch-closing mechanism | 719,057 | Jan 27 | 2922 | 653, 654 | 102 | 665 |
| Sullivan, Douglas, Mount Ayr, Iowa. Display-rack | 734,995 | July 28 | 4271 | 993 | 105 | 947 |
| Sullivan, Edward E., Fall River, Mass. Picker-motion for looms | 724,143 | Mar. 31 | 4680 | 1051 | 103 | 1039 |
| Sullivan, George B., Evanston, assignor to Vulcan Lever Co., Cincinnati, Ohio. Car-lever | 737,522 | Aug. 25 | 4662 | 1047 | 105 | 2031 |
| Sullivan, George P., and Z. P. Freeman, Tampa, Fla. Bottle or vessel stopper device | 733,344 | July 7 | 1158 | 275 | 105 | 244 |
| Sullivan, James J., Ferguson, Mo. Clay mixer and carrier | 723,753 | Mar. 24 | 3884 | 874 | 103 | 858 |
| Sullivan, John, Suffield, Conn. Tobacco-hoist | 739,358 | Sept. 22 | 3511 | 785 | 106 | 798 |
| Sullivan, John H. (See Parker, William K., assignor.) | | | | | | |
| Sullivan, John J. (See Knowlton, Ephraim H. B., assignor.) | | | | | | |
| Sullivan, John J., Holyoke, Mass. Valved appliance | 726,369 | Apr. 28 | 3609 | 818, 819 | 103 | 1976 |
| Sullivan, John J., New York, N. Y. Mail-box | 748,541 | Dec. 29 | 6026 | 1364 | 107 | 2503 |
| Sullivan, John J., Ipswich, Mass., and E. B. Allen, Elizabeth, N. J., assignors to Singer Manufacturing Company. Thread-cutting device for sewing-machines | 742,366 | Oct. 27 | 3844 | 863, 864 | 106 | 2107 |
| Sullivan, John W. (See McVoy and Sullivan.) | | | | | | |
| Sullivan, Joseph J., Genesee, Pa. Match-safe | 740,710 | Oct. 6 | 598 | 133 | 106 | 1376 |
| Sullivan Machine Company. (See Holdsworth, Fred D., assignor.) | | | | | | |
| Sullivan Machinery Co. (See Officer and Mercer, assignors.) | | | | | | |
| Sullivan Machinery Company. (See Officer, Thomas, assignor.) | | | | | | |
| Sullivan, Mary A., New York, N. Y. Massage implement | 718,170 | Jan. 13 | 1207 | 267 | 102 | 275 |
| Sullivan, Michael E., New Bedford, Mass. Card-clothing | 745,974 | Dec. 1 | 1215 | 273 | 107 | 1359 |
| Sullivan, Michael E., New Bedford, Mass., assignor to Sawyer Spindle Company, of Maine. Spinning-spindle | 728,042 | May 12 | 2296 | 510 | 104 | 506 |
| Sullivan, Michael E., New Bedford, assignor to Draper Company, Hopedale, Mass. Spinning-ring | 739,739 | Sept. 22 | 4234 | 948 | 106 | 956 |
| Sullivan, Michael H., assignor of one-third to C. C. Gindra, Poughkeepsie, N. Y. Rotary engine | 730,489 | June 9 | 1764 | 395, 396 | 104 | 1505 |
| Sullivan, Michael H., G. J. Dixon, and J. W. White, Carbondale, Pa. Detachable heel | 723,754 | Mar. 24 | 3885 | 875 | 103 | 858 |
| Sullivan, Thomas. (See Sheridan, Frank, assignor.) | | | | | | |
| Sullivan, William E., assignor, by mesne assignments, of one-half to Parkhill Manufacturing Company, Fitchburg, Mass. Thread-guide collar | 733,345 | July 7 | 1160 | 275 | 105 | 244 |
| Sulman, Henry L., and H. F. Kirkpatrick-Picard, London, England. Apparatus for the recovery of precious metals | 736,036 | Aug. 11 | 1909 | 408 | 105 | 1407 |
| Sult, Robert P. (See Painter, Samuel, assignor.) | | | | | | |
| Summa, Domenico, New York, N. Y. Watch-protector | 718,399 | Jan. 13 | 1626 | 357 | 102 | 364 |
| Summa, Domenico, New York, N. Y. Watch-protecting fob-chain | 741,564 | Oct. 13 | 2257 | 504 | 106 | 1748 |
| Summerfeldt, George H., Gouverneur, N. Y. Veterinary surgical instrument | 737,293 | Aug. 25 | 4227 | 941 | 105 | 1933 |
| Summerfield, John, Dallas, Tex. Acetylene-gas generator | 737,523 | Aug. 25 | 4663 | 1047 | 105 | 2031 |
| Summerfield, John, Dallas, Tex. Acetylene-gas generator | 737,524 | Aug. 25 | 4667 | 1047, 1048 | 105 | 2032 |
| Summerfield, John, Dallas, Tex. Water-heater | 737,525 | Aug. 25 | 4670 | 1048 | 105 | 2032 |
| Summers, Charles R. (See Summers, Horace W. and C. R.) | | | | | | |
| Summers, Edgar W., Akron, Ohio. Metallic car | 723,067 | Mar. 17 | 2617 | 589, 590 | 103 | 585 |
| Summers, Edgar W., Youngstown, Ohio. Car-truck | 723,755 | Mar. 24 | 3887 | 875 | 103 | 859 |
| Summers, Edgar W., Youngstown, Ohio. Roller side bearing for cars | 723,756 | Mar. 24 | 3889 | 875 | 103 | 859 |
| Summers, Edgar W., Youngstown, Ohio. Car-truck | 728,043 | May 12 | 2296 | 510, 511 | 104 | 506 |
| Summers, Edgar W., Youngstown, Ohio. Car | 728,044 | May 12 | 2299 | 511, 512 | 104 | 507 |
| Summers, Edgar W., Youngstown, Ohio. Metallic car | 738,128 | Sept. 1 | 1134 | 252 | 106 | 245 |
| Summers, Edgar W., Pittsburg, Pa. Car-truck | 740,605 | Oct. 6 | 439 | 95, 96 | 106 | 1340 |
| Summers, Edgar W., Wilkinsburg, Pa. Car-bottom | 746,602 | Dec. 8 | 2338 | 535 | 107 | 1622 |
| Summers, Fabian A., Washington, Ind. Air-ship | 723,068 | Mar. 17 | 2621 | 590, 591 | 103 | 587 |
| Summers, George F., *et al.* (See Mitchell, Winfield J., assignor.) | | | | | | |
| Summers, Horace W., Elyria, and C. R. Summers, Norwalk, Ohio. Automatic railway-switch | 747,501 | Dec. 22 | 4039 | 908 | 107 | 2041 |
| Summers, Samuel L., Philadelphia, Pa. Alkali caffeine methylene disalicylate | 721,923 | Mar. 3 | 513 | ..... | 103 | 114 |
| Summers, Samuel L., Philadelphia, Pa. Benzoic-acid ester of methylene diguaiacol and making same | 721,924 | Mar. 3 | 514 | ..... | 103 | 114 |
| Summersby, John J., and J. Grieve, assignors of one-third to H. A. Burnett, Dodge City, Kans. Hand-measure for gloves | 740,943 | Oct. 6 | 1021 | 231 | 106 | 1464 |
| Summit, John F., Lafollette, Tenn. Rail-joint | 748,437 | Dec. 29 | 5809 | 1323 | 107 | 2454 |
| Summit Thread Company. (See Bates and Labrum, assignors.) | | | | | | |
| Sumner, George F., assignor to A. B. Scully, trustee, Chicago, Ill. Apparatus for bottling liquids | 722,263 | Mar. 10 | 1132 | 250, 251 | 103 | 256 |
| Sumner, George F., assignor to Knitted Mattress Company, Canton, Mass. Surgical bandage | 737,526 | Aug. 25 | 4672 | 1048 | 105 | 2033 |
| Sumner & Goodwin Company. (See Curtis, Nelson, assignor.) | | | | | | |
| Sumpter, Henry C., Chicago, Ill. Egg or fruit box | 726,478 | Apr. 28 | 3815 | 863 | 103 | 2017 |
| Sundell, Frans R. A., Stockholm, Sweden. Covering walls or ceilings | 748,542 | Dec. 29 | 6027 | ..... | 107 | 2503 |
| Sunderland, Lewis. (See Dawson and Sunderland.) | | | | | | |
| Sunderland, Thomas, Waterbury, Conn. Double dump-cart | 732,324 | June 30 | 5211 | 1157 | 104 | 2273 |

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| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
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| Sundermeyer, John F. (See Cherne and Sundermeyer.) | | | | | | |
| Sundh, August. (See Baldwin and Sundh.) | | | | | | |
| Sundh, August, Yonkers, N. Y. Protective electric switch-box | 733,560 | July 14 | 1541 | 366, 367 | 105 | 343 |
| Sundh, August, Yonkers, N. Y. Pressure-regulated switch | 733,561 | July 14 | 1544 | 368 | 105 | 344 |
| Sundh, August, Yonkers, N. Y. Electrohydraulic controller for electric motors | 733,562 | July 14 | 1547 | 368, 369 | 105 | 345 |
| Sundh, August, Yonkers, N. Y. Electric controller | 733,563 | July 14 | 1550 | 369, 370 | 105 | 345 |
| Sundh, August, Yonkers, N. Y. Electric controller | 733,564 | July 14 | 1555 | 370 | 105 | 346 |
| Sundh, August, Yonkers, N. Y. Electric controller | 733,565 | July 14 | 1559 | 371 | 105 | 347 |
| Sundh, August, Yonkers, N. Y. Electric controller | 733,566 | July 14 | 1562 | 371, 372 | 105 | 348 |
| Sundh, August, Yonkers, N. Y. Electric controller | 733,567 | July 14 | 1565 | 372 | 105 | 349 |
| Sundh, August, Yonkers, N. Y. Pipe or rod coupling device | 733,568 | July 14 | 1568 | 373 | 105 | 350 |
| Sundh, August, Yonkers, N. Y. Protected switch mechanism | 744,817 | Nov. 24 | 3902 | 839 | 107 | 879 |
| Sundh, August, Yonkers, N. Y. Electric controller | 744,818 | Nov. 24 | 3904 | 839 | 107 | 880 |
| Sundh, August, Yonkers, N. Y. Controller for alternating-current motors | 745,926 | Dec. 1 | 1125 | 252 | 107 | 1339 |
| Sundh, August, Yonkers, N. Y., assignor to Otis Elevator Company, East Orange, N. J. Safety device for electric elevators | 726,370 | Apr. 28 | 3612 | 819 | 103 | 1977 |
| Sundh, August, and D. L. Lindquist, Yonkers, N. Y. Friction-gear | 747,016 | Dec. 15 | 3133 | 717 | 107 | 1820 |
| Sundin, John P., West Duluth, Minn. Clothes-line reel | 727,486 | May 5 | 1232 | 273 | 104 | 266 |
| Sundquist, Gustavus E., assignor of one-half to A. H. Wahl, Cleveland, Ohio. Telephone relay or step-up | 743,589 | Nov. 10 | 1590 | 333 | 107 | 356 |
| Sundstrom, Carl J., Jersey City, N. J. Box and cover therefor | 727,236 | May 5 | 762 | 163 | 104 | 164 |
| Sunergren, Charles G., Arlington, Mass. Making printing-surfaces for color-printing | 745,263 | Nov. 24 | 4767 | ..... | 107 | 1059 |
| Sunlight by Night Acetylene Gas Company. (See Condon, John, assignor.) | | | | | | |
| Sunlight Gas Machine Company. (See Scofield, William E., assignor.) | | | | | | |
| Superior Drill Company. (See Packham, Frank R., assignor.) | | | | | | |
| Suppan, Carl V. (See Kirsch, Suppan, and Szendi.) | | | | | | |
| Suppan, Carl V., Vienna, and B. Szendi, Budapest, Austria-Hungary. Truck for transport of ships, &c | 722,436 | Mar. 10 | 1443 | 320 | 103 | 323 |
| Suppes, Maximilian M., Elyria, Ohio. Blast-furnace hearth | 729,105 | May 26 | 4282 | 946 | 104 | 957 |
| Suppes, Maximilian M., Elyria, Ohio. Apparatus for handling coal for gas-producer plants | 735,422 | Aug. 4 | 740 | 158 | 105 | 1137 |
| Suppes, Maximilian M., Elyria, Ohio. Rolling-mill | 742,367 | Oct. 27 | 3848 | 864 | 106 | 2108 |
| Suppes, Maximilian M., Elyria, Ohio. Roll-adjusting mechanism for rolling-mills | 742,368 | Oct. 27 | 3849 | 864 | 106 | 2108 |
| Supple, John R., Oakland, Cal. Rowlock | 741,850 | Oct. 20 | 2798 | 623 | 106 | 1878 |
| Supplee, Samuel G., New York, N. Y. Dental plate | 725,506 | Apr. 14 | 2022 | 456 | 103 | 1615 |
| Supplee, Samuel G., New York, N. Y. Dental plate | 728,633 | May 19 | 3428 | 761 | 104 | 768 |
| Surface, Charles F., assignor to Van Camp Burial Vault Company, Indianapolis, Ind. Burial-vault | 741,384 | Oct. 13 | 1907 | 421 | 106 | 1674 |
| Surzycki, Stanislaus, Czenstochowa, Russia. Smelting-furnace for the continuous production of steel | 742,519 | Oct. 27 | 4119 | 927 | 106 | 2163 |
| Susanka, Leopold, Vienna, Austria-Hungary. Flash-light apparatus | 733,300 | July 7 | 1079 | 257 | 105 | 227 |
| Susquehanna Silk Mills. (See Klerx, Johann H., assignor.) | | | | | | |
| Sussman, John H. (See Bastian and Sussman.) | | | | | | |
| Sussmilch, William A., Rockford, Ill. Palette | 748,026 | Dec. 29 | 5059 | 1143 | 107 | 2291 |
| Sutcliffe, Edgar R., Leigh, England. Brick-making machine | 744,430 | Nov. 17 | 3203 | 687, 688 | 107 | 715 |
| Sutcliffe, Edgar R., Leigh, England. Making bricks or blocks | 744,431 | Nov. 17 | 3206 | ..... | 107 | 715 |
| Sutcliffe, Edgar R., Leigh, England. Making artificial stone, &c | 744,432 | Nov. 17 | 3207 | ..... | 107 | 715 |
| Sutcliffe, Fred, *et al.* (See Hodgson, Walter W., assignor.) | | | | | | |
| Sutcliffe, Horace H., Philadelphia, Pa. Needle-heddle and leno-cord-stripe motion | 729,106 | May 26 | 4284 | 946, 947 | 104 | 957 |
| Sutcliffe, John T., Padeham, England. Sole and heel protecting device for boots, shoes, &c | 731,970 | June 23 | 4498 | 1004 | 104 | 2114 |
| Sutcliffe, Thomas. (See McGowan, Thomas, assignor.) | | | | | | |
| Sutcliffe, Tom, London, England. Machine for aerating liquids and bottling same | 727,710 | May 12 | 1690 | 377 | 104 | 382 |
| Sutcliffe, William, Paterson, N. J. Steam-engine | 719,530 | Feb. 3 | 208 | 48, 49 | 102 | 867 |
| Sutcliffe, William, Paterson, N. J. Steam-engine | 729,107 | May 26 | 4285 | 947 | 104 | 957 |
| Sutcliffe, William, Paterson, N. J. Steam-engine | 737,294 | Aug. 25 | 4228 | 941 | 105 | 1933 |
| Suter, Jacob, and W. Lenk, Jersey City, N. J. Self-playing musical instrument | 747,802 | Dec. 22 | 4586 | 1035, 1036 | 107 | 2165 |
| Sutherland, John. (See Granger, John, assignor.) | | | | | | |
| Sutherland, Malcolm, and E. Marcuson, London, England. Combined portable electric lamp and battery | 733,766 | July 14 | 1900 | 448 | 105 | 418 |
| Sutherland, Stephen M. (See Morley, Albert, assignor.) | | | | | | |
| Sutherland, Stephen M., trustee. (See Morley, Albert, assignor.) | | | | | | |
| Sutphen, John E., assignor to Newton Reduction Company, Albany, N. Y. Ore-amalgamator | 719,161 | Jan. 27 | 3129 | 697 | 102 | 706 |
| Sutphin, Simon H. (See Trott and Sutphin.) | | | | | | |
| Sutro Brothers Braid Company. (See Mittendorff, Max, assignor.) | | | | | | |
| Sutton, Benjamin, Paterson, N. J. Toy wind-wheel | 726,371 | Apr. 28 | 3613 | 819 | 103 | 1977 |
| Sutton, Charles, Sodus Point, N. Y. Combined valve-seat and packing-ring | 746,402 | Dec. 8 | 1991 | 454 | 107 | 1544 |
| Sutton, Charles R., Dayton, assignor to J. M. Heckman and H. Snell, Union, Ohio. Means for repairing punctured pneumatic tires | 725,171 | Apr. 14 | 1405 | 318 | 103 | 1482 |
| Sutton, Edgar O., Detroit, Mich. Machine for forming butter-pats | 737,792 | Sept. 1 | 440 | 94 | 106 | 97 |
| Sutton, Henry M., W. L. Steele, and M. Coerver, Dallas, Tex. Electrical alarm system | 722,334 | Mar. 10 | 1265 | 282, 283 | 103 | 285 |
| Sutton, Henry M., W. L. Steele, and M. Coerver, Dallas, Tex. Balancing relays | 745,687 | Dec. 1 | 676 | 156 | 107 | 1242 |
| Sutton, Henry M., W. L. and E. G. Steele, Dallas, Tex. Ore-roaster | 729,008 | May 26 | 4114 | 912 | 104 | 924 |
| Sutton, Henry M., W. L. and E. G. Steele, Dallas, Tex. Roasting ores | 729,009 | May 26 | 4118 | 913 | 104 | 925 |
| Sutton, Henry M., W. L. and E. G. Steele, Dallas, Tex. Dry ore-concentrator | 747,265 | Dec. 15 | 3606 | 814, 815 | 107 | 1926 |
| Sutton, Isaac, Denver, Colo. Concentrator | 736,309 | Aug. 11 | 2385 | 519 | 105 | 1512 |
| Sutton, James P., Cincinnati, Ohio. Skirt-elevator | 724,518 | Apr. 7 | 187 | 46 | 103 | 1209 |
| Sutton, John G., Pontiac, Mich. Combined hay and stock rack | 722,054 | Mar. 3 | 739 | 164 | 103 | 159 |
| Sutton, John W., New York, N. Y. Steam-generator | 722,466 | Mar. 10 | 1514 | 334 | 103 | 339 |
| Sutton, John W., New York, N. Y. Cooling attachment for internal-combustion engines | 740,711 | Oct. 6 | 599 | 134 | 106 | 1376 |
| Sutton, John W., New York, N. Y. Cooling attachment for internal-combustion engines | 741,419 | Oct. 13 | 1960 | 434 | 106 | 1684 |
| Sutton, John W., Brooklyn, N. Y. Speed-indicator for automobiles | 739,740 | Sept. 22 | 4234 | 948 | 106 | 956 |
| Sutton, Lewis V., West Newton, Pa. Rotary engine | 740,944 | Oct. 6 | 1022 | 231, 232 | 106 | 1464 |
| Sutton, William D., Manly, Iowa. Whiffletree-hook | 737,793 | Sept. 1 | 443 | 95 | 106 | 98 |

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| Suverkrop, Edward A., and R. Coates, assignors to H. T. C. Wise, Philadelphia, Pa. Staple-machine | 731,630 | June 23 | 3892 | 867 | 104 | 1984 |
| Suzuki, Tozaburo, Sunamura, Japan. Apparatus for making rock-candy | 748,321 | Dec. 29 | 5590 | {1274 {1275 | 107 | 2405 |
| Svenson, Leonard A., Oakland, Cal. Puzzle | 723,498 | Mar. 24 | 3454 | 773 | 103 | 767 |
| Svenson, Nils, Excelsior, Minn. Thill-coupling | 726,202 | Apr. 21 | 3269 | 742 | 103 | 1890 |
| Svensson, Claes A., assignor of one-half to W. W. Oliver, Buffalo, N. Y. Drill-chuck | 747,017 | Dec. 15 | 3136 | {717 {718 | 107 | 1821 |
| Svensson, Johan A., Washington, D. C. Bed-plate motion for printing-presses | 730,174 | June 2 | 1161 | {261 {262 | 104 | 1364 |
| Swain, Elihu, and D. C. Wood, Iola, Kans. Ore-roasting furnace | 734,104 | July 21 | 2596 | {608 {609 | 105 | 583 |
| Swain, George F. (See Kellogg, Henry E., assignor.) | | | | | | |
| Swain, George F., assignor of one-half to H. E. Kellogg, Harvey, Ill. Exhaust-muffler | 738,858 | Sept. 15 | 2636 | 581 | 106 | 598 |
| Swain, James H., Pittsburg, Pa. Printing-block | 732,467 | June 30 | 5503 | 1220 | 104 | 2333 |
| Swain, Joseph G., Youngstown, Ohio. Electrical connector | 743,346 | Nov. 3 | 1026 | 221 | 107 | 219 |
| Swain, Seth R., El Paso, Tex. Apparatus for sizing ores or for other uses | 731,522 | June 23 | 3683 | {821 {822 | 104 | 1944 |
| Swallow, Fred., assignor of one-half to C. Branson, Miami, Ind. Ter. Churn | 723,757 | Mar. 24 | 3891 | 876 | 103 | 860 |
| Swalm, William E. (See Casterline, Sexton, Stockwell, and Swalm.) | | | | | | |
| Swalum, Sever T. (See Stephan, August J., assignor.) | | | | | | |
| Swan, Alfred, New York, N. Y., assignor to General Electric Company. Blowing-off machine for lamp-bulbs | 729,237 | May 26 | 4519 | 996 | 104 | 1007 |
| Swan Electric Manufacturing Company. (See Ford, Henry B., assignor.) | | | | | | |
| Swan, Henry C., Oshkosh, Wis. Shaft-clamp | 731,971 | June 23 | 4500 | 1004 | 104 | 2114 |
| Swan, Henry C., Cleveland, Ohio. Fifth-wheel | 734,996 | July 28 | 4273 | 993 | 105 | 947 |
| Swan, James, Seymour, Conn. Steam-engine piston | 744,643 | Nov. 17 | 3551 | 766 | 107 | 786 |
| Swan, James, Seymour, Conn. Steam-engine piston | 748,233 | Dec. 29 | 5446 | 1241 | 107 | 2374 |
| Swan, John C., Marietta, Ohio. Drilling apparatus | 726,111 | Apr. 21 | 3089 | {701 {702 | 103 | 1853 |
| Swan, John T., and C. K. Shelhamer, Auburn, Nebr., assignors to said Swan. Wagon-body | 747,266 | Dec. 15 | 3612 | 815 | 107 | 1928 |
| Swan, Peter, Northbend, Nebr. Book-mark | 718,291 | Jan. 13 | 1439 | 320 | 102 | 325 |
| Swan, Peter, Calcutta, India. Electric motor for ceiling-fans | 730,985 | June 16 | 2662 | 593 | 104 | 1717 |
| Swan, Peter, Calcutta, India. Electric motor | 732,235 | June 30 | 5054 | 1124 | 104 | 2241 |
| Swan, Peter, Calcutta, India. Electric motor for ceiling-fans | 732,602 | June 30 | 5757 | 1277 | 104 | 2390 |
| Swan, Soren S., Witwatersrand Gold Fields, Transvaal, South Africa. Tool and tool-holder | 719,275 | Jan. 27 | 3327 | 744 | 102 | 749 |
| Swanburg, Arthur W., assignor of two-thirds to N. F. Olson and A. Larson, Minneapolis, Minn. Portable door-lock | 718,673 | Jan. 20 | 2197 | 480 | 102 | 498 |
| Swaney, Fletcher D., assignor of one-half to H. Galer, Kansas City, Kans. Furnace or stove fire-pot | 744,644 | Nov. 17 | 3553 | 766 | 107 | 786 |
| Swanitz Company. (See Porter, Henry H., Jr., assignor.) | | | | | | |
| Swank, Edward C. (See Potter and Swank.) | | | | | | |
| Swannell, Frederick O. (See Lawther, Alfred B., assignor.) | | | | | | |
| Swanson, August, Red Wing, Minn. Album | 727,022 | May 5 | 403 | 84 | 104 | 88 |
| Swanson, Carl L., Blue Rapids, Kans. Cultivator | 722,264 | Mar. 10 | 1144 | {251 {252 | 103 | 258 |
| Swanson, Carl L., Blue Rapids, Kans. Cultivator | 723,422 | Mar. 24 | 3298 | 738 | 103 | 736 |
| Swanson, Carl L., Blue Rapids, Kans. Cultivator | 733,516 | July 14 | 1469 | 349 | 105 | 328 |
| Swanson, Swan F., Pueblo, Colo. Dumping-car | 727,487 | May 5 | 1233 | 274 | 104 | 266 |
| Swanson, Swan F., Pueblo, Colo. Railway-car | 727,488 | May 5 | 1235 | 274 | 104 | 266 |
| Swanton, Hugh. (See Davis, Herbert, assignor.) | | | | | | |
| Swanton, Hugh, London, England. Means for controlling fluid-pressure engines | 720,299 | Feb. 10 | 1641 | {375 {376 | 102 | 1186 |
| Swanton, Hugh, Stepney, London, England. Liquid-pressure engine for blowing organs | 729,238 | May 26 | 4521 | 996 | 104 | 1008 |
| Swaren, William A., assignor to National Voting Machine Company, Chicago, Ill. Voting-machine | 728,045 | May 12 | 2302 | 512 | 104 | 507 |
| Swarens, John F., Oskaloosa, Iowa. Burner-grate | 744,883 | Nov. 24 | 4017 | 866 | 107 | 904 |
| Swart, Lester D., Auburn, N. Y. Corn-husking machine | 732,468 | June 30 | 5504 | 1220 | 104 | 2333 |
| Swart, Lester D., Auburn, N. Y. Roller for corn-husking machines | 732,469 | June 30 | 5506 | 1221 | 104 | 2333 |
| Swart, Lester D., Auburn, N. Y., assignor to A. W. Stevens Company, Marinette, Wis. Cornstalk-shredder | 729,239 | May 26 | 4525 | 997 | 104 | 1008 |
| Swart, Lester D., Auburn, N. Y., assignor to A. W. Stevens Company, Marinette, Wis. Corn-husking machine | 731,393 | June 16 | 3430 | 765 | 104 | 1873 |
| Swart, Orson A., Middletown, N. Y. Harness | 737,295 | Aug. 25 | 4229 | 941 | 105 | 1933 |
| Swarthout, Elmer E., Evanston, Ill. Portable wood-sawing machine | 743,203 | Nov. 3 | 741 | {162 {163 | 107 | 155 |
| Swarthout, Ezekiel C. (See Pittenger, Elmer O., assignor.) | | | | | | |
| Swarts, W. W., *et al.* (See Stratton, Sadie, assignor.) | | | | | | |
| Swartwout, George H. (See Blackburn and Swartwout.) | | | | | | |
| Swartz, Albert L., Junction City, Oreg. Multiplying attachment for cameras | 745,688 | Dec. 1 | 679 | 156 | 107 | 1243 |
| Swartz, Benedictus. (See Winkenwerder and Swartz.) | | | | | | |
| Swartz, Edward G. (See Ashcraft and Lubbes, assignors.) | | | | | | |
| Swartz, George W., Huntsville, assignor of one-half to B. H. Lindsey, Bellemina, Ala. Oil-burner | 737,676 | Sept. 1 | 215 | 46 | 106 | 50 |
| Swasey, Ambrose, assignor to Warner & Swasey Company, Cleveland, Ohio. Depression range-finder | 737,794 | Sept. 1 | 443 | 95 | 106 | 98 |
| Swasie, Alpheus F., Marysville, Iowa. Buggy-top adjuster | 738,706 | Sept. 8 | 2324 | 510 | 106 | 512 |
| Swayne, Samuel F. (See Garver, Charles, assignor.) | | | | | | |
| Swayze, Joseph H., Belleville, Ill. Brooder | 722,437 | Mar. 10 | 1445 | 320 | 103 | 324 |
| Sweany, Francis L., Philadelphia, Pa. Link for sprocket-chains | 745,975 | Dec. 1 | 1216 | 273 | 107 | 1359 |
| Swearer, James A., Beaver, and C. E. Toynbee, Port Allegany, Pa., assignors, by mesne assignments, to Mississippi Wire Glass Company, Jersey City, N. J. Making wire glass | 736,310 | Aug. 11 | 2388 | 520 | 105 | 1512 |
| Swearingen, Alonzo J. (See Fambrough, Andrew C., assignor.) | | | | | | |
| Swearingen, Hannon T., Guthrie, Okla. Ter. Guard for bridge-piers | 747,660 | Dec. 22 | 4332 | 979 | 107 | 2107 |
| Swearingen, John W., Gaston, Cal. Quicksilver-feed for amalgamators | 733,301 | July 7 | 1080 | 257 | 105 | 228 |
| Swearinger, James H., Kansas City, Mo. Rolling steel shutter or door | 731,328 | June 16 | 3305 | 737 | 104 | 1847 |
| Sweat, Omega, Bolder, Tex. Railway appliance | 734,246 | July 21 | 2858 | {669 {670 | 105 | 638 |
| Swedenborg, Swan, Ashtabula, Ohio. Clam-shell bucket | 725,794 | Apr. 21 | 2562 | {580 {581 | 103 | 1745 |
| Swedish-American Telephone Company. (See Lidberg, Tiodolf, assignor.) | | | | | | |
| Sweeney, George W., New York, N. Y. Roller-bearing | 746,198 | Dec. 8 | 1625 | 362 | 107 | 1468 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | Spec. | Drg. | Vol. | Page. |
| Sweeney, Henry G., assignor to F. G. Kammerer, Chicago, Ill. Vending mechanism | 740,202 | Sept. 29 | 5116 | 1149<br>1150 | 106 | 1159 |
| Sweeney, John A., New York, N. Y. Supplemental coat-pocket | 745,927 | Dec. 1 | 1127 | 253 | 107 | 1339 |
| Sweeney, Luke, Terre Haute, Ind. Track-fastening | 741,943 | Oct. 20 | 2992 | 665 | 106 | 1918 |
| Sweeney, Samuel, Pittsburg, Pa. Ice-cream freezer | 720,856 | Feb. 17 | 2663 | 614<br>615 | 102 | 1414 |
| Sweet, Benjamin H., Brooklyn, N. Y. Apparatus for magnetic separation | 739,741 | Sept. 22 | 4236 | 948<br>949 | 106 | 956 |
| Sweet, Frank H. (See Strong, Frederick F., assignor.) | | | | | | |
| Sweet, Frederick D., assignor, by mesne assignments, to Ohio Fiber Machinery Co., Elyria, Ohio. Machine for cutting wood fiber | 747,337 | Dec. 15 | 3749 | 844<br>845 | 107 | 1959 |
| Sweet & Son, John, *et al.* (See Renfroe, Thomas N., assignor.) | | | | | | |
| Sweeting, John W., Cairo, Ill. Reamer | 719,902 | Feb. 3 | 880 | 207 | 102 | 1010 |
| Sweetser, William A., *et al.* (See Haines, John H. J., assignor.) | | | | | | |
| Sweetzer, William A., *et al.* (See Randall, Henry G., assignor.) | | | | | | |
| Swegle, Abram D., Fayette, Mo., assignor of one-half to D. A. Swegle, Galesburg, and I. L. Swegle, Fairview, Ill. System for the electrical propulsion of carriers | 724,627 | Apr. 7 | 894 | 94 | 103 | 1253 |
| Swegle, Abram D., Fayette, Mo., assignor of one-half to D. A. Swegle, deceased, Galesburg, (B. B. Swegle, administrator,) and I. L. Swegle, Fairview, Ill. Carrier for transporting and delivering parcels | 741,182 | Oct. 13 | 1482 | 336<br>337 | 106 | 1582 |
| Swegle, Abram D., Fayette, Mo., assignor of one-half to D. A. Swegle, deceased, Galesburg, (B. B. Swegle, administrator,) and I. L. Swegle, Fairview, Ill. Chain for conveyers, elevators, &c | 741,851 | Oct. 20 | 2799 | 623 | 106 | 1879 |
| Swegle, Bertan B., administrator, *et al.* (See Swegle, Abram D., assignor.) | | | | | | |
| Swegle, Daniel A., *et al.* (See Swegle, Abram D., assignor.) | | | | | | |
| Swegle, Isaac L., *et al.* (See Swegle, Abram D., assignor.) | | | | | | |
| Sweigart, Amos F., Longhorne, Pa. Switch | 718,229 | Jan. 13 | 1317 | 291 | 102 | 298 |
| Sweigart, Henry W. (See Oberholtzer, Walter S., assignor.) | | | | | | |
| Sweitzer, Charles C. (See Bell and Sweitzer.) | | | | | | |
| Swenson, Andrew S., Leavenworth, Kans. Inside grain-door | 733,517 | July 14 | 1470 | 349 | 105 | 328 |
| Swenson, Goran, New York, N. Y. Floor-cleaning apparatus | 722,768 | Mar. 17 | 2096 | 469 | 103 | 479 |
| Swenson, Gustaf T., near San Pedro, Cal. Wireless-telegraph receiver | 745,463 | Dec. 1 | 291 | 70 | 107 | 1161 |
| Swenson, John S. (See Swenson, Lorens and J. S.) | | | | | | |
| Swenson, Jonas A., McPherson, Kans. Automatic lubricator | 722,769 | Mar. 17 | 2097 | 469 | 103 | 479 |
| Swenson, Lorens and J. S., Cresco, Iowa. Valve | 744,433 | Nov. 17 | 3209 | 688 | 107 | 716 |
| Swenson, Magnus, Madison, Wis. Eliminating solvents from seeds | 747,267 | Dec. 15 | 3614 | ..... | 107 | 1928 |
| Swerdfiger, George A. (See Franc, Jacques, assignor.) | | | | | | |
| Swezey, Moses C., Westhaven, assignor to New Haven Acme Store Service Co., New Haven, Conn. Store-service apparatus | 736,651 | Aug. 18 | 3015 | 665 | 105 | 1658 |
| Swift, Edward S., trustee. (See Carroll, Fred M., assignor.) | | | | | | |
| Swift, Ernest H., Hartford, Conn. Automatic hammer | 720,636 | Feb. 17 | 2300 | 527 | 102 | 1336 |
| Swift, Ernest H. and M. H., Hartford, Conn. Drying gold-beater skins | 730,314 | June 9 | 1438 | 317 | 104 | 1437 |
| Swift, Frederick. (See Vanorman, Oliver, assignor.) | | | | | | |
| Swift, George, Oakdale, Mass. Picker-stick bunter | 727,859 | May 12 | 1967 | 438 | 104 | 436 |
| Swift, John P., Pawtucket, assignor to S. M. Conant, Central Falls, R. I. Passenger-supporting strap | 729,696 | June 2 | 301 | 70 | 104 | 1191 |
| Swift, Matthew H. (See Swift, Ernest H. and M. H.) | | | | | | |
| Swift, Moses R., Bennington, Vt. Golf-stick | 722,927 | Mar. 17 | 2379 | 532 | 103 | 535 |
| Swift, Wilbur L., New York, N. Y., assignor to Union Special Sewing Machine Co., Chicago, Ill. Folding-guide for sewing-machines | 742,257 | Oct. 27 | 3656 | 817 | 106 | 2067 |
| Swift, Willis C., Chicago, Ill. Lock-nut | 748,027 | Dec. 29 | 5059 | 1143 | 107 | 2291 |
| Swihart, John H., and F. C. Hoyt, assignors to National Computing Scale Company, Cleveland, Ohio. Weighing-scale | 728,046 | May 12 | 2308 | 513 | 104 | 508 |
| Swilling, Sam B., Carnesville, Ga. Planter | 731,243 | June 16 | 3141 | 698 | 104 | 1812 |
| Swindell, James D., assignor to American Furnace and Machine Co., Pittsburg, Pa. Hopper | 747,018 | Dec. 15 | 3138 | 718 | 107 | 1821 |
| Swindell, James D., assignor to American Furnace and Machine Co., Pittsburg, Pa. Crucible-furnace | 747,019 | Dec. 15 | 3139 | 718<br>719 | 107 | 1822 |
| Swindell, James D., assignor to American Furnace and Machine Co., Pittsburg, Pa. Furnace | 747,020 | Dec. 15 | 3141 | 719 | 107 | 1822 |
| Swindlehurst, Albert, Montreal, Canada, assignor to Oliver Typewriter Company, Chicago, Ill. Paper-guide for type-writers | 726,591 | Apr. 28 | 4056 | 916 | 103 | 2063 |
| Swinglehurst, Harry. (See Scott, Williams, and Swinglehurst.) | | | | | | |
| Swinney, Frederick, Tucson, Ariz. Ter. Device for handling beers or other liquids requiring added and even pressure | 734,145 | July 21 | 2677 | 630 | 105 | 599 |
| Swinton, David L., Jr., deceased. (See Case and Swinton.) | | | | | | |
| Swinton, Frances, administratrix. (See Case and Swinton.) | | | | | | |
| Swisher, Charles R., Wellington, Kans. Milk pasteurizer and cooler | 739,456 | Sept. 22 | 3722 | 828<br>829 | 106 | 845 |
| Switzer, William L., Denver, Colo. Corn-husking device | 746,647 | Dec. 8 | 2423 | 554 | 107 | 1641 |
| Swoboda, Hans O., East Orange, N. J. Electric switch | 735,841 | Aug. 11 | 1540 | 330 | 105 | 1328 |
| Swonson, John E., assignor to Butler Machine Company, Des Moines, Iowa. Car-switching | 718,674 | Jan. 20 | 2198 | 480<br>481 | 102 | 498 |
| Swonson, John E., assignor to Butler Machine Company, Des Moines, Iowa. Furnace-door opener | 731,972 | June 23 | 4501 | 1004 | 104 | 2114 |
| Swope, George B., Washington Court-House, Ohio. House-ventilator | 727,860 | May 12 | 1968 | 438 | 104 | 436 |
| Sword, Elisha N., Fig, Va. Mail-box and support | 730,806 | June 9 | 2309 | 513 | 104 | 1624 |
| Swyers, Brice P., Pittsburg, Pa. Shear-table | 722,265 | Mar. 10 | 1146 | 252<br>253 | 103 | 259 |
| Sy, Carl M. R., Hamburg, Germany. Device for cleaning windows | 724,059 | Mar. 31 | 4501 | 1014 | 103 | 1001 |
| Sykes, Joshua W., Detroit, Mich. Carpet-sweeper | 722,642 | Mar. 10 | 1825 | 406 | 103 | 408 |
| Sylvester, Carrol T., Chilton, Tex. Combined lister or breaking plow and seed-planter | 724,352 | Mar. 31 | 5095 | 1140 | 103 | 1121 |
| Sylvestersen, Jorgen H., Dundee, Ill. Ditching-machine | 719,058 | Jan. 27 | 2925 | 654 | 102 | 665 |
| Symes, James E., and B. K. Boyd, Bancroft, Mich. Knockdown crate | 746,199 | Dec. 8 | 1627 | 362<br>363 | 107 | 1468 |
| Symington, Thomas H., Baltimore, Md. Lid construction for railway journal-boxes | 723,069 | Mar. 17 | 2623 | 591 | 103 | 588 |
| Symington, Thomas H., Baltimore, Md. Journal-box lid | 739,515 | Sept. 22 | 3816 | 855 | 106 | 865 |
| Symington, Thomas H., Baltimore, Md. Journal-box lid | 739,516 | Sept. 22 | 3817 | 855<br>856 | 106 | 866 |
| Symington, Thomas H., Baltimore, Md. Journal-box lid | 739,517 | Sept. 22 | 3819 | 856 | 106 | 866 |
| Symmonds, Arthur L. and M. T., Colorado Springs, Colo. Brick-machine | 727,489 | May 5 | 1236 | 275 | 104 | 267 |
| Symmonds, Marlin T. (See Symmonds, Arthur L. and M. T.) | | | | | | |
| Symmonds, Robert, Jr. (See Jeffery and Symmonds.) | | | | | | |
| Symmonds, Robert, Jr., assignor to T. B. Jeffery, Kenosha, Wis. Power-transmitting mechanism for motor-vehicles | 723,758 | Mar. 24 | 3892 | 876 | 103 | 860 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | Spec. | Drg. | Vol. | Page. |
| Symmons, William G. S. (See Tonks and Symmons.) | | | | | | |
| Symms, Arthur T., Chicago, Ill. Means for making pipe | 734,375 | July 21 | 3103 | 730 | 105 | 690 |
| Symonds, Henry, Longbeach, assignor, by mesne assignments, to L. F. Kistler, Los Angeles, Cal. Acetylene-gas generator | 747,502 | Dec. 22 | 4042 | 908 | 107 | 2042 |
| Symonds, Herbert, East St. Louis, Ill., assignor of one-half to L. B. Carroll, St. Louis, Mo. Amusement device | 724,757 | Apr. 7 | 631 | 148 | 103 | 1303 |
| Syms, Robert H., New York, N. Y. Decoy | 735,314 | Aug. 4 | 536 | 109 | 105 | 1095 |
| Synnestvedt, Paul, Glenview, Ill. Vehicle driving mechanism | 729,010 | May 26 | 4120 | 913 | 104 | 925 |
| Synnestvedt, Paul, Glenview, Ill. Vehicle driving mechanism | 736,459 | Aug. 18 | 2639 | 580 | 105 | 1581 |
| Synnestvedt, Paul, Glenview, Ill. Vehicle driving mechanism | 737,883 | Sept. 1 | 662 | 141 | 106 | 145 |
| Synnestvedt, Paul, Glenview, Ill. Vehicle-driving mechanism | 744,434 | Nov. 17 | 3210 | 689 | 107 | 716 |
| Synnestvedt, Paul, assignor to Westinghouse Air Brake Company, Pittsburg, Pa. Triple valve | 730,315 | June 9 | 1440 | 317 | 104 | 1437 |
| Syracuse Arms Company. (See Horne, George A., assignor.) | | | | | | |
| Syracuse Time Recorder Company. (See Kimball and Palmer, assignors.) | | | | | | |
| Syracuse Time Recorder Company. (See Palmer and Kimball, assignors.) | | | | | | |
| Szafka, Joseph, Philadelphia, Pa. Wine-press | 734,774 | July 28 | 3858 | 899 | 105 | 860 |
| Szczepanik, Jan, assignor to Société des Inventions Jan Szczepanik & Co., Vienna, Austria-Hungary. Electrical jacquard mechanism for looms | 727,023 | May 5 | 404 | 85 | 104 | 88 |
| Szczepanik, Jan, assignor to Société des Inventions, Jan Szczepanik & Cie., Vienna, Austria-Hungary. Optical projection apparatus | 733,090 | July 7 | 699 | 170<br>171 | 105 | 149 |
| Szczepanik, Jan, assignor to Société des Inventions Jan Szczepanik & Cie., Vienna, Austria-Hungary. Apparatus for setting the hook-needles in jacquard-machines | 748,028 | Dec. 29 | 5060 | 1143<br>1144 | 107 | 2291 |
| Szekler, Morris, Cleveland, Ohio. Street-railway chart | 742,520 | Oct. 27 | 4120 | 927 | 106 | 2163 |
| Szemanski, Stefan C., San Francisco, Cal. Gold-saving device | 747,268 | Dec. 15 | 3615 | 815 | 107 | 1928 |
| Szendi, Béla. (See Kirsch, Suppan, and Szendi.) | | | | | | |
| Szendi, Béla. (See Suppan and Szendi.) | | | | | | |
| Szentjánossy, Sigmund, New York, N. Y. Cooking utensil | 737,171 | Aug. 25 | 3989 | 884 | 105 | 1883 |
| Szirmay, Ignaz, assignor of one-half to L. von Kollerich, Budapest, Austria-Hungary. Zincing objects by electrolysis | 736,565 | Aug. 18 | 2843 | ------ | 105 | 1625 |
| Tabb, Samuel Y., New York, N. Y. Cigar-tip cutter | 728,425 | May 19 | 3027 | 665 | 104 | 682 |
| Taber, Albert E., Greatfalls, Mont. Feed-water heater | 729,907 | June 2 | 704 | 156 | 104 | 1271 |
| Taber, David F., assignor to D. A. Beckwith, New York, N. Y. Card-index | 727,490 | May 5 | 1237 | 275 | 104 | 267 |
| Taber, Edward R., *et al.* (See Strom, Victor A., assignor.) | | | | | | |
| Taber, John C. B., Dallas, Tex. Inkstand | 742,929 | Nov. 3 | 186 | 43 | 107 | 41 |
| Taber, Silas W., Houlton, Me. Wagon-gear | 719,531 | Feb. 3 | 211 | 49 | 102 | 868 |
| Tabler, Jasper N., Royse City, Tex. Safety-envelop | 721,757 | Mar. 3 | 177 | 41 | 103 | 29 |
| Tabler, John H., Washington, D. C. Blanket-roll strap or poncho-holder | 740,712 | Oct. 6 | 600 | 134 | 106 | 1376 |
| Tabor, Anne E., Detroit, Mich. Wearing-apparel | 742,928 | Nov. 3 | 185 | 43 | 107 | 41 |
| Tabor, Joseph A., Scranton, Miss. Litter | 719,059 | Jan. 27 | 2927 | 654<br>655 | 102 | 665 |
| Tabor Manufacturing Company. (See Clark, William T., assignor.) | | | | | | |
| Tabor Manufacturing Company. (See Lewis, Wilfred, assignor.) | | | | | | |
| Taboulevitsch, Valdemar, Sselo Alexandrowskoje, near St. Petersburg, Russia. Steam-generator | 736,652 | Aug. 18 | 3016 | 666 | 105 | 1659 |
| Taboulevitsch, Valdemar, Sselo Alexandrowskoje, near St. Petersburg, Russia. Electric-light signal | 739,359 | Sept. 22 | 3512 | 786 | 106 | 798 |
| Tabrett, Henry C., and W. Lewin, San Francisco, Cal. Heater | 743,769 | Nov. 10 | 1900 | 402 | 107 | 422 |
| Tackaberry, Robert D., Lewiston, Me. Steam-trap | 743,952 | Nov. 10 | 2235 | 483 | 107 | 492 |
| Tafel, Julius, Würzburg, assignor to C. F. Boehringer & Soehne, Mannheim-Waldhof, Germany. Manufacture of camphidon | 727,024 | May 5 | 406 | ------ | 104 | 89 |
| Tafel, Julius, Würzburg, assignor to C. F. Boehringer & Soehne, Mannheim-Waldhof, Germany. Producing hydroxylamin | 727,025 | May 5 | 407 | ------ | 104 | 89 |
| Tafel, Julius, Würzburg, assignor to C. F. Boehringer & Soehne, Mannheim-Waldhof, Germany. Camphidin and preparing same | 727,026 | May 5 | 408 | ------ | 104 | 89 |
| Taft, Allen L. (See Gallagher, Micheal H., assignor.) | | | | | | |
| Taft, Charles E., New York, N. Y. Truck | 722,166 | Mar. 3 | 934 | 207 | 103 | 198 |
| Taft, Frederick F., *et al.* (See Wattles, Luther H., assignor.) | | | | | | |
| Taft, Jerome C., assignor to American Cotton Bale Company, Providence, R. I. Press | 719,702 | Feb. 3 | 520 | 117 | 102 | 932 |
| Taft, Robert C., Topeka, Kans. Wall-tie | 717,638 | Jan. 6 | 205 | 51 | 102 | 44 |
| Taggart, Thomas, *et al.* (See Sandage, William L., assignor.) | | | | | | |
| Tagliabue, Charles J., and F. W. Steuer, Brooklyn, N. Y.; said Steuer assignor to said Tagliabue. Hypodermic syringe | 729,011 | May 26 | 4122 | 913 | 104 | 926 |
| Tagliavia-Tanini, Frederick. (See Goldan, Sydney O., assignor.) | | | | | | |
| Tague, Tracy S., Pendleton, Ind. Governor for dynamos | 744,986 | Nov. 24 | 4199 | 908 | 107 | 941 |
| Tainter, Charles S., assignor to American Graphophone Company, Washington, D. C. Graphophone | 730,986 | June 16 | 2663 | 593<br>594 | 104 | 1717 |
| Taisey, Fred R., assignor to Taisey Pneumatic Service Company, Indianapolis, Ind. Pneumatic-despatch apparatus | 729,448 | May 26 | 4870 | 1079 | 104 | 1080 |
| Taisey Pneumatic Service Company. (See Taisey, Fred R., assignor.) | | | | | | |
| Tait, Felix B. (See Curtis, Edmund A., assignor.) | | | | | | |
| Takamine, Jokichi, New York, N. Y. Obtaining products from suprarenal glands | 730,175 | June 2 | 1163 | ------ | 104 | 1365 |
| Takamine, Jokichi, New York, N. Y. Glandular extractive product | 730,176 | June 2 | 1166 | ------ | 104 | 1365 |
| Takamine, Jokichi, New York, N. Y. Isolating the active principle of the suprarenal glands | 730,196 | June 2 | 1198 | ------ | 104 | 1371 |
| Takamine, Jokichi, New York, N. Y. Isolating the active principle of the suprarenal glands | 730,197 | June 2 | 1200 | ------ | 104 | 1372 |
| Takamine, Jokichi, New York, N. Y. Preparing extracts of the suprarenal glands | 730,198 | June 2 | 1202 | ------ | 104 | 1372 |
| Talbert, Daniel H., Indianapolis, Ind. Game apparatus | 730,987 | June 16 | 2668 | 594 | 104 | 1718 |
| Talbert, Jesse, Wagoner, Ind. Ter. Quick-action wrench | 743,770 | Nov. 10 | 1901 | 403 | 107 | 423 |
| Talbot, Benjamin, Leeds, England. Making gas | 718,887 | Jan. 20 | 2597 | 580 | 102 | 582 |
| Talbot, Benjamin, Pencoyd, Pa. Manufacture of open-hearth steel | 747,661 | Dec. 22 | 4333 | ------ | 107 | 2107 |
| Talbot, Benjamin, Harrogate, England, assignor to Continuous Metal Refining Company, Philadelphia, Pa. Manufacture of steel | 747,662 | Dec. 22 | 4335 | ------ | 107 | 2107 |
| Talbot, Richard. (See Rossetter and Talbot.) | | | | | | |
| Talen, Maurice W., C. F. Pearson, E. B. Christopher, G. E. Johnson, and L. A. Lindberg, Chicago, Ill. Vehicle driving-gear | 736,172 | Aug. 11 | 2143 | 461 | 105 | 1456 |
| Talge, Charles W., Indianapolis, Ind. Veneer-sawing machine | 720,985 | Feb. 17 | 2917 | 668<br>669 | 102 | 1467 |
| Taliaferro, James M. (See Tucker, Louis E., assignor.) | | | | | | |
| Taliaferro, John C., Baltimore, Md., assignor, by mesne assignments, to American Can Company, Jersey City, N. J. Machine for drying and fluxing metal sheets | 722,643 | Mar. 10 | 1827 | 406<br>407 | 103 | 409 |
| Taliaferro, Thomas W., Omaha, Nebr., assignor to Cudahy Packing Co., Chicago, Ill. Closure for bottles, jars, or other vessels | 747,269 | Dec. 15 | 3618 | 816 | 107 | 1929 |
| Tallant, William, assignor of one-half to A. H. Gulliver, Waltham, Mass. Loom for leno-weaving | 729,012 | May 26 | 4124 | 913<br>914 | 104 | 926 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Tallerday, Franklin G., assignor to Tallerday Steel Pipe & Tank Company, Waterloo, Iowa. Pipe connection | 733,346 | July 7 | 1160 | 275 | 105 | 244 |
| Tallerday, Franklin G., assignor to Tallerday Steel Pipe & Tank Company, Waterloo, Iowa. Knockdown wagon-body | 733,347 | July 7 | 1161 | 275 | 105 | 245 |
| Tallerday Steel Pipe & Tank Company. (See Tallerday, Franklin G., assignor.) | | | | | | |
| Talley, Charles H., Lincoln, Ill. Device for operating awnings | 734,247 | July 21 | 2859 | 670 | 105 | 638 |
| Talley, George C., Holland, Tex. Cotton-chopper | 721,618 | Feb. 24 | 4161 | 945 | 102 | 1751 |
| Talley, Henry I., Philadelphia, Pa. Envelop-sealer | 725,795 | Apr. 21 | 2564 | 581 | 103 | 1745 |
| Tallmadge, James W., Boston, Mass. Acetylene-gas generator | 734,105 | July 21 | 2598 | 609 | 105 | 583 |
| Talmage, Herbert J., Surprise, Nebr. Straw-conveyer | 723,335 | Mar. 24 | 3118 | 702 | 103 | 702 |
| Tammen, Tamme R. (See Hinrichs and Tammen.) | | | | | | |
| Tandy, John L., Horton, Kans. Display-cabinet | 730,718 | June 9 | 2171 | 482 | 104 | 1594 |
| Tandy, John L., Horton, Kans. Display-cabinet | 736,311 | Aug. 11 | 2389 | 520 | 105 | 1512 |
| Tandy, Lewis G., St. Louis, Mo. Surgical appliance | 731,083 | June 16 | 2847 | 632 | 104 | 1755 |
| Tank, August F., Snover, Mich. Road working or grading machine | 734,632 | July 28 | 3569 | 835, 836 | 105 | 803 |
| Tann, James H., Lansing, Mich. Musical instrument | 740,485 | Oct. 6 | 196 | 39 | 106 | 1287 |
| Tanner, Benjamin, Sturgis, Mich. Washboard | 743,111 | Nov. 3 | 560 | 120 | 107 | 117 |
| Tanner, Benjamin, Sturgis, Mich. Combined hay and stock rack | 743,112 | Nov. 3 | 562 | 120, 121 | 107 | 117 |
| Tanner, N., *et al.* (See McGuire, Peter J., assignor.) | | | | | | |
| Tanner, Rudolf, and O. Tolaas, St. Paul, Minn. Apparatus for drying sand | 745,689 | Dec. 1 | 680 | 156 | 107 | 1243 |
| Tannewitz, Edward, assignor of one-half to D. W. Kendall, Grand Rapids, Mich. Furniture-coupling | 735,618 | Aug. 4 | 1120 | 237 | 105 | 1220 |
| Tanron, Charles, San Francisco, Cal. Game apparatus | 728,327 | May 19 | 2858 | 631 | 104 | 647 |
| Tansley, George H., assignor to Colt's Patent Fire Arms Manufacturing Company, Hartford, Conn. Sight for firearms | 737,677 | Sept. 1 | 216 | 46 | 106 | 50 |
| Tapin, Léon, assignor to A. Kornfeld, Paris, France. Hydrocarbon-vapor burner | 718,675 | Jan. 20 | 2201 | 482 | 102 | 499 |
| Taplin, Albert J., Washington, D. C. Steam-turbine | 740,945 | Oct. 6 | 1025 | 232, 233 | 106 | 1465 |
| Taplin, Albert J., Washington, D. C. Marine propulsion | 740,946 | Oct. 6 | 1028 | 234, 235 | 106 | 1465 |
| Taplin, Clarence A., Forestville, assignor to Taplin Manufacturing Company, Bristol, Conn. Egg-beater | 725,507 | Apr. 14 | 2024 | 456 | 103 | 1614 |
| Taplin Manufacturing Company. (See Taplin, Clarence A., assignor.) | | | | | | |
| Tappan, Charles H., *et al.* (See Foss, Walter O., assignor.) | | | | | | |
| Tappan, William C., *et al.* (See Foss, Walter O., assignor.) | | | | | | |
| Tappe, August C., Cincinnati, Ohio. Hoof-pad | 719,162 | Jan. 27 | 3130 | 697 | 102 | 706 |
| Tarbell, George F., *et al.* (See Briggs, Frank J., assignor.) | | | | | | |
| Tarbell, Joseph H., assignor to Eickemeyer & Osterheld M'f'g. Co., Yonkers, N. Y. Hat-brim-stretching machine | 747,503 | Dec. 22 | 4045 | 909 | 107 | 2042 |
| Tarbell, Lafayette, Los Angeles, Cal. Pipe-wrench | 747,504 | Dec. 22 | 4047 | 909 | 107 | 2043 |
| Tarbox, David N., Cedarville, Ohio. Combination-tool | 743,590 | Nov. 10 | 1591 | 333 | 107 | 356 |
| Tarmon, William H., and F. M. Thompson, assignors to N. H. Bledsoe, Fort Wayne, Ind. Hydrocarbon-vapor burner | 725,796 | Apr. 21 | 2566 | 581 | 103 | 1745 |
| Tarney, Simeon U., Auburn, Ind. Window-screen | 746,403 | Dec. 8 | 1992 | 454 | 107 | 1544 |
| Tarpenning, Charles T., assignor of one-half to L. Koss, Indianapolis, Ind. Sheet-metal-bending machine | 724,519 | Apr. 7 | 187 | 46, 47 | 103 | 1209 |
| Tarr, Julius, Philadelphia, Pa. Ship loading or coaling device | 739,033 | Sept. 15 | 2917 | 647, 648 | 106 | 658 |
| Tasker, Vernon C., assignor to United States Ordnance Company, Washington, D. C. Gas-check for breech-loading guns | 740,782 | Oct. 6 | 754 | 170 | 106 | 1406 |
| Tasker, Vernon C., assignor to United States Ordnance Company, Washington, D. C. Firing device for breech-loading guns | 745,301 | Nov. 24 | 4857 | 1059 | 107 | 1076 |
| Tasker, Vernon C., Washington, D. C., assignor to American Ordnance Company, Norfolk, Va. Auxiliary barrel for breech-loading guns | 741,079 | Oct. 13 | 1280 | 292, 293 | 106 | 1540 |
| Tasker, Vernon C., Washington, D. C., assignor to American Ordnance Company, Norfolk, Va. Adjusting-gage for subcaliber guns | 741,183 | Oct. 13 | 1487 | 337 | 106 | 1583 |
| Tasker, Vernon C., Washington, D. C., assignor to American Ordnance Company, Norfolk, Va. Auxiliary barrel for breech-loading guns | 745,464 | Dec. 1 | 292 | 70 | 107 | 1161 |
| Tassain, Achille, Paris, France. Glazing conservatories, hothouses, &c | 719,903 | Feb. 3 | 882 | 207 | 102 | 1010 |
| Tasté, Albert, assignor to Société Anonyme Celestin Martin, Verviers, Belgium. Twisting-head | 721,527 | Feb. 24 | 3969 | 904 | 102 | 1708 |
| Tate, George A., Chicago, Ill., assignor of one-half to F. E. Newberry, St. Louis, Mo. Mechanism for controlling electric circuits | 726,479 | Apr. 28 | 3818 | 863 | 103 | 2017 |
| Tate, John C. (See Fageol, Rollie B., assignor.) | | | | | | |
| Tate, Martha B., Macon, Miss. Scrubbing-brush | 726,480 | Apr. 28 | 3821 | 863 | 103 | 2018 |
| Tate, William, and M. L. Cable, Greensboro, N. C. Combined water heater and condenser | 728,782 | May 19 | 3697 | 826 | 104 | 822 |
| Tate, William E., Weatherford, Tex. Baling-press | 738,957 | Sept. 15 | 2802 | 621 | 106 | 634 |
| Tatham, Henry B., Jr., Philadelphia, Pa. Gas or vapor stove | 732,470 | June 30 | 5506 | 1221 | 104 | 2334 |
| Tatum, Albert H., assignor to Whitall Tatum Company, New York, N. Y. Attaching device for stoppers | 733,438 | July 14 | 1335 | 315 | 105 | 299 |
| Tatum, Charles A., assignor to Whitall Tatum Company, New York, N. Y. Stopper-retainer | 721,477 | Feb. 24 | 3884 | 883 | 102 | 1689 |
| Tatum, Charles A., assignor to Whitall Tatum Company, New York, N. Y. Atomizer | 728,328 | May 19 | 2860 | 631 | 104 | 647 |
| Tatum, Charles A., assignor to Whitall Tatum Company, New York, N. Y. Securing device for jar-covers or the like | 729,908 | June 2 | 706 | 157 | 104 | 1272 |
| Tatum, Charles A., assignor to Whitall Tatum Company, New York, N. Y. Stopper for receptacles | 731,523 | June 23 | 3684 | 822 | 104 | 1944 |
| Tatum, Charles A., assignor to Whitall Tatum Company, New York, N. Y. Atomizer | 732,135 | June 30 | 4857 | 1081 | 104 | 2199 |
| Tatum, Watson. (See France and Tatum.) | | | | | | |
| Taube, William J., Parkridge, Ill. Check-valve | 745,742 | Dec. 1 | 763 | 174 | 107 | 1261 |
| Tauber, Maurice, New York, N. Y. Riding-skirt | 734,775 | July 28 | 3859 | 900 | 105 | 861 |
| Taurman, Chastian, Pikesville, Md. Bed | 723,336 | Mar. 24 | 3120 | 702 | 103 | 703 |
| Taussig, Maurice, Chicago, Ill., and P. A. Conne, New York, N. Y. Reflector for show-cases | 723,943 | Mar. 31 | 4276 | 960 | 103 | 959 |
| Tavenner, James W., Bloomington, Ill. Playing-cards | 741,984 | Oct. 20 | 3083 | 689 | 106 | 1935 |
| Tay, Walter I. (See Farrell, Heath, and Tay.) | | | | | | |
| Taylor, Albert H. (See Haesler and Taylor.) | | | | | | |
| Taylor, Alexander T., Sutton, W. Va. Combined mud-guard and luggage-carrier | 746,603 | Dec. 8 | 2339 | 536 | 107 | 1622 |
| Taylor, Arthur K., Baltimore, Md. Sheet-drier | 728,329 | May 19 | 2862 | 632, 633 | 104 | 648 |
| Taylor, Benjamin P., Bernie, Mo. Rail-joint | 721,109 | Feb. 17 | 3157 | 726 | 102 | 1522 |
| Taylor, Benjamin P., Bernie, Mo. Rail-joint | 748,234 | Dec. 29 | 5448 | 1241 | 107 | 2374 |
| Taylor, Carleton C., Denver, Colo. Traveler's reclining attachment for dress-suit cases | 733,767 | July 14 | 1901 | 448, 449 | 105 | 418 |
| Taylor, Carleton C., Denver, Colo. Combined hassock and sleeping-support | 733,768 | July 14 | 1904 | 449 | 105 | 418 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|
| | | | Spec. | Drgs. | Vol. | Page. |
| Taylor, Charles A., Winchester, Ill. Marker for planters | 747,505 | Dec. 22 | 4048 | 910 | 107 | 2043 |
| Taylor, Charles A., assignor of one-half to A. P. Grout, Winchester, Ill. Car-fender | 718,888 | Jan. 20 | 2599 | 580 581 | 102 | 582 |
| Taylor, Charles E., assignor of one-half to M. G. Magale, Magnolia, Ark. Ice-cream freezer | 737,973 | Sept. 1 | 832 | 182 183 | 106 | 182 |
| Taylor, Charles G., Farmington, Wash. Feed-water heater for boilers | 724,967 | Apr. 7 | 1013 | 232 | 103 | 1385 |
| Taylor, Charles H., Seattle, Wash. Mechanism for propelling and steering vessels | 733,882 | July 14 | 2132 | 502 | 105 | 465 |
| Taylor, Charles W. A., assignor of one-half to J. Storey, Liverpool, England. Steam-engine | 722,055 | Mar. 3 | 740 | 165 | 103 | 160 |
| Taylor, Clara E., Logansport, Ind. Nether garment | 732,603 | June 30 | 5758 | 1277 | 104 | 2390 |
| Taylor, Clarence L., assignor to Morgan Engineering Company, Alliance, Ohio. Overhead traveling crane | 718,676 | Jan. 20 | 2202 | 482 483 | 102 | 499 |
| Taylor, Clarence L., assignor to Morgan Engineering Company, Alliance, Ohio. Automatic brake | 718,802 | Jan. 20 | 2438 | 540 | 102 | 548 |
| Taylor, Clarence L., assignor to Morgan Engineering Company, Alliance, Ohio. Lubricating-box for axles of overhead traveling cranes | 721,252 | Feb. 24 | 3485 | 792 | 102 | 1606 |
| Taylor, Clarence L., assignor to Morgan Engineering Company, Alliance, Ohio. Hoist-block for cranes or derricks | 733,605 | July 14 | 1620 | 384 | 105 | 360 |
| Taylor, Clarence L., assignor to Morgan Engineering Company, Alliance, Ohio. Clutch-operating mechanism | 746,761 | Dec. 15 | 2634 | 606 | 107 | 1708 |
| Taylor, Clarence W., Sioux City, Iowa. Inhaler | 718,400 | Jan. 13 | 1627 | 358 | 102 | 364 |
| Taylor, Clarence W., Sioux City, Iowa. Inhaler | 723,070 | Mar. 17 | 2625 | 591 | 103 | 588 |
| Taylor, Clarence W., Sioux City, Iowa. Gas-regulating burner | 728,783 | May 19 | 3698 | 826 | 104 | 822 |
| Taylor, Clarence W., Sioux City, Iowa. Gas-regulating device for burners | 730,057 | June 2 | 975 | 218 | 104 | 1326 |
| Taylor, Clarence W., Sioux City, Iowa. Gas-burner | 733,091 | July 7 | 701 | 171 | 105 | 149 |
| Taylor, Edwin, Edwardsville, Kans. Sack-holder | 717,779 | Jan. 6 | 506 | 113 | 102 | 109 |
| Taylor, Edwin, Edwardsville, Kans. Potato sorter and grader | 725,172 | Apr. 14 | 1406 | 318 | 103 | 1482 |
| Taylor, Elwood E., Boston, Mass. Steam-generator | 719,624 | Feb. 3 | 377 | 87 | 102 | 900 |
| Taylor, Frederick D., assignor to Smyth Manufacturing Company, Hartford, Conn. Cloth-folding mechanism | 720,081 | Feb. 10 | 1229 | 283 284 | 102 | 1100 |
| Taylor, Frederick D., assignor to Smyth Manufacturing Company, Hartford, Conn. Pasting or gluing machine | 741,597 | Oct. 13 | 2322 | 520 | 106 | 1761 |
| Taylor, Frederick W. (See Gantt and Taylor.) | | | | | | |
| Taylor, Frederick W., Philadelphia, Pa. Golf-club | 732,136 | June 30 | 4858 | 1081 | 104 | 2200 |
| Taylor, Frederick W., Philadelphia, Pa. Golf-club | 732,137 | June 30 | 4860 | 1082 | 104 | 2200 |
| Taylor, Frederick W., and H. L. Gantt, assignors to Bethlehem Steel Company, South Bethlehem, Pa. Pyrometer | 722,770 | Mar. 17 | 2100 | 470 | 103 | 479 |
| Taylor, Frederick W., and H. L. Gantt, South Bethlehem, Pa., assignors, by mesne assignments, to Morse Thermo-Gage Co., Trumansburg, N. Y. Pyrometer | 735,423 | Aug. 4 | 741 | 158 159 | 105 | 1138 |
| Taylor, Frederick W., and H. L. Gantt, South Bethlehem, Pa., assignors, by mesne assignments, to Morse Thermo-Gage Co., Trumansburg, N. Y. Determining and regulating the temperature of heated articles or receptacles | 735,424 | Aug. 4 | 746 | 159 | 105 | 1139 |
| Taylor, Frederick W., and H. L. Gantt, South Bethlehem, Pa., assignors, by mesne assignments, to Morse Thermo-Gage Co., Trumansburg, N. Y. Pyrometer | 735,425 | Aug. 4 | 749 | 159 160 | 105 | 1139 |
| Taylor, Frederick W., and W. H. Sargent, assignors to E. & T. Fairbanks & Company, St. Johnsbury, Vt. Relieving-gear for scales | 719,904 | Feb. 3 | 884 | 207 208 | 102 | 1010 |
| Taylor, George D., and J. E. Parrish, Scranton, Pa. Oil-filter | 728,047 | May 12 | 2310 | 513 | 104 | 509 |
| Taylor, George H., New York, N. Y. Apparel-be ing | 721,619 | Feb. 24 | 4163 | 946 | 102 | 1751 |
| Taylor, George K. (See Mourning and Taylor.) | | | | | | |
| Taylor, George W., Kirkwood, Ga. Weighing-scale | 718,059 | Jan. 6 | 1004 | 224 | 102 | 216 |
| Taylor, Harry A., New York, N. Y. Placket-closure | 738,373 | Sept. 8 | 1681 | 364 | 106 | 377 |
| Taylor, Harry A., New York, N. Y. Placket-closure | 738,374 | Sept. 8 | 1683 | 364 | 106 | 378 |
| Taylor, Harry A., New York, N. Y. Placket-closure | 738,375 | Sept. 8 | 1685 | 365 | 106 | 378 |
| Taylor, Henry H., Bridgeport, Conn. Indoor-golf game | 720,191 | Feb. 10 | 1438 | 328 | 102 | 1144 |
| Taylor, Henry H., Bridgeport, Conn. Bustle | 741,184 | Oct. 13 | 1488 | 337 | 106 | 1583 |
| Taylor, Herbert, Blackburn, England. Friction let-off for looms | 745,121 | Nov. 24 | 4489 | 972 | 107 | 1001 |
| Taylor, Herbert B., Newark, N. J. Railway block-signaling system | 739,518 | Sept. 22 | 3820 | 856 | 106 | 866 |
| Taylor, Hiram, assignor of one-half to J. F. Tescher, Salem, Ohio. Cattle-stanchion | 738,784 | May 19 | 3700 | 826 | 104 | 822 |
| Taylor, Horace H., San Jose, assignor of one-half to F. J. Mayhew, San Francisco, Cal. Reflector for head, search, or other lights | 731,084 | June 16 | 2849 | 632 633 | 104 | 1755 |
| Taylor, Horace H., San Jose, assignor of one-half to F. J. Mayhew, San Francisco, Cal. Reflector for head or search lights | 742,135 | Oct. 20 | 3409 | 760 | 106 | 1999 |
| Taylor, Huston, St. Paul, Minn. Fountain-pen-filling device | 738,859 | Sept. 15 | 2637 | 581 | 106 | 598 |
| Taylor Hydraulic Air Compressing Company. (See Linton, William J., assignor.) | | | | | | |
| Taylor, Israel B. (See Diehl and Taylor.) | | | | | | |
| Taylor, Israel R., Asbury Park, N. J. Puzzle | 741,287 | Oct. 13 | 1701 | 380 | 106 | 1627 |
| Taylor, J. Saunders. (See Williams, George S., assignor.) | | | | | | |
| Taylor, James A., Waco, assignor of one-half to G. E. Lilly and J. W. Crooke, Richmond, Ky. Crate or case | 722,771 | Mar. 17 | 2101 | 470 | 103 | 480 |
| Taylor, James M., Omaha, Nebr. Roundabout or pleasure-railway | 738,514 | May 19 | 3183 | 705 | 104 | 714 |
| Taylor, James T., Wealthy, Tex. Apparatus for extermination of boll-weevil | 738,083 | Sept. 1 | 1022 | 228 | 106 | 222 |
| Taylor, James T., Houston, Tex. Fireproof nailing-brick | 741,185 | Oct. 13 | 1489 | 338 | 106 | 1583 |
| Taylor, James W. P., Washington, D. C. Sheet-jogging device for printing-presses | 738,641 | Sept. 8 | 2193 | 479 | 106 | 486 |
| Taylor, John E. S., New York, N. Y. Apparatus for removing obstructions from pipes | 739,120 | Sept. 15 | 3092 | 685 | 106 | 692 |
| Taylor, John H., Schenectady, N. Y. Electrical annunciator | 733,883 | July 14 | 2134 | 503 | 105 | 465 |
| Taylor, John J., 2d, and R. G. Shiley, assignors to Piso Company, Warren, Pa. Folding-machine | 747,803 | Dec. 22 | 4590 | 1036 1037 | 107 | 2166 |
| Taylor, John L., assignor to Taylor Sickle Head Company, Bozeman, Mont. Pitman connection | 720,192 | Feb. 10 | 1439 | 329 | 102 | 1144 |
| Taylor, John M., Hartford, Conn. Countersink | 724,520 | Apr. 7 | 189 | 47 | 103 | 1210 |
| Taylor, John T., Pittsburg, Pa. Adjustable window-shade | 726,006 | Apr. 21 | 2928 | 666 | 103 | 1820 |
| Taylor, John W., Reedsville, and W. J. Hunter, Huntingdon, Pa. Harvesting-machine | 740,947 | Oct. 6 | 1031 | 235 | 105 | 1466 |
| Taylor, Joseph R. (See Ward and Taylor.) | | | | | | |
| Taylor, Justus E., Gridley, Ill. Whiffletree-hook | 740,606 | Oct. 6 | 441 | 96 | 106 | 1341 |
| Taylor, Lewis B., Washington, D. C. Paper-jogger | 726,372 | Apr. 28 | 3615 | 820 | 103 | 1978 |
| Taylor, Lewis B., Washington, D. C. Paper-jogger | 739,121 | Sept. 15 | 3094 | 685 | 106 | 693 |
| Taylor, Miles D., Janesville, Wis. Wire-fence feeder and crimper | 735,842 | Aug. 11 | 1543 | 330 331 | 105 | 1329 |
| Taylor, Moras, Detroit, Mich. Screw-clamp | 747,270 | Dec. 15 | 3619 | 816 | 107 | 1929 |
| Taylor, Newton S., Chicago, Ill. Rotary engine | 727,861 | May 12 | 1969 | 439 | 104 | 436 |
| Taylor, Oliver B., Muskegon, Mich. Hardwood-floor scraper | 741,944 | Oct. 20 | 2993 | 665 | 106 | 1918 |
| Taylor, Orr E. (See Fair, Taylor, Mills, and Snodgrass.) | | | | | | |
| Taylor, Robert, Ayr, Scotland. Serving apparatus | 741,186 | Oct. 13 | 1490 | 338 | 106 | 1583 |
| Taylor, Robert J. (See Williams, Charles H., assignor.) | | | | | | |
| Taylor, Santley M., assignor of seven-eighths to H. C. Grove, E. E. Curry, C. M. Merrill, and A. F. Hills, Washington, D. C. Testing-machine | 737,296 | Aug. 25 | 4230 | 942 | 105 | 1933 |

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| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Taylor, Santley M., assignor of seven-eighths to H. C. Grove, E. E. Curry, C. M. Merrill, and A. F. Hills, Washington, D. C. Coin-controlled testing-machine | 741,080 | Oct. 13 | 1281 | 293 | 106 | 1541 |
| Taylor Sickle Head Company. (See Taylor, John L., assignor.) | | | | | | |
| Taylor, Stephen A., Denver, Colo. Gate | 740,783 | Oct. 6 | 755 | 170, 171 | 106 | 1407 |
| Taylor, Thomas. (See Stanton, Ray, assignor.) (Reissue.) | | | | | | |
| Taylor, Thomas D., Cranston, R. I. Deposit-credit book | 722,391 | Mar. 10 | 1364 | 302 | 103 | 306 |
| Taylor, Thomas P., Bridgeport, Conn. Hose-supporter | 720,193 | Feb. 10 | 1440 | 329 | 102 | 1144 |
| Taylor, Thomas P., Bridgeport, Conn. Hose-supporter | 720,194 | Feb. 10 | 1441 | 329 | 102 | 1144 |
| Taylor, Thomas P., Bridgeport, Conn., and R. B. Tunnicliffe, Chicago, Ill. Garment-clasp | 732,138 | June 30 | 4861 | 1082 | 104 | 2200 |
| Taylor, Tom. (See Haigh and Taylor.) | | | | | | |
| Taylor, Tom L., Atlanta, Ga. Laundry-marking machine | 745,302 | Nov. 24 | 4858 | 1059, 1060 | 107 | 1077 |
| Taylor, Warren H., assignor to Yale & Towne Manufacturing Company, Stamford, Conn. Lever-arm for door checks and closers | 729,697 | June 2 | 302 | 70 | 104 | 1191 |
| Taylor, Warren H., assignor to Yale & Towne Manufacturing Company, Stamford, Conn. Combination door check and closer | 730,417 | June 9 | 1621 | 363, 364 | 104 | 1475 |
| Taylor, Warren H., assignor to Yale & Towne Manufacturing Company, Stamford, Conn. Tumbler for combination-locks | 730,719 | June 9 | 2173 | 483 | 104 | 1594 |
| Taylor, Warren H., assignor to Yale & Towne Manufacturing Company, Stamford, Conn. Lock-case | 742,751 | Oct. 27 | 4526 | 1025 | 106 | 2250 |
| Taylor, William, assignor to Ideal Manufacturing Company, Detroit, Mich. Valve for flush-tanks | 727,491 | May 5 | 1239 | 275 | 104 | 267 |
| Taylor, William A., assignor to Kellogg Switchboard and Supply Company, Chicago, Ill. Central-energy telephone system | 743,953 | Nov. 10 | 2237 | 483 | 107 | 493 |
| Taylor, William D., Williams Bridge, N. Y. Puzzle | 744,884 | Nov. 24 | 4018 | 866 | 107 | 904 |
| Taylor, William F. (See Hughes and Taylor.) | | | | | | |
| Taylor, William F., and J. T. Williams, Reno, Tex. Planter attachment for cultivators | 729,808 | June 2 | 529 | 116, 117 | 104 | 1236 |
| Taylor, William L., Elmira, N. Y. Lock-joint for columns | 727,862 | May 12 | 1973 | 440 | 104 | 437 |
| Taylor, William W., and W. F. Bossert, Utica, N. Y. Railway mail-pouch-transfer system | 734,006 | July 21 | 2384 | 560 | 105 | 535 |
| Taylor, Zachary. (See Griffith, Stanton, assignor.) | | | | | | |
| Tayntor, Charles E., New York, N. Y. Roof for mausoleums, vaults, &c. | 722,392 | Mar. 10 | 1365 | 302 | 103 | 306 |
| Tcherniac, Joseph, Freiburg in Breisgau, Germany. Manufacturing hydrocyanic acid and cyanids | 747,271 | Dec. 15 | 3620 | ..... | 107 | 1929 |
| Tchooljian, Jacob, Del Rey, Cal. Seeding device | 719,905 | Feb. 3 | 885 | 208 | 102 | 1010 |
| Tea Tray Company. (See Eichhorn, Charles J., assignor.) | | | | | | |
| Teahen, James M. (See Drouillard and Teahen.) | | | | | | |
| Teal, Charles A., assignor to E. C. Roads, trustee, Philadelphia, Pa. Fire-extinguishing apparatus | 724,968 | Apr. 7 | 1014 | 232, 233 | 103 | 1385 |
| Teal, Henry S., assignor to United States Headlight Company, Buffalo, N. Y. Dimmer for headlights | 741,187 | Oct. 13 | 1491 | 339 | 106 | 1584 |
| Teal, Louis, Clifton Heights, Pa. Rotary engine | 742,369 | Oct. 27 | 3850 | 864, 865 | 106 | 2108 |
| Teamer, James M., Evansville, Ind. Sash-lock | 745,403 | Dec. 1 | 167 | 38 | 107 | 1135 |
| Teamer, John A. (See Riley, William B., assignor.) | | | | | | |
| Teamer, William H. B., assignor of two-thirds to J. Ramsey and I. Alloways, Philadelphia, Pa. Elevator | 718,230 | Jan. 13 | 1319 | 291, 292 | 102 | 298 |
| Teare, William H. (See McDonald, Brown, and Teare.) | | | | | | |
| Tebo, Napoleon, and T. B. French, Grafton, Mass. Carriage-axle nut | 718,171 | Jan. 13 | 1208 | 268 | 102 | 275 |
| Teegarden, Otto, Goshen, Ind. Jar-top wrench | 720,753 | Feb. 17 | 2500 | 576 | 102 | 1379 |
| Teeguarden, Freeman M., Colfax, and W. R. Teeguarden, Indianapolis, Ind. Feed mechanism for shredding-machines | 732,382 | June 30 | 5339 | 1183 | 104 | 2299 |
| Teeguarden, William R. (See Teeguarden, Freeman M. and W. R.) | | | | | | |
| Teeguarden, William R., Indianapolis, Ind. Rolls for corn-preparing machines | 729,698 | June 2 | 304 | 71 | 104 | 1191 |
| Teel, Franklin L., Logan, Iowa. Steel railway-tie | 724,412 | Mar. 31 | 5229 | 1171 | 103 | 1151 |
| Teeple, A., *et al.* (See Fogle, Archie B., assignor.) | | | | | | |
| Teeple, William S., and S. C. Johnson, Wellsburg, W. Va. Glass-blowing machine | 726,112 | Apr. 21 | 3104 | 703 | 103 | 1858 |
| Teeter, William M., Cripplecreek, Colo. Door-check | 724,521 | Apr. 7 | 190 | 47 | 103 | 1210 |
| Teilborg, Nels K., Wausa, Nebr. Clamp | 737,527 | Aug. 25 | 4672 | 1048 | 105 | 2033 |
| Tejada, Juan D., Havana, Cuba. Acetylene-gas generator or lamp | 721,675 | Mar. 3 | 45 | 10,11 | 103 | 12 |
| Teller, Harrison. (See Cope, Joseph H., assignor.) | | | | | | |
| Teller, John C., Minneapolis, Minn. Apparatus for generating and burning gas | 721,478 | Feb. 24 | 3886 | 883, 884 | 102 | 1689 |
| Teller, Joseph, Pittsburg, Pa. Railway-rail and rail-joint | 736,566 | Aug. 18 | 2846 | 623 | 105 | 1625 |
| Teller, Rufus K., Unadilla, N. Y. Coal-chute | 721,977 | Mar. 3 | 607 | 135 | 103 | 132 |
| Tellerson, Henry A., Oakland, Cal. Gun-cleaning rod | 740,486 | Oct. 6 | 197 | 39 | 106 | 1287 |
| Tellschow, Adolf, Berlin, Germany. Adjustable folding-flap for envelop-machines, paper-bag machines, or the like | 746,898 | Dec. 15 | 2907 | 671 | 107 | 1770 |
| Tellschow, Adolf, Berlin, Germany. Machine for making envelops or the like | 747,021 | Dec. 15 | 3142 | 720 | 107 | 1822 |
| Temperley, John R. (See Temperley and Miller.) | | | | | | |
| Temperley, Joseph, London, J. R. Temperley, Bromley, England, and T. S. Miller, South Orange, N. J. Sea-anchor | 728,330 | May 19 | 2869 | 633 | 104 | 649 |
| Temple, Eduard B., Philadelphia, assignor to Pennsylvania Optical Company, Reading, Pa. Spectacle-fitting | 735,917 | Aug. 11 | 1686 | 359 | 105 | 1359 |
| Temple, Edward Y. (See Temple, William T. and E. Y.) | | | | | | |
| Temple, Eva M., Portland, Oreg. Abdominal supporter | 722,644 | Mar. 10 | 1829 | 407 | 103 | 409 |
| Temple, Nettie, Stockton, Cal. Corset | 735,843 | Aug. 11 | 1546 | 331 | 105 | 1329 |
| Temple, William C., Pittsburg, Pa., assignor to Aultman and Taylor Machinery Company, Mansfield, Ohio. Water-tube boiler | 742,930 | Nov. 3 | 187 | 43 | 107 | 41 |
| Temple, William C., Pittsburg, Pa., assignor to Aultman and Taylor Machinery Company, Mansfield, Ohio. Steam-boiler | 742,931 | Nov. 3 | 189 | 44 | 107 | 42 |
| Temple, William O. (See Truitt and Temple.) | | | | | | |
| Temple, William T., Trenton, N. J. Bridle-bit | 733,769 | July 14 | 1906 | 449 | 105 | 419 |
| Temple, William T. and E. Y., Trenton, N. J. Folding top for vehicles | 727,492 | May 5 | 1240 | 276 | 104 | 268 |
| Templeman, Robert L., Tackett Mills, Va. Road-scraper | 736,312 | Aug. 11 | 2390 | 520 | 105 | 1512 |
| Templeton, William G., Colorado Springs, Colo. Adjustable gage | 725,891 | Apr. 21 | 2731 | 622 | 103 | 1781 |
| Templeton, William G., Colorado Springs, Colo. Cheese-cutter | 728,181 | May 12 | 2550 | 567 | 104 | 560 |
| Ten Winkel, August, assignor of one-half to S. H. Bissell, Denver, Colo., D. Bissell, Redwood Falls, and F. M. Cotton, Minneapolis, Minn. Concentrating apparatus | 728,331 | May 19 | 2870 | 634 | 104 | 649 |
| Ten Winkel, August, assignor of one-half to S. H. Bissell, Denver, Colo., D. Bissell, Redwood Falls, and F. M. Cotton, Minneapolis, Minn. Classifying or sizing apparatus | 741,565 | Oct. 13 | 2258 | 504 | 106 | 1748 |
| Tenenbom, Benjamin, assignor of one-half to D. Goldman, Washington, D. C. Fire escape | 726,592 | Apr. 28 | 4059 | 916 | 103 | 2063 |
| Tener, James B., Sabina, Ohio. Harness-saddle | 734,478 | July 21 | 3288 | 771 | 105 | 727 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Tengwall File & Ledger Company. (See Strubing, Wilhelm, assignor.) | | | | | | |
| Tengwall, Theodor A. W., Chicago, Ill. Loose-leaf binder | 720,754 | Feb. 17 | 2501 | 576 | 102 | 1380 |
| Tennant Auto-Tire Company. (See Tennant, Irvin, assignor.) | | | | | | |
| Tennant, Irvin, assignor to Tennant Auto-Tire Company, Springfield, Ohio. Pneumatic tire | 744,435 | Nov. 17 | 3213 | 689 | 107 | 717 |
| Tennant, Irvin, assignor to Tennant Auto-Tire Company, Springfield, Ohio. Pneumatic tire | 744,436 | Nov. 17 | 3215 | 689 | 107 | 717 |
| Tennent, James C., Caledonia, N. Y. Spraying device | 730,316 | June 9 | 1442 | 318 | 104 | 1438 |
| Tenney, Alonzo C. (See Martin, Albert L., assignor.) | | | | | | |
| Tenney, Charles I., Mason City, Iowa, assignor to Practical Gas Construction Company, North Chicago, Ill. Apparatus for purifying gas | 743,591 | Nov. 10 | 1591 | 333, 334 | 107 | 356 |
| Tennis, Edward, Chicago, Ill. Razor-strop | 718,172 | Jan. 13 | 1210 | 268 | 102 | 275 |
| Terborg, Christian. (See Stevens and Terborg.) | | | | | | |
| Terpe, George E., Walston, Pa. Brake attachment for cars | 732,604 | June 30 | 5759 | 1277 | 104 | 2390 |
| Terpening, Elmer A., Geneseo, Ill. Attachment for electric generators | 724,144 | Mar. 31 | 4681 | 1052 | 103 | 1039 |
| Terpening, Elmer A., assignor of one-third to N. Atwood, Geneseo, Ill. Telephone call system | 724,219 | Mar. 31 | 4824 | 1082 | 103 | 1067 |
| Terrell, Emery L., *et al.* (See Farmer, Julius M., assignor.) | | | | | | |
| Terrell, Henry D., Atlanta, Ga. Plow | 723,423 | Mar. 24 | 3302 | 739 | 103 | 737 |
| Terrell, William P. (See Kelley and Terrell.) | | | | | | |
| Terry, Albert A., Sydney, New South Wales, Australia. Door-stop | 748,543 | Dec. 29 | 6028 | 1365 | 107 | 2503 |
| Terry, Alfred E., Redditch, England. Exercising apparatus | 743,204 | Nov. 3 | 743 | 163 | 107 | 155 |
| Terry, Charles A., New York, N. Y., assignor to Westinghouse Electric and Manufacturing Company, Pittsburg, Pa. Current-collecting device for electric railways | 722,772 | Mar. 17 | 2102 | 470 | 103 | 480 |
| Terry, Edward C., Hartford, Conn. Steam-turbine | 741,385 | Oct. 13 | 1908 | 422 | 106 | 1674 |
| Terry, Frank S., and C. H. S. Kirten, St. Louis, Mo. Amusement device | 738,581 | Sept. 8 | 2066 | 451, 452 | 106 | 460 |
| Terry Heater Company. (See Hopkins, George W., assignor.) | | | | | | |
| Terry, Hiram, Hereford, Tex. Gate | 733,684 | July 14 | 1750 | 414 | 105 | 386 |
| Terry, John W., New Haven, Conn. Spring bed-bottom | 739,360 | Sept. 22 | 3514 | 786 | 106 | 799 |
| Terry, John W., New Haven, Conn. Spring-bed | 742,521 | Oct. 27 | 4121 | 928 | 106 | 2163 |
| Terry, Joseph T., Jr., assignor of one-half to J. O. Treanor, Altar, Mexico. Extracting gold or silver from slimes | 731,631 | June 23 | 3895 | 867 | 104 | 1985 |
| Terry, Seymour B. (See Caldwell and Terry.) | | | | | | |
| Terry, William, Pearl City, Ill. Wheel holder or support | 747,101 | Dec. 15 | 3296 | 750 | 107 | 1861 |
| Terry, William B., Marlow, Ind. Ter. Oscillating propeller | 747,506 | Dec. 22 | 4050 | 910 | 107 | 2043 |
| Terwilleger, Bertrand E. (See Terwilleger, Francis, assignor.) | | | | | | |
| Terwilleger, Bertrand E. (See Terwilleger, Francis and B. E.) | | | | | | |
| Terwilleger, Francis, Brookhaven, N. Y., assignor of one-half to B. E. Terwilleger, Lincoln University, Pa. Wrapping-cord knotter | 743,347 | Nov. 3 | 1027 | 221, 222 | 107 | 219 |
| Terwilleger, Francis and B. E., Lincoln University, Pa. Life-saving vessel | 731,394 | June 16 | 3431 | 765, 766 | 104 | 1873 |
| Terwilleger, Francis and B. E., Brookhaven, N. Y. Machine for picking poultry | 743,592 | Nov. 10 | 1593 | 334 | 107 | 356 |
| Terwilliger, Ulyses C., Islip, N. Y. Music-holder | 727,493 | May 5 | 1244 | 276 | 104 | 268 |
| Terzano, Teodosio. Hoosick Falls, N. Y. Car-fender | 735,315 | Aug. 4 | 537 | 109 | 105 | 1095 |
| Tesch, Torsten A. (See Hamfeldt and Tesch.) | | | | | | |
| Tescher, John F. (See Taylor, Hiram, assignor.) | | | | | | |
| Tesla, Nikola, New York, N. Y. Signaling | 723,188 | Mar. 17 | 2855 | 641 | 103 | 636 |
| Tesla, Nikola, New York, N. Y. System of signaling | 725,605 | Apr. 14 | 2192 | 496 | 103 | 1651 |
| Tesseyman, Henry, assignor to Barney & Smith Car Company, Dayton, Ohio. Car-seat mechanism | 717,723 | Jan. 6 | 357 | 87,88 | 102 | 77 |
| Test, Frank, Philadelphia, Pa. Marking-stamp | 729,699 | June 2 | 305 | 71 | 104 | 1191 |
| Test, Robert W., and H. Stabler, Washington, D. C. Card game | 726,232 | Apr. 21 | 3321 | 753, 754 | 103 | 1901 |
| Teter, Charles K., Upper Sandusky, Ohio. Nasal inhaler | 731,973 | June 23 | 4502 | 1005 | 104 | 2115 |
| Teter-Heany Developing Company. (See Heany, John A., assignor.) | | | | | | |
| Tetley, Charles E., and N. Petersen, Philadelphia, Pa. Valve | 725,378 | Apr. 14 | 1767 | 397 | 103 | 1559 |
| Tetlow, Joseph, Biddeford, Me. Separator | 741,386 | Oct. 13 | 1911 | 423 | 106 | 1675 |
| Tetzner, Charles K., New York, N. Y. Watch-protector | 736,460 | Aug. 18 | 2642 | 580 | 105 | 1582 |
| Teufel, Wilhelm J., Stuttgart, Germany. Body-belt | 733,092 | July 7 | 703 | 171 | 105 | 149 |
| Texas Crude Oil Burner Co. (See Bateman, Talbot O., assignor.) | | | | | | |
| Textile Finishing Machinery Company. (See Dana, Frederick I., assignor.) | | | | | | |
| Textile Machinery Improvement Company. (See Lemyre, Joseph E., assignor.) | | | | | | |
| Thach, Benjamin W., Hertford, N. C. Pea-harvester | 747,507 | Dec. 22 | 4051 | 910, 911 | 107 | 2043 |
| Thacher, Oren, Chelsea, Mich. Oil-stove | 723,499 | Mar. 24 | 3455 | 773 | 103 | 767 |
| Thacker, Frederick C. (See Perks and Thacker.) | | | | | | |
| Thackeray, Richard. (See Peckham, James M., assignor.) | | | | | | |
| Thame, James, Twickenham, England. Composition of matter for the manufacture of wall decorations or the like | 717,944 | Jan. 6 | 799 | | 102 | 171 |
| Thans, Otto A., Springfield, Mass. Pipe-coupling | 733,685 | July 14 | 1751 | 414 | 105 | 386 |
| Tharan, Gustave J., Philadelphia, Pa. Undermotion for looms | 727,027 | May 5 | 409 | 85 | 104 | 89 |
| Tharp, Orrin E., Denver, Colo. Wall-paper pasting and trimming machine | 742,807 | Oct. 27 | 4619 | 1047, 1048 | 106 | 2271 |
| Thatcher, Frederick B., Providence, R. I. Bottle-stopper | 727,711 | May 12 | 1692 | 377 | 104 | 382 |
| Thatcher, Thomas J., assignor of one-third to C. D. Saviers, Columbus, Ohio. Air-pipe coupling | 735,316 | Aug. 4 | 538 | 110 | 105 | 1096 |
| Thayer, Austin E., New York, N. Y. Sewing-cabinet | 731,974 | June 23 | 4503 | 1005 | 104 | 2115 |
| Thayer, C. E. (See Zeleny, Anthony, assignor.) | | | | | | |
| Thayer, Clark F., Erie, Pa. Baby-carriage | 717,945 | Jan. 6 | 800 | 180 | 102 | 171 |
| Thayer, Eugene T. S., West Springfield, Mass. Rag-dusting machine | 745,743 | Dec. 1 | 764 | 175 | 107 | 1261 |
| Thayer, Julien H., Mount Pleasant, N. C. Machine for gumming and straightening the teeth of saws | 743,771 | Nov. 10 | 1903 | 403, 404, 405 | 107 | 423 |
| Thayer, Orson B., *et al.* (See Campbell, Everett J., assignor.) | | | | | | |
| Thayer, Reuel H., Jr. (See McKeown, William C., assignor.) | | | | | | |
| Thayer, Russell, Philadelphia, Pa. Torch | 741,737 | Oct. 20 | 2597 | 578 | 106 | 1834 |
| Thayer, Russell, assignor to Kitson Hydrocarbon Heating and Incandescent Lighting Company, Philadelphia, Pa. Hydrocarbon-lamp | 735,682 | Aug. 4 | 1238 | 263 | 105 | 1244 |
| Thayer, Russell, Philadelphia, Pa., assignor to Kitson Hydro-Carbon Heating & Incandescent Lighting Company. Lighter | 742,258 | Oct. 27 | 3656 | 817 | 106 | 2067 |
| Thayer, Walter N., *et al.* (See Allen, Martin V. B., assignor.) | | | | | | |
| Thede, Gustav E., Havilah, Cal. Leaching ores | 732,605 | June 30 | 5760 | | 104 | 2390 |
| Thedford, Marshall L., Dyersburg, Tenn. Nut-lock | 730,199 | June 2 | 1202 | 269 | 104 | 1372 |
| Theige, George L., Westby, Wis. Feed-box | 744,258 | Nov. 17 | 2893 | 619 | 107 | 647 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|
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| Theilengerdes, Frederick, Memphis, Tenn. Car-brake | 722,266 | Mar. 10 | 1148 | 253, 254 | 103 | 259 |
| Theiring, Andrew J., Cincinnati, Ohio. Hub and axle-bearing | 726,373 | Apr. 28 | 3617 | 820 | 103 | 1978 |
| Theis, Friedrich C., Ohligs, Germany. Apparatus for bleaching, &c | 741,188 | Oct. 13 | 1493 | 339 | 106 | 1584 |
| Thellman, William S. (See Schuette, Fleischer, and Thellman.) | | | | | | |
| Therien, J. O. (See Malthaner, John C. F., assignor.) | | | | | | |
| Theriot, Victor N., *et al.* (See Decker, William A., assignor.) | | | | | | |
| Therkildsen, Charles C., Chicago, Ill. Preserving compound for packing eggs | 739,519 | Sept. 22 | 3824 | ..... | 106 | 867 |
| Thermoscopic Loop Syndicate. (See Adams, Ernest A., assignor.) | | | | | | |
| Thern, Emerich, Boston, Mass. Carving-machine | 724,969 | Apr. 7 | 1017 | 233 | 103 | 1386 |
| Theyskens, Alphonse, Testelt, Belgium. Manufacture of wheels and pulleys | 718,677 | Jan. 20 | 2204 | 483 | 102 | 500 |
| Thibert, Napoleon R., Worcester, Mass. Bit-stock | 719,703 | Feb. 3 | 521 | 117 | 102 | 933 |
| Thibodeau, Catherine M. (See Thibodeau, Charles, assignor). | | | | | | |
| Thibodeau, Charles, assignor, by mesne assignments, to C. M. Thibodeau, Somerville, Mass. Pulling candy | 736,313 | Aug. 11 | 2391 | 520, 521 | 105 | 1513 |
| Thiebaud, Charles E., Duquesne, Pa. Swivel-stand for lathe-chucks | 741,081 | Oct. 13 | 1285 | 293, 294 | 106 | 1541 |
| Thielbeule, Otto. (See Rostin, Thielbeule, and Warschauer.) | | | | | | |
| Thiele, Herman, Milwaukee, Wis. Car-fender | 737,528 | Aug. 25 | 4674 | 1049 | 105 | 2033 |
| Thiele, Josephine, St. Louis, Mo. Garbage-receptacle | 748,119 | Dec. 29 | 5243 | 1190 | 107 | 2331 |
| Thiem, Edward A., and G. W. Weber, St. Paul, Minn.; said Weber assignor to said Thiem. Toe-clip for bicycles | 722,056 | Mar. 3 | 742 | 165 | 103 | 160 |
| Thiem, Ernst A. P., Husum, Germany. Apparatus for lighting or extinguishing gas-lights from a distance | 737,172 | Aug. 25 | 3991 | 885 | 105 | 1883 |
| Thiemann, Heinrich, Stolp, Germany. Water-level indicator for steam-generators | 726,203 | Apr. 21 | 3271 | 742 | 103 | 1890 |
| Thieme, Alfred H., Springfield, Mass. Paper-hanger's size | 737,529 | Aug. 25 | 4675 | ..... | 105 | 2033 |
| Thierry, Charles V. (See Sudre and Thierry.) | | | | | | |
| Thiersant, Henri de, London, England. Electric ignition device for gas-burners | 740,062 | Sept. 29 | 4869 | 1091 | 106 | 1108 |
| Thiéry, Albert, Marcinelle, Belgium. Double-acting four-cycle explosion-motor | 723,071 | Mar. 17 | 2627 | 591, 592, 593 | 103 | 588 |
| Thiessen, Henry, assignor of one-half to E. R. Rohwedder, Davenport, Iowa. Mechanical movement | 718,033 | Jan. 6 | 968 | 214 | 102 | 208 |
| Thilborger, Edward J., *et al.* (See Pike, Daniel, assignor.) | | | | | | |
| Thilmany Pulp & Paper Company. (See Farwell, Otis M., assignor.) | | | | | | |
| Thiollier, Jean V. E., Paris, France. Means for fixing bolts, screws, or similar articles in soft substances, such as wood | 730,585 | June 9 | 1939 | 431 | 104 | 1544 |
| Thiollier, Jean V. E., Paris, France. Tool for applying metal fittings for bolts, &c | 731,719 | June 23 | 4047 | 903 | 104 | 2014 |
| Thirion, Frank, New York, N. Y. Engraver's block | 740,713 | Oct. 6 | 601 | 134 | 106 | 1377 |
| Thissell, Earl A., Lowell, Mass. Weft-replenishing mechanism for looms | 733,884 | July 14 | 2136 | 504, 505 | 105 | 466 |
| Thissell, Earl A., Lowell, Mass. Weft-replenishing mechanism for looms | 734,007 | July 21 | 2389 | 560, 561 | 105 | 536 |
| Thofehrn, Hermann G. C., Paris, France. Manufacture of steel | 723,501 | Mar. 24 | 3458 | 774 | 103 | 768 |
| Thofehrn, Hermann G. C., Paris, France. Treatment of mattes and raw metals | 725,297 | Apr. 14 | 1619 | ..... | 103 | 1528 |
| Thofehrn, Hermann G. C., Paris, France, and B. de Saint Seine, Widnes, England. Treating copper ores and ores of copper and nickel | 723,500 | Mar. 24 | 3456 | 773 | 103 | 768 |
| Thogersen, Arthur A., Brookings, S. D. Cultivator | 724,220 | Mar. 31 | 4826 | 1082 | 103 | 1068 |
| Thom, James C., Helmetta, N. J., assignor to American Snuff Company. Packing-machine | 723,072 | Mar. 17 | 2629 | 593 | 103 | 589 |
| Thom, James P., New Orleans, La. Car-fender | 720,502 | Feb. 10 | 1994 | 457, 458 | 102 | 1260 |
| Thoma, James K., Cooperstown, N. Y. Metallic railway-tie | 735,619 | Aug. 4 | 1121 | 237 | 105 | 1220 |
| Thoma, James K., Cooperstown, N. Y. Eyelet safety-tie | 743,954 | Nov. 10 | 2243 | 483 | 107 | 495 |
| Thoma, James K., Cooperstown, N. Y. Pocket-ball-bearing door and hanger therefor | 748,544 | Dec. 29 | 6029 | 1365 | 107 | 2504 |
| Thoman, Frank D., Toledo, Iowa. Trace | 740,948 | Oct. 6 | 1032 | 235 | 106 | 1466 |
| Thomann, Henry M. (See Thomann, John P. and H. M.) | | | | | | |
| Thomann, John P. and H. M., Riverside, Iowa. Pipe-tongs | 743,593 | Nov. 10 | 1597 | 335 | 107 | 357 |
| Thomann, Robert, Stuttgart, assignor to Firm of J. M. Voith, Würtemberg, Germany. Distributing-valve for hydraulic speed-regulators | 734,285 | July 21 | 2947 | 688 | 105 | 658 |
| Thomas, A. B. (See Venen, Almon S., assignor.) | | | | | | |
| Thomas, Albert V., Peoria, Ill. Display-rack | 719,060 | Jan. 27 | 2929 | 655 | 102 | 666 |
| Thomas, Arthur A., Portland, Ind. Band-cutter and feeder for threshing-machines | 720,637 | Feb. 17 | 2304 | 527, 528 | 102 | 1336 |
| Thomas & Betts. (See McMurtrie, Adnah, assignor.) | | | | | | |
| Thomas & Betts. (See Proudfit, Alexander C., assignor.) | | | | | | |
| Thomas, Charles L., Amsterdam, N. Y. Vehicle-spring | 744,259 | Nov. 17 | 2893 | 619 | 107 | 647 |
| Thomas E. Clark Wireless Telegraph-Telephone Co. (See Clark, Thomas E., assignor.) | | | | | | |
| Thomas, Edward, Fulton, Ky. Expansible piston | 730,720 | June 9 | 2174 | 483 | 104 | 1594 |
| Thomas, Edward G., Boston, Mass., assignor, by mesne assignments, to Automatic Weighing Machine Company, New York, N. Y. Automatic weighing-machine | 746,200 | Dec. 8 | 1629 | 363 | 107 | 1469 |
| Thomas, Edward G., Waltham, Mass., assignor to Automatic Weighing Machine Company, New York, N. Y. Weighing apparatus | 746,201 | Dec. 8 | 1634 | 364 | 107 | 1469 |
| Thomas, Edwin E., St. Paul, assignor of one-half to Union Iron Works, Minneapolis, Minn. Gang-saw | 717,946 | Jan. 6 | 801 | 181 | 102 | 171 |
| Thomas, Edwin E., St. Paul, assignor of one-half to Union Iron Works, Minneapolis, Minn. Disk lumber-conveyer for double-cutting band-mills | 730,317 | June 9 | 1443 | 318 | 104 | 1438 |
| Thomas, Emmet A. (See Barker, Wendell A., assignor.) | | | | | | |
| Thomas & Ettinger. (See Sullivan, Daniel M., assignor.) | | | | | | |
| Thomas, Frank H., Cambridge, Mass. Loose-leaf binder | 741,387 | Oct. 13 | 1913 | 423 | 106 | 1675 |
| Thomas, Frank P., assignor of three-fifths to A. and C. Kragnik, Racine, Wis. Car-brake | 740,487 | Oct. 6 | 199 | 39 | 106 | 1288 |
| Thomas, Frank W., Toledo, Ohio, assignor to John Thomson Press Company, New York, N. Y. Apparatus for operating the impression-latches of platen printing or embossing machines | 725,508 | Apr. 14 | 2025 | 457 | 103 | 1614 |
| Thomas, George B., assignor to Perkins Electric Switch Manufacturing Company, Bridgeport, Conn. Electric switch | 743,348 | Nov. 3 | 1032 | 223 | 107 | 220 |
| Thomas H. Dallett Company. (See Soley, William H., assignor.) | | | | | | |
| Thomas, Henry E., San Francisco, Cal. Projectile | 741,738 | Oct. 20 | 2598 | 578 | 106 | 1834 |
| Thomas, Jacob A., Hanover, Pa. Dental finishing-strip package | 718,401 | Jan. 13 | 1629 | 358 | 102 | 365 |
| Thomas, James, *et al.* (See McCabe and Hancock, assignors.) | | | | | | |
| Thomas, James H., *et al.* (See Peifer, John W., assignor.) | | | | | | |
| Thomas, James N., Leadville, Colo. Mail-bag catcher and deliverer | 747,663 | Dec. 22 | 4337 | 979 | 107 | 2108 |
| Thomas, James W., East St. Louis, Ill. Cornice-jack | 727,028 | May 5 | 410 | 86 | 104 | 89 |
| Thomas, James W., assignor to J. J. Morgan, Baltimore, Md. Pneumatic track-sander | 747,308 | Dec. 15 | 3693 | 832, 833 | 107 | 1947 |

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| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| Thomas, John, St. Louis, Mo. Roll-turning lathe | 734,997 | July 28 | 4274 | 994 | 105 | 947 |
| Thomas, John H., Clarke County, Wash. Spring-bed | 726,113 | Apr. 21 | 3105 | 703 | 103 | 1858 |
| Thomas, John P., Chicago, Ill. Roller-bearing | 731,720 | June 23 | 4048 | 903, 904 | 104 | 2014 |
| Thomas, John R., Cincinnati, Ohio. Sawing-machine | 722,335 | Mar. 10 | 1272 | 283 | 103 | 286 |
| Thomas, Julian H., Hamilton, Canada. Oliver | 728,143 | May 12 | 2479 | 551 | 104 | 545 |
| Thomas-Kilham, John, Baldwinsville, N. Y. Fire and water proof safe | 729,809 | June 2 | 530 | 117 | 104 | 1236 |
| Thomas Manufacturing Company. (See Pelton, Charles H., assignor.) | | | | | | |
| Thomas, Margaret B., Brooklyn, N. Y. Kitchen-table | 743,772 | Nov. 10 | 1917 | 405 | 107 | 426 |
| Thomas, Mary L., Eagle, Nebr. Curtain-fastener | 744,819 | Nov. 24 | 3907 | 840 | 107 | 881 |
| Thomas, Noah, Jr., London, Ohio. Transforming system | 724,060 | Mar. 31 | 4502 | 1014 | 103 | 1002 |
| Thomas, Onésime, Paris, France. Vaccinating-needle | 724,522 | Apr. 7 | 192 | 47 | 103 | 1210 |
| Thomas, Percy, Manchester, and J. S. Marsland, Halifax, England. Pump | 729,013 | May 26 | 4128 | 914 | 104 | 927 |
| Thomas, Richard H., Chicago, Ill. Combined scrub-brush and mop and wringer therefor | 728,332 | May 19 | 2872 | 634 | 104 | 650 |
| Thomas, Samuel L. (See Johnson, William E., assignor.) | | | | | | |
| Thomas, Stephen M., Omaha, Nebr. Name-finder | 721,342 | Feb. 24 | 3630 | 825 | 102 | 1637 |
| Thomas, Stephen S., Rayville, La. Hub-attaching device | 725,298 | Apr. 14 | 1620 | 366 | 103 | 1528 |
| Thomas, Thomas C., Peoria, Ill. Grain-door for railway-cars | 731,524 | June 23 | 3685 | 822 | 104 | 1944 |
| Thomas, Tom. (See Bass, Charles P., assignor.) | | | | | | |
| Thomas W. Houchin Company. (See Riker, Charles B., assignor.) | | | | | | |
| Thomas White Stove Company. (See Little, James O., assignor.) | | | | | | |
| Thomas, William R., Buffalo, N. Y. Hot-water furnace | 733,923 | July 14 | 2218 | 520 | 105 | 481 |
| Thomas, William S., assignor to D. G. Evans, St. Louis, Mo. Dispensing-cabinet and measuring-scoop therefor | 744,129 | Nov. 17 | 2632 | 562 | 107 | 590 |
| Thomason, Daniel N., Savannah, Ga. Stovepipe | 731,975 | June 23 | 4504 | 1006 | 104 | 2115 |
| Thomine, Edmond, Paris, France. Steam-generator | 723,337 | Mar. 24 | 3121 | 702 | 103 | 703 |
| Thompson, Albert T. (See Seaverns, John A., assignor.) | | | | | | |
| Thompson, Asa H., Groton, Mass. Machine for manufacturing leather-board or similar material | 746,404 | Dec. 8 | 1993 | 455 | 107 | 1545 |
| Thompson, Asa W., Atchison, Kans. Windmill | 739,948 | Sept. 29 | 4653 | 1044 | 106 | 1062 |
| Thompson, C. A. (See Barnes, Joshua B., assignor.) | | | | | | |
| Thompson, C. W. (See Wilkinson, Ernest, assignor.) | | | | | | |
| Thompson, Charles, Chicago, Ill. Bedstead | 738,254 | Sept. 8 | 1406 | 305 | 106 | 319 |
| Thompson, Charles A., Belleville, N. J. Stone-sawing machine | 739,975 | June 2 | 842 | 188 | 104 | 1299 |
| Thompson, Charles O. (See Muller and Thompson.) | | | | | | |
| Thompson, Charles S., Elizabeth, N. J. Bicycle-gearing | 734,008 | July 21 | 2394 | 562 | 105 | 537 |
| Thompson, Charles T., Philadelphia, Pa. Golf-ball | 731,821 | June 23 | 4239 | 944 | 104 | 2057 |
| Thompson, Clendinen A., New York, N. Y. Electric railway | 727,227 | May 5 | 763 | 163 | 104 | 165 |
| Thompson, Edward J., Bennington, N. H., assignor to C. J. Kimball Company. Coupling for shafting | 745,690 | Dec. 1 | 681 | 156 | 107 | 1243 |
| Thompson, Ernest, Hollinwood, near Oldham, England. Gage and alarm for steam-boilers | 738,958 | Sept. 15 | 2805 | 622 | 106 | 634 |
| Thompson, Everett L., New York, N. Y. Alarm valve and system | 743,049 | Nov. 3 | 440 | 96 | 107 | 92 |
| Thompson, Ezra O., Kirkville, Iowa. Pick-handle | 730,418 | June 9 | 1622 | 364 | 104 | 1475 |
| Thompson, Florence E., Chicago, Ill. Shirt-waist retainer and conformer | 721,253 | Feb. 24 | 3486 | 793 | 102 | 1607 |
| Thompson, Frank M., *et al.* (See Perkins, William D., assignor.) | | | | | | |
| Thompson, Frank M. (See Tarmon and Thompson.) | | | | | | |
| Thompson, Frederick W., New York, N. Y. Scenic apparatus | 725,509 | Apr. 14 | 2026 | 457, 458 | 103 | 1614 |
| Thompson, Frederick W., New York, N. Y. Scenic apparatus | 739,236 | Sept. 15 | 3299 | 730, 731, 732 | 106 | 737 |
| Thompson, George, Lacey, Iowa. Combined tank and heater | 744,943 | Nov. 24 | 4117 | 887 | 107 | 925 |
| Thompson, George C., Salt Lake City, Utah. Vehicle tongue-plate | 729,810 | June 2 | 532 | 117 | 104 | 1237 |
| Thompson, George F., Conway, Iowa. Gate-latch | 727,494 | May 5 | 1245 | 277 | 104 | 268 |
| Thompson, George F., Philadelphia, Pa., assignor to Nordyke & Marmon Company, Indianapolis, Ind. Scraper for roller-mills | 743,955 | Nov. 10 | 2243 | 483 | 107 | 495 |
| Thompson, George K., Newton, Mass., assignor to American Telephone and Telegraph Company. Telephone circuits and apparatus | 743,594 | Nov. 10 | 1598 | 335 | 107 | 357 |
| Thompson, George N., Belmond, Iowa. Fire-hose wrench | 741,082 | Oct. 13 | 1286 | 294 | 106 | 1541 |
| Thompson, George W., Pittsburg, Pa. Street-railway switch | 739,742 | Sept. 22 | 4238 | 949 | 106 | 957 |
| Thompson, Gustavus S., Baltic, S. D. Automatic belt-guide for threshing-machines | 745,691 | Dec. 1 | 682 | 157 | 107 | 1243 |
| Thompson, Harry F., Moscow, Mich. Railway-tie | 747,804 | Dec. 22 | 4599 | 1037 | 107 | 2168 |
| Thompson, Harry L. (See Eldridge, Claude E., assignor.) | | | | | | |
| Thompson, Henry, Toronto, Canada. Bathing-machine | 23,759 | Mar. 24 | 3895 | 877 | 103 | 861 |
| Thompson, Henry, Toronto, Canada. Car-seal | 742,085 | Oct. 20 | 3329 | 742 | 106 | 1983 |
| Thompson, Henry E., Louisville, Ky. Ventilating-cap for cellar-doors, skylights, &c. | 719,961 | Feb. 3 | 982 | 227, 228 | 102 | 1032 |
| Thompson, Henry H., Churchville, N. Y. Apparatus for extracting precious metals | 741,189 | Oct. 13 | 1495 | 339, 340 | 106 | 1584 |
| Thompson, Horace, Concord, N. H. Street-sweeper | 740,063 | Sept. 29 | 4871 | 1091, 1092 | 106 | 1108 |
| Thompson, Hugh L., Waterbury, Conn. Rolling-mill | 735,173 | Aug. 4 | 249 | 49 | 105 | 1036 |
| Thompson, Jacob B. (See Henderson and Thompson.) | | | | | | |
| Thompson, James, Greeley, Colo. Machine for grading or assorting potatoes | 719,532 | Feb. 3 | 212 | 49, 50 | 102 | 868 |
| Thompson, James, Greeley, Colo. Dumping-wagon | 719,533 | Feb. 3 | 215 | 50 | 102 | 868 |
| Thompson, James, Duluth, Minn. Fountain-mop | 727,863 | May 12 | 1974 | 440 | 104 | 437 |
| Thompson, James A. (See Wagoner, Thomas S., assignor.) | | | | | | |
| Thompson, James C., Wilkinsburg, Pa. Rail-sander | 732,325 | June 30 | 5213 | 1157, 1158 | 104 | 2273 |
| Thompson, James S., Chicago Heights, assignor to Railway Appliances Company, Chicago, Ill. Buffer | 725,797 | Apr. 21 | 2567 | 582 | 103 | 1746 |
| Thompson, James S., Chicago Heights, Ill., assignor to American Brake Shoe & Foundry Company, New York, N. Y. Brake-shoe | 735,426 | Aug. 4 | 752 | 160 | 105 | 1140 |
| Thompson, James T., Springfield, Ill. Valve-gear for steam-engines | 721,620 | Feb. 24 | 4164 | 946 | 102 | 1752 |
| Thompson, John. (See Ariens and Thompson.) | | | | | | |
| Thompson, John. (See Ariens, Thompson, and Wolfinger.) | | | | | | |
| Thompson, John A., Seattle, Wash. Twine-holder | 724,061 | Mar. 31 | 4504 | 1014 | 103 | 1002 |
| Thompson, John F., assignor of one-half to A. H. Buchanan, Ava, Mo. Beehive | 723,424 | Mar. 24 | 3303 | 739 | 103 | 738 |
| Thompson, John H. M., Center Junction, Iowa. Cattle-stanchion | 737,884 | Sept. 1 | 663 | 141 | 106 | 146 |
| Thompson, John L., New York, N. Y. Book-mark | 738,376 | Sept. 8 | 1687 | 365 | 106 | 379 |
| Thompson, John O., assignor of one-half to G. H. Miller, Mulberry, Ind. Feed mechanism for corn snapping, husking, and fodder-shredding machines | 719,962 | Feb. 3 | 984 | 228 | 102 | 1032 |
| Thompson, John S., Chicago, Ill., assignor to Mergenthaler Linotype Company. Linotype-machine | 723,073 | Mar. 17 | 2633 | 593 | 103 | 589 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drgs. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Thompson, John S., Chicago, Ill., assignor to Mergenthaler Linotype Company. Lino-type-machine | 732,383 | June 30 | 5341 | 1183, 1184 | 104 | 2300 |
| Thompson, John S., Chicago, Ill., assignor to Mergenthaler Linotype Company. Lino-type-machine | 734,106 | July 21 | 2601 | 610, 611, 612, 613 | 105 | 583 |
| Thompson, K. M., *et al.* (See Brown, Abner L., assignor.) | | | | | | |
| Thompson, La Marcus A., New York, N. Y. Pleasure-vehicle | 723,074 | Mar. 17 | 2634 | 594 | 103 | 590 |
| Thompson, Lynn C., Darlington, Ind. Window-shade cutter | 723,760 | Mar. 24 | 3898 | 877 | 103 | 861 |
| Thompson Manufacturing Company. (See Fletcher, Kimball B., assignor.) | | | | | | |
| Thompson, Martin O. (See Peterson and Thompson.) | | | | | | |
| Thompson, Milton E., Ridgway, Pa. Brush-holder for dynamo-electric machines | 741,945 | Oct. 20 | 2994 | 666 | 106 | 1918 |
| Thompson, Neals. (See Jackson and Thompson.) | | | | | | |
| Thompson, Nelson W., Erskineville, Oreg. Harrow | 742,752 | Oct. 27 | 4527 | 1025 | 106 | 2250 |
| Thompson & Norris Company. (See Duerden, Lawrence L., assignor.) | | | | | | |
| Thompson & Norris Company. (See Henderson, Benjamin H., assignor.) | | | | | | |
| Thompson, Oliver B., and W. G. Midgley, Buffalo, N. Y. Circuit-closing device | 746,604 | Dec. 8 | 2341 | 536 | 107 | 1622 |
| Thompson, Ralph P., Springfield, Ohio. Muffler for engines | 725,379 | Apr. 14 | 1769 | 397 | 103 | 1559 |
| Thompson, Ralph P., Springfield, Ohio. Oil-injector for gas-engines | 741,986 | Oct. 20 | 3090 | 690 | 106 | 1937 |
| Thompson, Ralph P., and E. Koeb, Springfield, Ohio. Gas-engine | 729,700 | June 2 | 306 | 71, 72 | 104 | 1192 |
| Thompson, Ralph P., and E. Koeb, Springfield, Ohio. Feed device for gasolene and air for gas-engines | 740,488 | Oct. 6 | 200 | 40 | 106 | 1288 |
| Thompson, Ralph P., and E. Koeb, Springfield, Ohio. Gas-engine | 741,985 | Oct. 20 | 3083 | 689 | 106 | 1935 |
| Thompson, Ralph S., Springfield, Ohio. Furnace | 726,374 | Apr. 28 | 3619 | 820, 821 | 103 | 1978 |
| Thompson, Robert, Holyoke, Mass. Locking device for the shipper mechanism of elevators | 735,620 | Aug. 4 | 1123 | 238 | 105 | 1220 |
| Thompson, Robert A., assignor of one-half to R. M. Dixon, Martinsburg, W. Va. Paper-box-covering machine | 731,140 | June 16 | 2961 | 658 | 104 | 1777 |
| Thompson, Robert B., Cullman, Ala. Churn-motor | 725,606 | Apr. 14 | 2196 | 496, 497 | 103 | 1652 |
| Thompson, Robert J., Stevens Point, Wis. Potato-digger | 720,503 | Feb. 10 | 1996 | 458, 459 | 102 | 1260 |
| Thompson, Robert L., Grand Rapids, Mich. Glove | 739,743 | Sept. 22 | 4239 | 949 | 106 | 957 |
| Thompson-Starrett Company. (See McGonagle, Arthur, assignor.) | | | | | | |
| Thompson, Stephen S., Wherry, Kans. Bootjack | 744,260 | Nov. 17 | 2895 | 620 | 107 | 647 |
| Thompson, Thomas E., Leominster, Mass. Educational appliance | 723,425 | Mar. 24 | 3304 | 739, 740 | 103 | 738 |
| Thompson, Thomas P., Chicago, Ill. Moving advertising-sign | 723,761 | Mar. 24 | 3899 | 877 | 103 | 862 |
| Thompson, Walter E. (See Jackson and Thompson.) | | | | | | |
| Thompson, William, Brockton, Mass. Edge-trimming machine for boots or shoes | 721,398 | Feb. 24 | 3734 | 850 | 102 | 1659 |
| Thompson, William, Toronto, Canada. Window fly-screen | 733,606 | July 14 | 1621 | 384 | 105 | 360 |
| Thompson, William, and A. W. Glover, Leeds, England. Apparatus for drawing fibers | 739,744 | Sept. 22 | 4241 | 949 | 106 | 957 |
| Thompson, William H., Beckley, W. Va. Clock-pendulum | 731,244 | June 16 | 3142 | 698 | 104 | 1812 |
| Thompson, William H., Salt Lake City, Utah. Thill or pole coupling | 734,998 | July 28 | 4275 | 994 | 105 | 947 |
| Thompson, William M., Charlotte C. H., Va. Self-registering measuring-machine for cloth | 728,333 | May 19 | 2874 | 634 | 104 | 650 |
| Thompson, William O., Philadelphia, Pa. Envelop-opener or paper-cutter | 719,906 | Feb. 3 | 886 | 208 | 102 | 1011 |
| Thompson, William P., Liverpool, England. Furnace for heating or melting materials | 725,173 | Apr. 14 | 1407 | 318 | 103 | 1482 |
| Thompson, William P., assignor of one-third to A. C. and J. N. Haight, Luzerne, Pa. Wrench | 734,376 | July 21 | 3104 | 730 | 105 | 690 |
| Thompson, William R., assignor of one-half to G. N. McKibbin, Norwalk, Conn. Electric switch | 717,724 | Jan. 6 | 361 | 88 | 102 | 77 |
| Thompson, William R., assignor to G. N. McKibbin, South Norwalk, Conn. Indicating device | 742,099 | Oct. 20 | 3347 | 747 | 106 | 1987 |
| Thompson, William W., Buchtel, Ohio. Fence-machine | 739,520 | Sept. 22 | 3825 | 857 | 106 | 867 |
| Thoms, Arthur. (See Murphy, John, assignor.) | | | | | | |
| Thoms, Charles F., assignor of one-half to D. Wright, Highlandtown, Md. Steering-head for motor-cycles | 723,075 | Mar. 17 | 2636 | 594 | 103 | 590 |
| Thoms, Friederich, San Francisco, Cal. Awning | 727,712 | May 12 | 1693 | 378 | 104 | 382 |
| Thomsen, Frederick, Newport News, Va. Toy building-blocks | 732,384 | June 30 | 5343 | 1184 | 104 | 2300 |
| Thomsen, Johannes, and A. Peterson, Chicago, Ill. Skate | 741,083 | Oct. 13 | 1287 | 294 | 106 | 1542 |
| Thomson, Arthur T. M. (See Geisler and Thomson.) | | | | | | |
| Thomson, Clifford, East Orange, N. J., assignor to Acme Ball Bearing Caster Company. Ball-caster | 725,174 | Apr. 14 | 1409 | 319 | 103 | 1483 |
| Thomson Electric Welding Company. (See Rietzel, Adolph F., assignor.) | | | | | | |
| Thomson, Elihu. (See Ball, Augustus A., Jr., assignor.) | | | | | | |
| Thomson, Elihu. (See Lemp, Hermann, assignor.) | | | | | | |
| Thomson, Elihu. (See Lemp and Persson, assignors.) | | | | | | |
| Thomson, Elihu. (See Macdonald, Alexander F., assignor.) | | | | | | |
| Thomson, Elihu. (See Persson, Otto F., assignor.) | | | | | | |
| Thomson, Elihu, Swampscott, Mass. Internally-fired engine | 723,502 | Mar. 24 | 3459 | 774 | 103 | 768 |
| Thomson, Elihu, Swampscott, Mass. Internally-fired engine | 723,503 | Mar. 24 | 3461 | 775 | 103 | 769 |
| Thomson, Elihu, Swampscott, Mass. Driving mechanism for automobiles | 732,908 | July 7 | 376 | 91, 92 | 105 | 82 |
| Thomson, Elihu, Swampscott, Mass. Means for regulating the power of automobiles | 733,093 | July 7 | 704 | 172 | 105 | 150 |
| Thomson, Elihu, Swampscott, Mass. Vapor-burner | 735,683 | Aug. 4 | 1239 | 263 | 105 | 1244 |
| Thomson, Elihu, Swampscott, Mass. Regulator for vapor-generators | 739,561 | Sept. 22 | 3892 | 873 | 106 | 881 |
| Thomson, Elihu, Swampscott, Mass. Transparent refractory observation-plate | 745,465 | Dec. 1 | 293 | 71 | 107 | 1161 |
| Thomson, Elihu, Lynn, Mass. Fluid-pressure engine | 740,203 | Sept. 29 | 5120 | 1150 | 106 | 1160 |
| Thomson, Elihu, Swampscott, Mass., assignor to General Electric Company. Rectifier | 723,076 | Mar. 17 | 2637 | 594, 595 | 103 | 591 |
| Thomson, Elihu, Swampscott, Mass., assignor to General Electric Company. Rectifying alternating currents | 723,189 | Mar. 17 | 2858 | 642 | 103 | 637 |
| Thomson, Elihu, Swampscott, Mass., assignor to General Electric Company. Electric control mechanism | 726,593 | Apr. 28 | 4060 | 916, 917 | 103 | 2063 |
| Thomson, Elihu, Swampscott, Mass., assignor to General Electric Company. Means for accentuating electrical contacts | 727,713 | May 12 | 1694 | 378, 379 | 104 | 382 |
| Thomson, Elihu, Swampscott, Mass., assignor to General Electric Company. Electric-arc lamp | 727,714 | May 12 | 1698 | 379 | 104 | 383 |
| Thomson, Elihu, Swampscott, Mass., assignor to General Electric Company. Induction-motor armature | 729,449 | May 26 | 4873 | 1079, 1080 | 104 | 1081 |
| Thomson, Elihu, Swampscott, Mass., assignor to General Electric Company. System of electric metering | 729,811 | June 2 | 533 | 117 | 104 | 1237 |
| Thomson, Elihu, Swampscott, Mass., assignor to General Electric Company. Electrostatic motor | 735,621 | Aug. 4 | 1125 | 238 | 105 | 1220 |

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| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|
| | | | Spec. | Drg. | Vol. | Page. |
| Thomson, Elihu, Swampscott, Mass., assignor to General Electric Company. Steam or similar engine | 741,388 | Oct. 13 | 1915 | 423 | 106 | 1675 |
| Thomson, Elihu, Swampscott, Mass., assignor to General Electric Company. Electric-arc lamp | 744,130 | Nov. 17 | 2634 | 562 | 107 | 590 |
| Thomson, Elihu, Swampscott, and F. P. Cox, Lynn, Mass., assignors to General Electric Company. Multiple-rate meter | 725,798 | Apr. 21 | 2568 | 582 | 103 | 1746 |
| Thomson, Elihu, Swampscott, and F. P. Cox, Lynn, Mass., assignors to General Electric Company. Multiple-rate metering | 726,233 | Apr. 21 | 3324 | 754<br>755 | 103 | 1902 |
| Thomson, F. A., trustee. (See Reynolds, Frank A., assignor.) | | | | | | |
| Thomson, Frank, Santa Ana, Cal. Apparatus for heating tires | 740,064 | Sept. 29 | 4873 | 1092 | 106 | 1108 |
| Thomson, George, Elizabeth, N. J. Metallic ingot or casting | 734,286 | July 21 | 2949 | ------ | 105 | 658 |
| Thomson, George, Elizabeth, N. J. Stamp-mill | 741,852 | Oct. 20 | 2799 | 623 | 106 | 1879 |
| Thomson, George H., Ossining, assignor to American Elevated Railroad Company, New York, N. Y. Elevated-railway structure | 722,773 | Mar. 17 | 2103 | 470 | 103 | 480 |
| Thomson, John, Brooklyn, assignor to John Thomson Press Company, New York, N. Y. Means for securing crank disks or gears against end movement | 725,510 | Apr. 14 | 2028 | 458<br>459 | 103 | 1615 |
| Thomson, John, Brooklyn, assignor to John Thomson Press Company, New York, N. Y. Apparatus for securing ink-distributing cylinders to platen printing-presses | 725,511 | Apr. 14 | 2029 | 459 | 103 | 1615 |
| Thomson, John, Brooklyn, assignor to John Thomson Press Company, New York, N. Y. Platen printing-press | 725,512 | Apr. 14 | 2030 | 459<br>460 | 103 | 1615 |
| Thomson, John, Brooklyn, assignor to John Thomson Press Company, New York, N. Y. Inking mechanism for printing-presses | 725,513 | Apr. 14 | 2031 | 460 | 103 | 1615 |
| Thomson, John, Brooklyn, assignor to John Thomson Press Company, New York, N. Y. Platen for printing-presses | 725,637 | Apr. 14 | 2272 | 513 | 103 | 1666 |
| Thomson, John, Brooklyn, assignor to John Thomson Press Company, New York, N. Y. Platen for printing-presses | 732,797 | July 7 | 185 | 46.47 | 105 | 43 |
| Thomson, Judson L., New York, N. Y., assignor to North & Judd Manufacturing Company, New Britain, Conn. Ice-creeper | 743,773 | Nov. 10 | 1918 | 406 | 107 | 426 |
| Thomson, Julius, Offenbach-on-the-Main, Germany. Apparatus for measuring leather | 730,491 | June 9 | 1770 | 396<br>397 | 104 | 1507 |
| Thomson, Robert, Glasgow, Scotland. Furnace | 726,114 | Apr. 21 | 3106 | 703<br>704 | 103 | 1858 |
| Thomson, Robert, Glasgow, Scotland. Combustion of fuel | 726,115 | Apr. 21 | 3109 | 704 | 103 | 1859 |
| Thomson, Robert W., Lynn, Mass., assignor, by mesne assignments, to United-Xpedite Finishing Company, Berwick, Me. Heel-finishing machine | 743,956 | Nov. 10 | 2244 | 484 | 107 | 495 |
| Thomson, Robert W., Lynn, Mass., assignor, by mesne assignments, to United-Xpedite Finishing Company, Berwick, Me. Heel-finishing machine | 743,993 | Nov. 10 | 2330 | 498 | 107 | 517 |
| Thomson, Robert W., Lynn, Mass., assignor to United-Xpedite Finishing Company, Berwick, Me. Heel-finishing machine | 743,994 | Nov. 10 | 2333 | 499 | 107 | 518 |
| Thomson, Thomas K., Yonkers, assignor of one-half to A. McMullen, New York, N. Y. Subaqueous-tunnel construction | 718,173 | Jan. 13 | 1212 | 268 | 102 | 276 |
| Thomson, Walter, Albany, N. Y. Penmanship-chart | 723,338 | Mar. 24 | 3122 | 702<br>703 | 103 | 703 |
| Thomson, William M., Pine Island, Minn. Key-fastener | 741,190 | Oct. 13 | 1506 | 340 | 106 | 1588 |
| Thomure, Andrew J., River Aux Vases, Mo. Guiding apparatus for vehicles | 723,077 | Mar. 17 | 2641 | 595 | 103 | 591 |
| Thordarson, Chester H., Chicago, Ill. Magneto-bell | 720,082 | Feb. 10 | 1231 | 284 | 102 | 1100 |
| Thorin, Aron N., Stockholm, Sweden. Regulating device for electric-arc lamps | 747,508 | Dec. 22 | 4053 | 911<br>912 | 107 | 2044 |
| Thoring, Fredrick J., Lima, Ohio. Coupling for drill-rods, line-shafts, or other devices | 734,107 | July 21 | 2606 | 613 | 105 | 584 |
| Thorkelin, Carl F. G. (See Girdlestone and Thorkelin.) | | | | | | |
| Thorn, J. Wiggans, *et al.* (See Philp, Bertil von, assignor.) | | | | | | |
| Thornburg, John S., Los Angeles, Cal. Spinning and dancing toy | 719,276 | Jan. 27 | 3329 | 744 | 102 | 749 |
| Thornburgh, William, Detroit, Mich. Car-door | 727,029 | May 5 | 411 | 86 | 104 | 90 |
| Thornburgh, William, Detroit, Mich. Draft-rigging | 733,094 | July 7 | 708 | 172 | 105 | 150 |
| Thorne, David J., Lardo, Canada. Nut-lock | 737,044 | Aug. 25 | 3758 | 835 | 105 | 1834 |
| Thorne, Edward H., assignor to Douglas Manufacturing Company, Fall River, Mass. Cop-tube | 737,531 | Aug. 25 | 4677 | 1049 | 105 | 2034 |
| Thorne, Millie, New York, N. Y. Pie-plate or bake-pan, &c | 731,417 | June 16 | 3473 | 776 | 104 | 1881 |
| Thorngren, Charles J., New Britain, Conn. Self-heating soldering-tool | 718,034 | Jan. 6 | 969 | 214 | 102 | 208 |
| Thornley, Albert J., Pawtucket, R. I. Exercising apparatus | 723,625 | Mar. 24 | 3671 | 823 | 103 | 812 |
| Thornley, George, Burton-upon-Trent, England. Trip-expansion valve-gear for motive-fluid engines | 733,686 | July 14 | 1752 | 415 | 105 | 386 |
| Thornton, Arthur W., McKeesport, Pa. Tobacco-pipe | 722,543 | Mar. 10 | 1654 | 364 | 103 | 371 |
| Thornton, Harold S., Montreal, Canada, assignor, by mesne assignments, to Komo Heat and Light Company, Pierre, S. D. Vapor-burner | 734,201 | July 21 | 2771 | 650 | 105 | 619 |
| Thornton, James M. (See Van Tassel and Thornton.) | | | | | | |
| Thornton, John E., Manchester, England. Pneumatic apparatus for controlling duration of exposure in photographic shutters | 729,014 | May 26 | 4129 | 914<br>915 | 104 | 927 |
| Thornton, John E., Manchester, England. Photographic shutter | 729,015 | May 26 | 4131 | 915 | 104 | 928 |
| Thornton, Julia H., Scotchplains, N. J. Corset | 721,621 | Feb. 24 | 4166 | 946 | 102 | 1752 |
| Thornton, William H. (See Davis, Thomas W., Jr., assignor.) | | | | | | |
| Thornycroft, John I., Chiswick, England. Steam-boiler | 735,427 | Aug. 4 | 754 | 161 | 105 | 1140 |
| Thorp, Edgar L., Nottingham, England. Plaiting or braiding machine | 726,116 | Apr. 21 | 3111 | 705 | 103 | 1859 |
| Thorp, Thomas, Whitefield, England. Inferential gas-meter | 732,385 | June 30 | 5345 | 1185 | 104 | 2301 |
| Thorpe, Arthur B., *et al.* (See Morin, Oliver N., assignor.) | | | | | | |
| Thorpe, Edwin T., Dickerson Run, Pa. Telegraph-key | 724,628 | Apr. 7 | 395 | 94 | 103 | 1254 |
| Thorpe, George B., Chicago, Ill. Door stop and holder | 723,219 | Mar. 17 | 2907 | 651 | 103 | 646 |
| Thorpe, Platt & Company. (See Thorpe, Robert H., assignor.) | | | | | | |
| Thorpe, Robert H., Montclair, N. J., assignor to Thorpe, Platt & Company, New York, N. Y. Steam-trap | 720,195 | Feb. 10 | 1442 | 329 | 102 | 1144 |
| Thorpe, Willard G., assignor of one-half to W. C. Fisher, St. Paul, Minn. Etching-machine | 740,204 | Sept. 29 | 5123 | 1150 | 106 | 1160 |
| Thorsell, Jean A., Pittsburg, Pa. Bolster for railway-cars | 725,175 | Apr. 14 | 1411 | 319 | 103 | 1483 |
| Thortvedt, Levi, Glyndon, Minn. Seed-cleaner for grain-separators | 718,741 | Jan. 20 | 2327 | 513<br>514 | 102 | 525 |
| Thorud, Marinius S., Chicago, Ill. Latch | 744,820 | Nov. 24 | 3908 | 840 | 107 | 881 |
| Thos. Mills & Bro. (See Armstrong, Harry Y., assignor.) | | | | | | |
| Thrasher, John G., Bay City, assignor of one-half to F. A. Wright, Trenton, Mich. Lawn-shears | 740,489 | Oct. 6 | 205 | 40 | 106 | 1289 |
| Threlkeld, Calvert W. and C. H., Memphis, Tenn. Claw-bar | 724,523 | Apr. 7 | 192 | 48 | 103 | 1210 |
| Threlkeld, Colin H. (See Threlkeld, Calvert W. and C. H.) | | | | | | |
| Thresher, Alfred A., Dayton, Ohio. Electric motor and brake | 736,461 | Aug. 18 | 2643 | 581 | 105 | 1582 |
| Throm, Anthony J., assignor to A. Cutler & Son, Buffalo, N. Y. Shelf attachment for desks | 719,625 | Feb. 3 | 379 | 87 | 102 | 901 |
| Thron, John E., Philadelphia, Pa. Split pulley | 745,928 | Dec. 1 | 1129 | 253 | 107 | 1339 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| Thropp, Peter D. (See De Laski and Thropp.) | | | | | | |
| Thrupp, Edgar C., Walton-on-Thames, England. Apparatus for liquefying air and separating oxygen therefrom | 743,349 | Nov. 3 | 1033 | 223 | 107 | 220 |
| Thrush, John. (See Rooke and Thrush.) | | | | | | |
| Thuemler, Hugo, Sewickley, Pa. Kiln for firing china, glass, or other ware | 717,725 | Jan. 6 | 362 | 89 | 102 | 78 |
| Thum, Frederick A., Newark, N. J. Tilting anode-mold | 733,095 | July 7 | 709 | 173 | 105 | 150 |
| Thumb, Edgar C., St. Johnsville, N. Y. Safety-envelop | 726,375 | Apr. 28 | 3623 | 821 | 103 | 1979 |
| Thun, Karl, Elberfeld, Germany, assignor to Farbenfabriken of Elberfeld Co., New York, N. Y. Purpurin-alpha-sulfonic acid | 746,405 | Dec. 8 | 1995 | ..... | 107 | 1545 |
| Thunen, Frederick W., and L. L. Cheshire, Oroville, Cal. Dredger | 731,976 | June 23 | 4505 | 1006 | 104 | 2115 |
| Thuner, Robert, *et al.* (See La Flamboy, Harry C., assignor.) | | | | | | |
| Thürey, Eduard, Deutz, Germany. Type-writing machine | 741,739 | Oct. 20 | 2599 | 578 | 106 | 1835 |
| Thurlow, Ira M. (See Prescott and Thurlow.) | | | | | | |
| Thurlow, Nathaniel, Niagara Falls, N. Y., assignor, by mesne assignments, to Portchester Chemical Company. Derivative of pinene and producing same | 726,783 | Apr. 28 | 4410 | ..... | 103 | 2135 |
| Thurman, Charles E., Chicago, Ill., assignor of three-fourths to J. A. Kimberly, Neenah, Wis. Bushing or plug for paper-rolls | 722,928 | Mar. 17 | 2379 | 532 | 103 | 536 |
| Thurman, John S., St. Louis, Mo. Pneumatic renovator | 720,083 | Feb. 10 | 1233 | 284 | 102 | 1101 |
| Thurman, John S., St. Louis, Mo. Dust-arresting bag | 720,084 | Feb. 10 | 1235 | 284 | 102 | 1101 |
| Thurman, John S., St. Louis, Mo. Oil-burner | 725,176 | Apr. 14 | 1413 | 320 | 103 | 1484 |
| Thurman, John S., St. Louis, Mo. Carpet-renovator | 725,299 | Apr. 14 | 1624 | 366 / 367 | 103 | 1529 |
| Thurman, John S., St. Louis, Mo. Renovating apparatus | 741,987 | Oct. 20 | 3096 | 690 | 106 | 1937 |
| Thurman, John S., St. Louis, Mo. Carpet-renovator | 744,437 | Nov. 17 | 3216 | 689 | 107 | 717 |
| Thurman, John S., St. Louis, Mo. Governor for gas-engines | 744,438 | Nov. 17 | 3218 | 690 | 107 | 718 |
| Thurman, John S., St. Louis, Mo. Dust-collector | 744,645 | Nov. 17 | 3555 | 766 / 767 | 107 | 787 |
| Thurman, John S., St. Louis, Mo. Sparking device | 746,406 | Dec. 8 | 1996 | 455 | 107 | 1545 |
| Thurmond, William, Denver, Colo. Feed-water heater | 747,509 | Dec. 22 | 4055 | 912 | 107 | 2044 |
| Thurnau, Edward C., Chicago, Ill. Cigar-box or similar receptacle | 732,664 | June 30 | 5873 | 1302 | 104 | 2413 |
| Thurnau, Edward C., Chicago, Ill. Show-case. (Reissue) | 12,188 | Dec. 29 | 6075 | 1377 | 107 | 2514 |
| Thurston, Charles H., Boston, assignor to R. A. Hammond, Sandwich, Mass. Hand-punch | 740,333 | Sept. 29 | 5356 | 1206 | 106 | 1209 |
| Thurston, E. L., trustee. (See Packer, Willard N., assignor.) | | | | | | |
| Thurston, Glenn W., Dunsmuir, Cal. Automatic oiling device | 739,745 | Sept. 22 | 4242 | 950 | 106 | 958 |
| Thurston, Howard F., Buffalo, N. Y. Combined salt and pepper shaker | 725,638 | Apr. 14 | 2273 | 513 | 103 | 1667 |
| Thurston, Richard H. (See Green, Jerome M., assignor.) | | | | | | |
| Thury, René, Geneva, Switzerland. Electric distributing system | 745,929 | Dec. 1 | 1130 | 253 | 107 | 1340 |
| Thus, Max, Reading, Pa. Stretching device for stockings | 736,314 | Aug. 11 | 2393 | 521 | 105 | 1513 |
| Thwaite, Benjamin H., assignor to Blast Furnace Power Syndicate, Limited, Westminster, England. Cleansing fans operating on blast-furnace gases | 731,395 | June 16 | 3432 | 766 | 104 | 1873 |
| Thweatt, Robbert W., Coppell, Tex. Railway-tie | 735,174 | Aug. 4 | 251 | 49 | 105 | 1036 |
| Thyberg, Charles F., and J. C. Moses, Salt Lake City, Utah. Lock | 725,013 | Apr. 7 | 1104 | 251 | 103 | 1405 |
| Thyberg, Samuel, Springfield, and A. C. L. Chapman, Easthampton, Mass. Machine for filling character depressions in buttons | 746,407 | Dec. 8 | 1998 | 455 / 456 | 107 | 1545 |
| Tibbetts, Seth H., Groveton, N. H. Screen for paper-pulp | 723,078 | Mar. 17 | 2642 | 595 | 103 | 591 |
| Tibbits, Wiley P., Toledo, Ohio. Life-preserver and swimming apparatus | 726,784 | Apr. 28 | 4412 | 994 | 103 | 2136 |
| Tibbitts, Frank R., Erie, Pa. Water-tube boiler | 738,377 | Sept. 8 | 1688 | 365 / 366 | 106 | 379 |
| Tice, George W., Memphis, Mich. Corn husker and shredder | 723,944 | Mar. 31 | 4277 | 961 | 103 | 959 |
| Tichenor, Grace G., Los Angeles, Cal. Dust-pan | 717,639 | Jan. 6 | 207 | 52 | 102 | 45 |
| Tichenor, William C., Lebanon, Ohio. Apparatus for cribbing corn | 731,085 | June 16 | 2851 | 633 | 104 | 1756 |
| Tichon, Joseph E., New Bedford, Mass., assignor to Draper Company, Portland, Me. Shuttle-checking mechanism for looms | 738,255 | Sept. 8 | 1407 | 305 | 106 | 319 |
| Tichon, Joseph E., assignor to J. V. and E. Cunniff and F. W. Reynolds, New Bedford, Mass. Tension device for loom-shuttles | 721,978 | Mar. 3 | 608 | 135 | 103 | 132 |
| Tichon, Joseph E., and H. S. Foster, New Bedford, Mass.; said Tichon assignor to H. A. Severson, Milwaukee, Wis. Yarn controller and separator for ring-spinning frames | 745,466 | Dec. 1 | 294 | 71 | 107 | 1162 |
| Tichsen, Horst, *et al.* (See Nowák, Emil, assignor.) | | | | | | |
| Tideman, Carl G., assignor of one-half to N. Nilson, Worcester, Mass. Yarn-guide holder for spinning-machines | 730,492 | June 9 | 1772 | 397 | 104 | 1507 |
| Tiefenbacher, Thomas B., New York, N. Y. Tool-holder for lathes | 721,979 | Mar. 3 | 610 | 135 | 103 | 132 |
| Tiemann, Edward F., Chicago, Ill. Jar-wrench | 718,174 | Jan. 13 | 1215 | 269 | 102 | 277 |
| Tierney, John J., New York, N. Y. Holder for toilet-paper | 741,988 | Oct. 20 | 3098 | 691 | 106 | 1938 |
| Tierney, John W., Philadelphia, Pa. Mixing apparatus | 745,930 | Dec. 1 | 1131 | 253 / 254 | 107 | 1340 |
| Tierney, John W., Philadelphia, Pa., assignor to Philadelphia Pneumatic Tool Company. Supporting device for shell-riveters | 747,272 | Dec. 15 | 3621 | 816 | 107 | 1929 |
| Tietz, Theodore, Hartford, Conn. Liquid-tapping device | 744,646 | Nov. 17 | 3557 | 767 | 107 | 787 |
| Tiffany, George S., Tecumseh, Mich. Machine for making concrete | 732,471 | June 30 | 5509 | 1222 | 104 | 2334 |
| Tiffany, George S., Brooklyn, assignor to Gray National Telautograph Company, New York, N. Y. Telautograph | 745,692 | Dec. 1 | 683 | 157 | 107 | 1243 |
| Tiffany, Philo, Cherokee, Iowa. Stock-watering-tank valve | 735,918 | Aug. 11 | 1688 | 360 | 105 | 1359 |
| Tifft, Charles J., *et al.* (See Long, William J., assignor.) | | | | | | |
| Tilden, Eugene M., Washington, D. C. Hand-stamp | 732,236 | June 30 | 5056 | 1124 | 104 | 2241 |
| Tilden, George G., Newark, N. J., assignor to Westinghouse Electric & Manufacturing Company. Prepayment-wattmeter for three-wire systems | 732,139 | June 30 | 4863 | 1082 | 104 | 2200 |
| Tilden, James A., Hydepark, Mass. Meter | 739,269 | Sept. 15 | 3363 | 747 | 106 | 752 |
| Tilden, James A., Hydepark, assignor to Hersey Manufacturing Company, South Boston, Mass. Meter | 729,701 | June 2 | 311 | 72 | 104 | 1193 |
| Tilden, James A., Hydepark, assignor to Hersey Manufacturing Company, South Boston, Mass. Fluid-controlling mechanism | 742,136 | Oct. 20 | 3411 | 761 | 106 | 2000 |
| Tilden, James A., Hydepark, assignor to Hersey Manufacturing Company, South Boston, Mass. Meter | 742,137 | Oct. 20 | 3413 | 761 | 106 | 2000 |
| Tilden-Thurber Company. (See Webster, John, assignor.) | | | | | | |
| Tilden, William C., Washington, D. C., assignor to J. Lovett, Martinsburg, W. Va. Producing alloys | 724,524 | Apr. 7 | 194 | ..... | 103 | 1211 |
| Tilden, William E., Cleveland, Ohio. Saw | 739,457 | Sept. 22 | 3724 | 829 | 106 | 845 |
| Tilford, George H., Providence, R. I. Pin-tongue and hinge-joint for breastpins | 731,245 | June 16 | 3143 | 698 | 104 | 1812 |
| Tilghman, Benjamin C., Jr., Philadelphia, Pa. Sand-blast machinery | 727,030 | May 5 | 412 | 86, 87 | 104 | 90 |
| Till, Henry, Tucson, Ariz. Ter. Can-opener | 731,329 | June 16 | 3306 | 738 | 104 | 1847 |
| Till, Pauline, Oakland, Cal. Veil-holder | 730,490 | June 9 | 1769 | 396 | 104 | 1507 |
| Tillberg, Charles F., Philadelphia, Pa. Spike-puller | 737,530 | Aug. 25 | 4675 | 1049 | 105 | 2034 |
| Tilley, Thomas S., Newport, assignor of one-half to J. O. Peckham, Middletown, R. I. Combined level and inclinometer | 740,491 | Oct. 6 | 208 | 41 | 106 | 1290 |
| Tillinghast, Elizabeth S., New Haven, Conn. Child's carriage | 742,100 | Oct. 20 | 3348 | 747 | 106 | 1988 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Des. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Tillinghast, Pardon W., Cranston, R. I. Pneumatic tire | 723,945 | Mar. 31 | 4279 | 962 | 103 | 960 |
| Tillinghast, Pardon W., Providence, R. I. Bicycle | 733,518 | July 14 | 1471 | 350 | 105 | 329 |
| Tillman, Joseph, Quitman, Ga. Making sugar-cane syrup | 729,976 | June 2 | 844 | ..... | 104 | 1300 |
| Tillotson, Homer J. (See Reade, John A., Jr., assignor.) | | | | | | |
| Tillotson, James M., Kinder, La. Deep-well propeller-pump | 739,746 | Sept. 22 | 4243 | 950 | 106 | 958 |
| Tilney, Mary G., Orange, N. J. Dress-shield | 722,057 | Mar. 3 | 744 | 165, 166 | 103 | 160 |
| Tilson, W. M., *et al.* (See Bryant, William P., assignor.) | | | | | | |
| Tilton, Charles H. (See Robinson and Tilton.) | | | | | | |
| Tilton, Fred G. (See Upham, Artemas B., assignor.) | | | | | | |
| Tilton, Newton J. (See Mitchell, Winfield J., assignor.) | | | | | | |
| Tilton, Newton J. (See Mitchell, Winfield J. and J. R., assignors.) | | | | | | |
| Timar, Ignaz, Berlin, Germany. Safety-stopper | 728,426 | May 19 | 3028 | 665 | 104 | 683 |
| Timar, Ignaz, Berlin, assignor to F. Heiliger, Andernach, Germany. Thermophoric mixture | 726,204 | Apr. 21 | 3272 | ..... | 103 | 1891 |
| Timavenis, Telemaque T., Boston, Mass. Propelling mechanism for vessels | 742,522 | Oct. 27 | 4123 | 928 | 106 | 2164 |
| Timby, Theodore F., Alma, Mich. Gate | 739,122 | Sept. 15 | 3097 | 685 | 106 | 693 |
| Timby, Theodore R., Brooklyn, N. Y. Mechanism for utilizing wind-power | 741,389 | Oct. 13 | 1917 | 424 | 106 | 1676 |
| Timm, Hermann G. E. (See Bracklow, Timm, and Bunz.) | | | | | | |
| Timm, Walter C., Jr., *et al.* (See Gould, Cornelius C., assignor.) | | | | | | |
| Timmerman, Jason D., Stone Mills, N. Y. Lightning-protector | 737,173 | Aug. 25 | 3993 | 885 | 105 | 1883 |
| Timmis, Walter S., Brooklyn, N. Y. Machine for producing controllers for printing, type-casting, &c. | 742,523 | Oct. 27 | 4124 | 928, 929, 930, 931 | 106 | 2164 |
| Timmis, Walter S., Cranford, N. J. Printer's block | 745,467 | Dec. 1 | 295 | 71 | 107 | 1162 |
| Timmons, James L., Edwardsville, Kans. Machine for harvesting and cleaning root crops | 745,931 | Dec. 1 | 1133 | 254 | 107 | 1341 |
| Timmons, Joseph M., New York, N. Y. Attachment for mandolins or similar instruments | 725,177 | Apr. 14 | 1415 | 320 | 103 | 1484 |
| Timms, James, Columbus, Ohio, assignor to Buckeye Malleable Iron and Coupler Company. Car-truck | 717,780 | Jan. 6 | 507 | 113 | 102 | 109 |
| Timms, James, Columbus, Ohio, assignor to Buckeye Malleable Iron and Coupler Company. Car-truck | 717,781 | Jan. 6 | 508 | 113 | 102 | 109 |
| Timms, James, assignor to Buckeye Malleable Iron and Coupler Company, Columbus, Ohio. Supporting-bracket for unlocking-levers | 717,947 | Jan. 6 | 803 | 181 | 102 | 172 |
| Timms, James, assignor to Buckeye Malleable Iron and Coupler Company, Columbus, Ohio. Car-coupling | 718,889 | Jan. 20 | 2599 | 581 | 102 | 582 |
| Timms, James, assignor to Buckeye Malleable Iron and Coupler Company, Columbus, Ohio. Car-coupling | 734,776 | July 28 | 3861 | 900 | 105 | 861 |
| Timms, James, assignor to Buckeye Malleable Iron and Coupler Company, Columbus, Ohio. Car-coupling | 734,999 | July 28 | 4278 | 995 | 105 | 948 |
| Timms, James, assignor to Buckeye Malleable Iron & Coupler Company, Columbus, Ohio. Friction draft-gear | 740,334 | Sept. 29 | 5357 | 1207 | 106 | 1209 |
| Timms, James, assignor to Buckeye Malleable Iron and Coupler Company, Columbus, Ohio. Friction draft-gearing and buffing apparatus | 740,335 | Sept. 29 | 5359 | 1207 | 106 | 1210 |
| Timms, James, assignor to Buckeye Malleable Iron and Coupler Company, Columbus, Ohio. Friction draft-gear and buffing apparatus | 740,378 | Sept. 29 | 5441 | 1224 | 106 | 1226 |
| Timms, James and J. O., Columbus, Ohio. Car-coupling | 722,267 | Mar. 10 | 1150 | 254 | 103 | 260 |
| Timms, James, and S. P. Bush, assignors to Buckeye Malleable Iron and Coupler Co., Columbus, Ohio. Making brake-shoes | 721,845 | Mar. 3 | 343 | ..... | 103 | 75 |
| Timms, James O. (See Timms, James and J. O.) | | | | | | |
| Timokhovitsch, Sergius, Moscow, Russia. Ventilation of rooms or buildings | 720,755 | Feb. 17 | 2502 | 577 | 102 | 1380 |
| Timon, Patrick E., San Patricio, Tex. Scrubbing-machine | 746,605 | Dec. 8 | 2342 | 537 | 107 | 1623 |
| Timothy, Hy., *et al.* (See Sandy, Edward M., assignor.) | | | | | | |
| Tinan, Benjamin P., *et al.* (See Albright, Harry W., assignor.) | | | | | | |
| Tinch, Jesse W., Los Angeles, Cal. Collar button or hook | 741,740 | Oct. 20 | 2600 | 579 | 106 | 1835 |
| Tincher, Thomas L., assignor to A. G. Wilmore, Chicago, Ill. Computing-scale | 720,756 | Feb. 17 | 2504 | 577, 578 | 102 | 1380 |
| Tindel, Adam, Philadelphia, assignor to Tindel-Morris Company, Eddystone, Pa. Angular-bending machine | 718,035 | Jan. 6 | 970 | 215 | 102 | 209 |
| Tindel, Adam, Philadelphia, assignor to Tindel-Morris Company, Eddystone, Pa. Rotary metal-cutting tool | 729,517 | May 26 | 4987 | 1106 | 104 | 1107 |
| Tindel, Adam, Philadelphia, assignor to Tindel-Morris Company, Eddystone, Pa. Metal-working tool | 736,799 | Aug. 18 | 3307 | 733 | 105 | 1718 |
| Tindel, Adam, Philadelphia, assignor to Tindel-Morris Company, Eddystone, Pa. Metal-working tool | 745,976 | Dec. 1 | 1218 | 273, 274 | 107 | 1360 |
| Tindel, Adam, Philadelphia, assignor to Tindel-Morris Company, Eddystone, Pa. Lathe-dog | 745,977 | Dec. 1 | 1219 | 274 | 107 | 1360 |
| Tindel-Morris Company. (See Tindel, Adam, assignor.) | | | | | | |
| Tindell, Frank, *et al.* (See Buckingham, Albert E., assignor.) | | | | | | |
| Tingley, Charles O., Rahway, N. J. Plug for pneumatic tires | 734,108 | July 21 | 2607 | 613 | 105 | 585 |
| Tinker, George E., New York, N. Y. Conductor | 730,058 | June 2 | 978 | 219 | 104 | 1327 |
| Tinkham, Francis M., Springfield, Mass. Couch-bed | 738,582 | Sept. 8 | 2067 | 452 | 106 | 460 |
| Tinklepaugh, Harry M., Pritchard, Pa. Shingle-gage | 738,256 | Sept. 8 | 1408 | 305 | 106 | 320 |
| Tinsman, Samuel H., Morris, Ill. Draft appliance | 726,481 | Apr. 28 | 3822 | 864 | 103 | 2018 |
| Tinsman, Samuel H., assignor to Implement Manufacturing Company, Davenport, Iowa, Lister | 732,140 | June 30 | 4865 | 1082, 1083 | 104 | 2201 |
| Tippett, George, assignor of one-half to W. R. Reed, Whatcheer, Iowa. Means for attaching pick-blades or other tools to their handles | 746,648 | Dec. 8 | 2425 | 554 | 107 | 1641 |
| Tirrill, Allen A., Laconia, N. H., assignor, by mesne assignments, to General Electric Company, Schenectady, N. Y. Automatic potential-regulator for dynamos | 725,799 | Apr. 21 | 2571 | 582, 583, 584 | 103 | 1746 |
| Tirrill, Allen A., Concord, N. H., assignor to General Electric Company, Schenectady, N. Y. Automatic potential-regulator | 725,800 | Apr. 21 | 2578 | 585, 586, 587 | 103 | 1747 |
| Tirrill, Allen A., Schenectady, N. Y., assignor to General Electric Company. Automatic potential-regulator | 726,234 | Apr. 21 | 3326 | 755, 756, 757 | 103 | 1902 |
| Tirrill, Oakes, and A. De Bevoise, New York, N. Y. Truss | 731,141 | June 16 | 2966 | 658 | 104 | 1778 |
| Tisch, Ralph P., and R. Kissinger; said Kissinger assignor to said Tisch and C. A. Pence, Hebron, Ohio. Trolley device | 748,322 | Dec. 29 | 5592 | 1275 | 107 | 2405 |
| Tischler, John. (See Czermak and Tischler.) | | | | | | |
| Tismer, Paul G., assignor to Bunnell Telegraphic & Electrical Company, New York, N. Y. Electric bell | 744,944 | Nov. 24 | 4119 | 887 | 107 | 925 |
| Tissier, Albert, Paris, France. Thermo-electric generator | 729,108 | May 26 | 4287 | 947 | 104 | 958 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Titcomb, George E., Philadelphia, Pa., assignor to Dodge Coal Storage Company, Naugatuck, Conn. Floating dock | 738,084 | Sept. 1 | 1024 | 229 | 106 | 222 |
| Titcomb, George E., Philadelphia, Pa., assignor to Dodge Coal Storage Company, Naugatuck, Conn. Barge | 742,101 | Oct. 20 | 3350 | 748 | 106 | 1988 |
| Titcomb, George E., Philadelphia, Pa., assignor to Dodge Coal Storage Company, Naugatuck, Conn. Rope-carrier for movable bucket conveyers | 742,753 | Oct. 27 | 4529 | 1026 | 106 | 2251 |
| Tittle, Reuben D., Springfield, Ohio. Seal-lock for pipe-couplings | 720,196 | Feb. 10 | 1444 | 330 | 102 | 1145 |
| Tittle, Reuben D., Springfield, assignor to Piqua Bracket Company, Piqua, Ohio. Shoe-jack | 737,174 | Aug. 25 | 3993 | 885 | 105 | 1883 |
| Titus, Charles B., assignor of one-half to J. Moore, Little River, Kans. Motor-vehicle | 731,086 | June 16 | 2852 | 633 | 104 | 1756 |
| Titus, Ernest A., *et al.* (See Farmer, Julius M., assignor.) | | | | | | |
| Titus, John, Oyster Bay, and W. Titus, Old Westbury, N. Y. Cabinet air cooler or heater | 721,254 | Feb. 24 | 3487 | 793 | 102 | 1607 |
| Titus, John, Oyster Bay, and W. Titus, Old Westbury, N. Y. Belt conveyer for transporting sand, gravel, &c | 723,504 | Mar. 24 | 3465 | 775 | 103 | 769 |
| Titus, John, Oyster Bay, and W. Titus, Old Westbury, N. Y. Apparatus for simultaneously supplying heated and refrigerated air | 724,145 | Mar. 31 | 4683 | 1052 | 103 | 1039 |
| Titus, John, Oyster Bay, and W. Titus, Old Westbury, N. Y. Apparatus for the medication of air | 740,714 | Oct. 6 | 603 | 134 | 106 | 1377 |
| Titus, Richard, Bowling Green, Ohio. Stuffing-box | 734,633 | July 28 | 3572 | 836 | 105 | 804 |
| Titus, Seth I., Villaridge, Ill. Revolving cultivator | 731,977 | June 23 | 4507 | 1006 | 104 | 2115 |
| Titus, William. (See Titus, John and W.) | | | | | | |
| Titze, Heinrich, Vienna, Austria-Hungary. Producing imitations of paintings on glass | 718,036 | Jan. 6 | 972 | ..... | 102 | 209 |
| Titzel, James C. (See Titzel, John A., Sr., assignor.) | | | | | | |
| Titzel, John A., Sr., Franklin, assignor of one-third to J. C. Titzel, Glenshaw, Pa. Electric motor or generator | 718,588 | Jan. 13 | 2048 | 445 | 102 | 456 |
| Tixier, Maurice C. M., Paris, France. Obtaining tar extract | 722,336 | Mar. 10 | 1274 | ..... | 103 | 287 |
| Tobey, Fred W., assignor to Globe-Wernicke Company, Cincinnati, Ohio. Door-equalizing device | 726,117 | Apr. 21 | 3114 | 706 | 103 | 1859 |
| Tobey, Fred W., assignor to Globe-Wernicke Company, Cincinnati, Ohio. Type-writer cabinet | 726,482 | Apr. 28 | 3824 | 864 | 103 | 2019 |
| Tobey, Fred W., assignor to Globe-Wernicke Company, Cincinnati, Ohio. Extensible-post binder | 730,318 | June 9 | 1445 | 319 | 104 | 1439 |
| Tobey, Fred W., assignor to Globe-Wernicke Company, Cincinnati, Ohio. Type-writer cabinet | 730,319 | June 9 | 1446 | 319 | 104 | 1439 |
| Tobey, Fred W., assignor to Globe-Wernicke Company, Cincinnati, Ohio. Vertical file | 745,693 | Dec. 1 | 685 | 157 | 107 | 1244 |
| Tobey, William W. (See Edgar and Tobey.) | | | | | | |
| Tobey, William W., Iola, Kans. Reinforcing and locking means for car-doors | 747,664 | Dec. 22 | 4339 | 979 | 107 | 2108 |
| Tobias, Charles S., Cincinnati, Ohio. Cap | 723,946 | Mar. 31 | 4282 | 962 | 103 | 960 |
| Tobias, Elroy. (See Collins and Tobias.) | | | | | | |
| Tobin, Alicia, administratrix. (See Tobin, John.) | | | | | | |
| Tobin, John, deceased, San Francisco, Cal.; A. Tobin, administratrix, assignor of one-half to M. R. Richard, New York, N. Y. Journal-bearing | 731,978 | June 23 | 4509 | 1007 | 104 | 2116 |
| Tobin, John, deceased, Brooklyn; A. Tobin, administratrix, assignor of one-half to J. E. Siegel, New York, N. Y. Sanitary pocket-cuspidor | 735,043 | July 28 | 4348 | 1011 | 105 | 962 |
| Tobin, Samuel, Emme, Pa. Car-coupling | 740,490 | Oct. 6 | 206 | 41 | 106 | 1289 |
| Todd, Albert V., Denver, Colo. Surgical appliance | 742,814 | Oct. 27 | 4635 | 1050 | 106 | 2274 |
| Todd, Albert V., Denver, Colo. Surgical appliance | 745,264 | Nov. 24 | 4768 | 1042 | 107 | 1059 |
| Todd, Charles L. (See Todd and Neff.) | | | | | | |
| Todd, Dana. (See Todd, Martha P. and D.) | | | | | | |
| Todd, Edmund N., Short Hills, assignor to Newark Chemical Company, Newark, N. J. Globe | 727,495 | May 5 | 1247 | 277 | 104 | 269 |
| Todd, Frank L., Elyria, Ohio. Variable-speed gearing | 736,462 | Aug. 18 | 2645 | 581, 582 | 105 | 1583 |
| Todd, Frank L., Elyria, Ohio. Screw-machine | 737,974 | Sept. 1 | 834 | 183, 184 | 106 | 182 |
| Todd, Helen M., Orwell, Vt. Skirt or train lifter | 724,758 | Apr. 7 | 632 | 149 | 103 | 1304 |
| Todd, John, Seattle, Wash. Collapsed-furnace straightener | 746,899 | Dec. 15 | 2908 | 671 | 107 | 1771 |
| Todd, Joseph W., Colwyn, Pa. Computing-machine | 743,113 | Nov. 3 | 563 | 121, 122 | 107 | 117 |
| Todd, Martha P. and D., Minneapolis, Minn. Kindergarten-loom | 748,120 | Dec. 29 | 5244 | 1190 | 107 | 2331 |
| Todd, Maurice B. and C. L., and E. H. Neff, North Topeka, Kans. Dumping wagon-box | 747,510 | Dec. 22 | 4057 | 912 | 107 | 2045 |
| Todenwarth, Richard v., Fulda, Germany. Extinguisher for candles | 728,427 | May 19 | 3029 | 665 | 104 | 683 |
| Toedt, Frederick W., Hamburg, Iowa. Explosive-engine | 722,774 | Mar. 17 | 2106 | 471 | 103 | 481 |
| Toennes, Richard, Boonville, Mo. Fire-escape | 718,037 | Jan. 6 | 973 | 215, 216 | 102 | 209 |
| Toerge, Frederick, Wilkinsburg, Pa. Hose-coupling | 734,377 | July 21 | 3105 | 731 | 105 | 690 |
| Toerring, Christian J., Philadelphia, Pa. Electric-arc lamp | 732,141 | June 30 | 4872 | 1084 | 104 | 2203 |
| Tokheim, John J., Thor, and E. O. Mansfield, assignors to Tokheim Manufacturing Co., Cedar Rapids, Iowa. Measuring-pump | 720,638 | Feb. 17 | 2306 | 528 | 102 | 1336 |
| Tokheim Manufacturing Co. (See Tokheim and Mansfield, assignors.) | | | | | | |
| Tolaas, Ole. (See Tanner and Tolaas.) | | | | | | |
| Tolcher, Henry, Banff, Alberta, Canada. Monocycle | 734,109 | July 21 | 2608 | 613 | 105 | 585 |
| Toledo Glass Company. (See Proeger, Julius, assignor.) | | | | | | |
| Toledo Metal Wheel Company. (See Southard, Frank E., assignor.) | | | | | | |
| Toledo Metal Wheel Company. (See Weber, John, assignor.) | | | | | | |
| Toledo Scale and Cash Register Company. (See De Vilbiss, Allen, Jr., assignor.) (Reissue.) | | | | | | |
| Toles, Justin K., assignor, by mesne assignments, to World's Postal Supply Company, Chicago, Ill. Post-canceling machine | 738,085 | Sept. 1 | 1025 | 229, 230 | 106 | 222 |
| Toles, Justin K., assignor to Bauer & Black, Chicago, Ill. Surgical bandage | 745,028 | Nov. 24 | 4298 | 929 | 107 | 961 |
| Toles, Silas, Galt, Canada. Saw | 739,361 | Sept. 22 | 3517 | 787 | 106 | 799 |
| Tollinger, David C. (See Ross and Tollinger.) | | | | | | |
| Tollner, Hugo. (See Weiss, Louis T., assignor.) | | | | | | |
| Tolman, Charles P., assignor to J. H. Churchill, trustee, Boston, Mass. System of electric lighting for cars | 744,261 | Nov. 17 | 2895 | 620 | 107 | 647 |
| Tolman, James P., Newton, Mass. Cordage-machine | 744,987 | Nov. 24 | 4201 | 909 | 107 | 941 |
| Tolman, James P., Newton, assignor to Samson Cordage Works, Boston, Mass. Coupling for cords or ropes | 723,339 | Mar. 24 | 3125 | 703 | 103 | 703 |
| Tolson, James, Esplanade, Sandgate, Queensland, Australia. Incandescent-mantle-lighting apparatus | 747,805 | Dec. 22 | 4600 | 1037, 1038 | 107 | 2168 |
| Toltz, Max. (See Lipschutz, Arthur, assignor.) | | | | | | |
| Toltz, Max, St. Paul, Minn., and A. Lipschutz, St. Louis, Mo. Safety means for distributing acetylene gas | 717,948 | Jan. 6 | 804 | 181 | 102 | 172 |
| Toltz, Max, St. Paul, Minn., and A. Lipschutz, St. Louis, Mo. Gas-distributing system | 730,807 | June 9 | 2311 | 514 | 104 | 1624 |
| Tomassek, Romeo P., assignor of one-half to T. H. Reynolds, New York, N. Y. Car-wheel | 729,450 | May 26 | 4875 | 1080 | 104 | 1081 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Tomb, George R., Lorain, assignor to Pneumatic Railway Equipment Company, Cleveland, Ohio. Trolley | 718,678 | Jan. 20 | 2205 | 484 | 102 | 500 |
| Tomic, Andreas, Pittsburg, Pa. Device for indicating position of sunken ships | 726,118 | Apr. 21 | 3115 | 706 | 103 | 1860 |
| Tomlin, Albert B., Fort Collins, Colo. Rail-joint | 744,262 | Nov. 17 | 2897 | 620 | 107 | 647 |
| Tomlinson, Charles H., Shelton, Conn. Clasp | 732,798 | July 7 | 186 | 47 | 105 | 43 |
| Tomlinson, Frederick, assignor of one-half to Broughton Copper Company, Limited, Salford, England. Manufacture of metal rods or the like | 718,546 | Jan. 13 | 1956 | 427<br>428 | 102 | 436 |
| Tomlinson, George E., Pekin, Ill. Flexible joint for car-couplings | 736,892 | Aug. 18 | 3479 | 773 | 105 | 1755 |
| Tomlinson, Henry. (See Muldowney and Tomlinson.) | | | | | | |
| Tomlinson, Henry, and J. J. Muldowney, Lawrence, assignors to Draper Company, Hopedale, Mass. Let-off mechanism for looms | 747,273 | Dec. 15 | 3623 | 817 | 107 | 1930 |
| Tomlinson, John. (See Lomax and Tomlinson.) | | | | | | |
| Tomlinson, Joseph, Cedar Rapids, Iowa. Bridge construction | 729,016 | May 26 | 4132 | 915 | 104 | 928 |
| Tomlinson, Joseph, Cedar Rapids, Iowa. Bridge construction | 747,511 | Dec. 22 | 4058 | 913 | 107 | 2045 |
| Tomlinson, Royal D., New York, N. Y. Condenser | 724,970 | Apr. 7 | 1019 | 233<br>234 | 103 | 1386 |
| Tomlinson, Royal D., New York, N. Y. Surface condenser | 724,971 | Apr. 7 | 1022 | 234 | 103 | 1387 |
| Tomlinson, Royal D., New York, N. Y. Condenser | 724,972 | Apr. 7 | 1024 | 234<br>235 | 103 | 1387 |
| Tommasi, Donato, Paris, France. Plate for electric accumulators | 727,496 | May 5 | 1248 | 277 | 104 | 269 |
| Tompkins, Caroline B., Jersey City, N. J. Slate | 723,340 | Mar. 24 | 3127 | 703 | 103 | 703 |
| Tompkins, Daniel A., Charlotte, N. C. Bolster-rail for spinning-frames | 727,715 | May 12 | 1700 | 379 | 104 | 383 |
| Tompkins, Frank P., *et al.* (See Misner, Perry, assignor.) | | | | | | |
| Tompkins, Jesse, assignor of one-half to A. Mathews and G. W. Royalty, Gatesville, Tex. Windmill | 726,376 | Apr. 28 | 3624 | 822 | 103 | 1979 |
| Tompkins, John D., Valatie, N. Y. Paper-making machine | 742,259 | Oct. 27 | 3657 | 817 | 106 | 2067 |
| Tompkins, Le Grand R., and C. E. Mead, Bangall, N. Y. Manure-conveyer for stables | 743,957 | Nov. 10 | 2247 | 484 | 107 | 496 |
| Toms, George N., assignor to Frictionless Roller Bearing Company, Boston, Mass. Antifriction-bearing | 733,348 | July 7 | 1162 | 276 | 105 | 245 |
| Toms, George N., assignor to Frictionless Roller Bearing Company, Boston, Mass. Antifriction-bearing | 740,336 | Sept. 29 | 5361 | 1208 | 106 | 1210 |
| Toms, George N., assignor, by mesne assignments, to Frictionless Roller Bearing Company, Boston, Mass. Antifriction device | 747,512 | Dec. 22 | 4060 | 913 | 107 | 2045 |
| Tomson, Henry R., Eaton, Colo. Draft-equalizer | 746,649 | Dec. 8 | 2426 | 554<br>555 | 107 | 1642 |
| Tomson, William H., London, England, and W. G. Hanna, Glasgow, Scotland. Apparatus for casting bearings | 731,632 | June 23 | 3896 | 867<br>868 | 104 | 1985 |
| Tone, Frank J., Niagara Falls, N. Y. Refractory brick or article | 735,022 | July 28 | 4311 | ------ | 105 | 955 |
| Tone, Frank J., Niagara Falls, N. Y. Reduction of metals and alloys | 745,122 | Nov. 24 | 4490 | 972<br>973 | 107 | 1002 |
| Tone, Joseph C., Irondequoit, assignor to himself, G. S. and H. Gallagher, New York, N. Y. Canal-boat propulsion | 719,907 | Feb. 3 | 888 | 209 | 102 | 1011 |
| Toni, Francesco, London, England. Pneumatic tire | 720,639 | Feb. 17 | 2307 | 528 | 102 | 1337 |
| Tönjes, Carl, Delmenhorst, Germany. Means for controlling the flow of liquids from or to chambers, pipes, or other receptacles | 734,378 | July 21 | 3106 | 731 | 105 | 690 |
| Tonks, John E., Knowle, and W. G. S. Symmons, London, England. Kettle or like utensil | 727,228 | May 5 | 764 | 163 | 104 | 165 |
| Tönnies, Heinrich A. F. B. H., Groningen, Netherlands. Acetylene-gas generator | 734,634 | July 28 | 3573 | 836 | 105 | 804 |
| Toof, Edwin J. (See Ammerman, William M., assignor.) | | | | | | |
| Toohey, John, assignor of one-half to M. C. Cann, Stockwell, Ind. Smoke-consumer | 744,131 | Nov. 17 | 2636 | 562 | 107 | 591 |
| Tooker, Charles O., Richmond, Ind. Permutation-padlock | 746,202 | Dec. 8 | 1636 | 364 | 107 | 1470 |
| Tooker, Harry B., New York, N. Y. Eraser | 745,084 | Nov. 24 | 4426 | 957 | 107 | 987 |
| Toole, John H., Chicago, Ill. Cushion-tire | 735,622 | Aug. 4 | 1127 | 238 | 105 | 1221 |
| Toole, John O., Butler, Nev. Windlass | 743,774 | Nov. 10 | 1919 | 406 | 107 | 426 |
| Toomey, Daniel F., Guilford, Conn. Submarine boat | 746,606 | Dec. 8 | 2343 | 537 | 107 | 1623 |
| Topliff, Francis W., Greenland, N. H. Tie and rail-clasp | 747,806 | Dec. 22 | 4602 | 1038 | 107 | 2168 |
| Topliff, Myron, Wallace, Idaho. Eccentric | 732,606 | June 30 | 5761 | 1278 | 104 | 2391 |
| Toquet, Benjamin L., Westport, Conn. Sparking igniter for gas-engines | 737,532 | Aug. 25 | 4678 | 1049<br>1050 | 105 | 2034 |
| Torbeck, Fred, Vandalia, Ill. Straw-stacker | 719,534 | Feb. 3 | 216 | 50 | 102 | 869 |
| Torgerson, Oscar, Mapleton, N. D. Draft-equalizer | 731,142 | June 16 | 2967 | 658 | 104 | 1778 |
| Tormey, James A., Winona, Minn. Fire-kindler | 745,932 | Dec. 1 | 1135 | 255 | 107 | 1341 |
| Tornberg, Knut, Medford, Mass. Electric-arc lamp | 748,121 | Dec. 29 | 5245 | 1191 | 107 | 2331 |
| Törnblom, Johan A., Eskilstuna, Sweden. Fork | 741,191 | Oct. 13 | 1506 | 341 | 106 | 1588 |
| Toronto Roller Bearing Company. (See Henderson, Albert E., assignor.) | | | | | | |
| Torrance, Charles A., and G. S. Stone, Talmage, Nebr. Tooth-brush | 728,048 | May 12 | 2313 | 514 | 104 | 509 |
| Torrance, Charles E., Florence, Mass. Paper-making machinery | 735,175 | Aug. 4 | 251 | 50 | 105 | 1036 |
| Torrance, Charles E., Northampton, Mass. Belt-driven elevator | 740,784 | Oct. 6 | 758 | 171<br>172 | 106 | 1407 |
| Torrance, Charles E., Northampton, Mass. Friction-clutch | 742,524 | Oct. 27 | 4145 | 932 | 106 | 2167 |
| Torrance, Sarah S., Chicago, Ill. Milliner's hat-holder | 729,451 | May 26 | 4876 | 1080 | 104 | 1081 |
| Torrens, Mary, Bridgnorth, England. Glove | 720,640 | Feb. 17 | 2308 | 529 | 102 | 1337 |
| Torrey, Augustus, deceased, Detroit, Mich.; C. F. Torrey, administratrix. Machine for excavating, conveying, and loading ballast. (Reissue) | 12,087 | Feb. 24 | 4230 | 961 | 102 | 1767 |
| Torrey, Charlotte F., administratrix. (See Torrey, Augustus.) (Reissue.) | | | | | | |
| Torry, Fay, Erie, Pa. Dumping-grate | 735,623 | Aug. 4 | 1127 | 238 | 105 | 1221 |
| Tóth, Elek, Lugos, Austria-Hungary. Door-lock | 720,757 | Feb. 17 | 2506 | 578 | 102 | 1381 |
| Tóth, Ferdinand, *et al.* (See Horváth, Josef, assignor.) | | | | | | |
| Totham, Eugenia, *et al.*, executors. (See Totham, James.) | | | | | | |
| Totham, James, deceased, New Haven, Conn.; E. Totham and C. F. Merwin, executors. Overflow-flush for basins, baths, washtrays, &c | 747,807 | Dec. 22 | 4604 | 1038 | 107 | 2168 |
| Totham, James, deceased; E. Totham and C. F. Merwin, executors, assignors to Peck Bros. & Co., New Haven, Conn. Faucet | 746,762 | Dec. 15 | 2635 | 606 | 107 | 1709 |
| Totten, William D., *et al.* (See Beardsley, Chauncey H., assignor.) | | | | | | |
| Totten, William D. (See King, John, assignor.) | | | | | | |
| Touchstone, Solomon G., Greenwood, S. C. Conveyer-apron | 736,315 | Aug. 11 | 2394 | 521 | 105 | 1513 |
| Toups, Felix A., Thibodaux, La. Draining-machine | 723,341 | Mar. 24 | 3128 | 703 | 103 | 704 |
| Tourgee, William O. (See Sargent, Rice, and Tourgee.) | | | | | | |
| Tourgeay, John, Windsor Mills, Canada, assignor to Laineau Manufacturing Co. Making [illegible] | 720,857 | Feb. 17 | 2664 | 615 | 102 | 1414 |
| Tourneur, Henri. (See Ragot and Tourneur.) | | | | | | |
| Tournier, Julius C., Schenectady, N. Y., assignor to General Electric Company. Globe-holder for arc-lamps | 730,721 | June 9 | 2176 | 483 | 104 | 1595 |
| Tousey, William G., Somerville, Mass. Water-filter | 733,885 | July 14 | 2139 | 505 | 105 | 466 |
| Towanda Paint Remover Company. (See Beck, Charles L., assignor.) | | | | | | |
| Towar, Alexander H. (See Fries, Theodore, assignor.) | | | | | | |
| Tower, Clinton A., Cleveland, Ohio. Hub-band cap | 729,518 | May 26 | 4989 | 1107 | 104 | 1107 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Tower, Clinton A., Cleveland, Ohio. Pivot-pin for couplings | 735,000 | July 28 | 4279 | 996 | 105 | 948 |
| Tower, Clinton A., assignor to National Malleable Castings Company, Cleveland, Ohio. Car-coupling | 728,049 | May 12 | 2315 | 514 | 104 | 510 |
| Tower, Clinton A., assignor to National Malleable Castings Company, Cleveland, Ohio. Car-coupling | 728,182 | May 12 | 2553 | 568 | 104 | 561 |
| Tower, Clinton A., Cleveland, Ohio, assignor to National Malleable Castings Company. Car-coupling | 734,146 | July 21 | 2679 | 630 | 105 | 600 |
| Tower, Clinton A., Cleveland, Ohio, assignor to National Malleable Castings Company. Car-coupling | 738,738 | Sept. 8 | 2367 | 520 | 106 | 522 |
| Tower, Clinton A., assignor to National Malleable Castings Company, Cleveland, Ohio. Car-coupling | 745,265 | Nov. 24 | 4770 | 1042 | 107 | 1059 |
| Tower, Daniel W., Grand Rapids, Mich. Fastening device for furniture | 742,525 | Oct. 27 | 4146 | 932 | 106 | 2168 |
| Tower, Daniel W., Grand Rapids, Mich. Stud for drawer-pulls | 742,526 | Oct. 27 | 4149 | 932 | 106 | 2168 |
| Tower, Daniel W., assignor to Grand Rapids Brass Co., Grand Rapids, Mich. Device for fastening furniture-trimmings | 745,404 | Dec. 1 | 168 | 38 | 107 | 1135 |
| Tower, W. G., *et al.* (See Bryant, William P., assignor.) | | | | | | |
| Towers, Charles B., Miles City, and W. A. Cameron, Stacey, Mont. Copy-holder | 723,079 | Mar. 17 | 2645 | 595, 596 | 103 | 592 |
| Towle, Felix S., Hackensack, N. J. Copy-holder | 724,629 | Apr. 7 | 396 | 94 | 103 | 1254 |
| Towler, Henry L., Minneapolis, Minn. Street or station indicator | 739,949 | Sept. 29 | 4655 | 1044, 1045 | 106 | 1062 |
| Towne, Carroll M., Milwaukee, Wis. Measuring instrument | 721,622 | Feb. 24 | 4167 | 947 | 102 | 1752 |
| Towne, Frank B., Holyoke, Mass., assignor to National Blank Book Company, New York, N. Y. Loose-leaf ledger | 721,623 | Feb. 24 | 4168 | 947 | 102 | 1753 |
| Towne, Frank B., Holyoke, Mass., assignor to National Blank Book Company, New York, N. Y. Temporary binder | 726,785 | Apr. 28 | 4413 | 994 | 103 | 2136 |
| Towne, William F., Oakland, Cal. Picture-hanging device | 722,467 | Mar. 10 | 1515 | 334 | 103 | 339 |
| Townsend, Charles G., Holton, Kans. Dish-mop | 739,747 | Sept. 22 | 4244 | 950 | 106 | 958 |
| Townsend, David C., Schuline, Ill. Trap-gun | 721,980 | Mar. 3 | 611 | 136 | 103 | 133 |
| Townsend, Frank B., Penn Yan, assignor of one-half to L. D. Perrin, Rochester, N. Y. Brake mechanism for vehicles | 735,844 | Aug. 11 | 1547 | 331 | 105 | 1330 |
| Townsend, Frederick B., assignor, by mesne assignments, to W. H. Miner Company, Chicago, Ill. Rocker side bearing for railway-cars | 725,380 | Apr. 14 | 1771 | 398 | 103 | 1559 |
| Townsend, Frederick B., assignor of one-half to W. H. Miner Company, Chicago, Ill. Friction draft-rigging | 734,009 | July 21 | 2399 | 562, 563 | 105 | 538 |
| Townsend, Frederick B., assignor to W. H. Miner Company, Chicago, Ill. Rocker side bearing | 734,010 | July 21 | 2403 | 563 | 105 | 539 |
| Townsend, Frederick B., assignor of one-half to W. H. Miner Company, Chicago, Ill. Friction draft-rigging for railway-cars | 734,011 | July 21 | 2404 | 563 | 105 | 540 |
| Townsend, Frederick B., assignor of one-half to W. H. Miner Company, Chicago, Ill. Tandem-spring friction draft-rigging for railway-cars | 734,012 | July 21 | 2406 | 564 | 105 | 540 |
| Townsend, Harry P., New Britain, Conn. Lock | 721,399 | Feb. 24 | 3736 | 850 | 102 | 1659 |
| Townsend, Harry P., assignor to Corbin Cabinet Lock Company, New Britain, Conn. Lock | 725,381 | Apr. 14 | 1773 | 398 | 103 | 1560 |
| Townsend, Harry P., assignor to Corbin Cabinet Lock Company, New Britain, Conn. Lock | 738,739 | Sept. 8 | 2368 | 520 | 106 | 522 |
| Townsend, John R., *et al.* (See Hall, Edward, assignor.) | | | | | | |
| Townsend, Preston P., Whiteburg, Md. Wheel-plow | 747,513 | Dec. 22 | 4061 | 913 | 107 | 2046 |
| Townsend, Robert D., Chicago, Ill. Attachment for can-headers | 738,642 | Sept. 8 | 2195 | 479 | 106 | 487 |
| Townsend, Thomas, Providence, R. I. Filling-machine for combing-needles | 723,080 | Mar. 17 | 2648 | 596, 597 | 103 | 593 |
| Townsend, Thomas E., Mahoningtown, Pa. Track-sanding device | 725,801 | Apr. 21 | 2587 | 587, 588 | 103 | 1748 |
| Towsley, John T., Cincinnati, Ohio. Wheel for trucks | 746,900 | Dec. 15 | 2909 | 671 | 107 | 1771 |
| Toxey, Elliott. (See Coleman and Toxey.) | | | | | | |
| Toy Gun Manufacturing Company. (See Hazlehurst, Edward, assignor.) | | | | | | |
| Toy, Thomas D., Cherryvale, Kans. Attachment for log-cars or road-wagons | 747,022 | Dec. 15 | 3144 | 720 | 107 | 1823 |
| Toynbee, Charles E. (See Swearer and Toynbee.) | | | | | | |
| Tozier, Charles C., assignor to Tozier Valve Manufacturing Company, Skowhegan, Me. Feed-water regulator | 747,514 | Dec. 22 | 4064 | 914 | 107 | 2046 |
| Tozier Valve Manufacturing Company. (See Tozier, Charles C., assignor.) | | | | | | |
| Trabue, Luther, Girard, Ill., assignor to Ohio Hay Press Company, Bellevue, Ohio. Tension-band for baling-presses | 724,062 | Mar. 31 | 4507 | 1015 | 103 | 1003 |
| Trabue, Luther, Girard, Ill., and C. E. Purcell, assignors to Ohio Hay Press Company, Bellevue, Ohio. Baling-press | 724,063 | Mar. 31 | 4507 | 1015 | 103 | 1003 |
| Trabue, Lyman. (See Trabue, Paul and L.) | | | | | | |
| Trabue, Paul and L., Girard, Ill. Indicator for baling-presses | 728,515 | May 19 | 3184 | 705 | 104 | 714 |
| Trabue, Paul and L., Girard, Ill. Tension-band for baling-presses | 728,516 | May 19 | 3185 | 706 | 104 | 715 |
| Trabue, Paul and L., Girard, Ill. Automatic folder or tucker for baling-presses | 736,653 | Aug. 18 | 3017 | 666 | 105 | 1659 |
| Tracey, James H., Sabetha, Kans. Display-cabinet | 720,504 | Feb. 10 | 1999 | 459 | 102 | 1261 |
| Trachsel, Louis E., Union Star, Mo. Folding poultry-shipping crate | 729,702 | June 2 | 312 | 72 | 104 | 1193 |
| Tracy, James B., Meriden, Conn., assignor to Aeolian Company, New York, N. Y. Means for retaining pianolas in position before keyboard musical instruments | 729,977 | June 2 | 844 | 188 | 104 | 1300 |
| Tracy, Joseph, New York, N. Y. Combined exhaust-valve and igniter | 722,544 | Mar. 10 | 1654 | 364 | 103 | 371 |
| Tracy, Theron H., Denver, Colo. Universal coupling for converters | 743,406 | Nov. 3 | 1192 | 247 | 107 | 255 |
| Traeger, Henry, Auburn, Wash. Harvester | 740,949 | Oct. 6 | 1033 | 235, 236 | 106 | 1466 |
| Trafford, Joseph, Boston, Mass. Bottle-wire cutter | 729,241 | May 26 | 4529 | 997 | 104 | 1009 |
| Trager, Gus E. (See Steadman, Frank M., assignor.) | | | | | | |
| Tragler, Edward B., Akron, Ohio. Rubber tire | 732,237 | June 30 | 5057 | 1125 | 104 | 2242 |
| Trahan, Joseph, New Bedford, Mass. Loom filling-box stand | 748,438 | Dec. 29 | 5810 | 1323 | 107 | 2454 |
| Traill, Walter S., London, England. Illuminating device | 725,514 | Apr. 14 | 2035 | 461 | 103 | 1616 |
| Traine, Wilhelm, Wiesbaden, Germany. Manufacturing oil-varnish | 744,263 | Nov. 17 | 2898 | ..... | 107 | 648 |
| Trainer, Edgar, San Antonio, Tex. Thill-coupling | 731,721 | June 23 | 4050 | 904 | 104 | 2015 |
| Trainer, Frank M., Weymouth, Mass. Vending-machine | 742,527 | Oct. 27 | 4150 | 932, 933 | 106 | 2168 |
| Trainham, Zachariah L., and H. E. Eastman, Richmond, Va. Automatic stop for railways | 739,748 | Sept. 22 | 4245 | 950, 951 | 106 | 959 |
| Trainham, Zachariah L., and H. E. Eastman, Richmond, Va. Switch-operating mechanism | 739,749 | Sept. 22 | 4247 | 951 | 106 | 959 |
| Trainner, Joseph. (See McHale and Trainner.) | | | | | | |
| Trakel, Charles J., Waukesha, Wis. Fish-hook | 719,704 | Feb. 3 | 523 | 117 | 102 | 933 |
| Tramblay, Felix, Milwaukee, Wis. Supporting device for sliding drawers | 740,337 | Sept. 29 | 5362 | 1208 | 106 | 1210 |
| Tramburg, Charles J., Minneapolis, Minn. Seat-support for bicycles | 724,630 | Apr. 7 | 399 | 95 | 103 | 1254 |
| Trapp, Edward A., New York, N. Y. Transportation-car | 731,525 | June 23 | 3688 | 822, 823 | 104 | 1945 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Trapp, Susanna B., New York, N. Y. Safety appliance for elevators | 725,892 | Apr. 21 | 2732 | 622, 623 | 103 | 1781 |
| Trask, George E. (See Carleton and Trask.) | | | | | | |
| Trask, Newell H., Kansas City, Mo. Ice-elevator | 718,175 | Jan. 13 | 1216 | 269 | 102 | 277 |
| Traube, Arthur. (See Miethe and Traube.) | | | | | | |
| Trauer, Frank C., Heizer, Kans. Feed-water heater | 724,413 | Mar. 31 | 5230 | 1171 | 103 | 1151 |
| Trauer, Frank C., Heizer, Kans. Feed-water heater | 730,177 | June 2 | 1169 | 262 | 104 | 1366 |
| Traun, Heinrich, Hamburg, Germany. Comb | 740,338 | Sept. 29 | 5365 | 1208 | 106 | 1211 |
| Traut, Frank L. (See Traut, Justus A. and F. L.) | | | | | | |
| Traut and Hine Manufacturing Company. (See Hine, Henry C., assignor.) | | | | | | |
| Traut and Hine Manufacturing Company. (See Humphrey, Ernest N., assignor.) | | | | | | |
| Traut, Justus A., New Britain, Conn. Plane | 718,679 | Jan. 20 | 2207 | 484 | 102 | 500 |
| Traut, Justus A., New Britain, Conn. Leveling instrument | 719,061 | Jan. 27 | 2930 | 655 | 102 | 666 |
| Traut, Justus A., New Britain, Conn. Level | 726,377 | Apr. 28 | 3626 | 822 | 103 | 1980 |
| Traut, Justus A., New Britain, Conn. Beam-compass | 734,014 | July 21 | 2413 | 564 | 105 | 542 |
| Traut, Justus A., New Britain, Conn. Angle-finder | 742,528 | Oct. 27 | 4152 | 933 | 106 | 2168 |
| Traut, Justus A., assignor to Stanley Rule & Level Company, New Britain, Conn. Plane | 719,062 | Jan. 27 | 2934 | 655 | 102 | 667 |
| Traut, Justus A. and F. L., New Britain, Conn. Foldable rule | 734,013 | July 21 | 2408 | 564 | 105 | 541 |
| Trauthen, Mathias, Omaha, Nebr. Heading-tool | 743,669 | Nov. 10 | 1733 | 365 | 107 | 386 |
| Trautwein, Jacob O. (See Rodgers and Trautwein.) | | | | | | |
| Traveller, Herbert D., Chicago, Ill. Elastic-tread horseshoe | 722,337 | Mar. 10 | 1275 | 283 | 103 | 287 |
| Traver, Philip C., Far Rockaway, N. Y. Bottle | 726,594 | Apr. 28 | 4062 | 917 | 103 | 2064 |
| Traver, Philip C., assignor to himself, A. McTigue, and J. McCaffery, Far Rockaway, N. Y. Packing-joint | 739,624 | Sept. 22 | 4023 | 897 | 106 | 910 |
| Travers, Vincent P., Jr. (See Spinney, Walter W., assignor.) | | | | | | |
| Traves, Webster F. (See McKechnie and Williams, assignors.) | | | | | | |
| Travis, Angie E., administratrix. (See Travis, Charles L.) | | | | | | |
| Travis, Charles L., deceased; A. E. Travis, Springfield, Mass., administratrix. Bicycle or like vehicle | 721,343 | Feb. 24 | 3631 | 826 | 102 | 1638 |
| Travis, Charles L., deceased; A. E. Travis, Springfield, Mass., administratrix. Bicycle | 739,237 | Sept. 15 | 3303 | 732 | 106 | 738 |
| Travis, Charles L., deceased, Minneapolis, Minn.; A. E. Travis, administratrix, assignor to Hygienic Wheel Company, New York, N. Y. Cushion-frame for bicycles | 739,034 | Sept. 15 | 2920 | 648 | 106 | 658 |
| Travis, Joseph H., New York, N. Y. Reclining-chair | 717,949 | Jan. 6 | 806 | 182 | 102 | 172 |
| Travis, Mary E., Evergreen, Ala. Fireplace and grate | 741,192 | Oct. 13 | 1508 | 341 | 106 | 1589 |
| Travis, Walter J., Garden City, N. Y. Golf-club | 739,458 | Sept. 22 | 3725 | 829 | 106 | 845 |
| Trax, Lucy E., Uniontown, Pa. Curtain-hanger | 733,519 | July 14 | 1475 | 351 | 105 | 329 |
| Traxler, Cisco R., Winston-Salem, assignor to United States Veneer Company, Winston, N. C. Veneer-cutting machine | 739,565 | Sept. 22 | 3896 | 873, 874 | 106 | 882 |
| Traxler, Robert P., San Francisco, Cal. Racing-hurdle | 732,680 | June 30 | 5904 | 1309 | 104 | 2419 |
| Traylor, Robert W., West Hoboken, assignor of one-half to F. Hall, Hoboken, N. J. Composite tube | 730,845 | June 9 | 2378 | 525 | 104 | 1638 |
| Treadway, William T., assignor to Universal Accountant Machine Company, St. Louis, Mo. Keyboard for calculating-machines | 718,176 | Jan. 13 | 1218 | 269, 270 | 102 | 277 |
| Treadway, William T., assignor to Universal Accountant Machine Company, St. Louis, Mo. Keyboard for calculating-machines | 732,438 | Mar. 10 | 1446 | 320 | 103 | 324 |
| Treadway, William T., assignor of one-half to Universal Accountant Machine Company, St. Louis, Mo. Indicating mechanism | 743,350 | Nov. 3 | 1086 | 223 | 107 | 220 |
| Treanor, J. O. (See Terry, Joseph T., Jr., assignor.) | | | | | | |
| Treas, Henry, and H. L. Kinzy, Delight, Ark. Stirrup | 731,396 | June 16 | 3433 | 766 | 104 | 1874 |
| Treat, Joseph A., Cleveland, Ohio. Device for laundry use | 724,221 | Mar. 31 | 4828 | 1082, 1083 | 103 | 1068 |
| Trebert, Louis, Marinette, Wis. Railway-switch | 737,045 | Aug. 25 | 3759 | 835 | 105 | 1835 |
| Trede, John F. (See Jacobson and Trede.) | | | | | | |
| Tredway, William T. (See Gracey, Charles B., assignor.) | | | | | | |
| Tredwell, Charles A., assignor to Horton Manufacturing Company, Bristol, Conn. Retaining device for fish-line reels | 718,589 | Jan. 13 | 2050 | 446 | 102 | 456 |
| Treen, John W., Jersey City, N. J. Combination step-ladder and ironing-board | 744,821 | Nov. 24 | 3910 | 840 | 107 | 881 |
| Treese, Albert L., assignor of seven-eighths to W. E. and G. W. Canfield and W. B. Hudson, Jennings, Okla. Ter. Rotary engine | 724,222 | Mar. 31 | 4829 | 1083 | 103 | 1069 |
| Tregellas, Thomas H., Iuka, Kans. Pump-rod lifter | 741,566 | Oct. 13 | 2260 | 504 | 106 | 1749 |
| Tregidgo, Alfonso A., San Francisco, Cal. Quicksilver-furnace | 735,919 | Aug. 11 | 1689 | 360 | 105 | 1359 |
| Tregoning, William C., Bridgeport, Conn. Snap-switch | 720,858 | Feb. 17 | 2666 | 615 | 102 | 1414 |
| Tregoning, William C., assignor to C. G. Perkins, Hartford, Conn. Binding-post and contact for electric switches | 733,569 | July 14 | 1570 | 373 | 105 | 350 |
| Tregoning, William C., assignor to C. G. Perkins, Hartford, Conn. Snap-switch-operating mechanism | 735,317 | Aug. 4 | 541 | 110 | 105 | 1096 |
| Tregoning, William C., assignor to C. G. Perkins, Hartford, Conn. Means for the attachment of incandescent lamps | 741,741 | Oct. 20 | 2601 | 579 | 106 | 1835 |
| Tregoning, William C., assignor to C. G. Perkins, Hartford, Conn. Push-button electric switch | 741,853 | Oct. 20 | 2800 | 623 | 106 | 1879 |
| Tregurtha, George E., Malden, Mass. Device for reversing motion | 721,624 | Feb. 24 | 4171 | 947, 948 | 102 | 1753 |
| Tregurtha, George E., Malden, Mass. Device for reversing motion. (Reissue) | 12,144 | Aug. 11 | 2427 | 530, 531 | 105 | 1520 |
| Tremain, Charles W., assignor of one-half to F. E. Tremain, Chicago, Ill. Gas-engine | 745,266 | Nov. 24 | 4771 | 1042 | 107 | 1059 |
| Tremain, Francis, Highgate, England. Electric conductor or cable | 727,031 | May 5 | 416 | 87 | 104 | 91 |
| Tremain, Francis, Highgate, England. Telephone or like cable | 747,515 | Dec. 22 | 4067 | 914 | 107 | 2047 |
| Tremain, Frank E. (See Tremain, Charles W., assignor.) | | | | | | |
| Tremaine, Harry B., Westfield, N. J. Keyboard musical instrument | 729,978 | June 2 | 846 | 189 | 104 | 1301 |
| Tremblay, Hormidas, assignor of one-half to H. L. Bedard, Southbridge, Mass. Bar-spring eyeglass-frame | 733,520 | July 14 | 1476 | 351 | 105 | 329 |
| Trenail Société Anonyme pour l'Exploitation du Trenail ses Applications. (See Stahl, Felix, assignor.) | | | | | | |
| Trenaman, John V., New York, N. Y. Fountain-cuspidor | 731,246 | June 16 | 3145 | 698 | 104 | 1813 |
| Trenchard, William H., and F. Heath, Gamul, Cal. Current water-motor | 742,529 | Oct. 27 | 4153 | 933, 934 | 106 | 2169 |
| Trenner, Simeon, Philadelphia, Pa. Disinfectant-vaporizer | 719,277 | Jan. 27 | 3331 | 745 | 102 | 749 |
| Trenthage, Jay A., Milwaukee, Wis. Milk-aerator | 728,334 | May 19 | 2875 | 634 | 104 | 650 |
| Trenton Watch Company. (See Dudley, William W., assignor.) | | | | | | |
| Trentzsch, Robert, assignor to Elektrogravüre Gesellschaft mit Beschränkter Haftung, Leipzig, Germany. Engraving-machine | 732,472 | June 30 | 5512 | 1222 | 104 | 2335 |
| Trepp, Samuel, St. Louis, Mo. Exhibiting mechanism | 735,176 | Aug. 4 | 254 | 51 | 105 | 1037 |
| Trescott, Anna W., Oakland, Cal. Scholar's companion. (Reissue) | 12,112 | May 19 | 3776 | 843 | 104 | 840 |
| Trett, Robert, and C. H. Roudybush, Woodland, Ill. Draft-equalizer | 739,123 | Sept. 15 | 3099 | 686 | 106 | 694 |

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| Trevarthen, A. (See Retallack, Joseph, assignor.) | | | | | | |
| Trevarthen, R. A. (See Retallack, Joseph, assignor.) | | | | | | |
| Treveal, Richard, assignor to D. M. Dunning, Jr., Auburn, N. Y. Roller-bearing | 739,521 | Sept. 22 | 3827 | 857 | 106 | 868 |
| Trevor, Francis N. (See Trevor, William W. and F. N.) | | | | | | |
| Trevor, William W. and F. N., Lockport, N. Y. Machine for removing bark from logs | 741,854 | Oct. 20 | 2802 | 624 | 106 | 1879 |
| Trevorrow, Joseph H. L. (See Williams and Trevorrow.) | | | | | | |
| Trewhella, William, Trentham, Victoria, Australia. Lever-jack | 723,558 | Mar. 24 | 3550 | 794 | 103 | 787 |
| Tribe, Thomas, Colorado Springs, Colo. Screw-anchor | 728,144 | May 12 | 2481 | 552 | 104 | 545 |
| Tribe, Thomas, Colorado Springs, Colo. Hinge-shoe | 734,635 | July 28 | 3574 | 837 | 105 | 805 |
| Trick, Christopher, Dayton, Onio. Bone-cutting machine | 744,647 | Nov. 17 | 3558 | 767 | 107 | 787 |
| Trierweiler, Joseph, Chicago, Ill. Curtain-fixture | 743,775 | Nov. 10 | 1920 | 406 | 107 | 426 |
| Triest, Wolfgang G. (See Snare, Triest, and McNicol.) | | | | | | |
| Trill, William L., Corry, Pa. Record-indicating device | 724,525 | Apr. 7 | 197 | 48 | 103 | 1211 |
| Trim, Charles, Houghton, Mich. Coupling for reach-poles | 743,776 | Nov. 10 | 1922 | 407 | 107 | 427 |
| Trimble, Ira, Sterling, Kans. Ball-bearing sickle-bar clip | 727,864 | May 12 | 1975 | 440 | 104 | 437 |
| Trimble, James S., Philadelphia, Pa. Washing-machine | 742,754 | Oct. 27 | 4531 | 1026 | 106 | 2251 |
| Trimble, Thomas F., Valatie, and W. A. Harder, Hudson, N. Y. Drawers | 737,975 | Sept. 1 | 840 | 184 | 106 | 184 |
| Triner, James M., assignor to Pelouze Scale & Mfg. Co., Chicago, Ill. Spring-balance | 739,035 | Sept. 15 | 2923 | 649 | 106 | 659 |
| Triplett, George B., Alexandria, Va., assignor of one-fifth to B. R. Mason, Washington, D. C. Baling-press | 722,191 | Mar. 3 | 984 | 218<br>219 | 103 | 208 |
| Triplett, James, Campbellsville, Ky. Fire-escape | 728,145 | May 12 | 2482 | 552 | 104 | 545 |
| Tripold, Ambrose A., New York, N. Y. Switch-operating mechanism | 737,885 | Sept. 1 | 664 | 141 | 106 | 146 |
| Tripp, Charles A., Indianapolis, Ind., and G. R. Wadleigh, Jackson, Tenn. Level-indicator for liquids | 722,645 | Mar. 10 | 1830 | 407 | 103 | 409 |
| Tripp, Chrestus A. (See Sauvage, William H., assignor.) | | | | | | |
| Tripp Giant Leveler Company. (See Winkley, Erastus E., assignor.) | | | | | | |
| Tripp, Henry C., Auburn, N. Y. Dump-wagon | 747,808 | Dec. 22 | 4605 | 1039 | 107 | 2169 |
| Tripp, Joseph A., Hanover, Mass. Photographic-plate holder | 747,665 | Dec. 22 | 4341 | 979 | 107 | 2109 |
| Tripp, Wirt W. (See Kelch, Thomas, assignor.) | | | | | | |
| Triski, Charles, *et al.* (See Ondra, Frant, assignor.) | | | | | | |
| Trismen, John H., New York, N. Y. Bicycle-gear | 740,950 | Oct. 6 | 1036 | 236 | 106 | 1467 |
| Tritsch, Julius, Vienna, Austria-Hungary. Link for shirt-cuffs or the like | 739,362 | Sept. 22 | 3518 | 787 | 106 | 800 |
| Trivett, Squire, and E. Cummings, Clay Center, Kans. Apparatus for feeding liquid fuel to stoves | 738,257 | Sept. 8 | 1409 | 306 | 106 | 320 |
| Trivick, Sidney, Clapham, England. Extracting metals from ores | 723,787 | Mar. 24 | 3947 | ..... | 103 | 871 |
| Trivick, Sidney, Clapham, England. Making dry alkaline sulfates | 728,335 | May 19 | 2876 | 635 | 104 | 650 |
| Troche, William. (See Goehring and Troche.) | | | | | | |
| Troehler, Rudolph, Cincinnati, Ohio. Barrel-feeding apparatus for barrel-washing machines | 748,545 | Dec. 29 | 6032 | 1365 | 107 | 2504 |
| Trognitz, Rudolph E., San Diego, Cal. Music-satchel | 726,119 | Apr. 21 | 3116 | 706 | 103 | 1860 |
| Troland, James R., New York, N. Y. Apparatus for telephoning | 731,822 | June 23 | 4240 | 944 | 104 | 2057 |
| Trolley Supply Company. (See Knutson, Alfred W., assignor.) | | | | | | |
| Trolsen, Thomas, Brooklyn, N. Y. Controller for electric-motor-driven pumps | 718,177 | Jan. 13 | 1220 | 270 | 102 | 278 |
| Tromble, Fremont J., assignor of one-half to H. W. Garland, Bay City, Mich. Steering device for motor-vehicles | 734,202 | July 21 | 2772 | 650 | 105 | 619 |
| Trostel, C. W., *et al.* (See Simon, William F., assignor.) | | | | | | |
| Trott, John R., and S. H. Sutphin, Virden, Ill. Car-starter | 738,086 | Sept. 1 | 1032 | 230 | 106 | 224 |
| Trounstine, John, *et al.* (See Brand, George, assignor.) | | | | | | |
| Trounstine, John. (See Frank, David, assignor.) | | | | | | |
| Troupe, Samuel L., Philadelphia, Pa. Apparatus for filling cans or other receptacles | 731,526 | June 23 | 3692 | 823<br>824 | 104 | 1945 |
| Trout, Walter C., Milwaukee, Wis. Steam-feed valve | 731,633 | June 23 | 3900 | 869 | 104 | 1985 |
| Trout, William H., and G. M Hinkley, Milwaukee, Wis., assignors of one-half to Allis-Chalmers Company, Chicago, Ill. Band-saw guide | 732,799 | July 7 | 187 | 47, 48 | 105 | 43 |
| Trowbridge, Wilbur C., San Francisco, Cal. Reflector attachment for ovens | 746,203 | Dec. 8 | 1639 | 364 | 107 | 1470 |
| Troy, Edward, Lacey, Iowa. Hay-rack | 722,775 | Mar. 17 | 2108 | 471 | 103 | 481 |
| Troy Laundry Machinery Co. (See Messerly, Everett A., assignor.) | | | | | | |
| Troy Laundry Machinery Co. (See Richardson and Wilcox, assignors.) | | | | | | |
| Troy Laundry Machinery Company. (See Roberts and Wilcox, assignors.) | | | | | | |
| Troy, Matthew O., Schenectady, N. Y., assignor to General Electric Company. System of electrical distribution | 729,812 | June 2 | 536 | 118 | 104 | 1238 |
| Trudeau, Eugene J., Chicago, Ill. Packing-holder for railway journal-boxes | 732,800 | July 7 | 192 | 49 | 105 | 44 |
| Trueblood, Barclay T., O'Neill, Nebr. Spectacles or eyeglasses | 720,859 | Feb. 17 | 2667 | 615 | 102 | 1415 |
| Trueblood, Samuel L., Kenova, W. Va. Car-coupling | 722,192 | Mar. 3 | 989 | 219 | 103 | 209 |
| Truelsen, Carsten, Loup, Nebr Churn and egg-beater | 741,946 | Oct. 20 | 2998 | 666 | 106 | 1919 |
| Truesdell, Allison D., Warren, Ohio. Folding chair | 719,908 | Feb. 3 | 889 | 209 | 102 | 1012 |
| Truesdell, Arthur E. (See Williams, George H., assignor.) | | | | | | |
| Truesdell, Lizzie A., Milwaukee, Wis. Kindergarten-loom | 735,177 | Aug. 4 | 259 | 51 | 105 | 1038 |
| Trufant, Walter E. (See Hatch, Frank A., assignor.) | | | | | | |
| Trufant, Walter E., Whitman, Mass. Machine for driving tacks | 735,178 | Aug. 4 | 260 | 52 | 105 | 1038 |
| Truffault, Jules M. M., Paris, France, assignor of fifty-one one-hundredths to E. V. Hartford. Antivibration device for vehicles | 743,995 | Nov. 10 | 2335 | 499 | 107 | 518 |
| Truitt, James B. and W. L., and W. O. Temple, Cripplecreek, assignors of one-fourth to B. Ross, Denver, Colo. Precipitating zinc-box | 737,046 | Aug. 25 | 3761 | 836 | 105 | 1835 |
| Truitt, John T., St. Louis, Mo. Pleasure-railway | 723,559 | Mar. 24 | 3551 | 794 | 103 | 788 |
| Truitt, Samuel, Guthrie, Okla. Ter. Drag-saw | 738,087 | Sept. 1 | 1033 | 230<br>231 | 106 | 224 |
| Truitt, Warren L. (See Truitt and Temple.) | | | | | | |
| Truman, George H., Fargo, N. D. Blow-off cock | 725,893 | Apr. 21 | 2737 | 623 | 103 | 1782 |
| Truman, William F. (See Hoxie and Truman.) | | | | | | |
| Trumbo, Adam L., Jasper, Ky. Gate | 744,439 | Nov. 17 | 3220 | 690<br>691 | 107 | 718 |
| Trump Brothers Machine Company. (See Plumley, Raymond L., assignor.) | | | | | | |
| Trump, Edward N., Syracuse, N. Y. Vacuum-pan | 743,351 | Nov. 3 | 1042 | 224 | 107 | 221 |
| Trump, Edward N., Syracuse, N. Y. Evaporating liquor | 743,352 | Nov. 3 | 1045 | 224 | 107 | 222 |
| Trump, Fuller, Springfield, Ohio. Balancing device for water-wheels | 743,595 | Nov. 10 | 1602 | 335 | 107 | 358 |
| Trump, George H. (See Clifton, Archer E., assignor.) | | | | | | |
| Trump, William J. (See Rhodes and Trump.) | | | | | | |
| Trunzer, John, Pittsburg, Pa. Floor construction | 736,316 | Aug. 11 | 2395 | 522 | 105 | 1514 |
| Truscott, Bert W., Cleveland, Ohio, assignor, by mesne assignments, to Veneer Barrel Machine Company, Chicago, Ill. Gripping device | 736,173 | Aug. 11 | 2146 | 461 | 105 | 1458 |
| Truscott, Bert W., Cleveland, Ohio, assignor, by mesne assignments, to Veneer Barrel Machine Company, Chicago, Ill. Gripping device for double-stave-veneer-barrel machines | 739,363 | Sept. 22 | 3518 | 787 | 106 | 800 |
| Truslow, Ernest, Summit, N. J. Game apparatus | 724,223 | Mar. 31 | 4831 | 1083 | 103 | 1069 |
| Truslow, Louis B., Greatneck, N. Y. Fly-paper holder | 734,636 | July 28 | 3576 | 837 | 105 | 805 |

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| Trussell, Emory A., assignor to Sieber & Trussell Mfg. Company, St. Louis, Mo. Temporary binder | 719,063 | Jan. 27 | 2935 | 656 | 102 | 667 |
| Trussell, Emory A., assignor to Sieber & Trussell Manufacturing Company, St. Louis, Mo. Transfer-binder | 737,297 | Aug. 25 | 4235 | 943 | 105 | 1934 |
| Trussell, Emory A., assignor to Sieber & Trussell Manufacturing Company, St. Louis, Mo. Temporary binder | 743,114 | Nov. 3 | 565 | 122 | 107 | 118 |
| Trust Company of America, trustee. (See Spaulding, Russell, assignor.) | | | | | | |
| Trützschler, Fritz von, Wismar, Germany. Apparatus for facilitating learning to ride bicycles | 720,860 | Feb. 17 | 2669 | 616 | 102 | 1415 |
| Tschantre, Ernest L., New York, N. Y. Ice and snow melter | 721,479 | Feb. 24 | 3887 | 884 | 102 | 1690 |
| Tscherning, Henry, assignor to Arcade Manufacturing Co., Freeport, Ill. Cork-puller | 728,517 | May 19 | 3186 | 706, 707 | 104 | 715 |
| Tscherning, Henry, assignor to Arcade Manufacturing Company, Freeport, Ill. Cork-puller | 728,518 | May 19 | 3188 | 707 | 104 | 715 |
| Tscherning, Henry, assignor to Arcade Manufacturing Company, Freeport, Ill. Cork-puller | 728,519 | May 19 | 3191 | 707, 708 | 104 | 716 |
| Tscherning, Henry, assignor to Arcade Manufacturing Company, Freeport, Ill. Cork-puller | 728,520 | May 19 | 3193 | 708 | 104 | 717 |
| Tscherning, Henry, assignor to Arcade Manufacturing Company, Freeport, Ill. Spring-hinge | 747,274 | Dec. 15 | 3625 | 817 | 107 | 1930 |
| Tscherning, Henry, assignor to Arcade Manufacturing Company, Freeport, Ill. Spring-hinge | 747,275 | Dec. 15 | 3626 | 817 | 107 | 1931 |
| Tscherning, Henry, assignor to Arcade Manufacturing Company, Freeport, Ill. Spring-hinge | 747,276 | Dec. 15 | 3627 | 817 | 107 | 1931 |
| Tschofen, Anton, Carver, Minn. Key system for musical instruments | 742,102 | Oct. 20 | 3352 | 748 | 106 | 1988 |
| Tubach, Emil F., Dushore, Pa. Bedstead-coupling | 745,535 | Dec. 1 | 411 | 94 | 107 | 1186 |
| Tubbs, Nelson J., assignor to T. J. Landrum, Louisville, Ky. Churn | 727,032 | May 5 | 418 | 87 | 104 | 91 |
| Tubbs, Nelson J., assignor of one-half to R. H. Smith and I. S. Hartley, Louisville, Ky. Device for disinfecting telephones | 743,353 | Nov. 3 | 1048 | 224 | 107 | 223 |
| Tubular Rivet & Stud Company. (See Bray, William C., assignor.) | | | | | | |
| Tubular Rivet & Stud Company. (See Coombs, Walter J., assignor.) | | | | | | |
| Tuch, Otto, Hamburg, Germany. Engine-indicator | 737,298 | Aug. 25 | 4236 | 943 | 105 | 1934 |
| Tuck, William W., Richmond Hill, and A. Wassmann, Astoria, assignors to A. A. Low, Horseshoe, N. Y. Hand-lever-locking device | 720,758 | Feb. 17 | 2507 | 578 | 102 | 1381 |
| Tuck, William W., Richmond Hill, and A. A. Low, Brooklyn, N. Y., assignors to said Low. Hydrocarbon-injector | 737,299 | Aug. 25 | 4237 | 943 | 105 | 1935 |
| Tuck, William W., Richmond Hill, A. A. Low, Horseshoe, and A. Wassmann, Halletts Point, N. Y., assignors to said Low. Explosive-engine | 738,860 | Sept. 15 | 2638 | 582 | 106 | 599 |
| Tuck, William W., Richmond Hill, A. A. Low, Horseshoe, and A. Wassmann, Astoria, N. Y., assignors to said Low. Kerosene-oil engine | 744,822 | Nov. 24 | 3911 | 841 | 107 | 881 |
| Tucker, Benjamin, Moncton, Canada. Nut-lock | 720,505 | Feb. 10 | 2001 | 459 | 102 | 1262 |
| Tucker, Benjamin W., Newark, N. J., assignor to E. Cliff, New York, N. Y. Car-truck | 745,536 | Dec. 1 | 413 | 95 | 107 | 1187 |
| Tucker, Beverly R. (See Shreiner and Tucker.) | | | | | | |
| Tucker, Charles H. (See King, Phineas F., assignor.) | | | | | | |
| Tucker & Dorsey Manufacturing Company. (See Dorsey, Robert L., assignor.) | | | | | | |
| Tucker, Edwin D., assignor to R. Hoe, New York, N. Y. Plate-finishing machine | 746,408 | Dec. 8 | 2002 | 456 | 107 | 1546 |
| Tucker, Edwin W., San Francisco, Cal. Piston-rod packing | 723,220 | Mar. 17 | 2907 | 651, 652 | 103 | 646 |
| Tucker, Edwin W., San Francisco, Cal. Metallic packing | 738,129 | Sept. 1 | 1135 | 252, 253 | 106 | 246 |
| Tucker, Edwin W., and C. L. Grundell, San Francisco, Cal. Crude-oil burner | 743,777 | Nov. 10 | 1925 | 407 | 107 | 427 |
| Tucker, Frank S., assignor to Electric Gas Lighting Company, Boston, Mass. Telephone-transmitter | 720,085 | Feb. 10 | 1237 | 285 | 102 | 1101 |
| Tucker, George, Birmingham, and J. F. Jones, Aston, near Birmingham, England. Machine for making lacing-hooks, &c | 746,901 | Dec. 15 | 2910 | 672 | 107 | 1771 |
| Tucker, Greenleaf R., Boston, Mass., and G. W. Goddard, Concord, N. H., assignors of one-third to E. S. Beach, Boston, Mass. Concentrating apparatus | 744,823 | Nov. 24 | 3912 | 841, 842 | 107 | 882 |
| Tucker, Holling G., assignor of one-half to C. S. Gass, Hereford, Tex. Oven for oil-burners | 744,945 | Nov. 24 | 4121 | 887 | 107 | 925 |
| Tucker, Louis E., assignor to J. M. Taliaferro, Petersburg, Va. Foot-rest for blacking-boxes | 742,138 | Oct. 20 | 3415 | 761 | 106 | 2001 |
| Tucker, Milton V., Hazlewood, Ky. Harvester-reel | 718,038 | Jan. 6 | 973 | 216 | 102 | 210 |
| Tucker, Robert C., Lamont, Mich. Tile-mold | 736,337 | Aug. 11 | 2425 | 529 | 105 | 1520 |
| Tucker, W. L., *et al.* (See Miner, Robert J., assignor.) | | | | | | |
| Tucker, William H., Ilion, N. Y. Card-index tray or cabinet | 729,242 | May 26 | 4530 | 998 | 104 | 1009 |
| Tucker, William R., Saskatoon, Canada. Joiner's clamp | 718,547 | Jan. 13 | 1958 | 428 | 102 | 436 |
| Tucker, Zechariah R., assignor to Universal Machine Company, Providence, R. I. Grinding-machine | 721,400 | Feb. 24 | 3737 | 851 | 102 | 1659 |
| Tucker, Zechariah R., assignor to Universal Machine Company, Providence, R. I. Clutch | 721,925 | Mar. 3 | 515 | 113 | 103 | 114 |
| Tucker, Zechariah R., assignor to Universal Machine Company, Providence, R. I. Spindle-head and bearings therefor | 726,378 | Apr. 28 | 3628 | 822 | 103 | 1980 |
| Tucker, Zechariah R., assignor to Universal Machine Company, Providence, R. I. Grinding-machine | 727,033 | May 5 | 420 | 87, 88 | 104 | 92 |
| Tucker, Zechariah R., assignor to Universal Machine Company, Providence, R. I. Carriage-reversing mechanism for grinding-machines | 731,087 | June 16 | 2854 | 634 | 104 | 1757 |
| Tudas, John. (See Muschweck and Tudas.) | | | | | | |
| Tudor Boiler Manufacturing Company. (See Tudor and Kaiser, assignors.) | | | | | | |
| Tudor, Charles E., and O. B. Kaiser, assignors to Tudor Boiler Manufacturing Company, Cincinnati, Ohio. Feed-water heater and purifier | 731,979 | June 23 | 4512 | 1007 | 104 | 2116 |
| Tudor, W. H. (See Border, Rupert L., assignor.) | | | | | | |
| Tuer, George S. (See Fowler and Tuer.) | | | | | | |
| Tufani, Antonio, New York, N. Y. Dumping-wagon | 719,585 | Feb. 3 | 217 | 51 | 102 | 869 |
| Tufts, Elmer G., Aurora, Ind. Shipping-crate | 718,402 | Jan. 13 | 1630 | 358 | 102 | 365 |
| Tufts, James A., Abiline, Kans. Window-shade-trimming apparatus | 736,317 | Aug. 11 | 2396 | 522 | 105 | 1514 |
| Tuggle, Samuel R. (See Morse and Tuggle.) | | | | | | |
| Tuggle, Samuel R., and C. W. Doering, Houston, Tex. Jack | 732,142 | June 30 | 4875 | 1084 | 104 | 2204 |
| Tuhey, Edward, *et al.* (See Herrick, Bissett, and Merrick, assignors.) | | | | | | |
| Tulloch, Louis R., Angels Camp, Cal. Mechanical movement | 743,596 | Nov. 10 | 1603 | 335 | 107 | 358 |
| Tulloch, Louis R., Angels Camp, Cal. Ore-feeder | 744,264 | Nov. 17 | 2899 | 620 | 107 | 648 |
| Tully, Bryan, Elkton, assignor to F. M. Woods, Teller County, Colo. Barrel-filter | 718,680 | Jan. 20 | 2210 | 484, 485 | 102 | 501 |
| Tully, John T. (See Deming and Tully.) | | | | | | |
| Tully, William H., Wilbur, Wash. Buggy-top support | 746,607 | Dec. 8 | 2345 | 538 | 107 | 1623 |
| Tumelty, Bernard J., Argentine, Kans. String-cutting device | 740,339 | Sept. 29 | 5366 | 1209 | 106 | 1211 |
| Tümler, Alexander F., Hamburg, Germany. Venetian blind | 723,762 | Mar. 24 | 3901 | 877 | 103 | 862 |
| Tunis, Howard H., Windsor Hills, Md. Single-rail car | 730,586 | June 9 | 1940 | 431 | 104 | 1545 |

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| Tunnicliffe, Robert B. (See Taylor and Tunnicliffe.) | | | | | | |
| Tunny, Patrick J., New York, N. Y. Lawn-mower | 726,786 | Apr. 28 | 4415 | 994 | 103 | 2136 |
| Tupper, Frank B., and G. M. Austin, North Berwick, Me. Pan | 743,205 | Nov. 3 | 744 | 163 | 107 | 156 |
| Tupper, John B., assignor of one-half to C. G. Dean, San Francisco, Cal. Wrench | 730,587 | June 9 | 1942 | 432 | 104 | 1545 |
| Tupper, John B., assignor of one-half to Lippert & Hahn, San Francisco, Cal. Pipe-wrench | 733,770 | July 14 | 1907 | 449 | 105 | 419 |
| Turajski, John K., Cleveland, Ohio. Siphon-filler | 737,300 | Aug. 25 | 4238 | 943 | 105 | 1935 |
| Turbayne, William A., Buffalo, assignor to C. M. Gould, New York, N. Y. Automatic regulator for electric generators | 732,238 | June 30 | 5059 | 1125 | 104 | 2242 |
| Turbayne, William A., Buffalo, N. Y., and A. S. Hubbard, Belleville, N. J., assignors to C. M. Gould, New York, N. Y. Automatic regulator for electric generators | 732,239 | June 30 | 5062 | 1126 | 104 | 2242 |
| Turck, Fenton B., Chicago, Ill. Massaging apparatus | 718,958 | Jan. 20 | 2737 | 612 | 102 | 611 |
| Turck, Frederick M., assignor to P. Hano, New York, N. Y. Order-holder | 719,393 | Jan. 27 | 3561 | 795 | 102 | 799 |
| Turck, John, Ayer, Mass. Clamp | 736,174 | Aug. 11 | 2147 | 462 | 105 | 1458 |
| Turck, Joseph A., Providence, R. I., assignor to Mechanical Accountant Company, Saco, Me. Calculating-machine | 720,086 | Feb. 10 | 1238 | 285, 286, 287 | 102 | 1102 |
| Tures, William, Granville, assignor of one-half to S. B. Dexter, Polo, Ill. Vapor-burning lamp | 724,973 | Apr. 7 | 1026 | 235 | 103 | 1387 |
| Tures, William, Granville, assignor of one-half to E. Dunham and R. B. Struthers, Princeton, Ill. Sound-reproducer | 732,776 | Mar. 17 | 2110 | 471 | 103 | 482 |
| Turk, David W., Cleveland, Ohio. Non-refillable bottle | 737,301 | Aug. 25 | 4239 | 944 | 105 | 1935 |
| Turk, Desiderius, Riesa, Germany. Device for regulating and controlling the supply of gas and air to furnaces | 717,640 | Jan. 6 | 208 | 52 | 102 | 45 |
| Turkington, Alexander, Lafayette, Ind. Pile-fabric loom | 723,342 | Mar. 24 | 3129 | 704, 705 | 103 | 704 |
| Turkington, Alexander, Lafayette, Ind. Wheel for vehicles | 741,193 | Oct. 13 | 1509 | 341 | 106 | 1589 |
| Turlay, Abram G., Clinton, Ill. Fluid-pressure brake appliance | 742,103 | Oct. 20 | 3356 | 748, 749 | 106 | 1989 |
| Turley, Edgar W. (See Wilkinson, Samuel, assignor.) | | | | | | |
| Turnbull, Walter J., assignor of three-fourths to J. M. Sherrouse, New Orleans, La. Toy cap-pistol | 725,802 | Apr. 21 | 2589 | 588 | 103 | 1749 |
| Turner, Alfred, *et al.* (See Danner, Joseph, assignor.) | | | | | | |
| Turner, Alpheus A., Bristol, Ind. Composition of matter used as veneer or covering for wood or canvas, &c | 748,235 | Dec. 29 | 5449 | ..... | 107 | 2375 |
| Turner, Calvin G., Wilmington, Del. Railway coupling device | 729,813 | June 2 | 538 | 118 | 104 | 1238 |
| Turner, Charles C., Arcadia, Fla. Shoe-tip | 741,567 | Oct. 13 | 2262 | 505 | 106 | 1749 |
| Turner, Charles E., Macon, Ga. Paper-roll holder | 723,081 | Mar. 17 | 2651 | 597 | 103 | 593 |
| Turner, Charles E., and W. T. Anderson, Macon, Ga. Voting-machine | 736,463 | Aug. 18 | 2648 | 582 | 105 | 1583 |
| Turner, Charles L., Winthrop, assignor to R., W. N., and R. G. Lockwood, Boston, Mass. Machine for polishing atomizer-tubes | 732,801 | July 7 | 193 | 49, 50 | 105 | 44 |
| Turner, Charles M., and H. Lyons, Lansing, Mich. Display-rack | 739,950 | Sept. 29 | 4659 | 1046 | 106 | 1063 |
| Turner, Charles R., Westfield, Mass. Hernial truss | 729,017 | May 26 | 4133 | 916 | 104 | 928 |
| Turner, Charles W., Brooklyn, N. Y. Gas-generator | 726,379 | Apr. 28 | 3630 | 823 | 103 | 1981 |
| Turner, Charles W., Brooklyn, N. Y. Oxyhydrocarbon-burner | 746,409 | Dec. 8 | 2004 | 457 | 107 | 1547 |
| Turner, Clarence E. (See Turner, Robert C., assignor.) | | | | | | |
| Turner, Claude A. P., Minneapolis, Minn. Suspended car-transfer | 719,979 | Feb. 3 | 1012 | 236 | 102 | 1038 |
| Turner, Collatinus A. (See O'Connor and Turner.) | | | | | | |
| Turner, Ephraim M., Denver, Colo. Buckle | 730,846 | June 9 | 2379 | 526 | 104 | 1638 |
| Turner, Frank H., Hartford, Conn. Calender-press | 737,229 | May 5 | 765 | 164 | 104 | 165 |
| Turner, Frank H., Hartford, Conn. Vehicle-wheel | 746,902 | Dec. 15 | 2914 | 673 | 107 | 1771 |
| Turner, Frank V., *et al.* (See Davenport, Frederick S., assignor.) | | | | | | |
| Turner, G. E., *et al.* (See Daellenbach, Charles R., assignor.) | | | | | | |
| Turner, George F., New York, N. Y., assignor to Pneumatic Scale Corporation, Portland, Me. Uniform-feed mechanism for weighing or packaging machines | 746,410 | Dec. 8 | 2006 | 457 | 107 | 1547 |
| Turner, George R., Augusta, Me. Can | 725,515 | Apr. 14 | 2036 | 461 | 103 | 1616 |
| Turner, Harry M., *et al.* (See Maheu, Victor, assignor) | | | | | | |
| Turner, Henry, Sheffield, England. Air-pump | 729,018 | May 26 | 4134 | 916 | 104 | 928 |
| Turner, Henry H. (See Cooper, Alfred E., assignor.) | | | | | | |
| Turner, Howard A., Minneapolis, Minn. Freight-car | 725,178 | Apr. 14 | 1416 | 320, 321 | 103 | 1484 |
| Turner, Howard A., Minneapolis, Minn. Freight-car | 729,452 | May 26 | 4878 | 1081 | 104 | 1082 |
| Turner, Isaac S., Centralia, Wash. Binding-screw | 723,082 | Mar. 17 | 2652 | 597 | 103 | 593 |
| Turner, James, assignor to Nicholson File Company, Providence, R. I. Machine for grinding file-blanks or the like | 733,439 | July 14 | 1336 | 315 | 105 | 299 |
| Turner, John, assignor of one-half to Goodman-Leavitt-Yatter Co., Boston, Mass. Billiard-cloth | 741,598 | Oct. 13 | 2325 | 520 | 106 | 1762 |
| Turner, John E., Dayton, Ohio. Folding table | 726,787 | Apr. 28 | 4417 | 995 | 103 | 2137 |
| Turner, John F. (See Burnett, Turner, and Oatman.) | | | | | | |
| Turner, John F., and E. Burnett, Clifford, Mich. Machine for picking beans | 731,722 | June 23 | 4051 | 904 | 104 | 2015 |
| Turner, John R. (See Stimpson, Moses, assignor.) | | | | | | |
| Turner, Joseph, Huddersfield, England. Yellow dye and making same | 743,778 | Nov. 10 | 1926 | ..... | 107 | 427 |
| Turner, Lucius A., *et al.* (See Stout, George H., assignor.) | | | | | | |
| Turner, Mathias E., Cleveland, Ohio. Dynamometer for electric current | 743,958 | Nov. 10 | 2247 | 484 | 107 | 496 |
| Turner, Orra A., Los Angeles, Cal., assignor to Wood and Iron Preserving Company. Structural element and producing same | 746,411 | Dec. 8 | 2008 | 457 | 107 | 1548 |
| Turner, Robert, New York, and B. R. Corley, Brooklyn, N. Y. Plate-press attachment | 719,909 | Feb. 3 | 890 | 209 | 102 | 1012 |
| Turner, Robert C., assignor of one-half to C. E. Turner, Columbus, Ohio. Apparatus for purifying, sterilizing, or aging liquids | 725,803 | Apr. 21 | 2592 | 588 | 103 | 1749 |
| Turner, Samuel, Sowerby Bridge, and F. W. Akeroyd, Batley, England. Treating hot refuse soapsuds | 743,959 | Nov. 10 | 2251 | ..... | 107 | 497 |
| Turner, Samuel C., East Providence, R. I. Machine for automatically folding goods in vats | 717,950 | Jan. 6 | 807 | 182 | 102 | 173 |
| Turner, Samuel W., assignor to Yost Typewriter Company, Limited, London, England. Inking appliance for type-writers | 728,050 | May 12 | 2319 | 515 | 104 | 511 |
| Turner & Seymour Mfg. Co. (See Hills, Sidney C., assignor.) | | | | | | |
| Turner, Thomas F., and H. B. Stewart, Canton, Ohio. Gold-washing machine | 736,464 | Aug. 18 | 2651 | 582, 583 | 105 | 1584 |
| Turner, William A., Providence, R. I. Sheet-metal knob | 732,973 | July 7 | 482 | 120 | 105 | 104 |
| Turner, William G., French Camp, Cal. Garment | 736,893 | Aug. 18 | 3479 | 773 | 105 | 1735 |
| Turner, William H. (See Stewart, Turner, and Dixon.) | | | | | | |
| Turner, Wilson P. H. (See Hopkins, William W., assignor.) | | | | | | |
| Turney, Edward, Portland, Oreg. Clutch-operating mechanism | 728,521 | May 19 | 3195 | 708, 709 | 104 | 717 |
| Turney, John E., Louisville, Ky. Drier | 740,607 | Oct. 6 | 442 | 96 | 106 | 1341 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | Spec. | Drg. | Vol. | Page. |
| Turney, Oliver. (See Cooper, William F., assignor.) | | | | | | |
| Turpangy, Jacob. (See Koorie and Turpangy.) | | | | | | |
| Turvill, Archibald, Philadelphia, Pa. Stair-carpet fastener | 740,785 | Oct. 6 | 763 | 172 | 106 | 1408 |
| Tüschel, Gustav, Odessa, Russia. Quick-varnish composition | 731,723 | June 23 | 4053 | ..... | 104 | 2016 |
| Tuseth, Charles J., Osseo, Minn. Binder tension | 745,123 | Nov. 24 | 4492 | 973 | 107 | 1002 |
| Tuttle, Arthur S., Brooklyn, N. Y. Valve | 728,336 | May 19 | 2878 | 635 | 104 | 651 |
| Tuttle & Bailey Manufacturing Company. (See Tuttle, Silas, assignor.) | | | | | | |
| Tuttle, Charles L. (See Whipple, Henry D., assignor.) | | | | | | |
| Tuttle, Edwin N., Beverly, Mass. Toy cannon | 729,453 | May 26 | 4881 | 1081 | 104 | 1082 |
| Tuttle, George R., Grass Valley, Cal. Ore-milling apparatus | 731,634 | June 23 | 3902 | 869 | 104 | 1986 |
| Tuttle, Henry W., assignor to J. M. Scott, Philadelphia, Pa. Vaporizer or carbureter for explosive-engines | 719,536 | Feb. 3 | 219 | 51 | 102 | 870 |
| Tuttle, Henry W., assignor to J. M. Scott, Philadelphia, Pa. Explosive-engine | 720,759 | Feb. 17 | 2508 | 578<br>579 | 102 | 1381 |
| Tuttle, Henry W., assignor to H. T. C. Wise, Philadelphia, Pa. Rub-apron for rub-rolls. | 723,505 | Mar. 24 | 3466 | 775 | 103 | 769 |
| Tuttle, Homer R., Wardhill, Mass., and R. S. Tuttle, Bradford, N. H. Collapsible tray | 726,205 | Apr. 21 | 3272 | 743 | 103 | 1891 |
| Tuttle, James H., Jr., Manlius, N. Y. Hot-air furnace | 739,036 | Sept. 15 | 2925 | 649 | 106 | 659 |
| Tuttle, Josiah S., assignor of one-half to G. T. Johnson, Kansas City, Mo. Baling-press. | 719,278 | Jan. 27 | 3334 | 745 | 102 | 750 |
| Tuttle, Josiah S., assignor to B. S. Hutchins, Kansas City, Mo. Lawn or house swing | 742,932 | Nov. 3 | 190 | 44 | 107 | 42 |
| Tuttle, Ralph S. (See Tuttle, Homer R. and R. S.) | | | | | | |
| Tuttle, Silas, New York, assignor to Tuttle & Bailey Manufacturing Company, Brooklyn, N. Y. Hot-air register | 737,976 | Sept. 1 | 841 | 185 | 106 | 184 |
| Tuttle, Washington I., Baltimore, Md., assignor to American Tobacco Company, New York, N. Y. Can or box structure | 743,597 | Nov. 10 | 1606 | 336 | 107 | 359 |
| Tutwiler, Carrington C., assignor to United Gas Improvement Company, Philadelphia, Pa. Apparatus for analyzing gases | 744,132 | Nov. 17 | 2637 | 563 | 107 | 591 |
| Tuve, Frank W. (See Shields, Hattie M., assignor.) | | | | | | |
| Tuvell, Frank, Binford, N. D. Pitman for mowers or reapers | 748,236 | Dec. 29 | 5450 | 1242 | 107 | 2375 |
| Tverdahl, Ole, assignor of one-eighth to L. M. Downs, Canal Dover, Ohio. Sad-iron | 740,996 | Oct. 6 | 1127 | 254 | 106 | 1486 |
| Twambley, Samuel G., Biddeford, Me. Centering-tool | 724,759 | Apr. 7 | 634 | 149 | 103 | 1304 |
| Tway, Sarah L., administratrix. (See Tway, William J.) | | | | | | |
| Tway, William J., deceased, Albuquerque, N. Mex. Ter.; S. L. Tway, administratrix. Wall-paper exhibitor | 745,933 | Dec. 1 | 1136 | 255 | 107 | 1341 |
| Tweed, Robert R. (See Mackintosh and Tweed.) | | | | | | |
| Tweedie, James, Rockland, Canada. Band-wheel scraper | 730,419 | June 9 | 1624 | 364 | 104 | 1475 |
| Tweedy, Edmund, New York, N. Y., assignor to Roberts Battery Company. Electric battery | 743,598 | Nov. 10 | 1608 | 336 | 107 | 359 |
| Tweedy, Edmund, New York, I. L. Roberts, Brooklyn, N. Y., and G. R. Tweedy, Danbury, Conn., assignors to Roberts Battery Company. Electric battery | 729,240 | May 26 | 4526 | 997 | 104 | 1008 |
| Tweedy, George B. M., Pittsburg, Pa. Puzzle | 719,910 | Feb. 3 | 892 | 209 | 102 | 1012 |
| Tweedy, George R. (See Tweedy, Roberts, and Tweedy.) | | | | | | |
| 20th Century Fire Escape Co. (See Stevenson and Watson, assignors.) | | | | | | |
| 20th Century Machinery Co. (See Volz, Simon, assignor.) | | | | | | |
| Twiggs, Albert J., Augusta, Ga. Dumping-car | 728,634 | May 19 | 3430 | 761 | 104 | 768 |
| Twinberrow, James D. (See Sheffield and Twinberrow.) | | | | | | |
| Twitchell, Charles R., and W. E. Brown, assignors to Brown-Winstanley Manufacturing Company, Los Angeles, Cal. Bottle-tin-foiling machine | 733,771 | July 14 | 1908 | 450 | 105 | 419 |
| Twitchell, James E., Detroit, Mich. Coat-hanger | 735,624 | Aug. 4 | 1129 | 239 | 105 | 1221 |
| Twohig, Redmond, Salina, Kans. Garden implement | 748,439 | Dec. 29 | 5810 | 1324 | 107 | 2454 |
| Tyberg, Oluf, assignor to R. L. Patterson and G. Arents, Jr., New York, N. Y. Pneumatic transferring mechanism for cigar-machines | 719,279 | Jan. 27 | 3336 | 745 | 102 | 750 |
| Tyberg, Oluf, assignor to R. L. Patterson and G. Arents, Jr., New York, N. Y. Cutting mechanism for cigar-wrappers | 723,947 | Mar. 31 | 4283 | 962 | 103 | 960 |
| Tyberg, Oluf, assignor to R. L. Patterson and G. Arents, Jr., New York, N. Y. Wrapping-machine | 729,454 | May 26 | 4882 | 1082 | 104 | 1083 |
| Tyberg, Oluf, and S. I. Prescott, assignors to R. L. Patterson and G. Arents, Jr., New York, N. Y. Pasting-machine | 719,626 | Feb. 3 | 382 | 88 | 102 | 901 |
| Tyden, Emil. (See Burton, Charles S., assignor.) | | | | | | |
| Tyden, Emil. (See Luger and Muller, assignors.) | | | | | | |
| Tyden, Emil. (See Wilhelm, Christian, assignor.) | | | | | | |
| Tyden, Emil, Hastings, Mich. Veneering columns | 720,760 | Feb. 17 | 2510 | 579 | 102 | 1381 |
| Tyden, Emil, Hastings, Mich. Pedestal-extension-table lock. (Reissue) | 12,083 | Feb. 17 | 3236 | 740<br>741 | 102 | 1542 |
| Tyden, Emil, Hastings, Mich. Sealing attachment for bags | 721,926 | Mar. 3 | 516 | 113 | 103 | 114 |
| Tyden, Emil, Hastings, Mich. Pedestal-extension-table locking device | 722,468 | Mar. 10 | 1516 | 335 | 103 | 339 |
| Tyden, Emil, Hastings, Mich. Pedestal-extension-table lock | 722,469 | Mar. 10 | 1522 | 335 | 103 | 341 |
| Tyden, Emil, Hastings, Mich. Pedestal-extension-table lock | 722,470 | Mar. 10 | 1525 | 335 | 103 | 342 |
| Tyden, Emil, Hastings, Mich. Pedestal-table-locking device | 733,607 | July 14 | 1623 | 384 | 105 | 360 |
| Tyden, Emil, Hastings, Mich. Pedestal-extension-table lock | 734,203 | July 21 | 2773 | 651 | 105 | 619 |
| Tyden, Emil, Hastings, Mich. Self-locking seal | 739,037 | Sept. 15 | 2927 | 649 | 106 | 659 |
| Tyden, Emil, Hastings, Mich. Self-locking seal | 739,038 | Sept. 15 | 2929 | 650 | 106 | 660 |
| Tyer, Author. (See Skidmore and Tyer.) | | | | | | |
| Tyer Rubber Co. (See Jones, Frederick H., assignor.) | | | | | | |
| Tyler, Allen, assignor of one-half to L. T. Creech, Quitman, Ga. Pindal-planter | 744,648 | Nov. 17 | 3559 | 767<br>768 | 107 | 787 |
| Tyler, Darius S. and L. D., Indianapolis, Ind. Washing-machine | 727,497 | May 5 | 1249 | 278 | 104 | 269 |
| Tyler, Edwin H., New York, N. Y. Truck-wagon | 717,951 | Jan. 6 | 808 | 183 | 102 | 173 |
| Tyler, George B., Coventry, England. Draft-regulating apparatus for furnaces | 719,394 | Jan. 27 | 3562 | 795 | 102 | 799 |
| Tyler Hinged Last Company. (See Mawhinney, Samuel, assignor.) | | | | | | |
| Tyler, Hiram. (See Ohmer and Tyler.) | | | | | | |
| Tyler, Hiram, assignor to J. F. Ohmer, Dayton, Ohio. Duplex-ticket holder | 718,590 | Jan. 13 | 2051 | 446 | 102 | 457 |
| Tyler, James M., Bay St. Louis, Miss. Burglar-trap | 738,258 | Sept. 8 | 1410 | 306 | 106 | 320 |
| Tyler, Lambert D. (See Tyler, Darius S. and L. D.) | | | | | | |
| Tyler, Morris S., Lansing, Mich. Coin-controlled vending-machine | 744,824 | Nov. 24 | 3919 | 842<br>843 | 107 | 882 |
| Tyler, Walter L., *et al.* (See Cowperthwait, Allan, assignor.) | | | | | | |
| Tyler, Walter L., *et al.* (See Lindstrom, Nils O., assignor.) | | | | | | |
| Tyler, William D., Brooklyn, N. Y. Automatic weighing-machine | 733,096 | July 7 | 710 | 173 | 105 | 150 |
| Tyndall, Charles A., Troy, assignor of one-half to C. W. Bruden, Utica, N. Y., and P. J. Smith, Waltham, Mass. Sign | 725,300 | Apr. 14 | 1627 | 367 | 103 | 1529 |
| Tyrrell's Hygienic Institute. (See Guild, Henry M., assignor.) | | | | | | |
| Tyson, Frank, Philadelphia, Pa., assignor of three-fourths to J. G. Lowdon, Abilene, Tex., R. W. Rutherford, Philadelphia, and J. R. Okell, Scranton, Pa. Paper-bag machine | 727,559 | May 5 | 1374 | 309<br>310<br>311 | 104 | 296 |
| Tyson, James R., Reading, Pa. Gas-heater | 737,977 | Sept. 1 | 842 | 185 | 106 | 184 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Tyson, Oscar P., Villa Rica, Ga. Corn-planter | 737,678 | Sept. 1 | 219 | 46 | 106 | 50 |
| Tyssowska, Zell N., assignor to J. G. Tyssowski, Chicago, Ill. Tool for pyrographic work | 727,034 | May 5 | 423 | 88 | 104 | 92 |
| Tyssowski, J. Gorham. (See Tyssowska, Zell N., assignor.) | | | | | | |
| Tyus, George C., Portland, Ark. Railway-switch | 735,318 | Aug. 4 | 542 | 110 | 105 | 1096 |
| U. S. Hame Company. (See Wiedrich, Charles L., assignor.) | | | | | | |
| U. S. Ore Reduction Company. (See Parker, Francis E., assignor.) | | | | | | |
| U. S. Portable Elevator Co. (See White, John F., assignor.) | | | | | | |
| Udstad, Sivert, assignor of two-thirds to I. A. Hanssen and T. S. North, Aurora, Ill. Electric-railway system | 747,277 | Dec. 15 | 3628 | 818 | 107 | 1931 |
| Uebel, Charlotte, Chicago, Ill. Shirt | 731,418 | June 16 | 3474 | 776 | 104 | 1881 |
| Uebelacker, Charles F., Kingston, assignor to Peckham Motor Truck and Wheel Company, New York, N. Y. Maximum-traction truck | 739,364 | Sept. 22 | 3519 | 787, 788 | 106 | 800 |
| Uecke, Robert C., Harvard, Ill. Pencil-sharpener | 718,548 | Jan. 13 | 1959 | 428 | 102 | 436 |
| Ueding, John, Vincennes, Ind. Belt-buckle | 731,247 | June 16 | 3146 | 699 | 104 | 1813 |
| Uehling, Otto C., Milwaukee, Wis. Stairway | 725,179 | Apr. 14 | 1419 | 321 | 103 | 1485 |
| Uffel, Herman von, and G. E. Lengert, Philadelphia, Pa. Device for stoning cherries | 741,194 | Oct. 13 | 1511 | 341 | 106 | 1589 |
| Uffelman, Charles, Allegheny, Pa. Scaffold | 742,755 | Oct. 27 | 4532 | 1026, 1027 | 106 | 2251 |
| Uffelman, Daniel C., York Township, Pa. Cigar-display box | 721,758 | Mar. 3 | 178 | 41 | 103 | 39 |
| Ufford, Charles A., Boston, Mass. Dress-form | 737,175 | Aug. 25 | 3995 | 886 | 105 | 1884 |
| Ufford, Charles A., Boston, Mass. Display-form | 743,115 | Nov. 3 | 567 | 122 | 107 | 118 |
| Uhalt, Alfred, New Orleans, La. Coffee-pot indicator | 745,744 | Dec. 1 | 767 | 175 | 107 | 1262 |
| Uhland, Wilhelm H., Leipzig-Gohlis, Germany. Apparatus for making starch | 725,180 | Apr. 14 | 1421 | 322 | 103 | 1486 |
| Uhlenhaut Bros. (See Uhlenhaut, William A. F., assignor.) | | | | | | |
| Uhlenhaut, William A. F., assignor to Uhlenhaut Bros., St. Louis, Mo. Cabinet attachment for milk-wagons | 727,498 | May 5 | 1251 | 278 | 104 | 269 |
| Uhlig, Richard W., Rutherford, assignor to H. C. Adams, Hackensack, N. J. Inking mechanism for type-writing machines | 726,235 | Apr. 21 | 3334 | 757 | 103 | 1903 |
| Uhlig, Richard W., Rutherford, assignor to H. C. Adams, Hackensack, N. J. Type-writing machine | 735,179 | Aug. 4 | 264 | 53, 54, 55, 56 | 105 | 1040 |
| Uhlin, Ernest, assignor to D. C. & U. Gas Engine Company, McDonald, Pa. Explosive-engine governor | 732,016 | June 23 | 4608 | 1028 | 104 | 2135 |
| Uhlinger, William W., Paterson, N. J. Warp-let-off motion | 744,440 | Nov. 17 | 3222 | 691 | 107 | 719 |
| Uhlrig, Herman, Kaw Township, Wabaunsee county, Kans. Buckle | 740,951 | Oct. 6 | 1037 | 237 | 106 | 1467 |
| Uhry, Jules, New York, N. Y. Hat-fastener | 719,064 | Jan. 27 | 2936 | 656 | 102 | 668 |
| Ulbricht, Charles J., Cliff Mine, Pa. Match-box | 728,522 | May 19 | 3199 | 709 | 104 | 718 |
| Ulbricht, Charles J., assignor of one-fourth to J. Bernhard, Cliff Mine, Pa. Nut-lock | 742,756 | Oct. 27 | 4533 | 1027 | 106 | 2252 |
| Ulland, Even, Minneapolis, Minn. Rotary engine | 719,163 | Jan. 27 | 3132 | 697, 698 | 102 | 706 |
| Ullathorne, Joe L., Memphis, Tenn. Seed-packet holder | 726,380 | Apr. 28 | 3633 | 823 | 103 | 1981 |
| Ullrich, Eduard, and V. Fussgänger, assignors to Farbwerke, vorm. Meister, Lucius & Brüning, Höchst-on-the-Main, Germany. Printing black | 742,530 | Oct. 27 | 4156 | ------ | 106 | 2169 |
| Ullrich, Gustav, Ratingen, Germany. Arrangement for heating, cooling, and mixing the mash in mash-tubs | 725,894 | Apr. 21 | 2738 | 623, 624 | 103 | 1782 |
| Ullrich, Stuart H. (See Paige and Ullrich.) | | | | | | |
| Ulrich, John, Columbus, Ohio. Boiler-flue roller | 737,302 | Aug. 25 | 4241 | 944 | 105 | 1935 |
| Umbeck, William, Cape Girardeau, Mo. Binder attachment | 746,412 | Dec. 8 | 2009 | 458 | 107 | 1548 |
| Umdenstock, Ernest, Reading, Kans. Telephone system | 728,785 | May 19 | 3702 | 826 | 104 | 823 |
| Umholtz, Charles W., Bristol, Va. Coke-oven lorry | 718,742 | Jan. 20 | 2329 | 514 | 102 | 525 |
| Umstead, Charles H. (See Umstead, Franklin B. and C. H.) | | | | | | |
| Umstead, Franklin B. and C. H., Philadelphia, Pa. Apparatus for making artificial stone for building piers, dry-docks, breakwaters, &c | 732,607 | June 30 | 5763 | 1278 | 104 | 2391 |
| Unanue, Pedro, Mexico, Mexico. Tunneling-machine | 732,326 | June 30 | 5215 | 1158, 1159 | 104 | 2273 |
| Unckrich, Ferdinand, Galion, assignor, by mesne assignments, to Defiance Machine Works, Defiance, Ohio. Rimming-machine | 742,086 | Oct. 20 | 3330 | 743 | 106 | 1984 |
| Under-Feed Stoker Company of America. (See Daley, Fred A., assignor.) | | | | | | |
| Under-Feed Stoker Company of America. (See Reel, David M., assignor.) | | | | | | |
| Underhill, David, Jr., *et al.* (See Green, Fred P., assignor.) | | | | | | |
| Underhill, John W., Conway, Ark. Addressing-machine | 722,268 | Mar. 10 | 1153 | 254, 255 | 103 | 261 |
| Underwood, Alvah W., Pittsfield, Mass. Insulating system for electric-transmission circuits | 732,665 | June 30 | 5874 | 1303 | 104 | 2413 |
| Underwood, Arthur W. (See Seyfang, George, assignor.) | | | | | | |
| Underwood, Charles K., *et al.* (See Comins, John R., assignor.) | | | | | | |
| Underwood, Frank G., Pluma, S. D. Leaching-tank filter | 727,230 | May 5 | 768 | 164 | 104 | 166 |
| Underwood, Gaylord, McKees Rocks, Pa. Spigot | 744,441 | Nov. 17 | 3224 | 691 | 107 | 719 |
| Underwood, Herbert G., assignor to International Power Vehicle Company, Stamford, Conn. Explosive-engine | 748,029 | Dec. 29 | 5062 | 1144 | 107 | 2292 |
| Underwood, Joseph B., Fayetteville, N. C. Stop-motion device for spools | 723,626 | Mar. 24 | 3673 | 823 | 103 | 812 |
| Underwood, Joseph B., Fayetteville, N. C. Thread cutter and tier | 723,627 | Mar. 24 | 3675 | 824 | 103 | 813 |
| Underwood, Joseph B., Fayetteville, N. C. Harvesting and curing tobacco | 748,440 | Dec. 29 | 5811 | 1324 | 107 | 2455 |
| Underwood, Leonard. (See Hill, Alexander S., assignor.) | | | | | | |
| Underwood, Louis E., Lynn, Mass., assignor to General Electric Company. Brush-holder | 732,240 | June 30 | 5065 | 1126 | 104 | 2243 |
| Underwood Stemming Machine Company. (See Havens, Joseph G., assignor.) | | | | | | |
| Underwood Typewriter Company. (See Helmond, William F., assignor.) | | | | | | |
| Underwood Typewriter Company. (See Helmond and Kavle, assignors.) | | | | | | |
| Underwood Typewriter Company. (See Kavle, Oscar C., assignor.) | | | | | | |
| Underwood Typewriter Company. (See Kellogg, Milton, assignor.) | | | | | | |
| Underwood Typewriter Company. (See Kunath, Edward F., assignor.) | | | | | | |
| Underwood Typewriter Company. (See Manning and Kavle, assignors.) | | | | | | |
| Underwood Typewriter Company. (See McLaughlin, John C., assignor.) | | | | | | |
| Underwood Typewriter Company. (See Myers, Louis, assignor.) | | | | | | |
| Underwood Typewriter Company. (See Neahr, Jacob E., assignor.) | | | | | | |
| Underwood Typewriter Company. (See Rice, Charles D., assignor.) | | | | | | |
| Underwood Typewriter Company. (See Wagner, Franz X., assignor.) | | | | | | |
| Underwood Typewriter Company. (See Wagner, Herman L., assignor.) | | | | | | |
| Ungeheuer, John C. M. (See Howard and Ungeheuer.) | | | | | | |
| Unger, Herman, Homestead, Pa. Sound-post for violins | 735,428 | Aug. 4 | 757 | 161 | 105 | 1141 |
| Unger, Isaac, Greenville, Ohio. Mail-box carrier | 722,929 | Mar. 17 | 2380 | 533 | 103 | 536 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | Spec. | Drgs. | Vol. | Page. |
| Unger, John S. (See Lewis and Unger.) | | | | | | |
| Union Automobile Co. (See Lambert, John W., assignor.) | | | | | | |
| Union Bag & Paper Company. (See Kasson, Mahlon O., assignor.) | | | | | | |
| Union Bag & Paper Company. (See Murchie, Sylvanus T., assignor.) | | | | | | |
| Union Brass Works Company. (See Soderlund, Gustive A., assignor.) | | | | | | |
| Union Bristle and Fiber Company. (See Schawman, Bror M., assignor.) | | | | | | |
| Union Button Sewing Machine Company. (See Lyons, Robert L., assignor.) | | | | | | |
| Union Carbide Company. (See Cox, George E. assignor.) | | | | | | |
| Union Carbide Company. (See Price, Edgar F., assignor.) | | | | | | |
| Union Carbide Company. (See Scales, Joseph, assignor.) | | | | | | |
| Union Cooperage Company. (See Vogt, Julius F., assignor.) | | | | | | |
| "Union," Firm of. (See Leuenberger, Carl A., assignor.) | | | | | | |
| Union, Frank L., Chicago, Ill. Corner-strip | 741,288 | Oct. 13 | 1702 | 380 | 106 | 1627 |
| Union, Frank L., Chicago, Ill. Flooring and constructing floors | 741,289 | Oct. 13 | 1704 | 381 | 106 | 1627 |
| Union Hardware Company. (See Stepzinski, Albert A., assignor.) | | | | | | |
| Union Horse Nail Company. (See Abbott, Benjamin J., assignor.) | | | | | | |
| Union Iron Works. (See Rowe, Willard C., assignor.) | | | | | | |
| Union Iron Works. (See Thomas, Edwin E., assignor.) | | | | | | |
| Union Lead and Oil Company. (See Bailey, John W., assignor.) | | | | | | |
| Union Luncheon Box Company. (See Broyles, Lester E., assignor.) | | | | | | |
| Union Manufacturing Company. (See Carleton, John W., assignor.) | | | | | | |
| Union Manufacturing Company. (See Carleton and Trask, assignors.) | | | | | | |
| Union Match Company. (See Wyman, William H., assignor.) | | | | | | |
| Union Metallic Cartridge Company. (See Gair, Robert, assignor.) | | | | | | |
| Union Ore Extraction and Reduction Company. (See McCaffrey, Peter W., assignor.) | | | | | | |
| Union Paper Bag Machine Company. (See Dulin, Charles E., assignor.) | | | | | | |
| Union Paper Bag Machine Company. (See Eisenbeis, Louis P., assignor.) | | | | | | |
| Union Paper Bag Machine Company. (See Howlett, Edwin J., assignor.) | | | | | | |
| Union Paper Bag Machine Company. (See Lorenz, William A., assignor.) | | | | | | |
| Union Paper Bag Machine Company. (See Mortson, George, assignor.) | | | | | | |
| Union Paper Bag Machine Company. (See Murchie, Sylvanus T., assignor.) | | | | | | |
| Union Paper Bag Machine Company. (See Ward, George R., assignor.) | | | | | | |
| Union Scale and Manufacturing Company. (See Hoepner, George, assignor.) | | | | | | |
| Union Special Sewing Machine Co. (See Allan, Edward T., assignor.) | | | | | | |
| Union Special Sewing Machine Co. (See Swift, Wilbur L., assignor.) | | | | | | |
| Union Special Sewing Machine Company. (See Kramer, Charles G., assignor.) | | | | | | |
| Union Special Sewing Machine Company. (See McNeil, Chester, assignor.) | | | | | | |
| Union Special Sewing Machine Company. (See McNeil and Sturtevant, assignors.) | | | | | | |
| Union Special Sewing Machine Company. (See Merritt, Arthur A., assignor.) | | | | | | |
| Union Special Sewing Machine Company. (See Onderdonk, Lansing, assignor.) | | | | | | |
| Union Special Sewing Machine Company. (See Woodward, Russel G., assignor.) | | | | | | |
| Union Switch and Signal Company. (See Coleman, John P., assignor.) | | | | | | |
| Union Switch and Signal Company. (See Hanlon, Marquis D., assignor.) | | | | | | |
| Union Switch & Signal Company. (See Hobson, John S., assignor.) | | | | | | |
| Union Switch and Signal Company. (See Meyer, Paul, assignor.) | | | | | | |
| Union Switch and Signal Company. (See Patenall, Thomas H., assignor.) | | | | | | |
| Union Switch & Signal Company. (See Pfeil, George H., assignor.) | | | | | | |
| Union Switch and Signal Company. (See Schreuder, Jens G., assignor.) | | | | | | |
| Union Switch and Signal Company. (See Wilson, Asbury G., assignor.) | | | | | | |
| Union Typewriter Company. (See Burridge, Lee S., assignor.) | | | | | | |
| Union Typewriter Company. (See Farnum, William C., assignor.) | | | | | | |
| Union Typewriter Company. (See Felbel, Jacob F., assignor.) | | | | | | |
| Union Typewriter Company. (See Gabrielson, Carl, assignor.) | | | | | | |
| Union Typewriter Company. (See Nilson, Peter F., assignor.) | | | | | | |
| Union Typewriter Company. (See Steiger, Andrew W., assignor.) | | | | | | |
| Union Typewriter Company. (See Stickney, Burnham C., assignor.) | | | | | | |
| Union Water Meter Company. (See Northrop, Frank L., assignor.) | | | | | | |
| United Alkali Company. (See Imhoff, Paul, assignor.) | | | | | | |
| United Asbestos Company. (See McCallum, John, assignor.) | | | | | | |
| United Barium Company. (See Jacobs, Charles B., assignor.) | | | | | | |
| United Coke and Gas Company. (See Schniewind, Frederic W. C., assignor.) | | | | | | |
| United Engineering and Contracting Company. (See Hough, David L., assignor.) | | | | | | |
| United Engineering and Foundry Company. (See Bray, Thomas J., Jr., assignor.) | | | | | | |
| United Gas Improvement Company. (See Tutwiler, Carrington C., assignor.) | | | | | | |
| United Hame Company. (See Wiedrich, Charles L., assignor.) | | | | | | |
| United Kingdom Self-Adjusting Anti-Friction Metallic Packing Syndicate. (See Foden, William, assignor.) | | | | | | |
| United Kingdom Self-Adjusting Anti-Friction Metallic Packing Syndicate. (See Gold, Henry J., assignor.) | | | | | | |
| United Pneumatic Fire Alarm Company. (See Latimer, John M., assignor.) | | | | | | |
| United Shirt and Collar Company. (See Dormandy, Garry J., assignor.) | | | | | | |
| United Shoe Machinery Company. (See Ambler, George A., assignor.) | | | | | | |
| United Shoe Machinery Company. (See Casgrain, Louis A., assignor.) | | | | | | |
| United Shoe Machinery Company. (See Cutter, Solomon M., assignor.) | | | | | | |
| United Shoe Machinery Company. (See Davey, John F., assignor.) | | | | | | |
| United Shoe Machinery Company. (See Eaton, Harrison H., assignor.) | | | | | | |
| United Shoe Machinery Company. (See Goddu, William, assignor.) | | | | | | |
| United Shoe Machinery Company. (See Gould, Howard W., assignor.) | | | | | | |
| United Shoe Machinery Company. (See Graham, Charles E., assignor.) | | | | | | |
| United Shoe Machinery Company. (See Mayo, Benjamin F., assignor.) | | | | | | |
| United Shoe Machinery Company. (See McAuliffe and Hogan, assignors.) | | | | | | |
| United Shoe Machinery Company. (See Raymond, Freeborn F., 2d, assignor.) | | | | | | |
| United Shoe Machinery Company. (See Shea, Daniel F., assignor.) | | | | | | |
| United Shoe Machinery Company. (See Stiggins, Edward A., assignor.) | | | | | | |
| United States Atmospheric Oxygen Company. (See Code, George, assignor.) | | | | | | |
| United States Automatic Box Machinery Company. (See Baxter, William C., assignor.) | | | | | | |
| United States Battery Company. (See Chronik, Louis, assignor.) | | | | | | |
| United States Butter Extractor Company. (See Andersson, Gustaf M., assignor.) | | | | | | |
| United States Dairy Manufacturing and Machine Company. (See Pihl, Carl J., assignor.) | | | | | | |
| United States Celestial Paradise Construction Company. (See Welsh, Adam A., assignor.) | | | | | | |
| United States Construction and Engine Company. (See Foster, Lucian M., assignor.) | | | | | | |
| United States Electric Clock Company. (See Himmer, Vitalis, Jr., assignor.) | | | | | | |
| United States Electric Clock Company of New York. (See Ongley, Charles E., assignor.) | | | | | | |
| United States Electric Signal Company. (See Ruddick, John J., assignor.) | | | | | | |
| United States Fastener Company. (See Goodwin, Charles H., assignor.) | | | | | | |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | Spec. | Drg. | Vol. | Page. |
| United States Fastener Company. (See Murphy, William B., assignor.) | | | | | | |
| United States Fastener Company. (See Pringle, Eugene, assignor.) | | | | | | |
| United States Fastener Company. (See Shipman, Madison D., assignor.) | | | | | | |
| United States Fiber Stopper Company. (See Rivers, Julian H., assignor.) | | | | | | |
| United States Fuel-Saving and Smoke Consuming Company. (See Puddington, Arthur W., assignor.) | | | | | | |
| United States Graphite Company. (See Davis, John H., assignor.) | | | | | | |
| United States Graphotype Company. (See Ackerman, William, assignor.) | | | | | | |
| United States Graphotype Company. (See Nicholas, William, assignor.) | | | | | | |
| United States Headlight Company. (See Kirby, John, Jr., assignor.) | | | | | | |
| United States Headlight Company. (See Teal, Henry S., assignor.) | | | | | | |
| United States Light & Heating Company. (See Brooks, Henry K., assignor.) | | | | | | |
| United States Light & Heating Company. (See Moskowitz, Morris, assignor.) | | | | | | |
| United States Light & Heating Company. (See Waddell and Brooks, assignors.) | | | | | | |
| United States Long Distance Automobile Company. (See Riotte, Carl C., assignor.) | | | | | | |
| United States Long Distance Automobile Company. (See Riotte and Radcliffe, assignors.) | | | | | | |
| United States Manufacturing Company. (See Quinlan, John J., assignor.) | | | | | | |
| United States Ordnance Company. (See Tasker, Vernon C., assignor.) | | | | | | |
| United States Railway Equipment Company. (See Floyd, George G., assignor.) | | | | | | |
| United States Repair & Guaranty Company. (See Perkins, Amos H., assignor.) (Reissue.) | | | | | | |
| United States Sales Book Company. (See Morton, Wilson, assignor.) | | | | | | |
| United States Security Mail Box Company. (See Lambert, Horace B., assignor.) | | | | | | |
| United States Slot Machine Company. (See Williams, John A., assignor.) | | | | | | |
| United States Sulphide Furnace Company. (See Koch, Walter E., assignor.) | | | | | | |
| United States Sulphide Smelting Furnace Company. (See MacDonald, John W., assignor.) | | | | | | |
| United States Tool Holder Company. (See Normand, Joseph M., assignor.) | | | | | | |
| United States Veneer Company. (See Traxler, Cisco R., assignor.) | | | | | | |
| United States Voting Machine Company. (See McKenzie, Angus, assignor.) | | | | | | |
| United States Wind Engine & Pump Company. (See Guy, George G., assignor.) | | | | | | |
| United-Xpedite Finishing Company. (See Thomson, Robert W., assignor.) | | | | | | |
| Universal Accountant Machine Company. (See Chapman, Penrose E., assignor.) | | | | | | |
| Universal Accountant Machine Company. (See Rinsche, Frank C., assignor.) | | | | | | |
| Universal Accountant Machine Company. (See Treadway, William T., assignor.) | | | | | | |
| Universal Brush Company. (See Morrison, John, assignor.) | | | | | | |
| Universal Car Seal Company. (See Reynolds and Chapman, assignors.) | | | | | | |
| Universal Chromephoto Engraving Company. (See Förster, Oskar, assignor.) | | | | | | |
| Universal Machine Company. (See Tucker, Zechariah R., assignor.) | | | | | | |
| Universal Safety Tread Company. (See Huestis, Frederick W., assignor.) | | | | | | |
| Universal Safety Tread Company. (See Hutchins, George F., assignor.) | | | | | | |
| Universal Safety Tread Company. (See Hutchins and Losey, assignors.) | | | | | | |
| Universal Seal and Stopper Company. (See Schmitt, Edward D., assignor.) | | | | | | |
| Universal Talking Machine Manufacturing Company. (See Valiquet, Louis P., assignor.) | | | | | | |
| Universal Winding Company. (See Palmer, Maro V., assignor.) | | | | | | |
| Universal Winding Company. (See Wardwell, Simon W., assignor.) | | | | | | |
| Unruh, Victor von, New York, N. Y. Dental bridgework | 726,381 | Apr. 28 | 3633 | 823 | 103 | 1981 |
| Unterbein, Friedrich. (See Graf, Dobblestein, and Unterbein.) | | | | | | |
| Untermann, Julius. (See Bayles, Alfred G., assignor.) | | | | | | |
| Untiedt, Heinrich, Schweinfurt, Germany. Self-acting mechanical stoker | 744,133 | Nov. 17 | 2639 | 563 | 107 | 591 |
| Updike, Mahlon, Chicago, Ill. Retort coke-oven | 731,088 | June 16 | 2858 | 634, 635 | 104 | 1758 |
| Upham, Artemas B., Boston, assignor of one-half to F. G. Tilton, Lowell, Mass. Trackless trolley | 722,654 | Mar. 10 | 1844 | 411, 412 | 103 | 412 |
| Upham, Artemas B., Boston, Mass., assignor to American Trackless Trolley Company. Trolley | 741,599 | Oct. 13 | 2326 | 521 | 106 | 176 |
| Upson, Theron A., Brooklyn, N. Y. Fastener for window-blinds | 735,625 | Aug. 4 | 1130 | 239 | 105 | 1221 |
| Upton, Alva T., Mount Vernon, Ill. Riding-harrow | 731,980 | June 23 | 4513 | 1007, 1008 | 104 | 2117 |
| Upton, Charles T., and G. S. Gilman, Lowell, Mass. Drilling apparatus | 746,204 | Dec. 8 | 1640 | 365 | 107 | 1470 |
| Upton, Colcord, Beverly, Mass., assignor to Upton Machine Company. Variable-speed gearing | 721,401 | Feb. 24 | 3741 | 851 | 102 | 1660 |
| Upton, George W. D. (See Bristol and Upton.) | | | | | | |
| Upton Machine Company. (See Upton, Colcord, assignor.) | | | | | | |
| Upton, Samuel, Somerville, Mass., assignor to Consolidated Fastener Company, Portland, Me. Feed mechanism | 717,952 | Jan. 6 | 810 | 183, 184 | 102 | 173 |
| Urban, Franz. (See Zschokke and Urban.) | | | | | | |
| Urbanek, John P., York, Wash. Circulator for steam-boilers | 737,886 | Sept. 1 | 666 | 141 | 106 | 146 |
| Uren, James B., Lillooet, Canada. Nut-lock | 727,716 | May 12 | 1702 | 379, 380 | 104 | 383 |
| Uren, Stephen, Sacramento, Cal. Reverberatory heating-furnace | 740,786 | Oct. 6 | 763 | 172 | 106 | 1408 |
| Urie, George M., and A. A. Markam, Kansas City, Mo. Telephone tablet attachment | 743,996 | Nov. 10 | 2336 | 499, 500 | 107 | 519 |
| Urie, George M., and A. A. Markam, Kansas City, Mo. Telephone tablet attachment | 745,978 | Dec. 1 | 1220 | 275 | 107 | 1360 |
| Urie, William T., Kansas City, Mo. Fertilizer-drying machine | 726,120 | Apr. 21 | 3117 | 706 | 103 | 1860 |
| Urquhart, Henry H., Mandlow, Mont. Irrigation-ditch-damming machine | 739,124 | Sept. 15 | 3100 | 686 | 106 | 694 |
| Urquhart, Ridley J., Liverpool, England. Motor-vehicle | 727,231 | May 5 | 770 | 164 | 104 | 166 |
| Urrutia y Motta, Juan, Getafe, near Madrid, Spain. Means for indicating the impact of bodies at a distance | 729,703 | June 2 | 315 | 73 | 104 | 1193 |
| Urwick, Albert W., Birmingham, England. Exercising apparatus | 735,319 | Aug. 4 | 543 | 110 | 105 | 1097 |
| Ury, Alfred A. (See Weiss, Louis T., assignor.) | | | | | | |
| Ury, Alfred A., New York, N. Y. Gas-check for Bunsen burners | 729,243 | May 26 | 4532 | 998 | 104 | 1009 |
| Ury, Solomon H., San Leandro, Cal. Life-boat-launching apparatus | 731,143 | June 16 | 2968 | 659 | 104 | 1779 |
| Uslar, Manuel V., Gross-Lichterfelde, and G. Erlwein, Schöneberg, near Berlin, assignors to Siemens & Halske Aktiengesellschaft, Berlin, Germany. Extracting gold | 725,895 | Apr. 21 | 2739 | ..... | 103 | 1782 |
| Usry, William R., Gadsden, Ala. Attachment for plows or cultivators | 736,175 | Aug. 11 | 2148 | 462 | 105 | 1458 |
| Utica Drop Forge & Tool Company. (See Crippen and Kellemen, assignors.) | | | | | | |
| Utley, Milton R., and B. J. Clements, assignors of one-third to S. Insull, Chicago, Ill. Fuse-block | 745,694 | Dec. 1 | 686 | 157 | 107 | 1244 |
| Utley, Thomas, Liverpool, England. Ship's air and light port | 743,599 | Nov. 10 | 1609 | 336, 337 | 107 | 359 |
| Utley, Winifred C., and W. C. Newman, Hagerstown, Md. Hook and eye | 734,777 | July 28 | 3862 | 901 | 105 | 861 |
| Utt, Frank M., *et al.* (See Busenbenz and Lange, assignors.) | | | | | | |
| Utterback, Joseph A., assignor of one-half to T. E. Boylan, Hubbard, Iowa. Mail-case for rural delivery | 739,625 | Sept. 22 | 4024 | 898 | 106 | 910 |

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| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Uytenbogaart, Johannes W. H., Utrecht, Netherlands. Electric fire-alarm | 743,600 | Nov. 10 | 1611 | 337 | 107 | 360 |
| Uytenbogaart, Johannes W. H., Utrecht, Netherlands. Electric receiver-clock | 746,903 | Dec. 15 | 2914 | 673 | 107 | 1771 |
| Vachon, George C., Chicago, Ill. Ornamenting wood | 723,948 | Mar. 31 | 4286 | 962 | 103 | 961 |
| Vacuum Dyeing Machine Company. (See Willard, James A., assignor.) | | | | | | |
| Vaders, Henry T., Philadelphia, Pa. Garment-supporter | 736,567 | Aug. 18 | 2847 | 623 | 105 | 1625 |
| Vägfabriks Aktiebolaget Stathmos. (See Berglund, Karl V., assignor.) | | | | | | |
| Vägfabriks Aktiebolaget Stathmos. (See Carlson, Carl A., assignor.) | | | | | | |
| Vagnfabriks Aktiebolaget I Södertelge. (See Erikson, Gustaf, assignor.) | | | | | | |
| Vahjen, Johann C., New York, assignor to J. H. Vahjen, Brooklyn, N. Y. Electrical cash-register | 721,981 | Mar. 3 | 612 | 136<br>137 | 103 | 133 |
| Vahjen, Johann C., New York, assignor to J. H. Vahjen, Brooklyn, N. Y. Cash-register | 731,981 | June 23 | 4516 | 1008<br>1009 | 104 | 2117 |
| Vahjen, John H. (See Vahjen, Johann C., assignor.) | | | | | | |
| Vahle, Ernest, West Hoboken, N. J. Loom | 744,442 | Nov. 17 | 3225 | 691<br>692<br>693 | 107 | 719 |
| Vail, Horton, deceased, Kewanee, Ill.; B. F. Baker, administrator. Head for steam-boilers | 721,344 | Feb. 24 | 3636 | 826 | 102 | 1638 |
| Vail, Ralph E., Mount Vernon, Ohio. Expansion-joint | 748,546 | Dec. 29 | 6034 | 1366 | 107 | 2505 |
| Vail, Robert W., New York, N. Y. Mast-hoop | 727,717 | May 12 | 1703 | 380 | 104 | 383 |
| Vail, Robert W., New York, N. Y. Mast-hoop | 727,718 | May 12 | 1704 | 380 | 104 | 384 |
| Vail, Robert W., New York, N. Y. Mast-hoop | 727,719 | May 12 | 1705 | 380 | 104 | 384 |
| Valdenaire, John J. (See McFerrin, John J., assignor.) | | | | | | |
| Valentine, Charles W., Watertown, assignor to New York Air Brake Company, New York, N. Y. Air-brake | 725,181 | Apr. 14 | 1422 | 322 | 103 | 1486 |
| Valentine, Charles W., Watertown, N. Y., assignor to New York Air Brake Company. Air-brake | 745,934 | Dec. 1 | 1138 | 255 | 107 | 1342 |
| Valentine, Ernest B., Oneonta, N. Y. Steam-stoker | 722,471 | Mar. 10 | 1528 | 336 | 103 | 343 |
| Valentine, Harry J., assignor to Columbian Hardware Company, Cleveland, Ohio. Spring-hinge | 734,446 | July 21 | 3226 | 759<br>760 | 105 | 715 |
| Valentine, Harry J., assignor to Columbian Hardware Company, Cleveland, Ohio. Spring-hinge | 734,447 | July 21 | 3227 | 760 | 105 | 716 |
| Valentine, Harry J., assignor to Columbian Hardware Company, Cleveland, Ohio. Spring door-closer | 734,448 | July 21 | 3229 | 760 | 105 | 716 |
| Valentine, Harry J., assignor to Columbian Hardware Co., Cleveland, Ohio. Blind-adjuster | 747,516 | Dec. 22 | 4068 | 914 | 107 | 2047 |
| Valentine, Harry J., Hempstead, assignor to W. Vogel & Brothers, Brooklyn, N. Y. Coin-receptacle | 746,205 | Dec. 8 | 1641 | 365 | 107 | 1471 |
| Valentine, James F., Philadelphia, Pa. Apparatus for disinfecting and fumigating | 731,982 | June 23 | 4527 | 1010 | 104 | 2119 |
| Valentine, James H., Chatham, N. J., assignor, by mesne assignments, to Varoma Medical Company. Vaporizer | 729,019 | May 26 | 4135 | 916 | 104 | 929 |
| Valentine, Nettie F., Brook Haven, N. Y. Chatelaine-pin | 742,087 | Oct. 20 | 3333 | 743 | 106 | 1984 |
| Valerius, Theodore L., Fort Atkinson, Wis., assignor to Creamery Package Mfg. Co., Chicago, Ill. Milk-can washer | 734,015 | July 21 | 2415 | 564<br>565 | 105 | 543 |
| Valerius, Theodore L., Fort Atkinson, Wis., assignor to Creamery Package Manufacturing Company, Chicago, Ill. Butter-printer | 740,608 | Oct. 6 | 445 | 97 | 106 | 1342 |
| Valerius, Theodore L., Fort Atkinson, Wis., assignor to Creamery Package Manufacturing Company, Chicago, Ill. Self-emptying vat | 742,757 | Oct. 27 | 4535 | 1027 | 106 | 2252 |
| Valerius, Theodore L., Fort Atkinson, Wis., assignor to Creamery Package Manufacturing Company, Chicago, Ill. Float-valve | 742,758 | Oct. 27 | 4536 | 1028 | 106 | 2252 |
| Valerius, Theodore L., Fort Atkinson, Wis., assignor to Creamery Package Manufacturing Company, Chicago, Ill. Bottle-carrier for testers | 742,759 | Oct. 27 | 4537 | 1028 | 106 | 2253 |
| Valerius, Theodore L., Fort Atkinson, Wis., assignor to Creamery Package Manufacturing Company, Chicago, Ill. Centrifugal milk-tester | 742,815 | Oct. 27 | 4637 | 1051 | 106 | 2274 |
| Valerius, Theodore L., Fort Atkinson, Wis., assignor to Creamery Package Manufacturing Company, Chicago, Ill. Milk or cream vat | 745,124 | Nov. 24 | 4493 | 973 | 107 | 1002 |
| Valiquet, Louis P., New York, N. Y., assignor, by mesne assignments, to Universal Talking Machine Manufacturing Company. Talking-machine | 717,953 | Jan. 6 | 812 | 184 | 102 | 174 |
| Valk, Laurence B., Los Angeles, Cal. Combination building | 723,426 | Mar. 24 | 3306 | 740 | 103 | 738 |
| Vallée, Francois X., Woonsocket, R. I. Brush-clearing implement | 734,287 | July 21 | 2951 | 688 | 105 | 658 |
| Vallée, Maxime, St. Jerome, Canada. Lock-latch | 719,705 | Feb. 3 | 524 | 118 | 102 | 933 |
| Vallone, Charles, assignor to E. J. Barcalo, Buffalo, N. Y. Bed-bottom | 733,772 | July 14 | 1913 | 451 | 105 | 420 |
| Vallone, Charles, assignor to E. J. Barcalo, Buffalo, N. Y. Bedstead corner-fastening | 745,695 | Dec. 1 | 688 | 158 | 107 | 1244 |
| Valone, Charles. (See Barcalo and Valone.) | | | | | | |
| Van Aller, Tycho. (See Geisenhöner and Van Aller.) | | | | | | |
| Van Aller, Tycho, Schenectady, N. Y. Swivel attachment-plug for electrical connections | 740,952 | Oct. 6 | 1038 | 237 | 106 | 1468 |
| Van Aller, Tycho, Schenectady, N. Y., assignor to General Electric Company. Electric fuse-box | 720,087 | Feb. 10 | 1255 | 287 | 102 | 1106 |
| Van Alstyne, Harry E., assignor to Martin Automatic Fish Reel Company, Ilion, N. Y. Fishing-reel | 742,260 | Oct. 27 | 3659 | 817<br>818 | 106 | 2068 |
| Van Altena, Henry, Brooklyn, N. Y. Combined game-board and man or game-piece receptacle | 724,760 | Apr. 7 | 635 | 149 | 103 | 1304 |
| Van Arsdale, George D., New York, N. Y. Separating copper from ores | 723,949 | Mar. 31 | 4287 | ..... | 103 | 961 |
| Van Auken, Eugene D., Salix, Iowa. Snapping-roll for corn-harvesters | 739,951 | Sept. 29 | 4660 | 1046 | 106 | 1063 |
| Van Auken, Thomas B., Lyons, N. Y. Machine for cleaning and polishing the outer surfaces of rods, tubes, or pipes | 718,549 | Jan. 13 | 1961 | 429 | 102 | 436 |
| Van Ausdal, James T., Independence, Kans. Combined washboiler and water-distilling apparatus | 725,182 | Apr. 14 | 1425 | 322 | 103 | 1486 |
| Van Ausdall, Andrew D., Oxford, Ohio. Wheel-tire | 729,704 | June 2 | 317 | 73 | 104 | 1194 |
| Van Beers, Jan, Paris, France. Envelop | 723,083 | Mar. 17 | 2653 | 598 | 103 | 594 |
| Van Berkel, Wilhelmus A., Rotterdam, Netherlands. Grinding or sharpening machine | 719,297 | Jan. 27 | 3373 | 753 | 102 | 758 |
| Van Berkel, Wilhelmus A., Rotterdam, Netherlands. Sharpening attachment for meat-slicers | 744,649 | Nov. 17 | 3562 | 768 | 107 | 788 |
| Van Blarcum, Josephine, Puerto Cortes, Honduras. Folding seat for sewing-machines | 746,763 | Dec. 15 | 2636 | 606 | 107 | 1709 |
| Van Brunt, Willard A., Horicon, Wis. Disk drill | 734,016 | July 21 | 2418 | 565<br>566 | 105 | 543 |
| Van Brunt, Willard A., Horicon, Wis. Double-disk drill | 734,017 | July 21 | 2419 | 566 | 105 | 544 |
| Van Brunt, Willard A., Horicon, Wis. Double-disk drill | 734,018 | July 21 | 2421 | 566<br>567 | 105 | 544 |
| Van Camp, Benjamin F., Indianapolis, Ind. Building-block | 738,643 | Sept. 8 | 2196 | 480 | 106 | 487 |
| Van Camp, Benjamin F., Warsaw, assignor, by mesne assignments, to Indiana Burial Vault Company, Indianapolis, Ind. Burial-vault | 728,337 | May 19 | 2879 | 635 | 104 | 651 |
| Van Camp Burial Vault Company. (See Surface, Charles F., assignor.) | | | | | | |
| Van Cise, Frederick J. and W. C., Mayville, N. Y. Spring-bed | 729,021 | May 26 | 4139 | 917 | 104 | 929 |
| Van Cise, William C. (See Van Cise, Frederick J. and W. C.) | | | | | | |
| Van Cleave, Franklin B., Echo, Oreg. Water-elevator | 723,427 | Mar. 24 | 3307 | 741 | 103 | 738 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drgs. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Van Cleve, F. H. (See Marble, Webster L., assignor.) | | | | | | |
| Van Cleve, Frank H., *et al.* (See Rowland, Milton H., assignor.) | | | | | | |
| Van Court, Robert E., Newton, Iowa. Combined square, level, and tape-measure | 733,302 | July 7 | 1081 | 257 | 105 | 228 |
| Van Daniker, Joseph R., Philipsburg, Pa. Emergency automatic air train-stop | 738,378 | Sept. 8 | 1689 | 366 | 106 | 380 |
| Van Denburgh, Albert S., Worcester, Mass. Eyeglass-frame | 746,608 | Dec. 8 | 2346 | 538 | 107 | 1624 |
| Van der Heide, Jochum K., Amsterdam, Netherlands. Closure for vessels for sterilized substances | 741,989 | Oct. 20 | 3100 | 691 | 106 | 1938 |
| Van der Velde, Martin K., Chicago, Ill. Steam-boiler | 727,499 | May 5 | 1252 | 279 | 104 | 269 |
| Van Deursen, Cornelis W., Dreumel, Netherlands. Churn | 718,743 | Jan. 20 | 2332 | 514 | 102 | 526 |
| Van Deusen, Arthur E., *et al.* (See Waterbury, George H., assignor.) | | | | | | |
| Van Deventer, Charles E., Springfield, Ill. Apparatus for aerial navigation | 741,568 | Oct. 13 | 2262 | 505, 506 | 106 | 1749 |
| Van Doorn, Henry D., assignor to American Ship Windlass Company, Providence, R. I. Combined windlass and winch | 720,197 | Feb. 10 | 1447 | 330 | 102 | 1145 |
| Van Doren, James W. (See Layton and Van Doren.) | | | | | | |
| Van Duyn, Marian, New York, N. Y. Supporter | 723,560 | Mar. 24 | 3553 | 795 | 103 | 788 |
| Van Duzer, Elizabeth F., *et al.* (See Van Duzer, La Fayette C., assignor.) | | | | | | |
| Van Duzer, Elizabeth H., *et al.* (See Van Duzer, La Fayette C., assignor.) | | | | | | |
| Van Duzer, La Fayette C., assignor to E. F. and E. H. Van Duzer, Biloxi, Miss. Drying-kiln | 745,085 | Nov. 24 | 4427 | 958 | 107 | 987 |
| Van Dyke, John W., Lima, Ohio. Railway tank-car | 738,259 | Sept. 8 | 1412 | 306, 307 | 106 | 320 |
| Van Dyke, John W., Lima, Ohio. Railway tank-car | 738,261 | Sept. 8 | 1425 | 307, 308 | 106 | 323 |
| Van Dyke, John W., Philadelphia, Pa. Railway tank-car | 738,260 | Sept. 8 | 1422 | 307 | 106 | 323 |
| Van Eghen, Jan H., *et al.* (See Ronsdorf, August, assignor.) | | | | | | |
| Van Etten, Helen M., Moravia, N. Y. Artificial fuel | 723,561 | Mar. 24 | 3554 | ..... | 103 | 788 |
| Van Everen, Horace. (See Bates, Ralph E., assignor.) | | | | | | |
| Van Eyck, Georg, Oeflingen, Germany. Sterilizing apparatus | 741,742 | Oct. 20 | 2602 | 579 | 106 | 1885 |
| Van Fleet, Hart S., Roselle, N. J. Ice-conserver | 746,414 | Dec. 8 | 2011 | 458 | 107 | 1548 |
| Van Fleet, Jesse D., Larimore, N. D. Combined vest and shirt | 737,978 | Sept. 1 | 845 | 185 | 106 | 184 |
| Van Gilder, Diocleation E., Toledo, Ohio. Washboard attachment | 720,506 | Feb. 10 | 2002 | 460 | 102 | 1262 |
| Van Gilder, Lincoln, and E. M. Post, assignors of one-half to H. and C. Godfrey, Philadelphia, Pa. Flexible electrical conductor | 730,847 | June 9 | 2380 | 526 | 104 | 1639 |
| Van Guysling, George E., Boston, and J. G. W. Romans, Weymouth, Mass., assignors to L. W. Baldwin, New York, N. Y. Coin-operated weighing-machine | 731,823 | June 23 | 4241 | 944, 945 | 104 | 2058 |
| Van Hook, Wendell, *et al.* (See Sheriff, Samuel, assignor.) | | | | | | |
| Van Horn, Charles M., Princebay, N. Y. Trammel | 720,507 | Feb. 10 | 2003 | 460 | 102 | 1262 |
| Van Horn, George A., *et al.* (See Morgan, James K., assignor.) | | | | | | |
| Van Horn, William, Piqua, Ohio. Collapsible box | 723,343 | Mar. 24 | 3138 | 705 | 103 | 705 |
| Van Houten, Frank H., Fishkill-on-the-Hudson, N. Y. Dough-dividing machine | 722,545 | Mar. 10 | 1655 | 365 | 103 | 371 |
| Van Houten, Frank H., assignor to Dutchess Tool Company, Fishkill-on-the-Hudson, N. Y. Dough-divider | 719,280 | Jan. 27 | 3339 | 746 | 102 | 751 |
| Van Houwelingen, Aart H., Pella, Iowa. Pneumatic underblast and stacker | 738,959 | Sept. 15 | 2806 | 622, 623 | 106 | 634 |
| Van Kirk, Arthur C., Tiffin, Ohio. Centrifugal separator | 745,696 | Dec. 1 | 690 | 158 | 107 | 1245 |
| Van Kirk, Benjamin R., assignor to Burnham, Williams & Company, Philadelphia, Pa. Locomotive | 730,722 | June 9 | 2177 | 483, 484 | 104 | 1595 |
| Van Kirk, Benjamin R., assignor to Burnham, Williams & Company, Philadelphia, Pa. Radial-swing truck | 735,626 | Aug. 4 | 1132 | 239 | 105 | 1222 |
| Van Kirk, Benjamin R., assignor to Burnham, Williams & Company, Philadelphia, Pa. Four-wheel swing-fulcrum truck | 736,318 | Aug. 11 | 2398 | 522, 523 | 105 | 1514 |
| Van Loan, Frank E., Athens, Pa., assignor to Plano Manufacturing Company, Chicago, Ill. Needle for grain-binders | 720,861 | Feb. 17 | 2669 | 616 | 102 | 1415 |
| Van Loan, Warren P., New York, N. Y. Brush | 727,035 | May 5 | 425 | 89 | 104 | 93 |
| Van Loan, Warren P., assignor to W. H. Bender, New York, N. Y. Puzzle | 729,705 | June 2 | 317 | 73 | 104 | 1194 |
| Van Meurs, Gustave, Ghent, Belgium. Needle-frame for spinning-machines | 733,908 | July 14 | 1625 | 385 | 105 | 361 |
| Van Ness, Thomas E. (See White and Van Ness.) | | | | | | |
| Van Noorden, Ezekiel, Boston, Mass. Device for operating windows or shutters | 740,953 | Oct. 6 | 1041 | 237, 238 | 106 | 1468 |
| Van Noorden, Ezekiel, Boston, Mass. Swinging window | 740,954 | Oct. 6 | 1043 | 238 | 106 | 1469 |
| Van Norman, Charles E. (See Stowell, Byron F., assignor.) | | | | | | |
| Van Norman, Charles E., Springfield, Mass. Steam-engine | 741,743 | Oct. 20 | 2603 | 579, 580 | 106 | 1885 |
| Van Nort, James L., Belleview, Mo. Tellurian | 739,238 | Sept. 15 | 3307 | 732, 733 | 106 | 739 |
| Van Nort, Sterling P., St. Louis, Mo. Colored-light projector | 738,707 | Sept. 8 | 2325 | 511 | 106 | 512 |
| Van Nostran, Samuel W., Minneapolis, Minn. Attachment for theater-seats | 741,004 | Oct. 6 | 1145 | 259 | 106 | 1488 |
| Van Olst, Lammert, Orange City, Iowa. Churn | 721,255 | Feb. 24 | 3490 | 793 | 102 | 1607 |
| Van Olst, Lammert, Orange City, Iowa. Rocking churn | 737,047 | Aug. 25 | 3764 | 836 | 105 | 1836 |
| Van Orden Corset Company. (See Van Orden, John M., assignor.) | | | | | | |
| Van Orden, John M. (See Munro, James H., assignor.) | | | | | | |
| Van Orden, John M., Newark, N. J., assignor to Van Orden Corset Company. Corset | 743,407 | Nov. 3 | 1194 | 247 | 107 | 255 |
| Van Orsdale, Lynn, Kane, Pa. Shoe-lace fastener | 727,500 | May 5 | 1253 | 279 | 104 | 270 |
| Van Patten, Robert E., Jerome, Mich. Coffin | 718,803 | Jan. 20 | 2440 | 541 | 102 | 548 |
| Van Pelt, Ada H., and W. A. Laufman, Oakland, Cal., assignors to said Van Pelt. Oil-burner | 724,761 | Apr. 7 | 637 | 149, 150 | 103 | 1304 |
| Van Pelt, Robert A., Harrisonburg, Va. Nut-lock | 720,641 | Feb. 17 | 2309 | 529 | 102 | 1337 |
| Van Riper, Abram H., and P. F. Guthrie, Nutley, N. J. Extinguishing fires | 732,143 | June 30 | 4877 | 1085 | 104 | 2204 |
| Van Riper, Clarence. (See Hamilton and Van Riper.) | | | | | | |
| Van Riper, Courtney, Washington, D. C. Telephone-pad | 726,483 | Apr. 28 | 3826 | 864, 865 | 103 | 2019 |
| Van Roden, Arthur C., *et al.* (See Lindstrom, Charles A., assignor.) | | | | | | |
| Van Roden, Arthur C., *et al.* (See Wallgren, Bengt, assignor.) | | | | | | |
| Van Ryzin, Martin P., and H. G. Saecker, Appleton, Wis. Knife-spacer for paper-stock engines | 723,763 | Mar. 24 | 3902 | 878 | 103 | 863 |
| Van Schott, Gerard J., assignor to himself and O. Dressler, Passaic, N. J. Clip-applier | 721,480 | Feb. 24 | 3889 | 885 | 102 | 1690 |
| Van Slyke, Alexander A., and E. Perry, Jr., Bridgeport, Conn. Platform rocking-chair | 730,320 | June 9 | 1448 | 319, 320 | 104 | 1439 |
| Van Tassel, James H., and J. M. Thornton, Elmira, N. Y. Metallic railway-tie | 730,059 | June 2 | 979 | 219 | 104 | 1327 |
| Van Tuyl, Andrew P., assignor of one-fourth to E. Hartung, Brooklyn, N. Y. Crane | 734,019 | July 21 | 2424 | 567 | 105 | 545 |
| Van Tuyl, John F., Sawpit, Colo. Valve for steam-engines | 724,526 | Apr. 7 | 199 | 48 | 103 | 1212 |
| Van Tuyl, John F., Sawpit, Colo. Cut-off valve-gear | 729,244 | May 26 | 4533 | 998 | 104 | 1009 |
| Van Valkenburg, Charles J. (See Van Valkenburg, Randall T., assignor.) | | | | | | |
| Van Valkenburg, Charles J., Manchester, Mich., and R. T. Van Valkenburg, Laporte, Ind. Display-cabinet | 730,493 | June 9 | 1773 | 398 | 104 | 1508 |
| Van Valkenburg, James K., Elmira, N. Y., assignor to Mergenthaler Linotype Company. Linotype-machine | 746,415 | Dec. 8 | 2012 | 458, 459 | 107 | 1548 |

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| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drgs. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Van Valkenburg, Randall T. (See Van Valkenburg, Charles J. and R. T.) | | | | | | |
| Van Valkenburg, Randall T. (See Williams and Van Valkenburg.) | | | | | | |
| Van Valkenburg, Randall T., assignor of one-half to W. E. Crichton, Laporte, Ind. Fence-post | 732,974 | July 7 | 484 | 120 | 105 | 104 |
| Van Valkenburg, Randall T., Laporte, Ind., assignor of one-half to C. J. Van Valkenburg, Manchester, Mich. Automobile road-bed | 743,116 | Nov. 3 | 570 | 123 | 107 | 119 |
| Van Vleck, John. (See Murray and Van Vleck.) | | | | | | |
| Van Vleet, Charles W., New York, N. Y. Parachute | 729,455 | May 26 | 4889 | 1082 | 104 | 1085 |
| Van Wagoner, Garret, *et al.* (See Wallgren, Bengt, assignor.) | | | | | | |
| Van Wagoner, Garrett, *et al.* (See Lindstrom, Charles A., assignor.) | | | | | | |
| Van Why, Joseph M. (See Cadoo and Van Why.) | | | | | | |
| Van Why, Melvin D., East Stroudsburg, Pa. Automatic switch | 741,744 | Oct. 20 | 2604 | 580 | 106 | 1836 |
| Van Wie, Henry, San Francisco, Cal. Non-refillable bottle | 721,759 | Mar. 3 | 179 | 41 | 103 | 39 |
| Van Wie, Henry, San Francisco, Cal. Sash-fastener | 727,036 | May 5 | 426 | 89 | 104 | 93 |
| Van Winkle, Henry, Paterson, N. J. Combined warping and beaming machine | 726,007 | Apr. 21 | 2929 | 666 | 103 | 1820 |
| Van Winkle, Ralph F., Linesville, Pa. Silo | 740,340 | Sept. 29 | 5367 | 1209 | 106 | 1211 |
| Van Wormer, John R., assignor of one-half to J. F. Beck, Atlanta, Ga. Lock for collapsible boxes | 734,449 | July 21 | 3231 | 761 | 105 | 716 |
| Van Zandt, Frederick N. (See Baldwin, Van Zandt, and Day.) | | | | | | |
| Van't Woud, Victor C., New York, N. Y. Syringe-pipe | 737,795 | Sept. 1 | 446 | 96 | 106 | 98 |
| Vance, Arthur B., Philadelphia, Pa. Line-marking-type attachment for type-writing machines | 745,935 | Dec. 1 | 1140 | 256 | 107 | 1342 |
| Vance, Bayne P., C. F. Jones, and R. Chamberlain, Vancouver, Canada. Drag for salving sunken vessels | 747,102 | Dec. 15 | 3298 | 750 | 107 | 1862 |
| Vance, Edward W., *et al.* (See Born, Marion A., assignor.) | | | | | | |
| Vance, John P., Dayton, Ohio. Block-plane | 729,020 | May 26 | 4138 | 917 | 104 | 929 |
| Vance, Walter N., assignor to Miehle Printing Press and Manufacturing Company, Chicago, Ill. Electric-motor controller | 742,933 | Nov. 3 | 192 | 44, 45 | 107 | 42 |
| Vance, William A., and T. Knapp, Winnetka, Ill. Sash-fastener | 746,764 | Dec. 15 | 2637 | 607 | 107 | 1709 |
| Vandam, Léon, Uccle, Belgium. Disinfecting apparatus | 746,413 | Dec. 8 | 2010 | 458 | 107 | 1548 |
| Vandegrift, James E. and R. P., and R. L. Morris, Shelbyville, Ind. Shaft-coupling | 731,635 | June 23 | 3903 | 869 | 104 | 1985 |
| Vandegrift, Rolla P. (See Vandegrift and Morris.) | | | | | | |
| Vandenburgh, Peter M. (See Lasher, Elmer J., assignor.) | | | | | | |
| Vander Naillen, Edmund L., San Francisco, Cal. Apparatus for extracting gold and other metals from ores | 737,533 | Aug. 25 | 4680 | 1050 | 105 | 2035 |
| Vanderbeek, Abraham, Hartford, Conn. Hand-tool | 735,845 | Aug. 11 | 1552 | 332 | 105 | 1331 |
| Vanderbeek, Herbert, Hartford, Conn., assignor, by mesne assignments, to Morton Trust Company, trustee. Motor-vehicle | 736,176 | Aug. 11 | 2149 | 462, 463 | 105 | 1458 |
| Vanderbilt, Cornelius. (See Auchincloss, William K., assignor.) | | | | | | |
| Vanderbilt, Cornelius. (See Shepard, Louis A., assignor.) | | | | | | |
| Vanderbilt, Cornelius, New York, N. Y. Fire-box for boilers | 726,382 | Apr. 28 | 3634 | 824 | 103 | 1982 |
| Vanderbilt, Cornelius, New York, N. Y. Railway-car | 728,051 | May 12 | 2320 | 515, 516 | 104 | 511 |
| Vanderbilt, Cornelius, New York, N. Y. Truck-bolster | 734,637 | July 28 | 3577 | 837 | 105 | 805 |
| Vanderbilt, Cornelius, New York, N. Y. Truck-bolster | 734,638 | July 28 | 3578 | 838 | 105 | 805 |
| Vanderbilt, Cornelius, New York, N. Y. Truck-bolster | 735,044 | July 28 | 4350 | 1011 | 105 | 962 |
| Vanderbilt, Cornelius, New York, N. Y. Tank-car and metallic-car construction | 747,278 | Dec. 15 | 3633 | 818, 819, 820 | 107 | 1932 |
| Vanderbilt, Cornelius, New York, N. Y. Tank-car and metallic-car construction | 747,279 | Dec. 15 | 3638 | 820, 821 | 107 | 1934 |
| Vanderbilt, Cornelius, New York, N. Y. Tender for locomotives or the like | 747,280 | Dec. 15 | 3641 | 821, 822 | 107 | 1935 |
| Vanderbilt, Cornelius, New York, N. Y. Railway-car | 748,030 | Dec. 29 | 5063 | 1144, 1145 | 107 | 2292 |
| Vanderbilt, Cornelius, New York, N. Y. Railway-car | 748,122 | Dec. 29 | 5251 | 1191, 1192 | 107 | 2333 |
| Vanderburg, Jacob L., Hot Springs, Ark. Hog-tongs | 740,715 | Oct. 6 | 605 | 135 | 106 | 1377 |
| Vandercook, Frank E., Waterbury, Conn. Metal-feed mechanism | 742,104 | Oct. 20 | 3357 | 749, 750 | 106 | 1989 |
| Vanderman, William, Willimantic, Conn. Pipe-bending form | 748,237 | Dec. 29 | 5451 | 1242 | 107 | 2375 |
| Vandewart, David. (See Morgenroth, Isaak, assignor.) | | | | | | |
| Vandling, Abraham H., Allegheny, Pa. Railway-switch | 728,635 | May 19 | 3431 | 761 | 104 | 768 |
| Vanfossen, William H., Eureka, Ill. Automatic fan | 745,267 | Nov. 24 | 4774 | 1042 | 107 | 1069 |
| Vaniman, Daniel, McPherson, Kans., and S. F. Sanger, South Bend, Ind. Device for pumping air and water | 732,241 | June 30 | 5066 | 1127 | 104 | 2243 |
| Vanness, Gideon E. (See Smolley, Wayne, assignor.) | | | | | | |
| Vanorman, Oliver, assignor of one-half to F. Swift, Los Angeles, Cal. Trolley-wire crossing | 740,205 | Sept. 29 | 5125 | 1151 | 106 | 1161 |
| Vanpeteghem, Jules, Ghent, Belgium. Device for loading cops on spindles | 739,952 | Sept. 29 | 4661 | 1046 | 106 | 1063 |
| Vans Agnew, Ernest G., Kissimee, Fla. Swimming-glove | 733,303 | July 7 | 1082 | 258 | 105 | 228 |
| Vansize, William B., New York, N. Y. Automatic telephone-exchange | 744,946 | Nov. 24 | 4122 | 888 | 107 | 925 |
| Vanstone, Wesley E., New Westminster, Canada. Water-heater | 736,800 | Aug. 18 | 3308 | 733, 734 | 105 | 1718 |
| Variel, R. H. F. (See Reed, Frederick H., assignor.) | | | | | | |
| Varin, Thomas, Brooklyn, and D. M. Buyers, Astoria, N. Y. Refrigerator-alarm | 745,537 | Dec. 1 | 414 | 95 | 107 | 1187 |
| Varley Duplex Magnet Company. (See Lewis, Rollin C., assignor.) | | | | | | |
| Varley Duplex Magnet Company. (See Varley, Richard, assignor.) | | | | | | |
| Varley, Richard, Providence, R. I., assignor to Varley Duplex Magnet Co. Winding electrical coils | 728,183 | May 12 | 2555 | 568 | 104 | 561 |
| Varley, Richard, Providence, R. I., assignor to Varley Duplex Magnet Company. Winding flat wire | 733,609 | July 14 | 1627 | 385 | 105 | 361 |
| Varley, Richard, Providence, R. I., assignor to Varley Duplex Magnet Company. Electrical helix | 734,778 | July 28 | 3864 | 901 | 105 | 861 |
| Varley, Richard, Providence, R. I., assignor to Varley Duplex Magnet Company. Electrical coil | 736,177 | Aug. 11 | 2154 | 463 | 105 | 1460 |
| Varley, Richard, Providence, R. I., assignor to Varley Duplex Magnet Company. Covering wire | 736,178 | Aug. 11 | 2155 | 463 | 105 | 1460 |
| Varley, Richard, Providence, R. I., assignor to Varley Duplex Magnet Company. Electric seal | 736,319 | Aug. 11 | 2399 | 523 | 105 | 1515 |
| Varley, Richard, Providence, R. I., assignor to Varley Duplex Magnet Company. Winding electrical coils | 743,779 | Nov. 10 | 1927 | 407 | 107 | 427 |
| Varley, Richard, Providence, R. I., assignor to Varley Duplex Magnet Company. Electric-coil terminal | 744,650 | Nov. 17 | 3564 | 768 | 107 | 788 |
| Varley, Richard, Providence, R. I., assignor to Varley Duplex Magnet Company. Vibrator for induction-coils | 748,442 | Dec. 29 | 5814 | 1324 | 107 | 2455 |
| Varley, Thomas F., Lowellville, Ohio. Trolley | 748,441 | Dec. 29 | 5813 | 1324 | 107 | 2455 |

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| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Varley, Thomas W., New York, N. Y. Ground-detector for electric circuits | 727,865 | May 12 | 1976 | 440 | 104 | 437 |
| Varley, Thomas W., New York, N. Y. Electrical measuring instrument | 737,303 | Aug. 25 | 4242 | 944 | 105 | 1936 |
| Varney, Frank H. (See Naphtaly, Jones, and Varney.) | | | | | | |
| Varney, Percy E., Haddon Heights, N. J. Clutch | 742,816 | Oct. 27 | 4641 | 1051 | 106 | 2275 |
| Varoma Medical Company. (See Valentine, James H., assignor.) | | | | | | |
| Varzar, Wassily, St. Petersburg, Russia. Elevated electric railway | 728,428 | May 19 | 3029 | 665 | 104 | 683 |
| Vauclain, Samuel M., assignor to Burnham, Williams & Company, Philadelphia, Pa. Truck | 721,625 | Feb. 24 | 4174 | 948, 949 | 102 | 1754 |
| Vauclain, Samuel M., assignor to Burnham, Williams & Company, Philadelphia, Pa. Reducing-valve | 722,058 | Mar. 3 | 744 | 166 | 103 | 161 |
| Vauclain, Samuel M., assignor to Burnham, Williams & Company, Philadelphia, Pa. Tandem compound engine | 726,788 | Apr. 28 | 4418 | 995 | 103 | 2137 |
| Vauclain, Samuel M., assignor to Burnham, Williams & Company, Philadelphia, Pa. Tandem compound engine | 729,456 | May 26 | 4890 | 1083 | 104 | 1085 |
| Vauclain, Samuel M., assignor to Burnham, Williams & Company, Philadelphia, Pa. Stay-bolt | 731,983 | June 23 | 4528 | 1010 | 104 | 2119 |
| Vauclain, Samuel M., and G. Greenough, Philadelphia, Pa. Feed-pipe strainer | 738,088 | Sept. 1 | 1034 | 231 | 106 | 224 |
| Vaugeois, Georges. (See D'Arsonval and Vaugeois.) | | | | | | |
| Vaughan, Arthur J., Chicago, Ill. Furnace | 724,974 | Apr. 7 | 1028 | 235, 236 | 103 | 1388 |
| Vaughan, David F., Haddonfield, N. J. Means for securing splice-bars to rails | 735,320 | Aug. 4 | 543 | 111 | 105 | 1097 |
| Vaughan, Harry, and J. W. Arrowsmith, Morristown, N. J. Clinical-thermometer shield | 738,960 | Sept. 15 | 2809 | 623 | 106 | 635 |
| Vaughan, Henry H., Chicago, Ill., assignor to Ridgely and Johnson Tool Company. Throttle-valve | 718,550 | Jan. 13 | 1962 | 429 | 102 | 437 |
| Vaughan, Henry H., and C. H. Johnson, Chicago, Ill. Fluid-pressure-operated tool | 742,934 | Nov. 3 | 199 | 46 | 107 | 44 |
| Vaughan, James M., Owensboro, Ky. Filter | 717,954 | Jan. 6 | 814 | 184 | 102 | 175 |
| Vaughan, John W., Granite, Okla. Ter. Burglar-proof express-car | 732,802 | July 7 | 197 | 50 | 105 | 45 |
| Vaughan, Mathis H., Huntsville, Ala. Gage for setting rollers of roving and spinning machines, &c | 730,178 | June 2 | 1171 | 262 | 104 | 1366 |
| Vaughan, Richard J. (See Howe and Vaughan.) | | | | | | |
| Vaughan, Robert M., assignor to S. P. Mayo and W. J. Whitehurst, Richmond, Va. Machine for prizing plug-tobacco | 731,144 | June 16 | 2970 | 659 | 104 | 1779 |
| Vaughan, Thomas M., assignor to Hermann-Vaughan Manufacturing Company, Indianapolis, Ind. Baby-jumper | 737,176 | Aug. 25 | 3998 | 886 | 105 | 1884 |
| Vaughn Machine Company. (See Perkins, Franklin J., assignor.) | | | | | | |
| Vaughn Machine Company. (See Strout, Robert W., assignor.) | | | | | | |
| Vaughn, Orvis C., Chicago, Ill. Harrow | 742,531 | Oct. 27 | 4158 | 934 | 106 | 2169 |
| Vaughn-Rood Machine Company. (See Perkins, Franklin J., assignor.) | | | | | | |
| Vaught, Alexander, Paragould, Ark. Crate | 731,984 | June 23 | 4529 | 1010 | 104 | 2120 |
| Vavasour, William E. J., Tadcaster, England. Steam-pressure engine | 723,628 | Mar. 24 | 3677 | 824, 825 | 103 | 813 |
| Vavra, Charles. (See Vavra, Joseph and C.) | | | | | | |
| Vavra, Joseph and C., Park River, N. D. Horse-power | 748,443 | Dec. 29 | 5815 | 1325 | 107 | 2455 |
| Vaydl, Frank, Lake Mary, Minn. Garden-hoe | 723,950 | Mar. 31 | 4289 | 963 | 103 | 961 |
| Veber, William F., Bowling Green, Ohio. Weather-strip for doors | 746,416 | Dec. 8 | 2013 | 459 | 107 | 1549 |
| Vedovelli, Edouard, assignor to La Société Vedovelli et Priestley, Paris, France. Apparatus for use in electric traction on the conduit system | 746,417 | Dec. 8 | 2015 | 460, 461, 462 | 107 | 1549 |
| Veeck & Cy., E. (See Daxbek, Joseph, Fils, assignor.) | | | | | | |
| Veeder, Curtis H., Hartford, Conn. Tachometer | 732,975 | July 7 | 485 | 120, 121 | 105 | 105 |
| Veeder, Curtis H., Hartford, Conn. Tachometer | 733,358 | July 7 | 1180 | 279, 280 | 105 | 248 |
| Veeder, Curtis H., assignor to Veeder Manufacturing Company, Hartford, Conn. Machine for cutting off metal rods, &c | 740,492 | Oct. 6 | 211 | 41, 42 | 106 | 1291 |
| Veeder, Curtis H., assignor to Veeder Manufacturing Company, Hartford, Conn. Odometer | 741,420 | Oct. 13 | 1962 | 435 | 106 | 1685 |
| Veeder Manufacturing Company. (See Veeder, Curtis H., assignor.) | | | | | | |
| Veen, Johannes, Roanoke, Ill. Roofing-tile and roof | 736,801 | Aug. 18 | 3310 | 734 | 105 | 1719 |
| Vegiard, Emile, dit Labonté, assignor to J. R. Marcotte, Montreal, Canada. Paint-brush | 745,405 | Dec. 1 | 170 | 38 | 107 | 1136 |
| Vegiard, Emile, dit Labonté, assignor to J. R. Marcotte, Montreal, Canada. Painting and cleaning apparatus | 745,406 | Dec. 1 | 171 | 39 | 107 | 1136 |
| Veideman, William E., New York, N. Y. Toy hoop | 726,789 | Apr. 28 | 4420 | 996 | 103 | 2137 |
| Veit, Henry E., Chicago, Ill. Loose-leaf binder | 729,979 | June 2 | 847 | 189 | 104 | 1300 |
| Veit, Joseph W., Wapakoneta, Ohio. Whip | 733,687 | July 14 | 1754 | 415 | 105 | 386 |
| Veith, Fred and F. Renfer, Jr., Pittston, Pa. Railway-rail joint | 737,177 | Aug. 25 | 4000 | 887 | 105 | 1885 |
| Velasko, Adolph G., Syracuse, N. Y. Undergarment | 744,885 | Nov. 24 | 4019 | 867 | 107 | 904 |
| Velasko, Adolph G., Syracuse, N. Y. Underdrawers | 747,809 | Dec. 22 | 4607 | 1039 | 107 | 2169 |
| Vellumoid Paper Company. (See Goessmann, Charles I., assignor.) | | | | | | |
| Vending Machine Company. (See Green, Romain M., assignor.) | | | | | | |
| Vending Machine Company. (See Rupley, George, assignor.) | | | | | | |
| Veneer Barrel Machine Company. (See Ott, Willard J., assignor.) | | | | | | |
| Veneer Barrel Machine Company. (See Truscott, Bert W., assignor.) | | | | | | |
| Veneer Package and Machine Company. (See Bartlett, Marcus J., assignor.) | | | | | | |
| Venen, Almon S., assignor of one-half to A. B. Thomas, Forestgrove, Oreg. Umbrella rib and stretcher-joint | 720,537 | Feb. 10 | 2081 | 480 | 102 | 1276 |
| Venn, Isaac H., Yonkers, N. Y., assignor to Otis Elevator Company, East Orange, N. J. Traveling stairway | 727,720 | May 12 | 1707 | 381 | 104 | 384 |
| Venn, Isaac H., Yonkers, N. Y., assignor to Otis Elevator Company, East Orange, N. J. Elevator apparatus | 728,338 | May 19 | 2882 | 636 | 104 | 652 |
| Venn, Isaac H., Yonkers, N. Y., assignor to Otis Elevator Company, East Orange, N. J. Safety device for stopping elevators | 729,022 | May 26 | 4140 | 917 | 104 | 929 |
| Venners, James H., Brooklyn, N. Y. Disinfectant-graduator | 730,494 | June 9 | 1774 | 398 | 104 | 1508 |
| Verdier, Mary E., Allentown, Pa. Violin-bow | 739,459 | Sept. 22 | 3726 | 829 | 106 | 846 |
| Verdin, Alois N., Glendale, assignor of two-thirds to W. E. Bassett and W. C. Peale, Cincinnati, Ohio. Washing-machine | 731,110 | Feb. 17 | 3158 | 727 | 102 | 1522 |
| Verdol, Jules, Lyons, France. Jacquard mechanism for looms | 729,706 | June 2 | 318 | 73 | 104 | 1194 |
| Verein Chemische Fabriken in Mannheim. (See Hasenbach, Wilhelm, assignor.) | | | | | | |
| Vereinigte Maschinenfabrik Augsburg und Maschinenbaugesellschaft Nürnberg, A. G. (See Krell, Rudolf, assignor.) | | | | | | |
| Vereinigte Maschinenfabrik Augsburg und Maschinenbaugesellschaft Nürnberg, A. G. (See Lauster, Imanuel, assignor.) | | | | | | |
| Vereinigte Maschinenfabrik Augsburg und Maschinenbaugesellschaft Nürnberg, A. G. (See Offenbacher, Martin, assignor.) | | | | | | |
| Vereinigte Maschinenfabrik Augsburg und Maschinenbaugesellschaft Nürnberg, A. G. (See Richter, Hans, assignor.) | | | | | | |
| Vermeer, Carel C., Binnenhaven, O. Z., Rotterdam, Netherlands. Apparatus for storing and unloading materials | 739,760 | Sept. 22 | 4260 | 955 | 106 | 962 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drgs. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Vermilyea, Le Roy. (See O'Leary, John, assignor.) | | | | | | |
| Vermont Farm Machine Company. (See Kimball, Perley L., assignor.) | | | | | | |
| Verner, James F., New York, N. Y. Car-fender | 718,292 | Jan. 13 | 1440 | 320 | 102 | 325 |
| Verner, John, Chariton, Iowa. Centrifugal fan or blower | 735,001 | July 28 | 4280 | 996 | 105 | 948 |
| Verney, Joseph. (See Deprez and Verney.) | | | | | | |
| Vernon, Charles J., deceased, (C. B. Vernon, administratrix,) and W. A. Choate, Los Angeles, Cal.; said Choate assignor to said Vernon. Fruit-peeling apparatus | 739,953 | Sept. 29 | 4662 | 1047 | 106 | 1064 |
| Vernon, Cora B., administratrix. (See Vernon and Choate.) | | | | | | |
| Vernon, Percy V. (See Herbert and Vernon.) | | | | | | |
| Verplast, Frederick, assignor to North American Scale Company, Boston, Mass. Coin-controlled weighing-machine | 746,418 | Dec. 8 | 2020 | 462 | 107 | 1550 |
| Verplast, Frederick, assignor to North American Scale Company, Boston, Mass. Scale | 748,238 | Dec. 29 | 5452 | 1242 | 107 | 2375 |
| Verrell, Charles F., Grand Rapids, Mich. Grain drier and cooler | 726,805 | Apr. 28 | 4454 | 1006 | 103 | 2145 |
| Verschuren, Auguste, Antwerp, Belgium. Water-directing appliance for disinfecting or fire-extinguishing purposes | 730,723 | June 9 | 2179 | 484 | 104 | 1595 |
| Vertical Propeller Company. (See Exline, Frank, assignor.) | | | | | | |
| Vervaet, Piter, Paterson, N. J. Manufacturing welding compounds | 720,300 | Feb. 10 | 1645 | ------ | 102 | 1186 |
| Very, Alpha O., Springfield, Mass. Vehicle-body | 737,887 | Sept. 1 | 667 | 142 | 106 | 146 |
| Very, Theodore S., trustee. (See Randall, John E., assignor.) | | | | | | |
| Vescelius, William A., Hightstown, N. J. Eyeglasses | 732,473 | June 30 | 5513 | 1223 | 104 | 2335 |
| Vessels, Benjamin, Raizon, Mo. Churn | 740,065 | Sept. 29 | 4874 | 1092 | 106 | 1109 |
| Vestal, Samuel C. (See Hubbard and Vestal.) | | | | | | |
| Vetter, Joseph C., Astoria, N. Y. Rheostat | 740,787 | Oct. 6 | 765 | 173 | 106 | 1408 |
| Veulle, Frederick H. de. (See Accles, Veulle, and Starley.) | | | | | | |
| Vial, Emile, Brussels, Belgium. Extracting the residuary matter from sewer-water | 730,588 | June 9 | 1943 | 432 / 433 | 104 | 1545 |
| Vianest, Francis A., New York, assignor of one-half to G. F. Cornelius, Brooklyn, N. Y. Starting-gate | 745,936 | Dec. 1 | 1142 | 256 | 107 | 1342 |
| Vicars, John, Sr., T., and John, Jr., Earlestown, England. Forced-draft appliance for furnaces | 729,909 | June 2 | 706 | 157 | 104 | 1272 |
| Vicars, Thomas. (See Vicars, John, Sr., T., and John, Jr.) | | | | | | |
| Vick, Lacy, Vicksburg, Ky. Compound tool | 723,764 | Mar. 24 | 3903 | 878 | 103 | 863 |
| Vickers, Samuel A., Chicago, Ill. Grain-car door | 732,666 | June 30 | 5876 | 1303 | 104 | 2414 |
| Vickers Sons & Maxim. (See Barnes, Robert, assignor.) | | | | | | |
| Vickers Sons & Maxim. (See Dawson and Buckham, assignors.) | | | | | | |
| Vickers Sons & Maxim. (See Dawson and Burton, assignors.) | | | | | | |
| Vickers Sons & Maxim. (See Dawson and Horne, assignors.) | | | | | | |
| Vickers Sons & Maxim. (See Dawson and Silverman, assignors.) | | | | | | |
| Vickers Sons & Maxim. (See McKechnie, James, assignor.) | | | | | | |
| Vickery, Benjamin P., Bradley, Ill. Gun-sight | 744,651 | Nov. 17 | 3565 | 768 | 107 | 789 |
| Vickery, Frank M., Boston, Mass. Spring shade-roller | 718,178 | Jan. 13 | 1221 | 270 | 102 | 278 |
| Victor, Albert E., assignor of one-third to W. Gessner, McKeesport, Pa. Combination right-angle square and level | 733,570 | July 14 | 1571 | 373 | 105 | 350 |
| Victor Electric Company. (See Grobe, Julius J., assignor.) | | | | | | |
| Victor Electric Company. (See Wantz, Julius B., assignor.) | | | | | | |
| Victor Safe & Lock Co. (See Blechschmidt, Charles E., assignor.) | | | | | | |
| Victor Talking Machine Company. (See Gleason, Edward D., assignor.) | | | | | | |
| Victor Talking Machine Company. (See Johnson, Eldridge R., assignor.) | | | | | | |
| Victoria Manufacturing Company. (See Worthley and Heaton, assignors.) (Reissue.) | | | | | | |
| Vierthaler, John, *et al.* (See Farmer, Julius M., assignor.) | | | | | | |
| Vieth, Hermann, assignor to Knoll & Co., Ludwigshafen-on-the-Rhine, Germany. Cotarnin phthalate and making same | 742,532 | Oct. 27 | 4159 | ------ | 106 | 2170 |
| Viggers, William, Des Moines, Iowa. Steam-engine for pumps, &c | 746,206 | Dec. 8 | 1642 | 365 | 107 | 1471 |
| Vigo, James J., New York, N. Y. Detachable handle for soldering-irons | 739,125 | Sept. 15 | 3104 | 687 | 106 | 695 |
| Vikören, Ole, Holdredge, Nebr. Horse-blinder | 721,760 | Mar. 3 | 180 | 42 | 103 | 40 |
| Villeneuve, Edward, Salem, Mass. Upper-guard for heel-trimming machines | 728,786 | May 19 | 3705 | 827 | 104 | 823 |
| Villet, Emile, New York, N. Y. Pile | 722,417 | Mar. 10 | 1413 | 312 | 103 | 317 |
| Villy, Gustave H., Manchester, England. Horn for phonographs, ear-trumpets, &c | 739,954 | Sept. 29 | 4663 | 1047 | 106 | 1064 |
| Vilsack, Joseph F., Johnstown, Pa. Rail-joint | 748,444 | Dec. 29 | 5818 | 1325 | 107 | 2456 |
| Vincent, Carroll H., Moline, Ill. Platform-scale | 740,955 | Oct. 6 | 1045 | 238 / 239 | 106 | 1469 |
| Vincent, John. (See Lawrence and Vincent.) | | | | | | |
| Vincke, Gerhard H., San Feliu de Guixols, Spain. Machine for sorting corks | 717,726 | Jan. 6 | 363 | 89 | 102 | 78 |
| Vine, Frederick T., Cambridge, England. Notice-board or the like | 722,777 | Mar. 17 | 2111 | 472 | 103 | 482 |
| Vineau, Louis de, Cleveland, Ohio. Collapsible horn | 745,029 | Nov. 24 | 4299 | 929 | 107 | 961 |
| Vining, James, Neodesha, Kans. Washing-machine | 722,167 | Mar. 3 | 935 | 207 | 103 | 199 |
| Vinson, George W., Murray, Ky. Vehicle-seat-supporting brace | 734,379 | July 21 | 3108 | 731 | 105 | 691 |
| Vint, Samuel W., Bradford, England. Stone, granite, or marble cutting machinery | 725,301 | Apr. 14 | 1628 | 367 | 103 | 1530 |
| Virgil Practice Clavier Company. (See Jones, Albert E., assignor.) | | | | | | |
| Virginia Fireworks Co. (See Del Grande, Nicholas, assignor.) | | | | | | |
| Vis, Gerard N., Schweizerhalle, near Basle, Switzerland. Purifying brine | 725,896 | Apr. 21 | 2740 | ------ | 103 | 1782 |
| Vischer, Sophie, New York, N. Y. Waist and supporter | 732,472 | Mar. 10 | 1530 | 336 | 103 | 343 |
| Visco, Gaetano, Brinton, Pa. Elevator mechanism | 740,956 | Oct. 6 | 1049 | 239 | 106 | 1470 |
| Visible Writing Machine Company. (See Hess, Herbert C., assignor.) | | | | | | |
| Visintini, Franz, Zurich, Switzerland. Lattice or truss girder, &c | 735,920 | Aug. 11 | 1691 | 360 | 105 | 1360 |
| Vissering, Harry, Chicago, Ill. Brake-beam | 729,707 | June 2 | 319 | 74 | 104 | 1194 |
| Vives, Guillermo, Ponce, Porto Rico. Barometer-alarm | 739,126 | Sept. 15 | 3105 | 687 | 106 | 696 |
| Vivian, James. (See Vivian, William and J.) | | | | | | |
| Vivian, William, Redruth, and J. Vivian, Camborne, England. Rotating valve for fluid-pressure engines | 725,516 | Apr. 14 | 2037 | 461 | 103 | 1616 |
| Vivian, William H., Gloucester, Mass. Cannon | 734,779 | July 28 | 3865 | 901 | 105 | 861 |
| Vliet, Charles W., Glenwood Springs, Colo. Current-motor | 733,304 | July 7 | 1083 | 258 | 105 | 228 |
| Vocke, Helen. (See Knoche, John, assignor.) | | | | | | |
| Voelker, Matt, Waterloo, Wis. Scoop | 741,195 | Oct. 13 | 1512 | 342 | 106 | 1589 |
| Voelker, William L., Erie, Pa., assignor to Electro Carbide Lamp Syndicate, Limited, Holborn, county of London, England. Electric furnace for the manufacture of filaments | 740,379 | Sept. 29 | 5443 | 1224 | 106 | 1227 |
| Voelpel, William, E. Suchert, and A. Oekel, assignors to Morton Manufacturing Company, Morton, Ill. Hot-water apparatus | 747,281 | Dec. 15 | 3644 | 823 | 107 | 1936 |
| Voetter, Ernst, Uerdingen, Germany. Dyeing with sulfur dyes | 724,631 | Apr. 7 | 400 | 95 | 103 | 1255 |
| Vogan, James W., Chicago, Ill. Coffee-pot | 741,196 | Oct. 13 | 1514 | 342 | 106 | 1590 |
| Vogan, John H. (See Vogan, Robert R. and J. H.) | | | | | | |
| Vogan, Robert R. and J. H., Allegheny, Pa. Rotary engine | 733,773 | July 14 | 1915 | 451 | 105 | 421 |
| Vogel & Brothers, William. (See Valentine, Harry J., assignor.) | | | | | | |
| Vogel, Ernst, assignor to Ortenbach & Vogel, Bitterfeld, Prussia, Germany. Duplex or twin piston pump | 730,179 | June 2 | 1172 | 263 | 104 | 1366 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|
| | | | Spec. | Drg. | Vol. | Page. |
| Vogel, Henry C., Philadelphia, Pa., assignor to S. S. Wenzell Machine Company, Charleston, W. Va. Bottle-washing machine | 744,443 | Nov. 17 | 3234 | 693 | 107 | 722 |
| Vogel, Joseph A., Wilmington, Del. Flushing apparatus for water-closets | 737,796 | Sept. 1 | 447 | 96 | 106 | 99 |
| Vogel, Louis, Whitelaw, Wis. Paving-strip | 743,960 | Nov. 10 | 2253 | 485 | 107 | 497 |
| Vogel, Paul, Crimmitzschau, Germany. Rope-splice | 730,060 | June 2 | 980 | 219 | 104 | 1328 |
| Vogel, Paul, Berlin, Germany. Speaking apparatus | 746,609 | Dec. 8 | 2347 | 538 | 107 | 1624 |
| Vogeler, Henry, Newcastle, Cal. Beehive-frame | 732,667 | June 30 | 5877 | 1303 | 104 | 2414 |
| Vogelsang, Adolf, Dusseldorf, Germany. Railway-rail-fastening device | 724,064 | Mar. 31 | 4509 | 1015<br>1016 | 103 | 1003 |
| Voght, Leonard V. (See Burgess, James C., assignor.) | | | | | | |
| Vogler, Adolph. (See Ranz, Jacob, assignor.) | | | | | | |
| Vogler, Mary J., Tipton, Ind. Combined sausage-stuffer and lard or jelly press | 720,301 | Feb. 10 | 1646 | 376 | 102 | 1187 |
| Voglesong, John W. (See Weller, George L., assignor.) | | | | | | |
| Vogt, Frederick, Jr. (See Eagle and Vogt.) | | | | | | |
| Vogt, Jacob, Newburgh, N. Y. Clamp | 739,365 | Sept. 22 | 3528 | 788 | 106 | 802 |
| Vogt, Joseph, New York, N. Y. Wall-paper seam-cutting and pasting machine | 742,808 | Oct. 27 | 4023 | 1048 | 106 | 2271 |
| Vogt, Julius F., assignor to Union Cooperage Company, St. Louis, Mo. Bail-ear for vessels | 736,179 | Aug. 11 | 2156 | 463 | 105 | 1460 |
| Vogt, Philip F., Dayton, Ohio. Flue-scraper | 735,846 | Aug. 11 | 1554 | 332 | 105 | 1331 |
| Vogue, Franklin S., Keokuk, Iowa. Magazine hammer or hatchet | 736,465 | Aug. 18 | 2652 | 583 | 105 | 1584 |
| Voight, Henry G., New Britain, Conn. Molding-machine | 741,569 | Oct. 13 | 2266 | 506<br>507 | 106 | 1750 |
| Voight, Henry G., assignor to Russell and Erwin Manufacturing Company, New Britain, Conn. Night-latch | 720,986 | Feb. 17 | 2919 | 669 | 102 | 1468 |
| Voight, Henry G., assignor to Russell & Erwin Manufacturing Company, New Britain, Conn. Knob-rose | 723,951 | Mar. 31 | 4290 | 963 | 103 | 962 |
| Voight, Henry G., assignor to Russell and Erwin Manufacturing Company, New Britain, Conn. Meat-cutter | 723,952 | Mar. 31 | 4291 | 963 | 103 | 962 |
| Voight, Henry G., assignor to Russell and Erwin Manufacturing Company, New Britain, Conn. Shelf-bracket | 725,382 | Apr. 14 | 1777 | 398<br>399 | 103 | 1561 |
| Voight, Henry G., assignor to Russell and Erwin Manufacturing Company, New Britain, Conn. Knockdown bracket | 728,339 | May 19 | 2883 | 636 | 104 | 652 |
| Voight, Henry G., assignor to Russell and Erwin Manufacturing Company, New Britain, Conn. Bracket | 734,780 | July 28 | 3867 | 901 | 105 | 862 |
| Voight, Henry G., assignor to Russell & Erwin Manufacturing Company, New Britain, Conn. Lock and latch | 744,134 | Nov. 17 | 2640 | 563 | 107 | 591 |
| Voight, Henry G., assignor to Russell and Erwin Manufacturing Company, New Britain, Conn. Knockdown bracket | 744,265 | Nov. 17 | 2900 | 621 | 107 | 648 |
| Voigt, Julius L., Sheboygan, Wis. Egg-separator | 718,179 | Jan. 13 | 1224 | 270 | 102 | 278 |
| Voigtlaender-Tetzner, Walter. (See Schraube and Voigtlaender-Tetzner.) | | | | | | |
| Voigtlaender-Tetzner, Walter, assignor to Badische Anilin and Soda Fabrik. Ludwigshafen-on-the-Rhine, Germany. Azo dye and making same | 718,032 | Jan. 6 | 966 | ------ | 102 | 208 |
| Voigtländer-Tetzner, Walter. (See Schraube and Voigtländer-Tetzner.) | | | | | | |
| Voigtmann, Frank, and S. H. Pomeroy, Chicago, Ill. Window | 718,403 | Jan. 13 | 1632 | 358<br>359 | 102 | 365 |
| Voigtmann, Frank, and S. H. Pomeroy, Chicago, Ill. Automatic fireproof window | 731,636 | June 23 | 3904 | 870 | 104 | 1986 |
| Voigtmann, Frank, Chicago, Ill., and S. H. Pomeroy, New York, N. Y. Window | 729,814 | June 2 | 539 | 118 | 104 | 1238 |
| Voigtmann, Frank, Chicago, Ill., and S. H. Pomeroy, New York, N. Y. Die for making hollow sheet-metal window or other sashes | 747,666 | Dec. 22 | 4342 | 980<br>981 | 107 | 2109 |
| Voith, Firm of J. M. (See Thomann, Robert, assignor.) | | | | | | |
| Voith, J. M. (See Schmitthenner, Carlos, assignor.) | | | | | | |
| Vojácek, Ladislav, Prague, Austria-Hungary. Paddle-wheel | 745,745 | Dec. 1 | 768 | 176 | 107 | 1262 |
| Volberding, Louis F., Dike, Iowa. Gate-hinge | 742,261 | Oct. 27 | 3661 | 818 | 106 | 2068 |
| Vollborn, Gustav F., Braman, Okla. Ter. Attachment for harvesters | 723,084 | Mar. 17 | 2654 | 598 | 103 | 594 |
| Volle, Johann F., Scranton, Miss. Eyeglass | 722,059 | Mar. 3 | 746 | 166 | 103 | 161 |
| Völler, Karl, Dusseldorf, Germany. Trigger mechanism for guns | 740,716 | Oct. 6 | 605 | 135 | 106 | 1378 |
| Vollman Buggy Body Company. (See Vollman, John, assignor.) | | | | | | |
| Vollman, John, assignor of one-half to Vollman Buggy Body Company, Owensboro, Ky. Vehicle-body | 747,810 | Dec. 22 | 4609 | 1040 | 107 | 2170 |
| Vollmann, Carl W., Montreal, Canada. Compressing system | 730,495 | June 9 | 1776 | 398 | 104 | 1508 |
| Vollmann, Carl W., Montreal, Canada. Refrigerating and purifying apparatus | 741,855 | Oct. 20 | 2805 | 624 | 106 | 1880 |
| Volp, John, Grove City, assignor to Kinnear Manufacturing Company, Columbus, Ohio. Roller for fireproof blinds | 742,262 | Oct. 27 | 3661 | 818 | 106 | 2068 |
| Voltohm Electricitats-Gesellschaft, A. G. (See Moritz, Friedrich, assignor.) | | | | | | |
| Volz, Charles and C., Wolfton, Mich. Steam-engine | 725,517 | Apr. 14 | 2038 | 461 | 103 | 1617 |
| Volz, Christian. (See Volz, Charles and C.) | | | | | | |
| Volz, Simon, Milwaukee, Wis., assignor to 20th Century Machinery Co. Bottle-soaking machine | 736,037 | Aug. 11 | 1912 | 408 | 105 | 1408 |
| Von Blom, John L., *et al.* (See Mills and Piddington, assignors.) | | | | | | |
| Von der Ahe, Charles C. (See Hergenhan and Von der Ahe.) | | | | | | |
| Von der Bosch, Jacob, Essen-on-the-Ruhr, Germany. Device for the ignition of slow matches | 720,104 | Feb. 10 | 1286 | 295 | 102 | 1113 |
| Von der Lühe, Theodore, and W. H. Bartholomew, New York, N. Y. Combined calendar and pen-rack | 746,540 | Dec. 8 | 2226 | 510<br>511 | 107 | 1596 |
| Von Pein, Edward J., Dayton, Ohio, assignor to National Cash Register Company, Jersey City, N. J. Cash-register | 745,937 | Dec. 1 | 1143 | 256<br>257 | 107 | 1343 |
| Voorhees, Frederick S., Freehold, N. J. Hedge-trimmer | 718,404 | Jan. 13 | 1634 | 359 | 102 | 366 |
| Voorhees, Gardner T., Boston, Mass. Oil-separator for refrigerating-machines | 730,496 | June 9 | 1780 | 399 | 104 | 1509 |
| Voorhees, Gardner T., Boston, Mass. Device for preventing vapor from passing the expansion-valves of refrigerating-machines | 731,824 | June 23 | 4244 | 945 | 104 | 2058 |
| Voorhees, Gardner T., Boston, Mass. Game apparatus | 731,825 | June 23 | 4246 | 945 | 104 | 2059 |
| Voorhees, Gardner T., Boston, Mass. Automatic gage-cock | 731,826 | June 23 | 4247 | 946 | 104 | 2059 |
| Voorhees, Jeremiah F., Philadelphia, Pa., assignor of one-half to N. B. K. Hoffman, New York, N. Y. Fluid-pressure brake for railway-trains | 739,761 | Sept. 22 | 4262 | 955 | 106 | 962 |
| Voorhies, Thomas J., McDonald, Pa. Non-explosive oil-can | 726,595 | Apr. 28 | 4064 | 917 | 103 | 2064 |
| Vordemfelde, William, assignor to St. Louis Car Company, St. Louis, Mo. Sliding-door fastener | 729,980 | June 2 | 848 | 189 | 104 | 1301 |
| Vordermark, John P., Indianapolis, Ind. Button-polisher | 725,897 | Apr. 21 | 2741 | 624 | 103 | 1782 |
| Vordtriede, Ernest H., St. Louis, Mo. Building-brick | 729,023 | May 26 | 4142 | 918 | 104 | 930 |
| Voris, James P., Astoria, N. Y. Pleasure-seeking or merrymaking device | 740,206 | Sept. 29 | 5126 | 1151<br>1152 | 106 | 1161 |
| Vorreiter, Ansbert E. (See Küpper and Vorreiter.) | | | | | | |
| Vorsteher, Carl. (See Lucas and Vorsteher.) | | | | | | |
| Vosburgh, John R., Johnstown, N. Y. Repair device for pneumatic tires | 746,207 | Dec. 8 | 1644 | 366 | 107 | 1471 |
| Vosburgh, Lee, Troy, N. Y. Portable grave-vault | 719,911 | Feb. 3 | 893 | 210 | 102 | 1013 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drgs. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Vose and Cliff Manufacturing Company. (See Cliff, Edward, assignor.) | | | | | | |
| Vose, Clifton, Brooklyn, N. Y. Weather-strip | 717,641 | Jan. 6 | 210 | 52 | 102 | 45 |
| Vose, Clifton, Brooklyn, N. Y., assignor to Noiseless and Draughtless Door and Window Cushion Company. Window | 737,534 | Aug. 25 | 4684 | 1050<br>1051 | 105 | 2035 |
| Voshardt, Herman F. (See Friedley, Albert, assignor.) | | | | | | |
| Voss, David. (See Hardy and Voss.) | | | | | | |
| Voss, Frederick. (See Hegbom, Marselius, assignor.) | | | | | | |
| Voss, Richard J., Davenport, Iowa. Cooling device for explosive-engines | 737,048 | Aug. 25 | 3765 | 836 | 105 | 1836 |
| Voss, William H., Davenport, Iowa. Gage for screw-drivers | 734,204 | July 21 | 2777 | 651 | 105 | 620 |
| Voss, William H., Davenport, Iowa. Mechanical movement | 744,444 | Nov. 17 | 3235 | 693 | 107 | 722 |
| Votaw, Charles L., Temple, Tex. Wheel | 743,117 | Nov. 3 | 571 | 123 | 107 | 119 |
| Votaw, Ernest D., Cambridge City, Ind. Machine for sealing envelops | 738,089 | Sept. 1 | 1036 | 231 | 106 | 225 |
| Votaw, William W. (See Lowrie and Votaw.) | | | | | | |
| Votey, Edwin S., Summit, N. J., assignor to Aeolian Company, New York, N. Y. Means for regulating the expression of mechanical musical instruments | 742,760 | Oct. 27 | 4539 | 1028 | 106 | 2253 |
| Votey, Edwin S., Summit, N. J., assignor to Aeolian Co., New York, N. Y. Means for adjusting music-rolls in mechanical musical instruments | 743,118 | Nov. 3 | 573 | 123 | 107 | 120 |
| Vou, James L. de, Wissahickon, Pa. Pulley-block | 729,024 | May 26 | 4144 | 918 | 104 | 930 |
| Vought-Berger Co. (See Vought, Milton I., assignor.) | | | | | | |
| Vought, Milton I., assignor to Vought-Berger Co., La Crosse, Wis. Telephone | 738,861 | Sept. 15 | 2639 | 582 | 106 | 599 |
| Voynow, Constantine B. (See Nichols and Voynow.) (Reissue.) | | | | | | |
| Voynow, Constantine B., Philadelphia, Pa. Pole or post | 723,085 | Mar. 17 | 2655 | 598 | 103 | 594 |
| Vredenburg, William, Grand Rapids, Mich. Guard for wagon-hubs | 730,180 | June 2 | 1173 | 263 | 104 | 1366 |
| Vreeland, Aaron, Singac, N. J. Pneumatic tire | 733,440 | July 14 | 1338 | 315 | 105 | 300 |
| Vreeland, Alexander P., and J. R. McDonald, assignors to R. B. Watson, Chicago, Ill. Starching or dampening machine | 719,912 | Feb. 3 | 895 | 210 | 102 | 1013 |
| Vries, Luitjen J. R. de, Panola, Ill. Window-screen | 733,774 | July 14 | 1916 | 451 | 105 | 421 |
| Vroom, Oler P. (See Knapp, Stephenson, and Vroom.) | | | | | | |
| Vroom, Oler P. (See Knapp, Vroom, Stephenson, and Arbuckle.) | | | | | | |
| Vrooman, Harry C. (See Estes, John W., assignor.) | | | | | | |
| Vroome, Garrett M., New York, N. Y. Ventilator for leader-pipes | 737,535 | Aug. 25 | 4686 | 1051 | 105 | 2036 |
| Vtipil, Frank, and J. Splavec, Milwaukee, Wis. Bed-bottom | 732,976 | July 7 | 488 | 121 | 105 | 105 |
| Vulcan Detinning Company. (See Laernoes and Dunn, assignors.) | | | | | | |
| Vulcan Detinning Company. (See Lemberg, Max, assignor.) | | | | | | |
| Vulcan Lever Co. (See Sullivan, George B., assignor.) | | | | | | |
| Vynne, E. Mann. (See Clark, George P., assignor.) | | | | | | |
| W. A. Case & Son Manufacturing Company. (See Hirsch, Charles, assignor.) | | | | | | |
| W. E. Caldwell Co., *et al.* (See Rothchild, Joseph, assignor.) | | | | | | |
| W. & E. T. Fitch Co. (See Hubbard, George M., assignor.) | | | | | | |
| W. F. Burns Company. (See Burns, Owen, assignor.) | | | | | | |
| W. F. & John Barnes Company. (See Barnes, John, assignor.) | | | | | | |
| W. F. & John Barnes Company. (See Barnes, William F., assignor.) | | | | | | |
| W. G. Browne Manufacturing Company. (See Browne, William G., assignor.) | | | | | | |
| W. G. Browne Manufacturing Company. (See Parish, Graham C., assignor.) | | | | | | |
| W. G. Nagel Electric Company. (See Loth, Harry H., assignor.) | | | | | | |
| W. H. Miner Company. (See Buckius, Albert O., Jr., assignor.) | | | | | | |
| W. H. Miner Company. (See Miner, William H., assignor.) | | | | | | |
| W. H. Miner Company. (See Townsend, Frederick B., assignor.) | | | | | | |
| W. J. Clark Company. (See Randolph, Alfred, assignor.) | | | | | | |
| W. & S. Blackinton Company. (See Blackinton, Louis A., assignor.) | | | | | | |
| W. S. Nott Company. (See Penney, Herbert E., assignor.) | | | | | | |
| W. W. Kimball Company. (See Hedgeland, Frederick W., assignor.) | | | | | | |
| W. W. Montague & Co. (See Dougall, William G., assignor.) | | | | | | |
| Waaser, Frank L., Brooklyn, assignor to J. P. Cumins, New York, N. Y. Valve | 730,988 | June 16 | 2671 | 595 | 104 | 1719 |
| Wachtl, Siegfried, assignor to L. Herz, Vienna, Austria-Hungary. Photographic apparatus | 739,239 | Sept. 15 | 3309 | 733 | 106 | 397 |
| Wachtl, Siegfried, assignor to L. Herz, Vienna, Austria-Hungary. Photographic camera | 739,240 | Sept. 15 | 3310 | 734 | 106 | 740 |
| Wack, John, assignor of one-half to W. L. Davis, Canton, Ohio. Mine-curtain raiser | 738,262 | Sept. 8 | 1439 | 308 | 106 | 324 |
| Wackerow, George L., assignor of one-half to F. G. Stickles, V. M. Miller, C. H. Brunn, and G. M. Randall, Mellette, S. D. Strainer | 719,913 | Feb. 3 | 898 | 211 | 102 | 1014 |
| Wackerow, George L., assignor of one-half to F. G. Stickles, V. M. Miller, C. H. Brunn, and G. M. Randall, Mellette, S. D. Oscillating valve | 728,787 | May 19 | 3706 | 827 | 104 | 823 |
| Wackerow, George L., assignor of one-half to F. G. Stickles, V. M. Miller, C. H. Brunn, and G. M. Randall, Mellette, S. D. Balanced slide-valve | 747,023 | Dec. 15 | 3145 | 720 | 107 | 1824 |
| Waddell, Alexander, Pittsburg, Pa. Briquetting coal | 720,088 | Feb. 10 | 1257 | 287 | 102 | 1106 |
| Waddell, Edward R. (See Hammond and Waddell.) | | | | | | |
| Waddell, John, Harriston, Canada. Pole-tip | 724,632 | Apr. 7 | 400 | 95 | 103 | 1255 |
| Waddell, John A. L., and I. G. Hedrick, Kansas City, Mo. Iron railway-bridge | 737,079 | Sept. 1 | 220 | 47 | 106 | 51 |
| Waddell, Montgomery, New York, N. Y., assignor to General Electric Company. Means for controlling electric motors. (Reissue) | 12,179 | Dec. 8 | 2432 | 556 | 107 | 1643 |
| Waddell, Montgomery, New York, N. Y., assignor to General Electric Company. Controlling electric motors. (Reissue) | 12,180 | Dec. 8 | 2434 | 556 | 107 | 1644 |
| Waddell, Montgomery, and H. K. Brooks, New York, N. Y., assignors to United States Light & Heating Company, of New Jersey. Generator or motor suspension | 746,610 | Dec. 8 | 2348 | 538<br>539 | 107 | 1624 |
| Waddell, Robert R., Cincinnati, Ohio. Snap-hook | 734,380 | July 21 | 3109 | 731 | 105 | 691 |
| Waddle, John H. (See Fowler, John H., assignor.) | | | | | | |
| Wade, David K., and R. C. Wright, McPherson, Kans. Stand | 733,441 | July 14 | 1339 | 316 | 105 | 300 |
| Wade, Emma P., Dubuque, Iowa. Dust-pan | 720,761 | Feb. 17 | 2511 | 579 | 102 | 1382 |
| Wade, Evan H., Chicago, Ill. Signal-lantern | 725,302 | Apr. 14 | 1629 | 368 | 103 | 1530 |
| Wade, Evan H., J. L. Nicholson, and S. C. Smith, Chicago, Ill. Furnace | 744,135 | Nov. 17 | 2642 | 563<br>564 | 107 | 592 |
| Wade, Frank M., assignor of one-fourth to C. Wheeler, National Home, Wis. Folding [illegible] | 729,025 | May 26 | 4145 | 918 | 104 | 930 |
| Wade, Frank M., Milwaukee, assignor of one-fourth to C. Wheeler, National Home, Wis. Box-making machine | 732,668 | June 30 | 5878 | 1304 | 104 | 2414 |
| Wade, George W., Oakforest, Tex. Automatic relief-valve for pneumatic seed-cotton distributers | 717,642 | Jan. 6 | 211 | 53 | 102 | 46 |
| Wade, Harry J., Pocatello, Idaho. Bake-oven | 746,611 | Dec. 8 | 2350 | 539<br>540 | 107 | 1625 |
| Wade, [illegible] L., Chicago, Ill. Basin or bath fitting | 746,419 | Dec. 8 | 2022 | 463 | 107 | 1550 |
| Wade, Laura B., *et al.* (See Perkins, William D., assignor.) | | | | | | |
| Wade, [illegible] D., Cedartown, Ga. Stop-motion mechanism | 727,501 | May 5 | 1254 | 279<br>280 | 104 | 270 |
| Wade, Martin J., Iowa City, Iowa. Toy bank | 744,886 | Nov. 24 | 4020 | 867 | 107 | 905 |
| Wade, Martin J., Iowa City, Iowa. Toy bank | 746,612 | Dec. 8 | 2351 | 540 | 107 | 1625 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Wade, Oscar A., assignor of one-half to G. Knight, Avon, Mass. Picture-hanger | 740,493 | Oct. 6 | 214 | 42 | 106 | 1291 |
| Wadey, Edwin, Los Angeles, Cal. Brake applicable to motor-cars, other railway-vehicles, and revolving shafts generally | 722,930 | Mar. 17 | 2382 | 533 | 103 | 536 |
| Wadey, Edwin, Los Angeles, Cal. Window-sash | 741,197 | Oct. 13 | 1515 | 342 | 106 | 1590 |
| Wadkins, George T., Galveston, Tex. Hydrocarbon-burner | 721,761 | Mar. 3 | 181 | 42 | 103 | 40 |
| Wadleigh, George R. (See Tripp and Wadleigh.) | | | | | | |
| Wadleigh, William M., Milks Grove, Ill. Harvester attachment for raising and saving down grain | 733,442 | July 14 | 1340 | 316 | 105 | 300 |
| Wadleigh, William M., Chicago, Ill. Harvester attachment for saving and securing down grain | 742,263 | Oct. 27 | 3663 | 818 | 106 | 2069 |
| Wadsworth, Francis H., Helensburgh, Scotland. Stowing and lowering or raising boats. | 727,232 | May 5 | 772 | 165 | 104 | 167 |
| Wadsworth, Frank L. O. (See Page and Wadsworth.) | | | | | | |
| Wadsworth, Frank L. O., Williams Bay, Wis., assignor, by mesne assignments, to Pressed Prism Plate Glass Company. Illuminating structure | 717,782 | Jan. 6 | 509 | 114 | 102 | 110 |
| Wadsworth, Frank L. O., Williams Bay, Wis., assignor, by mesne assignments, to Pressed Prism Plate Glass Company. Illuminating structure | 717,783 | Jan. 6 | 510 | 114 | 102 | 110 |
| Wadsworth, Frank L. O., Williams Bay, Wis., assignor, by mesne assignments, to Pressed Prism Plate Glass Company. Illuminating-canopy | 717,784 | Jan. 6 | 511 | 114 | 102 | 110 |
| Wadsworth, Frank L. O., Williams Bay, Wis., assignor, by mesne assignments, to Pressed Prism Plate Glass Company. Illuminating structure | 719,065 | Jan. 27 | 2937 | 656 | 102 | 668 |
| Wadsworth, Frank L. O., Williams Bay, Wis., assignor, by mesne assignments, to Pressed Prism Plate Glass Company. Illuminating glass structure | 720,987 | Feb. 17 | 2921 | 669 | 102 | 1468 |
| Wadsworth, Frank L. O., Williams Bay, Wis., assignor to Pressed Prism Plate Glass Company. Illuminating structure | 719,066 | Jan. 27 | 2939 | 656, 657 | 102 | 668 |
| Wadsworth, Frank L. O., Williams Bay, Wis., assignor, by mesne assignments, to Pressed Prism Plate Glass Company. Illuminating structure | 721,256 | Feb. 24 | 3492 | 793 | 102 | 1608 |
| Wadsworth, Frank L. O., Williams Bay, Wis., assignor, by mesne assignments, to Pressed Prism Plate Glass Company. Reflecting structure | 721,257 | Feb. 24 | 3493 | 794 | 102 | 1608 |
| Wadsworth, Frank L. O., Williams Bay., Wis., assignor, by mesne assignments, to Pressed Prism Plate Glass Company. Illuminating structure | 721,258 | Feb. 24 | 3493 | 794 | 102 | 1608 |
| Wadsworth, Frank L. O., Williams Bay., Wis., assignor to Pressed Prism Plate Glass Company. Illuminating structure | 721,259 | Feb. 24 | 3495 | 794 | 102 | 1608 |
| Wadsworth, Frank L. O., Williams Bay, Wis., assignor, by mesne assignments, to Pressed Prism Plate Glass Company. Illuminating-canopy | 732,474 | June 30 | 5515 | 1223 | 104 | 2335 |
| Wadsworth, Frank L. O., Williams Bay, Wis., assignor, by mesne assignments, to Pressed Prism Plate Glass Company. Illuminating structure | 734,020 | July 21 | 2426 | 567 | 105 | 546 |
| Wadsworth, Frank L. O., Williams Bay, Wis., assignor, by mesne assignments, to Pressed Prism Plate Glass Company. Reflecting-panel | 737,178 | Aug. 25 | 4001 | 887 | 105 | 1885 |
| Wadsworth, Frank L. O., Williams Bay, Wis., assignor, by mesne assignments, to Pressed Prism Plate Glass Company. Illuminating glass plate | 737,979 | Sept. 1 | 845 | 185 | 106 | 185 |
| Wadsworth, Frank L. O., Allegheny, Pa., assignor to Pressed Prism Plate Glass Company. Illuminating prism structure | 720,386 | Feb. 10 | 1798 | 409 | 102 | 1220 |
| Wadsworth, George F. (See Snyder, Lloyd C., assignor.) | | | | | | |
| Wadsworth, Howland and Company. (See Esbjörn, Sven H., assignor.) | | | | | | |
| Wadsworth, Joseph, Paterson, N. J. Swivel-loom | 728,052 | May 12 | 2322 | 516, 517 | 104 | 512 |
| Wadsworth, Joseph, Paterson, N. J. Swivel-loom | 740,717 | Oct. 6 | 607 | 136 | 106 | 1378 |
| Wadsworth, Joseph, Paterson, N. J. Swivel-loom | 745,538 | Dec. 1 | 415 | 95, 96 | 107 | 1187 |
| Waern, Adolf W. (See Carlson, Carl P., assignor.) | | | | | | |
| Wafer, William H., Chicago, Ill., assignor of one-half to L. E. Belcia, Beaumont, Tex.) Oil-burner | 731,397 | June 16 | 3435 | 766, 767 | 104 | 1874 |
| Wagenbauanstalt und Waggonfabrik für Elektrische Bahnen (vorm. W. C. F. Busch) Actiengesellschaft. (See Reichel, Karl G. M., assignor.) | | | | | | |
| Wagener, Phillip J., Pittsburg, Pa. Bolt-lock | 720,642 | Feb. 17 | 2310 | 529 | 102 | 1338 |
| Wagenhals, William G., Cincinnati, Ohio. Third-rail electric-railway system | 724,762 | Apr. 7 | 638 | 150 | 103 | 1305 |
| Wagenhorst, James H., Mansfield, Ohio. Blue-printing apparatus | 720,862 | Feb. 17 | 2670 | 616 | 102 | 1415 |
| Wagg, Solomon R., Appleton, Wis. Refining-engine | 718,060 | Jan. 6 | 1006 | 224 | 102 | 217 |
| Wagg, Solomon R., Appleton, Wis. Refining-engine | 718,061 | Jan. 6 | 1007 | 225 | 102 | 217 |
| Wagg, Solomon R., Appleton, Wis. Refining-engine | 722,060 | Mar. 3 | 746 | 167 | 103 | 161 |
| Wagg, Solomon R., Appleton, Wis. Refining-engine | 726,790 | Apr. 28 | 4421 | 996 | 103 | 2138 |
| Waggaman, Bernard A., assignor of one-half to J. Donnelly, Jr., Washington, D. C. Boot or shoe stretcher | 748,239 | Dec. 29 | 5453 | 1242 | 107 | 2375 |
| Waggoner, Albert E., Grand Rapids, Mich. Watchman's clock | 730,420 | June 9 | 1625 | 364 | 104 | 1476 |
| Waggoner, James G., assignor of one-half to C. H. Hubbard, Jonesville, Ind. Nut-lock | 738,263 | Sept. 8 | 1430 | 308 | 106 | 325 |
| Waggoner, William R., assignor to McRoy Clay Works, Brazil, Ind. Delivery-table for green clay articles | 742,105 | Oct. 20 | 3361 | 750 | 106 | 1990 |
| Wagner, Adam, Ashridge, Ohio. Trace-fastener | 739,039 | Sept. 15 | 2931 | 650 | 106 | 660 |
| Wagner, Caspar M., Chicago, Ill. Folding chair | 737,680 | Sept. 1 | 221 | 47 | 106 | 51 |
| Wagner, Chapin. (See Bolser, Thomas L., assignor.) | | | | | | |
| Wagner, Charles, New York, N. Y. Machine for covering lithographic-printing rollers | 734,381 | July 21 | 3110 | 732 | 105 | 691 |
| Wagner, Charles, Brooklyn, N. Y. Incandescent-lamp socket | 748,445 | Dec. 29 | 5819 | 1326 | 107 | 2456 |
| Wagner, Charles, Brooklyn, assignor to E. F. Caldwell & Company, New York, N. Y. Electric cut-out | 718,405 | Jan. 13 | 1635 | 359 | 102 | 366 |
| Wagner, Charles B., Jr., Burlington, Wis. Calf-weaner | 741,856 | Oct. 20 | 2806 | 624 | 106 | 1880 |
| Wagner, Christian, and C. J. Barnes, Jackson, Mich.; said Barnes assignor to said Wagner. Felly-retainer | 744,825 | Nov. 24 | 3922 | 843 | 107 | 883 |
| Wagner, Edward R., Milwaukee, assignor to E. R. Wagner Manufacturing Company, North Milwaukee, Wis. Metal wheel-hub | 719,281 | Jan. 27 | 3342 | 746 | 102 | 752 |
| Wagner, Edward R., Milwaukee, assignor to E. R. Wagner Manufacturing Company, North Milwaukee, Wis. Metal wheel-hub | 719,282 | Jan. 27 | 3343 | 746 | 102 | 752 |
| Wagner, Edward R., Milwaukee, assignor to E. R. Wagner Manufacturing Company, North Milwaukee, Wis. Metal wheel-hub | 731,637 | June 23 | 3907 | 870 | 104 | 1987 |
| Wagner Electric Manufacturing Company. (See Blair, Joseph H., assignor.) | | | | | | |
| Wagner Electric Manufacturing Company. (See Layman and Schwedtmann, assignors.) | | | | | | |
| Wagner, Frank C., Terre Haute, Ind. Worm-gearing | 731,527 | June 23 | 3702 | 824 | 104 | 1947 |
| Wagner, Franz X., assignor, by mesne assignments, to Underwood Typewriter Company, New York, N. Y. Tabulating device for type-writing machines | 729,457 | May 26 | 4892 | 1084 | 104 | 1086 |
| Wagner, Franz X., assignor, by mesne assignments, to Underwood Typewriter Company, New York, N. Y. Ribbon mechanism for type-writing machines | 729,815 | June 2 | 541 | 119 | 104 | 1239 |
| Wagner, Franz X., assignor, by mesne assignments, to Underwood Typewriter Company, New York, N. Y. Printing or type-bar mechanism for type-writing machines | 731,528 | June 23 | 3703 | 824, 825 | 104 | 1947 |
| Wagner, Franz X., assignor, by mesne assignments, to Underwood Typewriter Company, New York, N. Y. Indicating device for type-writing machines | 736,038 | Aug. 11 | 1915 | 408, 409 | 105 | 1409 |
| Wagner, Frederic J. (See Hinze and Wagner.) | | | | | | |
| Wagner, Harry G., Sidney, Ohio. Post-office cabinet | 728,053 | May 12 | 2324 | 517 | 104 | 512 |

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| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Page. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Wagner, Herman L., Brooklyn, assignor, by mesne assignments, to Underwood Typewriter Company, New York, N. Y. Tabulating-stop for type-writers | 738,961 | Sept. 15 | 2810 | 623 | 106 | 635 |
| Wagner, Jesse J. (See Jones and Wagner.) | | | | | | |
| Wagner, John, Denver, Colo. Burglar-alarm | 719,963 | Feb. 3 | 985 | 229 | 102 | 1032 |
| Wagner, John H., C. J. Hofstetter, and H. Ostendorf, Fort Jennings, Ohio. Ice-creeper | 739,103 | Sept. 15 | 3063 | 679 | 106 | 686 |
| Wagner, Michial J., Jr. (See White and Wagner.) | | | | | | |
| Wagner-Palmros Manufacturing Co. (See Damron, Carson W., assignor.) | | | | | | |
| Wagner, Peter F., Garfield, Ohio. Ladder | 734,147 | July 21 | 2680 | 630 | 105 | 600 |
| Wagner, William F., Peoria, Ill. Vegetable or meat cutter | 739,270 | Sept. 15 | 3365 | 747 | 106 | 752 |
| Wagoner, Thomas S., assignor of one-half to J. A. Thompson, Loogootee, Ind. Rotary harrow | 746,208 | Dec. 8 | 1646 | 366 | 107 | 1471 |
| Wagstaff, Joshua G., Dukinfield, England. Sectional boiler | 733,688 | July 14 | 1754 | 415, 416 | 105 | 386 |
| Wahl, Albert H. (See Sundquist, Gustavus E., assignor.) | | | | | | |
| Wahl, Chris. (See McGuire and Wahl.) | | | | | | |
| Wahl, Chris., West Chicago, Ill. Emergency draft-hook | 720,199 | Feb. 10 | 1450 | 331 | 102 | 1146 |
| Wahl, Chris., assignor of one-half to F. Hahn, West Chicago, Ill. Emergency draft-hook | 720,198 | Feb. 10 | 1448 | 331 | 102 | 1146 |
| Wahl & Henius. (See Frees, Herman E., assignor.) | | | | | | |
| Wahl & Henius. (See Nilson, Arvid, assignor.) | | | | | | |
| Wahlberg, John, Eureka, Cal. Hook | 725,518 | Apr. 14 | 2039 | 462 | 103 | 1617 |
| Wahlberg, Wilhelm, Chicago, Ill. Vapor-burner | 719,537 | Feb. 3 | 220 | 52 | 102 | 870 |
| Wahle, Adolph, Davenport, Iowa. Casing for mechanical movements | 732,977 | July 7 | 489 | 121 | 105 | 105 |
| Wahlin, Albert E., Fairview, Utah. Bicycle-brake | 719,914 | Feb. 3 | 899 | 211 | 102 | 1014 |
| Waid, James M., assignor of one-half to J. M. Waid, Colebrook, Ohio. Safety hoisting-hook | 742,761 | Oct. 27 | 4541 | 1029 | 106 | 2253 |
| Waid, John M. (See Waid, James M., assignor.) | | | | | | |
| Waid, Victor, Eastlake, Ala. Car-brake | 746,613 | Dec. 8 | 2352 | 540 | 107 | 1625 |
| Wainwright, Harry A., Chicago, Ill. Impeller for rotary blowers or pumps | 736,039 | Aug. 11 | 1917 | 409 | 105 | 1410 |
| Wainwright, Harry S., Ashford, England. Spark-arrester | 737,797 | Sept. 1 | 450 | 96, 97 | 106 | 99 |
| Wainwright, Harry S., Ashford, England. Blast-pipe for locomotives | 737,798 | Sept. 1 | 452 | 98 | 106 | 100 |
| Wainwright, Harry S., Ashford, England. Spark-arrester | 737,799 | Sept. 1 | 455 | 98 | 106 | 101 |
| Wainwright, Harry S., Ashford, England. Spark-arrester | 737,800 | Sept. 1 | 456 | 99 | 106 | 101 |
| Wainwright, Harry S., Ashford, England. Spark-arrester | 737,801 | Sept. 1 | 459 | 99, 100 | 106 | 102 |
| Wainwright, Harry S., Ashford, England. Spark-arrester | 737,802 | Sept. 1 | 461 | 101, 102 | 106 | 103 |
| Wainwright, Harry S., Ashford, England. Spark-arrester | 737,803 | Sept. 1 | 464 | 102, 103 | 106 | 104 |
| Wainwright, Henry H., Philadelphia, Pa. Metal-bound curbing | 727,233 | May 5 | 775 | 166 | 104 | 167 |
| Wainwright, John W., Hale, England. Truck for tram-cars or other rolling-stock | 718,551 | Jan. 13 | 1964 | 429 | 102 | 437 |
| Wainwright, William, Winchester, Ill. Whiffletree-hook | 725,183 | Apr. 14 | 1426 | 323 | 103 | 1486 |
| Wais, Christian, Cincinnati, Ohio. Stop mechanism | 745,125 | Nov. 24 | 4496 | 973, 974 | 107 | 1003 |
| Wait, Edwin, Edinborough, Scotland. Apparatus for operating transoms | 721,927 | Mar. 3 | 517 | 113 | 103 | 115 |
| Wait, Jay G., Sturgis, Mich. Fence-post | 732,242 | June 30 | 5068 | 1127 | 104 | 2243 |
| Waite, Charles N. (See Ryon and Waite.) | | | | | | |
| Waite, Fred, Otley, England. Platen printing-machine | 727,502 | May 5 | 1255 | 280 | 104 | 270 |
| Waite, Fred, Otley, England. Label making and printing machine | 746,209 | Dec. 8 | 1648 | 366, 367 | 107 | 1472 |
| Waite, Gilman. (See Washburn, Theodore W., assignor.) | | | | | | |
| Waite, Guy B., Hoboken, N. J. Concrete arch | 721,982 | Mar. 3 | 619 | 138 | 103 | 134 |
| Waite, Guy B., Hoboken, N. J. Extensible centering-support | 724,146 | Mar. 31 | 4685 | 1052 | 103 | 1040 |
| Waite, Guy B., New York, N. Y. Hanger for temporary centering | 736,040 | Aug. 11 | 1917 | 409 | 105 | 1410 |
| Waite, Harry F. (See Waite, Henry E. and H. F.) | | | | | | |
| Waite, Henry E., New York, N. Y. X-ray apparatus for treating diseases | 719,915 | Feb. 3 | 900 | 211 | 102 | 1014 |
| Waite, Henry E. and H. F., New York, N. Y. Static machine | 734,450 | July 21 | 3232 | 761 | 105 | 717 |
| Waite, Henry S., Columbus, Ohio. Telephone-bracket | 743,210 | Dec. 8 | 1650 | 367 | 107 | 1472 |
| Waite, John H., St. Joseph, Mo. Cupboard extension | 748,446 | Dec. 29 | 5820 | 1326 | 107 | 2456 |
| Waite, Mary M., Ipswich, assignor to E. K. Storey, Dalton-in-Furness, England. Covering device for foodstuffs, &c. | 734,148 | July 21 | 2681 | 631 | 105 | 600 |
| Waite, Thomas, Bradford, England. Apparatus for softening, filtering, and purifying water | 721,111 | Feb. 17 | 3160 | 727 | 102 | 1522 |
| Waits, Ernest F., Corinth, Miss. Optometer | 718,293 | Jan. 13 | 1441 | 320 | 102 | 326 |
| Wakefield, Charles C., London, England. Water-gage cock | 743,354 | Nov. 3 | 1051 | 225 | 107 | 224 |
| Wakefield, Edwin A., and G. W. Morse, Mechanic Falls, Me. Trolley-pole | 746,614 | Dec. 8 | 2354 | 541 | 107 | 1626 |
| Wakefield, Ernest, Mount Pleasant, Pa. Tailor's attitude-measure | 744,826 | Nov. 24 | 3923 | 844 | 107 | 884 |
| Wakefield, Nathen S., assignor of forty-five one-hundredths to F. W. Heidel and M. J. Hutchinson, Los Angeles, Cal. Device for regoring shoes | 723,086 | Mar. 17 | 2657 | 599 | 103 | 595 |
| Wakefield, Robert M., Mount Union, Pa. Lap-link | 747,103 | Dec. 15 | 3299 | 751 | 107 | 1862 |
| Wakelee, Justus I. (See Sedgwick and Wakelee.) | | | | | | |
| Wakeman, Rudolph H. (See Bowman, Erasmus R., assignor.) | | | | | | |
| Wakeman, Rufus. (See Meeker, Charles B., assignor.) | | | | | | |
| Walbridge, Henry B., Washington, D. C. Lock | 743,355 | Nov. 3 | 1053 | 225 | 107 | 225 |
| Walburn, Granderson L., Salisbury, Mo. Shipping-crate | 725,898 | Apr. 21 | 2743 | 624 | 103 | 1783 |
| Walch, Robert H. (See Erwood, John, assignor.) | | | | | | |
| Walcutt, Cleveland, Asnières, France. Apparatus for duplicating phonographic sound-records | 733,521 | July 14 | 1478 | 351 | 105 | 329 |
| Wald, David. (See Britsch, Otto C., assignor.) | | | | | | |
| Waldbrook, James, Oakville, Canada. Drive or master wheel divider for harvester-binders | 744,136 | Nov. 17 | 2644 | 564 | 107 | 592 |
| Waldby, Frank E., Pine City, Minn. Washing-machine | 736,803 | Aug. 18 | 3315 | 735 | 105 | 1720 |
| Walden, Frederick E. (See Wright, Edward, assignor.) | | | | | | |
| Walden, Henry. (See Noble and Walden.) | | | | | | |
| Walden, Howard de, and H. Knudsen, London, England. Turbine | 745,268 | Nov. 24 | 4775 | 1043 | 107 | 1060 |
| Walden, Joseph, Orange, N. J. Shoe | 739,956 | Sept. 29 | 4667 | 1048 | 106 | 1065 |
| Walder, Amos, and J. T. Schaffer, assignors of one-third to J. O. Brewster, Rochester, N. Y. Casting cylinders | 724,353 | Mar. 31 | 5097 | 1141 | 103 | 1122 |
| Walder, Ferdinand, Rochelle Park, N. J. Burglar-alarm | 738,963 | Sept. 15 | 2813 | 624 | 106 | 635 |
| Waldman, Jacob, assignor to Ellis & Goltermann, New York, N. Y. Atomizer | 720,863 | Feb. 17 | 2672 | 617 | 102 | 1416 |
| Waldmire, Henry W., Philadelphia, Pa. Glazing system | 723,953 | Mar. 31 | 4292 | 964 | 103 | 962 |
| Waldo, James O. (See Smith, William, assignor.) | | | | | | |
| Waldo, John A., Jr., Reading, Mass. Device for fastening loose-leaf books | 722,061 | Mar. 3 | 750 | 167 | 103 | 162 |
| Waldorf, Joseph W., St. Louis, assignor of one-half to C. C. Craft, Florisant, Mo. Nut-setting and bolt-trimming machine | 741,745 | Oct. 20 | 2607 | 580, 581 | 106 | 1836 |
| Waldron, Frederick A., assignor to Yale & Towne Manufacturing Company, Stamford, Conn. Electrically-driven suspensible hoist | 741,390 | Oct. 13 | 1919 | 424 | 106 | 1676 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Wales, Charles, Detroit, Mich. Adding-machine | 745,539 | Dec. 1 | 418 | 96, 97 | 107 | 1188 |
| Wales, Charles, Detroit, Mich. Correcting mechanism for adding-machines | 745,540 | Dec. 1 | 423 | 98 | 107 | 1188 |
| Wales, Charles, Detroit, Mich. Multiplying mechanism for adding-machines | 745,541 | Dec. 1 | 425 | 99 | 107 | 1188 |
| Wales, Charles, Detroit, Mich. Carrying mechanism for adding-machines | 745,542 | Dec. 1 | 426 | 100, 101 | 107 | 1189 |
| Wales, Charles, Detroit, Mich. Zero-resetting mechanism for adding-machines | 745,543 | Dec. 1 | 430 | 101 | 107 | 1189 |
| Wales, Cornelius M., Guntown, Miss. Hopple | 723,562 | Mar. 24 | 3555 | 795 | 103 | 788 |
| Wales, James P., Memphis, Tenn. Trunk-binder | 726,806 | Apr. 28 | 4456 | 1006 | 103 | 2145 |
| Wales, Samuel S., Munhall, Pa. Safety device for hoists | 721,481 | Feb. 24 | 3890 | 885 | 102 | 1690 |
| Wales, Samuel S., Munhall, Pa. Resistance-box | 723,788 | Mar. 24 | 3949 | 890 | 103 | 871 |
| Wales, Samuel S., Munhall, Pa. Circuit-breaker for hoists | 728,523 | May 19 | 3200 | 709 | 104 | 718 |
| Walk, Rudolph H., assignor of one-half to E. A. Kümmel, Milwaukee, Wis. Display-holder | 719,164 | Jan. 27 | 3133 | 698 | 102 | 706 |
| Walke, William, Joplin, Mo. Explosive-engine | 735,627 | Aug. 4 | 1133 | 240 | 105 | 1222 |
| Walker, A. U. (See Carr and Williams, assignors.) | | | | | | |
| Walker, Albert E., A., and G., Norwood Green, near Halifax, England. Shuttle-changing mechanism for looms | 737,536 | Aug. 25 | 4688 | 1051 | 105 | 2036 |
| Walker, Albert E., A., and G., Norwood Green, near Halifax, England. Weft-replenishing mechanism for looms | 738,644 | Sept. 8 | 2198 | 480, 481 | 106 | 487 |
| Walker, Alexander, assignor to What Cheer Drill & Miners Tool Co., Whatcheer, Iowa. Miner's pick | 733,349 | July 7 | 1163 | 276 | 105 | 245 |
| Walker, Alexander, assignor to What Cheer Drill and Miners Tool Co., Whatcheer, Iowa. Coal-drill support | 733,775 | July 14 | 1918 | 452 | 105 | 421 |
| Walker, Arthur. (See Walker, Albert E., A., and G.) | | | | | | |
| Walker, Benjamin, Jr., Austin, Tex. Water-regulator for steam-boilers | 727,503 | May 5 | 1257 | 281 | 104 | 270 |
| Walker, Benjamin, Detroit, Mich. Transfer decorating | 741,746 | Oct. 20 | 2612 | 581 | 106 | 1837 |
| Walker, Benjamin J., Erie, Pa. Device for burning pulverized coal | 739,957 | Sept. 29 | 4667 | 1049 | 106 | 1065 |
| Walker, Benjamin J., Erie, Pa. Burning pulverized coal | 739,958 | Sept. 29 | 4668 | 1049 | 106 | 1065 |
| Walker, Cecil E., and J. Fitting, Denver, Colo. Metallic framing for plastic partitions and ceilings | 734,781 | July 28 | 3868 | 902 | 105 | 862 |
| Walker, Charles W., Jorgensen, Va. Rein-hold | 744,445 | Nov. 17 | 3237 | 694 | 107 | 722 |
| Walker, Charles W., Bridgeport, Conn., assignor to Yost Writing Machine Company, Ilion, N. Y. Type-writing machine | 720,762 | Feb. 17 | 2512 | 580 | 102 | 1382 |
| Walker, Charles W., Bridgeport, Conn., assignor to Yost Writing Machine Company, Ilion, N. Y. Type-writing machine | 720,763 | Feb. 17 | 2517 | 580 | 102 | 1383 |
| Walker, Charles W., Bridgeport, Conn., assignor to Yost Writing Machine Company, Ilion, N. Y. Type-writing machine | 739,626 | Sept. 22 | 4026 | 898 | 106 | 910 |
| Walker, Edward, Warren, Pa. Ice-cream freezer | 727,504 | May 5 | 1259 | 281, 282 | 104 | 271 |
| Walker, Edward, Warren, Pa. Ice-cream-storage tank | 740,718 | Oct. 6 | 611 | 137 | 106 | 1379 |
| Walker, Edward E. (See Sowden, Albert B., assignor.) | | | | | | |
| Walker, Edwin J., Philadelphia, Pa. Bin | 728,054 | May 12 | 2325 | 518 | 104 | 512 |
| Walker, Elias M., Oatville, Kans. Animal-trap | 726,121 | Apr. 21 | 3119 | 707 | 103 | 1860 |
| Walker, Elias S. and G. B., Benton Harbor, Mich. Time damper mechanism | 724,354 | Mar. 31 | 5098 | 1141 | 103 | 1122 |
| Walker, Elmer L., Weston, assignor of one-half to H. N. Wilson, Lynn, Mass. Indicator | 737,980 | Sept. 1 | 847 | 186 | 106 | 185 |
| Walker, Enos L., St. Louis, Mo. Basket-handle fastener | 729,981 | June 2 | 849 | 189 | 104 | 1301 |
| Walker, Enos L., St. Louis, Mo. Wooden veneer berry-box | 729,982 | June 2 | 850 | 190 | 104 | 1301 |
| Walker, Francis E., Bedford, Iowa. Currency-holder | 742,088 | Oct. 20 | 3334 | 744 | 106 | 1985 |
| Walker, Frank, Los Angeles, Cal. Combined solar and artificial heat water-heater | 735,321 | Aug. 4 | 544 | 111 | 105 | 1097 |
| Walker, Frank J., Savannah, Ga. Cash-check | 737,049 | Aug. 25 | 3766 | 836 | 105 | 1836 |
| Walker, George. (See Walker, Albert E., A., and G.) | | | | | | |
| Walker, George A., Harrison, Okla. Ter. Machine for converting motion | 745,086 | Nov. 24 | 4430 | 958, 959 | 107 | 987 |
| Walker, George D., Orchard, Colo. Combined elevator and dump | 740,609 | Oct. 6 | 447 | 97 | 106 | 1343 |
| Walker, Glenn B. (See Walker, Elias S. and G. B.) | | | | | | |
| Walker, Henry and P. S., and J. Hamer, Charlton, England. Horseshoe | 735,322 | Aug. 4 | 546 | 111 | 105 | 1097 |
| Walker, John, assignor to C. Ashoff Weavers' Supply Company, Philadelphia, Pa. Heddle for looms | 728,055 | May 12 | 2327 | 518 | 104 | 513 |
| Walker, John H., Lexington, Ky. Trolley | 732,144 | June 30 | 4879 | 1085 | 104 | 2204 |
| Walker, John H., Lexington, Ky. Trolley | 732,145 | June 30 | 4880 | 1085 | 104 | 2205 |
| Walker, John H., Lexington, Ky. Lubricator | 732,146 | June 30 | 4883 | 1086 | 104 | 2206 |
| Walker, Louis A., Port Jefferson, N. Y., assignor to C. S. Mitchell, Paterson, N. J. Hook | 719,627 | Feb. 3 | 384 | 88 | 102 | 902 |
| Walker, Milton, Cambridge, Mass. Trolley-guide | 744,446 | Nov. 17 | 3238 | 694 | 107 | 722 |
| Walker, Oakley S., Worcester, Mass. Adjustable bearing-box | 730,808 | June 9 | 2313 | 514 | 104 | 1625 |
| Walker, Oakley S., Worcester, Mass. Grinding-machine | 732,803 | July 7 | 200 | 51 | 105 | 45 |
| Walker, Percy S. (See Walker and Hamer.) | | | | | | |
| Walker, Raymond W., Westboro, Mass. Type-writer | 747,667 | Dec. 22 | 4344 | 981 | 107 | 2109 |
| Walker, Reuben S., Pinehill, Pa. Automatic oiler for mining-cars | 718,029 | Jan. 6 | 975 | 216 | 102 | 210 |
| Walker, Robert, assignor to Bradley & Hubbard Mfg. Co., Meriden, Conn. Shade-holder for electric table-lamps | 723,087 | Mar. 17 | 2658 | 599 | 103 | 595 |
| Walker, Robert J., Holland, Mich. Electric automatic overflow-alarm | 730,181 | June 2 | 1174 | 263 | 104 | 1367 |
| Walker, Robert L., Brooklyn, N. Y. Smokeless and coal-saving furnace | 732,909 | July 7 | 380 | 92 | 105 | 82 |
| Walker, Thomas C., Jr., Denver, Colo. Friction-clutch coupling | 740,719 | Oct. 6 | 613 | 137 | 106 | 1379 |
| Walker, Thomas F. and T. S., Birmingham, England. Electrical ship's-log apparatus | 720,508 | Feb. 10 | 2004 | 460, 461, 462 | 102 | 1262 |
| Walker, Thomas S. (See Walker, Thomas F. and T. S.) | | | | | | |
| Walker, Ward C., Battlecreek, Mich. Binder | 735,847 | Aug. 11 | 1555 | 332, 333 | 105 | 1331 |
| Walker, Ward C., Battlecreek, Mich. Hose-clamp | 747,811 | Dec. 22 | 4610 | 1040 | 107 | 2170 |
| Walker, Warren D., Malone, N. Y. Hub-attaching device | 726,383 | Apr. 28 | 3635 | 824 | 103 | 1982 |
| Walker, William, New York, N. Y. Trousers-hanger | 725,804 | Apr. 21 | 2593 | 588 | 103 | 1750 |
| Walker, William A., assignor of one-half to D. A. Kilham, Beverly, Mass. Stop mechanism | 743,961 | Nov. 10 | 2254 | 485 | 107 | 498 |
| Walker, William S., assignor of one-half to J. F. Crouse, Winston-Salem, N. C. Bedstead-fastening | 736,894 | Aug. 18 | 3480 | 773 | 105 | 1755 |
| Walker, Willis F., Charlestown, W. Va. Construction of walls and partitions for buildings or other structures | 727,234 | May 5 | 776 | 166 | 104 | 168 |
| Walker, Willis F., Charlestown, W. Va. Bridge construction | 737,537 | Aug. 25 | 4689 | 1051 | 105 | 2036 |
| Walkinshaw, D. W., *et al.* (See Bryant, William P., assignor.) | | | | | | |
| Wall, George A., Providence, R. I. Counting mechanism | 738,962 | Sept. 15 | 2811 | 623 | 106 | 635 |
| Wall, George A., Providence, R. I. Bearing-thermostat | 748,240 | Dec. 29 | 5454 | 1243 | 107 | 2376 |
| Wall, George A., Providence, R. I. Thermostat | 748,323 | Dec. 29 | 5593 | 1275 | 107 | 2460 |
| Wall, George H. (See Dewrance and Wall.) | | | | | | |
| Wall, George H., Detroit, assignor to Safety Baggage Handler Company, Manistee, Mich. Baggage-handler | 747,899 | Dec. 22 | 4784 | 1081 | 107 | 2208 |
| Wall, Ormond E., Honolulu, Hawaii. Rack for holding false teeth | 721,528 | Feb. 24 | 3970 | 904 | 102 | 1708 |

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| Name, residence, and invention | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|
| | | | Spec. | Drgs. | Vol. | Page |
| Wall, Osborne, assignor of one-third to R. C. Hughes, New Plymouth, New Zealand. Sash-lock | 721,983 | Mar. 3 | 620 | 138 | 103 | 134 |
| Wallace, Aaron W. (See Parmelee, John H., assignor.) | | | | | | |
| Wallace, Andrew H., Guelph, Canada. Puzzle | 733,886 | July 14 | 2141 | 505 | 105 | 466 |
| Wallace, B. C., *et al.* (See Wilder, Robert E., assignor.) | | | | | | |
| Wallace, Charles S. (See Miller and Wallace.) | | | | | | |
| Wallace, Edwin G., Marshalltown, Iowa. Combined indicator and recorder for marksmen | 727,235 | May 5 | 777 | 166 | 104 | 168 |
| Wallace, Emilus F., Syracuse, N. Y. Letter-box | 745,938 | Dec. 1 | 1146 | 257 | 107 | 1344 |
| Wallace, George K. (See Mohlenhoff, Hermann J., assignor.) | | | | | | |
| Wallace, Ira F., and W. L. Kellogg, Minneapolis, Minn. Exhaust mechanism for locomotives | 718,681 | Jan. 20 | 2212 | 485 | 102 | 502 |
| Wallace, James B., Camden, S. C. Joint for sheet-metal pipes | 720,538 | Feb. 10 | 2083 | 480 | 102 | 1277 |
| Wallace, James C., Denver, Colo. Railway-rail joint | 731,638 | June 23 | 3908 | 870 | 104 | 1987 |
| Wallace, James E., Blackwell, Okla. Ter. Tongue attachment for binders | 747,812 | Dec. 22 | 4611 | 1040 | 107 | 2170 |
| Wallace, John H., The Brake, county of Fife, Scotland. Strap grip or buckle | 734,382 | July 21 | 3112 | 732 | 105 | 692 |
| Wallace, John W., Jersey City, N. J. Fishing-tackle | 720,643 | Feb. 17 | 2311 | 529 | 102 | 1338 |
| Wallace, Levi. (See Chapman, George F., assignor.) | | | | | | |
| Wallace, Stephen W., *et al.* (See Scruggs, Robert C., assignor.) | | | | | | |
| Wallace, William J., assignor to Goldmark and Wallace, New York, N. Y. Brush and making same | 729,458 | May 26 | 4894 | 1084 | 104 | 1087 |
| Wallach, Willy, New York, N. Y. Toilet-brush | 730,497 | June 9 | 1781 | 399 | 104 | 1510 |
| Wallenstein, Paul, Venus, Nebr. Machine for turning down spindles for wagon-axles | 734,639 | July 28 | 3579 | 838 | 105 | 805 |
| Wallenthin, Walfrid, assignor to Bates & Bacon, Attleboro, Mass. Fastener | 739,522 | Sept. 22 | 3828 | 857 | 106 | 868 |
| Waller, Jacob M. (See Jordan and Waller.) | | | | | | |
| Waller, Peter A., Kewanee, Ill. Husking-pin | 721,762 | Mar. 3 | 183 | 42 | 103 | 40 |
| Waller, Peter A., assignor to Boss Manufacturing Company, Kewanee, Ill. Corn-husking device | 728,429 | May 19 | 3030 | 666 | 104 | 683 |
| Walley, Herbert H., North Adams, Mass. Cuff-holder | 744,137 | Nov. 17 | 2645 | 564 | 107 | 592 |
| Walley, James J., assignor of one-half to J. A. Heffilfinger, Anoka, Minn. Rotary steam-engine | 746,420 | Dec. 8 | 2026 | 463<br>464 | 107 | 1551 |
| Wallgren, Bengt, assignor of two-thirds to A. C. Van Roden and G. Van Wagoner, East Rutherford, N. J. Fire-kindler | 747,282 | Dec. 15 | 3645 | 823 | 107 | 1936 |
| Wallich, Charles A. N., Bexhill, England. Calculating apparatus | 734,288 | July 21 | 2952 | 689 | 105 | 659 |
| Wallis, George L., Mastodon, assignor of one-half to C. Pressler, Pleasantgrove, Miss. Cultivator | 723,190 | Mar. 17 | 2862 | 642 | 103 | 637 |
| Wallis, L. R. (See Patterson, Ralph J., assignor.) | | | | | | |
| Wallis, William H. (See Cardella, Alexander S., assignor.) | | | | | | |
| Wallis, William P., Jr., and G. G. Straub, Williamsport, Pa. Valve | 727,236 | May 5 | 779 | 167 | 104 | 168 |
| Wallmann Engine Company. (See Wallmann, Henning F., assignor.) | | | | | | |
| Wallmann, Henning F., Chicago, Ill., assignor to Wallmann Engine Company. Mixing device for explosive-engines | 718,552 | Jan. 13 | 1965 | 430<br>431 | 102 | 438 |
| Wallmann, Henning F., Chicago, Ill., assignor to Wallmann Engine Company. Means for vaporizing water | 724,763 | Apr. 7 | 639 | 150<br>151 | 103 | 1305 |
| Wallmann, Henning F., Chicago, Ill., assignor to Wallmann Engine Company. Internal-combustion engine | 729,983 | June 2 | 851 | 190 | 104 | 1301 |
| Wallmann, Henning F., Chicago, Ill., assignor to Wallmann Engine Company. Compound internal-combustion engine | 729,984 | June 2 | 855 | 191 | 104 | 1302 |
| Wallmann, Henning F., Chicago, Ill., assignor to Wallmann Engine Company. Internal-combustion engine | 733,350 | July 7 | 1165 | 276 | 105 | 245 |
| Wallmann, Henning F., Chicago, Ill., assignor to Wallmann Engine Company. Mixer for gas-engines | 743,780 | Nov. 10 | 1928 | 408 | 107 | 428 |
| Wallner, George, Chicago, Ill. Bookbinding-machine | 732,910 | July 7 | 381 | 92.93 | 105 | 83 |
| Walls, Marion C. (See Page, Huntington, and Walls.) | | | | | | |
| Walls, Walter, *et al.* (See Moloney, John, Jr., assignor.) | | | | | | |
| Wally, Ferdinand, Rafing, near Pulkau, Austria-Hungary. After-pressing device for presses | 723,506 | Mar. 24 | 3467 | 776 | 103 | 770 |
| Walmsley, Richard. (See Ford and Walmsley.) | | | | | | |
| Walsh, Arthur Q., New York, N. Y. Shaving brush and soap holder | 723,563 | Mar. 24 | 3556 | 795 | 103 | 788 |
| Walsh, Edward, Jr. (See Hartung, Charles C., assignor.) | | | | | | |
| Walsh, Elijah A. (See Walsh, Jerome and E. A.) | | | | | | |
| Walsh, Hiram H., Newburgh, N. Y. Brick-drying apparatus | 732,978 | July 7 | 491 | 122 | 105 | 106 |
| Walsh, Jerome and E. A., Walshville, N. Y. Means for burning bricks or the like | 747,283 | Dec. 15 | 3646 | 823<br>824 | 107 | 1936 |
| Walsh, John, *et al.* (See Bryar, George, assignor.) | | | | | | |
| Walsh, John, Washington, D. C. Sectional plastic step | 744,887 | Nov. 24 | 4021 | 867 | 107 | 905 |
| Walsh, John E., Washington, D. C. Locking system for mail-boxes | 718,553 | Jan. 13 | 1969 | 431 | 102 | 438 |
| Walsh, John J. (See Fuller and Walsh.) | | | | | | |
| Walsh, John W., *et al.* (See Coenen, Henry J., assignor.) | | | | | | |
| Walsh, Ralph, Washington, D. C. Hypodermic syringe | 742,762 | Oct. 27 | 4542 | 1029 | 106 | 2254 |
| Walsh, Robert, Anaconda, Colo. Lantern | 719,916 | Feb. 3 | 901 | 211 | 102 | 1014 |
| Walsh, Thomas D., *et al.* (See Mackenzie, Herbert, assignor.) | | | | | | |
| Walsh, William J., Hamilton, Canada, assignor, by mesne assignments, to Adjustable Book Bracket Company, New York, N. Y. Adjustable swivel swing book-holder bracket. (Reissue) | 12,076 | Jan. 27 | 3608 | 807 | 102 | 808 |
| Walt, Philip H., Philadelphia, Pa. Embroidery-frame | 737,804 | Sept. 1 | 466 | 103 | 106 | 105 |
| Walter, Adolph E., Monroeville, Ohio. Fly-screen | 730,809 | June 9 | 2315 | 514 | 104 | 1625 |
| Walter Baker and Company. (See Brooks, Williams B., Jr., assignor.) | | | | | | |
| Walter, Charles R., assignor to J. B. Foote and Company, Fredericktown, Ohio. Saw clamp or vise | 723,789 | Mar. 24 | 3950 | 891 | 103 | 872 |
| Walter, Christian P., Chicago, Ill. Closure for the ends of tubing employed in metal beds | 732,804 | July 7 | 203 | 52 | 105 | 46 |
| Walter, Clarence R., San Francisco, Cal. Shipping or traveling case | 728,524 | May 19 | 3202 | 710<br>711 | 104 | 719 |
| Walter, Edward, assignor of one-half to W. C. Gaston, Keytesville, Mo. Buggy-top attachment | 719,538 | Feb. 3 | 222 | 52 | 102 | 870 |
| Walter, Edwin L., Scranton, Pa. Faucet | 731,639 | June 23 | 3910 | 871 | 104 | 1987 |
| Walter, Edwin L., Scranton, Pa. Screw and driver therefor | 748,241 | Dec. 29 | 5455 | 1243 | 107 | 2376 |
| Walter, Frank J., Chicago, Ill., assignor to Benton & Walter Manufacturing Company. Vest-pocket blow-torch | 732,805 | July 7 | 205 | 52 | 105 | 46 |
| Walter, Frederick A., Philadelphia, Pa. Sealed folding hollow body | 720,864 | Feb. 17 | 2674 | 617<br>618 | 102 | 1416 |
| Walter, Frederick G., Almond, Wis. Flash-lamp | 744,652 | Nov. 17 | 3566 | 769 | 107 | 789 |
| Walter, Fredrick C. (See Schmoldt and Walter.) | | | | | | |
| Walter, Gustav E. (See Parker, George H., assignor.) | | | | | | |
| Walter, Gustave E., New York, N. Y., assignor to Asbestolith Company. Fire-resisting door | 734,205 | July 21 | 2778 | 652 | 105 | 620 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Des. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Walter, Harry L. (See Currie, James E., Jr., assignor.) | | | | | | |
| Walter, John, assignor to Jameson Manufacturing Co., Limited, Detroit, Mich. Making sculptural reliefs, &c | 718,890 | Jan. 20 | 2601 | 581 | 102 | 583 |
| Walter, John C., Athena, Oreg. Weed-cutting machine | 736,320 | Aug. 11 | 2400 | 523 | 105 | 1515 |
| Walter, Joseph J., Wapakoneta, Ohio. Vault construction | 721,260 | Feb. 24 | 3497 | 795 | 102 | 1609 |
| Walter, Louis H., London, and J. A. Ewing, Cambridge, England. Detection of electrical oscillations | 741,570 | Oct. 13 | 2273 | 507, 508 | 106 | 1751 |
| Walter, Samuel, Dallas City, Ill. Washing-machine | 722,168 | Mar. 3 | 936 | 207 | 103 | 199 |
| Walter, Wilhelm, and W. Künstner, Prague, Austria-Hungary. Button or fastener | 733,443 | July 14 | 1342 | 316 | 105 | 301 |
| Walter, William, Shelton, Wash. Means for sealing jars | 726,807 | Apr. 28 | 4456 | 1006 | 103 | 2145 |
| Walter, William H., assignor to F. G. Kammerer, Chicago, Ill. Coin-controlled device | 737,304 | Aug. 25 | 4243 | 944, 945 | 105 | 1936 |
| Walter, William L., Port Huron, assignor of one-half to M. M. Richardson and S. W. Smith, Pontiac, Mich. Wave-motor | 741,084 | Oct. 13 | 1288 | 294, 295 | 106 | 1542 |
| Walter, William W. (See Greer, John, assignor.) | | | | | | |
| Walters, Charles W., Atlanta, Ga. Box-lid fastener | 744,138 | Nov. 17 | 2646 | 564 | 107 | 593 |
| Walters, George C., Philadelphia, Pa. Metallic packing | 722,269 | Mar. 10 | 1156 | 255 | 103 | 261 |
| Walters, George W., Elliott, Pa. Metallic mat | 728,525 | May 19 | 3205 | 711 | 104 | 719 |
| Walters, Joseph, Sumter, S. C. Electroplating apparatus | 721,402 | Feb. 24 | 3745 | 852 | 102 | 1661 |
| Walters, William H., *et al.* (See Pagenhart, Charles L., assignor.) | | | | | | |
| Walther, Edward, Washington, Iowa. Valve | 732,669 | June 30 | 5882 | 1305 | 104 | 2415 |
| Walther, Edward, Davenport, Iowa. Carbureter | 742,533 | Oct. 27 | 4159 | 934 | 106 | 2170 |
| Walther, Gustav. (See Salzer and Walther.) | | | | | | |
| Walther, Hermann, New York, N. Y. Tool-heater | 736,321 | Aug. 11 | 2401 | 524 | 105 | 1515 |
| Walther, Paul. (See Roehm and Walther.) | | | | | | |
| Walther, Robert E., Werdau, Germany. Incandescent lamp for liquid hydrocarbons | 745,697 | Dec. 1 | 691 | 158 | 107 | 1245 |
| Waltoff, Dayve B. de, New York, N. Y. Dispensing apparatus | 730,989 | June 16 | 2672 | 595 | 104 | 1719 |
| Walton, Druid A., Louisville, Ky. Steam-generator | 738,964 | Sept. 15 | 2814 | 624 | 106 | 636 |
| Walton, John, *et al.* (See Bate, Frederic G., assignor.) | | | | | | |
| Walton, Samuel T., New York, N. Y. Reversible smoke-stack | 731,248 | June 16 | 3146 | 699 | 104 | 1813 |
| Waltz, Dora A., Columbus, Ohio, and C. W. Dailey, Ann Arbor, Mich. Bed-pan | 747,517 | Dec. 22 | 4069 | 915 | 107 | 2047 |
| Walz, Charles J., assignor to West Disinfecting Company, New York, N. Y. Disinfecting apparatus | 729,459 | May 26 | 4896 | 1084 | 104 | 1087 |
| Walz, John E., Attica, Ohio. Curtain-pole | 735,180 | Aug. 4 | 290 | 56 | 105 | 1043 |
| Walz, Michael J., assignor of one-half to J. A. Deindoerfer, Defiance, Ohio. Nut-lock | 741,747 | Oct. 20 | 2613 | 581 | 106 | 1837 |
| Wamsley, Charles, assignor of one-half to G. A. Browne, Tacoma, Wash. Register | 748,324 | Dec. 29 | 5594 | 1275 | 107 | 2406 |
| Wandless, Frank W. (See McLennan and Wandless.) | | | | | | |
| Wands, John C., St. Louis, Mo. Bolster | 721,131 | Feb. 17 | 3226 | 738 | 102 | 1540 |
| Wands, John C., St. Louis, Mo. Side bearing. (Reissue) | 12,093 | Mar. 3 | 1014 | 223 | 103 | 216 |
| Wands, John C., St. Louis, Mo. Bolster | 724,633 | Apr. 7 | 402 | 95 | 103 | 1255 |
| Wands, John C., St. Louis, Mo. Journal brass and saddle | 731,724 | June 23 | 4054 | 905 | 104 | 2016 |
| Wanger, Linford R. (See Crowell, Wanger, and Wright.) | | | | | | |
| Wann, John M., assignor of one-half to S. L. Armstrong, Pocahontas, Ark. Journal-box | 739,366 | Sept. 22 | 3528 | 789 | 106 | 803 |
| Wannenwetsch, Charles H. A. (See Kleinschmidt and Wannenwetsch.) | | | | | | |
| Wansbrough, Gilbert D., London, England. Construction of roadways, sidewalks, &c | 728,056 | May 12 | 2228 | 518 | 104 | 513 |
| Wanser, Frank, *et al.* (See Hardinge, George F., assignor.) | | | | | | |
| Wantling, Isaac, assignor to Wantling's Favorite Coal Drill Company, Peoria, Ill. Anchoring device for drilling-machines | 722,778 | Mar. 17 | 2112 | 473 | 103 | 482 |
| Wantling, Isaac, assignor to Wantling's Favorite Coal Drill Company, Peoria, Ill. Coal or rock drill | 740,720 | Oct. 6 | 615 | 137, 138 | 106 | 1379 |
| Wantling's Favorite Coal Drill Company. (See Wantling, Isaac, assignor.) | | | | | | |
| Wantz, Julius B., Chicago, Ill., assignor to Victor Electric Company. Ear-pump | 728,526 | May 19 | 3206 | 711, 712 | 104 | 719 |
| Wantz, Julius B., Chicago, Ill., assignor to Victor Electric Company. Friction-gear for electric motors | 732,386 | June 30 | 5350 | 1185 | 104 | 2302 |
| Wantz, Julius B., Chicago, Ill., assignor to Victor Electric Company. Dental engine | 732,387 | June 30 | 5351 | 1185 | 104 | 2303 |
| Wantz, Julius B., Chicago, Ill., assignor to Victor Electric Company. Massaging implement | 742,534 | Oct. 27 | 4161 | 935 | 106 | 2170 |
| Wappler, Reinhold H., New York, N. Y. Endoscope or other optical instrument | 723,790 | Mar. 24 | 3951 | 891 | 103 | 872 |
| Warbritton, Felix, Attica, Ind. Washing-machine | 722,169 | Mar. 3 | 938 | 208 | 103 | 199 |
| Warburton, Edward A., Philadelphia, Pa. Tool-holder | 739,750 | Sept. 22 | 4248 | 951 | 106 | 960 |
| Ward, Arthur D., *et al.* (See Hachmann, Frederick, assignor.) | | | | | | |
| Ward Corby Company. (See Corby, William S. and C. I., assignors.) | | | | | | |
| Ward, Daniel, assignor of one-half to W. J. Shannon, Peoria, Ill. Fire-escape | 727,237 | May 5 | 780 | 167 | 104 | 169 |
| Ward, Daniel O., Oak Park, assignor to Ward Railway Supply Co., Chicago, Ill. Railway-tie plate | 727,037 | May 5 | 427 | 89, 90 | 104 | 93 |
| Ward, Dell, and J. R. Taylor, Grand Rapids, Mich. Flash-light gas-burner | 735,002 | July 28 | 4282 | 996 | 105 | 949 |
| Ward, Edward, Mayville, Wis. Steam-boiler | 721,482 | Feb. 24 | 3891 | 885 | 102 | 1691 |
| Ward, Edward A., and W. S. Young, assignors to Mid-Air Exhibition and Advertising Company, New York, N. Y. Aerial advertising apparatus | 739,127 | Sept. 15 | 3106 | 687 | 106 | 696 |
| Ward, Edward F., Atlanta, Ga. Egg-case | 747,518 | Dec. 22 | 4070 | 915 | 107 | 2048 |
| Ward, Edward S., San Jose, Cal. Reversible rotary engine | 744,447 | Nov. 17 | 3239 | 694 | 107 | 723 |
| Ward, Francis E., Cheltenham, England. Trolley-pole reverser for electric tramways | 721,529 | Feb. 24 | 3971 | 904 | 102 | 1709 |
| Ward, Frank A., and A. R. Selden, Rochester, N. Y. Supporting device for incandescent mantles | 733,522 | July 14 | 1479 | 351 | 105 | 330 |
| Ward, Frank D. (See Stearns and Ward.) | | | | | | |
| Ward, George R., New York, N. Y., assignor to C. F. Coburn, Boston, Mass. Packaging-machine | 741,748 | Oct. 20 | 2615 | 581, 582, 583, 584, 585 | 106 | 1838 |
| Ward, George R., New York, N. Y., assignor, by mesne assignments, to Union Paper Bag Machine Company, Philadelphia, Pa. Paper-bag machine | 744,947 | Nov. 24 | 4139 | 888, 889, 890, 891, 892 | 107 | 927 |
| Ward, George R., New York, N. Y., assignor, by mesne assignments, to Union Paper Bag Machine Company, Philadelphia, Pa. Paper-bag machine | 744,948 | Nov. 24 | 4135 | 892, 893, 894 | 107 | 928 |
| Ward, Gilbert C., Sr. (See Younghusband, Samuel S., assignor.) | | | | | | |
| Ward, Harold H., Boreham Wood, England. Time-controlled gas-cock | 732,243 | June 30 | 5070 | 1127, 1128 | 104 | 2244 |
| Ward, John S. (See Ivor and Ward.) | | | | | | |
| Ward, Lawrence E., Allegheny, Pa. Attachment for metal-planers | 725,805 | Apr. 21 | 2594 | 589 | 103 | 1750 |
| Ward, Mary F., Providence, R. I. Artificial fuel | 732,979 | July 7 | 493 | ..... | 105 | 106 |
| Ward, Philip E., and S. Harris, Kingston, Canada. Acetylene-gas generator | 742,935 | Nov. 3 | 202 | 46 | 107 | 44 |

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| Ward, R. A., *et al.* (See Nance, Turner H., assignor.) | | | | | | |
| Ward Railway Supply Co. (See Ward, Daniel O., assignor.) | | | | | | |
| Ward, Robert H., Mohawk, N. Y. Scale for fish-poles | 735,003 | July 28 | 4283 | 996 | 105 | 949 |
| Ward, Stephen S., Napa, assignor of two-thirds to W. C. Hewitt and C. Herrmann, Fernando, Cal. Foldable fruit-ladder | 736,804 | Aug. 18 | 3316 | 735 | 105 | 1720 |
| Ward, William L., Watauga Falls, N. C. Stirrup | 744,653 | Nov. 17 | 3568 | 769 | 107 | 789 |
| Ward, William S., assignor to H. D. Smith and Company, Plantsville, Conn. Carpenter's chisel | 718,040 | Jan. 6 | 975 | 217 | 102 | 210 |
| Ward, William S., assignor to H. D. Smith and Company, Plantsville, Conn. Screwdriver | 737,179 | Aug. 25 | 4001 | 887 | 105 | 1885 |
| Ward, William S., assignor to H. D. Smith and Company, Plantsville, Conn. Trowel | 745,544 | Dec. 1 | 433 | 102 | 107 | 1190 |
| Warden, James L. (See Hauck and Warden.) | | | | | | |
| Warden, William F., Akron, Ohio. Oil-filter | 740,957 | Oct. 6 | 1050 | 239 | 106 | 1471 |
| Warden, William F., Akron, Ohio. Exhaust-head | 745,939 | Dec. 1 | 1147 | 257 | 107 | 1344 |
| Warder, Bushnell & Glessner Company. (See Worcester, Samuel A., assignor.) | | | | | | |
| Wardle, William W. (See Keith and Wardle.) | | | | | | |
| Wardroper, David L., Atlanta, Ga. Fountain-pen | 735,004 | July 28 | 4284 | 997 | 105 | 949 |
| Wardwell, Olin N., Baldwinsville, Mass., and H. C. White, assignors to White Mop Wringer Company, Jamaica, Vt. Mop-wringer | 724,634 | Apr. 7 | 403 | 96 | 103 | 1256 |
| Wardwell, Simon W., Providence, R. I., assignor to Universal Winding Company, Portland, Me. Thread-unroller | 724,975 | Apr. 7 | 1029 | 236 | 103 | 1388 |
| Wardwell, Simon W., Providence, R. I., assignor to Universal Winding Company, Portland, Me. Bobbin-holder | 737,050 | Aug. 25 | 3767 | 837 | 105 | 1837 |
| Wardwell, Simon W., Providence, R. I., assignor to Universal Winding Company, Portland, Me. Winding-machine | 739,796 | Sept. 22 | 4336 | 971<br>972<br>973 | 106 | 979 |
| Wardwell, Simon W., Providence, R. I., assignor to Universal Winding Company, Portland, Me. Winding-machine | 740,958 | Oct. 6 | 1052 | 240 | 106 | 1471 |
| Ware, Henry, Springville, N. Y. Apparatus for unloading and distributing steel rails | 735,005 | July 28 | 4285 | 997 | 105 | 949 |
| Ware, Henry M., Lexington, Ky. Valve | 719,539 | Feb. 3 | 224 | 52 | 102 | 870 |
| Ware, Joseph L., St. Paul, Minn. Manufacturing vises | 745,746 | Dec. 1 | 769 | 176 | 107 | 1262 |
| Ware, Samuel, Genesee, Idaho. Gate | 742,763 | Oct. 27 | 4543 | 1029 | 106 | 2254 |
| Ware, Walter F., Camden, N. J. Rubber nipple for nursing-bottles | 726,122 | Apr. 21 | 3120 | 707 | 103 | 1861 |
| Wareham, George W., Pittsburg, Pa. Mattress-filler | 717,955 | Jan. 6 | 815 | 185 | 102 | 175 |
| Warhurst, James, Jr. (See Smith and Warhurst.) | | | | | | |
| Waring, Arthur B., Yonkers, N. Y. Hat-body forming machine | 723,954 | Mar. 31 | 4293 | 964 | 103 | 962 |
| Waring, Arthur B., Yonkers, N. Y. Hat-blocking machine | 724,404 | Mar. 31 | 5205 | 1167<br>1168 | 103 | 1146 |
| Waring, Arthur B., Yonkers, N. Y. Machine for forming napped bats for hat-bodies | 732,475 | June 30 | 5516 | 1223 | 104 | 2335 |
| Waring, Bert B., assignor of two-thirds to P. F. Arney, Albion, Iowa. Tape-holding attachment for lead-pencils | 725,383 | Apr. 14 | 1779 | 399 | 103 | 1561 |
| Waring, Edward M., Brooklyn, N. Y. Cloth-cutting machine | 735,848 | Aug. 11 | 1559 | 333 | 105 | 1332 |
| Waring Hat Manufacturing Company. (See Leonard, John, assignor.) | | | | | | |
| Waring, John B., East Orange, N. J., assignor, by mesne assignments, to Waring Patents Company, New York, N. Y. Valve | 737,681 | Sept. 1 | 223 | 48 | 106 | 51 |
| Waring, John B., East Orange, N. J., assignor, by mesne assignments, to Waring Patents Company, New York, N. Y. Reducing-valve | 737,682 | Sept. 1 | 226 | 48, 49 | 106 | 52 |
| Waring, John B., East Orange, N. J., assignor, by mesne assignments, to Waring Patents Company, New York, N. Y. Valve | 740,494 | Oct. 6 | 216 | 43 | 106 | 1292 |
| Waring, John B., East Orange, N. J., assignor, by mesne assignments, to Waring Patents Company, New York, N. Y. Reducing-valve | 740,495 | Oct. 6 | 218 | 43 | 106 | 1292 |
| Waring Patents Company. (See Waring, John B., assignor.) | | | | | | |
| Waring, Pierre C., *et al.* (See Marshall, John, assignor.) | | | | | | |
| Waring, William G., Tyrone, Pa. Extracting zinc | 718,554 | Jan. 13 | 1971 | 431 | 102 | 438 |
| Waring, William G., Tyrone, Pa. Producing pure white pigment | 718,555 | Jan. 13 | 1976 | 431 | 102 | 439 |
| Waring, William G., Tyrone, Pa. Making pure hydrogen sulfid from furnace-gases | 718,556 | Jan. 13 | 1978 | 432 | 102 | 440 |
| Wark, J. F. H. (See Booth, James, assignor.) | | | | | | |
| Warman, John I., and C. Winter, assignors to J. Heinsfurter, Chicago, Ill. Coin-receptacle | 721,262 | Feb. 24 | 3499 | 795<br>796 | 102 | 1609 |
| Warne, Frank H., Chicago, Ill. Automatic gate attachment | 736,568 | Aug. 18 | 2848 | 623<br>624 | 105 | 1625 |
| Warner, Alonzo A. (See Garrigus and Warner.) | | | | | | |
| Warner, Arthur P., Chicago, Ill. Means for controlling the speed of electric motors | 743,601 | Nov. 10 | 1613 | 337<br>338 | 107 | 361 |
| Warner, Arthur P., Chicago, Ill., and C. H. Warner, Beloit, Wis. Magnetic tachometer | 745,468 | Dec. 1 | 297 | 71 | 107 | 1162 |
| Warner, Charles E. and E. L., Waverly, Kans. Machine for making wire fences | 746,765 | Dec. 15 | 2038 | 607<br>608<br>609 | 107 | 1709 |
| Warner, Charles H. (See Warner, Arthur P. and C. H.) | | | | | | |
| Warner, Charles W. (See Campbell, Andrew C., assignor.) | | | | | | |
| Warner, Daniel, Bronson, Mich. Gate | 725,806 | Apr. 21 | 2596 | 589<br>590 | 103 | 1750 |
| Warner, Edward O., assignor to Latrobe Steel & Coupler Company, Philadelphia, Pa. Coupling | 734,782 | July 28 | 3870 | 902 | 105 | 862 |
| Warner Electric Company. (See Warner, Thomas W., assignor.) | | | | | | |
| Warner Electric Company. (See Warner, William F., assignor.) (Reissue.) | | | | | | |
| Warner, Ernest P., assignor to Western Electric Company, Chicago, Ill. Circuit-breaker | 736,041 | Aug. 11 | 1919 | 409<br>410 | 105 | 1410 |
| Warner, Eugene L. (See Warner, Charles E. and E. L.) | | | | | | |
| Warner, Francis D. (See Pratt, Allison A., assignor.) | | | | | | |
| Warner, Frederick E., assignor to Waterbury Machine Company, Waterbury, Conn. Press | 747,900 | Dec. 22 | 4785 | 1081 | 107 | 2209 |
| Warner, Frederick W., Montreal, Canada. Carbureter for carbureting-lamps | 737,683 | Sept. 1 | 230 | 49 | 106 | 53 |
| Warner, Henry H., Tacoma, Wash. Switch stand and lock | 740,788 | Oct. 6 | 766 | 173 | 106 | 1409 |
| Warner, Henry H., and G. H. Gilman, Tacoma, Wash. Wrecking supply-car | 734,021 | July 21 | 2427 | 568 | 105 | 546 |
| Warner, Hugh L., Dayton, Ohio. Compensating gearing | 732,327 | June 30 | 5216 | 1159 | 104 | 2274 |
| Warner, Hugh L., assignor to Dayton Motor Vehicle Co., Dayton, Ohio. Differential gearing | 730,421 | June 9 | 1627 | 365 | 104 | 1476 |
| Warner, Hugh L., assignor to G. N. Bierce, Dayton, Ohio. Running-gear for vehicles | 730,991 | June 16 | 2676 | 596 | 104 | 1720 |
| Warner, Isaac M., assignor to F. C. Boise, Union City, Mich. Wire-fence stretcher | 723,221 | Mar. 17 | 2910 | 652 | 103 | 646 |
| Warner, Isaac M., assignor to F. C. Boise, Union City, Mich. Wire-fence stretcher | 728,057 | May 12 | 2329 | 519 | 104 | 513 |
| Warner, Isaac M., assignor to F. C. Boise, Union City, Mich. Fence-post | 736,322 | Aug. 11 | 2402 | 524 | 105 | 1515 |
| Warner, Isaac M., assignor to F. C. Boise, Union City, Mich. Wire-fence stretcher | 736,323 | Aug. 11 | 2404 | 524 | 105 | 1515 |
| Warner, Isaac M., assignor to F. C. Boise, Union City, Mich. Wire-fence stretcher | 745,979 | Dec. 1 | 1222 | 275 | 107 | 1361 |
| Warner, Isaac M., Union City, assignor to himself, J. W. McCausey, L. S. Parsons, A. J. Boyer, and W. O. Hughart, Jr., Grand Rapids, Mich. Railway-tie | 747,668 | Dec. 22 | 4346 | 981 | 107 | 2110 |

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|---|---|---|---|---|---|---|
| Warner, Jason T., assignor of one-half to M. J. Burke, New Haven, Conn. Boiler-flue cutter | 729,109 | May 26 | 4289 | 948 | 104 | 958 |
| Warner Silver Manufacturing Company. (See Benziger, Rufus, assignor.) | | | | | | |
| Warner and Swasey Company. (See Fecker, Gottlieb, assignor.) | | | | | | |
| Warner & Swasey Company. (See Swasey, Ambrose, assignor.) | | | | | | |
| Warner, Thomas S., Frankfort, Kans., assignor to Sattley Manufacturing Company, Springfield, Ill. Lister-cultivator | 744,699 | Nov. 17 | 3690 | 796 | 107 | 819 |
| Warner, Thomas W., assignor to Warner Electric Company, Muncie, Ind. Pole-changer. | 739,128 | Sept. 15 | 3108 | 687, 688 | 106 | 696 |
| Warner, Walter E., Brooklyn, N. Y. Garment | 733,770 | July 14 | 1920 | 452 | 105 | 422 |
| Warner, William F., assignor to Warner Electric Company, Muncie, Ind. Pole-changer. (Reissue) | 12,162 | Oct. 13 | 2347 | 525, 526 | 106 | 1766 |
| Warner, William H., Jr., Allegan, Mich. Folding coop for poultry | 744,827 | Nov. 24 | 3925 | 844 | 107 | 884 |
| Warnica Company. (See La May, Arthur C., assignor.) | | | | | | |
| Warnock, Amos W., Boston, Mass. Pipe-cutter | 729,816 | June 2 | 545 | 120 | 104 | 1240 |
| Warnock, Harry R. (See Edwards, Frank H., assignor.) | | | | | | |
| Warr, William, Staleybridge, England. Rendering textile material non-inflammable | 723,088 | Mar. 17 | 2659 | ..... | 103 | 595 |
| Warren, Ambrose G., assignor of one-half to J. W. Paxson Company, Philadelphia, Pa. Washer for sand-blast apparatus | 719,395 | Jan. 27 | 3563 | 796 | 102 | 800 |
| Warren, Benjamin H. (See Cheney, Walter L., assignor.) | | | | | | |
| Warren Brothers Company. (See Ash, Horace W., assignor.) | | | | | | |
| Warren, Charles, assignor to Bell Organ and Piano Company, Limited, Guelph, Canada. Motor for self-playing organs | 737,180 | Aug. 25 | 4002 | 887, 888 | 105 | 1885 |
| Warren, Charles, assignor to Bell Organ and Piano Company, Limited, Guelph, Canada. Piano-player | 743,781 | Nov. 10 | 1931 | 408, 409 | 107 | 428 |
| Warren, Charles A. (See Carter, John W., assignor.) | | | | | | |
| Warren, Charles E., Los Angeles, Cal. Mechanical device for heating bakers' ovens with crude petroleum | 727,238 | May 5 | 782 | 167 | 104 | 169 |
| Warren & Company, S. D. (See Gore, Frederic E., assignor.) | | | | | | |
| Warren, Edward K., Threeoaks, Mich. Machine for manufacturing stiffening material | 739,461 | Sept. 22 | 3729 | 830 | 106 | 846 |
| Warren, Edward K., assignor to Warren Featherbone Company, Threeoaks, Mich. Stiffening cord or tape | 739,460 | Sept. 22 | 3727 | 830 | 106 | 846 |
| Warren Featherbone Company. (See Warren, Edward K., assignor.) | | | | | | |
| Warren, Ford C. (See Maranville, Egbert L., assignor.) | | | | | | |
| Warren Foundry and Machine Company. (See Ingham, Poulson, and Moore, assignors.) | | | | | | |
| Warren, Frank H. and W. C., Chicago, Ill. Paste-bucket and stand | 717,643 | Jan. 6 | 212 | 53 | 102 | 46 |
| Warren, Frederick J., Newton, Mass. Pavement | 727,505 | May 5 | 1261 | 282 | 104 | 272 |
| Warren, Frederick J., Newton, Mass. Asphaltum and its manufacture | 727,506 | May 5 | 1263 | ..... | 104 | 272 |
| Warren, Frederick J., Newton, Mass. Asphalt composition and its manufacture | 727,507 | May 5 | 1265 | ..... | 104 | 272 |
| Warren, Frederick J., Newton, Mass. Pavement | 727,508 | May 5 | 1266 | 282 | 104 | 272 |
| Warren, Frederick J., Newton, Mass. Constructing and laying street-pavements or roadways | 727,509 | May 5 | 1267 | ..... | 104 | 273 |
| Warren, Frederick J., Newton, Mass. Street sheet pavement or roadway | 727,510 | May 5 | 1271 | 282 | 104 | 273 |
| Warren, Frederick J., Newton, Mass. Street sheet pavement or roadway | 727,511 | May 5 | 1273 | 283 | 104 | 274 |
| Warren, Frederick J., Newton, Mass. Renewal of old street-pavements | 727,512 | May 5 | 1275 | 283 | 104 | 275 |
| Warren, Frederick J., Newton, Mass. Asphalt pavement | 738,965 | Sept. 15 | 2815 | ..... | 106 | 636 |
| Warren, Frederick J., Newton, Mass. Manufacture of coal-tar composition and pitches | 738,966 | Sept. 15 | 2817 | ..... | 106 | 636 |
| Warren, George H., and S. Fontain, Minneapolis, Minn. Grain-storage tank | 741,600 | Oct. 13 | 2329 | 522 | 106 | 1763 |
| Warren, George M., Newton, Mass. Spinning-ring | 729,708 | June 2 | 321 | 74 | 104 | 1195 |
| Warren, Haskell J., *et al.* (See Lemle, Jacob, assignor.) | | | | | | |
| Warren, Henry E., Newton, assignor to Lombard Governor Company, Boston, Mass. Speed-regulator | 742,106 | Oct. 20 | 3363 | 751 | 106 | 1991 |
| Warren, Herbert A., Woburn, assignor to Divinell-Wright Company, Boston, Mass. Display-cabinet | 737,684 | Sept. 1 | 231 | 49 | 106 | 53 |
| Warren, Howard S., Everett, and G. A. Campbell, Newton, Mass., assignors to American Telephone and Telegraph Company. Loaded electric circuit | 729,709 | June 2 | 322 | 74,75 | 104 | 1195 |
| Warren, John D., assignor of one-half to E. Munsell & Co., New York, N. Y. Mica lamp-chimney | 744,828 | Nov. 24 | 3926 | 844 | 107 | 884 |
| Warren, John E. (See Fassett and Warren.) | | | | | | |
| Warren, Lillie E., New York, N. Y. Means for teaching reading of the facial expressions which occur in speaking | 726,484 | Apr. 28 | 3827 | 865 | 103 | 2019 |
| Warren, Lyman E. (See Parkhurst, Edward G., assignor.) | | | | | | |
| Warren, Mary, Battlecreek, Mich. Hood for stoves | 731,985 | June 23 | 4531 | 1010, 1011 | 104 | 2120 |
| Warren, Mary, Battlecreek, Mich. Vegetable-crusher | 731,986 | June 23 | 4532 | 1011 | 104 | 2120 |
| Warren, Robert H., Washington, D. C. Securing device for stair-rods | 744,949 | Nov. 24 | 4140 | 894, 895 | 107 | 929 |
| Warren, Walter P., New York, N. Y. Moving-picture machine | 721,261 | Feb. 24 | 3498 | 795 | 102 | 1609 |
| Warren, Walter P., New York, N. Y. Moving-picture machine | 722,393 | Mar. 10 | 1367 | 303 | 103 | 307 |
| Warren, Walter P., New York, N. Y. Treating photographic or other prints | 741,198 | Oct. 13 | 1516 | 342 | 106 | 1590 |
| Warren Webster and Company. (See Halyburton, John P. L., assignor.) | | | | | | |
| Warren Webster and Company. (See Osbourn, Millard P., assignor.) | | | | | | |
| Warren, William B., St. Louis, Mo. Draft appliance for locomotive-boilers | 748,325 | Dec. 29 | 5596 | 1276 | 107 | 2406 |
| Warren, William C. (See Warren, Frank H. and W. C.) | | | | | | |
| Warsaw Elevator Company. (See Everingham, Edward B., assignor.) | | | | | | |
| Warschauer, Hugo. (See Rostin, Thielbeule, and Warschauer.) | | | | | | |
| Warson, William A., Seattle, Wash. Plastering-tool | 745,126 | Nov. 24 | 4499 | 974 | 107 | 1003 |
| Wartenberger, Josef, Berlin, Germany. Safe | 725,303 | Apr. 14 | 1630 | 368 | 103 | 1530 |
| Warther, Frank. (See Davoran and Warther.) | | | | | | |
| Warwick, George T. (See Macdonald and Warwick.) | | | | | | |
| Warwick, George T., and R. R. Macdonald, Springfield, Mass. Door-operating mechanism | 719,917 | Feb. 3 | 902 | 212 | 102 | 1015 |
| Warwood Tool Company. (See Shallenberger, John W., assignor.) | | | | | | |
| Washers, Henry, York, Pa., assignor to Rockdale Powder Co., Inc. Making explosives | 724,764 | Apr. 7 | 642 | ..... | 103 | 1305 |
| Washabaugh, Vernon C., Stauffers, Pa. Metallic tie and rail-fastener | 732,476 | June 30 | 5519 | 1224 | 104 | 2336 |
| Washam, Bert, Pryorcreek, Ind. Ter. Draft-equalizer | 718,180 | Jan. 13 | 1225 | 271 | 102 | 279 |
| Washburn, Charles I., executor. (See Washburn, George W.) | | | | | | |
| Washburn, Edwin C., Minneapolis, Minn. Knuckle for couplings | 721,345 | Feb. 24 | 3637 | 826, 827 | 102 | 1639 |
| Washburn, Edwin C., Minneapolis, Minn. Car-coupling | 727,721 | May 12 | 1708 | 382, 383 | 104 | 385 |
| Washburn, George A., assignor, by mesne assignments, to American Motor Carriage Company, Cleveland, Ohio. Connector for accumulator-plates | 723,791 | Mar. 24 | 3952 | 891 | 103 | 872 |
| Washburn, George W., deceased, New York, N. Y.; C. I. Washburn, executor. Hook and eye | 719,918 | Feb. 3 | 905 | 212 | 102 | 1015 |

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| Washburn, George W., deceased, New York, N. Y.; C. I. Washburn, executor. Safety-catch for brooches, &c | 719,919 | Feb. 3 | 906 | 212 | 102 | 1016 |
| Washburn, Herbert I., Schenectady, N. Y. Continuous dining-room service | 746,615 | Dec. 8 | 2355 | 541<br>542 | 107 | 1626 |
| Washburn, John W. (See Driscoll and Washburn.) | | | | | | |
| Washburn, Theodore W., assignor to G. Waite, Baldwinville, Mass. Locking device for chairs or the like | 727,866 | May 12 | 1979 | 441 | 104 | 438 |
| Washburn, Theodore W., assignor to G. Waite, Baldwinville, Mass. Folding chair | 736,180 | Aug. 11 | 2158 | 464 | 105 | 1460 |
| Washburn, William F. (See Herbert and Washburn.) | | | | | | |
| Washburn, William N. (See Gary, Charles H., assignor.) | | | | | | |
| Washburn, William N. (See Hough and Gary, assignors.) | | | | | | |
| Washburne, James V., Waterbury, Conn. Paper-fastener | 731,827 | June 23 | 4249 | 946 | 104 | 2059 |
| Washburne, James V., Waterbury, Conn. Stud member of glove or garment fasteners | 738,708 | Sept. 8 | 2326 | 511 | 106 | 512 |
| Washburne, James V., Waterbury, Conn. Stud member of glove or garment fasteners | 739,762 | Sept. 22 | 4264 | 955 | 106 | 963 |
| Washburne, James V., Waterbury, Conn. Stud member | 742,089 | Oct. 20 | 3335 | 744 | 106 | 1985 |
| Washburne, James V., Waterbury, Conn. Stud member | 745,747 | Dec. 1 | 771 | 176 | 107 | 1263 |
| Washburne, James V., Waterbury, Conn. Socket member | 746,616 | Dec. 8 | 2360 | 542 | 107 | 1627 |
| Washburne, Lester F., San Francisco, Cal. Carbureter | 733,444 | July 14 | 1343 | 317 | 105 | 301 |
| Washington, Andrew D., Meridian, Miss. Shoe-horn | 728,788 | May 19 | 3707 | 827 | 104 | 824 |
| Washington, Booker T. (See Campbell, Robert L., assignor.) | | | | | | |
| Washington, George, New Brighton, N. Y., assignor to W. E. Watkins, trustee, Montclair, N. J. Hydrocarbon incandescent lamp | 730,498 | June 9 | 1783 | 399 | 104 | 1510 |
| Washington, George, Brooklyn, N. Y., assignor, by mesne assignments, to W. E. Watkins, trustee, Montclair, N. J. Lamp | 745,698 | Dec. 1 | 692 | 159 | 107 | 1246 |
| Washington Pulley Company. (See Hight, Albert W., assignor.) | | | | | | |
| Washington Tool Company. (See Clinger, Fred D., assignor.) | | | | | | |
| Washington, William H., Jackson, Miss. Pressure-retaining valve | 731,249 | June 16 | 3147 | 699 | 104 | 1813 |
| Wasmuth, Carl, Grünhof, Germany. Type-writer | 728,340 | May 19 | 2884 | 636 | 104 | 652 |
| Wasmuth, Carl, Grünhof, Germany. Type-writer | 736,324 | Aug. 11 | 2405 | 525 | 105 | 1516 |
| Wass, John A. M. (See Erben and Wass.) | | | | | | |
| Wassmann, August. (See Low and Wassmann.) | | | | | | |
| Wassmann, August. (See Tuck and Wassmann.) | | | | | | |
| Wassmann, August. (See Tuck, Low, and Wassmann.) | | | | | | |
| Wasson, James R., Indianapolis, Ind. Desk attachment | 739,959 | Sept. 29 | 4669 | 1050 | 106 | 1065 |
| Waterbury Buckle Co. (See Smith and Buchanan, assignors.) | | | | | | |
| Waterbury, George H., assignor of sixty per cent. to N. W. Blethen, A. E. Van Deusen, C. P. Schumaker, C. F. Davies, Denver, and G. D. Nickel, Del Norte, Colo. Copper-leaching | 724,414 | Mar. 31 | 5232 | 1171 | 103 | 1152 |
| Waterbury, John B., *et al.* (See Curtis, Homer P., assignor.) | | | | | | |
| Waterbury Machine Company. (See O'Donnell, John H., assignor.) | | | | | | |
| Waterbury Machine Company. (See Warner, Frederick E., assignor.) | | | | | | |
| Waterbury Tool Co. (See Williams, Harvey D., assignor.) | | | | | | |
| Waterhouse, John, New York, N. Y. Drier | 727,513 | May 5 | 1276 | 283<br>284 | 104 | 275 |
| Waterman, Adolphus C., Athens, Mich. Building-block and wall construction | 734,022 | July 21 | 2429 | 568 | 105 | 546 |
| Waterman, Adolphus C., Athens, Mich. Railway-tie | 742,936 | Nov. 3 | 204 | 46 | 107 | 45 |
| Waterman, Arthur A., *et al.* (See Stone, Harry W., assignor.) | | | | | | |
| Waterman, Bradford B., East Bridgewater, Mass. Heel-breasting machine | 738,502 | Sept. 8 | 1933 | 422<br>423 | 106 | 430 |
| Waterman, Isaac G., Santa Barbara, Cal. Electrical control of the flow of water to basins of washstands, &c | 724,527 | Apr. 7 | 200 | 49 | 103 | 1212 |
| Waterman, Isaac G., Santa Barbara, Cal. Electromagnetic valve-controlling apparatus | 724,528 | Apr. 7 | 204 | 50 | 103 | 1213 |
| Waterman, Isaac G., Santa Barbara, Cal. Electric switch | 732,477 | June 30 | 5521 | 1224<br>1225 | 104 | 2336 |
| Waterman, Isaac G., Santa Barbara, Cal. Electrical-contact-controlling float | 732,608 | June 30 | 5768 | 1278 | 104 | 2392 |
| Waterman, Isaac G., Santa Barbara, Cal. Electromagnet | 733,097 | July 7 | 713 | 173 | 105 | 151 |
| Waterman, Isaac G., Santa Barbara, Cal. Electromagnet | 733,305 | July 7 | 1084 | 258 | 105 | 228 |
| Waterman, Isaac G., Santa Barbara, Cal. Electric switch | 748,123 | Dec. 29 | 5253 | 1192 | 107 | 2333 |
| Waterman, Lewis E., assignor to Emerson Manufacturing Company, Rockford, Ill. Cultivator | 726,596 | Apr. 28 | 4065 | 917<br>918 | 103 | 2064 |
| Waterman, Lewis E., assignor to Emerson Manufacturing Company, Rockford, Ill. Wheel-box | 740,341 | Sept. 29 | 5368 | 1209 | 106 | 1211 |
| Waterman, Lewis E., assignor to Emerson Manufacturing Company, Rockford, Ill. Wheel-box | 740,342 | Sept. 29 | 5369 | 1210 | 106 | 1212 |
| Waterman, William E. (See Jacobs, William S., assignor.) | | | | | | |
| Watermolen, John F., Greenbay, Wis. Compound tool | 742,764 | Oct. 27 | 4546 | 1030 | 106 | 2255 |
| Waters, Cornelius E., assignor of nine-twentieths to A. Arntz, Muskegon, Mich. Combination-tool | 736,042 | Aug. 11 | 1921 | 410 | 105 | 1410 |
| Waters, Frank J., assignor of two-thirds to W. A. Drew, F. E. and A. C. Farnham, A. Harrison, Providence, J. Gee, Cranston, and H. J. Page, Warwick, R. I. Rotary steam-engine | 733,777 | July 14 | 1921 | 452<br>453 | 105 | 422 |
| Waters, Frank J., assignor of two-thirds to W. A. Drew, F. E. and A. C. Farnham, A. Harrison, Providence, J. Gee, Cranston, and H. J. Page, Warrick, R. I. Reversing-valve for rotary engines | 735,181 | Aug. 4 | 291 | 57 | 105 | 1043 |
| Waters, Frederick R., Salem, Oreg. Pipe-coupling | 738,503 | Sept. 8 | 1937 | 423 | 106 | 431 |
| Waters, James, Pleasant City, Ohio. Insulator-machine | 735,429 | Aug. 4 | 757 | 161 | 105 | 1141 |
| Waters, James H., Tacoma, Wash. Heating-stove | 728,527 | May 19 | 3208 | 712 | 104 | 720 |
| Waters, John A. (See Fox and Waters.) | | | | | | |
| Waters, John A., Stamford, Conn. Heating apparatus for closed receptacles | 734,023 | July 21 | 2430 | 568<br>569 | 105 | 546 |
| Waters, Leo F. (See Riffle, Frederick, assignor.) | | | | | | |
| Waters, Llewelyn, Edwardsdale, Pa. Lubricator | 728,146 | May 12 | 2483 | 552 | 104 | 546 |
| Waters, Minor, New Albany, Ind., and B. S. Josselyn, Louisville, Ky. Railway-switch stand | 717,956 | Jan. 6 | 818 | 185 | 102 | 175 |
| Waters, Richard H., Burlington, Tex. Garment-supporter | 733,306 | July 7 | 1084 | 259 | 105 | 229 |
| Waters, Russell J., *et al.* (See Shepherd, Robert C., assignor.) | | | | | | |
| Waters, William, Auckland, and W. K. Elder, Penrose, assignors of one-half to S. C. Mackey, Davenport, New Zealand. Rotary potato-digger | 737,538 | Aug. 25 | 4690 | 1052 | 105 | 2037 |
| Waterson, Frederick E., Goshen, Ind. Railway-rail joint | 724,355 | Mar. 31 | 5100 | 1142 | 103 | 1122 |
| Watkins, Alfred, Hereford, England. Photographic-exposure meter | 725,807 | Apr. 21 | 2598 | 590 | 103 | 1751 |
| Watkins, Alfred E., Jersey City, N. J., assignor to B. F. Seadler as individual and as trustee, New York, N. Y. Polishing-brush | 721,263 | Feb. 24 | 3502 | 796 | 102 | 1610 |
| Watkins, E. E. (See Stevens, Robert A., assignor.) | | | | | | |
| Watkins, Edwin J., and W. H. Screeton; said Watkins assignor to E. Lloyd, London, England. Composition for cleansing painted surfaces | 723,089 | Mar. 17 | 2660 | ..... | 103 | 595 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|
| | | | Spec. | Drg. | Vol. | Page. |
| Watkins, Joel, Joliet, Ill. Spring for beds, couches, &c | 735,006 | July 28 | 4288 | 998 | 105 | 950 |
| Watkins, John E. (See Eiler, Watkins, and Cress.) | | | | | | |
| Watkins Manufacturing Co. (See Watkins, William D., assignor.) | | | | | | |
| Watkins, Robert H., *et al.* (See Murray, Michael R., assignor.) | | | | | | |
| Watkins, Robert T., and W. B. Overton, Denver, Colo.; said Overton assignor to said Watkins. Cabinet-trunk | 732,670 | June 30 | 5884 | 1305 | 104 | 2415 |
| Watkins, William D., assignor to Watkins Manufacturing Co., San Jose, Cal. Telephone selecting device | 728,147 | May 12 | 2484 | 552<br>553 | 104 | 546 |
| Watkins, William E. (See Kimbrough, Watkins, and McCarley.) | | | | | | |
| Watkins, William E., trustee. (See Howells and Johnson, assignors.) | | | | | | |
| Watkins, William E., trustee. (See Washington, George, assignor.) | | | | | | |
| Watrous, Earl G., Chicago, Ill. Flushing-tank for water-closets | 744,139 | Nov. 17 | 2647 | 565 | 107 | 593 |
| Watson, Anthony E., Kyneton, Victoria, Australia. Scraper for wheels of agricultural implements | 747,813 | Dec. 22 | 4612 | 1040 | 107 | 2171 |
| Watson & Co., John W. (See Garrett, Irvin H., assignor.) | | | | | | |
| Watson, Daniel M., Portland, Oreg. Rail-brace | 725,304 | Apr. 14 | 1631 | 368 | 103 | 1530 |
| Watson, Daniel M., Portland, Oreg. Electric heating apparatus | 735,182 | Aug. 4 | 295 | 58 | 105 | 1043 |
| Watson, Edwin B., assignor to Strawed Pipe Syndicate, Limited, London, England. Tobacco-pipe | 719,920 | Feb. 3 | 907 | 213 | 102 | 1016 |
| Watson, Ernest, Brainerd, Minn. Locomotive engineer's alarm | 742,535 | Oct. 27 | 4162 | 935<br>936 | 106 | 2171 |
| Watson, Frank C., Philadelphia, Pa. Rotary motor | 723,344 | Mar. 24 | 3139 | 705<br>706 | 103 | 706 |
| Watson, Frank H., assignor of one-half to J. C. McKinney, Lexington, Tenn. Musical instrument | 727,514 | May 5 | 1278 | 284<br>285 | 104 | 275 |
| Watson, George, Sault Ste. Marie, Mich. Heating attachment for lamps, &c | 745,699 | Dec. 1 | 694 | 159 | 107 | 1246 |
| Watson, George, Leeds, England. Apparatus for destroying refuse | 746,421 | Dec. 8 | 2027 | 464<br>465 | 107 | 1551 |
| Watson, George A. (See Brooks and Watson.) | | | | | | |
| Watson, George E., Brooklyn, N. Y. Horseshoe | 739,763 | Sept. 22 | 4265 | 956 | 106 | 963 |
| Watson, Harry H. (See Neslage and Watson.) | | | | | | |
| Watson, Henry B., and T. C. Billetop, Newcastle-upon-Tyne, England. Valve-gear for fluid-operated motors | 727,515 | May 5 | 1281 | 285<br>286 | 104 | 276 |
| Watson, Horace C., Oakland, Cal. Ticket-punch attachment | 726,597 | Apr. 28 | 4067 | 918 | 103 | 2065 |
| Watson, James, Marinette, Wis. Portable stove | 747,814 | Dec. 22 | 4613 | 1041 | 107 | 2171 |
| Watson, James A. (See Rose and Watson.) | | | | | | |
| Watson, James A., Washington, D. C. Vacuum despatch system | 747,104 | Dec. 15 | 3309 | 751 | 107 | 1862 |
| Watson, James A., Washington, D. C., assignor to York Card and Paper Company, York, Pa. Wall-paper-printing machine | 736,043 | Aug. 11 | 1922 | 410 | 105 | 1410 |
| Watson, James A., Washington, D. C., assignor to York Card and Paper Company, York, Pa. Wall-paper-printing apparatus | 736,044 | Aug. 11 | 1923 | 410 | 105 | 1411 |
| Watson, James H., Jr., New York, N. Y. Combined ruler and blotter | 743,119 | Nov. 3 | 575 | 124 | 107 | 120 |
| Watson, John, Baltimore, Md. Work-box | 718,804 | Jan. 20 | 2441 | 541 | 102 | 549 |
| Watson, John L., Los Angeles, Cal. Diving apparatus | 735,323 | Aug. 4 | 547 | 112 | 105 | 1098 |
| Watson, Leslie J., assignor of one-half to G. F. Conner, Port Huron, Mich. Governor | 721,846 | Mar. 3 | 344 | 76 | 103 | 75 |
| Watson, Louis T., *et al.* (See Maloney and Dore, assignors.) | | | | | | |
| Watson & McDaniel Co. (See Chapman, Joseph L., assignor.) | | | | | | |
| Watson, Merrill, East Orange, N. J., and W. H. Ham, New York, N. Y. Slab for building construction | 719,396 | Jan. 27 | 3565 | 796 | 102 | 800 |
| Watson, O'Neal, assignor of one-half to C. E. Lacey, Crawfordsville, Ind. Fish-trap | 731,398 | June 16 | 3437 | 767 | 104 | 1874 |
| Watson, R. Bruce. (See Vreeland and McDonald, assignors.) | | | | | | |
| Watson, Robert. (See Stevenson and Watson.) | | | | | | |
| Watson, Robert, assignor of one-half to C. A. Kram, Washington, D. C. Pneumatic massage apparatus | 720,865 | Feb. 17 | 2677 | 619 | 102 | 1417 |
| Watson, Robert, Scranton, Pa., assignor of one-half to C. A. Kram, Washington, D. C. Pneumatic massage apparatus | 738,583 | Sept. 8 | 2070 | 453 | 106 | 460 |
| Watson, Robert, Washington, D. C., assignor to P. J. Collins and C. G. Boland, Scranton, Pa. Steering mechanism for motor-vehicles | 723,090 | Mar. 17 | 2661 | 599 | 103 | 595 |
| Watson, Robert S., Bay City, Mich. Fresh-air inlet | 735,007 | July 28 | 4289 | 998 | 105 | 950 |
| Watson, Robert W., Silverton, Colo. Classifier for crushed ores, &c | 743,120 | Nov. 3 | 576 | 124 | 107 | 121 |
| Watson, Seymour D. (See Cooper, George D., assignor.) | | | | | | |
| Watson, Thomas, Bridge-of-Weir, assignor to E. S. Coats, Paisley, Scotland. Bearing for spindles | 729,460 | May 26 | 4897 | 1085 | 104 | 1087 |
| Watson, William D., Chicago, Ill. Pulley for metallic window-frames | 741,990 | Oct. 20 | 3101 | 691 | 106 | 1938 |
| Watson, William D., Chicago, Ill. Window-fastener | 742,090 | Oct. 20 | 3336 | 744 | 106 | 1985 |
| Watson, William G., Ogden, Utah. Metallic packing | 726,808 | Apr. 28 | 4457 | 1006 | 103 | 2146 |
| Watson, William T., Victoria, Canada. Automatic life-guard or fender for tram-cars | 728,636 | May 19 | 3433 | 762 | 104 | 768 |
| Watson, William T., Victoria, Canada. Automatic wheel-guard for tram-cars | 728,637 | May 19 | 3437 | 762 | 104 | 769 |
| Watson, William W., Baldwin, Iowa. Wireless check-row corn-planter | 722,779 | Mar. 17 | 2113 | 473<br>474 | 103 | 482 |
| Watt, Frank J., assignor to R. E. Hardy, Port Huron, Mich. Variable-speed mechanism | 725,899 | Apr. 21 | 2744 | 624 | 103 | 1783 |
| Watt, Frank N., and H. C. Keelor, Richmond, Ind. Couch-casket | 739,764 | Sept. 22 | 4266 | 956 | 106 | 963 |
| Watt, Stewart, Barnesville, Ohio. Twyer for cupola-furnaces | 722,062 | Mar. 3 | 751 | 167 | 103 | 162 |
| Wattenberg, Ferdinand A., New York, N. Y. Match-box | 729,817 | June 2 | 547 | 120 | 104 | 1240 |
| Wattenberg, Ferdinand A., New York, N. Y. Match-box | 729,818 | June 2 | 548 | 120 | 104 | 1240 |
| Watters, Charles H., Chicago, Ill. Valve device | 743,356 | Nov. 3 | 1056 | 226 | 107 | 225 |
| Watters, John H., Anniston, Ala. Track-sanding device | 736,895 | Aug. 18 | 3481 | 774 | 105 | 1755 |
| Watters, William J. (See Lorenz, August H., assignor.) | | | | | | |
| Wattie, William, assignor to Crompton & Knowles Loom Works, Worcester, Mass. Loom for weaving short wefts | 741,749 | Oct. 20 | 2620 | 585<br>586 | 106 | 1839 |
| Wattles, Cyra B., Providence, R. I. Machine for dressing floors | 730,499 | June 9 | 1784 | 399<br>400 | 104 | 1510 |
| Wattles, Luther H., assignor of two-thirds to F. F. Taft and G. W. Parker, Providence, R. I. Oil-burner | 740,959 | Oct. 6 | 1055 | 240 | 106 | 1472 |
| Wattleworth, Charles. (See Gair, Mark, assignor.) | | | | | | |
| Watts, Charles E., Brazil, Ind. Kiln | 725,519 | Apr. 14 | 2040 | 462 | 103 | 1617 |
| Watts, Ira, Mount Vernon, N. Y. Steam-separator | 718,805 | Jan. 20 | 2443 | 541 | 102 | 549 |
| Watts, Ira, Mount Vernon, N. Y. Feed-water heater | 720,200 | Feb. 10 | 1452 | 331<br>332 | 102 | 1147 |
| Watts, John E., Topeka, Kans. Horseshoe | 734,024 | July 21 | 2433 | 569 | 105 | 547 |
| Watts, Louis A., assignor to Watts Manufacturing Company, Cincinnati, Ohio. Adjustable shade-hanger | 734,025 | July 21 | 2434 | 569 | 105 | 547 |
| Watts Manufacturing Company. (See Watts, Louis A., assignor.) | | | | | | |
| Watts, Walter, Midland Junction, Western Australia, Australia. Pivot-blade joint for railways | 733,689 | July 14 | 1756 | 417 | 105 | 387 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|
| | | | Spec. | Drg. | Vol. | Page. |
| Waugh, Arthur L., Cambridge, Mass. Steering-gear for vehicles | 743,357 | Nov. 3 | 1058 | 226 | 107 | 226 |
| Waugh, Eugene. (See Waugh, Robert E. and E.) | | | | | | |
| Waugh, James M., Chicago, Ill. Draft-rigging for railway-cars | 731,725 | June 23 | 4056 | 905 | 104 | 2016 |
| Waugh, L. V. (See Fierbaugh, Samuel, assignor.) | | | | | | |
| Waugh, Robert E. and E., Denver, Colo., assignors of four-sevenths to J. H. and F. J. McShane, H. J. Paschel, and C. L. West, Omaha, Nebr. Dry-ore separator | 719,397 | Jan. 27 | 3566 | 796, 797 | 102 | 800 |
| Wave System Bolting Company. (See Stubbs, Riley A., assignor.) | | | | | | |
| Waxel, Ole E., West Oakland, Cal. Motor-bicycle | 735,628 | Aug. 4 | 1136 | 240, 241 | 105 | 1223 |
| Waxel, Ole E., Oakland, Cal. Power-producer | 738,264 | Sept. 8 | 1431 | 309, 310 | 106 | 325 |
| Way, Charles F., *et al.* (See Solomon, Emmett G., assignor.) | | | | | | |
| Way, George C., Cincinnati, assignor of seven-twelfths to C. L. Steele, H. Barr, Springfield, Ohio, and B. H. Barr, Kansas City, Mo. Boiler or other furnace | 735,849 | Aug. 11 | 1562 | 333, 334 | 105 | 1333 |
| Way, George W., Portland, Me. Vehicle fifth-wheel | 742,536 | Oct. 27 | 4165 | 936 | 106 | 2171 |
| Way, Pennock M., Tallapoosa, Ga. Saw | 739,241 | Sept 15 | 3312 | 734 | 106 | 740 |
| Way, Simeon, Kalkaska, Mich. Harness | 733,887 | July 14 | 2142 | 506 | 105 | 466 |
| Way, Thomas B., Jersey City, N. J. Adjustable templet for ships' carpenters | 742,937 | Nov. 3 | 206 | 47 | 107 | 45 |
| Waycott, Albert. (See Handiges, Philip T., assignor.) | | | | | | |
| Waymire, Albert A., Woods, Oreg. Combination-tool | 738,130 | Sept. 1 | 1138 | 254 | 106 | 246 |
| Wayne, Rysome. (See Martin, Irvin, assignor.) | | | | | | |
| Weant, George, Mannington, W. Va. Automatic water-feed regulator for steam-boilers | 726,123 | Apr. 21 | 3122 | 707 | 103 | 1861 |
| Weary, Frank O., Akron, Ohio. Jail or prison | 722,780 | Mar. 17 | 2120 | 474 | 103 | 483 |
| Weary, Frank O., Akron, Ohio. Jail or prison | 722,781 | Mar. 17 | 2123 | 475 | 103 | 484 |
| Weaser, William H., Pittsfield, Mass. Eyeglasses | 743,962 | Nov. 10 | 2255 | 485 | 107 | 498 |
| Weatherby, Joseph, Jr., Philadelphia, Pa., assignor to S. O. Spring, Peoria, Ill. Electric time-controller | 725,900 | Apr. 21 | 2746 | 625 | 103 | 1783 |
| Weatherby, Joseph, Jr., Philadelphia, Pa., assignor to S. O. Spring, Peoria, Ill. Electric protective system | 730,422 | June 9 | 1629 | 365, 366 | 104 | 1476 |
| Weatherby, Joseph, Jr., New Cumberland, assignor to International Burglar Immunity Company, Philadelphia, Pa. Electric protective system | 735,324 | Aug. 4 | 548 | 112 | 105 | 1098 |
| Weatherhead, Edward H., Cleveland, Ohio. Valve mechanism for hydraulic motors | 737,685 | Sept. 1 | 232 | 50 | 106 | 54 |
| Weatherholt, William C., Columbus, Ohio. Explosion-engine | 746,212 | Dec. 8 | 1653 | 367 | 107 | 1473 |
| Weathers, David N., Marengo, Ind. Meat-tenderer | 747,519 | Dec. 22 | 4072 | 915 | 107 | 2048 |
| Weathers, Joseph S., Windsor, Mo. Animal-poke | 732,328 | June 30 | 5219 | 1159 | 104 | 2275 |
| Weaver, Cartter, Buffalo, N. Y. Fastening for buttons, &c. | 727,239 | May 5 | 783 | 168 | 104 | 169 |
| Weaver, Charles E. (See Ruppel and Weaver.) | | | | | | |
| Weaver, Charles R., Baltimore, Md., assignor to P. C. Hains, Jr. Apparatus for making concrete | 722,782 | Mar. 17 | 2125 | 475 | 103 | 484 |
| Weaver, Eugene S., Jersey City, N. J. Automobile-sleigh | 747,815 | Dec. 22 | 4616 | 1041 | 107 | 2171 |
| Weaver, Frank H., Philadelphia, Pa. Reinforcing-tag for holding embroidery-silk | 737,181 | Aug. 25 | 4004 | 888 | 105 | 1886 |
| Weaver, George L. (See Eastman and Weaver.) | | | | | | |
| Weaver, George W., Rochester, N. Y. Loose leaf for temporary binders | 717,957 | Jan. 6 | 820 | 185 | 102 | 176 |
| Weaver, Henry H., Greentown, Ind. Pencil-holder | 723,765 | Mar. 24 | 3904 | 878 | 103 | 863 |
| Weaver, Henry M., Mansfield, Ohio. Bath or basin waste | 729,710 | June 2 | 326 | 75 | 104 | 1195 |
| Weaver, Henry M., Mansfield, Ohio. Bath-cock | 743,602 | Nov. 10 | 1618 | 338 | 107 | 361 |
| Weaver, Ira A., assignor to Sattley Manufacturing Company, Springfield, Ill. Cultivator | 738,265 | Sept. 8 | 1440 | 311 | 106 | 326 |
| Weaver, Joseph W. (See Eby and Weaver.) | | | | | | |
| Weaver, Lloyd, assignor to Fowler Nail Co., Seymour, Conn. Automatic machine for finishing horseshoe-nails | 746,766 | Dec. 15 | 2645 | 609, 610, 611 | 107 | 1710 |
| Weaver, Marvin S., Johnson City, Tenn. Shade-bracket | 748,124 | Dec. 29 | 5254 | 1192 | 107 | 2333 |
| Weaver, N. M., *et al.* (See Nance, Turner H., assignor.) | | | | | | |
| Weaver, Ralph B., Milton, assignor to S. Cabot, Boston, Mass. Crank-shaft for engines | 745,700 | Dec. 1 | 695 | 159 | 107 | 1246 |
| Weaver, Ralph B., Milton, assignor to S. Cabot, Boston, Mass. Cooling device for explosion-engines | 745,701 | Dec. 1 | 696 | 160 | 107 | 1247 |
| Weaver, Warren B., Lakeland, Fla. Sash-lock | 744,654 | Nov. 17 | 3569 | 769 | 107 | 790 |
| Weaver, William, assignor to McCord & Company, Chicago, Ill. Apparatus for making cores | 743,121 | Nov. 3 | 577 | 124, 125 | 107 | 121 |
| Weaver, William J., and C. F. Hoffman, Reynoldsville, Pa. Device for moistening adhesive surfaces | 721,112 | Feb. 17 | 3161 | 727 | 102 | 1522 |
| Weaver, William W., Chicago, Ill., assignor to Hot Blast Smokeless Stoker Company. Burner for liquid and pulverized fuel | 738,131 | Sept. 1 | 1139 | 254 | 106 | 246 |
| Weaver, William W., Chicago, Ill., assignor to Hot Blast Smokeless Stoker Company. Furnace | 738,132 | Sept. 1 | 1141 | 254, 255 | 106 | 247 |
| Weaver, William W., Chicago, Ill., assignor to Hot Blast Smokeless Stoker Company. Means for stoking furnaces | 738,133 | Sept. 1 | 1144 | 255 | 106 | 247 |
| Weaver, William W., Chicago, Ill., assignor to Hot Blast Smokeless Stoker Company. Supplying furnaces with fuel and promoting combustion thereof | 739,040 | Sept. 15 | 2932 | 650, 651 | 106 | 661 |
| Weaver, Williard B. (See Campbell and Weaver.) | | | | | | |
| Webb, Albert, Worcester, England. Woven pile carpet fabric | 720,764 | Feb. 17 | 2519 | 581 | 102 | 1384 |
| Webb, Arthur N., Youngsville, Pa. Bed-slat fastener | 736,569 | Aug. 18 | 2850 | 624 | 105 | 1626 |
| Webb, Arthur N., Youngsville, Pa. Bed-slat fastener | 746,211 | Dec. 8 | 1651 | 367 | 107 | 1472 |
| Webb Folding Box Company. (See Webb, Zaida B., assignor.) | | | | | | |
| Webb Folding Box Company. (See Webb, Zaida B., assignor.) (Reissue.) | | | | | | |
| Webb, George B., Westfield, N. J., assignor to Wyckoff, Seamans & Benedict, Ilion, N. Y. Type-writing machine | 720,302 | Feb. 10 | 1647 | 376, 377 | 102 | 1187 |
| Webb, George L. (See Dedman, Webb, and Hanna.) | | | | | | |
| Webb, Holstein W., Columbus, Ohio. Electrically-controlled gas-burner and pilot-light | 732,980 | July 7 | 494 | 122 | 105 | 106 |
| Webb, Holstein W., Columbus, Ohio. Manually-controlled gas-burner and pilot-light | 737,305 | Aug. 25 | 4247 | 945 | 105 | 1936 |
| Webb, James N., assignor to Benedict and Burnham Manufacturing Company, Waterbury, Conn. Burner-cap for incandescent gas-burners | 720,539 | Feb. 10 | 2084 | 481 | 102 | 1277 |
| Webb, Jean F., Denver, Colo., assignor to Pneumatic Cyanide Process Company. Apparatus for use in extracting metals from ores | 729,819 | June 2 | 549 | 121 | 104 | 1240 |
| Webb, John E., and G. M. Pillsbury, Rumford Falls, Me. Attachment for Fourdrinier machines | 718,406 | Jan. 13 | 1637 | 359, 360 | 102 | 366 |
| Webb, John W. (See Wilson, Allen F., assignor.) | | | | | | |
| Webb, L. E. (See Sims, Forest F., assignor.) | | | | | | |
| Webb, Michael. (See Miller and Webb.) | | | | | | |
| Webb, Powhatan A., and G. A. Howell, Jr., Atlanta, Ga. Filter for coffee or tea pots | 723,091 | Mar. 17 | 2662 | 599 | 103 | 596 |
| Webb, Samuel F., Wichita, Kans. Fence-post | 732,244 | June 30 | 5071 | 1128 | 104 | 2244 |
| Webb, Samuel J., Minden, La. Bale-tie | 720,644 | Feb. 17 | 2312 | 530 | 102 | 1338 |
| Webb, Samuel J., Minden, La. Oscillating cotton-press | 741,085 | Oct. 13 | 1292 | 295, 296 | 106 | 1543 |
| Webb, Samuel J., Minden, La. Rotary fluid-motor | 741,086 | Oct. 13 | 1294 | 296 | 106 | 1543 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | Spec. | Dr'g. | Vol. | Page. |
| Webb, William, assignor of one-half to B. F. Savery, Ypsilanti, Mich. Acetylene-gas generator | 723,092 | Mar. 17 | 2663 | 600 | 103 | 596 |
| Webb, William J., Yonkers, assignor, by mesne assignments, to Carpet Yarn Printing Company, New York, N. Y. Apparatus for printing or coloring yarn or similar material | 719,284 | Jan. 27 | 3348 | 747<br>748 | 102 | 753 |
| Webb, William J., Yonkers, assignor, by mesne assignments, to Carpet Yarn Printing Company, New York, N. Y. Printing or coloring yarn or similar material | 719,398 | Jan. 27 | 3569 | 797<br>798 | 102 | 801 |
| Webb, William R., London, England. Apparatus for raising vehicles for inspection and repair | 745,545 | Dec. 1 | 434 | 102 | 107 | 1190 |
| Webb, Zaida B., Florham Park, N. J. Puzzle | 742,139 | Oct. 20 | 3416 | 762 | 106 | 2001 |
| Webb, Zaida B., Madison, assignor to Webb Folding Box Company, Newark, N. J. Folding box | 727,723 | May 12 | 1711 | 383 | 104 | 385 |
| Webb, Zaida B., Florham Park, assignor to Webb Folding Box Company, Newark, N. J. Folding box | 727,723 | May 12 | 1712 | 384 | 104 | 385 |
| Webb, Zaida B., Florham Park, assignor to Webb Folding Box Company, Newark, N. J. Folding box | 729,461 | May 26 | 4898 | 1085 | 104 | 1088 |
| Webb, Zaida B., Florham Park, assignor to Webb Folding Box Company, Newark, N. J. Folding box. (Reissue) | 12,121 | June 16 | 3480 | 778 | 104 | 1882 |
| Webb, Zaida B., Florham Park, assignor to Webb Folding Box Company, Newark, N. J. Folding box | 732,329 | June 30 | 5221 | 1159<br>1160 | 104 | 2275 |
| Webber, Charles L., Neenah, Wis. Propeller-wheel | 725,639 | Apr. 14 | 2274 | 514 | 103 | 1667 |
| Webber, John C. P., Plymouth, England. Display device | 737,888 | Sept. 1 | 668 | 142 | 106 | 147 |
| Webber, Samuel A., and W. J. Davis, Windfall, assignors of one-half to K. D. Ross and S. Clyde, Elwood, Ind. Vending-machine | 733,523 | July 14 | 1481 | 352<br>353 | 105 | 330 |
| Webber, Samuel A., and W. J. Davis, Windfall, assignors of S. Clyde and C. K. D. Ross, Elwood, Ind. Coin-controlled device for vending-machines | 733,924 | July 14 | 2219 | 520<br>521 | 105 | 481 |
| Webber, Wallis G. (See Hawkins, Gardner C., assignor.) | | | | | | |
| Webber, Wesley, New York, N. Y. Vending-machine | 723,345 | Mar. 24 | 3143 | 707 | 103 | 706 |
| Webber, William, assignor to International Harvester Company, Chicago, Ill. Supplemental finger for guards of cutting apparatus | 745,940 | Dec. 1 | 1149 | 257 | 107 | 1344 |
| Webber, William O., Boston, Mass. Air-conduit for hydraulic air-compressors | 740,496 | Oct. 6 | 223 | 43 | 106 | 1294 |
| Webber, William O., Boston, Mass. Steam-engine governor | 745,748 | Dec. 1 | 773 | 177 | 107 | 1263 |
| Weber, Aaron M., New York, N. Y. Collar-foundation | 718,294 | Jan. 13 | 1443 | 321 | 102 | 326 |
| Weber, Arthur, Chicago, Ill. Bronzing-machine | 748,125 | Dec. 29 | 5255 | 1193 | 107 | 2333 |
| Weber, August, Sr., Schenectady, N. Y. Incandescent-electric-lamp socket | 743,206 | Nov. 3 | 745 | 163 | 107 | 156 |
| Weber, August, Jr., assignor to August Weber, Sr., Schenectady, N. Y. Incandescent-electric-lamp socket | 743,358 | Nov. 3 | 1061 | 227 | 107 | 226 |
| Weber, August, Sr., August, Jr., and J., Schenectady, N. Y., assignors to said August Weber, Sr. Incandescent-electric-lamp socket | 743,207 | Nov. 3 | 747 | 164 | 107 | 156 |
| Weber, Benjamin, assignor of one-half to C. Dittmar, Baltimore, Md. Handle for valises, parcels, teapots, &c | 728,058 | May 12 | 2330 | 519 | 104 | 513 |
| Weber, Bertha E., Dorseyville, Pa. Egg-beater | 742,264 | Oct. 27 | 3665 | 819 | 106 | 2069 |
| Weber, Carl, Chicago, Ill. Chimney | 748,242 | Dec. 29 | 5457 | 1243<br>1244 | 107 | 2376 |
| Weber, Carl E. L. (See Robedeau, Nazire J., assignor.) | | | | | | |
| Weber, Charles F., Peoria, Ill. Apparatus for inclosing meats for boiling | 735,629 | Aug. 4 | 1141 | 241 | 105 | 1224 |
| Weber, Cyrus J. (See Horst and Weber.) | | | | | | |
| Weber, Cyrus J., Steelton, Pa., assignor of one-half to T. J. Rafferty, Cumberland, Md. Combined level and grade-finder | 739,242 | Sept. 15 | 3313 | 734 | 106 | 740 |
| Weber, Edwin. (See Grosbetty, Peter, assignor.) | | | | | | |
| Weber, Emil, and F. C. Frey, Baker City, Oreg. Bottle-closure and brush | 722,170 | Mar. 3 | 939 | 208 | 103 | 199 |
| Weber, Frank W., Trenton, N. J. Inking-plate for job-presses | 742,765 | Oct. 27 | 4548 | 1030 | 106 | 2255 |
| Weber, Frederick C., Chicago, Ill. Cleansing and improving the quality of iron and steel. | 722,270 | Mar. 10 | 1157 | | 103 | 261 |
| Weber, Frederick C., Chicago, Ill. Reducing metallic oxids with metallic aluminium | 725,520 | Apr. 14 | 2042 | 462 | 103 | 1618 |
| Weber, Frederick C., Chicago, Ill. Treating kaolin for the production of carborundum and alumina | 728,528 | May 19 | 3209 | 712 | 104 | 720 |
| Weber, George A., assignor to Weber Railway Joint Manufacturing Company, New York, N. Y. Step-joint | 730,990 | June 16 | 2674 | 595<br>596 | 104 | 1719 |
| Weber, George A., assignor to Weber Railway Joint Manufacturing Company, New York, N. Y. Rail-fastening | 733,445 | July 14 | 1345 | 317 | 105 | 301 |
| Weber, George A., assignor to Weber Railway Joint Manufacturing Company, New York, N. Y. Insulated joint for railway-rail sections | 734,479 | July 21 | 3289 | 772 | 105 | 727 |
| Weber, George A., assignor to Weber Railway Joint Manufacturing Company, New York, N. Y. Rail-fastening | 735,630 | Aug. 4 | 1143 | 241 | 105 | 1224 |
| Weber, George A., assignor to Weber Railway Joint Manufacturing Company, New York, N. Y. Insulated joint | 735,631 | Aug. 4 | 1144 | 242 | 105 | 1224 |
| Weber, George A., assignor to Weber Railway Joint Manufacturing Company, New York, N. Y. Insulated joint for railway-rail sections | 738,862 | Sept. 15 | 2641 | 582 | 106 | 599 |
| Weber, George A., assignor to Weber Railway Joint Manufacturing Company, New York, N. Y. Rail-fastening | 739,465 | Sept. 22 | 3735 | 831 | 106 | 848 |
| Weber, George A., assignor to Weber Railway Joint Manufacturing Company, New York, N. Y. Rail-joint | 739,466 | Sept. 22 | 3736 | 831 | 106 | 848 |
| Weber, George A., assignor to Weber Railway Joint Manufacturing Company, New York, N. Y. Rail-fastening | 739,467 | Sept. 22 | 3738 | 832 | 106 | 848 |
| Weber, George A., assignor to Weber Railway Joint Manufacturing Company, New York, N. Y. Step-joint | 739,468 | Sept. 22 | 3739 | 832<br>833 | 106 | 849 |
| Weber, George A., assignor to Weber Railway Joint Manufacturing Company, New York, N. Y. Insulated twin joint | 739,469 | Sept. 22 | 3741 | 834 | 106 | 849 |
| Weber, George A., assignor to Weber Railway Joint Manufacturing Company, New York, N. Y. Composite girder or the like | 741,421 | Oct. 13 | 1964 | 435 | 106 | 1685 |
| Weber, George A., assignor to Weber Railway Joint Manufacturing Company, New York, N. Y. Composite structure | 742,809 | Oct. 27 | 4626 | 1048 | 106 | 2272 |
| Weber, George A., assignor to Weber Railway Joint Manufacturing Company, New York, N. Y. Rail-joint | 744,829 | Nov. 24 | 3928 | 844<br>845 | 107 | 885 |
| Weber, George A., assignor to Weber Railway Joint Manufacturing Company, New York, N. Y. Step-joint | 744,831 | Nov. 24 | 3931 | 845<br>846 | 107 | 885 |
| Weber, George A., assignor to Weber Railway Joint Manufacturing Company, New York, N. Y. Insulated rail-joint | 744,832 | Nov. 24 | 3932 | 846 | 107 | 886 |
| Weber, George A., assignor to Weber Railway Joint Manufacturing Company, New York, N. Y. Angle-chair | 744,833 | Nov. 24 | 3934 | 847 | 107 | 886 |
| Weber, George A., assignor to Weber Railway Joint Manufacturing Company, New York, N. Y. Insulated joint | 744,834 | Nov. 24 | 3935 | 848 | 107 | 887 |
| Weber, George A., assignor to Weber Railway Joint Manufacturing Company, New York, N. Y. Rail-joint | 744,835 | Nov. 24 | 3937 | 848<br>849 | 107 | 887 |
| Weber, George A., assignor to Weber Railway Joint Manufacturing Company, New York, N. Y. Step-joint | 745,303 | Nov. 24 | 4861 | 1060 | 107 | 1077 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Des. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Weber, George A., assignor to Weber Railway Joint Manufacturing Company, New York, N. Y. Rail-joint | 745,304 | Nov. 24 | 4862 | 1060<br>1061 | 107 | 1078 |
| Weber, George A., assignor to Weber Railway Joint Manufacturing Company, New York, N. Y. Rail-joint | 746,650 | Dec. 8 | 2428 | 555 | 107 | 1642 |
| Weber, George A., Stamford, Conn., assignor to Weber Railway Joint Mfg. Co., New York, N. Y. Railway-rail joint | 739,462 | Sept. 22 | 3732 | 830 | 106 | 847 |
| Weber, George A., Stamford, Conn., assignor to Weber Railway Joint Manufacturing Company, New York, N. Y. Railway-rail joint | 739,463 | Sept. 22 | 3732 | 830 | 106 | 847 |
| Weber, George A., Stamford, Conn., assignor to Weber Railway Joint Manufacturing Company, New York, N. Y. Railway-rail joint | 739,464 | Sept. 22 | 3734 | 831 | 106 | 848 |
| Weber, George A., New York, N. Y., and F. R. Coates, St. Paul, Minn., assignors to Weber Railway Joint Manufacturing Co., New York, N. Y. Rail-support | 744,830 | Nov. 24 | 3930 | 845 | 107 | 885 |
| Weber, George W. (See Thiem and Weber.) | | | | | | |
| Weber, George W., St. Paul, Minn., assignor to American Can Company, Jersey City, N. J. Manufacture of key-opening tongued-tearing-strip cans | 735,850 | Aug. 11 | 1565 | 334 | 105 | 1334 |
| Weber, Gustav A. A., Hartford, Conn. Memorandum-tablet | 738,504 | Sept. 8 | 1938 | 423 | 106 | 431 |
| Weber, Heinrich F., New York, N. Y. Bird-chaser | 733,778 | July 14 | 1928 | 453 | 105 | 423 |
| Weber, Heinrich F., New York, N. Y. Sounding toy | 733,779 | July 14 | 1930 | 453 | 105 | 423 |
| Weber, Henry, assignor of one-half to E. T. Berry, Mount Vernon, Ohio. Wrist-plate lock | 720,540 | Feb. 10 | 2085 | 481 | 102 | 1277 |
| Weber, Henry E., Canton, Ohio. Dental cuspidor | 728,638 | May 19 | 3440 | 763 | 104 | 770 |
| Weber, Jacob. (See Weber, Samuel and J.) (Reissue.) | | | | | | |
| Weber, Jacob M. (See Keyser and Weber.) | | | | | | |
| Weber, John. (See Weber, August, Sr., August, Jr., and J.) | | | | | | |
| Weber, John, assignor to Toledo Metal Wheel Co., Toledo, Ohio. Running-gear | 726,598 | Apr. 28 | 4068 | 918 | 103 | 2065 |
| Weber, John, assignor to Toledo Metal Wheel Company, Toledo, Ohio. Boy's wagon | 734,783 | July 28 | 3872 | 903 | 105 | 862 |
| Weber, John H. (See Snell, Charles S., assignor.) | | | | | | |
| Weber, Morris, Brooklyn, assignor of one-half to B. Bernard, New York, N. Y. Coat-lining | 733,780 | July 14 | 1931 | 454 | 105 | 424 |
| Weber, Nicholas. (See Forbes and Weber.) | | | | | | |
| Weber, Nicholas, Utica, N. Y. Shingle-bracket | 732,388 | June 30 | 5352 | 1186 | 104 | 2303 |
| Weber, Oskar H. (See Specketer and Weber.) | | | | | | |
| Weber, Peter, East Orange, assignor to New Jersey Patent Company, Orange, N. J. Phonographic recorder and reproducer | 744,266 | Nov. 17 | 2901 | 621 | 107 | 648 |
| Weber, Peter, assignor, by mesne assignments, to New Jersey Patent Company, Orange, N. J. Phonographic repeating mechanism | 744,267 | Nov. 17 | 2902 | 621 | 107 | 648 |
| Weber Railway Joint Manufacturing Co. (See Weber and Coates, assignors.) | | | | | | |
| Weber Railway Joint Manufacturing Company. (See Keily, John D., assignor.) | | | | | | |
| Weber Railway Joint Manufacturing Company. (See Weber, George A., assignor.) | | | | | | |
| Weber Railway Joint Mfg. Co. (See Daggett, George E., assignor.) | | | | | | |
| Weber, Rudolf, assignor to Escher Wyss & Cie., Zurich, Switzerland. Speed-governor | 719,283 | Jan. 27 | 3344 | 747 | 102 | 752 |
| Weber, Samuel and J., New York, N. Y. Signal-lantern. (Reissue) | 12,142 | Aug. 4 | 1261 | 267<br>268 | 105 | 1249 |
| Weber, William F., New York, N. Y. Combined hoisting and dumping apparatus | 748,447 | Dec. 29 | 5821 | 1326 | 107 | 2457 |
| Webley and Scott Revolver and Arms Company. (See Bloomer, Roland, assignor.) | | | | | | |
| Webster, Alfred J., assignor to J. A. Jeffrey, Columbus, Ohio. Conveyer | 735,921 | Aug. 11 | 1692 | 361 | 105 | 1360 |
| Webster, Allen, Springfield, Mass. Support and cleaner for pens and compounds for same | 720,765 | Feb. 17 | 2519 | 581 | 102 | 1384 |
| Webster, Arthur R., Milford, N. H. Adjustable soldering-block | 746,422 | Dec. 8 | 2028 | 465 | 107 | 1551 |
| Webster Camp and Lane Company. (See Hulett, George H., assignor.) | | | | | | |
| Webster, Charles A. (See Boma, John, assignor.) | | | | | | |
| Webster, Daniel M., assignor to Aultman & Taylor Machinery Company, Mansfield, Ohio. Steam-boiler | 733,781 | July 14 | 1932 | 454<br>455 | 105 | 424 |
| Webster, Daniel M., assignor to Aultman & Taylor Machinery Company, Mansfield, Ohio. Steam-boiler | 742,938 | Nov. 3 | 206 | 47 | 107 | 46 |
| Webster, Elmer W. (See Davis and Webster.) | | | | | | |
| Webster, Frank L., Waialua, Hawaii. Machine for conveying and loading crops | 740,066 | Sept. 29 | 4875 | 1093 | 106 | 1109 |
| Webster, Harold A., assignor to Webster Shoe Machine Company, Haverhill, Mass. Sole-leveling machine | 727,516 | May 5 | 1283 | 286<br>287 | 104 | 276 |
| Webster, Harold A., assignor to Webster Shoe Machine Company, Haverhill, Mass. Sole-leveling machine | 729,820 | June 2 | 550 | 121 | 104 | 1241 |
| Webster, Harold A., assignor to Webster Shoe Machine Company, Haverhill, Mass. Rotary brush or cushioned roll | 735,632 | Aug. 4 | 1145 | 242 | 105 | 1224 |
| Webster, Harold A., assignor to Webster Shoe Machine Company, Haverhill, Mass. Apparatus for leveling boots or shoes | 745,980 | Dec. 1 | 1224 | 275<br>276 | 107 | 1361 |
| Webster, Hosea, Montclair, N. J. Steam-superheater | 719,921 | Feb. 3 | 908 | 313 | 102 | 1016 |
| Webster, John, East Providence, R. I., assignor to Tilden-Thurber Company. Clothes-hanger | 730,992 | June 16 | 2678 | 597 | 104 | 1720 |
| Webster, John M., assignor to O. P. Schriver & Company, Cincinnati, Ohio. Pump-housing | 737,182 | Aug. 25 | 4005 | 888 | 105 | 1886 |
| Webster, John W., assignor to Deering Harvester Company, Chicago, Ill. Grain-binder | 723,955 | Mar. 31 | 4295 | 964 | 103 | 962 |
| Webster & Perks Tool Co. (See Perks, George W., assignor.) | | | | | | |
| Webster & Perks Tool Company. (See Perks, Albert J., assignor.) | | | | | | |
| Webster, R. Harry, *et al.* (See Gorrell, William R., assignor.) | | | | | | |
| Webster Shoe Machine Company. (See Webster, Harold A., assignor.) | | | | | | |
| Webster, Walter O., assignor to Burnham, Williams & Company, Philadelphia, Pa. Motor suspension | 722,063 | Mar. 3 | 752 | 168 | 103 | 162 |
| Webster, William L., assignor of one-half to A. Cromwell, New York, N. Y. Shaft-bearing | 724,976 | Apr. 7 | 1031 | 236 | 103 | 1381 |
| Webster, William L., assignor of one-half to A. Cromwell, New York, N. Y. Steam-turbine | 725,184 | Apr. 14 | 1427 | 323 | 103 | 1486 |
| Wechsler, Isaac, Brooklyn, N. Y. Suspenders | 719,285 | Jan. 27 | 3354 | 748 | 102 | 754 |
| Week, Carl and F., Gräfrath, Germany. Hernia-truss | 735,325 | Aug. 4 | 550 | 112 | 105 | 1098 |
| Week, Friedrich. (See Week, Carl and F.) | | | | | | |
| Weed, Ellen E., Brooklyn, N. Y. Strainer for sinks | 728,059 | May 12 | 2331 | 519 | 104 | 514 |
| Weed, George M., administrator. (See Fair, George, assignor.) | | | | | | |
| Weed, Jacob K., Philadelphia, Pa., assignor of one-half to S. Twitchell Company, Camden, N. J. Bottle-filling machine | 740,997 | Oct. 6 | 1128 | 254 | 106 | 1486 |
| Weed, James, assignor of two-thirds to J. Lewis and A. A. Brown, Rawlins, Wyo. Automatic gun | 718,062 | Jan. 6 | 1009 | 225 | 102 | 217 |
| Weeks, Albertus A. (See Keep, James M., assignor.) | | | | | | |
| Weeks, Arthur P., Santa Cruz, Cal. Cinch-plate | 730,321 | June 9 | 1450 | 320 | 104 | 1440 |
| Weeks, Chester B. (See Heftler and Weeks.) | | | | | | |
| Weeks, Frank A., Plainfield, N. J. Paper-file | 741,422 | Oct. 13 | 1966 | 435 | 106 | 1685 |
| Weeks, Frank W., San Antonio, Tex. Compositor's stick | 741,423 | Oct. 13 | 1967 | 436 | 106 | 1686 |
| Weeks, Frank W., San Antonio, Tex. Type | 744,836 | Nov. 24 | 3938 | 849 | 107 | 887 |
| Weeks, Frank W., San Antonio, Tex. Type-holder | 744,837 | Nov. 24 | 3940 | 849 | 107 | 888 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | Spec. | Drg. | Vol. | Page. |
| Weeks, Frank W., San Antonio, Tex. Combined compositor's stick and type-chase | 744,838 | Nov. 24 | 3941 | 849, 850 | 107 | 888 |
| Weeks, George A., Sheldon, Ill. Display-rack | 721,113 | Feb. 17 | 3162 | 728 | 102 | 1523 |
| Weeks, George H., Stoneham, Mass. Horse-boot | 719,932 | Feb. 3 | 909 | 213 | 102 | 1016 |
| Weeks, John, assignor of one-half to J. H. Morch, Brooklyn, N. Y. Feeder for fountain-pens | 731,987 | June 23 | 4533 | 1011 | 104 | 2120 |
| Weeks, Samuel C., and L. O'Brien, Johnstown, Pa. Machine for forming sand cores | 727,517 | May 5 | 1287 | 288 | 104 | 277 |
| Weeks, Samuel V., assignor of one-half to C. A. Raht, Chattanooga, Tenn. Disk plow | 741,199 | Oct. 13 | 1517 | 343 | 106 | 1590 |
| Weele, Frédéric ter, St. Dié, France. Drawing apparatus for spinning-machines | 727,518 | May 5 | 1289 | 288 | 104 | 277 |
| Wefel, William C., assignor to G. H. Heinemann & Company, Milwaukee, Wis. Glove | 741,424 | Oct. 13 | 1968 | 436 | 106 | 1686 |
| Wege, Peter M., Niles, Ohio, assignor to General Fireproofing Company. Cabinet-curtain guide | 721,403 | Feb. 24 | 3747 | 852 | 102 | 1661 |
| Wege, Peter M., Niles, Ohio, assignor to General Fireproofing Company. Shelf-support | 721,404 | Feb. 24 | 3748 | 852 | 102 | 1662 |
| Wege, Peter M., Niles, Ohio, assignor to General Fireproofing Company. Sheet-metal structure for shelves, &c. | 721,928 | Mar. 3 | 518 | 114 | 103 | 115 |
| Wege, Peter M., Niles, Ohio, assignor to General Fireproofing Company. Sheet-metal structure for book-racks | 723,428 | Mar. 24 | 3309 | 741 | 103 | 739 |
| Wegener, Arnold, New York, N. Y. Christmas-tree holder | 729,462 | May 26 | 4899 | 1085 | 104 | 1088 |
| Wegener, Carl, Berlin, Germany. Fuel-feeding apparatus | 725,901 | Apr. 21 | 2747 | 625 | 103 | 1783 |
| Weger, John W., Colbert, Ind. Ter. Rotary engine | 748,243 | Dec. 29 | 5458 | 1244 | 107 | 2377 |
| Wegerif, Johannes C., Battlesbridge, assignor to Renfrew Crusher Company, Limited, London, England. Mill for grinding | 721,984 | Mar. 3 | 622 | 138, 139 | 103 | 134 |
| Wegerif, Johannes C., Battlesbridge, assignor to Renfrew Crusher Company, Limited, London, England. Mill for grinding | 725,521 | Apr. 14 | 2045 | 463 | 103 | 1618 |
| Wegg, David S. (See Hien, Phillip, assignor.) | | | | | | |
| Weglein, Louis, Jr., Philadelphia, Pa. Mile or sign post | 736,181 | Aug. 11 | 2159 | 464 | 105 | 1461 |
| Wegner, Frederick A., Detroit, Mich. Coffee or tea infuser and strainer | 739,470 | Sept. 22 | 3743 | 835 | 106 | 850 |
| Wehmiller, Alfred. (See Barry, Wehmiller, and Dawson.) | | | | | | |
| Wehn, Charles E., Los Angeles, Cal. Collapsible table | 737,805 | Sept. 1 | 467 | 104 | 106 | 105 |
| Wehn, Samuel W., and C. W. Oler, Everett, Pa. Protector and snow-excluder for felt boots and overshoes therefor | 732,609 | June 30 | 5769 | 1279 | 104 | 2393 |
| Wehner, Clemens, C. Maltner, and F. Bansen, Leipzig, Germany. Water-gage | 721,763 | Mar. 3 | 185 | 43 | 103 | 40 |
| Wehner, Heinrich, Frankfort-on-the-Main, Germany. Flushing-valve | 727,240 | May 5 | 785 | 168 | 104 | 169 |
| Wehner, Herman A., and J. J. Keunst, Berlin, Wis. Thread-cutter | 727,867 | May 12 | 1979 | 441 | 104 | 438 |
| Weichelt, Charles L., Philadelphia, Pa. Mercerizing-machine | 722,064 | Mar. 3 | 754 | 168 | 103 | 163 |
| Weichhart, John, San Francisco, Cal. Belt-shifting device | 737,981 | Sept. 1 | 848 | 186 | 106 | 185 |
| Weichold, Charles, Cincinnati, Ohio. Nut-lock | 724,065 | Mar. 31 | 4510 | 1016 | 103 | 1004 |
| Weidensee, Albert G. (See Jensen, Jens C., assignor.) | | | | | | |
| Weider, James C., *et al.* (See Philips, James J. E., assignor.) | | | | | | |
| Weidig, Emile F., New Orleans, La. Lantern-frame for lamp-chimneys | 719,286 | Jan. 27 | 3354 | 748 | 102 | 754 |
| Weidig, Emile F., New Orleans, La. Lantern | 729,463 | May 26 | 4902 | 1086 | 104 | 1088 |
| Weidlinger, Vincenz, Weitenegg, Austria-Hungary. Weighing mechanism for barrow-trucks | 717,785 | Jan. 6 | 512 | 114 | 102 | 110 |
| Weidlog, Carl B., Sag Harbor, N. Y. Indicator for boring-machines | 741,087 | Oct. 13 | 1295 | 297 | 106 | 1543 |
| Weidman, William, Lowell, Wis. Band-cutter | 737,539 | Aug. 25 | 4692 | 1052 | 105 | 2037 |
| Weidmann, Melchior. (See Huber, Müller, and Weidmann.) | | | | | | |
| Weidner, George W., Reading, Pa. Lamp-bracket | 725,808 | Apr. 21 | 2599 | 590 | 103 | 1751 |
| Weigel, Louis, Helena, Mont. Label-holder | 723,093 | Mar. 17 | 2664 | 600 | 103 | 596 |
| Weigele, Theodore, assignor to Diamond Rubber Company, Akron, Ohio. Tire-repair tool | 743,963 | Nov. 10 | 2257 | 486 | 107 | 498 |
| Weiglein, Michael C., and L. A. Brodbeck, assignors to Monarch Carriage Goods Company, Cincinnati, Ohio. Buggy-boot | 720,766 | Feb. 17 | 2521 | 581 | 102 | 1384 |
| Weikly, James N. (See Fraser and Weikly.) | | | | | | |
| Weil, Arthur, Chicago, Ill. Combined grate and smoke-consuming fire-bridge | 730,993 | June 16 | 2679 | 597 | 104 | 1721 |
| Weil, August J. (See Woodman, George A., assignor.) | | | | | | |
| Weil, Cilli, Laupheim, Germany. Floor polisher or oiler | 733,098 | July 7 | 713 | 174 | 105 | 151 |
| Weil, Israel E. (See Finch and Weil.) | | | | | | |
| Weil, John, Mansfield, Ohio. Pocket-knife | 727,724 | May 12 | 1713 | 384 | 104 | 386 |
| Weil, Joseph, New York, N. Y. Necktie-fastener | 724,529 | Apr. 7 | 205 | 50 | 103 | 1213 |
| Weiler, George, Uniongrove, Wis. Dough-raiser | 727,868 | May 12 | 1981 | 441 | 104 | 438 |
| Weiler, Valentine, Lincoln, Nebr. Animal-trap | 722,065 | Mar. 3 | 755 | 168, 169 | 103 | 163 |
| Weiller, Louis M., New York, N. Y. Cigar-band | 743,208 | Nov. 3 | 751 | 164 | 107 | 157 |
| Weiller & Sons. (See Brower, Julius L., assignor.) | | | | | | |
| Weimar, Fred, assignor of one-half to G. Gronlund, Chicago, Ill. Gate-opener for railway-cars | 728,639 | May 19 | 3441 | 763 | 104 | 770 |
| Weimar, Fred, and S. P. Smurr, assignors of two-thirds to G. S. French, Chicago, Ill.; said Smurr assignor to said Weimar. Clutch | 730,724 | June 9 | 2180 | 485 | 104 | 1596 |
| Weimer, Edgar A. (See Moore, Calvin L., assignor.) | | | | | | |
| Weimer, Edgar A., Lebanon, Pa. Cinder or hot-metal car for blast-furnaces | 719,706 | Feb. 3 | 532 | 118, 119 | 102 | 935 |
| Weimer, John G., New York, N. Y. Coat | 728,640 | May 19 | 3443 | 763, 764 | 104 | 770 |
| Weinberg, Arthur, assignor to L. Cassella & Co., Frankfort-on-the-Main, Germany. Blue wool-dye and making same | 718,181 | Jan. 13 | 1226 | ..... | 102 | 279 |
| Weingaertner, Albert, St. Louis, Mo. Window | 739,960 | Sept. 29 | 4670 | 1050 | 106 | 1065 |
| Weingarten Brothers. (See Grotta, David, assignor.) | | | | | | |
| Weingarten, Morris, New York, N. Y. Riding-skirt | 731,250 | June 16 | 3150 | 700 | 104 | 1814 |
| Weinland, Henry F., assignor to Lagonda Manufacturing Company, Springfield, Ohio. Boiler-tube cleaner | 730,994 | June 16 | 2681 | 597 | 104 | 1721 |
| Weinland, Henry F., assignor to Lagonda Manufacturing Company, Springfield, Ohio. Tube-cleaner | 743,782 | Nov. 10 | 1935 | 410 | 107 | 429 |
| Weinrich, Moriz, Yonkers, N. Y. Treating sugar-cane | 747,520 | Dec. 22 | 4073 | 916 | 107 | 2048 |
| Weir, Fred A., Plano, Ill. Corner-clamp for bedsteads | 743,964 | Nov. 10 | 2258 | 486 | 107 | 499 |
| Weir Frog Company. (See Partington, Charles, assignor.) | | | | | | |
| Weir, Robert, Jr., McKeesport, Pa. Attachment for trunks | 744,988 | Nov. 24 | 4205 | 909 | 107 | 942 |
| Weir, Roderick, assignor of one-half to E. Richard, Winnipeg, Canada. Clothes-cabinet | 724,977 | Apr. 7 | 1033 | 236, 237 | 103 | 1389 |
| Weir, William S., Monmouth, Ill. Jar | 730,500 | June 9 | 1786 | 400 | 104 | 1510 |
| Weir Stove Company. (See Babbitt, Rollin H., Jr., assignor.) | | | | | | |
| Weir Stove Company. (See Wilbur, George E., assignor.) | | | | | | |
| Weires, Michel, Allison, Iowa. Draft apparatus | 717,786 | Jan. 6 | 513 | 115 | 102 | 110 |
| Weisbecker, Francis A., Brooklyn, N. Y. Metal-polishing machine | 733,099 | July 7 | 714 | 174 | 105 | 151 |
| Weise, Felix, Halle-on-the-Saale, Germany. Duplex steam-pump | 747,024 | Dec. 15 | 3146 | 720, 721 | 107 | 1824 |
| Weise, Wilhelm, Hohenstein-Ernstthal, Germany. Table-receptacle for sandwiches, &c. | 745,087 | Nov. 24 | 4432 | 959 | 107 | 988 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | Spec. | Dsg. | Vol. | Page. |
| Weisell, David D., assignor of one-half to E. H. Raab, Fort Wayne, Ind. Magazine torpedo-cane | 738,379 | Sept. 8 | 1691 | 366 | 106 | 380 |
| Weisker, Bernhard H., New York, N. Y. Submarine building | 739,961 | Sept. 29 | 4671 | 1050 | 106 | 1066 |
| Weisnek, Ignatz, Federal, Pa. Wrench | 743,359 | Nov. 3 | 1062 | 227 | 107 | 226 |
| Weiss, Albert, Zurich, and L. Giroud, Olten, Switzerland. Apparatus for discharging pulverulent, granular, or like substances | 722,783 | Mar. 17 | 2127 | 475, 476 | 103 | 483 |
| Weiss, Carl W., New York, N. Y. Centrifugal pump and compressor | 730,589 | June 9 | 1945 | 433 | 104 | 1546 |
| Weiss, Carl W., New York, N. Y. Reversing-gear | 737,686 | Sept. 1 | 234 | 50 | 106 | 54 |
| Weiss, Carl W., assignor of one-half to A. Mietz, New York, N. Y. Explosive-engine | 723,956 | Mar. 31 | 4296 | 965 | 103 | 963 |
| Weiss, Carl W., assignor of one-half to A. Mietz, New York, N. Y. Governor for hydrocarbon-engines | 723,957 | Mar. 31 | 4298 | 965 | 103 | 963 |
| Weiss, Hermann, Hilchenbach, Germany. Making glue and gelatin | 738,709 | Sept. 8 | 2328 | ------ | 106 | 513 |
| Weiss, John J., assignor to himself and L. F. Weiss, Worcester, Mass. Top roll for spinning-frames | 739,041 | Sept. 15 | 2938 | 651 | 106 | 661 |
| Weiss, Louis F. (See Weiss, John J., assignor.) | | | | | | |
| Weiss, Louis F., Worcester, Mass. Spinning-machine | 742,370 | Oct. 27 | 3853 | 866 | 106 | 2108 |
| Weiss, Louis T., assignor to H. Tollner, Brooklyn, N. Y. Can-opener | 725,305 | Apr. 14 | 1632 | 368 | 103 | 1531 |
| Weiss, Louis T., Brooklyn, assignor to W. M. Speer, New York, N. Y. Hinge-making machine | 738,266 | Sept. 8 | 1442 | 311, 312, 313 | 106 | 326 |
| Weiss, Louis T., assignor to A. A. Ury, New York, N. Y. Gas-check for Bunsen burners | 732,981 | July 7 | 496 | 122 | 105 | 107 |
| Weiss, Max L., St. Louis, Mo. Ring | 732,245 | June 30 | 5073 | 1128 | 104 | 2245 |
| Weiss, Stephen, *et al.* (See Aurnhamer, George, assignor.) | | | | | | |
| Weissbach, Karl F., Schlettau, assignor of one-half to C. A. Fiedler, Schlettau-im-Erzgebridge, Germany. Reed for looms | 725,809 | Apr. 21 | 2600 | 591 | 103 | 1751 |
| Weissenthanner, Alfred L., New York, N. Y. Closure for bottles, jars, or the like | 724,147 | Mar. 31 | 4687 | 1053 | 103 | 1040 |
| Weissenthanner, Alfred L., New York, N. Y., assignor to Phoenix Cap Company. Metallic closure for bottles, jars, &c. | 745,702 | Dec. 1 | 698 | 160 | 107 | 1247 |
| Weisser, Mathias, Milwaukee, Wis. Telephone-transmitter | 732,147 | June 30 | 4884 | 1086 | 104 | 2206 |
| Weissmann, Emil, Altenburg, Germany. Lady's hat-fastener | 742,537 | Oct. 27 | 4167 | 936 | 106 | 2171 |
| Weissmann, Gustave, Paris, France. Electric incandescent lamp and circuits and conductors therefor | 726,124 | Apr. 21 | 3124 | 707 | 103 | 1862 |
| Weitz, Edward G., St. Louis, Mo. Horseshoer's hammer | 725,522 | Apr. 14 | 2046 | 463 | 103 | 1618 |
| Weitzel, Jacob F., Ludlow, Ky., assignor of one-half to J. G. Steinkamp, Cincinnati, Ohio. Drinking-trough for domestic animals | 729,821 | June 2 | 552 | 121 | 104 | 1241 |
| Weitzel, Oscar, assignor of one-half to J. Dent, Thamesville, Canada. Automatic cock-operating device for steam-engines | 735,033 | Aug. 4 | 1147 | 242 | 105 | 1225 |
| Weitzell, Richard S., Marion, Ky. Mine-car spring-bumper, draw-bar, and automatic coupling | 734,640 | July 28 | 3581 | 838 | 105 | 806 |
| Weken, Richard J., Everett, Wash. Rail-joint | 743,783 | Nov. 10 | 1938 | 410 | 107 | 430 |
| Welch, Rosia W., Baltimore, Md., assignor to Royal Milling and Manufacturing Company. Rice-polishing machine | 742,939 | Nov. 3 | 207 | 47 | 107 | 46 |
| Welch, Rosia W., Baltimore, Md., assignor to Royal Milling and Manufacturing Company. Rice-hulling machine | 745,269 | Nov. 24 | 4777 | 1043 | 107 | 1061 |
| Welch, William, Mosspoint, Miss. Shears | 726,384 | Apr. 28 | 3636 | 824 | 103 | 1982 |
| Welch, William, assignor to Draper Company, Hopedale, Mass. Filling-carrier for loom-shuttles | 721,346 | Feb. 24 | 3638 | 827 | 102 | 1639 |
| Welde, Robert. (See Merling and Welde.) | | | | | | |
| Welin, Peter, Worcester, Mass. Automatic playing attachment for musical instruments | 727,725 | May 12 | 1714 | 384, 385 | 104 | 386 |
| Welin, Peter, Worcester, Mass. Automatic piano | 731,089 | June 16 | 2859 | 635, 636 | 104 | 1758 |
| Welin, Peter, assignor of one-half to T. P. Brown, Worcester, Mass. Automatic playing attachment for musical instruments | 748,126 | Dec. 29 | 5257 | 1193, 1194 | 107 | 2334 |
| Welker, Louis, Sr., Williamsport, Pa. Table | 733,925 | July 14 | 2221 | 521 | 105 | 482 |
| Welker, Louis, Sr., Williamsport, Pa. Extension-table | 735,008 | July 28 | 4290 | 998 | 105 | 950 |
| Welker, Oscar B., New York, N. Y. Pencil-sharpener | 741,857 | Oct. 20 | 2807 | 625 | 106 | 1880 |
| Welle-Boettler Bakery Company. (See Reiger, Charles, assignor.) | | | | | | |
| Weller, Franklin A., Philmont, N. Y. Apparatus for dyeing or bleaching | 735,183 | Aug. 4 | 296 | 58 | 105 | 1043 |
| Weller, George L., assignor to J. W. Voglesong, Elyria, Ohio. Wood-fiber-cutting machine | 732,246 | June 30 | 5074 | 1128, 1129 | 104 | 2245 |
| Weller, Michael S., assignor of one-half to G. B. Goetz, Charlestown, W. Va. Keyhole-guard and door-lifter | 724,635 | Apr. 7 | 404 | 96 | 103 | 1256 |
| Welles, Edward B., assignor of one-third to T. G. Clark, Asheville, N. C. Whiffletree-clip | 720,866 | Feb. 17 | 2681 | 619 | 102 | 1418 |
| Welles, Richard H., assignor to Badger Brass Manufacturing Company, Kenosha, Wis. Acetylene-gas generator | 737,183 | Aug. 25 | 4005 | 888, 889 | 105 | 1886 |
| Wellington, Frank O., and C. B. Edwards, East Braintree, assignors to Fore River Ship and Engine Company, Quincy, Mass. Steam-generator | 720,645 | Feb. 17 | 2313 | 530 | 102 | 1338 |
| Wellman, Calvin W., Toledo, Ohio. Coffin-lowering device | 717,727 | Jan. 6 | 365 | 89 | 102 | 78 |
| Wellman, Charles H. (See Daniels and Wellman.) | | | | | | |
| Wellman, Charles H. (See Seaver, Wellman, and Morgan.) | | | | | | |
| Wellman, Charles H. (See Wellman, Samuel T. and C. H.) | | | | | | |
| Wellman, Charles H. (See Wellman and Street, assignors.) | | | | | | |
| Wellman, Charles H., assignor to Wellman-Seaver Engineering Company, Cleveland, Ohio. Furnace-charging apparatus | 723,094 | Mar. 17 | 2665 | 600 | 103 | 596 |
| Wellman, Charles H., assignor to S. T. Wellman, Cleveland, Ohio, and J. Kennedy, Pittsburg, Pa., trustees. Manipulator for feed-tables of rolling-mills | 721,628 | Feb. 24 | 4178 | 950 | 102 | 1755 |
| Wellman, Charles H., and A. Ernst, assignors to Wellman-Seaver-Morgan Engineering Company, Cleveland, Ohio. Apparatus for pushing coke from coke-ovens | 731,252 | June 16 | 3152 | 701 | 104 | 1814 |
| Wellman, Charles H., J. W. Seaver, and C. F. Street, Cleveland, Ohio. Friction draft rigging for railway-cars | 734,480 | July 21 | 3290 | 772, 773 | 105 | 727 |
| Wellman, Charles H., A. Ernst, and F. H. Moyer, assignors to Wellman-Seaver-Morgan Engineering Company, Cleveland, Ohio. Combined charging and discharging device for coke-ovens | 731,251 | June 16 | 3151 | 700, 701 | 104 | 1814 |
| Wellman, Harlan P., Ashland, Ky. Electric headlight-lamp | 723,766 | Mar. 24 | 3905 | 878, 879 | 103 | 863 |
| Wellman, Harlan P., Ashland, Ky. Electric-arc lamp | 725,523 | Apr. 14 | 2046 | 463, 464 | 103 | 1618 |
| Wellman, Harlan P., Ashland, Ky. Electric headlight-lamp | 728,789 | May 19 | 3708 | 827, 828 | 104 | 824 |
| Wellman, Samuel T. (See Daniels and Wellman.) | | | | | | |
| Wellman, Samuel T., trustee. (See Kennedy, Julian, assignor.) | | | | | | |
| Wellman, Samuel T., *et al.*, trustees. (See Wellman, Charles H., assignor.) | | | | | | |
| Wellman, Samuel T. and C. H., assignors to Wellman-Seaver-Morgan Engineering Company, Cleveland, Ohio. Gripping device for furnace-charging machines | 719,399 | Jan. 27 | 3573 | 798 | 102 | 891 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| Wellman, Samuel T. and C. H., assignors to Wellman-Seaver-Morgan Engineering Company, Cleveland, Ohio. Furnace-charging machine | 721,627 | Feb. 24 | 4176 | 950 | 102 | 1754 |
| Wellman, Samuel T. and C. H., Cleveland, Ohio, assignors, by mesne assignments, to S. T. Wellman and J. Kennedy, Pittsburg, Pa. Manipulator for feed-tables of rolling-mills | 721,626 | Feb. 24 | 4175 | 949 | 102 | 1754 |
| Wellman, Samuel T., and C. F. Street, assignors of one-third to C. H. Wellman, Cleveland, Ohio. Railway-car | 728,813 | May 19 | 3756 | 838<br>839 | 104 | 835 |
| Wellman, Samuel T., and J. E. A. Moore, assignors to Wellman-Seaver Engineering Company, Cleveland, Ohio. Automatic rail gripping or locking device for electric cranes | 722,066 | Mar. 3 | 757 | 169 | 103 | 163 |
| Wellman-Seaver Engineering Company. (See Seaver, Wellman, and Morgan, assignors.) | | | | | | |
| Wellman-Seaver Engineering Company. (See Wellman, Charles H., assignor.) | | | | | | |
| Wellman-Seaver Engineering Company. (See Wellman and Moore, assignors.) | | | | | | |
| Wellman-Seaver-Morgan Company. (See Seaver, John W., assignor.) | | | | | | |
| Wellman-Seaver-Morgan Engineering Company. (See Daniels and Wellman, assignors.) | | | | | | |
| Wellman-Seaver-Morgan Engineering Company. (See Seaver and Moore, assignors.) | | | | | | |
| Wellman-Seaver-Morgan Engineering Company. (See Seaver and Morgan, assignors.) | | | | | | |
| Wellman-Seaver-Morgan Engineering Company. (See Wellman and Ernst, assignors.) | | | | | | |
| Wellman-Seaver-Morgan Engineering Company. (See Wellman, Samuel T. and C. H., assignors.) | | | | | | |
| Wellman-Seaver-Morgan Engineering Company. (See Wellman, Ernst, and Moyer, assignors.) | | | | | | |
| Wellman Sole Cutting Machine Company. (See Stackpole, Charles F., assignor.) | | | | | | |
| Wellner, Julius. (See Clifford, Charles C. and A. C., assignors.) | | | | | | |
| Wellner, Julius. (See Gleason, Edward D., assignor.) | | | | | | |
| Wellner, Julius, Philadelphia, Pa. Sound-reproducing machine | 734,206 | July 21 | 2780 | 652 | 105 | 621 |
| Wells, Absalom B., Washington, D. C. Hose-coupling | 721,985 | Mar. 3 | 623 | 139 | 103 | 135 |
| Wells, Albert C., Whittier, Cal. Street-railway curve | 717,728 | Jan. 6 | 367 | 90 | 102 | 79 |
| Wells, Albert R., Southington, Conn. Floor-plate for steam and water pipes | 722,338 | Mar. 10 | 1276 | 284 | 103 | 287 |
| Wells, Charles L., *et al.* (See Hachmann, Frederick, assignor.) | | | | | | |
| Wells, Charles L., St. Paul, Minn. Hose-supporter | 743,670 | Nov. 10 | 1734 | 366 | 107 | 386 |
| Wells, Elmer J., Nashua, assignor to Pool Game Register Company, Waterloo, Iowa. Pool-ball-registering triangle | 736,805 | Aug. 18 | 3318 | 736 | 105 | 1721 |
| Wells, Frank A., Florence, Kans. Cotton-seed huller | 731,988 | June 23 | 4534 | 1011<br>1012 | 104 | 2120 |
| Wells, Frank A., deceased, New York, N. Y.; W. E. Wells, administrator. Bidet | 723,346 | Mar. 24 | 3146 | 707 | 103 | 707 |
| Wells, Frank O., Greenfield, Mass. Micrometer-gage | 734,784 | July 28 | 3874 | 903 | 105 | 863 |
| Wells, Frederic E. (See Gile, Fred H., assignor.) | | | | | | |
| Wells, Frederic E., Greenfield, Mass. Screw-plate | 736,045 | Aug. 11 | 1925 | 411 | 105 | 1411 |
| Wells, George, assignor of one-half to J. T. Bolt, Montreal, Canada. Chromatrope | 730,501 | June 9 | 1787 | 400 | 104 | 1511 |
| Wells, George W., Southbridge, Mass. Grinding and polishing machine | 720,509 | Feb. 10 | 2007 | 462 | 102 | 1263 |
| Wells, George W., Southbridge, Mass. Eyeglass-spring | 729,464 | May 26 | 4903 | 1086 | 104 | 1089 |
| Wells, George W., Amesbury, Mass. Tack-driver | 730,995 | June 16 | 2683 | 597<br>598 | 104 | 1721 |
| Wells, Harlan P., Amesbury, Mass. Corner construction for vehicle-bodies | 730,423 | June 9 | 1633 | 366 | 104 | 1477 |
| Wells, Howard, administrator. (See Ingle, George S.) | | | | | | |
| Wells, Joel C., Southbridge, Mass. Spectacles | 729,247 | May 26 | 4536 | 999 | 104 | 1010 |
| Wells, Joel C., Southbridge, Mass. Eyeglass-guard | 740,721 | Oct. 6 | 619 | 138 | 106 | 1380 |
| Wells, John C., East Hampton, Conn. Wheel for toys | 729,246 | May 26 | 4535 | 999 | 104 | 1010 |
| Wells, Levi, Springhill, Pa. Milk cooler and aerator | 721,629 | Feb. 24 | 4179 | 951 | 102 | 1755 |
| Wells, Robert F., Melbourne, Victoria, Australia. Sheep-shears | 742,766 | Oct. 27 | 4549 | 1030 | 106 | 2255 |
| Wells, Stephen M., Jr., Bristol, Conn. Swivel | 721,483 | Feb. 24 | 3893 | 886 | 102 | 1691 |
| Wells, William E., administrator. (See Wells, Frank A.) | | | | | | |
| Wells, William H., Chicago, Ill., assignor to American Can Company, Jersey City, N. J. Key-opening can | 725,384 | Apr. 14 | 1780 | 399 | 103 | 1561 |
| Wells, William S., Astoria, assignor of one-half to M. C. Migel, New York, N. Y. Tension device | 739,523 | Sept. 22 | 3820 | 857 | 106 | 868 |
| Wells, William T., *et al.* (See De Vilbiss, Allen, Jr., assignor.) | | | | | | |
| Welsbach Light Company. (See Barrows, George S., assignor.) | | | | | | |
| Welsbach Light Company. (See Daggett, Herbert M., assignor.) | | | | | | |
| Welsbach Light Company. (See Jost, John F. W., assignor.) | | | | | | |
| Welsbach Light Company. (See Royal, Henry W., assignor.) | | | | | | |
| Welsbach Light Company. (See Russell, James H., assignor.) | | | | | | |
| Welsbach Light Company. (See Stites, Goss, and Wolff, assignors.) | | | | | | |
| Welsh, Adam A., Boston, Mass., assignor to United States Celestial Paradise Construction Company, Jersey City, N. J. Illusion device | 733,359 | July 7 | 1185 | 280<br>281 | 105 | 249 |
| Welsh, David, Saxonville, Mass. Machine for shaking out and opening textile fabrics | 741,750 | Oct. 20 | 2624 | 586<br>587 | 106 | 1839 |
| Welsh, David E., assignor to Pacific Timber Company, Cottagegrove, Oreg. Snatch-block | 743,965 | Nov. 10 | 2259 | 486 | 107 | 499 |
| Welsh, Elmer E., Lawrence, Kans., assignor to R. Wray, Pittsburg, Pa. Spike-extractor | 725,902 | Apr. 21 | 2748 | 625 | 103 | 1784 |
| Welsh, George G., Bigspring, Tex. Cattle-guard | 729,465 | May 26 | 4904 | 1086 | 104 | 1089 |
| Welsh, James A. (See Broyles, Henry F., assignor.) | | | | | | |
| Welsh, Judson P. (See Reimard, Charles H., assignor.) | | | | | | |
| Welter, Carl, and T. Grenzstein, Dusseldorf, Germany. Apparatus for affixing postage-stamps | 746,423 | Dec. 8 | 2030 | 465 | 107 | 1552 |
| Welter, Samuel. (See Armstrong and Welter.) | | | | | | |
| Welton, Park E., assignor to Acme Glass Machine Company, Akron, Ohio. Glass-beveling machine | 744,268 | Nov. 17 | 2904 | 622 | 107 | 649 |
| Wemmer, William N., Trenton, N. J., assignor of one-half to J. Lucas, Philadelphia, Pa. Valve | 725,640 | Apr. 14 | 2276 | 514 | 103 | 1667 |
| Wemp, Ernest E., Oxford, Mich. Separating-roll for bean-picking machines | 738,267 | Sept. 8 | 1451 | 313 | 106 | 328 |
| Wemyss, James S., New York, N. Y. Machine for removing waste paper from cylindrical cores | 744,140 | Nov. 17 | 2651 | 565 | 107 | 594 |
| Wenberg, Alfred, Joliet, Ill. Traction-wheel | 734,481 | July 21 | 3291 | 773 | 105 | 728 |
| Wende, Hermann A., Buffalo, N. Y. Chime-ringing device | 720,541 | Feb. 10 | 2086 | 481<br>482 | 102 | 1277 |
| Wendeler, William H., St. Louis, Mo. Brake mechanism | 734,207 | July 21 | 2781 | 652<br>653 | 105 | 621 |
| Wendler, Julius, Berlin, Germany. Apparatus for closing entrances | 732,982 | July 7 | 498 | 123 | 105 | 107 |
| Wendling, George X., San Francisco, Cal. Clamp for drying lumber | 734,110 | July 21 | 2609 | 614 | 105 | 585 |
| Wendling, Theobald, assignor to C. Bomeisler and H. Fisher, New York, N. Y. Filtering substance and making same | 724,636 | Apr. 7 | 405 | ..... | 103 | 1256 |
| Wendt, Cyrus L., Canton, S. D. Barber-chair attachment | 739,524 | Sept. 22 | 3830 | 858 | 106 | 868 |
| Wendt, Wilhelm, Berlin, Germany. Key-wheel type-writing machine | 747,105 | Dec. 15 | 3304 | 752 | 107 | 1803 |
| Wengefeld, Ludwig, Vogelsmühle, near Dahlhausen, Germany. Weaver's shuttle | 718,806 | Jan. 20 | 2446 | 541 | 102 | 549 |

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| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Des. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Wengenroth, August, assignor of one-third to F. A. Arbenz, West Hoboken, N. J. Furnace for liquid fuel | 723,564 | Mar. 24 | 3557 | 795 | 103 | 789 |
| Wenger, Milton, New Holland, Pa. Wrench | 743,360 | Nov. 3 | 1064 | 227 | 107 | 227 |
| Wenger, Paul. (See Mayer and Wenger.) | | | | | | |
| Wenger, Theodor, Délémont, Switzerland. Knife | 748,547 | Dec. 29 | 6035 | 1366 | 107 | 2505 |
| Wenig, Ferdinand. (See Berg, Rudolf, assignor.) | | | | | | |
| Wenigmann, Carl, assignor to Gesellschaft für Patentverwertung mit Beschränkter Haftung, Leipzig, Germany. Fly-catcher | 734,208 | July 21 | 2784 | 653 | 105 | 622 |
| Wenke, Frank, assignor of one-third to L. Maverick, San Antonio, Tex. Neck-yoke counter-stop for artillery-carriages | 736,182 | Aug. 11 | 2159 | 464 | 105 | 1461 |
| Wennas, Charles J., Philadelphia, Pa. Mechanical movement | 726,008 | Apr. 21 | 2932 | 667 | 103 | 1821 |
| Wenneborg, Henry, Jr., Springfield, Ill. Spittoon carrier and cleaner | 742,538 | Oct. 27 | 4168 | 936 | 106 | 2171 |
| Wenner, Anders G. L., Roseau, Minn. Nut-lock | 747,669 | Dec. 22 | 4347 | 982 | 107 | 2110 |
| Wenning, Alfred, and J. Bicking, assignors to Société Alsacienne de Constructions Mecanigues, Mülhausen, Alsace, Germany. Warp stop-motion for looms | 735,184 | Aug. 4 | 299 | 59 | 105 | 1044 |
| Wenrich, Michael F., Ravine, Pa. Nut-lock | 718,682 | Jan. 20 | 2213 | 485 | 102 | 502 |
| Wensel, Theodor, St. Paul, Minn. Printer's base and attachments | 720,387 | Feb. 10 | 1800 | 409 | 102 | 1220 |
| Wensel, Theodor, St. Paul, Minn. Clamp for printers' bases | 720,388 | Feb. 10 | 1801 | 409 | 102 | 1220 |
| Wentworth, John D., deceased; M. M. Wentworth, Lynn, Mass., executrix. Garment-pocket | 731,640 | June 23 | 3913 | 871 | 104 | 1988 |
| Wentworth, Lewis E., Darby, Pa. Non-refilling bottle | 718,407 | Jan. 13 | 1638 | 360 | 102 | 367 |
| Wentworth, Mabel M., executrix. (See Wentworth, John D.) | | | | | | |
| Wentworth, Samuel J., Newport, Ky. Stitch-divider for sewing-machines | 727,038 | May 5 | 429 | 90 | 104 | 94 |
| Wentz, Robert F., Nazareth, Pa. Drier | 742,265 | Oct. 27 | 3666 | 819 | 106 | 2069 |
| Wentzel, Andrew J., West Superior, Wis. Double boiler | 746,213 | Dec. 8 | 1654 | 368 | 107 | 1473 |
| Wentzel, James G., Wellsburg, W. Va. Railway-rail | 731,253 | June 16 | 3153 | 702 | 104 | 1815 |
| Wentzien, Carl, Hoboken, N. J. Sewer | 738,645 | Sept. 8 | 2202 | 481 | 106 | 488 |
| Wenzel, Carl E., Newark, N. J. Detonating toy | 729,985 | June 2 | 859 | 192 | 104 | 1302 |
| Wenzel, Carl E., Newark, N. J. Detonating toy gunboat | 730,182 | June 2 | 1177 | 264 | 104 | 1367 |
| Wenzel, Carl E., Newark, N. J. Detonating toy | 738,584 | Sept. 8 | 2073 | 453 | 106 | 461 |
| Wenzel, Carl E., Newark, N. J. Detonating toy | 738,585 | Sept. 8 | 2076 | 453 | 106 | 462 |
| Wenzel, Carl E., Newark, N. J. Detonating toy | 739,525 | Sept. 22 | 3832 | 858 | 106 | 868 |
| Wenzel, Carl E., Newark, N. J. Detonating toy | 742,767 | Oct. 27 | 4550 | 1030 | 106 | 2256 |
| Wenzel, Fredrick E., La Crosse, Wis. Labeling-machine | 730,424 | June 9 | 1634 | 366, 367 | 104 | 1477 |
| Wenzel, Max, New York, N. Y. Coat | 736,654 | Aug. 18 | 3018 | 666 | 105 | 1659 |
| Wenzel, Stefan, Corona, N. Y. Tobacco-pipe | 740,722 | Oct. 6 | 620 | 138 | 106 | 1380 |
| Wenzel, William, Appleton, Wis. Centrifugal pump | 718,557 | Jan. 13 | 1980 | 432 | 102 | 440 |
| Wenzell, George L. (See McKay and Wenzell.) | | | | | | |
| Wenzell, Samuel S., assignor to B. H. Hartley, Philadelphia, Pa. Umbrella-retainer for traveling-bags | 746,617 | Dec. 8 | 2360 | 542 | 107 | 1627 |
| Wenzelmann, Gustave, and E. H. Overholt, assignors to Wenzelmann Manufacturing Company, Streator, Ill. Tongue-support | 748,548 | Dec. 29 | 6036 | 1366 | 107 | 2505 |
| Werkstätte für Maschinenbau, vormals Ducommun. (See Nardin, Georges, assignor.) | | | | | | |
| Werle, Henry, Sterling, Ill. Stand for umbrellas, canes, or the like | 722,546 | Mar. 10 | 1658 | 366 | 103 | 372 |
| Wermes, Frederick J., Cincinnati, Ohio. Bench-vise | 721,639 | Feb. 24 | 4197 | 954 | 102 | 1760 |
| Werner, Emil, Philadelphia, Pa. Combined stand and easel | 733,100 | July 7 | 716 | 174 | 105 | 152 |
| Werner, Frederick. (See Holmes, Alexius, assignor.) | | | | | | |
| Werner, John A., assignor to Link Belt Machinery Company, Chicago, Ill. Car-icing system | 739,962 | Sept. 29 | 4672 | 1051 | 106 | 1066 |
| Werner, Joseph P., Cliftonforge, and W. H. Silvey, Lowmoor, Va. Telephone-line contact apparatus | 733,782 | July 14 | 1933 | 455 | 105 | 424 |
| Werner, Max F., Mendota, Wis. Animal-trap | 740,343 | Sept. 29 | 5370 | 1210 | 106 | 1212 |
| Werner, Paul F. (See Schmidt and Werner.) | | | | | | |
| Werner, Paul F., Willimansett, assignor to Coburn Trolley Track Manufacturing Company, Holyoke, Mass. Switch for overhead-trolley tracks | 721,484 | Feb. 24 | 3894 | 886 | 102 | 1691 |
| Wernet, George L., Philadelphia, Pa. Powder-dispensing device | 722,784 | Mar. 17 | 2129 | 476 | 103 | 485 |
| Wernicke, Alfred F., Norwood, assignor to Globe-Wernicke Company, Cincinnati, Ohio. Desk | 727,241 | May 5 | 787 | 168 | 104 | 170 |
| Wernicke, Otto H. L., *et al.* (See Roach, William G. and A. C., assignors.) | | | | | | |
| Wernig, Frederick A., Brooklyn, N. Y. Clasp | 721,264 | Feb. 24 | 3503 | 796 | 102 | 1610 |
| Wernig, Frederick A., Brooklyn, N. Y. Cuff-holder | 723,095 | Mar. 17 | 2666 | 600 | 103 | 597 |
| Wert, Martin, assignor of one-half to W. G. and G. T. McGlaughlin, Parkers Landing, Pa. Cup for oil-wells | 723,096 | Mar. 17 | 2667 | 601 | 103 | 597 |
| Wertheimer, Bernhard, Karlsruhe, Germany. Manufacture of cigars | 724,148 | Mar. 31 | 4691 | 1053 | 103 | 1041 |
| Wertz, Frank G. (See Entwisle and Wertz.) | | | | | | |
| Wertz, George N. (See Farnsworth, Henry T., assignor.) | | | | | | |
| Weschler, Daniel D., Erie, Pa. Malt-turning machine | 722,785 | Mar. 17 | 2130 | 476, 477 | 103 | 486 |
| Wescott, Hubert, deceased; J. R. Wescott, Mullethall, S. C., administrator. Clevis | 721,530 | Feb. 24 | 3973 | 905 | 102 | 1709 |
| Wescott, Jabez R., administrator. (See Wescott, Hubert.) | | | | | | |
| Wescott, Warner C. (See Colt, Mitchell D., assignor.) | | | | | | |
| Wescott, William P., Jr., Jersey City, N. J. Divided car-axle and journal-box | 722,786 | Mar. 17 | 2135 | 477 | 103 | 486 |
| Wessinger, Henry J., Duluth, Minn. Expansion pipe-joint | 723,347 | Mar. 24 | 3148 | 708 | 103 | 707 |
| Wessinger, Henry J., Duluth, Minn. Bearing-sleeve for expansion pipe-joints | 730,425 | June 9 | 1640 | 367 | 104 | 1479 |
| Wessinger, Henry J., Duluth, Minn. Engine valve mechanism | 737,687 | Sept. 1 | 235 | 50 | 106 | 54 |
| Wessman, Carl A., Rockford, Ill. Drill | 723,097 | Mar. 17 | 2669 | 601 | 103 | 597 |
| Wesson, Asa. (See Borland, Arthur E., assignor.) | | | | | | |
| Wesson, Daniel B., Springfield, Mass. Revolver | 733,101 | July 7 | 717 | 175 | 105 | 152 |
| Wesson, Joseph H., Springfield, Mass. Revolving firearm | 743,784 | Nov. 10 | 1939 | 410 | 107 | 430 |
| West, Arnold J., Aberdeen, Wash. Offset mechanism for sawmill-carriages | 732,148 | June 30 | 4885 | 1086, 1087 | 104 | 2206 |
| West, Charles C. (See White, Thomas, assignor.) | | | | | | |
| West, Clemont L., *et al.* (See Waugh, Robert E. and E., assignors.) | | | | | | |
| West Coast Company. (See Casler, Benjamin G., assignor.) | | | | | | |
| West Disinfecting Company. (See Walz, Charles J., assignor.) | | | | | | |
| West Disinfecting Company. (See Wise, Franklyn M., assignor.) | | | | | | |
| West, Georg, Godesburg, Germany. Bottle-stopper | 736,466 | Aug. 18 | 2655 | 583 | 105 | 1585 |
| West, Gustavus H., Waco, Tex. Metal-pipe joint | 721,114 | Feb. 17 | 3165 | 728 | 102 | 1523 |
| West, Henry P. P., San Francisco, Cal. Dough cutting and weighing machine | 719,923 | Feb. 3 | 910 | 213 | 102 | 1016 |
| West, Isaac D., *et al.* (See Quin, Robert A., assignor.) | | | | | | |
| West, James, Brooklyn, assignor to Security Paper Specialty Company, New York, N. Y. Cutting mechanism | 738,380 | Sept. 8 | 1693 | 367 | 106 | 380 |
| West, James, Brooklyn, assignor to Security Paper Specialty Company, New York, N. Y. Making envelops | 738,381 | Sept. 8 | 1695 | 367, 368, 369 | 106 | 381 |
| West, John C., Simcoe, Canada. Cannery-hoist | 746,767 | Dec. 15 | 2648 | 611 | 107 | 1711 |

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| West, Joseph M. (See West, Sylvester A. and J. M.) | | | | | | |
| West, Milton J., Ogden, Utah. Ratchet-wrench | 721,265 | Feb. 24 | 3504 | 796 | 102 | 1611 |
| West, Robert N., Baltimore, Md., assignor to Adams Laundry Machinery Co., Troy, N. Y. Clothes-drier | 746,768 | Dec. 15 | 2650 | 612 | 107 | 1712 |
| West, Samuel F., *et al.* (See Neth, Clarence J., assignor.) | | | | | | |
| West, Samuel J., Burnside, Mich. Combined hay and stock rack | 721,115 | Feb. 17 | 3166 | 728 | 102 | 1524 |
| West, Sidney T. (See Miner and West.) | | | | | | |
| West, Sylvester A. and J. M., Rockport, Mo. Brick-kiln door | 729,026 | May 26 | 4146 | 919 | 104 | 931 |
| West Tire Setter Company. (See Lattin, George, assignor.) | | | | | | |
| West, Washington L., West Union, W. Va. Measuring instrument | 728,790 | May 19 | 3711 | 828 | 104 | 824 |
| West, William P., and A. J. Glor, Varysburg, N. Y. Manure-carrier | 721,485 | Feb. 24 | 3896 | 886 | 102 | 1692 |
| Westbrook, Mary V., Highlands of Navesink, N. J. Embroidery-silk frame | 746,214 | Dec. 8 | 1656 | 368 | 107 | 1473 |
| Westbrook, Nancy A., assignor of one-half to B. F. Gooch, Mason, Tex. Spring-clamp | 717,729 | Jan. 6 | 368 | 90 | 102 | 79 |
| Westbrook, Troy D., Pensacola, Fla. Well-driving hammer | 740,497 | Oct. 6 | 224 | 44 | 106 | 1294 |
| Westcote, Robert D., New York, N. Y. Ticker attachment | 735,922 | Aug. 11 | 1698 | 362 | 105 | 1362 |
| Westcott, Benjamin F., Baltimore, Md. Measuring instrument | 719,924 | Feb. 3 | 911 | 214 | 102 | 1017 |
| Westerman, Theodore, Newark, N. J. Machine for rubbing flour and lard | 732,478 | June 30 | 5524 | {1225 / 1226} | {104} | 2337 |
| Westerman, William H., Marietta, Ohio. Pump | 721,640 | Feb. 24 | 4199 | 955 | 102 | 1760 |
| Western Electric Company. (See Dean, William W., assignor.) | | | | | | |
| Western Electric Company. (See Fiske, Bradley A., assignor.) | | | | | | |
| Western Electric Company. (See Hall, Roderic F., assignor.) | | | | | | |
| Western Electric Company. (See Loveridge and Haskins, assignors.) | | | | | | |
| Western Electric Company. (See McBerty, Frank R., assignor.) (Reissue.) | | | | | | |
| Western Electric Company. (See McBerty and Loveridge, assignors.) | | | | | | |
| Western Electric Company. (See O'Connell, Joseph J., assignor.) | | | | | | |
| Western Electric Company. (See Scribner, Charles E., assignor.) | | | | | | |
| Western Electric Company. (See Short, Samuel F., assignor.) | | | | | | |
| Western Electric Company. (See Warner, Ernest P., assignor.) | | | | | | |
| Western Electric Company. (See Wiseman, Daniel E., assignor.) | | | | | | |
| Western Telephone Manufacturing Company. (See Egan, Charles E., assignor.) | | | | | | |
| Western Union Telegraph Company. (See Barclay, John C., assignor.) | | | | | | |
| Western Union Telegraph Company. (See Phelps, William P., assignor.) | | | | | | |
| Western Wheeled Scraper Company. (See Bunnell, Morton G., assignor.) | | | | | | |
| Western Wheeled Scraper Company. (See McKnight, Thomas R., assignor.) | | | | | | |
| Western Wire Fence Company. (See Canfield, Frank, assignor.) | | | | | | |
| Westervelt, John C. (See Root and Westervelt.) | | | | | | |
| Westfahl, Henry, assignor to Patton Paint Company, Milwaukee, Wis. Color-exhibiting device | 720,646 | Feb. 17 | 2316 | 531 | 102 | 1339 |
| Westfall, W. J., *et al.* (See Williams, Jackson, assignor.) | | | | | | |
| Westgate, Joseph J., *et al.* (See Oakley, James O., assignor.) | | | | | | |
| Westgate, William J., Glenville, and C. E. Herrick, Cleveland, Ohio. Car-fender | 737,806 | Sept. 1 | 469 | 104 | 106 | 106 |
| Westhaver, Benjamin, Mahone Bay, Canada. Gold-separator | 732,149 | June 30 | 4887 | 1087 | 104 | 2206 |
| Westinghouse Air Brake Company. (See Clark, Francis L., assignor.) | | | | | | |
| Westinghouse Air Brake Company. (See Cook and Ferguson, assignors.) | | | | | | |
| Westinghouse Air Brake Company. (See Dayton, Melville E., assignor.) | | | | | | |
| Westinghouse Air Brake Company. (See Herr, Edwin M., assignor.) | | | | | | |
| Westinghouse Air Brake Company. (See Livingston, Fremont P., assignor.) | | | | | | |
| Westinghouse Air Brake Company. (See Mason, Harry R., assignor.) | | | | | | |
| Westinghouse Air Brake Company. (See Newell, Frank C., assignor.) | | | | | | |
| Westinghouse Air Brake Company. (See Synnestvedt, Paul, assignor.) | | | | | | |
| Westinghouse Air Brake Company. (See Westinghouse, George, assignor.) | | | | | | |
| Westinghouse Automatic Air & Steam Coupler Company. (See Niederlander, Nicholas F., assignor.) | | | | | | |
| Westinghouse Electric & Manufacturing Co. (See Davis, Harry P., assignor.) | | | | | | |
| Westinghouse Electric & Manufacturing Co. (See Peck and Randall, assignors.) | | | | | | |
| Westinghouse Electric & Manufacturing Co. (See Rowe, Norman, assignor.) | | | | | | |
| Westinghouse Electric & Manufacturing Company. (See Baird and Sass, assignors.) | | | | | | |
| Westinghouse Electric & Manufacturing Company. (See Baker, Malcolm H., assignor.) | | | | | | |
| Westinghouse Electric & Manufacturing Company. (See De Kaiser, Isaac, assignor.) | | | | | | |
| Westinghouse Electric & Manufacturing Company. (See Dick, William A., assignor.) | | | | | | |
| Westinghouse Electric and Manufacturing Company. (See Forrer, Joseph D., assignor.) | | | | | | |
| Westinghouse Electric & Manufacturing Company. (See Gibson, George H., assignor.) | | | | | | |
| Westinghouse Electric and Manufacturing Company. (See Henderson, Robert H., assignor.) | | | | | | |
| Westinghouse Electric & Manufacturing Company. (See Hill, Ernest R., assignor.) | | | | | | |
| Westinghouse Electric & Manufacturing Company. (See Lamme, Benjamin G., assignor.) | | | | | | |
| Westinghouse Electric & Manufacturing Company. (See Lincoln, Paul M., assignor.) | | | | | | |
| Westinghouse Electric & Manufacturing Company. (See Loss, Henrik V., assignor.) | | | | | | |
| Westinghouse Electric & Manufacturing Company. (See Maxim, Hiram P., assignor.) | | | | | | |
| Westinghouse Electric & Manufacturing Company. (See Merrick, Frank A., assignor.) | | | | | | |
| Westinghouse Electric and Manufacturing Company. (See Merrick and Stull, assignors.) | | | | | | |
| Westinghouse Electric & Manufacturing Company. (See Osborne, Loyall A., assignor.) | | | | | | |
| Westinghouse Electric & Manufacturing Company. (See Peck, John S., assignor.) | | | | | | |
| Westinghouse Electric & Manufacturing Company. (See Peck and Stuart, assignors.) | | | | | | |
| Westinghouse Electric & Manufacturing Company. (See Perkins, Thomas S., assignor.) | | | | | | |
| Westinghouse Electric & Manufacturing Company. (See Shallenberger, Oliver B., assignor.) | | | | | | |
| Westinghouse Electric & Manufacturing Company. (See Skinner, Charles E., assignor.) | | | | | | |
| Westinghouse Electric & Manufacturing Company. (See Stuart, Harve R., assignor.) | | | | | | |
| Westinghouse Electric and Manufacturing Company. (See Stull, Emmett W., assignor.) | | | | | | |
| Westinghouse Electric and Manufacturing Company. (See Terry, Charles A., assignor.) | | | | | | |
| Westinghouse Electric & Manufacturing Company. (See Tilden, George G., assignor.) | | | | | | |
| Westinghouse, George. (See Aspinwall, Louis M., assignor.) | | | | | | |
| Westinghouse, George. (See Crouse, John L., assignor.) | | | | | | |
| Westinghouse, George. (See Flichtner and Denny, assignors.) | | | | | | |
| Westinghouse, George. (See Gow, Alexander M., assignor.) | | | | | | |
| Westinghouse, George. (See Gulentz, Joseph M., assignor.) | | | | | | |
| Westinghouse, George. (See Hanks, Marshall W., assignor.) | | | | | | |
| Westinghouse, George. (See Jones, Willis S., assignor.) | | | | | | |
| Westinghouse, George. (See Knox, William J., assignor.) | | | | | | |
| Westinghouse, George. (See Leblanc, Maurice, assignor.) | | | | | | |
| Westinghouse, George. (See Potter, Henry N., assignor.) | | | | | | |
| Westinghouse, George. (See Wurts, Alexander J., assignor.) | | | | | | |
| Westinghouse, George, Jr., Pittsburg, Pa. Method of and means for driving electric motors | 731,726 | June 23 | 4060 | 905 | 104 | 2017 |

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| Westinghouse, George, Pittsburg, Pa. Gas-producing system | 739,367 | Sept. 22 | 3529 | 789 | 106 | 803 |
| Westinghouse, George, Pittsburg, Pa. Gas-engine | 745,703 | Dec. 1 | 700 | 160 | 107 | 1247 |
| Westinghouse, George, Pittsburg, Pa. Gas-engine | 745,704 | Dec. 1 | 702 | 161 | 107 | 1248 |
| Westinghouse, George, assignor to Westinghouse Air Brake Company, Pittsburg, Pa. Automatic fluid-pressure brake apparatus | 727,039 | May 5 | 431 | 90 | 104 | 94 |
| Westinghouse, George, assignor to Westinghouse Air Brake Company, Pittsburg, Pa. Automatic fluid-pressure brake apparatus | 727,040 | May 5 | 432 | 90, 91 | 104 | 94 |
| Westinghouse, George, and E. Ruud, Pittsburg, Pa., assignors to Westinghouse Machine Company. Gas-engine | 722,787 | Mar. 17 | 2135 | 477, 478 | 103 | 487 |
| Westinghouse, Henry H., Edgewood Park, Pa. Feed-water regulator | 737,807 | Sept. 1 | 471 | 105 | 106 | 106 |
| Westinghouse Machine Company. (See Armstead, Frank C., assignor.) | | | | | | |
| Westinghouse Machine Company. (See Arnold, Edwin E., assignor.) | | | | | | |
| Westinghouse Machine Company. (See Arnold and Kasley, assignors.) | | | | | | |
| Westinghouse Machine Company. (See Bole, William A., assignor.) | | | | | | |
| Westinghouse Machine Company. (See Flint, William P., assignor.) | | | | | | |
| Westinghouse Machine Company. (See Stranahan, Churchill, and Roney, assignors.) | | | | | | |
| Westinghouse Machine Company. (See Westinghouse and Ruud, assignors.) | | | | | | |
| Westinghouse Machine Company. (See Yawger and Churchill, assignors.) | | | | | | |
| Westlake, James W., Greenriver, Wyo. Device for tightening bed-springs | 737,808 | Sept. 1 | 473 | 105 | 106 | 106 |
| Westlen, Lars, Euclid, Minn. Keeper for trunk-straps | 739,963 | Sept. 29 | 4674 | 1051 | 106 | 1066 |
| Westley, James, Levenshulme, assignor of two-thirds to F. Foster and W. R. Bootland, Manchester, England. Steam-trap | 722,193 | Mar. 3 | 991 | 219 | 103 | 209 |
| Westmark, Hans O., assignor of forty-nine one-hundredths to J. F. Rogers, Aurora, Ill. Twin signaling and controlling system | 741,858 | Oct. 20 | 2807 | 625 | 106 | 1880 |
| Weston, Edward, Newark, N. J. Index needle or pointer for electrical measuring instruments | 727,041 | May 5 | 435 | 91 | 104 | 95 |
| Weston, Edward, Newark, N. J. Reflecting-galvanometer | 730,061 | June 2 | 980 | 220 | 104 | 1328 |
| Weston, Edward, Newark, N. J. Rheostat | 737,982 | Sept. 1 | 850 | 186, 187 | 106 | 185 |
| Weston, Edward B., Dayton, Ohio. Paper pail | 723,565 | Mar. 24 | 3559 | 796 | 103 | 789 |
| Weston, Edward B., Dayton, Ohio. Display-rack | 730,322 | June 9 | 1452 | 320 | 104 | 1440 |
| Weston, Frank F. (See Barton, George F., assignor.) | | | | | | |
| Weston, Frederick J., Montgomery, Iowa. End-gate and shoveling-board | 741,200 | Oct. 13 | 1521 | 343, 344 | 106 | 1591 |
| Weston, Frederick J., Montgomery, Iowa. Combined end-gate and shoveling-board | 741,201 | Oct. 13 | 1524 | 344 | 106 | 1592 |
| Weston, Grace M. G. and W. H., Newton, Mass. Clothes-drier | 741,202 | Oct. 13 | 1526 | 344 | 106 | 1592 |
| Weston, Henry, assignor of one-third to C. J. Sewell, Perth, Canada. Dynamo-gearing for railway-vehicles | 736,183 | Aug. 11 | 2161 | 464, 465 | 105 | 1461 |
| Weston, Lewis H., Holbrook, Oreg. Cryptograph | 723,566 | Mar. 24 | 3560 | 796 | 103 | 789 |
| Weston, Oliver, Cleveland, Ohio. Tool-handle wedge | 727,042 | May 5 | 436 | 92 | 104 | 95 |
| Weston, Thomas A., Arden, N. C. Wrench | 725,306 | Apr. 14 | 1633 | 369 | 103 | 1531 |
| Weston, Thomas A., Arden, N. C. Chain hoist | 742,539 | Oct. 27 | 4169 | 937 | 106 | 2172 |
| Weston, Thomas A., Arden, N. C. Appliance for operating punches or the like | 747,521 | Dec. 22 | 4075 | 916 | 107 | 2049 |
| Weston, Walter H. (See Weston, Grace M. G. and W. H.) | | | | | | |
| Westover, Jonathan G., Nunica, Mich. Vehicle-wheel | 725,014 | Apr. 7 | 1105 | 251 | 103 | 1405 |
| Wetherill, William C., Canon City, assignor to Empire Zinc Company, Denver, Colo. Treating complex ores of zinc | 724,637 | Apr. 7 | 406 | | 103 | 1256 |
| Wetmore, Charles P., assignor to Russell & Erwin Manufacturing Company, New Britain, Conn. Nut-machine | 729,822 | June 2 | 554 | 122, 123, 124, 125 | 104 | 1241 |
| Wetmore, William A., San Francisco, Cal. Railway-tie | 722,473 | Mar. 10 | 1532 | 336 | 103 | 344 |
| Wetmore, William A., San Francisco, Cal. Fisherman's hat-band | 725,524 | Apr. 14 | 2050 | 464 | 103 | 1619 |
| Wetmore, William C., Buffalo, N. Y. Truss-pad | 718,408 | Jan. 13 | 1640 | 360 | 102 | 367 |
| Wetter Numbering Machine Company. (See Sanders, Frank, assignor.) | | | | | | |
| Wetteroth, William. (See Adair, Benjamin L., assignor.) | | | | | | |
| Wetterstein, Frederick G., Etna, and G. R. Lynch, Allegheny, Pa. Wrench | 723,958 | Mar. 31 | 4299 | 965 | 103 | 963 |
| Wettlaufer, Conrad E., Buffalo, N. Y. Shoe-lace holder | 719,540 | Feb. 3 | 226 | 52 | 102 | 871 |
| Wetton, Thomas F., assignor of one-half to C. E. Krebs, Newark, Ohio. Trolley-pole | 746,424 | Dec. 8 | 2031 | 466 | 107 | 1552 |
| Wetzel, Albert, Stuttgart, Germany. Speed indicating and regulating apparatus | 726,125 | Apr. 21 | 3127 | 708 | 103 | 1862 |
| Wetzell, Frank R. (See Harrison and Wetzell.) | | | | | | |
| Wetzig, Ernest L., Junction City, Kans. Apparatus for resizing, decapping, and recapping cartridge-shells | 742,768 | Oct. 27 | 4552 | 1031 | 106 | 2256 |
| Wetzler, Joseph, New York, and A. Green, Rochester, N. Y., assignors to Compound Magnet Brake Company. Brake for street-railway cars | 743,966 | Nov. 10 | 2260 | 486 | 107 | 499 |
| Wetzler, Julius, Barmen, Germany. Spring-button | 719,067 | Jan. 27 | 2941 | 657 | 102 | 668 |
| Wever, Frank M. (See Colson, William L., assignor.) | | | | | | |
| Wever, Frank M., Savannah, Ga. Acid or other liquid distributing system | 728,148 | May 12 | 2488 | 553 | 104 | 546 |
| Wever, John W., *et al.* (See Evans, Elmer O., assignor.) | | | | | | |
| Wever, La Fayette T., Arran, assignor of two-thirds to F. P. Damon and J. W. Bushnell, Tallahassee, Fla. Sash-holder | 730,996 | June 16 | 2686 | 598 | 104 | 1722 |
| Wewers, William, assignor to Gem City Stove Manufacturing Co., Quincy, Ill. Grate | 737,540 | Aug. 25 | 4693 | 1052 | 105 | 2037 |
| Weyburn Company. (See Clarke, William A., assignor.) | | | | | | |
| Weyburn, Elbert D., Cohoes, assignor to Weyburn Machine Company, New York, N. Y. Flexible shaft and casing therefor | 729,823 | June 2 | 568 | 125 | 104 | 1244 |
| Weyburn, Elbert D., Cohoes, assignor to Weyburn Machine Company, New York, N. Y. Power-transmitting device | 729,824 | June 2 | 570 | 126 | 104 | 1244 |
| Weyburn, Lewis A., Rockford, Ill. Plow | 728,341 | May 19 | 2886 | 637 | 104 | 652 |
| Weyburn Machine Company. (See Weyburn, Elbert D., assignor.) | | | | | | |
| Weyenberg, Renier, *et al.* (See Coenen, Henry J., assignor.) | | | | | | |
| Weyer, Theodore G., assignor to S. Karpen & Bros., Chicago, Ill. Hinge for sofa-beds | 744,839 | Nov. 24 | 3943 | 850 | 107 | 888 |
| Weynand, Peter, Hondo, Tex. Mowing-machine | 738,505 | Sept. 8 | 1940 | 424 | 106 | 432 |
| Whaley, Barnett B., Brooklyn, N. Y. Toy | 729,466 | May 26 | 4905 | 1086 | 104 | 1089 |
| Whalley, Enoch, Willimansett, assignor of one-half to C. H. Curran, Holyoke, Mass. Mill-truck | 724,149 | Mar. 31 | 4692 | 1053 | 103 | 1041 |
| Wharton, John C. (See Morrison and Wharton.) | | | | | | |
| Wharton, John C., Nashville, Tenn. Rotary engine | 720,542 | Feb. 10 | 2088 | 482 | 102 | 1278 |
| Wharton, Joseph. (See Harrison and Wharton.) | | | | | | |
| What Cheer Drill and Miners Tool Co. (See Walker, Alexander, assignor.) | | | | | | |
| Wheeler, Alfred H., Providence, assignor to J. Meers, Cumberland Hill, and G. Reader, Providence, R. I. Picker-motion for looms | 739,526 | Sept. 22 | 3833 | 858 | 106 | 869 |
| Whealon, Francis O., St. Paul, Minn. Locomotive exhaust mechanism | 741,859 | Oct. 20 | 2810 | 625 | 106 | 1881 |
| Wheat, John, Decatur, Ill. Window-shade fixture | 744,269 | Nov. 17 | 2908 | 623 | 107 | 650 |
| Wheat, John, and W. H. Black, Decatur, Ill. Nut and bolt lock | 725,185 | Apr. 14 | 1430 | 323 | 103 | 1487 |
| Wheat, Lee. See Lore, Richard J., assignor.) | | | | | | |
| Wheater, Richard, Laddsdale, Iowa. Fastening for picks | 732,389 | June 30 | 5353 | 1186 | 104 | 2303 |

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| Wheatley, James B., *et al.* (See Renick, Frederick E., assignor.) | | | | | | |
| Wheatley, James B., Kansas City, Mo. Cabinet-washstand | 736,655 | Aug. 18 | 3019 | 667 | 105 | 1659 |
| Wheatley, McClellen B. (See Messer, Burton B., assignor.) | | | | | | |
| Wheatley, Thomas, Syracuse, N. Y. Fountain-pen | 742,769 | Oct. 27 | 4554 | 1031 | 106 | 2256 |
| Wheatley, Thomas, Syracuse, N. Y. Mutilating device | 743,785 | Nov. 10 | 1940 | 410 | 107 | 430 |
| Wheatstone Bridge Telephone Company. (See Mason, John H., assignor.) | | | | | | |
| Wheeldon, John, Sheffield, England. Protecting-band for pneumatic tires | 722,339 | Mar. 10 | 1277 | 284 | 103 | 287 |
| Wheeler, Amzi L. (See Holland and Wheeler.) | | | | | | |
| Wheeler & Baldwin. (See McColl, Jay R., assignor.) | | | | | | |
| Wheeler, Charles F., Minneapolis, Minn. Means for securing casters to furniture | 742,770 | Oct. 27 | 4555 | 1032 | 106 | 2257 |
| Wheeler, Charles V., Allegheny, and A. G. McKenna, Pittsburg, Pa. Projectile | 721,487 | Feb. 24 | 3898 | 887 | 102 | 1692 |
| Wheeler, Charles V., Allegheny, and A. G. McKenna, Braddock, Pa. Delayed-action fuse for projectiles | 745,981 | Dec. 1 | 1225 | 276 | 107 | 1362 |
| Wheeler, Charles V., Allegheny, and A. G. McKenna, Pittsburg, Pa., assignors to Firth Stirling Steel Company. Projectile | 725,385 | Apr. 14 | 1781 | 399 | 103 | 1562 |
| Wheeler, Cornelius. (See Wade, Frank M., assignor.) | | | | | | |
| Wheeler, Eben S., Detroit, Mich. Bathometer or ship's log | 734,785 | July 28 | 3875 | 903 | 105 | 863 |
| Wheeler, Edgar S., assignor, by mesne assignments, to G. A. Clement, Detroit, Mich. Attachment for dust-pans | 737,688 | Sept. 1 | 237 | 50 | 106 | 54 |
| Wheeler, Edward G., Mobile, Ala. Mattress-machine | 724,978 | Apr. 7 | 1034 | 237 | 103 | 1389 |
| Wheeler, George E., Burlington, Iowa. Magneto-generator | 746,904 | Dec. 15 | 2916 | 673 | 107 | 1772 |
| Wheeler, George E., assignor to Modern Electric Co., Burlington, Iowa. Telephone-receiver | 728,342 | May 19 | 2887 | 637 | 104 | 653 |
| Wheeler, George E., assignor to Modern Electric Co., Burlington, Iowa. Magneto-generator | 728,343 | May 19 | 2888 | 637 | 104 | 653 |
| Wheeler, George E., assignor to Modern Electric Co., Burlington, Iowa. Telephone-transmitter | 728,344 | May 19 | 2889 | 637, 638 | 104 | 653 |
| Wheeler, George J. (See Griffiths, William, assignor.) | | | | | | |
| Wheeler, George W., Everett, Wash. Baby-jumper | 731,641 | June 23 | 3914 | 871 | 104 | 1988 |
| Wheeler, H. A. (See McKaig, Eddy T., assignor.) | | | | | | |
| Wheeler, James A., and F. W. Hargrave, assignors to Alignum Company, New York, N. Y. Architectural partition | 724,638 | Apr. 7 | 408 | 96 | 103 | 1256 |
| Wheeler, James F., Perry Township, Marion county, and A. Boice, Indianapolis, Ind. Clover-buncher | 744,840 | Nov. 24 | 3947 | 850, 851 | 107 | 889 |
| Wheeler, Lemuel A., Pawnee City, Nebr. Wagon running-gear | 727,043 | May 5 | 437 | 92 | 104 | 96 |
| Wheeler, Leonard, Wheaton, and J. T. Murphy, Chicago, Ill. Third-rail support for underrunning third-rail electric railways | 726,599 | Apr. 28 | 4070 | 919 | 103 | 2066 |
| Wheeler, Leonard, Wheaton, and J. T. Murphy, Chicago, Ill. Rail contact-shoe and support therefor | 726,600 | Apr. 28 | 4071 | 919 | 103 | 2066 |
| Wheeler, Mary J., Bournemouth, England. Cooking utensil | 740,723 | Oct. 6 | 621 | 138 | 106 | 1380 |
| Wheeler, Samuel H., Fairfield, Conn. Cabinet letter-file | 724,639 | Apr. 7 | 409 | 97 | 103 | 1257 |
| Wheeler, Samuel H., Fairfield, assignor to Wheeler & Wilson Manufacturing Company, Bridgeport, Conn. Cabinet for sewing-machines | 739,765 | Sept. 22 | 4268 | 956 | 106 | 963 |
| Wheeler, Schuyler S. (See Herzog and Wheeler.) | | | | | | |
| Wheeler, Seth, Albany, N. Y. Toilet-paper server and package of paper therefor | 730,997 | June 16 | 2687 | 598, 599 | 104 | 1722 |
| Wheeler, Thomas W., Hylton, Tex. Starting or stopping mechanism for windmills | 722,547 | Mar. 10 | 1660 | 366 | 103 | 372 |
| Wheeler, Walter F., Spencer, Mass. Artificial tooth | 719,964 | Feb. 3 | 986 | 229 | 102 | 1032 |
| Wheeler, Warren F., Stoneham, Mass. Snow-plow | 734,026 | July 21 | 2438 | 570 | 105 | 547 |
| Wheeler, William A. (See Sheridan and Wheeler.) | | | | | | |
| Wheeler, William A., Albany, N. Y. Paper-roll support | 741,860 | Oct. 20 | 2812 | 626 | 106 | 1881 |
| Wheeler, William A., Indianapolis, Ind. Mail-box | 745,749 | Dec. 1 | 774 | 177 | 107 | 1263 |
| Wheeler, William I., and J. J. Bull, Scottsville, Ill. Expansible auger | 732,479 | June 30 | 5526 | 1226, 1227 | 104 | 2337 |
| Wheeler & Wilson Manufacturing Company. (See Abercrombie, Charles M., assignor.) | | | | | | |
| Wheeler & Wilson Manufacturing Company. (See Dial and Dimond, assignors.) | | | | | | |
| Wheeler & Wilson Manufacturing Company. (See Dial, Eames, and Dimond, assignors.) | | | | | | |
| Wheeler & Wilson Manufacturing Company. (See Dimond, George H., assignor.) | | | | | | |
| Wheeler & Wilson Manufacturing Company. (See Dimond and Dial, assignors.) | | | | | | |
| Wheeler & Wilson Manufacturing Company. (See Dimond, Dial, and Abercrombie, assignor.) | | | | | | |
| Wheeler & Wilson Manufacturing Company. (See Eames and Laubscher, assignors.) | | | | | | |
| Wheeler & Wilson Manufacturing Company. (See Habbert and Allen, assignors.) | | | | | | |
| Wheeler & Wilson Manufacturing Company. (See Laubscher, Alexander, assignor.) | | | | | | |
| Wheeler & Wilson Manufacturing Company. (See Noble, Donald, assignor.) | | | | | | |
| Wheeler & Wilson Manufacturing Company. (See O'Donnell, Edmond G., assignor.) | | | | | | |
| Wheeler & Wilson Manufacturing Company. (See Ostrom, Freeland W., assignor.) | | | | | | |
| Wheeler & Wilson Manufacturing Company. (See Steward, Aurelius, assignor.) | | | | | | |
| Wheeler & Wilson Manufacturing Company. (See Wheeler, Samuel H., assignor.) | | | | | | |
| Wheelhouse, E. E., *et al.* (See Wheelhouse, George E., assignor.) | | | | | | |
| Wheelhouse, George E., Utica, N. Y., assignor to J. Redmond, Springfield, Mass., and E. E. Wheelhouse, Utica, N. Y. Bodkin | 723,507 | Mar. 24 | 3467 | 776 | 103 | 770 |
| Wheelock, Charles F., Birmingham, Ala. Ore-separator | 734,641 | July 28 | 3583 | 838 | 105 | 806 |
| Wheelock, Etta W., North Cambridge, assignor, by mesne assignments, to S. W. and L. M. Hunt, Brookline, Mass. Skirt-holding device | 726,830 | Apr. 28 | 4496 | 1014 | 103 | 2154 |
| Wheelock, Jay E., Tampico, Ill. Governor for engines | 738,382 | Sept. 8 | 1699 | 369 | 106 | 381 |
| Wheelwright, Charles S., Bristol, R. I. Apparatus for separating or draining liquids from solids | 719,541 | Feb. 3 | 226 | 53 | 102 | 871 |
| Wheelwright, Charles S., Bristol, R. I. Garbage plant | 719,542 | Feb. 3 | 229 | 53 | 102 | 871 |
| Wheelwright, Edwin W., Birmingham, England. Compound of phosphorus and sulfur and making same | 745,546 | Dec. 1 | 434 | 102 | 107 | 1190 |
| Wheildon, William M., Boston, Mass. Computing device | 721,405 | Feb. 24 | 3750 | 852 | 102 | 1662 |
| Wheildon, William M., Boston, Mass., assignor to Economic-Sanitary Company, New York, N. Y. Apparatus for cremating putrescible waste materials | 723,959 | Mar. 31 | 4300 | 965, 966 | 103 | 963 |
| Wheildon, William M., Boston, Mass., assignor to Aero Pulverizer Company, Jersey City, N. J. Pulverizer | 745,705 | Dec. 1 | 707 | 161 | 107 | 1249 |
| Whelan, Dennis J., Troy, N. Y. Scale | 734,383 | July 21 | 3114 | 732, 733 | 105 | 692 |
| Whelan, Joseph A., Rock Springs, Wyo. Safety-stirrup | 721,486 | Feb. 24 | 3897 | 886 | 102 | 1692 |
| Wherry, William B., and J. B. Hill, Overton, Tex. Fence-post | 722,474 | Mar. 10 | 1533 | 336 | 103 | 344 |
| Whinery, Samuel B., Pittsburg, Pa., assignor to Pittsburgh Blue Print Company. Lamp-controller for electric blue-printing apparatus | 747,338 | Dec. 15 | 3750 | 845 | 107 | 1959 |
| Whipple, Allen D., assignor to Kellogg Switchboard and Supply Company, Chicago, Ill. Switchboard incandescent lamp | 728,060 | May 12 | 2332 | 519 | 104 | 514 |
| Whipple, Frederick S., Michigan City, Ind. Heater for railway-switches | 748,448 | Dec. 29 | 5824 | 1327 | 107 | 2457 |
| Whipple, Henry D., assignor of one-half to C. L. Tuttle, Rochester, N. Y. Curtain-fixture | 739,129 | Sept. 15 | 3111 | 688 | 106 | 697 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| Whipple, Henry D., assignor of one-half to C. L. Tuttle, Rochester, N. Y. Device for holding fence-wires | 739,130 | Sept. 15 | 3112 | 688 | 106 | 697 |
| Whipple, Henry J. P. (See Norton, Bernard W., assignor.) | | | | | | |
| Whipple, Joel N., assignor to Landis Machine Company, St. Louis, Mo. Shuttle-actuating mechanism | 730,848 | June 9 | 2382 | 526 | 104 | 1639 |
| Whipple, Joel N., assignor to Landis Machine Company, St. Louis, Mo. Wax-thread sewing-machine | 747,284 | Dec. 15 | 3648 | 824<br>825 | 107 | 1937 |
| Whirlpool Mixer and Kneader Company. (See Cristadoro, Charles, assignor.) | | | | | | |
| Whisler, Arrah J., Newark, N. J., assignor to Rubber Balloon Company of America, New York, N. Y. Toy balloon | 726,009 | Apr. 21 | 2933 | 667 | 103 | 1821 |
| Whitacre, James E., Chartergrove, Ill. Overhead-track covering for outside doors | 736,656 | Aug. 18 | 3022 | 667 | 105 | 1660 |
| Whitaker, Charles E., Norwich, Conn. Air-heating device for stoves, &c | 748,326 | Dec. 29 | 5597 | 1276 | 107 | 2407 |
| Whitaker, John H., Davenport, Iowa. Automatically-operating door | 738,134 | Sept. 1 | 1146 | 255<br>256 | 106 | 248 |
| Whitaker, Louis P., Washington, D. C. Apparatus for separating the lateral portions of leaves from their stems | 741,863 | Oct. 20 | 2817 | 626<br>627 | 106 | 1882 |
| Whitaker, Nelson E. (See Dally, Charles A., assignor.) | | | | | | |
| Whitaker, Richard, assignor of two-thirds to R. W. and J. W. Johnson, New Brunswick, N. J. Pump | 735,009 | July 28 | 4291 | 998 | 105 | 951 |
| Whitaker, Richard, assignor of two-thirds to R. W. and J. W. Johnson, New Brunswick, N. J. Valve for pumps | 737,809 | Sept. 1 | 474 | 105 | 106 | 107 |
| Whitaker, Richard, assignor of two-thirds to R. W. and J. W. Johnson, New Brunswick, N. J. Gas-pump | 742,940 | Nov. 3 | 208 | 48 | 107 | 46 |
| Whitaker, Simon S., Venetia, Pa. Cut-off valve for rotary engines | 739,566 | Sept. 22 | 3903 | 875 | 106 | 883 |
| Whitall, Frank M., *et al.* (See Whitall, Samuel R., assignor.) | | | | | | |
| Whitall, Samuel R., U. S. Army, assignor of eleven-twentieths to F. M. Whitall and J. R. Edson, Washington, D. C. Treating wurtzilite for paints, varnishes, &c | 734,482 | July 21 | 3292 | ..... | 105 | 728 |
| Whitall, Samuel R., U. S. Army, assignor of eleven-twentieths to F. M. Whitall and J. R. Edson, Washington, D. C. Composition of wurtzilite, rubber, &c | 734,483 | July 21 | 3295 | ..... | 105 | 728 |
| Whitall Tatum Company. (See Tatum, Albert H., assignor.) | | | | | | |
| Whitall Tatum Company. (See Tatum, Charles A., assignor.) | | | | | | |
| Whitbread, William E., Godalming, assignor of one-half to R. Corkling, London, N. W., England. Motor-vehicle | 718,231 | Jan. 13 | 1321 | 292 | 102 | 299 |
| Whitcomb, Alonzo W., assignor to Whitcomb Manufacturing Company, Worcester, Mass. Metal-planing machine | 720,647 | Feb. 17 | 2317 | 531 | 102 | 1339 |
| Whitcomb, Henry E. (See Haslop, George H., assignor.) | | | | | | |
| Whitcomb, James A., Boston, Mass. Chair | 725,186 | Apr. 14 | 1431 | 324 | 103 | 1487 |
| Whitcomb Manufacturing Company. (See Whitcomb, Alonzo W., assignor.) | | | | | | |
| Whitcomb, Myron L., *et al.* (See Robinson, Thomas, assignor.) | | | | | | |
| Whitcomb, William C. (See Lippitt and Whitcomb.) | | | | | | |
| Whitcomb, William C., Chicago, Ill., assignor to George D. Whitcomb Company. Knitting-machine | 742,941 | Nov. 3 | 210 | 48 | 107 | 46 |
| Whitcraft, Edgar, Brighton, N. Y., assignor of one-half to A. C. Baldwin, Derby, Conn. Transmission-gearing for automobiles | 734,209 | July 21 | 2784 | 653 | 105 | 622 |
| White, Albert. (See Cowell and White.) | | | | | | |
| White, Alvin C., Milwaukee, Wis. Attachable vehicle-runner | 744,841 | Nov. 24 | 3948 | 851 | 107 | 889 |
| White, Anna M., Hasbrouck Heights, N. J. Nursing-bottle | 747,025 | Dec. 15 | 3149 | 721 | 107 | 1824 |
| White, Ansley D. (See Diehl and Taylor, assignors.) | | | | | | |
| White, Arthur, Sheboygan Falls, Wis. Detachable spring sled-runner | 727,044 | May 5 | 438 | 92 | 104 | 96 |
| White, Arthur, Sheboygan Falls, Wis. Base for rocking-chairs | 735,185 | Aug. 4 | 300 | 59 | 105 | 1044 |
| White, Arthur E., Chicago, Ill. Nut lock and guard | 718,744 | Jan. 20 | 2333 | 515 | 102 | 526 |
| White, Arthur E., Chicago, and J. J. Evans, West Grossdale, Ill. Combined menu-card and meal and pay check | 739,964 | Sept. 29 | 4675 | 1052 | 106 | 1066 |
| White, Benjamin T., Julesburg, Mo. Parlor-croquet board | 721,764 | Mar. 3 | 185 | 43 | 103 | 41 |
| White, Bruce C., Pittsburg, Pa. Molding apparatus | 738,506 | Sept. 8 | 1941 | 424<br>425 | 106 | 432 |
| White, Bruce C., Pittsburg, Pa. Pump | 743,361 | Nov. 3 | 1065 | 227<br>228 | 107 | 227 |
| White, Bruce C., Pittsburg, Pa. Molding-machine | 743,362 | Nov. 3 | 1069 | 228<br>229 | 107 | 227 |
| White, Burdette J., assignor of one-half to H. A. Garvey, Westfield, Mass. Feed-water heater | 733,783 | July 14 | 1934 | 455 | 105 | 425 |
| White, Cassius I., Nottingham, Ind. Elevated railway | 743,786 | Nov. 10 | 1941 | 411<br>412 | 107 | 431 |
| White, Charles E., Moline, Ill. Mechanical movement | 721,847 | Mar. 3 | 345 | 76 | 103 | 75 |
| White, Charles J., New Britain, Conn. Clasp | 739,766 | Sept. 22 | 4269 | 956 | 106 | 964 |
| White, Charles L., Anderson, Ind. Flour-bolting machine | 740,344 | Sept. 29 | 5370 | 1210<br>1211 | 106 | 1212 |
| White, Charles O. (See Rickman, Robert L., assignor.) | | | | | | |
| White, Charles T., South Bend, Ind. Faucet-coupling | 727,242 | May 5 | 789 | 169 | 104 | 170 |
| White, Clarence O., assignor to Globe Iron Works, Minneapolis, Minn. Cooling-tank for internal-combustion engines | 723,098 | Mar. 17 | 2672 | 601<br>602 | 103 | 598 |
| White, Clark, Dunbar, Pa. Steam-valve | 733,888 | July 14 | 2143 | 506 | 105 | 467 |
| White, Daniel T., Racine, Wis. Dumping-box for vehicles | 738,863 | Sept. 15 | 2643 | 582<br>583 | 106 | 600 |
| White, Daniel T., and M. J. Wagner, Jr., Racine, Wis. Egg-crate | 744,842 | Nov. 24 | 3949 | 851 | 107 | 889 |
| White, David. (See Jones and White.) | | | | | | |
| White, David E., Winchester, Kans. Buckle-shield | 720,201 | Feb. 10 | 1454 | 332 | 102 | 1147 |
| White, David S., St. Paul, assignor to A. C. Paul, Minneapolis, Minn. Excavating-machine | 735,634 | Aug. 4 | 1148 | 243 | 105 | 1225 |
| White, Edgar, *et al.* (See Farmer, Julius M., assignor.) | | | | | | |
| White, Edward L., *et al.* (See Scherf, Theodore, assignor.) | | | | | | |
| White, Edwin B., Richmond, Va., assignor to American Tobacco Company. Cigarette-machine | 740,498 | Oct. 6 | 225 | 44 | 106 | 1294 |
| White, Elizabeth A. C., assignor to Royal Pattern Company, New York, N. Y. Skirt | 735,023 | July 28 | 4311 | 1002 | 105 | 955 |
| White, Everett H., assignor to Eaton, Cole & Burnham Company, Bridgeport, Conn. Hose-nozzle | 731,529 | June 23 | 3705 | 825 | 104 | 1948 |
| White, Frank, New York, N. Y. Knife | 720,202 | Feb. 10 | 1456 | 332 | 102 | 1147 |
| White, Frank, Toronto, assignor to himself, and G. A. Griffin, Guelph, Ontario, Canada. Apparatus for compressing and drying peat into blocks of peat | 738,090 | Sept. 1 | 1037 | 232<br>233 | 106 | 225 |
| White, Frank, Toronto, assignor to himself, and G. A. Griffin, Guelph, Canada. Forming peat into blocks for fuel | 738,135 | Sept. 1 | 1149 | 256 | 106 | 248 |
| White, Frank, Toronto, assignor to himself, and G. A. Griffin, Guelph, Canada. Block of peat | 738,136 | Sept. 1 | 1154 | 256 | 106 | 249 |
| White, Frank C., Meriden, Conn. Position guide and holder for pianos and automatic piano-players | 718,558 | Jan. 13 | 1981 | 432 | 102 | 440 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | Spec. | Drg. | Vol. | Page. |
| White, Frank H., Philadelphia, Pa. Traveling-case | 739,627 | Sept. 22 | 4030 | 898 | 106 | 912 |
| White, Fred H., Easton, Mass. Heel-building machine | 744,270 | Nov. 17 | 2910 | 623 | 107 | 651 |
| White, Frederick R., Lynn, Mass. Steering apparatus | 721,986 | Mar. 3 | 625 | 139 | 103 | 135 |
| White, George, Jersey City, N. J., assignor, by mesne assignments, to M. M. Gillam, trustee, New York, N. Y. Fluid-motor | 735,684 | Aug. 4 | 1241 | 263, 264 | 105 | 1244 |
| White, George, Jersey City, N. J., assignor, by mesne assignments, to Bush Engine Company. Rotary engine | 739,567 | Sept. 22 | 3904 | 875 | 106 | 884 |
| White, George A., Wellsville, Mo. Egg-testing device | 728,061 | May 12 | 2335 | 520 | 104 | 515 |
| White, George A., Bristol, Conn. Game-table | 735,186 | Aug. 4 | 301 | 59 | 105 | 1044 |
| White, George T., Colfax, Iowa. Mining-pick | 720,203 | Feb. 10 | 1457 | 332 | 102 | 1147 |
| White, H. Kirk, Jr., *et al.* (See Scott, James E., assignor.) | | | | | | |
| White, Harrie C. (See White, Hawley C. and H. C.) | | | | | | |
| White, Hawley C., North Bennington, Vt. Photographic-negative cleaner | 746,618 | Dec. 8 | 2362 | 542 | 107 | 1628 |
| White, Hawley C., assignor to H. C. White Company, North Bennington, Vt. Stereoscope | 735,024 | July 28 | 4312 | 1003 | 105 | 955 |
| White, Hawley C. and H. C., North Bennington, Vt. Photographic print | 725,525 | Apr. 14 | 2051 | ..... | 103 | 1619 |
| White, Hawley C. and H. C., North Bennington, Vt. Stereoscopic print and making same | 725,607 | Apr. 14 | 2197 | ..... | 103 | 1652 |
| White, Hawley C., and A. H. Mallison, assignors to H. C. White Co., North Bennington, Vt. Photographic-print washer | 737,983 | Sept. 1 | 852 | 187 | 106 | 186 |
| White, Henry. (See Silvis and White.) | | | | | | |
| White, Henry P., Kalamazoo, Mich. Speed-regulator | 721,406 | Feb. 24 | 3751 | 853 | 102 | 1662 |
| White, Henry P., and L. E. Payne, Kalamazoo, Mich.; said Payne assignor to said White. Cone-pulley structure | 739,368 | Sept. 22 | 3532 | 789 | 106 | 803 |
| White, Herbert E., Niles, Ohio, assignor to General Fire Proofing Company. Expanded-metal structure | 728,345 | May 19 | 2893 | 638 | 104 | 654 |
| White, Herbert E., Niles, Ohio, assignor to General Fireproofing Company. Machine for expanding metal | 735,635 | Aug. 4 | 1150 | 243, 244 | 105 | 1225 |
| White, Herman A., assignor to Curtiss-Way Company, Meridan, Conn. Printer's quoin | 723,099 | Mar. 17 | 2673 | 602 | 103 | 598 |
| White, Hubert C. (See Wardwell and White.) | | | | | | |
| White, Hugh F., Brooklyn, N. Y. Combination folding plumb, rule, and level | 741,861 | Oct. 20 | 2814 | 626 | 106 | 1882 |
| White, Hugh G., Waverly, Mo. Adding-register | 742,810 | Oct. 27 | 4627 | 1049 | 106 | 2272 |
| White, James, Kimmswick, Mo. Brake-lever | 727,869 | May 12 | 1981 | 441 | 104 | 438 |
| White, James D., London, England. Type-writing machine | 723,567 | Mar. 24 | 3564 | 797 | 103 | 790 |
| White, James D., London, England. Printing-telegraph receiver | 743,122 | Nov. 3 | 580 | 125, 126 | 107 | 121 |
| White, James K., Mansfield, Ohio. Straw-stacker | 734,027 | July 21 | 2440 | 570, 571 | 105 | 548 |
| White, James K., Mansfield, Ohio. Grain and seed separator | 738,137 | Sept. 1 | 1158 | 256 | 106 | 249 |
| White, James L., Salisbury, N. C. Furniture-brace | 742,266 | Oct. 27 | 3669 | 820 | 106 | 2070 |
| White, James P., Mattoon, Ill. Trap | 723,100 | Mar. 17 | 2675 | 602 | 103 | 598 |
| White, John, Edinburgh, Scotland. Apparatus for straining paper-pulp, &c | 728,346 | May 19 | 2894 | 638, 639 | 104 | 654 |
| White, John C., assignor to W. L. Oakes, Decatur, Ill. Valve-gear for gas-engines | 718,064 | Jan. 6 | 1013 | 226 | 102 | 218 |
| White, John C., assignor to W. L. Oakes, Decatur, Ill. Explosion-engine | 720,467 | May 26 | 4906 | 1087 | 104 | 1089 |
| White, John F., Racine, Wis. Grain-elevator | 722,788 | Mar. 17 | 2137 | 478 | 103 | 487 |
| White, John F., assignor to U. S. Portable Elevator Co., Bloomington, Ill. Elevator | 739,243 | Sept. 15 | 3315 | 735 | 106 | 741 |
| White, John F., assignor to U. S. Portable Elevator Co., Bloomington, Ill. Elevator-bucket | 740,499 | Oct. 6 | 228 | 45 | 106 | 1295 |
| White, John F., assignor to U. S. Portable Elevator Co., Bloomington, Ill. Conveyer | 747,285 | Dec. 15 | 3649 | 825 | 107 | 1937 |
| White, John G., Meriden, Conn. Hat rack or hanger | 736,806 | Aug. 18 | 3321 | 736 | 105 | 1721 |
| White, John H., *et al.* (See Scherf, Theodore, assignor.) | | | | | | |
| White, John W. (See Sullivan, Dixon, and White.) | | | | | | |
| White, Joseph, assignor to R. Hoe, New York, N. Y. Controlling device for liquid-supply rolls | 721,765 | Mar. 3 | 186 | 43, 44 | 103 | 41 |
| White, Joseph C., Chelsea, assignor to J. E. Maynadier, trustee, Boston, Mass. Firearm | 717,958 | Jan. 6 | 822 | 185, 186 | 102 | 176 |
| White, Joseph J., Selma, Ala. Car-fender | 724,979 | Apr. 7 | 1037 | 237 | 103 | 1390 |
| White, Joseph J., New Lisbon, N. J. Machine for assorting fruit | 731,828 | June 23 | 4251 | 946, 947 | 104 | 2060 |
| White, Joseph L. (See Gillner and White.) | | | | | | |
| White, Joseph P., Savannah, Ga. Single-trigger mechanism | 746,619 | Dec. 8 | 2364 | 543 | 107 | 1628 |
| White, Joseph W., Brighton, Iowa. Corn-planter | 723,960 | Mar. 31 | 4305 | 967 | 103 | 964 |
| White, Leonard L. (See Lindsay and White.) | | | | | | |
| White Light Burner Company. (See McCormick, Ulysses S., assignor.) | | | | | | |
| White, Martha M., assignor of one-half to H. Hihn, Campbell, Cal. Knee-protector | 727,243 | May 5 | 790 | 169 | 104 | 170 |
| White, Melville P., and H. Steuer, assignors to Chicago Ornamental Iron Company, Chicago, Ill. Device for operating elevator-doors | 734,484 | July 21 | 3297 | 773 | 105 | 728 |
| White, Merritt T., and T. E. Van Ness, Newark, N. J.; said Van Ness assignor to said White. Neckband-fastener | 730,323 | June 9 | 1453 | 321 | 104 | 1440 |
| White Mop Wringer Company. (See Wardwell and White, assignors.) | | | | | | |
| White, Morris C. (See Duryea and White.) | | | | | | |
| White, Morris C., Los Angeles, Cal. Sand pump or bailer | 739,042 | Sept. 15 | 2940 | 651 | 106 | 662 |
| White, Morris C., and O. C. Duryea, Los Angeles, Cal. Speed-governor | 724,765 | Apr. 7 | 643 | 151 | 103 | 1305 |
| White, Morris C., and O. C. Duryea, Los Angeles, Cal. Trolley-catch | 736,897 | Aug. 18 | 3486 | 774 | 105 | 1756 |
| White, Morris C., and O. C. Duryea, assignors to National Free Piston Engine Company, Limited, Los Angeles, Cal. Automatic feed mechanism | 736,325 | Aug. 11 | 2406 | 525 | 105 | 1516 |
| White, Morris C., and O. C. Duryea, assignors to National Free Piston Engine Company, (Limited.) Los Angeles, Cal. Automatic feed mechanism | 736,896 | Aug. 18 | 3483 | 774 | 105 | 1756 |
| White, Paul H., assignor to White Steam Wagon Company, Indianapolis, Ind. Speed-changing gear | 727,726 | May 12 | 1716 | 385 | 104 | 386 |
| White, R. D. (See Dieterich, Fred G., assignor.) | | | | | | |
| White, Robert E. L. (See Riely, Frank C., assignor.) | | | | | | |
| White, Robert L., Hartford, Conn. Oil-cup | 719,543 | Feb. 3 | 231 | 54 | 102 | 872 |
| White, Robert L., Hartford, Conn. Attachment for water-closets | 719,925 | Feb. 3 | 913 | 214 | 102 | 1017 |
| White, Rollin H., Cleveland, Ohio. Golf-club | 740,500 | Oct. 6 | 230 | 45 | 106 | 1295 |
| White, Rollin H., assignor to White Sewing Machine Company, Cleveland, Ohio. Air-pump mechanism for motor-vehicles | 734,028 | July 21 | 2444 | 571 | 105 | 549 |
| White, Rollin H., assignor to White Sewing Machine Company, Cleveland, Ohio. Pump mechanism for steam-carriages | 734,029 | July 21 | 2445 | 571 | 105 | 549 |
| White, Rollin H., assignor to White Sewing Machine Company, Cleveland, Ohio. Water-regulator | 737,984 | Sept. 1 | 856 | 188 | 106 | 187 |
| White, Rollin H., assignor to White Sewing Machine Co., Cleveland, Ohio. Feed-water regulator | 737,985 | Sept. 1 | 857 | 188 | 106 | 187 |
| White, Rollin H., assignor to White Sewing Machine Company, Cleveland, Ohio. Condenser mechanism for steam-carriages | 740,207 | Sept. 29 | 5130 | 1152 | 106 | 1162 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| White, Rollin H., assignor to White Sewing Machine Company, Cleveland, Ohio. Stack construction for steam-carriages | 740,208 | Sept. 29 | 5132 | 1152 | 106 | 1163 |
| White, Rollin H., assignor to White Sewing Machine Company, Cleveland, Ohio. Steering mechanism for automobiles | 740,209 | Sept. 29 | 5133 | 1152 | 106 | 1163 |
| White, Rollin H., assignor to White Sewing Machine Company, Cleveland, Ohio. Pump mechanism for automobiles | 740,210 | Sept. 29 | 5135 | 1153 | 106 | 1163 |
| White, Royal C., Chicago, Ill. Filling apparatus for liquids | 738,138 | Sept. 1 | 1159 | 257 | 106 | 250 |
| White Sewing Machine Company. (See Huffman, John O., assignor.) | | | | | | |
| White Sewing Machine Company. (See White, Rollin H., assignor.) | | | | | | |
| White Steam Wagon Company. (See White, Paul H., assignor.) | | | | | | |
| White, Stephen P., and J. C. Miller, Pulaski, Tenn. Hay-shock ventilator and safety stack-bottom | 724,356 | Mar. 31 | 5102 | 1142 | 103 | 1123 |
| White, Theodore F., Chino, Cal. Oil-distributing apparatus | 741,862 | Oct. 20 | 2815 | 626 | 106 | 1882 |
| White, Thomas, assignor of one-half to C. C. West, Ogden, Utah. Car-seal | 726,809 | Apr. 28 | 4459 | 1007 | 103 | 2146 |
| White, Walter S., *et al.* (See Flanigan, Joseph H., assignor.) | | | | | | |
| White, William. (See Phillips, Hodge, and White.) | | | | | | |
| White, William H., Burrillville, R. I. Shuttle-motion for looms | 743,123 | Nov. 3 | 584 | 126 | 107 | 122 |
| White, William N., Villanow, Ga. Fertilizer-drill | 748,549 | Dec. 29 | 6038 | 1367 | 107 | 2506 |
| White, William O., Robertson, Wyo. Machine for grubbing sage-brush | 717,644 | Jan. 6 | 213 | 54 | 102 | 46 |
| Whited, Edward F. (See Schurman and Whited.) | | | | | | |
| Whiteford, James, Pittsburg, Pa. Hose-coupling | 736,184 | Aug. 11 | 2164 | 465 | 105 | 1462 |
| Whitehead, Alfred R. (See Whitehead and Layland.) | | | | | | |
| Whitehead, Edward E., New Paris, Ind. Anchor for guy-ropes, &c | 735,187 | Aug. 4 | 304 | 59 | 105 | 1045 |
| Whitehead and Hoag Company. (See Conklin, Edward D., assignor.) | | | | | | |
| Whitehead, John, Newburgh, N. Y., assignor of one-half to W. H. and A. E. Margerison, Philadelphia, Pa. Hinge | 721,641 | Feb. 24 | 4200 | 955 | 102 | 1760 |
| Whitehead, John H., Apperley Bridge, A. R. Whitehead and W. E. Layland, Leeds, England. Circular combing-machine | 741,088 | Oct. 13 | 1296 | 297 | 106 | 1543 |
| Whitehead, Louis W., Manchester, England. Braiding-machine spindle | 738,383 | Sept. 8 | 1700 | 369 | 106 | 381 |
| Whitehead, Louis W., Manchester, England. Braiding-machine | 746,215 | Dec. 8 | 1657 | 368 | 107 | 1474 |
| Whitehouse, John, Waihi, Auckland, New Zealand. Spark-arrester | 748,550 | Dec. 29 | 6039 | 1367 | 107 | 2506 |
| Whitehurst, George W., Ellisville, Miss. Cultivator | 727,519 | May 5 | 1291 | 288 | 104 | 278 |
| Whitehurst, Robert W., Norfolk, Va. Anchor-box for joists | 725,526 | Apr. 14 | 2053 | 464 | 103 | 1620 |
| Whitehurst, Robert W., Norfolk, Va. Post-cap | 725,527 | Apr. 14 | 2054 | 465 | 103 | 1620 |
| Whitehurst, William J., *et al.* (See Vaughan, Robert M., assignor.) | | | | | | |
| Whiteley, Frederick T., Philadelphia, Pa. Device for locking and operating valves | 726,206 | Apr. 21 | 3274 | 743 | 103 | 1891 |
| Whitely, Alexander A. (See Nightingale, John E., assignor.) | | | | | | |
| Whitely, William N., Springfield, Ohio. Mowing-machine | 719,068 | Jan. 27 | 2942 | 657, 658 | 102 | 668 |
| Whitely, William N., Springfield, Ohio. Harvester | 730,998 | June 16 | 2689 | 599 | 104 | 1723 |
| Whitely, William N., Springfield, Ohio. Mowing-machine | 735,326 | Aug. 4 | 551 | 113 | 105 | 1098 |
| Whitely, William N., Springfield, Ohio. Grain-binding harvester | 737,986 | Sept. 1 | 859 | 188 | 106 | 187 |
| Whitely, William N., Springfield, Ohio. Mowing-machine | 744,141 | Nov. 17 | 2652 | 565, 566 | 107 | 594 |
| Whitely, William N., Springfield, Ohio. Harvesting-machine | 744,142 | Nov. 17 | 2656 | 566, 567 | 107 | 595 |
| Whiteside, Alfred H., and S. G. Campbell, Logansport, Ind. Bookbinder's vise | 727,520 | May 5 | 1292 | 288, 289 | 104 | 278 |
| Whiteside, George E., Wilson, assignor to H. Highland, Niagara Falls, N. Y. Power-transmission gearing | 746,216 | Dec. 8 | 1659 | 369 | 107 | 1475 |
| Whiteside, Madison, Carrier, Okla. Ter. Draft-equalizer | 723,101 | Mar. 17 | 2675 | 603 | 103 | 599 |
| Whiteside, Sidney B., assignor to Whiteside Wheel Company, Grand Rapids, Mich. Device for tensioning wheels | 732,017 | June 23 | 4610 | 1028 | 104 | 2135 |
| Whiteside, Thomas H., Youngstown, Ohio. Artificial tooth | 723,102 | Mar. 17 | 2677 | 603 | 103 | 599 |
| Whiteside Wheel Company. (See Whiteside, Sidney B., assignor.) | | | | | | |
| Whiteway, William T., St. John's, Canada. Combined rule and try-square | 730,849 | June 9 | 2384 | 526 | 104 | 1639 |
| Whitfield, Alfred W., Latty, Ohio. Nut-lock | 741,601 | Oct. 13 | 2330 | 522 | 106 | 1763 |
| Whitfield, Charles, Kettering, England. Gas-generating system | 724,357 | Mar. 31 | 5103 | 1142 | 103 | 1123 |
| Whitford, Charles, Madison, Wis. Fish-scaler | 734,210 | July 21 | 2787 | 654 | 105 | 623 |
| Whitham, Fredric E., Oxenhope, England. Grinding-mill | 736,657 | Aug. 18 | 3024 | 668 | 105 | 1660 |
| Whitin Machine Works. (See Aldrich, William O., assignor.) | | | | | | |
| Whitin Machine Works. (See Owen, Henry A., assignor.) | | | | | | |
| Whitin Machine Works. (See Owen, Henry A. and O. L., assignors.) | | | | | | |
| Whitin Machine Works. (See Owen, Oscar L., assignor.) | | | | | | |
| Whiting, Charles D., Nashua, N. H. Shoe-tray | 744,143 | Nov. 17 | 2661 | 567 | 107 | 596 |
| Whiting, Charles D., Nashua, N. H., assignor to Draper Company, Hopedale, Mass. Clamping device for harness or heddle bars | 729,245 | May 26 | 4534 | 998 | 104 | 1010 |
| Whiting & Davis. (See Davis, Edward P., assignor.) | | | | | | |
| Whiting, Edmund H., Providence, R. I. Hub for vehicle-wheels | 748,327 | Dec. 29 | 5597 | 1276 | 107 | 2407 |
| Whiting, Jasper. (See Sauveur and Whiting.) | | | | | | |
| Whiting, Jasper, Boston, Mass. Pyrometer | 724,066 | Mar. 31 | 4512 | 1016 | 103 | 1004 |
| Whiting, Lewis S., assignor to Aultman & Taylor Machinery Company, Mansfield, Ohio. Clover-huller | 738,646 | Sept. 8 | 2203 | 481, 482 | 106 | 488 |
| Whiting, Marie E. M. (See Parker and Whiting.) | | | | | | |
| Whiting, Paul, East Las Vegas, N. Mex. Ter. Hose-clamp | 723,767 | Mar. 24 | 3909 | 879, 880 | 103 | 864 |
| Whiting, Paul, East Las Vegas, N. Mex. Ter. Cylinder-valve | 723,768 | Mar. 24 | 3911 | 880 | 103 | 864 |
| Whiting, Paul, East Las Vegas, N. Mex. Ter. Check-valve and brake system | 723,769 | Mar. 24 | 3912 | 880, 881 | 103 | 865 |
| Whiting, Phillip E., Carmi, Ill. Type-writer cabinet | 747,309 | Dec. 15 | 3695 | 833 | 107 | 1948 |
| Whiting, Richard R., Cincinnati, Ohio. View outfit | 720,204 | Feb. 10 | 1458 | 333 | 102 | 1148 |
| Whiting, William A., Burlington, Vt. Speed-regulator for oil-engines | 725,528 | Apr. 14 | 2056 | 465, 466 | 103 | 1620 |
| Whitlatch, Emma. (See Hurst, Carrie F., assignor.) | | | | | | |
| Whitley, Alfred A., Bury, England. Tentering-machine | 742,107 | Oct. 20 | 3364 | 751, 752 | 106 | 1991 |
| Whitley, William J. (See Page, Daniel R., assignor.) | | | | | | |
| Whitlock, Frederick B., Indianapolis, Ind., assignor to National Malleable Castings Company. Fifth-wheel | 727,727 | May 12 | 1717 | 385 | 104 | 387 |
| Whitlock, John P., Ephratah, N. Y. Hay-rake attachment | 725,187 | Apr. 14 | 1432 | 324 | 103 | 1487 |
| Whitlock, John W., Libertyville, Iowa. Cream-separator | 724,640 | Apr. 7 | 411 | 97 | 103 | 1257 |
| Whitlock, Myron J., Ansonia, Conn. Accumulator mechanism | 719,628 | Feb. 3 | 385 | 88 | 102 | 902 |
| Whitlock Printing Press Mfg. Co. (See Huson, Winfield S., assignor.) | | | | | | |
| Whitlock, Ralph G., Los Angeles, Cal. Device for holding loose or removable sheets of paper | 720,548 | Feb. 10 | 2111 | 487 | 102 | 1282 |

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| Whitlock, William, assignor of one-third to C. W. Rarie, Greeley, Colo. Wagon-bed attachment | 738,710 | Sept. 8 | 2328 | 511 | 106 | 513 |
| Whitlock, William C. (See La May and Whitlock.) | | | | | | |
| Whitman & Barnes Manufacturing Co. (See Motherwell, David M., assignor.) | | | | | | |
| Whitman, John F., Philadelphia, Pa. Manufacture of ornamental articles from plastic materials | 731,254 | June 16 | 3154 | 702 | 104 | 1815 |
| Whitmore, Fred A., Dover, N. H., assignor to Draper Company, Portland, Me. Warp-stop-motion | 727,728 | May 12 | 1718 | 385<br>386 | 104 | 387 |
| Whitmore, Horace G., Omaha, Nebr. Paper file and binder | 717,787 | Jan. 6 | 513 | 115 | 102 | 111 |
| Whitmore, Oscar, San Diego, Cal. Brake-fitting | 727,045 | May 5 | 439 | 92 | 104 | 96 |
| Whitmore, Oscar, San Diego, Cal. Brake-block | 735,636 | Aug. 4 | 1152 | 244 | 105 | 1226 |
| Whitmore, Oscar, San Diego, Cal. Awning-fitting | 740,960 | Oct. 6 | 1058 | 241 | 106 | 1472 |
| Whitner, Hiram K., Chicago, Ill. Safety apparatus. (Reissue) | 12,145 | Aug. 11 | 2430 | 531 | 105 | 1521 |
| Whitner, Hiram K., Chicago, Ill. Safety-support for window-cleaners. (Reissue) | 12,146 | Aug. 11 | 2433 | 531<br>532 | 105 | 1521 |
| Whitney, Arthur A., New York, N. Y. Hat-machine | 734,642 | July 28 | 3585 | 839 | 105 | 807 |
| Whitney, Arthur E., Chicago, Ill. Hot-air feeder for stoves | 740,501 | Oct. 6 | 231 | 45 | 106 | 1296 |
| Whitney, Baxter D. (See Loveland, Byron S., assignor.) | | | | | | |
| Whitney, C. J., *et al.* (See Reilly, Bernard J., assignor.) | | | | | | |
| Whitney, Charles S., Springfield, Ill. Massaging implement | 733,784 | July 14 | 1935 | 456 | 105 | 425 |
| Whitney, Charles S., assignor of one-half to F. P. Lamoreux, Springfield, Ill. Electrical vibratory motor | 743,603 | Nov. 10 | 1619 | 338<br>339 | 107 | 362 |
| Whitney, Clarence E. (See Butler and Whitney.) | | | | | | |
| Whitney, Eddy R., Lynn, Mass., assignor to General Electric Company. Electrically-controlled organ-bellows | 718,182 | Jan. 13 | 1226 | 271 | 102 | 279 |
| Whitney, Eddy R., Swampscott, Mass., assignor to General Electric Company. Controller for electric motors | 732,247 | June 30 | 5076 | 1129 | 104 | 2245 |
| Whitney, Ernest C., West Fitchburg, Mass Sled attachment | 719,287 | Jan. 27 | 3355 | 749 | 102 | 754 |
| Whitney, Francis L., San Francisco, Cal. Wool-scouring mechanism | 718,232 | Jan. 13 | 1324 | 293 | 102 | 300 |
| Whitney, Frank E., Augusta, Ga. Bellows-motor controller | 725,386 | Apr. 14 | 1783 | 400 | 103 | 1562 |
| Whitney, George E., Boston, Mass. Steam-generator | 735,045 | July 28 | 4351 | 1012 | 105 | 962 |
| Whitney, Isaac. (See Flint and Whitney.) | | | | | | |
| Whitney, James M., Salem, Nebr. Stovepipe-clamp | 733,785 | July 14 | 1936 | 456 | 105 | 425 |
| Whitney, John R., Radnor Township, Delaware county, Pa. Dress-suit case | 732,983 | July 7 | 498 | 122 | 105 | 197 |
| Whitney, Jonah D., Syracuse, N. Y. Wagon | 725,307 | Apr. 14 | 1634 | 369<br>370 | 103 | 1531 |
| Whitney Manufacturing Company. (See Butler and Whitney, assignors.) | | | | | | |
| Whitney Manufacturing Company. (See Couch, Elbert M., assignor.) | | | | | | |
| Whitney, Martin G. (See Gale, Charles E., assignor.) | | | | | | |
| Whitney, Pardon A., Southington, Conn. Animal-trap | 719,544 | Feb. 3 | 233 | 54 | 102 | 872 |
| Whitney, Pardon A., Southington, Conn. Grinding-machine | 734,643 | July 28 | 3587 | 839 | 105 | 807 |
| Whitney, Terry C. (See Foster, John C., assignor.) | | | | | | |
| Whitney, William A., assignor to American Lock Nut Company of Oregon, Oregon, Ill. Lock-nut | 736,326 | Aug. 11 | 2409 | 526 | 105 | 1517 |
| Whitney, Willie D., Holley, N. Y. Harrow-tooth fastener | 728,347 | May 19 | 2895 | 639 | 104 | 654 |
| Whitney, Willie D., Holley, N. Y. Harrow-tooth fastener | 730,725 | June 9 | 2181 | 485 | 104 | 1596 |
| Whitney, Willis R., Boston, Mass., assignor to General Electric Company. Insulating material | 726,485 | Apr. 28 | 3830 | 866 | 103 | 2020 |
| Whitnight, Charles F., assignor of two-thirds to L. E. Bill and W. R. Simpson, Canton, Ohio. Pin-retainer | 739,527 | Sept. 22 | 3834 | 858 | 106 | 869 |
| Whittall, Matthew J., Worcester, Mass. Loom for weaving pile fabrics | 727,521 | May 5 | 1294 | 289 | 104 | 278 |
| Whitted, Robert H., Crawfordsville, assignor of one-half to S. Klepfer, Indianapolis, Ind. Weather-strip | 724,067 | Mar. 31 | 4515 | 1017 | 103 | 1005 |
| Whittemore, Charles. (See Whittemore, Walter L., assignor.) | | | | | | |
| Whittemore, John Q. A. (See Burke, Charles G., assignor.) | | | | | | |
| Whittemore, John Q. A. (See Burke, Charles G., assignor.) (Reissue.) | | | | | | |
| Whittemore, John Q. A. (See Ripley, Robert A., assignor.) | | | | | | |
| Whittemore, Walter L., Wollaston, assignor to C. Whittemore, Newton, Mass. Eyeleting-machine | 729,825 | June 2 | 571 | 126 | 104 | 1244 |
| Whittemore, Wilbert E., Waterville, Me. Spring-bottom for furniture | 746,769 | Dec. 15 | 2652 | 612 | 107 | 1712 |
| Whittemore, Zenas, assignor of one-fourth to H. J. Mason, Jr., Morton, Pa. Street-sweeper | 730,502 | June 9 | 1790 | 401 | 104 | 1511 |
| Whittier, Heman J. (See Stoolfire, Charles, assignor.) | | | | | | |
| Whittingham, George H., New York, N. Y., assignor to Automatic Switch Company of Baltimore City. Device for automatically cutting out starting resistances of electric motors | 728,814 | May 19 | 3759 | 839 | 104 | 836 |
| Whittingham, Walton C. (See Campbell, John D., assignor.) | | | | | | |
| Whittington, Elmer O., Oxford, Iowa. Heating apparatus for tanks | 736,898 | Aug. 18 | 3488 | 775 | 105 | 1757 |
| Whittington, George W., Indianapolis, Ind. Machine for making wire articles | 718,940 | Jan. 20 | 2701 | 604<br>605 | 102 | 604 |
| Whittington, George W., Indianapolis, Ind. Wire-fence-weaving machine | 732,984 | July 7 | 499 | 123<br>124<br>125 | 105 | 108 |
| Whittington, George W., Indianapolis, Ind. Wire-fence machine | 736,658 | Aug. 18 | 3025 | 668<br>669<br>670 | 105 | 1661 |
| Whittington, George W., assignor of one-half to J. H. Larimer, Indianapolis, Ind. Alternately-actuating mechanism | 735,685 | Aug. 4 | 1246 | 265 | 105 | 1246 |
| Whittington, George W., Indianapolis, assignor of two-thirds to A. D. Lofland, Crawfordsville, and J. S., Jr., and A. Lofland, Romney, Ind. Knotter for grain-binders | 745,941 | Dec. 1 | 1150 | 258 | 107 | 1344 |
| Whittington, Joseph H., assignor to Forsyth Manufacturing Company, Buffalo, N. Y. Back-pedaling brake | 735,327 | Aug. 4 | 555 | 114 | 105 | 1099 |
| Whittle, Samuel, Jr. (See Burk, Sidney M., assignor.) | | | | | | |
| Whittlesey, Edith O., St. Paul, assignor of one-half to N. W. Clark, Minneapolis, A. P. Lothrop and H. S. Johnson, St. Paul, Minn. Lady's belt, collar, or the like | 723,961 | Mar. 31 | 4308 | 967 | 103 | 964 |
| Whittlesey, Henry N., Camden, N. J. Vessel-hull | 735,637 | Aug. 4 | 1153 | 244<br>245 | 105 | 1226 |
| Whyte, Charles A. (See Macmillan and Whyte.) | | | | | | |
| Whyte, John A., and G. C. Edwards, Toronto, Canada. Combined signaling and telephonic intercommunicating system for railways | 744,655 | Nov. 17 | 3570 | 769 | 107 | 790 |
| Whyte, John D. (See Golland and Whyte.) | | | | | | |
| Wiard, Frederick H., assignor to Wiard Manufacturing Company, East Avon, N. Y. Washing-machine | 721,929 | Mar. 3 | 519 | 114 | 103 | 115 |
| Wiard, John B., Lynn, Mass., assignor to General Electric Company. Winding dynamo-electric machines | 744,144 | Nov. 17 | 2662 | 567<br>568 | 107 | 596 |

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| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| Wiard, John B., Lynn, Mass., assignor to General Electric Company. Winding for dynamo-electric machines | 744,145 | Nov. 17 | 2665 | 568, 569 | 107 | 596 |
| Wiard Manufacturing Company. (See Wiard, Frederick H., assignor.) | | | | | | |
| Wich, Ferdinand J., and G. L. Hoyt, Broadheath, assignors to Linotype Company, Limited, London, England. Sheet-delivery mechanism for printing or similar machines | 740,724 | Oct. 6 | 621 | 139, 140 | 106 | 1381 |
| Wichmann, Georg, and H. Kippenberg, assignors to Chemische Fabrik auf Actien, vorm. E. Schering, Berlin, Germany. Mercury salts of ethylenediamin bases and making same | 726,126 | Apr. 21 | 3128 | ------ | 103 | 1862 |
| Wicht, Frank W., and C. Spielmann, Brooklyn, N. Y. Numbering-machine | 739,369 | Sept. 22 | 3533 | 789 | 106 | 803 |
| Wick, Edwin L., Rochester, N. Y. Attachment for rakes | 729,468 | May 26 | 4907 | 1087 | 104 | 1089 |
| Wick, Myron C., *et al.* (See Huber, Ernest, assignor.) | | | | | | |
| Wickersham, Enoch G., Lewiston, Mich. Diffusion-battery | 737,184 | Aug. 25 | 4008 | 889 | 105 | 1887 |
| Wickersham Quoin Company. (See Stephens, Samuel, assignor.) | | | | | | |
| Wickham, Dennis, Ware, England. Bottle-rinsing apparatus | 723,792 | Mar. 24 | 3953 | 892 | 103 | 873 |
| Wickins, Edward L., South Yarra, Prahran, Victoria, Australia. Gage and float therefor | 745,942 | Dec. 1 | 1152 | 259 | 107 | 1345 |
| Wicks, Frederick, Esher, England. Type-controlling device for type-casting machines | 727,046 | May 5 | 441 | 93 | 104 | 97 |
| Wicks, James L. (See Simpson, Alfred J., Jr., assignor.) | | | | | | |
| Wickson, George G., San Francisco, Cal. Device for packaging liquids | 735,638 | Aug. 4 | 1159 | 245, 246 | 105 | 1227 |
| Wickson, George G., San Francisco, Cal. Lever-operated valve | 743,787 | Nov. 10 | 1945 | 412 | 107 | 431 |
| Wickstrom, Andrew, *et al.* (See Beer and Crane, assignors.) | | | | | | |
| Widders, William D., assignor of one-half to S. D. Ames, Fairland, Ind. Ter. Combined pencil-holder and calendar | 724,980 | Apr. 7 | 1039 | 238 | 103 | 1391 |
| Wide, Ivan, assignor of one-half to C. H. Halvorsen, Chicago, Ill. Lock | 722,194 | Mar. 3 | 992 | 220 | 103 | 210 |
| Wideen, Knut C., Brooklyn, assignor to Carbon-Hydrate Chemical Company, New York, N. Y. Obtaining carbon compounds | 732,480 | June 30 | 5528 | ------ | 104 | 2338 |
| Wider, Ottilie, Washington, D. C. Temperature-chart | 740,502 | Oct. 6 | 232 | 45, 46 | 106 | 1296 |
| Wider, Ottilie, Washington, D. C. Fountain-syringe | 744,656 | Nov. 17 | 3572 | 770 | 107 | 790 |
| Widerstrom, Charles W., assignor to Gilbert & Bennett Manufacturing Company, Georgetown, Conn. Batten-operating mechanism for looms | 744,843 | Nov. 24 | 3950 | 852 | 107 | 889 |
| Widman, Charles J. (See Widman and Messler, assignors.) | | | | | | |
| Widman, Edward G., and A. J. Messler; said Widman assignor to C. J. Widman, Buffalo, N. Y. Office-desk | 744,888 | Nov. 24 | 4022 | 867, 868 | 107 | 905 |
| Widmark, Fredrik. (See Fabian and Widmark.) | | | | | | |
| Widmer, Charles J., assignor to Imperial Stand Company, Marion, Ind. Folding stand | 730,062 | June 2 | 984 | 220 | 104 | 1328 |
| Widmer, Heinrich, Union Hill, N. J. Let-off motion for looms | 741,602 | Oct. 13 | 2331 | 522 | 106 | 1764 |
| Widness Manufacturing Company. (See Larsen, Nils, assignor.) | | | | | | |
| Wiebe, Isaak, Rosenfeld, Canada. Screen-cleaner | 718,559 | Jan. 13 | 1983 | 432 | 102 | 441 |
| Wiechmann, John, Albany, N. Y. Rotary engine | 724,224 | Mar. 31 | 4833 | 1084 | 103 | 1070 |
| Wieda, Ernst F. W. (See Finigan and Wieda.) | | | | | | |
| Wieda, Ernst F. W., Paterson, N. J. Candy-dripping machine | 723,103 | Mar. 17 | 2679 | 603, 604 | 103 | 599 |
| Wieda, Ernst F. W., Paterson, N. J. Kneading and mixing machine | 723,568 | Mar. 24 | 3568 | 797 | 103 | 790 |
| Wiedemann, Martin F., Burlington, Iowa. Awning-operating mechanism | 736,046 | Aug. 11 | 1926 | 411 | 105 | 1411 |
| Wiedemann, Martin F., Burlington, Iowa. Awning | 744,844 | Nov. 24 | 3952 | 852 | 107 | 890 |
| Wiedemann, Martin F., Burlington, Iowa. Awning | 744,845 | Nov. 24 | 3953 | 852 | 107 | 890 |
| Wiedenbeck, Siegmund T. (See Neubert and Wiedenbeck.) | | | | | | |
| Wiedenfeld, Peter, Duisburg, Germany. Sectional steam-boiler | 720,205 | Feb. 10 | 1462 | 333 | 102 | 1149 |
| Wiedenmayer, George C., Newark, N. J. Carbonating device | 718,683 | Jan. 20 | 2214 | 485, 486 | 102 | 502 |
| Wiederseim, William C., Philadelphia, Pa. Bottle-sealing device | 732,481 | June 30 | 5529 | 1227 | 104 | 2338 |
| Wiedersheim, John A., *et al.* (See Storey, Bradford W., assignor.) | | | | | | |
| Wiedrich, Charles L., assignor to U. S. Hame Company, Buffalo, N. Y. Hame and trace connector | 721,987 | Mar. 3 | 630 | 140 | 103 | 136 |
| Wiedrich, Charles L., assignor to United Hame Company, Buffalo, N. Y. Sheet-metal hame | 730,999 | June 16 | 2694 | 600 | 104 | 1724 |
| Wiegard, Franz, Kirchspiel Oelde, Germany. Reversible plow | 724,415 | Mar. 31 | 5235 | 1172 | 103 | 1152 |
| Wiehmayer, Theodor, Leipzig, Germany. Keyboard for pianos or organs | 717,645 | Jan. 6 | 215 | 54 | 102 | 47 |
| Wiek, William, Iola, Kans. Metal-shearing device | 742,942 | Nov. 3 | 210 | 48 | 107 | 47 |
| Wieland, Charles F., Milwaukee, Wis. Machine for cutting screw-threads | 733,446 | July 14 | 1346 | 317 | 105 | 302 |
| Wiemann, William P., Washington, Pa. Tachometer | 728,529 | May 19 | 3212 | 713 | 104 | 721 |
| Wieneke, Henry J., Iowa City, Iowa. Box-lid and tag holder | 735,328 | Aug. 4 | 557 | 114 | 105 | 1100 |
| Wiens, Adolph R., Milwaukee, Wis. Brush | 746,217 | Dec. 8 | 1663 | 370 | 107 | 1475 |
| Wiesbader, Julius. (See Löffler, Bernhard H., assignor.) | | | | | | |
| Wiesebrock, Frederick W. A., New York, N. Y., assignor, by mesne assignments, to Emergency Valve Company. Cut-off apparatus for gas or liquid supply pipes | 746,425 | Dec. 8 | 2032 | 466 | 107 | 1552 |
| Wieseckel, George, Allegheny, Pa. Lubricator | 720,767 | Feb. 17 | 2523 | 581 | 102 | 1384 |
| Wiesener, William G., Sydney, New South Wales, Australia. Shade-roller | 720,988 | Feb. 17 | 2922 | 669 | 102 | 1468 |
| Wiesenfeld, Robert S., assignor, by mesne assignments, to J. S. Patten, Baltimore, Md. Detonating toy | 720,768 | Feb. 17 | 2524 | 582 | 102 | 1385 |
| Wieser, Joseph, Brooklyn, assignor of one-half to K. Fink, New York, N. Y. Pedal mechanism for self-playing attachments for pianos | 719,926 | Feb. 3 | 914 | 214 | 102 | 1017 |
| Wieser, Joseph, assignor of one-half to K. Fink, New York, N. Y. Pedal for self-playing attachments for pianos | 745,943 | Dec. 1 | 1154 | 259 | 107 | 1345 |
| Wieser, Joseph, assignor of one-half to K. Fink, New York, N. Y. Expression device for self-playing attachments for pianos | 745,944 | Dec. 1 | 1156 | 260 | 107 | 1346 |
| Wieser, Joseph, assignor of one-half to K. Fink, New York, N. Y. Self-playing attachment for pianos | 747,816 | Dec. 22 | 4618 | 1042, 1043 | 107 | 2172 |
| Wieser, Karl, Rüttenscheid, near Essen-on-the-Ruhr, assignor to F. Krupp, Essen-on-the-Ruhr, Germany. Impact-fuse for exploding shells | 731,989 | June 23 | 4536 | 1012 | 104 | 2121 |
| Wieser, Karl, Rüttenscheid, near Essen-on-the-Ruhr, assignor to F. Krupp, Essen-on-the-Ruhr, Germany. Percussion-fuse for exploding shells | 744,448 | Nov. 17 | 3241 | 695 | 107 | 723 |
| Wigan, Herbert W. (See Bayer and Wigan.) | | | | | | |
| Wiggin, Albert J., Kennebunk, assignor of one-half to C. A. Bodwell, Sanford, Me. Axle-locking device for trolley-harps | 735,639 | Aug. 4 | 1161 | 246 | 105 | 1228 |
| Wiggins, Charles. (See Highers, Charles, assignor.) | | | | | | |
| Wiggins, Frederick A. (See Simeral and Wiggins.) | | | | | | |
| Wiggins, George W., and G. E. Quittmeyer, Bridgeport, Conn. Adjustable curtain-bracket | 736,467 | Aug. 18 | 2656 | 584 | 105 | 1585 |
| Wiggins, Hundley, *et al.* (See Lasswell, William H., assignor.) | | | | | | |
| Wiggins, William H., assignor to Brunswick-Balke-Collender Company, New York, N. Y. Bowling-alley | 722,340 | Mar. 10 | 1278 | 284 | 103 | 287 |
| Wigglesworth, Albert W., Chicago, Ill. Drilling-machine | 725,645 | Apr. 14 | 2285 | 516, 517 | 103 | 1669 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page |
|---|---|---|---|---|---|---|
| Wigglesworth, Albert W., and C. H. Norstrom, assignors to Chicago Machine Tool Company, Chicago, Ill. Power-transmitting device | 725,387 | Apr. 14 | 1784 | 400 | 103 | 1562 |
| Wiggs, Zeph, assignor to J. E. Henderson, Denton, Tex. Shaft-tug | 723,222 | Mar. 17 | 2911 | 652 | 103 | 647 |
| Wight, William N., New York, N. Y. Fireproof floor | 732,482 | June 30 | 5530 | 1227<br>1228 | 104 | 2338 |
| Wight, William N., New York, N. Y. Fireproof construction | 732,483 | June 30 | 5534 | 1228 | 104 | 2339 |
| Wight, William N., New York, N. Y. Fireproof floor and constructing same | 732,484 | June 30 | 5537 | 1228<br>1229 | 104 | 2339 |
| Wight, William N., New York, N. Y. Composite column and beam | 732,485 | June 30 | 5540 | 1229 | 104 | 2340 |
| Wight, William N., New York, N. Y. Wall | 734,289 | July 21 | 2955 | 689 | 105 | 659 |
| Wight, William N., New York, N. Y. Fireproof girder or beam | 742,943 | Nov. 3 | 211 | 48, 49 | 107 | 47 |
| Wight, William N., New York, N. Y. Partition and furring | 745,547 | Dec. 1 | 436 | 103 | 107 | 1190 |
| Wightman, Merle J., West New Brighton, N. Y., assignor to General Electric Company. Controlling electric boosters | 731,000 | June 16 | 2695 | 600 | 104 | 1724 |
| Wightman, Samuel R. (See Harrison and Wharton, assignors.) | | | | | | |
| Wigley, Robert O., Brewton, Ala. Sprocket-tooth | 735,640 | Aug. 4 | 1162 | 246 | 105 | 1228 |
| Wigley, Robert O., Brewton, Ala. Saw-collar-truing machine | 743,363 | Nov. 3 | 1081 | 229 | 107 | 229 |
| Wigmore, William H., Philadelphia, Pa. Apparatus for distributing gases | 718,941 | Jan. 20 | 2706 | 605 | 102 | 605 |
| Wigton, Burton L. (See Hale and Wigton.) | | | | | | |
| Wigton, Burton L. (See Noble and Wigton.) | | | | | | |
| Wikander, Anders J., Brooklyn, N. Y. Paper-bag machine | 743,124 | Nov. 3 | 585 | 126<br>127 | 107 | 122 |
| Wiki, Edward, Basle, Switzerland. Blowing-engine or compressor | 724,641 | Apr. 7 | 413 | 97, 98 | 103 | 1257 |
| Wilbanks, William N., assignor of one-half to F. E. Johnson, Cleburne, Tex. Display-rack | 726,127 | Apr. 21 | 3130 | 708 | 103 | 1862 |
| Wilbur, Burt, Syracuse, N. Y. Device for handling live electric wires | 731,145 | June 16 | 2972 | 660 | 104 | 1780 |
| Wilbur, Fred B., *et al.* (See Wilbur, John M., assignor.) | | | | | | |
| Wilbur, George E., assignor to Weir Stove Company, Taunton, Mass. Cooking stove or range | 719,629 | Feb. 3 | 391 | 88, 89 | 102 | 904 |
| Wilbur, John M., Colorado Springs, assignor of two-thirds to C. Minium and F. B. Wilbur, Colorado City, Colo. Switch-operating device | 724,358 | Mar. 31 | 5105 | 1143 | 103 | 1124 |
| Wilbur, John M., Colorado Springs, assignor of two-thirds to F. B. Wilbur and C. Minium, El Paso County, Colo. Switch-operating mechanism | 724,359 | Mar. 31 | 5107 | 1143 | 103 | 1124 |
| Wilburg, Paul, New Ulm, Minn. Horseshoe | 728,815 | May 19 | 3760 | 840 | 104 | 836 |
| Wilcomb, Frank, Norristown, Pa. Combination outer garment | 725,903 | Apr. 21 | 2749 | 626 | 103 | 1784 |
| Wilcox, Elijah A., New York, N. Y. Stencil | 740,961 | Oct. 6 | 1059 | 241 | 106 | 1472 |
| Wilcox, Frank E. (See Hickok and McCue, assignors.) | | | | | | |
| Wilcox, Frank E., Mechanicsburg, Pa. Vehicle-gear | 734,786 | July 28 | 3877 | 904 | 105 | 863 |
| Wilcox, Frank E., Mechanicsburg, Pa. Vehicle-gear | 734,787 | July 28 | 3878 | 904 | 105 | 864 |
| Wilcox, Frank E., Mechanicsburg, Pa. Vehicle-gear | 734,788 | July 28 | 3879 | 904 | 105 | 864 |
| Wilcox, Frank E., Mechanicsburg, Pa. Vehicle-gear | 738,384 | Sept. 8 | 1701 | 370 | 106 | 381 |
| Wilcox, Frank E., Mechanicsburg, Pa. Antirattler for fifth-wheels | 746,218 | Dec. 8 | 1664 | 370 | 107 | 1475 |
| Wilcox, Frank E., Mechanicsburg, Pa. Vehicle-gear | 746,219 | Dec. 8 | 1666 | 370 | 107 | 1476 |
| Wilcox, Henry, Newark, N. J., assignor to Wilcox Novelty Company. Safety-razor | 731,090 | June 16 | 2862 | 636 | 104 | 1759 |
| Wilcox, Henry S. (See Richardson and Wilcox.) | | | | | | |
| Wilcox, Henry S. (See Roberts and Wilcox.) | | | | | | |
| Wilcox, John F. (See Bresman, John, assignor.) | | | | | | |
| Wilcox, John F., assignor to Retort Coke Oven Company, Cleveland, Ohio. Manufacturing coke | 725,904 | Apr. 21 | 2751 | 626 | 103 | 1784 |
| Wilcox, Lewis C., Cincinnati, Ohio. Vaporizing device for hot-air registers | 736,659 | Aug. 18 | 3031 | 670 | 105 | 1662 |
| Wilcox, Lewis G., Philadelphia, Pa. Pencil-sharpener | 740,962 | Oct. 6 | 1060 | 241 | 106 | 1473 |
| Wilcox Novelty Company. (See Wilcox, Henry, assignor.) | | | | | | |
| Wilcox, Reuben O., Wichita, Kans. Vehicle-wheel | 735,329 | Aug. 4 | 558 | 114 | 105 | 1100 |
| Wilcox & White Company. (See Davis, Charles L., assignor. | | | | | | |
| Wilcox & White Company. (See Haywood, George W., assignor.) | | | | | | |
| Wilcox & White Company. (See Hosley and Harcourt, assignors.) | | | | | | |
| Wilcox, William, *et al.* (See Leikem, Anton, assignor.) | | | | | | |
| Wilcox, William R., Saratoga, Wyo. Bucket-dumping apparatus | 719,400 | Jan. 27 | 3575 | 799 | 102 | 802 |
| Wilcox, William R., Saratoga, Wyo. Means for operating hatchway-doors | 723,793 | Mar. 24 | 3954 | 892 | 103 | 873 |
| Wild, Charles E., Philadelphia, Pa. Apparatus for oxidizing textile material | 726,207 | Apr. 21 | 3275 | 744 | 103 | 1891 |
| Wild, Johann, Suhr, assignor to J. Bossart, Buchs, near Aarau, Switzerland. Drawing-compasses | 741,425 | Oct. 13 | 1969 | 436 | 106 | 1686 |
| Wilder, Edward B., St. Louis, Mo. Syringe | 720,648 | Feb. 17 | 2320 | 532 | 102 | 1340 |
| Wilder, Robert E., assignor of two-thirds to B. C. Wallace and D. F. Harris, Sumter, S. C. Broom-rack | 731,642 | June 23 | 3915 | 872 | 104 | 1989 |
| Wilder, William H., Caledonia, N. Y. Bean-harvester | 723,962 | Mar. 31 | 4309 | 967<br>968 | 103 | 965 |
| Wilder, William H., Gardner, Mass. Oil-stove | 733,307 | July 7 | 1085 | 259 | 105 | 229 |
| Wilder, William H., Gardner, Mass. Wick-raiser | 733,447 | July 14 | 1348 | 318 | 105 | 302 |
| Wildermann, Meyer, London, England. Electrolytic decomposition of alkaline salts | 741,864 | Oct. 20 | 2821 | 627<br>628<br>629 | 106 | 1883 |
| Wildermuth, La Fayette, Columbus, Ohio. Grass-receptacle for lawn-mowers | 744,657 | Nov. 17 | 3574 | 770 | 107 | 791 |
| Wilderson, Clinton G. (See Harrold and Wilderson.) | | | | | | |
| Wildhagen, Rudolph C. (See Main and Wildhagen.) | | | | | | |
| Wilding, Edwin, and A. H. Stott, London, England. Cleaner and renovator for wood | 734,485 | July 21 | 3298 | ..... | 105 | 728 |
| Wilding, James A. (See Haste and Wilding.) | | | | | | |
| Wildman, Andrew, Chicago, Ill., assignor of one-half to N. L. Hayden, Columbus, Ohio. Ruler | 734,149 | July 21 | 2682 | 631 | 105 | 600 |
| Wildman, James and W., Chicago, Ill. Smoke-consumer | 723,104 | Mar. 17 | 2681 | 604 | 103 | 600 |
| Wildman, William. (See Wildman, James and W.) | | | | | | |
| Wildridge, Gilbert J., Caldercruix, Scotland. Material for matrices | 744,889 | Nov. 24 | 4023 | ..... | 107 | 905 |
| Wilentshik, Bernhard, assignor to M. Wilentshik, New York, N. Y. Belt-buckle | 728,641 | May 19 | 3444 | 764 | 104 | 771 |
| Wilentshik, Mary. (See Wilentshik, Bernhard, assignor.) | | | | | | |
| Wiles, Frederick J., Stonypoint, N. Y. Sanding-machine for molds | 743,967 | Nov. 10 | 2263 | 487 | 107 | 500 |
| Wiles, John H., Roseburg, Oreg. Pruning-shears | 723,629 | Mar. 24 | 3681 | 825 | 103 | 814 |
| Wiles, Robert H., Chicago, assignor to Arcade Manufacturing Company, Freeport, Ill. Cork-puller | 728,642 | May 19 | 3446 | 764<br>765 | 104 | 771 |
| Wiles, Thomas S., Albany, N. Y. Dampening-machine | 736,660 | Aug. 18 | 3032 | 670<br>671 | 105 | 1662 |
| Wiles, Thomas S., Albany, N. Y. Combined dampening and ironing machine | 736,661 | Aug. 18 | 3034 | 671 | 105 | 1662 |
| Wiley, George, Vallejo, Cal. Car-coupling | 742,944 | Nov. 3 | 216 | 49 | 107 | 47 |
| Wiley, Henry T., Scottdale, Pa. Bag holder and filler | 720,543 | Feb. 10 | 2091 | 482 | 102 | 1278 |
| Wiley, Philip W., Washington, D. C. Tympan-gage adjusting and squaring device for printing-presses | 726,128 | Apr. 21 | 3132 | 709 | 103 | 1863 |
| Wiley, Richard. (See Haynes, Wiley, and Murden.) | | | | | | |
| Wiley, Roy R., St. Catharines, Canada. Transformer | 738,864 | Sept. 15 | 2645 | 583 | 106 | 601 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Wildley, Arthur R., Denver, Colo. Ore-concentrator | 719,401 | Jan. 27 | 3577 | 799 | 102 | 802 |
| Wildley, Arthur R., Denver, Colo. Concentrating-table | 719,402 | Jan. 27 | 3579 | 800 | 102 | 803 |
| Wildley, Arthur R., Denver, Colo. Elevator | 748,551 | Dec. 29 | 6042 | 1368 | 107 | 2507 |
| Wilford, Edward B. (See Schramm, Adolph W., assignor.) | | | | | | |
| Wilford, Edward B., and A. W. Schramm, Philadelphia, Pa. Electric motor | 743,364 | Nov. 3 | 1082 | 230 | 107 | 230 |
| Wilford, James W., Midland, Mich. Magazine air-gun | 740,067 | Sept. 29 | 4877 | 1094 | 106 | 1109 |
| Wilgus, Daniel C., San Francisco, Cal. Hydrocarbon burner and furnace | 739,043 | Sept. 15 | 2943 | 652 | 106 | 662 |
| Wilharm, August F. (See Wilharm, Frederick W., assignor.) | | | | | | |
| Wilharm, Frederick W., Swissvale, assignor of one-fifth to A. F. Wilharm, Pittsburg, Pa. Rail-joint | 746,620 | Dec. 8 | 2368 | 543 | 107 | 1629 |
| Wilhelm, Christian, Sturgis, assignor to E. Tyden, Hastings, Mich. Locking device for pedestal tables | 736,327 | Aug. 11 | 2410 | 526 | 105 | 1517 |
| Wilhelm, Frederick, *et al.* (See Schulz, Adolph C., assignor.) | | | | | | |
| Wilhelm, Joseph, Wheaton, Minn. Grain cleaner and distributer | 732,248 | June 30 | 5079 | {1129 1130 | 104 | 2246 |
| Wilhelm, Oliver P., Michigan City, Ind. Device for repairing car-couplings | 744,658 | Nov. 17 | 3576 | {770 771 | 107 | 791 |
| Wilhelms, Wilhelm, Bruning, Nebr. Animal-trap | 721,407 | Feb. 24 | 3754 | 853 | 102 | 1663 |
| Wilhite, Luther. (See Coleman and Wilhite.) | | | | | | |
| Wilke, Frank J., East St. Louis, Ill. Spark-arrester | 740,503 | Oct. 6 | 233 | 46 | 106 | 1296 |
| Wilke, Gustav, Grüne, Germany, assignor to R. A. Erbslöh, New York, N. Y. Chain-link | 723,429 | Mar. 24 | 3311 | 742 | 103 | 739 |
| Wilke Manufacturing Company. (See Conwell and Chamness, assignors.) | | | | | | |
| Wilke, Richard, Brunswick, Germany. Turn-table for cranes or the like | 748,328 | Dec. 29 | 5599 | 1276 | 107 | 2407 |
| Wilke, Rudolph W., Auburn Park, and M. Bauer, South Englewood, Ill. Air-brake coupling | 747,817 | Dec. 22 | 4622 | 1043 | 107 | 2173 |
| Wilken, George, Englewood, N. J. Top | 744,146 | Nov. 17 | 2668 | 569 | 107 | 597 |
| Wilkens, Richard, Hoboken, N. J. Glove | 723,348 | Mar. 24 | 3149 | 708 | 103 | 707 |
| Wilkes, Frederick T., Brantford, Canada. Sawmill log-turner | 738,385 | Sept. 8 | 1702 | 370 | 106 | 382 |
| Wilkes, Lincoln E., Hillsboro, Oreg. Plotting instrument | 747,522 | Dec. 22 | 4077 | 916 | 107 | 2049 |
| Wilkin, Theodore S., Milwaukee, Wis. Sawmill set-works | 723,794 | Mar. 24 | 3955 | {892 893 | 103 | 873 |
| Wilkin, Theodore S., Milwaukee, Wis. Sawmill | 739,045 | Sept. 15 | 2948 | 653 | 106 | 664 |
| Wilkin, Theodore S., Milwaukee, Wis. Tooth-bar guide and arrester | 739,046 | Sept. 15 | 2950 | 653 | 106 | 664 |
| Wilkin, Theodore S., Milwaukee, Wis. Set-works for sawmills | 744,449 | Nov. 17 | 3244 | {695 696 | 107 | 724 |
| Wilkin, Theodore S., Milwaukee, and E. S. Newton, Fond du Lac, Wis. Sawing-machine | 739,044 | Sept. 15 | 2945 | {652 653 | 106 | 663 |
| Wilkin, William M., Mobile, Ala. Log-turning mechanism | 721,409 | Feb. 24 | 3756 | 854 | 102 | 1663 |
| Wilkin, William M., Mobile, Ala. Gang-saw mill | 730,063 | June 2 | 985 | {220 221 | 104 | 1328 |
| Wilkins, Annie K., administratrix. (See Wilkins, Henry.) | | | | | | |
| Wilkins Brothers. (See Davidson, Maberry L., assignor.) | | | | | | |
| Wilkins, Charles, East Farnham, Canada. Automatic water-feed for boilers | 722,549 | Mar. 10 | 1662 | 367 | 103 | 373 |
| Wilkins, Charles F., Hutchinson, and F. A. Garrett, Heizer, Kans. Bearing for disks | 740,345 | Sept. 29 | 5373 | 1211 | 106 | 1212 |
| Wilkins, Charles L., assignor to Ohio Pump & Brass Company, Columbus, Ohio. Air-pump | 719,709 | Feb. 3 | 540 | 121 | 102 | 937 |
| Wilkins and Company, E. J. (See Wilkins, Myron W., assignor.) | | | | | | |
| Wilkins, Frank R., London, England. Stopper for bottles, jars, or similar receptacles | 739,628 | Sept. 22 | 4031 | 899 | 106 | 912 |
| Wilkins, Henry, deceased; A. K. Wilkins, Pittsburg, Pa., administratrix. Smoke-consumer | 746,426 | Dec. 8 | 2033 | 466 | 107 | 1552 |
| Wilkins, Myron W., assignor to E. J. Wilkins and Company, Gloversville, N. Y. Riveting-machine | 731,399 | June 16 | 3439 | {767 768 | 104 | 1874 |
| Wilkins, Sarah, Calumet, Mich. Hat-pin | 746,621 | Dec. 8 | 2369 | 543 | 107 | 1629 |
| Wilkins, Theodore, New York, N. Y. Knife-sharpening device | 743,365 | Nov. 3 | 1084 | 230 | 107 | 230 |
| Wilkinson, Charles A., Worcester, Mass. Internal-combustion engine | 736,807 | Aug. 18 | 3323 | {736 737 | 105 | 1722 |
| Wilkinson, Charles H., Huddersfield, England. Tire | 719,927 | Feb. 3 | 916 | 215 | 102 | 1018 |
| Wilkinson, Ernest, Washington, D. C., assignor to C. W. Thompson, Memphis, Tenn. Coffee or tea pot | 726,810 | Apr. 28 | 4460 | 1007 | 103 | 2146 |
| Wilkinson, George, Brantford, Canada. Sulky-plow | 736,662 | Aug. 18 | 3037 | 671 | 105 | 1663 |
| Wilkinson, George E., Nasby, Pa. Steering mechanism for traction-engines | 740,504 | Oct. 6 | 235 | 46 | 106 | 1296 |
| Wilkinson, George J., *et al.* (See O'Neill, William F., assignor.) | | | | | | |
| Wilkinson, James, Birmingham, Ala. Elastic-fluid turbine | 739,965 | Sept. 29 | 4677 | {1052 1053 | 106 | 1067 |
| Wilkinson, James, Birmingham, Ala. Governing mechanism for turbines | 741,426 | Oct. 13 | 1970 | 436 | 106 | 1686 |
| Wilkinson, James, Birmingham, Ala., assignor to Wilkinson Steam Turbine Company. Governing mechanism for turbines | 743,125 | Nov. 3 | 588 | 127 | 107 | 123 |
| Wilkinson, James, Birmingham, Ala., assignor to Wilkinson Steam Turbine Company. Elastic-fluid turbine | 745,270 | Nov. 24 | 4778 | {1043 1044 | 107 | 1061 |
| Wilkinson, James, Birmingham, Ala., assignor to Wilkinson Steam Turbine Company. Elastic-fluid-turbine wheel | 747,523 | Dec. 22 | 4078 | 917 | 107 | 2049 |
| Wilkinson, Jennie, Cleveland, Ohio. Garment-supporter | 733,102 | July 7 | 718 | 175 | 105 | 152 |
| Wilkinson, Samuel, assignor of one-third to E. W. Turley, Osceola Mills, Pa. Non-refillable bottle | 727,244 | May 5 | 790 | 169 | 104 | 170 |
| Wilkinson Steam Turbine Company. (See Wilkinson, James, assignor.) | | | | | | |
| Will & Finck Company. (See Finck and Herbstritt, assignors.) | | | | | | |
| Will, Frederick. (See Barnes, William H., assignor.) | | | | | | |
| Will, Hugo C., Williamsburg, Mich. Tower for windmills | 725,308 | Apr. 14 | 1639 | 370 | 103 | 1532 |
| Willard, Alfred L., Paris, France. Woven collar or cuff | 745,305 | Nov. 24 | 4364 | {1061 1062 | 107 | 1078 |
| Willard, Ben, New Orleans, La., assignor to General Electric Company. Overhead structure for electric railways | 729,826 | June 2 | 574 | 126 | 104 | 1245 |
| Willard, Charles A., St. Louis, Mo. Street-car safety-guard | 724,766 | Apr. 7 | 645 | 151 | 103 | 1306 |
| Willard, Edward A., New York, N. Y. Cigar-cutter | 719,165 | Jan. 27 | 3135 | 698 | 102 | 707 |
| Willard, James A., assignor to Vacuum Dyeing Machine Company, Chattanooga, Tenn. Dyeing-machine | 721,630 | Feb. 24 | 4180 | 951 | 102 | 1756 |
| Willard, James A., assignor to Vacuum Dyeing Machine Company, Chattanooga, Tenn. Apparatus for dyeing, &c | 723,795 | Mar. 24 | 3958 | 893 | 103 | 874 |
| Willard, James A., assignor to Vacuum Dyeing Machine Company, Chattanooga, Tenn. Apparatus for dyeing | 744,147 | Nov. 17 | 2669 | 569 | 107 | 597 |
| Willard, James A., assignor of three-fourths to W. M. and T. Lasley and C. L. Hall, Chattanooga, Tenn. Centrifugal machine | 744,659 | Nov. 17 | 3577 | 771 | 107 | 791 |
| Willard, William A. P., Jr., assignor to P. Lorrillard, Jr., Tuxedo, N. Y. Switch especially adapted for third rails for electric railways | 730,810 | June 9 | 2316 | {514 515 | 104 | 1625 |
| Willbanks, Lafayette A., and W. C. Allen, Buford, Ga. Plow | 718,041 | Jan. 6 | 976 | 217 | 102 | 210 |
| Wilcox and Gibbs Sewing Machine Company. (See Borton, Stockton, assignor.) | | | | | | |
| Wille, Frederick W., West Oakland, Cal. Window-cleaner | 730,183 | June 2 | 1179 | 264 | 104 | 1368 |

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| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Wille, John H. A., Savannah, Ga. Currycomb | 725,529 | Apr. 14 | 2059 | 466 | 103 | 1621 |
| Willett, Allen W., Perkasie, Pa. Endless-belt die for brick-machines, &c. | 748,244 | Dec. 29 | 5460 | 1244, 1245 | 107 | 2377 |
| Willett, Charles W., and G. F. Steedman, St. Louis, Mo. Automatic lumber-trimmer | 733,103 | July 7 | 719 | 175, 176 | 105 | 152 |
| Willett, Gerrard B., Minneapolis, Minn. Coat and hat hanger | 732,548 | Mar. 10 | 1662 | 366 | 103 | 373 |
| Willette, Willie S. (See Dyer and Willette.) | | | | | | |
| Willey, Edward S., assignor of one-fourth to R. O. Crisp, Elizabeth City, N. C. Device for cleaning the bottoms of vessels | 721,347 | Feb. 24 | 3639 | 827, 828 | 102 | 1639 |
| Willey, Horace F., and W. E. Barton, Wilmington, Del. Puzzle | 748,245 | Dec. 29 | 5462 | 1245 | 107 | 2378 |
| Willford, Joseph L. (See Blackmarr and Willford.) | | | | | | |
| Willhide, Bruce, Grafton, W. Va. Railway brake-shoe | 737,185 | Aug. 25 | 4009 | 889 | 105 | 1887 |
| William E. Gang Company. (See Gang and Hart, assignors.) | | | | | | |
| William Mann Company. (See Deckert, Joseph O., assignor.) | | | | | | |
| William Mann Company. (See Neidich, Samuel A., assignor.) | | | | | | |
| William Schollhorn Company. (See Bernard, William A., assignor.) | | | | | | |
| William Sellers and Company. (See Bancroft, John S., assignor.) | | | | | | |
| William Sellers and Company. (See Sellers, William, assignor.) | | | | | | |
| William Wharton, Jr., & Company, Incorporated. (See Angerer, Victor, assignor.) | | | | | | |
| Williams, Albert K., Jr., Washington, D. C., assignor of one-half to H. W. Blair, Manchester, N. H. Carriage for type-writing machines | 743,366 | Nov. 3 | 1085 | 230, 231, 232 | 107 | 230 |
| Williams, Alexander F. (See Dickie and Williams.) | | | | | | |
| Williams, Alfred. (See Daft and Williams.) | | | | | | |
| Williams, Alfred S. (See Mitchell, Alfred H., assignor.) | | | | | | |
| Williams, Andrew J., assignor of one-half to J. H. Karnes, Pioneer, Iowa. Double-dasher churn | 724,225 | Mar. 31 | 4835 | 1084, 1085 | 103 | 1070 |
| Williams, Andrew J., Gilmore City, and M. M. Heptonstall, Pioneer, Iowa. Ditching-machine | 743,604 | Nov. 10 | 1621 | 339, 340 | 107 | 362 |
| Williams, Andrew S. (See Hess, Alexander W., assignor.) | | | | | | |
| Williams, Anthony. (See Mills and Williams.) | | | | | | |
| Williams, Arnold E. (See Collier, Arthur T., assignor.) | | | | | | |
| Williams, Arthur, U. S. Army. Latch | 718,684 | Jan. 20 | 2217 | 486 | 102 | 503 |
| Williams, August. (See Goth and Williams.) | | | | | | |
| Williams, Benjamin B., Adrian, Mich. Rural mail-box | 741,865 | Oct. 20 | 2826 | 629 | 106 | 1883 |
| Williams, Benjamin F., Wilkesville, Ohio. Poultry-trough | 733,448 | July 14 | 1350 | 318 | 105 | 302 |
| Williams, Benjamine F., Ethel, Ark. Cotton-scraper | 739,528 | Sept. 22 | 3835 | 859 | 106 | 869 |
| Williams, Brown & Earle. (See Brown, Nathaniel H., assignor.) | | | | | | |
| Williams, Charles, assignor to British Mannesmann Tube Co., Limited, Landore, England. Making elbows | 720,989 | Feb. 17 | 2923 | 670 | 102 | 1468 |
| Williams, Charles A., Chicago, Ill. Garbage-crematory | 719,545 | Feb. 3 | 234 | 54, 55 | 102 | 873 |
| Williams, Chester B. (See Peterson, Leonard, assignor.) | | | | | | |
| Williams, Charles D. (See Blanchard and Williams.) | | | | | | |
| Williams, Charles H. (See Keen, Frederick W., assignor.) | | | | | | |
| Williams, Charles H., Milton, assignor to Dennison Manufacturing Company, Boston, Mass. Apparatus for melting sealing-wax, &c., on paper or other surfaces for the production of ornamental seal-designs | 722,311 | Mar. 10 | 1280 | 284 | 103 | 288 |
| Williams, Charles H., Jr., assignor to Chicago Railway Equipment Company, Chicago, Ill. Reversible fulcrum for brake-beams | 722,655 | Mar. 10 | 1846 | 412 | 103 | 412 |
| Williams, Charles H., assignor of one-half to R. J. Taylor, New York, N. Y. Pencil-sharpener | 726,385 | Apr. 28 | 3637 | 824 | 103 | 1982 |
| Williams, Clara A., Viola, Kans. Garment-supporter | 730,726 | June 9 | 2183 | 485 | 104 | 1597 |
| Williams, Clarence L. (See Lore and Barr, assignors.) | | | | | | |
| Williams, David, Cohoes, N. Y. Bat separating and folding machine | 739,370 | Sept. 22 | 3536 | 790 | 106 | 804 |
| Williams, David S. (See Robinson and Williams.) | | | | | | |
| Williams, David S., assignor to J. C. Hutchison, Philadelphia, Pa. Machine for making pies | 740,346 | Sept. 29 | 5374 | 1211, 1212 | 106 | 1213 |
| Williams, Dick B., Connellsville, Pa. Automatic compression grease-cup | 747,524 | Dec. 22 | 4081 | 917 | 107 | 2050 |
| Williams, Ebenezer B., assignor of one-half to F. J. Bippus, Chicago, Ill. Manifolding-book | 718,685 | Jan. 20 | 2219 | 486, 487 | 102 | 504 |
| Williams, Edgar W., and J. H. L. Trevorrow, Newport, England. Boring-tool | 729,469 | May 26 | 4908 | 1087 | 104 | 1090 |
| Williams, Edmund, Ironton, Ohio. Barb-wire machine | 739,244 | Sept. 15 | 3318 | 735, 736, 737 | 106 | 742 |
| Williams, Edward E., assignor to W. P. Callahan & Co., Dayton, Ohio. Explosive-engine | 731,001 | June 16 | 2697 | 601 | 104 | 1724 |
| Williams, Edward H., Sharon, Pa. Reclaiming flue-dust | 723,105 | Mar. 17 | 2683 | 604 | 103 | 600 |
| Williams, Edward H., Sharon, Pa. Silicated flue-dust | 723,106 | Mar. 17 | 2685 | ..... | 103 | 600 |
| Williams, Edward L. (See Williams, Thomas F., assignor.) | | | | | | |
| Williams, Edward R. (See Williams, Joseph, W. H., and E. R.) | | | | | | |
| Williams, Edwin J., Salt Lake City, Utah. Clothes-drier | 740,068 | Sept. 29 | 4878 | 1094 | 106 | 1109 |
| Williams, Emma, *et al.* (See Hare, William J. and J. P., assignors.) | | | | | | |
| Williams, Evart V., Argyle, Wis. Manufacture of dental crowns | 719,928 | Feb. 3 | 917 | 215 | 102 | 1018 |
| Williams, Francis I., *et al.* (See Stanifer, William D., assignor.) | | | | | | |
| Williams, Francis M., Iowa Falls, Iowa. Lifting-jack | 748,127 | Dec. 29 | 5259 | 1194 | 107 | 2334 |
| Williams, Frank F., assignor of one-half to Missouri Belting Company, St. Louis, Mo. Leather-stretching machine | 742,140 | Oct. 20 | 3417 | 762 | 106 | 2001 |
| Williams, Frank L., Nashville, Tenn. Shaker or mixer | 723,796 | Mar. 24 | 3963 | 894 | 103 | 875 |
| Williams, Frank M. (See Howard and Williams.) | | | | | | |
| Williams, Frank R., Syracuse, N. Y. Planimeter | 746,427 | Dec. 8 | 2035 | 467 | 107 | 1553 |
| Williams, Frank T., *et al.* (See Macklin, Charles H., assignor.) | | | | | | |
| Williams, Fred E., South Hamilton, N. Y., and R. T. Van Valkenburg, Newcastle, Pa. Gate | 726,601 | Apr. 28 | 4073 | 919 | 103 | 2066 |
| Williams, Frederick C., Chicago, Ill. Tubular grate | 720,867 | Feb. 17 | 2682 | 619, 620 | 102 | 1418 |
| Williams, Frederick W., Macon, Ga. Hay-baling machine | 724,360 | Mar. 31 | 5109 | 1143 | 103 | 1125 |
| Williams, George H., Kansas City, Mo. Graduated reinforced angle-bar and rail-shoe combined | 735,025 | July 28 | 4314 | 1003 | 105 | 955 |
| Williams, George H., Chicago, Ill., assignor of one-fourth to A. E. Truesdell, Pittsfield, Mass. Paint-box | 736,185 | Aug. 11 | 2166 | 465 | 105 | 1462 |
| Williams, George J., Philadelphia, Pa. Plumber's implement | 719,707 | Feb. 3 | 534 | 119 | 102 | 936 |
| Williams, George M., assignor of one-half to C. C. Brewer, Upper Sandusky, Ohio. Combined railway-tie and rail-brace | 746,905 | Dec. 15 | 2918 | 674 | 107 | 1772 |
| Williams, George R., Brooklyn, assignor to Economic Machine Company, New York, N. Y. Paper-feeding machine | 719,166 | Jan. 27 | 3135 | 698 | 102 | 707 |
| Williams, George R., Brooklyn, assignor to Economic Machine Company, New York, N. Y. Stop-motion for printing-presses | 723,107 | Mar. 17 | 2685 | 604, 605 | 103 | 600 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | Spec. | Dr'g. | Vol. | Page. |
| Williams, George R., Brooklyn, assignor to Economic Machine Company, New York, N. Y. Stop-motion for printing-presses | 723,108 | Mar. 17 | 2687 | 605 | 103 | 601 |
| Williams, George R., Brooklyn, assignor to Economic Machine Company, New York, N. Y. Paper-feeding machine | 726,386 | Apr. 28 | 3638 | 825 | 103 | 1982 |
| Williams, George R., Brooklyn, assignor, by mesne assignments, to E. C. Fuller Company, New York, N. Y. Slant-board for printing-presses, &c | 738,967 | Sept. 15 | 2818 | 624 | 106 | 636 |
| Williams, George S., assignor of one-half to J. S. Taylor, Norfolk, Va. Pneumatic actuating device | 746,220 | Dec. 8 | 1667 | 371 | 107 | 1476 |
| Williams, George W., Bethany, Mo. Trace-buckle | 742,267 | Oct. 27 | 3670 | 820 | 106 | 2070 |
| Williams, George W., New York, N. Y. Self-closing mouth for bags | 744,846 | Nov. 24 | 3954 | 852 | 107 | 890 |
| Williams, Gorham D., and A. J. Coney, Charleston, W. Va. Bank or mine car | 740,725 | Oct. 6 | 624 | 140 | 106 | 1381 |
| Williams, Gurdon H. (See McKechnie and Williams.) | | | | | | |
| Williams, Gurdon H., South Brooklyn, assignor, by mesne assignments, to Brown Hoisting Machinery Company, Cleveland, Ohio. Bucket | 747,818 | Dec. 22 | 4623 | 1043<br>1044 | 107 | 2173 |
| Williams, Gurdon H., South Brooklyn, assignor, by mesne assignments, to Brown Hoisting Machinery Company, Cleveland, Ohio. Clam-shell bucket | 747,819 | Dec. 22 | 4625 | 1044<br>1045 | 107 | 2173 |
| Williams, Harry A., and F. S. Bean, Akron, Ohio. Machine for inverting sewer-pipe | 719,708 | Feb. 3 | 535 | 120<br>121 | 102 | 936 |
| Williams, Harry M., and J. W. Woomer, Pittsburg, Pa. Trolley | 745,127 | Nov. 24 | 4501 | 974 | 107 | 1004 |
| Williams, Harry R., *et al.* (See Isham, William S., assignor.) | | | | | | |
| Williams, Harvey D., Washington, D. C., assignor of one-half to Waterbury Tool Co., Waterbury, Conn. Double universal joint | 724,068 | Mar. 31 | 4516 | 1017 | 103 | 1005 |
| Williams, Henry. (See Williams, Howard and H.) | | | | | | |
| Williams, Henry A., Quincy, assignor to E. C. Bassett, East Milton, Mass. Machine for making metal balls | 729,519 | May 26 | 4990 | 1107<br>1108<br>1109 | 104 | 1107 |
| Williams, Henry E. (See Carr and Williams.) | | | | | | |
| Williams, Henry J., Bolivar, N. Y. Shipping-crate | 721,642 | Feb. 24 | 4201 | 955 | 102 | 1760 |
| Williams, Henry J., Brooklyn, N. Y. Envelop-sealing machine | 724,981 | Apr. 7 | 1041 | 238 | 103 | 1391 |
| Williams, Henry M. (See Burger, Franz, assignor.) | | | | | | |
| Williams, Henry M. (See Burger and Williams.) | | | | | | |
| Williams, Henry M., assignor of one-fourth to F. Burger, Fort Wayne, Ind. Mirror drop-curtain | 722,342 | Mar. 10 | 1282 | 285 | 103 | 288 |
| Williams, Herbert, *et al.* (See Hare, William J. and J. P., assignors.) | | | | | | |
| Williams, Hiram W. (See Sigrist, Justin, assignor.) | | | | | | |
| Williams, Hosy C., Newsite, Miss. Hopple | 737,186 | Aug. 25 | 4010 | 889 | 105 | 1887 |
| Williams, Howard and H., Murphysboro, Ill. Switch for traction-rails | 731,643 | June 23 | 3917 | 872 | 104 | 1989 |
| Williams, Ira, Kenton, Ohio. Combined hay-rack and wagon-box | 748,246 | Dec. 29 | 5463 | 1245 | 107 | 2378 |
| Williams, Isaac N., Foltz, Ind. Fence | 727,245 | May 5 | 792 | 169 | 104 | 171 |
| Williams, Jackson, assignor of three-fourths to W. J. Westfall, Memphis, Tenn.; W. A. Ramsey, Mobile, Ala., and F. W. McCluer, Richmond, Va. Railway-signal | 718,063 | Jan. 6 | 1011 | 226 | 102 | 218 |
| Williams, James, assignor to Oriental Waterproof Syndicate, Limited, Hackney Wick, London, England. Waterproofing and rotproofing textile fabrics | 731,002 | June 16 | 2698 | ..... | 104 | 1725 |
| Williams, James B. (See Wolf and Williams.) | | | | | | |
| Williams, James B., Alberta, La. Machine for bagging and weighing grain | 736,663 | Aug. 18 | 3039 | 671 | 105 | 1663 |
| Williams, James F., assignor of two-thirds to F. Schenker, Vincennes, Ind. Ice-shaver | 719,966 | Feb. 3 | 989 | 229 | 102 | 1033 |
| Williams, James F., assignor of two-thirds to F. Schenker, Vincennes, Ind. Ice-shaver | 719,967 | Feb. 3 | 989 | 230 | 102 | 1033 |
| Williams, James F., assignor of two-thirds to F. Schenker, Vincennes, Ind. Water-power apparatus | 745,945 | Dec. 1 | 1158 | 260<br>261 | 107 | 1346 |
| Williams, James F., and C. Mustin, assignors of one-half to F. Schenker, Vincennes, Ind. Attachment for trousers | 719,965 | Feb. 3 | 987 | 229 | 102 | 1033 |
| Williams, James R., Fayetteville, N. C. Vending-machine | 738,386 | Sept. 8 | 1704 | 370<br>371 | 106 | 382 |
| Williams, James S., Thibodaux, La. Car-unloader and carrier-feeder | 744,660 | Nov. 17 | 3581 | 771<br>772 | 107 | 792 |
| Williams, James W., Spokane, Wash. Electric signal system for railways | 718,233 | Jan. 13 | 1325 | 293 | 102 | 300 |
| Williams, Jasper L., Olathe, and E. W. Arrasmith, Stanley, Kans.; said Arrasmith assignor of one-half to said Williams. Corn-heading attachment for binders | 742,141 | Oct. 20 | 3419 | 762 | 106 | 2001 |
| Williams, Jeff, and J. Butler, Rusk, Tex. Portable skid | 718,295 | Jan. 13 | 1444 | 321 | 102 | 326 |
| Williams, John A., Dallas, Oreg. Saw-handle | 719,069 | Jan. 27 | 2949 | 658 | 102 | 670 |
| Williams, John A., Brooklyn, assignor to United States Slot Machine Company, New York, N. Y. Vending-machine | 740,998 | Oct. 6 | 1130 | 255 | 106 | 1486 |
| Williams, John A., and L. B. Britton, Seattle, Wash. Car-fender | 738,647 | Sept. 8 | 2205 | 482 | 106 | 489 |
| Williams, John B., Rochester, N. Y. Bag for fruit-pickers | 717,646 | Jan. 6 | 216 | 55 | 102 | 47 |
| Williams, John C., Kansas City, Mo. Air-compressor | 728,149 | May 12 | 2491 | 553 | 104 | 547 |
| Williams, John L., New Haven, Conn. Acid-holder for fire-extinguishers | 719,403 | Jan. 27 | 3581 | 800 | 102 | 803 |
| Williams, John M., Knoxville, Pa. Feed-water regulator | 723,225 | Mar. 17 | 2915 | 653 | 103 | 648 |
| Williams, John M., Pittsburg, Pa. Boiler-feeder apparatus | 728,348 | May 19 | 2896 | 639 | 104 | 654 |
| Williams, John R. (See Sharp and Williams.) | | | | | | |
| Williams, John T. (See Taylor and Williams.) | | | | | | |
| Williams, Joseph, W. H., and E. R., Sharpsburg, Pa. Disinfecting apparatus | 719,929 | Feb. 3 | 918 | 215 | 102 | 1018 |
| Williams, Joseph G., Buffalo, N. Y. Measuring and registering device for liquid-supply tanks | 731,644 | June 23 | 3920 | 873 | 104 | 1990 |
| Williams, Judson G., Kiserton, Ky. Insect-trap | 720,990 | Feb. 17 | 2923 | 670 | 102 | 1468 |
| Williams, King R., Richmond, Ind. Copy-holder | 730,426 | June 9 | 1641 | 368 | 104 | 1479 |
| Williams, Lacey Y. (See Harrison and Williams.) | | | | | | |
| Williams, Lawrence, Columbus City, Iowa. Means for adjusting strokes of windmills | 737,541 | Aug. 25 | 4695 | 1052 | 105 | 2037 |
| Williams, Lee H., assignor, by mesne assignments, to Williams Pump Company, Indianapolis, Ind. Pump | 742,541 | Oct. 27 | 4172 | 938 | 106 | 2172 |
| Williams, Louis, Seattle, Wash. Electricity in electric therapeutics and electric treatment | 745,128 | Nov. 24 | 4502 | 974 | 107 | 1004 |
| Williams, Louis N. D. (See Scott, Robert W., assignor.) | | | | | | |
| Williams, Louis N. D. (See Scott and Williams.) | | | | | | |
| Williams, Louis N. D. (See Scott, Williams, and Swinglehurst.) | | | | | | |
| Williams, Louis N. D., Ashbourne, assignor of one-half to R. W. Scott, Philadelphia, Pa. Knitting-machine | 727,522 | May 5 | 1297 | 289 | 104 | 279 |
| Williams, Louis N. D., Ashbourne, assignor of one-half to R. W. Scott, Philadelphia, Pa. Stocking | 733,926 | July 14 | 2222 | 526 | 105 | 482 |
| Williams Manufacturing Company. (See Cannon, Warren B., assignor.) | | | | | | |
| Williams, Marion W., Hopkinsville, Ky. Steam feed-cooking apparatus | 720,649 | Feb. 17 | 2321 | 532 | 102 | 1340 |
| Williams, Milton F., assignor to Williams Patent Crusher & Pulverizer Company, St. Louis, Mo. Crusher and pulverizer | 726,602 | Apr. 28 | 4074 | 919 | 103 | 2067 |
| Williams, Milton F., assignor to Williams Patent Crusher & Pulverizer Company, St. Louis, Mo. Machine for hulling and breaking cotton-seed | 728,643 | May 19 | 3449 | 765 | 104 | 772 |
| Williams, Milton F., assignor to Williams Patent Crusher & Pulverizer Company, St. Louis, Mo. Breaker-bar | 738,507 | Sept. 8 | 1948 | 425 | 106 | 433 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | Spec. | Drg. | Vol. | Page. |
| Williams, Milton F., assignor to Williams Patent Crusher & Pulverizer Company, St. Louis, Mo. Shredding-machine | 741,947 | Oct. 20 | 2999 | 666 | 106 | 1920 |
| Williams, Milton J., assignor to Williams Patent Crusher & Pulverizer Company, St. Louis, Mo. Crusher and pulverizer | 730,503 | June 9 | 1793 | 401 | 104 | 1512 |
| Williams, Morris, *et al.* (See Quin, Robert A., assignor.) | | | | | | |
| Williams, Nathaniel, Owosso, Mich. Scaffold | 737,187 | Aug. 25 | 4011 | 890 | 105 | 1887 |
| Williams, Norman, *et al.* (See Maybury, William, assignor.) | | | | | | |
| Williams, Oliver B., Whitewater, Wis. Cut-out | 724,361 | Mar. 31 | 5110 | 1144 | 103 | 1125 |
| Williams Patent Crusher & Pulverizer Company. (See Williams, Milton F., assignor.) | | | | | | |
| Williams Patent Crusher & Pulverizer Company. (See Williams, Milton J., assignor.) | | | | | | |
| Williams, Percy. (See Salamon and Williams.) | | | | | | |
| Williams Pump Company. (See Williams, Lee H., assignor.) | | | | | | |
| Williams, Rufus C. (See Sheehan, Thomas C., assignor.) | | | | | | |
| Williams, Rufus C., Richmond, Va. Manifolding-register | 721,116 | Feb. 17 | 3167 | 729 | 102 | 1524 |
| Williams, Thomas, assignor of one-half to C. R. Spliralo, San Francisco, Cal. Oil-burner | 736,664 | Aug. 18 | 3041 | 672 | 105 | 1664 |
| Williams, Thomas F., Chicago, Ill., assignor to E. L. Williams, Gillham, Ark. Acetylene-gas generator | 740,726 | Oct. 6 | 626 | 140<br>141 | 106 | 1382 |
| Williams, Thornton. (See Day, William O., assignor.) | | | | | | |
| Williams, W. D. (See Rosebush, John, assignor.) | | | | | | |
| Williams, William A., San Francisco, Cal. Flushing-tank for closets | 718,560 | Jan. 13 | 1985 | 433 | 102 | 441 |
| Williams, William A., San Francisco, Cal. Flushing-tank | 741,203 | Oct. 13 | 1527 | 345 | 106 | 1592 |
| Williams, William A., Newsite, Miss. Wagon-brake | 739,767 | Sept. 22 | 4269 | 957 | 106 | 964 |
| Williams, William E., assignor of one-half to A. P. Ludlow, Springfield, Ohio. Electric thermal therapeutic blanket | 723,797 | Mar. 24 | 3964 | 894 | 103 | 875 |
| Williams, William E., Chicago, Ill., assignor, by mesne assignments, to Diamond Match Company. Machine for punching matches from plates | 741,866 | Oct. 20 | 2827 | 629<br>630 | 106 | 1884 |
| Williams, William H. (See Williams, Joseph, W. H., and E. R.) | | | | | | |
| Williams, William L., Winona, Minn. Sleigh attachment for vehicles | 721,408 | Feb. 24 | 3755 | 853<br>854 | 102 | 1663 |
| Williams, William N., Welcome, Minn. Shovel | 725,905 | Apr. 21 | 2753 | 626 | 103 | 1784 |
| Williams, William R., Norfolk, Va. Game apparatus | 722,789 | Mar. 17 | 2139 | 479 | 103 | 487 |
| Williams, William T. (See Wilmington, William G., assignor.) | | | | | | |
| Williams, William T., Brooklyn, N. Y. Calculating device | 727,523 | May 5 | 1300 | 290 | 104 | 280 |
| Williams, Willie E., Baltimore, Md. Structure of strengthened concrete | 738,268 | Sept. 8 | 1452 | 313 | 106 | 328 |
| Williams, Willie O., Lee, Ill. Saw | 726,603 | Apr. 28 | 4077 | 920 | 103 | 2067 |
| Williams, Willoughby C., San Antonio, Tex. Educational device | 720,510 | Feb. 10 | 2008 | 463 | 102 | 1263 |
| Williams & Winn Company. (See Winn and Bates, assignors.) | | | | | | |
| Williamson, Benjamin L., Buffalo, N. Y. Bench-vise | 727,246 | May 5 | 793 | 170 | 104 | 171 |
| Williamson, Charles, Newport News, Va. Game | 726,833 | Apr. 28 | 4500 | 1015 | 103 | 2155 |
| Williamson, Charles, Newport News, Va. Apparatus for submarine work | 745,469 | Dec. 1 | 299 | 72 | 107 | 1163 |
| Williamson, David. (See Lovell and Williamson.) | | | | | | |
| Williamson, Edward H., Jr., assignor of one-half to F. W. Shriver, Philadelphia, Pa. Focusing view-finder for photographic cameras | 736,899 | Aug. 18 | 3489 | 775 | 105 | 1757 |
| Williamson, Edward I., assignor of one-half to F. B. Hawkes, Weymouth, Mass. Edge-setter | 734,789 | July 28 | 3880 | 905 | 105 | 864 |
| Williamson, Ernest H. (See Elworthy, Herbert S., assignor.) | | | | | | |
| Williamson, Frank E., Glasco, Kans. Copy-holder for type-writers | 724,982 | Apr. 7 | 1042 | 238<br>239 | 103 | 1391 |
| Williamson, Henry A., Chicago, Ill. Combined brace, step-fastener, and support for step-ladders | 727,047 | May 5 | 442 | 93 | 104 | 97 |
| Williamson, Henry C., and H. Pries, Michigan City, Ind. Draft-rigging for railway-cars | 738,865 | Sept. 15 | 2648 | 583 | 106 | 601 |
| Williamson, Henry C., and H. Pries, Michigan City, Ind. Draft-rigging for railway-cars | 738,866 | Sept. 15 | 2649 | 583 | 106 | 601 |
| Williamson, Henry C., and H. Pries, Michigan City, Ind. Draft-rigging | 741,948 | Oct. 20 | 3002 | 667 | 106 | 1920 |
| Williamson, James F. (See Pearson and Cutcheon, assignors.) | | | | | | |
| Williamson, John B., Louisville, Ky. Condiment-holder | 748,329 | Dec. 29 | 5600 | 1277 | 107 | 2407 |
| Williamson, John W., Liberty, Iowa. Fly-trap | 726,604 | Apr. 28 | 4078 | 920 | 103 | 2067 |
| Williamson, Robert. (See Pott and Williamson.) | | | | | | |
| Williamson, Robert. (See Pott, Cassels, Williamson, and Stuart.) | | | | | | |
| Williamson, Robert B., Scranton, Pa. Induction-motor | 740,963 | Oct. 6 | 1061 | 241<br>242 | 106 | 1473 |
| Williamson, Sam, Minneapolis, Minn. Coin-controlled weighing-machine | 741,204 | Oct. 13 | 1529 | 345<br>346 | 106 | 1593 |
| Williamson, Samuel S., Philadelphia, Pa. Holder and cigar-shaper | 719,546 | Feb. 3 | 236 | 55 | 102 | 873 |
| Williamson, Samuel S., Philadelphia, Pa. Bib or faucet | 721,766 | Mar. 3 | 189 | 44 | 103 | 41 |
| Williamson, Samuel S., Philadelphia, Pa. Forming cigar-bunches by expansion | 730,324 | June 9 | 1456 | 321 | 104 | 1441 |
| Williamson, Samuel S., Philadelphia, Pa. Cuspidor | 737,542 | Aug. 25 | 4696 | 1053 | 105 | 2038 |
| Williamson, Thomas. (See Benge, John, assignor.) | | | | | | |
| Williamson, William, Saginaw, Mich. Ladder | 725,188 | Apr. 14 | 1434 | 324 | 103 | 1487 |
| Williamson, William A., Newark, N. J. Wardrobe-hook | 725,906 | Apr. 21 | 2754 | 627 | 103 | 1784 |
| Williamson, William C., Chicago, Ill. Means for attaching bails to baskets or other vessels | 748,552 | Dec. 29 | 6043 | 1368 | 107 | 2507 |
| Williamson, Zephaniah E., Sheffield, Ill. Water-heater | 726,834 | Apr. 28 | 4502 | 1016 | 103 | 2155 |
| Williamsport Mirror and Glass Company. (See Burch, Frank H., assignor.) | | | | | | |
| Williamsport Mirror & Glass Company. (See Coombs, Charles H., assignor.) | | | | | | |
| Willie, Isaac M., Freeport, Ill. Drive-belt | 721,643 | Feb. 24 | 4202 | 955 | 102 | 1760 |
| Willing, Arthur U., J. Christenson, and G. A. McLean, Oelwein, Iowa. Drop brake-handle for cars | 726,129 | Apr. 21 | 3133 | 709 | 103 | 1863 |
| Willis, Augustus C., Herold, Ill. Rotary engine | 747,026 | Dec. 15 | 3150 | 721<br>722 | 107 | 1825 |
| Willis, Belle R., St. Joseph, Mo. Surgical apparatus | 747,525 | Dec. 22 | 4083 | 917 | 107 | 2050 |
| Willis, Daniel C. (See Sullins, Cale M., assignor.) | | | | | | |
| Willis, George. (See Pfeiffer, John P., assignor.) | | | | | | |
| Willis, Henry M., East Williston, N. Y. Tobacco-pipe | 722,343 | Mar. 10 | 1283 | 285 | 103 | 288 |
| Willis, Henry M., East Williston, N. Y. Safeguard for watches | 728,816 | May 19 | 3761 | 840 | 104 | 837 |
| Wilis, Henry M., East Williston, N. Y. Tobacco-pipe. (Reissue) | 12,132 | July 21 | 3318 | 778 | 105 | 732 |
| Willis, James B. (See Harkins and Willis.) | | | | | | |
| Wilison, John, Derby, England, assignor to National Malleable Castings Company, Cleveland, Ohio. Automatic coupling for railway-carriages | 728,184 | May 12 | 2557 | 568<br>569 | 104 | 562 |
| Wiliits, Warren J., *et al.* (See Green, John D., assignor.) | | | | | | |
| Wilitts, Isaiah W. (See Crossley, William H., assignor.) | | | | | | |
| Willmann, Joseph, New Braunfels, Tex. Pipe-coupling | 717,647 | Jan. 6 | 217 | 55 | 102 | 47 |
| Willmann, William, Wimbledon, England. Gravity-escapement for clocks | 739,245 | Sept. 15 | 3322 | 737 | 106 | 743 |
| Willmanowsky, Otto. (See Knoth and Willmanowsky.) | | | | | | |
| Willmarth, Charles A., and J. S. Barnes, assignors of one-third to H. J. Ferrell, Detroit, Mich. Fence-wire ratchet or tightener | 735,026 | July 28 | 4315 | 1003 | 105 | 956 |
| Willmott, Henry C., South Woodford, England. Sheath for scissors or the like | 723,109 | Mar. 17 | 2690 | 605 | 103 | 601 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Willoughby, John, assignor of one-half to G. W. Bayley, Brooklyn, N. Y. Explosive-engine | 719,547 | Feb. 3 | 239 | 56 | 102 | 873 |
| Willoughby, Victor R. (See Wolff and Willoughby.) | | | | | | |
| Willower, Guy F., Lima, assignor to G. E. Jones and H. L. Slusser, Columbus Grove, Ohio. Shop-indicator | 740,380 | Sept. 29 | 5444 | 1224, 1225 | 106 | 1227 |
| Wills, Charles A., McKees Rocks, Pa. Metallic tie and rail-fastener | 733,104 | July 7 | 723 | 176 | 105 | 153 |
| Wills, Edwin C., Pittsburg, Pa. Apparatus for use in the production of steel | 719,404 | Jan. 27 | 3582 | 800 | 102 | 803 |
| Wills, Edwin C., Altoona, Pa. Apparatus for making steel, &c | 736,900 | Aug. 18 | 3491 | 775, 776 | 105 | 1758 |
| Wills, George, Somerset, Pa. Window-shade and curtain-holder | 748,128 | Dec. 29 | 5260 | 1194 | 107 | 2335 |
| Wills, James, New York, N. Y. Refrigerator-building | 742,540 | Oct. 27 | 4170 | 937, 938 | 106 | 2172 |
| Willsie, Burt H., Redding, Cal. Bag-holder | 733,449 | July 14 | 1351 | 318 | 105 | 303 |
| Willsie, Thomas, Ionia, Mich. Photographic light-screen | 727,524 | May 5 | 1302 | 290 | 104 | 280 |
| Willsie, Thomas, Ionia, Mich. Adjustable photographic shutter | 741,205 | Oct. 13 | 1532 | 346 | 106 | 1593 |
| Willson, Charles T., Amenia, N. Y. Gas-burner | 729,470 | May 26 | 4909 | 1088 | 104 | 1090 |
| Willson, Charles T., Amenia, N. Y. Gas-burner and self-igniter | 729,471 | May 26 | 4911 | 1088 | 104 | 1090 |
| Willson, Freeman R., Jr., assignor to J. A. Jeffrey, Columbus, Ohio. Conveyer | 730,003 | June 16 | 2698 | 601, 602 | 104 | 1725 |
| Willson, Freeman R., Jr., assignor to J. A. Jeffrey, Columbus, Ohio. Conveyer | 736,901 | Aug. 18 | 3493 | 776 | 105 | 1758 |
| Willson, Freeman R., Jr., assignor to J. A. Jeffrey, Columbus, Ohio. Conveying apparatus | 736,902 | Aug. 18 | 3495 | 776, 777 | 105 | 1759 |
| Willson, Freeman R., Jr., assignor to J. A. Jeffrey, Columbus, Ohio. Conveying apparatus | 736,903 | Aug. 18 | 3497 | 777, 778 | 105 | 1759 |
| Willson, Freeman R., Jr., assignor, by mesne assignments, to J. A. Jeffrey, Columbus, Ohio. Chain | 736,904 | Aug. 18 | 3500 | 779 | 105 | 1760 |
| Willson, Freeman R., Jr., assignor to J. A. Jeffrey, Columbus, Ohio. Belt-supporting device | 736,905 | Aug. 18 | 3502 | 779 | 105 | 1760 |
| Willson, Freeman R., Jr., Worthington, assignor, by mesne assignments, to J. A. Jeffrey, Columbus, Ohio. Sprocket-wheel | 736,906 | Aug. 18 | 3506 | 780 | 105 | 1761 |
| Willson, George V. (See Depew, George M., assignor.) | | | | | | |
| Willson, George V. (See Depew and Parsons, assignors.) | | | | | | |
| Willson, George V., Pittsburg, Pa. Finishing-machine for wire hoops | 717,648 | Jan. 6 | 218 | 55, 56 | 102 | 48 |
| Willson, George V., Pittsburg, Pa. Wire-cutting machine | 717,649 | Jan. 6 | 220 | 56 | 102 | 48 |
| Willson, George V., Pittsburg, Pa. Wire-twisting machine | 717,650 | Jan. 6 | 223 | 57 | 102 | 49 |
| Willson, Howard H., Chicago, Ill. Temporary binder | 723,963 | Mar. 31 | 4313 | 968 | 103 | 966 |
| Willson Laboratory Company. (See Chalmot, Guillaume de, assignor.) | | | | | | |
| Willson, Russell A. (See Currah and Willson.) | | | | | | |
| Willy, John, Chicago, Ill. Trunk-rest | 738,139 | Sept. 1 | 1169 | 258 | 106 | 252 |
| Wilmarth, Henry P., Attleboro, Mass. Nail-puller for tires | 738,867 | Sept. 15 | 2650 | 584 | 106 | 602 |
| Wilmarth & Morman Company. (See Ridderhof, Corneil, assignor.) | | | | | | |
| Wilmeth, Charles S., assignor of one-half to H. C. Kauffman, St. Louis, Mo. Combined agricultural machine | 731,146 | June 16 | 2974 | 660, 661 | 104 | 1780 |
| Wilmington, William G., assignor of one-half to W. T. Williams, Bloomington, Ill. Feed-water strainer and catch-basin | 723,110 | Mar. 17 | 2691 | 606 | 103 | 601 |
| Wilmore, Arthur G. (See Tincher, Thomas L., assignor.) | | | | | | |
| Wilmore, S. E. (See Scheble, Eugene S., assignor.) | | | | | | |
| Wilmoth, William F., assignor to Cemetal Fireproofing Company, New York, N. Y. Fireproofing construction | 730,200 | June 2 | 1203 | 270 | 104 | 1372 |
| Wilmoth, William F., E. I. Smith, New York, N. Y., and S. Golliek, Jersey City, N. J., assignors to Cemental Fireproofing Company, New York, N. Y. Fireproofing construction | 742,811 | Oct. 27 | 4628 | 1049 | 106 | 2272 |
| Wilsdorf, Frank H., assignor to August Kern Barber Supply Company, St. Louis, Mo. Barber-chair | 722,439 | Mar. 10 | 1448 | 321 | 103 | 324 |
| Wilsdorf, Frank H., assignor to August Kern Barber Supply Company, St. Louis, Mo. Barber-chair | 745,706 | Dec. 1 | 709 | 162 | 107 | 1249 |
| Wilsey, William H., Sioux City, Iowa. Safety device for elevators | 734,384 | July 21 | 3116 | 733, 734 | 105 | 692 |
| Wilson, Adoniram J., Westfield, N. J., assignor to Hall Signal Company, New York, N. Y. Lightning-arrester | 729,472 | May 26 | 4912 | 1088 | 104 | 1090 |
| Wilson, Albert K., and W. M. Shaver, Topeka, Kans. Hat-guard | 721,848 | Mar. 3 | 348 | 77 | 103 | 76 |
| Wilson, Albert O., and J. S. Brown, Lincoln, Nebr. Wiring-machine | 730,427 | June 9 | 1643 | 368 | 104 | 1479 |
| Wilson, Albert W., San Francisco, Cal. Link for fishing-gear | 724,362 | Mar. 31 | 5111 | 1144 | 103 | 1125 |
| Wilson, Albert W., San Francisco, Cal. Trolling-spoon | 730,064 | June 2 | 988 | 221 | 104 | 1329 |
| Wilson, Allen F., assignor of one-half to J. W. Webb, Clayton, N. J. Means for closing air-tight jars | 723,508 | Mar. 24 | 3468 | 776 | 103 | 770 |
| Wilson, Alonzo T., Des Moines, Iowa. Charcoal or coke oven | 744,700 | Nov. 17 | 3693 | 796, 797 | 107 | 820 |
| Wilson, Andrew J., Onaga, Kans. Lister attachment | 734,150 | July 21 | 2683 | 631 | 105 | 600 |
| Wilson, Andrew K., Chicago, Ill. Kitchen-cabinet | 723,964 | Mar. 31 | 4315 | 968, 969 | 103 | 966 |
| Wilson, Archibald E., Elkhorn, Canada. Freezing-box | 743,126 | Nov. 3 | 591 | 128 | 107 | 123 |
| Wilson, Asbury G., Wilkinsburg, assignor to Union Switch and Signal Company, Swissvale, Pa. Automatic block-signal system | 740,505 | Oct. 6 | 236 | 47 | 106 | 1297 |
| Wilson, Charles E. (See Hazlett, Romeo B., assignor.) | | | | | | |
| Wilson, Charles F., Catlettsburg, Ky. Gas-burner for stoves | 720,303 | Feb. 10 | 1654 | 377 | 102 | 1188 |
| Wilson, Charles R., San Francisco, Cal. Fruit-pulp machine | 741,428 | Oct. 13 | 1974 | 437 | 106 | 1687 |
| Wilson, Charles S. (See Souders, Cotter, and Wilson.) | | | | | | |
| Wilson, Charles W. (See Wilson, Lucinda J. and C. W.) | | | | | | |
| Wilson, Clarence C., Alameda, Cal. Gas-regulator | 731,255 | June 16 | 3155 | 702 | 104 | 1815 |
| Wilson, Clayton L., Munhall, assignor of one-half to J. Noland, Pittsburg, Pa. Metallic pole | 741,427 | Oct. 13 | 1973 | 437 | 106 | 1687 |
| Wilson, Cora I., Philadelphia, Pa. Irrigating device | 738,508 | Sept. 8 | 1949 | 425 | 106 | 433 |
| Wilson, Craven, assignor of one-half to J. E. Sadler, Cumby, Tex. Farm-gate | 747,526 | Dec. 22 | 4085 | 918 | 107 | 2051 |
| Wilson, David H., Chicago, Ill. Battery | 729,827 | June 2 | 575 | 127 | 104 | 1245 |
| Wilson, David J., Philadelphia, Pa. Mail-box | 747,820 | Dec. 22 | 4626 | 1045 | 107 | 2174 |
| Wilson, David J., assignor to Herrell Espey Company, Washington, D. C. Toy | 729,473 | May 26 | 4914 | 1088 | 104 | 1091 |
| Wilson, Edward F., Barnsbury, Canada. Game apparatus | 738,586 | Sept. 8 | 2077 | 454 | 106 | 462 |
| Wilson, Edward F., assignor to H. Channon Company, Chicago, Ill. Feeding device for sewing-machines | 735,641 | Aug. 4 | 1163 | 246, 247 | 105 | 1228 |
| Wilson, Elnathan, Philadelphia, Pa. Device for printing rolled wrapping-paper | 731,256 | June 16 | 3156 | 702 | 104 | 1816 |
| Wilson, Elihu C., Los Angeles, Cal. Casing-spear | 736,907 | Aug. 18 | 3507 | 780 | 105 | 1762 |
| Wilson, Elmer A. (See Crowl, Andrew M., assignor.) | | | | | | |
| Wilson, Elmer A., Niles, Ohio. Fuse-box | 726,605 | Apr. 28 | 4079 | 920, 921 | 103 | 2067 |
| Wilson, Eugenie M., Washington, D. C. Combination-eraser | 726,208 | Apr. 21 | 3279 | 744 | 103 | 1892 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|
| | | | Spec. | Dr'g. | Vol. | Page. |
| Wilson, Fergus F., assignor to A. J. Kelting, Brooklyn, N. Y. Blower | 738,868 | Sept. 15 | 2652 | 584<br>585 | 106 | 602 |
| Wilson, Francis P., Wellington, and J. Knight, Levin, New Zealand; said Knight assignor to said Wilson. Combined printer's galley and chase | 724,530 | Apr. 7 | 206 | 50 | 103 | 1213 |
| Wilson, Franklin H., Parkesburg, Pa. Safety device for elevators | 742,542 | Oct. 27 | 4174 | 938 | 106 | 2173 |
| Wilson, Fred. (See Akers and Wilson.) | | | | | | |
| Wilson, Frederick W., Crofton, Pa. Egg-tester | 735,027 | July 28 | 4317 | 1003<br>1004 | 105 | 956 |
| Wilson, Frederick W., assignor of one-fourth to G. M. Wilson, Ira, Iowa. Disk furrow opener or closer for seed-planters | 731,645 | June 23 | 3924 | 874 | 104 | 1990 |
| Wilson, G. M. (See Wilson, Frederick W., assignor.) | | | | | | |
| Wilson, George, Madelia, Minn. Oiler | 730,065 | June 2 | 989 | 222 | 104 | 1329 |
| Wilson, George, assignor to Emerson Manufacturing Company, Rockford, Ill. Horse hay-rake | 726,606 | Apr. 28 | 4081 | 921 | 103 | 2068 |
| Wilson, George, assignor to Emerson Manufacturing Company, Rockford, Ill. Seat-support | 736,665 | Aug. 18 | 3043 | 672 | 105 | 1664 |
| Wilson, George, assignor to Emerson Manufacturing Company, Rockford, Ill. Horse hay-rake | 745,946 | Dec. 1 | 1162 | 261 | 107 | 1348 |
| Wilson, George, assignor to Emerson Manufacturing Company, Rockford, Ill. Knife-head for harvesting-machines | 745,947 | Dec. 1 | 1163 | 261 | 107 | 1348 |
| Wilson, George E., Stillwater, Minn. Rope or cable drive for threshing-machines | 732,690 | June 30 | 5923 | 1314 | 104 | 2424 |
| Wilson, George L., Oakpark, Ill. Acetylene-gas generator | 724,642 | Apr. 7 | 415 | 98, 99 | 103 | 1258 |
| Wilson, George W., Arcadia, La. Vehicle-axle | 726,209 | Apr. 21 | 3280 | 745 | 103 | 1893 |
| Wilson, H. N. (See Walker, Elmer L., assignor.) | | | | | | |
| Wilson, Harry H., Newark, N. J. Apparatus for mixing dough | 719,070 | Jan. 27 | 2950 | 659 | 102 | 670 |
| Wilson, Harry H., Newark, N. J. Dough-mixing apparatus | 741,603 | Oct. 13 | 2332 | 522<br>523 | 106 | 1764 |
| Wilson, Harry L., Erie, Pa. Automatic stoker | 737,306 | Aug. 25 | 4249 | 945<br>946 | 105 | 1937 |
| Wilson, Harvey G., Union, Iowa. Tire-fastener | 721,266 | Feb. 24 | 3505 | 797 | 102 | 1611 |
| Wilson, Helen P., Vanwert, Ohio. Sterilizable surgical-instrument case | 736,328 | Aug. 11 | 2411 | 526 | 105 | 1517 |
| Wilson, Herbert N., *et al.* (See Blanchard, Horace, assignor.) | | | | | | |
| Wilson, Howard B., Schenectady, N. Y., assignor to General Electric Company. Starting-rheostat | 747,821 | Dec. 22 | 4628 | 1045 | 107 | 2174 |
| Wilson, Isaac P., assignor to R. K. Owens, New York, N. Y. Hydrocarbon-burner | 738,509 | Sept. 8 | 1950 | 426 | 106 | 433 |
| Wilson, James, St. Louis, Mo. Stove | 722,067 | Mar. 3 | 758 | 169 | 103 | 163 |
| Wilson, James, and J. S. Kemp-Welch, Wandsworth, England. Preventing smoke in furnaces | 718,234 | Jan. 13 | 1329 | 294 | 102 | 300 |
| Wilson, James, and J. S. Kemp-Welch, Wandsworth, England. Preventing smoke in furnaces | 727,729 | May 12 | 1720 | 386 | 104 | 387 |
| Wilson, James E., Bridgeport, Conn., assignor to National Lock Washer Company, Newark, N. J. Machine for making spiral washers | 718,409 | Jan. 13 | 1641 | 361<br>362 | 102 | 367 |
| Wilson, James M., Battlecreek, Mich. Magneto-electric machine | 719,167 | Jan. 27 | 3138 | 699 | 102 | 707 |
| Wilson, James M., assignor to Electric Sparking & Illuminating Company, Battlecreek, Mich. Sparking device for gas-engines | 735,923 | Aug. 11 | 1699 | 362 | 105 | 1362 |
| Wilson, James M., Jr., and J. B. Dalton, Graysville, Ga. Schedule and train calculating machine | 732,985 | July 7 | 504 | 125 | 105 | 108 |
| Wilson, Jerome B., Lansing, Mich. Machine for stretching wire | 721,849 | Mar. 3 | 350 | 77 | 103 | 76 |
| Wilson, Jerome B., Lansing, Mich. Wire-mattress stretcher | 739,568 | Sept. 22 | 3008 | 876 | 106 | 885 |
| Wilson, John, New Suffolk, N. Y. Recreation device | 728,062 | May 12 | 2337 | 520 | 104 | 515 |
| Wilson, John, New Suffolk, N. Y. Recreation device | 743,968 | Nov. 10 | 2266 | 487<br>488 | 107 | 501 |
| Wilson, John C., Boston, Mass., assignor to Automatic Time Stamp Company, Portland, Me. Time-stamp | 743,408 | Nov. 3 | 1195 | 248 | 107 | 255 |
| Wilson, John H., Washington, D. C. Game apparatus | 743,605 | Nov. 10 | 1625 | 340 | 107 | 363 |
| Wilson, John H. N., Honolulu, Hawaii. Apparatus for cutting sugar-cane | 747,027 | Dec. 15 | 3151 | 722<br>723 | 107 | 1825 |
| Wilson, John T., Jersey Shore, Pa. Piston-packing | 719,630 | Feb. 3 | 392 | 89 | 102 | 904 |
| Wilson, John T., Jersey Shore, Pa. Balanced slide-valve | 724,363 | Mar. 31 | 5112 | 1144<br>1145 | 103 | 1125 |
| Wilson, John T., Jersey Shore, Pa. Balanced slide-valve | 730,428 | June 9 | 1645 | 368<br>369 | 104 | 1480 |
| Wilson, John W., Cynthiana, Ky. Fishing-float | 721,267 | Feb. 24 | 3507 | 797 | 102 | 1611 |
| Wilson, Joseph, Lathrop, Mo. Boring and tenoning machine | 737,987 | Sept. 1 | 863 | 189 | 106 | 189 |
| Wilson, Leonard, assignor to Stanley Electric Manufacturing Company, Pittsfield, Mass. Electric rheostat | 741,206 | Oct. 13 | 1536 | 346 | 106 | 1594 |
| Wilson, Leonard, assignor to Stanley Electric Manufacturing Company, Pittsfield, Mass. Electric rheostat | 741,207 | Oct. 13 | 1538 | 347 | 106 | 1595 |
| Wilson, Lewis F., Gerrardstown, W. Va. Collapsible cabinet or dark room | 737,988 | Sept. 1 | 865 | 189 | 106 | 189 |
| Wilson, Lida, Brooklyn, N. Y. Appliance for electrically operating vessels and torpedoes from a distance | 719,405 | Jan. 27 | 3583 | 801 | 102 | 803 |
| Wilson, Lida, Brooklyn, N. Y. Elastic-fluid turbine | 733,105 | July 7 | 724 | 176<br>177 | 105 | 153 |
| Wilson, Lucinda J., Lawton, and C. W. Wilson, Linden, Okla. Ter. Cotton-picking sack or receptacle | 730,325 | June 9 | 1457 | 322 | 104 | 1441 |
| Wilson, Michael H., Pittsburg, Pa. Spring-scale | 739,047 | Sept. 15 | 2951 | 654 | 106 | 664 |
| Wilson, Milford J., Painesville, Ohio. Trolley | 747,106 | Dec. 15 | 3306 | 752 | 107 | 1864 |
| Wilson, Osborne E., Huyton, England. Apparatus for feeding pulverulent and small fuel to furnaces | 729,474 | May 26 | 4914 | 1089 | 104 | 1091 |
| Wilson, Percy C., D. W. Bassett, and J. Dring, London, England. Friction mechanism | 731,646 | June 23 | 3926 | 874 | 104 | 1991 |
| Wilson, Peter J., Ben Lomond, Cal. Station-indicator | 722,068 | Mar. 3 | 759 | 170 | 103 | 164 |
| Wilson, Peter J., Ben Lomond, Cal. Bottle | 729,475 | May 26 | 4916 | 1089 | 104 | 1091 |
| Wilson, Peter J., Ben Lomond, Cal. Bottle | 735,642 | Aug. 4 | 1165 | 247 | 105 | 1228 |
| Wilson, Ralph B., Chicago, Ill. Spring-lock attachment for bill-files, &c | 721,349 | Feb. 24 | 3644 | 829 | 102 | 1640 |
| Wilson, Ralph B., Chicago, Ill. Loose-leaf binder | 729,476 | May 26 | 4917 | 1089 | 104 | 1092 |
| Wilson, Ralph B., Chicago, Ill. Locking device for temporary binders | 748,129 | Dec. 29 | 5262 | 1194 | 107 | 2335 |
| Wilson, Richard, New York, N. Y. Transparent mirror | 728,063 | May 12 | 2339 | 521 | 104 | 515 |
| Wilson, Robert, assignor to B. and A. J. Plant, Newark, N. J. Weather-vane | 721,348 | Feb. 24 | 3640 | 828<br>829 | 102 | 1639 |
| Wilson, Robert A., Watertown, Mass. Beam trammel and calipers | 746,221 | Dec. 8 | 1669 | 371 | 107 | 1476 |
| Wilson, Robert J., assignor of one-third to J. P. Joy, St. Louis, Mo. Self-winding top-spinner | 744,148 | Nov. 17 | 2674 | 570 | 107 | 598 |
| Wilson, Robert T., Diamond, Ind. Chock-block | 719,288 | Jan. 27 | 3356 | 749 | 102 | 754 |
| Wilson, S. P. (See Holland, William A., assignor.) | | | | | | |
| Wilson, Samuel H., Coraopolis, Pa. Fruit-carrier | 747,822 | Dec. 22 | 4629 | 1046 | 107 | 2175 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Wilson, Samuel M., Philadelphia, Pa. Traction device | 747,823 | Dec. 22 | 4631 | 1046 | 107 | 2175 |
| Wilson, T. K., *et al.* (See Denton, Thomas B., assignor.) | | | | | | |
| Wilson, Thatcher P., Easthaven, assignor of two-thirds to J. P. Goodhart, New Haven, Conn. Water-still | 734,486 | July 21 | 3298 | 774 | 105 | 729 |
| Wilson, Thomas, assignor to Pennsylvania Globe Gas Light Company, Philadelphia, Pa. Gas-regulating valve | 718,959 | Jan. 20 | 2738 | 612 | 102 | 612 |
| Wilson, Thomas, and V. H. Slinack, assignors to Pennsylvania Globe Gas Light Company, Philadelphia, Pa. Welsbach or other burner | 742,543 | Oct. 27 | 4175 | 939 | 106 | 2173 |
| Wilson, Thomas H. (See Laurie and Wilson.) | | | | | | |
| Wilson, Thomas M., Layton, Pa. Brick-drier | 721,988 | Mar. 3 | 631 | 140 | 103 | 137 |
| Wilson, Walter B., Barnsley, England. Shield or hoop for spools or bobbins | 745,948 | Dec. 1 | 1164 | 262 | 107 | 1348 |
| Wilson, Walter G., Westminster, England. Piston-ring | 722,440 | Mar. 10 | 1449 | 321 | 103 | 325 |
| Wilson, Walter G., Westminster, England. Valve | 729,027 | May 26 | 4148 | 919 | 104 | 931 |
| Wilson, Walter G., Westminster, England. Change and reversing gear | 730,066 | June 2 | 991 | 222 | 104 | 1329 |
| Wilson, Walter G., Westminster, England. Commutator for causing the ignition of the charges in explosion-engines | 746,770 | Dec. 15 | 2654 | 613 | 107 | 1713 |
| Wilson, William. (See Dodge and Wilson.) | | | | | | |
| Wilson, William, London, Canada. Egg or fruit case | 720,206 | Feb. 10 | 1463 | 333 | 102 | 1149 |
| Wilson, William, Geneva, N. Y. Laying asphalt or bituminous roadways | 748,247 | Dec. 29 | 5464 | ..... | 107 | 2378 |
| Wilson, William, Geneva, N. Y. Roadway | 748,248 | Dec. 29 | 5466 | 1245 | 107 | 2378 |
| Wilson, William D., New Harmony, Mo. Water-gate | 720,207 | Feb. 10 | 1464 | 333 | 102 | 1149 |
| Wilson, William D., Booneville, Ark. Cotton chopper and cultivator | 731,990 | June 23 | 4537 | 1012 | 104 | 2121 |
| Wilson, William E., Larimer, Pa. Adjustable blind and curtain fixture | 745,120 | Nov. 24 | 4503 | 975 | 107 | 1004 |
| Wilson, William G., Bayonne, N. J. Pipe cutter and vise | 731,257 | June 16 | 3158 | 703 | 104 | 1816 |
| Wilson, William J., Birmingham, England. Coin-freed mechanism | 726,387 | Apr. 28 | 3641 | 825 | 103 | 1983 |
| Wilson, William T., Ansonia, Conn. Match-box | 723,798 | Mar. 24 | 3965 | 894 | 103 | 875 |
| Wilson, Wylie G. (See Dillon and Wilson.) | | | | | | |
| Wilt, Samuel W., Alvada, Ohio. Overshoe-fastener | 722,069 | Mar. 3 | 760 | 170 | 103 | 164 |
| Wilt, William E., assignor of one-half to J. W. Dawson, Pontiac, Mich. Axle-gage | 747,824 | Dec. 22 | 4632 | 1046 | 107 | 2175 |
| Wilton, Carl E., Bristol, Pa. Show-case | 734,644 | July 28 | 3589 | 840 | 105 | 808 |
| Wilton, Carl E., Bristol, Pa., assignor to Wilton Show Case Company. Support for shelves or other articles | 744,149 | Nov. 17 | 2675 | 570 | 107 | 599 |
| Wilton, George, London, England. Apparatus for the distillation of ammoniacal liquors | 745,470 | Dec. 1 | 302 | 72,73 | 107 | 1164 |
| Wilton Show Case Company. (See Wilton, Carl E., assignor.) | | | | | | |
| Wiltsey, Alvah, New York, N. Y. Shirt-waist and skirt supporter | 742,945 | Nov. 3 | 216 | 49 | 107 | 48 |
| Wiltsie, Cornelius J., assignor to Wiltsie Manufacturing Company, Chicago, Ill. Adjustable shade-fixture | 739,048 | Sept. 15 | 2952 | 654 | 106 | 665 |
| Wiltsie Manufacturing Company. (See Wiltsie, Cornelius J., assignor.) | | | | | | |
| Wimer, John R., Huntingdon, Pa. Combined door-sign and letter-slot | 746,906 | Dec. 15 | 2919 | 674 | 107 | 1772 |
| Winans, Linnaeus, Hood River, Oreg. Water-gate | 734,385 | July 21 | 3121 | 734 | 105 | 694 |
| Winant, William E., Washington, D. C. Conveyer | 718,745 | Jan. 20 | 2333 | 515, 516 | 102 | 526 |
| Winbolt, Fred W., Springfield, Mass. Support for incandescent electric lamps | 731,829 | June 23 | 4254 | 947 | 104 | 2061 |
| Winborg, Johan T., executor. (See Friberg, Holsten.) | | | | | | |
| Winchel, Rudolph, Webb City, and J. E. Putman, Joplin, Mo.; said Winchel assignor to said Putman. Horse-holding device | 738,141 | Sept. 1 | 1173 | 258, 259 | 106 | 253 |
| Winchester, Benjamin T., assignor to Winchester Manufacturing Co., Baltimore, Md. Hypodermic-syringe case | 724,643 | Apr. 7 | 417 | 99 | 103 | 1259 |
| Winchester, James D., and C. W. Greenlaw, Beverly, Mass. Last | 745,407 | Dec. 1 | 174 | 39 | 107 | 1136 |
| Winchester Manufacturing Co. (See Winchester, Benjamin T., assignor.) | | | | | | |
| Winchester Repeating Arms Co. (See Bennett, Thomas G., assignor.) | | | | | | |
| Winchester Repeating Arms Co. (See Gardner, John, assignor.) | | | | | | |
| Winchester Repeating Arms Co. (See Johnson, Thomas C., assignor.) | | | | | | |
| Winchester Repeating Arms Co. (See Mason and Burton, assignors.) | | | | | | |
| Winchester Repeating Arms Co. (See Roberts, Charles E., assignor.) | | | | | | |
| Windecker, Otto, Kaiserslautern, Germany. Rolling-machine | 727,247 | May 5 | 794 | 170 | 104 | 171 |
| Windhausen, Franz, Jr., Berlin, Germany. Regulating the supply of fluids | 746,222 | Dec. 8 | 1671 | 371 | 107 | 1477 |
| Windle, John E., North Grafton, Mass. Cloth-unrolling machine | 725,907 | Apr. 21 | 2755 | 627 | 103 | 1785 |
| Windoes, Bertha M., Kalamazoo, Mich. Globe-holder | 720,544 | Feb. 10 | 2092 | 483 | 102 | 1279 |
| Windom, Charles E., Sterling, Ill. Cooling-board | 746,223 | Dec. 8 | 1672 | 371, 372 | 107 | 1477 |
| Windsor Company. (See Bennett, Joseph, assignor.) | | | | | | |
| Windsor Company. (See Boral and Kymer, assignors.) | | | | | | |
| Windsor Machine Company. (See Hipwell, John B., assignor.) | | | | | | |
| Windsor, Nelson, Poplarbluff, Mo., assignor to A. S. Nichols, Chicago, Ill. Controlling mechanism for veneer-driers | 717,730 | Jan. 6 | 368 | 90,91 | 102 | 79 |
| Windsor, William A., *et al.* (See Fender, John B., assignor.) | | | | | | |
| Wine, Samuel A. (See Fry and Wine.) | | | | | | |
| Wineman, John W., and A. D. Maddox, Flatrock, Ill. Knife for cutting leather | 742,946 | Nov. 3 | 218 | 49 | 107 | 48 |
| Wineman, Parker, Austin, Ill. Machine for sawing staves | 725,908 | Apr. 21 | 2756 | 627, 628 | 103 | 1785 |
| Wineman, Parker, Austin, Ill. Overhead turner for logs | 748,130 | Dec. 29 | 5263 | 1195 | 107 | 2335 |
| Winer, Myer, *et al.* (See Drubech, Sam, assignor.) | | | | | | |
| Wines, Walter E., Minneapolis, Minn. Steam drying-press | 730,326 | June 9 | 1458 | 322 | 104 | 1441 |
| Winfield, Charles W., Tipton, Ind. Display-table | 734,645 | July 28 | 3592 | 840, 841 | 105 | 808 |
| Winfield, William C., Warren, Ohio. Making sheet-metal elbows | 743,050 | Nov. 3 | 443 | 96 | 107 | 93 |
| Winfield, William N. (See Barker and Winfield.) | | | | | | |
| Wing, Charles P., Hinsdale, Ill. Folding ax | 738,869 | Sept. 15 | 2654 | 585 | 106 | 602 |
| Wing, Herbert H., New Brighton, N. Y. Obtaining sodium sulfite | 743,209 | Nov. 3 | 752 | ..... | 107 | 157 |
| Wingate, Willard P., Charlotte, N. C. Spinning-frame | 745,030 | Nov. 24 | 4300 | 930 | 107 | 961 |
| Winget, Addie E., *et al.* (See Winget, Marion A., assignor.) | | | | | | |
| Winget, Marion A., assignor to A. E. Winget, E. Rowles, J. A. McDowell, and J. M. McDowell, Columbus, Ohio. Machine for molding concrete bodies | 734,487 | July 21 | 3300 | 774, 775 | 105 | 729 |
| Wingren, Richard, Burlington, Kans. Electric battery for body wear | 727,525 | May 5 | 1304 | 290 | 104 | 281 |
| Winiarski, August and T. E., Chicago, Ill. Elevator | 748,449 | Dec. 29 | 5825 | 1327 | 107 | 2458 |
| Winiarski, Teodor E. (See Winiarski, August and T. E.) | | | | | | |
| Winkenwerder, Henry, and B. Swartz, Milwaukee, Wis. Heat-regulating apparatus | 719,548 | Feb. 3 | 242 | 56,57 | 102 | 874 |
| Winkler, Carl A. P. von, New York, N. Y. Apparatus for covering horses' eyes | 735,924 | Aug. 11 | 1701 | 362 | 105 | 1362 |
| Winkler, Charles, New York, N. Y. Belt and drawers-supporter | 728,530 | May 19 | 3214 | 713 | 104 | 721 |
| Winkler, Curt, New York, N. Y. Glove | 745,088 | Nov. 24 | 4433 | 959 | 107 | 988 |
| Winkler, Egbert. (See McMillan, William, assignor.) | | | | | | |
| Winkler, Ehregott T. (See How and Winkler.) | | | | | | |
| Winkler, Fernando, Offenbach-on-the-Main, Germany. Type-distributing device | 738,269 | Sept. 8 | 1454 | 313, 314 | 106 | 329 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| Winkley, Erastus E., Lynn, Mass., assignor, by mesne assignments, to Tripp Giant Leveler Company, Lynn, Mass., and Portland, Me. Adjusting device for forms of sole-pressing machines | 746,224 | Dec. 8 | 1674 | 372 | 107 | 1477 |
| Winn, Alvin S., Escanaba, Mich. Window or door screen | 737,307 | Aug. 25 | 4252 | 946 | 105 | 1937 |
| Winn, Charles G., Shreveport, La. Cheese-cutter | 725,530 | Apr. 14 | 2060 | 466<br>467 | 103 | 1621 |
| Winn, David J., Sumter, S. C. Machine for opening and cleaning cotton | 739,246 | Sept. 15 | 3324 | 737<br>738 | 106 | 743 |
| Winn, George L., Jersey City, N. J., and A. L. Bates, Leominster, Mass., assignors to Williams & Winn Company, Jersey City, N. J., and Leominster, Mass. Lady's puff-comb | 735,643 | Aug. 4 | 1166 | 247 | 105 | 1229 |
| Winne, Cora D., Cherry Valley, N. Y. Attachment for brooms | 746,428 | Dec. 8 | 2037 | 467 | 107 | 1553 |
| Winquist, Victor, assignor of one-half to C. G. Peterson, Rockford, Ill. Bit for carving-machines | 740,506 | Oct. 6 | 238 | 47 | 106 | 1297 |
| Winship, Boit & Company. (See Leslie, James W., assignor.) | | | | | | |
| Winslow Bros. Co. (See Heermans, Thaddeus W., assignor.) | | | | | | |
| Winslow Bros. Co. (See Kail, Jackson L., assignor.) | | | | | | |
| Winslow Bros. Company. (See Winslow, Francis A., assignor.) | | | | | | |
| Winslow, Francis A., Chicago, Ill. Elevator-door-operating mechanism | 737,308 | Aug. 25 | 4253 | 946 | 105 | 1938 |
| Winslow, Francis A., assignor to Winslow Bros. Company, Chicago, Ill. Fireproof stair-way | 747,825 | Dec. 22 | 4633 | 1046 | 107 | 2176 |
| Winslow, George C., Kalamazoo, Mich. Post-base | 724,644 | Apr. 7 | 418 | 99 | 103 | 1259 |
| Winslow, Herbert H., Portland, Oreg. Manifold sales-book | 719,930 | Feb. 3 | 921 | 215 | 102 | 1019 |
| Winslow, Sidney W., trustee. (See Ladd, Sherman W., assignor.) | | | | | | |
| Winsor & Jerauld Manufacturing Company. (See Smith, Alvene H., assignor.) | | | | | | |
| Winsor, Paul. (See Brown, Harold G., assignor.) | | | | | | |
| Winston, Erasmus N. (See Horan and Winston.) | | | | | | |
| Winston, George, Chicago, Ill. Furnace | 739,966 | Sept. 29 | 4684 | 1053 | 106 | 1068 |
| Winter, Arthur F. (See Kade, Charles F., assignor.) | | | | | | |
| Winter, Carl. (See Warman and Winter.) | | | | | | |
| Winter, Heinrich, Charlottenburg, Germany. Centrifugal machine | 731,258 | June 16 | 3159 | 704 | 104 | 1816 |
| Winter, Heinrich, Charlottenburg, Germany. Centrifugal machine | 739,247 | Sept. 15 | 3326 | 738 | 106 | 743 |
| Winter, Heinrich, Charlottenburg, Germany. Crystallizing apparatus | 742,544 | Oct. 27 | 4176 | 939 | 106 | 2173 |
| Winter, John P., City Island, assignor to H. C. Cummings, New York, N. Y. Stone-sawing machine | 732,986 | July 7 | 506 | 126 | 105 | 109 |
| Winter, Katharine F., *et al.* (See Kade, Charles F., assignor.) | | | | | | |
| Winter, Robert, Berlin, Germany. Electric furnace | 724,069 | Mar. 31 | 4519 | 1017 | 103 | 1005 |
| Winter, Robert V., Fairfield, Iowa. Shoe-rest | 735,925 | Aug. 11 | 1702 | 362 | 105 | 1363 |
| Winter, Rudolph G., Minneapolis, Minn. Separable hinge | 720,304 | Feb. 10 | 1656 | 377 | 102 | 1189 |
| Winterbotham, Lydia S., Madison, Wis. Cloth-holder | 748,131 | Dec. 29 | 5264 | 1195 | 107 | 2335 |
| Winterhalder, Ludwig, Neustadt, Germany. Ice-spur | 736,468 | Aug. 18 | 2658 | 584 | 105 | 1585 |
| Winters, David L., Chicago, Ill. Rail-fastening apparatus | 718,042 | Jan. 6 | 978 | 217 | 102 | 211 |
| Winters, David L., Chicago, Ill. Galvanic battery | 734,646 | July 28 | 3593 | 841 | 105 | 809 |
| Winters, David L., Chicago, Ill. Ratchet-wrench | 736,047 | Aug. 11 | 1928 | 411 | 105 | 1412 |
| Winters, David L., assignor of one-half to T. W. Snow, Chicago, Ill. Galvanic battery | 744,989 | Nov. 24 | 4205 | 910 | 107 | 942 |
| Winters, Frederick V., assignor of one-half to J. S. McWhirter, New York, N. Y. Mechanism for removing ice and snow from the conducting or third rail of electric railways | 720,208 | Feb. 10 | 1465 | 334 | 102 | 1149 |
| Winters, Randolph A., Atwood, Kans. Fence-wire staple | 727,248 | May 5 | 795 | 170 | 104 | 171 |
| Winters, Randolph A., Atwood, Kans. Fence-wire tightener | 729,910 | June 2 | 708 | 158 | 104 | 1272 |
| Winters, Randolph A., Atwood, Kans. Fence-wire staple | 732,486 | June 30 | 5543 | 1229 | 104 | 2340 |
| Winther, Christian W., Fedora, S. D. Vent-controlling device | 725,189 | Apr. 14 | 1435 | 325 | 103 | 1488 |
| Winton, Alexander, Cleveland, Ohio. Exhaust-muffler | 723,111 | Mar. 17 | 2692 | 606 | 103 | 602 |
| Winton, Alexander, Cleveland, Ohio. Gearing | 742,812 | Oct. 27 | 4630 | 1049<br>1050 | 106 | 2273 |
| Winton, Henry D., Wellesley Hills, assignor to Hersey Manufacturing Company, South Boston, Mass. Soap-frame | 744,150 | Nov. 17 | 2678 | 570<br>571 | 107 | 599 |
| Wintruff, Hermann, Bremen, Germany. Dry food product and making same | 748,249 | Dec. 29 | 5467 | ------ | 107 | 2378 |
| Wintsch, Karl, Jr., Newark, N. J. Butcher's blade-bone extractor | 740,964 | Oct. 6 | 1064 | 242 | 106 | 1474 |
| Wintter, Mary C., Norfolk, Va. Lady's hat-holder | 740,965 | Oct. 6 | 1065 | 242 | 106 | 1474 |
| Wire Ball Fastener Company. (See Stirckler, John D., assignor.) | | | | | | |
| Wire Goods Company. (See Bement, William O., assignor.) | | | | | | |
| Wireback, Joseph F., Pittsburg, Pa. Extension-shoe | 736,186 | Aug. 11 | 2168 | 466 | 105 | 1463 |
| Wireless Telegraph Company of America. (See De Forest, Lee, assignor.) | | | | | | |
| Wirfs, Edward J., St. Louis, Mo. Refrigerator or cold-storage room | 734,248 | July 21 | 2860 | 670 | 105 | 639 |
| Wirfs, Edward J., St. Louis, Mo. Refrigerator or cold-storage room | 738,510 | Sept. 8 | 1952 | 426 | 106 | 434 |
| Wirsching, Louis, New York, N. Y. Thermocauter | 731,004 | June 16 | 2702 | 602 | 104 | 1726 |
| Wirt, Charles, Philadelphia, Pa. Electric heater or rheostat | 737,689 | Sept. 1 | 238 | 51 | 106 | 55 |
| Wirt, Charles, Philadelphia, Pa., assignor to Wirt Electric Company, Incorporated. Commutator-brush | 736,048 | Aug. 11 | 1929 | 412 | 105 | 1412 |
| Wirt Electric Company. (See Wirt, Charles, assignor.) | | | | | | |
| Wirt, Herbert C., Schenectady, N. Y., assignor to General Electric Company. Lamp-receptacle | 729,828 | June 2 | 576 | 127 | 104 | 1245 |
| Wirt, Herbert C., Schenectady, N. Y., assignor to General Electric Company. Plug-fuse | 731,005 | June 16 | 2704 | 602 | 104 | 1726 |
| Wirt, Herbert C., Schenectady, N. Y., assignor to General Electric Company. Lamp-socket | 735,188 | Aug. 4 | 305 | 60 | 105 | 1046 |
| Wirt, Herbert C., Schenectady, N. Y., assignor to General Electric Company. Ceiling-board hanger for arc-lamps | 735,189 | Aug. 4 | 306 | 60 | 105 | 1046 |
| Wirt, Paul E., Bloomsburg, Pa. Fountain-pen | 723,112 | Mar. 17 | 2695 | 607 | 103 | 602 |
| Wirt, Paul E., Bloomsburg, Pa. Fountain-pen | 723,113 | Mar. 17 | 2700 | 608 | 103 | 603 |
| Wirt, Paul E., Bloomsburg, Pa. Fountain-pen | 724,983 | Apr. 7 | 1045 | 239 | 103 | 1392 |
| Wirt, Paul E., Bloomsburg, Pa. Fountain-pen | 724,984 | Apr. 7 | 1049 | 239<br>240 | 103 | 1392 |
| Wirt, Reuben D., Independence, Mo. Hasp | 722,344 | Mar. 10 | 1285 | 285 | 103 | 289 |
| Wirtalla, Rudolph G., New York, N. Y. Loom heddle-frame | 729,477 | May 26 | 4918 | 1090 | 104 | 1092 |
| Wirth, Charles E., assignor to Plume and Atwood Manufacturing Company, Waterbury, Conn. Wick-raiser | 733,106 | July 7 | 727 | 177 | 105 | 154 |
| Wirth, Charles E., Waterbury, Conn., assignor to Plume and Atwood Manufacturing Company. Adjustable wick-raiser | 733,107 | July 7 | 729 | 177 | 105 | 154 |
| Wirth, Louis, *et al.* (See Carter, Charles E., assignor.) | | | | | | |
| Wirtz, Eduard, Schalke, Germany. Sheet-metal clamping-band with inclined loose displaceable joint for pipe-unions | 735,644 | Aug. 4 | 1167 | 247 | 105 | 1229 |
| Wirtz, Luis, London, England. Manufacture of material for use in the production of pigments | 733,308 | July 7 | 1087 | ------ | 105 | 229 |
| Wisch, Ernst. (See Edwards, Wisch, and Breneman.) | | | | | | |
| Wischermann, Henry, and J. Kolsch, Donora, Pa. Hose-coupling | 732,487 | June 30 | 5544 | 1230 | 104 | 2340 |

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| Name, residence, and invention. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|
| Wisconsin Bridge & Iron Co. (See Jackson, John F., assignor.) | | | | | | |
| Wise, Edgar H. (See Stahl, John P., assignor.) | | | | | | |
| Wise, Edgar H., Westmont, Pa. Resistance-pile | 727,249 | May 5 | 796 | 171 | 104 | 171 |
| Wise, Franklyn M., assignor to West Disinfecting Company, New York, N. Y. Disinfecting apparatus | 743,127 | Nov. 3 | 592 | 128 | 107 | 123 |
| Wise, George W., Glenfield, Pa. Curtain-pole | 731,259 | June 16 | 3162 | 704 | 104 | 1817 |
| Wise, Gertrude. (See Semler, Otis T., assignor.) | | | | | | |
| Wise, Henry T. C. (See Suverkrop and Coates, assignors.) | | | | | | |
| Wise, Henry T. C. (See Tuttle, Henry W., assignor.) | | | | | | |
| Wiseburn, Frank P., New York, and L. Buhle, Woodhaven, assignors to Patent Tobacco Sample Binder Company, New York, N. Y. Bundling apparatus | 734,488 | July 21 | 3303 | 775 | 105 | 729 |
| Wiseman, Daniel E., assignor to Western Electric Company, Chicago, Ill. Splicing-tool | 732,150 | June 30 | 4889 | 1087 | 104 | 2207 |
| Wiseman, John J., Wunghnu, Victoria, Australia. Butter for harvesters | 732,018 | June 23 | 4611 | 1029 | 104 | 2135 |
| Wiseman, Zachariah, Redstar, W. Va. Non-refillable bottle | 747,826 | Dec. 22 | 4634 | 1047 | 107 | 2176 |
| Wishard, Albert W. (See McGuire, Edward P., assignor.) | | | | | | |
| Wishart, William, assignor of one-half to H. Krueger, Chicago, Ill. Curtain-fixture | 737,188 | Aug. 25 | 4012 | 896 | 105 | 1888 |
| Wishart, William, and B. Seidel, Chicago, Ill., assignors to Adams & Westlake Company. Globe or shade holder | 723,799 | Mar. 24 | 3968 | 894 | 103 | 876 |
| Wisker, Martin V., Sedalia, Mo. Churn-dasher | 720,545 | Feb. 10 | 2093 | 483 | 102 | 1279 |
| Wisner, Abram C., *et al.* (See Knell, William F., assignor.) | | | | | | |
| Wisner, Elmer, Caro, Mich. Knife-cylinder for corn huskers and shredders | 737,543 | Aug. 25 | 4697 | 1053 | 105 | 2038 |
| Wisner, Josiah B., Camden, N. J. Device for moistening and sealing envelops | 730,590 | June 9 | 1947 | 433 | 104 | 1546 |
| Wissel, Conrad A., Dayton, Ky. Door-check | 721,989 | Mar. 3 | 633 | 141 | 103 | 137 |
| Wissman, George F., Indianapolis, Ind. Friction-clutch mechanism | 729,478 | May 26 | 4920 | 1090 | 104 | 1092 |
| Wissman, George F., Indianapolis, Ind. Head-block-sawing machine | 740,727 | Oct. 6 | 628 | 141 | 106 | 1382 |
| Wister, Jones, assignor to Safety Kerosene Stove and Light Company, Philadelphia, Pa. Combined oil stove and lamp | 738,968 | Sept. 15 | 2820 | 625 | 106 | 637 |
| Wistrand, Peter E., Galva, Ill. Check-row corn-planter | 729,986 | June 2 | 860 | 192, 193 | 104 | 1303 |
| Wiswall, Howard, Jr., Washington, N. C. Cotton-picker | 732,681 | June 30 | 5905 | 1310 | 104 | 2420 |
| Wiswall, William J., Kansas City, Mo. Cultivator | 727,048 | May 5 | 443 | 93 | 104 | 97 |
| Wiswell, E. R., *et al.* (See Hachmann, Frederick, assignor.) | | | | | | |
| Witbeck, Arba L. (See Rowe and Witbeck.) | | | | | | |
| Witcher, John D., Unionpoint, Ga. Square | 734,290 | July 21 | 2957 | 689 | 105 | 660 |
| Witek, John T., New York, N. Y. Coin-controlled weighing-machine | 724,364 | Mar. 31 | 5114 | 1145 | 103 | 1126 |
| Witek, John T., New York, N. Y. Coin-controlled weighing-machine | 724,365 | Mar. 31 | 5115 | 1146 | 103 | 1126 |
| Witham, Walter J., and J. H. Byrne, Toronto, Canada. Fire-escape | 721,488 | Feb. 24 | 3901 | 887 | 102 | 1693 |
| Withers, Charles A., Augusta, Ga. Ventilator for ships | 744,950 | Nov. 24 | 4142 | 895 | 107 | 929 |
| Witherspoon, Charles D. (See Plummer and Witherspoon.) | | | | | | |
| Witherspoon, John M. (See Moulton and Witherspoon.) | | | | | | |
| Withington, Sherman S., Adrian, Mich. Tie for wire fences | 738,142 | Sept. 1 | 1173 | 259 | 106 | 253 |
| Withington, Sherman S., Adrian, Mich. Wire-clamping device | 738,387 | Sept. 8 | 1707 | 371 | 106 | 382 |
| Withington, Sherman S., Adrian, Mich. Die for tying intersecting wires | 747,286 | Dec. 15 | 2651 | 826 | 107 | 1937 |
| Witkowski, Louis C., Philadelphia, Pa. Advertising display-card and carton-holder | 742,545 | Oct. 27 | 4178 | 940 | 106 | 2174 |
| Witman, Arthur C., assignor to George B. Donavin & Company, Columbus, Ohio. Gas-stove | 726,010 | Apr. 21 | 2934 | 667 | 103 | 1821 |
| Witt & Brown. (See Klein, Emil T., assignor.) | | | | | | |
| Witt, Frank F., Elyria, Ohio. Clothes-rack | 723,114 | Mar. 17 | 2704 | 608 | 103 | 603 |
| Witt, George E., San Francisco, Cal. Oil-burner | 741,867 | Oct. 20 | 2331 | 631 | 106 | 1885 |
| Witte, Alfred, New York, N. Y. Electric-arc lamp | 720,650 | Feb. 17 | 2323 | 532, 533 | 102 | 1341 |
| Witte, Gustav W., Chicago, Ill., assignor to International Harvester Company. Corn-husker and shredder | 741,868 | Oct. 20 | 2832 | 631, 632 | 106 | 1885 |
| Witte, Hubert, assignor to St. Louis Car Company, St. Louis, Mo. Car-seat | 743,210 | Nov. 3 | 755 | 165 | 107 | 158 |
| Witte, Rudolf B., Leipzig-Stötteritz, Germany. Safety-hook | 743,606 | Nov. 10 | 1626 | 340 | 107 | 363 |
| Wittekind, Henry. (See Bourke and Wittekind.) | | | | | | |
| Wittekind, Henry, Chicago, Ill. Metal sheet-piling | 725,608 | Apr. 14 | 2199 | 497 | 103 | 1652 |
| Wittekind, Henry, Chicago, Ill. Metal sheet-piling | 744,847 | Nov. 24 | 3956 | 853 | 107 | 890 |
| Wittemann Company. (See Wittemann, Jacob F., assignor.) | | | | | | |
| Wittemann, Jacob F., Brooklyn, assignor to Wittemann Company, New York, N. Y. Apparatus for finishing beer | 726,486 | Apr. 28 | 3831 | 866 | 103 | 2020 |
| Wittemann, Jacob F., Brooklyn, assignor to Wittemann Company, New York, N. Y. Treating fermentation-gas | 726,487 | Apr. 28 | 3836 | 867 | 103 | 2020 |
| Wittemann, Jacob F., Brooklyn, assignor to Wittemann Company, New York, N.Y. Filter | 732,682 | June 30 | 5907 | 1311 | 104 | 2420 |
| Wittenberg, Benjamin W., E. Brock, and E. Koch, Riga, Russia. Vulcanizing apparatus | 734,489 | July 21 | 3304 | 775 | 105 | 730 |
| Witter, Ezra W., Medina, Ohio. Dental appliance | 730,184 | June 2 | 1180 | 264 | 104 | 1368 |
| Wittig, Charles J., assignor of one-half to H. Ferge, Milwaukee, Wis. Apparatus for spraying coating or coloring fluids | 723,770 | Mar. 24 | 3914 | 881 | 103 | 865 |
| Wittigschlager, Wilhelmina, New York, N. Y. Receptacle for apparel, &c | 747,287 | Dec. 15 | 3653 | 826 | 107 | 1938 |
| Wittman, Jacob, Pittsburg, Pa. Hose-coupling | 729,479 | May 26 | 4922 | 1090 | 104 | 1092 |
| Wittmann, Hermann, Manitowoc, Wis. Toy | 724,226 | Mar. 31 | 4837 | 1085 | 103 | 1071 |
| Wittmann, Rudolf, Woodhaven, N. Y. Safety appliance for railway-trains | 722,646 | Mar. 10 | 1832 | 408 | 103 | 410 |
| Wittstein, Charles T., Chicago, Ill. Setting for articles of jewelry | 743,367 | Nov. 3 | 1090 | 232 | 107 | 231 |
| Witwer, William L. (See McFall, James R., assignor.) | | | | | | |
| Witzel, Charles J., Brooklyn, assignor to himself, G. A. Helm, and B. Smith, New York, N. Y. Rail-joint for metallic bedsteads | 723,569 | Mar. 24 | 3571 | 798 | 103 | 791 |
| Witzel, Charles J., G. A. Helm, Brooklyn, and B. W. Smith, New York, N. Y. Side-rail joint for metallic bedsteads | 723,570 | Mar. 24 | 3572 | 798 | 103 | 791 |
| Witzenmann, Emil, and W. Schwarz, Pforzheim, Germany. Device for winding metallic spiral hose | 726,488 | Apr. 28 | 3841 | 867 | 103 | 2021 |
| Wm. J. Smith Company. (See Smith, William J., assignor.) | | | | | | |
| Wm. Powell Company. (See Desmond, John, assignor.) | | | | | | |
| Woehrmann, C. von. (See Muenger, Frederick, assignor.) | | | | | | |
| Woellhof, Jacob, and J. C. W. Schultz, Chicago, Ill. Combined spool-holder and cushion | 746,907 | Dec. 15 | 2920 | 674 | 107 | 1773 |
| Woerner, Fritz, Hamburg, Germany. Automatic feeding-regulator | 718,942 | Jan. 20 | 2707 | 606 | 102 | 606 |
| Woerner, Robert, Mannheim, Germany. Apparatus for pressing cigars | 743,368 | Nov. 3 | 1091 | 232, 233 | 107 | 231 |
| Wohl, Alfred, Charlottenburg, Germany. Making lead sucrate | 726,130 | Apr. 21 | 3136 | ------ | 103 | 1863 |
| Wohl, James, Brooklyn, and E. U. Giovannoni, New York, N. Y. Maximum or indicating meter | 739,967 | Sept. 29 | 4685 | 1053, 1054 | 106 | 1068 |
| Wohl, Max, New York, N. Y. Toilet-cabinet | 747,527 | Dec. 22 | 4085 | 918 | 107 | 2051 |
| Wohlrabe, Willy, Dülken, Germany. Trunk | 724,985 | Apr. 7 | 1053 | 240 | 103 | 1393 |
| Wojciechowski, Jakob, Warsaw, Russia, assignor to American Tobacco Company, New York, N. Y. Cutting mechanism for cigarettes | 732,330 | June 30 | 5222 | 1160 | 104 | 2275 |
| Wojciechowski, Jakob, Warsaw, Russia, assignor to R. L. Patterson, New York, N. Y. Machine for filling cigarette-cartridges with tobacco | 741,208 | Oct. 13 | 1539 | 347, 348 | 106 | 1595 |

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| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| Woland, Walter A. (See Higgins, George M., assignor.) | | | | | | |
| Wolcott, Caroline A., executrix. (See Allison, Oscar W.) | | | | | | |
| Wolcott, Darwin S. (See Fessenden, Reginald A., assignor.) (Reissue.) | | | | | | |
| Wolcott Glass Machine Company. (See Wolcott, Willie M., assignor.) | | | | | | |
| Wolcott, Willie M., Chicago, Ill., assignor to Wolcott Glass Machine Company, Wheeling, W. Va. Machine for shaping glass | 719,710 | Feb. 3 | 542 | 121, 122, 123, 124 | 102 | 937 |
| Wold, Anton J., Richmond Hill Station, N. Y. Slip and shrinkage gage | 746,622 | Dec. 8 | 2370 | 544 | 107 | 1629 |
| Wold, Olaus C. (See Dean, Franklin P., assignor.) | | | | | | |
| Woldridge, Benton W., Trenton, Mo. Electric switch | 738,969 | Sept. 15 | 2821 | 625 | 106 | 637 |
| Wolf, Adam M., Plymouth, Wis. Spring-rocker | 733,450 | July 14 | 1352 | 318 | 105 | 303 |
| Wolf, Augustus, assignor to Wolf Company, Chambersburg, Pa Gyrating sieve or bolting-machine | 732,019 | June 23 | 4612 | 1029, 1030 | 104 | 2136 |
| Wolf Company. (See Wolf, Augustus, assignor.) | | | | | | |
| Wolf, Elmer E., and J. B. Williams, assignors to J. B. Williams, Springfield, Ohio. Block-signal system | 748,450 | Dec. 29 | 5827 | 1327, 1328 | 107 | 2458 |
| Wolf, Elmer E., and J. B. Williams, Springfield, assignors to said Williams, G. H. Kyle, Carthage, and J. B. Von Schriltz, Springfield, Ohio. Railway-crossing signal | 748,451 | Dec. 29 | 5832 | 1328, 1329 | 107 | 2459 |
| Wolf, Harry J., Telluride, Colo. Plumb-bob | 748,132 | Dec. 29 | 5265 | 1195 | 107 | 2336 |
| Wolf, Henry, Jr., assignor to E. Bloch, Cincinnati, Ohio. Intermittent automatic switch | 727,870 | May 12 | 1984 | 442 | 104 | 439 |
| Wolf, Herman H., Canton, Ohio. Block for shaping hats or caps | 724,227 | Mar. 31 | 4837 | 1085 | 103 | 1071 |
| Wolf, John, St. Louis, Mo. Trunk | 747,107 | Dec. 15 | 3307 | 753 | 107 | 1864 |
| Wolf, Ludwig. (See Lewis, Grow, and Wolf.) | | | | | | |
| Wolf, Rush, Bloomville, Ohio. Clevis | 724,986 | Apr. 7 | 1054 | 240 | 103 | 1393 |
| Wolf, Sayer, and Heller. (See Beck, Oliver P., assignor.) | | | | | | |
| Wolf, W. & L. (See Maxwell, William S., assignor.) | | | | | | |
| Wolf, William R., Burlington, Iowa. Sectional bookcase | 728,150 | May 12 | 2493 | 554 | 104 | 548 |
| Wolfe, Arthur P., assignor to Niagara Machine and Tool Works, Buffalo, N. Y. Machine for making can-bodies | 737,989 | Sept. 1 | 868 | 189, 190, 191 | 106 | 190 |
| Wolfe, Arthur P., assignor to Niagara Machine & Tool Works, Buffalo, N. Y. Can-heading machine | 741,869 | Oct. 20 | 2835 | 632, 633 | 106 | 1885 |
| Wolfe, Charles. (See Young and Wolfe.) | | | | | | |
| Wolfe, Charles H., *et al.* (See Bunch, John W., assignor.) | | | | | | |
| Wolfe, Edward M. (See King and Wolfe.) | | | | | | |
| Wolfe, Frank G., Scranton, assignor to Link Belt Engineering Company, Philadelphia, Pa. Drainage conveyer-trough | 719,406 | Jan. 27 | 3586 | 801 | 102 | 804 |
| Wolfe, Franklin M., Galt, Canada. Lawn-mower | 744,661 | Nov. 17 | 3585 | 772 | 107 | 794 |
| Wolfe, George, assignor to L. Kendal, New York, N. Y. Window-fixture | 740,610 | Oct. 6 | 450 | 98 | 106 | 1343 |
| Wolfe, Harry J., Dayton, Ohio. Combined level and attachment | 729,480 | May 26 | 4923 | 1091 | 104 | 1093 |
| Wolfe, John W., Randolph, Iowa. Ore-separator | 725,609 | Apr. 14 | 2201 | 497, 498 | 103 | 1653 |
| Wolfe, Milton J., Center, Ohio. Bench-stop | 731,647 | June 23 | 3927 | 874 | 104 | 1991 |
| Wolfe, Wiltsie F., New York, N. Y., assignor, by mesne assignments, to Smokeless Combustion Company. Downdraft-stove | 729,028 | May 26 | 4149 | 919 | 104 | 931 |
| Wolfenden, Jonothan. (See Murphy, Patrick H., assignor.) | | | | | | |
| Wolfensperger, Jacob, Cleveland, Ohio, assignor, by mesne assignments, to Cleveland Reversible Window Company. Window | 731,006 | June 16 | 2705 | 602, 603 | 104 | 1727 |
| Wolfert, Carlos H., Toledo, Ohio. Toy lantern | 732,806 | July 7 | 207 | 52 | 105 | 47 |
| Wolfert, Naum. (See Lurye, Henry I. and M. A., assignors.) | | | | | | |
| Wolff, Adolph, Zurich, Switzerland. Carbureter | 721,268 | Feb. 24 | 3507 | 797 | 102 | 1611 |
| Wolff, Alfred J. (See Stites, Goss, and Wolff.) | | | | | | |
| Wolff, Herbert W. (See Lipschutz, Arthur, assignor.) | | | | | | |
| Wolff, Herbert W., and A. Lipschutz, St. Louis, Mo. Brake-beam | 747,288 | Dec. 15 | 3654 | 826, 827 | 107 | 1938 |
| Wolff, Herbert W., and A. Lipschutz, assignors to American Car & Foundry Company, St. Louis, Mo. Railway-truck | 723,430 | Mar. 24 | 3312 | 742 | 103 | 739 |
| Wolff, Herbert W., and A. Lipschutz, assignors to American Car & Foundry Company, St. Louis, Mo. Dump-car | 733,786 | July 14 | 1937 | 456, 457 | 105 | 426 |
| Wolff, Herbert W., St. Louis, and V. R. Willoughby, St Charles, assignors to American Car & Foundry Company, St. Louis, Mo. Dumping-car | 717,788 | Jan. 6 | 515 | 115 | 102 | 111 |
| Wolff, Joseph C. (See Dumais, Jean B., assignor.) | | | | | | |
| Wolff, Max F., Tampa, Fla. Temporary binder | 730,727 | June 9 | 2184 | 486 | 104 | 1597 |
| Wolff, Scott L., Philadelphia, Pa. Apparatus far extracting grease | 747,108 | Dec. 15 | 3308 | 753 | 107 | 1864 |
| Wolfinger, Joseph. (See Ariens, Thompson, and Wolfinger.) | | | | | | |
| Wolfinger, Joseph, Dundas, Wis. Veneer-cutter | 747,827 | Dec. 22 | 4636 | 1047 | 107 | 2176 |
| Wolfskill, Susan C., Winters, Cal. Baby-buggy | 733,889 | July 14 | 2144 | 506 | 105 | 467 |
| Wolger, James H., assignor of two-thirds to S. C. Foss and C. E. Collins, Methuen, Mass. Warp stop-motion for looms | 737,544 | Aug. 25 | 4698 | 1053, 1054 | 105 | 2038 |
| Wolhaupter, Benjamin, Chicago, Ill. Tie-plate | 721,644 | Feb. 24 | 4203 | 956 | 102 | 1761 |
| Wolhaupter, Benjamin, Chicago, Ill. Tie-plate | 730,067 | June 2 | 993 | 223 | 104 | 1330 |
| Wolhaupter, Benjamin, Chicago, Ill. Rail-joint | 732,390 | June 30 | 5354 | 1186, 1187 | 104 | 2303 |
| Wollheim, Heinrich. (See Carbone, Tito L., assignor.) | | | | | | |
| Wollheim, Sigmund, Milwaukee, Wis. Coin-controlled apparatus | 730,068 | June 2 | 995 | 223 | 104 | 1330 |
| Wolpers, Conrad C. G., New York, N. Y. Permanent hat-pin and locking attachment | 735,046 | July 28 | 4353 | 1012 | 105 | 962 |
| Wolpert, Thomas. (See Wolpert, William and T.) | | | | | | |
| Wolpert, William and T., Louisville, Ky. Bath-tub seat | 732,249 | June 30 | 5082 | 1130 | 104 | 2246 |
| Wolters, Otto A., Hanover, Germany. Keyboard-operator | 730,504 | June 9 | 1795 | 401, 402 | 104 | 1512 |
| Wolters, Wilhelm, Magdeburg-Buckau, Germany. Making citrate soluble phosphates | 721,489 | Feb. 24 | 3903 | ..... | 102 | 1693 |
| Woltman, August. (See Ash and Woltman.) | | | | | | |
| Wolverine Manufacturing Company. (See Johnson, Henry, assignor.) | | | | | | |
| Womble, Zachariah C., Waco, Tex. Hydraulic milk-cooler | 746,623 | Dec. 8 | 2372 | 544 | 107 | 1629 |
| Womeldorf, Fredrick R., Carroll, Pa. Fly-fan | 736,469 | Aug. 18 | 2659 | 584 | 105 | 1585 |
| Wonderly, Thomas G., Galena, Ill. Shade-fixture | 717,789 | Jan. 6 | 516 | 116 | 102 | 111 |
| Wood, Abraham, and E. Nightingale, Ramsbottom; said Nightingale assignor to T. Wood, Manchester, England. Cloth-governing apparatus for guiding and straightening woven fabrics | 739,968 | Sept. 29 | 4687 | 1054 | 106 | 1069 |
| Wood, Albert C. (See Fulenwider and Wood.) | | | | | | |
| Wood, Albert F., Snoma, S. D. Tie-plate | 739,768 | Sept. 22 | 4271 | 957 | 106 | 964 |
| Wood, Albert F., Snoma, S. D. Stirrup | 743,969 | Nov. 10 | 2269 | 488 | 107 | 501 |
| Wood, Alexander, Glasgow, Scotland. Water-gage for steam-generators | 736,666 | Aug. 18 | 3043 | 672 | 105 | 1664 |
| Wood, Alfred F. (See Cloud and Wood.) | | | | | | |
| Wood, Alice B., Newton, Mass. Hair-confiner | 741,870 | Oct. 20 | 2840 | 633 | 106 | 1886 |
| Wood, Allen G., New York, N. Y. Apparatus for testing pressure-gages | 719,968 | Feb. 3 | 990 | 230 | 102 | 1033 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| Wood, Arthur W., *et al.* (See Woolley, Theodore W., assignor.) | | | | | | |
| Wood, Bert B., Helena, Mont. Wire fence | 733,890 | July 14 | 2146 | 506 | 105 | 467 |
| Wood, Catherine, *et al.* (See Wood, Frank B., assignor.) | | | | | | |
| Wood, Charles T., Abington, assignor to Wood & Small Welting Company, Whitman, Mass. Welt for boots or shoes | 740,507 | Oct. 6 | 239 | 47 | 106 | 1297 |
| Wood, Clarence C. (See Caswell and Wood.) | | | | | | |
| Wood, Collis, Victoria, Canada. Necktie-fastener | 747,028 | Dec. 15 | 3154 | 723 | 107 | 1826 |
| Wood, Doctor C. (See Swain and Wood.) | | | | | | |
| Wood, Edgar J., assignor to M. A. Wood, Brooklyn, N. Y. Steam-boiler furnace | 737,309 | Aug. 25 | 4254 | 947 | 105 | 1938 |
| Wood, Edgar J., assignor to M. A. Wood, Brooklyn, N. Y. Steam-generator | 738,143 | Sept. 1 | 1176 | 259 | 106 | 253 |
| Wood, Elijah. (See Nelson and Wood.) | | | | | | |
| Wood, Everett S., assignor to Draper Company, Hopedale, Mass. Automatic filling-replenishing loom | 720,209 | Feb. 10 | 1468 | 334 | 102 | 1150 |
| Wood, Everett S., assignor to Draper Company, Hopedale, Mass. Means for preventing banging off in looms | 742,813 | Oct. 27 | 4632 | 1050 | 106 | 2273 |
| Wood, Everett S., assignor to Draper Company, Hopedale, Mass. Filling-replenishing loom | 745,408 | Dec. 1 | 176 | 39,40 | 107 | 1137 |
| Wood, Everett S., assignor to Draper Company, Hopedale, Mass. Warp-evening mechanism for looms | 747,310 | Dec. 15 | 3697 | 833<br>834 | 107 | 1948 |
| Wood, Frank B., assignor to Frank B., Jr., and C. Wood, New York, N. Y. Telephone system | 718,686 | Jan. 20 | 2222 | 487 | 102 | 504 |
| Wood, Frank W., Newport News, Va., assignor to C. Cory & Son, New York, N. Y. Telephonic apparatus | 726,835 | Apr. 28 | 4503 | 1016 | 103 | 2155 |
| Wood, Frank W., Newport News, Va., assignor to C. Cory & Son, New York, N. Y. Telephonic apparatus | 726,836 | Apr. 28 | 4511 | 1017 | 103 | 2158 |
| Wood, Frank W., Newport News, Va., assignor to C. Cory & Son, New York, N. Y. Flexible tube for conveying and receiving articulate sounds | 735,645 | Aug. 4 | 1168 | 248 | 105 | 1229 |
| Wood, Franklin H., Wilkinsburg, Pa. Trousers-stretcher | 743,788 | Nov. 10 | 1946 | 412 | 107 | 431 |
| Wood, Frederick B. (See Gillett and Wood.) | | | | | | |
| Wood, Frederick D., and W. A. Royse, Louisville, Ky.; said Royse assignor to said Wood. Fire-escape | 722,648 | Mar. 10 | 1834 | 409 | 103 | 410 |
| Wood, Frederick W. (See Cummings, Albert G., assignor.) | | | | | | |
| Wood, Galen, Ballard, Wash., assignor of one-third to W. Mountjoy, Twin Bridges, Mont. Wheel-fastener and axle-protector | 730,429 | June 9 | 1648 | 369 | 104 | 1480 |
| Wood, George, East Orange, N. J., assignor of one-half to F. N. Devorss, New York, N. Y. Automatic return-feed mechanism for phonographs | 735,926 | Aug. 11 | 1703 | 363 | 105 | 1363 |
| Wood, George W., Denver, Colo. Rotary engine | 719,969 | Feb. 3 | 992 | 231 | 102 | 1034 |
| Wood, Gus H., Chicago, Ill. Extension-table | 730,850 | June 9 | 2385 | 527 | 104 | 1639 |
| Wood, H. A., *et al.* (See Bryant, William P., assignor.) | | | | | | |
| Wood, Harry C. (See Schrader, Ernest C., assignor.) | | | | | | |
| Wood, Henry A. W., assignor to Campbell Printing Press & Manufacturing Company, New York, N. Y. Automatic stereotype-printing-plate casting and finishing apparatus | 721,117 | Feb. 17 | 3172 | 729<br>730<br>731 | 102 | 1525 |
| Wood, Henry A. W., assignor to Campbell Printing Press & Manufacturing Company, New York, N. Y. Stereotype-printing-plate-casting apparatus | 721,118 | Feb. 17 | 3189 | 731 | 102 | 1530 |
| Wood, Henry A. W., assignor to Campbell Printing Press & Manufacturing Company, New York, N. Y. Stereotype-printing-plate-casting apparatus | 721,119 | Feb. 17 | 3192 | 732 | 102 | 1531 |
| Wood, Henry A. W., assignor to Campbell Printing Press & Manufacturing Company, New York, N. Y. Stereotype-printing-plate casting and finishing apparatus | 721,120 | Feb. 17 | 3195 | 732<br>733 | 102 | 1532 |
| Wood, Henry A. W., assignor to Campbell Printing Press & Manufacturing Company, New York, N. Y. Stereotype-plate-casting apparatus | 721,121 | Feb. 17 | 3199 | 733<br>734 | 102 | 1532 |
| Wood, Henry A. W., assignor to Campbell Printing Press & Manufacturing Company, New York, N. Y. Stereotype-printing-plate-finishing mechanism | 721,122 | Feb. 17 | 3203 | 734 | 102 | 1534 |
| Wood, Henry A. W., assignor to Campbell Printing Press & Manufacturing Company, New York, N. Y. Stereotype-printing-plate-finishing mechanism | 721,123 | Feb. 17 | 3206 | 735 | 102 | 1534 |
| Wood, Henry A. W., assignor to Campbell Printing Press & Manufacturing Company, New York, N. Y. Printing-press | 731,530 | June 23 | 3706 | 825<br>826 | 104 | 1948 |
| Wood, Henry A. W., assignor to Campbell Printing Press and Manufacturing Company, New York, N. Y. Offset-preventing mechanism for printing-presses | 748,135 | Dec. 29 | 5277 | 1198<br>1199 | 107 | 2338 |
| Wood, Henry A. W., New York, N. Y., assignor, by mesne assignments, to Detroit Trust Co., trustee, Detroit, Mich. Printing-machine | 735,646 | Aug. 4 | 1170 | 248 | 105 | 1229 |
| Wood, Henry A. W., New York, N. Y., assignor, by mesne assignments, to Detroit Trust Co., trustee, Detroit, Mich. Printing-machine | 748,133 | Dec. 29 | 5266 | 1195<br>1196 | 107 | 2336 |
| Wood, Henry A. W., New York, N. Y., assignor, by mesne assignments, to Detroit Trust Co., trustee, Detroit, Mich. Printing mechanism | 748,134 | Dec. 29 | 5270 | 1196<br>1197<br>1198 | 107 | 2337 |
| Wood and Iron Preserving Company. (See Turner, Orra A., assignor.) | | | | | | |
| Wood, Isaac S., Jr., Elberfeld, Ind. Threshing-machine feeder | 746,429 | Dec. 8 | 2038 | 467 | 107 | 1553 |
| Wood, James, Noroton, Conn. Stove | 742,108 | Oct. 20 | 3367 | 752 | 106 | 1991 |
| Wood, James B., assignor of two-thirds to J. E. Smith and G. L. Daugherty, Gate City, Va. Switchboard | 746,624 | Dec. 8 | 2374 | 545 | 107 | 1630 |
| Wood, James J., Fort Wayne, Ind. Current-regulator | 720,305 | Feb. 10 | 1658 | 378 | 102 | 1189 |
| Wood, James J., Fort Wayne, Ind. Globe-holder for arc-lamps, &c | 720,306 | Feb. 10 | 1661 | 378 | 102 | 1190 |
| Wood, James J., Fort Wayne, Ind. Armature-band | 720,307 | Feb. 10 | 1663 | 379 | 102 | 1190 |
| Wood, James J., Fort Wayne, Ind. Armature-banding device | 720,308 | Feb. 10 | 1665 | 379 | 102 | 1190 |
| Wood, James J., Fort Wayne, Ind. Switch for electric circuits | 721,410 | Feb. 24 | 3758 | 854<br>855 | 102 | 1664 |
| Wood, James J., Fort Wayne, Ind. Electric-circuit breaker | 724,228 | Mar. 31 | 4839 | 1086<br>1087 | 103 | 1071 |
| Wood, James J., Fort Wayne, Ind. Electric-arc lamp | 724,229 | Mar. 31 | 4848 | 1087 | 103 | 1072 |
| Wood, James J., Fort Wayne, Ind. Electric-arc lamp | 724,366 | Mar. 31 | 5117 | 1146<br>1147 | 103 | 1127 |
| Wood, James J., Fort Wayne, Ind. Electric-arc lamp for constant-potential circuits | 732,488 | June 30 | 5545 | 1230 | 104 | 2341 |
| Wood, James J., Fort Wayne, Ind. Rheostat for arc-lamps | 732,489 | June 30 | 5550 | 1231 | 104 | 2341 |
| Wood, James J., Fort Wayne, Ind. Electric-light fixture | 735,647 | Aug. 4 | 1173 | 248 | 105 | 1230 |
| Wood, James J., Fort Wayne, Ind. Electric fuse-box | 736,049 | Aug. 11 | 1930 | 412 | 105 | 1412 |
| Wood, James J., Fort Wayne, Ind. Electric-light fixture | 740,347 | Sept. 29 | 5378 | 1212 | 106 | 1213 |
| Wood, James J., Fort Wayne, Ind., assignor to General Electric Company. Means for preventing fluctuations in rotary motors | 724,645 | Apr. 7 | 420 | 100 | 103 | 1259 |
| Wood, James J., Fort Wayne, Ind., assignor to General Electric Company. Means for preventing fluctuations in rotary motors | 741,290 | Oct. 13 | 1705 | 381 | 106 | 1627 |
| Wood, John, Hadfield, and J. E. Gimson, Stalybridge, England. Engine-packing | 720,868 | Feb. 17 | 2686 | 621 | 102 | 1418 |
| Wood, John T., Litchfield, assignor of one-half to J. Oldendorph, Waterloo, Ill. Carbureter | 728,644 | May 19 | 3451 | 765<br>766 | 104 | 772 |
| Wood, John T., Litchfield, assignor of one-half to J. Oldendorph, Waterloo, Ill. Retort for carbureters | 728,645 | May 19 | 3453 | 766 | 104 | 773 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| Wood, Leonard E., San Francisco, and C. R. Cooper, Berkeley, Cal. Seal | 739,248 | Sept. 15 | 3328 | 738 | 106 | 744 |
| Wood Manufacturing Company. (See Wood, Rodney J., assignor.) | | | | | | |
| Wood, Margaret A. (See Wood, Edgar J., assignor.) | | | | | | |
| Wood, Montraville M., Schenectady, N. Y., assignor to General Electric Company. Circuit-breaker for third-rail shoes | 723,115 | Mar. 17 | 2705 | 608 | 103 | 604 |
| Wood, Montraville M., Schenectady, N. Y., assignor to General Electric Company. Indicator for liquid-containing vessels | 739,629 | Sept. 22 | 4033 | 899 | 106 | 912 |
| Wood, Richard W., Seattle, Wash. Time-limit ticket | 742,546 | Oct. 27 | 4179 | 940 | 106 | 2174 |
| Wood, Robert J. G., Leonia, N. J. Apparatus for treating and utilizing sewage | 739,049 | Sept. 15 | 2954 | 654<br>655 | 106 | 665 |
| Wood, Rodney J., Dayton, assignor to Wood Manufacturing Company, Springfield, Ohio. Copy-holder for type-writers | 728,646 | May 19 | 3453 | 767 | 104 | 773 |
| Wood, Samuel S., Elgin, Ill. Metallic railway-tie | 723,965 | Mar. 31 | 4316 | 969 | 103 | 966 |
| Wood & Small Welting Company. (See Wood, Charles T., assignor.) | | | | | | |
| Wood, Stephen W., New York, N. Y. Electrical traction towage | 724,367 | Mar. 31 | 5128 | 1147<br>1148 | 103 | 1129 |
| Wood, Stephen W., New York, N. Y. Electrical towage on canals | 724,368 | Mar. 31 | 5130 | 1148 | 103 | 1129 |
| Wood, Stephen W., New York, N. Y. Electrical towage traction-way | 724,369 | Mar. 31 | 5132 | 1149 | 103 | 1130 |
| Wood, Stephen W., New York, N. Y. Electrical traction-way for canal towage | 724,370 | Mar. 31 | 5134 | 1149 | 103 | 1130 |
| Wood, Thomas. (See Wood and Nightingale, assignors.) | | | | | | |
| Wood, Wallace, New York, N. Y. Device for exhibiting works of art | 721,767 | Mar. 3 | 190 | 44 | 103 | 42 |
| Wood, William, Pittsburg, Pa. Salt-cellar | 742,268 | Oct. 27 | 3671 | 820 | 106 | 2070 |
| Wood, William D., London, England, assignor to Farrand Organ Company, Detroit, Mich. Relief-valve | 744,662 | Nov. 17 | 3587 | 773 | 107 | 795 |
| Wood, William R., St. Louis, Mo. Vehicle-wheel | 719,970 | Feb. 3 | 995 | 231 | 102 | 1034 |
| Wood, William S., assignor of three-fourths to S. S. Harris, Chicago, Ill. Apparatus for making molds | 747,289 | Dec. 15 | 3656 | 827 | 107 | 1939 |
| Woodard, Hartson F., and B. J. Dolphin, Minneapolis, Minn. Lock for windows | 744,848 | Nov. 24 | 3957 | 853 | 107 | 891 |
| Woodard, Joseph W., Allendale, S. C. Train-order catcher | 744,890 | Nov. 24 | 4025 | 868 | 107 | 905 |
| Woodbridge, Frank, Indianapolis, Ind. Display apparatus | 743,128 | Nov. 3 | 594 | 128 | 107 | 124 |
| Woodbridge, Frank, Indianapolis, Ind. Color-changing display apparatus | 743,129 | Nov. 3 | 595 | 128 | 107 | 124 |
| Woodbridge, John S., Detroit, Mich. Paper-box machine | 739,529 | Sept. 22 | 3836 | 859 | 106 | 870 |
| Woodbridge, Jonathan E. (See Armstrong and Woodbridge.) | | | | | | |
| Woodbridge, Jonathan E., Schenectady, N. Y., assignor to General Electric Company. Synchronism-indicator | 722,345 | Mar. 10 | 1286 | 285 | 103 | 289 |
| Woodbridge, Jonathan E., Schenectady, N. Y., assignor to General Electric Company. Starting alternating-current machines | 728,817 | May 19 | 3763 | 840 | 104 | 837 |
| Woodbury, George E., Charlotte, Mich. Bolt | 739,250 | Sept. 15 | 3330 | 739 | 106 | 744 |
| Woodbury, Hezekiah O. (See Blaisdell, Robert W., assignor.) | | | | | | |
| Woodbury, Hezekiah O., assignor of two-thirds to E. F. Sanderson and R. W. Blaisdell, Beverly, Mass. Trolley-pole guide | 733,524 | July 14 | 1485 | 353<br>354 | 105 | 331 |
| Woodbury, Oscar D., Rochester, N. Y. Punch | 720,309 | Feb. 10 | 1667 | 379 | 102 | 1191 |
| Woodcock Plate Ice Company. (See Woodcock, Willard J., assignor.) | | | | | | |
| Woodcock, Willard J., Brooklyn, N. Y., assignor to Woodcock Plate Ice Company. Ice-making machinery | 745,548 | Dec. 1 | 439 | 103 | 107 | 1191 |
| Woodcock, Willard J., Brooklyn, N. Y., assignor to Woodcock Plate Ice Company. Producing plate-ice | 745,549 | Dec. 1 | 440 | 103 | 107 | 1191 |
| Woodcock, William H., and R. H. Hornbrook, Canton, Ohio. Gondola car | 723,800 | Mar. 24 | 3969 | 895 | 103 | 876 |
| Woodford, Frank E. (See Barnes and Woodford.) | | | | | | |
| Woodford, Milton E., Pittsburg, Pa., assignor to Automatic Postage Stamp Box Company. Stamp feeding and cutting mechanism | 736,329 | Aug. 11 | 2412 | 527 | 105 | 1517 |
| Woodings, Emanuel. (See Henggi and Woodings.) | | | | | | |
| Woodland, Frank O., assignor to Economic Machinery Co., Worcester, Mass. Automatic feeder mechanism for bottle-stoppering machines, &c | 732,987 | July 7 | 507 | 126 | 105 | 109 |
| Woodley, Frank T. (See Stearn and Woodley.) | | | | | | |
| Woodman, George A. (See Kuhlman and Woodman.) | | | | | | |
| Woodman, George A., Chicago, Ill., assignor to A. J. Weil, New York, N. Y. Journal-bearing | 730,327 | June 9 | 1459 | 322 | 104 | 1441 |
| Woodman, George A., Chicago, Ill., assignor to A. J. Weil, New York, N. Y. Journal-bearing | 730,328 | June 9 | 1460 | 322<br>323 | 104 | 1441 |
| Woodruff, Amos H., Chicago, Ill. Amalgamating-machine | 725,309 | Apr. 14 | 1639 | 370 | 103 | 1532 |
| Woodruff, Edmund W., Washington, D. C. Card holder or file | 723,116 | Mar. 17 | 2707 | 609 | 103 | 604 |
| Woodruff, Edmund W., Washington, D. C. Cabinet | 731,330 | June 16 | 3307 | 738 | 104 | 1847 |
| Woodruff, Edmund W., Washington, D. C. File for papers or cards | 732,807 | July 7 | 208 | 53 | 105 | 47 |
| Woodruff, Edward, Chicago, Ill. Mechanism for temporarily locking water-closet bowls or washbasins | 733,787 | July 14 | 1939 | 457 | 105 | 426 |
| Woodruff, Edward, Chicago, Ill. Mechanism for temporarily locking water-closet covers. | 735,927 | Aug. 11 | 1707 | 363 | 105 | 1364 |
| Woodruff Manufacturing Company. (See McFarland, Walter A., assignor.) | | | | | | |
| Woodruff, May B., Milwaukee, Wis. Work-holder for sewing-machines | 727,526 | May 5 | 1305 | 290 | 104 | 281 |
| Woodruff, Oliver D., Southington, Conn. Food-chopper | 717,959 | Jan. 6 | 823 | 186 | 102 | 177 |
| Woodruff, Thomas L., *et al.* (See Kilborn, Chauncey W., assignor.) | | | | | | |
| Woodruff, William P., Buffalo, N. Y., and D. J. McCarthy, Wilkinsburg, Pa. Fuse and fuse-magazine | 747,528 | Dec. 22 | 4086 | 918 | 107 | 2051 |
| Woodruff, William W., Winchester, Ky. Telephone-exchange | 734,386 | July 21 | 3122 | 735 | 105 | 694 |
| Woodruff, William W., assignor of one-half to J. M. Pickrell, Winchester, Ky. Apparatus for locating short circuits in electric lines | 739,569 | Sept. 22 | 3910 | 876 | 106 | 886 |
| Woods, Calvin W., North Brookfield, Mass., assignor to E. & A. H. Batcheller Company. Heel-attaching device | 748,452 | Dec. 29 | 5838 | 1329 | 107 | 2460 |
| Woods, Charles G., assignor of one-half to W. H. Browne, St. Louis, Mo. Cut-offs for house-plumbing | 733,788 | July 14 | 1941 | 457 | 105 | 427 |
| Woods, Chas. W., *et al.* (See Johnson, Lafayette W., assignor.) | | | | | | |
| Woods, Clinton E., Chicago, Ill., assignor, by mesne assignments, to Keystone Electric Company, Erie, Pa. Multivoltage system | 736,667 | Aug. 18 | 3045 | 672 | 105 | 1665 |
| Woods, Edwin S., assignor of one-half to S. W. McMunn, Chicago, Ill. Roller side bearing for car-trucks | 725,388 | Apr. 14 | 1788 | 400<br>401 | 103 | 1563 |
| Woods, Edwin S., assignor of one-half to S. W. McMunn, Chicago, Ill. Roller side bearing for car-trucks | 725,389 | Apr. 14 | 1791 | 401 | 103 | 1563 |
| Woods, F. M. (See Tully, Bryan, assignor.) | | | | | | |
| Woods, Granville T., New York, N. Y., assignor to General Electric Company. Electric-railway system | 718,183 | Jan. 13 | 1228 | 271<br>272 | 102 | 279 |
| Woods, Granville T. and L., New York, N. Y., assignors to General Electric Company. Electric railway | 729,481 | May 26 | 4924 | 1091 | 104 | 1093 |
| Woods, Green K., Prescott, Ariz. Ter. Farrier's rasp | 739,570 | Sept. 22 | 3913 | 876 | 106 | 886 |
| Woods, James T., Melbourne, Victoria, Australia. Appliance for use in coupling railway-trucks | 730,728 | June 9 | 2185 | 486 | 104 | 1597 |
| Woods, Jesse L., Jacksboro, Tex. Clock-calendar | 746,225 | Dec. 8 | 1675 | 372 | 107 | 1478 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| Woods, John L. (See McCracken, Isaac E., assignor.) | | | | | | |
| Woods, Lemuel D., Candia, N. H. Nut-lock | 730,430 | June 9 | 1651 | 369 | 104 | 1481 |
| Woods, Louin O., Stillwater, Okla. Ter. Transposition-chart | 718,065 | Jan. 6 | 1014 | 226 | 102 | 219 |
| Woods, Lyates. (See Woods, Granville T. and L.) | | | | | | |
| Woods, Patrick F., Depew, N. Y. Car-axle box | 730,185 | June 2 | 1183 | 265 | 104 | 1368 |
| Woods, William H., Boston, Mass. Screen for catch-basins or the like | 739,249 | Sept. 15 | 3329 | 739 | 106 | 744 |
| Woodside, James L., Lincoln, Nebr. Chimney-cap | 734,790 | July 28 | 3881 | 905 | 105 | 864 |
| Woodson, Eliza B., assignor of one-half to E. Harrison, Chicago, Ill. Kindergarten building-blocks | 741,949 | Oct. 20 | 3004 | 667 | 106 | 1921 |
| Woodward, Alfred M., assignor to Acme White Lead & Color Works, Detroit, Mich. Panoramic cabinet | 729,029 | May 26 | 4150 | 920 | 104 | 931 |
| Woodward, Allan H., Woodward, Ala. Storage structure | 732,020 | June 23 | 4614 | {1030 / 1031} | {104} | 2136 |
| Woodward, Allan H., Woodward, Ala. Storage structure | 732,021 | June 23 | 4618 | {1031 / 1032} | {104} | 2137 |
| Woodward, Ambrose W., Lancaster, Pa. Bottle with spherical or ball-valve stopper | 724,405 | Mar. 31 | 5209 | 1168 | 103 | 1147 |
| Woodward, Arthur. (See Hutton, Edward S., assignor.) | | | | | | |
| Woodward, Charles E. W., assignor of one-half to Fisk Rubber Company, Chicopee Falls, Mass. Tire construction | 744,663 | Nov. 17 | 3588 | 773 | 107 | 795 |
| Woodward, Erastus, Somerville, Mass. Heel-attaching machine | 743,369 | Nov. 3 | 1094 | 233 | 107 | 232 |
| Woodward, Irving C., Chicago, Ill. Vending-machine | 745,707 | Dec. 1 | 711 | 162 | 107 | 1249 |
| Woodward, Robert G., New York, N. Y. Account-sheet | 723,117 | Mar. 17 | 2711 | {609 / 610} | {103} | 605 |
| Woodward, Russel G., Waukegan, assignor to Union Special Sewing Machine Company, Chicago, Ill. Seam for sewed articles | 718,960 | Jan. 20 | 2740 | 613 | 102 | 612 |
| Woodward, Russel G., Waukegan, assignor to Union Special Sewing Machine Company, Chicago, Ill. Sewing-machine presser-foot | 722,441 | Mar. 10 | 1450 | 321 | 103 | 325 |
| Woodward, Russel G., Waukegan, assignor to Union Special Sewing Machine Company, Chicago, Ill. Sewing-machine presser-foot | 722,550 | Mar. 10 | 1664 | 367 | 103 | 374 |
| Woodward, Russel G., Waukegan, assignor to Union Special Sewing Machine Company, Chicago, Ill. Presser-foot for sewing-machines | 722,647 | Mar. 10 | 1833 | 409 | 103 | 410 |
| Woodworth, Albert J., Sparrows Point, Md. Electric hammer | 734,387 | July 21 | 3126 | 735 | 105 | 695 |
| Woodworth, Albert J., assignor of one-fourth to C. G. Chevalier, Sparrows Point, Md. Fire-alarm system | 744,849 | Nov. 24 | 3959 | {853 / 854} | {107} | 891 |
| Woodworth, George D., assignor of one-half to L. Lewisheim, New York, N. Y. Device for dampening cigar-boxes | 735,648 | Aug. 4 | 1174 | 249 | 105 | 1230 |
| Woodworth, Milton M., Wessington, S. D. Penholder | 738,587 | Sept. 8 | 2078 | 454 | 106 | 462 |
| Woodworth, William H., Delaware, Ohio. Spring-plate nut-lock | 720,769 | Feb. 17 | 2525 | 582 | 102 | 1385 |
| Woodworth, William M., Sycamore, Ind. Crate | 738,588 | Sept. 8 | 2079 | 454 | 106 | 462 |
| Woodyard, William T., Reedy, W. Va. Pruning implement | 731,147 | June 16 | 2978 | 661 | 104 | 1781 |
| Woolen, George L. (See Cameron, Murdick, assignor.) | | | | | | |
| Woolley, David J. (See Davison and Woolley.) | | | | | | |
| Woolley Foundry and Machine Works. (See Burger, Leopold F., assignor.) | | | | | | |
| Woolley, Leonidas G., Kenton, Ohio, assignor to Magneto Electric Company, New York, N. Y. Combined regulator and safety mechanism for explosive-engines | 719,407 | Jan. 27 | 3588 | {801 / 802} | {102} | 804 |
| Woolley, Leonidas G., Kenton, Ohio, assignor to Magneto Electric Company, Incorporated, New York, N. Y. Magneto-electric generator mechanism | 719,971 | Feb. 3 | 996 | 232 | 102 | 1035 |
| Woolley, Leonidas G., Kenton, Ohio, assignor to Magneto-Electric Company, New York, N. Y. Magneto-electric-semaphore signaling | 733,789 | July 14 | 1942 | 458 | 105 | 427 |
| Woolley, Theodore W., assignor of two-thirds to G. W. Foster and A. W. Wood, Buffalo, N. Y. Washboard | 722,394 | Mar. 10 | 1368 | 303 | 103 | 307 |
| Woolliscroft, John H., Sandycroft, England. Liquid-resistance switch for electrical purposes | 719,549 | Feb. 3 | 247 | 58 | 102 | 875 |
| Woolsey, Essie B. (See Woolsey, James H., assignor.) | | | | | | |
| Woolsey, James H., assignor to E. B. Woolsey, St. Louis, Mo. Penholder | 735,928 | Aug. 11 | 1708 | 363 | 105 | 1364 |
| Woolverton, James I., Trenton, N. J. Dental mixing-tablet | 735,929 | Aug. 11 | 1709 | 363 | 105 | 1364 |
| Woomer, John W. (See Williams and Woomer.) | | | | | | |
| Woonsocket Napping Machinery Company. (See Greene, Harry S., assignor.) | | | | | | |
| Wooster, Grace M., New York, N. Y. Worsted-box | 736,808 | Aug. 18 | 3324 | 737 | 105 | 1722 |
| Worcester, Ira D., Pittsburg, Pa. Toy | 733,108 | July 7 | 731 | 178 | 105 | 155 |
| Worcester, James S., Newark, N. J. Propelling device for boats | 748,453 | Dec. 29 | 5840 | 1329 | 107 | 2460 |
| Worcester, Samuel A., assignor to Warder, Bushnell & Glessner Company, Springfield, Ohio. Painting apparatus | 738,270 | Sept. 8 | 1456 | {314 / 315} | {106} | 329 |
| Word Manufacturing Company. (See Word, William W., assignor.) | | | | | | |
| Word, William W., Soulsbyville, Cal. Forging rock-drills | 731,727 | June 23 | 4062 | {905 / 906} | {104} | 2018 |
| Word, William W., Latrobe, Cal., assignor to Word Manufacturing Company. Apparatus for shaping and sharpening rock-drills | 731,728 | June 23 | 4064 | 906 | 104 | 2018 |
| Worden, Daniel T. (See Donaldson, Edwin, assignor.) | | | | | | |
| Worden, Dudley, assignor of one-half to E. P. Phelps, Whatcom, Wash. Combined saw set and gage | 736,470 | Aug. 18 | 2660 | 584 | 105 | 1586 |
| Worden, Euclid P., assignor to Fred M. Prescott Steam Pump Company, Milwaukee, Wis. Duplex pumping-engine | 738,589 | Sept. 8 | 2081 | {454 / 455} | {106} | 463 |
| Worden, Hiram S., Nicholson Township, Pa. Wrench | 731,260 | June 16 | 3164 | {704 / 705} | {104} | 1817 |
| Worden, Miner E., Scranton, Pa., assignor to Worden Tool Company. Wrench | 733,525 | July 14 | 1486 | 354 | 105 | 331 |
| Worden Tool Company. (See Worden, Miner E., assignor.) | | | | | | |
| Work, Bertram G., assignor to B. F. Goodrich Company, Akron, Ohio. Making india-rubber surgical instruments | 721,768 | Mar. 3 | 192 | 45 | 103 | 42 |
| Work, Emmet A., *et al.* (See Nicholls, Moses, assignor.) | | | | | | |
| Workman, Calvin W. (See Faubion and Workman.) | | | | | | |
| Workman, Cave G. (See Faubion and Workman.) | | | | | | |
| Workman, Harry S., Basin, Wyo. Wire-stretcher | 734,388 | July 21 | 3129 | {735 / 736} | {105} | 696 |
| Workman, James A., Sr., Portageville, Mo. Pump-motor | 728,064 | May 12 | 2340 | 521 | 104 | 516 |
| Workum, Julius F. (See Anderson and Dyer, assignors.) | | | | | | |
| Workum, Julius F. (See Fuller, James T., assignor.) | | | | | | |
| World's Postal Supply Company. (See Toles, Justin K., assignor.) | | | | | | |
| Worrall, Hodgetts F. (See Black and Worrall.) | | | | | | |
| Worrall, Mary. (See Black and Worrall, assignors.) | | | | | | |
| Worrell, Devere, *et al.* (See Gould, Cornelius C., assignor.) | | | | | | |
| Worrest, Alfred H., Lancaster, Pa., assignor to Metal Stamping Company. Thill-coupling | 723,509 | Mar. 24 | 3469 | 776 | 103 | 770 |
| Worrill, Fredrick W., Macon, Ga. Ball-winding mechanism | 736,809 | Aug. 18 | 3325 | 737 | 105 | 1722 |
| Worsley, Otto G., Newark, Ill. Rock-drill | 735,028 | July 28 | 4319 | 1004 | 105 | 956 |
| Worth, Elvin P., Boston, Mass., assignor to Electric Cushion Shoe Company, Portland, Me. Article for use in the manufacture of boots or shoes | 744,850 | Nov. 24 | 3964 | 854 | 107 | 893 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | Spec. | Dr'g. | Vol. | Page. |
| Worth, J. S., *et al.* (See Fairweather, Charles B., assignor.) | | | | | | |
| Worth, W. P., *et al.* (See Fairweather, Charles B., assignor.) | | | | | | |
| Worth, William O., Chicago, Ill. Vehicle-tire | 740,069 | Sept. 29 | 4879 | 1094 | 106 | 1110 |
| Worth, William O., Chicago, Ill., assignor to Chicago Motor Vehicle Company. Engine-governor | 735,930 | Aug. 11 | 1709 | 364, 365 | 105 | 1364 |
| Worth, William O., Chicago, Ill., assignor of two-thirds to W. R. Donaldson, Louisville, Ky., and H. W. Kellogg, Battlecreek, Mich. Motor-vehicle controlling device | 724,767 | Apr. 7 | 647 | 151, 152 | 103 | 1307 |
| Worth, William O., Chicago, Ill., assignor to himself and W. R. Donaldson, Louisville, Ky. Power-translating device | 731,007 | June 16 | 2708 | 603, 604 | 104 | 1727 |
| Worth, William O., Chicago, Ill., assignor to himself and W. R. Donaldson, Louisville, Ky. Universal joint or shaft-coupling | 734,490 | July 21 | 3306 | 776 | 105 | 730 |
| Worth, William O., Chicago, Ill., and W. R. Donaldson, Louisville, Ky. Heating system for motor-vehicles | 728,430 | May 19 | 3031 | 666 | 104 | 683 |
| Worth, William R., Jersey City, N. J. Trunk | 744,664 | Nov. 17 | 3590 | 773 | 107 | 795 |
| Worthen, Burt L., *et al.* (See Kemp, William, assignor.) | | | | | | |
| Worthing, Eugene, *et al.* (See Bassler, Edwin M., assignor.) | | | | | | |
| Worthington, Charles C., Dunnfield, N. J. Water-meter | 742,947 | Nov. 3 | 219 | 50 | 107 | 48 |
| Worthington, Charles C., Dunnfield, N. J. Pump | 742,949 | Nov. 3 | 229 | 51 | 107 | 50 |
| Worthington, Charles C., Irvington, N. Y. Steam-engine | 742,948 | Nov. 3 | 221 | 50, 51 | 107 | 48 |
| Worthington, George C., Elyria, Ohio. Ball-winding machine | 740,348 | Sept. 29 | 5379 | 1213 | 106 | 1214 |
| Worthington, Harry L., assignor of one-half to V. E. Kennedy, New York, N. Y. Terminal tip for electric wires | 731,400 | June 16 | 3442 | 769 | 104 | 1875 |
| Worthington, Henry R. (See Brown, William C., assignor.) | | | | | | |
| Worthington, Hugh S., Coaticook, Canada. Car-coupling | 723,349 | Mar. 24 | 3150 | 708 | 103 | 707 |
| Worthley, Nathaniel T., and J. Heaton, Brunswick, assignors to Victoria Manufacturing Company, Auburn, Me. Acetylene-gas generator. (Reissue) | 12,184 | Dec. 15 | 3760 | 847 | 107 | 1961 |
| Wortley, Seth W., Skegness, England. Covering or awning for vehicles | 733,526 | July 14 | 1489 | 354 | 105 | 332 |
| Wortman, Hamaline C., Reno, Ohio. Railway-rail joint | 722,346 | Mar. 10 | 1288 | 286 | 103 | 289 |
| Wortmann, Martin, New York, N. Y. Clock | 748,250 | Dec. 29 | 5468 | 1246 | 107 | 2379 |
| Wossoff, William M., Philadelphia, Pa. Pipe-coupling | 725,610 | Apr. 14 | 2203 | 498 | 103 | 1653 |
| Wotton Electric & Manufacturing Company. (See Wotton, James A., assignor.) | | | | | | |
| Wotton, James A., Atlanta, Ga. Manufacturing electric condensers | 719,973 | Feb. 3 | 1001 | 233 | 102 | 1036 |
| Wotton, James A., Atlanta, Ga., assignor to Wotton Electric & Manufacturing Company. Telephone-transmitter | 719,972 | Feb. 3 | 999 | 232 | 102 | 1035 |
| Wray, Robert. (See Welsh, Elmer E., assignor.) | | | | | | |
| Wray, William E., New York, N. Y. Third-rail-railway system | 745,708 | Dec. 1 | 712 | 162 | 107 | 1250 |
| Wren, Harry B., assignor of thirteen-fortieths to Hensey & Gough, Washington, D. C. Mechanism for making and breaking electric circuits | 729,482 | May 26 | 4926 | 1091, 1092 | 104 | 1094 |
| Wren, Harry B., Washington, D. C., assignor of thirteen-fortieths to J. I. Cassedy, Forest Glen, Md., W. R. Hensey and M. L. Gough, Washington, D. C. Electric sign | 730,854 | June 9 | 2389 | 528 | 104 | 1640 |
| Wren, John. (See Young, John T. and C. M., assignors.) | | | | | | |
| Wrenn, John L., Washington, D. C. Electrical signaling system | 736,050 | Aug. 11 | 1933 | 412 | 105 | 1413 |
| Wrenn, John L., Washington, D. C. Railway station-signal | 743,789 | Nov. 10 | 1947 | 412 | 107 | 432 |
| Wright, Allen C., Berkeley, Cal. Measuring and filling apparatus | 721,850 | Mar. 3 | 351 | 77 | 103 | 76 |
| Wright, Allen C., Berkeley, Cal. Measuring and filling apparatus | 724,768 | Apr. 7 | 649 | 152 | 103 | 1307 |
| Wright, Austin, *et al.* (See Gartz, William H., assignor.) | | | | | | |
| Wright, Benjamin, deceased, (G. O. Rogers and I. M. Mason, administrators.) assignor of one-half to G. O. Rogers, St. Louis, Mo. Explosive-engine | 747,828 | Dec. 22 | 4637 | 1047 | 107 | 2176 |
| Wright, Berton L. (See Feust and Wright.) | | | | | | |
| Wright, Canby A., Rush, Mo. Stock-feeder | 745,709 | Dec. 1 | 713 | 163 | 107 | 1250 |
| Wright, Charles, assignor of one-half to J. J. O'Shea, Everson, Pa. Hose-coupling | 736,908 | Aug. 18 | 3509 | 780 | 105 | 1762 |
| Wright, Clyde S., Quaker City, Ohio. Well-drilling apparatus | 737,545 | Aug. 25 | 4700 | 1054, 1055 | 105 | 2039 |
| Wright, Curtis, Jr. (See Sappington, Kendrick, and Wright.) | | | | | | |
| Wright, David. (See Thoms, Charles F., assignor.) | | | | | | |
| Wright, David C. (See Landrum, Bamberger, and Wright.) | | | | | | |
| Wright & Ditson. (See Murnane, Timothy H., assignor.) | | | | | | |
| Wright, Earl E., New Brighton, Pa. Driving-gear for motor-vehicles | 736,909 | Aug. 18 | 3510 | 780 | 105 | 1762 |
| Wright, Edward. (See Jones and Wright.) | | | | | | |
| Wright, Edward, Worcester, Mass. Woodworker's vise | 723,966 | Mar. 31 | 4317 | 969 | 103 | 967 |
| Wright, Edward, assignor to F. E. Walden, Worcester, Mass. Elevator mechanism | 734,249 | July 21 | 2862 | 671 | 105 | 639 |
| Wright, Edwin P., Richmond, Va. Dental manikin | 728,818 | May 19 | 3764 | 840, 841 | 104 | 837 |
| Wright, Elias G., Guilford, England. Packing for pipe-joints | 728,065 | May 12 | 2341 | 521 | 104 | 516 |
| Wright, Elisha P. S., Shorthills, N. J., and A. McCartney, New York, N. Y. Fireproof building construction | 727,250 | May 5 | 798 | 171 | 104 | 172 |
| Wright, Eugene, Plato, Iowa. Depth-gage for liquids | 735,330 | Aug. 4 | 559 | 114 | 105 | 1101 |
| Wright, Francis M., *et al.* (See Eastman, Tarleton B., assignor.) | | | | | | |
| Wright, Frank A. (See Thrasher, John G., assignor.) | | | | | | |
| Wright, Frank C., Cavespring, Ga. Screen for windows, doors, or the like | 726,210 | Apr. 21 | 3280 | 745 | 103 | 1893 |
| Wright, Fred M., Crestview, assignor of one-half to W. R. King, Lawrenceburg, Tenn. Cattle-guard | 744,450 | Nov. 17 | 3248 | 696 | 107 | 724 |
| Wright, Frederick K., Syracuse, N. Y. Signal-lamp | 743,997 | Nov. 10 | 2339 | 500 | 107 | 519 |
| Wright, George E., East Fairfield, Vt. Car-fender | 721,350 | Feb. 24 | 3645 | 829 | 102 | 1640 |
| Wright, George F. (See Richardson and Wright.) | | | | | | |
| Wright, George H., Spokane, Wash. Implement for applying and clenching fence-wire clamps | 727,527 | May 5 | 1306 | 291 | 104 | 281 |
| Wright, George L. (See Goodwin, Lyman O., assignor.) | | | | | | |
| Wright, Gilbert, assignor of one-half to C. C. Morgan, Pittsfield, Mass. Transformer | 742,548 | Oct. 27 | 4183 | 940, 941 | 106 | 2175 |
| Wright, Gilbert, assignor to Stanley Electric Manufacturing Company, Pittsfield, Mass. Resistance for electric circuits | 743,607 | Nov. 10 | 1627 | 341 | 107 | 363 |
| Wright, Gilbert, and F. V. Nicholls, assignors to Stanley Electric Manufacturing Company, Pittsfield, Mass. Electrical switching system | 742,547 | Oct. 27 | 4181 | 940 | 106 | 2174 |
| Wright, Gilbert, and H. M. Acly, assignors to Stanley Electric Manufacturing Company, Pittsfield, Mass. Electric regulator | 738,870 | Sept. 15 | 2655 | 585 | 106 | 603 |
| Wright, I. Orville, and J. H. Farlow, Baltimore, M. D. Draft-rigging for cars | 739,770 | Sept. 22 | 4274 | 958 | 106 | 965 |
| Wright, I. Orville, Baltimore, and W. H. Stem, Union Bridge, Md. Draft and buffing gear for cars | 740,349 | Sept. 29 | 5380 | 1213 | 106 | 1214 |
| Wright, I. Orville, Baltimore, W. H. Stem, Union Bridge, and J. H. Farlow, Baltimore, Md. Draft and buffing gear or rigging for cars | 739,769 | Sept. 22 | 4271 | 957 | 106 | 964 |
| Wright, J. E. (See O'Malley, Edward J., assignor.) | | | | | | |
| Wright, J. H. (See Brown, George E., assignor.) | | | | | | |
| Wright, Jacob H. (See Brown, George E., assignor.) | | | | | | |
| Wright, James, Fort Grant, Ariz. Ter. Stirrup | 740,789 | Oct. 6 | 767 | 173 | 106 | 1409 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | Spec. | Drg. | Vol. | Page. |
| Wright, James E. (See Guiley, Pierce, and Wright.) | | | | | | |
| Wright, James E., assignor of one-half to J. M. Kelton, West Bay City, Mich. Machine for making metal hoops | 725,390 | Apr. 14 | 1793 | 401<br>402 | 103 | 1564 |
| Wright, James E., and L. J. Edwards, Omaha, Nebr. Package-fastener | 745,306 | Nov. 24 | 4865 | 1062 | 107 | 1078 |
| Wright, James M. (See Spencer, John S., assignor.) | | | | | | |
| Wright, James R., Livingston, Mont. Gravity-motor | 725,909 | Apr. 21 | 2760 | 628<br>629 | 103 | 1786 |
| Wright, John, Hart, Mich. Foot attachment | 737,189 | Aug. 25 | 4014 | 890 | 105 | 1888 |
| Wright, John, London, England. Lathe accessory | 741,209 | Oct. 13 | 1546 | 348 | 106 | 1597 |
| Wright, John S., Duxbury, Mass. Photographic shutter | 726,608 | Apr. 28 | 4084 | 922<br>923 | 103 | 2068 |
| Wright, John T., Columbia, Tenn. Hay-press | 728,066 | May 12 | 2342 | 522 | 104 | 516 |
| Wright, Joseph, Lancaster, Wis. Girth | 721,769 | Mar. 3 | 193 | 45 | 103 | 42 |
| Wright, Lysander E., Newark, N. J. Steam-generator | 736,187 | Aug. 11 | 2170 | 466 | 105 | 1463 |
| Wright Manufacturing Company. (See Humphrey, Henry H., assignor.) | | | | | | |
| Wright, Mary E. (See Wright, William H., assignor.) | | | | | | |
| Wright, Mary E., administratrix. (See Wright, William.) | | | | | | |
| Wright, Morris C., Sultan, Wash. Gold-separator | 745,949 | Dec. 1 | 1164 | 262 | 107 | 1348 |
| Wright, Noah S., Dorloo, N. Y. Duplicating sales-book | 733,309 | July 7 | 1089 | 259 | 105 | 229 |
| Wright, Ralph C. (See Wade and Wright.) | | | | | | |
| Wright, Ransom C., Philadelphia, Pa., and F. E. Stebbins, Washington, D. C. Constructing or forming car-trucks | 737,810 | Sept. 1 | 475 | 106 | 106 | 107 |
| Wright, Reginald, and C. J. Siddall, Kalamazoo, Mich. Feed device for flash gas burners or lamps | 748,454 | Dec. 29 | 5842 | 1330 | 107 | 2461 |
| Wright, Reison C., Colorado Springs, Colo. Measuring-gage | 733,690 | July 14 | 1757 | 417 | 105 | 387 |
| Wright, Reuben W. (See Conn, Joshua, assignor.) | | | | | | |
| Wright, Ross P., assignor to Eastman Machine Company, Buffalo, N. Y. Cloth-cutting machine | 722,475 | Mar. 10 | 1534 | 337 | 103 | 344 |
| Wright, Sam A. (See Carter and Wright.) | | | | | | |
| Wright, Simon. (See Crowell, Wanger, and Wright.) | | | | | | |
| Wright, Thomas, Ensley, Ala. Lifting-jack | 730,329 | June 9 | 1461 | 323 | 104 | 1442 |
| Wright, Wallace T., Ursa, Ill. Band-cutter and feeder for threshing-machines | 719,168 | Jan. 27 | 3139 | 699 | 102 | 707 |
| Wright, William. (See La France and Wright.) | | | | | | |
| Wright, William. (See Smith and Wright.) | | | | | | |
| Wright, William, deceased, Brooklyn, N. Y.; M. E. Wright, administratrix. Corliss valve-gear for steam-engines | 747,109 | Dec. 15 | 3310 | 753<br>754 | 107 | 1864 |
| Wright, William, deceased, New York, N. Y.; M. E. Wright, administratrix. Valve | 747,339 | Dec. 15 | 3752 | 845 | 107 | 1959 |
| Wright, William A., Masonville, N. J., assignor of one-third to J. R. McFetridge, Philadelphia, Pa.; E., S. L., and H. W. McFetridge executors of said J. R. McFetridge, deceased. Amusement device | 737,190 | Aug. 25 | 4015 | 891 | 105 | 1888 |
| Wright, William H., assignor to M. E. Wright, Buffalo, N. Y. Bearing | 729,987 | June 2 | 864 | 193 | 104 | 1303 |
| Wright, William J., assignor of three-sixteenths to J. W. Lee and F. J. Galloway, Pittsburg, Pa. Governor mechanism for explosive-engines | 735,029 | July 28 | 4321 | 1004 | 105 | 957 |
| Wright, William J., assignor of three-sixteenths to J. W. Lee and F. J. Galloway, Pittsburg, Pa. Explosive-engine | 739,050 | Sept. 15 | 2956 | 655 | 106 | 666 |
| Wright, William J., assignor of three-sixteenths to J. W. Lee and F. J. Galloway, Pittsburg, Pa. Explosive-engine | 742,143 | Oct. 20 | 3424 | 763<br>764 | 106 | 2002 |
| Wright, William J., assignor of seven-sixteenths to J. F. McKibben, J. W. Lee, and F. J. Galloway, Pittsburg, Pa. Gas-engine | 732,683 | June 30 | 5909 | 1311 | 104 | 2421 |
| Wright, William J., assignor of seven-sixteenths to J. F. McKibben, J. W. Lee, and F. J. Galloway, Pittsburg, Pa. Valve mechanism for gas-engines | 742,142 | Oct. 20 | 3421 | 763 | 106 | 2002 |
| Wright, Willis M., New Haven, Conn. Feed-water heater | 746,226 | Dec. 8 | 1676 | 373 | 107 | 1478 |
| Wright's Automatic Tobacco Packing Machine Company. (See Rose, William, assignor.) | | | | | | |
| Wrightson, William P., Highbury, London, England. Apparatus for treating and utilizing town refuse | 722,195 | Mar. 3 | 993 | 220 | 103 | 210 |
| Wrigley, Lees J., Lawrence, Mass., assignor of one-half to L. I. Guion, Columbia, S. C. Drawing-frame | 723,630 | Mar. 24 | 3683 | 826 | 103 | 814 |
| Wrigley, Lees J., Lawrence, Mass., assignor of one-half to L. I. Guion, Columbia, S. C. Drawing-frame | 731,401 | June 16 | 3443 | 769 | 104 | 1875 |
| Wroe, James P., assignor of one-half to H. F. Lange, Lagrange, Tex. Stirrup-leather | 728,819 | May 19 | 3766 | 841 | 104 | 838 |
| Wuerfel, Ernest, Chicago, Ill. Regulator for windmills | 732,250 | June 30 | 5083 | 1130<br>1131 | 104 | 2247 |
| Wuest, Frederick, Lawrenceburg, Ind. Catch-pulley | 733,527 | July 14 | 1490 | 355 | 105 | 332 |
| Wuest, Philip, Jr., Philadelphia, Pa. Musical instrument | 731,262 | June 16 | 3168 | 705<br>706 | 104 | 1818 |
| Wuest, Philip, Jr., assignor to C. J. Heppe & Son, Philadelphia, Pa. Automatically-adjustable spool for music-sheets | 731,261 | June 16 | 3166 | 705 | 104 | 1817 |
| Wuest, Philip, Jr., Philadelphia, Pa., assignor to C. J. Heppe & Son. Mechanical musical instrument | 744,990 | Nov. 24 | 4207 | 910<br>911 | 107 | 942 |
| Wuhrmann, Emil, Zurich, Switzerland. Planing-machine | 723,967 | Mar. 31 | 4319 | 969 | 103 | 967 |
| Wulff, Marius, Copenhagen, Denmark. Cooling apparatus | 737,690 | Sept. 1 | 241 | 51 | 106 | 56 |
| Wunderlich, Frederic, Lebanon, Pa. Chimney-top | 720,210 | Feb. 10 | 1471 | 334 | 102 | 1150 |
| Wurmb, Theodore H., and R. Baumann, St. Louis, Mo. Secondary electric clock | 734,389 | July 21 | 3131 | 736 | 105 | 696 |
| Wurts, Alexander J., assignor to G. Westinghouse, Pittsburg, Pa. Sorting device for electric-lamp glowers | 722,790 | Mar. 17 | 2140 | 479 | 103 | 487 |
| Wurts, Alexander J., assignor to G. Westinghouse, Pittsburg, Pa. Heater cut-out for electric lamps | 728,647 | May 19 | 3456 | 767 | 104 | 773 |
| Wurts, Alexander J., assignor to G. Westinghouse, Pittsburg, Pa. Electric lamp | 728,648 | May 19 | 3459 | 767 | 104 | 774 |
| Wurts, Alexander J., assignor to G. Westinghouse, Pittsburg, Pa. Circuit making and breaking device | 728,820 | May 19 | 3767 | 841 | 104 | 838 |
| Wurts, Alexander J., assignor to G. Westinghouse, Pittsburg, Pa. Heater cut-out for electric lamps | 728,821 | May 19 | 3770 | 841 | 104 | 839 |
| Wurts, Alexander J., assignor to G. Westinghouse, Pittsburg, Pa. Electric lamp | 730,069 | June 2 | 998 | 223<br>224 | 104 | 1331 |
| Würtz, Paul, Hoboken, N. J. Molding material | 742,109 | Oct. 20 | 3368 | ------ | 106 | 1992 |
| Wüst, Wilhelm, Arienheller-Rheinbrohl, Bad Arienheller, assignor to E. Keiser, Hagen, Germany. Means and device for closing bottles | 730,729 | June 9 | 2186 | ------ | 104 | 1597 |
| Wüstner, Ernest, Philadelphia, Pa. Vending-machine | 734,647 | July 28 | 3594 | 841 | 105 | 809 |
| Wuth, William A. O., Pittsburg, Pa., assignor to International Cement Company. Manufacture of cement | 738,388 | Sept. 8 | 1709 | ------ | 106 | 383 |
| Wuth, William A. O., Pittsburg, Pa., assignor to International Cement Company. Manufacture of cement | 738,389 | Sept. 8 | 1710 | ------ | 106 | 383 |
| Wyant, Frederic H. (See Ingram and Wyant.) | | | | | | |
| Wyant, Mott. (See Campion and Wyant.) | | | | | | |
| Wyatt, Frank, Hoxie, Kans. Stacker | 738,390 | Sept. 8 | 1711 | 371 | 106 | 383 |

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| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| Wyatt, George T., Olmstead, Ky. Furnace | 732,610 | June 30 | 5770 | 1279 | 104 | 2393 |
| Wyckoff, Frank R., assignor to Aeolian Company, New York, N. Y. Music-roll | 731,008 | June 16 | 2711 | 604 | 104 | 1728 |
| Wyckoff, Frank R., Brooklyn, assignor to Aeolian Company, New York, N. Y. Mechanism for playing musical instruments | 733,528 | July 14 | 1491 | 355 | 105 | 332 |
| Wyckoff, Seamans & Benedict. (See Briggs and Farnham, assignors.) | | | | | | |
| Wyckoff, Seamans & Benedict. (See Camp, Foster K., assignor.) | | | | | | |
| Wyckoff, Seamans & Benedict. (See Roberts, William E., assignor.) | | | | | | |
| Wyckoff, Seamans & Benedict. (See Shepard, Charles H., assignor.) | | | | | | |
| Wyckoff, Seamans & Benedict. (See Webb, George B., assignor.) | | | | | | |
| Wygant, Lewis B., Denver, Colo. Knotting mechanism | 743,998 | Nov. 10 | 2341 | 501, 502, 503, 504 | 107 | 519 |
| Wyjack, Paul F. (See Kelly, Stroppel, and Wyjack.) | | | | | | |
| Wykoff, Charles L., Perry, Iowa. Snow-plow | 731,419 | June 16 | 3476 | 777 | 104 | 1881 |
| Wyland, George C., Williamsport, Pa. Checkrein-fastener | 724,070 | Mar. 31 | 4520 | 1017 | 103 | 1005 |
| Wylie, William A., Indianapolis, Ind. Reclining-chair | 740,966 | Oct. 6 | 1067 | 242, 243 | 106 | 1474 |
| Wylie, William A., Indianapolis, Ind. Reclining-chair | 740,967 | Oct. 6 | 1069 | 243 | 106 | 1475 |
| Wylie, William A., Indianapolis, Ind. Reclining-chair | 740,968 | Oct. 6 | 1071 | 243 | 106 | 1475 |
| Wyman, George R., assignor to F. W. Bird & Son, East Walpole, Mass. Packing-machine | 724,230 | Mar. 31 | 4853 | 1088, 1089, 1090 | 103 | 1073 |
| Wyman, George R., assignor to F. W. Bird & Son, East Walpole, Mass. Box-machine | 731,729 | June 23 | 4066 | 907 | 104 | 2018 |
| Wyman, George R., assignor to F. W. Bird & Son, East Walpole, Mass. Box-machine | 731,730 | June 23 | 4069 | 907, 908 | 104 | 2019 |
| Wyman & Gordon. (See Fuller, George F., assignor.) | | | | | | |
| Wyman, Horace, assignor to Crompton & Knowles Loom Works, Worcester, Mass. Shedding mechanism for looms | 719,289 | Jan. 27 | 3357 | 749, 750 | 102 | 755 |
| Wyman, Horace, assignor to Crompton & Knowles Loom Works, Worcester, Mass. Dobby mechanism for looms | 720,869 | Feb. 17 | 2686 | 621 | 102 | 1419 |
| Wyman, Horace, assignor to Crompton & Knowles Loom Works, Worcester, Mass. Warp stop-motion for looms | 724,769 | Apr. 7 | 653 | 152 | 103 | 1308 |
| Wyman, Louis A. (See Hilton, Roland C., assignor.) | | | | | | |
| Wyman, Warren, *et al.* (See Goodsell, Frank, assignor.) | | | | | | |
| Wyman, William H., Oshkosh, Wis., assignor to Union Match Company, Duluth, Minn. Box-filling machine | 736,668 | Aug. 18 | 3047 | 673 | 105 | 1665 |
| Wynans, William H., St. Joseph, Mo. Combination pen and pencil receptacle tablet | 736,810 | Aug. 18 | 3328 | 737 | 105 | 1723 |
| Wynell, Robert, San Francisco, Cal. Compensating heel for boots or shoes | 724,150 | Mar. 31 | 4693 | 1054 | 103 | 1041 |
| Wynn, Lavonious K., Des Moines, Iowa. Cabinet for storing, supporting, and unrolling wire screening for cutting off pieces | 733,310 | July 7 | 1090 | 260 | 105 | 230 |
| Wyse, Abram, New York, N. Y. Record attachment for waiters' or merchandise checks | 728,649 | May 19 | 3461 | 768 | 104 | 774 |
| Wysong, Edward C., Eaton, Ohio. Drill-chuck | 726,388 | Apr. 28 | 3642 | 826 | 103 | 1983 |
| Wysong, Edward C., Eaton, Ohio. Axle-nut wrench | 729,829 | June 2 | 577 | 127 | 104 | 1246 |
| Wyss-Baumgartner, Alfred, Solothurn, Switzerland. Apparatus for lowering persons or dead-weights | 720,310 | Feb. 10 | 1668 | 379 | 102 | 1191 |
| Wyssa, Jean, Geneva, Switzerland. Bed | 736,188 | Aug. 11 | 2173 | 466, 467 | 105 | 1464 |
| X-Ray Novelty Co. (See Gage, Harry A., assignor.) | | | | | | |
| Xpedite Machine Company. (See Pease, Charles, assignor.) | | | | | | |
| Yager, John T., Brownsboro, Ky. Farm-gate | 727,528 | May 5 | 1309 | 291 | 104 | 281 |
| Yai, Sakizo, Tokio, Japan. Electric battery | 746,227 | Dec. 8 | 1678 | 373 | 107 | 1478 |
| Yale, Arthur W., Philadelphia, Pa. Automobile | 721,269 | Feb. 24 | 3508 | 797, 798 | 102 | 1611 |
| Yale & Towne Manufacturing Company. (See Horgan, Arthur J., assignor.) | | | | | | |
| Yale & Towne Manufacturing Company. (See Horne, Joseph A., assignor.) | | | | | | |
| Yale & Towne Manufacturing Company. (See Taylor, Warren H., assignor.) | | | | | | |
| Yale & Towne Manufacturing Company. (See Waldron, Frederick A., assignor.) | | | | | | |
| Yancey, William P., Tampa, Fla. Wheel | 731,648 | June 23 | 3929 | 874 | 104 | 1991 |
| Yantis, Noah W., and H. H. Baltzley, Assumption, Ill. Anti-incrustating device and water-purifier | 747,290 | Dec. 15 | 3659 | 827 | 107 | 1939 |
| Yard, William T., Lawrence Station, N. J. Wood-sawing machine | 730,330 | June 9 | 1462 | 323 | 104 | 1442 |
| Yarger, Samuel J. (See Zwissler, Valentine, assignor.) | | | | | | |
| Yarnell, Charles S., assignor to Moore Carving Machine Company, Minneapolis, Minn. Rubbing and polishing machine | 743,608 | Nov. 10 | 1628 | 341 | 107 | 364 |
| Yarnell, Harrison, Pasadena, Cal. Ore-crushing machine | 745,710 | Dec. 1 | 714 | 163 | 107 | 1250 |
| Yates, Alfred, Somerville, Mass. Downdraft continuous brick-kiln | 719,974 | Feb. 3 | 1002 | 233 | 102 | 1036 |
| Yates, John A., Rockport, Ind. Automatic screw-holding device | 729,830 | June 2 | 578 | 127 | 104 | 1246 |
| Yates, William C., Schenectady, N. Y., assignor to General Electric Company. Rheostat | 733,610 | July 14 | 1629 | 385 | 105 | 362 |
| Yates, William C., Schenectady, N. Y., assignor to General Electric Company. Rheostat | 738,970 | Sept. 15 | 2822 | 625 | 106 | 637 |
| Yaw, Clio B., Omaha, Nebr. Carriage-escapement dog | 726,489 | Apr. 28 | 3842 | 868 | 103 | 2021 |
| Yawger, Edwin, Pittsburg, Pa., and W. W. Churchill, New York, N. Y., assignors to Westinghouse Machine Company, Pittsburg, Pa. Furnace | 746,908 | Dec. 15 | 2921 | 674 | 107 | 1773 |
| Yawman & Erbe Manufacturing Company. (See Yawman, Philip H., assignor.) | | | | | | |
| Yawman & Erbe Mfg. Co. (See Gilmour, Alexander J., assignor.) | | | | | | |
| Yawman, Philip H., assignor to Yawman & Erbe Manufacturing Company, Rochester, N. Y. Index attachment for filing-cases | 745,982 | Dec. 1 | 1229 | 276, 277 | 107 | 1362 |
| Yaxley, Ernest E., assignor to American Electric Telephone Company, Chicago, Ill. Polarized telephone signal-bell | 718,235 | Jan. 13 | 1330 | 294 | 102 | 301 |
| Yeack, Charles, Akron, Ohio. Combined telephone transmitter and receiver | 741,604 | Oct. 13 | 2335 | 523 | 106 | 1764 |
| Yeager, Charles E., Prairie Creek, Ind. Seed-planter | 720,770 | Feb. 17 | 2526 | 582 | 102 | 1385 |
| Yeager, Henry, and J. W. Rigney, Terre Haute, Ind. Making block ice-cream | 729,248 | May 26 | 4538 | 999 | 104 | 1010 |
| Yeager, Henry, and J. W. Rigney, Terre Haute, Ind. Ice-cream mold | 729,249 | May 26 | 4539 | 999 | 104 | 1011 |
| Yeager, Philip, Otterville, Iowa. Draft-equalizer | 722,347 | Mar. 10 | 1290 | 286 | 103 | 290 |
| Yeager, William H., and E. R. Rixstine, Allentown, Pa. Fire-escape | 732,808 | July 7 | 211 | 53 | 105 | 48 |
| Yeager, William N., Battlecreek, Mich. Incubator | 731,649 | June 23 | 3930 | 875 | 104 | 1991 |
| Yeagley, Jacob B., Indianapolis, Ind. Draft-equalizer | 738,590 | Sept. 8 | 2083 | 455 | 106 | 463 |
| Yeatman, Walter C., and C. F. Messinger, assignors to Chicago Nut Company, Chicago, Ill. Forming-tool | 718,961 | Jan. 20 | 2741 | 613 | 102 | 612 |
| Yeiser, Henry C., *et al.* (See Roach, William G. and A. C., assignors.) | | | | | | |
| Yeiser, Henry C., assignor to Globe-Wernicke Company, Cincinnati, Ohio Filing-cabinet | 742,950 | Nov. 3 | 231 | 51 | 107 | 50 |
| Yeiser, John C., Austin, Tex. Car-coupling | 736,330 | Aug. 11 | 2415 | 527 | 105 | 1518 |
| Yeiser, John C., assignor of one-fifth to H. M. Little and E. B. Hancock, Austin, Tex. Car-coupling | 729,483 | May 26 | 4928 | 1092 | 104 | 1094 |
| Yelton, Walter C., Newark, N. J., assignor to J. M. Quinby and Company. Front-sash supporting and operating apparatus for hansom-cabs | 719,975 | Feb. 3 | 1005 | 234 | 102 | 1077 |

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| Yelvington, John H. and J. E., Nocatee, Fla. Insecticide | 745,950 | Dec. 1 | 1166 | | 107 | 1349 |
| Yelvington, Joseph E. (See Yelvington, John H. and J. E.) | | | | | | |
| Yeoman, Robert H., Omaha, Nebr. Furnace | 724,646 | Apr. 7 | 422 | 100, 101 | 103 | 1260 |
| Yeomans, Clifton, New York, N. Y. Separable button | 745,089 | Nov. 24 | 4434 | 959 | 107 | 988 |
| Yeomans, Edward, Chicago, Ill. Automatic sewage-ejector | 735,430 | Aug. 4 | 758 | 161, 162 | 105 | 1141 |
| Yeomans, Lucien I., Walworth, N. Y., assignor to Goodell Company, Antrim, N. H. Fruit parer and coring machine | 718,687 | Jan. 20 | 2226 | 487, 488 | 102 | 505 |
| Yerkes, John, St. Louis, Mo. Lathe for cutting and turning corncob pipe-sections | 741,429 | Oct. 13 | 1976 | 437, 438 | 106 | 1687 |
| Yerrington, Henry W., Oceanic, N. J. Safety gas-burner | 726,490 | Apr. 28 | 3845 | 868 | 103 | 2022 |
| Yetter, Andrew B., New York, N. Y. Moving-van | 740,350 | Sept. 29 | 5383 | 1214 | 106 | 1215 |
| Yingling, Charles, Metuchin, N. J. Railway-train arrest | 740,969 | Oct. 6 | 1073 | 243 | 106 | 1475 |
| Yingling, William R., *et al.* (See Moore, Enos T., assignor.) | | | | | | |
| Yoe, Philip, assignor to L. Rauh, Dayton, Ohio. Indicator-lock | 723,350 | Mar. 24 | 3152 | 708, 709 | 103 | 708 |
| Yoe, Philip, assignor to L. Rauh, Dayton, Ohio. Indicator-lock | 736,189 | Aug. 11 | 2175 | 467 | 105 | 1464 |
| Yoerger, George, Brooklyn, N. Y. Exercising apparatus | 737,889 | Sept. 1 | 670 | 142 | 106 | 147 |
| Yon, Philip, Pittsfield, Mass. Shoe | 731,650 | June 23 | 3932 | 875 | 104 | 1992 |
| Yondorf, David, Chicago, Ill. Journal-box | 734,250 | July 21 | 2864 | 671 | 105 | 639 |
| Yonker, John, Chicago, Ill. Combination lace and roller curtain bracket | 748,330 | Dec. 29 | 5601 | 1277 | 107 | 2407 |
| Yorger, Charles, Indianapolis, Ind. Cash and credit account cabinet | 739,630 | Sept. 22 | 4035 | 899, 900, 901 | 106 | 913 |
| York Card and Paper Company. (See McCoy, John, assignor.) | | | | | | |
| York Card and Paper Company. (See Watson, James A., assignor.) | | | | | | |
| York, Carl H., Chicago, Ill. Portable bath | 720,089 | Feb. 10 | 1258 | 288 | 102 | 1107 |
| York, Raymond D., Portsmouth, Ohio. Rolling blanks for I-beams or girders | 728,349 | May 19 | 2897 | 640 | 104 | 654 |
| York, Raymond D., Portsmouth, Ohio. Rolling-mill | 732,490 | June 30 | 5552 | 1231 | 104 | 2342 |
| York, Raymond D., Portsmouth, Ohio. Universal rolling-mill | 746,228 | Dec. 8 | 1679 | 373, 374 | 107 | 1478 |
| York Silk Manufacturing Company. (See Collins, Matthew G., assignor.) | | | | | | |
| Yorke, Frederick H., Foosland, Ill. Decoy-duck | 717,790 | Jan. 6 | 518 | 116 | 102 | 112 |
| Yost Electric Manufacturing Company. (See Hunt, Edward J., assignor.) | | | | | | |
| Yost Electric Manufacturing Company. (See Kenney, Owen E., assignor.) | | | | | | |
| Yost Electric Manufacturing Company. (See Yost and Kenney, assignors.) | | | | | | |
| Yost, Hiram B., Indiana Harbor, Ind. Railway-rail | 746,430 | Dec. 8 | 2039 | 467 | 107 | 1553 |
| Yost, John, Raubsville, Pa. Fire-escape | 726,389 | Apr. 28 | 3643 | 826 | 103 | 1983 |
| Yost, Joseph L., and O. E. Kenney, Toledo, Ohio, assignors to Yost Electric Manufacturing Company, of Ohio. Incandescent-lamp socket | 737,310 | Aug. 25 | 4257 | 947 | 105 | 1938 |
| Yost, Joseph L., and O. E. Kenney, Toledo, Ohio, assignors to Yost Electric Manufacturing Company, of Ohio. Incandescent-lamp socket | 737,890 | Sept. 1 | 671 | 142 | 106 | 147 |
| Yost, Joseph L., and O. E. Kenney, Toledo, Ohio, assignors to Yost Electric Manufacturing Company, of Ohio. Incandescent-lamp socket | 738,648 | Sept. 8 | 2207 | 482 | 106 | 489 |
| Yost, Lotta A., Philadelphia, Pa. Lady's or child's hose-supporter | 733,927 | July 14 | 2224 | 521 | 105 | 482 |
| Yost Typewriter Company. (See Turner, Samuel W., assignor.) | | | | | | |
| Yost Writing Machine Company. (See Steiger, Andrew W., assignor.) | | | | | | |
| Yost Writing Machine Company. (See Walker, Charles W., assignor.) | | | | | | |
| Youde, Jessie. (See Youde, Robert, S. H., M. L. G. E., M. H., S. H., and J.) | | | | | | |
| Youde, Mary H. (See Youde, Robert, S. H., M. L. G. E., M. H., S. H., and J.) | | | | | | |
| Youde, Mary L. G. E. (See Youde, Robert, S. H., M. L. G. E., M. H., S. H., and J.) | | | | | | |
| Youde, Robert, S. H., M. L. G. E., M. H., S. H., and J., Liverpool, England. Poultry, game, or bird rearing apparatus, partly applicable to hatching apparatus | 740,728 | Oct. 6 | 631 | 142, 143 | 106 | 1383 |
| Youde, Sarah H. (See Youde, Robert, S. H., M. L. G. E., M. H., S. H., and J.) | | | | | | |
| Youmans, George P., Galesburg, Mich. Tower | 748,136 | Dec. 29 | 5279 | 1199 | 107 | 2388 |
| Young, Albert W., Philadelphia, Pa. Combined extension step-ladder and window-jack | 728,650 | May 19 | 3463 | 768 | 104 | 775 |
| Young, Alexander S., Galesburg, Ill. Street-sweeper | 746,229 | Dec. 8 | 1683 | 374, 375 | 107 | 1479 |
| Young, Alfred K., Boyce Station, Pa. Engineer's torch | 729,250 | May 26 | 4540 | 1000 | 104 | 1011 |
| Young, Arthur L., Providence, R. I. Display-clamp | 720,389 | Feb. 10 | 1802 | 409 | 102 | 1221 |
| Young, Carl J., Seattle, Wash. Logging dog or hook | 727,529 | May 5 | 1310 | 291 | 104 | 282 |
| Young, Charles M. (See Young, John T. and C. M.) | | | | | | |
| Young, Charles P., *et al.* (See Albright, Harry W., assignor.) | | | | | | |
| Young, Charles P., York, Pa. Rural-delivery letter-box | 729,110 | May 26 | 4290 | 948 | 104 | 958 |
| Young, Cleo O., Rialto, Cal. Paper-holder | 743,609 | Nov. 10 | 1631 | 342 | 107 | 364 |
| Young, David. (See Jackson, William S., assignor.) | | | | | | |
| Young, Eddy E., Newton, Mass. Tunnel-support | 739,969 | Sept. 29 | 4689 | 1054 | 106 | 1069 |
| Young, Ernest A., Westhaven, Conn. Lacing | 727,530 | May 5 | 1311 | 292 | 104 | 282 |
| Young, Ernest A., Hardwick, Vt. Automatic valve attachment for oil-cans | 733,109 | July 7 | 731 | 178 | 105 | 155 |
| Young, Francis, assignor to Aeolian Company, New York, N. Y. Mechanism for accentuating one or more notes in mechanically-actuated musical apparatus | 743,130 | Nov. 3 | 597 | 129, 130 | 107 | 125 |
| Young, Francis L., London, England. Music-roll for mechanical musical instruments | 718,410 | Jan. 13 | 1644 | 362 | 102 | 368 |
| Young, Francis L., London, England. Transposing device for mechanical musical instruments | 729,988 | June 2 | 867 | 193 | 104 | 1364 |
| Young, Frank. (See Roberts, Young, and Smith.) | | | | | | |
| Young, Frank E., Canton, Ohio. Making steel | 724,770 | Apr. 7 | 655 | 153 | 103 | 1309 |
| Young, Frank N., Providence, R. I. Umbrella-receptacle for attachment to the bodies of carriages | 732,022 | June 23 | 4621 | 1032 | 104 | 2138 |
| Young, Frank S., Norristown, Pa. Producing magnesium and calcium carbonates | 734,030 | July 21 | 2446 | 572 | 105 | 550 |
| Young, Franklin K., Boston, Mass., and J. E. Sheriff, New York, N. Y., assignors to American Automatic Arms Company, Saco, Me. Cartridge | 740,790 | Oct. 6 | 769 | 173 | 106 | 1409 |
| Young, Franz W. (See Erickson and Young.) | | | | | | |
| Young, Frederick D., Huntington, W. Va. Metallic tie | 743,790 | Nov. 10 | 1949 | 413 | 107 | 432 |
| Young, Freeman N., Arlington, Mass. Bottle-rinsing machine | 742,269 | Oct. 27 | 3672 | 820, 821 | 106 | 2070 |
| Young, George H., Elmira, N. Y. Electromagnet for separating metals | 721,490 | Feb. 24 | 3904 | 887 | 102 | 1693 |
| Young, George W. (See Young, William R. and G. W.) | | | | | | |
| Young, Harry H., Colchester, England. Reducing-gear | 741,089 | Oct. 13 | 1297 | 297 | 106 | 1544 |
| Young, Henry M., St. Charles, Ill. Attachment for chairs | 731,148 | June 16 | 2979 | 662 | 104 | 1781 |
| Young, Henry R., New Orleans, La. Electric terminal | 741,605 | Oct. 13 | 2336 | 523 | 106 | 1764 |
| Young, Laura D., Akron, Ohio. Dust-arrester for hot-air pipes | 718,591 | Jan. 13 | 2053 | 446 | 102 | 457 |
| Young, Laura D., Akron, Ohio. Dust-arrester | 741,210 | Oct. 13 | 1548 | 349 | 106 | 1597 |
| Young, James H., trustee. (See Moskowitz, Morris, assignor.) | | | | | | |
| Young, Jehu, and C. Wolfe, Victor, Iowa. Wagon-brake | 727,049 | May 5 | 445 | 93, 94 | 104 | 98 |

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| Young, John G. (See Brown, James L., assignor.) | | | | | | |
| Young, John G. (See Johnson and Young.) | | | | | | |
| Young, John H., Filley, Mo. Machine for cutting timber at the surface of the ground | 723,968 | Mar. 31 | 4320 | 970 | 103 | 967 |
| Young, John N., Alameda, Cal. Stove or range | 737,546 | Aug. 25 | 4702 | 1056 | 105 | 2039 |
| Young, John S., Brooklyn, N. Y. Telephone-support | 722,348 | Mar. 10 | 1291 | 286 | 103 | 290 |
| Young, John T., Williamstown, and C. M. Young, North Bendigo, assignors to said John T. Young and J. Wren, Kew, Victoria, Australia. Automatic spring-catch for sliding sashes | 733,790 | July 14 | 1945 | 458 | 105 | 427 |
| Young, John V., Reading, Mass. Support for roasts of meat | 728,067 | May 12 | 2343 | 522 | 104 | 516 |
| Young, Joseph H., South Sharon, Pa. Rail-joint | 747,670 | Dec. 22 | 4349 | 982 | 107 | 2110 |
| Young, Llewellyn W., Waltham, Mass. Painter's appliance | 722,349 | Mar. 10 | 1292 | 286 | 103 | 290 |
| Young, Mathias C., Muskegon, Mich. Fire-escape | 737,547 | Aug. 25 | 4704 | 1056 | 105 | 2039 |
| Young, McClintock. (See Fisher and Young.) | | | | | | |
| Young, Nellie J., Minneapolis, Minn. Garment-fastener | 723,969 | Mar. 31 | 4321 | 970 | 103 | 968 |
| Young, Otis W., Rockford, assignor of one-half to O. C. Mann, Nora Springs, Iowa. Valve for engines | 740,729 | Oct. 6 | 636 | 143<br>144 | 106 | 1384 |
| Young, Pearl, *et al.* (See Crist, George J., assignor.) | | | | | | |
| Young, Philip K., Omaha, Nebr. Clothes-reel | 742,270 | Oct. 27 | 3674 | 821 | 106 | 2070 |
| Young, Robert H., Minneapolis, Minn. Inkstand | 740,508 | Oct. 6 | 240 | 48 | 106 | 1297 |
| Young, Thomas, Schenectady, N. Y. Auxiliary draft for furnaces | 740,509 | Oct. 6 | 241 | 48 | 106 | 1298 |
| Young, Thomas, Bradford, Pa. Heating-stove | 743,370 | Nov. 3 | 1097 | 234 | 107 | 232 |
| Young, Thomas D., Glasgow, Scotland. Pipe-molding apparatus | 733,529 | July 14 | 1492 | 355<br>356 | 105 | 332 |
| Young, Walter D., Baltimore, Md. Contact-shoe for electric railways | 738,649 | Sept. 8 | 2209 | 483 | 106 | 490 |
| Young, Warner S. (See Ward and Young.) | | | | | | |
| Young, Wesley, San Francisco, Cal. Pneumatic pruning-shears | 728,068 | May 12 | 2344 | 522 | 104 | 517 |
| Young, Wesley, San Francisco, Cal. Pneumatic pruning-saw | 728,069 | May 12 | 2346 | 523 | 104 | 517 |
| Young, Wilbur F., Springfield, Mass. Gas-light heater | 725,310 | Apr. 14 | 1640 | 370 | 103 | 1532 |
| Young, William A., Cuyahoga Falls, Ohio. Friction-clutch | 726,609 | Apr. 28 | 4090 | 923 | 103 | 2069 |
| Young, William A., assignor of one-half to S. L. Forsyth, Cottonwood Point, Mo. Nut-lock | 740,510 | Oct. 6 | 242 | 48 | 106 | 1298 |
| Young, William H. (See Newman and Young.) | | | | | | |
| Young, William R. and G. W., Stockton, Cal. Nut-lock | 721,990 | Mar. 3 | 635 | 141 | 103 | 138 |
| Youngblood, Amos, North Augusta, S. C. Railway-switch | 720,090 | Feb. 10 | 1259 | 288<br>289 | 102 | 1107 |
| Youngblood, David F., San Antonio, Tex. Locking system for jail-doors | 719,169 | Jan. 27 | 3143 | 699<br>700 | 102 | 708 |
| Younghusband, Samuel S., Darlington, assignor to G. C. Ward, Sr., Newcastle, England. Slide-valve gear for steam-engines | 724,987 | Apr. 7 | 1054 | 240 | 103 | 1393 |
| Younghusband, Samuel S., Darlington, assignor to G. C. Ward, Sr., Newcastle, England. Slide-valve gear for steam-engines | 724,988 | Apr. 7 | 1055 | 241 | 103 | 1394 |
| Younghusband, Samuel S., Darlington, assignor to G. C. Ward, Sr., Newcastle, England. Slide-valve gear for steam-engines | 724,989 | Apr. 7 | 1056 | 241 | 103 | 1394 |
| Younghusband, Samuel S., Darlington, assignor to G. C. Ward, Sr., Newcastle, England. Slide-valve gear for steam-engines | 724,990 | Apr. 7 | 1057 | 241<br>242 | 103 | 1394 |
| Youngs, Joseph L., Chateaugay, N. Y. Suction device for pulp-machines | 747,029 | Dec. 15 | 3155 | 723 | 107 | 1826 |
| Yount, Joe C., Thayer, Iowa. Adjustable gun-stock | 729,030 | May 26 | 4151 | 920 | 104 | 932 |
| Youse, Edwin S. (See Eshelman, Charles G., assignor.) | | | | | | |
| Ysskin, Herman, Newark, N. J. Convertible baby-carriage | 732,023 | June 23 | 4621 | 1032<br>1033 | 104 | 2138 |
| Yuhász, Julius, Brooklyn, N. Y. Washboard | 747,030 | Dec. 15 | 3157 | 723 | 107 | 1826 |
| Yule, John, *et al.* (See Robertson, Le Roy, assignor.) | | | | | | |
| Yurgae, Robert H., assignor to Signalphone Company, Milwaukee, Wis. Telephony | 728,350 | May 19 | 2898 | 640 | 104 | 655 |
| Zachry, William E., assignor to himself and W. E. Cooney, Brooklyn, N. Y. Car-fender | 726,390 | Apr. 28 | 3644 | 826 | 103 | 1983 |
| Zahikjanz, Gabriel, assignor to Bergmann Elektricitäts Werke, Aktiengesellschaft, Berlin, Germany. Turbine | 731,009 | June 16 | 2712 | 604<br>605 | 104 | 1328 |
| Zahikjanz, Gabriel, assignor to Bergmann Elektricitäts Werke, Aktiengesellschaft, Berlin, Germany. Turbine | 745,409 | Dec. 1 | 180 | 40, 41 | 107 | 1138 |
| Zahikjanz, Gabriel, assignor to Bergmann-Elektricitäts-Werke, Aktiengesellschaft, Berlin, Germany. Steam-turbine | 745,410 | Dec. 1 | 182 | 41 | 107 | 1138 |
| Zahikjanz, Gabriel, assignor to Bergmann-Elektricitäts Werke Aktiengesellschaft, Berlin, Germany. Turbine | 748,137 | Dec. 29 | 5281 | 1199<br>1200 | 107 | 2339 |
| Zahl, Arthur H., Bensenville, Ill. Christmas tree | 735,010 | July 28 | 4292 | 999 | 105 | 951 |
| Zamboni, Lawrence. (See Spahr, Otto, assignor.) | | | | | | |
| Zand, Adolf, Charlottenburg, Germany. Producing iridescent scales | 746,909 | Dec. 15 | 2924 | ------ | 107 | 1773 |
| Zander, John, Chicago, Ill. Gas-governor | 718,592 | Jan. 13 | 2053 | 446 | 102 | 457 |
| Zani, Arnaldo P., Berlin, Germany, assignor to General Electric Company. Controlling induction-motors | 735,190 | Aug. 4 | 307 | 60 | 105 | 1046 |
| Zani, Arnaldo P., Berlin, Germany, assignor to General Electric Company. Operating alternating-current induction-motors | 735,686 | Aug. 4 | 1250 | 265 | 105 | 1247 |
| Zarniko, Gerhard, Hildesheim, Germany. Grinding-mill | 741,606 | Oct. 13 | 2337 | 523 | 106 | 1765 |
| Zaruba, Josef F., Hamburg, Germany. Smoke-consuming apparatus for furnaces | 724,647 | Apr. 7 | 425 | 102 | 103 | 1260 |
| Zaruba, Josef F., Hamburg, Germany. Gas-firing | 729,989 | June 2 | 868 | 193 | 104 | 1704 |
| Zastrow, George W., Baltimore, Md. Machine for treating pineapples | 735,649 | Aug. 4 | 1175 | 249 | 105 | 1230 |
| Zborowski, Ladislaw, Stevens Point, Wis. Window-ventilator | 732,809 | July 7 | 213 | 53 | 105 | 48 |
| Zech, Martin, Prairie du Sac, Wis. Bicycle-canopy | 726,610 | Apr. 28 | 4092 | 924 | 103 | 2070 |
| Zeckendorf, Alois, Cincinnati, Ohio. Electric hand or foot heater | 721,270 | Feb. 24 | 3509 | 798 | 102 | 1612 |
| Zeh, Edmund, assignor to Niagara Machine & Tool Works, Buffalo, N. Y. Can-body-making machine | 734,648 | July 28 | 3596 | 842<br>843 | 105 | 809 |
| Zeh, Edmund, assignor to Niagara Machine & Tool Works, Buffalo, N. Y. Sheet-metal-cutting machine | 740,730 | Oct. 6 | 639 | 144<br>145 | 106 | 1384 |
| Zeh, Edmund, and W. D. Forsyth, Buffalo, N. Y. Metal column, girder, or structure | 742,549 | Oct. 27 | 4185 | 941 | 106 | 2175 |
| Zehnder, Morris R., Scranton, Pa. Cylinder relief-valve | 725,015 | Apr. 7 | 1107 | 251<br>252 | 103 | 1405 |
| Zehnder, William D., Scranton, Pa. Furnace | 727,050 | May 5 | 446 | 94 | 104 | 98 |
| Zehner, W. D. (See Souder, Howell W., assignor.) | | | | | | |
| Zehrbach, Henry D. (See Lugibihl and Zehrbach.) | | | | | | |
| Zehrbach, Henry D., assignor of one-half to A. D. Lugibihl, Bluffton, Ohio. Cream-separator | 736,570 | Aug. 18 | 2852 | 624 | 105 | 1626 |
| Zeidler, John L. (See Shultz, Charles H., assignor.) | | | | | | |
| Zeidler, Paul J. (See Baker, Francis M., assignor.) | | | | | | |
| Zeininger, Jacob K., Somerville, Mass., assignor to Karl Digestible Rusk Company, Kittery, Me. Baking-pan | 737,548 | Aug. 25 | 4706 | 1056 | 105 | 2040 |
| Zeiser, Charles A., assignor of one-half to H. Borsch, Chicago, Ill. Temple for spectacles | 731,830 | June 23 | 4255 | 947 | 104 | 2061 |

*Alphabetical list of patentees*—Continued.

| Name, residence, and invention. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|
| | | | Spec. | Drg. | Vol. | Page. |
| Zeiss, Firm of Carl. (See Rudolph, Paul, assignor.) | | | | | | |
| Zeleny, Anthony, assignor of one-half to C. E. Thayer, Minneapolis, Minn. Electric thermometer | 721,770 | Mar. 3 | 194 | 45 | 103 | 42 |
| Zelewski, Roman von, Birkengang, Germany. Roasting-furnace with a swimming hearth | 741,430 | Oct. 13 | 1977 | 439 | 106 | 1688 |
| Zell, Thomas B. (See Lawrance, James P. S., assignor.) | | | | | | |
| Zell, Thomas B., Reading, assignor of one-half to F. Baldt, Sr., Chester, Pa. Cast-steel wheel | 736,190 | Aug. 11 | 2178 | 467 | 105 | 1465 |
| Zellenka, Rudolf, Vienna, Austria-Hungary. Preventing the warping and undulating of xylolith floors | 747,110 | Dec. 15 | 3313 | 754 | 107 | 1865 |
| Zeller, Melancthon E., Bluffton, Ohio. Harness-buckle | 735,650 | Aug. 4 | 1176 | 249 | 105 | 1231 |
| Zeller, Melancthon E., Bluffton, Ohio. Harness-buckle | 738,650 | Sept. 8 | 2211 | 483 | 106 | 490 |
| Zellers, William H., Philadelphia, Pa. Tool-actuating attachment for drilling-machines | 721,930 | Mar. 3 | 522 | 114<br>115 | 103 | 116 |
| Zemelman, Meyer, assignor, by mesne assignments, to Indianapolis Galvinized Wash Board Manufacturing Company, Indianapolis, Ind. Washboard | 741,950 | Oct. 20 | 3006 | 667 | 106 | 1921 |
| Zempel, Henry J., Yellow Bank Township, Minn. Draft-equalizer | 719,550 | Feb. 3 | 249 | 58 | 102 | 876 |
| Zenger, Emil, Scranton, Pa. Picking-table for fabrics | 737,990 | Sept. 1 | 877 | 192 | 106 | 191 |
| Zengerl, Frederick E., Philadelphia, Pa. Narrow-ware loom | 734,390 | July 21 | 3133 | 736<br>737 | 105 | 696 |
| Zenith Manufacturing Company. (See Follett, Edward P., assignor.) | | | | | | |
| Zenke, Henry C., New York, N. Y. Letter-opener | 745,090 | Nov. 24 | 4436 | 960 | 107 | 988 |
| Zesiger, John L., Cleveland, Ohio. Door catch and lock | 719,976 | Feb. 3 | 1006 | 234 | 102 | 1037 |
| Ziegenfus, Marcus, Burns, Oreg. Driven-well drill | 719,290 | Jan. 27 | 3360 | 750 | 102 | 755 |
| Ziegler, Alfred M., Boston, Mass. Suspenders | 725,190 | Apr. 14 | 1436 | 325 | 103 | 1488 |
| Ziegler, Alfred M., Boston, Mass. Suspender-end | 738,740 | Sept. 8 | 2370 | 521 | 106 | 522 |
| Ziegler, Benjamin H., and D. Betzner, Berlin, Canada. Extension-ladder | 745,750 | Dec. 1 | 775 | 177 | 107 | 1264 |
| Ziegler, Christian F., assignor to Reynolds Electric Flasher Manufacturing Company, Chicago, Ill. Electric switch | 743,970 | Nov. 10 | 2269 | 488 | 107 | 501 |
| Ziegler, Henry, New York, N. Y. Upright piano | 719,977 | Feb. 3 | 1009 | 235 | 102 | 1037 |
| Ziegler, Jacob, Coffeyville, Kans. Harness-trace | 727,730 | May 12 | 1721 | 386 | 104 | 388 |
| Ziegler, Jacob, Erie, Pa. Combined hot-water and hot-air furnace | 745,130 | Nov. 24 | 4504 | 975 | 107 | 1004 |
| Ziegler, John F., Toledo, Ohio. Filter | 741,090 | Oct. 13 | 1298 | 298 | 106 | 1544 |
| Ziehl, Emil, assignor to Berliner Maschinenbau Actien-Gesellschaft, vormals L. Schwartzkopff, Berlin, Germany. Field-winding for electric machines | 736,910 | Aug. 18 | 3512 | 781 | 105 | 1763 |
| Zielinski, Oscar, Berlin, Germany. Edison-screw switch-holder for incandescent lamps | 723,510 | Mar. 24 | 3472 | 777 | 103 | 771 |
| Ziemer, Henry H., Adamstown, Pa. Cigar-box | 720,390 | Feb. 10 | 1803 | 410 | 102 | 1221 |
| Ziller, August, and H. Bouchard, Austin, Tex. Hay-press | 731,010 | June 16 | 2713 | 605 | 104 | 1728 |
| Zillgitt, Charlie J., Lake City, Minn. Spring-wheel | 732,684 | June 30 | 5913 | 1311<br>1312 | 104 | 2421 |
| Zimmer, George. (See Allen and Zimmer.) | | | | | | |
| Zimmer, John H., assignor to Edmonds-Metzel Manufacturing Company, Chicago, Ill. Savings-bank | 718,184 | Jan. 13 | 1236 | 272 | 102 | 282 |
| Zimmer, Samuel B. (See Spence, Prugh, and Zimmer.) | | | | | | |
| Zimmerly, Andrew, and W. H. Lindewirth, Pittsburg, Pa. Curtain-pole bracket | 748,455 | Dec. 29 | 5846 | 1330 | 107 | 2462 |
| Zimmerman, Abraham M., New Holland, Pa. Vaporizer for gas-engines | 724,648 | Apr. 7 | 426 | 102 | 103 | 1261 |
| Zimmerman, Abraham M., New Holland, Pa. Sparking mechanism for engines | 724,649 | Apr. 7 | 427 | 103 | 103 | 1261 |
| Zimmerman, Casper, Vienna, S. D. Railway-car | 718,236 | Jan. 13 | 1331 | 294 | 102 | 301 |
| Zimmerman, Casper, Vienna, S. D. Elevated-railway structure | 718,237 | Jan. 13 | 1332 | 294<br>295 | 102 | 301 |
| Zimmerman, Casper, Chicago, Ill., assignor of one-half to C. Anderson and J. M. Knadle, Vienna, S. D. Railway-car | 731,149 | June 16 | 2980 | 662 | 104 | 1781 |
| Zimmerman, Casper, Chicago, Ill., assignor of one-half to C. Anderson and J. M. Knadle, Vienna, S. D. Device for protecting cars | 732,988 | July 7 | 511 | 127 | 105 | 110 |
| Zimmerman, Casper, Chicago, Ill., assignor of one-half to C. Anderson and J. M. Knadle, Vienna, S. D. Burglar-proof compartment for railway-cars, &c | 732,989 | July 7 | 512 | 127 | 105 | 110 |
| Zimmerman, Casper, Chicago, Ill., assignor of one-half to C. Anderson and J. M. Knadle, Vienna, S. D. Refrigerator-car | 734,649 | July 28 | 3604 | 843 | 105 | 810 |
| Zimmerman, Casper, Chicago, Ill., assignor of one-half to C. Anderson and J. M. Knadle, Vienna, S. D. Burglar-proof mail and express car | 734,650 | July 28 | 3605 | 843<br>844 | 105 | 810 |
| Zimmerman, Charles, Araby, Md. Shutter bower and fastener | 740,970 | Oct. 6 | 1075 | 244 | 106 | 1476 |
| Zimmerman, Eli T., Mansfield, Ohio. Folding chair | 719,170 | Jan. 27 | 3146 | 700 | 102 | 709 |
| Zimmerman, Emil O., assignor to C. G. Braxmar Co., New York, N. Y. Baldric-fastener | 725,810 | Apr. 21 | 2601 | 591 | 103 | 1752 |
| Zimmerman, Eugene, Horseheads, N. Y. Fire-extinguishing apparatus | 732,990 | July 7 | 513 | 127 | 105 | 110 |
| Zimmerman, Frank N., Friedens, Pa. Nut-lock | 742,550 | Oct. 27 | 4186 | 941 | 106 | 2175 |
| Zimmerman, Fred, Chicago, Ill. Map-hanging device | 747,829 | Dec. 22 | 4639 | 1048 | 107 | 2177 |
| Zimmerman, Harry M., Plumville, Pa. Draft attachment for vehicles | 731,411 | June 16 | 3461 | 774 | 104 | 1879 |
| Zimmerman, William, Chicago, Ill. Mucilage-jar | 739,970 | Sept. 29 | 4690 | 1055 | 106 | 1069 |
| Zimmerman, William A., Los Angeles, Cal., assignor to National Cash Register Company, Jersey City, N. J. Cash-register | 739,530 | Sept. 22 | 3839 | 860 | 106 | 870 |
| Zimmerman, William C. F., Lonetree, Iowa. Take-up and catch block | 740,070 | Sept. 29 | 4880 | 1094 | 106 | 1110 |
| Zimmerman, William H., Halethorpe, Md. Scientific toy | 722,070 | Mar. 3 | 761 | 170 | 103 | 164 |
| Zimmermann, Adolph. (See Schmahl and Zimmermann.) | | | | | | |
| Zimmermann, William M. (See Lichtenberger and Zimmermann.) | | | | | | |
| Zimmermann, Willy C., Düren, Germany. Weather-strip | 746,910 | Dec. 15 | 2924 | 675 | 107 | 1773 |
| Zindel, Barnhardt, Greenbay, Wis. Pressure-regulator | 723,118 | Mar. 17 | 2713 | 610 | 103 | 605 |
| Zink, Augustine P., Lorain, Ohio. Spark arrester and extinguisher | 747,830 | Dec. 22 | 4641 | 1048 | 107 | 2177 |
| Zink, Scheuyler B., Portsmouth, Va. Electrotherapeutic apparatus | 735,687 | Aug. 4 | 1253 | 265<br>266 | 105 | 1248 |
| Zinn, Mary. (See Scheuber, August W., assignor.) | | | | | | |
| Zirkle, Charles M., Richmond, Va. Sash-fastener | 720,870 | Feb. 17 | 2688 | 621 | 102 | 1419 |
| Zitt, William M., Chicago, Ill., assignor to McConnell Asbestos Company, Limited, Pittsburg, Pa. Non-conducting covering | 723,970 | Mar. 31 | 4322 | 970 | 103 | 968 |
| Zobel, Julius, Juliusburg, Germany. Machine for clearing fields, roads, or the like | 724,650 | Apr. 7 | 428 | 103<br>104 | 103 | 1261 |
| Zobelein, George, *et al.* (See Rademacher, Frank, assignor.) | | | | | | |
| Zoder, George W., and W. P. Hayne, Boyce, La. Press for oleaginous substances | 748,138 | Dec. 29 | 5282 | 1200<br>1201 | 107 | 2339 |
| Zoell, George W. (See Loge and Zoell.) | | | | | | |
| Zoeller, Theodore J., Nashville, Tenn. Cleaning filters | 736,669 | Aug. 18 | 3051 | 674 | 105 | 1666 |
| Zoelly, Heinrich, Zurich, Switzerland. Wheel for steam-turbines | 748,139 | Dec. 29 | 5285 | 1201 | 107 | 2340 |
| Zöller, Edmund, Indianapolis, Ind. Display-card | 732,810 | July 7 | 214 | 54 | 105 | 48 |
| Zórawski, Gustav de, Ozorków, Russia. Reed for looms | 736,670 | Aug. 18 | 3053 | 674 | 105 | 1666 |
| Zschokke, Walther, and F. Urban, Steglitz, near Berlin, assignors to Firm of C. P. Goerz, Friedenau, near Berlin, Germany. Photographic objective | 745,550 | Dec. 1 | 440 | 103 | 107 | 1191 |

*Alphabetical list of patentees*—Continued.

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|---|---|---|---|---|---|---|
| | | | Spec. | Dr'g. | Vol. | Page. |
| Zucker, Karl, Mannheim, Germany. Cross-jointed iron bars | 746,230 | Dec. 8 | 1686 | 375 | 107 | 1480 |
| Zühl, Ernst, Berlin, Germany. Celluloid compound and making same | 729,990 | June 2 | 869 | ------ | 104 | 1304 |
| Zühl, Ernst, Berlin, Germany. Celluloid or pyroxylin compound and making same | 733,110 | July 7 | 732 | ------ | 105 | 155 |
| Zumwalt, Joe C., Clay Center, assignor of two-thirds to G. W. and E. W. Orr, Clay County, Nebr. Gate | 730,730 | June 9 | 2187 | 486<br>487 | 104 | 1597 |
| Zweigbergk, Thorsten von, Preston, England. Controller | 723,119 | Mar. 17 | 2715 | 610 | 103 | 606 |
| Zweigbergk, Thorsten von, Preston, England. Controller | 744,665 | Nov. 17 | 3590 | 773<br>774 | 107 | 795 |
| Zwerk, George C., Saginaw, Mich. Machine for making cement shingles | 748,140 | Dec. 29 | 5286 | 1201 | 107 | 2340 |
| Zwerk, George C., Saginaw, Mich. Cement shingle | 748,141 | Dec. 29 | 5287 | 1202 | 107 | 2340 |
| Zwicker, Edd, Cable, Ill. Time-controller for dampers | 733,530 | July 14 | 1494 | 356 | 105 | 333 |
| Zwietusch, Otto, Milwaukee, Wis. Collection and utilization of carbonic-acid gas produced by fermentation in breweries | 728,070 | May 12 | 2347 | 523 | 104 | 517 |
| Zwillinger, Bernhard, New York, N. Y., assignor, by mesne assignments, to American Fuel and Distillation Company. Carbonizing apparatus | 744,666 | Nov. 17 | 3593 | 774 | 107 | 796 |
| Zwillinger, Bernhard, New York, N. Y., assignor, by mesne assignments, to American Fuel and Distillation Company. Carbonizing | 744,667 | Nov. 17 | 3595 | 774<br>775 | 107 | 796 |
| Zwillinger, Bernhard, New York, N. Y., assignor, by mesne assignments, to American Fuel and Distillation Company. Apparatus for carbonizing | 744,668 | Nov. 17 | 3597 | 775<br>776 | 107 | 797 |
| Zwillinger, Bernhard, New York, N. Y., assignor, by mesne assignments, to American Fuel and Distillation Company. Carbonizing and cooling down the charge | 744,669 | Nov. 17 | 3600 | 776 | 107 | 797 |
| Zwillinger, Bernhard, New York, N. Y., assignor to American Fuel and Distillation Company. Carbonizing material | 744,670 | Nov. 17 | 3602 | 776 | 107 | 798 |
| Zwissler, Valentine, assignor to S. J. Yarger, Philadelphia, Pa. Stapling-machine | 730,070 | June 2 | 1000 | 224 | 104 | 1331 |
| Zwoyer, Ellsworth B. A., Hoboken, N. J. Briquet-making machine | 718,043 | Jan. 6 | 980 | 217<br>218 | 102 | 211 |
| Zylberlast, Stanislas, Manchester, England. Means for operating the points on tramway or like tracks | 728,822 | May 19 | 3772 | 842 | 104 | 839 |
| Zylstra, William H., Grand Rapids, Mich. Newspaper-box | 743,610 | Nov. 10 | 1633 | 342 | 107 | 365 |

# ALPHABETICAL LIST OF DESIGNS.

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|---|---|---|---|---|
| A. Geisel Manufacturing Company. (See Dahman, William H., assignor.) | | | | |
| A. A. Griffing Iron Company. (See Waggoner, Edward P., assignor.) | | | | |
| Adams, Friederich O. (See Adams, Julius F. and F. O.) | | | | |
| Adams, Julius F. and F. O., Allegheny, Pa. Gas-stove | 36,533 | Sept. 1 | 106 | 255 |
| Ahrenfeldt, Charles J., New York, N. Y. Plate or similar article | 36,250 | Mar. 24 | 103 | 878 |
| Ahrenfeldt, Charles J., New York, N. Y. Covered dish or similar article | 36,257 | Mar. 31 | 103 | 1153 |
| Ahrenfeldt, Charles J., New York, N. Y. Plate or similar article | 36,261 | Mar. 31 | 103 | 1154 |
| Ahrenfeldt, Charles J., New York, N. Y. Teapot or similar article | 36,306 | May 5 | 104 | 298 |
| Ahrenfeldt, Charles J., New York, N. Y. Covered dish or similar article | 36,307 | May 5 | 104 | 299 |
| Alexander, Jesse, Brooklyn, N. Y. Cyclometer-casing | 36,657 | Dec. 1 | 107 | 1364 |
| Algonquin Printing Company. (See Broadway, Alexander H., assignor.) | | | | |
| Allan-Pfeiffer Chemical Company. (See Garwood, Charles B., assignor.) | | | | |
| Alland, James, Boston, Mass. Bottle | 36,493 | Aug. 11 | 105 | 1523 |
| Alling & Company. (See Welch, Frank M., assignor.) | | | | |
| Ambrose, Edward, Troy, assignor to Enterprise Gas Stove Manufacturing Company, New York, N. Y. Stove | 36,290 | Apr. 14 | 103 | 1672 |
| American Metal Wheel and Toy Company. (See Barschow, George H., assignor.) | | | | |
| American Radiator Company. (See Woolley, Clarence M., assignor.) | | | | |
| American Type Founders' Company. (See Capitain, William F., assignor.) | | | | |
| American Type Founders Company. (See Cleland, Thomas M., assignor.) | | | | |
| American Type Founder's Company. (See Ihlenburg, Herman, assignor.) | | | | |
| American Type Founders Company. (See Ipsen, Ludvig S., assignor.) | | | | |
| Anderson, William C., Chicago, Ill., assignor to Libbey Glass Company, Toledo, Ohio. Cut-glass vessel | 36,275 | Apr. 7 | 103 | 1407 |
| Anson, Thomas J., Akron, Ohio. Floor or wall covering | 36,547 | Sept. 8 | 106 | 534 |
| Arbenz, Frederick A., West Hoboken, N. J. Fabric | 36,218 | Feb. 3 | 102 | 1042 |
| Armour & Company. (See Ross, Edwin, assignor.) | | | | |
| Ashton, Harry L., Chicago, Ill. Picture-frame | 36,690 | Dec. 22 | 107 | 2223 |
| Atkinson, Hobart F. (See Denio, William L., assignor.) | | | | |
| Atwell, Samuel R. (See Davis and Atwell.) | | | | |
| Avery, Helen F., New York, assignor to Will & Baumer Company, Syracuse, N. Y. Lamp-shade. | 36,714 | Dec. 29 | 107 | 2517 |
| Avery, Helen F., New York, assignor to Will & Baumer Company, Syracuse, N. Y. Lamp-shade. | 36,715 | Dec. 29 | 107 | 2517 |
| Avery, Helen F., New York, assignor to Will & Baumer Company Syracuse, N. Y. Lamp-shade. | 36,716 | Dec. 29 | 107 | 2517 |
| Bächle, Emil, Meriden, Conn., assignor to International Silver Company, Jersey City, N. J. Handle for crumb-scrapers or similar articles | 36,448 | July 21 | 105 | 735 |
| Bächle, Emil, Meriden, Conn., assignor to International Silver Company, Jersey City, N. J. Ornament for vessels or similar articles | 36,449 | July 21 | 105 | 735 |
| Bächle, Emil, Meriden, Conn., assignor to International Silver Company, Jersey City, N. J. Handle for vessels or similar articles | 36,450 | July 21 | 105 | 735 |
| Bächle, Emil, Meriden, Conn., assignor to International Silver Company, Jersey City, N. J. Handle for vessels or similar articles | 36,451 | July 21 | 105 | 735 |
| Bächle, Emil, Meriden, Conn., assignor to International Silver Company, Jersey City, N. J. Handle for receptacles | 36,452 | July 21 | 105 | 735 |
| Bächle, Emil, Meriden, Conn., assignor to International Silver Company, Jersey City, N. J. Spout for receptacles | 36,453 | July 21 | 105 | 735 |
| Bächle, Emil, Meriden, Conn., assignor to International Silver Company, Jersey City, N. J. Ornament for vessels or similar articles | 36,470 | Aug. 4 | 105 | 1249 |
| Bächle, Emil, Meriden, Conn., assignor to International Silver Company, Jersey City, N. J., and Meriden, Conn. Candlestick | 36,231 | Feb. 17 | 102 | 1544 |
| Badger Brass Manufacturing Company. (See Welles, Richard H., assignor.) | | | | |
| Balinski, Szymon, Boston, Mass. Picture-frame | 36,529 | Aug. 25 | 105 | 2048 |
| Ball, Percy B., Providence, R. I., assignor to Fahys Watch Case Company, New York, N. Y. Handle for spoons or forks | 36,420 | July 14 | 105 | 483 |
| Barschow, George H., assignor to American Metal Wheel and Toy Company, Toledo, Ohio. Wagon-body | 36,659 | Dec. 1 | 107 | 1364 |
| Barschow, George H., assignor to American Metal Wheel and Toy Company, Toledo, Ohio. Wagon-body | 36,660 | Dec. 1 | 107 | 1364 |
| Barschow, George H., assignor to American Metal Wheel and Toy Company, Toledo, Ohio. Wagon-body | 36,661 | Dec. 1 | 107 | 1365 |
| Barschow, George H., assignor to American Metal Wheel and Toy Company, Toledo, Ohio. Wagon-body | 36,705 | Dec. 22 | 107 | 2225 |
| Barschow, George H., assignor to American Metal Wheel and Toy Company, Toledo, Ohio. Wagon-body | 36,706 | Dec. 22 | 107 | 2226 |
| Barschow, George H., assignor to American Metal Wheel and Toy Company, Toledo, Ohio. Wagon-body | 36,707 | Dec. 22 | 107 | 2223 |
| Barstow Stove Company. (See Spicer, William A., assignor.) | | | | |
| Beck, Charles W., New York, N. Y. Lamp-body | 36,197 | Jan. 27 | 102 | 809 |
| Bendheim, Edward, New York, N. Y. Handkerchief | 36,620 | Nov. 10 | 107 | 531 |
| Bendix, Albert J., New York, N. Y. Fabric | 36,291 | Apr. 14 | 103 | 1672 |
| Bennett, Charles A., Taunton, Mass. Mounting for silverware or similar articles | 36,298 | Apr. 28 | 103 | 2161 |
| Bennett, Charles A., Taunton, Mass. Handle for spoons, forks, or similar articles | 36,412 | July 7 | 105 | 251 |
| Bennett, Charles A., Taunton, Mass. Almond-dish or similar article | 36,539 | Sept. 8 | 106 | 533 |
| Bennett, Charles A., Taunton, Mass. Almond-dish or similar article | 36,540 | Sept. 8 | 106 | 533 |
| Bennett, Charles A., Taunton, Mass. Almond-dish or similar article | 36,541 | Sept. 8 | 106 | 533 |
| Bennett, Charles A., Taunton, Mass. Almond-dish or similar article | 36,542 | Sept. 8 | 106 | 533 |
| Bennett, Charles A., Taunton, Mass. Almond-dish or similar article | 36,543 | Sept. 8 | 106 | 533 |
| Bennett, Charles A., Taunton, Mass. Almond-dish or similar article | 36,544 | Sept. 8 | 106 | 534 |
| Bennett, Charles A., Taunton, Mass. Almond-dish or similar article | 36,545 | Sept. 8 | 106 | 534 |
| Benton, Thomas K., Glenridge, N. J. Back for brushes or similar toilet articles | 36,475 | Aug. 4 | 105 | 1250 |
| Benton, Thomas K., Glenridge, N. J. Back for brushes or similar toilet articles | 36,476 | Aug. 4 | 105 | 1251 |
| Benziger, Rufus, assignor to Warner Silver Manufacturing Company, Chicago, Ill. Picture-frame | 36,256 | Mar. 31 | 103 | 1153 |

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| Name, residence, and design. | No. | Date. | Official Gazette. Vol. | Page. |
|---|---|---|---|---|
| Bergstrom, Oscar, New York, N. Y. Tiling | 36,356 | June 9 | 104 | 1645 |
| Berninghaus, Oscar, assignor to Louisiana Purchase Exposition Company, St. Louis, Mo. Badge | 36,407 | July 7 | 105 | 251 |
| Bertram, William L. (See Cope and Bertram.) | | | | |
| Bigney, Sidney O., Attleboro, Mass., assignor to Bristol Manufacturing Company. Back for brushes or similar articles | 36,245 | Mar. 17 | 103 | 651 |
| Birtman, Charles F. (See Reade and Birtman.) | | | | |
| Blackinton & Co., R. (See Keller, Sidney A., assignor.) | | | | |
| Blair, George W., Pittsburg, Pa. Lamp-shade | 36,591 | Oct. 20 | 106 | 2003 |
| Blogg, Herbert F., New Haven, Conn. Badge or similar article | 36,314 | May 12 | 104 | 563 |
| Blonde, August, Allegheny, Pa. Alphabet | 36,549 | Sept. 8 | 106 | 534 |
| Boal, Stanhope, Piqua, Ohio. Stove | 36,198 | Jan. 27 | 102 | 809 |
| Boas, Charles R., Harrisburg, Pa. Spoon | 36,613 | Nov. 3 | 107 | 258 |
| Boeck, Charles H., assignor to Novelty Manufacturing Company, Jackson, Mich. Oil or gas stove | 36,443 | July 14 | 105 | 487 |
| Boll, Charles S., Harrisburg, Pa. Head or foot section for bedsteads | 36,191 | Jan. 13 | 102 | 459 |
| Bonnert, Charles C., Baltimore, Md. Bottle | 36,262 | Mar. 31 | 103 | 1154 |
| Botkin, Murray R., Kokomo, Colo. Display-rack | 36,438 | July 14 | 105 | 487 |
| Bower, Emma E., Ann Arbor, Mich. Badge | 36,254 | Mar. 31 | 103 | 1152 |
| Boyer, Murray C., Riverton, N. J. Tiling | 36,348 | June 2 | 104 | 1382 |
| Bristol Manufacturing Company. (See Bigney, Sidney O., assignor.) | | | | |
| Bristol Manufacturing Company. (See Saart, William H., assignor.) | | | | |
| Broadway, Alexander H., assignor to Algonquin Printing Company, New York, N. Y. Handkerchief | 36,581 | Oct. 6 | 106 | 1491 |
| Brogan, Anthony D., and A. M. Malloch, Glasgow, Scotland. Plate-glass | 36,444 | July 14 | 105 | 488 |
| Brooker, John W., Sapp, Ga. Rein-guide | 36,590 | Oct. 13 | 106 | 1768 |
| Brosi, Frederick T., Quincy, Ill. Coal-hod | 36,459 | July 21 | 105 | 736 |
| Brown, Carl E., Columbus, Ohio. Stringed-musical-instrument body | 36,308 | May 5 | 104 | 299 |
| Brown, Edmund L., Martinsville, Ind. Rocking-chair | 36,224 | Feb. 10 | 102 | 1283 |
| Brown, Lewis A., St. Louis, Mo. Ink-receptacle | 36,694 | Dec. 22 | 107 | 2223 |
| Brown, Louis H., assignor to M. J. Whittall, Worcester, Mass. Carpet | 36,445 | July 14 | 105 | 488 |
| Browne, James A., East Orange, N. J. Watch-charm or similar article | 36,462 | July 28 | 105 | 966 |
| Bruch, Charles P., New York, N. Y. Letter-head or similar article | 36,369 | June 16 | 104 | 1885 |
| Brundage, Egbert T., East Orange, N. J., assignor to McCleary, Wallin & Crouse, New York, N. Y. Rug | 36,334 | May 26 | 104 | 1109 |
| Brundage, Egbert T., East Orange, N. J., assignor to McCleary, Wallin & Crouse, New York, N. Y. Rug | 36,335 | May 26 | 104 | 1109 |
| Brundage, Egbert T., East Orange, N. J., assignor to McCleary, Wallin & Crouse, New York, N. Y. Rug | 36,336 | May 26 | 104 | 1109 |
| Brundage, Egbert T., East Orange, N. J., assignor to McCleary, Wallin & Crouse, New York, N. Y. Rug | 36,337 | May 26 | 104 | 1109 |
| Brundage, Egbert T., East Orange, N. J., assignor to McCleary, Wallin & Crouse, New York, N. Y. Rug | 36,338 | May 26 | 104 | 1110 |
| Brundage, Egbert T., East Orange, N. J., assignor to McCleary, Wallin & Crouse, New York, N. Y. Rug | 36,339 | May 26 | 104 | 1110 |
| Brunninghausen, Germain, Paris, France. Piano-case | 36,599 | Oct. 20 | 106 | 2005 |
| Brunswick-Balke-Collender Company. (See Ehrenpreis, John, assignor.) | | | | |
| Buckland, Grace H., Fremont, Ohio. Fabric | 36,241 | Mar. 3 | 103 | 216 |
| Cahalane, Daniel C., assignor to W. L. Mason & Co., Keene, N. H. Inkstand | 36,318 | May 12 | 104 | 564 |
| Calame, Louis C., Bienne, Switzerland. Watchcase | 36,228 | Feb. 17 | 102 | 1543 |
| Capitain, William F., St. Louis, Mo., assignor to American Type Founders' Company, Newark, N. J. Font of type | 36,461 | July 21 | 105 | 737 |
| Caron, Joseph A., assignor to C. Coughlin, Montreal, Canada. Badge | 36,190 | Jan. 13 | 102 | 459 |
| Carter's Ink Company. (See Gordon, Charles B., assignor.) | | | | |
| Castle Braid Company. (See Schwarcz, Charles, assignor.) | | | | |
| Catlow, Joseph, assignor to M. F. Williams, Providence, R. I. Buckle or brooch plate | 36,248 | Mar. 24 | 103 | 878 |
| Catty, James W., New York, N. Y. Doily or similar article | 36,510 | Aug. 18 | 105 | 1769 |
| Catty, James W., New York, N. Y. Doily or similar article | 36,511 | Aug. 18 | 105 | 1769 |
| Catty, James W., New York, N. Y. Doily or similar article | 36,686 | Dec. 22 | 107 | 2222 |
| Caxton Company. (See Dux, Joseph, assignor.) | | | | |
| Chance Brothers and Co. (See Woodward, Thomas J., assignor.) | | | | |
| Chance Brothers and Co. (See Woodward, Tom, assignor.) | | | | |
| Chapman, Kenneth M., Las Vegas, N. Mex. Ter. Ornament | 36,614 | Nov. 3 | 107 | 259 |
| Chapman, Kenneth M., Las Vegas, N. Mex. Ter. Box | 36,621 | Nov. 10 | 107 | 531 |
| Chandler, Richard D., Hydepark, Mass. Lamp-shade | 36,294 | Apr. 21 | 103 | 1904 |
| Chandler, Richard D., Hydepark, assignor to Chandler Specialty Company, Boston, Mass. Lamp-shade | 36,293 | Apr. 21 | 103 | 1904 |
| Chandler Specialty Company. (See Chandler, Richard D., assignor.) | | | | |
| Chéron, Pierre J., assignor to F. W. Smith, Gardner, Mass. Handle for spoons, forks, or similar articles | 36,569 | Oct. 6 | 106 | 1489 |
| Chipman, Richmond L., Akron, Ohio. Tiling | 36,558 | Sept. 15 | 106 | 757 |
| Chisholm, George D., Chicago, Ill. Stand | 36,481 | Aug. 4 | 105 | 1251 |
| Clarkson, Edward H., Newburyport, Mass. Brooch-bar | 36,610 | Nov. 3 | 107 | 258 |
| Cleland, Thomas M., assignor to American Type Founders Company, New York, N. Y. Font of ornaments | 36,368 | June 16 | 104 | 1885 |
| Clulee, John, Wallingford, assignor to International Silver Co., Meriden, Conn. Handle for spoons, forks, or similar articles | 36,284 | Apr. 14 | 103 | 1671 |
| Codman, William C., assignor to Gorham Manufacturing Company, Incorporated, Providence, R. I. Handle for spoons, forks, or similar articles | 36,196 | Jan. 27 | 102 | 809 |
| Codman, William C., assignor to Gorham Manufacturing Company, Providence, R. I. Handle for spoons, forks, or similar articles | 36,421 | July 14 | 105 | 484 |
| Codman, William C., Providence, R. I., assignor to Dow, Jones & Co., New York, N. Y. Member for paper-file clamps | 36,643 | Nov. 24 | 107 | 1085 |
| Cohen, Ovid, New Haven, Conn. Book and paper cutter | 36,465 | July 28 | 105 | 966 |
| Cohen, Stanley A., New York, N. Y. Game-chip | 36,242 | Mar. 10 | 103 | 418 |
| Collins, Henry H., Jr., Philadelphia, Pa. Card-mount | 36,562 | Sept. 22 | 106 | 986 |
| Collins, Henry H., Jr., Philadelphia, Pa. Card-mount | 36,563 | Sept. 22 | 106 | 987 |
| Cummins, Alexander H., Akron, Ohio. Floor or wall covering | 36,546 | Sept. 8 | 106 | 534 |
| Cooper, Herbert, Brooklyn, N. Y. Cut stone | 36,359 | June 16 | 104 | 1884 |
| Co[illegible]rative Foundry Company. (See Kennedy and King, assignors.) | | | | |
| Cope, George W., and W. L. Bertram, Detroit, assignors to Kalamazoo Stove Company, Kalamazoo, Mich. Range | 36,311 | May 5 | 104 | 299 |
| Cope, George W., and W. L. Bertram, Detroit, assignors to Kalamazoo Stove Company, Kalamazoo, Mich. Heating-stove | 36,312 | May 5 | 104 | 300 |
| Cope, George W., and W. L. Bertram, Detroit, assignors to Kalamazoo Stove Company, Kalamazoo, Mich. Range | 36,324 | May 12 | 104 | 565 |

*Alphabetical list of patentees of designs*—Continued.

| Name, residence, and design. | No. | Date. | Official Gazette. Vol. | Page. |
|---|---|---|---|---|
| Cosgrove, Joseph. (See Denivelle and Cosgrove.) | | | | |
| Coughlin, Cornelius. (See Caron, Joseph A., assignor.) | | | | |
| Court, Charles S. (See Crees and Court.) | | | | |
| Crane, William M., New York, N. Y., assignor to William M. Crane Company. Gas-stove | 36,556 | Sept. 15 | 106 | 756 |
| Crawford, Richard M., Camden, N. J. Badge or similar article | 36,496 | Aug. 18 | 105 | 1766 |
| Crees, Eustace, and C. S. Court, Providence, R. I., assignors to Watson and Newell Company. Handle for spoons or similar articles | 36,220 | Feb. 10 | 102 | 1282 |
| Crees, Eustace, and C. S. Court, Providence, R. I., assignors to Watson and Newell Company. Handle for spoons or similar articles | 36,229 | Feb. 17 | 102 | 1543 |
| Crees, Eustace, and C. S. Court, Providence, R. I., assignors to Watson and Newell Company. Handle for spoons or similar articles | 36,230 | Feb. 17 | 102 | 1544 |
| Crees, Eustace, and C. S. Court, Providence, R. I., assignors to Watson and Newell Company. Handle for spoons or similar articles | 36,295 | Apr. 28 | 103 | 2160 |
| Crees, Eustace, and C. S. Court, Providence, R. I., assignors to Watson and Newell Company. Handle for spoons or similar articles | 36,296 | Apr. 28 | 103 | 2160 |
| Crees, Eustace, and C. S. Court, Providence, R. I., assignors to Watson and Newell Company. Handle for spoons or similar articles | 36,303 | May 5 | 104 | 298 |
| Crees, Eustace, and C. S. Court, Providence, R. I., assignors to Watson and Newell Company. Handle for spoons or similar articles | 36,304 | May 5 | 104 | 298 |
| Crees, Eustace, and C. S. Court, Providence, R. I., assignors to Watson and Newell Company. Handle for spoons or similar articles | 36,305 | May 5 | 104 | 298 |
| Crees, Eustace, and C. S. Court, Providence, R. I., assignors to Watson and Newell Company. Handle for spoons or similar articles | 36,315 | May 12 | 104 | 563 |
| Crees, Eustace, and C. S. Court, Providence, R. I., assignors to Watson and Newell Company. Handle for spoons or similar articles | 36,316 | May 12 | 104 | 564 |
| Crees, Eustace, and C. S. Court, Providence, R. I., assignors to Watson and Newell Company. Handle for spoons or similar articles | 36,360 | June 16 | 104 | 1884 |
| Crees, Eustace, and C. S. Court, Providence, R. I., assignors to Watson and Newell Company. Handle for spoons or similar articles | 36,361 | June 16 | 104 | 1884 |
| Crees, Eustace, and C. S. Court, Providence, R. I., assignors to Watson and Newell Company. Handle for spoons or similar articles | 36,385 | June 30 | 104 | 2427 |
| Crees, Eustace, and C. S. Court, Providence, R. I., assignors to Watson and Newell Company. Handle for spoons or similar articles | 36,386 | June 30 | 104 | 2427 |
| Crees, Eustace, and C. S. Court, Providence, R. I., assignors to Watson and Newell Company. Handle for spoons or similar articles | 36,387 | June 30 | 104 | 2427 |
| Crees, Eustace, and C. S. Court, Providence, R. I., assignors to Watson and Newell Company. Handle for spoons or similar articles | 36,471 | Aug. 4 | 105 | 1250 |
| Crees, Eustace, and C. S. Court, Providence, R. I., assignors to Watson and Newell Company. Handle for spoons or similar articles | 36,490 | Aug. 18 | 105 | 1767 |
| Crees, Eustace, and C. S. Court, Providence, R. I., assignors to Watson and Newell Company. Handle for spoons, forks, or similar articles | 36,515 | Aug. 25 | 105 | 2046 |
| Crees, Eustace, and C. S. Court, Providence, R. I., assignors to Watson and Newell Company. Handle for spoons, forks, or similar articles | 36,516 | Aug. 25 | 105 | 2046 |
| Crees, Eustace, and C. S. Court, Providence, R. I., assignors to Watson and Newell Company. Handle for spoons, forks, or similar articles | 36,535 | Sept. 8 | 106 | 532 |
| Crees, Eustace, and C. S. Court, Providence, R. I., assignors to Watson and Newell Company. Handle for spoons, forks, or similar articles | 36,536 | Sept. 8 | 106 | 532 |
| Crees, Eustace, and C. S. Court, Providence, R. I., assignors to Watson and Newell Company. Handle for spoons, forks, or similar articles | 36,570 | Oct. 6 | 106 | 1489 |
| Crees, Eustace, and C. S. Court, Providence, R. I., assignors to Watson and Newell Company. Handle for spoons, forks, or similar articles | 36,571 | Oct. 6 | 106 | 1489 |
| Crees, Eustace, and C. S. Court, Providence, R. I., assignors to Watson and Newell Company. Handle for spoons, forks, or similar articles | 36,572 | Oct. 6 | 106 | 1489 |
| Crees, Eustace, and C. S. Court, Providence, R. I., assignors to Watson & Newell Company. Handle for spoons, forks, or similar articles | 36,583 | Oct. 13 | 106 | 1768 |
| Crees, Eustace, and C. S. Court, Providence, R. I., assignors to Watson & Newell Company. Handle for spoons, forks, or similar articles | 36,584 | Oct. 13 | 106 | 1768 |
| Crees, Eustace, and C. S. Court, Providence, R. I., assignors to Watson & Newell Company. Handle for spoons, forks, or similar articles | 36,585 | Oct. 13 | 106 | 1768 |
| Crees, Eustace, and C. S. Court, Providence, R. I., assignors to Watson & Newell Company. Handle for spoons, forks, or similar articles | 36,586 | Oct. 13 | 106 | 1768 |
| Crees, Eustace, and C. S. Court, Providence, R. I., assignors to Watson & Newell Company. Handle for spoons, forks, or similar articles | 36,587 | Oct. 13 | 106 | 1768 |
| Crees, Eustace, and C. S. Court, Providence, R. I., assignors to Watson and Newell Company. Handle for spoons, forks, or similar articles | 36,604 | Oct. 27 | 106 | 2278 |
| Crees, Eustace, and C. S. Court, Providence, R. I., assignors to Watson & Newell Company. Handle for spoons, forks, or similar articles | 36,624 | Nov. 17 | 107 | 822 |
| Crees, Eustace, and C. S. Court, Providence, R. I., assignors to Watson & Newell Company. Handle for spoons, forks, or similar articles | 36,625 | Nov. 17 | 107 | 822 |
| Crees, Eustace, and C. S. Court, Providence, R. I., assignors to Watson & Newell Company. Handle for spoons, forks, or similar articles | 36,626 | Nov. 17 | 107 | 822 |
| Crees, Eustace, and C. S. Court, Providence, R. I., assignors to Watson and Newell Company. Handle for spoons, forks, or similar articles | 36,637 | Nov. 24 | 107 | 1085 |
| Crees, Eustace, and C. S. Court, Providence, R. I., assignors to Watson and Newell Company. Handle for spoons, forks, or similar articles | 36,638 | Nov. 24 | 107 | 1085 |
| Crees, Eustace, and C. S. Court, Providence, R. I., assignors to Watson and Newell Company. Handle for spoons, forks, or similar articles | 36,639 | Nov. 24 | 107 | 1085 |
| Crees, Eustace, and C. S. Court, Providence, R. I., assignors to Watson and Newell Company. Handle for spoons, forks, or similar articles | 36,640 | Nov. 24 | 107 | 1085 |
| Crees, Eustace, and C. S. Court, Providence, R. I., assignors to Watson and Newell Company. Handle for spoons, forks, or similar articles | 36,641 | Nov. 24 | 107 | 1085 |
| Crees, Eustace, and C. S. Court, Providence, R. I., assignors to Watson and Newell Company. Handle for spoons, forks, or similar articles | 36,642 | Nov. 24 | 107 | 1085 |
| Crees, Eustace, and C. S. Court, Providence, R. I., assignors to Watson and Newell Company. Handle for spoons, forks, or similar articles | 36,667 | Dec. 8 | 107 | 1646 |
| Crees, Eustace, and C. S. Court, Providence, R. I., assignors to Watson and Newell Company. Handle for spoons, forks, or similar articles | 36,668 | Dec. 8 | 107 | 1646 |
| Crees, Eustace, and C. S. Court, Providence, R. I., assignors to Watson and Newell Company. Handle for spoons, forks, or similar articles | 36,687 | Dec. 22 | 107 | 2222 |
| Cribben & Sexton Company. (See Harter, Augustus F., assignor.) | | | | |
| Cribben & Sexton Company. (See Mersfelder, William L., assignor.) | | | | |
| Croll, Henry L., New York, N. Y. Box-cover | 36,317 | May 12 | 104 | 564 |
| Crowell, Gilbert L., Jr., Arlington, N. J. Handle for a spoon, fork, or similar article | 36,240 | Mar. 3 | 103 | 216 |
| Crowell, Gilbert L., Jr., Arlington, N. J., assignor to Dominick & Haff, New York, N. Y. Candlestick | 36,187 | Jan. 6 | 102 | 224 |

*Alphabetical list of patentees of designs*—Continued.

| Name, residence, and design. | No. | Date. | Official Gazette. Vol. | Page. |
|---|---|---|---|---|
| Curtis, Henry H. (See Hobson, John H., assignor.) | | | | |
| Curtis, Henry H. (See Keller, Sidney A., assignor.) | | | | |
| Daab, Martin, Jr., Hoboken, N. J. Casing for weighing-machines | 36,645 | Nov. 24 | 107 | 1086 |
| Daggett, Fred L., Somerville, Mass. Candy-box | 36,432 | July 14 | 105 | 486 |
| Daggett, Fred L., Somerville, Mass. Candy-box | 36,433 | July 14 | 105 | 486 |
| Daggett, Fred L., Somerville, Mass. Candy-box | 36,434 | July 14 | 105 | 486 |
| Daggett, Fred L., Somerville, Mass. Candy-box | 36,435 | July 14 | 105 | 486 |
| Daggett, Fred L., Somerville, Mass. Candy-box | 36,436 | July 14 | 105 | 486 |
| Daggett, Fred L., Somerville, Mass. Box-covering | 36,457 | July 21 | 105 | 736 |
| Dahman, William H., assignor to A. Geisel Manufacturing Company, St. Louis, Mo. Portable oven | 36,680 | Dec. 15 | 107 | 1963 |
| Dahman, William H., assignor to A. Geisel Manufacturing Company, St. Louis, Mo. Portable oven | 36,681 | Dec. 15 | 107 | 1963 |
| Davis, Marcus H., and S. R. Atwell, Winchester, Va. Back for playing-cards | 36,580 | Oct. 6 | 106 | 1491 |
| Day, Matthew C., assignor to J. B. & S. M. Knowles Company, Providence, R. I. Handle for paper-knives or similar articles | 36,524 | Aug. 25 | 105 | 2048 |
| Day, Matthew C., assignor to J. B. & S. M. Knowles Company, Providence, R. I. Handle for paper-knives or similar articles | 36,525 | Aug. 25 | 105 | 2048 |
| De Freitas, William, assignor to Municipal Lighting Company, New York, N. Y. Illuminating-lamp | 36,320 | May 12 | 104 | 564 |
| Denio, William L., assignor of one-half to H. F. Atkinson, Rochester, N. Y. Fire-alarm box | 36,548 | Sept. 8 | 106 | 534 |
| Denivelle, Edward, Mount Vernon, and J. Cosgrove, Yonkers, N. Y. Statuette | 36,212 | Feb. 3 | 102 | 1041 |
| Denivelle, Edward, Mount Vernon, and J. Cosgrove, Yonkers, N. Y. Statuette | 36,213 | Feb. 3 | 102 | 1041 |
| Denivelle, Frederic L., *et al.* (See Outcault, Richard F., assignor.) | | | | |
| Dickinson, Philemon O. (See Leigh and Dickinson.) | | | | |
| Dickinson, Philemon O., Newark, N. J. Brooch or buckle-plate or similar article | 36,351 | June 9 | 104 | 1644 |
| Dickinson, Philemon O., Newark, N. J. Brooch or buckle-plate or similar article | 36,352 | June 9 | 104 | 1644 |
| Dickinson, Philemon O., Newark, N. J. Back for brushes, mirrors, or similar articles | 36,392 | June 30 | 104 | 2428 |
| Dickinson, Philemon O., Newark, N. J. Back for brushes, mirrors, or similar articles | 36,393 | June 30 | 104 | 2428 |
| Dickinson, Philemon O., Newark, N. J. Brooch or buckle-plate or similar article | 36,411 | July 7 | 105 | 251 |
| Dickinson, Philemon O., assignor to Unger Brothers, Newark, N. J. Handle for nail-files or similar articles | 36,463 | July 28 | 105 | 966 |
| Dickinson, Philemon O., and O. Leigh, Newark, N. J. Back for brushes or similar articles | 36,223 | Feb. 10 | 102 | 1283 |
| Dieter, William, New York, N. Y. Vehicle-body | 36,534 | Sept. 1 | 106 | 255 |
| Doherty, Sabella G., New York, N. Y. Easel | 36,644 | Nov. 24 | 107 | 1086 |
| Dominick & Haff. (See Crowell, Gilbert L., Jr., assignor.) | | | | |
| Douglass, Leon F., Philadelphia, Pa., assignor to Victor Talking Machine Company. Talking-machine cabinet | 36,717 | Dec. 29 | 107 | 2517 |
| Douglass, Leon F., Philadelphia, Pa., assignor to Victor Talking Machine Company. Talking-machine cabinet | 36,718 | Dec. 29 | 107 | 2517 |
| Dow, Jones & Co. (See Codman, William C., assignor.) | | | | |
| Doyle, Bernard W., Leominster, Mass. Pompadour dip-puff comb | 36,670 | Dec. 8 | 107 | 1646 |
| Draper, Carrie M., Newton Highlands, Mass. Sofa-pillow cover | 36,483 | Aug. 4 | 105 | 1252 |
| Drucker and Company, N. (See La Rock, Joseph B., assignor.) | | | | |
| Dunn, Cleveland A., assignor to Graff, Washbourne & Dunn, New York, N. Y. Teething-ring | 36,283 | Apr. 14 | 103 | 1671 |
| Dux, Joseph, assignor to Caxton Company, Chicago, Ill. Desk and seat support or standard | 36,506 | Aug. 18 | 105 | 1768 |
| Early, Joseph N., New York, N. Y. Sign-box | 36,217 | Feb. 3 | 102 | 1042 |
| Earnest, Samuel R., Colorado Springs, Colo. Medal or similar article | 36,211 | Feb. 3 | 102 | 1041 |
| Eastwood and Park. (See Turton, Walter, assignor.) | | | | |
| Eberle, Edward F., Erie, Pa. Panel border for photographs, pictures, and illustrative matter | 36,712 | Dec. 29 | 107 | 2516 |
| Edelmann, Frederick, Weehawken, N. J., assignor to Kursheedt Manufacturing Company, New York, N. Y. Collar | 36,684 | Dec. 22 | 107 | 2222 |
| Edmiston, Hugh C. (See Meakin, Alfred J., assignor.) | | | | |
| Eggington, Walter, Corning, N. Y. Glass vessel | 36,233 | Feb. 24 | 102 | 1768 |
| Ehrenpreis, John, assignor to Brunswick-Balke-Collender Company, Chicago, Ill. Billiard-table | 36,662 | Dec. 1 | 107 | 1365 |
| Ehrenpreis, John, assignor to Brunswick-Balke-Collender Company, Chicago, Ill. Back-bar fixture | 36,675 | Dec. 8 | 107 | 1647 |
| Eldredge, Charles H., assignor to Eldredge & Moss, Chicago, Ill. Finger-ring or similar article | 36,418 | July 14 | 105 | 483 |
| Eldredge & Moss. (See Eldredge, Charles H., assignor.) | | | | |
| Electric and Dental Specialty Company. (See Price, Weston E., assignor.) | | | | |
| Elliott, Euphemia, Detroit, Mich. Wall-vase | 36,630 | Nov. 17 | 107 | 823 |
| Emmons, Charles L., Garwood, N. J. Casing for players for pianos | 36,565 | Sept. 22 | 106 | 987 |
| Emmons, Charles L., Garwood, N. J. Casing for players for pianos | 36,566 | Sept. 22 | 106 | 987 |
| Enterprise Gas Stove Manufacturing Company. (See Ambrose, Edward, assignor.) | | | | |
| Evans, Walker, St. Louis, Mo. Font of type | 36,358 | June 9 | 104 | 1645 |
| Fahys Watch Case Company. (See Ball, Percy B., assignor.) | | | | |
| Fahys Watch Case Company. (See Habensack, Frederick, assignor.) | | | | |
| Farmiloe, Thomas M., London, England. Window-glass | 36,349 | June 2 | 104 | 1383 |
| Farnan, Jules, New York, N. Y. Bottle | 36,395 | June 30 | 104 | 2428 |
| Fay, James, New York, N. Y. Furniture-support | 36,401 | June 30 | 104 | 2429 |
| Fay, James, New York, N. Y. Furniture-support | 36,402 | June 30 | 104 | 2429 |
| Fay, James, New York, N. Y. Furniture-support | 36,403 | June 30 | 104 | 2430 |
| Fondeville, Auguste J., West Hoboken, assignor of one-half to H. Van Iderstine, Newark, N. J. Dish or plate or similar article | 36,243 | Mar. 10 | 103 | 419 |
| Foster, Theodore W., Providence, R. I. Handle for button-hooks or similar articles | 36,488 | Aug. 11 | 105 | 1523 |
| Foster, Theodore W., Providence, R. I. Back for hair-bushes or similar articles | 36,489 | Aug. 11 | 105 | 1523 |
| Foster, Theodore W., Providence, R. I. Cover for puff-boxes or similar articles | 36,491 | Aug. 11 | 105 | 1523 |
| Fox, Ernest G., Cleveland, Ohio. Register-plate | 36,578 | Oct. 6 | 106 | 1490 |
| Freeman, Otis M., Providence, R. I. Watchcase | 36,601 | Oct. 27 | 106 | 2277 |
| Freeman, Otis M., Providence, R. I. Watchcase | 36,602 | Oct. 27 | 106 | 2277 |
| Freund, Zdenko, Newark, N. J., assignor to W. B. Kerr and Company, New York, N. Y. Back for hand-mirrors or similar articles | 36,365 | June 16 | 104 | 1885 |
| Friedlander, William S., Passaic, N. J. Textile fabric | 36,405 | June 30 | 104 | 2430 |
| Furness, Theodore F., Philadelphia, Pa. Tiling | 36,313 | May 5 | 104 | 300 |
| Furness, Theodore F., Philadelphia, Pa. Tiling | 36,343 | June 2 | 104 | 1381 |
| Furness, Theodore F., Philadelphia, Pa. Tiling | 36,344 | June 2 | 104 | 1381 |
| Furness, Theodore F., Philadelphia, Pa. Tiling | 36,345 | June 2 | 104 | 1382 |
| Furness, Theodore F., Philadelphia, Pa. Tiling | 36,346 | June 2 | 104 | 1382 |
| Furness, Theodore F., Philadelphia, Pa. Tiling | 36,347 | June 2 | 104 | 1382 |
| Gaines, Charles, Rock Island, Ill. Show-case | 36,371 | June 16 | 104 | 1886 |
| Garwood, Charles B., Baltimore, Md., assignor to Allan-Pfeiffer Chemical Company, St. Louis, Mo. Bottle | 36,373 | June 23 | 104 | 2141 |
| Gavin, John H., assignor to L. Wolff Manufacturing Company, Chicago, Ill. Shower-bath fixture | 36,719 | Dec. 29 | 107 | 2518 |
| Gay, Edgar A., Rochester, N. Y. Bar-rest for Morris chairs | 36,597 | Oct. 20 | 106 | 2004 |

*Alphabetical list of patentees of designs*—Continued.

| Name, residence, and design. | No. | Date. | Official Gazette. Vol. | Page. |
|---|---|---|---|---|
| Gaylor, Leonard B., Newton Center, Mass. Automobile-body | 36,508 | Aug. 18 | 105 | 1768 |
| George B. Donavin & Company. (See Hunt, Oliver D. and B., assignors.) | | | | |
| George W. Dover Company. (See Keller, Sidney A., assignor.) | | | | |
| Giebel, Harmon, Brooklyn, N. Y. Decorative fabric | 36,513 | Aug. 18 | 105 | 1769 |
| Goetze, Emil, Wallingford, assignor to International Silver Co., Meriden, Conn. Teapot or similar article | 36,394 | June 30 | 104 | 2428 |
| Goetze, Emil, Wallingford, assignor to International Silver Co., Meriden, Conn. Back for mirrors or similar articles | 36,413 | July 7 | 105 | 251 |
| Goetze, Emil H., Wallingford, Conn., assignor to International Silver Company, Jersey City, N. J., and Meriden, Conn. Handle for crumb-scrapers or similar articles | 36,425 | July 14 | 105 | 484 |
| Goetze, Emil H., Wallingford, Conn., assignor to International Silver Company, Jersey City, N. J., and Meriden, Conn. Handle for vessels or similar articles | 36,426 | July 14 | 105 | 485 |
| Goetze, Emil H., Wallingford, Conn., assignor to International Silver Company, Jersey City, N. J., and Meriden, Conn. Border for vessels or similar articles | 36,427 | July 14 | 105 | 485 |
| Goetze, Emil H., Wallingford, Conn., assignor to International Silver Company, Jersey City, N. J., and Meriden, Conn. Foot for vessels, ornaments, or similar articles | 36,428 | July 14 | 105 | 485 |
| Golden, Charles D., Chicago, Ill. Picture-frame | 36,456 | July 21 | 105 | 736 |
| Goodman, Samuel, New Haven, Conn. Badge | 36,469 | Aug. 4 | 105 | 1249 |
| Gordon, Charles B., Newton, assignor to Carter's Ink Company, Boston, Mass. Bottle | 36,480 | Aug. 4 | 105 | 1251 |
| Gorham Manufacturing Company. (See Codman, William C., assignor.) | | | | |
| Gothberg, Ernest, Jersey City, N. J. Chandelier-trimming | 36,374 | June 23 | 104 | 2141 |
| Graf-Webb Iron Manufacturing Company. (See Thiem, Rudolph, assignor.) | | | | |
| Graff, Washbourne & Dunn. (See Dunn, Cleveland A., assignor.) | | | | |
| Greenburg, George G., Chicago, Ill. Badge | 36,341 | June 2 | 104 | 1381 |
| Greenburg, George G., Chicago, Ill. Spoon | 36,342 | June 2 | 104 | 1381 |
| Greenman, Herbert K., Chicago, Ill. Case for hotel-registers | 36,299 | Apr. 28 | 103 | 2161 |
| Gutta Percha and Rubber Manufacturing Company. (See Spadone, Alfred A., assignor.) | | | | |
| Habensack, Frederick, Sag Harbor, N. Y. Handle for spoons or forks | 36,422 | July 14 | 105 | 484 |
| Habensack, Frederick, Sag Harbor, assignor to Fahys Watch Case Company, New York, N. Y. Handle for spoons, forks, or similar articles | 36,708 | Dec. 29 | 107 | 2515 |
| Haberl, Paul A., Denver, Colo. Souvenir-spoon | 36,249 | Mar. 24 | 103 | 878 |
| Haley, Mark A., assignor to Onondaga Pottery Company, Syracuse, N. Y. Cup | 36,550 | Sept. 15 | 106 | 755 |
| Haley, Mark A., assignor to Onondaga Pottery Company, Syracuse, N. Y. Saucer | 36,551 | Sept. 15 | 106 | 755 |
| Haley, Mark A., assignor to Onondaga Pottery Company, Syracuse, N. Y. Plate | 36,552 | Sept. 15 | 106 | 755 |
| Haley, Mark A., assignor to Onondaga Pottery Company, Syracuse, N. Y. Dish | 36,553 | Sept. 15 | 106 | 755 |
| Haley, Mark A., assignor to Onondaga Pottery Company, Syracuse, N. Y. Covered dish | 36,554 | Sept. 15 | 106 | 756 |
| Haley, Mark A., assignor to Onondaga Pottery Company, Syracuse, N. Y. Teapot | 36,555 | Sept. 15 | 106 | 756 |
| Hamilton, Nellie Y., Walworth, N. Y. Sofa-pillow cover | 36,272 | Mar. 31 | 103 | 1155 |
| Harrell, Samuel A., Brussells, Mo. Rein-holder | 36,674 | Dec. 8 | 107 | 1647 |
| Harris, Alice, Kansas City, Kans. Pendent mirror or similar article | 36,557 | Sept. 15 | 106 | 757 |
| Harter, Augustus F., assignor to Cribben & Sexton Company, Chicago, Ill. Cooking-range | 36,310 | May 5 | 104 | 299 |
| Harter, Augustus F., assignor to Cribben & Sexton Company, Chicago, Ill. Cooking-stove | 36,321 | May 12 | 104 | 564 |
| Harter, Augustus F., assignor to Cribben & Sexton Company, Chicago, Ill. Cooking-stove | 36,322 | May 12 | 104 | 564 |
| Harter, Augustus F., assignor to Cribben & Sexton Company, Chicago, Ill. Heating-stove | 36,323 | May 12 | 104 | 565 |
| Haugan, Helge A., Chicago, Ill. Savings-bank | 36,678 | Dec. 15 | 107 | 1963 |
| Haviland, Charles E., Limoges, France. Plate, dish, or similar article | 36,505 | Aug. 18 | 105 | 1768 |
| Heisey, Augustus H., Pittsburg, Pa. Candelabrum | 36,500 | Aug. 18 | 105 | 1767 |
| Henry, William W., New York, N. Y. Tiling | 36,460 | July 21 | 105 | 737 |
| Hillbom, Henrik, assignor to R. Wallace & Sons Mfg. Co., Wallingford, Conn. Metal border | 36,244 | Mar. 10 | 103 | 419 |
| Hillbom, Henrik, assignor to R. Wallace & Sons Mfg. Co., Wallingford, Conn. Handle for spoons, forks, or similar articles | 36,379 | June 30 | 104 | 2426 |
| Hillbom, Henrik, assignor to R. Wallace & Sons Mfg. Co., Wallingford, Conn. Handle for spoons, forks, or similar articles | 36,380 | June 30 | 104 | 2426 |
| Hillbom, Henrik, assignor to R. Wallace & Sons Mfg. Co., Wallingford, Conn. Handle for spoons, forks, or similar articles | 36,381 | June 30 | 104 | 2426 |
| Hillbom, Henrik, assignor to R. Wallace & Sons Mfg. Co., Wallingford, Conn. Handle for spoons, forks, or similar articles | 36,382 | June 30 | 104 | 2426 |
| Hillbom, Henrik, assignor to R. Wallace & Sons Mfg. Co., Wallingford, Conn. Handle for spoons, forks, or similar articles | 36,383 | June 30 | 104 | 2426 |
| Hillbom, Henrik, assignor to R. Wallace & Sons Mfg. Co., Wallingford, Conn. Handle for knives or similar articles | 36,384 | June 30 | 104 | 2426 |
| Hillbom, Henrik, assignor to R. Wallace & Sons Mfg. Co., Wallingford, Conn. Back for brushes, mirrors, or similar articles | 36,447 | July 21 | 105 | 734 |
| Hiller, Louis C., Wallingford, assignor to International Silver Co., Meriden, Conn. Back for brushes, mirrors, or similar articles | 36,490 | Aug. 11 | 105 | 1523 |
| Hinderer, Friedrich, New Orleans, La. Plant or flower box | 36,679 | Dec. 15 | 107 | 1963 |
| Hitzl, Carl, Chicago, Ill. Bottle | 36,431 | July 14 | 105 | 485 |
| Hobson, John H., assignor to H. H. Curtis, North Attleboro, Mass. Handle for spoons, forks, or similar articles | 36,709 | Dec. 29 | 107 | 2516 |
| Hohner, Hans, New York, N. Y. Harmonica | 36,692 | Dec. 22 | 107 | 2223 |
| Homan Silver Plate Company. (See Leavenworth, Seth H., assignor.) | | | | |
| Homer, George E., Boston, Mass. Fob-chain or similar article | 36,623 | Nov. 17 | 107 | 822 |
| Homer Laughlin China Company. (See Mountford, Arthur, assignor.) | | | | |
| Horth, George H., Hudson Heights, N. J. Finger-ring | 36,484 | Aug. 11 | 105 | 1522 |
| Housh Company. (See Housh, Frank E., assignor.) | | | | |
| Housh, Frank E., Winthrop, assignor to Housh Company, Boston, Mass. Photograph-mount | 36,530 | Aug. 25 | 105 | 2048 |
| Howe, Charles H., Leominster, Mass. Hair ornament | 36,628 | Nov. 17 | 107 | 823 |
| Howe, Charles H., Leominster, Mass. Hair ornament | 36,629 | Nov. 17 | 107 | 823 |
| Humphrey, Alfred H., Kalamazoo, Mich. Gas-lamp | 36,332 | May 19 | 104 | 843 |
| Hunt, Bertha. (See Hunt, Oliver D. and B.) | | | | |
| Hunt, Oliver D. and B., assignors to George B. Donavin & Company, Columbus, Ohio. Stove | 36,658 | Dec. 1 | 107 | 1364 |
| Hyde Exploring Expedition. (See Keppler, Joseph, assignor.) | | | | |
| Ihlenburg, Herman, Philadelphia, Pa., assignor to American Type Founder's Company, Newark, N. J. Font of type | 36,406 | June 30 | 104 | 2430 |
| International Silver Co. (See Clulee, John, assignor.) | | | | |
| International Silver Co. (See Goetze, Emil, assignor.) | | | | |
| International Silver Co. (See Hiller, Louis C., assignor.) | | | | |
| International Silver Co. (See Kintz, Robert R., assignor.) | | | | |
| International Silver Co. (See Pretat, Frederick E., assignor.) | | | | |
| International Silver Co. (See Stohr, Samuel, assignor.) | | | | |
| International Silver Company. (See Bächle, Emil, assignor.) | | | | |
| Ipsen, Ludvig S., Malden, Mass., assignor to American Type Founders Company, New York, N. Y. Font of type | 36,366 | June 16 | 104 | 1885 |
| Ipsen, Ludvig S., Malden, Mass., assignor to American Type Founders Company, New York, N. Y. Font of type | 36,367 | June 16 | 104 | 1885 |
| Irvine, John C., San Francisco, Cal. Badge | 36,514 | Aug. 25 | 105 | 2046 |

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| Name, residence, and design. | No. | Date. | Official Gazette. Vol. | Page. |
|---|---|---|---|---|
| J. B. & S. M. Knowles Company. (See Day, Matthew C., assignor.) | | | | |
| J. L. Mott Iron Works. (See Peet, William C., assignor.) | | | | |
| Jackson, Austin F., Taunton, Mass. Teapot | 36,297 | Apr. 28 | 103 | 2160 |
| Jackson, Austin F., Taunton, Mass. Teapot or similar article | 36,537 | Sept. 8 | 106 | 532 |
| Johnson, Robert L., Hanley, England. Cup | 36,330 | May 19 | 104 | 843 |
| Johnson, Robert L., Hanley, England. Covered dish | 36,331 | May 19 | 104 | 843 |
| Kade, Charles F., assignor to M. Winter Lumber Co., Sheboygan, Wis. Ornamental partition | 36,289 | Apr. 14 | 103 | 1672 |
| Kalamazoo Stove Company. (See Cope and Bertram, assignors.) | | | | |
| Keigher, Lizzie M., Newark, N. J. Fancy dress ornament | 36,664 | Dec. 1 | 107 | 1365 |
| Keller, Sidney A., New York, N. Y. Brooch, button, or buckle plate or similar article | 36,650 | Dec. 1 | 107 | 1363 |
| Keller, Sidney A., New York, N. Y., assignor to R. Blackinton & Co., North Attleboro, Mass. Handle for spoons, forks, or similar articles | 36,292 | Apr. 21 | 103 | 1903 |
| Keller, Sidney A., New York, N. Y., assignor to George W. Dover Company. Brooch, button, or buckle-plate or similar article | 36,485 | Aug. 11 | 105 | 1522 |
| Keller, Sidney A., New York, N. Y., assignor to George W. Dover Company. Brooch, button, or buckle plate or similar article | 36,649 | Dec. 1 | 107 | 1363 |
| Keller, Sidney A., New York, N. Y., assignor to George W. Dover Company. Brooch, button, or buckle-plate or similar article | 36,666 | Dec. 8 | 107 | 1646 |
| Keller, Sidney A., New York, N. Y., assignor to H. H. Curtis, North Attleboro, Mass. Handle for spoons, forks, or similar articles | 36,518 | Aug. 25 | 105 | 2047 |
| Kellogg, Hosford D. (See Seeler, Edgar V., assignor.) | | | | |
| Kennedy, Olin W., Muncie, Ind. Display-frame | 36,285 | Apr. 14 | 103 | 1671 |
| Kennedy, Thomas R., and E. J. King, assignors to Cooperative Foundry Company, Rochester, N. Y. Stove | 36,439 | July 14 | 105 | 487 |
| Kennedy, Thomas R., and E. J. King, assignors to Co-Operative Foundry Company, Rochester, N. Y. Stove | 36,596 | Oct. 20 | 106 | 2004 |
| Keppler, Joseph, New York, N. Y., assignor to Hyde Exploring Expedition. Support and back for furniture | 36,235 | Feb. 24 | 102 | 1769 |
| Keppler, Joseph, New York, N. Y., assignor to Hyde Exploring Expedition. Support and leg for furniture | 36,236 | Feb. 24 | 102 | 1769 |
| Keppler, Joseph, New York, N. Y., assignor to Hyde Exploring Expedition. Support and upright for furniture | 36,237 | Feb. 24 | 102 | 1769 |
| Keppler, Joseph, New York, N. Y., assignor to Hyde Exploring Expedition. Pedestal or leg for furniture | 36,238 | Feb. 24 | 102 | 1770 |
| Keppler, Joseph, New York, N. Y., assignor to Hyde Exploring Expedition. Support or bracket for furniture | 36,251 | Mar. 24 | 103 | 878 |
| Keppler, Joseph, New York, N. Y., assignor to Hyde Exploring Expedition. Upright or support for furniture | 36,252 | Mar. 24 | 103 | 879 |
| Keppler, Joseph, New York, N. Y., assignor to Hyde Exploring Expedition. Panel or upright for furniture | 36,253 | Mar. 24 | 103 | 879 |
| Kerr and Company, William B. (See Freund, Zdenko, assignor.) | | | | |
| Kimberling, Alice H., Point Pleasant, W. Va. Toy money-bank case | 36,579 | Oct. 6 | 106 | 1491 |
| King, Edward J. (See Kennedy and King.) | | | | |
| Kingman, Edward B., Leominster, Mass. Comb | 36,682 | Dec. 22 | 107 | 2221 |
| Kingman, Edward B., Leominster, Mass. Comb | 36,683 | Dec. 22 | 107 | 2221 |
| Kintz, Robert R., assignor to International Silver Co., Meriden, Conn. Mount for dishes | 36,492 | Aug. 11 | 105 | 1523 |
| Koch, August W., Cincinnati, Ohio. Tiling | 36,404 | June 30 | 104 | 2430 |
| Kochs, Theodore A., Chicago, Ill. Bottle | 36,455 | July 21 | 105 | 736 |
| Kohr, William H., Salina, Kans. Window-shelf bracket | 36,375 | June 23 | 104 | 2141 |
| Kolb, Gustave F., New York, N. Y. Tray | 36,695 | Dec. 22 | 107 | 2224 |
| Kronman, Edward, New York, N. Y. Coffee-urn hot-water jacket | 36,286 | Apr. 14 | 103 | 1672 |
| Kursheedt Manufacturing Company. (See Edelmann, Frederick, assignor.) | | | | |
| L. Wolff Manufacturing Company. (See Gavin, John H., assignor.) | | | | |
| La Rock, Joseph B., Bellevue, Ky., assignor to N. Drucker and Company, Cincinnati, Ohio. Trunk-pad | 36,300 | Apr. 28 | 103 | 2161 |
| Langslow, Fowler Company. (See Teall, John E., assignor.) | | | | |
| Lawler, James J., Mount Vernon, N. Y. Casing for gas-heaters | 36,698 | Dec. 22 | 107 | 2224 |
| Leavenworth, Seth H., Cincinnati, Ohio. Mounting for dishes or similar articles | 36,454 | July 21 | 105 | 736 |
| Leavenworth, Seth H., assignor to Homan Silver Plate Company, Cincinnati, Ohio. Mounting for metal dishes | 36,280 | Apr. 7 | 103 | 1408 |
| Lee, Fred E., Dowagiac, Mich. Stove ornament | 36,325 | May 12 | 104 | 565 |
| Léger, Armand, Fenton, England. Plate or similar article | 36,363 | June 16 | 104 | 1885 |
| Leigh, Otto. (See Dickinson and Leigh.) | | | | |
| Leigh, Otto, Newark, N. J. Back for brushes or similar articles | 36,372 | June 23 | 104 | 2141 |
| Leigh, Otto, assignor to Unger Brothers, Newark, N. J. Handle for button-hooks or similar articles | 36,221 | Feb. 10 | 102 | 1283 |
| Leigh, Otto, assignor to Unger Brothers, Newark, N. J. Back for brushes or similar articles | 36,222 | Feb. 10 | 102 | 1283 |
| Leigh, Otto, assignor to Unger Brothers, Newark, N. J. Handle for nail-files or similar articles | 36,464 | July 28 | 105 | 966 |
| Leigh, Otto, and P. O. Dickinson, Newark, N. J. Back for brushes, mirrors, or similar articles | 36,390 | June 30 | 104 | 2427 |
| Leigh, Otto, and P. O. Dickinson, Newark, N. J. Back for brushes, mirrors, or similar articles | 36,391 | June 30 | 104 | 2427 |
| Leroy, Isidore, assignor to Société Isidore Leroy et Fils, Paris, France. Wall-paper | 36,720 | Dec. 29 | 107 | 2518 |
| Leroy, Isidore, assignor to Société Isidore Leroy et Fils, Paris, France. Wall-paper | 36,721 | Dec. 29 | 107 | 2518 |
| Leslie, Benjamin P., New York, N. Y., assignor to Naething-Leslie Tiling Company. Tile covering for floors, walls, or other surfaces | 36,370 | June 16 | 104 | 1886 |
| Libbey Glass Company. (See Anderson, William C., assignor.) | | | | |
| Libbey Glass Company. (See Marrett, William, assignor.) | | | | |
| Linotype Company. (See Nadall, Berne, assignor.) | | | | |
| Lloyd, Marshall B., Minneapolis, Minn. Go-cart body | 36,598 | Oct. 20 | 106 | 2005 |
| London, Louis B., New York, N. Y. Gas-lamp body | 36,531 | Sept. 1 | 106 | 254 |
| London, Louis B., New York, N. Y. Gas-lamp body | 36,532 | Sept. 1 | 106 | 254 |
| Louisiana Purchase Exposition Company. (See Berninghaus, Oscar, assignor.) | | | | |
| Louisiana Purchase Exposition Company. (See Stevens, Walter B., assignor.) | | | | |
| Lowe, John E., assignor to J. E. Lowe & Son, Leominster, Mass. Pompadour-puff comb | 36,693 | Dec. 22 | 107 | 2223 |
| Lowe & Son, J. E. (See Lowe, John E., assignor.) | | | | |
| Lyons, Charles D. (See Wendelstein, Carl M., assignor.) | | | | |
| M. S. Benedict Manufacturing Company. (See Stocking, William R., assignor.) | | | | |
| Maddock Pottery Company. (See May, Charles A., assignor.) | | | | |
| Magee Furnace Company. (See Magee, John, assignor.) | | | | |
| Magee, John, Malden, assignor to Magee Furnace Company, Boston, Mass. Stove or range | 36,440 | July 14 | 105 | 487 |
| Magee, John, Malden, assignor to Magee Furnace Company, Boston, Mass. Rim for plates of stoves or similar articles | 36,615 | Nov. 3 | 107 | 259 |
| Malliet, William A., Hackensack, N. J. Medallion | 36,232 | Feb. 24 | 102 | 1768 |
| Malliet, William A., Hackensack, N. J. Medallion | 36,376 | June 30 | 104 | 2426 |
| Malliet, William A., Hackensack, N. J. Medallion | 36,377 | June 30 | 104 | 2426 |
| Malliet, William A., Hackensack, N. J. Medallion | 36,378 | June 30 | 104 | 2426 |
| Malloch, Andrew M. (See Brogan and Malloch.) | | | | |
| Marrett, William, assignor to Libbey Glass Company, Toledo, Ohio. Cut-glass vessel | 36,276 | Apr. 7 | 103 | 1407 |

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| Name, residence, and design. | No. | Date. | Official Gazette. Vol. | Page. |
|---|---|---|---|---|
| Marrett, William, assignor to Libbey Glass Company, Toledo, Ohio. Cut-glass vessel | 36,277 | Apr. 7 | 103 | 1407 |
| Marrett, William, assignor to Libbey Glass Company, Toledo, Ohio. Cut-glass vessel | 36,278 | Apr. 7 | 103 | 1407 |
| Marshall, Anna P., Fitchburg, Mass. Basket | 36,673 | Dec. 8 | 107 | 1647 |
| Mason & Co., W. L. (See Cahalane, Daniel C., assignor.) | | | | |
| May, Charles A., assignor to Maddock Pottery Company, Trenton, N. J. Plate or similar article | 36,193 | Jan. 20 | 102 | 615 |
| May, Charles A., assignor to Maddock Pottery Company, Trenton, N. J. Plate or similar article | 36,353 | June 9 | 104 | 1644 |
| McCleary, Wallin & Crouse. (See Brundage, Egbert T., assignor.) | | | | |
| McGuire, James F., New York, N. Y. Bottle | 36,672 | Dec. 8 | 107 | 1647 |
| Meakin, Alfred J., Stoke-upon-Trent, England, assignor to H. C. Edmiston, New York, N. Y. Plate | 36,466 | July 28 | 105 | 966 |
| Meakin, Alfred J., Stoke-upon-Trent, England, assignor to H. C. Edmiston, New York, N. Y. Covered dish | 36,467 | July 28 | 105 | 966 |
| Melrose, Kenneth, San Francisco, Cal. Badge | 36,495 | Aug. 18 | 105 | 1766 |
| Menges, Edward E., assignor to Seamless Rubber Co., New Haven, Conn. Water-bag | 36,397 | June 30 | 104 | 2428 |
| Mersfelder, William L., Cincinnati, Ohio, assignor to Cribben & Sexton Company, Chicago, Ill. Stove | 36,494 | Aug. 11 | 105 | 1523 |
| Metzeler, Theodore, *et al.* (See Outcault, Richard F., assignor.) | | | | |
| Meyer, Herman L., St. Louis, Mo. Picture-frame | 36,477 | Aug. 4 | 105 | 1251 |
| Miller, August C., Taunton, Mass. Candelabrum | 36,588 | Oct. 13 | 106 | 1768 |
| Miller, August C., assignor to Reed and Barton Corporation, Taunton, Mass. Mounting for silverware | 36,603 | Oct. 27 | 106 | 2277 |
| Miller, John C., Cincinnati, Ohio. Ring | 36,274 | Apr. 7 | 103 | 1407 |
| Miller, John C., Cincinnati, Ohio. Watch-charm | 36,446 | July 21 | 105 | 734 |
| Morton Trust Company, trustee. (See Riker, Andrew L., assignor.) | | | | |
| Mountford, Arthur, assignor to Homer Laughlin China Company, East Liverpool, Ohio. Covered dish or similar article | 36,279 | Apr. 7 | 103 | 1408 |
| Municipal Lighting Company. (See De Freitas, William, assignor.) | | | | |
| Myers, Phineas B., Morristown, N. J. Paper box | 36,396 | June 30 | 104 | 2428 |
| Myers, Phineas B., Morristown, N. J. Paper box | 36,458 | July 21 | 105 | 736 |
| Mygatt, Otis A., New York, N. Y. Reflector for artificial lights | 36,214 | Feb. 3 | 102 | 1041 |
| Mygatt, Otis A., New York, N. Y. Reflector for artificial lights | 36,215 | Feb. 3 | 102 | 1042 |
| Nadall, Berne, Kingston, assignor to Linotype Company, Limited, London, England. Font of printing-type | 36,357 | June 9 | 104 | 1645 |
| Naething-Leslie Tiling Company. (See Leslie, Benjamin P., assignor.) | | | | |
| Nahr, Edwin, New Orleans, La. Smoke-ring maker | 36,526 | Aug. 25 | 105 | 2048 |
| Navarro, Jacinto M., New York, N. Y. Name-plate for coffee-mills | 36,710 | Dec. 29 | 107 | 2516 |
| Nostitz, Hans P. von, New York, N. Y. Braid | 36,188 | Jan. 6 | 102 | 221 |
| Nostitz, Hans P. von, New York, N. Y. Braid | 36,189 | Jan. 6 | 102 | 221 |
| Novelty Manufacturing Company. (See Boeck, Charles H., assignor.) | | | | |
| O'Brien, Walter A., assignor to Sterling Knit Goods Company, Boston, Mass. Fabric | 36,209 | Jan. 27 | 102 | 811 |
| O'Brien, Walter A., assignor to Sterling Knit Goods Company, Boston, Mass. Fabric | 36,210 | Jan. 27 | 102 | 811 |
| O'Callahan, John, Philadelphia, Pa. Badge | 36,417 | July 14 | 105 | 483 |
| Oldenbusch, Ernest, Brooklyn, N. Y. Frame for pictures, mirrors, or similar articles | 36,691 | Dec. 22 | 107 | 2223 |
| Oliver Brothers Company. (See Woodruff, Frank G., assignor.) | | | | |
| Onondaga Pottery Company. (See Haley, Mark A., assignor.) | | | | |
| Orcutt, Charles D., Dayton, Ohio. Stool | 36,263 | Mar. 31 | 103 | 1154 |
| Orcutt, Charles D., Dayton, Ohio. Stool | 36,264 | Mar. 31 | 103 | 1154 |
| Orcutt, Charles D., Dayton, Ohio. Stool | 36,265 | Mar. 31 | 103 | 1154 |
| Orcutt, Charles D., Dayton, Ohio. Stool | 36,266 | Mar. 31 | 103 | 1154 |
| Orcutt, Charles D., Dayton, Ohio. Stool-leg | 36,281 | Apr. 7 | 103 | 1408 |
| Orcutt, Charles D., Dayton, Ohio. Stool-leg | 36,288 | Apr. 14 | 103 | 1672 |
| Outcault, Richard F., New York, assignor to T. Metzeler and F. L. Denivelle, Brooklyn, N. Y. Statuette | 36,302 | May 5 | 104 | 298 |
| Oxley Enos Company. (See Watkins, Howard E., assignor.) | | | | |
| Palmer, Isaac E., Middletown, Conn. Hammock-body | 36,468 | July 28 | 105 | 967 |
| Palmer, Isaac E., Middletown, Conn. Hammock-body | 36,616 | Nov. 3 | 107 | 259 |
| Palmer, Isaac E., Middletown, Conn. Fabric for hammocks | 36,617 | Nov. 3 | 107 | 259 |
| Palmer, Isaac E., Middletown, Conn. Fabric for hammocks | 36,618 | Nov. 3 | 107 | 259 |
| Peet, William C., assignor to J. L. Mott Iron Works, New York, N. Y. Lavatory | 36,594 | Oct. 20 | 106 | 2004 |
| Peet, William C., assignor to J. L. Mott Iron Works, New York, N. Y. Lavatory | 36,595 | Oct. 20 | 106 | 2004 |
| Penfold, Charles C., Buffalo, N. Y. Badge | 36,410 | July 7 | 105 | 251 |
| Pepper, De Watt, New Milford, Conn. Divan-frame | 36,199 | Jan. 27 | 102 | 809 |
| Pepper, De Watt, New Milford, Conn. Divan-frame | 36,200 | Jan. 27 | 102 | 810 |
| Pepper, De Watt, New Milford, Conn. Divan-frame | 36,201 | Jan. 27 | 102 | 810 |
| Pepper, De Watt, New Milford, Conn. Divan-frame | 36,202 | Jan. 27 | 102 | 810 |
| Pepper, De Watt, New Milford, Conn. Divan-frame | 36,203 | Jan. 27 | 102 | 810 |
| Pepper, De Watt, New Milford, Conn. Divan-frame | 36,204 | Jan. 27 | 102 | 810 |
| Pepper, De Watt, New Milford, Conn. Divan-frame | 36,205 | Jan. 27 | 102 | 810 |
| Pepper, De Watt, New Milford, Conn. Couch-frame | 36,206 | Jan. 27 | 102 | 810 |
| Pepper, De Watt, New Milford, Conn. Couch-frame | 36,207 | Jan. 27 | 102 | 810 |
| Pepper, De Watt, New Milford, Conn. Couch-frame | 36,208 | Jan. 27 | 102 | 811 |
| Pepper, De Watt, New Milford, Conn. Divan-frame | 36,328 | May 12 | 104 | 566 |
| Piepenbring, Edward, Washington, D. C. Coffee-pot or similar article | 36,429 | July 14 | 105 | 486 |
| Poesche, Hermann, Cleveland, Ohio. Metal stand for adding-machines | 36,437 | July 14 | 105 | 485 |
| Prahar, Lester L., New York, N. Y. Belt-buckle | 36,486 | Aug. 11 | 105 | 1522 |
| Prahar, Lester L., New York, N. Y. Belt-buckle | 36,487 | Aug. 11 | 105 | 1523 |
| Pretat, Frederick E., Waterbury, assignor to International Silver Co., Meriden, Conn. Handle for spoons, forks, or similar articles | 36,389 | June 30 | 104 | 2427 |
| Price, Weston A., assignor to Electric and Dental Specialty Company, Cleveland, Ohio. Ammeter-cover | 36,398 | June 30 | 104 | 2429 |
| Price, Weston A., assignor to Electric and Dental Specialty Company, Cleveland, Ohio. Rheostat or controller cover | 36,399 | June 30 | 104 | 2429 |
| Priore, Michael G., Yonkers, N. Y. Bracket | 36,246 | Mar. 17 | 103 | 651 |
| Promnitz, Herman E., Dayton, Ky. Badge | 36,408 | July 7 | 105 | 251 |
| Promnitz, Herman E., Dayton, Ky. Badge | 36,409 | July 7 | 105 | 251 |
| Pryor, Thomas F., Jr., Newark, N. J. Back for mirrors or similar articles | 36,424 | July 14 | 105 | 484 |
| R. Wallace & Sons Mfg. Co. (See Hillbom, Henrik, assignor.) | | | | |
| Reade, John A., Jr., and C. F. Birtman, Chicago, Ill. Cabinet-stand for electric motors | 36,608 | Oct. 27 | 106 | 2278 |
| Reed and Barton Corporation. (See Miller, August C., assignor.) | | | | |
| Reed and Barton Corporation. (See Wilkes, Samuel G., assignor.) | | | | |
| Rhoads, William M., Denver, Colo. Book-cover | 36,192 | Jan. 20 | 102 | 615 |
| Richards, Lewis F., assignor to T. C. Wheaton Company, Millville, N. J. Bottle | 36,479 | Aug. 4 | 105 | 1251 |
| Riker, Andrew L., Shorthills, N. J., assignor, by mesne assignments, to Morton Trust Company, trustee. Vehicle-body | 36,225 | Feb. 10 | 102 | 1283 |
| Risley, Arthur B., Hoboken, N. J. Match-scraper | 36,309 | May 5 | 104 | 299 |
| Ritz, August N., Milwaukee, Wis. Bottle | 36,656 | Dec. 1 | 107 | 1364 |

*Alphabetical list of patentees of designs*—Continued.

| Name, residence, and design. | No. | Date. | Official Gazette. Vol. | Page. |
|---|---|---|---|---|
| Ross, Edwin, assignor to Armour & Company, Chicago, Ill. Cake of soap | 36,287 | Apr. 14 | 103 | 1672 |
| Roth, Henry G., Minneapolis, Minn. Display-fixture for stores | 36,267 | Mar. 31 | 103 | 1155 |
| Roth, Henry G., Minneapolis, Minn. Display-fixture for stores | 36,268 | Mar. 31 | 103 | 1155 |
| Roth, Henry G., Minneapolis, Minn. Display-fixture for stores | 36,269 | Mar. 31 | 103 | 1155 |
| Roth, Henry G., Minneapolis, Minn. Display-fixture for stores | 36,270 | Mar. 31 | 103 | 1155 |
| Roth, Henry G., Minneapolis, Minn. Display-fixture for stores | 36,271 | Mar. 31 | 103 | 1155 |
| Roth, Henry G., Minneapolis, Minn. Display-fixture for stores | 36,631 | Nov. 17 | 107 | 823 |
| Roth, Henry G., Minneapolis, Minn. Display-fixture for stores | 36,632 | Nov. 17 | 107 | 823 |
| Roth, Henry G., Minneapolis, Minn. Display-fixture for stores | 36,633 | Nov. 17 | 107 | 824 |
| Roth, Henry G., Minneapolis, Minn. Display-fixture for stores | 36,634 | Nov. 17 | 107 | 824 |
| Rueckert, Ernest F., assignor to B. K. Smith and Co., Providence, R. I. Brooch-plate or similar article | 36,648 | Dec. 1 | 107 | 1363 |
| Ruppel, Charles, Philadelphia, Pa., assignor to Victor Talking Machine Company. Cabinet | 36,195 | Jan. 20 | 102 | 615 |
| S. Hirsch & Company. (See Schilling, Frank, assignor.) | | | | |
| Saart, William H., Attleboro, Mass., assignor to Bristol Manufacturing Company. Handle for nail-cleaners or similar articles | 36,423 | July 14 | 105 | 484 |
| Sackman, Charles, Brooklyn, N. Y. Textile fabric | 36,329 | May 12 | 104 | 566 |
| Sargent and Company. (See Stevens, William E., assignor.) | | | | |
| Schafer, Adam J., Utica, N. Y. Grave-marker | 36,416 | July 7 | 105 | 252 |
| Schilling, Frank, Cincinnati, Ohio, assignor to S. Hirsch & Company, Kansas City, Mo. Bottle | 36,226 | Feb. 10 | 102 | 1284 |
| Schilling, Frank, Cincinnati, Ohio, assignor to S. Hirsch & Company, Kansas City, Mo. Bottle | 36,227 | Feb. 10 | 102 | 1284 |
| Schmalz, Frederick L., St. Paul, Minn. Watch-charm or similar article | 36,497 | Aug. 18 | 105 | 1766 |
| Schmidt, Fritz, New York, N. Y. Glove | 36,665 | Dec. 1 | 107 | 1365 |
| Schmidt, Fritz, New York, N. Y. Glove | 36,685 | Dec. 22 | 107 | 2222 |
| Schmidt, Fritz, New York, N. Y. Glove | 36,722 | Dec. 29 | 107 | 2518 |
| Schultze, Carl E., New York, N. Y. Doll | 36,564 | Sept. 22 | 106 | 987 |
| Schwarcz, Charles, New York, N. Y., assignor to Castle Braid Company. Braid | 36,509 | Aug. 18 | 105 | 1768 |
| Seamless Rubber Co. (See Menges, Edward E., assignor.) | | | | |
| Seeler, Edgar V., assignor to H. D. Kellogg, Philadelphia, Pa. Radiator | 36,507 | Aug. 18 | 105 | 1768 |
| Shepard, Chester B., Melrose, Mass. Spoon or similar article | 36,567 | Sept. 22 | 106 | 987 |
| Sierer, Joseph K., New York, N. Y. Tile covering for floors, walls, or other surfaces | 36,234 | Feb. 24 | 102 | 1769 |
| Sierer, Joseph K., New York, N. Y. Tile covering for floors, walls, or other surfaces | 36,247 | Mar. 17 | 103 | 651 |
| Silver & Company. (See Silver, William H., assignor.) | | | | |
| Silver, William H., assignor to Silver & Company, New York, N. Y. Oil-stove-burner drum | 36,441 | July 14 | 105 | 487 |
| Silver, William H., New York, assignor to Silver & Company, Brooklyn, N. Y. Top plate and rim for oil-stoves | 36,442 | July 14 | 105 | 487 |
| Silvers, Lewis L., Barberton, Ohio. Tile flooring | 36,676 | Dec. 8 | 107 | 1648 |
| Simmer, Nicholas, Grand Forks, N. Dak. Standard for hat-holders | 36,333 | May 19 | 104 | 843 |
| Simons Brothers & Company. (See Weihman, Henry A., assignor.) | | | | |
| Singer Manufacturing Company. (See Whyte, Robert, assignor.) | | | | |
| Skall, Max A., New York, N. Y. Whisk-broom holder | 36,430 | July 14 | 105 | 485 |
| Smith and Co., B. K. (See Rueckert, Ernest F., assignor.) | | | | |
| Smith, Frank W. (See Chéron, Pierre J., assignor.) | | | | |
| Société Isidore Leroy et Fils. (See Leroy, Isidore, assignor.) | | | | |
| Spadone, Alfred A., assignor to Gutta Percha and Rubber Manufacturing Company, New York, N. Y. Tiling | 36,482 | Aug. 4 | 105 | 1252 |
| Speirs, Albert S., New York, N. Y. Indian peace-pipe | 36,669 | Dec. 8 | 107 | 1646 |
| Spicer, William A., assignor to Barstow Stove Company, Providence, R. I. Connected bracket and high shelf for stove-ranges | 36,415 | July 7 | 105 | 252 |
| Steinau, Jacob A., Louisville, Ky. Table-cloth | 36,512 | Aug. 18 | 105 | 1769 |
| Sterling Knit Goods Company. (See O'Brien, Walter A., assignor.) | | | | |
| Stevens, Walter B., St. Louis, Mo., assignor to Louisiana Purchase Exposition Company. Flag or banner | 36,273 | Apr. 7 | 103 | 1407 |
| Stevens, William E., assignor to Sargent and Company, New Haven, Conn. Coffin-trimming | 36,219 | Feb. 3 | 102 | 1042 |
| Stock, Robert, Bridgeport, Conn. Table-mat | 36,350 | June 2 | 104 | 1383 |
| Stocking, William R., Glastonbury, Conn., assignor to M. S. Benedict Manufacturing Company, East Syracuse, N. Y. Handle for spoons, forks, or similar articles | 36,498 | Aug. 18 | 105 | 1766 |
| Stohr, Samuel, assignor to International Silver Co., Meriden, Conn. Metal dish | 36,354 | June 9 | 104 | 1644 |
| Stohr, Samuel, assignor to International Silver Co., Meriden, Conn. Metal border for vessels or similar articles | 36,364 | June 16 | 104 | 1885 |
| Story, Robert K., Brooklyn, N. Y. Radiator-section | 36,400 | June 30 | 104 | 2429 |
| Straker, Joseph E., Jr., Attleboro, Mass. Handle for spoons or similar articles | 36,419 | July 14 | 105 | 483 |
| Straker, Joseph E., Jr., Attleboro, Mass., assignor to Watson and Newell Company. Handle for spoons or similar articles | 36,362 | June 16 | 104 | 1884 |
| Straker, Joseph E., Jr., Attleboro, Mass., assignor to Watson and Newell Company. Handle for spoons or similar articles | 36,388 | June 30 | 104 | 2427 |
| Straker, Joseph E., Jr., Attleboro, Mass., assignor to Watson and Newell Company. Handle for spoons or similar articles | 36,472 | Aug. 4 | 105 | 1250 |
| Straker, Joseph E., Jr., Attleboro, Mass., assignor to Watson and Newell Company. Handle for spoons or similar articles | 36,517 | Aug. 25 | 105 | 2046 |
| Straker, Joseph E., Jr., assignor to Watson & Newell Company, Attleboro, Mass. Handle for spoons, forks, or similar articles | 36,561 | Sept. 22 | 106 | 986 |
| Straker, Joseph E., Jr., Attleboro, Mass., assignor to Watson and Newell Company. Handle for spoons, forks, or similar articles | 36,688 | Dec. 22 | 107 | 2222 |
| Straker, Joseph E., Jr., Attleboro, Mass., assignor to Watson and Newell Company. Medallion or similar article | 36,689 | Dec. 22 | 107 | 2222 |
| Swift, John P., Pawtucket, R. I. Braid | 36,609 | Oct. 27 | 106 | 2278 |
| T. C. Wheaton Company. (See Richards, Lewis F., assignor.) | | | | |
| Teall, John E., assignor to Langslow, Fowler Company, Rochester, N. Y. Chair | 36,663 | Dec. 1 | 107 | 1365 |
| Thiem, Rudolph, Hamilton, Ohio, assignor to Graf-Webb Iron Manufacturing Company, Louisville, Ky. Cooking stove or range | 36,301 | Apr. 28 | 103 | 2161 |
| Thiesen, George C., Jersey City, N. J. Salad-dish | 36,258 | Mar. 31 | 103 | 1153 |
| Thiesen, George C., Jersey City, N. J. Dish | 36,259 | Mar. 31 | 103 | 1153 |
| Thiesen, George C., Jersey City, N. J. Plate or similar article | 36,260 | Mar. 31 | 103 | 1153 |
| Thornton, John L., Providence, R. I. Emblematic button | 36,611 | Nov. 3 | 107 | 258 |
| Thornton, John L., Providence, R. I. Emblematic button | 36,612 | Nov. 3 | 107 | 258 |
| Tolkowsky, Abram, M., and I., Antwerp, Belgium. Cut stone | 36,340 | June 2 | 104 | 1381 |
| Tolkowsky, Abram, M., and I., Antwerp, Belgium. Cut stone | 36,600 | Oct. 27 | 106 | 2277 |
| Tolkowsky, Isidore. (See Tolkowsky, Abram, M., and I.) | | | | |
| Tolkowsky, Maurice. (See Tolkowsky, Abram, M., and I.) | | | | |
| Torrance, Francis J., Allegheny, and J. F. Whitehead, New Brighton, Pa. Lavatory | 36,647 | Nov. 24 | 107 | 1086 |
| Totten, Charles A. L., Milford, Conn. Button or similar article | 36,255 | Mar. 31 | 103 | 1153 |
| Towne, Henry R., New York, N. Y., assignor to Yale & Towne Manufacturing Company, Stamford, Conn. Ash-receiver | 36,414 | July 7 | 105 | 252 |
| Turton, Walter, Arlington, N. J., assignor to Eastwood and Park. Back for mirrors, brushes, or similar articles | 36,627 | Nov. 17 | 107 | 823 |

*Alphabetical list of patentees of designs*—Continued.

| Name, residence, and design. | No. | Date. | Official Gazette. Vol. | Page. |
|---|---|---|---|---|
| Twiss, Fred E., Lawrence, Mass. Monument | 36,239 | Feb. 24 | 102 | 1770 |
| Ullman, George H., New York, N. Y. Chandelier | 36,326 | May 12 | 104 | 566 |
| Ullman, George H., New York, N. Y. Chandelier | 36,327 | May 12 | 104 | 566 |
| Unger Brothers. (See Dickinson, Philemon O., assignor.) | | | | |
| Unger Brothers. (See Leigh, Otto, assignor.) | | | | |
| Van Gelder, Martinus, Philadelphia, Pa. Cup | 36,711 | Dec. 29 | 107 | 2516 |
| Van Iderstine, Harry. (See Fondeville, Auguste J., assignor.) | | | | |
| Vanderbilt, Jeremiah, New York, assignor to Will & Baumer Company, Syracuse, N. Y. Lamp-shade | 36,713 | Dec. 29 | 107 | 2516 |
| Victor Talking Machine Company. (See Douglass, Leon F., assignor.) | | | | |
| Victor Talking Machine Company. (See Ruppel, Charles, assignor.) | | | | |
| Waggoner, Edward P., Syracuse, N. Y., assignor to A. A. Griffing Iron Company, Jersey City, N. J. Radiator | 36,589 | Oct. 13 | 106 | 1768 |
| Wagner, Dwight H., assignor to Wheeling Corrugating Company, Wheeling, W. Va. Center plate for ceilings | 36,699 | Dec. 22 | 107 | 2224 |
| Wagner, Dwight H., assignor to Wheeling Corrugating Company, Wheeling, W. Va. Corner-plate for ceilings | 36,700 | Dec. 22 | 107 | 2225 |
| Wagner, Dwight H., assignor to Wheeling Corrugating Company, Wheeling, W. Va. Border-plate for ceilings | 36,701 | Dec. 22 | 107 | 2225 |
| Wagner, Dwight H., assignor to Wheeling Corrugating Company, Wheeling, W. Va. Sheet-metal border-plate for ceilings | 36,702 | Dec. 22 | 107 | 2225 |
| Wagner, Dwight H., assignor to Wheeling Corrugating Company, Wheeling, W. Va. Sheet-metal field-plate for ceilings and molding therefor | 36,703 | Dec. 22 | 107 | 2225 |
| Wagner, Dwight H., assignor to Wheeling Corrugating Company, Wheeling, W. Va. Sheet-metal wall-plate | 36,704 | Dec. 22 | 107 | 2225 |
| Ward, Benjamin M., Mattoon, Ill. Match-safe | 36,478 | Aug. 4 | 105 | 1251 |
| Warner Silver Manufacturing Company. (See Benziger, Rufus, assignor.) | | | | |
| Watkins, Howard E., assignor to Oxley Enos Company, New York, N. Y. Chandelier | 36,194 | Jan. 20 | 102 | 615 |
| Watkins, Howard E., assignor to Oxley Enos Company, New York, N. Y. Shell for lighting-fixtures | 36,501 | Aug. 18 | 105 | 1767 |
| Watkins, Howard E., assignor to Oxley Enos Company, New York, N. Y. Shell for lighting-fixtures | 36,502 | Aug. 18 | 105 | 1767 |
| Watkins, Howard E., assignor to Oxley Enos Company, New York, N. Y. Shell for lighting-fixtures | 36,503 | Aug. 18 | 105 | 1767 |
| Watkins, Howard E., assignor to Oxley Enos Company, New York, N. Y. Shell for lighting-fixtures | 36,504 | Aug. 18 | 105 | 1768 |
| Watson and Newell Company. (See Crees and Court, assignors.) | | | | |
| Watson and Newell Company. (See Straker, Joseph E., Jr., assignor.) | | | | |
| Weber, Aaron M., New York, N. Y. Collar | 36,677 | Dec. 15 | 107 | 1963 |
| Weber, Henry, New York, N. Y. Spout for silverware or similar articles | 36,519 | Aug. 25 | 105 | 2047 |
| Weber, Henry, New York, N. Y. Handle for silverware or similar articles | 36,520 | Aug. 25 | 105 | 2047 |
| Weber, Henry, New York, N. Y. Handle for silverware or similar articles | 36,521 | Aug. 25 | 105 | 2047 |
| Weber, Henry, New York, N. Y. Trimming for silverware or similar articles | 36,522 | Aug. 25 | 105 | 2047 |
| Weber, Henry, New York, N. Y. Trimming for silfierware or similar articles | 36,523 | Aug. 25 | 105 | 2047 |
| Weber, Henry, New York, N. Y. Spout for silverware or similar articles | 36,651 | Dec. 1 | 107 | 1363 |
| Weber, Henry, New York, N. Y. Handle for silverware or similar articles | 36,652 | Dec. 1 | 107 | 1363 |
| Weber, Henry, New York, N. Y. Handle for silverware or similar articles | 36,653 | Dec. 1 | 107 | 1364 |
| Weber, Henry, New York, N. Y. Tip for silverware or similar articles | 36,654 | Dec. 1 | 107 | 1364 |
| Weber, Henry, New York, N. Y. Lip for silverware or similar articles | 36,655 | Dec. 1 | 107 | 1364 |
| Weihman, Henry A., assignor to Simons Brothers & Company, Philadelphia, Pa. Back for brushes or similar articles | 36,473 | Aug. 4 | 105 | 1250 |
| Weihman, Henry A., assignor to Simons Brothers & Company, Philadelphia, Pa. Back for brushes or similar articles | 36,474 | Aug. 4 | 105 | 1250 |
| Welch, Frank M., New York, N. Y., assignor to Alling & Company, Newark, N. J. Brooch or similar article | 36,582 | Oct. 13 | 106 | 1767 |
| Welles, Richard H., assignor to Badger Brass Manufacturing Company, Kenosha, Wis. Lamp-body | 36,671 | Dec. 8 | 107 | 1647 |
| Wendelstein, Carl M., assignor to C. D. Lyons, Attleboro, Mass. Brooch, button, or buckle plate or like article of manufacture | 36,568 | Oct. 6 | 106 | 1489 |
| West, George R., Wilkinsburg, Pa. Plate | 36,538 | Sept. 8 | 106 | 593 |
| Wheeling Corrugating Company. (See Wagner, Dwight H., assignor.) | | | | |
| Whelan, Edward T., Jersey City, N. J. Grave-mark | 36,560 | Sept. 15 | 106 | 757 |
| White, Frank D., Akron, Ohio. Floor or wall covering | 36,559 | Sept. 15 | 106 | 757 |
| Whitehead, John F. (See Torrance and Whitehead.) | | | | |
| Whittall, Matthew J. (See Brown, Louis H., assignor.) | | | | |
| Whyte, Robert, Glasgow, Scotland, assignor to Singer Manufacturing Company. Decalcomania transfer-sheet | 36,282 | Apr. 7 | 103 | 1408 |
| Wiesenfeld, Robert S., Baltimore, Md. Advertising-clock case | 36,319 | May 12 | 104 | 564 |
| Wilder, William H., Gardner, Mass. Oil-stove | 36,216 | Feb. 3 | 102 | 1042 |
| Wilkes, Samuel G., assignor to Reed and Barton Corporation, Taunton, Mass. Handle for cups or other receptacles or vessels | 36,605 | Oct. 27 | 106 | 2278 |
| Will & Baumer Company. (See Avery, Helen F., assignor.) | | | | |
| Will & Baumer Company. (See Vanderbilt, Jeremiah, assignor.) | | | | |
| Willard, Henry G., Chicago, Ill. Electric-light fixture | 36,592 | Oct. 20 | 106 | 2004 |
| Willard, Henry G., Chicago, Ill. Electric-light fixture | 36,593 | Oct. 20 | 106 | 2004 |
| William M. Crane Company. (See Crane, William M., assignor.) | | | | |
| Williams, Manuel F. (See Catlow, Joseph, assignor.) | | | | |
| Wilson, Joseph, Montrose, Pa. Cut-glass vessel | 36,696 | Dec. 22 | 107 | 2224 |
| Winter Lumber Co., M. (See Kade, Charles F., assignor.) | | | | |
| Wittstein, Charles T., Chicago, Ill. Finger-ring | 36,619 | Nov. 10 | 107 | 531 |
| Wittstein, Charles T., Chicago, Ill. Gem-setting | 36,622 | Nov. 17 | 107 | 822 |
| Wood, James W., Poughkeepsie, N. Y. Bottle | 36,573 | Oct. 6 | 106 | 1490 |
| Woodruff, Frank G., assignor to Oliver Brothers Company, Lockport, N. Y. Bedstead end frame | 36,606 | Oct. 27 | 106 | 2278 |
| Woods, William W., Springfield, Mo. Stove | 36,697 | Dec. 22 | 107 | 2224 |
| Woodward, Thomas J., Birmingham, assignor to Chance Brothers and Co., Limited, West Smethwick, near Birmingham, England. Plate-glass | 36,635 | Nov. 17 | 107 | 824 |
| Woodward, Thomas J., Birmingham, assignor to Chance Brothers and Co., Limited, West Smethwick, near Birmingham, England. Plate-glass | 36,636 | Nov. 17 | 107 | 824 |
| Woodward, Tom, Birmingham, assignor to Chance Brothers and Co., Limited, West Smethwick, near Birmingham, England. Facing-tile | 36,646 | Nov. 24 | 107 | 1086 |
| Woolley, Clarence M., Chicago, Ill., assignor to American Radiator Company. Radiator | 36,607 | Oct. 27 | 106 | 2278 |
| Wotherspoon, James R., Philadelphia, Pa. Radiator | 36,355 | June 9 | 104 | 1644 |
| Wunschow, Daisy M., Santa Cruz, Cal. Pipe-rack | 36,527 | Aug. 25 | 105 | 2048 |
| Wunschow, Daisy M., Santa Cruz, Cal. Holder for smokers' articles | 36,528 | Aug. 25 | 105 | 2048 |
| Yale & Towne Manufacturing Company. (See Towne, Henry R., assignor.) | | | | |
| Zipp, John, Chattanooga, Tenn. Washbasin | 36,574 | Oct. 6 | 106 | 1490 |
| Zipp, John, Chattanoona, Tenn. Washbasin | 36,575 | Oct. 6 | 106 | 1490 |
| Zipp, John, Chattanooga, Tenn. Washbasin | 36,576 | Oct. 6 | 106 | 1490 |
| Zipp, John, Chattanooga, Tenn. Washbasin | 36,577 | Oct. 6 | 106 | 1490 |

# ALPHABETICAL LIST OF TRADE-MARKS.

| Name, residence, and title. | No. | Date. | Official Gazette. Volume. | Page. |
|---|---|---|---|---|
| A. Baldwin & Co., Ltd., New Orleans, La. Cook-stoves, heating-stoves, ranges, and furnaces | 39,670 | Jan. 20 | 102 | 618 |
| A. Steinhardt & Bro., New York, N. Y. Elastic bands, elastic braids, and elastic webbing | 41,737 | Dec. 29 | 107 | 2519 |
| A. B. Dick Company, Chicago, Ill. Duplicating-machines and parts thereof | 41,536 | Nov. 24 | 107 | 1090 |
| A. B. Dick Company, Chicago, Ill. Stencil-paper | 41,661 | Dec. 15 | 107 | 1965 |
| A. B. Dick Company, Chicago, Ill. Duplicating-ink | 41,662 | Dec. 15 | 107 | 1965 |
| A. C. Lawrence Leather Co., Boston, Mass. Leather | 41,140 | Sept. 22 | 106 | 989 |
| A. C. Lawrence Leather Co., Boston, Mass. Leather. | 41,141 | Sept. 22 | 106 | 989 |
| A. & F. Pears, Limd., London, England. Preparations for the complexion | 40,589 | June 16 | 104 | 1888 |
| A. H. Andrews Company, Chicago, Ill. Liquid and paste composition for certain named purposes | 41,525 | Nov. 24 | 107 | 1089 |
| Abdulla & Co., Ld., London, England. Cigarettes | 41,614 | Dec. 8 | 107 | 1652 |
| Abegg & Rusch, New York, N. Y. Satin-back velvet ribbons | 40,380 | May 19 | 104 | 844 |
| Abendroth Bros., Portchester and New York, N. Y. Hot-water and steam heaters | 39,828 | Feb. 17 | 102 | 1548 |
| Abendroth Bros., Portchester and New York, N. Y. Soil-pipes and fittings for same | 41,165 | Sept. 22 | 106 | 992 |
| Acheson Company, Niagara Falls, N. Y. Earthenware, pottery, and ceramic articles | 39,882 | Mar. 3 | 103 | 219 |
| Acheson Company, Niagara Falls, N. Y. Refractory materials and articles made thereof | 39,887 | Mar. 3 | 103 | 219 |
| Acker, Merrall & Condit Co., New York, N. Y. Certain named canned goods | 40,388 | May 19 | 104 | 845 |
| Acker, Merrall & Condit Co., New York, N. Y. Preserved fruits | 40,389 | May 19 | 104 | 845 |
| Acker, Merrall & Condit Co., New York, N. Y. Hominy | 41,230 | Oct. 6 | 106 | 1494 |
| Actien-Gesellschaft für Anilin-Fabrikation, Berlin, Germany. Photographic developers | 41,254 | Oct. 6 | 106 | 1497 |
| Adair Manufacturing Company, Waco, Tex. Toilet cream | 41,041 | Sept. 1 | 106 | 258 |
| Adams, Joel U., Cincinnati, Ohio. Trusses | 41,200 | Sept. 29 | 106 | 1233 |
| Adams, Joel U., Cincinnati, Ohio. Suspensories | 41,789 | Dec. 29 | 107 | 2524 |
| Adolph Frankau & Compy., Ld., London, England. Pipes and cigar and cigarette tubes | 40,135 | Apr. 21 | 103 | 1905 |
| Advance Fence Co., Peoria, Ill. Wire fence | 41,541 | Nov. 24 | 107 | 1090 |
| Aeolian Company, New York, N. Y. Mechanical piano-players | 41,010 | Aug. 25 | 105 | 2053 |
| Aeolian Company, New York, N. Y. Mechanical piano-players | 41,011 | Aug. 25 | 105 | 2053 |
| Aiken, Lambert & Co., New York, N. Y. Fountain-pens | 41,433 | Nov. 10 | 107 | 532 |
| Ainsley Packing Co., J. C., Campbell, Cal. Canned fruits and vegetables | 40,391 | May 19 | 104 | 845 |
| Ainsley Packing Co., J. C., Campbell, Cal. Canned fruits and vegetables | 40,392 | May 19 | 104 | 845 |
| Akerman & Tuffley, North San Diego, Cal. Olive-oil | 41,183 | Sept. 29 | 106 | 1231 |
| Aktienbrauerei Zum Löwenbräu, Munich, Germany. Yeast | 39,736 | Feb. 3 | 102 | 1045 |
| Aktienbrauerei Zum Löwenbräu, Munich, Germany. Yeast | 39,737 | Feb. 3 | 102 | 1045 |
| Aktieselskabet Aluminia, Copenhagen, Denmark. Delftware and chinaware | 40,572 | June 9 | 104 | 1651 |
| Alden Chemical Company, New York, N. Y. Certain named medical compounds | 41,704 | Dec. 22 | 107 | 2228 |
| Alden, Walker and Wilde, Middleboro, Mass. Leather boots and shoes | 41,593 | Dec. 8 | 107 | 1649 |
| Alden, Walker and Wilde, Middleboro, Mass. Leather boots and shoes | 41,594 | Dec. 8 | 107 | 1649 |
| Aldine Grate & Mantle Co., Grand Rapids, Mich. Fireplace-grates | 41,679 | Dec. 15 | 107 | 1969 |
| Alexander, Peter J., St. Paul, Minn. Candy | 40,382 | May 19 | 104 | 844 |
| Alfalfa Remedy Co., Chicago, Ill. Tonic | 40,351 | May 12 | 104 | 572 |
| Alfred Bishop, Limited, London, England. Effervescent chemical substance | 39,766 | Feb. 10 | 102 | 1286 |
| Alfred Bishop, Limited, London, England. Effervescent chemical substance | 39,767 | Feb. 10 | 102 | 1286 |
| Allen Manufacturing Co., Toledo, Ohio. Fountain bath-brushes | 40,880 | Aug. 4 | 105 | 1256 |
| Allen, William F., near Salisbury, Md. Cantaloups | 41,759 | Dec. 29 | 107 | 2521 |
| Alma Cement Company, Jersey City, N. J. Portland cement | 41,723 | Dec. 22 | 107 | 2230 |
| Alpers, William C., New York, N. Y. Internal remedy for certain named diseases | 40,255 | May 5 | 104 | 303 |
| Altenheim Medical Dispensary, Cincinnati, Ohio. Remedy for treatment of the hair and scalp | 39,716 | Feb. 3 | 102 | 1043 |
| Alva Roller Mills, Alva, Okla. Ter. Flour | 40,497 | June 2 | 104 | 1387 |
| Alvarez y Rivas, Rafael, New York, N. Y. Cigars | 40,063 | Apr. 7 | 103 | 1412 |
| Am. Circular Loom Co., Chelsea, Mass. Conduits and coverings for electrical conductors | 39,625 | Jan. 6 | 102 | 234 |
| Amelotte, Albert J., Worcester, Mass. Certain named syrup and beverages | 40,161 | Apr. 21 | 103 | 1908 |
| Amelung, Catharine J., Pittsburg, Pa. Skin preparations | 41,632 | Dec. 8 | 107 | 1654 |
| American Art Stone & Manufacturing Company, Cleveland, Ohio. Toy building-blocks formed of artificial stone | 41,537 | Nov. 24 | 107 | 1090 |
| American Art Stone & Manufacturing Company, Cleveland, Ohio. Toy building-blocks of artificial stone | 41,646 | Dec. 8 | 107 | 1655 |
| American Brake Shoe Co., Chicago, Ill. Brake-shoes | 40,780 | July 14 | 105 | 492 |
| American Brake Shoe Co., Chicago, Ill. Brake-shoes | 40,810 | July 21 | 105 | 740 |
| American Brake Shoe and Foundry Co., Jersey City, N. J., and New York, N. Y. Brake-shoes | 40,124 | Apr. 14 | 103 | 1676 |
| American Cereal Co., Akron, Ohio; Chicago, Ill., and Cedar Rapids, Iowa. Prepared cereal food | 40,496 | June 2 | 104 | 1387 |
| American Chemical Manufacturing & Mining Co., Rochester, N. Y. Shoe-polish | 41,082 | Sept. 8 | 106 | 537 |
| American Cigar Company, Jersey City, N. J., and New York, N. Y. Cigars, cheroots, and all-tobacco cigarettes | 41,576 | Dec. 1 | 107 | 1369 |
| American El. Nov. & Mf'g. Co., New York, N. Y. Clocks | 40,566 | June 9 | 104 | 1651 |
| American El. Nov. & Mf'g. Co., New York, N. Y. Incandescent mantles and burners | 40,567 | June 9 | 104 | 1651 |
| American Glutrose Co., Camden, N. J. Core compound | 41,205 | Sept. 29 | 106 | 1234 |
| American Graphophone Co., Washington, D. C. Sound-records | 40,072 | Apr. 7 | 103 | 1413 |
| American Grass Twine Company, St. Paul, Minn. Carpets, rugs, mats, and art squares | 41,177 | Sept. 29 | 106 | 1231 |
| American Hard Rubber Co., New York, N. Y. Battery-cells | 40,406 | May 19 | 104 | 847 |
| American Lady Corset Co., Detroit, Mich. Corsets | 41,467 | Nov. 17 | 107 | 825 |
| American Lady Corset Co., Detroit, Mich. Corsets | 41,741 | Dec. 29 | 107 | 2519 |
| American Lead Pencil Company, Hoboken, N. J. Lead-pencils | 40,090 | Apr. 14 | 103 | 1673 |
| American Leather Co., New York, N. Y.; Wilmington, Del.; Boston, Mass., and Cincinnati, Ohio. Certain named leather | 41,742 | Dec. 29 | 107 | 2519 |
| American Metallic Packing Co., Cleveland, Ohio. Certain named pliable metallic packing | 40,076 | Apr. 7 | 103 | 1413 |
| American Mutoscope & Biograph Co., New York, N. Y. Moving-picture apparatus | 40,073 | Apr. 7 | 103 | 1413 |
| American Net and Twine Co., Boston and Cambridge, Mass.; New York, N. Y., and Anniston, Ala. Fish-nettings | 40,661 | June 30 | 104 | 2431 |
| American Optical Co., Southbridge, Mass. Eyeglass and spectacle frames or mountings | 39,751 | Feb. 10 | 102 | 1285 |
| American Optical Co., Southbridge, Mass. Eyeglass and spectacle frames or mountings | 40,669 | June 30 | 104 | 2432 |
| American Oyster Carrier Co., Detroit, Mich. Containers for certain named articles | 41,500 | Nov. 17 | 107 | 828 |
| American Paint Works, New Orleans, La. Paints | 41,397 | Nov. 3 | 107 | 260 |

*Alphabetical list of registrants of trade-marks*—Continued.

| Name, residence, and title. | No. | Date. | Official Gazette. Vol. | Page. |
|---|---|---|---|---|
| American Pressed Steel Co., Philadelphia, Pa. Metallic plates | 39,736 | Feb. 10 | 102 | 1290 |
| American Ribbon & Carbon Co., Rochester, N. Y. Type-writer ribbons | 41,686 | Dec. 22 | 107 | 2227 |
| American Sheet Steel Company, New York, N. Y. Sheet-steel | 39,703 | Jan. 27 | 102 | 815 |
| American Silver Company, Bristol, Conn. Plated tableware | 40,371 | May 12 | 104 | 574 |
| American Silver Company, Bristol, Conn. Silver and plated articles of tableware | 40,724 | July 7 | 105 | 253 |
| American Soda Fountain Company, Boston, Mass. Beef extracts and beverages made therefrom | 41,450 | Nov. 10 | 107 | 535 |
| American Stove Company, Jersey City, N. J. Stoves, ranges, and ovens | 40,228 | Apr. 28 | 103 | 2168 |
| American Thread Company, Jersey City, N. J. Spool-cotton, thread, and sewing-cotton | 39,692 | Jan. 27 | 102 | 814 |
| American Thread Company, Jersey City, N. J. Spool-cotton, thread, and sewing-cotton | 39,693 | Jan. 27 | 102 | 814 |
| American Thread Company, Jersey City, N. J. Spool-cotton, thread, and sewing-cotton | 40,524 | June 9 | 104 | 1646 |
| American Thread Company, Jersey City, N. J. Spool-cotton, thread, and sewing-cotton | 40,525 | June 9 | 104 | 1646 |
| American Thread Company, Jersey City, N. J. Spool-cotton, thread, and sewing-cotton | 41,138 | Sept. 22 | 106 | 989 |
| American Thread Company, Jersey City, N. J. Spool-cotton, thread, sewing-cotton, and machine-thread | 41,139 | Sept. 22 | 106 | 989 |
| American Tobacco Co., Newark, N. J., and New York, N. Y. Smoking-tobacco and cigarettes made therefrom | 41,142 | Sept. 22 | 106 | 989 |
| American Tobacco Co., Newark, N. J., and New York, N. Y. Smoking-tobacco | 41,323 | Oct. 20 | 106 | 2007 |
| American Trading Company, New York, N. Y. Brown, bleached, and printed cotton goods | 40,756 | July 14 | 105 | 489 |
| American Wringer Co., New York, N. Y. Wringing-machines | 39,858 | Feb. 24 | 102 | 1774 |
| American Wringer Co., New York, N. Y. Wringers | 39,859 | Feb. 24 | 102 | 1774 |
| Ammon, Jacob S., Reading, Pa. Antisepticized cigars | 40,486 | June 2 | 104 | 1386 |
| Anasarcin Chemical Company, Winchester, Tenn. Medicine for certain named diseases | 39,943 | Mar. 17 | 103 | 653 |
| Anchor Stove & Range Co., New Albany, Ind. Stoves and ranges | 40,837 | July 28 | 105 | 970 |
| Anderson, Nellie A., Burlington, Wis. Food for goldfish | 40,736 | July 7 | 105 | 254 |
| Andrew Lohr Bottling Co., Cairo, Ill. Soda-water and mineral waters | 40,645 | June 23 | 104 | 2143 |
| Annandale & Son, Limited, Polton, Scotland. Ledger-paper | 40,854 | Aug. 4 | 105 | 1254 |
| Anthony & Scovill Company, New York, N. Y. Sensitized photographic paper and film | 41,689 | Dec. 22 | 107 | 2227 |
| Apollo Chemical Company, Boston, Mass. Facial massage-cream and skin-food | 41,108 | Sept. 15 | 106 | 759 |
| Apple, Vincent G., Dayton, Ohio. Automobiles or motor-vehicles and parts thereof | 41,502 | Nov. 17 | 107 | 828 |
| Arbuckles & Co., Pittsburg, Pa. Evaporated fruits | 39,681 | Jan. 27 | 102 | 813 |
| Arbuckles & Co., Pittsburg, Pa. Canned fruits and vegetables | 39,682 | Jan. 27 | 102 | 813 |
| Arkell Company, New York, N. Y. Periodicals | 40,662 | June 30 | 104 | 2431 |
| Armeny & Marion, New York, N. Y. Fountain-pens | 41,432 | Nov. 10 | 107 | 532 |
| Arnhold, Karberg & Co., New York, N. Y. Cotton piece goods | 40,886 | Aug. 11 | 105 | 1524 |
| Asbestine Manufacturing Co., Windber, Pa. Fire-brick and refractory linings | 40,718 | June 30 | 104 | 2436 |
| Astropathic Institute, Chicago, Ill. Damiana compound | 39,912 | Mar. 10 | 103 | 421 |
| Atkinson, Frederick G., Minneapolis, Minn. Wheat-flour | 40,910 | Aug. 11 | 105 | 1526 |
| Atkinson, Frederick G., Minneapolis, Minn. Wheat-flour | 41,776 | Dec. 29 | 107 | 2522 |
| Auburn Extract Company, Auburn, N. Y. Baking-powder | 41,086 | Sept. 8 | 106 | 537 |
| Auburn Extract Company, Auburn, N. Y. Flavoring extracts | 41,145 | Sept. 22 | 106 | 989 |
| Auditorium Pharmacy Company, Chicago, Ill. Lotions | 40,144 | Apr. 21 | 103 | 1906 |
| Auerbach, Louis, New York, N. Y. Cravats and silk for same | 40,851 | Aug. 4 | 105 | 1254 |
| Aug. Luhn & Co., Gesellschaft mit Beschränkter Haftung, Barmen, Germany. Certain named soap | 39,656 | Jan. 20 | 102 | 617 |
| Aug. Luhn & Co., Gesellschaft mit Beschränkter Haftung, Barmen, Germany. Certain named soap | 40,610 | June 16 | 104 | 1890 |
| Auro Chemical Company, Morristown, N. J. Disinfectant, antiseptic, and deodorant | 41,252 | Oct. 6 | 106 | 1497 |
| Aurora Automatic Machinery Company, Aurora, Ill. Bicycles, tricycles, and parts thereof | 39,990 | Mar. 24 | 103 | 884 |
| Aurora Automatic Machinery Company, Aurora, Ill. Motor-propelled vehicles and parts thereof | 40,080 | Apr. 7 | 103 | 1414 |
| Austin & Co., H. A., Boston, Mass. Buttons | 39,690 | Jan. 27 | 102 | 814 |
| Austin & Co., H. A., Boston, Mass. Ladies' belts | 39,691 | Jan. 27 | 102 | 814 |
| Autocar Company, Ardmore, Pa. Motor-vehicles | 40,781 | July 14 | 105 | 492 |
| Autotype Company, London, England. Photographic paper | 40,244 | May 5 | 104 | 302 |
| Axman, Lars, Minneapolis, Minn. Wild rice | 41,118 | Sept. 15 | 106 | 760 |
| Ayvad, Parnac M., New York, N. Y. Coffee | 40,270 | May 5 | 104 | 304 |
| Bach, Engelbert, Taylorville, Ill. Liniment | 39,944 | Mar. 17 | 103 | 654 |
| Badische Anilin & Soda Fabrik, Ludwigshafen, Germany. Dyestuff | 40,614 | June 16 | 104 | 1891 |
| Bailey & Blendinger Mfg. Co., Woburn, Mass. Machine-knives, belt-knives, and leather-knives | 40,972 | Aug. 18 | 105 | 1776 |
| Bailey & Parkinson, Buffalo, N. Y. Paper-clips | 41,725 | Dec. 22 | 107 | 2231 |
| Baker & Co., A. A., London, England. Rum | 40,989 | Aug. 25 | 105 | 2050 |
| Baker, Horatio C., New York, N. Y. Salt | 39,641 | Jan. 13 | 102 | 461 |
| Baker & Sons, George, New York, N. Y. Leather shoes | 40,237 | May 5 | 104 | 301 |
| Bakst Bros., New York, N. Y. Nerve, muscle, and blood remedies | 41,240 | Oct. 6 | 106 | 1495 |
| Bakteriologisk Laboratorium, Neumann & Co., i Aalborg, Aalborg, Denmark. Poisons for rodents | 41,787 | Dec. 29 | 107 | 2524 |
| Balaguer, Alice, New York, N. Y. Medicines for purification of the blood | 40,996 | Aug. 25 | 105 | 2051 |
| Baldner, Alfred A., Cleveland, Ohio. Cosmetic ointment | 41,696 | Dec. 22 | 107 | 2228 |
| Balduff, William S., Omaha, Nebr. Candy and bonbons | 40,271 | May 5 | 104 | 304 |
| Baldwin, Frederic E., New York, N. Y. Certain named lamps | 39,885 | Mar. 3 | 103 | 219 |
| Baldwin, Penrose, Asheville, N. C. Remedy for certain named diseases | 40,471 | June 2 | 104 | 1385 |
| Ball, Ernest H., New York, N. Y. Salves | 41,488 | Nov. 17 | 107 | 827 |
| Ballin and Laventall, Albany, N. Y. Leather shoes | 40,086 | Apr. 14 | 103 | 1673 |
| Baltimore Boot and Shoe Mfg. Co., Baltimore, Md. Leather shoes | 41,743 | Dec. 29 | 107 | 2520 |
| Baltimore Boot and Shoe Mfg. Co., Baltimore, Md. Leather boots and shoes | 41,744 | Dec. 29 | 107 | 2520 |
| Bannister & Clark, Newark, N. J. Razors | 41,494 | Nov. 17 | 107 | 828 |
| Barber Asphalt Paving Co., Philadelphia, Pa. Asphaltic cements | 41,529 | Nov. 24 | 107 | 1089 |
| Barber Asphalt Paving Co., Philadelphia, Pa. Asphaltic cements | 41,530 | Nov. 24 | 107 | 1089 |
| Barber Asphalt Paving Co., Philadelphia, Pa. Asphaltic cements | 41,531 | Nov. 24 | 107 | 1089 |
| Barber Asphalt Paving Co., Philadelphia, Pa. Asphaltic cements | 41,532 | Nov. 24 | 107 | 1089 |
| Barber Asphalt Paving Co., Philadelphia, Pa. Asphaltic cements | 41,533 | Nov. 24 | 107 | 1090 |
| Barber Asphalt Paving Co., Philadelphia, Pa. Asphaltic cements | 41,534 | Nov. 24 | 107 | 1090 |
| Barber & Colman, Rockford, Ill. Knot-tying implements | 40,081 | Apr. 7 | 103 | 1414 |
| Barna, Herman, Des Moines, Iowa. Mantles for gas-lamps | 40,071 | Apr. 7 | 103 | 1413 |
| Barnett, Horatio, Malvern, Ark. Wrapping-paper and wrapping-bags | 41,287 | Oct. 13 | 106 | 1770 |
| Barnsley & Co., Manchester, England. Gray and bleached cotton goods | 39,710 | Feb. 3 | 102 | 1043 |
| Barron & Co., James S., New York, N. Y. Brooms and brushes | 40,508 | June 2 | 104 | 1388 |
| Batchelder, Mark D., Peoria, Ill. Dyspepsia medicines | 40,437 | May 26 | 104 | 1112 |
| Batcheller Importing Company, New York, N. Y. Perfumed preparations in powdered, paste, solid, and liquid form | 39,811 | Feb. 17 | 102 | 1546 |
| Batcheller Importing Company, New York, N. Y. Certain named perfumed preparations | 40,863 | Aug. 4 | 105 | 1255 |
| Battle Creek Food Co., Limited, Battlecreek, Mich. Prepared cereal foods and breakfast-foods | 39,818 | Feb. 17 | 102 | 1547 |
| Battle Creek Food Co., Limited, Battlecreek, Mich. Prepared cereal foods and breakfast-foods | 39,819 | Feb. 17 | 102 | 1547 |
| Battle Creek Food Co., Limited, Battlecreek, Mich. Prepared cereal foods and breakfast-foods | 39,820 | Feb. 17 | 102 | 1547 |
| Battle Creek Grape Juice Co., Limited, Battlecreek, Mich. Unfermented grape-juice | 39,638 | Jan. 13 | 102 | 461 |
| Bauer, Herman, Schenectady, N. Y. Remedy for the cure of whooping-cough | 40,113 | Apr. 14 | 103 | 1675 |

*Alphabetical list of registrants of trade-marks*—Continued.

| Name, residence, and title. | No. | Date. | Official Gazette. Vol. | Page. |
|---|---|---|---|---|
| Baxeres de Alzugaray, José, London, England. Antiseptics, disinfectants, germicides, and insecticides | 41,781 | Dec. 29 | 107 | 2523 |
| Baxter & Bro., H. C., Brunswick, Me. Canned fruits and canned vegetables | 39,821 | Feb. 17 | 102 | 1547 |
| Baxter & Bro., H. C., Brunswick, Me. Canned vegetables and canned fruits | 39,822 | Feb. 17 | 102 | 1547 |
| Baxter & Bro., H. C., Brunswick, Me. Canned fruits and vegetables | 40,390 | May 19 | 104 | 845 |
| Baxter & Bro., H. C., Brunswick, Me. Certain named canned goods | 40,446 | May 26 | 104 | 1113 |
| Baxter Bros. Co., Brunswick, Me., and Wapello, Iowa. Canned vegetables | 40,981 | Aug. 25 | 105 | 2049 |
| Bay State Milling Co., Winona, Minn., and Boston, Mass. Wheat-flour | 39,640 | Jan. 13 | 102 | 461 |
| Bay State Shoe & Leather Co., Worcester, Mass. Leather boots and shoes | 40,184 | Apr. 28 | 103 | 2162 |
| Beadenkopf, Martin, Wilmington, Del. Leather | 41,431 | Nov. 10 | 107 | 532 |
| Beasley, William H., Rockmart, Ga. Flavoring-syrup for beverages | 40,708 | June 30 | 104 | 2435 |
| Becker, Jacob H., New York, N. Y. Pianos | 39,591 | Mar. 3 | 103 | 219 |
| Becker, Johann H., Ohligs, Germany. Razors | 39,787 | Feb. 10 | 102 | 1289 |
| Beekman Novelty Company, New York, N. Y. Certain named fountain-pen-filling devices | 40,297 | May 12 | 104 | 567 |
| Belcher & Taylor Ag'l Tool Co., Chicopee Falls, Mass. Corn-planters | 39,732 | Feb. 3 | 102 | 1045 |
| Belleville Woolen Mills, Providence, R. I. Woolen goods | 40,427 | May 26 | 104 | 1111 |
| Bellingham Bay Brewery, Whatcom, Wash. Lager-beer | 41,366 | Oct. 27 | 106 | 2281 |
| Benbow-Brammer Manufacturing Company, St. Louis, Mo. Washing-machines | 40,833 | July 28 | 105 | 970 |
| Bendheim, Edward, New York, N. Y. Handkerchiefs | 41,469 | Nov. 17 | 107 | 826 |
| Bendiner & Schlesinger, New York, N. Y. Tonic and reconstructive medicine | 40,591 | June 16 | 104 | 1888 |
| Bendixen Tobacco Co., Syracuse, N. Y. Chewing-tobacco | 40,828 | July 28 | 105 | 969 |
| Bengué, Jules B., Paris, France. Certain named anesthetics | 40,904 | Aug. 11 | 105 | 1526 |
| Bengué, Jules B., Paris, France. Certain named anesthetics | 40,905 | Aug. 11 | 105 | 1526 |
| Berard Chemical Company, Chicago, Ill. Tonic | 41,078 | Sept. 8 | 106 | 536 |
| Berdan & Co., Toledo, Ohio. Coffee | 39,617 | Jan. 6 | 102 | 222 |
| Berdan & Co., Toledo, Ohio. Coffee | 39,618 | Jan. 6 | 102 | 223 |
| Berdan & Co., Toledo, Ohio. Catsup | 39,619 | Jan. 6 | 102 | 223 |
| Berg Medicine Co., Des Moines, Iowa. Remedy for sore throat | 40,556 | June 9 | 104 | 1650 |
| Bernheimer & Bro., Jacob S., New York, N. Y. Antiseptic and antimoth fabrics | 40,403 | May 19 | 104 | 846 |
| Bernstein, Moritz, Pueblo, Colo. Ladies' petticoats | 40,430 | May 26 | 104 | 1112 |
| Berry Brothers, Limited, Detroit, Mich. Copal varnish | 41,000 | Aug. 25 | 105 | 2052 |
| Berry Hill Mineral Spring Co. of Va., Culpeper, Va. Mineral water | 40,741 | July 7 | 105 | 255 |
| Berry Hill Mineral Spring Co. of Va., Culpeper, Va. Mineral water | 40,914 | Aug. 11 | 105 | 1527 |
| Bevan & Co., Malaga, Spain. Certain named fruits | 40,205 | Apr. 28 | 103 | 2165 |
| Bevan & Co., Malaga, Spain. Certain named fruits | 40,206 | Apr. 28 | 103 | 2165 |
| Bickum, Charles I., Haverhill, Mass. Remedy for venereal diseases | 40,559 | June 9 | 104 | 1650 |
| Bigham, John, Pittsburg, Pa. Sliding-block puzzles | 41,211 | Oct. 6 | 106 | 1492 |
| Bigler, George R., Springfield, Ill. Veterinary medicines to be used internally | 40,671 | June 30 | 104 | 2432 |
| Bigler, George R., Springfield, Ill. Insecticides | 40,794 | July 21 | 105 | 739 |
| Binney & Smith Co., New York, N. Y. Crayons and pencils | 40,217 | Apr. 28 | 103 | 2166 |
| Binney & Smith Co., New York, N. Y. Crayons and pencils | 40,506 | June 2 | 104 | 1388 |
| Binney & Smith Co., New York, N. Y. Marking substances and crayons and pencils in which such are used | 40,720 | July 7 | 105 | 253 |
| Binney & Smith Co., New York, N. Y. Crayons, pencils, and marking substances | 40,814 | July 28 | 105 | 968 |
| Biogen Company, New York, N. Y. Magnesium dioxid | 41,050 | Sept. 1 | 106 | 259 |
| Bios Laboratory Co., Danbury, Conn. Tonic | 39,875 | Mar. 3 | 103 | 218 |
| Bird & Co., J. A. & W., Boston, Mass. Leather boots and shoes | 40,364 | May 12 | 104 | 573 |
| Bird, Percival D., Louisville, Ky. Games | 41,392 | Nov. 3 | 107 | 260 |
| Birk Bros. Brewing Co., Chicago, Ill. Beer and malt extract | 40,198 | Apr. 28 | 103 | 2164 |
| Birmingham Small Arms Co., Ld., Birmingham, England. Automobiles and motor-cycles and their component parts | 41,269 | Oct. 6 | 106 | 1498 |
| Birmingham Small Arms Co., Ld., Birmingham, England. Automobiles and motor-cycles and their component parts | 41,270 | Oct. 6 | 106 | 1498 |
| Bisleri & Co., Felice, Milan, Italy, and New York, N. Y. Remedies for malaria | 40,472 | June 2 | 104 | 1385 |
| Bissell Carpet Sweeper Co., Grand Rapids, Mich. Carpet-sweepers | 39,919 | Mar. 10 | 103 | 422 |
| Bissell Carpet Sweeper Co., Grand Rapids, Mich. Carpet-sweepers | 39,920 | Mar. 10 | 103 | 422 |
| Bissell Carpet Sweeper Co., Grand Rapids, Mich. Carpet-sweepers | 39,921 | Mar. 10 | 103 | 422 |
| Bissell Carpet Sweeper Co., Grand Rapids, Mich. Carpet-sweepers | 40,744 | July 7 | 105 | 255 |
| Blackmarr & Mandeville, Chicago, Ill. Lotions | 41,155 | Sept. 22 | 106 | 990 |
| Blankenbuhler, Fred W., Denver, Colo. Eggs | 40,538 | June 9 | 104 | 1648 |
| Bledsoe, John F., Seattle, Wash. Remedy in liquid form for certain named diseases | 39,636 | Jan. 13 | 102 | 461 |
| Bleistiftfabrik vormals Johann Faber Actien Gesellschaft, Nuremburg, Germany. Certain named pencils | 41,130 | Sept. 22 | 106 | 988 |
| Bleistiftfabrik vormals Johann Faber Actien Gesellschaft, Nuremburg, Germany. Certain named pencils | 41,131 | Sept. 22 | 106 | 988 |
| Bleistiftfabrik vormals Johann Faber Actien Gesellschaft, Nuremburg, Germany. Certain named pencils | 41,132 | Sept. 22 | 106 | 988 |
| Bliss & Co., L. C., Boston and Whitman, Mass. Boot and shoe leather soles | 39,645 | Jan. 20 | 102 | 616 |
| Bliss, Painter & Co., Minneapolis, Minn. Certain named garments | 41,018 | Sept. 1 | 106 | 256 |
| Bloch & Neuburger, Mobile, Ala. Shirts, collars, and cuffs | 39,754 | Feb. 10 | 102 | 1285 |
| Blodgett, Edward F., Leominster, Mass. Certain named hair fastening and supporting articles | 40,925 | Aug. 18 | 105 | 1770 |
| Blood Molasses Feed Company of America, New York, N. Y. Certain named animal-food | 39,873 | Mar. 3 | 103 | 218 |
| Bloomer, Louis, Newark, N. J. Medical preparation or compound for treatment of deafness | 41,243 | Oct. 6 | 106 | 1496 |
| Blum Shoe Company, Dansville, N. Y. Felt slippers for housewear | 39,836 | Feb. 24 | 102 | 1771 |
| Bobbett and Kegrize, New York, N. Y. Periodical or magazine | 40,422 | May 26 | 104 | 1111 |
| Bockar, Benedict, New York, N. Y. Malt-extract compounds | 41,224 | Oct. 6 | 106 | 1493 |
| Bockar, Jacob, New York, N. Y. Antiseptic in liquid and powdered form | 40,731 | July 7 | 105 | 254 |
| Boehm, Wendelin, Pittsburg, Pa. Noodles, macaroni, and vermicelli | 41,401 | Nov. 3 | 107 | 261 |
| Boehringer & Soehne, C. F., Waldhof, near Mannheim, Germany. Remedy for tapeworm and similar parasitic ailments | 40,558 | June 9 | 104 | 1650 |
| Boepple Button Company, Muscatine, Iowa. Crushed shell for poultry | 40,955 | Aug. 18 | 105 | 1773 |
| Bokel McKenney Co. of Baltimore City, Baltimore, Md. Whisky | 41,129 | Sept. 15 | 106 | 760 |
| Boker & Co., Hermann, New York, N. Y. Razors | 39,788 | Feb. 10 | 102 | 1289 |
| Bole Drug Co., Limited, Winnipeg, Canada. Pellets for cure of kidney diseases | 41,158 | Sept. 22 | 106 | 991 |
| Bon Ami Company, Jersey City, N. J., and New York, N. Y. Scouring-soap | 40,611 | June 16 | 104 | 1890 |
| Bone Phosphate and Chemical Company, Limited, Flint, England. Dips and washes for animals | 40,766 | July 14 | 105 | 490 |
| Bonner, Clarence E., Cherrypoint, Ill. Wrenches | 40,512 | June 2 | 104 | 1388 |
| Booth, Ralph W., New York, N. Y. Type-writer ribbons | 41,735 | Dec. 29 | 107 | 2519 |
| Booth's Distillery, Limited, London, England. Malt spirit | 39,968 | Mar. 24 | 103 | 882 |
| Bordas, Edouard P., Lake Linden, Mich. Medical compounds for heart stimulants, diuretics, and eliminants | 40,249 | May 5 | 104 | 302 |
| Borden's Condensed Milk Co., New York, N. Y. Confectionery | 40,691 | June 30 | 104 | 2434 |
| Borden's Condensed Milk Co., New York, N. Y. Milk, malted milk, and food-product milk | 40,692 | June 30 | 104 | 2434 |
| Borden's Condensed Milk Co., New York, N. Y. Milk, condensed milk, cream, and evaporated cream | 41,619 | Dec. 8 | 107 | 1653 |

*Alphabetical list of registrants of trade-marks*—Continued.

| Name, residence, and title. | No. | Date. | Official Gazette. Vol. | Page. |
|---|---|---|---|---|
| Borden's Condensed Milk Co., New York, N. Y. Milk, condensed milk, cream, and evaporated cream | 41,620 | Dec. 8 | 107 | 1653 |
| Borden's Condensed Milk Co., New York, N. Y. Milk, condensed milk, cream, and evaporated cream | 41,621 | Dec. 8 | 107 | 1653 |
| Borden's Condensed Milk Co., New York, N. Y. Certain named dairy products | 41,709 | Dec. 22 | 107 | 2229 |
| Bosman & Lohman Company, Norfolk, Va. Salted peanuts | 41,229 | Oct. 6 | 106 | 1494 |
| Boston Beer Company, Boston, Mass. Ale, beer, and porter | 41,365 | Oct. 27 | 106 | 2280 |
| Boston & Lockport Block Co., Lockport, N. Y., and Boston, Mass. Pulleys or blocks | 40,971 | Aug. 18 | 105 | 1776 |
| Bourdeau Food Co., Lmtd., Battlecreek, Mich. Malted-wheat flakes | 39,840 | Feb. 24 | 102 | 1772 |
| Bowles, Homer E., Muncie, Ind. External remedy for parasites | 40,902 | Aug. 11 | 105 | 1526 |
| Boyer & Company, Philadelphia, Pa. Shoe-polish | 41,629 | Dec. 8 | 107 | 1654 |
| Boyle, Joseph M., Cincinnati, Ohio. Remedies for cure of goiter | 39,717 | Feb. 3 | 102 | 1044 |
| Bradbury Equalizer Co., Coxsackie, N. Y. Medicine for treatment of certain named diseases of horses | 40,402 | May 19 | 104 | 846 |
| Bradford Dyers' Association, Limited, Bradford, England. Certain named linings and dress goods | 41,208 | Oct. 6 | 106 | 1492 |
| Bradham, Caleb D., New Bern, N. C. Flavoring-syrup for soda-water | 40,619 | June 16 | 104 | 1891 |
| Braeburn Steel Co., Braeburn, Pa. Tool-steel | 40,716 | June 30 | 104 | 2436 |
| Brandle & Smith, Philadelphia, Pa. Confectionery | 40,489 | June 2 | 104 | 1386 |
| Brandt & Co., H. O., Manchester, England. Velvets, velveteens, and plush goods | 41,548 | Dec. 1 | 107 | 1366 |
| Brandt & Co., H. O., Manchester, England. Velvets, velveteens, and plush goods | 41,549 | Dec. 1 | 107 | 1366 |
| Braun, Albert, Allegheny, Pa. Coffee | 41,364 | Oct. 27 | 106 | 2280 |
| Braun, Joseph V., Carey, Ohio. Sheet-music | 40,423 | May 26 | 104 | 1111 |
| Brigstocke, Mortimer K., New York, N. Y. Composition for cleaning and polishing metal, glass, and woodwork | 40,822 | July 28 | 105 | 969 |
| Brill Brothers, New York, N. Y. Coats, vests, pants, and overcoats | 41,100 | Sept. 15 | 106 | 758 |
| Brist Company, Topeka, Kans. Game articles | 40,421 | May 26 | 104 | 1111 |
| British-American Tobacco Co., Ltd., New York, N. Y. Smoking-tobacco | 40,396 | May 19 | 104 | 846 |
| British-American Tobacco Co., Ltd., New York, N. Y. Smoking-tobacco | 40,487 | June 2 | 104 | 1386 |
| Broga, Arthur E., Oneida, N. Y. Medicine for blood and liver diseases | 40,190 | Apr. 28 | 103 | 2163 |
| Brookman Brothers, Chicago, Ill. Chlorid of lime | 41,528 | Nov. 24 | 107 | 1089 |
| Brown & Allen, Atlanta, Ga. Cream preparation for the skin | 41,412 | Nov 3 | 107 | 261 |
| Brown, Durrell & Co., Boston, Mass. Ribbons | 40,932 | Aug 18 | 105 | 1771 |
| Brown, Durrell & Co., Boston, Mass. Yarns | 40,933 | Aug. 18 | 105 | 1771 |
| Brown, Durrell & Co., Boston, Mass. Corsets and corset-waists | 40,977 | Aug. 25 | 105 | 2049 |
| Brown, Durrell & Co., Boston, Mass. Draperies for furnishing | 40,978 | Aug. 25 | 105 | 2049 |
| Brown, Durrell & Co., Boston, Mass. Overalls, coats, and pants | 41,016 | Sept. 1 | 106 | 256 |
| Brown, Durrell & Co., Boston, Mass. Ladies' wrappers | 41,062 | Sept. 8 | 106 | 535 |
| Brown, Durrell & Co., Boston, Mass. Knit or woven underwear | 41,063 | Sept. 8 | 106 | 535 |
| Brown, Durrell & Co., Boston, Mass. Shirts | 41,101 | Sept. 15 | 106 | 758 |
| Brown, Durrell & Co., Boston, Mass. Ladies', misses', and children's muslin underwear | 41,171 | Sept. 29 | 106 | 1230 |
| Brown, Harold P., New York, N. Y. Artificial fuel | 40,120 | Apr. 14 | 103 | 1676 |
| Brown, Harrington, Los Angeles, Cal. Refined asphaltum for paving purposes | 40,713 | June 30 | 104 | 2436 |
| Brown-Hurley Hardware Company, Des Moines, Iowa. Shovels, spades, and scoops | 40,779 | July 14 | 105 | 492 |
| Brown, James H., Battlecreek, Mich. Medicated foods | 39,877 | Mar. 3 | 103 | 218 |
| Brown, Luman S., Springfield, Mass. Charcoal | 41,095 | Sept. 8 | 106 | 538 |
| Brumer Bros., Clinton, Iowa. Solution for soldering and cleansing metals | 40,172 | Apr. 21 | 103 | 1909 |
| Bruner, William W., Kealakekua, Hawaii. Coffee | 40,694 | June 30 | 104 | 2434 |
| Brunner, Maria, Buffalo, N. Y. Bread | 40,770 | July 14 | 105 | 491 |
| Bryan-Marsh Company, New York, N. Y. Incandescent electric lamps | 41,343 | Oct. 20 | 106 | 2010 |
| Bryant, Charles P. J., Kansas City, Mo. Ointment | 40,563 | June 9 | 104 | 1650 |
| Bryant, Charles P. J., Kansas City, Mo. Ointment | 40,564 | June 9 | 104 | 1650 |
| Bubb, Harry A., Williamsport, Pa. Core compound | 41,377 | Oct. 27 | 106 | 2282 |
| Buchanan, James, London, England, Glasgow, Leith, and Glenlivet, Scotland. Whisky | 40,166 | Apr. 21 | 103 | 1908 |
| Buckeye Rubber Company, Jersey City, N. J., and Akron, Ohio. Rubber tires for vehicles | 40,079 | Apr. 7 | 103 | 1413 |
| Buckmobile Company, New Hartford, N. Y. Self-propelled vehicles | 40,033 | Mar. 31 | 103 | 1160 |
| Buettner & Co., T., Chicago, Ill. Embroidery-threads | 39,899 | Mar. 10 | 103 | 420 |
| Buettner & Co., T., Chicago, Ill. Fancy needlework and art linen pieces | 41,655 | Dec. 15 | 107 | 1964 |
| Buffalo Dental Manufacturing Co., Buffalo, N. Y. Thermometer-tubes | 41,724 | Dec. 22 | 107 | 2231 |
| Bunker Hill Milling Company, Evansville, Ind. Flour | 40,201 | Apr. 28 | 103 | 2164 |
| Burch, George W., Quincy, Ill. Remedy for coughs, colds, and bronchial troubles | 41,414 | Nov. 3 | 107 | 262 |
| Burgon & Ball, Ltd., Sheffield, England. Certain named cutlery | 41,495 | Nov. 17 | 107 | 828 |
| Burnett, Tom B., Dallas, Tex. Mattresses | 41,746 | Dec. 29 | 107 | 2520 |
| Burton Bros. & Co., New York, N. Y. Cotton goods | 40,624 | June 23 | 104 | 2142 |
| Burton Bros. & Co., New York, N. Y. Silk and silk-mixed dress goods and linings | 40,887 | Aug. 11 | 105 | 1524 |
| Burton Bros. & Co., New York, N. Y. Linings | 40,888 | Aug. 11 | 105 | 1524 |
| Burton Bros. & Co., New York, N. Y. Silk linings and silk fabrics for dress goods | 41,694 | Dec. 22 | 107 | 2227 |
| Burton, John S., Sherman, Tex. Liniment | 39,739 | Feb. 3 | 102 | 1045 |
| Busha, Fred C., Pontiac, Mich. Cereal substitute for coffee | 41,404 | Nov. 3 | 107 | 261 |
| C. A. Edgarton Mfg. Company, Shirley, Mass. Elastic belting | 39,666 | Jan. 20 | 102 | 618 |
| C. A. Lammers Bottling Company, Denver, Colo. Beer | 41,760 | Dec. 29 | 107 | 2521 |
| C. F. Streit Mfg. Co., Cincinnati, Ohio. Chairs | 39,890 | Mar. 3 | 103 | 219 |
| C. M. Clapp Co., Buffalo, N. Y. Leather boots, shoes, and slippers | 39,758 | Feb. 10 | 102 | 1285 |
| Cagwin, Joel E., Story City, Iowa. Liniment | 41,418 | Nov. 3 | 107 | 262 |
| Caldwell, George W., Middletown, N. Y. Tonic | 41,156 | Sept. 22 | 106 | 991 |
| Calhoun & Witherbee, Worcester, Mass. Nut-candy | 41,572 | Dec. 1 | 107 | 1369 |
| California Fig Syrup Co., San Francisco, Cal. Purgative syrup | 41,338 | Oct. 20 | 106 | 2009 |
| California Fig Syrup Co., San Francisco, Cal. Purgative syrup | 41,339 | Oct. 20 | 106 | 2009 |
| Callahan & Co., W. P., Dayton, Ohio. Explosive-engines | 41,732 | Dec. 22 | 107 | 2232 |
| Calumet Tire Rubber Co., Chicago, Ill. Rubber horseshoes | 40,575 | June 9 | 104 | 1652 |
| Campbell, Joseph, Buffalo, N. Y. Handsaws and parts thereof | 40,511 | June 2 | 104 | 1388 |
| Canada Corundum Company, Limited, Toronto, Canada. Corundum | 41,642 | Dec. 8 | 107 | 1655 |
| Canfield Rubber Company, Bridgeport, Conn. Dress-shields | 40,366 | May 12 | 104 | 574 |
| Canonne, Henry, Paris, France. Pastils for treatment of maladies of the respiratory organs | 41,487 | Nov. 17 | 107 | 827 |
| Carnegie Iron and Steel Company, Pittsburg, Pa. Stovepipes and pipe-elbows | 40,656 | June 23 | 104 | 2144 |
| Cantrell & Cochrane, Ltd., Dublin, Ireland. Sarsaparilla | 39,674 | Jan. 27 | 102 | 812 |
| Capen Belting & Rubber Company, St. Louis, Mo. Rubber hose | 40,246 | May 5 | 104 | 302 |
| Capen's Sons, A. M., New York, N. Y. Soap | 40,454 | May 26 | 104 | 1114 |
| Capron and Co., Providence, R. I. Collar-buttons | 40,723 | July 7 | 105 | 253 |
| Carbo Chemical Company, Winona, Minn. Remedy for eczema and other skin diseases | 41,701 | Dec. 22 | 107 | 2228 |
| Carborundum Company, Niagara Falls, N. Y. Carborundum abrasive material | 40,220 | Apr. 28 | 103 | 2167 |
| Carey Salt Company, Hutchinson, Kans. Table-salt | 40,501 | June 2 | 104 | 1387 |
| Carlson, Frederic A., Los Angeles, Cal. Insecticides | 41,355 | Oct. 27 | 106 | 2280 |
| Carmel Wine Co., New York, N. Y. Wine | 40,348 | May 12 | 104 | 572 |
| Carr, Spencer E., Chicago, Ill. Leather boots and shoes | 39,633 | Jan. 13 | 102 | 460 |
| Carroll, Leslie S., Palouse, Wash. Hair cleansers and tonics | 41,236 | Oct. 6 | 106 | 1495 |

*Alphabetical list of registrants of trade-marks*—Continued.

| Name, residence, and title. | No. | Date. | Official Gazette. Vol. | Page. |
|---|---|---|---|---|
| Carson Glove Co., San Francisco, Cal. Gloves | 40,130 | Apr. 21 | 103 | 1905 |
| Carson Glove Co., San Francisco, Cal. Gloves | 40,131 | Apr. 21 | 103 | 1905 |
| Carson Glove Co., San Francisco, Cal. Gloves | 40,233 | May 5 | 104 | 301 |
| Carssow Pharmaceutical Co., St. Louis, Mo. Anemic remedy and blood-tonic | 41,241 | Oct. 6 | 106 | 1495 |
| Cash, Frank, King Mills, Ark. Washing-fluid soap | 41,399 | Nov. 3 | 107 | 260 |
| Casper, Mark, New York, N. Y. Cod-liver-oil preparations and tonic medicines | 40,893 | Aug. 11 | 105 | 1525 |
| Cassidy, Isabel, New York, N. Y. Liquid preparations for treating the face | 39,876 | Mar. 3 | 103 | 218 |
| Celler Filter Werke G. M. B. H., Celle, Germany. Portable and stationary filters | 39,988 | Mar. 24 | 103 | 884 |
| Centemeri & Co., P., New York, N. Y.; Philadelphia, Pa.; San Francisco, Cal., and Grenoble, France. Certain named gloves | 39,954 | Mar. 24 | 103 | 880 |
| Centemeri & Co., P., New York, N. Y.; Philadelphia, Pa.; San Francisco, Cal., and Grenoble, France. Certain named gloves | 39,955 | Mar. 24 | 103 | 880 |
| Central City Cereal Coffee Co., Peoria, Ill. Cereal coffee compositions | 40,199 | Apr. 28 | 103 | 2164 |
| Central Lighting Company, New York, N. Y. Gas-fixtures and mantles and parts thereof | 41,678 | Dec. 15 | 107 | 1967 |
| Cero-Fruto Food Co., Battlecreek, Mich. Sweet cereal cakes and biscuits | 40,771 | July 14 | 105 | 491 |
| Chadbourne, Zebulon L., New York, N. Y. Hammocks | 40,578 | June 16 | 104 | 1887 |
| Chadwick-Boston Lead Co., Boston, Mass. White lead, dry or ground in oil | 41,526 | Nov. 24 | 107 | 1089 |
| Chamberlain Commission Co., F. B., St. Louis, Mo. Baking-powder | 40,874 | Aug. 4 | 105 | 1255 |
| Chamberlain, Frederick E., Los Angeles, Cal. Remedies for certain named diseases | 41,417 | Nov. 3 | 107 | 262 |
| Champion Blower & Forge Co., Lancaster, Pa. Blowers and forges | 39,829 | Feb. 17 | 102 | 1548 |
| Chandler Specialty Manufacturing Company, Boston, Mass. Certain named lamps, lamp-globes, and shades | 40,289 | May 5 | 104 | 306 |
| Charles W. Dempster & Co., Chicago, Ill. Certain named hats | 40,659 | June 30 | 104 | 2431 |
| Charles Wolff Packing Co., Topeka, Kans. Ham and breakfast-bacon | 40,876 | Aug. 4 | 105 | 1256 |
| Charles Wolff Packing Co., Topeka, Kans. Ham and breakfast-bacon | 40,877 | Aug. 4 | 105 | 1256 |
| Charleston Metallic Packing Co., Charleston, S. C. Sheet and piston packing | 41,321 | Oct. 20 | 106 | 2007 |
| Chas. M. Robbins Co., Attleboro, Mass. Medals, pins, and badges | 39,951 | Mar. 24 | 103 | 880 |
| Chase Merritt Co., Boston, Mass. Leather boots and shoes for men and boys | 41,071 | Sept. 8 | 106 | 536 |
| Chemical Works formerly Sandoz, Basle, Switzerland. Remedy for certain named purposes | 40,596 | June 16 | 104 | 1889 |
| Chemische Fabrik auf Actien, (vorm. E. Schering,) Berlin, Germany. Certain named photographic goods | 40,137 | Apr. 21 | 103 | 1906 |
| Chemische Fabrik Helfenberg A. G. vorm. Eugen Dieterich, Helfenberg, Germany. Chemicals for photographic baths | 40,027 | Mar. 31 | 103 | 1159 |
| Chemische Fabrik von Heyden Aktien-Gesellschaft, Radebeul, near Dresden, Germany. Remedy for certain named diseases | 40,597 | June 16 | 104 | 1889 |
| Chemische Fabrik von Heyden, Aktiengesellschaft, Radebeul, Germany. Colloidal calomel | 41,245 | Oct. 6 | 106 | 1496 |
| Cherokee Indian Medicine Co., Enid, Okla. Ter. Hair-tonics and dandruff cures | 41,235 | Oct. 6 | 106 | 1495 |
| Chicago Fire Proof Covering Co., Chicago, Ill. Certain named pipe-covering | 39,795 | Feb. 10 | 102 | 1290 |
| Chicago Shipping & Receipt Book Co., Chicago, Ill. Loose-leaf binders | 40,214 | Apr. 28 | 103 | 2166 |
| Chicago Writing Machine Co., Chicago, Ill. Telephones mounted on folding holders | 41,009 | Aug. 25 | 105 | 2053 |
| Chickicura Company, Newport News, Va. Medicine for poultry | 41,624 | Dec. 8 | 107 | 1653 |
| Chillicothe Packing Company, Chillicothe, Ohio. Eggs | 40,832 | July 28 | 105 | 970 |
| China Export-, Import- and Bank- Compagnie, Hamburg, Germany, and Hongkong, China. Margarin | 40,385 | May 19 | 104 | 845 |
| Chinese American Commercial Company, San Francisco, Cal. Flour | 40,539 | June 9 | 104 | 1648 |
| Christian, John F., New York, N. Y. Medicinal drinking-water | 40,546 | June 9 | 104 | 1649 |
| Christiansen, John A., Buffalo, N. Y. Medicine for cure of certain named diseases | 39,772 | Feb. 10 | 102 | 1287 |
| Christman & Son, New York, N. Y. Pianos | 40,587 | June 16 | 104 | 1888 |
| Chubbuck, William, Rockaway Beach, N. Y. Cough remedies | 39,915 | Mar. 10 | 103 | 421 |
| Church & Dwight Co., New York, N. Y. Carbonating-powder | 40,647 | June 23 | 104 | 2144 |
| Churchill Chemical Co., New York, N. Y. Remedies for diseases of the skin | 40,992 | Aug. 25 | 105 | 2051 |
| Churchill Chemical Co., New York, N. Y. Remedies for certain named diseases | 40,993 | Aug. 25 | 105 | 2051 |
| Chute, George M., Toledo, Ohio. Soap | 39,895 | Mar. 3 | 103 | 220 |
| Citro, Giuseppe, Hoboken, N. J. Tonic | 40,788 | July 21 | 105 | 738 |
| Claflin Chemical Co., Limited, Windsor, Canada. Medicine for certain named diseases | 41,483 | Nov. 17 | 107 | 827 |
| Clapp, Dwight M., Boston, Mass. Tooth, nail, hair, and manicure brushes | 41,636 | Dec. 8 | 107 | 1654 |
| Clarinda Poultry, Butter & Egg Co., Clarinda, Iowa. Poultry | 41,451 | Nov. 10 | 107 | 535 |
| Clark & Parsons Company, East Wilton, Me. Bread and cake knives | 40,804 | July 21 | 105 | 740 |
| Clarke, Marian N., Wilkesbarre, Pa. Electrotherapeutic apparatus | 41,099 | Sept. 8 | 106 | 538 |
| Clemson, Francis W., Woburn, Mass. Saws | 41,423 | Nov. 3 | 107 | 262 |
| Clemson, George N., Middletown, N. Y. Saws | 41,588 | Dec. 1 | 107 | 1370 |
| Cleopatra Manufacturing Company, Boston, Mass. Facial massage-cream and skin-food | 40,022 | Mar. 31 | 103 | 1159 |
| Clincher Automobile Tire Manufactures Association, Akron, Ohio. Metallic rims for vehicle-wheels | 40,973 | Aug. 18 | 105 | 1776 |
| Coaleo Fuel Manufacturing Company, St. Louis, Mo. Manufactured fuel | 41,758 | Dec. 29 | 107 | 2521 |
| Coalite Company, New York, N. Y. Powdered chemical for certain named purposes | 41,582 | Dec. 1 | 107 | 1370 |
| Cobb, Lawrence, Richmond, Va. Bluing | 40,379 | May 5 | 104 | 305 |
| Cold Process Co., New York, N. Y. Condensed milk | 40,009 | Mar. 31 | 103 | 1158 |
| Colgate & Co., New York, N. Y. Perfumery | 41,042 | Sept. 1 | 106 | 258 |
| Colgate & Co., New York, N. Y. Soap | 41,043 | Sept. 1 | 106 | 259 |
| Collier & Son, P. F., New York, N. Y. Certain named publications | 39,991 | Mar. 31 | 103 | 1156 |
| Collins, Clara, Philadelphia, Pa. Cosmetics | 41,779 | Dec. 29 | 107 | 2523 |
| Colonial Salt Company, Akron, Ohio. Salt | 41,371 | Oct. 27 | 106 | 2281 |
| Columbia Drug Comp., Savannah, Ga. Stomach, bladder, and kidney cures | 39,775 | Feb. 10 | 102 | 1287 |
| Columbia Lubricants Company of New York, New York, N. Y. Lubricating-oils | 40,339 | May 12 | 104 | 571 |
| Columbia Pottery & Mfg. Company, Kokomo, Ind. Water-closets, closet-tanks, closet-seats, and closet-bowls | 41,390 | Oct. 27 | 106 | 2284 |
| Columbus Merchandise Company, Columbus, Ohio. Shirts | 41,652 | Dec. 15 | 107 | 1964 |
| Columbus Pharmacal Co., Columbus, Ohio. Antiseptics | 40,608 | June 16 | 104 | 1890 |
| Commercial Asphalt Co., New York, N. Y. Asphalt | 40,503 | June 2 | 104 | 1387 |
| Compressed (Whole Leaf) Tea Syndicate, Ltd., London, England. Tea | 40,393 | May 19 | 104 | 845 |
| Concentrated Flaked Potato Co., Janesville, Wis. Potato food products | 41,516 | Nov. 24 | 107 | 1088 |
| Confectioners' Machinery and Manufacturing Co., Springfield, Mass. Confectionery-coating machinery | 41,797 | Dec. 29 | 107 | 2524 |
| Confectioners' Machinery and Manufacturing Company, Springfield, Mass. Molding or printing and starch machines | 41,796 | Dec. 29 | 107 | 2524 |
| Conklin, George W., Breckenridge, Minn. Remedies for certain named diseases | 40,015 | Mar. 31 | 103 | 1158 |
| Connor, Washington E., New York, N. Y. Oranges | 39,649 | Jan. 20 | 102 | 616 |
| Conrad, Charles H., Chicago, Ill. Coffee | 40,350 | May 12 | 104 | 572 |
| Consolidated Car Heating Co., Albany, N. Y. Apparatus for heating cars | 40,513 | June 2 | 104 | 1388 |
| Consolidated Manhattan Suspender Co., New York, N. Y. Suspenders | 39,695 | Jan. 27 | 102 | 814 |
| Continental-Caoutchouc- und Gutta-Percha-Compagnie, Hanover, Germany. Pneumatic tires | 41,422 | Nov. 3 | 107 | 262 |
| Continental Packing Co., Chicago, Ill. Lard | 40,274 | May 5 | 104 | 305 |
| Continental Packing Co., Chicago, Ill. Lard | 40,275 | May 5 | 104 | 305 |
| Cook & Bernheimer Co., New York, N. Y. Whisky | 40,265 | May 5 | 104 | 304 |
| Cook & Brady, Middletown, Del. Butter | 40,103 | Apr. 14 | 103 | 1675 |

*Alphabetical list of registrants of trade-marks*—Continued.

| Name, residence, and title. | No. | Date. | Official Gazette. Vol. | Page. |
|---|---|---|---|---|
| Cook's Sons, Adam, New York, N. Y. Lubricating compound | 39,725 | Feb. 3 | 102 | 1044 |
| Cooper, Leon N., New York, N. Y. Carbon-paper | 40,580 | June 16 | 104 | 1887 |
| Cordley & Hayes, New York, N. Y. Certain named spittoons | 41,554 | Dec. 1 | 107 | 1367 |
| Cordley & Hayes, New York, N. Y. Certain named coolers | 41,680 | Dec. 15 | 107 | 1967 |
| Corn Products Company, Jersey City, N. J., and New York, N. Y. Syrup | 41,117 | Sept. 15 | 106 | 759 |
| Cornell Stocking Corporation, New Bedford, Mass. Stockings | 40,431 | May 26 | 104 | 1112 |
| Cornioley, Augustine, Paris, France. Hair-lotions | 40,397 | May 19 | 104 | 846 |
| Cortada y Guell, Concepcion, Barcelona, Spain. Playing-cards | 41,507 | Nov. 24 | 107 | 1087 |
| Cosmetique Oriental Zibai, New York, N. Y. Lotions | 41,077 | Sept. 8 | 106 | 536 |
| Costigan, John J., Friendship, N. Y. Leather boots and shoes | 40,842 | Aug. 4 | 105 | 1253 |
| Cotzhausen, Alfred von, Greenfield, Wis. Certain named foods | 41,370 | Oct. 27 | 106 | 2281 |
| Cowles, Frederick H., New York, N. Y. Trousers-hangers | 41,434 | Nov. 10 | 107 | 532 |
| Cox, Richard C., Brooklyn, N. Y. Type-writing machines | 39,857 | Feb. 24 | 102 | 1773 |
| Craig, John E., Cleveland, Tenn. Clothes-washing solution | 40,408 | May 19 | 104 | 847 |
| Crandall Pharmacal Company, New York, N. Y. Antiseptic preparations for mouth and nose washes | 41,517 | Nov. 24 | 107 | 1088 |
| Crane, Willard G., Auburn, N. Y. White laundry soap | 40,024 | Mar. 31 | 103 | 1159 |
| Crank, Nathaniel, Hill City, Kans. Vaccine virus | 39,771 | Feb. 10 | 102 | 1287 |
| Crawford, Clifton, New York, N. Y. Musical comedy in book form | 40,091 | Apr. 14 | 103 | 1673 |
| Creese & Cook Co., Danvers, Mass. Leather | 41,656 | Dec. 15 | 107 | 1964 |
| Crest Manufacturing Co., Cambridge, Mass. Steam and gas engines and their parts and accessories | 39,627 | Jan. 6 | 102 | 224 |
| Crist, Firman R., Salem, N. J. Neuralgia and headache cures | 40,590 | June 16 | 104 | 1888 |
| Crocov, Peter G., Pittsburg, Pa. Cigars, stogies, cheroots, and little cigars | 41,445 | Nov. 10 | 107 | 534 |
| Crooks & Co., Samuel, New York, N. Y. Tea | 40,162 | Apr. 21 | 103 | 1908 |
| Crown Cordial & Extract Co., New York, N. Y. Concentrated syrup | 39,657 | Jan. 20 | 102 | 617 |
| Crown Cordial & Extract Co., New York, N. Y. Fruit preparations and extracts | 41,302 | Oct. 13 | 106 | 1771 |
| Crucible Steel Company of America, Pittsburg, Pa. Tool-steel | 39,792 | Feb. 10 | 102 | 1289 |
| Crucible Steel Company of America, Pittsburg, Pa. Tool-steel | 41,163 | Sept. 22 | 106 | 991 |
| Crucible Steel Company of America, Pittsburg, Pa. Tool-steel | 41,164 | Sept. 22 | 106 | 991 |
| Crucible Steel Company of America, Pittsburg, Pa. Tool-steel | 41,265 | Oct. 6 | 106 | 1498 |
| Crucible Steel Company of America, Pittsburg, Pa. Tool-steel | 41,266 | Oct. 6 | 106 | 1498 |
| Crucible Steel Company of America, Jersey City, N. J., and New York, N. Y. Tool-steel | 40,841 | July 28 | 105 | 970 |
| Crusader Stogie Company, Pittsburg, Pa. Cigars and stogies | 40,864 | Aug. 4 | 105 | 1255 |
| Crusader Stogie Company, Pittsburg, Pa. Cigars and stogies | 40,917 | Aug. 11 | 105 | 1527 |
| Cudahy Bros. Co., Cudahy, Wis. Cured meats | 40,003 | Mar. 31 | 103 | 1157 |
| Cudahy Packing Co., Chicago, Ill., and South Omaha, Nebr. Lard | 40,209 | Apr. 28 | 103 | 2165 |
| Cudahy Packing Co., Chicago, Ill., and South Omaha, Nebr. Smoked and canned meats | 40,617 | June 16 | 104 | 1891 |
| Cudahy Packing Co., Chicago, Ill., and South Omaha, Nebr. Certain named meats | 41,778 | Dec. 29 | 107 | 2523 |
| Curley & Brother, J., New York, N. Y. Safety-razors | 39,854 | Feb. 24 | 102 | 1773 |
| Cyphers Incubator Co., Buffalo, N. Y. Disinfectant and germicide | 40,306 | May 12 | 104 | 568 |
| D. Weeks & Co., Des Moines, Iowa. Remedy for piles | 40,401 | May 19 | 104 | 846 |
| D. B. Murphy File Company, Camden, N. J. Files | 41,539 | Nov. 24 | 107 | 1090 |
| D. K. Miller Lock Co., Philadelphia, Pa. Locks | 39,705 | Jan. 27 | 102 | 815 |
| Dad Chemical Co., New York, N. Y. Remedies for certain named diseases | 39,880 | Mar. 3 | 103 | 219 |
| Daimler-Motoren-Gesellschaft, Cannstadt, Germany. Certain named vehicles and machines therefor | 41,126 | Sept. 15 | 106 | 760 |
| Daimler-Motoren-Gesellschaft, Cannstadt, Germany. Certain named vehicles and machines therefor | 41,127 | Sept. 15 | 106 | 760 |
| Dana & Co., Cincinnati, Ohio. Ice-cream freezers | 39,642 | Jan. 13 | 102 | 462 |
| Dana & Co., Cincinnati, Ohio. Ice-cream freezers | 39,643 | Jan. 13 | 102 | 462 |
| Dana & Company, Cincinnati, Ohio. Ice-cream freezers | 41,122 | Sept. 15 | 106 | 760 |
| Daniel, Charles A., Philadelphia, Pa. Machinery packing | 40,416 | May 19 | 104 | 848 |
| Darby Candy Company, Baltimore, Md. Candy | 41,573 | Dec. 1 | 107 | 1369 |
| Davenport Malting Co., Davenport, Iowa. Beer | 40,441 | May 26 | 104 | 1113 |
| Davidson, Samuel C., Belfast, Ireland. Fans and blowers | 40,840 | July 28 | 105 | 970 |
| Davidson, Samuel C., Belfast, Ireland. Fluid-pressure motor-engines, including turbine-motors | 40,884 | Aug. 4 | 105 | 1256 |
| Davidson, Samuel C., Belfast, Ireland. Pumps | 40,921 | Aug. 11 | 105 | 1528 |
| Davidson, Samuel C., Belfast, Ireland. Certain named heating and drying apparatus | 41,015 | Aug. 25 | 105 | 2054 |
| Davin et Cie., A., Marseilles, France. Cleaning agent for wood, metal, and other articles | 40,318 | May 12 | 104 | 569 |
| Davis & Marston, New York, N. Y. Soap and soap-powder | 41,754 | Dec. 29 | 107 | 2521 |
| Davis, Metta E., Fremont, Nebr. Cholera remedies | 40,052 | Apr. 7 | 103 | 1411 |
| Davis Sewing Machine Co., Dayton, Ohio. Sewing-machines and sewing-machine attachments | 39,663 | Jan. 20 | 102 | 618 |
| Davis Sewing Machine Co., Dayton, Ohio. Sewing-machines and sewing-machine attachments | 39,664 | Jan. 20 | 102 | 618 |
| Davis Sewing Machine Co., Dayton, Ohio. Sewing-machines and sewing-machine attachments | 39,665 | Jan. 20 | 102 | 618 |
| Dawson, Halliwell & Company, Manchester, England. Certain named dry goods | 39,647 | Jan. 20 | 102 | 616 |
| Dawson, Halliwell & Company, Manchester, England. Certain named dry goods | 39,711 | Feb. 3 | 102 | 1043 |
| Dawson, Jonathan, Paterson, N. J. Insoles for shoes | 40,530 | June 9 | 104 | 1647 |
| Dawson, Peter, Dufftown, Scotland. Scotch whisky | 40,916 | Aug. 11 | 105 | 1527 |
| Day-Galpin Mfg. Co., Portland, Me. Paint | 40,824 | July 28 | 105 | 969 |
| Day, Wellington G., Baltimore, Md. Metal-polishing compound | 41,755 | Dec. 29 | 107 | 2521 |
| De Naamlooze Vennootschap Koninklijke Porcelein en Aardewerkfabriek Rozenburg, Gravenhage, Netherlands. Porcelain, earthenware, pottery, and crockery | 41,052 | Sept. 1 | 106 | 260 |
| De Bevoise Waist Co., Newark, N. J. Corsets, corset-waists, and underwaists | 40,298 | May 12 | 104 | 567 |
| De Roubaix, Oedenkoven & Co., Borgerhout, Belgium. Candles | 41,094 | Sept. 8 | 106 | 538 |
| De Roubaix, Oedenkoven & Co., Borgerhout, Belgium. Candles | 41,112 | Sept. 15 | 106 | 759 |
| De Roubaix, Oedenkoven & Co., Borgerhout, Belgium. Candles | 41,113 | Sept. 15 | 106 | 759 |
| De Roubaix, Oedenkoven & Co., Borgerhout, Belgium. Candles | 41,234 | Oct. 6 | 106 | 1495 |
| De Roubaix, Oedenkoven & Co., Borgerhout, Belgium. Candles | 41,512 | Nov. 24 | 107 | 1088 |
| Debow & Co., Newark, N. J. Eggs | 40,649 | June 23 | 104 | 2144 |
| Deerfield Water Company, Cleveland, Ohio. Mineral water | 39,874 | Mar. 3 | 103 | 218 |
| Delaney & Co., J. M., New York, N. Y. Hides, leather, and cut leather | 39,700 | Jan. 27 | 102 | 815 |
| Delbret-Claverie, Charles A., Paris, France. Hernial trusses and other orthopedic bandages and appliances | 41,708 | Dec. 22 | 107 | 2229 |
| Denman, Frank H., Petaluma, Cal. Butter | 41,180 | Sept. 29 | 106 | 1231 |
| Denman, Frank H., Petaluma, Cal. Butter | 41,181 | Sept. 29 | 106 | 1231 |
| Denman, John R., Sonoma, Cal. Butter | 40,954 | Aug. 18 | 105 | 1773 |
| Dennison Manufacturing Co., Boston, Mass. Apparatus for melting sealing-wax | 39,825 | Feb. 17 | 102 | 1547 |
| Dentists Pharmacal Company, Philadelphia, Pa. Antiseptic mouth-wash and gargle | 39,740 | Feb. 3 | 102 | 1046 |
| Denton, Edward, Manchester, England. Certain named parlor game | 40,750 | July 14 | 105 | 489 |
| Derm Aseptic Company, Chicago, Ill. Skin lotion | 41,489 | Nov. 17 | 107 | 827 |
| Dermogen Co., New York, N. Y. Powder for use in surgical dressings | 41,045 | Sept. 1 | 106 | 259 |
| Deutsche Gasglühlicht Actiengesellschaft, Berlin, Germany. Lamps and their parts | 41,121 | Sept. 15 | 106 | 760 |
| Deutsche Honig-Frucht-Marmeladen-Fabrik Heinrich Adolf Behrendt, Dresden, Germany. Marmalades, honey-fruit marmalades, and marmalade-tablets | 40,985 | Aug. 25 | 105 | 2050 |
| Devlin, Sara A., Detroit, Mich. Manicure-powder | 39,845 | Feb. 24 | 102 | 1772 |

*Alphabetical list of registrants of trade-marks*—Continued.

| Name, residence, and title. | No. | Date. | Official Gazette. Vol. | Page. |
|---|---|---|---|---|
| Devold, Peder, Aalesund, Norway. Cod-liver oil | 40,681 | June 30 | 104 | 2433 |
| Devoto, John, New York, N. Y. Olive-oil | 40,908 | Aug. 11 | 105 | 1526 |
| Dicker, Henry W., Cleveland, Ohio. Remedy for certain named venereal diseases | 40,678 | June 30 | 104 | 2435 |
| Dickey, Walter S., Kansas City, Mo. Clay pigeons | 40,970 | Aug. 18 | 105 | 1775 |
| Dielectric Mfg. Co., St. Louis, Mo. Insulating liquids | 40,170 | Apr. 21 | 103 | 1909 |
| Dielhenn Mfg. Co., Massillon, Ohio. Women's woven undergarments | 39,994 | Mar. 31 | 103 | 1156 |
| Dinsmoor Novelty Co., New York, N. Y. Combined skirt fastener and supporter | 39,952 | Mar. 24 | 103 | 880 |
| Disser Syndicate, Limited, London, England. Certain named machines | 40,031 | Mar. 31 | 103 | 1160 |
| Distillers Company, Limited, Edinburgh, Scotland. Whisky | 41,406 | Nov. 3 | 107 | 261 |
| Doane, Francis, Boston, Mass. Pens | 40,239 | May 5 | 104 | 301 |
| Doane, Francis, Boston, Mass. Pens | 40,240 | May 5 | 104 | 301 |
| Doane, Francis, Boston, Mass. Pens | 40,241 | May 5 | 104 | 301 |
| Dock & Coal Co., Plattsburg, N. Y. Wheat-flour | 39,684 | Jan. 27 | 102 | 813 |
| Dock & Coal Co., Plattsburg, N. Y. Corn and oat feed for stock | 39,685 | Jan. 27 | 102 | 812 |
| Dodez, Edward W., Fort Wayne, Ind. Antiseptic dental filling and remedy | 40,353 | May 12 | 104 | 573 |
| Dodge Bros., Petersburg, Va. Salves for certain named purposes | 41,198 | Sept. 29 | 106 | 1233 |
| Dolan Mercantile Co., Atchison, Kans. Rice | 41,713 | Dec. 22 | 107 | 2272 |
| Domestic Sewing Machine Company, Newark, N. J. Sewing-machines | 41,308 | Oct. 13 | 106 | 1772 |
| Donshea, Adeline M., New York, N. Y. Corsets | 39,863 | Mar. 3 | 103 | 219 |
| Dorothy Dodd Shoe Company, Montclair, N. J., and Boston, Mass. Misses' and children's leather shoes | 39,632 | Jan. 13 | 102 | 460 |
| Doud, Fred S., Albion, Mich. Certain named beverage | 40,349 | May 12 | 104 | 572 |
| Douglas, William S., New York, N. Y. Surgical dressings | 41,409 | Nov. 3 | 107 | 261 |
| Douglass, William B., Raleigh, N. C. Flavoring preparation for carbonated drinks | 41,227 | Oct. 6 | 106 | 1494 |
| Dovewreath Card Co., New York, N. Y. Certain named stationery | 39,928 | Mar. 17 | 103 | 652 |
| Dow & Company, F. H., Boston, Mass. Chocolate confections | 39,679 | Jan. 27 | 102 | 813 |
| Dowie, John A., Zion City, Ill. Confectionery | 40,347 | May 12 | 104 | 572 |
| Downey, Edward L., Middleport, N. Y. Chemical compound poison for insects | 41,049 | Sept. 1 | 106 | 259 |
| Dozier, William A., Hattiesburg, Miss. Bitters | 40,767 | July 14 | 105 | 490 |
| Dr. Blair Medical Company, Freeport, Ill. Salves, liniments, tonics, and bowel-regulating medicines | 39,768 | Feb. 10 | 102 | 1286 |
| Dr. D. Jayne & Son, Philadelphia, Pa. Medicinal and chemical preparations for prevention and cure of diseases | 41,627 | Dec. 8 | 107 | 1653 |
| Dr. McLaughlin Company, Chicago, Ill. Electric belts | 40,808 | July 21 | 105 | 740 |
| Dr. Parker Med. Co., Portland, Me. Medicinal preparation in tablet form | 40,398 | May 19 | 104 | 846 |
| Dr. Pinet Co., Ville St. Laurent, Canada. Medicinal preparation for treatment of dyspepsia and loss of appetite | 41,564 | Dec. 1 | 107 | 1368 |
| Dr. Tutt M'f'g. Co., New York, N. Y. Liver-pills | 40,606 | June 16 | 104 | 1890 |
| Draper & Co., J. Forney, Albia, Iowa. Solution used externally for all scalp and skin diseases | 40,356 | May 12 | 104 | 573 |
| Drees, Albertine, Newark, N. J. Hair wavers and curlers | 40,735 | July 7 | 105 | 254 |
| Dreher, Carl, Freiburg, Germany. Titanium preparations for leather-dyeing | 40,534 | June 9 | 104 | 1647 |
| Dreyfus, Leo, New York, N. Y. Insecticide | 41,438 | Nov. 10 | 107 | 533 |
| Droescher, Severin R., New York, N. Y. Razor-hones | 40,136 | Apr. 21 | 103 | 1905 |
| Droescher, Severin R., New York, N. Y. Razor-hones | 40,323 | May 12 | 104 | 569 |
| Droescher, Severin R., New York, N. Y. Razors | 40,456 | May 26 | 104 | 1115 |
| Droescher, Severin R., New York, N. Y. Razors | 40,457 | May 26 | 104 | 1115 |
| Drucker & Co., N., Cincinnati, Ohio. Trunks | 39,733 | Feb. 3 | 102 | 1045 |
| Drudy, Mortimer F., New York, N. Y. Toilet and sachet powders | 40,482 | June 2 | 104 | 1385 |
| Dubbs, Willis S., Seattle, Wash. Petroleum and its distillates | 41,106 | Sept. 15 | 106 | 758 |
| Ducasse, François, New York, N. Y. Dried or evaporated apples | 40,648 | June 23 | 104 | 2144 |
| Duché & Sons, T. M., New York, N. Y. Vegetable fat or grease | 41,152 | Sept. 22 | 106 | 990 |
| Dudley & Co., U. H., New York, N. Y. Dried currants | 41,114 | Sept. 15 | 106 | 759 |
| Duffy & Co., John J., Tacoma, Wash. Cigars | 40,768 | July 14 | 105 | 490 |
| Dufur-Banzhaf Mfg. Co., Denver, Colo. Washing-powder | 40,278 | May 5 | 104 | 305 |
| Duke, Montague & Gillet Company, Baltimore, Md. Straw hats | 40,927 | Aug. 18 | 105 | 1770 |
| Duluth-Superior Milling Co., Duluth, Minn. Wheat-flour | 41,030 | Sept. 1 | 106 | 257 |
| Dumas, William A., Detroit, Mich. Tooth-paste and a tooth-powder | 41,635 | Dec. 8 | 107 | 1654 |
| Duncan & Stenz, New York, N. Y. Silk and silk piece goods | 41,314 | Oct. 20 | 106 | 2006 |
| Dunlevy and Brother, Pittsburg, Pa. Fresh and cured meats | 40,452 | May 26 | 104 | 1114 |
| Dunton, George E., New York, N. Y. Medicines for certain named diseases | 40,704 | June 30 | 104 | 2435 |
| Duwel & Bros., B., Cincinnati, Ohio. Scrap-tobacco for chewing and smoking | 40,169 | Apr. 21 | 103 | 1909 |
| Dyett & Co., New York, N. Y. Carbon-paper | 41,660 | Dec. 15 | 107 | 1965 |
| E. Lazenby & Son, Limited, London, England. Sauces | 40,986 | Aug. 25 | 105 | 2050 |
| E. C. De Witt & Co., Chicago, Ill. Remedies for diseases of the nerves or nervous system | 41,290 | Oct. 13 | 106 | 1770 |
| E. H. Dunlap Mfg. Co., Como, Miss. Colic and kidney cure for mules and horses | 40,765 | July 14 | 105 | 490 |
| Earl Thompson Company, Syracuse, N. Y. Certain named stationery | 39,929 | Mar. 17 | 103 | 652 |
| Eastern Cereal Coffee Co., Norfolk, Va. Cereal coffee | 41,225 | Oct. 6 | 106 | 1493 |
| Eastern Shore of Virginia Produce Exchange, Onley, Va. Sweet and Irish potatoes | 40,934 | Aug. 18 | 105 | 1771 |
| Eastman Kodak Co., Rochester, N. Y. Photographic-printing paper | 40,701 | June 30 | 104 | 2435 |
| Eastman Kodak Co., Rochester, N. Y. Photographic films and plates | 40,719 | July 7 | 105 | 253 |
| Eberhard Manufacturing Co., Cleveland, Ohio. Certain named saddlery hardware | 41,455 | Nov. 10 | 107 | 535 |
| Eberhard Manufacturing Co., Cleveland, Ohio. Certain named saddlery hardware | 41,726 | Dec. 22 | 107 | 2231 |
| Eddystone Manufacturing Co., Philadelphia, Pa. Soap | 41,192 | Sept. 29 | 106 | 1232 |
| Edgecombe, Edward F., Cuyahoga Falls, Ohio. Cement for certain named purposes | 41,001 | Aug. 25 | 105 | 2052 |
| Edmonds-Metzel Manufacturing Company, Chicago, Ill. Metal savings-boxes | 40,414 | May 19 | 104 | 847 |
| Edmonston & Co., Washington, D. C. Leather boots and shoes | 41,592 | Dec. 8 | 107 | 1649 |
| Edson Manufacturing Co., Boston, Mass. Disinfectants | 40,962 | Aug. 18 | 105 | 1774 |
| Edward and John Burke, Ltd., Dublin, Ireland, and New York, N. Y. Whisky | 40,013 | Mar. 31 | 103 | 1158 |
| Edwards, Christopher B., Cincinnati, Ohio. Sheet-metal roofing-plates | 41,685 | Dec. 15 | 107 | 1968 |
| Edwards, Rueben G., London, England. Preparation for the hair | 40,308 | May 12 | 104 | 568 |
| Edwards, Thomas C., Pittsburg, Pa. Coffee | 40,830 | July 28 | 105 | 969 |
| Ehmann Olive Co., Oroville, Cal. Olive-oil emulsion | 41,486 | Nov. 17 | 107 | 827 |
| Ehrensing, Henry, New Orleans, La. Paste for destroying vermin | 40,907 | Aug. 11 | 105 | 1526 |
| Eimer & Amend, New York, N. Y. Medicinal preparation for cure of certain named diseases | 40,359 | May 12 | 104 | 573 |
| Electric Gas Lighting Company, Boston, Mass. Telephonic apparatus | 39,794 | Feb. 10 | 102 | 1289 |
| Electric Gas Lighting Company, Portland, Me., and Boston, Mass. Telephones and telephone-annunciators | 40,919 | Aug. 11 | 105 | 1528 |
| Electro-Chemic Institute, New Orleans, La. Medical publications | 39,644 | Jan. 20 | 102 | 616 |
| Elgin National Watch Company, Chicago, Ill. Watches and watch-movements | 40,372 | May 12 | 104 | 574 |
| Elgin National Watch Company, Chicago, Ill. Watches and watch-movements | 40,373 | May 12 | 104 | 574 |
| Elias, Salim, & T. Abdoo, New York, N. Y. Razors | 41,267 | Oct. 6 | 106 | 1498 |
| Elizabeth Mill Co., Providence, R. I. Thread-yarn | 39,959 | Mar. 24 | 103 | 881 |
| Ellis, Albert W., Boston, Mass. Toy puzzles | 41,277 | Oct. 13 | 106 | 1769 |
| Ellis, Mattie E., Curve, Tenn. Hair-tonics | 40,683 | June 30 | 104 | 2433 |
| Elmira Knitting Mills, Elmira, N. Y. Undershirts | 40,084 | Apr. 14 | 103 | 1673 |
| Emigh & Straub, Troy, N. Y. Detachable laundered collars and cuffs | 41,136 | Sept. 22 | 106 | 988 |

*Alphabetical list of registrants of trade-marks*—Continued.

| Name, residence, and title | No. | Date. | Official Gazette. Vol. | Page. |
|---|---|---|---|---|
| Enck, William C., Lititz, Pa. Medicated cough-drops | 41,195 | Sept. 29 | 106 | 1233 |
| Engel, Dietrich von, Bremen, Germany. Stomach-powder | 40,475 | June 2 | 104 | 1385 |
| Enk Medicine Co., Union City, Ind. Homeopathic preparations | 39,913 | Mar. 10 | 103 | 421 |
| Eppstein, Milton L., Denison, Tex. Soda-fountain syrup | 41,185 | Sept. 29 | 106 | 1232 |
| Erba, Luigi, Milan, Italy. Extracts of fruits | 41,367 | Oct. 27 | 106 | 2281 |
| Erba, Luigi, Milan, Italy. Extracts of fruits | 41,368 | Oct. 27 | 106 | 2281 |
| Erba, Luigi, Milan, Italy. Extracts of fruits | 41,369 | Oct. 27 | 106 | 2281 |
| Esterbrook Steel Pen Manufacturing Co., Camden, N. J., and New York, N. Y. Pens | 39,950 | Mar. 24 | 103 | 880 |
| Esterbrook Steel Pen Mfg. Co., Camden, N. J., and New York, N. Y. Metallic pens | 41,752 | Dec. 29 | 107 | 2520 |
| Estey Manufacturing Company, Owosso, Mich. Certain named household furniture | 40,229 | Apr. 28 | 103 | 2168 |
| Evans, Walter S., Milwaukee, Wis. Tonic medicine in tablet form | 41,439 | Nov. 10 | 107 | 533 |
| Ever-Brite Co., Cleveland, Ohio. Polishing preparation for certain named purposes | 40,965 | Aug. 18 | 105 | 1775 |
| Everett, Ione B., Atlantic City, N. J. Remedy for diseases of head, throat, and lungs | 40,358 | May 12 | 104 | 573 |
| Ewell & Everett, Detroit, Mich. Medicated tablets for la grippe and its after effects | 41,336 | Oct. 20 | 106 | 2009 |
| Eye-Fix Remedy Company, Detroit, Mich. Remedies for diseases of the eye | 41,047 | Sept. 1 | 106 | 259 |
| Ezawa Kingoro, Tokio, Japan. Watches and clocks | 41,218 | Oct. 6 | 106 | 1493 |
| F. Chevalier Co., San Francisco, Cal. Certain named whiskies | 40,644 | June 23 | 104 | 2143 |
| F. B. Chamberlain Company, East St. Louis, Ill., and St. Louis, Mo. Certain named flour | 40,938 | Aug. 18 | 105 | 1771 |
| F. F. Dalley Co. of Hamilton, Limited, Hamilton, Canada. Shoe-polish paste | 41,374 | Oct. 27 | 106 | 2282 |
| F. F. Pulver Company, Rochester, N. Y. Advertising novelties and devices made wholly or in part of pyroxylin or its compounds | 41,029 | Sept. 1 | 106 | 257 |
| F. N. Johnson Co., Bellefontaine, Ohio. Syrups | 41,665 | Dec. 15 | 107 | 1965 |
| F. S. Webster Company, Boston, Mass.; New York, N. Y.; Chicago, Ill., and London, England. Carbon-paper | 41,463 | Nov. 17 | 107 | 825 |
| Fagan, Thomas F. E., New York, N. Y. Certain named medicines | 40,438 | May 26 | 104 | 1113 |
| Fairchild Bros. & Foster, New York, N. Y. Tonics | 41,625 | Dec. 8 | 107 | 1653 |
| Fales, Lewis F., Walpole, Mass. Sewing-machines | 41,012 | Aug. 25 | 105 | 2053 |
| Fannon, James L., Philadelphia, Pa. Lubricating and similar oils | 41,756 | Dec. 29 | 107 | 2521 |
| Farbenfabriken of Elberfeld Co., New York, N. Y. Intestinal antiseptic | 40,859 | Aug. 4 | 105 | 1254 |
| Farbenfabriken of Elberfeld Co., New York, N. Y. Hypnotic | 41,157 | Sept. 22 | 106 | 991 |
| Farbwerke, vormals Meister, Lucius & Brüning, Höchst-on-the-Main, Germany. Photographic developing preparation | 40,259 | May 5 | 104 | 303 |
| Farquhar & Co., A. B., New York, N. Y. Plows for certain named purposes | 40,717 | June 30 | 104 | 2436 |
| Fearon, Daniel & Co., New York, N. Y. Certain named cotton goods | 40,465 | June 2 | 104 | 1384 |
| Fearon, Daniel & Co., New York, N. Y. Certain named cotton goods | 40,466 | June 2 | 104 | 1384 |
| Fearon, Daniel & Co., New York, N. Y. Certain named cotton goods | 40,467 | June 2 | 104 | 1384 |
| Fearon, Daniel & Co., New York, N. Y. Certain named cotton goods | 40,468 | June 2 | 104 | 1384 |
| Federal Chemical Company, Louisville, Ky. Fertilizer | 41,722 | Dec. 22 | 107 | 2230 |
| Feeser, Louis, St. Paul, Minn. Antiseptic astringent powder | 40,960 | Aug. 18 | 105 | 1774 |
| Feller, Eugen V., Stubica, Austria-Hungary. Medical compound for external use | 40,016 | Mar. 31 | 103 | 1158 |
| Feller, Eugen V., Stubica, Austria-Hungary. Certain named medical compound | 41,242 | Oct. 6 | 106 | 1495 |
| Fellows Medical Mf'g Co., Limited, New York, N. Y. Preparation of hypophosphites | 41,626 | Dec. 8 | 107 | 1653 |
| Felt & Tarrant Manufacturing Co., Chicago, Ill. Combined listing and adding machines | 40,417 | May 19 | 104 | 848 |
| Felton & Son, Boston, Mass. Rum | 41,223 | Oct. 6 | 106 | 1493 |
| Ferrell Kellam Drug Company of Baltimore City, Baltimore, Md. Medicine for liver and kidney complaints | 41,080 | Sept. 8 | 106 | 536 |
| Ferro-Phos Co., Pottstown, Pa. Flavoring-syrup for soda-water and carbonation | 41,477 | Nov. 17 | 107 | 826 |
| Finley Acker Co., Philadelphia, Pa. Candy | 41,149 | Sept. 22 | 106 | 990 |
| Finola Manufacturing Company, Baltimore, Md. Cleaning and polishing preparation | 40,277 | May 5 | 104 | 305 |
| Firth-Sterling Steel Company, Pittsburg, Pa. High-speed cutting-steel | 41,459 | Nov. 10 | 107 | 535 |
| Firth-Sterling Steel Company, Pittsburg, Pa. High-speed cutting-steel | 41,460 | Nov. 10 | 107 | 536 |
| Fitch, William, West Brookfield, Mass. Corsets | 40,529 | June 9 | 104 | 1647 |
| Fitchmul Company, Portland, Me., and Concord, N. H. Medicinal preparations for the cure of certain named diseases | 40,357 | May 12 | 104 | 573 |
| Fitchmul Company, Portland, Me., and Concord, N. H. Preparations for cure of certain named diseases | 40,551 | June 9 | 104 | 1649 |
| Fitzgerald, Julia E., Syracuse, N. Y. Medicines for pulmonary and bronchial affections | 40,017 | Mar. 31 | 103 | 1159 |
| Fleming, Birkby & Goodall Limd., Halifax, England. Machine belts and belting | 41,550 | Dec. 1 | 107 | 1366 |
| Fletcher, Frank W., Colmesneil, Tex. Rheumatic remedy | 39,773 | Feb. 10 | 102 | 1287 |
| Flinch Card Co., Kalamazoo, Mich. Card games | 41,004 | Aug. 25 | 105 | 2053 |
| Flintkote Manufacturing Co., Arlington, N. J. Roofing-felt and roofing-paper | 39,785 | Feb. 10 | 102 | 1289 |
| Florence Manufacturing Co., Northampton, Mass.; New York, N. Y., and Chicago, Ill. Brushes for toilet purposes | 40,105 | Apr. 14 | 103 | 1675 |
| Florian, Julian, New York, N. Y. Preparation for treatment of photographic plates | 41,522 | Nov. 24 | 107 | 1088 |
| Floridine Mf'g Co., New York, N. Y. Scouring-soap and soap-powder | 39,809 | Feb. 17 | 102 | 1546 |
| Flournoy Tobacco Co., Paducah, Ky. Plug and twist tobacco | 40,260 | May 5 | 104 | 303 |
| Fonseca, Francisco E., New York, N. Y. Cigars | 40,825 | July 28 | 105 | 969 |
| Fonseca, Francisco E., New York, N. Y. Cigars | 40,826 | July 28 | 105 | 969 |
| Foote, Pierson & Co., New York, N. Y. Lubricant liquid | 41,257 | Oct. 6 | 106 | 1497 |
| Forcite Powder Company, New York, N. Y. Blasting-powder | 41,206 | Sept. 29 | 106 | 1234 |
| Ford, George A., Chicago, Ill. Night-robes and pajamas | 41,653 | Dec. 15 | 107 | 1964 |
| Ford, James B., Baltimore, Md. Salve | 40,355 | May 12 | 104 | 573 |
| Forgan, Thomas H., Northwich, England. Medicine for treatment of fevers | 40,149 | Apr. 21 | 103 | 1906 |
| Forster Bros., Philadelphia, Pa. Leather boots and shoes | 41,102 | Sept. 15 | 106 | 758 |
| Fort Wayne Steam Specialty Company, Fort Wayne, Ind. Compounds for purifying water | 40,485 | June 2 | 104 | 1386 |
| Foster-Milburn Company, Buffalo, N. Y. Laxatives | 40,857 | Aug. 4 | 105 | 1254 |
| Fountain of Youth Company, Trenton, N. J. Hair tonic or renewer | 41,411 | Nov. 3 | 107 | 261 |
| Francis Brothers, London, England, and New York, N. Y. Serial publication | 40,375 | May 19 | 104 | 844 |
| Frank & Co., Ivan, New York, N. Y. Suits for boys and children | 41,312 | Oct. 20 | 106 | 2006 |
| Frank & Co., Ivan, New York, N. Y. Suits for boys and children | 41,348 | Oct. 27 | 106 | 2279 |
| Frank & Co., Ivan, New York, N. Y. Collars for boys and girls | 41,546 | Dec. 1 | 107 | 1366 |
| Franke-Jenner Fireproof Flooring Co., Brooklyn, N. Y. Certain named fireproof materials and constructions | 39,889 | Mar. 3 | 103 | 219 |
| Fraser Tablet Company, New York and Brooklyn, N. Y. Anodyne tablets | 40,020 | Mar. 31 | 103 | 1159 |
| Fred Hollender & Co., Incorp., New York, N. Y. Lager-beer | 41,446 | Nov. 10 | 107 | 534 |
| Frederick H. Sprague Company, Orange, Mass. Trousers | 40,726 | July 7 | 105 | 253 |
| Frederick Stearns & Co., Detroit, Mich. Perfumery | 39,812 | Feb. 17 | 102 | 1546 |
| Frederick Stearns & Co., Detroit, Mich. Serum | 40,860 | Aug. 4 | 105 | 1254 |
| Frederick Stearns & Co., Detroit, Mich. Perfumery | 41,191 | Sept. 29 | 106 | 1232 |
| Fres-Ko Chemical Co., Fort Wayne, Ind. Soldering-flux | 39,910 | Mar. 10 | 103 | 421 |
| Fritz Schmitz, Jun., Altmengers, Leipzig, Germany. Certain named cleaning, polishing, and preserving preparations | 41,453 | Nov. 10 | 107 | 535 |
| Fruchaud et Cie., Rene, Limoges, France. Kitchen utensils made of porcelain or chinaware | 39,984 | Mar. 24 | 103 | 883 |
| Frye & Co., Joel, New York, N. Y. Canned fish | 39,671 | Jan. 27 | 102 | 812 |
| Frye & Co., Joel, New York, N. Y. Canned fish | 39,672 | Jan. 27 | 102 | 812 |
| Fuchs, J. Fr., Cannstadt, Germany. Drawing-knives or spokeshaves | 41,496 | Nov. 17 | 107 | 828 |

*Alphabetical list of registrants of trade-marks*—Continued.

| Name, residence, and title. | No. | Date. | Official Gazette. Vol. | Page. |
|---|---|---|---|---|
| G. Watzek & E. François. Berlin, Germany. Remedy for promoting the growth of hair | 41,107 | Sept. 15 | 106 | 758 |
| "G. R. C." Co., Tifton, Ga. Remedy for rheumatism and diseases of the blood | 41,442 | Nov. 10 | 107 | 533 |
| Gailey, Daniel, Philadelphia, Pa. Games | 40,242 | May 5 | 104 | 302 |
| Gallinger, Simon, New York, N. Y. Bronze-powders | 39,810 | Feb. 17 | 102 | 1546 |
| Gannaway Drug Co., Warren, Ark. Medicinal tonic for malaria, chills, and fevers | 41,557 | Dec. 1 | 107 | 1367 |
| Garcia & Maggini, San Francisco, Cal. Green and dried fruits | 40,160 | Apr. 21 | 103 | 1908 |
| Gardner Governor Company, Quincy, Ill. Governors for pressure-fluid engines | 41,166 | Sept. 22 | 106 | 992 |
| Gardner Governor Company, Quincy, Ill. Pumps and pump parts | 41,730 | Dec. 22 | 107 | 2231 |
| Gardner Governor Company, Quincy, Ill. Fluid-compressors and compressor parts | 41,731 | Dec. 22 | 107 | 2231 |
| Gardner, R. W., New York, N. Y. Certain named internal remedy | 41,784 | Dec. 29 | 107 | 2523 |
| Gavitt, Harry E., Topeka, Kans. Playing-cards | 41,506 | Nov. 24 | 107 | 1087 |
| Gearon, Dennis, San Francisco, Cal. Salve for certain named purposes | 41,570 | Dec. 1 | 107 | 1369 |
| Geddes & Harkleroad, San Francisco, Cal. Metal-polishes | 39,975 | Mar. 24 | 103 | 882 |
| Gem Cutlery Co., New York, N. Y. Safety-razors | 41,383 | Oct. 27 | 106 | 2283 |
| General Electric Company, Schenectady, N. Y. Direct-current motors and generators | 40,514 | June 2 | 104 | 1388 |
| General Electric Company, Schenectady, N. Y. Alternating-current transformers | 40,745 | July 7 | 105 | 255 |
| General Electric Company, Schenectady, N. Y. Covered electrical conductors | 41,497 | Nov. 17 | 107 | 828 |
| Genesee Pure Food Co., Leroy, N. Y. Jelly | 40,383 | May 19 | 104 | 844 |
| Genesee Pure Food Co., Leroy, N. Y. Cereal breakfast-foods | 40,384 | May 19 | 104 | 845 |
| Geo. A. Hormel & Co., Austin, Minn. Cured meats | 41,178 | Sept. 29 | 106 | 1231 |
| Geo. A. Newman Co., Louisville, Ky. Antiseptic and astringent powders | 41,296 | Oct. 13 | 106 | 1771 |
| Geo. Borgfeldt & Co., New York, N. Y. Toys | 40,505 | June 2 | 104 | 1388 |
| Geo. Ertel Co., Quincy, Ill. Incubators and brooders | 40,082 | Apr. 7 | 103 | 1414 |
| George A. Bohrer Brewing Co., Lafayette, Ind. Beer | 40,915 | Aug. 11 | 105 | 1527 |
| George Urban Milling Co., Buffalo, N. Y. Wheat-flour | 41,578 | Dec. 1 | 107 | 1369 |
| George Urban Milling Co., Buffalo, N. Y. Wheat-flour | 41,579 | Dec. 1 | 107 | 1369 |
| George Urban Milling Co., Buffalo, N. Y. Wheat-flour | 41,580 | Dec. 1 | 107 | 1369 |
| Georges Favre-Jacot & Co., Le Locle, Switzerland. Watches and parts of watches | 41,747 | Dec. 29 | 107 | 2520 |
| Gerbig, Charles H., Toronto, Canada. Stove and metal polishes | 40,966 | Aug. 18 | 105 | 1775 |
| Gibbens and Stream, New Orleans, La. Rubber belting | 41,322 | Oct. 20 | 106 | 2007 |
| Gibbs Engineering & Manufacturing Company, New York, N. Y. Certain named vehicles and parts thereof | 41,729 | Dec. 22 | 107 | 2231 |
| Gibbs, John W., New York, N. Y. Leather boots, shoes, and slippers | 39,759 | Feb. 10 | 102 | 1285 |
| Gibford, Edward B., Adrian, Mich. Razor-strops | 41,384 | Oct. 27 | 106 | 2283 |
| Gilbert, Son & Co., Murray, Ky. Plug chewing-tobacco | 39,650 | Jan. 20 | 102 | 616 |
| Gillespie, Maria A., New York, N. Y. Remedies for seasickness | 40,763 | July 14 | 105 | 490 |
| Ginter, Mathew J., Minneapolis, Minn. Remedy for indigestion | 40,473 | June 2 | 104 | 1385 |
| Gisler, August, St. Louis, Mo. Bread and cakes | 40,158 | Apr. 21 | 103 | 1907 |
| Glaser, Kohn & Co., Chicago, Ill. Pickles | 40,537 | June 9 | 104 | 1648 |
| Glenn-Armstrong Co., Chicago, Ill. Cooking-oil | 39,655 | Jan. 20 | 102 | 617 |
| Glidden Varnish Co., Cleveland, Ohio. Varnish | 40,799 | July 21 | 105 | 739 |
| Goetz and Co., Brooklyn, N. Y. Pianos | 40,588 | June 16 | 104 | 1888 |
| Gold Coin Stock Food Company, St. Paul, Minn. Prepared foods for live stock | 41,623 | Dec. 8 | 107 | 1653 |
| Gold Leaf Baking Powder Company, Defiance, Ohio. Laundry starch | 40,453 | May 26 | 104 | 1114 |
| Goldman, Gustav, Baltimore, Md. Pads or padding | 41,025 | Sept. 1 | 106 | 257 |
| Goldstein, Leo E., Newark, N. J. Leather shoe-laces | 41,396 | Nov. 3 | 107 | 260 |
| Goldwater, Henry, New York, N. Y. Certain named ointment | 41,568 | Dec. 1 | 107 | 1368 |
| Gonyea and Perodeau, Providence, R. I. Rupture cure | 39,878 | Mar. 3 | 103 | 218 |
| Goodfellow-Brookes Shoe Company, St. Louis, Mo. Leather shoes | 40,531 | June 9 | 104 | 1647 |
| Goodyear Tire & Rubber Company, Akron, Ohio. Solid and pneumatic tires | 41,344 | Oct. 20 | 106 | 2010 |
| Gorah Co., New York, N. Y. Medicinal tonic | 40,014 | Mar. 31 | 103 | 1158 |
| Goulding, Lewis, Whitman, Mass. Carbonated beverage | 41,036 | Sept. 1 | 106 | 258 |
| Govan, William J., Atlanta, Ga. Wash for tender or sore feet | 40,682 | June 30 | 104 | 2433 |
| Govin, Gustavo F., New York, N. Y. Talcum powder | 41,299 | Oct. 13 | 106 | 1771 |
| Graeco-American Currant & Supply Co., Jersey City, N. J. Currants | 41,622 | Dec. 8 | 107 | 1653 |
| Graham, James, Detroit, Mich. Syringes | 40,304 | May 12 | 104 | 568 |
| Graham, James, Detroit, Mich. Bread and biscuits | 40,984 | Aug. 25 | 105 | 2050 |
| Green, Howard, Westminster, England. Certain named medical preparation | 41,672 | Dec. 15 | 107 | 1966 |
| Green, John D., Chillicothe, Ohio. Washing-powders | 41,480 | Nov. 17 | 107 | 827 |
| Green-Wheeler Shoe Company, Fort Dodge, Iowa. Leather boots and shoes | 40,844 | Aug. 4 | 105 | 1253 |
| Green-Wheeler Shoe Company, Fort Dodge, Iowa. Leather boots and shoes | 40,845 | Aug. 4 | 105 | 1253 |
| Green-Wheeler Shoe Company, Fort Dodge, Iowa. Leather boots and shoes | 40,846 | Aug. 4 | 105 | 1253 |
| Green-Wheeler Shoe Company, Fort Dodge, Iowa. Leather boots and shoes | 40,847 | Aug. 4 | 105 | 1253 |
| Greene, Tweed & Company, New York, N. Y. Self-lubricating packing | 41,258 | Oct. 6 | 106 | 1497 |
| Greene, Tweed & Company, New York, N. Y. Self-lubricating packing | 41,259 | Oct. 6 | 106 | 1497 |
| Greene, Tweed & Company, New York, N. Y. Braided flax packing | 41,319 | Oct. 20 | 106 | 2007 |
| Greene, Tweed & Company, New York, N. Y. Braided flax packing | 41,320 | Oct. 20 | 106 | 2007 |
| Greenwood, Chester, Farmington, Me. Ear-protectors | 40,527 | June 9 | 104 | 1647 |
| Greever-Lotspeich Mfg. Co., Knoxville, Tenn. Flavoring extracts | 40,273 | May 5 | 104 | 305 |
| Gregg, Fred W., Cleveland, Ohio. Pills and pellets for certain named diseases | 40,018 | Mar. 31 | 103 | 1159 |
| Gregg, Fred W., Cleveland, Ohio. Remedy for disorders of the spine and nerves and general disabilities | 40,820 | July 28 | 105 | 968 |
| Gretsch, Fred., New York, N. Y. Certain named musical instruments | 41,054 | Sept. 1 | 106 | 260 |
| Gribbon Brothers, New York, N. Y. Certain named fabrics | 39,698 | Jan. 27 | 102 | 815 |
| Gribbon Brothers, New York, N. Y. Certain named fabrics | 39,830 | Feb. 24 | 102 | 1771 |
| Grief & Bro., L., Baltimore, Md. Coats, vests, pants, and overcoats | 40,376 | May 19 | 104 | 844 |
| Griffin Button Company, Shelton, Conn. Horn buttons and hoof buttons | 41,075 | Sept. 8 | 106 | 536 |
| Griffin, Horatio M., Galt, Canada. Aromatic food preparations for animals | 40,878 | Aug. 4 | 105 | 1256 |
| Griffon Cutlery Company, New York, N. Y. Safety-razors | 41,382 | Oct. 27 | 106 | 2283 |
| Griggs, Cooper and Company, St. Paul, Minn. Canned and packaged fruits and vegetables | 40,688 | June 30 | 104 | 2433 |
| Griggs, Cooper and Company, St. Paul, Minn. Canned and packaged fruits and vegetables | 40,689 | June 30 | 104 | 2433 |
| Grogan, Charles P., Los Angeles, Cal. Olive-oil | 41,448 | Nov. 10 | 107 | 534 |
| Ground Hog Plow & Foundry Co., Clarksville, Tenn. Plows | 39,706 | Jan. 27 | 102 | 816 |
| Gruel & Otto, Port Huron, Mich. Certain named carbonated beverages | 40,394 | May 19 | 104 | 845 |
| Grunert, Ferdinand, Chicago, Ill. Cheese | 40,983 | Aug. 25 | 105 | 2050 |
| Gude & Co., Chemische Fabrik, A., Berlin, Germany. Hematogenic or blood-forming iron compounds | 41,484 | Nov. 17 | 107 | 827 |
| Gude & Co., Chemische Fabrik, A., Berlin, Germany. Hematogenic or blood-forming iron compounds | 41,706 | Dec. 22 | 107 | 2228 |
| Guenther, George G., Reading, Pa. Hosiery | 41,064 | Sept. 8 | 106 | 535 |
| Guiterman, Rosenfeld & Co., New York, N. Y. Fountain-pens | 39,612 | Jan. 6 | 102 | 222 |
| Gulf Refining Company, Port Arthur, Tex. Petroleum-oils | 40,173 | Apr. 21 | 103 | 1909 |
| Gulf Refining Company, Port Arthur, Tex. Petroleum-oils | 41,670 | Dec. 15 | 107 | 1966 |
| Guptill, Hervey E., Haverhill, Mass. Ladies' leather boots and shoes | 40,303 | May 12 | 104 | 568 |
| Gurney Heater Mfg. Co., Boston, Mass. Heating apparatus | 39,925 | Mar. 10 | 103 | 422 |

*Alphabetical list of registrants of trade-marks*—Continued.

| Name, residence, and title. | No. | Date. | Official Gazette. Vol. | Page. |
|---|---|---|---|---|
| Gush, Winant V. P., Brielle, N. J. Plastic composition for shielding glass surfaces against the action of vapors or moisture | 39,764 | Feb. 10 | 102 | 1286 |
| Gustin, Cook & Buckley, Bay City, Mich. Tea | 39,678 | Jan. 27 | 102 | 812 |
| Guthman, Solomons & Co., New York, N. Y. Braids | 41,692 | Dec. 22 | 107 | 2227 |
| Guthmann, Carpenter & Telling, Chicago, Ill. Leather boots and shoes | 40,432 | May 26 | 104 | 1112 |
| H. Channon Company, Chicago, Ill. Wire rope | 41,124 | Sept. 15 | 106 | 760 |
| H. A. Metz & Co., New York, N. Y. Chemical preparations for use in dyeing and printing textiles | 39,908 | Mar. 10 | 103 | 421 |
| H. A. Metz & Co., New York, N. Y. Coloring-matters for production of pigments | 40,175 | Apr. 21 | 103 | 1909 |
| H. B. Wiggin's Sons Company, Bloomfield, N. J. Compounds for certain named purposes | 41,330 | Oct. 20 | 106 | 2008 |
| H. D. Foss & Co., Incorporated, Boston, Mass. Chocolate confections | 39,935 | Mar. 17 | 103 | 652 |
| H. H. Fuller & Co., Halifax, Canada. Picks | 41,458 | Nov. 10 | 107 | 535 |
| H. M. Reynolds Roofing Co., Grand Rapids, Mich. Sheet-roofing | 41,551 | Dec. 1 | 107 | 1367 |
| H. M. Reynolds Roofing Co., Grand Rapids, Mich. Sheet-roofing | 41,552 | Dec. 1 | 107 | 1367 |
| H. M. Sawyer & Son, Cambridge, Mass. Certain named waterproof fabrics and articles made therefrom | 40,367 | May 12 | 104 | 574 |
| H. M. Sawyer & Son, Cambridge, Mass. Certain named waterproof fabrics and articles made therefrom | 41,736 | Dec. 29 | 107 | 2519 |
| H-O (Hornby's Oatmeal) Company, New York and Buffalo, N. Y. Breakfast-foods | 40,200 | Apr. 28 | 103 | 2164 |
| H-T Stock Food Co., Cleveland, Ohio. Stock and poultry foods | 39,973 | Mar. 24 | 103 | 882 |
| Haarmann-de Laire-Schaefer Co., Maywood, N. J. Perfumery and flavoring products | 41,630 | Dec. 8 | 107 | 1654 |
| Haarmann-de Laire-Schaefer Co., Maywood, N. J. Perfumery | 41,631 | Dec. 8 | 107 | 1654 |
| Haddock, John M., Bedford, Iowa. Game of cards | 40,024 | Apr. 7 | 103 | 1409 |
| Hagan and Dodd Co., Atlanta, Ga. Ginger-ale | 41,617 | Dec. 8 | 107 | 1652 |
| Hair, Josiah T., Chicago, Ill. Chemical fire-extinguisher | 41,738 | Dec. 22 | 107 | 2231 |
| Halbach, William M., London, England. Leather boots, shoes, and slippers | 41,353 | Oct. 27 | 106 | 2279 |
| Hall & Ruckel, New York, N. Y. Dentifrices | 40,307 | May 12 | 104 | 568 |
| Hallam, Charles F., New York, N. Y. Shields for mattresses | 41,068 | Sept. 8 | 106 | 535 |
| Hall's Safe Company, Cincinnati, Ohio. Fire and burglar proof safes, vault-doors, and safe-deposit boxes | 41,794 | Dec. 29 | 107 | 2524 |
| Hamilton, Joshua S., Brantford, Canada. Wine | 40,196 | Apr. 28 | 103 | 2164 |
| Hamilton, Joshua S., Brantford, Canada. Champagne or sparkling wine | 40,197 | Apr. 28 | 103 | 2164 |
| Hamparzum, Aram, a Firm, New York, N. Y. Figs | 40,942 | Aug. 18 | 105 | 1772 |
| Hance Bros. & White, Philadelphia, Pa. Gelatinous elastic capsules containing liquid or solid medicines | 39,941 | Mar. 17 | 103 | 653 |
| Handy Brothers Mining Co., West Bay City, Mich. Bituminous coal | 40,286 | May 5 | 104 | 306 |
| Hanford-Hazelwood Cream Company, Sioux City, Iowa. Butter | 40,953 | Aug. 18 | 105 | 1773 |
| Harding, George L., Binghamton, N. Y. Poultry food and remedies | 40,956 | Aug. 18 | 105 | 1774 |
| Hargrave Iodoform Vapor Co., Ltd., Wilson, N. C. Remedies for catarrh and bronchial troubles | 39,659 | Jan. 20 | 102 | 617 |
| Harp-O-Chord Co., Columbus, Ohio. Combination musical instruments, comprising a banjo and harmonica | 40,805 | July 21 | 105 | 740 |
| Harris, Leroy H., Washington, D. C. Blood-tonic | 39,798 | Feb. 10 | 102 | 1290 |
| Harris, Minnie M., New York, N. Y. Medicines for external treatment of diseases and irritations of skin, scalp, and face | 39,769 | Feb. 10 | 102 | 1287 |
| Harris Safety Company, New York, N. Y. Certain named fire-extinguishers | 40,177 | Apr. 21 | 103 | 1910 |
| Hart Manufacturing Co., Hartford, Conn. Certain named electrical appliances | 39,856 | Feb. 24 | 102 | 1773 |
| Hart & Shepard, East Canterbury, N. H. Ladies' cloaks | 39,993 | Mar. 31 | 103 | 1156 |
| Hartigan, Joseph, Mount Pleasant, Pa. Waterproof dressing for leather | 39,806 | Feb. 17 | 102 | 1545 |
| Harvey, Lockie & Co., London, England. Fruits and vegetables in packages | 40,935 | Aug. 18 | 105 | 1771 |
| Hatschek, Ludwig, Schöndorf, Austria-Hungary. Roofing and other building material from artificial stone | 41,389 | Oct. 27 | 106 | 2284 |
| Havana Commercial Co., Jersey City, N. J., and New York, N. Y. Cigars | 41,473 | Nov. 17 | 107 | 826 |
| Havanna Cigar Manufacturing Co., Havanna, near Congleton, England. Cigars and cheroots | 41,033 | Sept. 1 | 106 | 258 |
| Hawes, John B., Ithaca, N. Y. Suppositories for prevention of certain named diseases | 39,720 | Feb. 3 | 102 | 1044 |
| Hazel, George W., Chicago, Ill. Refined lard | 41,182 | Sept. 29 | 106 | 1231 |
| Hazelwood Company, Limited, Spokane, Wash. Milk, cream, and buttermilk | 40,829 | July 28 | 105 | 969 |
| Hazen Confectionery Company, Cambridge, Mass. Confectionery | 40,346 | May 12 | 104 | 572 |
| Heberling, Albert T., Parkesburg, Pa. Spavin cure | 40,156 | Apr. 21 | 103 | 1907 |
| Hecker-Jones-Jewell Milling Company, New York, N. Y. Flour | 40,937 | Aug. 18 | 105 | 1771 |
| Helbling & Co., G., Küsnacht, Switzerland. Water-closets and water-closet fittings | 41,061 | Sept. 1 | 106 | 260 |
| Held, Robert, Berlin, Germany. Telephones | 40,585 | June 16 | 104 | 1888 |
| Heller, Alfred, Meningen, Germany. Doll-heads | 40,179 | Apr. 28 | 103 | 2162 |
| Hellman & Co., A. M., St. Louis, Mo. Beverages or tonics containing whisky | 40,769 | July 14 | 105 | 491 |
| Helvetia Milk Condensing Co., Highland, Ill. Condensed milk | 39,936 | Mar. 17 | 103 | 653 |
| Helvetia Milk Condensing Co., Highland, Ill. Condensed milk | 39,937 | Mar. 17 | 103 | 653 |
| Hemingray Glass Co., Covington, Ky. Glass jars | 39,727 | Feb. 3 | 102 | 1044 |
| Hennequin, Paul E., Paris, France. Double weldless barrels for firearms | 40,883 | Aug. 4 | 105 | 1256 |
| Henry Meier & Co., Pittsburg, Pa. Hair-tonics | 41,518 | Nov. 24 | 107 | 1088 |
| Henry Milward & Sons, Limited, Redditch, England. Needles | 39,851 | Feb. 24 | 102 | 1773 |
| Henry Milward & Sons, Limited, Redditch, England. Needles | 39,852 | Feb. 24 | 102 | 1773 |
| Hensel Colladay Co., Philadelphia, Pa. Skirt-edge protector | 39,694 | Jan. 27 | 102 | 814 |
| Herb Medicine Co., Springfield, Ohio. Horse, cattle, and poultry food and medicine in powdered form | 40,007 | Mar. 31 | 103 | 1157 |
| Hercules Pulley Covering Company, Denver, Colo. Certain named cement or composition and paper | 40,215 | Apr. 28 | 103 | 2166 |
| Herskovits, Moris, New York, N. Y. Paprika | 40,101 | Apr. 14 | 103 | 1674 |
| Herz Manufacturing Company, St. Paul, Minn. Hydrocarbon-burners | 39,704 | Jan. 27 | 102 | 815 |
| Hesselroth, Lawrence, Chicago, Ill. Breath-perfuming candies | 41,408 | Nov. 3 | 107 | 261 |
| Hetzel, Charles E., executor. (See Hetzel, John G.) | | | | |
| Hetzel, John G., deceased; C. E. Hetzel, Newark, N. J., executor. Roofing compositions | 40,775 | July 14 | 105 | 491 |
| Heymann & Co., Philadelphia, Pa. Cigars | 40,262 | May 5 | 104 | 304 |
| Heymann & Co., Philadelphia, Pa. Cigars | 40,263 | May 5 | 104 | 304 |
| Hideite Leather Co., Boston, Mass. Leather-board and leather | 41,073 | Sept. 8 | 106 | 536 |
| Higgason, Wallace B., Zearing, Iowa. Remedies for certain namad diseases of swine | 39,715 | Feb. 3 | 102 | 1043 |
| Hill, Joseph P., Worcester, Mass. Ash-sifters | 39,947 | Mar. 17 | 103 | 654 |
| Hill Publishing Company, New York, N. Y. Monthly magazine | 39,709 | Feb. 3 | 102 | 1043 |
| Hill, Thomas L., San Francisco, Cal. Certain named dental preparations | 40,352 | May 12 | 104 | 572 |
| Hill-Warner-Fitch Co., Binghamton, N. Y. Caramels, chocolates, bonbons, and favors | 41,574 | Dec. 1 | 107 | 1369 |
| Himadi, David A., Lodi, N. J. Proprietary medicines for treatment of certain named diseases | 41,291 | Oct. 13 | 106 | 1771 |
| Hinchman, Mary E., Richmond, Va. Lotions, creams, cosmetics, and pastes | 39,776 | Feb. 10 | 102 | 1287 |
| Hirschman Shoe Co., Salt Lake City, Utah. Leather and leather and canvas shoes | 40,660 | June 30 | 104 | 2431 |
| Hirsh Brothers, New Haven, Conn. Garment-supporter clasps | 41,055 | Sept. 1 | 106 | 260 |
| Hison Remedy Company, Lincoln, Nebr. Liquid extract of smoke | 40,684 | June 30 | 104 | 2433 |
| Hitchcock Supply Co., Inc., Springfield, Mass. Water-closet bowls | 40,573 | June 9 | 104 | 1651 |
| Hobart, Frank, Topeka, Kans. Proprietary medicine for certain named diseases | 41,416 | Nov. 3 | 107 | 262 |
| Hochberg, Hugo, New York, N. Y. Safety-matches | 40,963 | Aug. 18 | 105 | 1775 |

*Alphabetical list of registrants of trade-marks*—Continued.

| Name, residence, and title. | No. | Date. | Official Gazette. Vol. | Page. |
|---|---|---|---|---|
| Hockaday Hardware Company, Wichita, Kans. Paints and colors | 41,260 | Oct. 6 | 106 | 1497 |
| Hockaday Hardware Company, Wichita, Kans. Wire fences | 41,261 | Oct. 6 | 106 | 1497 |
| Hockaday Hardware Company, Wichita, Kans. Lawn-mowers | 41,262 | Oct. 6 | 106 | 1498 |
| Hockaday Hardware Company, Wichita, Kans. Sewing-machines and parts thereof | 41,263 | Oct. 6 | 106 | 1498 |
| Hockaday Hardware Company, Wichita, Kans. Stoves and ranges | 41,264 | Oct. 6 | 106 | 1498 |
| Hockaday Hardware Company, Wichita, Kans. Axes and hatchets | 41,340 | Oct. 20 | 106 | 2009 |
| Hodges and Bro., Laurium, Mich. Ointment or salve | 39,621 | Jan. 6 | 102 | 223 |
| Hodgman Rubber Company, New York, N. Y. Mackintoshes and rubber coats | 40,041 | Apr. 7 | 103 | 1409 |
| Hoff, John N., Newark, N. J. Paints, painters' varnishes, and painters' oils | 40,338 | May 12 | 104 | 571 |
| Hohner, Firm of M., Trossingen, Germany, and New York, N. Y. Mouth-harmonicas | 40,569 | June 9 | 104 | 1651 |
| Holden, George B., Lowell, Mass. Washing compound | 40,171 | Apr. 21 | 103 | 1909 |
| Holzapfel, Albert C. A., London, England. Dietetic preparations | 40,344 | May 12 | 104 | 571 |
| Home Medicine Company, Washington, D. C. Remedies for diseases of the stomach and bowels | 40,605 | June 16 | 104 | 1890 |
| Hood and Mead, Des Moines, Iowa. Cigars | 41,616 | Dec. 8 | 107 | 1652 |
| Hood Rubber Co., Boston, Mass. Rubber boots and shoes | 41,210 | Oct. 6 | 106 | 1492 |
| Hood Rubber Company, Boston, Mass. Rubber boots and shoes | 41,472 | Nov. 17 | 107 | 826 |
| Hooper Sons' Manufacturing Company, Philadelphia, Pa. Cordage | 39,629 | Jan. 13 | 102 | 460 |
| Hornby, Nichols, Parker Company, Pipestone, Minn. Dried fruits | 40,690 | June 30 | 104 | 2434 |
| Hornby, Nichols, Parker Company, Pipestone, Minn. Canned vegetables and fruits | 41,031 | Sept. 1 | 106 | 257 |
| Horne, James N., Hornes Mill, Miss. Chalybeate mineral water | 40,268 | May 5 | 104 | 304 |
| Horton Angell Company, Attleboro, Mass. Shirt-studs | 40,565 | June 9 | 104 | 1650 |
| Horton, Arthur E., Boston, Mass. Pamphlets, books, charts, and maps of useful information | 41,286 | Oct. 13 | 106 | 1770 |
| Horton Manufacturing Company, Fort Wayne, Ind. Hand-operated washing-machines | 40,326 | May 12 | 104 | 570 |
| Hospital Sheeting Co., Boston, Mass. Waterproof sheetings and fabrics | 41,547 | Dec. 1 | 107 | 1366 |
| Houchens Medicine Company, Baltimore, Md. Medicinal preparation for cure of certain named diseases | 40,311 | May 12 | 104 | 568 |
| Housatonic Manufacturing Company, New Haven, Conn. Plated articles of tableware | 40,725 | July 7 | 105 | 253 |
| Hovey, Eddy H., New York, N. Y. Certain named attachments for steam-boilers | 39,669 | Jan. 20 | 102 | 618 |
| Howard, Curtis C., Columbus, Ohio. Embalming fluid | 40,639 | June 23 | 104 | 2143 |
| Howe, Benjamin V., Boston, Mass. Medical compound for the cure of coughs and colds | 40,858 | Aug. 4 | 105 | 1254 |
| Howells & Co., Charles H., Paterson, N. J. Pharmaceutical compounds used as a tonic | 41,293 | Oct. 13 | 106 | 1771 |
| Howley, Haviland & Dresser, New York, N. Y. Sheet-music | 40,035 | Apr. 7 | 103 | 1409 |
| Howley, Haviland & Dresser, New York, N. Y. Sheet-music | 40,092 | Apr. 14 | 103 | 1674 |
| Hudnut, Richard, New York, N. Y. Cold-cream | 39,743 | Feb. 3 | 102 | 1046 |
| Hudnut, Richard, New York, N. Y. Perfumes | 39,744 | Feb. 3 | 102 | 1046 |
| Hudnut, Richard, New York, N. Y. Perfumes | 39,745 | Feb. 3 | 102 | 1046 |
| Hudnut, Richard, New York, N. Y. Perfumes | 39,746 | Feb. 3 | 102 | 1046 |
| Hudnut, Richard, New York, N. Y. Perfumes | 39,747 | Feb. 3 | 102 | 1046 |
| Hudnut, Richard, New York, N. Y. Perfumes | 39,748 | Feb. 3 | 102 | 1046 |
| Hudson, Charles, London, England. Packing material for steam, water, and gas joints | 40,778 | July 14 | 105 | 492 |
| Hudson Portland Cement Co., Hudson, N. Y. Hydraulic cement | 41,002 | Aug. 25 | 105 | 2052 |
| Huenefeld, Ernst H., Cincinnati, Ohio. Certain named cooking and heating apparatus | 39,927 | Mar. 10 | 103 | 422 |
| Huennekes & Co., H., New York, N. Y. Certain named building-bricks | 40,922 | Aug. 11 | 105 | 1528 |
| Huff and Wedge, New York, N. Y. Malt nut-food preparations | 41,478 | Nov. 17 | 107 | 826 |
| Hugo, Charles W., New Orleans, La. Prepared or mixed poultry-food | 40,276 | May 5 | 104 | 305 |
| Hunicke, Julius O., New York, N. Y. Antipyretics, narcotics, and soporifics | 40,361 | May 12 | 104 | 573 |
| Hunolt, Mary A., Edina, Mo. Certain named insecticide | 40,906 | Aug. 11 | 105 | 1526 |
| Hunter Brothers Milling Company, St. Louis, Mo. Flour | 41,300 | Oct. 13 | 106 | 1771 |
| Hunter Brothers Milling Company, St. Louis, Mo. Flour | 41,301 | Oct. 13 | 106 | 1771 |
| Hunter Brothers Milling Company, St. Louis, Mo. Flour | 41,479 | Nov. 17 | 107 | 826 |
| Hunter Brothers Milling Company, St. Louis, Mo. Flour | 41,714 | Dec. 22 | 107 | 2229 |
| Hunter Brothers Milling Company, St. Louis, Mo. Flour | 41,715 | Dec. 22 | 107 | 2229 |
| Hunter Manufacturing and Commission Company, New York, N. Y., and Greensboro, N. C. Cotton sheetings | 41,468 | Nov. 17 | 107 | 825 |
| Huntley & Palmers, Ltd., Reading, England. Biscuits | 39,653 | Jan. 20 | 102 | 617 |
| Huntley & Palmers, Ltd., Reading, England. Biscuits and cakes | 39,971 | Mar. 24 | 103 | 882 |
| Huntley & Palmers, Ltd., Reading, England. Biscuits and cakes | 39,972 | Mar. 24 | 103 | 882 |
| Hurley, Catharine, Palmer, Kans. Remedy for rheumatism | 40,557 | June 9 | 104 | 1650 |
| Hutton, J. C., Melbourne, Victoria, Australia. Cured meats | 41,720 | Dec. 22 | 107 | 2230 |
| Huyler's, New York, Albany, Brooklyn, Buffalo, and Saratoga Springs, N. Y.; Philadelphia, Pa.; Boston, Mass.; Chicago, Ill.; Baltimore, Md.; St. Louis, Mo.; Atlantic City and Long Branch, N. J., and Newport, R. I. Chocolate | 39,905 | Mar. 10 | 103 | 420 |
| Hyde Carbon Black Company, Borough of Ridgway, Pa. Lampblack | 40,999 | Aug. 25 | 105 | 2052 |
| Hygienic Food Company, Ltd., Battlecreek, Mich. Flaked wheat food | 39,780 | Feb. 10 | 102 | 1288 |
| Iama Hamper Co., Limited, Lansing, Mich. Certain named woven-wire and slat receptacles | 40,176 | Apr. 21 | 103 | 1910 |
| Ichthyol Gesellschaft, Cordes, Hermanni & Co., Hamburg, Germany. Antitoxic serums | 40,562 | June 9 | 104 | 1650 |
| Ide & Co., Geo. P., Troy, N. Y. Dress-shirts, collars, cuffs, and men's shirt-waists | 39,930 | Mar. 17 | 103 | 652 |
| Ide & Co., Geo. P., Troy, N. Y. Shirts, collars, cuffs, and men's shirt-waists | 39,931 | Mar. 17 | 103 | 652 |
| Ide & Co., Geo. P., Troy, N. Y. Shirt-collars | 39,997 | Mar. 31 | 103 | 1156 |
| Illinois Shoe Co., Alton, Ill. Leather boots and shoes | 40,752 | July 14 | 105 | 489 |
| Illinois Steel Company, Chicago, Ill. Portland cement | 40,321 | May 12 | 104 | 956 |
| Imperial Tobacco Co. (of Great Britain & Ireland), Limited, Bristol, England. Smoking-tobacco | 40,542 | June 9 | 104 | 1648 |
| Imperial Tobacco Company (of Great Britain & Ireland), Limited, Bristol, England. Smoking-tobacco | 40,540 | June 9 | 104 | 1648 |
| Imperial Tobacco Company (of Great Britain & Ireland), Limited, Bristol, England. Smoking-tobacco | 40,541 | June 9 | 104 | 1648 |
| Imperial Tobacco Company (of Great Britain & Ireland), Limited, Bristol, England. Smoking-tobacco | 40,543 | June 9 | 104 | 1648 |
| Imperial Underwear Co., Scranton, Pa. Ladies' corset-covers | 40,626 | June 23 | 104 | 2142 |
| Indeliba Manufacturing Company, Rochester, N. Y. Type-writer and stamping ribbons | 40,817 | July 28 | 105 | 968 |
| Independent Incandescent Lamp Co., St. Louis, Mo. Incandescent electric lamps | 39,946 | Mar. 17 | 103 | 654 |
| Independent Starch Co., New York, N. Y. Corn-starch or corn-flour | 40,618 | June 16 | 104 | 1891 |
| India Alkali Works, Boston, Mass. Cleaning preparations for certain named purposes | 39,687 | Jan. 27 | 102 | 814 |
| Indianapolis Bolster Spring Company, Indianapolis, Ind. Buffer-springs | 40,292 | May 5 | 104 | 306 |
| Industrie-Gesellschaft für Schappe, Basle, Switzerland. Spun silk | 39,757 | Feb. 10 | 102 | 1285 |
| Ingrim, Joseph E., Colusa, Cal. General tonic | 40,478 | June 2 | 104 | 1385 |
| Interior Hardwood Company, Indianapolis, Ind. Certain named varnish | 39,726 | Feb. 3 | 102 | 1044 |
| International Paper Company, Corinth, N. Y. Certain named paper | 41,688 | Dec. 22 | 107 | 2227 |
| International Shoe Co., New York, N. Y. Leather boots and shoes | 40,185 | Apr. 28 | 103 | 2162 |
| International Shoe Co., New York, N. Y. Leather boots and shoes | 40,186 | Apr. 28 | 103 | 2162 |
| International Shoe Co., New York, N. Y. Liquid leather-dressing | 40,219 | Apr. 28 | 103 | 2167 |
| Internationale Heil-u. Nährmittel Compagnie, G. M. B. H., Leipzig, Germany. Certain named medicinal food | 41,150 | Sept. 22 | 106 | 990 |
| Internationale Heil-u. Nährmittel Compagnie, G. M. B. H., Leipzig, Germany. Certain named medicinal food | 41,151 | Sept. 22 | 106 | 990 |
| Iodol Medicine Company, Tarentum, Pa. Remedies for certain named diseases | 39,980 | Mar. 24 | 103 | 883 |

*Alphabetical list of registrants of trade-marks*—Continued.

| Name, residence, and title | No. | Date. | Official Gazette. Vol. | Page. |
|---|---|---|---|---|
| Iron Table Salt Co., Toledo, Ohio. Table-salt | 41,372 | Oct. 27 | 106 | 2281 |
| Ironsides Company, Columbus, Ohio. Lubricating oils and compounds | 39,807 | Feb. 17 | 102 | 1545 |
| Isbell & Co., S. M., Jackson, Mich. Beans, either as a food or as a seed | 39,683 | Jan. 27 | 102 | 813 |
| Island Trading Syndicate, Ld., London, England. Tanning extract and cutch | 39,869 | Mar. 3 | 103 | 218 |
| Iwahara, Kenzo, New York, N. Y. Cotton sheetings and drills | 39,961 | Mar. 24 | 103 | 881 |
| J. Milhau's Son, New York, N. Y. Tonics | 40,548 | June 9 | 104 | 1649 |
| J. Spencer Turner Co., New York, N. Y. Cotton ducks, drillings, and sheetings | 41,137 | Sept. 22 | 106 | 988 |
| J. B. & G. W. McFatrich, Chicago, Ill. Eye remedies | 40,899 | Aug. 11 | 105 | 1525 |
| J. C. Blair Co., Huntingdon, Pa. Writing-paper and envelops | 41,749 | Dec. 29 | 107 | 2520 |
| J. C. Blair Co., Huntingdon, Pa. Writing-paper and envelops | 41,750 | Dec. 29 | 107 | 2520 |
| J. C. Ergood Co., Washington, D. C. Canned or packaged fruits and vegetables | 40,203 | Apr. 28 | 103 | 2164 |
| J. C. Ergood Co., Washington, D. C. Canned or packaged vegetables and fruits | 40,204 | Apr. 28 | 103 | 2165 |
| J. C. Grant Chemical Company, East St. Louis, Ill. Baking-powder | 40,709 | June 30 | 104 | 2435 |
| J. C. Grant Chemical Company, East St. Louis, Ill. Baking-powder | 41,577 | Dec. 1 | 107 | 1369 |
| J. C. Marks Liquor Co., Birmingham, Ala. Whiskies and brandies | 41,618 | Dec. 8 | 107 | 1652 |
| J. E. Tilt Shoe Co., Chicago, Ill. Leather boots and shoes | 39,900 | Mar. 10 | 103 | 420 |
| J. H. Bunnell & Co., New York, N. Y. Incandescent electric lamps | 40,324 | May 12 | 104 | 570 |
| J. M. Robinson, Norton & Co., Louisville, Ky. Shirts | 40,377 | May 19 | 104 | 844 |
| J. M. Robinson, Norton & Co., Louisville, Ky. Certain named clothing | 41,590 | Dec. 8 | 107 | 1649 |
| J. & M. Schwabacher, Ltd., New Orleans, La. Canned fruits and vegetables | 40,202 | Apr. 28 | 103 | 2162 |
| J. & P. Baltz Brewing Co., Philadelphia, Pa. Certain named malt liquors | 40,011 | Mar. 31 | 103 | 1158 |
| Jacob Beck & Son, Ltd., Detroit, Mich. Rolled oats | 40,687 | June 30 | 104 | 2433 |
| Jacobson, Fritz, Brooklyn, N. Y. Medicine for nerve, blood, and skin diseases | 40,592 | June 16 | 104 | 1888 |
| Jacquin, Gaston L., New York, N. Y. Table mushroom relish or sauce | 39,778 | Feb. 10 | 102 | 1288 |
| James A. McClurg & Sons, Inc., New York, N. Y. Candies, chocolates, and candied productions | 40,943 | Aug. 18 | 105 | 1772 |
| James E. Blake Co., Attleboro, Mass. Certain named match-boxes | 40,370 | May 12 | 104 | 574 |
| James H. Billington Co., Philadelphia, Pa. Spindle and mule banding | 40,362 | May 12 | 104 | 573 |
| James H. Billington Co., Philadelphia, Pa. Picking-leather | 40,363 | May 12 | 104 | 573 |
| Jameson, Clyde B., Buffalo, N. Y. Roofing materials | 40,413 | May 19 | 104 | 847 |
| Janowitz-Maxwell Co., New York, N. Y. Pajamas and night-robes | 39,752 | Feb. 10 | 102 | 1285 |
| Janowitz-Maxwell Co., New York, N. Y. Pajamas and night-robes | 39,753 | Feb. 10 | 102 | 1285 |
| Jenkins Bros., Brooklyn, N. Y. Disinfectants | 40,609 | June 16 | 104 | 1890 |
| Jenkins, Frank W., New York, N. Y. China and porcelain ware for certain named purposes | 41,535 | Nov. 24 | 107 | 1090 |
| Jenkins, James I., Norfolk, Va. House-paint | 40,800 | July 21 | 105 | 740 |
| Jenney, Harry C., New Bedford, Mass. Leather boots and shoes | 41,745 | Dec. 29 | 107 | 2520 |
| Jennings, Abraham G., New York, N. Y. Horseshoes | 40,882 | Aug. 4 | 105 | 1256 |
| Jewell & Vinson, Dayton, Ohio. Prepared and mixed liquid paints | 40,409 | May 19 | 104 | 847 |
| John B. Stetson Company, Philadelphia, Pa. Soft and stiff felt hats and caps | 40,975 | Aug. 25 | 105 | 2049 |
| John Mackintosh, Ltd., Halifax, England. Confectionery | 41,228 | Oct. 6 | 106 | 1494 |
| John Richardson Company, Boston, Mass. English china-clay | 41,104 | Sept. 15 | 106 | 758 |
| John S. Brittain Dry Goods Co., St. Joseph, Mo. Overalls and pants | 40,813 | July 28 | 105 | 968 |
| Johnson, Hayward & Piper, New York, N. Y. Combs | 41,190 | Sept. 29 | 106 | 1232 |
| Johnson Service Company, Milwaukee, Wis. Mechanism for regulating or controlling supply of moisture to the air, &c | 40,125 | Apr. 14 | 103 | 1676 |
| Johnston, D. J., Toronto, Canada. Medicines for the treatment of certain named diseases | 40,898 | Aug. 11 | 105 | 1525 |
| Johnston, John F., Fall River, Mass. Water-closets | 41,793 | Dec. 29 | 107 | 2524 |
| Joliet Stove Works, Joliet, Ill. Heating and cooking stoves | 39,987 | Mar. 24 | 103 | 884 |
| Joliet Stove Works, Joliet, Ill. Heating and cooking stoves | 41,387 | Oct. 27 | 106 | 2283 |
| Jonas & Colver, Limited, Sheffield, England. Steel in certain named forms | 41,733 | Dec. 22 | 107 | 2232 |
| Jonas & Colver, Limited, Sheffield, England. Machine-tools having a cutting edge operating by a shaving cut | 41,792 | Dec. 29 | 107 | 2524 |
| Jones, Alfred, Ravenna, Ohio. Leather shoes | 39,957 | Mar. 24 | 103 | 880 |
| Jones, Minor T., Chicago, Ill. Whisky | 40,167 | Apr. 21 | 103 | 1908 |
| Jordan, A. E., deceased, Richmond, Va.; F. M. Jordan, administratrix. Ham and bacon | 41,328 | Oct. 20 | 106 | 2008 |
| Jordan, Fannie M., administratrix. (See Jordan, A. E.) | | | | |
| Jordan Marsh Company, Boston, Mass. Certain named boots and shoes | 40,183 | Apr. 28 | 103 | 2162 |
| Joseph Lay Company, Ridgeville, Ind. Brooms and brushes | 40,074 | Apr. 7 | 103 | 1413 |
| Joseph Lay Company, Ridgeville, Ind. Brooms | 40,285 | May 5 | 104 | 306 |
| "Jupiter" Gesellschaft mit Beschränkter Haftung, Hamburg, Germany. Match-boxes and match-cases | 41,386 | Oct. 27 | 106 | 2283 |
| K. K. General-Direction der Tabak-Regie in Wien, Vienna, Austria-Hungary. Cut tobacco for pipes and cigarettes | 41,777 | Dec. 29 | 107 | 2522 |
| Kalish, Julius, New York, N. Y. Whooping-cough medicine | 41,415 | Nov. 3 | 107 | 262 |
| Kalish, Julius, New York, N. Y. Cough medicine | 41,565 | Dec. 1 | 107 | 1368 |
| Kalle & Company, Beibrich-on-the-Rhine, Germany, and New York, N. Y. Remedy far stomachic disturbances | 40,680 | June 30 | 104 | 2433 |
| Kalola Company, Savannah, Ga. Mineral waters and crystallized mineral waters | 39,784 | Feb. 10 | 102 | 1288 |
| Kalola Company, Savannah, Ga. Tonic beverages | 39,938 | Mar. 17 | 103 | 653 |
| Kamm & Schellinger Brewing Co., Mishawaka, Ind. Beer, ale, porter, stout, and malt extract | 40,544 | June 9 | 104 | 1648 |
| Kampfe Bros., New York, N. Y. Safety-razors and razor-blades | 39,983 | Mar. 24 | 103 | 883 |
| Kampfe Bros., New York, N. Y. Cases for razors and razor parts | 40,777 | July 14 | 105 | 491 |
| Kaplan & Goldsoll, New York, N. Y. Boots, shoes, slippers, and ties made wholly or partly of leather | 41,276 | Oct. 13 | 106 | 1769 |
| Kauffmann & Cie., A., Ulm-on-the-Danube, Germany. Plaster for repairing cigars | 40,827 | July 28 | 105 | 969 |
| Kay & Ess Co., Dayton, Ohio. Oils for certain named purposes | 39,870 | Mar. 3 | 103 | 218 |
| Kean, John, Chicago, Ill. Ointment and tablets for certain named diseases | 39,945 | Mar. 17 | 103 | 654 |
| Keefe, Cornelius, Jr., Boston, Mass. Medicinal foods, tonics, and cordials | 41,337 | Oct. 20 | 106 | 2009 |
| Keeley Brewing Company, Chicago, Ill. Beer, barley-stout, ale, and barley and malt extracts | 41,575 | Dec. 1 | 107 | 1369 |
| Keever Starch Mnfg. Co., Columbus, Ohio. Laundry starch | 39,782 | Feb. 10 | 102 | 1288 |
| Keimol Chemical Company, Baltimore, Md. Antiseptic and germicide preparation | 40,256 | May 5 | 104 | 303 |
| Keller, John W., Ashley, Pa. Ready-mixed paint | 40,119 | Apr. 14 | 103 | 1676 |
| Kent-Costikyan, New York, N. Y. Carpets and rugs | 39,967 | Mar. 24 | 103 | 881 |
| Kentucky Block Cannel Coal Company, New York, N. Y. Coal | 41,096 | Sept. 8 | 106 | 538 |
| Kerr, Belle F., Columbus, Ohio. Hair-restoratives | 40,107 | Apr. 14 | 103 | 1675 |
| Kerr & Co., Wm. B., New York, N. Y. Certain named silverware | 40,926 | Aug. 18 | 105 | 1770 |
| Keuffel & Esser Co., Hoboken, N. J. Drawing-paper | 40,516 | June 9 | 104 | 1646 |
| Keuffel & Esser Co., Hoboken, N. J. Drawing-paper | 40,517 | June 9 | 104 | 1646 |
| Keuffel & Esser Co., Hoboken, N. J. Drawing-paper | 40,518 | June 9 | 104 | 1646 |
| Keuffel & Esser Co., Hoboken, N. J. Drawing-paper | 40,519 | June 9 | 104 | 1646 |
| Keuffel & Esser Co., Hoboken, N. J. Tracing-paper | 40,520 | June 9 | 104 | 1646 |
| Keuffel & Esser Co., Hoboken, N. J. Tracing-paper | 40,521 | June 9 | 104 | 1646 |
| Keuffel & Esser Co., Hoboken, N. J. Tracing-paper | 40,522 | June 9 | 104 | 1646 |
| Keuffel & Esser Co., Hoboken, N. J. Blue-print paper | 40,523 | June 9 | 104 | 1646 |
| Keuffel & Esser Co., Hoboken, N. J. Blue-print paper | 40,581 | June 16 | 104 | 1887 |
| Keuffel & Esser Co., Hoboken, N. J. Tracing-paper | 40,582 | June 16 | 104 | 1887 |
| Keuffel & Esser Co., Hoboken, N. J. Drafting-scales | 40,583 | June 16 | 104 | 1888 |

*Alphabetical list of registrants of trade-marks*—Continued.

| Name, residence, and title. | No. | Date. | Official Gazette. Vol. | Page. |
|---|---|---|---|---|
| Keuffel & Esser Co., Hoboken, N. J. Drawing-tools | 40,584 | June 16 | 104 | 1888 |
| Keuffel & Esser Co., Hoboken, N. J. Measuring-tapes | 40,663 | June 30 | 104 | 2431 |
| Keuffel & Esser Co., Hoboken, N. J. Surveying instruments | 40,664 | June 30 | 104 | 2431 |
| Keuffel & Esser Co., Hoboken, N. J. Drawing-tools | 40,665 | June 30 | 104 | 2431 |
| Keuffel & Esser Co., Hoboken, N. J. Certain named papers | 40,666 | June 30 | 104 | 2431 |
| Keuffel & Esser Co., Hoboken, N. J. Certain named papers | 40,667 | June 30 | 104 | 2431 |
| Keuffel & Esser Co., Hoboken, N. J. Drawing-paper | 40,668 | June 30 | 104 | 2431 |
| Keuffel & Esser Co., Hoboken, N. J. Calculating instruments | 40,714 | June 30 | 104 | 2436 |
| Keuffel & Esser Co., Hoboken, N. J. Drawing-paper | 40,782 | July 21 | 105 | 738 |
| Keystone Chamois Company, Great Bend, Pa. Chamois-skins | 39,701 | Jan. 27 | 102 | 815 |
| Keystone Fence Company, Peoria, Ill. Wire fence | 41,542 | Nov. 24 | 107 | 1090 |
| Khouri, Peter, New York, N. Y. Razors | 40,776 | July 14 | 105 | 491 |
| Kielsmeier, Friedrich A., Hika, Wis. Cheese | 41,085 | Sept. 8 | 106 | 537 |
| Kienzler, Herman, New York, N. Y. Olive-oil | 41,717 | Dec. 22 | 107 | 2230 |
| Kihoma Medicine Co., Falls City, Nebr. Liver-regulators | 40,049 | Apr. 7 | 103 | 1410 |
| Kildow & Lowry, Roseville, Ohio. Earthen cooking utensils | 40,075 | Apr. 7 | 103 | 1413 |
| King & Co., Alexander, New York, N. Y. Spool-cotton | 40,381 | May 19 | 104 | 844 |
| King-K Medicine Company, Cleburne, Tex. Liniment | 40,404 | May 19 | 104 | 846 |
| Kirk, Geary & Co., Sacramento, Cal. Medicinal bitters | 40,990 | Aug. 25 | 105 | 2051 |
| Kirkeby, August V., New York, N. Y. Substitute for wall-paper | 40,070 | Apr. 7 | 103 | 1413 |
| Kirschbaum, Simon, Philadelphia, Pa. Men's trousers, coats, and vests | 39,864 | Mar. 3 | 103 | 217 |
| Klauberg, William J., New York, N. Y. Razors | 39,628 | Jan. 13 | 102 | 460 |
| Kleinschmidt, Augustus A., St. Louis, Mo. Antiseptic germicide | 40,055 | Apr. 7 | 103 | 1411 |
| Klement & Spaeth, Ravensburg, Germany. Toilet lotions | 40,734 | July 7 | 105 | 254 |
| Klotz, Victor, Paris, France, and New York, N. Y. Perfumed preparations in powdered, paste, solid, and liquid forms | 40,045 | Apr. 7 | 103 | 1410 |
| Klotz, Victor, Paris, France, and New York, N. Y. Perfumed preparations in powdered, paste, solid, and liquid forms | 40,046 | Apr. 7 | 103 | 1410 |
| Knee, Mary S., Greenville, Pa. Remedy for coughs, colds, and lung troubles | 40,900 | Aug. 11 | 105 | 1525 |
| Knight, Thomas G., New York, N. Y. Bath-tubs | 39,948 | Mar. 17 | 103 | 654 |
| Knob, Marie S., Philadelphia, Pa. Certain named cleansing preparation | 39,974 | Mar. 24 | 103 | 882 |
| Knoll & Co., Ludwigshafen-on-the-Rhine, Germany. Internal antiseptic and uric-acid solvent | 40,632 | June 23 | 104 | 2142 |
| Knoll & Co., Ludwigshafen-on-the-Rhine, Germany. Medical compound to be used as a hæmostatic | 40,633 | June 23 | 104 | 2142 |
| Knoll & Co., Ludwigshafen-on-the-Rhine, Germany. Remedy for skin diseases | 40,634 | June 23 | 104 | 2142 |
| Knothe, Adolph C., New York, N. Y. Wearing-apparel belts | 40,627 | June 23 | 104 | 2142 |
| Knothe Brothers, New York, N. Y. Suspenders | 39,614 | Jan. 6 | 102 | 222 |
| Knothe Brothers, New York, N. Y. Suspenders | 39,615 | Jan. 6 | 102 | 222 |
| Knott, Cochran & Company, Atlanta, Ga. Washing-powders | 41,153 | Sept. 22 | 106 | 990 |
| Knox, Charles B., Johnstown, N. Y. Remedies for blood and skin diseases | 40,792 | July 21 | 105 | 739 |
| Knox Hat Manufacturing Company, New York, N. Y. Hats and caps | 41,272 | Oct. 13 | 106 | 1769 |
| Knox Hat Manufacturing Company, New York, N. Y. Hats and caps | 41,466 | Nov. 17 | 107 | 825 |
| Koch, Edwin E., Saginaw, Mich. Coffee substitutes | 41,226 | Oct. 6 | 106 | 1494 |
| Koch, Henriette, New York, N. Y. Leather boots and shoes | 40,043 | Apr. 7 | 103 | 1410 |
| Koelling, Jules F., Chicago, Ill. Face-powders | 39,777 | Feb. 10 | 102 | 1288 |
| Kohn & Baer, New York, N. Y. Fur garments | 40,526 | June 9 | 104 | 1647 |
| Kohn & Baer, New York, N. Y. Fur garments | 41,019 | Sept. 1 | 106 | 256 |
| Kohna Medicine Co., Ravenna, Ohio. Tonics and laxative tablets | 41,785 | Dec. 29 | 107 | 2523 |
| Kolb, Henry M., Philadelphia, Pa. Pistols | 40,743 | July 7 | 105 | 255 |
| Kolb, Joseph H., Tatamy, Pa. Throat remedies | 40,147 | Apr. 21 | 103 | 1906 |
| Konovitz, William, New York, N. Y. Watchcases | 40,504 | June 2 | 104 | 1388 |
| Kops Bros., New York, N. Y. Corsets | 40,528 | June 9 | 104 | 1647 |
| Kops Bros., New York, N. Y. Corsets | 41,691 | Dec. 22 | 107 | 2227 |
| Kraus Medicine Co., Washington, D. C. Remedy for cure of certain named diseases | 40,150 | Apr. 21 | 103 | 1907 |
| Kraut & Dohnal, Chicago, Ill. Razors | 40,509 | June 2 | 104 | 1388 |
| Kraut & Dohnal, Chicago, Ill. Razors | 40,510 | June 2 | 104 | 1388 |
| Krebs Pigment & Chemical Co., Wilmington, Del. Pigments for paints for certain named purposes | 40,774 | July 14 | 105 | 491 |
| Krehbiel, Andrew J., Dayton, Ohio. Certain named medicinal preparations | 39,813 | Feb. 17 | 102 | 1546 |
| Kristal-Glas-en Aardewerk Fabrieken De Sphinx Voorheen Petrus Regout & Co., Maastricht, Netherlands. Porcelain and china ware | 41,316 | Oct. 20 | 106 | 2007 |
| Kron, Rudolf, Golzern, Germany. Machines, looms, apparatus, and devices for certain named purposes | 40,328 | May 12 | 104 | 570 |
| Kron, Rudolf, Golzern, near Grimma, Germany. Certain named fabrics | 40,625 | June 23 | 104 | 2142 |
| Krone, John, Chicago, Ill. Remedies for certain named diseases | 40,555 | June 9 | 104 | 1650 |
| Kummer, Frederic A., New York, N. Y. Antiseptics | 40,155 | Apr. 21 | 103 | 1907 |
| Kuné, Frederick G., New Orleans, La. Potable water | 39,783 | Feb. 10 | 102 | 1288 |
| Kutnow Bros., New York, N. Y. Antiseptic internal injectors | 39,917 | Mar. 10 | 103 | 422 |
| L. A. Roberts & Co., Danvers, Mass. Chocolate, cocoa, and preparation of chocolate and cocoa | 40,010 | Mar. 31 | 103 | 1158 |
| L. C. Smith & Bros. Typewriter Company, Syracuse, N. Y. Type-writing machines | 40,834 | July 28 | 105 | 970 |
| Lacey, R. S. & A. B., Washington, D. C. Books | 41,657 | Dec. 15 | 107 | 1965 |
| Lackey, Eli A., Hamlet, N. C. Whisky | 40,621 | June 16 | 104 | 1892 |
| Lacto-Globulin Co., Ltd., Montreal, Canada. Milk food | 41,775 | Dec. 29 | 107 | 2522 |
| Laflin & Rand Powder Co., New York, N. Y. Blasting-powder | 39,734 | Feb. 3 | 102 | 1045 |
| Lahusen, Ad. F., Hamburg, Germany. Starch and starch compounds | 39,841 | Feb. 24 | 102 | 1772 |
| Laing, Lester, San Francisco, Cal. Medicines for bust development | 40,553 | June 9 | 104 | 1649 |
| Lambert, John P., St. Paul, Minn. Ointment | 40,109 | Apr. 14 | 103 | 1675 |
| Lambert Pharmacal Company, St. Louis, Mo. Liquid chemical or medical preparation for certain named purposes | 41,413 | Nov. 3 | 107 | 262 |
| Landauer, David, London, England. Medicine for prevention of seasickness | 40,152 | Apr. 21 | 103 | 1907 |
| Landers, Frank L., New York, N. Y. Erasers | 39,853 | Feb. 24 | 102 | 1773 |
| Landers, Frary & Clark, New Britain, Conn. Bread or dough mixers and kneaders | 41,683 | Dec. 15 | 107 | 1968 |
| Landsberger, Julius A., San Francisco, Cal. Glass jars | 41,790 | Dec. 29 | 107 | 2524 |
| Lang, James S., Glasgow, Scotland. Boiler composition for preventing incrustation and corrosion | 40,697 | June 30 | 104 | 2434 |
| Lange, Mathilde, Chicago, Ill. Furniture and floor polish | 41,524 | Nov. 24 | 107 | 1089 |
| Lanston Monotype Machine Co., New York, N. Y. Type casting and composing machines and supplies therefor | 40,715 | June 30 | 104 | 2436 |
| Larimore and Co., New York, N. Y. Antiseptic preparations | 39,979 | Mar. 24 | 103 | 883 |
| Larkin Metallic Packing Company, Pittsburg, Pa. Metallic packing | 40,222 | Apr. 28 | 103 | 2167 |
| Larom, Frank W., New York, N. Y. Gloves | 40,039 | Apr. 7 | 103 | 1409 |
| Lasser, Silas, Callicoon Depot, N. Y. Cough-syrup | 41,288 | Oct. 13 | 106 | 1770 |
| Lauderdale Chemical Company, Brooklyn, N. Y. Substance and salve for skin application | 41,520 | Nov. 24 | 107 | 1088 |
| Lauro, John, New York, N. Y. Liniment | 39,770 | Feb. 10 | 102 | 1287 |
| Lautenbach, Emile, Baltimore, Md. Proprietary compounds used for headache, neuralgia, and similar complaints | 40,560 | June 9 | 104 | 1650 |

*Alphabetical list of registrants of trade-marks*—Continued.

| Name, residence, and title. | No. | Date. | Official Gazette. Vol. | Page. |
|---|---|---|---|---|
| Lawrence, Austin M., Boston, Mass. Candied cereal food | 41,147 | Sept. 22 | 106 | 989 |
| Layton Pure Food Company, East St. Louis, Ill. Acid ingredients for baking-powders | 39,779 | Feb. 10 | 102 | 1288 |
| Leach, Glenn W., Chicago, Ill. Medical tonic | 40,477 | June 2 | 104 | 1385 |
| Leach Insecticide Company of Baltimore City, Baltimore, Md. Insecticides | 41,419 | Nov. 3 | 107 | 262 |
| Leas & McVitty, Incorporated, Philadelphia, Pa. Tanned leather | 39,760 | Feb. 10 | 102 | 1286 |
| Lee & Co., Stephen T., Buffalo, N. Y. Medicine for certain named diseases | 39,718 | Feb. 3 | 102 | 1044 |
| Leerburger, George, New York, N. Y. Linings for hats | 39,697 | Jan. 27 | 102 | 815 |
| Leffingwell, Douglas, Minneapolis, Minn. Whisky | 41,038 | Sept. 1 | 106 | 258 |
| Léhealol Preparation Co., Melrose, Mass. Ointments and lotions for certain named purposes | 41,519 | Nov. 24 | 107 | 1088 |
| Leipziger Buchbinderei - Actiengesellschaft vorm. Gustav Fritzsche, Leipzig, Germany. Certain named photographic films and wrappers therefor | 41,285 | Oct. 13 | 106 | 1770 |
| Lemke, Herman C., Milwaukee, Wis. Stomach-drops | 40,360 | May 12 | 104 | 573 |
| Leprince, Maurice, Paris, France. Remedy for certain named diseases | 41,358 | Oct. 27 | 106 | 2280 |
| Lever Brothers, Limited, Port Sunlight, England. Scouring and polishing soap | 39,620 | Jan. 6 | 102 | 223 |
| Levering Coffee Co., Baltimore, Md. Roasted coffee | 41,474 | Nov. 17 | 107 | 826 |
| Levering Coffee Co., Baltimore, Md. Roasted coffee | 41,763 | Dec. 29 | 107 | 2521 |
| Levering Coffee Co., Baltimore, Md. Roasted coffee | 41,764 | Dec. 29 | 107 | 2521 |
| Levering Coffee Co., Baltimore, Md. Roasted coffee | 41,765 | Dec. 29 | 107 | 2522 |
| Levering Coffee Co., Baltimore, Md. Roasted coffee | 41,766 | Dec. 29 | 107 | 2522 |
| Levering Coffee Co., Baltimore, Md. Roasted coffee | 41,767 | Dec. 29 | 107 | 2522 |
| Levering Coffee Co., Baltimore, Md. Roasted coffee | 41,768 | Dec. 29 | 107 | 2522 |
| Levering Coffee Co., Baltimore, Md. Roasted coffee | 41,769 | Dec. 29 | 107 | 2522 |
| Levering Coffee Co., Baltimore, Md. Roasted coffee | 41,770 | Dec. 29 | 107 | 2522 |
| Levering Coffee Co., Baltimore, Md. Roasted coffee | 41,771 | Dec. 29 | 107 | 2522 |
| Levi Strauss & Co., San Fancisco, Cal. Certain named outer clothing | 40,181 | Apr. 28 | 103 | 2162 |
| Levine, Lazarus, Pittsburg, Pa. Trousers | 39,865 | Mar. 3 | 103 | 217 |
| Levy, Albert, London, England. Smoking-tobacco and cigarettes | 41,220 | Oct. 6 | 106 | 1493 |
| Levy, Albert, London, England. Smoking-tobacco and cigarettes | 41,221 | Oct. 6 | 106 | 1493 |
| Levy, Albert, London, England. Smoking-tobacco and cigarettes | 41,324 | Oct. 20 | 106 | 2007 |
| Levy, Ernest & Herman, New York, N. Y. Ribbons | 39,756 | Feb. 10 | 102 | 1285 |
| Levy, Salovitz, Philadelphia, Pa. Feather dusters | 40,030 | Mar. 31 | 103 | 1160 |
| Lewis Bros., New York, N. Y., and Chicago, Ill. Soap powder and laundry soap | 40,025 | Mar. 31 | 103 | 1159 |
| Liberty Mantle Manufacturing Company, Chicago, Ill.. Incandescent gas-mantles | 39,826 | Feb. 17 | 102 | 1548 |
| Lindener Zündhütchen-und Thonwaaren-Fabrik, Linden, Germany. Explosives | 41,378 | Oct. 27 | 106 | 2282 |
| Lindener Zündhütchen-und Thonwaaren-Fabrik, Linden, Germany. Explosives | 41,379 | Oct. 27 | 106 | 2282 |
| Linderman & Binz, Chicago, Ill. Certain named metallic fasteners | 40,459 | May 26 | 104 | 1115 |
| Lindon Cereal Company, Limited, Benton Harbor, Mich. Coffee substitute | 41,475 | Nov. 17 | 107 | 826 |
| Lindsay, Charles R., Jr., Chicago, Ill. Incandescent-gas-lamp mantles | 39,886 | Mar. 3 | 103 | 219 |
| Listman Mill Company, La Crosse, Wis. Wheat-flour | 39,652 | Jan. 20 | 102 | 617 |
| Lith-Alkin Chemical Company, Pierre, S. D. Chemical combination of double salt of lithium and sodium | 40,796 | July 21 | 105 | 739 |
| Little, Adelbert P., Rochester, N. Y. Manifold-paper for type-writers | 41,212 | Oct. 6 | 106 | 1492 |
| Little, Adelbert P., Rochester, N. Y. Manifold or copying paper | 41,485 | Nov. 10 | 107 | 533 |
| Little, Adelbert P., Rochester, N. Y. Carbon-paper | 41,687 | Dec. 22 | 107 | 2227 |
| Livermore, Homer F., Boston, Mass. Machines and appliances for carding, spinning, and weaving, and parts thereof | 41,168 | Sept. 22 | 106 | 992 |
| Lloyd L. Jackson Co., Baltimore, Md. Broadcloth | 40,700 | June 30 | 104 | 2434 |
| Lobel, Coleman & Marcus, New York, N. Y. Suspenders | 39,998 | Mar. 31 | 103 | 1156 |
| Lobravico, Giovanni B., New York, N. Y. Smoking-tobacco | 40,064 | Apr. 7 | 103 | 1412 |
| Locke, William, New York, N. Y. Kid gloves | 41,545 | Dec. 1 | 107 | 1366 |
| Loders & Nucoline, Limited, Silvertown, near London, England. Fats and mixtures thereof used as food or as ingredients in food | 40,705 | June 30 | 104 | 2435 |
| Lodor, Napoleon, Richmond, Va. Headache remedies | 40,896 | Aug. 11 | 105 | 1525 |
| Lodor, Napoleon, Richmond, Va. Headache remedies | 40,897 | Aug. 11 | 105 | 1525 |
| Loewith & Co., P. H., New York, N. Y. Sausages | 40,492 | June 2 | 104 | 1386 |
| Loft, George W., New York, N. Y. Certain named confectionery | 39,872 | Mar. 3 | 103 | 218 |
| Lomolo Remedy Company, New York, N. Y. Remedy for cure of certain named diseases | 40,730 | July 7 | 105 | 254 |
| Lopez, Manuel, Havana, Cuba. Cigars | 41,325 | Oct. 20 | 106 | 2008 |
| Lord & Taylor, New York, N. Y. Hosiery | 39,866 | Mar. 3 | 103 | 217 |
| Lord & Taylor, New York, N. Y. Hosiery | 40,085 | Apr. 14 | 103 | 1673 |
| Lord & Taylor, New York, N. Y. Hosiery | 40,299 | May 12 | 104 | 567 |
| Lord & Taylor, New York, N. Y. Hosiery | 40,300 | May 12 | 104 | 567 |
| Lord & Taylor, New York, N. Y. Hosiery | 40,301 | May 12 | 104 | 567 |
| Lord & Taylor, New York, N. Y. Hosiery | 40,302 | May 12 | 104 | 567 |
| Loss, Julius H., Chicago, Ill. Certain named scientific game of amusement | 41,393 | Nov. 3 | 107 | 260 |
| Loudon & Johnson, New York, N. Y. Tea | 41,034 | Sept. 1 | 106 | 258 |
| Low, Abbot A., New York, N. Y. Natural spring water | 40,545 | June 9 | 104 | 1649 |
| Lowry, Frederick S., Roseville, Ohio. Earthenware cooking utensils | 40,122 | Apr. 14 | 103 | 1676 |
| Lubin, Siegmund, Philadelphia, Pa. Life-moving-picture films | 39,622 | Jan. 6 | 102 | 223 |
| Luck, Thomas P., Columbus, Tex. Ginger-ale, lemon-soda, and sarsaparilla | 40,620 | June 16 | 104 | 1891 |
| Luckett, Thomas D., Clarksville, Tenn. Leaf-tobacco | 40,211 | Apr. 28 | 103 | 2166 |
| Lufkin Rule Co., Saginaw, Mich. Measuring-tapes | 40,470 | June 2 | 104 | 1384 |
| Lusterine Manufacturing Company, Salem, Oreg. Sensitized cloth | 41,354 | Oct. 27 | 106 | 2279 |
| Lutz & Schramm Co., Allegheny, Pa. Certain named relishes | 40,941 | Aug. 18 | 105 | 1772 |
| Lutzahn, August C. P., Wheaton, Ill. Corn cures | 40,145 | Apr. 21 | 103 | 1906 |
| Luyties, Frederick A., St. Louis, Mo. Antipyretics, narcotics, and soporifics | 39,816 | Feb. 17 | 102 | 1546 |
| Luyties, Frederick A., St. Louis, Mo. Medicinal preparations for treatment of catarrh | 41,673 | Dec. 15 | 107 | 1967 |
| Luze & Fils, A. de, Bordeaux, France. Wines | 41,037 | Sept. 1 | 106 | 258 |
| Lyman, David, Woonsocket, R. I. Dressings | 41,360 | Oct. 27 | 106 | 2280 |
| Lyman, David, Woonsocket, R. I. Dressings | 41,491 | Nov. 17 | 107 | 828 |
| Lynchburg Shoe Co., Lynchburg, Va. Leather boots and shoes | 40,785 | July 21 | 105 | 738 |
| Lyon & Healy, Chicago, Ill. Musical boxes | 41,119 | Sept. 15 | 106 | 760 |
| M. Phillips & Son, New York, N. Y. Shirts | 41,133 | Sept. 22 | 106 | 988 |
| M. Phillips & Son, New York, N. Y. Shirts | 41,134 | Sept. 22 | 106 | 988 |
| M. Phillips & Son, New York, N. Y. Shirts | 41,135 | Sept. 22 | 106 | 988 |
| M. Zimmermann Company, New York, N. Y. Certain named cured meats | 39,654 | Jan. 20 | 102 | 617 |
| M. B. Foster & Sons, Limited, London, England. Beer | 41,303 | Oct. 13 | 106 | 1771 |
| M. B. Foster & Sons, Limited, London, England. Beer | 41,304 | Oct. 13 | 106 | 1772 |
| M. J. Breitenbach Co., New York, N. Y. Malt extracts for medicinal use | 39,713 | Feb. 3 | 102 | 1043 |
| Mabey, Charles W., Indianapolis, Ind. Cleaning compound for cleaning carpets, rugs, and like fabrics | 40,613 | June 16 | 104 | 1891 |
| Macfarlane, George W., New York, N. Y. Certain named piece goods | 41,740 | Dec. 29 | 107 | 2519 |
| Macfadden, Bernarr, New York, N. Y. Certain named breakfast-food | 39,781 | Feb. 10 | 102 | 1288 |
| Macomber & Whyte Rope Company, Chicago, Ill. Wire rope | 41,059 | Sept. 1 | 106 | 260 |
| Madison Medicine Co., Madison, Wis. Medicinal preparation for certain named diseases | 40,191 | Apr. 28 | 103 | 2163 |
| Magic Curler Co., Philadelphia, Pa. Hair-curlers | 41,464 | Nov. 17 | 107 | 825 |

*Alphabetical list of registrants of trade-marks*—Continued.

| Name, residence, and title. | No. | Date. | Official Gazette. Vol. | Page. |
|---|---|---|---|---|
| Magic Curler Co., Philadelphia, Pa. Hair-curlers | 41,465 | Nov. 17 | 107 | 825 |
| Magic Foot Draft Co., Jackson, Mich. Adhesive plasters for cure of rheumatism | 40,732 | July 7 | 105 | 254 |
| Magic Foot Draft Co., Jackson, Mich. Adhesive medicated plasters for cure of rheumatism | 40,733 | July 7 | 105 | 254 |
| Maltova, Limited, Leeds, England. Food for invalids | 40,737 | July 7 | 105 | 254 |
| Malz, Herman, New York, N. Y. Decorative sheets for application to panes of glass and other surfaces | 41,436 | Nov. 10 | 107 | 533 |
| Manchester Mills, Manchester, N. H. Cotton fabrics | 41,065 | Sept. 8 | 106 | 535 |
| Manchester Mills, Manchester, N. H. Worsted dress goods | 41,173 | Sept. 29 | 106 | 1230 |
| Manheimer & Bros., Louis. Chicago, Ill. Watches, including movements and cases | 39,688 | Jan. 27 | 102 | 814 |
| Manix, Cornelius J., Cleveland, Ohio. Lubricating-oil | 39,848 | Feb. 24 | 102 | 1773 |
| Manning, Bowman & Co., Meriden, Conn. Household utensils of enameled ware | 39,985 | Mar. 24 | 103 | 883 |
| Manning, Bowman & Company, Meriden, Conn. Certain named cooking utensils | 41,585 | Dec. 1 | 107 | 1370 |
| Manufacture Lyonnaise de Matières Colorantes, Lyons, France. Certain named decolorizing substances | 41,641 | Dec. 8 | 107 | 1655 |
| Maple City Soap Works, Monmouth, Ill. Toilet and laundry soaps | 39,847 | Feb. 24 | 102 | 1773 |
| Marble, Alphonso, Penn Yan, N. Y. Curative oil for certain named diseases | 40,791 | July 21 | 105 | 739 |
| Marcus Ward Company, New York, N. Y. Writing-paper and envelops | 40,702 | June 30 | 104 | 2435 |
| Marlin Fire Arms Co., New Haven, Conn. Gun-barrels | 41,013 | Aug. 25 | 105 | 2054 |
| Marokene Co., New York, N. Y. Imitation leather | 40,931 | Aug. 18 | 105 | 1771 |
| Marschat, Karolina A., New York, N. Y. Healing balms for wounds | 40,146 | Apr. 21 | 103 | 1906 |
| Marsh Brothers Co., Sheffield, England. Cast-steel in bars, rods, and wire | 39,888 | Mar. 3 | 103 | 219 |
| Marsh, Joseph A., New York, N. Y. Writing and spelling tablets | 40,294 | May 12 | 104 | 567 |
| Marshall, Alfred W., London, England. Prepared food made from fish and other ingredients | 40,706 | June 30 | 104 | 2435 |
| Marshall and Co., Hamilton, Ohio. Foot-powder | 40,481 | June 2 | 104 | 1385 |
| Marshall-Sanders Co., Boston, Mass. Incandescent electric lighting fittings | 39,729 | Feb. 3 | 102 | 1044 |
| Martin, Albert L., Clinton, Iowa. Gelatin made from moss | 40,097 | Apr. 14 | 103 | 1674 |
| Martin & Bowne Co., New York, N. Y. Toilet-brushes | 40,106 | Apr. 14 | 103 | 1675 |
| Martin & Bowne Co., New York, N. Y. Tooth, nail, hair, and flesh brushes | 41,040 | Sept. 1 | 106 | 258 |
| Martin & Bowne Co., New York, N. Y. Tooth, nail, hair, and flesh brushes | 41,076 | Sept. 8 | 106 | 536 |
| Martin, Hannah C., New York, N. Y. Remedies for certain named diseases | 41,048 | Sept. 1 | 106 | 259 |
| Martin Wagner Co. of Baltimore City, Baltimore, Md. Fruit preserves | 41,327 | Oct. 20 | 106 | 2008 |
| Martinazzi & Co., E., Turin, Italy. Bitters | 40,439 | May 26 | 104 | 1113 |
| Mascot Knitting Mills, Sweetwater, Tenn. Hosiery | 41,429 | Nov. 10 | 107 | 532 |
| Massachusetts Chemical Company, Boston, Mass. Insulating preparations for electrical machinery and apparatus | 41,523 | Nov. 24 | 107 | 1089 |
| Massachusetts Society for the Prevention of Cruelty to Animals, Boston, Mass. Printed magazines | 39,708 | Feb. 3 | 102 | 1043 |
| Master Horseshoers' National Protective Association of America, New York, N. Y. Horseshoes | 41,540 | Nov. 24 | 107 | 1090 |
| Masurite Explosive Company, New York, N. Y., and Masury, Ohio. Electrical exploders | 41,420 | Nov. 3 | 107 | 262 |
| Masury, Young & Co., Boston, Mass. Preparations for removing stains from textile fabrics | 40,455 | May 26 | 104 | 1115 |
| Matchless Manufacturing Co., New York, N. Y. Gas-burners, gas-lamps, and mantles for same | 39,623 | Jan. 6 | 102 | 223 |
| Mattison, Annie L., Dallas and Fort Worth, Tex. Medicinal and toilet preparation for the complexion | 41,194 | Sept. 29 | 106 | 1232 |
| Mayo, Edgar L., Elmira, N. Y. Substitute for soap for use in shaving | 40,023 | Mar. 31 | 103 | 1159 |
| McArthur, Warren, Chicago, Ill. Hatchets made entirely of metal | 40,077 | Apr. 7 | 103 | 1413 |
| McBride, Edward J., Bluehill, Nebr. Butter | 40,386 | May 19 | 104 | 845 |
| McCallum, Joseph B., Whiteville, N. C. Remedy for hog-cholera and other swine diseases | 41,160 | Sept. 22 | 106 | 991 |
| McCanna & Fraser Co., Burlington, Wis. Butter-print | 40,650 | June 23 | 104 | 2144 |
| McCaw, Stevenson & Orr, Ld., Belfast, Ireland. Certain named substitute for stained glass | 41,462 | Nov. 17 | 107 | 825 |
| McCloskey Brothers, New Orleans, La. Wheat-flour | 41,089 | Sept. 8 | 106 | 537 |
| McCloskey Brothers, New Orleans, La. Wheat-flour | 41,449 | Nov. 10 | 107 | 534 |
| McConnon & Company, Winona, Minn. Internal remedies for diseases of the stomach and intestines | 40,637 | June 23 | 104 | 2143 |
| McCormack, William, Bellmont, Ill. Hair-tonic | 40,550 | June 9 | 104 | 1649 |
| McDermott-Bunger Dairy Co., New York, N. Y. Certain named dairy products | 40,445 | May 26 | 104 | 1113 |
| McDermott-Bunger Dairy Co., New York, N. Y. Butter | 40,909 | Aug. 11 | 105 | 1526 |
| McFarlan & Co., Amsterdam, N. Y. Certain named slippers and shoes | 39,804 | Feb. 17 | 102 | 1545 |
| McGuire, Thomas, Brooklyn, N. Y. Proprietary vegetable healing-salve | 39,896 | Mar. 3 | 103 | 220 |
| McIntire & Co., George A., Stamford, Conn. Dust-pans | 39,728 | Feb. 3 | 102 | 1044 |
| McIntyre, John, Jersey City, N. J. Solid milk | 39,616 | Jan. 6 | 102 | 222 |
| McKesson & Robbins, New York, N. Y. Laxative medicine | 39,844 | Feb. 24 | 102 | 1772 |
| McKinney, George M., Chicago, Ill. Toilet powder | 39,741 | Feb. 3 | 102 | 1046 |
| McLean & Shaffer, Pittsburg, Pa. Whisky | 40,055 | Apr. 7 | 103 | 1412 |
| McLeod & Froom Grocery Co., Milwaukee, Wis. Cream-colored cleaning compound | 40,964 | Aug. 18 | 105 | 1775 |
| McMahon, Michael H., Bessemer, Mich. Remedies for cure of rheumatism and similar diseases | 41,702 | Dec. 22 | 107 | 2228 |
| Medical Lake Salt Mfg. Co., Spokane, Wash. Medicinal salts and tablets made therefrom | 39,637 | Jan. 13 | 102 | 461 |
| Medical Lake Salt Mfg. Co., Spokane, Wash. Toilet soap | 41,633 | Dec. 8 | 107 | 1654 |
| Medical Lake Salt Mfg. Co., Spokane, Wash. Ointment and plasters | 41,786 | Dec. 29 | 107 | 2523 |
| Megrath, William A., New York, N. Y. Certain named beverages | 40,440 | May 26 | 104 | 1113 |
| Meikleham, William J., Denver, Colo. Bread, biscuits, cakes, crackers, and pies | 41,362 | Oct. 27 | 106 | 2280 |
| Meinecke & Co., New York, N. Y. Syringes or douches of rubber | 39,817 | Feb. 17 | 102 | 1547 |
| Meinecke & Co., New York, N. Y. Hot-water bags and ice-bags and stoppers for same | 40,405 | May 19 | 104 | 846 |
| Meinrath, Eli, Kansas City, Mo. Preparation for seasoning all varieties of food | 40,875 | Aug. 4 | 105 | 1255 |
| Melchior, Armstrong & Dessau, New York, N. Y. Files | 40,974 | Aug. 18 | 105 | 1776 |
| Méliès, Georges, Paris, France. Photographic films, pictures, views, and kinematographic series of pictures | 39,860 | Mar. 3 | 103 | 217 |
| Mercer, Samuel D., Omaha, Nebr. Certain named pills | 39,661 | Jan. 20 | 102 | 618 |
| Merck & Co., New York, N. Y. Concentrated product of the active principles of cod-liver oil | 41,298 | Oct. 13 | 106 | 1771 |
| Merck, E., Darmstadt, Germany. Certain named chemical product | 40,115 | Apr. 14 | 103 | 1676 |
| Mertz and Mertz Co., Washington, D. C. Coats, pants, vests, and overcoats | 41,394 | Nov. 3 | 107 | 260 |
| Mertz, William C., New York, N. Y. Trousers | 41,313 | Oct. 20 | 106 | 2006 |
| Meserole, William H., Brooklyn, N. Y. Portland cement | 40,282 | May 5 | 104 | 305 |
| Metcalf, William H., New Haven, Conn. Certain named antiseptics | 39,815 | Feb. 17 | 102 | 1546 |
| Mexican Disinfectant Company, Carrollton, Ill. Disinfectants | 40,862 | Aug. 4 | 105 | 1254 |
| Meyer, Arnold O., a Firm, Hamburg, Germany. Cotton fabrics, woven or knit | 41,020 | Sept. 1 | 106 | 256 |
| Meyer, Arnold O., a Firm, Hamburg, Germany. Cotton fabrics, woven or knit | 41,021 | Sept. 1 | 106 | 256 |
| Meyer, Arnold O , a Firm, Hamburg, Germany. Cotton fabrics, woven or knit | 41,022 | Sept. 1 | 106 | 256 |
| Meyer, Arnold O., a Firm, Hamburg, Germany. Cotton fabrics, woven or knit | 41,023 | Sept. 1 | 106 | 256 |
| Meyer, Arnold O., Hamburg, Germany. Chisels | 41,307 | Oct. 13 | 106 | 1772 |
| Meyer, Arnold O., Hamburg, Germany. Certain named knives | 41,341 | Oct. 20 | 106 | 2009 |
| Meyer, Arnold O., Hamburg, Germany. Shovels | 41,424 | Nov. 3 | 107 | 262 |
| Meyer, Arnold O., Hamburg, Germany. Shovels | 41,425 | Nov. 3 | 107 | 262 |
| Meyer, Arnold O., Hamburg, Germany. Cotton fabrics, woven and knit | 41,471 | Nov. 17 | 107 | 826 |
| Meyer & Goetze, New York, N. Y. Certain named woven cotton piece goods | 41,274 | Oct. 13 | 106 | 1769 |
| Michieli Chemical Company, San Francisco, Cal. Complexion or face powders | 40,309 | May 12 | 104 | 568 |
| Michigan Sprocket Chain Co., Limited, Delray, Mich. Drive-chains | 41,014 | Aug. 25 | 105 | 2054 |

*Alphabetical list of registrants of trade-marks*—Continued.

| Name, residence, and title. | No. | Date. | Official Gazette. Vol. | Page. |
|---|---|---|---|---|
| Midnight Mineral Water Company, New York, N. Y. Beverage for certain named purposes | 40,950 | Aug. 18 | 105 | 1773 |
| Midvale Mining & Man'f'g Co., St. Louis, Mo. Ferromanganese | 39,850 | Feb. 24 | 102 | 1773 |
| Miller Co., J. W., Freeport, Ill. Incubators and brooders | 40,420 | May 19 | 104 | 848 |
| Miller and Stone, Chicago, Ill. Remedy for the cure of certain named diseases | 40,894 | Aug. 11 | 105 | 1525 |
| Milne, John C., New York, N. Y. Flannel piece goods | 40,424 | May 26 | 104 | 1111 |
| Milne, John C., New York, N. Y. Flannel piece goods | 40,425 | May 26 | 104 | 1111 |
| Milne, John C., New York, N. Y. Flannel piece goods | 40,426 | May 26 | 104 | 1111 |
| Milversted, Charles H., Chicago, Ill. Liniment | 41,566 | Dec. 1 | 107 | 1368 |
| Minnesota Shoe Company, St. Paul, Minn. Leather boots and shoes | 41,103 | Sept. 15 | 106 | 758 |
| Minor, Jesse, Pittsburg, Pa. Chewing-gum | 40,443 | May 26 | 104 | 1113 |
| Minor, Jesse, Pittsburg, Pa. Candies | 40,490 | June 2 | 104 | 1386 |
| Minor & Son, P. W., Batavia, N. Y. Leather boots and shoes | 40,815 | July 28 | 105 | 968 |
| Minor & Son, P. W., Batavia, N. Y. Rubber heels for boots and shoes | 41,074 | Sept. 8 | 106 | 536 |
| Mistrot, Felix E., Galveston, Tex. Leather boots and shoes | 39,634 | Jan. 13 | 102 | 460 |
| Mitchell, Lewis & Staver Co., Portland, Oreg. Certain named vehicles | 41,345 | Oct. 20 | 106 | 2010 |
| Mittag & Volger, Parkridge, N. J. Carbon-papers | 40,703 | June 30 | 104 | 2435 |
| Mitteldeutsche Portland-Cement-Fabrik Prüssing & Co. in Schönebeck/Elbe Commanditgesellschaft auf Actien, Schönebeck, Germany. Portland cement | 41,329 | Oct. 20 | 106 | 2008 |
| Mittineague Paper Co., West Springfield, Mass. Fine writing-paper | 40,093 | Apr. 14 | 103 | 1674 |
| Mittineague Paper Co., West Springfield, Mass. Fine writing-paper | 40,094 | Apr. 14 | 103 | 1674 |
| Mittineague Paper Co., West Springfield, Mass. Cover-papers | 40,855 | Aug. 4 | 105 | 1254 |
| Modoc Soap Co., Cincinnati, Ohio. Certain named liquid cleaner | 40,797 | July 21 | 105 | 739 |
| Moffet, John, Philadelphia, Pa. Certain named proprietary medicine | 39,982 | Mar. 24 | 103 | 883 |
| Moguleski, Isaak, Philadelphia, Pa. Cigarettes | 40,212 | Apr. 28 | 103 | 2166 |
| Molassine Company, Ltd., London, England. Food for stock and other animals | 39,686 | Jan. 27 | 102 | 813 |
| Molloy, Elijah J., New York, N. Y. External applications for affections of the skin | 39,843 | Feb. 24 | 102 | 1772 |
| Molloy, Elijah J., New York, N. Y. Medicinal preparations for diseases of the blood and skin | 40,995 | Aug. 25 | 105 | 2051 |
| Monarch Acetylene Gas Co., Omaha, Nebr. Acetylene-gas generators | 40,419 | May 19 | 104 | 848 |
| Monongahela River Consolidated Coal & Coke Company, Pittsburg, Pa. Coal | 41,543 | Nov. 24 | 107 | 1090 |
| Moore & Calvi, New York, N. Y. Plug-tobacco | 41,444 | Nov. 10 | 107 | 534 |
| Moore, William E., Huntington, Oreg. Certain named ointments | 40,997 | Aug. 25 | 105 | 2051 |
| Morando, Achille, Sampierdarena, Italy. Fresh, dry, and conserved fruits | 41,326 | Oct. 20 | 106 | 2008 |
| Morgan & Brehaut, Cottage Grove, Oreg. Flavoring extracts for soda-fountain syrup and beverages made therefrom | 41,186 | Sept. 29 | 106 | 1232 |
| Morotock Mfg. Co., Danville, Va. Men's coats, trousers, and overalls | 40,365 | May 12 | 104 | 574 |
| Morrhistinol Manufacturing Company, New York, N. Y. Cod-liver-oil preparations and tonic medicines | 40,476 | June 2 | 104 | 1385 |
| Morris, Eugene F., Paris, Tex. Tooth-wash, tooth-powder, and tooth-paste | 40,685 | June 30 | 104 | 2433 |
| Morris, Murch & Butler, Boston, Mass. Cleaning and polishing preparations for certain named purposes | 41,255 | Oct. 6 | 106 | 1497 |
| Morris, William J., New York, N. Y. Prepared tonic food for animals | 41,556 | Dec. 1 | 107 | 1367 |
| Morrison, Abram B., New Martinsville, W. Va. Remedies for diseases of the throat and lungs | 40,994 | Aug. 25 | 105 | 2051 |
| Morrison, Josiah F., San Francisco, Cal. Cancer medicine | 39,814 | Feb. 17 | 102 | 1546 |
| Morse, Hollis H., Atlanta, Ga. Rebate-tickets | 40,127 | Apr. 21 | 103 | 1905 |
| Morse, Walter R., Boston, Mass. Scrim and art-ticking | 39,831 | Feb. 24 | 102 | 1771 |
| Morten & Company, New York, N. Y. Wines | 39,907 | Mar. 10 | 103 | 421 |
| Motsinger Device Manufacturing Company, Pendleton, Ind. Electric generators and parts and attachments therefor | 41,167 | Sept. 22 | 106 | 992 |
| Mouneyrat, Antoine, St. Denis, France. Pharmaceutical products containing organic arsenic and phosphorus | 41,676 | Dec. 15 | 107 | 1967 |
| Mrs. McCullough Yeast Co., Centralia, Ill. Yeast-cakes | 39,934 | Mar. 17 | 103 | 652 |
| Mu-Col Company, Providence, R. I. Antiseptic compounds | 40,479 | June 2 | 104 | 1385 |
| Mülhens & Kropff, New York, N. Y. Antiseptic fluid for internal and external use | 40,672 | June 30 | 104 | 2432 |
| Müller, Caroline J., Brooklyn, N. Y. Medicinal compounds for treatment of croup and whooping-cough | 39,658 | Jan. 20 | 102 | 617 |
| Mumford, Gurdon S., Cambridge, Mass. Certain named game | 40,374 | May 12 | 104 | 574 |
| Munson, James G., San Jose, Cal. Remedy for headache, neuralgia, and nervousness | 41,482 | Nov. 17 | 107 | 827 |
| Muralo Company, New Brighton, N. Y. Certain named paint | 40,710 | June 30 | 104 | 2435 |
| Murphy, Catherine J., Woburn, Mass. Medicine for malaria and kindred diseases | 40,051 | Apr. 7 | 103 | 1410 |
| Myers, William O., Lonaconning, Md. Hair-tonic | 40,991 | Aug. 25 | 105 | 2051 |
| N. K. Fairbank Company, Chicago, Ill. Prepared fatty, oleaginous, or unctuous food substances | 39,673 | Jan. 27 | 102 | 812 |
| Nason & Co., R. N., San Francisco, Cal. Lubricants | 40,411 | May 19 | 104 | 847 |
| National Artificial Leather Company, Camden, N. J., and Philadelphia, Pa. Artificial leather | 41,007 | Aug. 25 | 105 | 2053 |
| National Cash Register Company, Jersey City, N. J., and Dayton, Ohio. Cash-registers and autographic registers | 41,421 | Nov. 3 | 107 | 262 |
| National Cigarette Co., Washington, D. C. Cigarettes | 41,222 | Oct. 6 | 106 | 1493 |
| National Dairy Machine Co., Newark, N. J. Cream-separators | 39,922 | Mar. 10 | 103 | 422 |
| National Lead Co., New York, N. Y. Cast, spun, or pressed metal art novelties | 40,698 | June 30 | 104 | 2434 |
| National Medical Co., Sheldon, Iowa. Antiseptic, germ, insect, and worm destroyer | 40,257 | May 5 | 104 | 303 |
| National Mfg. & Supply Co., Memphis, Tenn. Meat-preserving compounds | 41,233 | Oct. 6 | 106 | 1495 |
| National Phonograph Company, Orange, N. J. Phonographs and parts of phonographs | 41,659 | Dec. 15 | 107 | 1965 |
| National School Slate Company, Slatington, Pa. School-slates | 40,731 | July 7 | 105 | 253 |
| National School Slate Company, Slatington, Pa. School-slates | 40,732 | July 7 | 105 | 253 |
| National Spring Bed Co., New Britain, Conn. Wire fabric | 41,498 | Nov. 17 | 107 | 828 |
| National Sweeper Company, Marion, Ind. Carpet-sweepers | 41,649 | Dec. 8 | 107 | 1656 |
| National Sweeper Company, Marion, Ind. Carpet-sweepers | 41,650 | Dec. 8 | 107 | 1656 |
| National Tool Company, New Haven, Conn. Steel in certain named forms | 40,623 | June 16 | 104 | 1892 |
| National Waist & Skirt Company, Boston, Mass. Shirt-waists | 39,613 | Jan. 6 | 102 | 222 |
| Nature's Breakfast Food Company, Minneapolis, Minn. Food made from wheat | 39,738 | Feb. 3 | 102 | 1045 |
| Nebinger, John, Atlantic City, N. J. Artificial stone for certain named purposes | 41,123 | Sept. 15 | 106 | 760 |
| Neirath, Leopold F., Berlin, Germany. Oxygen preparations for internal use | 41,199 | Sept. 29 | 106 | 1233 |
| Neirath, Leopold F., Berlin, Germany. Oxygen preparations for external use | 41,782 | Dec. 29 | 107 | 2523 |
| Nelson, Baker & Co., Detroit, Mich. Vulneraries | 40,658 | June 23 | 104 | 2144 |
| Nelson, Baker & Co., Detroit, Mich. Uterine sedative | 40,761 | July 14 | 105 | 490 |
| Nelson, Baker & Co., Detroit, Mich. Diuretics | 40,790 | July 21 | 105 | 739 |
| Nelson, Baker & Co., Detroit, Mich. Tonic cordials | 41,707 | Dec. 22 | 107 | 2229 |
| Nelson, Baker & Co., Detroit, Mich. Antiseptic and germicide solutions | 41,780 | Dec. 29 | 107 | 2523 |
| Nelson-Dedicke Felt Co., Middleville, N. Y. Felts | 39,648 | Jan. 20 | 102 | 616 |
| Nelson & Kreuter, Chicago, Ill. Collar and cuff ironing machines | 39,989 | Mar. 24 | 103 | 884 |
| Neostyle Company, New York, N. Y. Stencil duplicating-machines and parts thereof | 40,920 | Aug. 11 | 105 | 1528 |
| Neostyle Company, New York, N. Y. Stencil-paper | 41,639 | Dec. 8 | 107 | 1655 |
| Neostyle Company, New York, N. Y. Duplicating-ink | 41,663 | Dec. 15 | 107 | 1965 |
| Neptuna Co., Clinton, Iowa. Cough medicine | 41,700 | Dec. 22 | 107 | 2228 |
| Neural, Adolph, New York, N. Y. Whiskies, brandies, and cognacs | 41,447 | Nov. 10 | 107 | 534 |
| New England Confectionery Co., Portland, Me., and Boston, Mass. Confectionery | 40,867 | Aug. 4 | 105 | 1255 |
| New England Confectionery Co., Portland, Me., and Boston, Mass. Confectionery | 40,868 | Aug. 4 | 105 | 1255 |

*Alphabetical list of registrants of trade-marks*—Continued.

| Name, residence, and title. | No. | Date. | Official Gazette. Vol. | Page. |
|---|---|---|---|---|
| New England Confectionery Co., Portland, Me., and Boston, Mass. Confectionery | 40,912 | Aug. 11 | 105 | 1527 |
| New England Confectionery Co., Portland, Me., and Boston, Mass. Confectionery | 41,084 | Sept. 8 | 106 | 537 |
| New England Enameling Co., Middletown, Conn. Enameled iron and steel ware | 41,499 | Nov. 17 | 107 | 828 |
| New Home Sewing Machine Company, Orange, Mass., and New York, N. Y. Dry-thread sewing-machines and accessories | 41,795 | Dec. 29 | 107 | 2524 |
| New York Consolidated Card Company, New York, N. Y. Playing-cards | 40,749 | July 14 | 105 | 489 |
| Newark Spring Mattress Co., Newark, N. J. Mattresses | 40,369 | May 12 | 104 | 574 |
| Newark Spring Mattress Co., Newark, N. J. Mattresses | 40,533 | June 9 | 104 | 1647 |
| Newcomb, Endicott & Co., Detroit, Mich. Corsets | 40,234 | May 5 | 104 | 301 |
| Newcomb, James G., New York, N. Y. Mixed paint | 40,502 | June 2 | 104 | 1387 |
| Newcomb, James G., New York, N. Y. Cold and hot water paint | 41,581 | Dec. 1 | 107 | 1370 |
| Newcomb, Jas. G., New York, N. Y. Paint | 40,711 | June 30 | 104 | 2435 |
| Newcomb, Jas. G., New York, N. Y. Paint | 40,712 | June 30 | 104 | 2436 |
| Newcomb, Jas. G., New York, N. Y. Varnishes and japans | 40,879 | Aug. 4 | 105 | 1256 |
| Newman, Alexander D., New York, N. Y. Whisky | 39,675 | Jan. 27 | 102 | 812 |
| Newman & Co., A., Philadelphia, Pa. Leather boots and shoes | 39,901 | Mar. 10 | 103 | 420 |
| Newmarket Mfg. Co., Newmarket, N. H. Cotton fabrics | 41,315 | Oct. 20 | 106 | 2007 |
| Nichols, William B., New York, N. Y. Remedies for indigestion | 40,399 | May 19 | 104 | 846 |
| Nichols, William I., Bridgeport, Conn. Cough tablets and drops | 40,819 | July 28 | 105 | 968 |
| Nicholson, Leonard S., Washington, D. C. Uric-acid remedy | 40,676 | June 30 | 104 | 2432 |
| Nicoll Enamel Paint Company of Baltimore City, Baltimore, Md. Mixed paints | 39,892 | Mar. 3 | 103 | 220 |
| Nix, Robert W., Charleston, S. C. Remedies for headache | 39,916 | Mar. 10 | 103 | 421 |
| No-Vex Hook and Eye Mfg. Co., Kankakee, Ill. Hooks and eyes | 41,189 | Sept. 29 | 106 | 1232 |
| Non-Explosive Caps Company, Denver, Colo. Compound adapted to render explosive liquids non-explosive | 40,798 | July 21 | 105 | 739 |
| Nonotuck Silk Company, Florence and Boston, Mass. Spool and skein silk | 40,089 | Apr. 14 | 103 | 1673 |
| Nonotuck Silk Company, Florence and Boston, Mass.; New York and Gloversville, N. Y.; Chicago, Ill.; Cincinnati, Ohio; Philadelphia, Pa.; San Francisco, Cal., and St. Paul, Minn. Thread of any fibrous material | 40,180 | Apr. 28 | 103 | 2162 |
| Norden-Bittner Electric Co., New York, N. Y. Electric-lamp sockets and rosettes | 39,855 | Feb. 24 | 102 | 1773 |
| Northrop, Herbert N., Somerville, Mass. Garment-supporters | 41,734 | Dec. 29 | 107 | 2519 |
| Norton, Edward B., Birmingham, Ala. Extracts and perfumes | 40,044 | Apr. 7 | 103 | 1410 |
| Norwich Pharmacal Company, Norwich, N. Y. Liquid medicinal preparations for treatment of skin diseases | 40,254 | May 5 | 104 | 303 |
| Norwich Pharmacal Company, Norwich, N. Y. Astringent solutions for topical applications | 40,258 | May 5 | 104 | 303 |
| Noyes Norman Shoe Co., St. Joseph, Mo. Leather shoes for men, women, and children | 39,699 | Jan. 27 | 102 | 815 |
| Nuyens & Co., Bordeaux, France. Liqueurs | 41,513 | Nov. 24 | 107 | 1088 |
| O. Porsch Chemical Company, New York, N. Y. Chemical compounds for certain named purposes | 39,765 | Feb. 10 | 102 | 1286 |
| O'Donnell, Neill, Sumter, S. C. Blankets for household use | 41,654 | Dec. 15 | 107 | 1964 |
| O'Donohue's Sons, Joseph J., New York, N. Y. Coffee | 41,772 | Dec. 29 | 107 | 2522 |
| O'Neil, Patrick J., Chicago, Ill. Washing compounds | 40,484 | June 2 | 104 | 1386 |
| O'Neill, Mary C., Saugus, Mass. Bluing | 41,571 | Dec. 1 | 107 | 1369 |
| O'Rourke and Hurley, Littlefalls, N. Y. Soap | 41,373 | Oct. 27 | 106 | 2282 |
| Oak Grove, Flint, Mich. Table-waters | 40,163 | Apr. 21 | 103 | 1908 |
| Oak Grove, Flint, Mich. Table-waters | 40,164 | Apr. 21 | 103 | 1908 |
| Oakland Chemical Co., New York, N. Y. Antiseptic and disinfectant | 40,998 | Aug. 25 | 105 | 2052 |
| Odom, Rufus L., Nashville, Tenn. Compound for certain named purposes | 40,959 | Aug. 18 | 105 | 1774 |
| Oelo Chemical Company, Portsmouth, Va. Salves or ointments for external application | 41,569 | Dec. 1 | 107 | 1368 |
| Offray, Claudius M., New York, N. Y. Ribbons | 39,630 | Jan. 13 | 102 | 460 |
| Ohio Chemical Co., Columbus, Ohio. Headache and stomach medicines | 39,714 | Feb. 3 | 102 | 1043 |
| Ohio Match Co., Wadsworth, Ohio. Friction-matches | 41,596 | Dec. 8 | 107 | 1650 |
| Ohio Match Co., Wadsworth, Ohio. Friction-matches | 41,597 | Dec 8 | 107 | 1650 |
| Ohio Match Co., Wadsworth, Ohio. Friction-matches | 41,598 | Dec. 8 | 107 | 1650 |
| Ohio Match Co., Wadsworth, Ohio. Friction-matches | 41,599 | Dec. 8 | 107 | 1650 |
| Ohio Match Co., Wadsworth, Ohio. Friction-matches | 41,600 | Dec. 8 | 107 | 1650 |
| Ohio Match Co., Wadsworth, Ohio. Friction-matches | 41,601 | Dec. 8 | 107 | 1650 |
| Ohio Match Co., Wadsworth, Ohio. Friction-matches | 41,602 | Dec. 8 | 107 | 1650 |
| Ohio Match Co., Wadsworth, Ohio. Friction-matches | 41,603 | Dec. 8 | 107 | 1650 |
| Ohio Match Co., Wadsworth, Ohio. Friction-matches | 41,604 | Dec. 8 | 107 | 1651 |
| Ohio Match Co., Wadsworth, Ohio. Friction-matches | 41,605 | Dec. 8 | 107 | 1651 |
| Ohio Match Co., Wadsworth, Ohio. Friction-matches | 41,606 | Dec. 8 | 107 | 1651 |
| Ohio Match Co., Wadsworth, Ohio. Friction-matches | 41,607 | Dec. 8 | 107 | 1651 |
| Ohio Match Co., Wadsworth, Ohio. Friction-matches | 41,608 | Dec. 8 | 107 | 1651 |
| Ohio Match Co., Wadsworth, Ohio. Friction-matches | 41,609 | Dec. 8 | 107 | 1651 |
| Ohio Match Co., Wadsworth, Ohio. Friction-matches | 41,610 | Dec. 8 | 107 | 1651 |
| Ohio Match Co., Wadsworth, Ohio. Friction-matches | 41,611 | Dec. 8 | 107 | 1651 |
| Ohio Match Co., Wadsworth, Ohio. Friction-matches | 41,612 | Dec. 8 | 107 | 1652 |
| Ohio Match Co., Wadsworth, Ohio. Friction-matches | 41,613 | Dec. 8 | 107 | 1652 |
| Ohio Match Co., Wadsworth, Ohio. Friction-matches | 41,671 | Dec. 15 | 107 | 1966 |
| Ohio Rubber Co., Cleveland, Ohio. Waterproof cement for uniting rubber or leather surfaces | 40,322 | May 12 | 104 | 569 |
| Ohio Salt Co., Wadsworth, Ohio. Table-salt | 40,387 | May 19 | 104 | 845 |
| Ohio Talking Machine Co., Toledo, Ohio. Certain named talking-machines | 41,584 | Dec. 1 | 107 | 1370 |
| Ohio Truss Co., Cincinnati, Ohio. Suspensories | 40,532 | June 9 | 104 | 1647 |
| OiliO Chemical Company, Great Bend, Kans. Pain-allaying medicine | 41,703 | Dec. 22 | 107 | 2228 |
| Oklahoma City Mill & Elevator Co., Oklahoma, Okla. Ter. Flour | 40,738 | July 7 | 105 | 254 |
| Oklahoma City Mill & Elevator Co., Oklahoma, Okla. Ter. Flour | 40,739 | July 7 | 105 | 255 |
| Okonite Co., Ltd., New York, N. Y. Certain named electrical conductors or wires | 40,226 | Apr. 28 | 103 | 2167 |
| Oliver, Frank M., Walla Walla, Wash. Internal remedy for treatment of kidney and rheumatic ailments | 41,197 | Sept. 29 | 106 | 1233 |
| Omo Manufacturing Company, Middletown, Conn. Dress shields or protectors | 40,038 | Apr. 7 | 103 | 1409 |
| Oneida Community, Limited, Kenwood, N. Y. Silver spoons, forks, knives, and ladles | 40,069 | Apr. 7 | 103 | 1412 |
| Oregon Nursery Company, Limited, Salem, Oreg. Fruit-trees | 41,203 | Sept. 29 | 106 | 1233 |
| Oriental Plant Food Co., New York, N. Y. Plant food | 40,801 | July 21 | 105 | 740 |
| Orinoco Asphalt, Gesellschaft mit Beschränkter Haftung, Hamburg, Germany. Asphalt and products derived therefrom | 40,057 | Apr. 7 | 103 | 1411 |
| Ormiston & Glass, Limited, London, England. Pens | 41,380 | Oct. 27 | 106 | 2283 |
| Ormiston & Glass, Limited, London, England. Steel pens | 41,381 | Oct. 27 | 106 | 2283 |
| Orrine Company, Alexandria, Va., and Washingon, D. C. Proprietary medicines for cure of alcoholic habits | 40,112 | Apr. 14 | 103 | 1675 |
| Osgood, Frederick M., Manchester, N. H. Toys | 41,003 | Aug. 25 | 105 | 2052 |
| Oshkosh Brewing Company, Oshkosh, Wis. Beer | 40,988 | Aug. 25 | 105 | 2050 |
| Outlook Envelope Company, Chicago, Ill. Envelops | 41,751 | Dec. 29 | 107 | 2520 |
| Overton, Charles C., Coney Island, N. Y. Cooking utensils | 40,287 | May 5 | 104 | 306 |
| Ox-Beef Company of America, Montclair, N. J., and Chicago, Ill. Meat extracts and concentrated meats | 39,839 | Feb. 24 | 102 | 1772 |

*Alphabetical list of registrants of trade-marks*—Continued.

| Name, residence, and title. | No. | Date. | Official Gazette. Vol. | Page. |
|---|---|---|---|---|
| P. A. Blichert Mfg. Co., New York, N. Y. Shoe-polish | 41,154 | Sept. 22 | 106 | 990 |
| Pabst Brewing Company, Milwaukee, Wis. Lager-beer | 40,066 | Apr. 7 | 103 | 1412 |
| Pabst Brewing Company, Milwaukee, Wis. Malt tonic | 40,314 | May 12 | 104 | 569 |
| Pacific Coast Steamship Company, San Francisco, Cal. Guide-books and illustrated souvenirs | 41,658 | Dec. 15 | 107 | 1965 |
| Pacific Steel and Wire Co., San Francisco, Cal. Wire, wire fencing, and wire rope | 41,461 | Nov. 10 | 107 | 536 |
| Packard, W. D. & J. W., Warren, Ohio. Electrical transformers | 41,538 | Nov. 24 | 107 | 1090 |
| Paiste Co., H. T., Philadelphia, Pa. Electric-lamp sockets | 40,290 | May 5 | 104 | 306 |
| Pan American Motor Co, Mamaroneck, N. Y. Automobiles and parts thereof | 39,707 | Jan. 27 | 102 | 816 |
| Pandora Corset Co., Jackson, Mich. Corsets | 41,589 | Dec. 8 | 107 | 1649 |
| Pannill Paint and Paint Solder Manufacturing Company, Wilmington, N. C. Roof-paint | 40,283 | May 5 | 104 | 306 |
| Paracamph Company, Louisville, Ky. Tonic laxatives | 40,154 | Apr. 21 | 103 | 1907 |
| Pardridge & Blackwell, Detroit, Mich. Coats, vests, and trousers | 41,690 | Dec. 22 | 107 | 2227 |
| Paris Medicine Company, St. Louis, Mo. Medicines for cure of chills | 40,189 | Apr. 28 | 103 | 2163 |
| Parker Bros., Inc., Salem, Mass. Games played with cards | 40,889 | Aug. 11 | 105 | 1524 |
| Parker, Holmes & Co., Boston, Mass. Leather boots, shoes, and slippers | 39,867 | Mar. 3 | 103 | 217 |
| Paschall, Lewis M., Minneapolis, Minn. Rye-flour | 40,772 | July 14 | 105 | 491 |
| Paschall, Lewis M., Minneapolis, Minn. Wheat-flour | 40,936 | Aug. 18 | 105 | 1771 |
| Pasteur-Chamberland Filter Co., Dayton, Ohio. Pipe-fittings | 39,827 | Feb. 17 | 102 | 1548 |
| Patapsco Shoe Co., Baltimore, Md. Leather shoes | 40,087 | Apr. 14 | 103 | 1673 |
| Patterson, James R., Union City, Mich. Sand-filled Portland cement | 41,454 | Nov. 10 | 107 | 535 |
| Paul's Ink Co., Jersey City, N. J. Ink | 41,753 | Dec. 29 | 107 | 2520 |
| Pearson, Edward T., Hamburg, Germany. Tonic, stimulating, and reconstructive medicinal preparations | 41,237 | Oct. 6 | 106 | 1495 |
| Pearson, Edward T., Hamburg, Germany. Tonic, stimulating, and reconstructive medicinal preparations | 41,238 | Oct. 6 | 106 | 1495 |
| Peck, George W., New York, N. Y. Crates and packing-cases | 39,667 | Jan. 20 | 102 | 618 |
| Peerless Carbon Black Company, Pittsburg, Pa. Carbon-blacks and lampblacks | 41,481 | Nov. 17 | 107 | 827 |
| Peerless Mfg. Co., Pittsburg, Pa. Insecticides | 40,435 | May 26 | 104 | 1112 |
| Peerless Yeast Co., Ltd., Union City, Mich. Yeast-cakes | 40,873 | Aug. 4 | 105 | 1255 |
| Perdo Remedy Company, Barberton, Ohio. Germicide for external use | 39,881 | Mar. 3 | 103 | 219 |
| Perfection Overgaiter Company, Burlington, Vt. Leggings and overgaiters | 41,172 | Sept. 29 | 106 | 1230 |
| Perforated Music Roll Co., West Orange, N. J. Perforated music-rolls for automatic musical instruments | 40,245 | May 5 | 104 | 302 |
| Perroud, Alexandre, Grenoble, France. Gloves | 41,349 | Oct. 27 | 106 | 2279 |
| Perroud, Alexandre, Grenoble, France. Gloves | 41,350 | Oct. 27 | 106 | 2279 |
| Perroud, Alexandre, Grenoble, France. Gloves | 41,351 | Oct. 27 | 106 | 2279 |
| Perry, Charles E., Boston, Mass. Paper in sheets, strips, and rolls | 41,640 | Dec. 8 | 107 | 1655 |
| Peru Cin-Cone Company, New York, N. Y. Nerve-tonics | 39,981 | Mar. 24 | 103 | 883 |
| Peryer, Maurice, Christchurch, New Zealand. Preparations for cleaning smooth surfaces | 41,111 | Sept. 15 | 106 | 759 |
| Peters, Charles H., St. John, New Brunswick. Tea | 39,721 | Feb. 3 | 102 | 1044 |
| Petersen, Marcus, Buffalo, N. Y. Toilet preparations for the skin | 40,142 | Apr. 21 | 103 | 1906 |
| Petry, Charles H., Paterson, N. J. Cleaning compounds for cleaning and polishing metal, glass, and similar substances | 41,643 | Dec. 8 | 107 | 1655 |
| Pettingell-Andrews Company, Boston, Mass. Incandescent lamps | 40,227 | Apr. 28 | 103 | 2168 |
| Pheno-Bromate Chemical Company, New York, N. Y. Remedies for certain named diseases | 39,879 | Mar. 3 | 103 | 219 |
| Philadelphia Pneumatic Tool Company, Philadelphia, Pa. Certain named pneumatic tools | 40,461 | May 26 | 104 | 1115 |
| Piebes & Co., New York, N. Y. Children's headwear | 40,850 | Aug. 4 | 105 | 1253 |
| Pierce, Gerald, Chicago, Ill. Beer | 41,405 | Nov. 3 | 107 | 261 |
| Pillsbury-Washburn Flour Mills Company, (Limited,) Minneapolis, Minn. Flour made from wheat | 41,668 | Dec. 15 | 107 | 1966 |
| Pillsbury-Washburn Flour Mills Company, (Limited,) Minneapolis, Minn. Flour made from wheat | 41,669 | Dec. 15 | 107 | 1966 |
| Pineoleum Manufacturing Company, New York, N. Y. Catarrhal remedies | 40,248 | May 5 | 104 | 302 |
| Pioneer Tar Soap Co., Dayton, Ohio. Certain named soap | 39,846 | Feb. 24 | 102 | 1772 |
| Pit Publishing Co., Detroit, Mich. Card games | 40,812 | July 28 | 105 | 968 |
| Pit Publishing Company, Topeka, Kans. Card games | 41,748 | Dec. 29 | 107 | 2520 |
| Plunkett-Jarrell Grocer Co., Little Rock, Morrillton, and Hope, Ark. Baking-soda | 41,232 | Oct. 6 | 106 | 1494 |
| Polar Creamery Co., Lafayette, Ind. Certain named cooling apparatus | 40,574 | June 9 | 104 | 1652 |
| Pollak, Samuel, Brooklyn, N. Y. Bay-rum | 41,109 | Sept. 15 | 106 | 759 |
| Pope, Lawrence K., Chicago, Ill. Cigars | 40,865 | Aug. 4 | 105 | 1255 |
| Porter, Charles W., Lynn, Mass. Women's leather boots and shoes | 41,069 | Sept. 8 | 106 | 535 |
| Porter, Charles W., Lynn, Mass. Women's leather shoes | 41,070 | Sept. 8 | 106 | 535 |
| Porter-Ryerson-Hoobler Company, Omaha, Nebr. Medical compounds for certain named purposes | 40,594 | June 16 | 104 | 1889 |
| Porter-Ryerson-Hoobler Company, Omaha, Nebr. Medical compounds for certain named purposes | 40,595 | June 16 | 104 | 1889 |
| Porter, Sophronia, Enid, Okla. Ter. Yeast | 40,062 | Apr. 7 | 103 | 1412 |
| Portland Packing Co., Portland, Me. Canned vegetables and fruits | 40,000 | Mar. 31 | 103 | 1157 |
| Postum Cereal Co., Limited, Battlecreek, Mich. Cereal breakfast-foods | 40,911 | Aug. 11 | 105 | 1527 |
| Postum Cereal Co., Limited, Battlecreek, Mich. Cereal coffee | 41,090 | Sept. 8 | 106 | 537 |
| Potter Co., J. A. & J. T., Providence, R. I. Salve | 41,105 | Sept. 15 | 106 | 758 |
| Powers Manufacturing Company, Philadelphia, Pa. Blood and nerve remedies | 40,793 | July 21 | 105 | 739 |
| Pozzi, Albert A., St. Louis, Mo. Tea | 40,693 | June 30 | 104 | 2434 |
| Pranges, Leo, South Brooklyn, N. Y. Fruit-syrup | 40,099 | Apr. 14 | 103 | 1674 |
| Pratt Food Co., Philadelphia, Pa. Cure for colic | 41,247 | Oct. 6 | 106 | 1496 |
| Pratt Food Co., Philadelphia, Pa. Liniments | 41,248 | Oct. 6 | 106 | 1496 |
| Pratt Food Co., Philadelphia, Pa. Ointments | 41,249 | Oct. 6 | 106 | 1496 |
| Pratt Food Co., Philadelphia, Pa. Lice-killer | 41,250 | Oct. 6 | 106 | 1496 |
| Prenzlau, Louis, Hamburg, Germany. Tanning extracts and tanning liquors | 39,849 | Feb. 24 | 102 | 1773 |
| Prescott & Co., J. L., New York, N. Y. Stove-polish | 41,375 | Oct. 27 | 106 | 2282 |
| Preservaline Manufacturing Co., New York, N. Y. Certain named chemical compounds | 41,674 | Dec. 15 | 107 | 1967 |
| Presto Manufacturing Company, Ossining, N. Y. Internal headache remedy | 40,188 | Apr. 28 | 103 | 2163 |
| Preston, George S., Knoxville, Tenn. Certain named syrup and carbonated beverage made therefrom | 40,395 | May 19 | 104 | 846 |
| Preston & Stauffer, New Orleans, La. Mixed teas | 40,067 | Apr. 7 | 103 | 1412 |
| Preston & Stauffer, New Orleans, La. Mixed teas | 40,068 | Apr. 7 | 103 | 1412 |
| Price Cereal Food Co., Battlecreek, Mich. Flaked cereal foods | 40,316 | May 12 | 104 | 569 |
| Price & Vogt, Philadelphia, Pa. Stiff and soft felt hats | 41,310 | Oct. 20 | 106 | 2006 |
| Price & Vogt, Philadelphia, Pa. Stiff and soft felt hats | 41,311 | Oct. 20 | 106 | 2006 |
| Price, William B., Frederick, Md. Fireproofing or fire-resisting preparation | 40,615 | June 16 | 104 | 1891 |
| Price, William B., Frederick, Md. Fireproofing or fire-resisting starch | 40,616 | June 16 | 104 | 1891 |
| Price, William B., Frederick, Md. Salt | 40,740 | July 7 | 105 | 255 |
| Priest, Almira J., Imogene, Iowa. Yeast | 40,940 | Aug. 18 | 105 | 1772 |
| Procter & Gamble Co., Cincinnati and Ivorydale, Ohio. Seed-oils and seed products | 39,723 | Feb. 3 | 102 | 1044 |
| Procter & Gamble Co., Cincinnati and Ivorydale, Ohio. Seed-oils and seed products | 39,763 | Feb. 10 | 102 | 1286 |
| Progressive Knitting Mills, Detroit, Mich. Knit gloves and mittens | 41,651 | Dec. 15 | 107 | 1964 |

*Alphabetical list of registrants of trade-marks*—Continued.

| Name, residence, and title. | No. | Date. | Official Gazette. Vol. | Page. |
|---|---|---|---|---|
| Protopazzi Bros., London, England. Figs | 40,831 | July 28 | 105 | 970 |
| Provo Chemical Co., Bloomington, Ill. Antiseptic and germicidal preparations | 41,695 | Dec. 22 | 107 | 2228 |
| Putzler Gebr. Glashütten-Werke, Gesellschaft mit Beschränkter Haftung, Penzig, Germany. Certain named glassware | 41,219 | Oct. 6 | 106 | 1493 |
| Pyle & Sons, James, New York, N. Y. Washing compound | 40,823 | July 28 | 105 | 969 |
| Queen City Creamery Co., Parsons, Kans. Butter | 40,104 | Apr. 14 | 103 | 1675 |
| Quin Sharpe Drug Co., Vicksburg, Miss. Antiseptic or disinfectant compound | 41,567 | Dec. 1 | 107 | 1368 |
| R. I. Sherman Mfg. Co., Boston, Mass. Canned, pickled, preserved, or evaporated fruits and vegetables | 41,403 | Nov. 3 | 107 | 261 |
| R. T. Davis Mill & Mfg. Co., St. Joseph, Mo. Malted wheat-flake food | 40,006 | Mar. 31 | 103 | 1157 |
| Radam, Ida, New York, N. Y. Certain named medicinal preparations | 40,552 | June 9 | 104 | 1649 |
| Radical Remedy Co., Hickory, N. C. Salve | 41,697 | Dec. 22 | 107 | 2228 |
| Radical Remedy Co., Hickory, N. C. Tooth-powder | 41,698 | Dec. 22 | 107 | 2228 |
| Radical Remedy Co., Hickory, N. C. Medicine to cure headaches and neuralgia | 41,699 | Dec. 22 | 107 | 2228 |
| Rahaim & Co., S., New York, N. Y. Razors | 39,789 | Feb. 10 | 102 | 1289 |
| Ramsdell Sweet & Co., O. P., Buffalo, N. Y. Misses' and children's leather shoes | 40,088 | Apr. 14 | 103 | 1673 |
| Randleman & Sons, Capt. M. C., Des Moines, Iowa. Washing-machines | 40,418 | May 19 | 104 | 848 |
| Raub Cigar Co., New York, N. Y. Cigars | 40,980 | Aug. 25 | 105 | 2049 |
| Rauch, Carl F. E. M., Berlin, Germany. Still and sparkling wines | 40,165 | Apr. 21 | 103 | 1908 |
| Rawe, William H., Pawtucket, R. I. Stop, waste, and ball cocks and valves | 41,058 | Sept. 1 | 106 | 260 |
| Raystone Jewel Company, Paterson, N. J. Gems, jewels, and precious stones and imitations thereof | 39,992 | Mar. 31 | 103 | 1156 |
| Ready Bits Company, Incorporated, New Haven, Conn. Breakfast-food | 41,514 | Nov. 24 | 107 | 1088 |
| Ready Bits Corporation, New Haven, Conn. Breakfast-foods | 40,447 | May 26 | 104 | 1113 |
| Ready Bits Corporation, New Haven, Conn. Breakfast-foods | 40,448 | May 26 | 104 | 1114 |
| Rebhan & Co., H., New York, N. Y. Woolen and worsted cloths | 41,503 | Nov. 24 | 107 | 1087 |
| Redeker & Hennis, Nuremberg, Germany. Water-colors and oil-colors | 40,295 | May 12 | 104 | 567 |
| Reed & Barton Corporation, Taunton, Mass. Baby-spoons | 41,278 | Oct. 13 | 106 | 1769 |
| Reed & Barton Corporation, Taunton, Mass. Baby-spoons | 41,279 | Oct. 13 | 106 | 1769 |
| Reed & Barton Corporation, Taunton, Mass. Baby-spoons | 41,280 | Oct. 13 | 106 | 1770 |
| Reed & Barton Corporation, Taunton, Mass. Baby-spoons | 41,281 | Oct. 13 | 106 | 1770 |
| Reed & Barton Corporation, Taunton, Mass. Baby-spoons | 41,282 | Oct. 13 | 106 | 1770 |
| Reed & Barton Corporation, Taunton, Mass. Baby-spoons | 41,283 | Oct. 13 | 106 | 1770 |
| Reed & Barton Corporation, Taunton, Mass. Baby-spoons | 41,284 | Oct. 13 | 106 | 1770 |
| Refined Wood Company, New York, N. Y. Manufactured lumber | 41,388 | Oct. 27 | 106 | 2284 |
| Regal Shoe Company, Boston, Mass. Leather boots and shoes and leather for same | 39,902 | Mar. 10 | 103 | 420 |
| Regar, George B., Philadelphia, Pa. Pills for certain named diseases | 41,628 | Dec. 8 | 107 | 1654 |
| Reichard, Ferdinand, Huntington, Ind. Cigars | 41,305 | Oct. 13 | 106 | 1772 |
| Reichard, Jeremiah, New York, N. Y. Safety-razors and razor-blades | 40,836 | July 28 | 105 | 970 |
| Reichard, Jeremiah, New York, N. Y. Safety-razors and razor-blades | 41,201 | Sept. 29 | 106 | 1233 |
| Reisinger, Hugo, New York, N. Y. Electric clocks | 39,918 | Mar. 10 | 103 | 422 |
| Reiter & Co., Andrew, Baltimore, Md. Canned fruits and vegetables | 40,499 | June 2 | 104 | 1387 |
| Remaly, George J., Allentown, Pa. Brain and nerve remedies | 41,289 | Oct. 13 | 106 | 1770 |
| Republic Rubber Company, Youngstown, Ohio. Sheet-rubber packing and gaskets | 40,816 | July 28 | 105 | 968 |
| Respirator Medication Co., Chicago, Ill. Respirators | 41,553 | Dec. 1 | 107 | 1367 |
| Rettger, Christopher C., New York, N. Y. Certain named fabric piece goods | 39,646 | Jan. 20 | 102 | 616 |
| Reymer & Brothers, Incorporated, Pittsburg, Pa. Candy | 40,869 | Aug. 4 | 105 | 1255 |
| Reymer & Brothers, Incorporated, Pittsburg, Pa. Candy | 40,870 | Aug. 4 | 105 | 1255 |
| Reymer & Brothers, Incorporated, Pittsburg, Pa. Candy | 40,871 | Aug. 4 | 105 | 1255 |
| Reymer & Brothers, Incorporated, Pittsburg, Pa. Candy | 40,872 | Aug. 4 | 105 | 1255 |
| Reymer & Brothers, Incorporated, Pittsburg, Pa. Candy | 41,148 | Sept. 22 | 106 | 989 |
| Reynolds & Co., Wm. T., Poughkeepsie, N. Y. Canned vegetables and fruits | 40,500 | June 2 | 104 | 1387 |
| Reynolds & Co., Wm. T., Poughkeepsie, N. Y. Canned vegetables and canned fruits | 41,092 | Sept. 8 | 106 | 538 |
| Reynolds & Co., Wm. T., Poughkeepsie, N. Y. Coffee | 41,711 | Dec. 22 | 107 | 2229 |
| Reynolds & Co., Wm. T., Poughkeepsie, N. Y. Coffee | 41,712 | Dec. 22 | 107 | 2229 |
| Rheinische Nadelfabriken, Aix-la-Chapelle, Germany. Pins | 41,120 | Sept. 15 | 106 | 760 |
| Rice & Hutchins, Inc., Boston, Mass. Leather and boots and shoes made of leather | 41,026 | Sept. 1 | 106 | 257 |
| Richardson, Alonzo F., New York, N. Y. Remedies for diseases of the skin and scalp, hair-food, and hair-tonics | 40,599 | June 16 | 104 | 1889 |
| Richardson, Alonzo F., New York, N. Y. Remedies for diseases of the skin and scalp, hair-food, and hair-tonics | 40,600 | June 16 | 104 | 1889 |
| Richardson, Alonzo F., New York, N. Y. Remedies for diseases of the skin and scalp, hair-food, and hair-tonics | 40,601 | June 16 | 104 | 1889 |
| Richardson, Alonzo F., New York, N. Y. Remedies for throat and lung diseases | 40,602 | June 16 | 104 | 1889 |
| Richardson, Alonzo F., New York, N. Y. Remedies for pulmonary and similar diseases | 40,603 | June 16 | 104 | 1890 |
| Richardson, Alonzo F., New York, N. Y. Remedies for throat and lung diseases | 40,635 | June 23 | 104 | 2142 |
| Richardson, Alonzo F., New York, N. Y. Remedies for kidney, liver, and bladder troubles | 40,636 | June 23 | 104 | 2143 |
| Richardson, Alonzo F., New York, N. Y. Remedies for diseases of the skin and scalp | 40,679 | June 30 | 104 | 2432 |
| Richardson, Delmer D., Chicago, Ill. Medicinal preparations or compounds for the nerves and nervous diseases | 41,239 | Oct. 6 | 106 | 1495 |
| Richardson, Roberts Dry Goods Co., St. Joseph, Mo. Pants, overalls, coats, and vests | 40,849 | Aug. 4 | 105 | 1253 |
| Richardson, Roberts Dry Goods Co., St. Joseph, Mo. Shirts | 40,929 | Aug. 18 | 105 | 1770 |
| Richardson, Roberts Dry Goods Co., St. Joseph, Mo. Hosiery | 41,209 | Oct. 6 | 106 | 1492 |
| Richardson Silk Company, Chicago, Ill. Silk thread for sewing and embroidering | 40,238 | May 5 | 104 | 301 |
| Richman, Sumberg & Co., New York, N. Y. Trousers | 40,784 | July 21 | 105 | 738 |
| Richter, Friedrich A., Rudolstadt, Germany, and New York, N. Y. Soap | 39,724 | Feb. 3 | 102 | 1044 |
| Ricord Mfg. Co., Allegheny, Pa. Remedy for certain named diseases | 39,774 | Feb. 10 | 102 | 1287 |
| Riedel, J. D., Berlin, Germany. Medicinal preparations for certain named diseases | 41,440 | Nov. 10 | 107 | 533 |
| Riessner, Thomas, New York, N. Y. Bronze printing-ink | 40,218 | Apr. 28 | 103 | 2167 |
| Rio Chemical Co., New York, N. Y. Remedies for certain named diseases | 40,400 | May 19 | 104 | 846 |
| Ritsert, Eduard, Frankfort-on-the-Main, Germany. Anesthetics | 41,356 | Oct. 27 | 106 | 2280 |
| Robert F. Mackenzie Co., Cleveland, Ohio. Molasses taffy candy kisses | 41,407 | Nov. 3 | 107 | 261 |
| Roberts, David, Waukesha, Wis. Stock-food | 41,093 | Sept. 8 | 106 | 538 |
| Robertson, William C., New York, N. Y. Writing-pens | 40,890 | Aug. 11 | 105 | 1524 |
| Robinson & Sons, Robert, Annan, Scotland. Oatmeals and rolled oats | 41,231 | Oct. 6 | 106 | 1494 |
| Robinson, William H., Brooklyn, N. Y. Mattresses, bolsters, pillows, and cushions | 41,385 | Oct. 27 | 106 | 2283 |
| Robinson & Woodworth, Boston, Mass. Tea | 40,951 | Aug. 18 | 105 | 1773 |
| Rocca, Tassy & De Roux, Marseilles, France. Cacao-oils | 39,762 | Feb. 10 | 102 | 1286 |
| Rock River Hay Tool Co., Janesville, Wis. Hay-carriers, tracks therefor, and hay-forks | 41,684 | Dec. 15 | 107 | 1968 |
| Rockland-Rockport Lime Company, Rockland, Me., and New York, N. Y. Ground white lime | 39,909 | Mar. 10 | 103 | 421 |
| Rodenberg & Dunn, New York, N. Y., and Providence, R. I. Certain named jewelry | 41,216 | Oct. 6 | 106 | 1493 |
| Rodenberg & Dunn, New York, N. Y., and Providence, R. I. Certain named jewelry | 41,217 | Oct. 6 | 106 | 1493 |
| Roderick Lean Manufacturing Co., Mansfield, Ohio. Harrows | 41,125 | Sept. 15 | 106 | 760 |
| Rogers, Lucrece G., New York, N. Y. Face-cream | 39,742 | Feb. 3 | 102 | 1046 |
| Rogers Paper M'f'g. Co., Inc., South Manchester, Conn. Press-board | 40,654 | June 23 | 104 | 2144 |
| Rogers Screw Co., Providence, R. I. Screws | 41,587 | Dec. 1 | 107 | 1370 |

*Alphabetical list of registrants of trade-marks*—Continued.

| Name, residence, and title. | No. | Date. | Official Gazette. Vol. | Page. |
|---|---|---|---|---|
| Root Manufacturing Company, Cohoes, N. Y. Certain named underwear | 41,170 | Sept. 29 | 106 | 1230 |
| Rose Manufacturing Company, New York, N. Y. Skin-bleaching preparation | 41,332 | Oct. 20 | 106 | 2008 |
| Rose Manufacturing Company, New York, N. Y. Skin-bleaching preparation | 41,333 | Oct. 20 | 106 | 2009 |
| Rose Mfg. Co., Dallas, Tex. Certain named wearing-apparel | 39,995 | Mar. 31 | 103 | 1156 |
| Rosemond, Eugene V., New York, N. Y. Hats for women and children | 40,083 | Apr. 14 | 103 | 1673 |
| Rosenberg, Hugo, Berlin, Germany. Remedy against gall-stone | 41,441 | Nov. 10 | 107 | 533 |
| Rosendorf, Isidore L., Selma, Ala. Remedy for certain named diseases | 40,677 | June 30 | 104 | 2432 |
| Rosenstein Brothers, New York, N. Y. Certain named clam preparations | 40,001 | Mar. 31 | 103 | 1157 |
| Rosenstein Brothers, New York, N. Y. Dried, pickled, or otherwise preserved fish | 41,718 | Dec. 22 | 107 | 2230 |
| Rosenstein Brothers, New York, N. Y. Dried, pickled, or otherwise preserved fish | 41,719 | Dec. 22 | 107 | 2230 |
| Rosenthal & Bros., Samuel, New York, N. Y. Certain named wearing-apparel | 39,897 | Mar. 3 | 103 | 220 |
| Rosenthal, John M., Fort Wayne, Ind. Dentifrice | 41,437 | Nov. 10 | 107 | 533 |
| Rosenthal, Louis, Montreal, Canada. Remedies for cure of certain named diseases | 41,559 | Dec. 1 | 107 | 1367 |
| Ross Brothers, Worcester, Mass. Chicken-feed | 41,716 | Dec. 22 | 107 | 2229 |
| Rothan, George J., Peoria, Ill. Remedies for certain named diseases | 41,783 | Dec. 29 | 107 | 2523 |
| Rothschild Bros. Hat Co., St. Louis, Mo. Hats | 41,271 | Oct. 13 | 106 | 1769 |
| Rothschild, Meyers & Co., New York, N. Y. Enameled steel ware | 41,681 | Dec. 15 | 107 | 1967 |
| Rothschild, Meyers & Co., New York, N. Y. Enameled steel ware | 41,682 | Dec. 15 | 107 | 1968 |
| Rouse, Hempstone & Co., Baltimore, Md. Shirts, collars, and cuffs | 41,017 | Sept. 1 | 106 | 256 |
| Roy, Edward H., Nashville, Tenn. Playing-cards | 41,027 | Sept. 1 | 106 | 257 |
| Royal Remedy & Extract Co., Dayton, Ohio. Fruit-syrups | 40,315 | May 12 | 104 | 569 |
| Royal Remedy & Extract Co., Dayton, Ohio. Chewing-gum | 40,913 | Aug. 11 | 105 | 1527 |
| Royal Remedy & Extract Co., Dayton, Ohio. Lemon and vanilla flavoring extracts | 40,987 | Aug. 25 | 105 | 2050 |
| Royal Suspender Co., New York, N. Y. Suspenders | 39,631 | Jan. 13 | 102 | 460 |
| Royal Worcester Corset Co., Worcester, Mass. Corsets | 39,803 | Feb. 17 | 102 | 1545 |
| Royal Worcester Corset Co., Worcester, Mass. Corsets | 40,379 | May 19 | 104 | 844 |
| Royal Worcester Corset Co., Worcester, Mass. Corsets | 41,426 | Nov. 10 | 107 | 532 |
| Royal Worcester Corset Co., Worcester, Mass. Corsets | 41,427 | Nov. 10 | 107 | 532 |
| Rudolph Wurlitzer Company, Cincinnati, Ohio. Automatic piano and orchestrion | 41,677 | Dec. 15 | 107 | 1967 |
| Rullman, William H., Annapolis, Md. Liniment | 40,607 | June 16 | 104 | 1890 |
| Russ, Suchard and Company, Neufchâtel, Switzerland. Certain named confections | 40,008 | Mar. 31 | 103 | 1158 |
| Russell, George B., Seymour, Ind. Liniments for external and internal uses | 40,638 | June 23 | 104 | 2143 |
| Russell, James W., Boston, Mass. Oleaginous compound used as an axle-grease and harness-dressing | 40,696 | June 30 | 104 | 2434 |
| Russell Manufacturing Co., Middletown, Conn. Harness-webbing | 39,904 | Mar. 10 | 103 | 420 |
| Russell Mfg. Co., Louisville, Ky. Juices of fruits | 41,761 | Dec. 29 | 107 | 2521 |
| S. Levyn, Buffalo, N. Y. Cigars | 41,615 | Dec. 8 | 107 | 1653 |
| S. R. Feil Co., Cleveland, Ohio. General tonic preparations | 40,313 | May 12 | 104 | 568 |
| Sachs Bros. & Co., San Francisco, Cal. Certain named underwear | 41,428 | Nov. 10 | 107 | 533 |
| Sachs Bros. & Co., San Francisco, Cal. Ribbons | 41,544 | Dec. 1 | 107 | 1366 |
| Sachs Bros. & Co., San Francisco, Cal. Hosiery | 41,591 | Dec. 8 | 107 | 1649 |
| Safety Emery Wheel Company, Springfield, Ohio. Abrasive tools, abrasive wheels, and abrasive materials | 41,268 | Oct. 6 | 106 | 1498 |
| Saginaw Realty Company, Ltd., Saginaw, Mich. Sauer-kraut | 39,823 | Feb. 17 | 102 | 1547 |
| Sahlmark, Joseph, Ludington, Mich. Tonic | 40,789 | July 21 | 105 | 739 |
| Salmon & Tredway, Morristown, N. J. Blank books | 41,028 | Sept. 1 | 106 | 257 |
| Salo-Sedatus Chemical Company, St. Louis, Mo. Proprietary medicine for certain named purposes | 41,196 | Sept. 29 | 106 | 1233 |
| Salt Lake Candy Co., Salt Lake City, Utah. Chocolate candy | 40,098 | Apr. 14 | 103 | 1674 |
| Salt's Textile Mfg. Co., New York, N. Y. Silk velvets | 39,960 | Mar. 24 | 103 | 881 |
| Samson Iron Works, Stockton, Cal. Gas, gasolene, and oil engines | 39,926 | Mar. 10 | 103 | 422 |
| Sanders, Edward A., Saginaw, Mich. Chimney-cowls | 40,123 | Apr. 14 | 103 | 1676 |
| Sanderson Brothers Steel Co., Syracuse, N. Y. Tool-steel | 41,060 | Sept. 1 | 106 | 260 |
| Sandusky Portland Cement Co., Sandusky, Ohio. Portland cement | 40,412 | May 19 | 104 | 847 |
| Sanger Bros., Dallas, Tex. Leather, kid, or vici boots and shoes | 39,805 | Feb. 17 | 102 | 1545 |
| Sanitas Nut Food Co., Ltd., Battlecreek, Mich. Food prepared from certain named articles | 40,494 | June 2 | 104 | 1387 |
| Saratoga Victory Manufacturing Company, Victory, N. Y., and Boston, Mass. Cloth used for linings | 40,852 | Aug. 4 | 105 | 1254 |
| Satyria Chemical Co., St. Louis, Mo. Proprietary remedy for certain named diseases | 41,159 | Sept. 22 | 106 | 991 |
| Saul, Philip C., New York, N. Y. Pharmaceutical products for nervous diseases | 40,250 | May 5 | 104 | 302 |
| Sausaman, John L., Claypool, Ind. Preserving material for meat, fruit, vegetables, and the like | 40,280 | May 5 | 104 | 305 |
| Sauvion, Isidore, Cognac, France. Cognac | 40,012 | Mar. 31 | 103 | 1158 |
| Sawyer, Alvin P., Chicago, Ill. Certain named medicines | 40,856 | Aug. 4 | 105 | 1254 |
| Sawyer, Charles W., Marion, Ohio. Certain named proprietary medicine | 40,193 | Apr. 28 | 103 | 2163 |
| Sawyer Crystal Blue Company, Boston, Mass. Bluing | 40,026 | Mar. 31 | 103 | 1159 |
| Scanlon, Henry Y., Cleveland, Ohio. Maple-sugar and maple-syrup | 41,091 | Sept. 8 | 106 | 538 |
| Schaarmann, Gustav, New York, N. Y. Dental burs | 40,918 | Aug. 11 | 105 | 1527 |
| Schauf, Adam K., New York, N. Y. Nerve-tonics | 41,485 | Nov. 17 | 107 | 827 |
| Schauf, Adam K., New York, N. Y. Remedy for nervous affections and a blood-purifier | 41,560 | Dec. 1 | 107 | 1367 |
| Schauf, Adam K., New York, N. Y. Tonic for stomach, kidneys, liver, and bladder | 41,561 | Dec. 1 | 107 | 1368 |
| Schauf, Adam K., New York, N. Y. Remedy for dyspepsia, indigestion, and stomach complaints | 41,562 | Dec. 1 | 107 | 1368 |
| Scheffer & Rossum, St. Paul, Minn. Leather for certain named purposes | 40,630 | June 23 | 104 | 2142 |
| Schieffelin & Co., New York, N. Y. Antitubercular and expectorant | 40,759 | July 14 | 105 | 490 |
| Schieffelin & Co., New York, N. Y. Internal antiseptic and antirheumatic | 40,760 | July 14 | 105 | 490 |
| Schiff, Henry, New York, N. Y. Certain named knit goods | 39,696 | Jan. 27 | 102 | 815 |
| Schmidt, Christian, Newark, N. J. Stoves | 39,790 | Feb. 10 | 102 | 1289 |
| Schmidt, Fritz, New York, N. Y. Kid gloves | 40,751 | July 14 | 105 | 489 |
| Schmidt, George A., Chicago, Ill. Toilet soap in liquid and solid form | 41,193 | Sept. 29 | 106 | 1232 |
| Schmidt, Johann, Nuremberg, Germany. Certain named soluble receptacles | 41,046 | Sept. 1 | 106 | 259 |
| Schmidt, Johann, Nuremberg, Germany. Soluble receptacles | 41,079 | Sept. 8 | 106 | 536 |
| Schmitz & Co., C., New York, N. Y. Cotton piece goods | 39,962 | Mar. 24 | 103 | 881 |
| Schmitz & Co., C., New York, N. Y. Cotton piece goods | 39,963 | Mar. 24 | 103 | 881 |
| Schmitz & Co., C., New York, N. Y. Cotton piece goods | 39,964 | Mar. 24 | 103 | 881 |
| Schneider, Robert, Berlin, Germany. Remedies for tuberculous and catarrhal complaints | 40,895 | Aug. 11 | 105 | 1525 |
| Schneider, Robert, Berlin, Germany. Lamps and tubes for treatment of certain named diseases | 41,361 | Oct. 27 | 106 | 2280 |
| Scholl & Company, Julian, New York, N. Y. Rock-crushers | 40,231 | Apr. 28 | 103 | 2168 |
| Schoo Chemical Co., Pueblo, Colo. Hair-restorer | 39,940 | Mar. 17 | 103 | 653 |
| Schoo Chemical Co., Pueblo, Colo. Medical compound for certain named diseases | 39,942 | Mar. 17 | 103 | 653 |
| Schrafft & Sons, W. F., Boston, Mass. Confectionery | 40,272 | May 5 | 104 | 304 |
| Schuller, Leonhard, Vienna, Austria-Hungary. Umbrellas and parasols | 41,309 | Oct. 20 | 106 | 2006 |
| Schwab, Henry E., Brooklyn, N. Y. Stomach-bitters | 39,660 | Jan. 20 | 102 | 618 |
| Schwanhäusser, Gustav, Nuremberg, Germany. Pencils | 39,799 | Feb. 17 | 102 | 1545 |
| Schwanhäusser, Gustav, Nuremberg, Germany. Pencils | 41,215 | Oct. 6 | 106 | 1492 |
| Schwarzschild & Sulzberger Company, Kansas City, Kans.; Chicago, Ill., and New York, N. Y. Oleaginous and unctuous food substances | 40,317 | May 12 | 104 | 569 |

*Alphabetical list of registrants of trade-marks*—Continued.

| Name, residence, and title. | No. | Date. | Official Gazette. Vol. | Page. |
|---|---|---|---|---|
| Schwarzschild & Sulzberger Company, Kansas City, Kans.; Chicago, Ill., and New York, N. Y. Lard substitute | 40,491 | June 2 | 104 | 1386 |
| Schwille, George W., New York, N. Y. Candies | 40,444 | May 26 | 104 | 1113 |
| Scott, Arthur H., Philadelphia, Pa. Toilet-paper | 41,638 | Dec. 8 | 107 | 1654 |
| Scott, Frederick D., Montreal, Canada. Tailors' prepared gutta-percha tissue | 41,738 | Dec. 29 | 107 | 2519 |
| Scott Paper Co., Philadelphia, Pa. Toilet-paper | 40,128 | Apr. 21 | 103 | 1905 |
| Scott Paper Co., Philadelphia, Pa. Toilet-paper | 40,216 | Apr. 28 | 103 | 2166 |
| Scott Paper Co., Philadelphia, Pa. Toilet-paper | 40,651 | June 23 | 104 | 2144 |
| Scott Paper Co., Philadelphia, Pa. Toilet-paper | 40,652 | June 23 | 104 | 2144 |
| Scott Paper Co., Philadelphia, Pa. Toilet-paper | 40,653 | June 23 | 104 | 2144 |
| Scott Paper Co., Philadelphia, Pa. Toilet-paper | 40,783 | July 21 | 105 | 738 |
| Scott Paper Co., Philadelphia, Pa. Toilet-paper | 41,508 | Nov. 24 | 107 | 1087 |
| Scott Paper Co., Philadelphia, Pa. Toilet-paper | 41,509 | Nov. 24 | 107 | 1087 |
| Scott Paper Co., Philadelphia, Pa. Toilet-paper | 41,510 | Nov. 24 | 107 | 1087 |
| Scott Paper Co., Philadelphia, Pa. Toilet-paper | 41,637 | Dec. 8 | 107 | 1654 |
| Scovill Manufacturing Company, Waterbury, Conn. Buttons | 40,133 | Apr. 21 | 103 | 1905 |
| Seabury, Benjamin H., Tacoma, Wash. Readily-fusible metals | 40,460 | May 26 | 104 | 1115 |
| Seeman Bros., New York, N. Y. Wheat-flakes | 40,939 | Aug. 18 | 105 | 1771 |
| Seeman Bros., New York, N. Y. Cocoa and chocolate | 41,762 | Dec. 29 | 107 | 2521 |
| Seneca Camera Company, Rochester, N. Y. Cameras | 40,243 | May 5 | 104 | 302 |
| Severin, Albert L., Palmyra, Wis. Remedy for certain named diseases of hogs | 40,157 | Apr. 21 | 103 | 1907 |
| Seville Packing Co., New York, N. Y. Certain named relish | 40,100 | Apr. 14 | 103 | 1674 |
| Seyd, Otto, New York, N. Y. Woolen dress goods | 41,395 | Nov. 3 | 107 | 260 |
| Seymour, John, Port Huron, Mich. Fluid for removing varnish | 40,028 | Mar. 31 | 103 | 1160 |
| Sharp & Dohme, Baltimore, Md. Salve or ointment | 40,480 | June 2 | 104 | 1385 |
| Sharp & Dohme, Baltimore, Md. Laxative aromatic compound | 41,294 | Oct. 13 | 106 | 1771 |
| Sharp & Dohme, Baltimore, Md. Antiseptic powder | 41,295 | Oct. 13 | 106 | 1771 |
| Sharp & Dohme, Baltimore, Md. Remedy for coughs and colds and affections of the throat | 41,334 | Oct. 20 | 106 | 2009 |
| Shaw, Jardine & Co., Limited, Manchester, England. Cotton yarns | 41,207 | Oct. 6 | 106 | 1492 |
| Shawmut Rubber Company, Boston, Mass. Rubber boots and shoes | 39,903 | Mar. 10 | 103 | 420 |
| Shepard & Company, Otis, Pittsburg, Pa. Tea | 41,184 | Sept. 29 | 106 | 1231 |
| Shepherd Mfg. Co., Wilmington, Del., and Pittsburg, Pa. Tonic and shampoo preparations for the hair and scalp | 40,143 | Apr. 21 | 103 | 1906 |
| Sherman Oil & Cotton Company, Sherman, Tex. Cooking-fats and lard | 39,824 | Feb. 17 | 102 | 1547 |
| Sherman Oil & Cotton Company, Sherman, Tex. Cooking-fats and lard | 39,894 | Mar. 3 | 103 | 220 |
| Sherman, Reid & Co., New York, N. Y. Quilts | 40,979 | Aug. 25 | 105 | 2049 |
| Sherman, Reid & Co., New York, N. Y. Long-cloth | 41,024 | Sept. 1 | 106 | 257 |
| Shields Croup Liniment Co., Minier, Ill. Liniment | 40,861 | Aug. 4 | 105 | 1254 |
| Shilling, Alfred J., Chicago, Ill. Remedy for certain named diseases | 40,474 | June 2 | 104 | 1385 |
| Shoemaker & Busch, Philadelphia, Pa. Compounds of chlorids and formaldehydes | 40,213 | Apr. 28 | 103 | 2166 |
| Shurly & Dietrich, Galt, Canada. Saws | 40,078 | Apr. 7 | 103 | 1413 |
| Sibley, Edward L., Bennington, Vt. Eyelets | 41,056 | Sept. 1 | 106 | 260 |
| Sibley, Edward L., Bennington, Vt. Press or machine for setting or removing eyelets | 41,057 | Sept. 1 | 106 | 260 |
| Sidle, Henry K., Minneapolis, Minn. Paint and varnish remover | 40,410 | May 19 | 104 | 847 |
| Sieber & Trussell Mfg. Company, St. Louis, Mo. Loose-sheet-holding devices and temporary binders | 40,507 | June 2 | 104 | 1388 |
| Siegel & Company, J., Detroit, Mich. Corsets | 39,956 | Mar. 24 | 103 | 880 |
| Siegel-Cooper Company, New York, N. Y. Leather shoes | 40,885 | Aug. 11 | 105 | 1524 |
| Siegel-Cooper Company, New York, N. Y. Leather shoes | 40,930 | Aug. 18 | 105 | 1770 |
| Siemon, Jacob C., Wiarton, Canada. Soaps | 40,483 | June 2 | 104 | 1385 |
| Silver & Co., New York, N. Y. Night-lamps | 40,568 | June 9 | 104 | 1651 |
| Silz, Auguste, New York, N. Y. Certain named poultry | 40,232 | Apr. 28 | 103 | 2168 |
| Singer Manufacturing Co., New York, N. Y. Sewing-machines and sewing-machine attachments and parts thereof | 39,791 | Feb. 10 | 102 | 1289 |
| Singer Manufacturing Company, New York, N. Y. Sewing-machines, attachments, and parts thereof | 40,288 | May 5 | 104 | 306 |
| Singer Manu'f'g Co., New York, N. Y. Sewing-machines, sewing-machine attachments, and parts thereof | 40,807 | July 21 | 105 | 740 |
| Sir Isaac Pitman & Sons, Ltd., Bath, England. All kinds of writing-paper | 41,318 | Oct. 20 | 106 | 2007 |
| Skellie, Iram H., Wellsville, N. Y. Cigars | 40,695 | June 30 | 104 | 2434 |
| Skinner, Gardiner M., Clayton, N. Y. Spoon-bait | 39,702 | Jan. 27 | 102 | 815 |
| Slater, Frank W., Montreal, Canada. Leather boots and shoes | 39,635 | Jan. 13 | 102 | 461 |
| Smith, Ada L., New York, N. Y. Tonic and blood-purifier | 40,048 | Apr. 7 | 103 | 1410 |
| Smith, Addison R., Jackson, Mich. Medicine for cure of kidney and bladder troubles | 40,758 | July 14 | 105 | 490 |
| Smith Bros., Savannah, Ga. Whisky | 40,266 | May 5 | 104 | 304 |
| Smith, Edgar T., Elmore, Minn. Remedy for asthma, catarrh, hay-fever, and consumption | 40,310 | May 12 | 104 | 568 |
| Smith, Frank J., Albany, N. Y. Certain named medicinal preparations | 39,914 | Mar. 10 | 103 | 421 |
| Smith, George H., Fresno, Cal. Tonic laxative and stomachic for man | 40,631 | June 23 | 104 | 2142 |
| Smith, Lichty & Hillman Co., Waterloo, Iowa. Spices | 41,666 | Dec. 15 | 107 | 1965 |
| Smith, Rudolph R., Annapolis, Md. Remedy for stomach disorders | 41,335 | Oct. 20 | 106 | 2009 |
| Smith & Schipper, New York, N. Y. Cotton piece goods | 39,861 | Mar. 3 | 103 | 217 |
| Smith & Schipper, New York, N. Y. Cotton piece goods | 39,862 | Mar. 3 | 103 | 217 |
| Smith & Sons Manufacturing Co., Kansas City, Mo. Drag-scrapers and wheeled scrapers | 40,622 | June 16 | 104 | 1892 |
| Snowdon Sons & Co., Ltd., London, England. Lubricating substances | 41,256 | Oct. 6 | 106 | 1497 |
| Soc. Anonyme Le Carbone, Levallois-Peret, near Paris, France. Batteries, carbons, and agglomerates for electrical purposes | 41,342 | Oct. 20 | 106 | 2010 |
| Sociedad Vinicola, S. & L. Durlacher, Hamburg, Germany. Certain named beverage | 39,939 | Mar. 17 | 103 | 653 |
| Societa Agricola delle Tre Fontane, Tre Fontane, near Rome, Italy. Liquors containing eucalyptus oil or essence | 39,893 | Mar. 3 | 103 | 220 |
| Société Anonyme des Chocolats au Lait F. L. Cailler, Broc, Switzerland. Chocolates | 40,269 | May 5 | 104 | 304 |
| Société Anonyme Le Carbone, Levallois-Perret, France. Certain named electrical supplies | 39,624 | Jan. 6 | 102 | 223 |
| Société Anonyme le Carbone, Levallois-Perret, near Paris, France. Batteries, carbons, and agglomerates for electrical purposes | 39,923 | Mar. 10 | 103 | 422 |
| Société Anonyme le Carbone, Levallois-Perret, near Paris, France. Batteries, carbons, and agglomerates for electrical purposes | 39,924 | Mar. 10 | 103 | 422 |
| Société Anonyme Le Carbone, Levallois-Perret, France. Electrical batteries and their parts | 40,809 | July 21 | 105 | 740 |
| Société Anonyme le Khédive, Brussels, Belgium, and Paris, France. Cigarettes | 39,933 | Mar. 17 | 103 | 652 |
| Société Anonyme pour la Fabrication de la Soie de Chardonnet, Besançon, France. Thread and cloth made from artificial silk | 41,174 | Sept. 29 | 106 | 1230 |
| Société Anonyme pour la Fabrication de la Soie de Chardonnet, Besançon, France. Certain named silk products | 41,175 | Sept. 29 | 106 | 1231 |
| Société Anonyme pour la Fabrication de la Soie de Chardonnet, Besançon, France. Silk products imitating hair | 41,176 | Sept. 29 | 106 | 1231 |
| Société Chimique des Usines du Rhone Anct. Gilliard, P. Monnet & Cartier, St. Fons, France. Certain named chemical substances | 39,977 | Mar. 24 | 103 | 883 |
| Société Chimique des Usines du Rhone Anct. Gilliard, P. Monnet & Cartier, St. Fons, France. Pharmaceutical products composed of salicylic acid and acetic acid | 39,978 | Mar. 24 | 103 | 883 |

*Alphabetical list of registrants of trade-marks*—Continued.

| Name, residence, and title. | No. | Date. | Official Gazette. Vol. | Page. |
|---|---|---|---|---|
| Société des Caves et des Producteurs Réunis de Roquefort, (Aveyron,) Roquefort, France. Cheese | 40,060 | Apr. 7 | 103 | 1411 |
| Société des Caves et des Producteurs Réunis de Roquefort, (Aveyron,) Roquefort, France. Cheese | 40,159 | Apr. 21 | 103 | 1907 |
| Société Générale des Cirages Français, Paris, France. White paste for polishing metals | 40,821 | July 28 | 105 | 969 |
| Société Générale des Cirages Français, Paris, France. Soap for polishing metals | 41,110 | Sept. 15 | 106 | 759 |
| Society for Tea Trade, W. Wissotzky & Co., Moscow, Russia. Tea | 41,710 | Dec. 22 | 107 | 2229 |
| Sommer & Co., H. F., Newark, N. J. Patent-leather, patent-leather shoes, and patent-leather slippers | 40,628 | June 23 | 104 | 2142 |
| Sommer & Co., H. F., Newark, N. J. Patent-leather, patent-leather shoes, and patent-leather slippers | 40,629 | June 23 | 104 | 2142 |
| Sommer, John L., Newark, N. J. Shoe-lifts or shoe-horns | 41,275 | Oct. 13 | 106 | 1769 |
| Southall Bros. & Barclay, Ltd., Birmingham, England. Cod-liver oil and medicinal preparations into which cod-liver oil enters | 40,148 | Apr. 21 | 103 | 1906 |
| Southern Cotton Oil Co., Jersey City, N. J.; Savannah, Ga., and Gretna, La. Lard compound | 40,982 | Aug. 25 | 105 | 2050 |
| Southern Cotton Oil Company, Jersey City, N. J.; Savannah, Ga., and Gretna, La. Cotton-seed hulls and mixed feed of cotton-seed meal and cotton-seed hulls | 39,842 | Feb. 24 | 102 | 1772 |
| Southern Flaked Food Company, Nashville, Tenn. Flaked food made from cereals | 40,493 | June 2 | 104 | 1386 |
| Southern Pacific Company, Beechmont, Ky.; New York, N. Y., and San Francisco, Cal. Magazines | 41,214 | Oct. 6 | 106 | 1492 |
| Sperry Medicine Co., Waterbury, Conn. Remedies for certain named diseases | 40,192 | Apr. 28 | 103 | 2163 |
| Sphinx Turkish Cigarette Company, New York, N. Y. Paper cigarettes | 40,261 | May 5 | 104 | 303 |
| Spokane Paint & Oil Co., Spokane, Wash. Varnish and hard-oil finish | 40,968 | Aug. 18 | 105 | 1775 |
| Sprague, Ida P., San Antonio, Tex. Liquid medicine | 40,312 | May 12 | 104 | 568 |
| Springfield Rubber Tire Company, New Haven, Conn. Rubber vehicle-tires | 40,747 | July 7 | 105 | 256 |
| Sprungli, E., Zurich, Switzerland. Woolen fabrics | 39,832 | Feb. 24 | 102 | 1771 |
| Sprungli, E., Zurich, Switzerland. Cigars and cheroots | 40,442 | May 26 | 104 | 1113 |
| Sprüngli, Firm of E., Zurich, Switzerland. Cigars, cheroots, and cigarettes | 39,749 | Feb. 3 | 102 | 1046 |
| Sprüngli, Firm of E., Zurich, Switzerland. Cigars, cheroots, and cigarettes | 39,750 | Feb. 3 | 102 | 1046 |
| Squire, Peter W., London, England. Formaldehyde compounds | 40,561 | June 9 | 104 | 1659 |
| St. Charles Condensing Co., St. Charles, Ill. Canned cream, canned milk, condensed milk, and evaporated cream | 40,707 | June 30 | 104 | 2435 |
| St. Jacobs Oil, Limited, London, England. Liquid compound for cure of dyspepsia | 40,253 | May 5 | 104 | 303 |
| St. Louis Chemical Co., St. Louis, Mich. Bleaching-powder | 40,612 | June 16 | 104 | 1890 |
| Stahl, Eidman & Co., Baltimore, Md. Coffee | 41,363 | Oct. 27 | 106 | 2280 |
| Staley, Etta S., Pearl, Mo. Remedies for certain named diseases | 40,251 | May 5 | 104 | 302 |
| Stamford Manufacturing Company, Stamford, Conn., and New York, N. Y. Vegetable tanning material for leather | 40,340 | May 12 | 104 | 571 |
| Stamford Manufacturing Company, Stamford, Conn., and New York, N. Y. Dyestuff or coloring mixture for leather | 40,341 | May 12 | 104 | 571 |
| Stamford Manufacturing Company, Stamford, Conn., and New York, N. Y. Tanning extract for leather | 40,641 | June 23 | 104 | 2143 |
| Standard Dry Plate Co., Lewiston, Me. Dry-plates | 40,138 | Apr. 21 | 103 | 1906 |
| Standard, Frank J., Chicago, Ill. Medicine for cure of indigestion and constipation | 40,153 | Apr. 21 | 103 | 1907 |
| Standard Horse Nail Company, New Brighton, Pa. Horseshoe-nails | 41,202 | Sept. 29 | 106 | 1233 |
| Standard Manufacturing Company, Atlanta, Ga. Certain named clothing | 40,040 | Apr. 7 | 103 | 1409 |
| Standard Mfg. Co., Atlanta, Ga. Overalls, blouses, coats, and pants | 40,429 | May 26 | 104 | 1112 |
| Standard Mfg. Co., Atlanta, Ga. Shirts | 40,754 | July 14 | 105 | 489 |
| Standard Mfg. Co., Atlanta, Ga. Blouses, coats, overalls, and pants | 40,928 | Aug. 18 | 105 | 1770 |
| Standard Paper Manufacturing Company, Manchester, Va. Blotting-paper | 41,213 | Oct. 6 | 106 | 1492 |
| Standard Stove & Range Co., Pittsburg, Pa. Stoves, ranges, furnaces, and heaters | 41,457 | Nov. 10 | 107 | 535 |
| Standard Table Oil Cloth Co., Jersey City, N. J., and New York, N. Y. Certain named oil-cloths | 39,966 | Mar. 24 | 103 | 881 |
| Standard Table Oil Cloth Company, Jersey City, N. J., and New York, N. Y. Certain named oil-cloths | 39,965 | Mar. 24 | 103 | 881 |
| Standard Wall Paper Co., Sandyhill, N. Y. Wall-paper | 41,005 | Aug. 25 | 105 | 2053 |
| Standard Wall Paper Co., Sandyhill, N. Y. Wall-paper | 41,006 | Aug. 25 | 105 | 2053 |
| Staples Valve Co., Newburgh, N. Y. Water-supply tanks | 40,839 | July 28 | 105 | 970 |
| Starbuck, William H., New York, N. Y. Linseed-oil and varnishes | 40,058 | Apr. 7 | 103 | 1411 |
| Stark, Adam R., Glasgow, Scotland. Disinfectants | 41,297 | Oct. 13 | 106 | 1771 |
| Stearns & Co., Frederick, Detroit, Mich. Perfumery | 40,021 | Mar. 31 | 103 | 1159 |
| Steele Brothers, Gloversville, N. Y. Fur garments | 40,235 | May 5 | 104 | 301 |
| Stern & Co., Chas. A., Boston, Mass. Leather boots and shoes | 39,833 | Feb. 24 | 102 | 1771 |
| Stern & Co., Chas. A., Boston, Mass. Leather boots and shoes | 39,834 | Feb. 24 | 102 | 1771 |
| Stern & Co., Chas. A., Boston, Mass. Leather boots and shoes | 39,835 | Feb. 24 | 102 | 1771 |
| Stewart Bread Company, Philadelphia, Pa. Bread, biscuit, and cakes | 40,802 | July 21 | 105 | 740 |
| Stewart, Frank H., Philadelphia, Pa. Electric-light support | 39,786 | Feb. 10 | 102 | 1289 |
| Stewart-Mowry Company, Chicago, Ill. Varnishes and japans | 40,284 | May 5 | 104 | 306 |
| Stirling Silk Mfg. Co., New York, N. Y. Silk fabrics | 39,801 | Feb. 17 | 102 | 1545 |
| Stitzel Distilling Company, Louisville, Ky. Whisky | 39,676 | Jan. 27 | 102 | 812 |
| Stitzel Distilling Company, Louisville, Ky. Whisky | 41,187 | Sept. 29 | 106 | 1232 |
| Stitzel Distilling Company, Louisville, Ky. Whisky | 41,188 | Sept. 29 | 106 | 1232 |
| Stockwell & Ensor, Baltimore, Md. Sad-irons | 40,462 | May 26 | 104 | 1115 |
| Stoddard, Ridgway, Mount Holly, N. J. Condition-powder for horses, cattle, and poultry | 40,670 | June 30 | 104 | 2432 |
| Stoelting & Dunn, Seattle, Wash. Trunks, traveling-bags, and dress-suit cases | 40,571 | June 9 | 104 | 1651 |
| Stolz, Ernst H., Chicago, Ill. Medicines for certain named diseases | 39,719 | Feb. 3 | 102 | 1044 |
| Stolz, Otto G., Chicago, Ill. Medicinal preparations for treatment of certain named diseases | 40,728 | July 7 | 105 | 254 |
| Stoner, Robert R., Minneapolis, Minn. Tonic and laxative | 41,292 | Oct. 13 | 106 | 1771 |
| Stover Manufacturing Company, Freeport, Ill. Windmills | 40,464 | May 26 | 104 | 1116 |
| Strait, Horace B., Minneapolis, Minn. Yeast-cakes | 40,498 | June 2 | 104 | 1387 |
| Stratton, James P., Leadville, Colo. Liquid having a skin-toning effect | 40,549 | June 9 | 104 | 1649 |
| Straus, Gunst & Co., Richmond, Va. Whisky | 40,168 | Apr. 21 | 103 | 1909 |
| Straus, Gunst & Co., Richmond, Va. Whisky | 40,195 | Apr. 28 | 103 | 2163 |
| Strauss Manufacturing Company, Ridgefield, N. J., and New York, N. Y. Ball-propelling games | 40,293 | May 12 | 104 | 567 |
| Strobel & Wilken Co., New York, N. Y. Dolls | 40,134 | Apr. 21 | 103 | 1905 |
| Strohecker, Charles W., Brooklyn, N. Y. Certain named boots, shoes, and slippers | 40,236 | May 5 | 104 | 301 |
| Sturgis & McKinnon, Espanmadt, Canada. Natural spring-water and mineral water | 41,035 | Sept. 1 | 106 | 258 |
| Stuchlik, John, Chicago, Ill. Tea used as a remedy for constipation | 40,187 | Apr. 28 | 103 | 2163 |
| Studebaker Brothers Manufacturing Company, South Bend, Ind. Draft wheeled vehicles | 40,178 | Apr. 21 | 103 | 1910 |
| Stumpp & Walter Co., New York, N. Y. Flowering pips | 41,721 | Dec. 22 | 107 | 2230 |
| Sturge, John & E., Birmingham, England. Chalk | 41,306 | Oct. 13 | 106 | 1772 |
| Sub-Target Gun Co., Boston, Mass. Certain named practice apparatus | 40,415 | May 19 | 104 | 847 |
| Sullivan, Vail & Co., New York, N. Y. Broadcloth | 41,504 | Nov. 24 | 107 | 1087 |
| Sunland Orchard Co., Los Angeles, Cal. Certain named fruit preparations | 41,115 | Sept. 15 | 106 | 759 |
| Supplee Hardware Co., Philadelphia, Pa. Lawn-mowers | 39,668 | Jan. 20 | 102 | 618 |
| Supplee Hardware Co., Philadelphia, Pa. Lawn-mowers | 39,797 | Feb. 10 | 102 | 1290 |
| Supplee Hardware Co., Philadelphia, Pa. Shovels, spades, and scoops | 40,835 | July 28 | 105 | 970 |
| Supplee Hardware Company, Philadelphia, Pa. Fishing-tackle | 41,586 | Dec. 1 | 107 | 1370 |

*Alphabetical list of registrants of trade-marks*—Continued.

| Name, residence, and title. | No. | Date. | Official Gazette. Vol. | Page. |
|---|---|---|---|---|
| Sutton, James D., Mobile, Ala. Headache cures | 40,957 | Aug. 18 | 105 | 1774 |
| Swampscott Gelatine Company, Swampscott, Mass. Gelatin | 40,944 | Aug. 18 | 105 | 1772 |
| Swan Dry Powder Fire Extinguisher Company, Denver, Colo. Dry-powder fire-extinguisher | 40,643 | June 23 | 104 | 2143 |
| Swenk, Edmund D., Philadelphia, Pa. Certain named antiseptic powders | 40,436 | May 26 | 104 | 1112 |
| Swift Fertilizer Works, Chicago, Ill., and Atlanta, Ga. Manufactured fertilizers | 40,329 | May 12 | 104 | 570 |
| Swift Fertilizer Works, Chicago, Ill., and Atlanta, Ga. Manufactured fertilizers | 40,330 | May 12 | 104 | 570 |
| Swift Fertilizer Works, Chicago, Ill., and Atlanta, Ga. Manufactured fertilizers | 40,331 | May 12 | 104 | 570 |
| Swift Fertilizer Works, Chicago, Ill., and Atlanta, Ga. Manufactured fertilizers | 40,332 | May 12 | 104 | 570 |
| Swift Fertilizer Works, Chicago, Ill., and Atlanta, Ga. Manufactured fertilizers | 40,333 | May 12 | 104 | 570 |
| Swift Fertilizer Works, Chicago, Ill., and Atlanta, Ga. Manufactured fertilizers | 40,334 | May 12 | 104 | 570 |
| Swift Fertilizer Works, Chicago, Ill., and Atlanta, Ga. Manufactured fertilizers | 40,335 | May 12 | 104 | 570 |
| Swift Fertilizer Works, Chicago, Ill., and Atlanta, Ga. Manufactured fertilizers | 40,336 | May 12 | 104 | 570 |
| Swift Fertilizer Works, Chicago, Ill., and Atlanta, Ga. Manufactured fertilizers | 40,337 | May 12 | 104 | 570 |
| Swift Fertilizer Works, Chicago, Ill., and Atlanta, Ga. Fertilizers | 40,434 | May 26 | 104 | 1112 |
| Swift Specific Co., Atlanta, Ga. Medicine for certain named diseases | 40,050 | Apr. 7 | 103 | 1410 |
| Sykes, William W., Minneapolis, Minn. Compound for cleansing enameled surfaces | 40,407 | May 19 | 104 | 847 |
| Sytonic Company, Ltd., Jackson, Mich. Apparatus for curing rheumatism and like ills | 41,443 | Nov. 10 | 107 | 533 |
| T. B. Wood's Sons, Chambersburg, Pa. Shaft-hangers | 40,748 | July 7 | 105 | 256 |
| T. G. Hawkes & Co., Corning, N. Y. Cut glass and engraved glass | 39,883 | Mar. 3 | 103 | 219 |
| T. G. Hawkes & Co., Corning, N. Y. Engraved and cut glass | 39,884 | Mar. 3 | 103 | 219 |
| T. H. Symington Co., Baltimore, Md. Certain named special metal | 40,515 | June 2 | 104 | 1388 |
| T. H. Thompson Milling Co., Houston, Tex. Flour | 40,451 | May 26 | 104 | 1114 |
| T. M. Sinclair & Co., Cedar Rapids, Iowa. Lard | 41,400 | Nov. 3 | 107 | 260 |
| Tabler Chemical Co., Martinsburg, W. Va. Pomade and skin-food | 40,901 | Aug. 11 | 105 | 1525 |
| Tabor, Thomas H., Ellijay, Ga. Washing compounds | 41,039 | Sept. 1 | 106 | 258 |
| Tabor, Trego & Co., (1902,) Limited, London, England. Varnish and paint | 41,644 | Dec. 8 | 107 | 1655 |
| Tabor, Trego & Co., (1902,) Limited, London, England. Varnish and paint | 41,645 | Dec. 8 | 107 | 1655 |
| Tabor & Wertheimer, Buffalo, N. Y. Certain named articles of clothing | 40,576 | June 16 | 104 | 1887 |
| Talcott, Richard H. L., Brookline, Mass. Washing-soap | 40,773 | July 14 | 105 | 491 |
| Tallant Grant Packing Company, Astoria, Oreg. Canned and preserved fish | 41,179 | Sept. 29 | 106 | 1231 |
| Tanqueray, Gordon & Co., Ld., London, England. Whisky | 39,651 | Jan. 20 | 102 | 617 |
| Taylor & Co., C. M., Philadelphia, Pa. Peanut butter | 40,102 | Apr. 14 | 103 | 1674 |
| Taylor & Reith, New York, N. Y. Certain named veterinary remedies | 40,054 | Apr. 7 | 103 | 1411 |
| Telephonine Company of America, Washington, D. C., and New York, N. Y. Antiseptic and disinfecting compound | 40,961 | Aug. 18 | 105 | 1774 |
| Templeton, Kenly & Co., Ltd., Chicago, Ill. Lifting-jacks | 40,032 | Mar. 31 | 103 | 1160 |
| Terpinol Tablet Co., Philadelphia, Pa. Remedies for diseases of the throat and chest | 40,604 | June 16 | 104 | 1890 |
| Terre Haute Brewing Co., Terre Haute, Ind. Lager-beer and bottled beer | 39,906 | Mar. 10 | 103 | 420 |
| Texas Drug Company, Dallas, Tex. Pile-salve | 39,662 | Jan. 20 | 102 | 618 |
| Theo. Schmidtman's Sons Company, Manitowoc, Wis. Certain named stationery | 41,511 | Nov. 24 | 107 | 1087 |
| Theopold, Morris & Company, Faribault, Minn. Certain named candy | 41,032 | Sept. 1 | 106 | 257 |
| Thomas & Co., Evan, New York, N. Y. Cornmeal | 39,639 | Jan. 13 | 102 | 461 |
| Thompson, Walter E., Boston, Mass. Baking-powder | 41,515 | Nov. 24 | 107 | 1088 |
| Tibbs, Hutchings & Co., St. Paul, Minn. Hosiery for men, women, and children | 40,182 | Apr. 28 | 103 | 2162 |
| Tillmann & Bendell, San Francisco, Cal. Rye and Bourbon whiskies | 40,488 | June 2 | 104 | 1386 |
| Timmer and Diehl, Tippecanoe City, Ohio. Pear-trees and pears produced therefrom | 41,204 | Sept. 29 | 106 | 1234 |
| Tingley, Charles O., Rahway, N. J. Plastic rubber cement | 40,746 | July 7 | 105 | 255 |
| Toch Brothers, New York, N. Y. Cement preparation for coating metals, &c | 40,281 | May 5 | 104 | 305 |
| Todd, Edward, Jr., New York, N. Y. Fountain-pens | 40,296 | May 12 | 104 | 567 |
| Toke Point Oyster Company, Toke Point, Wash., and Astoria and Portland, Oreg. Oysters | 40,002 | Mar. 31 | 103 | 1157 |
| Topeka Milling Company, Topeka, Kans. Breakfast cereal foods | 41,087 | Sept. 8 | 106 | 537 |
| Topeka Milling Company, Topeka, Kans. Flour | 41,088 | Sept. 8 | 106 | 537 |
| Toscano, Frank, New York, N. Y. Pomades | 41,410 | Nov. 3 | 107 | 261 |
| Tourtel, John M., London, England. Speech and sound producing machines and their parts | 41,647 | Dec. 8 | 107 | 1655 |
| Tousey Varnish Co., Chicago, Ill. Varnishes | 40,029 | Mar. 31 | 103 | 1160 |
| Towle Syrup Co., St. Paul, Minn. Syrups | 41,476 | Nov. 17 | 107 | 826 |
| Towle Syrup Company, St. Paul, Minn. Table syrups and molasses | 39,680 | Jan. 27 | 102 | 813 |
| Towle Syrup Company, St. Paul, Minn. Syrups and molasses | 41,116 | Sept. 15 | 106 | 759 |
| Traill, Walter S., London, England. Hydrocarbon-lamps | 39,626 | Jan. 6 | 102 | 224 |
| Tredair Rubber Co., Boston, Mass. Certain named rubber fabrics | 41,739 | Dec. 29 | 107 | 2519 |
| Trenckmann & Co., Schöneberg, Germany. Certain named leather | 41,072 | Sept. 8 | 106 | 536 |
| Trent, Simeon V., Salt Lake City, Utah. Ore-roasters or oxidizing-furnaces | 40,126 | Apr. 14 | 103 | 1676 |
| Tripod Paint Company, Atlanta, Ga. White lead | 40,118 | Apr. 14 | 103 | 1676 |
| Tripod Paint Company, Atlanta, Ga. Fillers | 40,174 | Apr. 21 | 103 | 1909 |
| Troy Laundry Machinery Co., Limited, Chicago, Ill. Laundry soap | 40,535 | June 9 | 104 | 1647 |
| Troy Laundry Machinery Co., Limited, Chicago, Ill. Bluing | 40,536 | June 9 | 104 | 1648 |
| Troy Laundry Machinery Co., Ltd., Chicago, Ill. Starch | 40,343 | May 12 | 104 | 571 |
| Turner Brothers, Limited, Spotland, Rochdale, England. Certain named packings | 40,433 | May 26 | 104 | 1112 |
| Tüschel, Gustav, Odessa, Russia. Varnish compositions | 41,376 | Oct. 27 | 106 | 2282 |
| Twin City Nut Food Co., Minneapolis, Minn. Food composed of wheat, oats, and barley malted | 40,005 | Mar. 31 | 103 | 1157 |
| Tyler & Co., F. B. & A. M., Lancaster, Mass. Malarial or fever and ague medicines | 40,114 | Apr. 14 | 103 | 1675 |
| Ullman Co., Sigmund, New York, N. Y. Printing-inks | 41,081 | Sept. 8 | 106 | 536 |
| Underwood Typewriter Company, New York, N. Y. Type-writers and type-writer parts | 40,806 | July 21 | 105 | 740 |
| Union Bag & Paper Co., New York, N. Y. Paper bags | 39,837 | Feb. 24 | 102 | 1771 |
| Union Bag & Paper Co., New York, N. Y. Paper bags | 40,095 | Apr. 14 | 103 | 1674 |
| Union Bag & Paper Co., New York, N. Y. Paper bags | 40,096 | Apr. 14 | 103 | 1674 |
| Union Bag & Paper Co., New York, N. Y. Paper bags | 40,129 | Apr. 21 | 103 | 1905 |
| Union Carbide Company, Chicago, Ill., and New York, N. Y. Calcium carbid | 41,253 | Oct. 6 | 106 | 1497 |
| Union Luncheon Box Company, New York, N. Y. Portable lunch-boxes | 41,008 | Aug. 25 | 105 | 2053 |
| Union Mills, Boston, Mass., and Hudson, Mechanicsville, and New York, N. Y. Undershirts and drawers | 40,755 | July 14 | 105 | 489 |
| United Button Co., New York, N. Y., and Springfield, Mass. Certain named buttons | 39,932 | Mar. 17 | 103 | 652 |
| United Button Co., New York, N. Y., and Springfield, Mass. Certain named buttons | 39,953 | Mar. 24 | 103 | 880 |
| United Drug Company, Jersey City, N. J., and Boston, Mass. Dyspepsia-tablets | 40,019 | Mar. 31 | 103 | 1159 |
| United States Envelope Co., Worcester, Mass. Envelops | 40,924 | Aug. 18 | 105 | 1770 |
| Universal Talking Machine Mfg. Co., New York, N. Y. Talking machines and records | 40,570 | June 9 | 104 | 1651 |
| Upham, Richard D., New York, N. Y. Insulating compound | 41,161 | Sept. 22 | 106 | 991 |
| Utz & Dunn, Rochester, N. Y. Leather boots and shoes | 39,958 | Mar. 24 | 103 | 880 |
| Utz & Dunn, Rochester, N. Y. Leather boots and shoes | 40,843 | Aug. 4 | 105 | 1253 |
| V. C. & C. V. King Co., New York, N. Y. Certain named adhesive compounds | 39,868 | Mar. 3 | 103 | 218 |
| V. C. & C. V. King Co., New York, N. Y. Certain named plaster | 41,051 | Sept. 1 | 106 | 259 |
| Vail Brothers, Philadelphia, Pa. Preparations for treatment of the hair | 40,764 | July 14 | 105 | 490 |
| Van Camp Condensed Milk Company, Indianapolis, Ind. Evaporated cream | 41,773 | Dec. 29 | 107 | 2522 |
| Van Camp Condensed Milk Company, Indianapolis, Ind. Evaporated cream | 41,774 | Dec. 29 | 107 | 2522 |
| Van Eyck, Georg, Oeflingen, Germany. Sterilizing and preserving apparatus | 41,493 | Nov. 17 | 107 | 828 |
| Van Ness, Theodore P., Newark, N. J. Remedies for certain named diseases | 40,762 | July 14 | 105 | 490 |

*Alphabetical list of registrants of trade-marks*—Continued.

| Name, residence, and title. | No. | Date. | Official Gazette. Vol. | Page. |
|---|---|---|---|---|
| Van Westrum, Leonard S., Berlin, Germany. Mixed liquids for certain named purposes | 40,967 | Aug. 18 | 105 | 1775 |
| Veana Food Co., Limited, Bellevue, Mich. Certain named prepared cereal foods | 40,449 | May 26 | 104 | 1114 |
| Veana Food Co., Limited, Bellevue, Mich. Certain named prepared cereal foods | 40,450 | May 26 | 104 | 1114 |
| Vehicle Apron & Hood Co., Columbus, Ohio. Vehicle-aprons, vehicle-top hoods, and vehicle storm-fronts | 39,731 | Feb. 3 | 102 | 1045 |
| Vereinigte Chininfabriken Zimmer & Co., Ges. mit Beschränkter Haftung, Frankfort-on-the-Main, Germany. Combinations of quinin and phenetidin | 40,116 | Apr. 14 | 103 | 1676 |
| Vereinigte Chininfabriken Zimmer & Co., Ges. mit Beschränkter Haftung, Frankfort-on-the-Main, Germany. Salts of diorthoöxydibenzalaceton | 40,117 | Apr. 14 | 103 | 1676 |
| Verkaufsstelle der Vereinigten Deutschen Drahtgeflecht-Fabrikanten Gesellschaft mit Beschränkter Haftung, Cologne, Germany. Wire-netting | 41,727 | Dec. 22 | 107 | 2231 |
| Veronneau, John L., Burlington, Vt. Powders for cancer cure | 41,244 | Oct. 6 | 106 | 1496 |
| Vetter, Joseph J., Brooklyn, N. Y. Medicine for certain named diseases | 40,151 | Apr. 21 | 103 | 1907 |
| Vicera-Celerybroth and Food Co., Ltd., Jackson, Mich. Stocks for broths and soups | 39,838 | Feb. 24 | 102 | 1772 |
| Victor Talking Machine Co., Camden, N. J. Talking-machines and talking-machine parts | 40,223 | Apr. 28 | 103 | 2167 |
| Victor Talking Machine Co., Camden, N. J. Talking-machines and talking-machine parts | 40,224 | Apr. 28 | 103 | 2167 |
| Victor Talking Machine Co., Camden, N. J. Talking-machines and talking-machine parts | 40,225 | Apr. 28 | 103 | 2167 |
| Vim Metal Company, Newark, N. J. Antifriction metal and articles made therefrom | 40,121 | Apr. 14 | 103 | 1676 |
| Vin-Morrhol Chemical Co., Baltimore, Md. Tonic medicines | 40,111 | Apr. 14 | 103 | 1675 |
| Vinamox Medical Company, Toledo, Ohio. Tonics | 40,194 | Apr. 28 | 103 | 2163 |
| Vincent Manufacturing Company, Catskill, N. Y. Remedies for diseases of stock and poultry | 39,911 | Mar. 10 | 103 | 421 |
| Vischer & Co., A., New York, N. Y. Ladies' underwaists | 40,976 | Aug. 25 | 105 | 2049 |
| Visible Typewriters Company, New York, N. Y. Type-writer attachments for holding books | 39,730 | Feb. 3 | 102 | 1045 |
| Vlasto, Solon J., New York, N. Y. Coffee | 40,646 | June 23 | 104 | 2143 |
| Vogel & Son, Jacob, Cincinnati, Ohio. Lard | 40,208 | Apr. 28 | 103 | 2165 |
| Vogt, Julius C., Saginaw, Mich. Horseradish | 40,207 | Apr. 28 | 103 | 2165 |
| W. Fred. Steinmetz Co., Philadelphia, Pa. Medicine to prevent seasickness | 40,673 | June 30 | 104 | 2432 |
| W. D. & J. W. Packard, Warren, Ohio. Incandescent electric lamps | 41,456 | Nov. 10 | 107 | 535 |
| W. J. Bush & Co., Incorporated, New York, N. Y. Insecticides | 41,490 | Nov. 17 | 107 | 827 |
| W. J. Smith Co., Lexington, Ky. Whisky | 40,945 | Aug. 18 | 105 | 1772 |
| W. J. Smith Co., Lexington, Ky. Whisky | 40,946 | Aug. 18 | 105 | 1772 |
| W. J. Smith Co., Lexington, Ky. Whisky | 40,947 | Aug. 18 | 105 | 1772 |
| W. P. Fuller & Co., San Francisco, Sacramento, Los Angeles, Oakland, San Diego, and Stockton, Cal.; Portland, Oreg., and Seattle and Tacoma, Wash. Lubricating-oil | 40,640 | June 23 | 104 | 2143 |
| W. R. Grace & Co., New York, N. Y. Certain named cotton goods | 39,999 | Mar. 31 | 103 | 1156 |
| W. R. Grace & Co., New York, N. Y. Certain named cotton piece goods | 41,693 | Dec. 22 | 107 | 2227 |
| W. R. Roach & Co., Hart, Mich. Canned fruits and vegetables | 41,402 | Nov. 3 | 107 | 261 |
| W. T. Wagner's Sons, Cincinnati, Ohio. Artificial table-waters | 40,742 | July 7 | 105 | 255 |
| W. T. Wroe & Sons, Austin, Tex. Harness-saddles, harness-straps, bridles, and halters | 40,969 | Aug. 18 | 105 | 1775 |
| Wagner, Gustave A., Cleveland, Ohio. Bricks | 41,162 | Sept. 22 | 106 | 991 |
| Wahlers, Diedrich, Newark, N. J. Birch-beer and root-beer | 41,664 | Dec. 15 | 107 | 1965 |
| Waite, Merton E., Utica, N. Y. Hair-tonic | 40,247 | May 5 | 104 | 302 |
| Waldberg & Co., Gesellschaft mit Beschränkter Haftung, Berlin, Germany. Telephones | 40,655 | June 23 | 104 | 2144 |
| Wallace & Co., George C., Paducah, Ky. Hosiery | 39,712 | Feb. 3 | 102 | 1043 |
| Walworth Manufacturing Company, Boston, Mass. Certain named tools | 40,291 | May 5 | 104 | 306 |
| Wanous, Josie A., Minneapolis, Minn. Hair-tonic compound | 40,108 | Apr. 14 | 103 | 1675 |
| War Eagle Fuel Co., War Eagle, W. Va. Bituminous coal | 41,097 | Sept. 8 | 106 | 538 |
| Warner, Mony J., New York, N. Y. Dress and shirting textiles | 41,470 | Nov. 17 | 107 | 826 |
| Warren Brothers Company, Boston, Mass. Bituminous composition or cement | 39,976 | Mar. 24 | 103 | 882 |
| Warren Brothers Company, Boston, Mass. Bituminous composition or cement | 40,320 | May 12 | 104 | 569 |
| Warren Featherbone Co., Three Oaks, Mich. Hats and bonnets | 40,428 | May 26 | 104 | 1112 |
| Warren, George C., Utica, N. Y. Asphalt and asphalt compositions | 40,319 | May 12 | 104 | 569 |
| Warren Webster & Co., Camden, N. J. Feed-water heaters | 40,230 | Apr. 28 | 103 | 2168 |
| Washington Cutlery Co., Milwaukee, Wis. Knives | 41,648 | Dec. 8 | 107 | 1655 |
| Wateridge, Frederick W., Shrewsbury, England. Receptacles for butter | 39,986 | Mar. 24 | 103 | 883 |
| Watson, Stewart M., Jackson, Mich. Surgical appliance for cure of rheumatism | 41,492 | Nov. 17 | 107 | 828 |
| Wayne Biscuit Company, Fort Wayne, nd. Cookies | 40,061 | Apr. 7 | 103 | 1412 |
| Weaver's Pharmacy, Phillipsburg, N. J., and Easton, Pa. Medical compound for cure of certain named diseases | 40,554 | June 9 | 104 | 1650 |
| Weaver's Pharmacy, Phillipsburg, N. J., and Easton, Pa. Quinine and cantharides hair-tonic | 40,787 | July 21 | 105 | 738 |
| Weber, George H., Toledo, Ohio. Ladies' and misses' leather shoes | 40,727 | July 7 | 105 | 253 |
| Weber, Jacob, Crafton, Pa. Preparatio for the hair and scalp | 40,047 | Apr. 7 | 103 | 1410 |
| Weber, Otto E., Brooklyn, N. Y. Coffee, coffee surrogate, and coffee additions | 39,970 | Mar. 24 | 103 | 882 |
| Webster, Fred L., Adams, N. Y. Remedies for indigestion and dyspepsia | 41,563 | Dec. 1 | 107 | 1368 |
| Wechsler Bros., New York, N. Y. Combined belts and suspenders | 40,132 | Apr. 21 | 103 | 1905 |
| Wegelin & Wilckes Black Mfg. Co., Camden, N. J., and New York, N. Y. Lampblack | 40,642 | June 23 | 104 | 2143 |
| Weickert, Walter, St. Louis, Mo. Incandescent gas-mantles | 40,458 | May 26 | 104 | 1115 |
| Weingarten Bros., New York, N. Y. Corsets | 39,802 | Feb. 17 | 102 | 1545 |
| Wells, Charles A. M., Hyattsville, Md. Toilet powder | 41,634 | Dec. 8 | 107 | 1654 |
| Wells & Richardson Co., Burlington, Vt. Remedies for kidney diseases in tablet form | 40,675 | June 30 | 104 | 2432 |
| Wells & Strauss, New York, N. Y. Ribbons | 40,036 | Apr. 7 | 103 | 1409 |
| Wells & Strauss, New York, N. Y. Ribbons | 40,037 | Apr. 7 | 103 | 1409 |
| Wertheimer Swarts Shoe Co., St. Louis, Mo. Leather shoes | 40,042 | Apr. 7 | 103 | 1409 |
| Weschcke, Charles, Springfield, Minn. Medicines for cure of certain named diseases | 40,958 | Aug. 18 | 105 | 1774 |
| Wesson Company, Jersey City, N. J., and Savannah, Ga. Prepared fatty, oleaginous, or unctuous substances | 40,004 | Mar. 31 | 103 | 1157 |
| Wesson Company, Jersey City, N. J., and Savannah, Ga. Prepared fatty, oleaginous, or unctuous food substances | 40,210 | Apr. 28 | 103 | 2165 |
| West Disinfecting Co., New York, N. Y. Disinfectants | 40,795 | July 21 | 105 | 739 |
| West, William F., Pittsburg, Pa. Medical compound for cure of certain named diseases | 40,252 | May 5 | 104 | 303 |
| Western Fire Appliance Co., Inc., San Francisco, Cal. Chemical fire-extinguishers | 41,128 | Sept. 15 | 106 | 760 |
| Western Roofing & Supply Co., Chicago, Ill. Cold-water paint | 39,871 | Mar. 3 | 103 | 218 |
| Westervelt, Herbert E., South Bend, Ind. Paper bags | 41,317 | Oct. 20 | 106 | 2007 |
| Westphal, Paul, New York, N. Y. Perfumes | 40,891 | Aug. 11 | 105 | 1524 |
| Westphal, Paul, New York, N. Y. Perfumes | 40,892 | Aug. 11 | 105 | 1524 |
| Wetzel, New York, N. Y. Certain named wearing-apparel | 39,996 | Mar. 31 | 103 | 1156 |
| Wheeler & Baldwin, Chicago, Ill. Garment-supporters | 40,378 | May 19 | 104 | 844 |
| Wheeler, M. Arthur, Troy, N. Y. Alteratives | 41,705 | Dec. 22 | 107 | 2228 |
| Whelan, Mary C., Washington, D. C. Women's corsets | 40,848 | Aug. 4 | 105 | 1253 |
| Whigelt, George, New York, N. Y. Paint-remover | 40,221 | Apr. 28 | 103 | 2167 |
| Whitcher, Frank W., Boston, Mass. Elastic or cushion heels and soles for boots and shoes | 40,469 | June 2 | 104 | 1384 |
| Whitcher, Frank W., Boston, Mass. Combined needle and thread fasteners | 41,555 | Dec. 1 | 107 | 1367 |
| White, Charles E., Philadelphia, Pa. Dyspepsia cure | 41,246 | Oct. 6 | 106 | 1496 |
| White Herb Medicine Company, Baltimore, Md. Internal remedy for certain named diseases | 40,903 | Aug. 11 | 105 | 1526 |
| White & Wyckoff Mfg. Co., Holyoke, Mass. Certain named stationery | 41,347 | Oct. 27 | 106 | 2279 |
| Whitehurst, Charles E., Baltimore, Md. Insect-powders | 40,305 | May 12 | 104 | 568 |

*Alphabetical list of registrants of trade-marks*—Continued.

| Name, residence, and title. | No. | Date. | Official Gazette. Vol. | Page. |
|---|---|---|---|---|
| Whitman Grocery Co., Orange, Mass. Coffee | 39,969 | Mar. 24 | 103 | 882 |
| Whitman Grocery Co., Orange, Mass. Gelatin | 40,059 | Apr. 7 | 103 | 1411 |
| Whitman Grocery Company, Orange, Mass. Prepared gelatin | 40,345 | May 12 | 104 | 571 |
| Whitman Grocery Company, Orange, Mass. Prepared tapioca | 40,495 | June 2 | 104 | 1387 |
| Whittall & Co., J. W., Constantinople, Turkey. Bird-seeds | 40,686 | June 30 | 104 | 2433 |
| Whittemore Bro's and Co., Cambridgeport, Mass. Certain named preparations for use on leather and boots and shoes | 39,761 | Feb. 10 | 102 | 1286 |
| Whittemore Bro's. and Co., Cambridge, Mass. Shoe-polish and leather-dressings | 41,083 | Sept. 8 | 106 | 537 |
| Whittemore Bro's. and Co., Cambridge, Mass. Shoe-blacking, shoe-dressing, and shoe-polish | 41,331 | Oct. 20 | 106 | 2008 |
| Wiener, Bertha I., Chicago, Ill. Insoles | 41,595 | Dec. 8 | 107 | 1649 |
| Wigg & Co., Charles, New York, N. Y. Chemical eradicators | 40,056 | Apr. 7 | 103 | 1411 |
| Wightman & Hough Co., Providence, R. I. Bracelets, lockets, and brooches | 39,689 | Jan. 27 | 102 | 814 |
| Wilkins, Mary T., Washington, D. C. Butter-workers | 40,463 | May 26 | 104 | 1116 |
| William Carter Co., Highlandville, Mass. Certain named knit goods | 41,505 | Nov. 24 | 107 | 1087 |
| William Mann Company, Philadelphia, Pa. Certain named paper and envelops | 39,898 | Mar. 10 | 103 | 420 |
| Williams & Co., W. H., Birmingham, England. Razors | 40,803 | July 21 | 105 | 740 |
| Williams, Lucas R., Chicago, Ill., and New York, N. Y. Medicine for cure of nervous diseases | 40,674 | June 30 | 104 | 2432 |
| Williams-Marvin Co., San Francisco, Cal. Leather shoes | 41,352 | Oct. 27 | 106 | 2279 |
| Williams Patent Crusher and Pulverizer Co., St. Louis, Mo. Crushing and pulverizing machines | 41,583 | Dec. 1 | 107 | 1370 |
| Williams & Sanders Mfg. Co., Syracuse, N. Y. Certain named cleaning preparation | 40,342 | May 12 | 104 | 571 |
| Williamsville Manufacturing Co., Killingly, Conn. Cotton-cloth buff-wheels | 41,791 | Dec. 29 | 107 | 2524 |
| Wilson Company, Richmond Hill, N. Y. Salve | 41,521 | Nov. 24 | 107 | 1088 |
| Wilson, George L., Detroit, Mich. Tonics | 40,547 | June 9 | 104 | 1649 |
| Wilson, Lucy J., Philadelphia, Pa. Extracts of cereals and vegetables | 39,722 | Feb. 3 | 102 | 1044 |
| Wilson, Richard, Cobourg, Canada. Sticky fly-paper | 40,579 | June 16 | 104 | 1887 |
| Wimpfheimer & Bro., A., New York, N. Y. Velvets, velveteens, and corduroys | 41,430 | Nov. 10 | 107 | 532 |
| Winthrop Drug and Chemical Works, Chicago, Ill. Rheumatic remedies | 40,729 | July 7 | 105 | 254 |
| Wireless Sun Glow Cyllindrode Battery Co., Detroit, Mich. Batteries and electrical appliances for treating nervous diseases | 39,735 | Feb. 3 | 102 | 1045 |
| Wisconsin Condensed Milk Co., Burlington, Wis. Condensed milk | 40,952 | Aug. 18 | 105 | 1773 |
| Wisconsin Condensed Milk Co., Burlington, Wis., and New York, N. Y. Condensed milk | 41,667 | Dec. 15 | 107 | 1966 |
| Wise, Joseph R., Pittsburg, Pa. Lubricating-greases | 39,808 | Feb. 17 | 102 | 1546 |
| Witchell Sons & Company, Limited, Detroit, Mich. Leather boots, shoes, slippers, and sandals | 41,169 | Sept. 29 | 106 | 1230 |
| Wm. Fulton & Sons, Ld., Paisley, Scotland. Cloths and stuffs of wool, worsted, or hair | 40,368 | May 12 | 104 | 574 |
| Wm. H. Horstmann Company, Philadelphia, Pa.; New York, N. Y.; Boston, Mass.; Baltimore, Md.; Detroit, Mich., and Paris and Lyons, France. Yarns | 40,757 | July 14 | 105 | 489 |
| Wm. H. Page Boiler Co., Norwich, Conn., and New York, N. Y. Hot-water boilers and steam-boilers | 41,346 | Oct. 20 | 106 | 2010 |
| Wm. Hutton & Sons, Ld., Sheffield, England. Silver and plated articles of tableware | 40,657 | June 23 | 104 | 2144 |
| Wm. J. Lemp Brewing Co., St. Louis, Mo. Beer | 40,948 | Aug. 18 | 105 | 1773 |
| Wm. J. Lemp Brewing Co., St. Louis, Mo. Beer | 40,949 | Aug. 18 | 105 | 1773 |
| Wm. L. Gilbert Clock Co., Winsted, Conn. Clocks | 40,586 | June 16 | 104 | 1888 |
| Wm. R. Gratz Company, New York, N. Y. Certain named musical instruments and bows therefor | 41,391 | Nov. 3 | 107 | 260 |
| Wolf, Joseph A., Providence, R. I. Gloves | 39,755 | Feb. 10 | 102 | 1285 |
| Wood, Albert F., Detroit, Mich. Toilet creams and lotions | 40,354 | May 12 | 104 | 573 |
| Wood & Bolton, Poughkeepsie, N. Y. Whiskies | 40,264 | May 5 | 104 | 304 |
| Wood, Stubbs & Co., Louisville, Ky. Certain named seeds | 40,866 | Aug. 4 | 105 | 1255 |
| Woodward, Orator F., Leroy, N. Y. Certain named toilet preparation | 40,818 | July 28 | 105 | 968 |
| Woollacott, Henry J., Los Angeles, Cal. Wines | 39,677 | Jan. 27 | 102 | 812 |
| Worcester Umbrella Company, Worcester, Mass. Umbrellas | 40,786 | July 21 | 105 | 738 |
| Worman, Frank T., Troy, Ohio. Blackberry-plants | 41,452 | Nov. 10 | 107 | 535 |
| Worth, Baily & Co., Philadelphia, Pa. Boiler-tubes | 40,838 | July 28 | 105 | 970 |
| Wright & Wade, McPherson, Kans. Laxative tablets | 40,110 | Apr. 14 | 103 | 1675 |
| Wulschner Music Company, Indianapolis, Ind. Pianos, automatic piano-players, attachments and parts | 39,793 | Feb. 10 | 102 | 1289 |
| Yawman & Erbe Mfg. Co., Rochester, N. Y. Sectional bookcases and filing-cabinets | 40,325 | May 12 | 104 | 570 |
| Yawman & Erbe Mfg. Co., Rochester, N. Y. Certain named devices | 41,053 | Sept. 1 | 106 | 260 |
| Yocum, Bess P., Scranton, Pa. Tonic | 41,558 | Dec. 1 | 107 | 1367 |
| York, Chauncey F., Warriorsmark, Pa. Medicine for digestion and diseases of the stomach | 40,593 | June 16 | 104 | 1889 |
| York, Chauncey F., Warriorsmark, Pa. Watches | 40,811 | July 28 | 105 | 968 |
| York Knitting Mills Co., York, Pa. Hosiery | 41,273 | Oct. 13 | 106 | 1769 |
| York Silk Manufacturing Company, York, Pa. Silk fabrics | 41,066 | Sept. 8 | 106 | 535 |
| York Silk Manufacturing Company, York, Pa. Silk fabrics | 41,067 | Sept. 8 | 106 | 535 |
| Young, Albert B., Buffalo, N. Y. External remedy for animals | 41,788 | Dec. 29 | 107 | 2524 |
| Young, George A., Portland, Me. Lamp-chimneys | 40,699 | June 30 | 104 | 2434 |
| Younglove and Singer, Peoria, Ill. Hair-grower and dandruff cure | 41,044 | Sept. 1 | 106 | 259 |
| Zaegel, Max R., Sheboygan, Wis. Chemical and pharmaceutical internal remedies | 41,675 | Dec. 15 | 107 | 1967 |
| Zeiss, Firm of Carl, Jena, Germany. Photographic cameras | 40,139 | Apr. 21 | 103 | 1906 |
| Zeiss, Firm of Carl, Jena, Germany. Lens instruments | 40,140 | Apr. 21 | 103 | 1906 |
| Zeiss, Firm of Carl, Jena, Germany. Optical systems consisting of one or several lenses | 40,141 | Apr. 21 | 103 | 1906 |
| Zema-Cura Company, New York, N. Y. Remedy for cure of eczema and other skin diseases | 40,598 | June 16 | 104 | 1889 |
| Zoller & Co., Charles, New York, N. Y. Bohemian and Bavarian hops | 41,143 | Sept. 22 | 106 | 989 |
| Zoller & Co., Charles, New York, N. Y. Bohemian and Bavarian hops | 41,144 | Sept. 22 | 106 | 989 |
| Zoller & Co., Charles, New York, N. Y. Antiseptics | 41,251 | Oct. 6 | 106 | 1497 |
| Zoller & Co., Charles, New York, N. Y. Pitch and rosin | 41,398 | Nov. 3 | 107 | 260 |
| Zorgo Salve Co., Grand Rapids, Mich. Salve | 40,053 | Apr. 7 | 103 | 1411 |

# ALPHABETICAL LIST OF LABELS.

| Name, residence, and title. | No. | Date. | Official Gazette. Volume. | Page. |
|---|---|---|---|---|
| Abraham, Charles E., Kansas City, Kans. "64." (For Tablets) | 10,582 | Dec. 8 | 107 | 1657 |
| Acker, Merrall & Condit Co., New York, N. Y. "Flashing Beauty." (For Canned Fish) | 10,020 | May 19 | 104 | 849 |
| Acker, Merrall & Condit Co., New York, N. Y. "Victoria." (For Tea) | 10,147 | June 30 | 104 | 2473 |
| Acker, Merrall & Condit Co., New York, N. Y. "Mayflower." (For Bacon) | 10,360 | Sept. 15 | 106 | 761 |
| Acker, Merrall & Condit Company, New York, N. Y. "Formosa Oolong." (For Tea) | 10,390 | Sept. 29 | 106 | 1235 |
| Acker, Merrall & Condit Company, New York, N. Y. "Kildare." (For Irish Jams) | 10,574 | Dec. 8 | 107 | 1657 |
| Adams, A. C., Marathon, N. Y. "Mohawk Ointment." (For an Ointment) | 9,764 | Feb. 24 | 102 | 1775 |
| Adams, John L., New York, N. Y. "Adams' Kitchen Spice Bags." (For Spice-Bags) | 10,134 | June 30 | 104 | 2437 |
| Adams, Morrill P., Worcester, Mass. "Negaiwas Salve." (For Salve) | 10,215 | Aug. 4 | 105 | 1257 |
| Adams & Powell, Sedan, Kans. "Plumed Knight." (For Cigars) | 9,893 | Apr. 14 | 103 | 1677 |
| Adler & Company, Cincinnati, Ohio. "Hand Made Hosiery." (For Hosiery) | 9,821 | Mar. 24 | 103 | 885 |
| Adler & Company, Cincinnati, Ohio. "Eagle Brand Hand Knit Socks." (For Hosiery) | 9,822 | Mar. 24 | 103 | 885 |
| Advance Flour Mill Company, Carrollton, Ill. "Leader." (For Flour) | 10,529 | Nov. 24 | 107 | 1091 |
| Advance Flour Mill Company, Carrollton, Ill. "Bob White." (For Flour) | 10,530 | Nov. 24 | 107 | 1091 |
| Advance Flour Mill Company, Carrollton, Ill. "Pride of Carrollton." (For Flour) | 10,531 | Nov. 24 | 107 | 1091 |
| Advance Flour Mill Company, Carrollton, Ill. "Up to Date." (For Flour) | 10,532 | Nov. 24 | 107 | 1091 |
| Alexander, William H., Piedmont, Ala. "Dr. W. H. Alexander's Healing Oil." (For Healing-Oils) | 10,426 | Oct. 20 | 106 | 2011 |
| Allegany Paint Company, Cumberland, Md. "Peacock Pure Paint." (For Paints) | 10,425 | Oct. 20 | 106 | 2011 |
| Allen, Slade & Co., Fall River, Mass. "'Baroda' Ceylon Tea." (For Tea) | 10,128 | June 23 | 104 | 2145 |
| Almy, Frederick, New York, N. Y. "Yankee Homespun." (For Dry Goods) | 9,976 | May 12 | 104 | 575 |
| Alpha Drug Company, New York, N. Y. "Alpha Oil." (For Medicinal Oil) | 10,411 | Oct. 13 | 106 | 1773 |
| Altmann, Leopold, New York, N. Y. "Cupidor." (For Hair Tonic and Restorer) | 10,001 | May 12 | 104 | 575 |
| American Condensed Milk Co., Ltd., Jackson, Mich. "Blue Bell." (For Condensed Milk) | 10,297 | Aug. 25 | 105 | 2055 |
| American Condensed Milk Co., Ltd., Jackson, Mich. "Jaxon." (For Condensed Milk) | 10,298 | Aug. 25 | 105 | 2055 |
| American Condensed Milk Co., Ltd., Jackson, Mich. "Dairy Maid." (For Condensed Milk) | 10,299 | Aug. 25 | 105 | 2055 |
| American Condensed Milk Co., Ltd., Jackson, Mich. "Anchor." (For Condensed Milk) | 10,300 | Aug. 25 | 105 | 2055 |
| American Condensed Milk Co., Ltd., Jackson, Mich. "Cameo." (For Condensed Milk) | 10,509 | Nov. 17 | 107 | 829 |
| American Condensed Milk Co., Ltd., Jackson, Mich. "White Pansy." (For Condensed Milk) | 10,510 | Nov. 17 | 107 | 829 |
| American Condensed Milk Co., Ltd., Jackson, Mich. "First American." (For Condensed Milk) | 10,562 | Dec. 1 | 107 | 1371 |
| American Condensed Milk Co., Ltd., Jackson, Mich. "Stamp." (For Condensed Milk) | 10,563 | Dec. 1 | 107 | 1371 |
| American Hulled Bean Co., Limited, Battlecreek, Mich. "American Hulled Beans." (For Hulled Beans) | 9,720 | Jan. 27 | 102 | 817 |
| American Interlaced Horse Collar Co., Philadelphia, Pa. "No More Sore Backs." (For Animal-Pads) | 9,825 | Mar. 24 | 103 | 885 |
| American Lithographic Co., New York, N. Y. "Hoya Nueva." (For Cigars) | 10,370 | Sept. 22 | 106 | 993 |
| American Lithographic Co., New York, N. Y. "Hoya Nueva." (For Cigars) | 10,371 | Sept. 22 | 106 | 993 |
| American Lithographic Company, New York, N. Y. "The Poplars." (For Cigars) | 9,759 | Feb. 17 | 102 | 1549 |
| American Lithographic Company, New York, N. Y. "Piccadilly." (For Cigars) | 9,768 | Feb. 24 | 102 | 1775 |
| American Lithograghic Company, New York, N. Y. "Prime Choice." (For Cigars) | 9,805 | Mar. 17 | 103 | 655 |
| American Lithographic Company, New York, N. Y. "Sweet Erin." (For Cigars) | 9,806 | Mar. 17 | 103 | 655 |
| American Lithographic Company, New York, N. Y. "Royal Seal." (For Cigars) | 9,873 | Apr. 7 | 103 | 1415 |
| American Lithographic Company, New York, N. Y. "Luz de Oro." (For Cigars) | 10,169 | July 7 | 105 | 257 |
| American Lithographic Company, New York, N. Y. "The Very Best." (For Cigars) | 10,251 | Aug. 11 | 105 | 1529 |
| American Lithographic Company, New York, N. Y. "Royal Gem." (For Cigars) | 10,291 | Aug. 25 | 105 | 2055 |
| American Lithographic Company, New York, N. Y. "Compliments of the Season." (For Cigars) | 10,292 | Aug. 25 | 105 | 2055 |
| American Lithographic Company, New York, N. Y. "White Eagle." (For Cigars) | 10,387 | Sept. 29 | 106 | 1235 |
| Anderson & Bullard, Boulder, Colo. "Tickler." (For Cigars) | 9,679 | Jan. 20 | 102 | 619 |
| Andrew Lohr Bottling Company, Cairo, Ill. "Lorithia." (For Mineral Water) | 10,272 | Aug. 18 | 105 | 1777 |
| Angeny, Joseph S., Jr., Ambler, Pa. "Chlorodyne Plaster." (For Medical Plasters) | 10,123 | June 23 | 104 | 2145 |
| Ap-O-Rheuma Co., Buckhannon, W. Va. "Ap-O-ton-iko." (For Medicine) | 9,963 | May 5 | 104 | 307 |
| Armstrong, Andrew R., Pinebush, N. Y. "Pine Tree Liniment." (For Liniment) | 9,970 | May 5 | 104 | 307 |
| Armstrong, E. C., Crossfork, Pa. "Ole Bull Pure Rye Whiskey." (For Whisky) | 9,790 | Mar. 10 | 103 | 423 |
| Artesian Manufacturing & Bottling Company, Waco, Tex. "Club Lithia." (For Lithia-Water) | 9,956 | May 5 | 104 | 307 |
| Artesian M'f'g & Bottling Co., Waco, Tex., and St. Louis, Mo. "Circle 'A' Brand." (For Ginger-Ale) | 10,202 | July 28 | 105 | 971 |
| Associated Drug Co., Philadelphia, Pa. "Chere-Amie." (For a Medicine) | 9,741 | Feb. 10 | 102 | 1291 |
| Associated Drug Co., Philadelphia, Pa. "Pepjulime." (For Medicine) | 10,072 | June 9 | 104 | 1653 |
| Associated Drug Co., Philadelphia, Pa. "Popularis." (For Medicine) | 10,183 | July 14 | 105 | 493 |
| Auburn Extract Company, Auburn, N. Y. "Grandma's." (For Baking-Powder) | 10,189 | July 21 | 105 | 741 |
| Auerbach and Schneider, Pittsburg, Pa. "Wabash Special." (For Whisky) | 10,513 | Nov. 17 | 107 | 829 |
| Austin, Drew & Co., Orange, N. J. "Ladd & Co." (For Hats) | 10,367 | Sept. 22 | 106 | 993 |
| Ayres, De Witt C., Penn Yan, N. Y. "Chautauqua & Erie Grape Co." (For Grapes) | 9,670 | Jan. 6 | 102 | 225 |
| Bachmann, Charles J., Baltimore, Md. "Star." (For Snuff) | 10,015 | May 19 | 104 | 849 |
| Bader, Henry F., East St. Louis, Ill. "Bader's Infallible Hair Grower." (For Hair-Grower) | 10,557 | Dec. 1 | 107 | 1371 |
| Bahr, Daniel, New York, N. Y. "Golden Dwarf Celery Tonic." (For Tonic) | 9,738 | Feb. 10 | 102 | 1291 |
| Bailey, George H., Brooklyn, N. Y. "Pin Ball Space." (For a Game) | 10,311 | Sept. 1 | 106 | 261 |
| Bailey Knitting Mills, Fort Plain, N. Y. "Bailey's Standard Gloves, Assorted Sizes." (For Gloves) | 10,612 | Dec. 22 | 107 | 2233 |
| Bailey & Sons, Chas., Fort Plain, N. Y. "Bailey's Standard Gloves." (For Gloves) | 10,613 | Dec. 22 | 107 | 2233 |
| Bailey, Willis N., Watervliet, N. Y. "B B S." (For Medicine) | 10,256 | Aug. 18 | 105 | 1777 |
| Baker Extract Company, Springfield, Mass. "Baker's Pure Extract Vanilla." (For Extract Vanilla) | 10,203 | July 28 | 105 | 971 |
| Balasguide & Co., San Juan, Porto Rico. "Mi Luisa." (For Cigars) | 9,758 | Feb. 17 | 102 | 1549 |
| Baldinger, Henry, St. Paul, Minn. "Pareve Crackers." (For Crackers) | 9,848 | Mar. 31 | 103 | 1161 |
| Baldwin, Martha M., Syracuse, N. Y. "Mme. Baldwin's Imperial Hair Restorative." (For a Hair-Restorative) | 9,828 | Mar. 24 | 103 | 885 |
| Ballagh, W. T., Nevada, Mo. "Red Lion Kidney Pills." (For Kidney-Pills) | 9,799 | Mar. 17 | 103 | 655 |
| Barberie, John J., Buffalo, N. Y. "Barberie's Furniture Polish." (For Furniture-Polish) | 10,261 | Aug. 18 | 105 | 1777 |
| Bargahiser, A. J., Rockford, Ohio. "A. J. Bargahiser's Chick-Hen Cholera Cure." (For Cholera Cure) | 10,245 | Aug. 11 | 105 | 1529 |

*Alphabetical list of registrants of labels*—Continued.

| Name, residence, and title. | No. | Date. | Official Gazette. Vol. | Page. |
|---|---|---|---|---|
| Bargahiser, Andrew J., Rockford, Ohio. "A. J. Bargahiser's Egg Food." (For Poultry-Food) | 9,694 | Jan. 20 | 102 | 619 |
| Barker, Louis J., Syracuse, N. Y. "Courage Pills." (For Medicine) | 10,327 | Sept. 8 | 106 | 539 |
| Barna, Herman, Des Moines, Iowa. "Capital." (For Gas-Lamp Mantles) | 9,721 | Jan. 27 | 102 | 817 |
| Barnfield, John H., Logansport, Ind. "Sneeze-No-More." (For Medicine) | 10,285 | Aug. 25 | 105 | 2055 |
| Baron, Samuel, New York, N. Y. "Baron's Welsh Rabbit." (for Welsh Rabbit) | 10,388 | Sept. 29 | 106 | 1235 |
| Barson, Abdalla N., New York, N. Y. "A. N Barson." (For Cigarettes) | 9,894 | Apr. 14 | 103 | 1677 |
| Bartgis, William R., Baltimore, Md. "Cloretol." (For an Antiseptic) | 10,541 | Nov. 24 | 107 | 1091 |
| Bartholomew, James, Columbus, Ohio. "Bartholomew's Hot Wave." (For Medicine) | 9,906 | Apr. 14 | 103 | 1677 |
| Batt & Co., Simon, New York, N. Y. "La Flor De Batt." (For Cigars) | 10,512 | Nov. 17 | 107 | 829 |
| Battle Creek Health Tablet Company, Limited, Battlecreek, Mich. "Peptorene." (For a Medicine) | 9,880 | Apr. 7 | 103 | 1415 |
| Battle Creek Ryena Food Co., Limited, Battlecreek, Mich. "Ryena." (For Food Product) | 10,018 | May 19 | 104 | 849 |
| Baugh, C. H., Raleigh, N. C. "Lee's Chill Cure." (For Medicine) | 9,999 | May 12 | 104 | 575 |
| Beatrice Creamery Co., Lincoln, Nebr. "Lancaster County Renovated Butter." (For Butter) | 10,507 | Nov. 17 | 107 | 829 |
| Beatrice Creamery Co., Lincoln, Nebr. "Elgin Valley." (For Butter) | 10,595 | Dec. 15 | 107 | 1969 |
| Beatrice Creamery Company, Lincoln, Nebr. "Lincoln Brand Separator Creamery Butter." (For Butter) | 10,171 | July 7 | 105 | 257 |
| Beaulieu, F. X., North Adams, Mass. "Pilules St. Anne." (For Pills) | 10,543 | Nov. 24 | 107 | 1091 |
| Beinecke, B., Jr., Boston, Mass. "Essex Sauce." (For Sauce) | 10,378 | Sept. 22 | 106 | 993 |
| Bels, Jacob, Brooklyn, N. Y. "Bebe." (For Cigars) | 9,858 | Mar. 31 | 103 | 1161 |
| Bender, Emil, Kaiserslautern, Germany. "Bender's Idealbandage." (For Bandages) | 10,213 | Aug. 4 | 105 | 1257 |
| Bendixen Tobacco Co., Syracuse, N. Y. "Wang." (For Cigars) | 10,176 | July 14 | 105 | 493 |
| Benjamin Moore & Company, Jersey City, N. J., and Brooklyn, N. Y. "Trip-L-Body White." (For White Lead and Paint) | 10,186 | July 14 | 105 | 493 |
| Bentley, Bert H., Glens Falls, N. Y. "Burt's Capsules." (For Medicine) | 10,480 | Nov. 3 | 107 | 263 |
| Berger, Otto, Galveston, Tex. "Golden Rod." (For Medicine) | 10,606 | Dec. 15 | 107 | 1969 |
| Beringer & Schaich, Philadelphia, Pa. "Geyser." (For Hair-Tonic) | 9,765 | Feb. 24 | 102 | 1775 |
| Best Gum Company, Louisville, Ky. "Best." (For Chewing-Gum) | 9,984 | May 12 | 104 | 575 |
| Bilisoly, P. C., Norfolk, Va. "Mister Skeeter." (For a Preparation to Keep Away Mosquitoes) | 10,207 | July 28 | 105 | 971 |
| Black, J. A., Ashland, Ohio. "Black's Poultry Food." (For Poultry-Food) | 10,032 | May 26 | 104 | 1117 |
| Black, J. A., Ashland, Ohio. "Black's Stock Food." (For Stock-Food) | 10,033 | May 26 | 104 | 1117 |
| Blackmarr, Frank H., and P. Mandeville, Chicago, Ill. "Lotio Retardo." (For Medicine) | 10,073 | June 9 | 104 | 1653 |
| Blank & Co., John, New Orleans, La. "A Little Straight." (For Whisky) | 10,450 | Oct. 27 | 106 | 2285 |
| Bleecker & Simons, New York, N. Y. "Diadem." (For Coffee) | 10,404 | Oct. 6 | 106 | 1499 |
| Bloss-Ellermann-Muhly Manufacturing Company, Baltimore, Md. "Economy Cleaner." (For a Cleaning Preparation) | 9,814 | Mar. 17 | 103 | 655 |
| Blotte & Company, V., New York, N. Y. "Ferro-China." (For a Tonic) | 10,542 | Nov 24 | 107 | 1091 |
| Blotto & Company, V., New York, N. Y. "Ferro-China-Tipo-Bislery." (For Tonic) | 10,452 | Oct 27 | 106 | 2285 |
| Blumenthal Bros., Philadelphia, Pa. "'Power' Extracts and Colors." (For Extracts and Colors) | 10,572 | Dec 8 | 107 | 1657 |
| Blumenthal Bros., Philadelphia, Pa. "Peach Mellow Flavor." (For Extract) | 10,573 | Dec. 8 | 107 | 1657 |
| Blumenthal Bros., Philadelphia, Pa. "Peach Mellow." (For a Beverage) | 10,637 | Dec 29 | 107 | 2525 |
| Boehncke, F. E., Brooklyn, N. Y. "Fine Selection Vanilla Compound." (For Vanilla Compound) | 9,837 | Mar 24 | 103 | 885 |
| Bolin, Nathan C., Decker, Tex. "Bolin's Magic Cure." (For Medicine) | 9,968 | May 5 | 104 | 307 |
| Bolin, Nathan C., Decker, Tex. "Bolin's Pile Cure." (For Medicine) | 9,969 | May 5 | 104 | 307 |
| Bonita Water Co., St. Louis, Mo. "Pink of Perfection." (For Water) | 10,149 | June 30 | 104 | 2437 |
| Booth, Thornton S., Troy, N. Y. "Ori-Na-Si." (For Nose and Mouth Wash) | 9,687 | Jan 20 | 102 | 619 |
| Booth, Thornton S., Watervliet, N. Y. "Vanine Tonic Laxative." (For a Medicine) | 9,800 | Mar. 17 | 103 | 655 |
| Boyce, A. M., Ottumwa, Iowa. "Boyce's Crystal Dandruff Cure and Hair Restorative." (For Dandruff Cure, &c) | 10,393 | Sept 29 | 106 | 1235 |
| Boyer & Co., Philadelphia, Pa. "Fleur de Lis French Dressing." (For Shoe-Polish) | 10,317 | Sept 1 | 106 | 261 |
| Boyer & Co., Philadelphia, Pa. "Fleur de Lis French Dressing." (For Shoe-Polish) | 10,318 | Sept. 1 | 106 | 261 |
| Bozone Company, Cazenovia, N. Y. "Bozone." (For Medicine) | 9,964 | May 5 | 104 | 307 |
| Bradley, Samuel G., Newburgh, N. Y. "Headquarters." (For Confectionery) | 9,950 | Apr 28 | 103 | 2169 |
| Brady, Bernard, New Orleans, La. "A Firemans Discovery." (For Medicines) | 9,879 | Apr. 7 | 103 | 1415 |
| Braham Pen Company, Cincinnati, Ohio. "Angel." (For Pens) | 10,445 | Oct 27 | 106 | 2285 |
| Braig, John L., Springfield, Mo. "Braig's Preference." (For Cigars) | 10,052 | June 2 | 104 | 1389 |
| Breglio & Co., P. A., Springfield, Mass. "River Nile Club Pure Rye Whiskey." (For Whisky) | 10,602 | Dec. 15 | 107 | 1969 |
| Breininger, Conrad, Brooklyn, N. Y. "Breininger's 5 Brothers." (For Cigars) | 9,895 | Apr. 14 | 103 | 1677 |
| Brewton, Swain H., Philadelphia, Pa. "Snpepsia." (For Medicine) | 10,539 | Nov 24 | 107 | 1091 |
| Bridwell, Sidney, Chesapeake Beach, Md. "B. B. S. Salve." (For Salve) | 10,611 | Dec 15 | 107 | 1969 |
| Brighton Medicine Company, Indianapolis, Ind. "Brighton's W. O. W." (For a Medicine) | 9,778 | Mar 3 | 103 | 221 |
| Brinkmann & Co., New York, N. Y. "Dr. Thuest Universal Health Drops." (For Medicine) | 9,750 | Feb 17 | 102 | 1549 |
| Broadhead, Joseph, Firthcliffe, N. Y. "Monastery Pile Cure." (For Medicine) | 10,481 | Nov. 3 | 107 | 263 |
| Brown, Samuel L., Portland, Oreg. "Union Cigar Band." (For Cigars) | 10,369 | Sept. 22 | 106 | 993 |
| Brownsville Fruit Distilling Co., New York, N. Y. "Brownsville Fruit Distilling Co." (For Brandy) | 9,737 | Feb. 10 | 102 | 1291 |
| Brugger, Frederick, New York, N. Y. "Diamondo Rocko." (For a Water and Fire Proof Solution) | 10,043 | May 26 | 104 | 1117 |
| Bryon, B. A., Ridgefield, Conn. "St. George Water." (For Spring-Water) | 10,180 | July 14 | 105 | 493 |
| Buffalo Mfg. Co., Pensacola, Fla. "Buffalo Brand." (For Baking-Soda) | 9,792 | Mar 10 | 103 | 423 |
| Bullard, O. W., Boulder, Colo. "Tickler." (For Cigars) | 10,335 | Sept. 8 | 106 | 539 |
| Burch & Co., H. N., Perry, N. Y. "Shawmut Sure Cure for Rheumatism." (For Medicine) | 10,199 | July 21 | 105 | 741 |
| Buttfield, Firm of W. J., New York, N. Y. "Belle of Japan." (For Tea) | 10,148 | June 30 | 104 | 2437 |
| Buttles & Co., Kansas City, Mo. "Champagne Gum." (For Chewing-Gum) | 10,078 | June 9 | 104 | 1653 |
| C. B. Henschel Mfg. Co., Milwaukee, Wis. "Agitator." (For Cigars) | 10,192 | July 21 | 105 | 741 |
| C. L. Cotton Perfume & Extract Co., Earlville, N. Y. "A Delightful Face Powder. A Perfect Baby Powder." (For Toilet Powder) | 10,181 | July 14 | 105 | 493 |
| Caldwell, George W., Middletown, N. Y. "Dr. Caldwell's Femitone." (For Medicine) | 10,257 | Aug. 18 | 105 | 1777 |
| California Fig Syrup Co., San Francisco, Cal., and Louisville, Ky. "Califig." (For Proprietary Medicines) | 10,096 | June 16 | 104 | 1893 |
| Calixto Lopez & Co., New York, N. Y. "Morro Castle Habana." (For Cigars, Cigarettes, and Manufactured Tobacco) | 10,157 | June 30 | 104 | 2437 |
| Calixto Lopez & Co., New York, N. Y. "Morro Castle Habana." (For Cigarettes) | 10,158 | June 30 | 104 | 2437 |
| Cannon, Henry H., Irvington, N. Y. "Aunt Sue's Clothes Cleaner." (For Clothes-Cleaning Compound) | 10,330 | Sept. 8 | 106 | 539 |
| Canton Drug & Chemical Company, Canton, Ohio. "Rheumatol for all Rheumatism." (For Medicine) | 10,161 | July 7 | 105 | 257 |
| Carqué, Otto, Chicago, Ill. "Pomona." (For Unfermented Fruit-Juice) | 10,333 | Sept 8 | 106 | 539 |
| Carter's Ink Co., Boston, Mass. "Dragon Carbon Paper." (For Carbon-Paper) | 9,745 | Feb. 17 | 102 | 1549 |
| Carter's Ink Co., Boston, Mass. "Dragon Typewriter Ribbon." (For Type-Writer Ribbons) | 9,746 | Feb. 17 | 102 | 1549 |
| Case, Horace G., Worcester, Mass. "Common Sense Pile Cure." (For Medicine) | 10,540 | Nov. 24 | 107 | 1091 |
| Casey Bros., Scranton, Pa. "Green Valley Rye." (For Whisky) | 10,350 | Sept. 15 | 106 | 761 |
| Casey, John H., Hillyard, Wash. "Casey's Rheumatic Cure." (For Medicine) | 10,588 | Dec. 8 | 107 | 1657 |
| Celery Gum Co., Limited, Grand Rapids, Mich. "Celery Nerve Chewing Gum." (For Chewing-Gum) | 9,985 | May 12 | 104 | 575 |

*Alphabetical list of registrants of labels*—Continued.

| Name, residence, and title. | No. | Date. | Official Gazette. Vol. | Page. |
|---|---|---|---|---|
| Central Cigar M'f'g Co., New York, N. Y. "Union Central." (For Cigars) | 9,734 | Feb. 10 | 102 | 1291 |
| Central City Cereal Coffee Co., Peoria, Ill. "Mocon." (For Cereal Coffee) | 9,781 | Mar. 3 | 103 | 221 |
| Central Litho. Co., Cleveland, Ohio. "Cubanos Cigarros." (For Cigars) | 10,248 | Aug. 11 | 105 | 1529 |
| Central Litho. Co., Cleveland, Ohio. "Elegantes Cigarros." (For Cigars) | 10,249 | Aug. 11 | 105 | 1529 |
| Central Litho. Co., Cleveland, Ohio. "Exquisitos Cigarros." (For Cigars) | 10,250 | Aug. 11 | 105 | 1529 |
| Central Lithograph Co., Cleveland, Ohio. "Cubanas Cigarros." (For Cigars) | 10,170 | July 7 | 105 | 257 |
| Champlin, Arthur L., Warren, R. I. "Aunt Betsy's Cordial." (For Medicinal Cordial) | 10,621 | Dec. 22 | 107 | 2233 |
| Chapin and Sacks, Washington, D. C. "Elk Grove Creamery." (For Dairy Products) | 10,050 | June 2 | 104 | 1389 |
| Charles B. Perkins & Co., Boston, Mass. "Susette." (For Cigars) | 10,579 | Dec. 8 | 107 | 1657 |
| Charles Wolff Packing Co., Topeka, Kans. "Kaw Valley Brand." (For Mince-Meat) | 9,983 | May 12 | 104 | 575 |
| Chave, Thomas T., Tomahawk, Wis. "Chave's Cholera Cure." (For Medicine) | 10,258 | Aug. 18 | 105 | 1777 |
| Chicago Barbers Protective Union, Chicago, Ill. "The Cigar for the People Chicago Barbers Protective Union." (For Cigars) | 9,838 | Mar. 24 | 103 | 885 |
| Citizens' Wholesale Supply Co., Columbus, Ohio. "Natural Leaf Tea." (For Tea) | 9,726 | Feb. 3 | 102 | 1047 |
| Citizens' Wholesale Supply Co., Columbus, Ohio. "Golden Rule Hair Restorative." (For Hair-Restorative) | 10,284 | Aug. 25 | 105 | 2055 |
| Citizens' Wholesale Supply Co., Columbus, Ohio. "Golden Rule Shampooing Liquid." (For Shampooing Liquid) | 10,483 | Nov. 3 | 107 | 263 |
| Citizens' Wholesale Supply Co., Columbus, Ohio. "Golden Rule Compound Quinine Hair Tonic." (For Hair-Tonic) | 10,484 | Nov. 3 | 107 | 263 |
| Clark, Joseph H., Oakland, Cal. "Clark's Absorbent Odorless Dress-Shield." (For Dress-Shields) | 10,201 | July 28 | 105 | 971 |
| Clark, Kimball V., Buffalo, N. Y. "'Clark's' 'Ball Tip' Hold Back Spring Hinge Quick Acting." (For Hinges) | 9,981 | May 12 | 104 | 575 |
| Clincher Automobile Tire Manufacturers Association, Akron, Ohio. "Rim Standardized by the Clincher Automobile Tire Manufacturers Association." (For Wheel-Rims) | 10,282 | Aug. 18 | 105 | 1777 |
| Clipper Manufacturing Company, New York, N. Y. "The Clipper Clip." (For Clips) | 10,324 | Sept. 8 | 106 | 539 |
| Cobean, Edward J., Toronto, Canada. "Kola Celery and Pepsin." (For Kola Tonic Wine) | 10,196 | July 21 | 105 | 741 |
| Coffin-Fletcher Packing Co., Indianapolis, Ind. "Primrose." (For Sugar-Cured Hams) | 9,902 | Apr. 14 | 103 | 1677 |
| Cohen, A. L., Seattle, Wash. "La Calinda." (For Cigars) | 10,233 | Aug. 4 | 105 | 1257 |
| Cohen & Co., S., New York, N. Y. "Reliance Angora Tam O'Shanter." (For Soft Woolen Caps) | 10,446 | Oct. 27 | 106 | 2285 |
| Cohn, Henry J., Chicago, Ill. "Tom Barrett." (For Cigars) | 9,808 | Mar. 17 | 103 | 655 |
| Cole Lithographing Co., Chicago, Ill. "Butter Ball." (For Cigars) | 9,993 | May 12 | 104 | 575 |
| Cole, William G., Wilmington, Del. "Ye Olde King Cole Rye." (For Whisky) | 10,152 | June 30 | 104 | 2437 |
| Colonial Advertising Co., New York, N. Y. "Peter Dawson's Scotch Whiskies." (For Scotch Whisky) | 10,105 | June 16 | 104 | 1893 |
| Colonial Advertising Co., New York, N. Y. "Dawson's in Japan." (For Scotch Whisky) | 10,106 | June 16 | 104 | 1893 |
| Colonial Advertising Co., New York, N. Y. "Dawson's in America—New York." (For Scotch Whisky) | 10,107 | June 16 | 104 | 1893 |
| Colonial Advertising Co., New York, N. Y. "Dawson's in the Desert." (For Scotch Whisky) | 10,108 | June 16 | 104 | 1893 |
| Colonial Advertising Co., New York, N. Y. "Dawson's in France—Paris." (For Scotch Whisky) | 10,109 | June 16 | 104 | 1893 |
| Colonial Advertising Co., New York, N. Y. "Dawson's in Holland." (For Scotch Whisky) | 10,110 | June 16 | 104 | 1893 |
| Colonial Advertising Co., New York, N. Y. "Dawson's in Germany." (For Scotch Whisky) | 10,111 | June 16 | 104 | 1893 |
| Columbia Hosiery Co., New York, N. Y. "The 'Winona' Scratcher." (For Stockings) | 10,424 | Oct. 20 | 106 | 2011 |
| Columbia Phonograph Co., Washington, D. C. "Columbia Phonograph Co. Columbia Record." (For Sound-Records) | 9,823 | Mar. 24 | 103 | 885 |
| Consolidated Ubero Plantations Company, Boston, Mass. "Ubero Selected Coffee." (For Coffee) | 9,899 | Apr. 14 | 103 | 1677 |
| Cook, Sarah E., Baltimore, Md. "Nerveritis." (For a Medicine) | 9,826 | Mar. 24 | 103 | 885 |
| Cotzhausen, Alfred von, Milwaukee, Wis. "The Beer of Quality." (For Lager-Beer) | 10,273 | Aug. 18 | 105 | 1777 |
| Coxon and Roberts, Utica, N. Y. "Olivene." (For Medicine) | 10,501 | Nov. 10 | 107 | 537 |
| Cozzens, Elbers & Prankard, New York, N. Y. "Yu-Uzit." (For a Silk Fabric) | 10,283 | Aug. 25 | 105 | 2055 |
| Crichton, A., Castleton, Canada. "Grippura." (For Medicine) | 10,197 | July 21 | 105 | 741 |
| Crichton, Alexander, Castleton, Canada. "It Reaches the Right Spot." (For Medicine | 10,516 | Nov. 17 | 107 | 829 |
| Crocov, P. G., Pittsburg, Pa. "The Phœbus." (For Certain Manufactured Tobacco) | 10,490 | Nov. 10 | 107 | 537 |
| Croft, Samel F., New York, N. Y. "Viche-Fiz." (For Medicine) | 10,636 | Dec. 29 | 107 | 2525 |
| Croswell Company, New York, N. Y. "No-Bald." (For Hair-Tonic) | 10,554 | Dec. 1 | 107 | 1371 |
| Croswell Company, New York, N. Y. "Liliskin." (For Toilet Preparation) | 10,555 | Dec. 1 | 107 | 1371 |
| Crouch Chemical Co., Pittsburg, Pa. "Crouch's Ammoniated Soap." (For Soap) | 9,929 | Apr. 21 | 103 | 1911 |
| Crouss, George H., Springfield, Mass. "El Friar." (For Cigars) | 10,432 | Oct. 20 | 106 | 2011 |
| Currie, Edward J., Keyport, N. J. "Molly Pitcher." (For Thread) | 10,396 | Oct. 6 | 106 | 1499 |
| Currie, Edward J., Keyport, N. J. "Crystal." (For Thread) | 10,397 | Oct. 6 | 106 | 1499 |
| Cutler, William C., Baker City, Oreg. "Trib." (For Medical Compound) | 10,604 | Dec. 15 | 107 | 1969 |
| Daniel, Daniel, Little Rock, Ark. "Life Preserver Highest Patent Pure Winter Wheat Flour." (For Flour) | 10,508 | Nov. 17 | 107 | 829 |
| Daniels, Harry T., East Providence, R. I. "Gold Leaf Brand Vermont Maple Sap Syrup." (For Syrup) | 10,079 | June 9 | 104 | 1653 |
| Dant, John P., Louisville, Ky. "Old Danton." (For Whisky) | 10,492 | Nov. 10 | 107 | 537 |
| Davis, B. T., Huntington, W. Va. "Dr. Winston's Mountain Root Pills." (For a Medicine) | 9,881 | Apr. 7 | 103 | 1415 |
| Davis, Benajah T., Huntington, W. Va. "Colcin." (For Medicine) | 10,198 | July 21 | 105 | 741 |
| Davis Bros., Gloucester, Mass. "Tuberose." (For Fish) | 10,391 | Sept. 29 | 106 | 1235 |
| Davis Bros., Gloucester, Mass. "Tiger Lily." (For Codfish) | 10,407 | Oct. 6 | 106 | 1499 |
| De Zeabault & Co., Juano F., Cleveland, Ohio. "King Edward." (For Tonsorial Balm) | 9,923 | Apr. 21 | 103 | 1911 |
| Deerfield Water Company, Cleveland, Ohio. "T B C Triple Bi-Carbonate Deerfield Water." (For Mineral Water) | 9,948 | Apr. 28 | 103 | 2169 |
| Delgado, Enrique, San Juan, Porto Rico. "Olympia." (For Cigars) | 10,089 | June 9 | 104 | 1653 |
| Delorge and Jennings, Winooski, Vt. "Delorge & Jenning's Tiger Rheumatic Cure." (For a Medicine) | 9,786 | Mar. 10 | 103 | 423 |
| Dennie, Frank B., Minneapolis, Minn. "Security Stock Food Glutenized." (For Stock-Food) | 9,761 | Feb. 17 | 102 | 1549 |
| Dennie, Frank B., Minneapolis, Minn. "Security Gall Cure." (For a Gall Cure) | 10,216 | Aug. 4 | 105 | 1257 |
| Dermo Chemical Co., Philadelphia, Pa. "Dermo." (For Antiseptic Germicides) | 10,320 | Sept. 1 | 106 | 261 |
| Detor Bros., Canastota, N. Y. "Little W. J. D." (For Cigars) | 10,087 | June 9 | 104 | 1653 |
| Deutz Lithographing Co., New York, N. Y. "Samaritan Grape Juice." (For Grape-Juice) | 9,669 | Jan. 6 | 102 | 225 |
| Deutz Lithographing Co., New York, N. Y. "Pratt's Motor Car Spirits." (For Naphtha) | 10,494 | Nov. 10 | 107 | 537 |
| Dezeabault & Co., Juano L., Cleveland, Ohio. "Queen Alexandria of Judea Lotus Balm." (For Toilet Preparation) | 9,876 | Apr. 7 | 103 | 1415 |
| Dezeabault & Co., Juano L., Cleveland, Ohio. "J. B. Actress's Obesity-Wine for Corpulency." (For Medicine) | 10,184 | July 14 | 105 | 493 |
| Dezeabault & Co., Juano L., Cleveland, Ohio. "Dropsy Wine." (For Medicine) | 10,549 | Dec. 1 | 107 | 1371 |
| Diamond Roller Mills, Taylor, Tex. "White Plume." (For Flour) | 10,112 | June 16 | 104 | 1893 |
| Diamond Roller Mills, Taylor, Tex. "Eagle." (For Flour) | 10,113 | June 16 | 104 | 1893 |
| Diamond Roller Mills, Taylor, Tex. "Belle of Williamson." (For Flour) | 10,132 | June 23 | 104 | 2145 |
| Dill, Francis J., Boston, Mass. "King of Kings Cure." (For a Medicine) | 9,801 | Mar. 17 | 103 | 655 |
| Dillingham, John R., Kansas City, Mo. "Rheumeo." (For Medicine) | 10,589 | Dec. 8 | 107 | 1657 |
| Dinet & Delfosse, Chicago, Ill. "Auritone D. & D." (For Medicine) | 10,013 | May 19 | 104 | 849 |
| Dinet & Delfosse, Chicago, Ill. "Iodo-Nucleoid." (For Medicine) | 10,159 | July 7 | 105 | 257 |

*Alphabetical list of registrants of labels*—Continued.

| Name, residence, and title. | No. | Date. | Official Gazette. Vol. | Page. |
|---|---|---|---|---|
| Dinet & Delfosse Pharmacal Co., Chicago, Ill. "Iodo-Nuclein. D. & D." (For Medicine) | 10,074 | June 9 | 104 | 1653 |
| Dorion, Louis P. A., Haverhill, Mass. "Dr. Boston's Catarrh Cream." (For Medicine) | 10,142 | June 30 | 104 | 2437 |
| Douglas & Company, Cedar Rapids, Iowa. "Riverside Gloss Starch." (For Starch) | 10,077 | June 9 | 104 | 1653 |
| Dr. James English Cooling Powder & Remedy Co., Philadelphia, Pa. "Dr. James English Cooling Powders." (For Powders) | 10,205 | July 28 | 105 | 971 |
| Dr. James English Cooling Powder & Remedy Co., Philadelphia, Pa. "Dr. James English Cooling Powder & Remedy Co." (For Powders) | 10,243 | Aug. 11 | 105 | 1529 |
| Dr. Parker Medical Co., Portland, Me. "Dr. Parker's Tonetic Tablets." (For Medicine) | 9,942 | Apr. 28 | 103 | 2169 |
| Dr. Rewalt Medicine Co., St. Paul, Minn. "Dr. Rewalt's R. Q. R." (For a Medicine) | 9,843 | Mar. 31 | 103 | 1161 |
| Drees, Albertine, Newark, N. J. "Mme. A. Drees' The Alberta Hair Waver and Curler." (For Hair Wavers and Curlers) | 10,121 | June 23 | 104 | 2145 |
| Drew, Allan, Kansas City, Mo. "Elk Bitters." (For Bitters) | 10,031 | May 26 | 104 | 1117 |
| Drueding Bros., Philadelphia, Pa. "One Kip Chamois Skins." (For Chamois-Skins) | 9,922 | Apr. 21 | 103 | 1911 |
| Duché & Sons, T. M., New York, N. Y. "Duché's Original Flexible Licorice." (For Licorice) | 10,408 | Oct. 6 | 106 | 1499 |
| Dunn, W. H., Buffalo, N. Y. "Monarch Wild Cherry Bitters." (For Bitters) | 9,996 | May 12 | 104 | 575 |
| Dunn, William H., Watervliet, N. Y. "Dunn's Diamond Edge Oil." (For Oil for Strops and Hones) | 10,042 | May 26 | 104 | 1117 |
| Dunton & Co., M. W., Providence, R. I. "Nokorode." (For Soldering-Paste) | 10,101 | June 16 | 104 | 1893 |
| Dunyon, C. W., Ogunquit, Me. "Wawa Lithia Spring Water." (For Lithia Spring Water) | 10,194 | July 21 | 105 | 741 |
| Dyer, Thomas, Providence, R. I. "Mann's Vegetable Canker Cure." (For a Medicine) | 10,144 | June 30 | 104 | 2437 |
| E-Z-B Antiseptic Co., Chillicothe, Ohio. "E-Z-B Antiseptic Foot Powder." (For Foot-Powder) | 10,485 | Nov. 3 | 107 | 263 |
| Eareckson, Thomas W., Baltimore, Md. "The Eareck Homoeopathic Medicines." (For Medicines) | 9,998 | May 12 | 104 | 575 |
| Eastarling Print Shop, Jacksonville, Ill. "Egg Skin Balm." (For an Emollient) | 10,583 | Dec. 8 | 107 | 1657 |
| Eastern Biscuit Co., Manchester, Conn. "Eastern Biscuit Co." (For Crackers and Biscuits) | 10,416 | Oct. 13 | 106 | 1773 |
| Eckert, T. A., Newport, Ky. "Sea Island." (For Coffee) | 10,403 | Oct. 6 | 106 | 1499 |
| Eden & Sons, William B., Roxborough, Pa. "Black Cat Stove Polish." (For Stove-Polish) | 10,092 | June 9 | 104 | 1653 |
| Egyptian Food Co., Milwaukee, Wis. "Egyptian Food." (For Cereal Food) | 10,593 | Dec. 15 | 107 | 1969 |
| Electro Sterilizing Co., Brooklyn, N. Y. "Electronaris Table Water." (For Water) | 9,852 | Mar. 31 | 103 | 1161 |
| Elias, Salim, New York, N. Y. "Land of Promise Wine." (For Wines) | 9,757 | Feb. 17 | 102 | 1549 |
| Erb, Ludwig G. B., New York, N. Y. "Dr. Mill's Asthma Powder." (For a Medicine) | 9,827 | Mar. 24 | 103 | 885 |
| Erb, Ludwig G. B., New York, N. Y. "Dr. Mills' Pile Suppositories." (For a Medicine) | 9,941 | Apr. 28 | 103 | 2169 |
| Escher, Max, Buffalo, N. Y. "Our Soap." (For Soap) | 10,331 | Sept. 8 | 106 | 539 |
| Escher, Max, Buffalo, N. Y. "Pansy Soap." (For Soap) | 10,471 | Nov. 3 | 107 | 263 |
| Escher, Max, Buffalo, N. Y. "Rex Soap." (For Soap) | 10,472 | Nov. 3 | 107 | 263 |
| Eureka Drug Co., Eureka, S. D. "Carbonigrol." (For Horse-Liniment) | 10,412 | Oct. 13 | 106 | 1773 |
| Evans, Clarence D., Healdsburg, Cal. "Arabalene Face Enamel." (For Skin Preparations) | 10,610 | Dec. 15 | 107 | 1969 |
| F. A. Weck Co., San Francisco, Cal. "Laxative Grapes." (For Medicine) | 10,075 | June 9 | 104 | 1653 |
| F. L. Daggett & Co., Boston, Mass. "Daggett's Chocolates." (For Confectionery) | 9,871 | Apr. 7 | 103 | 1415 |
| F. L. Daggett & Co., Boston, Mass. "Daggett's Chocolate Peppermints." (For Confectionery) | 9,872 | Apr. 7 | 103 | 1415 |
| F. L. Daggett Co., Boston, Mass. "Daggett's Chocolates." (For Confectionery) | 10,596 | Dec. 15 | 107 | 1969 |
| F. L. Daggett Co., Boston, Mass. "Daggett's Chocolates." (For Confectionery) | 10,597 | Dec. 15 | 107 | 1969 |
| Fabian & Chases, Birmingham, Ala. "Gov. Bob Taylor." (For Cigars) | 10,156 | June 30 | 104 | 2437 |
| Fahnestock, Allen L., Glasford, Ill. "A. L. Fahnestock's Sure Pop Liniment." (For Medical Compound) | 10,214 | Aug. 4 | 105 | 1257 |
| Fair Brothers, Natick, Mass. "Laxative Flour." (For Flour) | 9,869 | Apr. 7 | 103 | 1415 |
| Faulhaber Chemical Company, New York, N. Y. "Royal Bengal Metal Polish." (For Metal-Polish) | 10,363 | Sept. 15 | 106 | 761 |
| Fawcett, Hughes, New York, N. Y. "The Coutrai Lockstitch Thread." (For Sewing-Machine Thread) | 10,368 | Sept. 22 | 106 | 993 |
| Faxon, William H., Buffalo, N. Y. "Ginger Wafers." (For Cakes) | 10,220 | Aug. 4 | 105 | 1257 |
| Faxon, William H., Buffalo, N. Y. "Chocolate Wafers." (For Cakes) | 10,221 | Aug. 4 | 105 | 1257 |
| Faxon, William H., Buffalo, N. Y. "Graham Wafers." (For Crackers) | 10,222 | Aug. 4 | 105 | 1257 |
| Faxon, William H., Buffalo, N. Y. "Milk Biscuits." (For Crackers) | 10,223 | Aug. 4 | 105 | 1257 |
| Faxon, William H., Buffalo, N. Y. "Cheese Wafers." (For Crackers) | 10,224 | Aug. 4 | 105 | 1257 |
| Faxon, William H., Buffalo, N. Y. "Banquets." (For Crackers) | 10,225 | Aug. 4 | 105 | 1257 |
| Faxon, William H., Buffalo, N. Y. "Butter Thins." (For Crackers) | 10,226 | Aug. 4 | 105 | 1257 |
| Faxon, William H., Buffalo, N. Y. "Milk Lunch." (For Crackers) | 10,227 | Aug. 4 | 105 | 1257 |
| Faxon, William H., Buffalo, N. Y. "Water Thins." (For Crackers) | 10,228 | Aug. 4 | 105 | 1257 |
| Fay, James, New York, N. Y. "Antiques." (For Antiques) | 10,135 | June 30 | 104 | 2437 |
| Ferd. Heim Brewing Company, Kansas City, Mo. "Heim's Eagle's Cream." (For Bottled Beer) | 9,772 | Feb. 24 | 102 | 1775 |
| Ferd. Heim Brewing Company, Kansas City, Mo. "Kyffhäuser Lager Beer." (For Bottled Beer) | 10,127 | June 23 | 104 | 2145 |
| Ferguson, Raymond M., and M. M. Atherton, Grand Rapids, Mich. "Scalpine." (For Dandruff Cure) | 10,454 | Oct. 27 | 106 | 2285 |
| Fischer & Co., B., New York, N. Y. "Queen Quality." (For Teas) | 9,932 | Apr. 21 | 103 | 1911 |
| Fischer & Co., B., New York, N. Y. "Defiance." (For Teas) | 9,933 | Apr. 21 | 103 | 1911 |
| Fischer & Co., B., New York, N. Y. "Columbia." (For Teas) | 9,934 | Apr. 21 | 103 | 1911 |
| Fischer & Co., B., New York, N. Y. "Mandarin." (For Teas) | 9,935 | Apr. 21 | 103 | 1911 |
| Fischer & Co., B., New York, N. Y. "Liberty Bell." (For Teas) | 9,936 | Apr. 21 | 103 | 1911 |
| Fischer & Co., B., New York, N. Y. "Nonpareil." (For Teas) | 9,937 | Apr. 21 | 103 | 1911 |
| Fischer & Co., B., New York, N. Y. "Queen Quality." (For Coffee) | 10,439 | Oct. 20 | 106 | 2011 |
| Fitchmul Company, Concord, N. H. "Fitchmul." (For Medicine) | 9,688 | Jan. 20 | 102 | 619 |
| Fixen, Laura G., Chicago, Ill. "Fac Ease Elsinore." (For Skin-Food and Massage-Cream) | 10,146 | June 30 | 104 | 2437 |
| Flame-Proof Co., New York, N. Y. "F. P. C. Wax." (For Wax) | 9,867 | Mar. 31 | 103 | 1161 |
| Fleishman, Morris & Co., Richmond, Va. "Red Raven." (For Shoes) | 10,614 | Dec. 22 | 107 | 2233 |
| Fletcher, Z. P. (See Reed and Fletcher.) | | | | |
| Forbes, Andrew, Philadelphia, Pa. "Jack Rose." (For Whisky) | 10,195 | July 21 | 105 | 741 |
| Foster & Co., F. A., Boston, Mass. "Astoria Knitted Table Felt." (For Knitted Table-Felt) | 10,028 | May 26 | 104 | 1117 |
| Frank, E. S., Clarion, Iowa. "Salome." (For a Medicine) | 10,427 | Oct. 20 | 106 | 2011 |
| Fred. Miller Brewing Co., Wauwatosa, Wis. "High Life." (For Beer) | 10,164 | July 7 | 105 | 257 |
| Freeman, Tracy L., New York, N. Y. "Adirondack Novelties." (For Indian Souvenirs, Goods, and Curios) | 10,026 | May 26 | 104 | 1117 |
| Freeman, William D., Cincinnati, Ohio. "Freeman's Face Powder." (For Face-Powder) | 9,809 | Mar. 17 | 103 | 655 |
| Freeman, William D., Cincinnati, Ohio. "Freeman's Medicated Face Powder." (For Face-Powder) | 9,973 | May 5 | 104 | 307 |
| Friedgen, Charles, New York, N. Y. "Violet Emollient Skin Tonic and Massage Cream." (For Massage Cream) | 10,514 | Nov. 17 | 107 | 829 |
| Friedman, Samuel L., Chicago, Ill. "Diamond Ring Brand Confections." (For Candies and Confections) | 10,313 | Sept. 1 | 106 | 261 |
| Fulcher, M. T., Alton, Ill. "No-pa-ine." (For Medicine) | 10,140 | June 30 | 104 | 2437 |
| Fulcher, M. T., Alton, Ill. "The Ounce of Prevention." (For Medicine) | 10,259 | Aug. 18 | 105 | 1777 |
| Funk & Co., Lawson C., Philadelphia, Pa. "Bender's Liquid Antiseptic Soap Perfumed." (For Liquid Antiseptic Soap) | 10,362 | Sept. 15 | 106 | 761 |
| Gallagher, William C., Philadelphia, Pa. "Reliance Mills." (For Hosiery, Underwear, and Knit Goods) | 10,447 | Oct. 27 | 106 | 2285 |

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| Name, residence, and title. | No. | Date. | Official Gazette. Vol. | Page. |
|---|---|---|---|---|
| Gallegos, Juan, Mission San Jose, Cal. "La Palmera Imperial Prunes." (For Prunes) | 10,641 | Dec. 29 | 107 | 2525 |
| Galvin, La Prette & Fitzgerald, Syracuse, N. Y. "Imperial Tycoon Cigars." (For Cigars) | 9,789 | Mar. 10 | 103 | 423 |
| Garcia & Bros., F., New York, N. Y. "F. Garcia & Bros. Fabricantes De Tabacos Habana." (For Cigars) | 10,275 | Aug. 18 | 105 | 1777 |
| Garcia & Bros., F., New York, N. Y. "F. Garcia & Bros." (For Cigars) | 10,293 | Aug. 25 | 105 | 2055 |
| Garden City Sand Company, Chicago, Ill. "White Swan." (For Wall-Plaster) | 9,841 | Mar. 24 | 103 | 885 |
| Gause, Tina H., New York, N. Y. "Phryne." (For Toilet Preparations) | 10,536 | Nov. 24 | 107 | 1091 |
| Gellner, Hugo, Cleveland, Ohio. "Vermintene." (For an Insect-Exterminator) | 9,747 | Feb. 17 | 102 | 1549 |
| Gempp-Pernod, Gustave, New York, N. Y. "Extrait d'Absinthe." (For Absinthe) | 10,167 | July 7 | 105 | 257 |
| George Urban Milling Co., Buffalo, N. Y. "Reliance." (For Flour) | 10,413 | Oct. 13 | 106 | 1773 |
| George Urban Milling Co., Buffalo, N. Y. "Liberty." (For Flour) | 10,414 | Oct. 13 | 106 | 1773 |
| George Urban Milling Co., Buffalo, N. Y. "Iroquois." (For Flour) | 10,415 | Oct. 13 | 106 | 1773 |
| George Urban Milling Co., Buffalo, N. Y. "Pie Flour." (For Flour) | 10,441 | Oct. 20 | 106 | 2011 |
| George Urban Milling Co., Buffalo, N. Y. "Lotus." (For Flour) | 10,442 | Oct. 20 | 106 | 2011 |
| Gibbs, James D., Louisville, Ky. "Vin Erba." (For Medicine) | 9,766 | Feb. 24 | 102 | 1775 |
| Gibson Musical String Co., Belleville, N. J. "Gibson Musical String Co's Columbia Brand Steel Strings." (For Musical Strings) | 10,005 | May 19 | 104 | 849 |
| Gies, Charles, Greatfalls, Mont. "Chas. M. Russell." (For Cigars) | 9,703 | Jan. 27 | 102 | 817 |
| Gillett, Geo. H., New York, N. Y. "Cuba Citrus Culture." (For Citrus Fruits) | 10,252 | Aug. 4 | 105 | 1257 |
| Gillett, George H., New York, N. Y. "Choice Cuban Cigars." (For Cigars) | 10,599 | Dec. 15 | 107 | 1969 |
| Gillon & Co., John, Leith, Scotland. "Remarkable Old Scotch Whiskey." (For Whisky) | 9,856 | Mar. 31 | 103 | 1161 |
| Gitt, C. D., Danville, Va. "Americuba." (For Cigars) | 10,352 | Sept. 15 | 106 | 761 |
| Glackner, John, New York, N. Y. "The Royal Reina." (For Cigars) | 10,449 | Oct. 27 | 106 | 2285 |
| Goldwater, Henry, New York, N. Y. "Goldwater's Mosquito Cure." (For an Ointment) | 10,478 | Nov. 3 | 107 | 263 |
| Goodwin, Frank A., Chicago, Ill. "Silkweed Tonic." (For Medicine) | 10,400 | Oct. 6 | 106 | 1499 |
| Gordon Remedy Co., Shelbyville, Ill. "Dr. Gordon's Somagen." (For Medicine) | 10,287 | Aug. 25 | 105 | 2055 |
| Gordon Remedy Co., Shelbyville, Ill. "Dr. Gordon's Laxative Campho Quinine." (For Medicine) | 10,288 | Aug. 25 | 105 | 2055 |
| Gould Witch Hazel Company, New York, N. Y. "Witch Hazel (Gould)." (For Witch-Hazel) | 9,742 | Feb. 10 | 102 | 1291 |
| Govan, William J., Atlanta, Ga. "Royal Foot Wash." (For a Preparation for the Feet) | 10,004 | May 12 | 104 | 575 |
| Graham Bros. & Co., Chicago, Ill. "Lana Oil Complexion Cream and Skin Food." (For Cosmetics) | 10,039 | May 26 | 104 | 1117 |
| Grape Fruit Tablet Company of Baltimore City, Baltimore, Md. "Grape Fruit Tablets." (For Medicine) | 9,753 | Feb. 17 | 102 | 1549 |
| Grasso, Paride, New York, N. Y. "Paride's Compound." (For a Medicine) | 10,056 | June 2 | 104 | 1389 |
| Grasso, Paride, New York, N. Y. "Paride's Compound Ointment." (For Ointment) | 10,057 | June 2 | 104 | 1389 |
| Gray, Hayes I., Greenfield, Ohio. "Gray's Remedy." (For Medicine) | 10,162 | July 7 | 105 | 257 |
| Greenough, Charles J., Saranac Lake, N. Y. "Greenough's Quick Cure." (For Veterinary Medicines) | 10,628 | Dec. 22 | 107 | 2233 |
| Guarantee Medicine Company, Pierre, S. D., and Chicago, Ill. "Dr. Lung's Uterine Balsam." (For Medicine) | 10,585 | Dec. 8 | 107 | 1657 |
| Gulden, Charles, New York, N. Y. "Bon Ton Brand." (For Olives) | 10,440 | Oct. 20 | 106 | 2011 |
| H. W. Rountree & Brother Trunk & Bag Co., Richmond, Va. "Roller Tray Trunks." (For Trunks and Traveling-Bags | 9,744 | Feb. 17 | 102 | 1549 |
| H. W. Wilder Co., Chicago, Ill. "Watermelon Jelly, Natures Palatable Specific." (For Medicine) | 10,244 | Aug. 11 | 105 | 1529 |
| Hafemeister, M. W. H., Minneapolis, Minn. "Jaborandine Dandruff Cure." (For Hair Medicine) | 10,058 | June 2 | 104 | 1389 |
| Hafer, J. H., Bedford, Pa. "Stop-Ache." (For a Medicine) | 9,925 | Apr. 21 | 103 | 1911 |
| Hambro Distilling and Distributing Co., Baltimore, Md. "Hambro." (For Whisky) | 9,896 | Apr. 14 | 103 | 1677 |
| Hamburger Company, Chicago, Ill. "Labor's Choice Whiskey." (For Whisky) | 10,016 | May 19 | 104 | 849 |
| Hamilton, Joshua S., Brantford, Canada. "Crusader Port." (For Port-Wine) | 9,897 | Apr. 14 | 103 | 1677 |
| Hand, Zeiopheard, Millville, N. J. "Dr. Z. Hand's Antiseptic Dental Powder." (For Dental Powder) | 10,608 | Dec. 15 | 107 | 1969 |
| Hanscom Bros., Philadelphia, Pa. "Life." (For Cereal Food) | 10,564 | Dec. 1 | 107 | 1371 |
| Hardesty, Charles E., Canton, Ohio. "Hardesty's Extract of Nine Bark." (For Medicine) | 10,076 | June 9 | 104 | 1653 |
| Hardway, George J., Cleveland, Ohio. "Blue Ribbon Pepsin Gum." (For Chewing-Gum) | 10,570 | Dec. 8 | 107 | 1657 |
| Harrington & Co., Cleveland, Ohio. "Harrington's Air Tight Package." (For Leather Soles and Taps) | 10,210 | Aug. 4 | 105 | 1257 |
| Harrington & Co., Cleveland, Ohio. "Harrington Directions for Shoe Repairing." (For Leather Soles and Taps) | 10,211 | Aug. 4 | 105 | 1257 |
| Harrington & Co., Cleveland, Ohio. "Harrington & Co.'s New Method of Cutting Blanks." (For Leather Soles and Taps) | 10,339 | Sept. 15 | 106 | 761 |
| Harris, Leroy H., Washington, D. C. "Harris' New Blood Tonic." (For Blood-Tonic) | 9,748 | Feb. 17 | 102 | 1549 |
| Healio Medicine Company, New York, N. Y. "Healio Salve." (For a Salve) | 9,700 | Jan. 27 | 102 | 817 |
| Hearn Co., Cambridge, Md. "Mother's Brand." (For Canned Tomatoes) | 10,406 | Oct. 6 | 106 | 1499 |
| Hecht & Zummach, Milwaukee, Wis. "Weather Proof Liquid Paint." (For Paints) | 9,695 | Jan. 20 | 102 | 616 |
| Helmet Creamery Company, Kansas City, Mo. "Sunnybrook Creamery Butter." (For Butter) | 10,616 | Dec. 22 | 107 | 2233 |
| Helmon, Preston, Charleston, S. C. "Helmon's 'B' Sugar." (For Medicine) | 10,246 | Aug. 11 | 105 | 1529 |
| Henry Roever Co., Chester, Pa. "Roever's Blue-Naptha." (For Soap) | 9,961 | May 5 | 104 | 307 |
| Henschel & Co., A. C., Chicago, Ill. "Peak Fine." (For Cigars) | 9,857 | Mar. 31 | 103 | 1161 |
| Henschel & Co., A. C., Chicago, Ill. "Old Wheel." "For Cigars) | 9,884 | Apr. 14 | 103 | 1677 |
| Henschel & Co., A. C., Chicago, Ill. "Royal Victor." (For Cigars) | 9,885 | Apr. 14 | 103 | 1677 |
| Henschel & Co., A. C., Chicago, Ill. "El Refinado." (For Cigars) | 10,085 | June 9 | 104 | 1653 |
| Henschel Mfg. Co., C. B., Milwaukee, Wis. "German Puffs." (For Cigars) | 9,729 | Feb. 3 | 102 | 1047 |
| Henschel Mfg. Co., C. B., Milwaukee, Wis. "Sydney Smith." (For Cigars) | 9,769 | Feb. 24 | 102 | 1775 |
| Henschel Mfg. Co., C. B., Milwaukee, Wis. "The Reporter." (For Cigars) | 9,770 | Feb. 24 | 102 | 1775 |
| Henschel Mfg. Co., C. B., Milwaukee, Wis. "Franz Hals." (For Cigars) | 9,771 | Feb. 24 | 102 | 1775 |
| Henschel Mfg. Co., C. B., Milwaukee, Wis. "Carrie Mell." (For Cigars) | 9,874 | Apr. 7 | 103 | 1415 |
| Henschel Mfg. Co., C. B., Milwaukee, Wis. "John Richard Green." (For Cigars) | 9,886 | Apr. 14 | 103 | 1677 |
| Henschel Mfg. Co., C. B., Milwaukee, Wis. "Samuel Smiles." (For Cigars) | 9,887 | Apr. 14 | 103 | 1677 |
| Henschel Mfg. Co., C. B., Milwaukee, Wis. "Celia Thaxter." (For Cigars) | 9,888 | Apr. 14 | 103 | 1677 |
| Henschel Mfg. Co., C. B., Milwaukee, Wis. "Charles Darwin." (For Cigars) | 9,889 | Apr. 14 | 103 | 1677 |
| Henschel Mfg. Co., C. B., Milwaukee, Wis. "Edmond About." (For Cigars) | 10,336 | Sept. 8 | 106 | 539 |
| Henschel Mfg. Co., C. B., Milwaukee, Wis. "Lartius." (For Cigars) | 10,372 | Sept. 22 | 106 | 993 |
| Henschel Mfg. Co., C. B., Milwaukee, Wis. "Lord Jeffrey." (For Cigars) | 10,373 | Sept. 22 | 106 | 993 |
| Henschel Mfg. Co., C. B., Milwaukee, Wis. "Revelation." (For Cigars) | 10,430 | Oct. 20 | 106 | 2011 |
| Henschel Mfg. Co., C. B., Milwaukee, Wis. "El Genio." (For Cigars) | 10,431 | Oct. 20 | 106 | 2011 |
| Henschel M'f'g. Co., C. B., Milwaukee, Wis. "J. Gilbert Holland." (For Cigars) | 10,155 | June 30 | 104 | 2437 |
| Hentz & Co., Percy R., Philadelphia, Pa. "Scheetz's Celebrated Bitter Cordial." (For a Medicine) | 9,739 | Feb. 10 | 102 | 1291 |
| Hentz's Bitters Company, Philadelphia, Pa. "Hentz's Curative Bitters." (For a Medicinal Preparation) | 10,122 | June 23 | 104 | 2145 |
| Hercules Mfg. Co., Detroit, Mich. "Sopagus." (For Cleaning and Polishing Preparation) | 10,379 | Sept. 22 | 106 | 993 |
| Herlihy, James A., Chillicothe, Ohio. "Herlihy's Black-No-More." (For Cosmetic) | 10,050 | June 2 | 104 | 1389 |
| Herr, Alfred E., Chicago, Ill. "Norheumatism." (For Medicine) | 10,380 | Sept. 22 | 106 | 993 |
| Hightower, J. W., Dalton, Ga. "Antikolin." (For Medicine) | 10,635 | Dec. 29 | 107 | 2525 |

*Alphabetical list of registrants of labels*—Continued.

| Name, residence, and title. | No. | Date. | Official Gazette. Vol. | Page. |
|---|---|---|---|---|
| Hilfer, Louis, St. Louis, Mo. "Security Matches." (For Matches) | 9,840 | Mar. 24 | 103 | 885 |
| Hill, Henry A., Camden, N. J. "Enamel Pointed Pen." (For Pens) | 10,280 | Aug. 18 | 105 | 1777 |
| Hoffmann, Alfredo, Philadelphia, Pa. "English Punch." (For Punch or Liquor) | 10,166 | July 7 | 105 | 257 |
| Hoklas & Sons, Henry, Peoria, Ill. "Blome's 34." (For Cigars) | 10,153 | June 30 | 104 | 2437 |
| Hollister Drug Co., Madison, Wis. "Hollister's Rocky Mountain Tea Nuggets." (For Medicine) | 10,625 | Dec. 22 | 107 | 2233 |
| Holt, E. E., St. Louis, Mo. "Nervorina." (For a Medicine) | 9,844 | Mar. 31 | 103 | 1161 |
| Hopkins, William B., Louisville, Ky. "Lung Tonic." (For Medicine) | 10,550 | Dec. 1 | 107 | 1371 |
| Hornby, Nichols, Parker Co., Pipestone, Minn. "Calumet." (For Coffee) | 9,989 | May 12 | 104 | 575 |
| Hornby, Nichols, Parker Co., Pipestone, Minn. "Calumet." (For Tea) | 10,456 | Nov. 3 | 107 | 263 |
| Horovitz, Moses, New York, N. Y. "Ish-Allah." (For Coffee) | 10,270 | Aug. 18 | 105 | 1777 |
| Howard, Horace E., Los Angeles, Cal. "Howard's Freckle Cream." (For a Toilet Preparation) | 10,398 | Oct. 6 | 106 | 1499 |
| Howard, Joshua E., New York, N. Y. "Howard's Hygienic Healing Flesh Soap." (For Soap) | 10,240 | Aug. 11 | 105 | 1529 |
| Hoxie Chemical Co., Frankfort, Ky. "Hoxie." (For Toilet Cream) | 10,498 | Nov. 10 | 107 | 537 |
| Hume, Robert D., Wedderburn, Oreg., and San Francisco, Cal. "Hume Brand." (For Canned Salmon) | 10,527 | Nov. 24 | 107 | 1091 |
| Hume, Robert D., Wedderburn, Oreg., and San Francisco, Cal. "Winner Brand." (For Canned Salmon) | 10,528 | Nov. 24 | 107 | 1091 |
| Hurd, William S., Denver, Colo. "Lightning Tapioca." (For Tapioca) | 10,019 | May 19 | 104 | 849 |
| I. Brod & Co., Philadelphia, Pa. "Regal Shirt Waist." (For Shirt-Waists) | 10,338 | Sept. 15 | 106 | 761 |
| Ideal Cocoa and Chocolate Company, Lititz, Pa. "Ideal Breakfast Cocoa Absolutely Pure and Soluble." (For Cocoa) | 10,314 | Sept. 1 | 106 | 261 |
| Igleheart Brothers, Evansville, Ind. "Self-Rising Pan Cake Flour." (For Pancake-Flour) | 9,776 | Mar. 3 | 103 | 221 |
| Illfelder & Co., B., New York, N. Y. "Foxy Grandpa Transfer Pictures." (For Decalcomania-Transfers) | 10,022 | May 26 | 104 | 1117 |
| Illinois Sugar Refining Co., Chicago, Ill. "Cube Crystal Gloss Starch." (For Starch) | 9,724 | Feb. 3 | 102 | 1047 |
| Illinois Sugar Refining Co., Chicago, Ill. "Crescent Corn Syrup." (For Syrup) | 10,129 | June 23 | 104 | 2145 |
| Illinois Sugar Refining Co., Chicago, Ill. "Golden Grain Fancy Table Syrup." (For Syrup) | 10,130 | June 23 | 104 | 2145 |
| Illinois Sugar Refining Co., Chicago, Ill. "Rex Fancy Table Syrup." (For Syrup) | 10,131 | June 23 | 104 | 2145 |
| Illinois Sugar Refining Co., Chicago, Ill. "Eagle Corn Syrup." (For Syrup) | 10,355 | Sept. 15 | 106 | 761 |
| Illinois Sugar Refining Co., Chicago, Ill. "Golden Crown Corn Syrup." (For Syrup) | 10,356 | Sept. 15 | 106 | 761 |
| Illinois Sugar Refining Co., Chicago, Ill. "Solar Fancy Table Syrup." (For Syrup) | 10,357 | Sept. 15 | 106 | 761 |
| Illinois Sugar Refining Co., Chicago, Ill. "Universal Fancy Table Syrup." (For Syrup) | 10,358 | Sept. 15 | 106 | 761 |
| Illinois Sugar Refining Co., Chicago, Ill. "Climax Corn Syrup." (For Corn-Syrup) | 10,418 | Oct. 13 | 106 | 1773 |
| Illinois Sugar Refining Co., Chicago, Ill. "Climax Corn Syrup." (For Corn-Syrup) | 10,419 | Oct. 13 | 106 | 1773 |
| Illinois Sugar Refining Co., Chicago, Ill. "Big Sandy Sorghum." (For Sorghum) | 10,505 | Nov. 17 | 107 | 829 |
| Illinois Sugar Refining Co., Chicago, Ill. "Iando Fancy Sorghum." (For Sorghum) | 10,506 | Nov. 17 | 107 | 829 |
| Importers & Traders Biscuit Co., Niagara Falls, N. Y. "Edam." (For Cheese Wafers) | 9,793 | Mar. 10 | 103 | 423 |
| Importers & Traders Biscuit Co., Niagara Falls, N. Y. "Christie." (For Sugar Wafers) | 9,794 | Mar. 10 | 103 | 423 |
| Importers & Traders Biscuit Co., Niagara Falls, N. Y. "Christie." (For Fruit Sandwiches) | 9,795 | Mar. 10 | 103 | 423 |
| International Union of the United Brewery Workmen of America, Cincinnati, Ohio. "Union Made." (For Beer, Ale, and Porter) | 10,165 | July 7 | 105 | 257 |
| Ironsides Company, Columbus, Ohio. "Ironsides Boiler Scale Solvent Shield." (For Boiler-Scale Solvents) | 9,908 | Apr. 14 | 103 | 1677 |
| Ironsides Company, Columbus, Ohio. "Ironsides Abba Paints." (For Samples with Paint Applied) | 9,909 | Apr. 14 | 103 | 1677 |
| Ironsides Company, Columbus, Ohio. "Ironsides Abba Paint." (For Paints) | 9,910 | Apr. 14 | 103 | 1677 |
| Ironsides Company, Columbus, Ohio. "Ironsides Gear Shield." (For Lubricating Compounds) | 9,911 | Apr. 14 | 103 | 1677 |
| Ironsides Company, Columbus, Ohio. "Belt Shield." (For Compounds for Preserving Belts) | 9,912 | Apr. 14 | 103 | 1677 |
| Ironsides Company, Columbus, Ohio. "Ironsides Gear Shield." (For Lubricating Compounds for Gears) | 9,913 | Apr. 14 | 103 | 1677 |
| Ironsides Company, Columbus, Ohio. "Ironsides Fibre Rope Shield-Filler." (For Fiber-Rope Compounds) | 9,914 | Apr. 14 | 103 | 1677 |
| Ironsides Company, Columbus, Ohio. "Fibre Rope Shield." (For Lubricating Compounds for Fiber Rope) | 9,915 | Apr. 14 | 103 | 1677 |
| Ironsides Company, Columbus, Ohio. "Ironsides Fibre Rope Shield." (For Fiber-Rope Compounds) | 9,916 | Apr. 14 | 103 | 1677 |
| Ironsides Company, Columbus, Ohio. "Ironsides Fibre Rope Shield-Filler." (For Fiber-Rope Compounds) | 9,917 | Apr. 14 | 103 | 1677 |
| Ironsides Company, Columbus, Ohio. "Wire Rope Shield." (For Lubricating Compounds for Wire Rope) | 9,918 | Apr. 14 | 103 | 1677 |
| Ironsides Company, Columbus, Ohio. "Ironsides Wire Rope Shield." (For Wire-Rope-Lubricating Compounds) | 9,919 | Apr. 14 | 103 | 1677 |
| Ironsides Company, Columbus, Ohio. "Ironsides Wire Rope Shield-Filler." (For Wire-Rope Compounds) | 9,920 | Apr. 14 | 103 | 1677 |
| Ironsides Company, Columbus, Ohio. "Ironsides Wire Rope Shield-Filler." (For Lubricating and Preserving Compounds for Wire Ropes) | 9,921 | Apr. 14 | 103 | 167 |
| Ironton Tack Co., Ironton, Ohio. "Buckeye Carpet Tacks." (For Carpet-Tacks) | 9,824 | Mar. 24 | 103 | 885 |
| J. Clavel Wine & Cordial Co., New York, N. Y. "E. Poncelli & Cia." (For Vermouth) | 10,125 | June 23 | 104 | 2145 |
| J. A. Bokel Company of Baltimore City, Baltimore, Md. "Carvel." (For Whisky) | 10,576 | Dec. 8 | 107 | 1657 |
| Jacobs Pharmacy Company, Atlanta, Ga. "Fine Old Rabbit Foot." (For Whisky) | 9,683 | Jan. 20 | 102 | 619 |
| Jacobs Pharmacy Company, Atlanta, Ga. "Uncle Remus." (For Whisky) | 9,684 | Jan. 20 | 102 | 619 |
| Jacobs Pharmacy Company, Atlanta, Ga. "Hickory Nut Mountain." (For Whisky) | 9,685 | Jan. 20 | 102 | 619 |
| Jacobus Pharmacal Co., Chicago, Ill. "Boro-Methylate." (For Germicide) | 10,394 | Sept. 29 | 106 | 1235 |
| James McIntosh Company, Minneapolis, Minn. "Grape Vino." (For Beverages) | 10,083 | June 9 | 104 | 1653 |
| Jameson, Clyde B., Buffalo, N. Y. "National M. C. R. Brand." (For Roofing-Felt) | 9,980 | May 12 | 104 | 575 |
| Jedlička, Ed., New York, N. Y. "Ed. Jedlička." (For Phonograph-Records) | 10,027 | May 26 | 104 | 1117 |
| Jefferson, W. T., Chicago, Ill. "Veribest." (For Canned Meats) | 9,696 | Jan. 20 | 102 | 619 |
| Jenkins Bros., Brooklyn, N. Y. "J-B." (For Ammonia) | 10,541 | Nov. 24 | 107 | 1091 |
| Jenkins & Reynolds Company, Chicago, Ill. "Imperial." (For Fire-Clay) | 10,044 | May 26 | 104 | 1117 |
| Jensen, Hans, Chicago, Ill. "Bommerlunder Cherry Cordial." (For Cherry Cordial) | 10,242 | Aug. 11 | 105 | 152 |
| Jewett, Fred F., Elmira, N. Y. "Noako Pile Cure." (For a Medicine) | 9,675 | Jan. 6 | 102 | 225 |
| John Mackintosh, Ltd., Halifax, England. "Old Fashioned Treacle Toffee." (For Confectionery) | 9,900 | Apr. 14 | 103 | 1677 |
| Johnson, Albert A., Manchester, N. H. "Sheridan." (For Cigars) | 10,421 | Oct. 13 | 106 | 1773 |
| Johnson & Radcliffe, Cambridge, Md. "Castle Haven Brand Tomatoes." (For Canned Tomatoes) | 10,266 | Aug. 18 | 105 | 1777 |
| Johnston, H. M., Bedford City, Va. "Elk's Home Brand Tomatoes." (For Canned Tomatoes) | 10,267 | Aug. 18 | 105 | 1777 |
| Johnston & Larimer D. G. Co., Wichita, Kans. "Black Beauty." (For Hosiery) | 9,842 | Mar. 31 | 103 | 1161 |
| [illegible] David R., Jr., Dubuque, Iowa. "Little Tudor." (For Children's Outer Garments) | 10,116 | June 16 | 104 | 1893 |
| Jordan, Linwood F., Portland, Me. "U Need M Cream Co-Coa Nut Candy." (For a Confection) | 9,717 | Jan. 27 | 102 | 817 |
| Jordan, Linwood F., Portland, Me. "U-Chu-M Pepsin Gum." (For Confection-Gum) | 9,718 | Jan. 27 | 102 | 817 |
| Jordan, Linwood F., Portland, Me. "U Want M Old Crow Hand Picked." (For Peanuts) | 9,719 | Jan. 27 | 102 | 817 |
| Jordan, Linwood F., Portland, Me. "Hive-R-Honey Kiss Pure and Sweet." (For a Confection) | 9,986 | May 12 | 104 | 575 |
| Josephson Bros., New York, N. Y. "Grand Vizier." (For Cigars) | 10,177 | July 14 | 105 | 493 |
| Josey, W. J., Americus, Ga. "Union Health Shoes." (For Shoes) | 10,517 | Nov. 24 | 107 | 1091 |
| Josselyn, Elmer H., Baltimore, Md. "Fine Macaroons." (For Macaroons) | 10,417 | Oct. 13 | 106 | 1773 |

*Alphabetical list of registrants of labels*—Continued.

| Name, residence, and title. | No. | Date. | Official Gazette. Vol. | Page. |
|---|---|---|---|---|
| Jossi, Jacob, Watertown, Wis. "Jossi's Red Clover Brand Full Cream Cheese." (For Cheese) | 9,901 | Apr. 14 | 103 | 1677 |
| Julius, Christian H., Chicago, Ill. "Herbas." (For Medicine) | 10,500 | Nov. 10 | 107 | 537 |
| Jumel, Albert N., Baton Rouge, La. "Dan-Do-Line." (For Hair-Tonic) | 10,584 | Dec. 8 | 107 | 1657 |
| Kanaley, Edward, Yonkers, N. Y. "Top-Round Groceries." (For Groceries) | 9,982 | May 12 | 104 | 575 |
| Kanaley, Edward, Yonkers, N. Y. "Smack of Goodness." (For Groceries) | 10,175 | July 14 | 105 | 493 |
| Kauder, William, New York, N. Y. "Emile Zola." (For Cigars) | 9,736 | Feb. 10 | 102 | 1291 |
| Kaufman, D. J., Washington, D. C. "M. S. M." (For Clothing) | 9,977 | May 12 | 104 | 575 |
| Keith, Hanford C., Toledo, Ohio. "Dr. Keith's Liquor Cure." (For a Liquor Cure) | 10,343 | Sept. 15 | 106 | 761 |
| Keith, Hanford C., Toledo, Ohio. "Dr. Keith's Tobacco and Cigarette Cure." (For a Tobacco and Cigarette Cure) | 10,344 | Sept. 15 | 106 | 761 |
| Kellum Med. Co., Inc., Newport News, Va. "Kellum's Sure Cure." (For Medicine) | 10,428 | Oct. 20 | 106 | 2011 |
| Kendrick, Mary E., Morristown, N. J. "The 'Diva' Proprietary Medicines." (For Proprietary Medicines) | 10,410 | Oct. 13 | 106 | 1773 |
| Kerr, Harvey B., Grand Island, Nebr. "Kerr's Cough Drops." (For Cough-Drops) | 9,846 | Mar. 31 | 103 | 1161 |
| Kessler, Carl E., New York, N. Y. "No. 227,887 Rheumatic Mixture." (For Medicine) | 10,587 | Dec. 8 | 107 | 1657 |
| Keynon, W. D., Bosworth, Mo. "Keynon's Wonderful Spasmodic Colic Cure for Beasts." (For Medicine) | 10,200 | July 21 | 105 | 741 |
| Keystone Pearl Button Co., Erie, Pa. "Best American Make Pearl Buttons." (For Pearl Buttons) | 10,548 | Dec. 1 | 107 | 1371 |
| Kieckhefer, Ferdinand A. W., Milwaukee, Wis. "Kieckhefer's Certified Milk." (For Purified Milk) | 10,405 | Oct. 6 | 106 | 1499 |
| Kimalena Company, New York, N. Y. "Kimalena." (For Medicine) | 10,482 | Nov. 3 | 107 | 263 |
| Kindel Drug Co., Weatherford, Tex. "Kindel's Liver Regulator." (For Medicines) | 9,702 | Jan. 27 | 102 | 817 |
| Kinnicutt, Ambrose, Albany, N. Y. "Panama Ship-Canal Puzzle." (For a Puzzle-Box) | 10,071 | June 9 | 104 | 1653 |
| Klein, Paul C., Boston, Mass. "Klein's Ylang Ylang Cold Cream." (For Cold Cream) | 9,699 | Jan. 27 | 102 | 817 |
| Knapp, May J., Seattle, Wash., and S. E. Munger, Tipton, Mich. "Autocratia, Dr. J. D. Maxson's Remedies." (For Medicine) | 10,453 | Oct. 27 | 106 | 2285 |
| Knob, Marie S., Philadelphia, Pa. "A-Mon-Da-Mi-Na." (For a Cleaning Preparation for the Hands, &c.) | 9,812 | Mar. 17 | 103 | 655 |
| Kory & Sons, A., New Orleans, La. "Battle Ship." (For Clothing) | 10,591 | Dec. 15 | 107 | 1969 |
| Kraemer, Michael, Alexandria, Minn. "Geneva Natural Spring Water." (For Spring-Water) | 10,346 | Sept. 15 | 106 | 761 |
| Kramer, Charles, New York, N. Y. "Uneeda Cigarette." (For Cigarettes) | 9,943 | Apr. 28 | 103 | 2169 |
| Kurzban, Jacob, New York, N. Y. "Ish-Allah Coffee." (For Coffee) | 10,271 | Aug. 18 | 105 | 1777 |
| L. W. Leithhead Drug Co., Duluth, Minn. "Mederine Soap." (For Soap) | 10,473 | Nov. 3 | 107 | 263 |
| L. W. Leithhead Drug Co., Duluth, Minn. "Nervo-Tablets." (For Medicine for Nervous Diseases) | 10,474 | Nov. 3 | 107 | 263 |
| L. W. Leithhead Drug Co., Duluth, Minn. "Worm Chocolates for Children." (For Worm Medicine) | 10,475 | Nov. 3 | 107 | 263 |
| L. W. Leithhead Drug Co., Duluth, Minn. "Indian Oil." (For Medicinal Oil) | 10,476 | Nov. 3 | 107 | 263 |
| L. W. Leithhead Drug Co., Duluth, Minn. "Mederine Ointment." (For an Ointment) | 10,477 | Nov. 3 | 107 | 263 |
| L. W. Leithhead Drug Co., Duluth, Minn. "Nervo Tablets." (For Medicine) | 10,607 | Dec. 15 | 107 | 1969 |
| Laabs Brothers, Milwaukee, Wis. "The Monarch Brand Fancy Creamery Butter." (For Butter) | 9,754 | Feb. 17 | 102 | 1549 |
| Lafayette Cracker & Confectionery Co., Lafayette, Ind. "Sip Sap." (For Wafers) | 9,816 | Mar. 17 | 103 | 655 |
| Lake Helen Mfg. Co., Lake Helen, Fla. "Lake Helen Palm Comptie Starch." (For Starch) | 10,316 | Sept. 1 | 106 | 261 |
| Lake Odessa Malted Cereal Company, Limited, Lake Odessa, Mich. "Crescent Wheat Flakes." (For Cereal Food) | 10,049 | June 2 | 104 | 1389 |
| Lake Odessa Malted Cereal Company, Limited, Lake Odessa, Mich. "Vita-Foda." (For Cereal Food) | 10,114 | June 16 | 104 | 1893 |
| Lake Odessa Malted Cereal Company, Limited, Lake Odessa, Mich. "Crescent Cereal." (For Cereal Food) | 10,115 | June 16 | 104 | 1893 |
| Lambert, Moses H., New Haven, Conn. "The Gold Bond Hat." (For Hats) | 10,395 | Oct. 6 | 106 | 1499 |
| Landfield Bros. & Company, New York, N. Y. "Andrea Delsarto." (For Cigars) | 9,807 | Mar. 17 | 103 | 655 |
| Lange & Co., C., Chicago, Ill. "Piney Ridge Pure Rye." (For Whisky) | 9,990 | May 12 | 104 | 575 |
| Langham, J. W., Philadelphia, Pa. "Cough Chaser." (For Cough Medicine) | 10,605 | Dec. 15 | 107 | 1969 |
| Las Dos Naciones Cigar Co., Nogales, Ariz. Ter. "La Favorita." (For Cigars) | 10,461 | Nov. 3 | 107 | 263 |
| Las Dos Naciones Cigar Co., Nogales, Ariz. Ter. "La Favorita." (For Cigars) | 10,462 | Nov. 3 | 107 | 263 |
| Las Dos Naciones Cigar Co., Nogales, Ariz. Ter. "La Favorita." (For Cigars) | 10,463 | Nov. 3 | 107 | 263 |
| Las Dos Naciones Cigar Co., Nogales, Ariz. Ter. "La Favorita." (For Cigars) | 10,464 | Nov. 3 | 107 | 263 |
| Laughlin, B. F., Paris, Ky. "B. F. Laughlin's Cholera Cure." (For a Medicine) | 9,674 | Jan. 6 | 102 | 225 |
| Lawrence, L. D., Chicago, Ill. "The Calendar Broom." (For Brooms) | 9,732 | Feb. 10 | 102 | 1291 |
| Le Grande Mfg. Co., Chicago, Ill. "Ponquaee Wrinkle Remover." (For a Toilet Preparation) | 9,847 | Mar. 31 | 103 | 1161 |
| Le Momi & Co., J. G., Louisville, Ky. "Le Momi's Wonderful Healer." (For a Medicine) | 9,673 | Jan. 6 | 102 | 225 |
| Lee Broom & Duster Co., Davenport, Iowa, and Lincoln, Nebr. "Victor." (For Brooms) | 10,174 | July 7 | 105 | 257 |
| Lee Broom & Duster Co., Davenport, Iowa, and Lincoln, Nebr. "Janitor." (For Brooms) | 10,422 | Oct. 13 | 106 | 1773 |
| Leffingwell, Douglas, Minneapolis, Minn. "Thor Rye." (For Whisky) | 10,438 | Oct. 20 | 106 | 2011 |
| Lehn & Fink, New York, N. Y. "Sugar of Milk." (For Infant-Food) | 10,145 | June 30 | 104 | 2437 |
| Leigh, W. R., Middletown, N. Y. "Monarch Wall Size." (For Liquid Size) | 10,495 | Nov. 10 | 107 | 537 |
| Lemonette Co., Ltd., Garrett, Ind. "Lemonette." (For Substitute for Lemon-Juice) | 9,780 | Mar. 3 | 103 | 221 |
| Lesher, Whitman & Co., New York, N. Y. "Fast Bind—Fast Find." (For Velvets and Other Pile Fabrics) | 10,631 | Dec. 29 | 107 | 2525 |
| Levaur, Aaron, Philadelphia, Pa. "Love Blend." (For Tea and Coffee) | 9,931 | Apr. 21 | 103 | 1911 |
| Levinger Drug Co., Baker City, Oreg. "Money Back Pile Cure." (For Medicine) | 10,247 | Aug. 11 | 105 | 1529 |
| Libby, Edward L., New Bedford, Mass. "Mrs. Olive Saunders' Blood Purifying Compound." (For Medicine) | 10,340 | Sept. 15 | 106 | 761 |
| Liberty Soap Co., Chicago, Ill. "Our Baby's Bath Toilet Soap." (For Soap) | 9,810 | Mar. 17 | 103 | 655 |
| Liberty Soap Co., Chicago, Ill. "Baby's Bath Toilet Soap." (For Soap) | 9,811 | Mar. 17 | 103 | 655 |
| Lieber, Albert, Indianapolis, Ind. "Duesseldorfer Beer." (For Beer) | 9,686 | Jan. 20 | 102 | 619 |
| Liebling, S., New York, N. Y. "Dr. S. Liebling's 'Loyal' Tooth Powder." (For Tooth-Powder) | 10,609 | Dec. 15 | 107 | 1969 |
| Lilley, R. M., Sr. and R. M. Lilley, Jr., Columbus, Ohio. "Lilley's Pick Me Up. P. M. U." (For Medicine) | 10,014 | May 19 | 104 | 849 |
| Lindqvist & Co., B., Chicago, Ill. "Svensk Toddy Cognac." (For Cognac) | 9,875 | Apr. 7 | 103 | 1415 |
| Lion Dry Battery Co., New York, N. Y. "The Lion Dry Battery." (For Dry-Battery Cells) | 10,139 | June 30 | 104 | 2437 |
| Lisle, William, Milwaukee, Wis. "Scotty's Milwaukee Sweaters." (For Sweaters) | 9,940 | Apr. 28 | 103 | 2169 |
| Lissberger & Jacobs, New York, N. Y. "Alittle Whiskey." (For Whisky) | 10,493 | Nov. 10 | 107 | 537 |
| Lititz Little Bretzel Co., Lancaster, Pa. "Lititz Little Bretzels." (For Bretzels) | 10,455 | Nov. 3 | 107 | 263 |
| Littlejohn, John, Aurora, Ill. "The Hindoos Rheumatic Remedy." (For a Medicine) | 9,926 | Apr. 21 | 103 | 1911 |
| Lobravico, Giovanni B., New York, N. Y. "Il Re Dei Tabacchi." (For Tobacco) | 9,839 | Mar. 24 | 103 | 885 |
| Lockyer, Frank H., San Francisco, Cal. "Lockyer's Chili-Peka Seasoning." (For Seasonings) | 9,851 | Mar. 31 | 103 | 1161 |
| Loeb & Marks Co., New York, N. Y. "Black & Blue Clothes." (For Clothing) | 10,322 | Sept. 8 | 106 | 539 |
| Lopard & Co., N., New York, N. Y. "Queen Louise Face Massage Cream." (For Complexion-Cream) | 10,622 | Dec. 22 | 107 | 2233 |
| Lord, George A., Middleport, N. Y. "Miracle Yeast." (For Dry Hop Yeast) | 9,774 | Feb. 24 | 102 | 1775 |
| Lyons Foot Remedy Co., Detroit, Mich. "Dr. Lyons Footine Powders." (For Foot-Powders) | 10,003 | May 12 | 104 | 575 |
| Mackmiller, T. F., Iron River, Wis. "Pheasant Brand Splits." (For Mineral Water) | 9,853 | Mar. 31 | 103 | 1161 |
| Main Issue Cigar Co., Limited, Detroit, Mich. "Main Issue." (For Cigars) | 10,351 | Sept. 15 | 106 | 761 |
| Maizene Food Co., Ltd., Union City, Mich. "Mochoette." (For Cereal Coffee) | 9,930 | Apr. 21 | 103 | 1911 |

*Alphabetical list of registrants of labels*—Continued.

| Name, residence, and title. | No. | Date. | Official Gazette. Vol. | Page. |
|---|---|---|---|---|
| Maizene Food Co., Ltd., Union City, Mich. "Corene." (For Cereal Food) | 9,952 | Apr. 28 | 103 | 2169 |
| Mallory, Wallace D., Seattle, Wash. "Mallory's Scalp Treatment." (For Preparations for the Hair) | 9,972 | May 5 | 104 | 307 |
| Maloney, James C., Chicago, Ill. "Millionaire Punch." (For Punch) | 10,151 | June 30 | 104 | 2437 |
| Mandelbaum, Emanuel, Cleveland, Ohio. "Saharet." (For Cigars) | 10,084 | June 9 | 104 | 1653 |
| Mandeville, Paul. (See Blackmarr and Mandeville.) | | | | |
| Manhattan Laboratories, New York, N. Y. "Florida Water." (For Florida Water) | 10,634 | Dec. 29 | 107 | 2525 |
| Manusos, Peter J., Chicago, Ill. "Manusos High Grade Chocolates and Fruits." (For Confectionery and Fruits) | 10,639 | Dec. 29 | 107 | 2525 |
| Manusos, Peter J., Chicago, Ill. "Manusos Assorted Chocolates." (For Confectionery) | 10,640 | Dec. 29 | 107 | 2525 |
| Markovitz, R., Baltimore, Md. "Sister Cuba." (For Cigars) | 9,947 | Apr. 28 | 103 | 2169 |
| Marrion, Eugene, Barre, Vt. "Blue Ribbon." (For Cigars) | 10,558 | Dec. 1 | 107 | 1371 |
| Marshall, John, Fall River, Mass. "Wearbest." (For Hats) | 10,208 | Aug. 4 | 105 | 1257 |
| Marshall, John, Fall River, Mass. "Veribest." (For Hats) | 10,209 | Aug. 4 | 105 | 1257 |
| Marshall, Thomas P., Macon, Ga. "Marshall's Dead-Shot for Chills and Fever." (For a Medicine) | 9,878 | Apr. 7 | 103 | 1415 |
| Martin & Co., T., New York, N. Y. "Steamer Basket Card." (For Steamer-Baskets) | 9,953 | May 5 | 104 | 307 |
| Mavro Brothers, New York, N. Y. "The Skarabee." (For Cigarettes) | 10,193 | July 21 | 105 | 741 |
| Mayer's Sons, M. H., Chicago, Ill. "La Domo." (For Cigars) | 9,677 | Jan. 13 | 102 | 463 |
| McCart-Christy Co., Cleveland, Ohio. "Century Club." (For Cigars) | 9,927 | Apr. 21 | 103 | 1911 |
| McCleary, Wallin & Crouse, Amsterdam, N. Y. "Columbian Axminster." (For Axminster Carpets) | 10,487 | Nov. 10 | 107 | 537 |
| McGinnis & Kennedy, Youngstown, Ohio. "The Sphinx." (For Cigars) | 10,511 | Nov. 17 | 107 | 829 |
| McNamee, James, Amsterdam, N. Y. "McNamee's Sanitary Mesh-Knit Underwear." (For Underwear) | 10,007 | May 19 | 104 | 849 |
| Medlenka, C. P. B., Houston, Tex. "'Black Tiger' Bedbug Destroyer." (For Insecticides) | 9,785 | Mar. 10 | 103 | 423 |
| Meenehan, John F., Washington, D. C. "Holly Mount." (For Whisky) | 10,051 | June 2 | 104 | 1389 |
| Megrath, William A., New York, N. Y. "Rex." (For Lemon-Soda) | 9,861 | Mar. 31 | 103 | 1161 |
| Megrath, William A., New York, N. Y. "Rex." (For Lemon-Soda) | 9,862 | Mar. 31 | 103 | 1161 |
| Megrath, William A , New York, N. Y. "Rex." (For Sarsaparilla) | 9,863 | Mar. 31 | 103 | 1161 |
| Megrath, William A., New York, N. Y. "Rex." (For Sarsaparilla) | 9,864 | Mar. 31 | 103 | 1161 |
| Megrath, William A., New York, N. Y. "Rex." (For Ginger-Ale) | 9,865 | Mar. 31 | 103 | 1161 |
| Megrath, William A., New York, N. Y. "Rex." (For Ginger-Ale) | 9,866 | Mar. 31 | 103 | 1161 |
| Megrath, William A., New York, N. Y. "Carbonaris." (For Mineral Water) | 9,898 | Apr. 14 | 103 | 1677 |
| Mendel & Co., Jos., Columbus, Ohio. "Major Lark." (For Cigars) | 10,276 | Aug. 18 | 105 | 1777 |
| Merritt, Arthur, Boston, Mass. "Airedale Fabric." (For Dry Goods) | 10,547 | Dec. 1 | 107 | 1371 |
| Messina, Joseph, Apalachicola, Fla. "Pearl Brand." (For Canned Oysters) | 9,760 | Feb. 17 | 102 | 1549 |
| Metzler & Son, S. S., Alta Loma, Tex. "Seawall Brand." (For Preserved Figs) | 10,504 | Nov. 17 | 107 | 829 |
| Mexican Disinfectant Company, Carrollton, Ill. "Mexican Disinfectant, Deodorizer & Germicide." (For Disinfectant, Deodorizer, and Germicide) | 10,206 | July 28 | 105 | 971 |
| Michel, Gustav, New York, N. Y. "Michel's Celebrated Stomach Bitters." (For Stomach-Bitters) | 10,392 | Sept. 29 | 106 | 1235 |
| Milan, Salim, New York, N. Y. "Salim Milan Blue Bells." (For Cigarettes) | 10,460 | Nov. 3 | 107 | 263 |
| Miller, Benjamin B., Mount Ayr, Ind. "Benj. B. Miller's Cholera Remedy." (For a Medicine) | 9,802 | Mar. 17 | 103 | 655 |
| Miller, Henry F., Philadelphia, Pa. "Miller's X Rays Soap." (For Soap) | 10,054 | June 2 | 104 | 1389 |
| Moeller & Kolb, Chicago, Ill. "Union Buttons." (For Cigars) | 10,337 | Sept. 8 | 106 | 539 |
| Montanye & Co., W. H., New York, N. Y. "Demi Tasse Heavy Bodied Turkish Coffee." (For Coffee) | 10,334 | Sept. 8 | 106 | 539 |
| Morgan, William A., Eastman, Ga. "Cherokee Spring Water." (For Medicinal Water) | 9,779 | Mar. 3 | 103 | 221 |
| Morris & Son, David, Philadelphia, Pa. "Conqueror Brand Tomatoes." (For Canned Tomatoes) | 10,359 | Sept. 15 | 106 | 761 |
| Morrison, James W., Jr., New York, N. Y. "Maltopeptine Gum." (For Chewing-Gum) | 9,788 | Mar. 10 | 103 | 423 |
| Morrison, James W., Jr., New York, N. Y. "Maltopeptine Gum." (For Chewing-Gum) | 9,815 | Mar. 17 | 103 | 655 |
| Morse, Rodolph F., Providence, R. I. "Gilberts Self-Packing Gauge Glass Preserver." (For Gage Glass Preservers) | 10,006 | May 19 | 104 | 849 |
| Mountain Sage Malt Tonic Co., Denver, Colo. "Prof. Pozzoni's Mountain Sage Malt Tonic." (For Tonic) | 10,345 | Sept. 15 | 106 | 761 |
| Mountain Sage Malt Tonic Co., Denver, Colo. "Mountain Sage Malt Tonic." (For Malt Tonic) | 10,603 | Dec. 15 | 107 | 1969 |
| Mountain Sage Malt Tonic Co., Denver, Colo. "Mountain Sage Bitters." (For Medicine) | 10,624 | Dec. 22 | 107 | 2233 |
| Munger, S. Estella. (See Knapp and Munger.) | | | | |
| Munson, J. G., San Jose, Cal. "Munson's Ye-Ti-Va Remedy." (For Medicines) | 9,689 | Jan. 20 | 102 | 619 |
| Murphy, Daniel J., Lowell, Mass. "Murphy's Rheumatic Cure." (For Medicine) | 10,036 | May 26 | 104 | 1117 |
| Mutual Grocery Corporation, New York, N. Y. "Once—Always." (For Groceries) | 10,263 | Aug. 18 | 105 | 1777 |
| Mutual Grocery Corporation, New York, N. Y. "Mutual." (For Groceries) | 10,264 | Aug. 18 | 105 | 1777 |
| Myers, W. E., Leon, Iowa. "Cholene." (For a Medicine) | 9,722 | Feb. 3 | 102 | 1047 |
| N. Shure Co., Chicago, Ill. "12 Piece Secretary's Outfit Fine Writing Utensils." (For Writing Utensils) | 9,939 | Apr. 28 | 103 | 2169 |
| Napanoch Knife Co, Napanoch, N. Y. "Superior Pocket Cutlery." (For Pocket Cutlery) | 10,381 | Sept. 22 | 106 | 993 |
| Napoli, Carmine, Philadelphia, Pa. "Daisy Flower Extract." (For Medicine) | 9,965 | May 5 | 104 | 307 |
| National Grocery and Jobbers Supply Co., Saginaw, Mich. "Cremo." (For Baking-Powder) | 10,594 | Dec. 15 | 107 | 1969 |
| National Licorice Co., Brooklyn, N. Y. "Chinese Pigtails." (For Licorice) | 10,561 | Dec. 1 | 107 | 1371 |
| National Licorice Co., Brooklyn, N. Y. "Flexible Licorice Can You Braid My Pigtail?" (For Licorice) | 10,598 | Dec. 15 | 107 | 1969 |
| National Phonograph Co., Orange, N. J. "Edison Records Echo All Over the World." (For Phonograph-Records) | 10,136 | June 30 | 104 | 2437 |
| National Toilet Co., Paris, Tenn. "Satinola." (For a Toilet Preparation) | 10,534 | Nov. 24 | 107 | 1091 |
| National Toilet Co., Paris, Tenn. "Egyptian Cream." (For a Toilet Preparation) | 10,535 | Nov. 24 | 107 | 1091 |
| National Turkey-Lene Co., Washington, D. C. "Shell to Dish." (For a Preparation for Treating Turkeys) | 9,903 | Apr. 14 | 103 | 1677 |
| Neef Bros. Brewing Co., Denver, Colo. "Gold Belt." (For Beer) | 9,727 | Feb. 3 | 102 | 1047 |
| Neff, Martin, Redlion, Pa. "Smokers Protection." (For Cigars) | 10,255 | Aug. 11 | 105 | 1529 |
| Nestle, Henri, New York, N. Y. "Unsweetened Nectar Milk." (For Condensed Milk) | 10,219 | Aug. 4 | 105 | 1257 |
| Neumann, August W., New York, N. Y. "Electro Benzine Clearing Powder." (For Benzine Clearing Powder) | 9,904 | Apr. 14 | 103 | 1677 |
| New England Asthma Remedy Co., Dubuque, Iowa. "New England 'Breathe Easy' Asthma Cure." (For Medicine) | 9,787 | Mar. 10 | 103 | 423 |
| New England Bottling Co., Minneapolis, Minn. "Nerva." (For Non-Alcoholic Carbonated Beverages) | 10,108 | June 16 | 104 | 1893 |
| New Harlem Publishing Company, New York, N. Y. "New Harlem Past and Present." (For a Book) | 10,326 | Sept. 8 | 106 | 539 |
| Newman & Co., A., Philadelphia, Pa. "The Famous Queen of Comfort Shoemakers." (For Boots and Shoes) | 9,979 | May 12 | 104 | 575 |
| Non-Corrosible Tube Dry Powder Fire Extinguisher Co., Denver, Colo. "Non-Corrosible Tube Dry Powder Fire Extinguisher." (For Fire-Extinguishers) | 9,820 | Mar. 17 | 103 | 655 |
| Norfolk Flour Co., Norfolk, Va. "Premium." (For Flour) | 9,777 | Mar. 3 | 103 | 221 |
| Norman Lichty Mfg. Co., Des Moines, Iowa. "Krause's Phosphorets." (For Medicine) | 10,035 | May 26 | 104 | 1117 |
| North American Medical Specialty Mfg. Co., Chicago, Ill. "Asthma Cure." (For a Medicine) | 10,286 | Aug. 25 | 105 | 2055 |

*Alphabetical list of registrants of labels*—Continued.

| Name, residence, and title. | No. | Date. | Official Gazette. Vol. | Page. |
|---|---|---|---|---|
| Norton Paint & Hdw. Co., Toledo, Ohio. "Old English Varnishes." (For Varnish) | 10,260 | Aug. 18 | 105 | 1777 |
| Nowlin, Samuel T., Lynchburg, Va. "Ki Ki." (For Smoking-Tobacco) | 9,859 | Mar. 31 | 103 | 1161 |
| O'Connor, J. D., Washington, D. C. "Yellow Key Stone." (For Whisky) | 10,577 | Dec. 8 | 107 | 1657 |
| O'Connor, J. W., Boston, Mass. "Muskerry Club Old Rye Whiskey." (For Whisky) | 9,991 | May 12 | 104 | 575 |
| O'Donnell & Son, Peter V., New York, N. Y. "O'Donnell's Roach Meal." (For an Insecticide) | 10,444 | Oct. 27 | 106 | 2285 |
| Oak Grove, Flint, Mich. "Prosit." (For Table-Water) | 9,755 | Feb. 17 | 102 | 1549 |
| Ohio Match Company, Wadsworth, Ohio. "Bunker Hill." (For Matches) | 10,423 | Oct. 13 | 106 | 1773 |
| Old Colony Brewing Co., Fall River, Mass. "Old Colony Sparkling Lager." (For Ale) | 10,347 | Sept. 15 | 106 | 761 |
| Old Colony Brewing Co., Fall River, Mass. "Strengthene." (For Ale) | 10,348 | Sept. 15 | 106 | 761 |
| Old Colony Brewing Co., Fall River, Mass. "Old Colony Club Ale." (For Ale) | 10,349 | Sept. 15 | 106 | 761 |
| Olwin, A. H., Aberdeen, S. D. "Just Fun." (For Polish) | 10,090 | June 9 | 104 | 1653 |
| $100 Puzzle Co., New York, N. Y. "$100 Puzzle." (For Puzzles) | 10,045 | June 2 | 104 | 1389 |
| Ontario Biscuit Co., Buffalo, N. Y. "Ontario Malt Biscuits." (For Biscuits) | 10,617 | Dec. 22 | 107 | 2233 |
| Ontario Biscuit Co., Buffalo, N. Y. "Ontario Biscuit Co." (For Biscuits) | 10,618 | Dec. 22 | 107 | 2233 |
| Ontario Biscuit Co., Buffalo, N. Y. "Graham Biscuits." (For Biscuits) | 10,619 | Dec. 22 | 107 | 2233 |
| Oregon Packing Company, Portland, Oreg. "Umatilla." (For Canned Plums) | 9,849 | Mar. 31 | 103 | 1161 |
| Orleans County Canning Company, Barre Center, N. Y. "Silver Star Tomatoes." (For Tomatoes) | 9,818 | Mar. 17 | 103 | 655 |
| Orleans County Canning Company, Barre Center, N. Y. "Oak Orchard Apples." (For Apples) | 9,819 | Mar. 17 | 103 | 655 |
| Our Soap Co., Buffalo, N. Y. "Turpentine Soap." (For Soap) | 10,526 | Nov. 24 | 107 | 1091 |
| Ozonized Ox Marrow Co., Chicago, Ill. "Ozonized Ox Marrow." (For Hair-Tonic) | 10,037 | May 26 | 104 | 1117 |
| Padgett, A. P., Augusta, Ga. "Padgett's Seven Year Old Huntus Rye Whiskey." (For Whisky) | 10,295 | Aug. 25 | 105 | 2055 |
| Palmiter, Anson, Portland, Oreg. "Palmiter's Gall Liniment." (For Liniment) | 10,479 | Nov. 3 | 107 | 263 |
| Parker, Gilman L., Boston, Mass. "Colonial Tea." (For Tea) | 10,575 | Dec. 8 | 107 | 1657 |
| Paul Schmidt Co., Cleveland, Ohio. "Neustadter Vogelgesang." (For Wine) | 10,126 | June 23 | 104 | 2145 |
| Pearl Medical Co., Oneida, N. Y. "Pearl's Tincture of Life." (For Medicine) | 10,341 | Sept. 15 | 106 | 761 |
| Pearson, James J., New York, N. Y. "Mercerized Paint." (For Paints) | 9,743 | Feb. 10 | 102 | 1291 |
| Peerless Carbon Black Co., Pittsburg, Pa. "Peerless Black." (For Carbon-Blacks and Lamp-blacks) | 10,364 | Sept. 15 | 106 | 761 |
| Peerless Carbon Black Co., Pittsburg, Pa. "Peerless Black." (For Carbon-Blacks and Lamp-blacks) | 10,365 | Sept. 15 | 106 | 761 |
| Peerless Yeast Company, Limited, Union City, Mich. "Yeast Cream." (For Dry Hop Yeast) | 9,868 | Apr. 7 | 103 | 1415 |
| Pelmulder, Charles, Grant City, Iowa. "Grant Pear." (For Pear-Trees) | 10,546 | Dec. 1 | 107 | 1371 |
| Perry, George W., Chicago, Ill. "Purity." (For Wine) | 10,600 | Dec. 15 | 107 | 1969 |
| Perry, George W., Chicago, Ill. "Purity." (For Whisky) | 10,601 | Dec. 15 | 107 | 1969 |
| Peter, D., Vevey, Switzerland. "Peter's The Original Milk-Chocolate." (For a Food Preparation) | 9,671 | Jan. 6 | 102 | 225 |
| Peter, D., Vevey, Switzerland. "Peter's Swiss Milk-Chocolate." (For Milk-Chocolate) | 9,714 | Jan. 27 | 102 | 817 |
| Peter, D., Vevey, Switzerland. "Peter's The Original Milk-Chocolate." (For Milk-Chocolate) | 9,715 | Jan. 27 | 102 | 817 |
| Peter, D., Vevey, Switzerland. "Peter's The Original Milk-Chocolate." (For Milk-Chocolate) | 9,716 | Jan. 27 | 102 | 817 |
| Peter, D., Vevey, Switzerland. "Peter's Swiss Milk-Chocolate." (For Milk-Chocolate) | 9,725 | Feb. 3 | 102 | 1047 |
| Petersen, Marcus, Buffalo, N. Y. "Hamadala Chips." (For Medicinal Preparations or Confections) | 9,962 | May 5 | 104 | 307 |
| Pflugradt Co., Milwaukee, Wis. "Goldenrod." (For a Confection) | 9,987 | May 12 | 104 | 575 |
| Phenic Oil Company, Chicago, Ill. "Dr. Gordon's Cough Balsam." (For Medicine) | 9,751 | Feb. 17 | 102 | 1549 |
| Piana, Serafino, New York, N. Y. "Ferro China-Milano." (For Tonic) | 9,767 | Feb. 24 | 102 | 1775 |
| Plump, Herman F., Long Island City, N. Y. "Plump's Enterprise Fly Wrapper." (For Wrapping-Paper) | 10,632 | Dec. 29 | 107 | 2525 |
| Polycarpos, Cost, Dubuque, Iowa. "The Sun." (For Candy and Ice-Cream) | 9,692 | Jan. 20 | 102 | 619 |
| Postum Cereal Co., Limited, Battlecreek, Mich. "Post Sugar." (For Sugar) | 10,302 | Aug. 25 | 105 | 2055 |
| Postum Cereal Co., Limited, Battlecreek, Mich. "Post's Candy." (For Candy) | 10,303 | Aug. 25 | 105 | 2055 |
| Postum Cereal Co., Limited, Battlecreek, Mich. "Post's Chocolates." (For Chocolates) | 10,304 | Aug. 25 | 105 | 2055 |
| Poulsen, Alfred E., Battlecreek, Mich. "Cennum." (For a Medicine) | 9,740 | Feb 10 | 102 | 1291 |
| Poulsen, Alfred E., Battlecreek, Mich. "Duplex Oil." (For Machine-Oil) | 9,763 | Feb. 17 | 102 | 1549 |
| Powell & Co., Leopold, New York, N. Y. "Princess Louise Francoise." (For Cigars) | 10,580 | Dec. 8 | 107 | 1657 |
| Power & Stalter, Paterson, N. J. "P. & S. Rye." (For Whisky) | 9,728 | Feb. 3 | 102 | 1047 |
| Proctor, Hiram W. B., Acton, Mass. "Blaisdell's Wonderful Remedy." (For Medicine) | 10,342 | Sept. 15 | 106 | 761 |
| Queen City Star Polish Company, Bangor, Me. "Queen City Polish." (For Polish) | 10,091 | June 9 | 104 | 1653 |
| Quirin & Duhaime, Boston, Mass. "Royal Crown Maryland Pure Rye." (For Whisky) | 9,712 | Jan. 27 | 102 | 817 |
| R. Hardesty Mfg. Co., Denver, Colo. "Hardesty's Challenge." (For Flavoring Extracts) | 10,376 | Sept. 22 | 106 | 993 |
| R. Hardesty Mfg. Co., Denver, Colo. "Gold Label." (For Baking-Powder) | 10,377 | Sept. 22 | 106 | 993 |
| R. M. Rose Company, Atlanta, Ga. "Rose's Medicinal Malt Whiskey." (For Whisky) | 9,803 | Mar. 17 | 103 | 655 |
| Raab, Charles, New York, N. Y. "Blue Ribbon Tomato Catsup." (For Tomato-Catsup) | 9,796 | Mar. 10 | 103 | 423 |
| Raab, Charles, New York, N. Y. "Golden Crown Tomato Catsup." (For Tomato-Catsup) | 9,797 | Mar. 10 | 103 | 423 |
| Raab, Charles, New York, N. Y. "Excelsior Washing Fluid." (For Washing Fluid) | 9,798 | Mar. 10 | 103 | 423 |
| Ralston Purina Co., St. Louis, Mo. "Ralston Cereal Coffee." (For Cereal Coffee) | 9,791 | Mar. 10 | 103 | 423 |
| Ralston Purina Co., St. Louis, Mo. "Ralston Baking Powder." (For Baking-Powder) | 9,836 | Mar. 24 | 103 | 885 |
| Ralston Purina Co., St. Louis, Mo. "Ralston Crisps." (For Cereal Food) | 9,870 | Apr. 7 | 103 | 1415 |
| Ralston Purina Co., St. Louis, Mo. "Ralston Gelatine." (For Gelatin) | 9,959 | Apr. 28 | 103 | 2169 |
| Ralston Purina Co., St. Louis, Mo. "Purina Health Cocoa." (For Cocoa and Chocolate Products) | 10,239 | Aug. 11 | 105 | 1529 |
| Ralston Purina Co., St. Louis, Mo. "Purina Cream Graham." (For Cereal Products) | 10,265 | Aug. 18 | 105 | 1777 |
| Ralston Purina Co., St. Louis, Mo. "Ralston Purina Pan Kake Syrup." (For Syrups) | 10,301 | Aug. 25 | 105 | 2055 |
| Randolph Box and Label Co., Chicago, Ill. "Hair Tonic and Dandruff Cure." (For Hair-Tonic and Dandruff Cure) | 9,829 | Mar. 24 | 103 | 885 |
| Randolph Box and Label Co., Chicago, Ill. "Bay Rum." (For Bay-Rum) | 9,830 | Mar. 24 | 103 | 885 |
| Randolph Box and Label Co., Chicago, Ill. "Violet Ammonia." (For Toilet Water) | 9,831 | Mar. 24 | 103 | 885 |
| Randolph Box and Label Co., Chicago, Ill. "Violet Water." (For Toilet Water) | 9,832 | Mar. 24 | 103 | 885 |
| Randolph Box and Label Co., Chicago, Ill. "Florida Water." (For Toilet Water) | 9,833 | Mar. 24 | 103 | 885 |
| Randolph Box and Label Co., Chicago, Ill. "Floral Cologne." (For Toilet Water) | 9,834 | Mar. 24 | 103 | 885 |
| Raritan Mantle Co., New York, N. Y. "Trylyta." (For Incandescent Mantles) | 10,047 | June 2 | 104 | 1389 |
| Rawlinson, Harry J., York, Pa. "Creamola Furniture Polish." (For Furniture-Polish) | 10,470 | Nov. 3 | 107 | 263 |
| Ready Bits Corporation, New Haven, Conn. "Power." (For Cereal Food Products) | 9,958 | May 5 | 104 | 307 |
| Reed, Clara N., Kingston, N. Y. "C. N. R. Plaster Preventive of Car and Sea Sickness." (For Plasters) | 10,629 | Dec. 22 | 107 | 2233 |
| Reed, Joselin, and Z. P. Fletcher, New York, N. Y. "The So-Safe Intestinal Remedy." (For Medicine) | 9,966 | May 5 | 104 | 307 |
| Reily, Taylor & Co., New Orleans, La. "Opti-Mo-Jav." (For Coffee) | 10,080 | June 9 | 104 | 1653 |
| Reily, Taylor & Co., New Orleans, La. "Creole Comfort." (For Coffee) | 10,081 | June 9 | 104 | 1653 |
| Reily, Taylor & Co., New Orleans, La. "Luzianne." (For Coffee) | 10,082 | June 9 | 104 | 1653 |
| Rhu, A., Marion, Ohio. "Soma Osmatine." (For Bath-Fluid) | 10,515 | Nov. 17 | 107 | 829 |
| Rice, Wilhemina, Chicago, Ill. "The Illinois Boiler Cleaning Compound." (For Boiler-Cleaning Compound) | 10,262 | Aug. 18 | 105 | 1777 |
| Richter, Carl G. F., New York, N. Y. "Nomorepain." (For Medicine) | 9,752 | Feb. 17 | 102 | 1549 |
| Rifkin & Getzoff, New York, N. Y. "Ping Pong Wafers With a Spoon." (For Wafers) | 10,173 | July 7 | 105 | 257 |

*Alphabetical list of registrants of labels*—Continued.

| Name, residence, and title. | No. | Date. | Official Gazette. Vol. | Page. |
|---|---|---|---|---|
| Rigelhaupt, Ignatz J., Philadelphia, Pa. "Dr. Yaentzer's Cock-Sure Remedies Always Cure." (For Medicine) | 10,143 | June 30 | 104 | 2437 |
| Rippen, Herman, Perth Amboy, N. J. "Rippen's Mixture." (For Smoking and Chewing Tobacco) | 9,860 | Mar. 31 | 103 | 1161 |
| Rippen, Herman, Perth Amboy, N. J. "Tobacco Italiano." (For Smoking and Chewing Tobacco) | 9,995 | May 12 | 104 | 575 |
| Robert A. Johnston Co., Milwaukee, Wis. "Auto-Chocolates." (For Confectionery) | 10,571 | Dec. 8 | 107 | 1657 |
| Robinson, Edward P., New York, N. Y. "Dr. E. P. Robinson's Facial Soap." (For Soap) | 10,053 | June 2 | 104 | 1389 |
| Roche, John B., New York, N. Y. "Vino Vermouth." (For Liqueur) | 10,556 | Dec. 1 | 107 | 1371 |
| Rochon, Frank X. J., South Bend, Ind. "Napoleon the Great." (For Cigars) | 9,680 | Jan. 20 | 102 | 619 |
| Rodriguez Lopez Co., Philadelphia, Pa. "Rodriguez Lopez Co." (For Cigarettes) | 9,704 | Jan. 27 | 102 | 817 |
| Rogers, Amos, Ottawa, Canada. "Fruitatives." (For Medicine) | 10,538 | Nov. 24 | 107 | 1091 |
| Rolffes & Co., New York, N. Y. "Roland Braid Buttons." (For Buttons) | 10,323 | Sept. 8 | 106 | 539 |
| Roschen, William, New York, N. Y. "Brownie's One Night Roach Powder." (For an Insecticide) | 10,124 | June 23 | 104 | 2145 |
| Rosebud Perfume Company, Woodsboro, Md. "Prof. Smith's Hair Grower and Dandruff Cure." (For Medicine) | 10,409 | Oct. 13 | 106 | 1773 |
| Roses, Sons & Co., L., Baltimore, Md. "J. H. Small." (For Cigars) | 10,620 | Dec. 22 | 107 | 2233 |
| Rothschild, Meyers & Co., New York, N. Y. "The World's Fair—St. Louis—1904—Louisiana Purchase Exposition Cup." (For Cups) | 9,938 | Apr. 28 | 103 | 2169 |
| Rovane, John, Sr., Keokuk, Iowa. "Pes Paca." (For Foot-Powder) | 10,552 | Dec. 1 | 107 | 1371 |
| Rowe, A. C., New York, N. Y. "Atomized Electric Fire Powder." (For a Fire-Extinguisher) | 9,676 | Jan. 6 | 102 | 225 |
| Royal Queen Remedy Co., Binghamton, N. Y. "Pratt's Liver Root No. 8." (For Medicines) | 10,095 | June 16 | 104 | 1893 |
| Royal Queen Remedy Co., Binghamton, N. Y. "Pratt's White Mountain Spruce Pine Tolu and Honey." (For Medicine) | 10,141 | June 30 | 104 | 2437 |
| Royal Remedy & Extract Co., Dayton, Ohio. "Merry Bell." (For Chewing-Gum) | 10,241 | Aug. 11 | 105 | 1529 |
| Royalton Woolen Co., New York, N. Y. "Royalton Woolen Co." (For Uniform-Cloths) | 9,654 | Jan. 6 | 102 | 225 |
| Ruff, U. Gilbert, Philadelphia, Pa. "Ruff's Pimpl-Cura." (For a Medicinal Preparation) | 10,093 | June 16 | 104 | 1893 |
| Ruff, U. Gilbert, Philadelphia, Pa. "Mother Gilberts Baby Comfort." (For a Medicinal Preparation) | 10,094 | June 16 | 104 | 1893 |
| Runkel Brothers, New York, N. Y. "Knickerbocker Sweet Chocolate." (For Chocolate) | 10,389 | Sept. 29 | 106 | 1235 |
| S. Levyn, (Incorporated,) Buffalo, N. Y. "Millard Fillmore." (For Cigars) | 10,433 | Oct. 20 | 106 | 2011 |
| S. Levyn, (Incorporated,) Buffalo, N. Y. "Lord Varrick." (For Cigars) | 10,469 | Nov. 3 | 107 | 263 |
| S. Levyn, Buffalo, N. Y. "Colonel Bill." (For Cigars) | 10,559 | Dec. 1 | 107 | 1371 |
| S. Levyn, Buffalo, N. Y. "Plain People." (For Cigars) | 10,560 | Dec. 1 | 107 | 1371 |
| S. Rauh & Company, New York, N. Y. "Turnwell." (For Leather Belts) | 9,975 | May 12 | 104 | 575 |
| S. C. Herbst Importing Company, Milwaukee, Wis. "La Grata." (For Cigars) | 9,735 | Feb. 10 | 102 | 1291 |
| S. S. Pierce Co., Boston, Mass. "Anti-Nerve Kaughphy." (For Coffee Compound) | 9,957 | May 5 | 104 | 307 |
| Sable, Leon, New York, N. Y. "Well Made, Good Value." (For Caps) | 10,070 | June 9 | 104 | 1653 |
| Saginaw Lime & Lumber Company, Saginaw, Ala. "White Rose." (For Lime) | 10,630 | Dec. 22 | 107 | 2233 |
| Salt Lake City Brewing Co., Salt Lake City, Utah. "Our American Beauty." (For Beer) | 10,420 | Oct. 13 | 106 | 1773 |
| Sand Springs Bottling Works, Abilene, Kans. "Sand Springs." (For Orange-Cider and Bottled Water) | 10,104 | June 16 | 104 | 1893 |
| Sanitary Chemical Co., Allegheny, Pa. "O-Mie." (For Wall-Paper and Fresco Cleansers) | 9,762 | Feb. 17 | 102 | 1549 |
| Sanitary Chemical Co., Allegheny, Pa. "Smoky City Cleaner." (For a Cleaning Preparation) | 9,813 | Mar. 17 | 103 | 655 |
| Sanitas Condensed Milk Co., Seattle, Wash. "Sanitas Puritas." (For Milk for Infants and Invalids) | 10,319 | Sept. 1 | 106 | 261 |
| Sattler, Gustav, New York, N. Y. "Argon Lotion." (For Toilet Preparation) | 10,212 | Aug. 4 | 105 | 1257 |
| Sauvion, Isidore, Cognac, France. "Hannasse & Fils Cognac." (For Cognac Brandies) | 9,713 | Jan. 27 | 102 | 817 |
| Savage, Elizabeth, New York, N. Y. "Nara-Mattah." (For Hair-Tonic) | 9,723 | Feb. 3 | 102 | 1047 |
| Sawyer Crystal Blue Co., Boston, Mass. "Sawyer's Crystal Blue." (For Washing-Blue) | 10,566 | Dec. 1 | 107 | 1371 |
| Sawyer Crystal Blue Co., Boston, Mass. "Sawyer's Crystal Blue." (For Washing-Blue) | 10,567 | Dec. 1 | 107 | 1371 |
| Schaffer, Dan, Sandusky, Ohio. "Schaffer's Wonder Full Liniment." (For Liniment) | 9,907 | Apr. 14 | 103 | 167 |
| Schein, Samuel B., St. Paul, Minn. "Simon's Aromatic Stomach Bitters." (For Stomach-Bitters) | 9,845 | Mar. 31 | 103 | 1161 |
| Schlotterbeck & Foss Company, Portland, Me. "Harrington's Strictly Pure Extracts, Essences and Preparations." (For Extracts, Essences, and Preparations) | 10,017 | May 19 | 104 | 849 |
| Schmidt, Bernard, Harrisburg, Pa. "Schmidt Bread." (For Bread) | 10,237 | Aug. 11 | 105 | 1529 |
| Schmidt & Co., New York, N. Y. "Wranglers." (For Cigars) | 9,655 | Jan. 6 | 102 | 225 |
| Schmidt & Co., New York, N. Y. "Star Coin." (For Cigars) | 9,656 | Jan. 6 | 102 | 225 |
| Schmidt & Co., New York, N. Y. "Vista Orada." (For Cigars) | 9,657 | Jan. 6 | 102 | 225 |
| Schmidt & Co., New York, N. Y. "Republica Emblematica." (For Cigars) | 9,658 | Jan. 6 | 102 | 225 |
| Schmidt & Co., New York, N. Y. "Arizola." (For Cigars) | 9,659 | Jan. 6 | 102 | 225 |
| Schmidt & Co., New York, N. Y. "Club." (For Cigars) | 9,660 | Jan. 6 | 102 | 225 |
| Schmidt & Co., New York, N. Y. "Photoco." (For Cigars) | 9,661 | Jan. 6 | 102 | 225 |
| Schmidt & Co., New York, N. Y. "Maloney's Pilgrim." (For Cigars) | 9,662 | Jan. 6 | 102 | 225 |
| Schmidt & Co., New York, N. Y. "Black Duck." (For Cigars) | 9,663 | Jan. 6 | 102 | 225 |
| Schmidt & Co., New York, N. Y. "Vistas." (For Cigars) | 9,664 | Jan. 6 | 102 | 225 |
| Schmidt & Co., New York, N. Y. "Miss White." (For Cigars) | 9,665 | Jan. 6 | 102 | 225 |
| Schmidt & Co., New York, N. Y. "Lady Alice." (For Cigars) | 9,666 | Jan. 6 | 102 | 225 |
| Schmidt & Co., New York, N. Y. "Miss Liberty Glories." (For Cigars) | 9,667 | Jan. 6 | 102 | 225 |
| Schmidt & Co., New York, N. Y. "Tampa Trade." (For Cigars) | 9,678 | Jan. 13 | 102 | 463 |
| Schmidt & Co., New York, N. Y. "White House." (For Cigars) | 9,681 | Jan. 20 | 102 | 619 |
| Schmidt & Co., New York, N. Y. "Vigoralis." (For Cigars) | 9,682 | Jan. 20 | 102 | 619 |
| Schmidt & Co., New York, N. Y. "Vista Grande." (For Cigars) | 9,705 | Jan. 27 | 102 | 817 |
| Schmidt & Co., New York, N. Y. "La Isla." (For Cigars) | 9,706 | Jan. 27 | 102 | 817 |
| Schmidt & Co., New York, N. Y. "The Harvest." (For Cigars) | 9,707 | Jan. 27 | 102 | 817 |
| Schmidt & Co., New York, N. Y. "John P. Altgeld." (For Cigars) | 9,708 | Jan. 27 | 102 | 817 |
| Schmidt & Co., New York, N. Y. "Milwaukee Leader." (For Cigars) | 9,709 | Jan. 27 | 102 | 817 |
| Schmidt & Co., New York, N. Y. "I O A." (For Cigars) | 9,710 | Jan. 27 | 102 | 817 |
| Schmidt & Co., New York, N. Y. "Eclipse." (For Cigars) | 9,711 | Jan. 27 | 102 | 817 |
| Schmidt & Co., New York, N. Y. "El Sol Vencedor." (For Cigars) | 9,730 | Feb. 3 | 102 | 1047 |
| Schmidt & Co., New York, N. Y. "Merry Christmas." (For Cigars) | 9,731 | Feb. 3 | 102 | 1047 |
| Schmidt & Co., New York, N. Y. "J. Sterling Morton." (For Cigars) | 9,784 | Mar. 3 | 103 | 221 |
| Schmidt & Co., New York, N. Y. "El Provost." (For Cigars) | 9,891 | Apr. 14 | 103 | 1677 |
| Schmidt & Co., New York, N. Y. "Vista De Paleta." (For Cigars) | 9,892 | Apr. 14 | 103 | 1677 |
| Schmidt & Co., New York, N. Y. "Merchants' Court." (For Cigars) | 9,944 | Apr. 28 | 103 | 2169 |
| Schmidt & Co., New York, N. Y. "Avila." (For Cigars) | 9,945 | Apr. 28 | 103 | 2169 |
| Schmidt & Co., New York, N. Y. "Cuban Bloom." (For Cigars) | 9,946 | Apr. 28 | 103 | 2169 |
| Schmidt & Co., New York, N. Y. "Sana-Dermal Talcum." (For Talcum Powder) | 10,002 | May 12 | 104 | 575 |
| Schmidt & Co., New York, N. Y. "American Federation." (For Cigars) | 10,029 | May 26 | 104 | 1117 |
| Schmidt & Co., New York, N. Y. "John Mitchell." (For Cigars) | 10,088 | June 9 | 104 | 1653 |
| Schmidt & Co., New York, N. Y. "Empress Grand." (For Cigars) | 10,154 | June 30 | 104 | 2437 |
| Schmidt & Co., New York, N. Y. "Chief Swenie." (For Cigars) | 10,168 | July 7 | 105 | 257 |
| Schmidt & Co., New York, N. Y. "The Speaker." (For Cigars) | 10,190 | July 21 | 105 | 741 |

*Alphabetical list of registrants of labels*—Continued.

| Name, residence, and title. | No. | Date. | Official Gazette. Vol. | Page. |
|---|---|---|---|---|
| Schmidt & Co., New York, N. Y. "Prime Crop." (For Cigars) | 10,191 | July 21 | 105 | 741 |
| Schmidt & Co., New York, N. Y. "El Speako." (For Cigars) | 10,234 | Aug. 4 | 105 | 1257 |
| Schmidt & Co., New York, N. Y. "Black Seal." (For Cigars) | 10,235 | Aug. 4 | 105 | 1257 |
| Schmidt & Co., New York, N. Y. "Sensation." (For Cigars) | 10,252 | Aug. 11 | 105 | 1529 |
| Schmidt & Co., New York, N. Y. "Nevadoe." (For Cigars) | 10,277 | Aug. 18 | 105 | 1777 |
| Schmidt & Co., New York, N. Y. "El Trado." (For Cigars) | 10,278 | Aug. 18 | 105 | 1777 |
| Schmidt & Co., New York, N. Y. "La Corrida de Toros." (For Cigars) | 10,279 | Aug. 18 | 105 | 1777 |
| Schmidt & Co., New York, N. Y. "The Grafter." (For Cigars) | 10,353 | Sept. 15 | 106 | 761 |
| Schmidt & Co., New York, N. Y. "Stock Cigar." (For Cigars) | 10,354 | Sept. 15 | 106 | 761 |
| Schmidt & Co., New York, N. Y. "Big Game." (For Cigars) | 10,382 | Sept. 29 | 106 | 1235 |
| Schmidt & Co., New York, N. Y. "High Altitude." (For Cigars) | 10,383 | Sept. 29 | 106 | 1235 |
| Schmidt & Co., New York, N. Y. "Cuban Clippings." (For Cigars) | 10,384 | Sept. 29 | 106 | 1235 |
| Schmidt & Co., New York, N. Y. "Infinito." (For Cigars) | 10,385 | Sept. 29 | 106 | 1235 |
| Schmidt & Co., New York, N. Y. "J. B. Eads." (For Cigars) | 10,386 | Sept. 29 | 106 | 1235 |
| Schmidt & Co., New York, N. Y. "Bankers Union." (For Cigars) | 10,434 | Oct. 20 | 106 | 2011 |
| Schmidt & Co., New York, N. Y. "Bannerette." (For Cigars) | 10,465 | Nov. 3 | 107 | 263 |
| Schmidt & Co., New York, N. Y. "Donna Sancha." (For Cigars) | 10,466 | Nov. 3 | 107 | 263 |
| Schmidt & Co., New York, N. Y. "Queen's Crown." (For Cigars) | 10,467 | Nov. 3 | 107 | 263 |
| Schmidt & Co., New York, N. Y. "Villena." (For Cigars) | 10,468 | Nov. 3 | 107 | 263 |
| Schmidt & Co., New York, N. Y. "Crema Vuelta." (For Cigars) | 10,489 | Nov. 10 | 107 | 537 |
| Schmidt & Co., New York, N. Y. "Red Dandies." (For Cigars) | 10,520 | Nov. 24 | 107 | 1091 |
| Schmidt & Co., New York, N. Y. "Cubadura." (For Cigars) | 10,521 | Nov. 24 | 107 | 1091 |
| Schmidt & Co., New York, N. Y. "Please." (For Cigars) | 10,522 | Nov. 24 | 107 | 1091 |
| Schmidt & Co., New York, N. Y. "Merry Christmas and Happy New Year." (For Cigars) | 10,523 | Nov. 24 | 107 | 1091 |
| Schmidt & Co., New York, N. Y. "Medalla de Prima Clase." (For Cigars) | 10,524 | Nov. 24 | 107 | 1091 |
| Schmidt & Co., New York, N. Y. "Bear Facts." (For Cigars) | 10,525 | Nov. 24 | 107 | 1091 |
| Scholey, H. J., St. Paul, Minn. "Thomas Nelson." (For Cigars) | 9,890 | Apr. 14 | 103 | 1677 |
| Scholey, H. T., St. Paul, Minn. "Oberto." (For Cigars) | 10,519 | Nov. 24 | 107 | 1091 |
| Schultz, Carl H., New York, N. Y. "Lithia Selters." (For Water) | 10,163 | July 7 | 105 | 257 |
| Schumacher, Paul J. P., New York, N. Y. "Preservola." (For Hair-Tonic) | 10,499 | Nov. 10 | 107 | 537 |
| Schwartz Bros., Baltimore, Md. "Old Napley." (For Whisky) | 10,402 | Oct. 6 | 106 | 1499 |
| Schwartz Bros., Baltimore, Md. "Cap Sheaf." (For Whisky) | 10,557 | Dec. 1 | 107 | 1371 |
| Schwarz & Co., E. M., New York, N. Y. "Lord Derby." (For Cigars) | 10,578 | Dec. 8 | 107 | 1657 |
| Schweickhardt, R. & F., St. Louis, Mo. "Forest Park Bouquet Perfume." (For Perfumery) | 10,399 | Oct. 6 | 106 | 1499 |
| Scott, Arthur H., Philadelphia, Pa. "Balsam Sanitissue." (For Toilet-Paper) | 10,117 | June 16 | 104 | 1893 |
| Scott Paper Co., Philadelphia, Pa. "Phynest." (For Toilet-Paper) | 10,118 | June 16 | 104 | 1893 |
| Scott Paper Co., Philadelphia, Pa. "Tishu." (For Toilet-Paper) | 10,119 | June 16 | 104 | 1893 |
| Scott Paper Co., Philadelphia, Pa. "Jewt." (For Toilet-Paper) | 10,188 | July 21 | 105 | 741 |
| Scott Paper Co., Philadelphia, Pa. "Welmaid." (For Toilet-Paper) | 10,537 | Nov. 24 | 107 | 1091 |
| Seabury & Johnson, New York, N. Y. "Yankee Baby Powder." (For Toilet Powder) | 10,182 | July 14 | 105 | 493 |
| Seeman Brothers, New York, N. Y. "Foxhall." (For Cigars) | 10,253 | Aug. 11 | 105 | 1529 |
| Seeman Brothers, New York, N. Y. "New Wonder." (For Cigars) | 10,254 | Aug. 11 | 105 | 1529 |
| Senilet Drug Co., Baltimore, Md. "Senilets." (For a Medicine) | 9,924 | Apr. 21 | 103 | 1911 |
| Seyms & Company, Hartford, Conn. "Blue Label Coffee." (For Coffee) | 9,773 | Feb. 24 | 102 | 1775 |
| Shanahan & Mitcheli, Vinita, Ind. Ter. "Vinita Artesian Water, Chief Mineral Water of the Indian Territory." (For Artesian Water) | 10,296 | Aug. 25 | 105 | 2055 |
| Shannon, George H., Cambridge, N. Y. "Dr. Shannon's Dent-Aseptic Tooth Paste." (For Tooth-Paste) | 9,905 | Apr. 14 | 103 | 1677 |
| Shepard, Jas. C., Wilmington, N. C. "Shepard's Lung Food." (For Medicine) | 10,626 | Dec. 22 | 107 | 2233 |
| Shouse, N. L., Kansas City, Mo. "Valentine's Benz-ol Capsules." (For Medicine) | 10,160 | July 7 | 105 | 257 |
| Sir Joseph Causton & Sons, Ltd., London, England. "Pasteurized Milk." (For a Preparation of Milk) | 10,533 | Nov. 24 | 107 | 1091 |
| Skimin Chemical Compound Co., Kansas City, Mo. "Antiexplo." (For Non-Explosive Compound) | 10,366 | Sept. 15 | 106 | 761 |
| Smith, Conrad G., Cumberland, Md. "The C. G. Smith Tender Feet Shoes." (For Shoes) | 10,236 | Aug. 11 | 105 | 1529 |
| Smith, Ed. M., Chicago, Ill. "Smith's Trust Puzzle." (For Puzzles) | 9,974 | May 12 | 104 | 575 |
| Smith, J. B., Forksville, Pa. "Smith's Hair Tonic." (For Hair-Tonic) | 10,038 | May 26 | 104 | 1117 |
| Smith, Julius W., St. Paul, Minn. "Doctor Twig's Remedy for Catarrh." (For Medicine) | 9,877 | Apr. 7 | 103 | 1415 |
| Smith, Lichty & Hillman Company, Waterloo, Iowa. "Schollian's No. 1." (For Cigars) | 10,435 | Oct. 20 | 106 | 2011 |
| Smith, Robert D., Elmwood, Conn. "Razor Strop Dressing Powder." (For Dressing for Razor-Strops) | 10,041 | May 26 | 104 | 1117 |
| Smith & Sons, T. L., Boston, Mass. "Golden Horn." (For Whisky) | 10,458 | Nov. 3 | 107 | 263 |
| Smith, Thomas E., Mobile, Ala. "Smith's White Mixture." (For Medicine) | 9,967 | May 5 | 104 | 307 |
| Smith, William K., Tiffin, Ohio. "Smith's Wonder Worker." (For a Medicine) | 10,627 | Dec. 22 | 107 | 2233 |
| Somers & Co., J. C., Statesville, N. C. "Catawba Chief Corn Whiskey." (For Whisky) | 9,782 | Mar. 3 | 103 | 221 |
| Sonnenschein, Leopold, Chicago, Ill. "Sunshine Old Reserve Rye." (For Whisky) | 9,992 | May 12 | 104 | 575 |
| Soper & Bros., Samuel A., Baltimore, Md. "Honest Tom." (For Cigars) | 10,178 | July 14 | 105 | 493 |
| Southern Oil and Chemical Co., Mobile, Ala. "Pyrollin." (For Disinfectant and Cleanser) | 10,401 | Oct. 6 | 106 | 1499 |
| Spurgin Manufacturing Co., Chicago, Ill. "Spurgin's Double-Quick Index." (For an Index) | 10,325 | Sept. 8 | 106 | 539 |
| Standard Horse Nail Co., New Brighton, Pa. "Bright Shear Blue." (For Horse-Nails) | 10,281 | Aug. 18 | 105 | 1777 |
| Standard Mfg. Co., Atlanta, Ga. "Union." (For Wearing-Apparel) | 10,133 | June 30 | 104 | 2437 |
| Stauter, John H., Springfield, Ohio. "Vigor Vito Capsules." (For Medicines) | 9,749 | Feb. 17 | 102 | 1549 |
| Stecher Litho. Co., Rochester, N. Y. "El Caribe." (For Cigarettes, Cigars, and Cheroots) | 9,994 | May 12 | 104 | 575 |
| Stecher Litho. Co., Rochester, N. Y. "Live Oak." (For Prunes) | 10,448 | Oct. 27 | 106 | 2285 |
| Stecher Litho. Co., Rochester, N. Y. "Pharaoh." (For Canned Goods) | 10,488 | Nov. 10 | 107 | 537 |
| Steiner, Jean N., Chicago, Ill. "Crystal Chimney." (For an Inhaler) | 9,698 | Jan. 27 | 102 | 817 |
| Stephens, M. C., Atlanta, Ga. "For Your Liver's Sake Podophylets Take." (For Medicine) | 10,012 | May 19 | 104 | 849 |
| Stern & Co., Louis, Chicago, Ill. "Protection Pure Rye Whiskey." (For Whisky) | 9,783 | Mar. 3 | 103 | 221 |
| Stern & Co., Louis, Chicago, Ill. "Medicated Charcoal Old Bourbon Whiskey." (For Whisky) | 10,294 | Aug. 25 | 105 | 2055 |
| Stern, Lionel M., Cleveland, Ohio. "Graphoid." (For Paint, &c.) | 9,954 | May 5 | 104 | 307 |
| Stiles, J. H., York, Pa. "Grunilda." (For Cigars) | 10,179 | July 14 | 105 | 493 |
| Stolze, John, Reading, Pa. "Dr. John Stolze's Dinner Powder." (For Medicine) | 10,328 | Sept. 8 | 106 | 539 |
| Stonebraker, Charles H. (See Stonebraker, Joseph R. and C. H.) | | | | |
| Stonebraker, Joseph R. and C. H., Baltimore, Md. "Swallow Whiskey." (For Whisky) | 10,030 | May 26 | 104 | 1117 |
| Strader, Wilson P., Lexington, Ky. "Blue Lick Natural Mineral Water." (For Mineral Water) | 9,949 | Apr. 28 | 103 | 2169 |
| Stroudsburg Brewing Company, Stroudsburg, Pa. "Old Stock Beer." (For Lager-Beer) | 9,854 | Mar. 31 | 103 | 1161 |
| Stroudsburg Brewing Company, Stroudsburg, Pa. "Cool Temperature." (For Lager-Beer) | 9,855 | Mar. 31 | 103 | 1161 |
| Stutz, Charles, New York, N. Y. "Virginius Rufus." (For Cigars) | 9,668 | Jan. 6 | 102 | 225 |
| Sughrue & Johnson, Hillsboro, N. H. "Sughrue & Johnson U. C. T." (For Cigars) | 9,955 | May 5 | 104 | 307 |
| Sunoleum Mfg. Co., Cleveland, Ohio. "Sunoleum." (For Washing Compound) | 10,443 | Oct. 20 | 106 | 2011 |
| Sunshine Polish Co., Philadelphia, Pa. "Sunshine Metal Polish." (For Metal-Polish) | 10,021 | May 19 | 104 | 849 |
| Supplee Hardware Co., Philadelphia, Pa. "Girard." (For Lawn-Mowers) | 10,048 | June 2 | 104 | 1389 |
| Swift Specific Company, Atlanta, Ga. "Swift's Specific." (For Medicine) | 10,034 | May 26 | 104 | 1117 |
| Swineford Arsenic Lithia Water Company, Richmond, Va. "Lion Lithia." (For Lithia Water) | 10,217 | Aug. 4 | 105 | 1257 |
| Sykes, W. W., Minneapolis, Minn. "Cleanamel." (For Chemical Compound) | 10,545 | Nov. 24 | 107 | 1091 |
| T. E. Roberts Tobo. Co., Chase City, Va. "Old Belt." (For Smoking-Tobacco) | 10,374 | Sept. 22 | 106 | 993 |

*Alphabetical list of registrants of labels*—Continued.

| Name, residence, and title. | No. | Date. | Official Gazette. Vol. | Page. |
|---|---|---|---|---|
| T. E. Roberts Tobo. Co., Chase City, Va. "Red Warrior." (For Smoking-Tobacco) | 10,375 | Sept. 22 | 106 | 993 |
| T. F. Donahue Co., Providence, R. I. "Moor Rye Whiskey." (For Whisky) | 10,457 | Nov. 3 | 107 | 263 |
| Tabb, Ira F., Mount Sterling, Ky. "Kentucky Leaf." (For Tobacco) | 10,459 | Nov. 3 | 107 | 263 |
| Tallmadge, W. H., New York, N. Y. "Eagle Rye Whiskey." (For Whisky) | 10,451 | Oct. 27 | 106 | 2285 |
| Tetlow Manufacturing Co., Philadelphia, Pa. "Tetlow's Favorite Bath Powder." (For Bath-Powder) | 10,497 | Nov. 10 | 107 | 537 |
| Thayer, Henry J., Boston, Mass. "Indian Head Cape Cod Cranberries." (For Cranberries) | 10,268 | Aug. 18 | 105 | 1777 |
| Theo. Poehler Mercantile Co., Emporia, Kans. "Vim." (For a Food Preparation) | 9,817 | Mar. 17 | 103 | 655 |
| Thierwechter, George, and C. C. Zimmerman, Oakharbor, Ohio. "White Oak High Patent Flour." (For Flour) | 9,959 | May 5 | 104 | 307 |
| Thurston, Frank W., Chicago, Ill. "Thurston's Adamantine Special Pattern Makers' Shellac." (For Shellac) | 9,672 | Jan. 6 | 102 | 225 |
| Thyrazine Chemical Company, Paris, Tex. "Thyrazine." (For a Medicine) | 9,701 | Jan. 27 | 102 | 817 |
| Tonini & Son, A., Grandview, Ind. "Tonini's Brilliant Stove Polish." (For Stove-Polish) | 9,775 | Feb. 24 | 102 | 1775 |
| Topsy Puzzle Company, Marshall, Mich. "Topsy Puzzle." (For Puzzles) | 10,486 | Nov. 10 | 107 | 537 |
| Tri-Avena Meat Co., Lim., Kalamazoo, Mich. "Tri-Avena." (For Prepared Food) | 9,733 | Feb. 10 | 102 | 1291 |
| Trousdale & Reily, Monroe, La. "Old Smoke-House." (For Hams) | 10,229 | Aug. 4 | 105 | 1257 |
| True Blue Mfg. Co., Boston, Mass. "True Blue Bluing." (For Bluing) | 10,565 | Dec. 1 | 107 | 1371 |
| Trumplette & Co., New York, N. Y. "T. & Co., Specially Selected Silk." (For Silk Goods) | 10,568 | Dec. 8 | 107 | 1657 |
| Tryon, Albert H., Brooklyn, N. Y. "Rat Paint." (For Disinfectant) | 10,496 | Nov. 10 | 107 | 537 |
| Tuttle Company, Rutland, Vt. "Elegant." (For Sheathing-Paper) | 10,592 | Dec. 15 | 107 | 1969 |
| Union Bag and Paper Co., New York, N. Y. "Union Self Opening." (For Paper Bags) | 10,023 | May 26 | 104 | 1117 |
| Union Bag and Paper Co., New York, N. Y. "Union Self Opening." (For Paper Bags) | 10,024 | May 26 | 104 | 1117 |
| Union Bag and Paper Co., New York, N. Y. "Union Self Opening." (For Paper Bags) | 10,025 | May 26 | 104 | 1117 |
| Union Manufacturing Company, New Britain, Conn. "Union Plane." (For Planes) | 10,518 | Nov. 24 | 107 | 1091 |
| United Cloth Hat & Cap Makers of Central Pennsylvania, Northumberland, Pa. "United Cloth Hat & Cap Makers of Central Pa.—Union Made—Hats—Caps." (For Hats and Caps) | 10,590 | Dec. 15 | 107 | 1969 |
| United Silk Workers Association of America, Paterson, N. J. "United Silk Workers Association of America Union Label." (For Silk or Silk-Mixed Woven Fabrics) | 10,120 | June 23 | 104 | 2145 |
| United States Condensed Milk Co., Deansboro, N. Y. "Empire State Condensed Milk." (For Condensed Milk) | 9,691 | Jan. 20 | 102 | 619 |
| United States Condensed Milk Co., Deansboro, N. Y. "Sunshine Condensed Milk." (For Condensed Milk) | 10,615 | Dec. 22 | 107 | 2233 |
| Universal Home Treatment Co., Worcester, Mass. "Mentho-Lyptol." (For Medicine) | 10,586 | Dec. 8 | 107 | 1657 |
| Universal Talking Machine Manufacturing Company, New York, N. Y. "Universal Zonophone Record." (For Sound-Records) | 10,137 | June 30 | 104 | 2437 |
| Universal Talking Machine Manufacturing Company, New York, N. Y. "Universal Zonophone Record." (For Sound-Records) | 10,138 | June 30 | 104 | 2437 |
| Van Buren, Hilda, Seattle, Wash. "Hilda's Lithagogue." (For Medicine) | 10,329 | Sept. 8 | 106 | 539 |
| Van Etten, Helen M., Moravia, N. Y. "Golden Hair Remedy." (For Hair Remedy) | 10,097 | June 16 | 104 | 1893 |
| Voigt Cereal Food Co., Ltd., Grand Rapids, Mich. "Life." (For Cereal Flake Foods) | 10,569 | Dec. 8 | 107 | 1657 |
| W. Warren Thread Works, Westfield, Mass. "Westfield." (For Thread) | 9,697 | Jan. 27 | 102 | 817 |
| W. J. Bush & Co., Incorporated, New York, N. Y. "Barley Brew." (For Beverage) | 10,218 | Aug. 4 | 105 | 1257 |
| W. J. Bush & Co., Incorporated, New York, N. Y. "Bok Ale." (For Non-Alcoholic Beverages) | 10,315 | Sept. 1 | 106 | 261 |
| W. J. Smith Co., Lexington, Ky. "True Heart." (For Spirituous Liquors) | 10,204 | July 28 | 105 | 971 |
| W. R. Hollingshead Company, New York, N. Y. "Soapex." (For Washing Compound) | 10,642 | Dec. 29 | 107 | 2525 |
| W. T. Georgen Co., New York, N. Y. "Lachryne." (For a Preparation for Improving the Sight) | 10,098 | June 16 | 104 | 1893 |
| W. T. Georgen Co., New York, N. Y. "Ko-Kel Krystal Kleanser." (For a Preparation for Cleaning and Polishing Lenses) | 10,099 | June 16 | 104 | 1893 |
| Wadhams & Kerr Bros., Portland, Oreg. "Monopole Brand." (For Canned Strawberries) | 9,850 | Mar. 31 | 103 | 1161 |
| Waisman, Moritz, New York, N. Y. "McKinley Brand." (For Spool-Cotton) | 10,187 | July 21 | 105 | 741 |
| Wakega Medical Co., Tacoma, Wash. "Wakega Medical Co." (For Medicine) | 10,429 | Oct. 20 | 106 | 2011 |
| Walter M. Lowney Co., Boston, Mass. "Always Ready Lowney's Sweet Chocolate Powder." (For Sweet Chocolate Powder) | 9,988 | May 12 | 104 | 575 |
| Walter M. Lowney Co., Boston, Mass. "Lowney's Confectioners' Chocolate Powder." (For Chocolate Powder) | 10,312 | Sept. 1 | 106 | 261 |
| Walter M. Lowney Company, Boston, Mass. "Lowney's Gold Medal Chocolate Powder." (For Chocolate-Powder) | 10,269 | Aug. 18 | 105 | 1777 |
| Ward, Allen W., Avon, N. Y. "Allen W. Ward's Pills." (For Medicine) | 10,289 | Aug. 25 | 105 | 2055 |
| Warner, Louise E., Los Angeles, Cal. "Tamazula." (For Hair-Tonic) | 10,623 | Dec. 22 | 107 | 2233 |
| Warren Axe & Tool Co., Warren, Pa. "Sager Special Chemical Process Axe." (For Axes) | 9,882 | Apr. 7 | 103 | 1415 |
| Warren Axe & Tool Co., Warren, Pa. "The Warren Axe." (For Axes) | 9,883 | Apr. 7 | 103 | 1415 |
| Warren, Jerry J., Keywest, Fla. "Cura de un Minuto." (For Medicine) | 10,503 | Nov. 10 | 107 | 537 |
| Washington Shoe Mfg. Co., Seattle, Wash. "Tread-Well." (For Boots and Shoes) | 9,978 | May 12 | 104 | 575 |
| Wau-Kis-Ko Health Powder Co., Battlecreek, Mich. "Wau-Kis-Ko." (For Toilet Powder) | 10,040 | May 26 | 104 | 1117 |
| Webb Manufacturing Company, Nashville, Tenn. "Spurlock's Southern Laundry Washing Blue." (For Washing-Blue) | 10,102 | June 16 | 104 | 1893 |
| Weber & Co., Frank C., Chicago, Ill. "Jackson Park." (For Canned Fruits and Vegetables) | 10,332 | Sept. 8 | 106 | 539 |
| Weber & Co., John H., Philadelphia, Pa. "Household Enamel." (For Enamel) | 10,643 | Dec. 29 | 107 | 2525 |
| Webster, Ford & Co., Baltimore, Md. "United Brand." (For Canned Tomatoes) | 10,305 | Aug. 25 | 105 | 2055 |
| Weeks, Charles E., Rockland, Me. "That Settles It." (For a Coffee-Settler) | 9,690 | Jan. 20 | 102 | 619 |
| Wegener, Herman O., Saginaw, Mich. "Little Jury Box." (For Cigars) | 9,928 | Apr. 21 | 103 | 1911 |
| Wemer, John, New York, N. Y. "Homokura." (For Medicine) | 10,290 | Aug. 25 | 105 | 2055 |
| Westerkamp, Joseph J., Cincinnati, Ohio. "Aqua Oculi." (For Medicine) | 10,502 | Nov. 10 | 107 | 537 |
| Western Packing Company, Denver, Colo. "Honeysuckle." (For Leaf-Lard) | 9,835 | Mar. 24 | 103 | 885 |
| Western Packing Company, Denver, Colo. "Banquet Leaf Lard." (For Lard) | 10,238 | Aug. 11 | 105 | 1529 |
| Western Packing Company, Denver, Colo. "Honeysuckle." (For Breakfast-Bacon) | 10,306 | Aug. 25 | 105 | 2055 |
| Western Packing Company, Denver, Colo. "Honeysuckle." (For Hams) | 10,307 | Aug. 25 | 105 | 2055 |
| Western Packing Company, Denver, Colo. "Banquet." (For Hams) | 10,308 | Aug. 25 | 105 | 2055 |
| Western Packing Company, Denver, Colo. "White Plume." (For Lard) | 10,309 | Aug. 25 | 105 | 2055 |
| Western Packing Company, Denver, Colo. "Honeysuckle." (For Leaf-Lard) | 10,310 | Aug. 25 | 105 | 2055 |
| Wheaton & Sons, Hiram, New Bedford, Mass. "Heirloom Rye Whisky." (For Whisky) | 10,437 | Oct. 20 | 106 | 2011 |
| Wheeler, George W., Santa Rosa, Cal. "Klenezy." (For Cleaning Preparation) | 10,100 | June 16 | 104 | 1893 |
| Whitcher, Frank W., Boston, Mass. "Velvet Whole Heels." (For Rubber Heels) | 10,008 | May 19 | 104 | 849 |
| Whitcher, Frank W., Boston, Mass. "'Nojar' Rubber Heels." (For Rubber Heels) | 10,009 | May 19 | 104 | 849 |
| Whitcher, Frank W., Boston, Mass. "Velvet Rubber Heels." (For Rubber Heels) | 10,010 | May 19 | 104 | 849 |
| Whitcomb, W. H., Pueblo, Colo. "Bug Axe." (For Insect-Exterminator) | 10,000 | May 12 | 104 | 575 |
| White Bros., Norfolk, Va. "Old Jamestown Ter Centenary Rye Whiskey." (For Whisky) | 9,804 | Mar. 17 | 103 | 655 |
| White, Charles C., New York, N. Y. "White's Boro Paper for the Toilet." (For Toilet-Paper | 10,633 | Dec. 29 | 107 | 2525 |
| White, Charles H., Owosso, Mich. "Sure Pop." (For Shelled Popcorn) | 10,172 | July 7 | 105 | 257 |
| White Sulphur Springs Company, Louisville, Ky. "Neptune's Spa." (For Mineral Water) | 10,150 | June 30 | 104 | 2437 |
| Whitehead & Co., Swansea, Mass. "Whitworth Red Bottle." (For Medicine) | 9,997 | May 12 | 104 | 575 |
| Whitehouse Supply Co., Chicago, Ill. "White House Pure Cream Baking Powder." (For Baking-Powder) | 9,960 | May 5 | 104 | 307 |
| Wholesale Grocers' and Tobacconists' Association of Tidewater Va., Norfolk, Va. "Dixie Wafer." (For Crackers) | 10,361 | Sept. 15 | 106 | 761 |

*Alphabetical list of registrants of labels*—Continued.

| Name, residence, and title. | No. | Date. | Official Gazette. Vol. | Page. |
|---|---|---|---|---|
| Wieghorst, Diederich, Brooklyn, N. Y. "D. W. Plymouth Rock Brand." (For Eggs) | 9,693 | Jan. 20 | 102 | 619 |
| Willamette Valley Prune Association, Salem, Oreg. "Pheasant Brand." (For Prunes) | 10,230 | Aug. 4 | 105 | 1257 |
| Willamette Valley Prune Association, Salem, Oreg. "Hunter Brand." (For Prunes) | 10,231 | Aug. 4 | 105 | 1257 |
| Williams & Bros., J., Meyersdale, Pa. "Panama." (For Cigars) | 10,581 | Dec. 8 | 107 | 1657 |
| Williams, George C., Reading, Pa. "Western Union." (For Cigars) | 10,086 | June 9 | 104 | 1653 |
| Willow Springs Brewing Co., Omaha, Nebr. "Stars and Stripes." (For Beer) | 10,436 | Oct. 20 | 106 | 2011 |
| Wilmanns, Adolph, Milwaukee, Wis. "Malt Elixir." (For Malt Extract) | 10,491 | Nov. 10 | 107 | 537 |
| Wilmanns, Adolph, Milwaukee, Wis. "Meister Bräu." (For Beer and Malt Extract) | 10,638 | Dec. 29 | 107 | 2525 |
| Wilmington Shell Fish Co., Wilmington, Cal. "Scallop Cocktails." (For a Beverage) | 9,756 | Feb. 17 | 102 | 1549 |
| Wilson & Co., I. R., Charleston, S. C. "Wilson's Freckle Cure." (For Salve) | 9,971 | May 5 | 104 | 307 |
| Winthrop Drug and Chem. Wks., Chicago, Ill. "Winthrop's Health Biscuit." (For Medicine) | 10,321 | Sept. 1 | 106 | 261 |
| Winthrop Drug and Chemical Works, Chicago, Ill. "Winthrop's Blood Purifier." (For Medicine) | 10,060 | June 2 | 104 | 1389 |
| Winthrop Drug and Chemical Works, Chicago, Ill. "Winthrop's Kidney Tea." (For Medicine) | 10,061 | June 2 | 104 | 1389 |
| Winthrop Drug and Chemical Works, Chicago, Ill. "Winthrop's U-Ric-Sol-Vent." (For Medicine) | 10,062 | June 2 | 104 | 1389 |
| Winthrop Drug and Chemical Works, Chicago, Ill. "Winthrop's Liniment." (For Medicine) | 10,063 | June 2 | 104 | 1389 |
| Winthrop Drug and Chemical Works, Chicago, Ill. "Winthrop's Blood Poison Tablets." (For Medicine) | 10,064 | June 2 | 104 | 1389 |
| Winthrop Drug and Chemical Works, Chicago, Ill. "Winthrop's Laxative Pills." (For Medicine) | 10,065 | June 2 | 104 | 1389 |
| Winthrop Drug and Chemical Works, Chicago, Ill. "Winthrop's Neuralgia Tablets." (For Medicine) | 10,066 | June 2 | 104 | 1389 |
| Winthrop Drug and Chemical Works, Chicago, Ill. "Winthrop's Cough Mixture." (For Medicine) | 10,067 | June 2 | 104 | 1389 |
| Winthrop Drug and Chemical Works, Chicago, Ill. "Winthrop's Bitters." (For Medicine) | 10,068 | June 2 | 104 | 1389 |
| Winthrop Drug and Chemical Works, Chicago, Ill. "Winthrop's Ointment." (For Medicine) | 10,069 | June 2 | 104 | 1389 |
| Wolcott, Avery L., Otsego, Mich. "Wolcott's Vegetable Balm." (For Liniment) | 10,185 | July 14 | 105 | 493 |
| Wolfson, L., San Antonio, Tex. "White Elk Shoe." (For Shoes) | 10,046 | June 2 | 104 | 1389 |
| Wood, Albert F., Detroit, Mich. "Velvet-Skin Cream." (For Cosmetic) | 10,011 | May 19 | 104 | 849 |
| Wootton, Frederick W., Hartford, Conn. "Wootton's Menthol Cough Syrup." (For Cough-Syrup) | 10,551 | Dec. 1 | 107 | 1371 |
| Wootton, Silas E. L., Cambridge, Mass. "Egyptian Furniture, Piano, and Hardwood Polish." (For Polish) | 10,055 | June 2 | 104 | 1389 |

# PRINTS.

| Name, residence, and title. | No. | Date. | Official Gazette. Volume. | Page. |
|---|---|---|---|---|
| A. Schoenhut Company, Philadelphia, Pa. "Humpty Dumpty's Greatest Show on Earth." (For Toys) | 652 | Apr. 21 | 103 | 1911 |
| A. Schoenhut Company, Philadelphia, Pa. "Humpty Dumpty's Circus." (For Toys) | 857 | Nov. 24 | 107 | 1091 |
| American Brewing Co., St. Louis, Mo. "Watching a Good Thing." (For Beer) | 815 | Sept. 1 | 106 | 261 |
| American Lithographic Company, New York, N. Y. "A Life Saver." (For Porous Plasters) | 618 | Feb. 17 | 102 | 1549 |
| American Lithographic Company, New York, N. Y. "Pure Breakfast Cocoa." (For Cocoa) | 854 | Nov. 17 | 107 | 829 |
| Armour & Co., Chicago, Ill. "The World's Fare." (For Extract of Beef) | 831 | Sept. 29 | 106 | 1235 |
| Bacon & Co., B. H., Rochester, N. Y. "Hail to the King." (For Medicine) | 825 | Sept. 15 | 106 | 761 |
| Barker, Louis J., Syracuse, N. Y. "Aristoform." (For Medicine) | 856 | Nov. 24 | 107 | 1091 |
| Barrett-Lindeman Co., Philadelphia, Pa. "The Miller Varnish & Paint Remover Paste." (For a Paint and Varnish Remover) | 732 | June 9 | 104 | 1653 |
| Barrett-Lindeman Co., Philadelphia, Pa. "The Miller Varnish Remover." (For a Varnish-Remover) | 733 | June 9 | 104 | 1653 |
| Basin Oil Company, Basin, Wyo., and Chicago, Ill. "The Basin Oil Co." (For Oil or Petroleum) | 680 | May 12 | 104 | 575 |
| Bendheim, Edward, New York, N. Y. "Brotherhood Handkerchief." (For Handkerchiefs) | 814 | Sept. 1 | 106 | 261 |
| Bendheim, Edward, New York, N. Y. "Brotherhood Handkerchief." (For Handkerchiefs) | 829 | Sept. 29 | 106 | 1235 |
| Bon Ami Company, New York, N. Y. "Hasn't Scratched Yet." (For Soap) | 623 | Mar. 3 | 103 | 221 |
| Bon Ami Company, New York, N. Y. "Hasn't Scratched Yet." (For Soap) | 624 | Mar. 3 | 103 | 221 |
| Bon Ami Company, New York, N. Y. "Hasn't Scratched Yet." (For Scouring-Soap) | 841 | Oct. 13 | 106 | 1773 |
| Bon Ami Company, New York, N. Y. "Hasn't Scratched Yet." (For Scouring-Soap) | 842 | Oct. 13 | 106 | 1773 |
| Bonner, William T., Boston, Mass. "Wiltbonco Standard Internally Fired Boiler, Double Furnace Type with Morison Fronts." (For Steam-Boilers) | 634 | Mar. 24 | 103 | 885 |
| Bonner, William T., Boston, Mass. "Wiltbonco Standard Internally Fired Boiler, Double Furnace Type with Butman Fronts." (For Steam-Boilers) | 635 | Mar. 24 | 103 | 885 |
| Bonner, William T., Boston, Mass. "Wiltbonco Standard Internally Fired Boiler, Single Furnace Type." (For Steam-Boilers) | 636 | Mar. 24 | 103 | 885 |
| Bonner, William T., Boston, Mass. "Wiltbonco Standard Internally Fired Boiler, Double Furnace Type." (For Steam-Boilers) | 637 | Mar. 24 | 103 | 885 |
| Boston Belting Company, Boston, Mass. "Boston Belting Co., The Original Rubber Man." (For Mechanical Rubber Goods) | 734 | June 9 | 104 | 1653 |
| Both, W. C., Chicago, Ill. "Men's Apparel." (For Men's Apparel) | 621 | Feb. 24 | 102 | 1775 |
| Both, W. C., Chicago, Ill. "Male Attire." (For Men's Apparel) | 667 | May 5 | 104 | 307 |
| Both, W. C., Chicago, Ill. "Gents' and Children's Apparel." (For Men's and Children's Apparel) | 709 | May 26 | 104 | 1117 |
| Both, W. C., Chicago, Ill. "Men's Apparel." (For Men's Apparel) | 821 | Sept. 15 | 106 | 761 |
| Brown Shoe Co., St. Louis, Mo. "Buster Brown." (For Shoes) | 845 | Oct. 20 | 106 | 2011 |
| Brunswick, George, New York, N. Y. "Birthstones." (For Imitation Stones) | 721 | June 2 | 104 | 1389 |
| Buffalo Forge Company, Buffalo, N. Y. "Temperature Diagram." (For Mechanical Draft Apparatus) | 771 | July 21 | 105 | 741 |
| Buffalo Forge Company, Buffalo, N. Y. "Effect of Resistance." (For Mechanical Draft Apparatus) | 772 | July 21 | 105 | 741 |
| Buffalo Forge Company, Buffalo, N. Y. "Performance of Steel Plate Exhausters." (For Mechanical Draft Apparatus) | 773 | July 21 | 105 | 741 |
| Buffalo Forge Company, Buffalo, N. Y. "Thermal Efficiency Curves." (For Mechanical Draft Apparatus) | 774 | July 21 | 105 | 741 |
| Buffalo Forge Company, Buffalo, N. Y. "Temperature Curves." (For Mechanical Draft Apparatus) | 775 | July 21 | 105 | 741 |
| Buffalo Forge Company, Buffalo, N. Y. "Influence of the Temperature of Air." (For Mechanical Draft Apparatus) | 776 | July 21 | 105 | 741 |
| Buffalo Forge Company, Buffalo, N. Y. "Horizontal Tandem Arrangement of Fans." (For Mechanical Draft Apparatus) | 777 | July 21 | 105 | 741 |
| Buffalo Forge Company, Buffalo, N. Y. "Type of Apparatus." (For Mechanical Draft Apparatus) | 778 | July 21 | 105 | 741 |
| Buffalo Forge Company, Buffalo, N. Y. "Application to Scotch Marine Boilers." (For Mechanical Draft Apparatus) | 779 | July 21 | 105 | 741 |
| Buffalo Forge Company, Buffalo, N. Y. "Induced Draft." (For Mechanical Draft Apparatus) | 780 | July 21 | 105 | 741 |
| Buffalo Forge Company, Buffalo, N. Y. "Induced Draft Plant." (For Mechanical Draft Apparatus) | 781 | July 21 | 105 | 741 |
| Buffalo Forge Company, Buffalo, N. Y. "Induced Draft Plant." (For Mechanical Draft Apparatus) | 782 | July 21 | 105 | 741 |
| Buffalo Forge Company, Buffalo, N. Y. "Horizontal Tandem Full Housing Fans." (For Mechanical Draft Apparatus) | 783 | July 21 | 105 | 741 |
| Buffalo Forge Company, Buffalo, N. Y. "Forced Draft Plant." (For Mechanical Draft Apparatus) | 784 | July 21 | 105 | 741 |
| Buffalo Forge Company, Buffalo, N. Y. "Induced Draft Plant." (For Mechanical Draft Apparatus) | 785 | July 21 | 105 | 741 |
| Buffalo Forge Company, Buffalo, N. Y. "Cost Curves Plates." (For Mechanical Draft Apparatus) | 786 | July 21 | 105 | 741 |
| Buffalo Forge Company, Buffalo, N. Y. "Induced Draft." (For Mechanical Draft Apparatus) | 787 | July 21 | 105 | 741 |
| Buffalo Forge Company, Buffalo, N. Y. "Osaka Water Works." (For Mechanical Draft Apparatus) | 788 | July 21 | 105 | 742 |
| Buffalo Forge Company, Buffalo, N. Y. "Induced Draft." (For Mechanical Draft Apparatus) | 789 | July 21 | 105 | 742 |
| Buffalo Forge Company, Buffalo, N. Y. "Induced Draft." (For Mechanical Draft Apparatus) | 790 | July 21 | 105 | 742 |
| Buffalo Forge Company, Buffalo, N. Y. "Application of Induced Draft." (For Mechanical Draft Apparatus) | 791 | July 21 | 105 | 742 |
| Buffalo Forge Company, Buffalo, N. Y. "Scottish Co-Operative Society's Junction Mills Works." (For Mechanical Draft Apparatus) | 792 | July 21 | 105 | 742 |
| Buffalo Forge Company, Buffalo, N. Y. "Induced Draft Plant." (For Mechanical Draft Apparatus | 793 | July 21 | 105 | 742 |
| Butler, Wm. H., New York, N. Y. "At the Fountain." (For Cigarettes) | 613 | Feb. 3 | 102 | 1047 |
| Buttfield, Firm of W. J., New York, N. Y. "Crescent Chop." (For Tea) | 746 | June 30 | 104 | 2437 |
| Buttfield, Firm of W. J., New York, N. Y. "Triumph." (For Tea) | 747 | June 30 | 104 | 2437 |

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| Name, residence, and title. | No. | Date. | Official Gazette. Vol. | Page. |
|---|---|---|---|---|
| Buttfield, Firm of W. J., New York, N. Y. "Cream of the Crop." (For Tea) | 748 | June 30 | 104 | 2437 |
| Buttfield, Firm of W. J., New York, N. Y. "Golden Tips." (For Tea) | 749 | June 30 | 104 | 2437 |
| Buttfield, Firm of W. J., New York, N. Y. "Sure Winner." (For Tea) | 750 | June 30 | 104 | 2437 |
| Buttfield, Firm of W. J., New York, N. Y. "Gold Anchor." (For Tea) | 751 | June 30 | 104 | 2437 |
| Buttfield, Firm of W. J., New York, N. Y. "Sterling Merit." (For Tea) | 752 | June 30 | 104 | 2437 |
| Buttfield, Firm of W. J., New York, N. Y. "Bon Ami." (For Tea) | 753 | June 30 | 104 | 2437 |
| Buttfield, Firm of W. J., New York, N. Y. "A Popular Brand." (For Tea) | 754 | June 30 | 104 | 2437 |
| Buttfield, Firm of W. J., New York, N. Y. "Uncle Sam." (For Tea) | 755 | June 30 | 104 | 2437 |
| Buttfield, Firm of W. J., New York, N. Y. "Silver Eagle." (For Tea) | 766 | July 14 | 105 | 493 |
| Buttfield, W. J., New York, N. Y. "Gilt Edge." (For Tea) | 726 | June 2 | 104 | 1389 |
| Buttfield, W. J., New York, N. Y. "Highest Quality." (For Tea) | 727 | June 2 | 104 | 1389 |
| Buttfield, W. J., New York, N. Y. "World's Choice." (For Tea) | 728 | June 2 | 104 | 1389 |
| Cahn, Wampold & Co., Chicago, Ill. "Men's Apparel." (For Clothing) | 730 | June 9 | 104 | 1653 |
| Cahn, Wampold & Company, Chicago, Ill. "Men's Apparel." (For Clothing) | 614 | Feb. 10 | 102 | 1291 |
| Carrom-Archarena Co., Ludington, Mich. "A Carrom Board Makes a Happy Home." (For Game Boards and Apparatus) | 616 | Feb. 17 | 102 | 1549 |
| Carrom-Archarena Co., Ludington, Mich. "Library & Dining Combination Billiard & Pool Tables." (For Billiard and Pool Tables) | 617 | Feb. 17 | 102 | 1549 |
| Carter's Ink Co., Boston, Mass. "Carter's Ideal Typewriter Ribbons and Carbon Papers." (For Type-Writer Ribbons and Carbon-Papers) | 762 | July 7 | 105 | 257 |
| Carter's Ink Co., Boston, Mass. "Carter's Photolibrary Paste." (For Adhesive Paste) | 763 | July 7 | 105 | 257 |
| Cero-Fruto Food Company, Battlecreek, Mich. "Cero-Fruto." (For Food Preparation) | 863 | Dec. 1 | 107 | 1371 |
| Chapman & Smith Company, Chicago, Ill. "He Makes It Known to Every Zone." (For Baking-Powder) | 619 | Feb. 17 | 102 | 1549 |
| Chapman & Smith Company, Chicago, Ill. "He Makes It Known to Every Zone." (For Food Products) | 812 | Aug. 25 | 105 | 2055 |
| Charles E. Bentley Co., New York, N. Y. "The New Raffia Embroidery No. 1154." (For Mats) | 850 | Nov. 10 | 107 | 537 |
| Charles E. Bentley Co., New York, N. Y. "The New Raffia Embroidery No. 1156." (For Mats) | 851 | Nov. 10 | 107 | 537 |
| Charles E. Bentley Co., New York, N. Y. "The New Raffia Embroidery No. 1155." (For Mats) | 852 | Nov. 10 | 107 | 537 |
| Charles E. Bentley Co., New York, N. Y. "The New Raffia Embroidery No. 1162." (For Mats) | 853 | Nov. 10 | 107 | 537 |
| Citizens' Wholesale Supply Co., Columbus, Ohio. "Golden Rule Hair Restorative." (For Hair-Restorative) | 808 | Aug. 25 | 105 | 2055 |
| Coe & Brandt, New York, N. Y. "Carpet Magic." (For Carpets) | 677 | May 12 | 104 | 575 |
| Cooley, Lester D., Kalamazoo, Mich. "Mosquito-Quits." (For Insect-Eradicators) | 640 | Mar. 31 | 103 | 1161 |
| Cotzhausen, Alfred von, Milwaukee, Wis. "Purity Did It." (For Beer) | 615 | Feb. 10 | 102 | 1291 |
| Cotzhausen, Alfred von, Milwaukee, Wis. "Vicereo" (For Cereal Food) | 622 | Feb. 24 | 102 | 1775 |
| Cotzhausen, Alfred von, Milwaukee, Wis. "Gräfin Übermut." (For Lager-Beer) | 631 | Mar. 24 | 103 | 885 |
| Cox, Palmer, New York, N. Y. "The Little Baker." (For Bread) | 664 | Apr. 28 | 103 | 2169 |
| Crichton, Alexander, Castleton, Canada. "Grippura Cures Grippe." (For a Medicine) | 644 | Apr. 7 | 103 | 1415 |
| Culecide Co., Jersey City, N. J. "Mosquitokill." (For Insecticides) | 712 | May 26 | 104 | 1117 |
| D'Unger, R., Chicago, Ill. "Electrified Extract of Beef." (For Extract of Beef) | 804 | Aug. 11 | 105 | 1529 |
| David Adler & Sons Clothing Co., Milwaukee, Wis. "Men's Winter Apparel." (For Men's Apparel) | 710 | May 26 | 104 | 1117 |
| David Adler & Sons Clothing Co., Milwaukee, Wis. "The Fall and Winter Fashions." (For Men's Winter Apparel) | 760 | July 7 | 105 | 257 |
| David Adler & Sons Clothing Co., Milwaukee, Wis. "New Styles for Fall." (For Men's Apparel) | 765 | July 14 | 105 | 493 |
| David Adler & Sons Clothing Co., Milwaukee, Wis. "The Adler Fall Fashions." (For Winter Apparel) | 805 | Aug. 18 | 105 | 1777 |
| David Adler & Sons Clothing Co., Milwaukee, Wis. "College Styles." (For Men's Winter Apparel) | 806 | Aug. 18 | 105 | 1777 |
| Davidson & Finkelbrand, New York, N. Y. "Everright." (For Clothing) | 819 | Sept. 8 | 106 | 539 |
| Denton, Edward, Manchester, England. "So-lah." (For a Game) | 794 | July 28 | 105 | 971 |
| Desbecker-Block Tailoring Co., Buffalo, N. Y. "He Takes Your Measure We Do the Rest." (For Clothing) | 603 | Jan. 6 | 102 | 225 |
| Dr. James English Cooling Powder & Remedy Co., Philadelphia, Pa. "Dr. James English Cooling Powders for Teething Babies." (For Powders) | 803 | Aug. 11 | 105 | 1529 |
| Erdman & Co., Philadelphia, Pa. "Erdman's German Herb Cure." (For a Medicine) | 608 | Jan. 27 | 102 | 817 |
| Erdman & Co., Philadelphia, Pa. "Erdman's German Herb Cure." (For Medicine) | 769 | July 21 | 105 | 741 |
| Fish & Co., Dundee, N. Y. "Mountain Herbs Infallible Dropsy Cure." (For Medicine) | 797 | Aug. 4 | 105 | 1257 |
| Frictionless Metal Co., Richmond, Va. "A Good Eye Opener." (For Metal) | 835 | Oct. 6 | 106 | 1499 |
| Friend Bros. Clothing Co., Milwaukee, Wis. "Friend Suits." (For Men's Winter Apparel) | 843 | Oct. 20 | 106 | 2011 |
| Friend Bros. Clothing Co., Milwaukee, Wis. "Friend Overcoats." (For Men's Winter Apparel) | 844 | Oct. 20 | 106 | 2011 |
| Furth Company, New York, N. Y. "Right Label." (For Rye Whisky) | 757 | June 30 | 104 | 2437 |
| General Manifold Company, Franklin, Pa. "Revelation Brand." (For Carbon-Paper) | 802 | Aug. 11 | 105 | 1529 |
| Gerstendorfer Bros., New York, N. Y. "Sporty Bill Gay." (For Decorative Enamels) | 628 | Mar. 24 | 103 | 885 |
| Gillies & Co., Edwin J., New York, N. Y. "Picking Gillies Coffees." (For Coffees) | 647 | Apr. 14 | 103 | 1678 |
| Glutting, John F., Newark, N. J. "Hot Stuff." (For Coal) | 855 | Nov. 17 | 107 | 829 |
| Goldenberg, Max, Chicago, Ill. "A Word to You, Young Man." (For Furniture) | 633 | Mar. 24 | 103 | 885 |
| Gosman Ginger Ale Co., Baltimore, Md. "See The Bottle." (For Ginger-Ale) | 704 | May 19 | 104 | 849 |
| Govignon, Victor, Boston, Mass. "Le Coiffeur." (For Hair-Dressing Implements) | 849 | Nov. 10 | 107 | 537 |
| Grand Central Tea & Coffee Co., Chicago, Ill. "Red Cross." (For Tea and Coffee) | 864 | Dec. 1 | 107 | 1371 |
| Grand Central Tea & Coffee Co., Chicago, Ill. "White Cross." (For Tea and Coffee) | 865 | Dec. 1 | 107 | 1371 |
| Grand Central Tea & Coffee Co., Chicago, Ill. "Blue Cross." (For Tea and Coffee) | 866 | Dec. 1 | 107 | 1371 |
| Grand Rapids Sticky Fly Paper Co., Grand Rapids, Mich. "Stick 'Em." (For Sticky Fly-Paper) | 764 | July 7 | 105 | 257 |
| Gratz, Alfred, Philadelphia, Pa. "Don't Scratch." (For Talking-Machines) | 795 | July 28 | 105 | 971 |
| Gray Lithograph Co., New York, N. Y. "The High Grade Mirror Candies." (For Candy) | 703 | May 19 | 104 | 849 |
| Gray Lithograph Co., New York, N. Y. "Botanic Blood Balm." (For Medicine) | 722 | June 2 | 104 | 1389 |
| Gray Lithograph Co., New York, N. Y. "Rocky Ford Cantaloupes." (For Cantaloupes) | 745 | June 23 | 104 | 2145 |
| Gray Lithograph Co., New York, N. Y. "The Prize Winner." (For Horse-Nails) | 827 | Sept. 22 | 106 | 993 |
| Great Atlantic & Pacific Tea Company, New York, N. Y. "Only First Class Goods Make Trade Lively." (For Tea) | 606 | Jan. 13 | 102 | 463 |
| H. A. Thomas & Wylie Lithographing Co., New York, N. Y. "Dressing for Dinner." (For Salad-Dressing) | 639 | Mar. 31 | 103 | 1161 |
| H. J. Heinz Co., Allegheny, Pa. "India Relish." (For a Relish or Sauce for Meat) | 816 | Sept. 1 | 106 | 261 |
| Haller, Samuel P., Pittsburg, Pa. "A Pair of Fast Trotters." (For Whisky) | 848 | Nov. 3 | 107 | 263 |
| Henderson Lithographing Co., Cincinnati, Ohio. "Our Bright Light." (For Smoking-Tobacco | 642 | Apr. 7 | 103 | 1415 |
| Henderson Lithographing Co., Cincinnati, Ohio. "Yeager." (For Bathing-Suits) | 643 | Apr. 7 | 103 | 1415 |
| Henderson Lithographing Co., Cincinnati, Ohio. "Rainier." (For Beer) | 653 | Apr. 21 | 103 | 1911 |
| Hess, George R., Joliet, Ill. "Di-Ges-To." (For Medicine) | 809 | Aug. 25 | 105 | 2055 |
| Hezel Milling Company, East St. Louis, Ill. "America's Best Flour." (For Flour) | 651 | Apr. 14 | 103 | 1678 |
| Hill & Mayers, Addison, N. Y. "Prune Juice." (For Smoking and Chewing Tobacco) | 620 | Feb. 17 | 102 | 1549 |
| Hooker, Corser & Mitchell Co., Brattleboro, Vt. "Cantripum." (For Overalls) | 711 | May 26 | 104 | 1117 |
| Imperial Wine & Medicine Co., Newburgh, N. Y. "Imperial Calisaya, Hops and Port Wine." (For Medicine) | 669 | May 5 | 104 | 307 |

*Alphabetical list of registrants of prints*—Continued.

| Name, residence, and title. | No. | Date. | Official Gazette. Vol. | Page. |
|---|---|---|---|---|
| International Harvester Company of America, Chicago, Ill. "McCormick Harvesting Machines." (For Harvesting-Machines) | 735 | June 9 | 104 | 1653 |
| J. Walter Thompson Co., New York, N. Y. "Mennen's Borated Talcum Powder." (For Talcum Powder) | 723 | June 2 | 104 | 1389 |
| J. Walter Thompson Co., New York, N. Y. "Malta-Vita." (For Food Product) | 724 | June 2 | 104 | 1389 |
| J. Walter Thompson Co., New York, N. Y. "No Work, No Heat, Just Cream, Then Eat." (For Food Product) | 725 | June 2 | 104 | 1389 |
| Jobson, Frank L., Richmond, Va. "Wizard Belt Stick." (For Belt-Dressing) | 679 | May 12 | 104 | 575 |
| John Wahl Paint & Color Co., Monroe, Mich. "Jet-a-Lac." (For an Enamel) | 641 | Mar. 31 | 103 | 1161 |
| Johnson & Johnson, New Brunswick, N. J. "Red Cross Absorbent Cotton." (For Absorbent Cotton) | 761 | July 7 | 105 | 257 |
| Keller, Loomis & Co., New York, N. Y. "Mum(m)'s the Word." (For Liquors) | 768 | July 21 | 105 | 741 |
| Keystone Pearl Button Co., Erie, Pa. "The Best American Make." (For Buttons) | 822 | Sept. 15 | 106 | 761 |
| Knapp, May J., Seattle, Wash., and S. E. Munger, Tipton, Mich. "Autocratia, Dr. J. D. Maxson's Remedies." (For Medicine) | 847 | Oct. 27 | 106 | 2285 |
| Krag, Erik L., Chicago, Ill. "The New Star." (For Filing-Cabinets) | 676 | May 5 | 104 | 307 |
| Kuh, Nathan & Fischer Company, Chicago, Ill. "Newport Sack." (For Sack Suits) | 646 | Apr. 14 | 103 | 1678 |
| Lazarus & Co., P., Los Angeles, Cal. "American Indian Souvenir Playing Cards." (For Playing-Cards) | 717 | June 2 | 104 | 1389 |
| Le Valley Vitae Carbon Brush Co., New York, N. Y. "Le Valley Vitae Carbon Brush." (For Carbon Brushes) | 818 | Sept. 8 | 106 | 539 |
| Libby, McNeill & Libby, Chicago, Ill. "Melrose Paté." (For Melrose Paté) | 629 | Mar. 24 | 103 | 885 |
| Lytle, Carter, Baltimore, Md. "Kornol." (For Paint for Corns) | 607 | Jan. 20 | 102 | 619 |
| Malin & Co., Cleveland, Ohio. "Malin Coil Wire." (For Coil-Wire) | 832 | Sept. 29 | 106 | 1235 |
| McCaleb, Robert C., La Crosse, Wis. "What Did He Say?" (For Whisky) | 838 | Oct. 13 | 106 | 1773 |
| McCormick, Oran, Boston, Mass. "Peggy from Paris." (For Hosiery) | 836 | Oct. 13 | 106 | 1773 |
| Meyer-Both Co., Chicago, Ill. "Ladies' Apparel." (For Ladies' Apparel) | 638 | Mar. 31 | 103 | 1161 |
| Meyer-Both Co., Chicago, Ill. "Ladies' Attire." (For Ladies' Clothing) | 662 | Apr. 28 | 103 | 2169 |
| Meyer-Both Co., Chicago, Ill. "Ladies' Apparel." (For Ladies' Apparel) | 708 | May 26 | 104 | 1117 |
| Meyer-Both Co., Chicago, Ill. "Ladies Apparel." (For Ladies' Apparel) | 833 | Oct. 6 | 106 | 1499 |
| Minnesota Tribune Company, Minneapolis, Minn. "The Farmer's Tribune." (For a Newspaper) | 706 | May 26 | 104 | 1117 |
| Minnesota Tribune Company, Minneapolis, Minn. "The Tribune." (For a Newspaper) | 707 | May 26 | 104 | 1117 |
| Mountain Sage Malt Tonic Company, Denver, Colo. "Prof. Pozzoni's Mountain Sage Malt Tonic." (For Tonic) | 837 | Oct. 13 | 106 | 1773 |
| Mossler Co., Chicago, Ill. "See That Shoulder." (For Clothing) | 807 | Aug. 25 | 105 | 2055 |
| Munger, S. Estella. (See Knapp and Munger.) | | | | |
| Murphy, Frederick E., Minneapolis, Minn. "American Leghorn." (For a Poultry Journal) | 625 | Mar. 17 | 103 | 655 |
| Netschert, Frank, (a Firm,) Chicago, Ill., and New York, N. Y. "I Am Coming." (For Artificial Flowers and Perpetuated Plants) | 661 | Apr. 28 | 103 | 2169 |
| New Harlem Publishing Company, New York, N. Y. "New Harlem Past and Present." (For a Book) | 817 | Sept. 8 | 106 | 539 |
| New Home Sewing Machine Co., Orange, Mass. "New Home." (For Sewing-Machines) | 604 | Jan. 6 | 102 | 225 |
| New Home Sewing Machine Co., Orange, Mass. "New Home." (For Sewing-Machines) | 605 | Jan. 6 | 102 | 227 |
| Niestlie, William, Wilmington, N. C. "Niestlie's Compound Syrup of Tar, Honey, Rum & Wild Cherry Old Time Plantation Remedy." (For a Medicine) | 632 | Mar. 24 | 103 | 885 |
| Nonotuck Silk Company, Florence, Mass. "Too Strong to Break." (For Spool-Silk) | 627 | Mar. 24 | 103 | 885 |
| Northwestern Yeast Co., Chicago, Ill. "Yeast Foam Key to Success." (For Yeast) | 649 | Apr. 14 | 103 | 1678 |
| Northwestern Yeast Co., Chicago, Ill. "Magic Yeast Key to Success." (For Yeast) | 650 | Apr. 14 | 103 | 1678 |
| Nu-lectric Chemical Co., Nanticoke, Pa. "Nu-lectric." (For Medicine) | 770 | July 21 | 105 | 741 |
| Oppenheimer, Seasongood & Co., Cincinnati, Ohio. "At the Anvil." (For Clothing) | 719 | June 2 | 104 | 1389 |
| Oriental Tobacco Co., New York, N. Y. "Egyptian Palms." (For Cigarettes) | 668 | May 5 | 104 | 307 |
| Pratt Food Co., Philadelphia, Pa. "Pratt's Foods." (For Animal and Poultry Foods) | 820 | Sept. 8 | 106 | 539 |
| Prussian Remedy Co., St. Paul, Minn. "Prussian Stock Food." (For Stock-Food) | 796 | July 28 | 105 | 971 |
| Regal Shoe Co., Boston, Mass. "Regal Mirrorgraph." (For Boots and Shoes) | 626 | Mar. 17 | 103 | 655 |
| Ritterman & Kraemer, New York, N. Y. "The Real Thing." (For Whisky) | 839 | Oct. 13 | 106 | 1773 |
| Rodenberg & Dunn, New York, N. Y., and Providence, R. I. "Guarantee Certificate." (For Solid-Gold Tubes Filled with Composition Metal) | 720 | June 2 | 104 | 1389 |
| Romünder, Hermann, Bloomsbury, N. J. "The Comfort Passenger Car—In Fall." (For Passenger-Cars) | 713 | May 26 | 104 | 1117 |
| Romünder, Hermann, Bloomsbury, N. J. "The Comfort Passenger Car—In Spring." (For Passenger-Cars) | 714 | May 26 | 104 | 1117 |
| Romünder, Hermann, Bloomsbury, N. J. "The Comfort Passenger Car—In Winter." (For Passenger-Cars) | 715 | May 26 | 104 | 1117 |
| Romünder, Hermann, Bloomsbury, N. J. "The Comfort Passenger Car—In Summer." (For Passenger-Cars) | 716 | May 26 | 104 | 1117 |
| Royal Pattern Co., New York, N. Y. "The Lily Skirt." (For Skirt-Patterns) | 663 | Apr. 28 | 103 | 2169 |
| Sawyer, George W., Minneapolis, Minn. "The Merchants Home Baked Beans." (For Baked Beans) | 834 | Oct. 6 | 106 | 1499 |
| Schirmann, Philip L., Chicago, Ill. "La Grange Diuretic Mineral Water." (For Mineral Water) | 756 | June 30 | 104 | 2437 |
| Schmidt, Adolf, New York, N. Y. "Schmidt's Kloster Bräu." (For Beer) | 824 | Sept. 15 | 106 | 761 |
| Seiter & Kappes, New York, N. Y. "The Shoe of All Nations." (For Shoes) | 731 | June 9 | 104 | 1653 |
| Seiter & Kappes, New York, N. Y. "The Hoffman House." (For Cigars) | 810 | Aug. 25 | 105 | 2055 |
| Seiter & Kappes, New York, N. Y. "The Hoffman House Little Cigars." (For Cigars) | 811 | Aug. 25 | 105 | 2055 |
| Singer Manufacturing Co., New York, N. Y. "La Salle Leaving Fort St. Louis of Texas, A. D. 1687." (For Sewing-Machines) | 858 | Nov. 24 | 107 | 1091 |
| Singer Manufacturing Co., New York, N. Y. "Discovery of the Mississippi by Marquette, A. D. 1673." (For Sewing-Machines) | 859 | Nov. 24 | 107 | 1091 |
| Singer Manufacturing Co., New York, N. Y. "Hennepin at the Falls of St. Anthony, A. D. 1680." (For Sewing-Machines) | 860 | Nov. 24 | 107 | 1091 |
| Singer Manufacturing Co., New York, N. Y. "La Salle at the Mouth of the Mississippi, A. D. 1682." (For Sewing-Machines) | 861 | Nov. 24 | 107 | 1091 |
| Singler & Co., C., South Bend, Ind. "Hot Stuff." (For Table-Sauce) | 630 | Mar. 24 | 103 | 885 |
| Southern Oil & Chemical Company, Mobile, Ala. "Pyrol Wood Preservative." (For Wood-Preservative) | 867 | Dec. 8 | 107 | 1657 |
| Sprague Company, Frederick H., Orange, Mass. "Russian." (For Vests) | 759 | June 30 | 104 | 2437 |
| St. Louis Southwestern Railway Co., St. Louis, Mo. "Cotton Belt Route Playing Cards." (For Playing-Cards) | 729 | June 9 | 104 | 1653 |
| Standard Food Co., Binghamton, N. Y. "Nu-Life." (For Cereal Food) | 868 | Dec. 15 | 107 | 1969 |
| Star Milk Cooler Company, Haddonfield, N. J. "Floor Cylinder." (For Floor-Cylinders for Milk-Cooling Outfits) | 654 | Apr. 21 | 103 | 1911 |
| Star Milk Cooler Company, Haddonfield, N. J. "Banjo Conductor." (For Banjo-Conductors for Milk-Cooling Outfits) | 655 | Apr. 21 | 103 | 1911 |
| Star Milk Cooler Company, Haddonfield, N. J. "Funnel and Conductor." (For Funnels and Conductors for Milk-Cooling Outfits) | 656 | Apr. 21 | 103 | 1911 |

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|---|---|---|---|---|
| Star Milk Cooler Company, Haddonfield, N. J. "Milk Funnel and Lid." (For Milk-Funnels and Lids for Milk-Cooling Outfits) | 657 | Apr. 21 | 103 | 1911 |
| Star Milk Cooler Company, Haddonfield, N. J. "Star Milk Collecting Tank." (For Milk-Collecting Tanks for Milk-Cooling Outfits) | 658 | Apr. 21 | 103 | 1911 |
| Star Milk Cooler Company, Haddonfield, N. J. "Star Milk Receiving Tank." (For Milk-Tanks for Milk-Cooling Outfits) | 659 | Apr. 21 | 103 | 1911 |
| Star Milk Cooler Company, Haddonfield, N. J. "Trap Cloth Strainer." (For Milk-Strainers) | 660 | Apr. 21 | 103 | 1911 |
| Star Milk Cooler Company, Haddonfield, N. J. "Star Cream Bottle Filler." (For Cream-Bottle Fillers) | 665 | Apr. 28 | 103 | 2169 |
| Star Milk Cooler Company, Haddonfield, N. J. "Star Side Bar Filler." (For Bottle-Fillers) | 666 | Apr. 28 | 103 | 2169 |
| Star Milk Cooler Company, Haddonfield, N. J. "Star All Metal Table." (For Bottle-Filler Tables) | 675 | May 5 | 104 | 307 |
| Star Milk Cooler Company, Haddonfield, N. J. "Star Sterilizer Cars, Style A." (For Sterilizing Outfits) | 682 | May 12 | 104 | 575 |
| Star Milk Cooler Company, Haddonfield, N. J. "Star Sterilizer Cars, Styles D E and F." (For Sterilizing Outfits) | 683 | May 12 | 104 | 575 |
| Star Milk Cooler Company, Haddonfield, N. J. "Star Sterilizer Cars, Styles B and C." (For Sterilizing Outfits) | 684 | May 12 | 104 | 576 |
| Star Milk Cooler Company, Haddonfield, N. J. "Star Sterilizer Cars, Styles G and H." (For Sterilizing Outfits) | 685 | May 12 | 104 | 576 |
| Star Milk Cooler Company, Haddonfield, N. J. "Star Car Truck." (For Sterilizing Outfits) | 686 | May 12 | 104 | 576 |
| Star Milk Cooler Company, Haddonfield, N. J. "Star Family of Carriers." (For Dairy-Plant Equipment) | 687 | May 12 | 104 | 576 |
| Star Milk Cooler Company, Haddonfield, N. J. "Star Bottle Washing Outfit." (For Dairy-Plant Equipment) | 688 | May 12 | 104 | 576 |
| Star Milk Cooler Company, Haddonfield, N. J. "Star Stone Wash Sinks." (For Dairy-Plant Equipment) | 689 | May 12 | 104 | 576 |
| Star Milk Cooler Company, Haddonfield, N. J. "Star Lock Angle Carriers." (For Dairy-Plant Equipment) | 690 | May 12 | 104 | 576 |
| Star Milk Cooler Company, Haddonfield, N. J. "Star Lock Angle Carriers." (For Dairy-Plant Equipment) | 691 | May 12 | 104 | 576 |
| Star Milk Cooler Company, Haddonfield, N. J. "Star Lock Angle Carriers." (For Dairy-Plant Equipment) | 692 | May 12 | 104 | 576 |
| Star Milk Cooler Company, Haddonfield, N. J. "Star Lock Band Carriers." (For Dairy-Plant Equipment) | 693 | May 12 | 104 | 576 |
| Star Milk Cooler Company, Haddonfield, N. J. "Star Lock Band Carriers." (For Dairy-Plant Equipment) | 694 | May 12 | 104 | 576 |
| Star Milk Cooler Company, Haddonfield, N. J. "Star Band Carriers." (For Dairy-Plant Equipment) | 695 | May 12 | 104 | 576 |
| Star Milk Cooler Company, Haddonfield, N. J. "Star Lock Band Carriers." (For Dairy-Plant Equipment) | 696 | May 12 | 104 | 576 |
| Star Milk Cooler Company, Haddonfield, N. J. "Star Bottle Rinser." (For Dairy-Plant Equipment) | 697 | May 12 | 104 | 576 |
| Star Milk Cooler Company, Haddonfield, N. J. "Star Galvanized Bottle Boxes." (For Dairy-Plant Equipment) | 698 | May 12 | 104 | 576 |
| Star Milk Cooler Company, Haddonfield, N. J. "Star Galvanized Bottle Boxes." (For Dairy-Plant Equipment) | 699 | May 12 | 104 | 576 |
| Star Milk Cooler Company, Haddonfield, N. J. "Star Metal Spacers." (For Dairy-Plant Equipment) | 700 | May 12 | 104 | 576 |
| Star Milk Cooler Company, Haddonfield, N. J. "Star Reversing Racks." (For Dairy-Plant Equipment) | 701 | May 12 | 104 | 576 |
| Star Milk Cooler Company, Haddonfield, N. J. "Star Reversing Racks." (For Dairy-Plant Equipment) | 702 | May 12 | 104 | 576 |
| Star Milk Cooler Company, Haddonfield, N. J. "Star Absorbent Cotton Strainer." (For Strainers) | 736 | June 16 | 104 | 1893 |
| Star Milk Cooler Company, Haddonfield, N. J. "Star Milk Coolers and Ice Water Sections." (For Milk-Coolers) | 737 | June 16 | 104 | 1893 |
| Star Milk Cooler Company, Haddonfield, N. J. "Star Metal Wash Sinks with Bottle Rinsers." (For Wash-Sinks) | 738 | June 16 | 104 | 1893 |
| Star Milk Cooler Company, Haddonfield, N. J. "Star Sanitary Dairy Apparatus." (For Dairy-Plant Equipment) | 739 | June 16 | 104 | 1893 |
| Star Milk Cooler Company, Haddonfield, N. J. "Star Can Rinser." (For Dairy-Plant Equipment) | 740 | June 16 | 104 | 1893 |
| Star Milk Cooler Company, Haddonfield, N. J. "Star Milk Collecting Vats." (For Dairy-Plant Equipment) | 741 | June 16 | 104 | 1893 |
| Star Milk Cooler Company, Haddonfield, N. J. "Star Milk Receiving Vats." (For Dairy-Plant Equipment) | 742 | June 16 | 104 | 1893 |
| Star Milk Cooler Company, Haddonfield, N. J. "Star Milk Trucks." (For Dairy-Plant Equipment) | 743 | June 16 | 104 | 1893 |
| Star Milk Cooler Company, Haddonfield, N. J. "Star Can Wash Sinks." (For Dairy-Plant Equipment) | 744 | June 16 | 104 | 1893 |
| Stecher Litho. Co., Rochester, N. Y. "Choice Flower Seeds." (For Flower-Seeds) | 611 | Feb. 3 | 102 | 1045 |
| Stecher Litho. Co., Rochester, N. Y. "New Crop Vegetable Seeds." (For Vegetable-Seeds) | 612 | Feb. 3 | 102 | 1047 |
| Stecher Litho Co., Rochester, N. Y. "The New Game of Diamonds." (For Games) | 645 | Apr. 14 | 103 | 1678 |
| Strength Food Company, New York, N. Y. "Which is the Larger." (For Food Preparation) | 648 | Apr. 14 | 103 | 1678 |
| Superior Food Co., Ltd., Sault Ste. Marie, Mich. "Cere Vita." (For Wheat Food) | 767 | July 21 | 105 | 741 |
| Theo. A. Kochs Company, Chicago, Ill. "Modern Styles of Hair Cutting." (For a Hair Preparation) | 869 | Dec. 15 | 107 | 1969 |
| United Drug Company, Boston, Mass. "Report of Private Chang." (For a Medicine) | 670 | May 5 | 104 | 307 |
| United Drug Company, Boston, Mass. "Report of Private Arrowhead." (For a Medicine) | 671 | May 5 | 104 | 307 |
| United Drug Company, Boston, Mass. "Captives of Dyspensia." (For a Medicine) | 672 | May 5 | 104 | 307 |
| United Drug Company, Boston, Mass. "General Orders." (For a Medicine) | 673 | May 5 | 104 | 307 |
| United Drug Company, Boston, Mass. "Bridge of Health." (For a Medicine) | 674 | May 5 | 104 | 307 |
| United States Blow Pipe & Hydraulic Works, Seattle, Wash. "Dust Collecting System." (For Blowpipes and Dust-Collectors) | 798 | Aug. 4 | 105 | 1257 |
| United States Playing Card Company, Cincinnati, Ohio. "Naples Back No. 606 Congress Playing Cards." (For Playing-Cards) | 705 | May 26 | 104 | 1117 |
| United States Playing Card Company, Cincinnati, Ohio. "Oriental, Italy and The Cavalier Backs No. 606 Congress Playing Cards." (For Playing-Cards) | 718 | June 2 | 104 | 1389 |
| United States Playing Card Company, Cincinnati, Ohio. "Holland, Kaatje and Moorish Backs Congress Playing Cards." (For Playing-Cards) | 799 | Aug. 4 | 105 | 1257 |
| United States Playing Card Company, Cincinnati, Ohio. "Kite Time and Spring Backs No. 606 Congress Playing Cards." (For Playing-Cards) | 800 | Aug. 4 | 105 | 1257 |
| United States Playing Card Company, Cincinnati, Ohio. "Locomobile Back Bicycle Playing Card." (For Playing-Cards) | 801 | Aug. 4 | 105 | 1257 |
| United States Playing Card Company, Cincinnati, Ohio. "Toboggan Congress Playing Cards." (For Playing-Cards) | 823 | Sept. 15 | 106 | 761 |

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| United States Playing Card Company, Cincinnati, Ohio. "Yacht Congress Playing Cards." (For Playing-Cards) | 826 | Sept. 22 | 106 | 993 |
| United States Playing Card Company, Cincinnati, Ohio. "Holly Congress Playing Cards." (For Playing-Cards) | 828 | Sept. 29 | 106 | 1235 |
| United States Playing Card Company, Cincinnati, Ohio. "Mistletoe Congress Playing Cards." (For Playing-Cards) | 846 | Oct. 20 | 106 | 2011 |
| Varney, Clark E., Somerville, Mass. "Graphic Base Ball." (For a Game) | 872 | Dec. 29 | 107 | 2525 |
| Victor Talking Machine Co., Camden, N. J. "Victor IV." (For Talking-Machines and Accessories) | 609 | Jan. 27 | 102 | 817 |
| Victor Talking Machine Co., Camden, N. J. "Premium Victor." (For Talking-Machines and Accessories) | 610 | Jan. 27 | 102 | 817 |
| Vogel, Jacob, and Vogel Brothers, New York, N. Y. "Contrasted Costumes, No. 1." (For Clothing) | 678 | May 12 | 104 | 575 |
| Vogeler, Henry, Newcastle Cal. "Butter and Eggs." (For Butter and Eggs) | 840 | Oct. 13 | 106 | 1773 |
| Vulcan Iron Works Co., Toledo, Ohio. "The Vulcan." (For Steam-Shovels) | 758 | June 30 | 104 | 2437 |
| Weaver & Co., C. H., Chicago, Ill. "Crown Brand." (For Butter) | 862 | Nov. 24 | 107 | 1091 |
| Wells, Richardson & Co., Burlington, Vt. "Paine's Celery Compound." (For Medicine) | 830 | Sept. 29 | 106 | 1235 |
| World's Dispensary Medical Association, Buffalo, N. Y. "$500 Reward." (For Medicine) | 681 | May 12 | 104 | 575 |
| World's Dispensary Medical Association, Buffalo, N. Y. "Dr. Pierce's Golden Medical Discovery." (For Medicine) | 870 | Dec. 22 | 107 | 2233 |
| World's Dispensary Medical Association, Buffalo, N. Y. "Dr. Pierce's Golden Medical Discovery and Dr. Pierce's Favorite Prescription." (For Medicine) | 871 | Dec. 22 | 107 | 2233 |
| Wright, George F., Princeton, Minn. "The Bread Winner." (For Flour) | 813 | Aug. 25 | 105 | 2055 |

# DISCLAIMERS.

| Name, residence, and invention. | No. | Filed. | Official Gazette. Volume. | Page. |
|---|---|---|---|---|
| Begole, Joshua F., St. Louis, Mo.; disclaimer filed by assignee, Wagner Electric Mfg. Co. Synchronism indicator | 712,174 | Mar. 30, 1903 | 103 | 1422 |
| Devlin, Edward, Paterson, N. J.; disclaimer filed by patentee. Means for locking the steering mechanism of motor-vehicles | 718,324 | July 11, 1903 | 105 | 501 |
| Klein, Rudolph, Rochester, N. Y.; disclaimer filed by patentee and assignee, Bausch & Lomb Optical Co. Photographic shutter | 695,564 | Nov. 11, 1903 | 107 | 836 |
| Miller, Thomas S., South Orange, and Joseph H Dickinson, Montclair, N. J.; disclaimer filed by patentees and assignee. Log hauling and loading machine | 726,325 | Sept. 11, 1903 | 106 | 769 |
| Neafis, Louis F., Chicago, Ill.; disclaimer filed by patentee. Testing device | 684,850 | June 8, 1903 | 104 | 1661 |
| Reisky, Emil, Rochester, N. Y.; disclaimer filed by assignee. Bowling-alley | 599,477 | Dec. 29, 1902 | 102 | 1 |
| Wagner, Edward, St. Louis, Mo.; disclaimer filed by patentee and assignee. Beer-pasteurizing apparatus | 607,304 | Oct. 23, 1903 | 106 | 2019 |

# ALPHABETICAL LIST OF INVENTIONS.

| Invention. | Name. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|---|
| | | | | Specification. | Drawing. | Volume. | Page. |
| Abdominal bandage | C. Babion | 748,336 | Dec. 29 | 5614 | 1279 | 107 | 2410 |
| Abdominal support | F. W. Clark | 747,139 | Dec. 15 | 3369 | 764 | 107 | 1877 |
| Abdominal supporter | D. Gleason | 720,342 | Feb. 10 | 1720 | 391 | 102 | 1203 |
| Abdominal supporter | E. M. Temple | 722,644 | Mar. 10 | 1829 | 407 | 103 | 409 |
| Abrading-machine | L. Peterson | 737,270 | Aug. 25 | 4179 | 930<br>931 | 105 | 1922 |
| Abrading material | J. M. Nash | 725,761 | Apr. 21 | 2502 | 568 | 103 | 1731 |
| Abrading material and mounting therefor | R. Gardner | 730,527 | June 9 | 1836 | 410 | 104 | 1521 |
| Abrading material. Tool for holding | M. E. McAfee | 734,927 | July 28 | 4135 | 963 | 105 | 919 |
| Abrading-shoe | J. M. Griffin | 738,029 | Sept. 1 | 939 | 208 | 106 | 205 |
| Abrading-tool | J. O. Rollins | 739,028 | Sept. 15 | 2908 | 646 | 106 | 656 |
| Abrading-tool compound | K. Sakurai | 733,082 | July 7 | 682 | ..... | 105 | 145 |
| Abrading-wheel-truing tool | L. A. Sherman | 745,120 | Nov. 24 | 4488 | 972 | 107 | 1001 |
| Account-carrier | F. A. Chapman | 721,422 | Feb. 24 | 3779 | 859<br>860 | 102 | 1668 |
| Account-register and desk | C. Paul and J. E. Hankey | 717,909 | Jan. 6 | 741 | 165<br>166 | 102 | 158 |
| Account-sheet | W. J. Hughes | 722,303 | Mar. 10 | 1215 | 270 | 103 | 275 |
| Account-sheet | R. G. Woodward | 723,117 | Mar. 17 | 2711 | 609<br>610 | 103 | 605 |
| Accounts. Means for checking separate | H. D. Bristol | 732,271 | June 30 | 5125 | 1139 | 104 | 2256 |
| Accumulator | W. K. L. Dickson | 741,675 | Oct. 20 | 2466 | 552 | 106 | 1807 |
| Accumulator mechanism | M. J. Whitlock | 719,628 | Feb. 3 | 385 | 88 | 102 | 902 |
| Accumulator-plate | W. Kraushaar | 718,774 | Jan. 20 | 2392 | 531 | 102 | 539 |
| Accumulator-plate | F. W. Bühne | 745,274 | Nov. 24 | 4787 | 1045 | 107 | 1062 |
| Accumulator-plate connector | G. A. Washburn | 723,791 | Mar. 24 | 3952 | 891 | 103 | 872 |
| Accumulator plate or grid | J. von der Poppenburg | 743,188 | Nov. 3 | 706 | 155 | 107 | 147 |
| Acetyl cellulose | A. Eichengrün and T. Becker | 734,123 | July 21 | 2635 | ..... | 105 | 590 |
| 1-Acetylamido-2-4-diamidobenzene | O. Dressel | 742,845 | Nov. 3 | 49 | ..... | 107 | 13 |
| Acetylene-burner | J. W. Bray | 717,535 | Jan. 6 | 23 | 7 | 102 | 8 |
| Acetylene-burner | H. E. Shaffer | 732,125 | June 30 | 4827 | 1076 | 104 | 2194 |
| Acetylene-generator | J. M. Green | 738,794 | Sept. 15 | 2511 | 552 | 106 | 570 |
| Acetylene-generators. Automatic governor for | F. Sedgwick | 728,024 | May 12 | 2265 | 503 | 104 | 499 |
| Acid. Absorber for the manufacture of sulfuric | J. B. F. Herreshoff | 737,233 | Aug. 25 | 4108 | 913 | 105 | 1907 |
| Acid. Alkyloxyalkyliden esters of salicylic | J. Callsen | 740,628 | Oct. 6 | 470 | ..... | 106 | 1347 |
| Acid. Amido-oxybenzyl sulfonic | F. Fischer and H. Guntrum | 729,054 | May 26 | 4202 | ..... | 104 | 942 |
| Acid and cyanid salt therefrom. Making hydrocyanic | J. H. Paul | 746,876 | Dec. 15 | 2866 | ..... | 107 | 1760 |
| Acid and cyanids. Manufacturing hydrocyanic | J. Tcherniac | 747,271 | Dec. 15 | 3620 | ..... | 107 | 1929 |
| Acid and making same. Benzylnaphthylamin-sulfonic | I. Levinstein and C. Mensching | 722,861 | Mar. 17 | 2265 | ..... | 103 | 511 |
| Acid and making same. Methylene-hippuric | A. Nicolaier and P. Hunsalz | 743,986 | Nov. 10 | 2317 | ..... | 107 | 514 |
| Acid and metallic oxids. Producing sulfuric | H. S. Blackmore | 724,251 | Mar. 31 | 4906 | ..... | 103 | 1082 |
| Acid. Apparatus for making sulfuric | N. L. Heinz | 728,914 | May 26 | 3943 | 876<br>877 | 104 | 888 |
| Acid. Apparatus for manufacturing sulfuric | J. B. F. Herreshoff | 737,626 | Sept. 1 | 125 | 27 | 106 | 30 |
| Acid. Apparatus for the manufacture of sulfuric | O. H. Eliel | 725,427 | Apr. 14 | 1857 | 415 | 103 | 1578 |
| Acid. Anthraquinone-alpha-sulfonic | R. E. Schmidt | 743,664 | Nov. 10 | 1728 | ..... | 107 | 385 |
| Acid ester and making same. Trimethyl-cyclohexenoncarboxylic- | G. Merling and R. Welde | 743,305 | Nov. 3 | 949 | ..... | 107 | 204 |
| Acid ester of methylene diguaiacol and making same. Benzoic- | S. L. Summers | 721,924 | Mar. 3 | 514 | ..... | 103 | 114 |
| Acid in natural phosphates soluble in citric acid. Rendering the phosphoric | G. Hoyermann | 736,730 | Aug. 18 | 3179 | ..... | 105 | 1692 |
| Acid in products of combustion. Device for automatically recording the amount of carbonic | P. Schultze | 728,022 | May 12 | 2262 | 503 | 104 | 499 |
| Acid. Making acetic | J. G. and A. Behrens, Jr | 741,615 | Oct. 20 | 2361 | ..... | 106 | 1785 |
| Acid. Making anthraquinone alpha disulfonic | R. E. Schmidt | 742,910 | Nov. 3 | 159 | ..... | 107 | 35 |
| Acid. Making methylene citric | R. Berendes | 722,275 | Mar. 10 | 1163 | ..... | 103 | 263 |
| Acid. Making sulfuric | J. B. F. Herreshoff | 722,981 | Mar. 17 | 2465 | 552<br>553 | 103 | 553 |
| Acid. Making sulfuric | M. Neumann | 729,643 | June 2 | 212 | 48, 49 | 104 | 1172 |
| Acid. Making sulfuric | G. Gin | 734,849 | July 28 | 4011 | 936 | 105 | 892 |
| Acid. Making sulfuric | J. B. F. Herreshoff | 737,625 | Sept. 1 | 123 | 27 | 106 | 29 |
| Acid. Manufacturing muriatic | G. E. Hipp | 726,533 | Apr. 28 | 3931 | ..... | 103 | 2038 |
| Acid mordant and making same. Organic | W. Beckers | 719,555 | Feb. 3 | 262 | ..... | 102 | 878 |
| Acid. Obtaining pure pyroligneous | G. Glock | 736,959 | Aug. 25 | 3620 | ..... | 105 | 1805 |
| Acid of aromatic aldehyde and making same. Sulfo- | A. Steiner | 731,139 | June 16 | 2960 | ..... | 104 | 1777 |
| Acid or other gas. Apparatus for charging fluids or the like with carbonic- | G. A. Lowry | 732,203 | June 30 | 4985 | 1109 | 104 | 2227 |
| Acid or other liquid distributing system | W. L. Colson | 728,084 | May 12 | 2375 | 528 | 104 | 523 |
| Acid or other liquid distributing system | F. M. Wever | 728,148 | May 12 | 2488 | 553 | 104 | 546 |
| Acid. Preparing dialkyl-barbituric | M. Engelmann | 744,732 | Nov. 24 | 3757 | ..... | 107 | 849 |
| Acid. Purpurin-alpha-sulfonic | K. Thun | 746,405 | Dec. 8 | 1995 | ..... | 107 | 1545 |
| Acid salts and making same. Sulfonic- | L. O. Helmers | 722,506 | Mar. 10 | 1596 | ..... | 103 | 358 |
| Acid salts of alkaline earthy metals and metals proper and making same. Sulfonic- | L. O. Helmers | 722,507 | Mar. 10 | 1597 | ..... | 103 | 359 |
| Acid-vat | T. W. Ruffner | 744,242 | Nov. 24 | 4731 | 1033 | 107 | 1051 |
| Acids. Apparatus for condensing and mixing | F. I. du Pont | 736,625 | Aug. 18 | 2977 | 655 | 105 | 1650 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Acids. Apparatus for making mixtures of nitric and sulfuric | F. I. du Pont | 743,922 | Nov. 10 | 2184 | 471 | 107 | 481 |
| Acids. Apparatus for making sulfuric or other | J. G. Graham | 736,087 | Aug. 11 | 2004 | 427 | 105 | 1429 |
| Acids. Mechanism for reducing pyroligneous | W. S. Brandt | 737,067 | Aug. 25 | 3801 | 842 | 105 | 1843 |
| Adder and subtracter. Pocket | T. M. Minor | 746,352 | Dec. 8 | 1911 | 436 | 107 | 1526 |
| Adding and recording machine | A. S. Dennis | 733,947 | July 21 | 2265 | 532, 533, 534, 535 | 105 | 511 |
| Adding and subtracting integers and fractions. Machine for | B. Bundy | 740,522 | Oct. 6 | 270 | 53 | 106 | 1303 |
| Adding-machine | J. C. Lotterhand | 718,486 | Jan. 13 | 1800 | 400, 401, 402 | 102 | 398 |
| Adding-machine | S. Hartmann | 726,056 | Apr. 21 | 3001 | 683 | 103 | 1836 |
| Adding-machine | A. H. Stanton | 726,586 | Apr. 28 | 4044 | 913, 914 | 103 | 2060 |
| Adding-machine | J. L. Levin | 727,392 | May 5 | 1056 | 229 | 104 | 228 |
| Adding-machine | A. D. Gilpin | 728,323 | May 19 | 2634 | 587, 588 | 104 | 599 |
| Adding-machine | G. F. Meier | 730,281 | June 9 | 1381 | 304, 305 | 104 | 1425 |
| Adding-machine | C. Wales | 745,539 | Dec. 1 | 418 | 96, 97 | 107 | 1188 |
| Adding-machine carrying mechanism | C. Wales | 745,542 | Dec. 1 | 426 | 100, 101 | 107 | 1189 |
| Adding-machine correcting mechanism | C. Wales | 745,540 | Dec. 1 | 423 | 98 | 107 | 1188 |
| Adding-machine multiplying mechanism | C. Wales | 745,541 | Dec. 1 | 425 | 99 | 107 | 1188 |
| Adding-machine zero-resetting mechanism | C. Wales | 745,543 | Dec. 1 | 430 | 101 | 107 | 1189 |
| Adding-register | H. G. White | 742,810 | Oct. 27 | 4627 | 1049 | 106 | 2272 |
| Addition-tester | H. E. Brown | 719,734 | Feb. 3 | 583 | 132 | 102 | 945 |
| Addressing and assorting machine | L. A. Agnew | 720,213 | Feb. 10 | 1484 | 339, 340 | 102 | 1152 |
| Addressing-machine | L. E. Olson | 722,136 | Mar. 3 | 871 | 195 | 103 | 187 |
| Addressing-machine | J. W. Underhill | 722,268 | Mar. 10 | 1153 | 254, 255 | 103 | 261 |
| Addressing-machine | H. L. Gay | 722,969 | Mar. 17 | 2448 | 548 | 103 | 550 |
| Addressing-machine | A. B. Hunkins | 744,347 | Nov. 17 | 3052 | 655, 656 | 107 | 682 |
| Adhesive-applying apparatus | A. N. and E. J. Barnes | 719,554 | Feb. 3 | 261 | 61 | 102 | 878 |
| Adhesive-applying mechanism | J. C. F. Balze | 733,361 | July 14 | 1193 | 283 | 105 | 267 |
| Adhesive-applying mechanism | J. C. F. Balze | 746,657 | Dec. 15 | 2458 | 562 | 107 | 1669 |
| Adhesives. Making | C. D. Ekman | 742,174 | Oct. 27 | 3484 | | 106 | 2032 |
| Adjustable chair | T. M. McKee | 718,372 | Jan. 13 | 1577 | 348 | 102 | 353 |
| Adjustable chair or table | P. C. Palmer | 730,690 | June 9 | 2127 | 472 | 104 | 1586 |
| Adjustable extension-hanger | H. S. Burley | 733,003 | July 7 | 532 | 132 | 105 | 114 |
| Adjustable gage | W. G. Templeton | 725,891 | Apr. 21 | 2731 | 622 | 103 | 1781 |
| Adjustable holder | W. A. Dickinson | 739,482 | Sept. 22 | 3768 | 842 | 106 | 856 |
| Adjustable seat | A. Adler | 720,549 | Feb. 17 | 2115 | 488 | 102 | 1301 |
| Adjustable table | G. H. Cummings | 745,160 | Nov. 24 | 4592 | 996 | 107 | 1021 |
| Adjustable wrench | G. M. Kifer and W. F. Shrader | 720,933 | Feb. 17 | 2814 | 646 | 102 | 1445 |
| Adjustable wrench | E. F. Hirst | 734,329 | July 21 | 3029 | 713 | 105 | 675 |
| Adjusting device | L. Myers | 738,928 | Sept. 15 | 2757 | 609 | 106 | 624 |
| Advertisement-displaying apparatus | W. Britain, Jr | 726,250 | Apr. 28 | 3361 | 763 | 103 | 1925 |
| Advertising and check-protecting device. Combined | A. A. Root | 742,495 | Oct. 27 | 4075 | 916, 917 | 106 | 2153 |
| Advertising and playing board. Combined | N. Sandoz | 728,986 | May 26 | 4068 | 903 | 104 | 914 |
| Advertising apparatus | W. C. Day | 728,446 | May 19 | 3057 | 673, 674 | 104 | 689 |
| Advertising apparatus. Aerial | E. A. Ward and W. S. Young | 739,127 | Sept. 15 | 3106 | 687 | 106 | 696 |
| Advertising-automaton | F. C. Dorment | 721,787 | Mar. 3 | 231 | 50, 51, 52 | 103 | 51 |
| Advertising-book | J. H. Asbury | 740,511 | Oct. 6 | 243 | 48, 49 | 106 | 1298 |
| Advertising-card | J. L. Bieder | 744,158 | Nov. 17 | 2691 | 574 | 107 | 602 |
| Advertising device | E. J. Sedlack | 720,977 | Feb. 17 | 2902 | 665 | 102 | 1464 |
| Advertising device | F. C. Dorment | 721,788 | Mar. 3 | 237 | 52, 53 | 103 | 52 |
| Advertising device | C. F. Echternach | 725,830 | Apr. 21 | 2629 | 598 | 103 | 1758 |
| Advertising device | W. C. Carr | 729,843 | June 2 | 593 | 131 | 104 | 1249 |
| Advertising device | W. A. Demmon | 733,819 | July 14 | 2018 | 475 | 105 | 441 |
| Advertising device | J. D. Smith | 734,982 | July 28 | 4242 | 986 | 105 | 940 |
| Advertising device | S. S. Fels | 735,486 | Aug. 4 | 868 | 185 | 105 | 1165 |
| Advertising device | L. R. Gaynor | 738,177 | Sept. 8 | 1271 | 275 | 106 | 291 |
| Advertising device | E. Altman | 746,232 | Dec. 8 | 1688 | 376 | 107 | 1480 |
| Advertising device and street-indicator. Electric | R. D. Lampson | 733,053 | July 7 | 628 | 153 | 105 | 133 |
| Advertising device. Electric | J. C. Currah and R. A. Willson | 737,359 | Aug. 25 | 4344 | 968 | 105 | 1958 |
| Advertising device. Electric | G. W. Enright | 742,407 | Oct. 27 | 3917 | 880 | 106 | 2120 |
| Advertising display-card and carton-holder | L. C. Witkowski | 742,545 | Oct. 27 | 4178 | 940 | 106 | 2174 |
| Advertising-envelop | F. Howey | 745,187 | Nov. 24 | 4641 | 1008 | 107 | 1033 |
| Advertising-frame | C. McGinn | 739,019 | Sept. 15 | 2896 | 643 | 106 | 653 |
| Advertising-machine | M. J. Jordan | 738,914 | Sept. 15 | 2733 | 603, 604 | 106 | 619 |
| Advertising matter. Conveyance for displaying | R. H. Neff | 726,092 | Apr. 21 | 3056 | 694 | 103 | 1847 |
| Advertising novelty | W. A. Demmon | 735,720 | Aug. 11 | 1314 | 283 | 105 | 1278 |
| Advertising novelty | J. L. Kellogg | 740,143 | Sept. 29 | 5006 | 1124 | 106 | 1137 |
| Advertising or other purposes. Optical device for | R. C. T. Evans | 719,771 | Feb. 3 | 664 | 153 | 102 | 963 |
| Advertising or the like | C. Scott-Snell | 731,075 | June 16 | 2834 | 629, 630 | 104 | 1753 |
| Advertising paper-holder | D. L. Stowe | 748,117 | Dec. 29 | 5240 | 1189 | 107 | 2330 |
| Advertising system | J. S. Mather | 726,444 | Apr. 28 | 3733 | 847 | 103 | 2001 |
| Adz. Single-hand | O. Keehne | 735,268 | Aug. 4 | 459 | 91 | 105 | 1078 |
| Aerated-liquid-dispensing apparatus | J. J. McLaughlin | 736,000 | Aug. 11 | 1850 | 396 | 105 | 1395 |
| Aerated liquids from bulk on draft. Apparatus for supplying | W. Nicholls | 721,073 | Feb. 17 | 3074 | 706 | 102 | 1502 |
| Aerated waters. Apparatus for the automatic production and delivery of | W. Lee and W. McMurray | 722,368 | Mar. 10 | 1327 | 293 | 103 | 298 |
| Aerating apparatus. Liquid | J. Gwynne and E. W. Sargeant | 721,036 | Feb. 17 | 3011 | 691 | 102 | 1487 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|---|
| | | | | Spec. | Drg. | Vol. | Page. |
| Aerating apparatus. Liquid- | K. S. Murray | 748,405 | Dec. 29 | 5733 | {1309 1310 | {107 | 2437 |
| Aerating beer, &c. Means for | E. C. Harvey | 721,184 | Feb. 24 | 3330 | 761 | 102 | 1575 |
| Aerating liquids and bottling same. Machine for | T. Sutcliffe | 727,710 | May 12 | 1690 | 377 | 104 | 382 |
| Aerating or carbonating apparatus. Liquid | F. J. Fletcher | 723,453 | Mar. 24 | 3349 | 750 | 103 | 748 |
| Aerator. Milk- | J. Lemire | 718,644 | Jan. 20 | 2137 | 467 | 102 | 488 |
| Aerial apparatus | J. Kaiser | 722,848 | Mar. 17 | 2246 | 503 | 103 | 508 |
| Aerial apparatus | A. W. La France and W. Wright | 726,543 | Apr. 28 | 3949 | {892 893 | {103 | 2042 |
| Aerial device | C. A. Needham | 720,837 | Feb. 17 | 2628 | 606 | 102 | 1406 |
| Aerial device | C. A. Needham | 720,838 | Feb. 17 | 2629 | {606 607 | {102 | 1406 |
| Aerial device | C. A. Needham | 730,956 | June 16 | 2608 | {580 581 | {104 | 1706 |
| Aerial-navigation apparatus | C. E. Van Deventer | 741,568 | Oct. 13 | 2262 | {505 506 | {106 | 1749 |
| Aerial navigation. Machine for | I. I. Morris | 737,947 | Sept. 1 | 777 | 170 | 106 | 170 |
| Aerial vessel | G. D. Shultz | 729,800 | June 2 | 511 | {112 113 | {104 | 1232 |
| Aeroplane | T. Gibon | 730,107 | June 2 | 1055 | 236 | 104 | 1343 |
| Agitating apparatus | W. H. Motter | 730,384 | June 9 | 1565 | {348 349 | {104 | 1463 |
| Agitation-tank | J. and L. Stoveken | 729,806 | June 2 | 525 | 115 | 104 | 1235 |
| Agricultural implement | W. C. Allen | 719,291 | Jan. 27 | 3362 | 750 | 102 | 755 |
| Agricultural implement | D. Lubin | 721,582 | Feb. 24 | 4081 | 928 | 102 | 1734 |
| Agricultural implement | D. Lubin | 722,028 | Mar. 3 | 694 | {153 154 | {103 | 150 |
| Agricultural implement | R. E. Clarke | 726,642 | Apr. 28 | 4145 | 935 | 103 | 2080 |
| Agricultural implement | M. O. Schreiber | 727,460 | May 5 | 1184 | 261 | 104 | 256 |
| Agricultural implement | W. W. Brady | 728,535 | May 19 | 3228 | 716 | 104 | 724 |
| Agricultural implement | J. H. Auble | 738,272 | Sept. 8 | 1460 | 315 | 106 | 330 |
| Agricultural implement | D. Lubin | 739,193 | Sept. 15 | 3216 | 711 | 106 | 719 |
| Agricultural implement | D. Lubin | 739,194 | Sept. 15 | 3217 | 711 | 106 | 719 |
| Agricultural implement | J. Downing | 740,633 | Oct. 6 | 477 | 105 | 106 | 1349 |
| Agricultural implement | F. W. Miller | 746,547 | Dec. 8 | 2240 | {513 514 | {107 | 1599 |
| Agricultural implement. Power-operated | D. Lubin | 721,581 | Feb. 24 | 4078 | {927 928 | {102 | 1733 |
| Agricultural implement. Power-propelled | D. Lubin | 721,580 | Feb. 24 | 4076 | 926 | 102 | 1733 |
| Agricultural-implement seat | J. W. Holtzmuller and W. Osborn | 731,778 | June 23 | 4157 | 927 | 104 | 2037 |
| Agricultural-implement wheel-scraper | A. E. Watson | 747,813 | Dec. 22 | 4612 | 1040 | 107 | 2171 |
| Agricultural implements. Steering-truck for | F. R. Packham | 732,215 | June 30 | 5007 | 1113 | 104 | 2232 |
| Agricultural machine | D. Lubin | 721,583 | Feb. 24 | 4083 | {928 929 | {102 | 1735 |
| Agricultural machine | D. Lubin | 721,584 | Feb. 24 | 4086 | 930 | 102 | 1735 |
| Agricultural machine | W. Y. Donahoe | 722,955 | Mar. 17 | 2422 | 541 | 103 | 544 |
| Agricultural machine. Combined | C. S. Wilmeth | 731,146 | June 16 | 2974 | {660 661 | {104 | 1780 |
| Agricultural machine. Motor-operated | D. Lubin | 721,585 | Feb. 24 | 4088 | {930 931 | {102 | 1736 |
| Agricultural machines to motors. Means for coupling | A. Castelin | 729,275 | May 26 | 4584 | 1012 | 104 | 1021 |
| Agricultural purposes. Motor-tractor for | D. Albone | 724,531 | Apr. 7 | 207 | 50 | 103 | 1213 |
| Air and gas engine | J. B. O'Donnell | 724,606 | Apr. 7 | 350 | 85 | 103 | 1244 |
| Air and gas mixer | C. A. Dally | 718,049 | Jan. 6 | 988 | 220 | 102 | 213 |
| Air and gas mixer | F. J. Moehn | 741,809 | Oct. 20 | 2732 | 608 | 106 | 1863 |
| Air and gas mixtures. Meter for | H. E. Oving | 731,607 | June 23 | 3851 | 858 | 104 | 1976 |
| Air and separating oxygen therefrom. Apparatus for liquefying | E. C. Thrupp | 743,349 | Nov. 3 | 1033 | 223 | 107 | 220 |
| Air and water heating apparatus | C. H. Atkins | 737,562 | Sept. 1 | 3 | 1 | 106 | 3 |
| Air. Apparatus for simultaneously supplying heated and refrigerated | J. and W. Titus | 724,145 | Mar. 31 | 4683 | 1052 | 103 | 1039 |
| Air-brake | J. Farrar | 722,403 | Mar. 10 | 1380 | 306 | 103 | 310 |
| Air-brake | F. L. Guillemet | 722,837 | Mar. 17 | 2229 | {499 500 | {103 | 505 |
| Air-brake | C. W. Valentine | 725,181 | Apr. 14 | 1422 | 322 | 103 | 1486 |
| Air-brake | J. Lipkowski | 727,394 | May 5 | 1060 | 230 | 104 | 228 |
| Air-brake | A. J. De la Croix | 738,165 | Sept. 8 | 1246 | 270 | 106 | 286 |
| Air-brake | J. H. Bleoo | 742,386 | Oct. 27 | 3880 | {871 872 | {106 | 2113 |
| Air-brake | M. H. Neff | 745,735 | Dec. 1 | 752 | 172 | 107 | 1259 |
| Air-brake | C. W. Valentine | 745,934 | Dec. 1 | 1138 | 255 | 107 | 1342 |
| Air-brake and signal system | T. J. Quirk | 742,491 | Oct. 27 | 4062 | 913 | 106 | 2150 |
| Air-brake angle-cocks. Operating device for | W. B. Riley | 722,384 | Mar. 10 | 1350 | 299 | 103 | 303 |
| Air-brake attachment | F. B. O'Bannon and F. J. Chamberlain. | 740,306 | Sept. 29 | 5305 | 1195 | 106 | 1198 |
| Air-brake attachment | H. F. Ong | 743,916 | Nov. 10 | 2171 | {468 469 | {107 | 478 |
| Air-brake attachment. Locomotive | H. R. Nevens | 739,907 | Sept. 29 | 4576 | 1029 | 106 | 1045 |
| Air-brake. Automatic | W. C. Shannon and L. D. Mullen | 735,603 | Aug. 4 | 1084 | {230 231 | {105 | 1211 |
| Air-brake. Automatic | C. H. Nelson | 742,722 | Oct. 27 | 4481 | {1013 1014 | {106 | 2239 |
| Air-brake automatic safety-stop | W. H. Hughes and J. Roche | 736,262 | Aug. 11 | 2296 | 496 | 105 | 1490 |
| Air-brake connection | S. Feust and B. L. Wright | 735,735 | Aug. 11 | 1336 | 288 | 105 | 1282 |
| Air-brake coupling | J. Shourek | 739,793 | Sept. 22 | 4331 | 970 | 106 | 978 |
| Air-brake coupling | R. W. Wilke and M. Bauer | 747,817 | Dec. 22 | 4622 | 1043 | 107 | 2173 |
| Air-brake coupling. Automatic | C. H. Seitz | 730,484 | June 9 | 1754 | 392 | 104 | 1503 |
| Air-brake cylinders of engines and tenders. Instantaneous release for the | T. A. Seery | 718,533 | Jan. 13 | 1922 | 422 | 102 | 429 |
| Air brake. Direct-acting compressed- | W. K. M. Hildebrand | 732,856 | July 7 | 284 | 71 | 105 | 63 |
| Air-brake dust-arrester | T. M. Henderson | 730,824 | June 9 | 2344 | 519 | 104 | 1632 |
| Air-brake for motor road-vehicles | H. Ledermann | 741,261 | Oct. 13 | 1633 | {367 368 | {106 | 1614 |
| Air-brake graduating-release appliance | E. G. Shortt | 726,469 | Apr. 28 | 3783 | 856 | 103 | 2011 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|---|
| | | | | Spec. | Dr'g. | Vol. | Page. |
| Air-brake hose-coupling | A. F. Allan and J. A. Lenhoff | 743,796 | Nov. 10 | 1957 | 415 | 107 | 434 |
| Air-brake hose-coupling and valve mechanism | G. B. Dinkins | 725,421 | Apr. 14 | 1847 | 413 | 103 | 1575 |
| Air-brake mechanism | T. J. Quirk | 726,459 | Apr. 28 | 3765 | 853 | 103 | 2008 |
| Air-brake mechanism | T. J. Quirk. (Reissue) | 12,158 | Sept. 22 | 4358 | 978 | 106 | 985 |
| Air-brake-operating device. Automatic | A. H. Freeman | 737,092 | Aug. 25 | 3842 | 854 | 105 | 1851 |
| Air-brake pipes. Fluid-pressure coupling for | J. G. Ludwig | 727,982 | May 12 | 2196 | 489 | 104 | 486 |
| Air-brake. Railway | P. Jacobson | 735,981 | Aug. 11 | 1807 | 387 | 105 | 1386 |
| Air-brake. Railway automatic emergency | J. P. Birmingham | 741,299 | Oct. 13 | 1726 | 385 | 106 | 1631 |
| Air-brake safety angle-cock | P. McGuire and C. Wahl | 733,503 | July 14 | 1440 | 339 | 105 | 322 |
| Air-brake safety device | J. H. Luckey | 746,969 | Dec. 15 | 3047 | 699 | 107 | 1801 |
| Air-brake system | W. B. Mann | 735,544 | Aug. 4 | 982 | 208 | 105 | 1189 |
| Air-brake system | H. R. Kuhn | 746,107 | Dec. 8 | 1455 | 327 | 107 | 1429 |
| Air-brake-system attachment | J. W. Alexander | 728,071 | May 12 | 2354 | 524 | 104 | 518 |
| Air-brake system. Duplex | W. H. Nightingale | 723,297 | Mar. 24 | 3058 | 687<br>688 | 103 | 690 |
| Air-brake system. Duplex | W. H. Nightingale | 748,302 | Dec. 29 | 5565 | 1269<br>1270 | 107 | 2400 |
| Air-brake systems. Compressor for | W. K. M. Hildebrand | 740,133 | Sept. 29 | 4983 | 1118<br>1119 | 106 | 1132 |
| Air-brake systems. Device for heating | J. W. Geary | 736,810 | Aug. 18 | 3390 | 750 | 105 | 1736 |
| Air-brake. Vehicle | J. S. Smart | 732,789 | July 7 | 170 | 43, 44 | 105 | 40 |
| Air-brakes while set. Means for supplying fluid-pressure to the auxiliary reservoirs and brake-cylinders of | E. G. Shortt | 727,469 | May 5 | 1205 | 266 | 104 | 260 |
| Air-compressing apparatus | F. E. Bachman | 739,472 | Sept. 22 | 3745 | 835 | 106 | 850 |
| Air-compressor | W. M. Myers | 719,127 | Jan. 27 | 3077 | 684 | 102 | 695 |
| Air-compressor | B. Gastal | 732,968 | Mar. 17 | 2446 | 547<br>548 | 103 | 549 |
| Air-compressor | M. W. Marsden | 723,000 | Mar. 17 | 2495 | 561 | 103 | 559 |
| Air-compressor | J. C. Williams | 728,149 | May 12 | 2491 | 553 | 104 | 547 |
| Air-compressor | G. De Laval and G. P. Aborn | 731,692 | June 23 | 3099 | 892<br>893 | 104 | 2004 |
| Air-compressor | G. Code | 734,303 | July 21 | 2991 | 704 | 105 | 665 |
| Air-compressor | G. De Laval and G. P. Aborn | 738,920 | Sept. 15 | 2741 | 606 | 106 | 621 |
| Air-compressor | L. M. Sartain | 739,792 | Sept. 22 | 4329 | 969 | 106 | 978 |
| Air compressor and heater | C. R. Keller | 725,450 | Apr. 14 | 1913 | 428 | 103 | 1589 |
| Air-compressor. Compound | G. W. Marsh | 723,001 | Mar. 17 | 2499 | 561 | 103 | 560 |
| Air-compressor-cylinder water-jacket | J. H. Herron | 736,254 | Aug. 11 | 2280 | 493 | 105 | 1486 |
| Air-compressor governor | J. H. Herron | 736,253 | Aug. 11 | 2278 | 492<br>493 | 105 | 1486 |
| Air-compressor. Hydraulic | J. H. Shedd | 738,576 | Sept. 8 | 2058 | 449 | 106 | 458 |
| Air-compressors. Air-conduit for hydraulic | W. O. Webber | 740,496 | Oct. 6 | 223 | 43 | 106 | 1294 |
| Air-compressors. Controller for hydraulic | W. J. Linton | 734,904 | July 28 | 4097 | 955 | 105 | 910 |
| Air-compressors. Unloading means for | E. Hill | 730,121 | June 2 | 1079 | 242<br>243 | 104 | 1347 |
| Air-conduit coupling | E. G. H. Stein and J. Mandel | 726,004 | Apr. 21 | 2925 | 665 | 103 | 1820 |
| Air cooler and heater. Cabinet | J. and W. Titus | 721,254 | Feb. 24 | 3187 | 793 | 102 | 1607 |
| Air-cooling apparatus | W. G. Bloss | 738,761 | Sept. 15 | 2441 | 535 | 106 | 554 |
| Air-cooling apparatus | W. G. Bloss | 738,762 | Sept. 15 | 2442 | 535<br>536 | 106 | 554 |
| Air. Cooling, drying, and purifying | W. L. Moore | 726,181 | Apr. 21 | 3235 | 733 | 103 | 1883 |
| Air-draft heater | J. McDermott | 741,608 | Oct. 13 | 2340 | 524 | 106 | 1765 |
| Air-duct | A. C. McCord | 738,745 | Sept. 8 | 2399 | 527 | 106 | 529 |
| Air-forcing device for ventilation or similar uses | J. B. and J. Le Reau, dit L'Heureux | 733,223 | July 7 | 930 | 224 | 105 | 195 |
| Air-heater and steam-generator | T. S. C. Lowe | 718,008 | Jan. 6 | 929 | 206 | 102 | 200 |
| Air heating and moistening apparatus | I. S. McDougall | 740,303 | Sept. 29 | 5301 | 1193<br>1194 | 106 | 1197 |
| Air-heating apparatus | J. T. Farmer | 746,805 | Dec. 15 | 2711 | 625<br>626 | 107 | 1725 |
| Air in factories, workrooms, &c. Moistening, cooling, or heating the | L. Sconfietti | 728,772 | May 19 | 3672 | 817 | 104 | 818 |
| Air in the production of mechanical energy. Utilization of liquefied | C. S. Bradley | 720,778 | Feb. 17 | 2540 | 585 | 102 | 1388 |
| Air inlet for sanitary ventilation of the drainage systems of houses, buildings, &c. Fresh- | G. Cody | 736,220 | Aug. 11 | 2221 | 478 | 105 | 1474 |
| Air-inlet. Fresh- | R. S. Watson | 735,007 | July 28 | 4289 | 998 | 105 | 950 |
| Air-inlet. Self-acting | V. G. Bauer | 721,853 | Mar. 3 | 360 | 79 | 103 | 78 |
| Air-lock. Safety | W. I. Aims | 721,991 | Mar. 3 | 636 | 141 | 103 | 138 |
| Air. Means for filtering, attemperating, and moistening or drying | J. Brady | 727,581 | May 12 | 1421 | 319 | 104 | 324 |
| Air-moistening apparatus | A. Levy | 720,364 | Feb. 10 | 1766 | 400 | 102 | 1213 |
| Air or gas compressors. Unloading device for | W. S. Fairhurst | 726,220 | Apr. 21 | 3296 | 748 | 103 | 1896 |
| Air or other aeriform bodies. Compressor for | H. C. Sergeant and W. Raymond | 745,298 | Nov. 24 | 4840 | 1055 | 107 | 1073 |
| Air or other aeriform fluids. Apparatus for the liquefaction of | C. Joly | 718,572 | Jan. 13 | 2009 | 437 | 102 | 447 |
| Air or other gases. Mechanism for compressing | W. H. Reynolds | 728,413 | May 19 | 2999 | 660 | 104 | 676 |
| Air or other similar brake. Compressed- | A. Chaumont | 737,906 | Sept. 1 | 697 | 150<br>151 | 106 | 153 |
| Air-pipe moisture and rust trap | J. S. Bridges | 732,042 | June 30 | 4662 | 1041 | 104 | 2160 |
| Air purifier and blower | F. Marx | 731,927 | June 23 | 4421 | 986 | 104 | 2096 |
| Air-separator | C. H. Lane | 728,473 | May 19 | 3123 | 691 | 104 | 703 |
| Air-separator | C. H. Lane | 728,474 | May 19 | 3125 | 691 | 104 | 703 |
| Air-separator | C. H. Lane | 728,475 | May 19 | 3127 | 692 | 104 | 704 |
| Air-ship | E. P. Johnston | 722,516 | Mar. 10 | 1610 | 355<br>356 | 103 | 362 |
| Air-ship | F. A. Summers | 723,068 | Mar. 17 | 2621 | 590<br>591 | 103 | 587 |
| Air-ship | J. Berry | 723,636 | Mar. 24 | 3692 | 827 | 103 | 816 |
| Air-ship | T. Michelsen | 735,981 | Apr. 21 | 2885 | 654 | 103 | 1811 |
| Air-ship steering mechanism. Dirigible- | L. A. Boswell | 738,844 | May 26 | 3827 | 852 | 104 | 866 |
| Air spray. Compressed- | L. Scruggs | 731,752 | Mar. 3 | 171 | 40 | 103 | 38 |
| Air-tight box, tin, or canister | A. Fogg | 721,507 | Feb. 24 | 3928 | 894 | 102 | 1699 |
| Air to buildings. Apparatus for supplying cool | A. Siebert | 734,975 | July 28 | 4225 | 982 | 105 | 937 |
| Air under pressure. Apparatus for delivering | H. Davis | 726,263 | Apr. 28 | 3388 | 770 | 103 | 1930 |
| Air. Utilization of compressed | R. Nutty | 745,373 | Dec. 1 | 108 | 25 | 107 | 1124 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Alarm: *See* Barometer-alarm. Bicycle-alarm. Boiler-alarm. Burglar-alarm. Coyote-alarm. Crossing-alarm. Door-alarm. Electric alarm. Elevator electric alarm. Engineer's alarm. Fire-alarm. Fire and burglar alarm. Heat-alarm. High or low water alarm. Jail-alarm. Journal automatic alarm. Knob-alarm. Locomotive-engineer's alarm. Low-water alarm. Oil-can acoustic alarm. Overflow-alarm. Railway-alarm. Refrigerator-alarm. Thermostatic alarm. Trolley-alarm. | | | | | | | |
| Alarm and annunciator | R. J. Dodd | 723,845 | Mar. 31 | 4066 | 918 | 103 | 912 |
| Alarm-giving mechanism | E. H. Juhlin | 717,865 | Jan. 6 | 670 | 149 | 102 | 143 |
| Alarm-lock | W. Edwards | 732,282 | June 30 | 5148 | 1143, 1144 | 104 | 2260 |
| Alarm system | E. H. Ballou | 741,573 | Oct. 13 | 2280 | 509 | 106 | 1752 |
| Alarm system. Electric | S. Schwarzschild | 730,576 | June 9 | 1925 | 423 | 104 | 1541 |
| Alarm system. Electric time- | E. T. Ackerman | 719,551 | Feb. 3 | 250 | 59 | 102 | 876 |
| Alarm system. Electrical | H. M. Sutton, W. L. Steele, and M. Coerver. | 722,334 | Mar. 10 | 1265 | 282, 283 | 103 | 285 |
| Album | A. Swanson | 727,022 | May 5 | 403 | 84 | 104 | 88 |
| Album and stand. Combined | N. H. Jones | 727,148 | May 5 | 632 | 135 | 104 | 137 |
| Album stand or support | G. Schwab | 741,555 | Oct. 13 | 2244 | 499 | 106 | 1745 |
| Album, toilet-box, and writing-desk. Combined photograph- | R. Aizenman | 739,571 | Sept. 22 | 3914 | 876, 877 | 106 | 886 |
| Albuminate and albuminate-containing material. Durable elastic | A. V. H. F. C. Clauson-Kaas | 724,810 | Apr. 7 | 733 | ------ | 103 | 1327 |
| Albuminoid substances from maize. Making | E. Donard and H. Labbé | 744,510 | Nov. 17 | 3343 | ------ | 107 | 744 |
| Albumose. Making | D. Finkler | 728,385 | May 19 | 2952 | ------ | 104 | 666 |
| Alcohol-burner | J. P. Steppe | 720,634 | Feb. 17 | 2295 | 526 | 102 | 1335 |
| Alcohol-heater | E. R. Plummer | 731,069 | June 16 | 2825 | 628 | 104 | 1751 |
| Alcohol. Making trichloroisopropyl | F. Hofmann and O. Bonhoeffer | 742,430 | Oct. 27 | 3963 | ------ | 106 | 2129 |
| Alimentary-paste-drying apparatus | J. Alloatti | 735,931 | Aug. 11 | 1712 | 365 | 105 | 1365 |
| Alimentary products. Machine for the production of coated | L. Heilmann-Taylor | 729,933 | June 2 | 743 | 165, 166 | 104 | 1279 |
| Alkali caffeine methylene disalicylate | S. L. Summers | 721,923 | Mar. 3 | 513 | ------ | 103 | 114 |
| Alkali chlorids. Apparatus for the electrolytic decomposition of | C. Fournier | 734,312 | July 21 | 3002 | 707 | 105 | 668 |
| Alkali cyanid and alkali metal. Simultaneously producing | P. Danckwardt | 746,796 | Dec. 15 | 2699 | 622 | 107 | 1722 |
| Alkali cyanids. Manufacturing | P. Danckwardt | 746,795 | Dec. 15 | 2698 | 622 | 107 | 1722 |
| Alkali metals. Manufacture of | H. Specketer and O. H. Weber | 730,979 | June 16 | 2652 | ------ | 104 | 1715 |
| Alkalies and alkali earths. Manufacturing hydrates of | F. Jahn | 744,920 | Nov. 24 | 4079 | 879 | 107 | 916 |
| Alkaline-earth dioxids. Making hydrates of | G. F. Jaubert | 734,713 | July 28 | 3730 | ------ | 105 | 836 |
| Alkaline metals. Making chromates of the | F. M. and D. D. Spence, A. Shearer, and T. J. I. Craig. | 747,255 | Dec. 15 | 3580 | ------ | 107 | 1920 |
| Alkaline salts. Electrolytic decomposition of | M. Wildermann | 741,864 | Oct. 20 | 2821 | 627, 628, 629 | 106 | 1883 |
| Alkaline sulfates. Making dry | S. Trivick | 728,335 | May 19 | 2876 | 635 | 104 | 650 |
| Alkylated auramins and making same | C. Hoffmann | 720,920 | Feb. 17 | 2795 | ------ | 102 | 1441 |
| Alloy | J. Stevenson, Jr | 724,141 | Mar. 31 | 4678 | ------ | 103 | 1039 |
| Alloy | W. G. Stevens | 726,588 | Apr. 28 | 4050 | ------ | 103 | 2061 |
| Alloy | W. Rübel | 743,566 | Nov. 10 | 1544 | ------ | 107 | 347 |
| Alloy and making same | A. Ramsdell | 735,819 | Aug. 11 | 1500 | ------ | 105 | 1319 |
| Alloy of iron and titanium | A. J. Rossi | 721,467 | Feb. 24 | 3862 | ------ | 102 | 1685 |
| Alloys directly from ores. Making nickel-iron | N. V. Hybinette | 736,400 | Aug. 18 | 2539 | ------ | 105 | 1560 |
| Alloys. Making | J. Stevenson, Jr | 724,142 | Mar. 31 | 4679 | ------ | 103 | 1039 |
| Alloys. Manufacture of cast-iron | G. Grunauer | 723,601 | Mar. 24 | 3626 | ------ | 103 | 802 |
| Alloys of aluminium. Producing | A. Manhardt | 721,814 | Mar. 3 | 283 | ------ | 103 | 62 |
| Alloys. Producing | W. C. Tilden | 724,524 | Apr. 7 | 194 | ------ | 103 | 1211 |
| Alloys. Production of | E. Gates | 729,752 | June 2 | 415 | 93, 94, 95 | 104 | 1213 |
| Alternately-actuating mechanism | G. W. Whittington | 735,685 | Aug. 4 | 1246 | 265 | 105 | 1246 |
| Alternator | C. A. Parsons | 732,888 | July 7 | 342 | 84 | 105 | 75 |
| Altitude instrument | E. G. Hewett | 728,915 | May 26 | 3944 | 877 | 104 | 888 |
| Alumina and by-products. Making | L. R. Keogh | 740,364 | Sept. 29 | 5416 | 1219, 1220 | 106 | 1221 |
| Alumina and by-products. Making | L. R. Keogh | 744,765 | Nov. 24 | 3808 | 821 | 107 | 860 |
| Alumina. Obtaining | C. A. Doremus | 725,683 | Apr. 21 | 2357 | ------ | 103 | 1699 |
| Aluminium and its alloys. Producing | D. A. Peniakoff | 728,120 | May 12 | 2456 | ------ | 104 | 541 |
| Aluminium by hydrocarbons. Reducing | A. Reuterdahl | 738,733 | Sept. 8 | 2362 | 519 | 106 | 521 |
| Aluminium. Producing | H. F. D. Schwahn | 719,698 | Feb. 3 | 506 | 115 | 102 | 930 |
| Aluminium sulfate. Drying | R. S. Perry and H. G. Schanche | 748,525 | Dec. 29 | 5980 | ------ | 107 | 2491 |
| Amalgamating device | G. C. Scott | 726,997 | May 5 | 348 | 75 | 104 | 75 |
| Amalgamating-machine | A. H. Woodruff | 725,309 | Apr. 14 | 1639 | 370 | 103 | 1532 |
| Amalgamating-machine | S. Alford and J. J. R. Smythe | 748,456 | Dec. 29 | 5848 | 1330 | 107 | 2462 |
| Amalgamator | O. H. Burden and T. F. Adams | 720,883 | Feb. 17 | 2709 | 626 | 102 | 1423 |
| Amalgamator | G. C. Scott | 734,618 | July 28 | 3542 | 829 | 105 | 799 |
| Amalgamator | T. H. Hicks | 734,867 | July 28 | 4040 | 943 | 105 | 897 |
| Amalgamator | H. Hoeschen, G. Marks, and H. Eisele | 743,871 | Nov. 10 | 2090 | 446 | 107 | 461 |
| Amalgamator | G. Fletcher, C. E. Davis, and B. T. Douglass. | 745,047 | Nov. 24 | 4340 | 938 | 107 | 970 |
| Amalgamator and concentrator | T. B. Lee | 744,687 | Nov. 17 | 3630 | 783 | 107 | 804 |
| Amalgamator. Ore- | J. E. Sutphen | 719,161 | Jan. 27 | 3129 | 697 | 102 | 706 |
| Amalgamator quicksilver-feed | J. W. Swearingen | 733,301 | July 7 | 1080 | 257 | 105 | 228 |
| Amber, ambroid, or the like, in mass, cigarette-holders, pipe-stems, &c. Producing from | E. Simon | 742,245 | Oct. 27 | 3630 | 811 | 106 | 2062 |
| Amins. Making substitution products of aromatic | R. Lesser | 729,876 | June 2 | 658 | ------ | 104 | 1263 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|---|
| | | | | Spec. | Dr'g. | Vol. | Page. |
| Ammonia from ammonia-containing gases. Obtaining | H. H. Dow | 733,465 | July 14 | 1380 | 326 | 105 | 309 |
| Ammunition. Apparatus for handling | L. H. Everhart | 718,832 | Jan. 20 | 2485 | 553 | 102 | 556 |
| Ammunition. Carrier for small-arms fixed | A. Mills | 722,123 | Mar. 3 | 853 | 191 | 103 | 184 |
| Ammunition. Carrier for small-arms fixed | A. Mills | 722,124 | Mar. 3 | 854 | 191 | 103 | 184 |
| Ammunition-chest | R. P. Stout | 730,411 | June 9 | 1611 | 361 | 104 | 1473 |
| Ammunition-distributing apparatus | W. C. Manning | 740,673 | Oct. 6 | 535 | 119 | 106 | 1361 |
| Ammunition-hoist for ordnance | A. T. Dawson and J. Horne | 736,075 | Aug. 11 | 1988 | 422 | 105 | 1424 |
| Amusement apparatus | B. Beerwald | 717,798 | Jan. 6 | 532 | 119 | 102 | 115 |
| Amusement apparatus | T. Folks | 720,014 | Feb. 10 | 1105 | 253, 254 | 102 | 1074 |
| Amusement apparatus | F. Robinson | 721,094 | Feb. 17 | 3132 | 719, 720 | 102 | 1516 |
| Amusement apparatus | J. Brown | 721,631 | Feb. 24 | 4183 | 951, 952 | 102 | 1756 |
| Amusement apparatus | C. R. Culver | 724,672 | Apr. 7 | 473 | 114 | 103 | 1270 |
| Amusement apparatus | T. Folks | 728,894 | May 26 | 3907 | 868 | 104 | 881 |
| Amusement apparatus | C. C. Eggers | 737,375 | Aug. 25 | 4370 | 974 | 105 | 1963 |
| Amusement apparatus | J. H. Maguire | 737,753 | Sept. 1 | 364 | 77, 78 | 106 | 81 |
| Amusement device | H. Symonds | 724,757 | Apr. 7 | 631 | 148 | 103 | 1303 |
| Amusement device | A. Seyfried and F. W. Sheelor | 725,156 | Apr. 14 | 1379 | 311 | 103 | 1477 |
| Amusement device | J. J. McCormick and L. H. McDaniel | 732,427 | June 30 | 5422 | 1203 | 104 | 2318 |
| Amusement device | C. A. Needham | 732,430 | June 30 | 5426 | 1204 | 104 | 2319 |
| Amusement device | A. Seyfried | 736,305 | Aug. 11 | 2373 | 516 | 105 | 1509 |
| Amusement device | W. A. Wright | 737,190 | Aug. 25 | 4015 | 891 | 105 | 1888 |
| Amusement device | F. S. Terry and C. H. S. Kirten | 738,581 | Sept. 8 | 2066 | 451, 452 | 106 | 460 |
| Amusement device | C. A. Needham | 740,685 | Oct. 6 | 554 | 124 | 106 | 1367 |
| Amusement device | C. A. Needham | 746,986 | Dec. 15 | 3080 | 705 | 107 | 1809 |
| Amusement device. Coin-controlled | R. H. Hartley | 739,865 | Sept. 29 | 4473 | 1005 | 106 | 1024 |
| Amusement. Mechanical | O. B. Danner | 743,377 | Nov. 3 | 1109 | 236 | 107 | 235 |
| Amusement-way. Centrifugal | C. L. Hagen | 723,525 | Mar. 24 | 3495 | 782 | 103 | 775 |
| Amusement-wheel | F. T. Harlan | 741,964 | Oct. 20 | 3048 | 679, 680 | 106 | 1928 |
| Anatomical guard, boot, or pad | W. W. Keen | 746,338 | Dec. 8 | 1885 | 429 | 107 | 1521 |
| Anchor | W. A. Duncanson | 730,009 | June 2 | 898 | 200 | 104 | 1311 |
| Anchor connection for uniting objects of every description. Automatically-acting | W. Requard | 747,768 | Dec. 22 | 4524 | 1019, 1020 | 107 | 2151 |
| Anchor. Earth- | G. H. Miller | 736,995 | Aug. 25 | 3682 | 817 | 105 | 1818 |
| Anchor for guy-ropes, &c | E. E. Whitehead | 735,187 | Aug. 4 | 304 | 59 | 105 | 1045 |
| Anchor. Guy- | L. D. Pitcher | 728,609 | May 19 | 3389 | 751 | 104 | 759 |
| Anchor-post | W. Small | 744,421 | Nov. 17 | 3187 | 683 | 107 | 711 |
| Anchor. Sea- | T. S. Miller | 717,890 | Jan. 6 | 711 | 159 | 102 | 151 |
| Anchor. Sea- | T. S. Miller | 727,175 | May 5 | 672 | 144 | 104 | 145 |
| Anchor. Sea- | J. and J. R. Temperley and T. S. Miller | 728,330 | May 19 | 2869 | 633 | 104 | 649 |
| Anchor. Ship's | H. J. Brooke | 731,663 | Mar. 3 | 23 | 4 | 103 | 7 |
| Anchor-stowing mechanism. Ship | J. Kidd | 735,985 | Aug. 11 | 1816 | 389 | 105 | 1388 |
| Anchor. Subterranean | C. F. Preslaw | 747,219 | Dec. 15 | 3518 | 798 | 107 | 1907 |
| Anchorage for dams or other structures | J. F. Jackson | 738,722 | Sept. 8 | 2344 | 515 | 106 | 516 |
| Andiron. Fireplace- | A. A. Low | 746,539 | Dec. 8 | 2225 | 510 | 107 | 1596 |
| Anesthetic-administering apparatus | G. H. Hurd | 743,409 | Nov. 3 | 1199 | 248 | 107 | 256 |
| Anesthetic-administering apparatus | F. M. Richardson and J. F. Field | 746,380 | Dec. 8 | 1956 | 447 | 107 | 1536 |
| Anesthetic apparatus | V. Knowles | 743,294 | Nov. 3 | 933 | 203 | 107 | 200 |
| Anesthetics. Apparatus for administering | W. A. Heckard | 721,185 | Feb. 24 | 3332 | 761 | 102 | 1576 |
| Anesthetics. Device for administering | G. L. Bennett | 736,059 | Aug. 11 | 1963 | 418 | 105 | 1419 |
| Anesthetics-vaporizer | G. L. Bennett | 747,364 | Dec. 22 | 3803 | 856 | 107 | 1987 |
| Angle-bar and rail-shoe combined. Graduated reinforced | G. H. Williams | 735,025 | July 28 | 4314 | 1003 | 105 | 955 |
| Angle-brace. Extensible or extension | J. H. Rusby | 719,050 | Jan. 27 | 2904 | 650 | 102 | 660 |
| Angle-chair | G. A. Weber | 744,833 | Nov. 24 | 3934 | 847 | 107 | 886 |
| Angle-finder | J. A. Traut | 742,528 | Oct. 27 | 4152 | 933 | 106 | 2168 |
| Animal catching and holding device | F. C. Guss | 729,332 | May 26 | 4689 | 1036 | 104 | 1043 |
| Animal-cover | J. Murphy | 746,359 | Dec. 8 | 1920 | 439 | 107 | 1528 |
| Animal leg-brace | N. P. Allen | 739,634 | Sept. 22 | 4044 | 902 | 106 | 914 |
| Animal scraping or dehairing machine | J. W. Kohlhepp | 720,702 | Feb. 17 | 2423 | 554 | 102 | 1361 |
| Animal-shackle | T. E. Jones | 724,015 | Mar. 31 | 4432 | 996 | 103 | 987 |
| Animal-shears | H. V. Dunn | 742,615 | Oct. 27 | 4299 | 969 | 106 | 2200 |
| Animal-shears | W. M. Cahill | 748,478 | Dec. 29 | 5890 | 1339 | 107 | 2472 |
| Animal-trap | P. A. Whitney | 719,544 | Feb. 3 | 233 | 54 | 102 | 872 |
| Animal-trap | W. Gabrielson | 720,911 | Feb. 17 | 2769 | 637 | 102 | 1436 |
| Animal-trap | C. C. Nesmith and J. L. Brewer | 721,321 | Feb. 24 | 3585 | 815 | 102 | 1628 |
| Animal-trap | W. Wilhelms | 721,407 | Feb. 24 | 3754 | 853 | 102 | 1663 |
| Animal-trap | W. M. Bristol and G. F. Eberhard | 721,537 | Feb. 24 | 3979 | 907 | 102 | 1711 |
| Animal-trap | W. A. Smith | 721,614 | Feb 24 | 4156 | 944 | 102 | 1750 |
| Animal-trap | V. Weiler | 722,065 | Mar. 3 | 755 | 168, 169 | 103 | 163 |
| Animal-trap | V. O. Harter and W. H. Brown | 723,773 | Mar. 24 | 3922 | 885 | 103 | 866 |
| Animal-trap | A. W. Phillips | 724,931 | Apr. 7 | 941 | 216 | 103 | 1371 |
| Animal-trap | R. Chassé | 725,040 | Apr. 14 | 1157 | 261 | 103 | 1432 |
| Animal-trap | E. M. Walker | 726,121 | Apr. 21 | 3119 | 707 | 103 | 1860 |
| Animal-trap | J. Campbell, Sr | 726,140 | Apr. 21 | 3150 | 712 | 103 | 1866 |
| Animal-trap | S. Robinson | 726,350 | Apr. 28 | 3570 | 809 | 103 | 1968 |
| Animal-trap | C. C. Bowen | 727,275 | May 5 | 846 | 182 | 104 | 182 |
| Animal-trap | E. F. McDaniel | 729,786 | June 2 | 483 | 107 | 104 | 1227 |
| Animal-trap | C. C. Bowen | 730,434 | June 9 | 1666 | 373 | 104 | 1484 |
| Animal-trap | A. D. Gaston | 730,528 | June 9 | 1837 | 410 | 104 | 1522 |
| Animal-trap | T. J. Foreman | 734,413 | July 21 | 3169 | 744 | 105 | 703 |
| Animal-trap | G. F. Eberhard | 735,957 | Aug. 11 | 1757 | 376, 377 | 105 | 1375 |
| Animal-trap | M. F. Werner | 740,343 | Sept. 29 | 5370 | 1210 | 106 | 1212 |
| Animal-trap | C. W. Gillis | 742,627 | Oct. 27 | 4320 | 972 | 106 | 2205 |
| Animal-trap | G. E. Alphin | 742,953 | Nov. 3 | 236 | 52 | 107 | 51 |
| Animal-trap | A. Arnesen | 743,420 | Nov. 10 | 1228 | 254 | 107 | 277 |
| Animal-trap | W. C. Hooker | 744,343 | Nov. 17 | 3045 | 654 | 107 | 681 |
| Animal-trap | J. M. Mast | 744,379 | Nov. 17 | 3110 | 669 | 107 | 695 |
| Animal-trap | W. H. Reiff | 745,118 | Nov. 24 | 4485 | 971 | 107 | 1000 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Animal-trap | B. F. D. Miller | 748,201 | Dec. 29 | 5394 | 1226 | 107 | 2362 |
| Anklet | E. M. Douglas | 743,625 | Nov. 10 | 1667 | 350 | 107 | 372 |
| Annealing apparatus | J. A. Anderson and C. M. Hollingsworth. | 722,073 | Mar. 3 | 766 | 171 | 103 | 165 |
| Annealing apparatus. Gold- | C. F. Dwight | 724,826 | Apr. 7 | 768 | 178 | 103 | 1334 |
| Annealing-box | M. D. Grimm | 727,788 | May 12 | 1836 | 410 | 104 | 410 |
| Annealing-furnace | S. Huxley | 735,264 | Aug. 4 | 449 | 88, 89 | 105 | 1076 |
| Annealing metal plates | M. D. Grimm | 727,787 | May 12 | 1835 | 410 | 104 | 409 |
| Annealing system | J. Hughes | 723,276 | Mar. 24 | 3017 | 679 | 103 | 682 |
| Annunciator | F. W. Dunbar | 733,468 | July 14 | 1385 | 327 | 105 | 310 |
| Annunciator | E. M. Hewlett | 735,511 | Aug. 4 | 917 | 195 | 105 | 1177 |
| Annunciator. Electrical | J. H Taylor | 733,883 | July 14 | 2134 | 503 | 105 | 465 |
| Annunciator. Express or other | J. H. Rusby | 747,778 | Dec. 22 | 4544 | 1024 | 107 | 2156 |
| Annunciator. Line- | H. P. Clausen | 742,165 | Oct. 27 | 3466 | 774 | 106 | 2028 |
| Anode-hook | F. W. Cann | 745,479 | Dec. 1 | 821 | 75 | 107 | 1168 |
| Anode-mold. Tilting | F. A. Thum | 733,095 | July 7 | 709 | 173 | 105 | 150 |
| Ant-trap | W. F. Finley | 729,053 | May 26 | 4200 | 929 | 104 | 941 |
| Anthracene derivatives and making same | M. Kugel | 722,719 | Mar. 17 | 2004 | ..... | 103 | 459 |
| Anticorrosive composition | A. P. Cuthriell | 736,699 | Aug. 18 | 3120 | ..... | 105 | 1680 |
| Antifouling composition | A. P. Cuthriell | 736,698 | Aug. 18 | 3120 | ..... | 105 | 1680 |
| Antifreezing closet | J. Moloney, Jr | 737,441 | Aug. 25 | 4510 | 1011 | 105 | 1994 |
| Antifriction device | G. N. Toms | 747,512 | Dec. 22 | 4060 | 913 | 107 | 2045 |
| Antifriction end-thrust device | S. S. Eveland | 718,110 | Jan. 13 | 1104 | 244 | 102 | 253 |
| Antifriction end-thrust device | S. S. Eveland | 718,111 | Jan. 13 | 1105 | 244 | 102 | 253 |
| Antifriction-wheel | P. Little, Sr | 746,117 | Dec. 8 | 1482 | 331 | 107 | 1437 |
| Antihunting device | A. Churchward | 745,327 | Dec. 1 | 26 | 5 | 107 | 1106 |
| Anti-incrustating device and water-purifier | N. W. Yantis and H. H. Baltzley | 747,290 | Dec. 15 | 3659 | 827 | 107 | 1939 |
| Antikicking device and shield | C. Jacobson | 741,669 | Oct. 20 | 2454 | 549 | 106 | 1805 |
| Antiseptic and deodorizing compound | H. P. Busch | 730,231 | June 9 | 1288 | ..... | 104 | 1405 |
| Antiseptic. Solid soluble | R. Koehler | 731,578 | June 23 | 3803 | ..... | 104 | 1966 |
| Antivibrating burner | C. Marshall | 747,457 | Dec. 22 | 3953 | 889 | 107 | 2020 |
| Anvil shearing attachment | C. A. Christenson | 717,658 | Jan. 6 | 233 | 59 | 102 | 51 |
| Apparel | N. F. Hurdel | 726,299 | Apr. 28 | 3467 | 787 | 103 | 1947 |
| Apparel. Article of | A. B. Saliger | 727,695 | May 12 | 1636 | 371 | 104 | 370 |
| Apparel. Article of | J. Steinborg | 733,603 | July 14 | 1617 | 383 | 105 | 359 |
| Apparel clasp. Wearing- | W. Maybaum | 734,425 | July 21 | 3189 | 750 | 105 | 707 |
| Apparel. Wearing- | A. E. Tabor | 742,928 | Nov. 3 | 185 | 43 | 107 | 41 |
| Applicator | H. A. Bierley and J. G. Nehrbas | 719,175 | Jan. 27 | 3152 | 701 | 102 | 710 |
| Apron | E. W. Peterson | 742,059 | Oct. 20 | 3226 | 723 | 106 | 1965 |
| Apron and hood. Combined storm | J. P. Gordon | 726,906 | May 5 | 139 | 33 | 104 | 32 |
| Apron-guiding mechanism | W. J. Asher. (Reissue) | 12,173 | Nov. 24 | 4885 | 1066 | 107 | 1081 |
| Apron. Storm- | J. C. Crimins. (Reissue) | 12,170 | Nov. 17 | 3700 | 798 | 107 | 821 |
| Apron. Storm- | A. C. Holden | 745,613 | Dec. 1 | 549 | 128 | 107 | 1214 |
| Arc-light. Electrolytic | W. T. Dean | 728,210 | May 19 | 2602 | 582 | 104 | 593 |
| Arc light systems. Regulator for alternating series | J. H. Hallberg | 728,570 | May 19 | 3309 | 732 | 104 | 740 |
| Arcs. Disrupting | F. E. Case | 736,913 | Aug. 18 | 3519 | 782 | 105 | 1764 |
| Arch. Concrete | G. B. Waite | 721,982 | Mar. 3 | 619 | 138 | 103 | 134 |
| Arch construction | J. A. Drake | 727,110 | May 5 | 555 | 119 | 104 | 121 |
| Arch-supporter | O. Booth | 724,158 | Mar. 31 | 4704 | 1056 | 103 | 1043 |
| Arches. Device for use in constructing | T. R. Spencer | 740,197 | Sept. 29 | 5106 | 1147 | 106 | 1157 |
| Arithmograph | H. Ellis | 744,004 | Nov. 10 | 2359 | 507, 508, 509 | 107 | 522 |
| Arm-rest | G. Smith | 736,886 | Aug. 18 | 3470 | 770 | 105 | 1753 |
| Arm-rest | R. H. Brasel | 744,287 | Nov. 17 | 2951 | 631 | 107 | 660 |
| Armature | J. A. Little | 732,200 | June 30 | 4978 | 1108 | 104 | 2225 |
| Armature-band | J. J. Wood | 720,307 | Feb. 10 | 1663 | 379 | 102 | 1190 |
| Armature-banding device | J. J. Wood | 720,308 | Feb. 10 | 1665 | 379 | 102 | 1190 |
| Armature-coil | F. A. Merrick | 736,417 | Aug. 18 | 2568 | 563, 564 | 105 | 1566 |
| Armature-coil | C. Knape | 744,012 | Nov. 10 | 2399 | 515 | 107 | 527 |
| Armature-coils. Form for winding | W. F. Drees | 733,633 | July 14 | 1668 | 396 | 105 | 369 |
| Armature. Drum- | H A. Balcome | 720 511 | Feb. 10 | 2011 | 463 | 102 | 1263 |
| Armature. Dynamo-electric-machine | C. P. Steinmetz | 730,582 | June 9 | 1935 | 430 | 104 | 1544 |
| Armature for electric motors and generators | C. D. Knight | 741,676 | Oct. 20 | 2468 | 552 | 106 | 1807 |
| Armature. Induction-motor | E. Thomson | 729,449 | May 26 | 4873 | 1079, 1080 | 104 | 1081 |
| Armature-winding apparatus | F. P. McBerty | 727,182 | May 5 | 682 | 147 | 104 | 148 |
| Armor for ships' turrets, &c | C. P. E. Schneider | 727,699 | May 12 | 1643 | 372 | 104 | 372 |
| Army equipment | R. M. G. Phillips | 723,545 | Mar. 24 | 3528 | 789 | 103 | 783 |
| Aromatic esters and making same | E. Ritsert | 748,101 | Dec. 29 | 5209 | ..... | 107 | 2324 |
| Arsenic fumes. Arresting | R. Baggaley | 746,251 | Dec. 8 | 1724 | 388 | 107 | 1487 |
| Artesian or oil drilling-machine | D. A. Messner | 736,993 | Aug. 25 | 3679 | 816 | 105 | 1818 |
| Article-attacher | E. B. Carpenter | 740,229 | Sept. 29 | 5170 | 1161 | 106 | 1171 |
| Artillery. Armored shield for traveling | E. von Reichenau | 726,988 | May 5 | 326 | 70, 71 | 104 | 71 |
| Artillery. Heavy field | T. D. Smythe | 737,972 | Sept. 1 | 829 | 182 | 106 | 181 |
| Artist's holding and separating clamp | G. C. Everett | 728,450 | May 19 | 3071 | 679 | 104 | 691 |
| Artist's outfit | J. Neumann | 727,672 | May 12 | 1594 | 361 | 104 | 361 |
| Ash-can | J. W. M. Hipwell | 736,396 | Aug. 18 | 2534 | 557 | 105 | 1559 |
| Ash-can cover | J. Koslopsky | 745,964 | Dec. 1 | 1198 | 268 | 107 | 1355 |
| Ash or garbage can | E. H. Huenefeld | 729,590 | June 2 | 123 | 31 | 104 | 1152 |
| Ash-receiver and match-safe. Combined | D. P. Moody | 727,821 | May 12 | 1891 | 422 | 104 | 420 |
| Ash-receiver and paper-weight. Combined | P. A. Robson | 747,227 | Dec. 15 | 3530 | 801 | 107 | 1909 |
| Ash shovel and sifter. Combined | C. F. Belknap | 732,504 | June 30 | 5577 | 1236 | 104 | 2348 |
| Asparagus-buncher | P. Brunett | 719,561 | Feb. 3 | 268 | 62 | 102 | 879 |
| Asparagus-holder | A. H. Brinkman | 738,521 | Sept. 8 | 1974 | 429 | 106 | 439 |
| Asphalt. Apparatus for treating rock- | J. S. Downard and B. A. Roloson | 722,500 | Mar. 10 | 1586 | 350 | 103 | 357 |
| Asphalt composition and its manufacture | F. J. Warren | 727,507 | May 5 | 1265 | ..... | 104 | 272 |
| Asphalt, concrete, and mastic mixer. Interchangeable | G. A. Schillinger | 747,652 | Dec. 22 | 4315 | 971, 972, 973, 974, 975, 976 | 107 | 2103 |
| Asphalt-cutting attachment for steam-rollers | J. Richards | 719,260 | Jan. 27 | 3304 | 740 | 102 | 743 |
| Asphalt, stone, &c. Manufacture of artificial | C. Rubitschung | 748,019 | Dec. 29 | 5049 | ..... | 107 | 2289 |

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| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Asphalt surfaces. Apparatus for heating | J. W. Nesmith | 743,020 | Nov. 3 | 388 | 84 | 107 | 81 |
| Asphaltum and its manufacture | F. J. Warren | 727,506 | May 5 | 1263 | | 104 | 272 |
| Assay-furnace. Crucible | C. N. Anthony | 743,214 | Nov. 3 | 762 | 166 | 107 | 160 |
| Assayer's pulverizing apparatus | J. Q. A. King | 746,104 | Dec. 8 | 1452 | 326 | 107 | 1429 |
| Astrakhan. Imitation | M. Lewin | 736,412 | Aug. 18 | 2554 | 560 | 105 | 1563 |
| Astronomical instrument | E. G. Hewitt | 728,916 | May 26 | 3945 | 877 | 104 | 889 |
| Asymmetric conductor | C. Hambuechen | 732,631 | June 30 | 5811 | 1288 | 104 | 2402 |
| Atmosphere. Apparatus for automatically controlling the humidity of | O. E. Boggs | 735,856 | Aug. 11 | 1581 | 337 | 105 | 1337 |
| Atmospheric motors. Collapsible vessel for | W. M. Fulton | 729,926 | June 2 | 729 | 163 | 104 | 1276 |
| Atmospheric motors. Collapsible vessel for | W. M Fulton | 729,927 | June 2 | 732 | 163 | 104 | 1277 |
| Atmospheric motors. Collapsible vessel for | W. M. Fulton | 731,354 | June 16 | 3341 | 746 | 104 | 1854 |
| Atomizer | S. Hasbrouck | 719,587 | Feb. 3 | 321 | 75 | 102 | 889 |
| Atomizer | J. Waldman | 720,863 | Feb. 17 | 2672 | 617 | 102 | 1416 |
| Atomizer | M Goldman | 725,954 | Apr. 21 | 2842 | 645 | 103 | 1803 |
| Atomizer | C. Bomeisler | 727,069 | May 5 | 478 | 102 | 104 | 105 |
| Atomizer | C. A. Tatum | 728,328 | May 19 | 2860 | 631 | 104 | 647 |
| Atomizer | C. A. Tatum | 732,135 | June 30 | 4857 | 1081 | 104 | 2199 |
| Atomizer | A. S. Dixon | 743,696 | Nov. 10 | 1773 | 375 | 107 | 394 |
| Atomizer | A. S. Dixon | 743,697 | Nov. 10 | 1779 | 376 | 107 | 396 |
| Atomizer | J. D. Pierce | 744,603 | Nov. 17 | 3485 | 752 | 107 | 772 |
| Atomizer | F. A. Smith | 748,227 | Dec. 29 | 5436 | 1239 | 107 | 2372 |
| Atomizer-holder | J. C. Cramer | 729,138 | May 26 | 4335 | 957 | 104 | 968 |
| Atomizer. Perfumery- | R. W. Moore | 746,866 | Dec. 15 | 2847 | 656 | 107 | 1755 |
| Atomizer-tube-polishing machine | C. L. Turner | 732,801 | July 7 | 193 | 49, 50 | 105 | 44 |
| Atomizing and carbureting device | W. Sams | 736,157 | Aug. 11 | 2120 | 455 | 105 | 1451 |
| Atomizing device | W. Sams | 738,848 | Sept. 15 | 2620 | 578 | 106 | 594 |
| Atomizing device | W. Sams. (Reissue) | 12,176 | Nov. 24 | 4894 | 1068 | 107 | 1083 |
| Attaching or detaching hook. Automatic | W. E. Lafferty | 720,822 | Feb. 17 | 2604 | 602 | 102 | 1401 |
| Auger | W. M. Potter | 740,692 | Oct. 6 | 565 | 126 | 106 | 1369 |
| Auger-blank die | I. W. Smith | 740,936 | Oct. 6 | 1008 | 228 | 106 | 1461 |
| Auger. Earth- | A. L. Kitselman | 720,255 | Feb. 10 | 1561 | 357 | 102 | 1170 |
| Auger. Earth- | N. Erzig | 727,322 | May 5 | 930 | 202 | 104 | 201 |
| Auger. Earth- | W. L. Iwan | 732,859 | July 7 | 291 | 73 | 105 | 64 |
| Auger. Earth- | A. Buntenbach | 738,982 | Sept. 15 | 2842 | 630 | 106 | 642 |
| Auger. Earth-boring | A. M. Bevier | 738,760 | Sept. 15 | 2439 | 535 | 106 | 554 |
| Auger. Expansible | W. I. Wheeler and J. J. Bull | 732,479 | June 30 | 5526 | 1226, 1227 | 104 | 2337 |
| Auger. Post- | J. D. Sanford | 727,847 | May 12 | 1943 | 433 | 104 | 431 |
| Auger. Post-hole | H. S. Butler | 743,445 | Nov. 10 | 1296 | 266 | 107 | 292 |
| Auger-section coupling. Well- | D. G. Jones | 724,708 | Apr. 7 | 547 | 131 | 103 | 1286 |
| Auger. Spoke- | J. M. Brown | 720,512 | Feb. 10 | 2013 | 464 | 102 | 1264 |
| Auger. Well- | C. N. Hutchins | 742 991 | Nov. 3 | 305 | 68 | 107 | 66 |
| Aural instrument | R. M. Shaffer | 723,929 | Mar. 31 | 4241 | 954 | 103 | 951 |
| Auriphone | L. M. Atkinson | 738,593 | Sept. 8 | 2098 | 458 | 106 | 467 |
| Autocar-brake | A. Govan | 732,846 | July 7 | 269 | 67 | 105 | 60 |
| Autocar dust-guard | W. H. Brown | 742,580 | Oct. 27 | 4235 | 954 | 106 | 2186 |
| Autographic duplicate recorder | W. W. Eaton | 740,108 | Sept. 29 | 4944 | 1110 | 106 | 1124 |
| Autographic register | H. Konerman | 729,942 | June 2 | 764 | 169, 170 | 104 | 1284 |
| Autographic register | H. Konerman | 729,943 | June 2 | 766 | 170 | 104 | 1284 |
| Automatic brake | C. L. Taylor | 718,802 | Jan. 20 | 2438 | 540 | 102 | 548 |
| Automatic coupling | G. A. Hermanson | 721,891 | Mar. 3 | 431 | 95 | 103 | 95 |
| Automatic coupling | F. M. and H. C. Harvey | 742,317 | Oct. 27 | 3767 | 844 | 106 | 2089 |
| Automatic elevator | W. H. Hultgren | 737,108 | Aug. 25 | 3869 | 859 | 105 | 1857 |
| Automatic friction-brake | A. Sedgwick and J. I. Wakelee | 744,632 | Nov. 17 | 3533 | 762 | 107 | 782 |
| Automatic gate | E. W. Easley | 730,354 | June 9 | 1515 | 336 | 104 | 1453 |
| Automatic indicator | W. E. Laird | 742,681 | Oct. 27 | 4415 | 996, 997 | 106 | 2225 |
| Automatic lubricator | J. A. Swenson | 722,769 | Mar. 17 | 2097 | 469 | 103 | 479 |
| Automatic lubricator | A. A. Freeman | 733,382 | July 14 | 1235 | 292 | 105 | 277 |
| Automatic potential-regulator | A. A. Tirrill | 725,800 | Apr. 21 | 2578 | 585, 586, 587 | 103 | 1747 |
| Automatic potential-regulator | A. A. Tirrill | 726,234 | Apr. 21 | 3326 | 755, 756, 757 | 103 | 1902 |
| Automatic regulator | A. R. Dodge | 746,047 | Dec. 8 | 1355 | 303 | 107 | 1406 |
| Automatic sprinkler | W. Morgan | 725,271 | Apr. 14 | 1580 | 357 | 103 | 1520 |
| Automatic sprinkler | H. C. Perham | 744,791 | Nov. 24 | 3855 | 830 | 107 | 870 |
| Automatic switch | O. McNorton, Jr | 727,185 | May 5 | 686 | 147 | 104 | 148 |
| Automatic switch | F. R. S. Ditmars | 728,880 | May 26 | 3885 | 864 | 104 | 876 |
| Automatic switch | H. H. Doll | 733,822 | July 14 | 2023 | 476 | 105 | 442 |
| Automatic switch | J. F. McElroy | 739,205 | Sept. 15 | 3236 | 716 | 106 | 723 |
| Automatic switch | M. D. Van Why | 741,744 | Oct. 20 | 2604 | 580 | 106 | 1836 |
| Automatic switch | J. M. Comer | 744,168 | Nov. 17 | 2713 | 579 | 107 | 606 |
| Automatic switch | O. Jordan | 747,724 | Dec. 22 | 4443 | 1002 | 107 | 2132 |
| Automatic switch. Intermittent | H. Wolf, Jr | 727,870 | May 12 | 1984 | 442 | 104 | 439 |
| Automatic trip-brake | E. L. Cridge | 721,503 | Feb. 24 | 3920 | 892 | 102 | 1697 |
| Automatically-operated gate | G. McElroy | 730,290 | June 9 | 1399 | 307, 308 | 104 | 1429 |
| Automobile | A. W. Yale | 721,269 | Feb. 24 | 3508 | 797, 798 | 102 | 1611 |
| Automobile | F. L. Fay | 721,876 | Mar. 3 | 407 | 89 | 103 | 89 |
| Automobile | L. B. Gaylor | 722,224 | Mar. 10 | 1062 | 233 | 103 | 242 |
| Automobile | C. B. Mills and A. Williams | 726,967 | May 5 | 271 | 61 | 104 | 59 |
| Automobile | G. O. Draper | 730,352 | June 9 | 1511 | 335 | 104 | 1452 |
| Automobile | G. O. Draper | 730,353 | June 9 | 1512 | 335 | 104 | 1453 |
| Automobile | C. A. Bush | 731,993 | June 23 | 4541 | 1013, 1014 | 104 | 2122 |
| Automobile | F. M. Leavitt | 740,666 | Oct. 6 | 526 | 115, 116 | 106 | 1359 |
| Automobile | C. E. Roberts | 748,015 | Dec. 29 | 5040 | 1137, 1138, 1139 | 107 | 2286 |
| Automobile-body | J. H. MacAlman | 740,897 | Oct. 6 | 943 | 212 | 106 | 1448 |

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| Invention. | Name. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|---|
| | | | | Spec. | Dr'g. | Vol. | Page. |
| Automobile-brake | L. L. Hoffman | 725,250 | Apr. 14 | 1549 | 351 | 103 | 1513 |
| Automobile carriage | W. H. Noyes | 722,243 | Mar. 10 | 1102 | 242 | 103 | 250 |
| Automobile chain-boot | C. G. Fisher | 732,536 | June 30 | 5634 | 1249 | 104 | 2361 |
| Automobile-controller | L. Mott | 745,226 | Nov. 24 | 4702 | 1026 | 107 | 1045 |
| Automobile controlling device | C. B. Grout | 737,399 | Aug. 25 | 4427 | 991 | 105 | 1976 |
| Automobile controlling-gear | S. J. Anderson | 748,252 | Dec. 29 | 5472 | 1247 | 107 | 2379 |
| Automobile controlling mechanism | H. Lemp and O. F. Persson | 739,776 | June 2 | 462 | 104 | 104 | 1222 |
| Automobile controlling mechanism | H. F. Cuntz | 738,100 | Sept. 1 | 1073 | 237 | 106 | 232 |
| Automobile controlling mechanism | G. H. Day | 738,167 | Sept. 8 | 1249 | 271 | 106 | 286 |
| Automobile driving-gear | E. Rawson | 720,967 | Feb. 17 | 2885 | 660 | 102 | 1460 |
| Automobile driving-gear | K. G. Johnston | 735,774 | Aug. 11 | 1409 | 303 | 105 | 1299 |
| Automobile driving mechanism | E. Thomson | 732,908 | July 7 | 376 | 91, 92 | 105 | 82 |
| Automobile-engines. Foot starter mechanism for | D. F. Graham and F. A. Fox | 725,955 | Apr. 21 | 2843 | 645 | 103 | 1803 |
| Automobile-furnace draft device | F. C. Cheesewright | 733,354 | July 7 | 1173 | 278 | 105 | 247 |
| Automobile-gearing | G. P. Dorris | 724,557 | Apr. 7 | 251 | 61 | 103 | 1223 |
| Automobile-hood | J. Pichl | 737,467 | Aug. 25 | 4555 | 1021 | 105 | 2005 |
| Automobile-jack | G. W. Bartlett | 727,264 | May 5 | 818 | 176 | 104 | 176 |
| Automobile-lock | B. D. Colby | 730,515 | June 9 | 1817 | 405 | 104 | 1517 |
| Automobile power-gear and brake apparatus | T. P. Meinhard | 731,588 | June 23 | 3815 | 849, 850 | 104 | 1969 |
| Automobile propelling means | H. Lemp | 723,168 | Mar. 17 | 2802 | 631, 632 | 103 | 623 |
| Automobile pump mechanism | R. H. White | 740,210 | Sept. 29 | 5135 | 1153 | 106 | 1163 |
| Automobile rear-axle construction | W. Morrison | 734,080 | July 21 | 2545 | 593, 594 | 105 | 573 |
| Automobile sleigh attachment | M. Abrahamovitz | 741,211 | Oct. 13 | 1549 | 349 | 106 | 1597 |
| Automobile. Snow or ice | T. Gunderson | 747,064 | Dec. 15 | 3230 | 736 | 107 | 1845 |
| Automobile speed-indicator | J. W. Sutton | 739,740 | Sept. 22 | 4234 | 948 | 106 | 956 |
| Automobile steering apparatus | H. H. Buffum | 729,598 | June 2 | 34 | 9 | 104 | 1133 |
| Automobile steering device | A. R. Demory | 741,117 | Oct. 13 | 1353 | 310 | 106 | 1555 |
| Automobile steering-gear | A. P. Brush | 719,562 | Feb. 3 | 270 | 62 | 102 | 879 |
| Automobile steering mechanism | H. H. Buffum | 721,859 | Mar. 3 | 380 | 83 | 103 | 83 |
| Automobile steering mechanism | R. H. White | 740,209 | Sept. 29 | 5133 | 1152 | 106 | 1163 |
| Automobile steering mechanism | L. Mott | 743,013 | Nov. 3 | 378 | 81 | 107 | 79 |
| Automobile steering-wheel | H. W. Meyers | 729,079 | May 26 | 4239 | 936 | 104 | 948 |
| Automobile transmission-gear | J. W. Lambert | 730,930 | June 16 | 2552 | 568 | 104 | 1694 |
| Automobile transmission-gear | A. M. Jenkins | 740,659 | Oct. 6 | 514 | 113 | 106 | 1357 |
| Automobile transmission-gearing | E. Whitcraft | 734,209 | July 21 | 2784 | 653 | 105 | 622 |
| Automobile vehicle | H. Lemp | 724,021 | Mar. 31 | 4441 | 998 | 103 | 989 |
| Automobiles. Means for regulating the power of | E. Thomson | 733,093 | July 7 | 704 | 172 | 105 | 150 |
| Automotor-carriage | C. J. Ollagnier | 734,084 | July 21 | 2554 | 596 | 105 | 575 |
| Autotruck | C. L. and R. A. Schultz | 733,084 | July 7 | 684 | 166, 167, 168 | 105 | 145 |
| Awl | J. P. Brady | 726,135 | Apr. 21 | 3143 | 710 | 103 | 1864 |
| Awl. Needle- | B. E. Hervey | 722,105 | Mar. 3 | 826 | 184 | 103 | 178 |
| Awl. Sewing- | I. D. Morgaridge | 718,057 | Jan. 6 | 1002 | 224 | 102 | 216 |
| Awl. Sewing- | M. R. Botkin | 723,981 | Mar. 31 | 4351 | 977 | 103 | 973 |
| Awl. Sewing- | W. M. Mansell | 744,581 | Nov. 17 | 3455 | 745 | 107 | 767 |
| Awls. Shuttle for use with sewing- | E. B. McCann | 744,595 | Nov. 17 | 3472 | 749 | 107 | 770 |
| Awning | G. E. Bedell | 720,999 | Feb. 17 | 2947 | 676 | 102 | 1473 |
| Awning | T. Thoms | 727,712 | May 12 | 1693 | 378 | 104 | 382 |
| Awning | H. C. Marcus | 730,677 | June 9 | 2103 | 468 | 104 | 1580 |
| Awning | C. H. Hansen | 732,739 | July 7 | 76 | 20 | 105 | 19 |
| Awning | A. L. Sabey | 737,666 | Sept. 1 | 197 | 42 | 106 | 46 |
| Awning | T. H. Rees and J. McDonnell | 740,920 | Oct. 6 | 980 | 221 | 106 | 1456 |
| Awning | T. H. Rees and J. McDonnell | 740,921 | Oct. 6 | 983 | 221, 222 | 106 | 1457 |
| Awning | H. Oltmanns and C. J. Schmidt | 741,162 | Oct. 13 | 1432 | 327 | 106 | 1571 |
| Awning | J. O. Sorensen | 742,246 | Oct. 27 | 3632 | 811 | 106 | 2062 |
| Awning | C. L. Gaylord | 743,711 | Nov. 10 | 1803 | 380, 381 | 107 | 402 |
| Awning | M. F. Wiedemann | 744,844 | Nov. 24 | 3952 | 852 | 107 | 890 |
| Awning | M. F. Wiedemann | 744,845 | Nov. 24 | 3953 | 852 | 107 | 890 |
| Awning | C. W. Monroe | 744,971 | Nov. 24 | 4175 | 903 | 107 | 936 |
| Awning | R. Mount | 746,732 | Dec. 15 | 2578 | 593 | 107 | 1696 |
| Awning and window-shade. Combined | W. E. Messacar | 736,992 | Aug. 25 | 3676 | 815, 816 | 105 | 1817 |
| Awning-fitting | O. Whitmore | 740,960 | Oct. 6 | 1058 | 241 | 106 | 1472 |
| Awning-fixture | J. F. Kohler | 723,610 | Mar. 24 | 3643 | 815 | 103 | 806 |
| Awning-fixture | A. De Simone | 743,257 | Nov. 3 | 854 | 186 | 107 | 179 |
| Awning-frame. Combined roller and swinging | F. D. Frazee | 743,706 | Nov. 10 | 1792 | 378 | 107 | 993 |
| Awning-hook | D. W. Carr | 748,479 | Dec. 29 | 5892 | 1339 | 107 | 2472 |
| Awning. Metallic | E. Cornitius | 722,566 | Mar. 10 | 1699 | 378 | 103 | 381 |
| Awning-operating device | C. H. Talley | 734,247 | July 21 | 2859 | 670 | 105 | 638 |
| Awning-operating mechanism | M. F. Wiedemann | 736,046 | Aug. 11 | 1926 | 411 | 105 | 1411 |
| Awning-support | J. Springard | 726,583 | Apr. 28 | 4041 | 913 | 103 | 2059 |
| Awning. Window- | C. J. Conradt | 746,294 | Dec. 8 | 1799 | 408 | 107 | 1502 |
| Awnings. Means for operating roller- | A. L. Clark | 726,863 | May 5 | 52 | 12 | 104 | 14 |
| Ax | E. Blount | 746,783 | Dec. 15 | 2677 | 618 | 107 | 1717 |
| Ax. Folding | C. P. Wing | 738,869 | Sept. 15 | 2654 | 585 | 106 | 602 |
| Ax-handle protector | J. C. Dalrymple | 739,652 | Sept. 22 | 4082 | 909 | 106 | 922 |
| Ax or tool handle wedge | G. P. Morrill | 740,583 | Oct. 6 | 394 | 82 | 106 | 1330 |
| Axes, hatchets, or the like. Making | A. Schmidt | 736,637 | Aug. 18 | 2997 | 661 | 105 | 1654 |
| Axle | E. A. Judd | 731,306 | June 16 | 3272 | 727 | 104 | 1841 |
| Axle | E. A. Judd | 731,307 | June 16 | 3273 | 727 | 104 | 1841 |
| Axle | J. E. Spencer | 734,629 | July 28 | 3565 | 834 | 105 | 803 |
| Axle | C. S. Caird | 741,305 | Oct. 13 | 1737 | 388 | 106 | 1633 |
| Axle | C. P. Clark | 743,829 | Nov. 10 | 2018 | 428 | 107 | 446 |
| Axle | M. R. Gustin | 744,066 | Nov. 17 | 2514 | 539 | 107 | 565 |
| Axle and journal-box. Divided car- | W. P. Wescott, Jr | 722,786 | Mar. 17 | 2133 | 477 | 103 | 486 |
| Axle and wheel. Car | M. P. Gerbing | 740,976 | Oct. 6 | 1088 | 246 | 106 | 1478 |
| Axle and wheel. Vehicle | B. B. Gilmore | 745,009 | Nov. 24 | 4238 | 919 | 107 | 949 |
| Axle. Ball-bearing | J. J. Hartney | 721,700 | Mar. 3 | 92 | 19 | 103 | 20 |
| Axle-box | E. Ottenbacher | 722,380 | Mar. 10 | 1346 | 298 | 103 | 302 |
| Axle-box | J. Krohn | 743,892 | Nov. 10 | 2138 | 460 | 107 | 471 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Axle box. Car- | G. G. Floyd | 720,796 | Feb. 17 | 2569 | 592 | 102 | 1393 |
| Axle box. Car- | J. Maltry | 727,987 | May 12 | 2202 | 491 | 104 | 488 |
| Axle box. Car- | P. F. Woods | 730,185 | June 2 | 1183 | 265 | 104 | 1368 |
| Axle box. Car- | E. Denegre | 739,842 | Sept. 29 | 4428 | 994 | 106 | 1016 |
| Axle-box dust-guard | N. H. Davis | 725,049 | Apr. 14 | 1170 | 264 | 103 | 1435 |
| Axle-box dust-guard | A. Boren | 740,621 | Oct. 6 | 462 | 101 | 106 | 1345 |
| Axle-box for vehicle-wheels | T. Hill | 739,415 | Sept. 22 | 3653 | 812 | 106 | 830 |
| Axle box. Vehicle- | J. McFarland | 728,597 | May 19 | 3368 | 746 | 104 | 754 |
| Axle-brace | C. Schneider, Sr. | 744,116 | Nov. 17 | 2609 | 558 | 107 | 585 |
| Axle-gage | F. J. Compliment and J. O. Robinson. | 725,411 | Apr. 14 | 1831 | 410 | 103 | 1572 |
| Axle-gage | W. E. Wilt | 747,824 | Dec. 22 | 4632 | 1046 | 107 | 2175 |
| Axle lubricator. Car- | C. R. Claghorn | 736,689 | Aug. 18 | 3101 | 684 | 105 | 1676 |
| Axle lubricator. Car- | C. R. Claghorn | 736,819 | Aug. 18 | 3355 | 741 | 105 | 1728 |
| Axle lubricator. Car- | P. T. Langdon | 742,041 | Oct. 20 | 3200 | 715 | 106 | 1959 |
| Axle or shaft marker | O. Sovelius | 742,077 | Oct. 20 | 3311 | 738 | 106 | 1980 |
| Axle. Revolving | C. Faulkner | 722,218 | Mar. 10 | 1051 | 231 | 103 | 240 |
| Axle. Revolving | Wm. F. Bangs | 728,352 | May 19 | 2903 | 641 | 104 | 656 |
| Axle. Rotary | C. Faulkner | 742,851 | Nov. 3 | 58 | 14 | 107 | 15 |
| Axle-skein | W. Lytle | 717,879 | Jan. 6 | 693 | 155 | 102 | 148 |
| Axle-skein | E. Lamb | 738,044 | Sept. 1 | 960 | 213 | 106 | 209 |
| Axle-skein | H. M. Cryer | 740,093 | Sept. 29 | 4917 | 1103 | 106 | 1118 |
| Axle-spindle protector | C. H. Smith | 727,010 | May 5 | 379 | 80 | 104 | 83 |
| Axle. Track-wheel | A. R. Foster and G. W. Cook | 747,691 | Dec. 22 | 4382 | 988 | 107 | 2118 |
| Axle. Tubular vehicle- | C. S. Smith | 725,787 | Apr. 21 | 2549 | 578 | 103 | 1741 |
| Axle. Vehicle- | G. W. Wilson | 726,209 | Apr. 21 | 3280 | 745 | 103 | 1200 |
| Axle. Vehicle- | G. B. McWilliams | 735,568 | Aug. 4 | 1034 | 219 | 105 | 1388 |
| Axle. Vehicle- | J. T. Kenter | 735,984 | Aug. 11 | 1813 | 389 | 105 | 1893 |
| Axle washer. Vehicle- | W. C. Folant | 719,101 | Jan. 27 | 3027 | 674 | 102 | 685 |
| Axles. Machine for turning down spindles for wagon- | P. Wallenstein | 734,639 | July 28 | 3579 | 888 | 105 | 805 |
| Axles, shafts, &c. Apparatus for making | C. Mercàder | 731,486 | June 23 | 3618 | 807 | 104 | 1930 |
| Axles. Y-union for trussed | W. C. Baker | 731,093 | June 16 | 2869 | 637 | 104 | 1760 |
| Baby-comforter | H. Spencer | 745,920 | Dec. 1 | 1117 | 250 | 107 | 1337 |
| Baby-jumper | W. A. Marqua | 731,197 | June 16 | 3065 | 680 | 104 | 1796 |
| Baby-jumper | G. W. Wheeler | 731,641 | June 23 | 3914 | 871 | 104 | 1988 |
| Baby-jumper | A. Heitmann | 735,668 | Aug. 4 | 1212 | 257 | 105 | 1238 |
| Baby-jumper | M. B. Davidson | 736,826 | Aug. 18 | 3369 | 743 | 105 | 1732 |
| Baby-jumper | T. M. Vaughan | 737,176 | Aug. 25 | 3998 | 886 | 105 | 1884 |
| Baby-jumper | W. M. Nix | 743,546 | Nov. 10 | 1501 | 314 | 107 | 338 |
| Baby-jumper bracket | E. C. Smith | 732,127 | June 30 | 4829 | 1077 | 104 | 2194 |
| Baby-walker | J. L. Phillips | 734,940 | July 28 | 4159 | 968 | 105 | 924 |
| Back-band and trace-carrier | J. H. Estes | 738,895 | Sept. 15 | 2699 | 596 | 106 | 612 |
| Back-band hook | E. L. McClain | 729,387 | May 26 | 4773 | 1056 | 104 | 1060 |
| Back-band hook | I. G. Carmack | 742,835 | Nov. 3 | 31 | 7 | 107 | 9 |
| Back-band hook | J. W. Hazlewood | 742,984 | Nov. 3 | 287 | 64 | 107 | 63 |
| Back-pedaling brake | J. H. Whittington | 735,327 | Aug. 4 | 555 | 114 | 105 | 1099 |
| Back-pedaling brake and coaster | R. Abell | 723,352 | Mar. 24 | 3156 | 709<br>710 | 103 | 709 |
| Badge | G. H. Brooks | 721,008 | Feb. 17 | 2958 | 680 | 102 | 1475 |
| Badge | F. W. Pollock | 725,585 | Apr. 14 | 2154 | 488 | 103 | 1642 |
| Badge and boutonnière-holder. Combined | A. P. W. Neithercott | 726,975 | May 5 | 293 | 66 | 104 | 63 |
| Badge and pin therefor. Button- | W. D. Beetchenow | 720,553 | Feb. 17 | 2129 | 492 | 102 | 1303 |
| Badge fastener. Button- | C. A. Russell | 729,671 | June 2 | 265 | 61 | 104 | 1183 |
| Badge-pins, &c. Automatic catch for | C. J. Dieges | 743,835 | Nov. 10 | 2029 | 431 | 107 | 448 |
| Bag:<br>*See* Caddy-bag. Chatelaine-bag. Coal-bag. Coal or wood bag. Dust-arresting bag. Feed-bag. Flexible bag. Fruit-picker's bag. Hot-water bag. Laundry-bag. Mail-bag. Mail-delivery bag. Moth-bag. Paper bag. Striking-bag. Water-bag. | | | | | | | |
| Bag | J. J. Jessen and J. H. Ross | 723,282 | Mar. 24 | 3028 | 681 | 103 | 685 |
| Bag-fastener | W. H. Slattery | 734,980 | July 28 | 4238 | 985 | 105 | 939 |
| Bag-fastener | C. M. Du Frane | 738,014 | Sept. 1 | 918 | 203 | 106 | 201 |
| Bag-fastener | W. Parks | 739,919 | Sept. 29 | 4602 | 1033 | 106 | 1050 |
| Bag-fastener | C. W. Bader | 741,437 | Oct. 13 | 1992 | 441 | 106 | 1691 |
| Bag-filler | J. Heinrich and F. Probst | 748,500 | Dec. 29 | 5931 | 1347 | 107 | 2481 |
| Bag filler and holder | M. E. Hall | 744,338 | Nov. 17 | 3036 | 651<br>652 | 107 | 678 |
| Bag-filling machine | C. A. Fisher | 726,275 | Apr. 28 | 3416 | 775<br>776<br>777<br>778 | 103 | 1936 |
| Bag-filling-machine feeder | F. Dedreux | 744,175 | Nov. 17 | 2737 | 583 | 107 | 612 |
| Bag-forming machine | L. F. Fales | 717,828 | Jan. 6 | 595 | 133<br>134 | 102 | 128 |
| Bag, &c., frame | G. R. Farrell | 747,158 | Dec. 15 | 3404 | 771 | 107 | 1885 |
| Bag. Hand or like containing | W. W. McCormick | 742,478 | Oct. 27 | 4036 | 906 | 106 | 2145 |
| Bag-handle | G. H. Gentzel | 721,362 | Feb. 24 | 3668 | 835 | 102 | 1644 |
| Bag, &c., handle | A. Ritter and M. Halpern | 748,012 | Dec. 29 | 5029 | 1135 | 107 | 2284 |
| Bag-holder | A. D. Skinner | 721,101 | Feb. 17 | 3143 | 722 | 102 | 1518 |
| Bag-holder | G. E. Brown | 725,538 | Apr. 14 | 2082 | 471 | 103 | 1625 |
| Bag-holder | C. Kenney | 725,721 | Apr. 21 | 2427 | 550 | 103 | 1714 |
| Bag-holder | E. E. Jenkins | 728,110 | May 12 | 2417 | 538 | 104 | 533 |
| Bag-holder | D. W. Mitchell | 733,247 | July 7 | 977 | 236 | 105 | 204 |
| Bag-holder | B. H. Willsie | 733,449 | July 14 | 1351 | 318 | 105 | 303 |
| Bag-holder | A. W. French | 737,730 | Sept. 1 | 321 | 67 | 106 | 73 |
| Bag-holder | J. H. Gmelin | 741,484 | Oct. 13 | 2103 | 468 | 106 | 1715 |
| Bag-holder | P. Brown | 742,578 | Oct. 27 | 4233 | 953 | 106 | 2185 |
| Bag-holder | J. W. Fiddes | 743,848 | Nov. 10 | 2052 | 436 | 107 | 453 |
| Bag-holder | C. W. Olin | 746,988 | Dec. 15 | 3084 | 706 | 107 | 1810 |
| Bag-holder | W. Lilly | 748,387 | Dec. 29 | 5700 | 1301 | 107 | 2430 |
| Bag holder and filler | H. T. Wiley | 720,543 | Feb. 10 | 2091 | 482 | 102 | 1278 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|---|
| | | | | Spec. | Dr'g. | Vol. | Page. |
| Bag-holder for bagging grain | E. M. Gilbert | 719,210 | Jan. 27 | 3207 | 715 | 102 | 722 |
| Bag-holder for grain-chutes, &c | C. L. Squire | 726,584 | Apr. 28 | 4041 | 913 | 103 | 2059 |
| Bag making and filling machine | A. H. Phillips | 727,554 | May 5 | 1360 | 305, 306, 307 | 104 | 293 |
| Bag, reticule, or the like | A. Amson | 744,151 | Nov. 17 | 2680 | 571 | 107 | 600 |
| Bag-turning machine | S. M. Philbrick and L. C. Coulter | 742,061 | Oct. 20 | 3235 | 725 | 106 | 1967 |
| Bags, bales, &c. Tie for | W. J. Beardsley | 732,673 | June 30 | 5891 | 1307 | 104 | 2417 |
| Bags, &c. Holder for | F. Cords | 743,691 | Nov. 10 | 1764 | 372 | 107 | 392 |
| Bags. Self-closing mouth for | G. W. Williams | 744,846 | Nov. 24 | 3954 | 852 | 107 | 890 |
| Baggage-handler | G. H. Wall | 747,899 | Dec. 22 | 4784 | 1081 | 107 | 2208 |
| Bail-ear for metallic vessels | C. B. McDonald | 746,733 | Dec. 15 | 2579 | 593 | 107 | 1696 |
| Bail-ear. Vessel | J. F. Vogt | 736,179 | Aug. 11 | 2156 | 463 | 105 | 1460 |
| Bailer | L. Jones | 727,375 | May 5 | 1029 | 223 | 104 | 222 |
| Bails. Device for handling vessel | J. McMahon | 727,417 | May 5 | 1097 | 241 | 104 | 237 |
| Bails to baskets, &c. Means for attaching | W. C. Williamson | 748,552 | Dec. 29 | 6043 | 1368 | 107 | 2507 |
| Bait. Artificial | C. C. Shaffer | 723,045 | Mar. 17 | 2572 | 578, 579 | 103 | 576 |
| Bait-box. Automatic | N. Blanchet | 731,335 | June 16 | 3315 | 739 | 104 | 1849 |
| Bait-holder | V. Gebhardt | 740,416 | Oct. 6 | 50 | 11 | 106 | 1255 |
| Bait. Spoon | J. R. Harlow | 734,703 | July 28 | 3709 | 868 | 105 | 832 |
| Baking iron. Wafer | L. Rifkin and D. Getzoff | 736,155 | Aug. 11 | 2116 | 454 | 105 | 1451 |
| Baking-pan | J. K. Zeininger | 737,548 | Aug. 25 | 4706 | 1056 | 105 | 2040 |
| Baking wafers, &c. Apparatus for | H. W. Mackenzie | 721,455 | Feb. 24 | 3834 | 872 | 102 | 1679 |
| Balance-escapement | E. Buysse | 725,037 | Apr. 14 | 1154 | 260 | 103 | 1431 |
| Balance-escapement | A. M. Lane | 748,290 | Dec. 29 | 5545 | 1265 | 107 | 2396 |
| Balance-escapement dust-cap | P. Moosmann | 718,369 | Jan. 13 | 1573 | 347 | 102 | 352 |
| Balance-escapements. Double roller for | F. J. Reaves | 740,179 | Sept. 29 | 5071 | 1140 | 106 | 1150 |
| Balance. Spring | S. R. Munson | 732,740 | Mar. 17 | 2046 | 456 | 103 | 468 |
| Balance. Spring | J. M. Triner | 739,035 | Sept. 15 | 2923 | 649 | 106 | 659 |
| Balance-staff | D. H. Church | 744,719 | Nov. 24 | 3733 | 806 | 107 | 845 |
| Baldric-fastener | E. O. Zimmerman | 725,810 | Apr. 21 | 2601 | 591 | 103 | 1752 |
| Bale-forming apparatus | W. E. Anderson and F. L. Dyer | 735,435 | Aug. 4 | 773 | 164, 165 | 105 | 1145 |
| Bale-tie | A. M. Lander | 718,133 | Jan. 13 | 1144 | 254 | 102 | 261 |
| Bale-tie | S. T. Green | 720,133 | Feb. 10 | 1337 | 306 | 102 | 1124 |
| Bale-tie | C. W. Harmon | 720,582 | Feb. 17 | 2183 | 506 | 102 | 1313 |
| Bale-tie | S. J. Webb | 720,644 | Feb. 17 | 2312 | 530 | 102 | 1338 |
| Bale-tying attachment for compressors | J. H. Kennedy | 743,520 | Nov. 10 | 1455 | 305 | 107 | 327 |
| Baling apparatus. Cotton | F. L. Dyer | 723,591 | Mar. 24 | 3609 | 806, 807 | 103 | 799 |
| Baling apparatus. Cotton | J. R. Fordyce | 731,882 | June 23 | 4339 | 968, 969 | 104 | 2080 |
| Baling machine. Fiber | J. J. Davenport | 729,285 | May 26 | 4607 | 1019 | 104 | 1026 |
| Baling machine. Hay | F. W. Williams | 724,360 | Mar. 31 | 5109 | 1143 | 103 | 1125 |
| Baling machine. Straw | G. J. Freese | 736,084 | Aug. 11 | 2000 | 426 | 105 | 1428 |
| Baling-press | D. L. Nicholson | 718,016 | Jan. 6 | 943 | 209 | 102 | 203 |
| Baling-press | J. S. Tuttle | 719,278 | Jan. 27 | 3334 | 745 | 102 | 750 |
| Baling-press | F. L. Heinrich | 719,591 | Feb. 3 | 326 | 76 | 102 | 890 |
| Baling-press | M. D. Hunt | 720,148 | Feb. 10 | 1357 | 310 | 102 | 1128 |
| Baling-press | C. H. Jackson | 721,805 | Mar. 3 | 266 | 60 | 103 | 59 |
| Baling-press | G. B. Triplett | 722,191 | Mar. 3 | 984 | 218, 219 | 103 | 208 |
| Baling-press | T. Collier | 723,652 | Mar. 24 | 3715 | 832, 833 | 103 | 821 |
| Baling-press | L. Trabue and C. E. Purcell | 724,063 | Mar. 31 | 4507 | 1015 | 103 | 1003 |
| Baling-press | L. S. Gehman | 724,843 | Apr. 7 | 797 | 184 | 103 | 1340 |
| Baling-press | J. T. Renas | 725,872 | Apr. 21 | 2699 | 614 | 103 | 1774 |
| Baling-press | C. E. Hardie | 725,958 | Apr. 21 | 2848 | 646 | 103 | 1804 |
| Baling-press | J. W. Hamilton | 726,284 | Apr. 28 | 3433 | 781 | 103 | 1940 |
| Baling-press | M. B. Jones | 726,694 | Apr. 28 | 4240 | 960 | 103 | 2100 |
| Baling-press | G. E. Maxwell | 727,401 | May 5 | 1070 | 232, 233 | 104 | 231 |
| Baling-press | W. R. Colman | 727,907 | May 12 | 2054 | 457 | 104 | 455 |
| Baling-press | H. D. Reese and L. Blount | 728,760 | May 19 | 3654 | 813 | 104 | 815 |
| Baling-press | J. Jensen | 729,183 | May 26 | 4420 | 974 | 104 | 986 |
| Baling-press | G. Senger | 729,903 | June 2 | 698 | 154 | 104 | 1270 |
| Baling-press | W. Frost | 730,106 | June 2 | 1054 | 236 | 104 | 1342 |
| Baling-press | W. T. and G. P. Carr and H. E. Williams. | 731,663 | June 23 | 3950 | 879 | 104 | 1996 |
| Baling-press | J. S. Moore | 732,099 | June 30 | 4775 | 1066 | 104 | 2183 |
| Baling-press | T. A. Killman | 733,849 | July 14 | 2069 | 489, 490, 491 | 105 | 451 |
| Baling-press | I. V. Jones | 735,267 | Aug. 4 | 455 | 90, 91 | 105 | 1078 |
| Baling-press | W. R. Colman | 736,496 | Aug. 18 | 2726 | 597 | 105 | 1599 |
| Baling-press | J. T., W. R., and G. B. Rodgers | 736,550 | Aug. 18 | 2819 | 617 | 105 | 1620 |
| Baling-press | I. R. Choat | 737,347 | Aug. 25 | 4324 | 963, 964 | 105 | 1954 |
| Baling-press | W. C. Spurgeon | 737,516 | Aug. 25 | 4649 | 1043, 1044 | 105 | 2028 |
| Baling-press | J. J. Stopple | 737,521 | Aug. 25 | 4657 | 1046 | 105 | 2030 |
| Baling-press | L. G. Reynolds | 738,068 | Sept. 1 | 1000 | 222, 223 | 106 | 217 |
| Baling-press | W. E. Tate | 738,957 | Sept. 15 | 2802 | 621 | 106 | 634 |
| Baling-press | A. C. Roberts, J. C. Baker, and J. H. Ross. | 741,718 | Oct. 20 | 2572 | 572 | 106 | 1829 |
| Baling-press | E. R. Kerr | 745,862 | Dec. 1 | 1016 | 229 | 107 | 1316 |
| Baling-press automatic folder or tucker | P. and L. Trabue | 736,653 | Aug. 18 | 3017 | 666 | 105 | 1659 |
| Baling-press bed-plate | F. J. Coad and E. Biddle | 743,973 | Nov. 10 | 2286 | 491 | 107 | 505 |
| Baling press. Cotton | W. H. Reeves | 721,325 | Feb. 24 | 3599 | 817, 818, 819 | 102 | 1631 |
| Baling-press door-closing means | A. Johnson | 722,513 | Mar. 10 | 1605 | 353 | 103 | 362 |
| Baling-press-feeding apparatus | O. C. Bowman | 727,740 | May 12 | 1739 | 390 | 104 | 392 |
| Baling-press indicator | P. and L. Trabue | 728,515 | May 19 | 3184 | 705 | 104 | 714 |

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| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Baling-press plunger | G. Schubert | 727,850 | May 12 | 1950 | 435 | 104 | 432 |
| Baling-press tension-band | L. Trabue | 724,062 | Mar. 31 | 4507 | 1015 | 103 | 1003 |
| Baling-press tension-band | P. and L. Trabue | 728,516 | May 19 | 3185 | 706 | 104 | 715 |
| Baling-presses. Apparatus for disposing of waste from | J. G. Root and J. C. Westervelt | 731,955 | June 23 | 4471 | 997<br>998 | 104 | 2107 |
| Ball:<br>See Bowling-ball. Lubricating metallic ball.<br>Foot-ball. Playing-ball.<br>Golf-ball. Pool or other like ball. | | | | | | | |
| Ball | K. V. Painter | 719,498 | Feb. 3 | 158 | 36 | 102 | 857 |
| Ball | K. V. Painter | 719,499 | Feb. 3 | 159 | 36 | 102 | 857 |
| Ball | K. V. Painter | 719,500 | Feb. 3 | 160 | 36 | 102 | 857 |
| Ball | H. M. Singer | 728,311 | May 19 | 2827 | 625 | 104 | 641 |
| Ball | K. V. Painter | 730,959 | June 16 | 2612 | 581 | 104 | 1707 |
| Ball | K. V. Painter | 731,406 | June 16 | 3452 | 771 | 104 | 1877 |
| Ball | K. V. Painter | 732,583 | June 30 | 5727 | 1272 | 104 | 2382 |
| Ball | H. D. Day | 740,403 | Oct. 6 | 30 | 7 | 106 | 1251 |
| Ball-and-socket fastener. Wire | J. D. Stirckler | 732,461 | June 30 | 5492 | 1218 | 104 | 2331 |
| Ball-and-socket fastener. Wire | J. D. Stirckler | 732,462 | June 30 | 5493 | 1218 | 104 | 2331 |
| Ball-and-socket joint | J. C. Martin, Jr. | 717,882 | Jan. 6 | 698 | 156 | 102 | 149 |
| Ball-and-socket joint for dolls, &c | E. Debes | 719,310 | Jan. 27 | 3402 | 759 | 102 | 765 |
| Ball-and-socket knuckle | S. A. Schellenger | 728,419 | May 19 | 3016 | 662 | 104 | 680 |
| Ball-bearing washer | C. J. Caley | 738,097 | Sept. 1 | 1067 | 236 | 106 | 231 |
| Ball-catcher | S. A. Cohen | 724,814 | Apr. 7 | 746 | 174 | 103 | 1330 |
| Ball-coupling | H. T. Henderson | 729,168 | May 26 | 4394 | 969 | 104 | 980 |
| Ball-float | J. P. Burlingame | 740,625 | Oct. 6 | 467 | 103 | 106 | 1346 |
| Ball-mill. Tubular | M. F. Abbé | 744,451 | Nov. 17 | 3249 | 696 | 107 | 724 |
| Ball players. Head-harness for foot- | J. W. Curtiss | 724,444 | Apr. 7 | 42 | 11 | 103 | 1178 |
| Ball register. Electric base- | J. M. Humphreys | 727,633 | May 12 | 1511 | 342 | 104 | 343 |
| Ball-retainer | L. Myers | 740,681 | Oct. 6 | 551 | 123 | 106 | 1366 |
| Ball seam. Base- | B. T. Rogers | 732,962 | July 7 | 465 | 116 | 105 | 100 |
| Balls. Making hollow | C. Davis | 736,229 | Aug. 11 | 2236 | 482 | 105 | 1477 |
| Balls. Making playing- | E. Kempshall | 727,542 | May 5 | 1331 | 297 | 104 | 287 |
| Balls. Making playing- | C. T. Kingzett | 734,888 | July 28 | 4074 | 950 | 105 | 905 |
| Balls. Making shells for playing- | F. H. Richards | 720,482 | Feb. 10 | 1960 | 448 | 102 | 1252 |
| Balls. Manufacture of golf- | C. T. Kingzett | 734,339 | July 21 | 3043 | 716 | 105 | 677 |
| Balls. Manufacture of golf- | P. A. Martin | 745,213 | Nov. 24 | 4680 | 1020 | 107 | 1040 |
| Balls. Manufacture of playing- | F. H. Richards | 721,462 | Feb. 24 | 3851 | 876<br>877 | 102 | 1683 |
| Balls. Manufacture of the cores of golf or like | P. A. Martin | 745,212 | Nov. 24 | 4678 | 1019 | 107 | 1040 |
| Balls, &c. Manufacturing composition for golf- | R. Hutchison | 730,126 | June 2 | 1087 | ------ | 104 | 1348 |
| Balls. Manufacturing game- | A. L. Burt | 731,542 | June 23 | 3731 | 831 | 104 | 1952 |
| Balloon. Seamless rubber | D. Harris | 718,121 | Jan. 13 | 1122 | 248 | 102 | 257 |
| Ballot-box | W. L. Cornelius | 719,195 | Jan. 27 | 3183 | 709 | 102 | 717 |
| Ballot-box | J. McGaughey | 733,070 | July 7 | 658 | 159 | 105 | 139 |
| Ballot-box | M. L. Cram | 742,009 | Oct. 20 | 3135 | 700 | 106 | 1945 |
| Ballot box. Secret- | H. J. Fox | 742,783 | Oct. 27 | 4573 | 1036<br>1037 | 106 | 2261 |
| Balustrade | K. T. Horn | 736,399 | Aug. 18 | 2538 | 558 | 105 | 1560 |
| Banana-bunch hanger | M. F. Levy | 725,458 | Apr. 14 | 1932 | 433 | 103 | 1594 |
| Banana-shipping case | E. O. Pittenger | 722,890 | Mar. 17 | 2327 | 520 | 103 | 525 |
| Banana-shipping case | F. Schmitz | 726,578 | Apr. 28 | 4028 | 910<br>911 | 103 | 2057 |
| Banana-shipping case | F. Schmitz | 735,828 | Aug. 11 | 1518 | 325 | 105 | 1323 |
| Banana-swing | J. C. Skinner | 730,408 | June 9 | 1604 | 358 | 104 | 1471 |
| Band-cutter | T. N. Huddlestone | 719,594 | Feb. 3 | 331 | 77 | 102 | 891 |
| Band-cutter | T. E. Crecelius | 734,304 | July 21 | 2992 | 704 | 105 | 666 |
| Band-cutter | W. Weidman | 737,539 | Aug. 25 | 4692 | 1052 | 105 | 2037 |
| Band-cutter and feeder | R. Shedenhelm | 718,665 | Jan. 20 | 2181 | 477<br>478 | 102 | 496 |
| Band-cutter and feeder | J. H. Florence and J. E. Misner | 719,777 | Feb. 3 | 677 | 156 | 102 | 966 |
| Band-cutter and feeder | R. Shedenhelm | 724,621 | Apr. 7 | 377 | 90, 91 | 103 | 1250 |
| Band-cutter and feeder | R. Shedenhelm | 724,622 | Apr. 7 | 384 | 91, 92 | 103 | 1251 |
| Band-cutter and feeder | J. N. D. Reeves | 727,840 | May 12 | 1928 | 429<br>430 | 104 | 428 |
| Band-cutter and feeder | D. Ramsey | 731,498 | June 23 | 3640 | 812<br>813 | 104 | 1935 |
| Band-cutter and feeder | O. W. Brown | 743,143 | Nov. 3 | 625 | 135<br>136 | 107 | 130 |
| Band-cutter and feeder | J. T. Smith | 745,741 | Dec. 1 | 760 | 174 | 107 | 1260 |
| Band-cutter and feeder | A. J. Heine | 746,961 | Dec. 15 | 3036 | 696<br>697 | 107 | 1799 |
| Band-cutter and feeder | A. J. Heine | 747,067 | Dec. 15 | 3235 | 737<br>738 | 107 | 1847 |
| Band-cutter and feeder | F. J. Main and R. C. Wildhagen | 747,456 | Dec. 22 | 3952 | 888 | 107 | 2020 |
| Band-cutter and self-feeder | J. H. Rains | 721,740 | Mar. 3 | 152 | 35, 36 | 103 | 34 |
| Band-fastening | J. H. Christopher | 734,512 | July 28 | 3351 | 784 | 105 | 757 |
| Band-hook and blank therefor | J. B. Robinson | 726,763 | Apr. 28 | 4377 | 984 | 103 | 2129 |
| Band. Spring- | R. C. Kisling and A. Coe | 744,564 | Nov. 17 | 3431 | 739 | 107 | 762 |
| Band-tightener | D. Mullane | 732,773 | July 7 | 137 | 37 | 105 | 33 |
| Band-wheel scraper | J. Tweedie | 730,419 | June 9 | 1624 | 364 | 104 | 1475 |
| Bandage | E. L. Ewing | 725,688 | Apr. 21 | 2363 | 535 | 103 | 1700 |
| Bandage. Catamenial | W. F. Laux | 725,726 | Apr. 21 | 2434 | 552 | 103 | 1715 |
| Bandage. Catamenial | S. P. Langdon | 727,159 | May 5 | 646 | 139 | 104 | 140 |
| Bandage. Chest- | J. Baldwin | 728,434 | May 19 | 3037 | 667 | 104 | 685 |
| Bandage. Hemostatic | E. E. Denain | 721,162 | Feb. 24 | 3300 | 754<br>755 | 102 | 1569 |
| Bandage-making machine | F. L. Pohlmann | 739,267 | Sept. 15 | 3359 | 746 | 106 | 750 |
| Bandage. Supporting- | L. R. Miller and E. T. Richert | 731,201 | June 16 | 3070 | 681 | 104 | 1797 |
| Bandage. Suspensory | J. L. Lupfer | 722,121 | Mar. 3 | 852 | 190 | 103 | 183 |
| Bandage. Suspensory | E. R. Drake | 744,512 | Nov. 17 | 3346 | 720 | 107 | 744 |
| Bandage. Suspensory | E. R. Drake | 746,474 | Dec. 8 | 2115 | 486 | 107 | 1571 |
| Bandoleer and waist-belt rifle-carrier. Combined | E. H. B. Laing | 745,866 | Dec. 1 | 1023 | 230 | 107 | 1317 |
| Bangle-fastening | F. Rabone | 748,417 | Dec. 29 | 5769 | 1316 | 107 | 2446 |
| Banjo | W. B. Farmer | 724,833 | Apr. 7 | 783 | 181 | 103 | 1337 |
| Bank | E. W. Buechling | 735,940 | Aug. 11 | 1730 | 369 | 105 | 1369 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Bank and register. Cyclic | O. R. Myers | 720,456 | Feb. 10 | 1919 | 437 | 102 | 1244 |
| Bank. Child's | J. Phillips | 740,776 | Oct. 6 | 742 | 167 | 106 | 1404 |
| Bank. Coin- | O. Burns | 727,282 | May 5 | 856 | 184 | 104 | 184 |
| Bank. Coin-registering | J. F. Healy | 734,705 | July 28 | 3713 | 868, 869 | 105 | 832 |
| Bank. Money- | O. Burns | 718,908 | Jan. 20 | 2638 | 592 | 102 | 590 |
| Bank. Registering- | J. Daly | 728,876 | May 26 | 3878 | 863 | 104 | 875 |
| Bank. Savings- | J. H. Zimmer | 718,184 | Jan. 13 | 1236 | 272 | 102 | 282 |
| Bank. Savings- | T. W. Mills and J. E. Cunningham | 725,858 | Apr. 21 | 2674 | 609 | 103 | 1768 |
| Bank. Savings- | A. C. Mills, Jr | 732,770 | July 7 | 130 | 36 | 105 | 32 |
| Bank. Savings- | E. F. Brown | 743,442 | Nov. 10 | 1289 | 264 | 107 | 291 |
| Bank. Transferable job- | G. M. Green | 721,560 | Feb. 24 | 4022 | 914 | 102 | 1719 |
| Baptismal font | H. F. Nehr | 722,342 | Mar. 10 | 1100 | 242 | 103 | 250 |
| Bar: *See* Breaker-bar. Dolly-bar. Fob-bar. Grate-bar. Mower-bar. Nigger-bar. Pinch-bar. | | | | | | | |
| Bar-severing machine | H. S. McCool | 717,706 | Jan. 6 | 329 | 79 | 102 | 72 |
| Bar-working machine | G. O. Gridley | 725,438 | Apr. 14 | 1884 | 421, 422, 423 | 103 | 1583 |
| Bars or shoals. Apparatus for removing | E. Brace | 723,131 | Mar. 17 | 2734 | 614 | 103 | 609 |
| Barber-chair | F. H. Wilsdorf | 722,439 | Mar. 10 | 1448 | 321 | 103 | 324 |
| Barber-chair | F. H. Wilsdorf | 745,706 | Dec. 1 | 709 | 162 | 107 | 1249 |
| Barber's cabinet | L. Harrison, S. V. Lyon, and J. J. Lackey. | 727,166 | May 5 | 658 | 141 | 104 | 142 |
| Barber's chair shampooing attachment | M. and H. Romans | 727,452 | May 5 | 1170 | 258 | 104 | 253 |
| Barge | G. E. Titcomb | 742,101 | Oct. 20 | 3350 | 748 | 106 | 1988 |
| Barge. Freight- | L. P. Harvey | 733,583 | July 14 | 1587 | 378 | 105 | 353 |
| Barium hydrate. Preparing | C. B. Jacobs | 720,927 | Feb. 17 | 2805 | ------ | 102 | 1443 |
| Barium sulfate and zinc chlorid. Obtaining | W. D. Gilman | 746,954 | Dec. 15 | 3027 | ------ | 107 | 1797 |
| Bark extracts. Apparatus for mixing | F. C. Prindle | 723,304 | Mar. 24 | 3068 | 690 | 103 | 692 |
| Bark from logs. Machine for removing | W. W. and F. N. Trevor | 741,854 | Oct. 20 | 2802 | 624 | 106 | 1879 |
| Bark from standing trees. Apparatus for removing. | W. P. Kidder | 734,565 | July 28 | 3451 | 805 | 105 | 779 |
| Bark from standing trees. Apparatus for removing. | W. P. Kidder | 739,495 | Sept. 22 | 3786 | 847, 848 | 106 | 860 |
| Bark-removing machine | J. Moreau | 735,793 | Aug. 11 | 1438 | 310 | 105 | 1305 |
| Bark-splitting machine. Multiple | H. L. Staley | 734,768 | July 28 | 3847 | 897 | 105 | 858 |
| Barn | J. Scheidler | 732,787 | July 7 | 165 | 43 | 105 | 39 |
| Barometer-alarm | G. Vives | 739,126 | Sept. 15 | 3105 | 687 | 106 | 696 |
| Barrack-jack | C. Hammond | 721,515 | Feb. 24 | 3939 | 897 | 102 | 1701 |
| Barrel | E. C. Phillips | 718,020 | Jan. 6 | 948 | 210 | 102 | 204 |
| Barrel | S. J. McGaughey and J. Sheerer | 740,031 | Sept. 29 | 4820 | 1081 | 106 | 1098 |
| Barrel-cover. Adjustable | E. Bertelsmann | 744,026 | Nov. 17 | 2435 | 523 | 107 | 550 |
| Barrel-filler | F. W. and G. N. Inden | 734,231 | July 21 | 2831 | 664 | 105 | 633 |
| Barrel-head | G. F. McKeever | 720,276 | Feb. 10 | 1609 | 368 | 102 | 1179 |
| Barrel-head | H. K. Mourning and G. K. Taylor | 740,679 | Oct. 6 | 547 | 122 | 106 | 1365 |
| Barrel-head | E. P. Hatch | 741,332 | Oct. 13 | 1793 | 398 | 106 | 1646 |
| Barrel-head | E. E. Davenport | 744,499 | Nov. 17 | 3328 | 716 | 107 | 741 |
| Barrel-head-doweling machine | C. W. Boykin | 743,440 | Nov. 10 | 1283 | 263 | 107 | 289 |
| Barrel-head fastener | H. H. Kromberg | 730,666 | June 9 | 2086 | 464 | 104 | 1576 |
| Barrel-heading machine | J. B. Stanhope | 732,793 | July 7 | 177 | 45 | 105 | 41 |
| Barrel-heading press | W. D. Davis | 721,430 | Feb. 24 | 3797 | 864 | 102 | 1671 |
| Barrel-heater | A. A. Gohn | 745,432 | Dec. 1 | 226 | 52 | 107 | 1148 |
| Barrel-holder | M. Derrig | 720,681 | Feb. 17 | 2376 | 544 | 102 | 1352 |
| Barrel holding and dumping apparatus | C. E. Ringrose | 746,164 | Dec. 8 | 1565 | 350 | 107 | 1454 |
| Barrel-lifter | W. J. Stewart | 744,813 | Nov. 24 | 3896 | 837 | 107 | 879 |
| Barrel machines. Gripping device for double-stave-veneer- | B. W. Truscott | 739,363 | Sept. 22 | 3518 | 787 | 106 | 800 |
| Barrel or keg | S. J. Edmiston | 736,830 | Aug. 18 | 3376 | 746 | 105 | 1733 |
| Barrel-press | A. Schenck | 737,778 | Sept. 1 | 412 | 88 | 106 | 90 |
| Barrel protector-ring or bushing | P. Hochheimer | 735,377 | Aug. 4 | 639 | 133 | 105 | 1117 |
| Barrel-scrubbing machine | H. Olsen | 734,280 | July 21 | 2932 | 685 | 105 | 655 |
| Barrel-washer | S. C. O. Berg | 720,315 | Feb. 10 | 1676 | 381 | 102 | 1193 |
| Barrel-washing machine | J. Müller | 730,470 | June 9 | 1735 | 388 | 104 | 1499 |
| Barrel-washing machines. Barrel-feeding apparatus for | R. Troehler | 748,545 | Dec. 29 | 6032 | 1365 | 107 | 2504 |
| Barrel-washing tank | H. Olsen | 734,281 | July 21 | 2935 | 686 | 105 | 656 |
| Barrels to receive spirituous liquors. Preparing wooden | D. Malone | 747,740 | Dec. 22 | 4467 | 1007 | 107 | 2137 |
| Barrier and door-holder. Folding | C. P. and F. E. Howard | 743,079 | Nov. 3 | 504 | 109 | 107 | 105 |
| Basin. Adjustable wash- | M. Brandt | 717,533 | Jan. 6 | 20 | 5,6 | 102 | 7 |
| Basin. Catch- | L. Skaife | 720,290 | Feb. 10 | 1630 | 373 | 102 | 1183 |
| Basin. Catch- | M. Cullen | 730,817 | June 9 | 2331 | 517 | 104 | 1628 |
| Basin or bath fitting | J. J. Wade | 746,419 | Dec. 8 | 2022 | 463 | 107 | 1550 |
| Basin-plug. Adjustable metal | W. F. Schultheiss | 732,452 | June 30 | 5468 | 1214 | 104 | 2327 |
| Basin. Wash- | W. G. Hoshock | 743,873 | Nov. 10 | 2094 | 447 | 107 | 462 |
| Basins, baths, washtrays, &c. Overflow-flush for | J. Totham | 747,807 | Dec. 22 | 4604 | 1038 | 107 | 2168 |
| Basins or the like. Screen for catch- | W. H. Woods | 739,249 | Sept. 15 | 3329 | 739 | 106 | 744 |
| Basins, sinks, or like fixtures. Attachment for | W. Ford | 739,162 | Sept. 15 | 3163 | 699, 700 | 106 | 707 |
| Basins, &c., to slabs. Means for securing | W. A. Keen | 726,070 | Apr. 21 | 3021 | 687 | 103 | 1840 |
| Basket | M. P. Kilian | 719,121 | Jan. 27 | 3069 | 682 | 102 | 694 |
| Basket | J. I. Lane | 722,408 | Mar. 10 | 1397 | 308 | 103 | 313 |
| Basket | F. Kretzschmar | 738,724 | Sept. 8 | 2349 | 515 | 106 | 518 |
| Basket | J., Jr., and W. Brown | 743,057 | Nov. 3 | 461 | 100 | 107 | 96 |
| Basket. Bottle- | J. A. Roudil | 728,018 | May 12 | 2256 | 502 | 104 | 497 |
| Basket for holding tin scraps | M. Laernoes and J. Dunn | 734,894 | July 28 | 4083 | 951 | 105 | 907 |
| Basket. Fruit- | S. J. Dunkley | 724,170 | Mar. 31 | 4728 | 1060 | 103 | 1049 |
| Basket-handle fastener | E. L. Walker | 729,981 | June 2 | 849 | 189 | 104 | 1301 |
| Basket-machine | C. Engberg | 722,961 | Mar. 17 | 2431 | 543, 544 | 103 | 546 |
| Basket-making machine | C. Engberg | 722,962 | Mar. 17 | 2434 | 545 | 103 | 547 |
| Basket. Plant- | A. Lord | 726,079 | Apr. 21 | 3035 | 689 | 103 | 1843 |
| Baskets, &c. Fastening for | A. A. Benedict | 724,245 | Mar. 31 | 4898 | 1096 | 103 | 1081 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Baskets. Hoop for veneer | E. E. Leary | 738,552 | Sept. 8 | 2027 | 441 | 106 | 451 |
| Bass viol. Trick | G. H. Butzbach | 739,827 | Sept. 29 | 4401 | 988 | 106 | 1010 |
| Bat | T. H. Murnane | 748,000 | Dec. 29 | 5008 | 1132 | 107 | 2279 |
| Bat. Base-ball | C. F. Held | 727,359 | May 5 | 1001 | 218 | 104 | 216 |
| Bat. Base-ball | J. F. McCoy | 729,639 | June 2 | 207 | 47 | 104 | 1170 |
| Bat separating and folding machine | D. Williams | 739,370 | Sept. 22 | 3536 | 790 | 106 | 804 |
| Bath:<br>*See* Copying-bath. Portable bath.<br>Heat-bath. Shower-bath.<br>Heat and heat-light bath. | | | | | | | |
| Bath and fever machine | F. W. Hall | 732,976 | Mar. 17 | 2458 | 550 | 103 | 552 |
| Bath apparatus. Needle and shower | D. W. Dinneen | 743,623 | Nov. 10 | 1662 | 349 | 107 | 371 |
| Bath apparatus. Shower- | L. P. Dunn | 733,635 | July 14 | 1674 | 397 | 105 | 370 |
| Bath apparatus. Vapor- | L. Mohr | 739,612 | Sept. 22 | 3996 | 891 | 106 | 903 |
| Bath-brushes. Showering device for attachment to. | T. De Vilbiss | 733,018 | July 7 | 560 | 136 | 105 | 120 |
| Bath-cabinet heater. Sweat- | T. O. Carman | 746,018 | Dec. 8 | 1302 | 292 | 107 | 1394 |
| Bath cabinets. Head-cap for vapor- | J. B. Davison | 718,435 | Jan. 13 | 1692 | 373 | 102 | 377 |
| Bath fluids. Means for introducing gases into | L. von Orth | 743,025 | Nov. 3 | 400 | 86 | 107 | 84 |
| Bath-mat. Portable | W. E. Allen | 745,553 | Dec. 1 | 443 | 104 | 107 | 1192 |
| Bath-room or water-closet indicator | J. J. Smith | 747,252 | Dec. 15 | 3575 | 809 | 107 | 1919 |
| Bath-seat | W. H. Silver | 736,032 | Aug. 11 | 1900 | 407 | 105 | 1406 |
| Bath-tub | H. Hoeglauer | 722,232 | Mar. 10 | 1083 | 238, 239 | 103 | 247 |
| Bath-tub | I. W. Schmidt | 746,389 | Dec. 8 | 1972 | 450 | 107 | 1540 |
| Bath-tub | I. W. Schmidt | 746,390 | Dec. 8 | 1973 | 451 | 107 | 1540 |
| Bath-tub bracket attachment | J. E. Palmatary | 743,917 | Nov. 10 | 2175 | 469 | 107 | 479 |
| Bath-tub. Collapsible | W. G. Gittings | 744,745 | Nov. 24 | 3779 | 814 | 107 | 854 |
| Bath-tub. Portable steam | A. Moorefield | 724,487 | Apr. 7 | 131 | 31 | 103 | 1198 |
| Bath-tub safety device | F. McCall | 730,953 | June 16 | 2604 | 579 | 104 | 1705 |
| Bath-tub seat | W. and T. Wolpert | 732,249 | June 30 | 5082 | 1130 | 104 | 2246 |
| Bath tub. Shower- | G. P. Homeier | 735,514 | Aug. 4 | 925 | 196 | 105 | 1178 |
| Bath-tub shower-bath attachment | J. Carmichael | 719,994 | Feb. 10 | 1051 | 244 | 102 | 1062 |
| Bath-tub transporting and emptying device | J. C. R. March | 747,559 | Dec. 22 | 4140 | 929, 930 | 107 | 2064 |
| Bath-tub trap | J. H. Fitzgerald | 740,639 | Oct. 6 | 484 | 106 | 106 | 1350 |
| Bath-tubs, stoves, &c. Fastening device for | W. S. Johnson | 717,863 | Jan. 6 | 668 | 148 | 102 | 143 |
| Bath valve mechanism. Shower- | C. H. Rollins | 747,487 | Dec. 22 | 4013 | 902 | 107 | 2036 |
| Baths. Rose for shower- | W. Kesselring | 722,849 | Mar. 17 | 2250 | 504 | 103 | 508 |
| Bathing apparatus | L. V. Levinger | 744,370 | Nov. 17 | 3092 | 663 | 107 | 690 |
| Bathing apparatus. Portable | L. V. Gray | 736,089 | Aug. 11 | 2006 | 428 | 105 | 1429 |
| Bathing-machine | H. Thompson | 723,759 | Mar. 24 | 3895 | 777 | 103 | 861 |
| Bathing sandal, slipper, &c | J. S. Smith | 726,778 | Apr. 28 | 4399 | 989 | 103 | 2134 |
| Bathometer or ship's log | E. S. Wheeler | 734,785 | July 28 | 3875 | 903 | 105 | 863 |
| Batteries and product thereof. Producing active material and electrodes for storage | O. P. Fritchle | 738,427 | Sept. 8 | 1775 | 386 | 106 | 397 |
| Batteries and products thereof. Producing active material and electrodes for storage | O. P. Fritchle | 738,313 | Sept. 8 | 1570 | 339 | 106 | 354 |
| Batteries. Apparatus for producing active material and electrodes for storage | O. P. Fritchle | 738,314 | Sept. 8 | 1573 | 340 | 106 | 354 |
| Batteries. Armored element for electric | E. A. Sperry | 723,326 | Mar. 24 | 3104 | 699 | 103 | 700 |
| Batteries. Treating lead plates for use in secondary | C. J. Reed | 735,820 | Aug. 11 | 1501 | 321 | 105 | 1319 |
| Batteries used in connection with dynamo-electric machinery, &c. Mode of and apparatus for regulating the charge and discharge of storage | R. S. McLeod | 737,764 | Sept. 1 | 385 | 82 | 106 | 85 |
| Battery:<br>*See* Diffusion-battery. Medicinal battery.<br>Dry battery. Pocket-battery.<br>Electric battery. Primary battery.<br>Floating battery. Secondary battery.<br>Galvanic battery. Storage battery.<br>Gas-battery. Thermo-electric battery. | | | | | | | |
| Battery | L. Begeman | 718,076 | Jan. 13 | 1043 | 233 | 102 | 240 |
| Battery | D. H. Wilson | 729,827 | June 2 | 575 | 127 | 104 | 1245 |
| Battery | D. Drawbaugh | 733,949 | July 21 | 2275 | 535 | 105 | 513 |
| Battery | J. W. Gladstone | 742,856 | Nov. 3 | 67 | 16 | 107 | 16 |
| Battery | J. W. Gladstone | 742,857 | Nov. 3 | 68 | 16 | 107 | 17 |
| Battery | G. Schauli and D. Loewenstein | 742,337 | Nov. 3 | 1013 | 218 | 107 | 217 |
| Battery box or other receptacle | L. Paget | 724,607 | Apr. 7 | 354 | 85 | 103 | 1244 |
| Battery cans, &c. Funnel for filling storage- | T. A. Edison | 721,870 | Mar. 3 | 397 | 87 | 103 | 87 |
| Battery charge-indicator. Secondary- | H. P. Maxim | 731,484 | June 23 | 3615 | 806 | 104 | 1930 |
| Battery-charging device. Storage- | H. Lemp | 726,548 | Apr. 28 | 3961 | 895 | 103 | 2044 |
| Battery-charging system. Secondary- | H. P. Maxim | 742,886 | Nov. 3 | 116 | 27 | 107 | 26 |
| Battery-chute | F. E. Paradis | 728,968 | May 26 | 4035 | 896 | 104 | 907 |
| Battery circuit-breaker. Storage- | H. Garrett | 729,323 | May 26 | 4670 | 1032 | 104 | 1039 |
| Battery circuit-breaker. Storage- | H. Garrett | 746,490 | Dec. 8 | 2141 | 493 | 107 | 1377 |
| Battery connection | W. W. Keirstead | 718,846 | Jan. 20 | 2504 | 557 | 102 | 560 |
| Battery connection | L. Chronik | 733,697 | July 14 | 1766 | 419 | 105 | 389 |
| Battery connector. Electrical- | W. R. Edwards | 728,092 | May 12 | 2392 | 532 | 104 | 527 |
| Battery-connector. Flexible | P. Kennedy | 745,193 | Nov. 24 | 4651 | 1012 | 107 | 1034 |
| Battery-diaphragm | F. A. Decker and W. P. Divine | 717,549 | Jan. 6 | 54 | 13 | 102 | 14 |
| Battery-electrolytes. Composition of matter for | W. Peto and J. W. T. Cadett | 735,808 | Aug. 11 | 1475 | | 105 | 1313 |
| Battery element | L. Chronik | 733,696 | July 14 | 1766 | 419 | 105 | 389 |
| Battery element | C. B. Schoenmehl | 737,285 | Aug. 25 | 4215 | 939 | 105 | 1930 |
| Battery envelops. Manufacture of storage- | E. A. Sperry | 723,329 | Mar. 24 | 3107 | | 103 | 701 |
| Battery-grid | G. H. Rabenalt | 743,102 | Nov. 3 | 545 | 117 | 107 | 113 |
| Battery-grids. Machine for making | T. J. Coster | 737,081 | Aug. 25 | 3825 | 850 | 105 | 1848 |
| Battery-jar | G. H. Condict | 729,550 | June 2 | 53 | 13 | 104 | 1137 |
| Battery plate and making same. Secondary- | A. F. Clark | 736,217 | Aug. 11 | 2217 | 477 | 105 | 1473 |
| Battery-plate-forming die | A. d'Arsonval and G. Vaugeois | 725,192 | Apr. 14 | 1440 | 327 | 103 | 1489 |
| Battery plate. Storage- | J. Bijur | 744,895 | Nov. 24 | 4035 | 870 | 107 | 908 |
| Battery plates. Constructing storage- | G. H. Gale | 731,447 | June 23 | 3539 | 789 | 104 | 1914 |
| Battery-plates. Making | J. Bijur | 728,189 | May 19 | 2569 | 572, 573 | 104 | 586 |
| Battery plates. Preparing storage- | R. N. Chamberlain | 720,326 | Feb. 10 | 1695 | 385 | 102 | 1198 |
| Battery plates. Producing storage- | W. Gardiner | 724,387 | Mar. 31 | 5176 | | 103 | 1140 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Battery separator. Secondary- | A. F. Clark | 736,216 | Aug. 11 | 2215 | 477 | 105 | 1473 |
| Battery separator. Secondary- | H. Rodman | 747,892 | Dec. 22 | 4771 | 1077 | 107 | 2206 |
| Battery separator. Storage- | E. A. Sperry | 739,100 | May 26 | 4271 | 944 | 104 | 955 |
| Battery solution. Primary- | H. S. Amwake | 729,883 | June 2 | 581 | | 104 | 1246 |
| Battery switch. Electric- | J. Appleton | 734,291 | July 21 | 2958 | 690 691 692 693 694 695 696 697 | 105 | 660 |
| Battery system. Storage- | R. N. Chamberlain | 720,563 | Feb. 17 | 2143 | 496 | 102 | 1307 |
| Battery tank. Storage- | B. Ford | 719,778 | Feb. 3 | 678 | 156 | 102 | 966 |
| Battery terminal. Storage- | J. W. Madigin | 739,432 | Sept. 22 | 3688 | 821 | 106 | 837 |
| Battery-transmitter | J. S. Goldberg | 747,602 | Dec. 22 | 4212 | 948 | 107 | 2080 |
| Battery zinc cup. Primary- | V. G. Apple | 731,422 | June 23 | 3492 | 780 | 104 | 1904 |
| Bayonet | B. F. Perry | 718,150 | Jan. 13 | 1172 | 260 | 102 | 268 |
| Bead-threading machine | F. Mermet | 747,995 | Dec. 29 | 4995 | 1128 1129 | 107 | 2277 |
| Beading-strip | H. S. Hale | 744,537 | Nov. 17 | 3391 | 730 | 107 | 754 |
| Beam trammel and calipers | R. A. Wilson | 746,221 | Dec. 8 | 1669 | 371 | 107 | 1476 |
| Beams together. Means for clamping and securing cross metal | H. A. Streeter | 729,445 | May 26 | 4866 | 1078 | 104 | 1079 |
| Beaming-machine pressing attachment | J. McCallum | 725,120 | Apr. 14 | 1309 | 295 | 103 | 1462 |
| Bean grader. String- | M. H. Butler | 741,304 | Oct. 13 | 1735 | 387 | 106 | 1633 |
| Bean-picking machine | J. F. Turner and E. Burnett | 731,722 | June 23 | 4051 | 904 | 104 | 2015 |
| Bean-picking machines. Separating-rolls for | E. E. Wemp | 738,267 | Sept. 8 | 1451 | 313 | 106 | 328 |
| Bean-preserving device | R. R. Maxson | 724,908 | Apr. 7 | 906 | 207 | 103 | 1364 |
| Bean-separating machine | E. Burnett, J. F. Turner, and J. C. Oatman. | 741,956 | Oct. 20 | 3021 | 670 | 106 | 1924 |
| Bean-separator | J. W. Carnochan | 721,421 | Feb. 24 | 3775 | 858 859 | 102 | 1668 |
| Bearing | A. Ramsay | 717,715 | Jan. 6 | 346 | 84 | 102 | 75 |
| Bearing | G. W. King, H. J. Barnhart, and C. B. King. | 729,356 | May 26 | 4725 | 1044 | 104 | 1050 |
| Bearing | W. H. Wright | 729,987 | June 2 | 864 | 193 | 104 | 1303 |
| Bearing | H. Hinckley | 731,052 | June 16 | 2786 | 621 | 104 | 1742 |
| Bearing | E. C. Ahlheim | 739,631 | Sept. 22 | 4040 | 901 | 106 | 913 |
| Bearing | W. D. Richter | 742,905 | Nov. 3 | 151 | 35 | 107 | 33 |
| Bearing and support for universal mills | F. Seiling | 730,802 | June 9 | 2304 | 512 | 104 | 1623 |
| Bearing. Antifriction- | A. E. Henderson | 725,620 | Apr. 14 | 2225 | 503 | 103 | 1658 |
| Bearing. Antifriction- | A. E. Henderson | 727,914 | May 5 | 152 | 37 | 104 | 35 |
| Bearing. Antifriction- | G. N. Toms | 733,348 | July 7 | 1162 | 276 | 105 | 245 |
| Bearing. Antifriction- | G. N. Toms | 740,336 | Sept. 29 | 5361 | 1208 | 106 | 1210 |
| Bearing. Antifriction- | F. M. Carroll | 742,836 | Nov. 3 | 32 | 7 | 107 | 9 |
| Bearing. Antifriction- | D. E. Kempster | 747,324 | Dec. 15 | 3732 | 839 | 107 | 1953 |
| Bearing. Antifriction thrust- | W. R. Cunningham | 724,265 | Mar. 31 | 4934 | 1104 | 103 | 1088 |
| Bearing. Ball- | F. W. Gurney | 717,987 | Jan. 6 | 884 | 197 | 102 | 190 |
| Bearing. Ball- | E. J. Farr | 724,834 | Apr. 7 | 784 | 181 | 103 | 1337 |
| Bearing. Ball- | A. E. Henderson | 725,246 | Apr. 14 | 1542 | 350 | 103 | 1511 |
| Bearing. Ball- | M. Reid | 728,132 | May 12 | 2460 | 547 | 104 | 541 |
| Bearing. Ball- | A. Riebe | 734,194 | July 21 | 2764 | 648 | 105 | 617 |
| Bearing. Ball- | O. C. Knipe | 735,529 | Aug. 4 | 958 | 202 | 105 | 1185 |
| Bearing. Ball- | A. Johnston | 747,436 | Dec. 22 | 3920 | 882 | 107 | 2014 |
| Bearing-balls. Machine for reducing and finishing hollow | A. Johnston | 720,436 | Feb. 10 | 1879 | 428 429 | 102 | 1237 |
| Bearing-box. Adjustable | O. S. Walker | 730,808 | June 9 | 2313 | 514 | 104 | 1625 |
| Bearing cages. Manufacture of roller- | L. W. Noyes | 725,763 | Apr. 21 | 2503 | 569 | 103 | 1732 |
| Bearing-casting apparatus | W. H. Tomson and W. G. Hanna | 731,632 | June 23 | 3897 | 867 868 | 104 | 1985 |
| Bearing. Center- | J. E. Norwood | 736,539 | Aug. 18 | 2801 | 613 | 105 | 1616 |
| Bearing. Compensating knob- | C. J. Caley | 745,568 | Dec. 1 | 465 | 110 | 107 | 1196 |
| Bearing construction. Ball- | W. H. Makutchan | 745,638 | Dec. 1 | 591 | 137 | 107 | 1224 |
| Bearing. Convolute pressure- | R. C. Sayer | 737,154 | Aug. 25 | 3944 | 876 877 | 105 | 1873 |
| Bearing. Detachable shaft- | S. C. Davidson | 732,053 | June 30 | 4680 | 1045 | 104 | 2164 |
| Bearing. Disk- | C. F. Wilkins and F. A. Garrett | 740,345 | Sept. 29 | 5373 | 1211 | 106 | 1212 |
| Bearing. End-thrust ball- | M. Reid | 739,717 | Sept. 22 | 4193 | 937 | 106 | 947 |
| Bearing. Fluid- | J. F. Cooley | 741,628 | Oct. 20 | 2382 | 534 | 106 | 1789 |
| Bearing for centrifugal machines. Spring neck- | J. H. Fleming and O. Anderson | 742,178 | Oct. 27 | 3492 | 779 | 106 | 2033 |
| Bearing for drawers, &c. Roller- | A. C. Pickard | 728,971 | May 26 | 4041 | 897 | 104 | 908 |
| Bearing for freely-oscillating centrifugal machines. | L. Hirt | 745,611 | Dec. 1 | 546 | 127 | 107 | 1213 |
| Bearing for wagon-reaches. Antifriction- | G. W. Gardner | 743,481 | Nov. 10 | 1381 | 283 | 107 | 310 |
| Bearing. Hub- | I. Metzger | 726,324 | Apr. 28 | 3522 | 798 | 103 | 1958 |
| Bearing in swivel-joints for hoist-blocks. Ball- | F. Hooker | 721,801 | Mar. 3 | 259 | 58 | 103 | 58 |
| Bearing. Laterally-adjustable side | G. W. Greenwood | 728,224 | May 19 | 2640 | 589 | 104 | 600 |
| Bearing mechanism. Ball- | J. E. Breitwiser | 725,403 | Apr. 14 | 1820 | 407 | 103 | 1569 |
| Bearing plate. Center- | C. A. Lindström | 744,922 | Nov. 24 | 4082 | 880 | 107 | 917 |
| Bearing. Ring-spindle | C. G. E. Salzberger | 729,673 | June 2 | 267 | 61, 62 | 104 | 1184 |
| Bearing. Rocker side | F. B. Townsend | 734,010 | July 21 | 2403 | 563 | 105 | 539 |
| Bearing. Roller- | A. E. Henderson | 718,122 | Jan. 13 | 1123 | 248 | 102 | 257 |
| Bearing. Roller- | R. L. Ellery | 724,090 | Mar. 31 | 4559 | 1026 | 103 | 1014 |
| Bearing. Roller- | A. E. Henderson | 725,247 | Apr. 14 | 1544 | 350 351 | 103 | 1512 |
| Bearing. Roller- | J. Kincaid | 730,773 | June 9 | 2257 | 501 | 104 | 1614 |
| Bearing. Roller- | J. P. Thomas | 731,720 | June 23 | 4048 | 903 904 | 104 | 2014 |
| Bearing. Roller- | J. A. Perkins | 732,111 | June 30 | 4795 | 1070 | 104 | 2187 |
| Bearing. Roller- | J. Hutchison | 738,808 | Sept. 15 | 2542 | 559 | 106 | 577 |
| Bearing. Roller- | R. Treveal | 739,521 | Sept. 22 | 3827 | 857 | 106 | 868 |
| Bearing. Roller- | F. E. Brooks | 741,008 | Oct. 13 | 1153 | 261 | 106 | 1512 |
| Bearing. Roller- | W. Houldsworth | 744,917 | Nov. 24 | 4073 | 878 | 107 | 915 |
| Bearing. Roller- | E. Klahn | 745,198 | Nov. 24 | 4659 | 1014 | 107 | 1036 |
| Bearing. Roller- | G. W. Sweeney | 746,198 | Dec. 8 | 1625 | 362 | 107 | 1468 |
| Bearing. Roller- | F. Schumacher | 747,895 | Dec. 22 | 4777 | 1079 | 107 | 2207 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|---|
| | | | | Spec. | Drg. | Vol. | Page. |
| Bearing. Roller side | A. G. Steinbrenner | 727,017 | May 5 | 395 | 83 | 104 | 86 |
| Bearing. Roller side | A. G. Steinbrenner | 734,990 | July 28 | 4261 | 990 | 105 | 944 |
| Bearing. Shaft- | A. H. Reid | 717,924 | Jan. 6 | 766 | 172 | 102 | 164 |
| Bearing. Shaft- | W. L. Webster | 724,976 | Apr. 7 | 1031 | 236 | 103 | 1389 |
| Bearing. Shaft and axle | H. O'Reilly | 718,376 | Jan. 13 | 1588 | 350 | 102 | 355 |
| Bearing. Shaft or journal | W. A. Hoyt | 726,295 | Apr. 28 | 3456 | 784, 785 | 103 | 1944 |
| Bearing. Side | J. C. Wands. (Reissue) | 12,093 | Mar. 3 | 1014 | 223 | 103 | 216 |
| Bearing. Side | G. L. Harvey | 734,862 | July 28 | 4032 | 941, 942 | 105 | 896 |
| Bearing. Side | A. G. Steinbrenner | 734,989 | July 28 | 4259 | 989, 990 | 105 | 944 |
| Bearing. Spindle- | T. Watson | 729,460 | May 26 | 4897 | 1085 | 104 | 1087 |
| Bearing. Spindle- | C. E. Lovejoy | 729,777 | June 2 | 466 | 105 | 104 | 1223 |
| Bearing. Submerged-gudgeon | I. F. Davis | 724,086 | Mar. 31 | 4554 | 1025 | 103 | 1013 |
| Bearing-thermostat | G. A. Wall | 748,240 | Dec. 29 | 5454 | 1243 | 107 | 2376 |
| Bearing. Thrust- | J. T. Cowley | 744,906 | Nov. 24 | 4050 | 874 | 107 | 911 |
| Bearing. Velocipede- | E. G. Latta | 748,291 | Dec. 29 | 5547 | 1265 | 107 | 2396 |
| Bearing. Wheel- | C. T. McCue | 748,090 | Dec. 29 | 5185 | 1173 | 107 | 2319 |
| Beater adjusting or regulating device | A. Castelin | 742,112 | Oct. 20 | 3372 | 753 | 105 | 1992 |
| Beating-engine | M. A. Mills | 726,726 | Apr. 28 | 4293 | 969, 970 | 103 | 2112 |
| Beating-engine | E. A. Jones | 745,859 | Dec. 1 | 1008 | 227 | 107 | 1314 |
| Beating-engines. Emptying | E. A. Jones | 724,880 | Apr. 7 | 861 | 198 | 103 | 1353 |
| Beating-engines. Removable bed-plate for | M. A. Mills | 729,954 | June 2 | 800 | 178 | 104 | 1290 |
| Beating or whisking device | W. R. and N. B. Cain | 742,773 | Oct. 27 | 4560 | 1033 | 106 | 2258 |
| Bed | C. Taurman | 723,336 | Mar. 24 | 3120 | 702 | 103 | 703 |
| Bed | T. L. Mahoney | 728,483 | May 19 | 3137 | 694 | 104 | 705 |
| Bed | M. V. Hammack | 732,070 | June 30 | 4715 | 1053 | 104 | 2170 |
| Bed | C. A. Needham | 736,139 | Aug. 11 | 2094 | 449 | 105 | 1446 |
| Bed | J. Wyssa | 736,188 | Aug. 11 | 2173 | 466, 467 | 105 | 1464 |
| Bed | J. Gillespie | 740,550 | Oct. 6 | 319 | 66 | 106 | 1312 |
| Bed and commode attachment. Invalid- | W. C. Feely | 730,010 | June 2 | 899 | 200 | 104 | 1311 |
| Bed and couch. Combined | D. T. Owen | 730,392 | June 9 | 1581 | 352 | 104 | 1466 |
| Bed and couch. Combined | D. Schalk | 746,584 | Dec. 8 | 2303 | 528 | 107 | 1614 |
| Bed and sofa or chair. Convertible | L. Kragen | 737,743 | Sept. 1 | 348 | 73 | 106 | 79 |
| Bed and table. Combination | J. F. Cook | 739,990 | Sept. 29 | 4731 | 1064 | 106 | 1077 |
| Bed attachment | A. H. Sommers | 739,452 | Sept. 22 | 3717 | 827 | 106 | 844 |
| Bed-bottom | W. D. Hunt | 726,064 | Apr. 21 | 3012 | 685 | 103 | 1898 |
| Bed-bottom | A. E. Beall | 728,438 | May 19 | 3043 | 669 | 104 | 686 |
| Bed-bottom | C. E. Lindsey | 729,950 | June 2 | 781 | 174 | 104 | 1287 |
| Bed-bottom | J. Ranz | 732,112 | June 30 | 4798 | 1070 | 104 | 2187 |
| Bed-bottom | F. Vtipil and J. Splavec | 732,976 | July 7 | 488 | 121 | 105 | 105 |
| Bed-bottom | W. D. Hunt | 733,650 | July 14 | 1698 | 403 | 105 | 375 |
| Bed-bottom | C. Vallone | 733,772 | July 14 | 1913 | 451 | 105 | 420 |
| Bed-bottom. Spring | F. S. Sprague | 729,692 | June 2 | 297 | 69 | 104 | 1190 |
| Bed-bottom. Spring | T. J. Canivan | 730,872 | June 16 | 2438 | 539 | 104 | 1670 |
| Bed-bottom. Spring | C. D. Brouyette | 732,392 | June 30 | 5362 | 1187 | 104 | 2305 |
| Bed-bottom. Spring | G. B. Smith | 738,368 | Sept. 8 | 1673 | 362 | 106 | 376 |
| Bed-bottom. Spring | J. W. Terry | 739,360 | Sept. 22 | 3514 | 786 | 106 | 799 |
| Bed-bottom spring-support | G. Brand | 725,030 | Apr. 14 | 1142 | 258 | 103 | 1429 |
| Bed-bottom-supporting frame | J. H. Dyett | 727,112 | May 5 | 557 | 120 | 104 | 121 |
| Bed-bottom-supporting spring | G. Brand | 725,031 | Apr. 14 | 1143 | 258 | 103 | 1429 |
| Bed-brace | C. A. Howse | 725,845 | Apr. 21 | 2651 | 604 | 103 | 1763 |
| Bed-brace | J. W. E. Smith | 738,079 | Sept. 1 | 1017 | 227 | 106 | 220 |
| Bed-brace | E. L. Cruzan | 739,839 | Sept. 29 | 4422 | 992 | 106 | 1014 |
| Bed canopy-support | H. G. Schuette | 739,352 | Sept. 22 | 3502 | 783 | 106 | 796 |
| Bed chair. Sick- | D. M. Moore | 717,894 | Jan. 6 | 716 | 160, 161 | 102 | 153 |
| Bedclothes-holder | S. A. Coffman | 728,204 | May 19 | 2591 | 579 | 104 | 591 |
| Bed corner-fastener | M. F. Maddox | 726,554 | Apr. 28 | 3974 | 900 | 103 | 2046 |
| Bed. Couch- | D. Frank | 729,320 | May 26 | 4665 | 1031 | 104 | 1038 |
| Bed. Couch- | F. M. Tinkham | 738,582 | Sept. 8 | 2067 | 452 | 106 | 460 |
| Bed coupling. Iron- | G. W. Comee | 719,192 | Jan. 27 | 3179 | 708 | 102 | 716 |
| Bed-cover holder | F. C. Billings | 731,844 | June 23 | 4275 | 952 | 104 | 2065 |
| Bed-covering | A. W. R. Berr | 725,821 | Apr. 21 | 2614 | 594 | 103 | 1755 |
| Bed. Folding | C. P. Brown | 722,485 | Mar. 10 | 1556 | 342 | 103 | 349 |
| Bed. Folding | T. Hauser | 729,860 | June 2 | 629 | 137, 138 | 104 | 1257 |
| Bed. Folding | D. T. Owen | 730,390 | June 9 | 1576 | 351 | 104 | 1466 |
| Bed. Folding | D. T. Owen | 730,391 | June 9 | 1578 | 351 | 104 | 1465 |
| Bed. Folding | D. T. Owen | 730,393 | June 9 | 1583 | 352 | 104 | 1466 |
| Bed. Folding | G. W. Sanor | 731,506 | June 23 | 3656 | 815, 816 | 104 | 1938 |
| Bed. Folding | A. W. Pyle | 734,363 | July 21 | 3079 | 725, 726 | 105 | 685 |
| Bed. Folding | C. L. Gamer | 740,845 | Oct. 6 | 865 | 194 | 106 | 1431 |
| Bed. Folding | W. Harman | 741,132 | Oct. 13 | 1378 | 316 | 106 | 1560 |
| Bed. Folding | C. P. Brown | 743,142 | Nov. 3 | 621 | 135 | 107 | 130 |
| Bed. Folding | E. L. Kirk | 747,186 | Dec. 15 | 3447 | 781, 782 | 107 | 1894 |
| Bed. Folding swing- | S. Drubech | 720,410 | Feb. 10 | 1835 | 418 | 102 | 1228 |
| Bed head and back rest | W. C. Feely | 730,011 | June 2 | 901 | 201 | 104 | 1311 |
| Bed. Hospital- | J. R. Smith | 726,472 | Apr. 28 | 3788 | 857 | 103 | 2012 |
| Bed. Invalid- | B. R. Butler | 717,809 | Jan. 6 | 552 | 124 | 102 | 119 |
| Bed. Invalid- | W. C. Sennett | 727,467 | May 5 | 1199 | 265 | 104 | 259 |
| Bed. Invalid- | J. Cheetham | 728,865 | May 26 | 3862 | 859 | 104 | 872 |
| Bed. Invalid- | W. McLennan | 735,135 | Aug. 4 | 178 | 38 | 105 | 1020 |
| Bed. Invalid- | W. McLennan | 739,336 | Sept. 22 | 3480 | 777 | 106 | 791 |
| Bed. Invalid- | R. L. Johnson | 740,867 | Oct. 6 | 896 | 200, 201 | 106 | 1437 |
| Bed-lounge | E. Finger | 747,399 | Dec. 22 | 3860 | 868 | 107 | 2000 |
| Bed. mattress or cushion | J. F. Nunan | 722,135 | Mar. 3 | 870 | 194, 195 | 103 | 186 |
| Bed. Metal folding | D. R. Roche | 729,895 | June 2 | 687 | 152 | 104 | 1268 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Bed mosquito-bar holder | M. S. Schayer | 719,957 | Feb. 3 | 975 | 225 | 102 | 1030 |
| Bed-movement | G. F. Read | 746,741 | Dec. 15 | 2596 | 596 597 | 107 | 1700 |
| Bed or couch-bed. Extension- | A. de Piniec-Mallet | 734,726 | July 28 | 3760 | 877 | 105 | 841 |
| Bed or couch bottom | J. Hoey | 747,176 | Dec. 15 | 3432 | 778 | 107 | 1890 |
| Bed or couch heating apparatus | P. H. T. Paulinetti | 721,226 | Feb. 24 | 3438 | 781 | 102 | 1596 |
| Bed-pan | L. M. Hoffman | 727,949 | May 12 | 2142 | 478 | 104 | 475 |
| Bed-pan | D. A. Waltz and C. W. Dailey | 747,517 | Dec. 22 | 4069 | 915 | 107 | 2047 |
| Bed. Portable | W. J. Curry | 726,408 | Apr. 28 | 3672 | 833 | 103 | 1989 |
| Bed-rail | W. D. Hall | 743,053 | Nov. 3 | 492 | 107 | 107 | 103 |
| Bed-rail coupling | A. E. Jacobson | 746,335 | Dec. 8 | 1880 | 429 | 107 | 1520 |
| Bed-rail lock or connection | M. Benjamin | 733,127 | July 7 | 763 | 185 | 105 | 161 |
| Bed-rest | J. A. Palitzsch | 745,234 | Nov. 24 | 4714 | 1030 | 107 | 1048 |
| Bed-sheets in position. Means for holding | F. Kahl | 739,682 | Sept. 22 | 4135 | 922 | 106 | 934 |
| Bed-slat | V. T. Grabs | 726,046 | Apr. 21 | 2988 | 679 | 103 | 1833 |
| Bed-slat fastener | A. N. Webb | 736,569 | Aug. 18 | 2850 | 624 | 105 | 1626 |
| Bed-slat fastener | A. N. Webb | 746,211 | Dec. 8 | 1651 | 367 | 107 | 1472 |
| Bed-slat fastener and brace | R. H. Shelton | 731,326 | June 16 | 3303 | 737 | 104 | 1846 |
| Bed. Sofa- | J. Maher | 723,171 | Mar. 17 | 2807 | 632 633 | 103 | 624 |
| Bed. Spring- | W. F. Ade, Jr. | 719,631 | Feb. 3 | 395 | 89 | 102 | 905 |
| Bed. Spring- | J. H. Thomas | 726,113 | Apr. 21 | 3105 | 703 | 103 | 1858 |
| Bed. Spring- | J. W. Terry | 742,521 | Oct. 27 | 4121 | 928 | 106 | 2163 |
| Bed. Spring- | I. H. Haas and J. W. Crow | 745,345 | Dec. 1 | 52 | 11 | 107 | 1112 |
| Bed. Spring- | E. A. Crawford and J. F. Dixon | 746,034 | Dec. 8 | 1334 | 299 | 107 | 1401 |
| Bed-spring | A. E. Beall | 727,265 | May 5 | 820 | 177 | 104 | 176 |
| Bed-spring | F. J. and W. C. Van Cise | 729,021 | May 26 | 4139 | 917 | 104 | 929 |
| Bed-spring | N. Rubenstein | 737,278 | Aug. 25 | 4198 | 936 | 105 | 1926 |
| Bed-spring | T. J. Ridgway and J. F. Dixon | 744,237 | Nov. 17 | 2852 | 610 | 107 | 638 |
| Bed-spring | J. L. Barnaman | 745,764 | Dec. 1 | 796 | 182 | 107 | 1268 |
| Bed-spring tension attachment | G. E. Distelhurst | 738,421 | Sept. 8 | 1765 | 384 | 106 | 395 |
| Bed-spring-tightening device | J. W. Westlake | 737,808 | Sept. 1 | 473 | 105 | 106 | 106 |
| Bed-spring. Woven-wire | E. J. Barcalo and C. Valone | 719,635 | Feb. 3 | 402 | 92 | 102 | 906 |
| Bed-sunner and clothes-drier | K. C. Moore | 738,924 | Sept. 15 | 2749 | 608 | 106 | 622 |
| Bed-warmer | F. Avery | 731,012 | June 16 | 2717 | 606 | 104 | 1729 |
| Beds and removing them from same. Device for lifting sick people in | A. Gaiser | 738,104 | Sept. 1 | 1083 | 240 | 106 | 234 |
| Beds, &c. Leaf-support for sofa- | O. R. Hunt | 740,567 | Oct. 6 | 365 | 75 | 106 | 1325 |
| Beds. Sheet for | D. Grattan | 738,674 | Sept. 8 | 2269 | 499 | 106 | 501 |
| Bedstead | M. L. Cross | 725,320 | Apr. 14 | 1668 | 376 | 103 | 1538 |
| Bedstead | A. Stedman | 726,108 | Apr. 21 | 3082 | 699 | 103 | 1852 |
| Bedstead | R. Cane | 729,842 | June 2 | 592 | 130 | 104 | 1249 |
| Bedstead | C. Thompson | 738,254 | Sept. 8 | 1406 | 305 | 106 | 319 |
| Bedstead | J. P. Lein | 746,852 | Dec. 15 | 2813 | 648 | 107 | 1748 |
| Bedstead | J. W. Argubright and A. J. Olson | 748,036 | Dec. 29 | 5071 | 1147 | 107 | 2204 |
| Bedstead and mattress | G. S. Heatley | 722,705 | Mar. 17 | 1982 | 442 | 103 | 455 |
| Bedstead attachment | J. A. Martin | 719,125 | Jan. 27 | 3075 | 683 | 102 | 695 |
| Bedstead attachment | E. J. Barcalo | 726,393 | Apr. 28 | 3648 | 827 | 103 | 1984 |
| Bedstead attachment | A. M. Hoyer | 730,770 | June 9 | 2251 | 500 | 104 | 1613 |
| Bedstead-canopy support. Turnback | I. E. Palmer | 722,882 | Mar. 17 | 2309 | 515 516 | 103 | 521 |
| Bedstead-canopy support. Turnback | I. E. Palmer | 722,883 | Mar. 17 | 2312 | 516 | 103 | 521 |
| Bedstead-canopy support. Turnback | I. E. Palmer | 726,563 | Apr. 28 | 3991 | 904 | 103 | 2049 |
| Bedstead caster attachment | R. Scott | 721,610 | Feb. 24 | 4148 | 942 | 102 | 1749 |
| Bedstead corner-clamp | F. A. Weir | 743,964 | Nov. 10 | 2258 | 486 | 107 | 499 |
| Bedstead corner-fastener | W. S. Foster | 725,330 | Apr. 14 | 1689 | 381 | 103 | 1543 |
| Bedstead corner-fastening | C. Vallone | 745,695 | Dec. 1 | 688 | 158 | 107 | 1244 |
| Bedstead corner-joint | G. Brand | 724,159 | Mar. 31 | 4705 | 1056 | 103 | 1043 |
| Bedstead-coupling | E. F. Tubach | 745,535 | Dec. 1 | 411 | 94 | 107 | 1186 |
| Bedstead. Door- | H. B. Ruggles | 748,563 | Dec. 29 | 6066 | 1374 | 107 | 2512 |
| Bedstead-fastener | F. Schmidt | 729,424 | May 26 | 4836 | 1072 | 104 | 1072 |
| Bedstead-fastener | J. M. Nichols | 739,020 | Sept. 15 | 2898 | 643 | 106 | 654 |
| Bedstead-fastening | A. Strobel | 732,133 | June 30 | 4855 | 1081 | 104 | 2198 |
| Bedstead-fastening | W. S. Walker | 736,894 | Aug. 18 | 3480 | 773 | 105 | 1755 |
| Bedstead. Folding | A. Allendy | 719,292 | Jan. 27 | 3363 | 751 | 102 | 756 |
| Bedstead. Folding | M. Benz | 741,446 | Oct. 13 | 2007 | 446 | 106 | 1694 |
| Bedstead. Invalid- | S. W. Bennett | 718,746 | Jan. 20 | 2340 | 516 517 | 102 | 528 |
| Bedstead. Metallic | M. J. Casey | 732,515 | June 30 | 5595 | 1239 | 104 | 2352 |
| Bedstead post and rail joint-coupling | A. W. Busby | 720,887 | Feb. 17 | 2721 | 627 | 102 | 1426 |
| Bedstead rail-joint. Metallic- | C. J. Witzel | 723,569 | Mar. 24 | 3571 | 798 | 103 | 791 |
| Bedstead side-rail joint. Metallic- | C. J. Witzel, G. A. Helm, and B. W. Smith. | 723,570 | Mar. 24 | 3572 | 798 | 103 | 791 |
| Beehive | J. F. Thompson | 723,424 | Mar. 24 | 3303 | 739 | 103 | 738 |
| Beehive | F. Danzenbaker | 736,226 | Aug. 11 | 2231 | 481 | 105 | 1476 |
| Beehive comb-foundation | H. A. Feldmann | 747,055 | Dec. 15 | 3218 | 733 | 107 | 1843 |
| Beehive comb-frame | J. W. Brown | 741,764 | Oct. 20 | 2651 | 593 | 106 | 1845 |
| Beehive-frame | H. Vogeler | 732,667 | June 30 | 5877 | 1303 | 104 | 2414 |
| Bee nursery. Queen-cell shield and queen- | A. Stanley | 732,794 | July 7 | 179 | 46 | 105 | 42 |
| Bee-smoker | T. F. Bingham | 718,689 | Jan. 20 | 2232 | 488 | 102 | 506 |
| Bee-smoker | H. Root | 739,510 | Sept. 22 | 3809 | 853 | 106 | 864 |
| Beefsteak. Hand-roller for cutting and tendering | S. P. Hastings | 725,840 | Apr. 21 | 2645 | 602 | 103 | 1762 |
| Beer. Apparatus for converting wort into | C. Spindler | 734,985 | July 28 | 4252 | 988 | 105 | 942 |
| Beer, &c. Apparatus for cooling | C. Spindler | 724,750 | Apr. 7 | 621 | 145 | 103 | 1301 |
| Beer. Converting wort into | O. Selg and C. Guntrum | 733,284 | July 7 | 1054 | 251 | 105 | 221 |
| Beer-cooler | J. D Hendrix | 718,759 | Jan. 20 | 2365 | 523 | 102 | 533 |
| Beer-cooler | G. T. J. Mamerow | 747,622 | Dec. 22 | 4254 | 957 | 107 | 2090 |
| Beer-cooler | O. F. Hager | 748,496 | Dec. 29 | 5923 | 1345 | 107 | 2479 |
| Beer-finishing apparatus | J. F. Wittemann | 726,486 | Apr. 28 | 3831 | 866 | 103 | 2020 |
| Beer-pasteurizing apparatus | M. L. Fesenmeier | 740,837 | Oct. 6 | 855 | 191 | 106 | 1428 |
| Beer-pipe cleaner | E. M. Burroughs | 746,012 | Dec. 8 | 1293 | 290 | 107 | 1392 |
| Beer-pipes, &c. Apparatus for cleaning | E. Neely | 720,613 | Feb. 17 | 2261 | 519 | 102 | 1328 |
| Beer-pipes. Device for cleaning | A. Müller | 718,502 | Jan. 13 | 1862 | 409 | 102 | 417 |
| Beer. Preserving | F. Crötte | 734,305 | July 21 | 2993 | 704 | 105 | 666 |
| Beer-tap | P. B. Abrell | 747,111 | Dec. 15 | 3314 | 754 | 107 | 1865 |

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| Invention. | Name. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|---|
| | | | | Spec. | Drg. | Vol. | Page. |
| Beers or other liquids requiring added and even pressure. Device for handling | F. Swinney | 734,145 | July 21 | 2677 | 630 | 105 | 995 |
| Beet-digger | T. F. Fitzsimmons | 735,736 | Aug. 11 | 1342 | 289 | 105 | 1284 |
| Beet-digger | G. W. Gary and B. O. Ostrom | 746,067 | Dec. 8 | 1391 | 311 | 107 | 1414 |
| Beet-pulling machine | H. G. Hotchkiss | 728,920 | May 26 | 3951 | 878 | 104 | 890 |
| Beet-root cutter | C. C. Brabant | 743,683 | Nov. 10 | 1752 | 369 | 107 | 390 |
| Beet-root cutter. Sulky | T. J. Hubbell | 741,794 | Oct. 20 | 2707 | 603 | 106 | 1857 |
| Beet-topper | C. H. Arft | 745,556 | Dec. 1 | 447 | 105 | 107 | 1192 |
| Beet topper and puller | F. Briggs | 732,484 | Mar. 10 | 1555 | 341 | 103 | 348 |
| Beets, &c. Topping-machine for | C. Spreckels | 722,156 | Mar. 3 | 915 | 204 | 103 | 195 |
| Bell | C. Bauknecht | 718,241 | Jan. 13 | 1337 | 296 | 102 | 302 |
| Bell | J. T. Duff | 731,551 | June 23 | 3746 | 834 | 104 | 1955 |
| Bell. Alarm- | J. C. Schleicher | 717,626 | Jan. 6 | 185 | 47 | 102 | 40 |
| Bell alarm attachment. Electric- | H. Blakeney and R. A. Baker | 737,900 | Sept. 1 | 687 | 147 | 106 | 151 |
| Bell and door-knob. Combined | T. E. Crecelius and G. E. Pfennighausen. | 718,432 | Jan. 13 | 1688 | 372 | 102 | 376 |
| Bell attachment and burglar-alarm. Door- | E. Snedeker | 726,366 | Apr. 28 | 3603 | 817 | 103 | 1975 |
| Bell. Door- | C. B. Pace | 723,908 | Mar. 31 | 4197 | 945 | 103 | 941 |
| Bell. Electric | P. G. Tismer | 744,944 | Nov. 24 | 4119 | 887 | 107 | 925 |
| Bell indicator attachment | C. E. Monroe | 736,616 | Aug. 18 | 2962 | 650 | 105 | 1647 |
| Bell. Magneto- | C. H. Thordarson | 720,082 | Feb. 10 | 1231 | 284 | 102 | 1100 |
| Bell. Party-line | L. Moore | 746,979 | Dec. 15 | 3067 | 702, 703 | 107 | 1806 |
| Bell. Polarized electric | F. B. Cook | 740,744 | Oct. 6 | 665 | 151 | 106 | 1389 |
| Bell-ringer | I. W. Bragg | 737,329 | Aug. 25 | 4294 | 954 | 105 | 1946 |
| Bell-ringer. Electric | T. Lidberg | 733,225 | July 7 | 933 | 225 | 105 | 195 |
| Bell-ringing mechanism. Electromagnetic | J. J. Sheahan | 723,048 | Mar. 17 | 2581 | 581, 582 | 103 | 579 |
| Bell switch. Rotary extension- | G. E. Cork | 734,402 | July 21 | 3151 | 740, 741 | 105 | 700 |
| Bells. Orchestra- | C. H. Agne | 742,952 | Nov. 3 | 234 | 52 | 107 | 50 |
| Bellows | A. J. Gunter | 721,367 | Feb. 24 | 3674 | 837 | 102 | 1646 |
| Bellows-motor controller | F. E. Whitney | 725,386 | Apr. 14 | 1783 | 400 | 103 | 1562 |
| Belt | P. F. Haviland | 723,271 | Mar. 24 | 3007 | 676 | 103 | 680 |
| Belt | F. F. Knothe | 743,984 | Nov. 10 | 2315 | 494 | 107 | 514 |
| Belt-adjuster | F. J. Fischer | 724,837 | Apr. 7 | 788 | 182 | 103 | 1338 |
| Belt and drawers-supporter | C. Winkler | 728,530 | May 19 | 3214 | 713 | 104 | 721 |
| Belt and fastener therefor. Conveyer- | A. Rasmussen | 744,979 | Nov. 24 | 4189 | 906 | 107 | 939 |
| Belt and garment supporter | C. W. Kohlmann | 720,591 | Feb. 17 | 2196 | 509 | 102 | 1316 |
| Belt. Apparel- | M. Brueckner | 719,560 | Feb. 3 | 267 | 62 | 102 | 879 |
| Belt. Apparel- | B. Fischman | 732,289 | June 30 | 5160 | 1146 | 104 | 2262 |
| Belt. Apparel- | B. B. McCulloch | 739,902 | Sept. 29 | 4566 | 1027 | 106 | 1042 |
| Belt. Apparel- | M. Scheuer | 742,746 | Oct. 27 | 4520 | 1024 | 106 | 2248 |
| Belt attachment. Waist- | A. T. Goldfield | 744,533 | Nov. 17 | 3378 | 728 | 107 | 752 |
| Belt. Body- | W. J. Teufel | 733,092 | July 7 | 703 | 171 | 105 | 149 |
| Belt, collar, &c. Lady's | E. O. Whittlesey | 723,961 | Mar. 31 | 4308 | 967 | 103 | 964 |
| Belt-controller | E. Michaud and E. J. Bricker | 733,067 | July 7 | 654 | 158 | 105 | 139 |
| Belt. Conveyer- | G. C. Plummer | 722,039 | Mar. 3 | 715 | 159 | 103 | 154 |
| Belt. Conveyer- | G. C. Plummer | 722,040 | Mar. 3 | 717 | 159 | 103 | 155 |
| Belt. Conveyer- | G. C. Plummer | 722,041 | Mar. 3 | 719 | 160 | 103 | 155 |
| Belt. Conveyer- | H. D. Richards | 722,252 | Mar. 10 | 1118 | 246 | 103 | 253 |
| Belt. Conveyer- | R. H. Martin | 724,483 | Apr. 7 | 115 | 28, 29 | 103 | 1194 |
| Belt die for brick-machines, &c. Endless- | A. W. Willett | 748,244 | Dec. 29 | 5460 | 1244, 1245 | 107 | 2377 |
| Belt. Drive- | I. M. Willie | 721,643 | Feb. 24 | 4202 | 955 | 102 | 1760 |
| Belt-driven elevator | C. E. Torrance | 740,784 | Oct. 6 | 758 | 171, 172 | 106 | 1407 |
| Belt. Driving- | G. S. Ingle | 738,684 | Sept. 8 | 2284 | 502, 503 | 106 | 504 |
| Belt. Driving- | G. J. Booth | 741,998 | Oct. 20 | 3114 | 694 | 106 | 1941 |
| Belt. Electromedical | F. Farmer | 721,032 | Feb. 17 | 3004 | 690 | 102 | 1486 |
| Belt ends. Joining woven- | O. E. Geisel | 726,670 | Apr. 28 | 4190 | 946 | 103 | 2090 |
| Belt-fastener | M. A. Chilcote | 720,782 | Feb. 17 | 2546 | 586 | 102 | 1389 |
| Belt-fastener | J. C. Miller | 725,982 | Apr. 21 | 2887 | 655 | 103 | 1812 |
| Belt-fastener | J. M. Erickson | 729,302 | May 26 | 4640 | 1025 | 104 | 1033 |
| Belt-fastener | M. N. Edwards | 734,410 | July 21 | 3162 | 743 | 105 | 702 |
| Belt-fastener | H. T. Jones | 744,353 | Nov. 17 | 3065 | 658 | 107 | 685 |
| Belt-fastener | F. H. Smith | 745,533 | Dec. 1 | 409 | 94 | 107 | 1186 |
| Belt for medical purposes. Electric | E. Smellie | 738,078 | Sept. 1 | 1016 | 227 | 106 | 220 |
| Belt-guide | H. Parker | 745,377 | Dec. 1 | 116 | 26, 27 | 107 | 1125 |
| Belt-idler | W. R. Smith | 719,895 | Feb. 3 | 872 | 205 | 102 | 1008 |
| Belt-lacing tool | T. Gingras | 734,169 | July 21 | 2713 | 638 | 105 | 607 |
| Belt. Lady's | V. R. Humphrey | 747,180 | Dec. 15 | 3436 | 779 | 107 | 1891 |
| Belt. Machinery- | G. E. Preston | 723,917 | Mar. 31 | 4209 | 948 | 103 | 944 |
| Belt. Metallic | W. J. Egan | 725,686 | Apr. 21 | 2361 | 534 | 103 | 1699 |
| Belt. Metallic money- | W. E. Halladay | 733,478 | July 14 | 1400 | 330 | 105 | 314 |
| Belt or chain tightener | A. Anderson | 733,113 | July 7 | 739 | 179 | 105 | 156 |
| Belt pad. Hernial- | F. Matuchet | 721,963 | Mar. 3 | 580 | 129 | 103 | 127 |
| Belt-shifter | J. J. Leahy and A. Parmiter | 718,262 | Jan. 13 | 1371 | 306 | 102 | 310 |
| Belt-shifter | E. P. Hayes | 732,074 | June 30 | 4723 | 1055 | 104 | 2171 |
| Belt-shifting device | J. Weichhart | 737,981 | Sept. 1 | 848 | 186 | 106 | 185 |
| Belt-shipper | O. L. Owen | 724,123 | Mar. 31 | 4635 | 1044 | 103 | 1030 |
| Belt-shipper safety-lock | W. G. James | 727,955 | May 12 | 2153 | 480 | 104 | 477 |
| Belt-shipping device | G. W. Ruth | 719,262 | Jan. 27 | 3306 | 740 | 102 | 743 |
| Belt-shipping device | A. Coulter | 720,566 | Feb. 17 | 2149 | 498, 499 | 102 | 1307 |
| Belt-strap | J. M. Gitterman | 732,064 | June 30 | 4703 | 1050 | 104 | 2168 |
| Belt support. Conveyer- | G. C. Plummer | 728,005 | May 12 | 2235 | 497, 498 | 104 | 494 |
| Belt supporter | G. T. Rhoads | 728,414 | May 19 | 3004 | 660 | 104 | 677 |
| Belt-supporting device | F. R. Willson, Jr | 736,905 | Aug. 18 | 3502 | 779 | 105 | 1760 |
| Belt. Suspender- | L. Reiter | 731,951 | June 23 | 4467 | 996 | 104 | 2106 |
| Belt tightener | F. H. Gilbert | 735,241 | Aug. 4 | 398 | 78 | 105 | 1066 |
| Belt-tightener. Quick-release | J. N. Kailor and H. C. Clay | 741,042 | Oct. 13 | 1204 | 272 | 106 | 1523 |
| Belt tighteners. Automatic lock for | W. B. Martin | 747,743 | Dec. 22 | 4471 | 1008 | 107 | 2138 |
| Belt. Waist- | H. J. Gaisman | 729,856 | June 2 | 617 | 136 | 104 | 1254 |

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|---|---|---|---|---|---|---|---|
| Belt. Waist- | L. Sanders | 730,050 | June 2 | 962 | 216 | 104 | 1324 |
| Belt. Waist- | J. Forman | 731,295 | June 16 | 3248 | 723 | 104 | 1834 |
| Belt. Waist- | H. J. Gaisman | 734,167 | July 21 | 2711 | 638 | 105 | 607 |
| Belt. Waist- | J. Forman | 747,060 | Dec. 15 | 3225 | 735 | 107 | 1844 |
| Belt. Waterproof protected leather | L. Loeb | 730,832 | June 9 | 2355 | 521 | 104 | 1634 |
| Belting | L. H. Gilmer | 723,379 | Mar. 24 | 3231 | 724 | 103 | 721 |
| Belting | C. Heron | 733,393 | July 14 | 1254 | 297 | 105 | 281 |
| Belting. Apparel- | G. H. Taylor | 721,619 | Feb. 24 | 4163 | 946 | 102 | 1751 |
| Bench: *See* Draw-bench. Folding bench. Greenhouse-bench. Piano or organ bench. Washbench. | | | | | | | |
| Bench | M. D. Jones | 724,583 | Apr. 7 | 308 | 75 | 103 | 1234 |
| Bench | J. A. Franz | 726,042 | Apr. 21 | 2983 | 678 | 103 | 1832 |
| Bench-stop | M. J. Wolfe | 731,647 | June 23 | 3927 | 874 | 104 | 1991 |
| Bench-stop | H. W. Baltz | 743,673 | Nov. 10 | 1737 | 366 | 107 | 387 |
| Bending-machine | J. Krueger | 718,478 | Jan. 13 | 1787 | 396, 397 | 102 | 396 |
| Bending-machine | W. H. Johnson | 727,959 | May 12 | 2159 | 481, 482, 483 | 104 | 479 |
| Bending-machine | C. Flinn | 736,834 | Aug. 18 | 3383 | 747, 748 | 105 | 1734 |
| Bending-machine | C. Flinn | 736,835 | Aug. 18 | 3384 | 748 | 105 | 1735 |
| Bending-machine | W. H. Johnson | 746,090 | Dec. 8 | 1426 | 320, 321 | 107 | 1423 |
| Bending-machine | J. H. Baker | 746,263 | Dec. 8 | 1746 | 396 | 107 | 1491 |
| Bending-machine and die therefor | G. F. Hutchins and J. B. Losey | 733,967 | July 21 | 2313 | 544 | 105 | 520 |
| Bending machine. Angular- | A. Tindel | 718,035 | Jan. 6 | 970 | 215 | 102 | 209 |
| Bending machine or tool | B. S. Peard | 736,145 | Aug. 11 | 2102 | 451 | 105 | 1448 |
| Benzin-pan | C. E. Howard and J. C. M. Ungeheuer. | 736,729 | Aug. 18 | 3178 | 702 | 105 | 1692 |
| Berry-box. Wooden veneer | E. L. Walker | 729,982 | June 2 | 850 | 190 | 104 | 1301 |
| Berth and divan. Convertible | H. B. Arnold | 737,561 | Sept. 1 | 1 | 1 | 106 | 3 |
| Berth. Folding | J. P. Lein | 743,526 | Nov. 10 | 1467 | 306 | 107 | 330 |
| Berth. Sleeping- | E. Dawe | 734,519 | July 28 | 3362 | 787 | 105 | 759 |
| Bevel and square. Combined | J. W. Murphy | 735,128 | Aug. 4 | 155 | 35 | 105 | 1015 |
| Bevel and square. Compound | T. V. Hampton | 718,344 | Jan. 13 | 1533 | 339 | 102 | 344 |
| Bevel-joint. Compound | S. W. Moore | 733,500 | July 14 | 1435 | 337 | 105 | 321 |
| Bevel-siding head | E. C. Price | 745,906 | Dec. 1 | 1094 | 244 | 107 | 1331 |
| Beveling-machine | T. F. Hatton | 737,230 | Aug. 25 | 4105 | 912 | 105 | 1907 |
| Beveling-machine | C. L. Goehring and W. Troche | 737,388 | Aug. 25 | 4393 | 981 | 105 | 1969 |
| Beveling-tool | C. Rosecrans | 730,163 | June 2 | 1145 | 257 | 104 | 1360 |
| Beverage-dispenser | G. A. Logan | 733,228 | July 7 | 937 | 226 | 105 | 196 |
| Beverage-dispensing apparatus. Hot- | H. A. Hopkins | 747,713 | Dec. 22 | 4426 | 997 | 107 | 2128 |
| Beverages. Apparatus for dispensing gas-impregnated | E. Adam | 718,411 | Jan. 13 | 1645 | 363 | 102 | 368 |
| Beverages. Apparatus for producing aerated | P. E. Malmstrom | 720,719 | Feb. 17 | 2447 | 560 | 102 | 1367 |
| Beverages. Manufacture of non-intoxicating | A. Nilson | 731,388 | Feb. 24 | 406 | ------ | 102 | 1653 |
| Beverages. Producing | F. Brandner | 740,519 | Oct. 6 | 266 | ------ | 106 | 1302 |
| Beverages. Production of fermented | M. Hahn | 717,744 | Jan. 6 | 3716 | ------ | 102 | 91 |
| Bias-cutter | T. B. Reardon | 723,305 | Mar. 24 | 3069 | 690 | 103 | 693 |
| Bib or faucet | S. S. Williamson | 721,766 | Mar. 3 | 189 | 44 | 103 | 41 |
| Bicycle | W. Robinson | 723,408 | Mar. 24 | 3273 | 733 | 103 | 731 |
| Bicycle | C. E. Pierce | 723,486 | Mar. 24 | 3437 | 769 | 103 | 764 |
| Bicycle | D. M. Small | 723,934 | Mar. 31 | 4251 | 956 | 103 | 953 |
| Bicycle | B. F. Modisett | 727,405 | May 5 | 1076 | 235, 236, 237 | 104 | 232 |
| Bicycle | J. S. Copeland | 727,592 | May 12 | 1437 | 323 | 104 | 327 |
| Bicycle | G. Seyfang | 730,194 | June 2 | 1193 | 268 | 104 | 1370 |
| Bicycle | P. W. Tillinghast | 733,518 | July 14 | 1471 | 350 | 105 | 329 |
| Bicycle | A. F. Price | 737,017 | Aug. 25 | 3721 | 825, 826 | 105 | 1827 |
| Bicycle | C. L. Travis | 739,237 | Sept. 15 | 3303 | 732 | 106 | 738 |
| Bicycle | A. Mendenhall | 740,156 | Sept. 29 | 5027 | 1129 | 106 | 1141 |
| Bicycle | H. P. Seymour | 740,703 | Oct. 6 | 585 | 131 | 106 | 1373 |
| Bicycle-alarm | R. Lewitz | 739,095 | Sept. 15 | 3043 | 674 | 106 | 683 |
| Bicycle attachment | H. R. Blomberg | 722,078 | Mar. 3 | 774 | 173 | 103 | 167 |
| Bicycle attachment | W. E. Stockton | 727,708 | May 12 | 1687 | 377 | 104 | 381 |
| Bicycle attachment | C. G. Hightower | 745,185 | Nov. 24 | 4039 | 1007 | 107 | 1032 |
| Bicycle-balance | M. L. Edmunds | 730,622 | June 9 | 2001 | 444 | 104 | 1559 |
| Bicycle-bearing | C. J. Dorff | 725,547 | Apr. 14 | 2092 | 474 | 103 | 1628 |
| Bicycle-bearing | H. B. Gillette | 738,180 | Sept. 8 | 1274 | 276 | 106 | 292 |
| Bicycle-brake | F. P. McElfresh | 717,900 | Jan. 6 | 726 | 162 | 102 | 155 |
| Bicycle-brake | A. E. Wahlin | 719,914 | Feb. 3 | 899 | 211 | 102 | 1014 |
| Bicycle-brake. Coaster | J. Hurck | 719,118 | Jan. 27 | 3062 | 680, 681 | 102 | 692 |
| Bicycle-canopy | M. Zech | 726,610 | Apr. 28 | 4092 | 924 | 103 | 2070 |
| Bicycle carrying attachment | L. Murdoch | 733,865 | July 14 | 2104 | 496, 497 | 105 | 458 |
| Bicycle-chain-tightening device | A. G. Anderson | 724,417 | Apr. 7 | 3 | 1 | 103 | 1171 |
| Bicycle coaster-brake | W. H. McCormick and R. D. Macphail. | 721,598 | Feb. 24 | 4116 | 937 | 102 | 1741 |
| Bicycle cushion-frame | C. L. Travis | 739,034 | Sept. 15 | 2920 | 648 | 106 | 658 |
| Bicycle delivery attachment | W. Mosley | 728,960 | May 26 | 4023 | 894 | 104 | 904 |
| Bicycle driving mechanism | J. B. Huss | 719,595 | Feb. 3 | 332 | 77 | 102 | 891 |
| Bicycle driving mechanism. Chainless- | C. Stollewerk | 744,428 | Nov. 17 | 3198 | 686 | 107 | 713 |
| Bicycle extension-frame. Seat-supporting | G. S. Akers | 739,633 | Sept. 22 | 4043 | 902 | 106 | 914 |
| Bicycle-frames. Runner attachment for | F. Dupras | 737,372 | Aug. 25 | 4365 | 973 | 105 | 1962 |
| Bicycle-gear | J. H. Trismen | 740,950 | Oct. 6 | 1036 | 236 | 106 | 1467 |
| Bicycle-gearing | C. Holst | 717,576 | Jan. 6 | 95 | 24 | 102 | 23 |
| Bicycle-gearing | M. E. Porter | 721,739 | Mar. 3 | 150 | 35 | 103 | 34 |
| Bicycle-gearing | C. S. Thompson | 734,008 | July 21 | 2394 | 562 | 105 | 537 |
| Bicycle-handle | L. S. Fletcher | 725,691 | Apr. 21 | 2368 | 536 | 103 | 1701 |
| Bicycle handle-bar | J. W. Leavitt | 718,641 | Jan. 20 | 2131 | 465 | 102 | 487 |

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|---|---|---|---|---|---|---|---|
| Bicycle handle-bar | H. Ruppel and C. E. Weaver | 742,357 | Oct. 27 | 3829 | 858 | 106 | 2103 |
| Bicycle handle-bar. Adjustable | T. H. Jacob | 725,085 | Apr. 14 | 1243 | 280 | 103 | 1449 |
| Bicycle leading attachment | J. B. Davis | 718,322 | Jan. 13 | 1495 | 332 | 102 | 337 |
| Bicycle-lock | W. T. McNary | 746,365 | Dec. 8 | 1932 | 441 | 107 | 1530 |
| Bicycle luggage-carrier | F. C. Johnson | 739,680 | Sept. 22 | 4131 | 921 | 106 | 932 |
| Bicycle. Motor- | O. E. Waxel | 735,628 | Aug. 4 | 1136 | 240, 241 | 105 | 1223 |
| Bicycle. Motor- | J. W. Meijer | 738,559 | Sept. 8 | 2037 | 443 | 106 | 453 |
| Bicycle motor-tender | W. J. Belcher | 725,924 | Apr. 21 | 2790 | 634 | 103 | 1793 |
| Bicycle mud-guard | H. Fesenfeld | 737,725 | Sept. 1 | 307 | 64 | 106 | 69 |
| Bicycle mud-guard | W. Beckwith | 741,997 | Oct. 20 | 3112 | 694 | 106 | 1940 |
| Bicycle or like vehicle | C. L. Travis | 721,343 | Feb. 24 | 3631 | 826 | 102 | 1638 |
| Bicycle or like vehicle | L. B. Somerby | 747,789 | Dec. 22 | 4565 | 1030, 1031 | 107 | 2160 |
| Bicycle-pump | S. A. Broste | 724,795 | Apr. 7 | 706 | 165 | 103 | 1320 |
| Bicycle repair-plug | D. H. Cox, Jr. | 733,014 | July 7 | 554 | 135 | 105 | 119 |
| Bicycle-rest | E. S. Gamber | 721,511 | Feb. 24 | 3933 | 895 | 102 | 1700 |
| Bicycle-riders or other performers. Trackway for | C. R. Culver | 739,155 | Sept. 15 | 3151 | 696 | 106 | 705 |
| Bicycle-saddle | E. C. Moury | 737,648 | Sept. 1 | 171 | 36 | 106 | 40 |
| Bicycle seat-post | S. Bobo | 720,658 | Feb. 17 | 2338 | 535 | 102 | 1343 |
| Bicycle seat-post and pump | W. A. Allen | 730,074 | June 2 | 1005 | 225 | 104 | 1332 |
| Bicycle-seat-post clamp | J. H. Rast | 718,528 | Jan. 13 | 1914 | 420 | 102 | 427 |
| Bicycle seat-support | C. H. Eddy | 721,167 | Feb. 24 | 3306 | 756 | 102 | 1570 |
| Bicycle seat-support | C. J. Tramburg | 724,630 | Apr. 7 | 399 | 95 | 103 | 1254 |
| Bicycle speed-gear. Rear-driven | F. C. Haste and J. A. Wilding | 720,800 | Feb. 17 | 2574 | 593 | 102 | 1394 |
| Bicycle spring-frame | J. Hunter | 724,871 | Apr. 7 | 846 | 195 | 103 | 1350 |
| Bicycle. Spring-frame | J. H. Guiley, J. H. Pierce, and J. E. Wright. | 740,554 | Oct. 6 | 324 | 67, 68 | 106 | 1313 |
| Bicycle-support | M. Henoch | 744,543 | Nov. 17 | 3401 | 733 | 107 | 756 |
| Bicycle-support | J. Longbottom | 747,449 | Dec. 22 | 3941 | 886 | 107 | 2018 |
| Bicycle supporting-bar | G. Spence | 727,473 | May 5 | 1213 | 267 | 104 | 262 |
| Bicycle toe-clip | E. A. Thiem and G. W. Weber | 722,056 | Mar. 3 | 742 | 165 | 103 | 160 |
| Bicycle-track | S. M. Howard | 726,224 | Apr. 21 | 3305 | 750 | 103 | 1899 |
| Bicycle-track | R. H. Erwin | 738,174 | Sept. 8 | 1263 | 273, 274 | 106 | 289 |
| Bicycle trailer package-carrier | W. F. Parker | 730,193 | June 2 | 1192 | 268 | 104 | 1370 |
| Bicycle-wheel | G. G. Ritchie | 722,433 | Mar. 10 | 1438 | 319 | 103 | 322 |
| Bicycle-wheel hub | G. Ellstrom | 722,402 | Mar. 10 | 1379 | 305 | 103 | 309 |
| Bicycles. Apparatus for facilitating learning to ride | F. von Trützschler | 720,860 | Feb. 17 | 2669 | 616 | 102 | 1415 |
| Bicycles, &c. Driving mechanism for | A. T. Brown and C. E. Lipe | 744,038 | Nov. 17 | 2452 | 526, 527 | 107 | 553 |
| Bicycles. Pneumatic seat-post for | E. Brougham | 746,279 | Dec. 8 | 1776 | 404 | 107 | 1498 |
| Bicycles, &c. Variable gearing for | F. Mitchell | 736,129 | Aug. 11 | 2077 | 445 | 105 | 1443 |
| Bicyclist's strength-testing machine | R. W. Blaisdell | 734,662 | July 28 | 3631 | 850 | 105 | 816 |
| Bidet | F. A. Wells | 723,346 | Mar. 24 | 3146 | 707 | 103 | 707 |
| Bilge-water-discharging apparatus | J. R. Jobin | 718,466 | Jan 13 | 1767 | 392 | 102 | 392 |
| Bill-holder | J. H. Parks | 730,562 | June 9 | 1893 | 422 | 104 | 1534 |
| Bill-holder | J. H. Parks | 734,358 | July 21 | 3073 | 723 | 105 | 684 |
| Billet-heating furnace | V. E. Edwards | 720,904 | Feb. 17 | 2757 | 634 | 102 | 1433 |
| Billet-heating furnace | E. H. Carroll | 726,814 | Apr. 28 | 4465 | 1008 | 103 | 2147 |
| Billiard and pool table. Combination | A. Karhan | 747,726 | Dec. 22 | 4447 | 1003 | 107 | 2133 |
| Billiard and pool table. Convertible | H. L. Haskell | 740,012 | Sept. 29 | 4772 | 1074 | 106 | 1087 |
| Billiard-chalk holder | J. Pejchar | 744,935 | Nov. 24 | 4102 | 884 | 107 | 922 |
| Billiard-cloth | J. Turner | 741,508 | Oct. 13 | 2325 | 520 | 106 | 1762 |
| Billiard-cue chalker | W. E. Guese | 737,226 | Aug. 25 | 4098 | 911 | 105 | 1906 |
| Billiard-cue tip | H. Seelinger | 743,041 | Nov. 3 | 430 | 93 | 107 | 90 |
| Billiard or pool table cushion | D. W. Delaney | 717,737 | Jan. 6 | 402 | 94 | 102 | 88 |
| Billiard-tip. Cushion | J. E. Lavley | 723,285 | Mar. 24 | 3031 | 682 | 103 | 685 |
| Bills. Device for holding and filling blank | G. J. Knopf | 726,171 | Apr. 21 | 3197 | 723 | 103 | 1876 |
| Bin: *See* Elevator-bin. Grain-bin. Grocer's bin. Grocery-bin. Nail-bin. Revolving bin. Storage-bin. Store-bin. | | | | | | | |
| Bin | E. J. Walker | 728,054 | May 12 | 2325 | 518 | 104 | 512 |
| Binder | H. P. Jones | 719,673 | Feb. 3 | 461 | 105 | 102 | 919 |
| Binder | W. G. and H. S. Jones | 719,674 | Feb. 3 | 462 | 105 | 102 | 919 |
| Binder | J. O. Deckert | 724,168 | Mar. 31 | 4724 | 1060 | 103 | 1047 |
| Binder | H. P. Jones | 724,709 | Apr. 7 | 548 | 131 | 103 | 1286 |
| Binder | H. C. Blackmer | 730,225 | June 9 | 1272 | 282, 283 | 104 | 1402 |
| Binder | J. Berman | 731,270 | June 16 | 3183 | 709 | 104 | 1821 |
| Binder | W. C. Walker | 735,847 | Aug. 11 | 1555 | 332, 333 | 105 | 1331 |
| Binder | W. E. Blackburn and G. H. Swartwout. | 736,482 | Aug. 18 | 2700 | 592 | 105 | 1593 |
| Binder | E. M. Anderson and G. E. Post | 737,892 | Sept. 1 | 674 | 143 | 106 | 148 |
| Binder attachment | W. Umbeck | 746,412 | Dec. 8 | 2009 | 458 | 107 | 1548 |
| Binder cord-holder. Self- | B. R. Benjamin | 741,296 | Oct. 13 | 1718 | 384, 385 | 106 | 1630 |
| Binder. Expansion-back | E. T. A. Akass | 736,340 | Aug. 18 | 2439 | 533 | 105 | 1539 |
| Binder. Extensible-post | F. W. Tobey | 730,318 | June 9 | 1445 | 319 | 104 | 1439 |
| Binder. Fodder- | E. Hanby | 721,181 | Feb. 24 | 3324 | 760 | 102 | 1574 |
| Binder for sheet-music, &c | J. C. Kimsey | 722,589 | Mar. 10 | 1736 | 386 | 103 | 388 |
| Binder-frame | J. O. Deckert | 724,166 | Mar. 31 | 4719 | 1058, 1059 | 103 | 1046 |
| Binder-frame | A. H. Lorenz | 739,552 | Sept. 22 | 3873 | 869 | 106 | 1877 |
| Binder knotter-protector | F. B. Stout | 732,464 | June 30 | 5496 | 1218 | 104 | 2332 |
| Binder leaf-holder. Transfer- | I. H. Sisson | 721,100 | Feb. 17 | 3142 | 722 | 102 | 1518 |
| Binder-locking device. Temporary- | R. B. Wilson | 748,129 | Dec. 29 | 5262 | 1194 | 107 | 2335 |
| Binder-locking device. Transfer- | I. H. Sisson | 721,098 | Feb. 17 | 3138 | 721 | 102 | 1517 |
| Binder. Loose-leaf | T. A. W. Tengwall | 720,754 | Feb. 17 | 2501 | 576 | 102 | 1380 |
| Binder. Loose-leaf | J. L. McMillan | 724,599 | Apr. 7 | 337 | 82, 83 | 103 | 1241 |
| Binder. Loose-leaf | R. B. Wilson | 729,476 | May 26 | 4917 | 1089 | 104 | 1092 |
| Binder. Loose-leaf | H. E. Veit | 729,979 | June 2 | 847 | 189 | 104 | 1300 |
| Binder. Loose-leaf | G. A. Roedde | 730,160 | June 2 | 1138 | 256 | 104 | 1359 |

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| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Binder. Loose-leaf | G. A. Roedde | 730,161 | June 2 | 1140 | 256 | 104 | 1359 |
| Binder. Loose-leaf | E. L. Krag | 731,579 | June 23 | 3803 | 847 | 104 | 1966 |
| Binder. Loose-leaf | W. Saunders | 733,599 | July 14 | 1610 | 382 | 105 | 358 |
| Binder. Loose-leaf | G. W. Sheridan and W. A. Wheeler | 734,474 | July 21 | 3279 | 770 | 105 | 726 |
| Binder. Loose-leaf | E. T. A. Akass | 736,342 | Aug. 18 | 2442 | 534 | 105 | 1540 |
| Binder. Loose-leaf | C. R. Nelson | 737,005 | Aug. 25 | 3700 | 821 | 105 | 1822 |
| Binder. Loose-leaf | J. R. Barrett | 737,317 | Aug. 25 | 4275 | 950 | 105 | 1942 |
| Binder. Loose-leaf | F. H. Thomas | 741,387 | Oct. 13 | 1913 | 423 | 106 | 1675 |
| Binder. Loose-leaf | W. P. Northcott and H. B. Mounsey | 745,372 | Dec. 1 | 105 | 25 | 107 | 1123 |
| Binder or file. Loose-leaf | C. F. W. Graun | 744,749 | Nov. 24 | 3784 | 815 | 107 | 855 |
| Binder or file. Loose-leaf | J. F. Cordes | 747,144 | Dec. 15 | 3375 | 766, 767 | 107 | 1878 |
| Binder. Temporary | E. A. Trussell | 719,063 | Jan. 27 | 2935 | 656 | 102 | 667 |
| Binder. Temporary | W. J. Brown | 722,651 | Mar. 10 | 1838 | 410 | 103 | 411 |
| Binder. Temporary | J. L. C. Montague | 722,870 | Mar. 17 | 2276 | 510 | 103 | 514 |
| Binder. Temporary | H. H. Willson | 723,963 | Mar. 31 | 4313 | 968 | 103 | 966 |
| Binder. Temporary | G. H. Gresham | 724,849 | Apr. 7 | 806 | 186 | 103 | 1341 |
| Binder. Temporary | W. S. Mendenhall | 725,265 | Apr. 14 | 1568 | 355 | 103 | 1517 |
| Binder. Temporary | F. B. Towne | 726,785 | Apr. 28 | 4413 | 994 | 103 | 2136 |
| Binder. Temporary | P. Buford | 727,744 | May 12 | 1743 | 391 | 104 | 392 |
| Binder. Temporary | C. A. Hartmann | 729,763 | June 2 | 444 | 101 | 104 | 1218 |
| Binder. Temporary | E. L. Krag | 730,544 | June 9 | 1863 | 416 | 104 | 1528 |
| Binder. Temporary | M. F. Wolff | 730,727 | June 9 | 2184 | 486 | 104 | 1597 |
| Binder. Temporary | A. L. Holton | 735,379 | Aug. 4 | 643 | 133 | 105 | 1118 |
| Binder. Temporary | M. P. Jackson | 735,879 | Aug. 11 | 1620 | 346 | 105 | 1346 |
| Binder. Temporary | J. W. Harsha | 735,973 | Aug. 11 | 1785 | 382 | 105 | 1381 |
| Binder. Temporary | P. Peugeot and G. A. Shoemaker | 741,710 | Oct. 20 | 2555 | 569 | 106 | 1826 |
| Binder. Temporary | E. A. Trussell | 743,114 | Nov. 3 | 565 | 122 | 107 | 118 |
| Binder. Temporary | A. Lawson | 744,369 | Nov. 17 | 3091 | 663 | 107 | 690 |
| Binder. Temporary | S. D. Page | 745,896 | Dec. 1 | 1076 | 242 | 107 | 1327 |
| Binder. Temporary | J. J. Duffy | 746,052 | Dec. 8 | 1366 | 305 | 107 | 1408 |
| Binder. Temporary | J. A. Mudd | 746,354 | Dec. 8 | 1914 | 437 | 107 | 1527 |
| Binder. Temporary | W. Strubing | 747,659 | Dec. 22 | 4331 | 978 | 107 | 2107 |
| Binder. Temporary or loose-leaf | I. H. Sisson | 721,099 | Feb. 17 | 3139 | 721, 722 | 102 | 1518 |
| Binder tension | C. J. Tuseth | 745,123 | Nov. 24 | 4492 | 973 | 107 | 1002 |
| Binder tension device | R. L. Kortright | 723,682 | Mar. 24 | 3759 | 844 | 103 | 831 |
| Binder tongue attachment | J. E. Wallace | 747,812 | Dec. 22 | 4611 | 1040 | 107 | 2170 |
| Binder. Transfer- | S. A. Neidich | 726,093 | Apr. 21 | 3058 | 694 | 103 | 1847 |
| Binder. Transfer- | E. A. Trussell | 737,297 | Aug. 25 | 4235 | 943 | 105 | 1934 |
| Binders. Loose leaf for temporary | G. W. Weaver | 717,957 | Jan. 6 | 820 | 185 | 102 | 176 |
| Binders. Needle-bar for self- | T. E. Lind | 731,796 | June 23 | 4192 | 934, 935 | 104 | 2045 |
| Binders. Summarizing-sheet for serial- | A. O. and E. R. Kittredge | 724,886 | Apr. 7 | 869 | 200 | 103 | 1355 |
| Binding | C. M. Smith and A. Smyth | 719,154 | Jan. 27 | 3118 | 694 | 102 | 704 |
| Binding machine. Pamphlet- | J. W. Butterfield | 723,825 | Mar. 31 | 4023 | 906, 907, 908, 909 | 103 | 904 |
| Binding-strip cutting and forming machine | L. Delivouk and F. J. George | 739,841 | Sept. 29 | 4425 | 993 | 106 | 1015 |
| Bird-chaser | H. F. Weber | 733,778 | July 14 | 1928 | 453 | 105 | 423 |
| Bird-trap | F. E. Allen | 722,794 | Mar. 17 | 2147 | 480 | 103 | 488 |
| Biscuit and doughnut cutter. Combined | N. A. Oliver | 730,792 | June 9 | 2288 | 508 | 104 | 1619 |
| Biscuit-cooling apparatus | G. Herbert, Jr | 739,310 | Sept. 22 | 3435 | 766 | 106 | 783 |
| Bit: *See* Boring-bit. Bridle-bit. Carving-machine bit. Drill-bit. Drilling-bit. Extension-bit. Horse-bit. Plane-bit. | | | | | | | |
| Bit | F. P. Hall, W. E. Olds, and M. A. Buck. | 720,689 | Feb. 17 | 2390 | 548 | 102 | 1355 |
| Bit | W. C. Johnson | 721,894 | Mar. 3 | 439 | 97 | 103 | 97 |
| Bit | W. C. Moorhead | 736,998 | Aug. 25 | 3687 | 818 | 105 | 1820 |
| Bit-brace guide | J. H. McWeeney | 720,950 | Feb. 17 | 2847 | 652 | 102 | 1453 |
| Bit-stock | N. R. Thibert | 719,703 | Feb. 3 | 521 | 117 | 102 | 933 |
| Bit-stock | I. E. Stump | 722,332 | Mar. 10 | 1262 | 281 | 103 | 284 |
| Blackboard | A. E. A. Opitz | 736,431 | Aug. 18 | 2596 | 569 | 105 | 1572 |
| Blackboard attachment | F. D. Jones | 732,863 | July 7 | 297 | 74 | 105 | 65 |
| Blackheads. Instrument for removing | A. A. C. Hildebrandt and N. W. Johnston. | 722,019 | Mar. 3 | 682 | 151 | 103 | 147 |
| Blacking and polishing machine. Shoe | C. W. Mannooch | 747,558 | Dec. 22 | 4138 | 928, 929 | 107 | 2063 |
| Blacking-box foot-rest | L. E. Tucker | 742,138 | Oct. 20 | 3415 | 761 | 106 | 2001 |
| Blacking-can | A. E. Sampson | 722,911 | Mar. 17 | 2357 | 527 | 103 | 531 |
| Blacking device. Shoe- | W. G. Callender | 733,370 | July 14 | 1207 | 286 | 105 | 270 |
| Blacking machine. Boot- | J. A. De Vito | 718,102 | Jan. 13 | 1093 | 241, 242 | 102 | 250 |
| Blacking or polishing appliance. Boot | H. L. Reinhold, Jr | 747,640 | Dec. 22 | 4296 | 966 | 107 | 2099 |
| Blacking-stand shoe-holder. Boot- | E. L. Hann | 734,173 | July 21 | 2723 | 641 | 105 | 609 |
| Blank ends. Machine for finishing | J. H. Haskins | 722,300 | Mar. 10 | 1208 | 266, 267, 268 | 103 | 274 |
| Blank-stringing machine | J. H. Russell | 745,389 | Dec. 1 | 144 | 33 | 107 | 1130 |
| Blanket-roll, field-mattress, and clothing-bag combined | R. I. Clapham | 730,877 | June 16 | 2446 | 541 | 104 | 1672 |
| Blanket-roll strap or poncho-holder | J. H. Tabler | 740,712 | Oct. 6 | 600 | 134 | 106 | 1376 |
| Blast-cavities. Tester for | C. B. Lanham | 745,357 | Dec. 1 | 77 | 19 | 107 | 1118 |
| Blast-furnace | W. C. Coffin | 718,313 | Jan. 13 | 1468 | 325, 326 | 102 | 331 |
| Blast-furnace | L. Bentley | 718,945 | Jan. 20 | 2712 | 607 | 102 | 606 |
| Blast-furnace | R. Berg | 721,417 | Feb. 24 | 3768 | 857 | 102 | 1666 |
| Blast-furnace | C. W. A. Koelkebeck | 721,956 | Mar. 3 | 570 | 126, 127 | 103 | 125 |
| Blast-furnace | N. Erzig | 726,893 | May 5 | 115 | 27 | 104 | 27 |
| Blast-furnace | O. S. Garretson | 728,700 | May 19 | 3545 | 788 | 104 | 792 |

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|---|---|---|---|---|---|---|---|
| Blast-furnace | G. W. Bollman | 736,353 | Aug 18 | 2458 | 537 | 105 | 1542 |
| Blast-furnace | J. C. Cromwell | 736,365 | Aug. 18 | 2478 | 542 | 105 | 1547 |
| Blast-furnace | M. Blanchard and C. D. Williams | 739,281 | Sept. 22 | 3387 | 754 | 106 | 772 |
| Blasting-caps. Device for protecting | D. B. Gillies | 746,262 | Dec 8 | 1745 | 396 | 107 | 1491 |
| Bleaching | M. Ruthenburg | 747,234 | Dec. 15 | 3538 | 803 | 107 | 1911 |
| Bleaching apparatus. Fabric- | V. Floquet and L. Bonnet | 721,436 | Feb 24 | 3805 | 866 | 102 | 1673 |
| Bleaching, &c. Apparatus for | F. C. Theis | 741,188 | Oct. 13 | 1493 | 339 | 106 | 1584 |
| Bleaching compound. Making | M. Ruthenburg | 739,448 | Sept. 22 | 3710 | ..... | 106 | 842 |
| Bleaching plant. Cell for electrolytic | L. E. Lander | 724 191 | Mar. 31 | 4772 | 1070 | 103 | 1056 |
| Bleaching textile fabrics, &c. Apparatus for | M. Haas | 729 574 | June 2 | 101 | 25, 26 | 104 | 1147 |
| Bleaching yarn-cops | J. E. Bland and E. J. Gilligan | 739,751 | Sept. 22 | 4249 | {951 952 | {106 | 960 |
| Blind-adjuster | H. J. Valentine | 747,516 | Dec. 22 | 4068 | 914 | 107 | 2047 |
| Blind and curtain fixture. Adjustable | W. E Wilson | 745,129 | Nov. 24 | 4503 | 975 | 107 | 1004 |
| Blind and fixings for same. Roller- | A. E Millane | 720,372 | Feb. 10 | 1781 | 403 | 102 | 1216 |
| Blind fascia. Sun- | S. Prebble | 740,916 | Oct. 6 | 974 | 219 | 106 | 1454 |
| Blind-fastener | J. J. Quackenbush | 729,892 | June 2 | 683 | 150 | 104 | 1267 |
| Blind-fastener | E. Favreau | 736,949 | Aug. 25 | 3603 | 799 | 105 | 1802 |
| Blind fastener. Window- | T. A. Upson | 735,625 | Aug. 4 | 1130 | 239 | 105 | 1221 |
| Blind opening or closing device | N. O. Bond | 732,261 | June 30 | 5105 | 1135 | 104 | 2252 |
| Blind-operating device | N. O. Bond | 732,262 | June 30 | 5107 | 1136 | 104 | 2252 |
| Blind-operating device. Window- | A. C. Price and W. J. Conner | 737,476 | Aug. 25 | 4565 | 1023 | 105 | 2007 |
| Blind operator and lock. Window- | I. C. Sargent | 731,408 | June 16 | 3457 | 772 | 104 | 1878 |
| Blind-slat lock | J. W. Clark | 719,648 | Feb. 3 | 423 | 97 | 102 | 910 |
| Blind-stop | C. L. Koenig | 736,408 | Aug. 18 | 2550 | 559 | 105 | 1562 |
| Blind. Venetian | A. F. Tumler | 723,762 | Mar. 24 | 3901 | 877 | 103 | 862 |
| Blind. Window- | E. A. Clark | 725,042 | Apr. 14 | 1161 | 262 | 103 | 1432 |
| Blind-wiring machine | C. Hinz | 737,929 | Sept. 1 | 738 | {160 161 | {106 | 162 |
| Block:<br>*See* Building-block. Horse kicking-block.<br>Building or roofing block. Kindling-block.<br>Link-block.<br>Capping-block. Peat block.<br>Child's block. Printer's block.<br>Chimney-block. Printing-block.<br>Chock-block. Pulley-block.<br>Concrete or cement building-block. Rail block.<br>Sheet-leader block.<br>Disinfectant-block. Snatch-block.<br>Drilling-block. Swage-block.<br>Educational and puzzle block. Tackle-block.<br>Tiling-block.<br>Engraver's block. Toy building-block.<br>Facing-block. Wagon brake-block.<br>Fuse-block. Wall-block.<br>Hat-forming block. Wire-drawing block.<br>Hoist-block. | | | | | | | |
| Block construction. Hollow- | B. L. Blair | 721,534 | Feb. 24 | 3977 | 906 | 102 | 1710 |
| Block-mold | P. B. Miles | 738,830 | Sept. 15 | 2586 | 571 | 106 | 587 |
| Block-mold | J. C. Miller | 744,970 | Nov. 24 | 4174 | 902 | 107 | 936 |
| Block-signal. Electric | W. S. Jackson | 743,878 | Nov. 10 | 2100 | {449 450 | {107 | 463 |
| Block-signal system | I. H. Francisco | 743,852 | Nov. 10 | 2058 | {437 438 | {107 | 454 |
| Block-signal system | E. E. Wolf and J. B. Williams | 748,450 | Dec. 29 | 5827 | {1327 1328 | {107 | 2458 |
| Block-signal system. Automatic | A. G. Wilson | 740,505 | Oct. 6 | 236 | 47 | 106 | 1297 |
| Block-signaling system and apparatus therefor | J. E. Allison | 744,706 | Nov. 24 | 3710 | 801 | 107 | 840 |
| Block-system signaling device | M. J. Gallagher | 743,857 | Nov. 10 | 2067 | 440 | 107 | 456 |
| Blocks or ingots. Subdividing | J. Scales | 722,759 | Mar. 17 | 2081 | 466 | 103 | 475 |
| Blotter | E. K. Nelson | 739,704 | Sept. 22 | 4166 | 931 | 106 | 941 |
| Blotting-pad | W. A. Murray | 736,289 | Aug. 11 | 2349 | 510 | 105 | 1504 |
| Blow-testing machine | M. B. Mills | 740,161 | Sept. 29 | 5037 | {1132 1133 | {106 | 1144 |
| Blow-torch. Vest-pocket | F. J. Walter | 732,805 | July 7 | 205 | 52 | 105 | 46 |
| Blower | F. F. Wilson | 738,868 | Sept. 15 | 2652 | {584 585 | {106 | 602 |
| Blower | T. M. Eynon | 742,618 | Oct. 27 | 4305 | 970 | 106 | 2201 |
| Blower and fire-screen. Fire- | P. Grayson | 728,905 | May 26 | 3929 | 872 | 104 | 885 |
| Blower. Fan- | J. M. Stukes | 748,436 | Dec. 29 | 5808 | 1323 | 107 | 2454 |
| Blower. Powder- | H. E. Krupke | 728,247 | May 19 | 2682 | 600 | 104 | 610 |
| Blower. Pressure- | A. W. Case | 718,693 | Jan. 20 | 2239 | 489 | 102 | 507 |
| Blower. Rotary | P. Forwerg and B. Larsen | 735,357 | Aug. 4 | 599 | 123 | 105 | 1109 |
| Blower. Steam- | E. Gibson | 717,566 | Jan. 6 | 79 | 20 | 102 | 19 |
| Blowers or pumps. Impeller for rotary | H. A. Wainwright | 736,039 | Aug. 11 | 1917 | 409 | 105 | 1410 |
| Blowing-engine | F. M. Rites | 746,744 | Dec. 15 | 2604 | 598 | 107 | 1702 |
| Blowing-engine or compressor | E. Wiki | 724,041 | Apr. 7 | 413 | 97, 98 | 103 | 1257 |
| Blowpipe | E. Johnson | 731,910 | June 23 | 4392 | 979 | 104 | 2090 |
| Blowpipe. Automatic | A. Princen | 725,769 | Apr. 21 | 2521 | 571 | 103 | 1735 |
| Blowpipe-burner | H. S. Burton | 724,257 | Mar. 31 | 4917 | 1100 | 103 | 1085 |
| Blowpipe. Oxyhydrogen- | W. H. Murphy | 743,313 | Nov. 3 | 957 | 208 | 107 | 206 |
| Blowpipe-rest | W. H. Moon | 740,455 | Oct. 6 | 138 | 28 | 106 | 1275 |
| Bluing. Effervescent laundry | W. C. Pope | 738,481 | Sept. 8 | 1895 | ..... | 106 | 422 |
| Bluing. Spool- | A. K. Phillips | 728,608 | May 19 | 3387 | 750 | 104 | 759 |
| Board:<br>*See* Bread and kneading board. Press-board.<br>Recording-board.<br>Cooling-board. Scoop-board.<br>Croquet-board. Sign-board.<br>Drawing-board. Switchboard.<br>Game-board. Tally board.<br>Ironing-board. Washboard.<br>Marking-board. Writing-board.<br>Notice-board. | | | | | | | |
| Board-machine | C. E. Frye | 727,538 | May 5 | 1323 | 295 | 104 | 285 |

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|---|---|---|---|---|---|---|---|
| Boat | C. Drohovith | 721,868 | Mar. 3 | 394 | 87 | 103 | 86 |
| Boat | E. C. Rosenaw | 722,908 | Mar. 17 | 2354 | 526 | 103 | 530 |
| Boat | S. A. Duvall | 730,889 | June 16 | 2478 | 550 | 104 | 1679 |
| Boat | G. H. Rood | 738,359 | Sept. 8 | 1657 | 359 | 106 | 373 |
| Boat-coupling | I. H. Larr | 739,091 | Sept. 15 | 3036 | 672 | 106 | 682 |
| Boat device. Recreation submarine- | F. W. Brady | 743,816 | Nov. 10 | 1998 | 424 | 107 | 442 |
| Boat float arrangement | W. M. von Malein | 725,264 | Apr. 14 | 1568 | 355 | 103 | 1516 |
| Boat. Folding | I. O. Perring | 736,623 | Aug. 18 | 2975 | 654 | 105 | 1650 |
| Boat-gunwale. Sectional hollow | J. L. Burton | 727,894 | May 12 | 2030 | 452 | 104 | 450 |
| Boat. Illusion- | M. E. Smith | 744,880 | Nov. 24 | 4010 | 865 | 107 | 902 |
| Boat-launching apparatus. Life- | S. H. Ury | 731,143 | June 16 | 2968 | 659 | 104 | 1779 |
| Boat. Life- | R. Forrest | 721,690 | Mar. 3 | 76 | 16 | 103 | 17 |
| Boat. Life- | A. Lasserre | 736,747 | Aug. 18 | 3207 | 709 | 105 | 1698 |
| Boat-lowering apparatus | E. O. Spetmann | 723,416 | Mar. 24 | 3291 | 736 | 103 | 734 |
| Boat. Miniature or toy submarine | A. F. Humphrey | 741,581 | Oct. 13 | 2291 | 512 | 106 | 1754 |
| Boat. Miniature or toy submarine | A. F. Humphrey | 742,326 | Oct. 27 | 3779 | 847 | 106 | 2092 |
| Boat motor-power | F. A. Creed | 720,897 | Feb. 17 | 2742 | 631 | 102 | 1429 |
| Boat or vessel | H. J. Bayard | 739,775 | Sept. 22 | 4288 | 961, 962 | 106 | 968 |
| Boat-outrigger | D. R. and M. N. Sheen | 731,515 | June 23 | 3675 | 819 | 104 | 1942 |
| Boat-releasing device. Ship's- | W. H. Rothwell | 746,169 | Dec. 8 | 1576 | 352, 353 | 107 | 1457 |
| Boat. Sectional | B. McMonagle | 729,641 | June 2 | 209 | 48 | 104 | 1171 |
| Boat structure. Submarine- | H. N. Ridgway | 731,500 | June 23 | 3642 | 813 | 104 | 1935 |
| Boat. Submarine | C. B. Gillette | 718,450 | Jan. 13 | 1733 | 385 | 102 | 384 |
| Boat. Submarine | H. H. Morrell | 726,085 | Apr. 21 | 3043 | 691 | 103 | 1844 |
| Boat. Submarine | S. Lake | 726,227 | Apr. 21 | 3309 | 751 | 103 | 1900 |
| Boat. Submarine | S. Lake | 726,705 | Apr. 28 | 4261 | 963 | 103 | 2106 |
| Boat. Submarine | F. T. Cable | 732,920 | July 7 | 398 | 96 | 105 | 86 |
| Boat. Submarine | L. Y. Spear | 739,734 | Sept. 22 | 4226 | 946 | 106 | 954 |
| Boat. Submarine | D. F. Toomey | 746,606 | Dec. 8 | 2343 | 537 | 107 | 1624 |
| Boat wagon. Life- | O. C. Nickerson | 729,394 | May 26 | 4787 | 1059 | 104 | 1062 |
| Boats. Automatic diving mechanism for submarine | F. W. Brady | 738,879 | Sept. 15 | 2672 | 588, 589 | 106 | 606 |
| Boats, barbettes, &c. Apparatus for facilitating the sighting of distant objects from submarine | H. Grubb | 725,839 | Apr. 21 | 2641 | 601, 602 | 103 | 1761 |
| Boats. Collapsible part for | J. Ewing, Jr | 746,940 | Dec. 15 | 3000 | 689 | 107 | 1791 |
| Boats. Combined ventilating and observing tube for submarine | S. Lake | 726,947 | May 5 | 217 | 51 | 104 | 47 |
| Boats. Compensating device for submarine or submergible | L. Y. Spear | 739,735 | Sept. 22 | 4227 | 946 | 106 | 955 |
| Boats, &c. Lifting apparatus for raising or lowering canal- | R. Krell | 742,450 | Oct. 27 | 3992 | 896, 897 | 106 | 2135 |
| Boats. Observing-tube for submarine | S. Lake | 725,570 | Apr. 14 | 2125 | 481, 482 | 103 | 1635 |
| Boats propelled by electric or other power. Means for guiding | H. Healy | 738,190 | Sept. 8 | 1292 | 280 | 106 | 295 |
| Boats. Stowing and lowering or raising | F. H. Wadsworth | 727,232 | May 5 | 772 | 165 | 104 | 167 |
| Boats. Ventilation of submarine | S. Lake | 719,235 | Jan. 27 | 3259 | 728 | 102 | 733 |
| Boats. Winch for fish- | J. J. McDonald | 738,348 | Sept. 8 | 1636 | 354 | 106 | 368 |
| Bobbin | A. A. Sack | 733,557 | July 14 | 1536 | 365 | 105 | 342 |
| Bobbin-holder | W. Fielding | 718,995 | Jan. 27 | 2807 | 629 | 102 | 641 |
| Bobbin-holder | J. C. Edwards | 731,554 | June 23 | 3748 | 835 | 104 | 1956 |
| Bobbin-holder | A. E. Rhoades | 731,617 | June 23 | 3866 | 861 | 104 | 1978 |
| Bobbin-holder | A. E. Rhoades | 731,618 | June 23 | 3867 | 861 | 104 | 1979 |
| Bobbin-holder | T. J. Murdock | 736,617 | Aug. 18 | 2963 | 651 | 105 | 1648 |
| Bobbin-holder | S. W. Wardwell | 737,050 | Aug. 25 | 3767 | 837 | 105 | 1837 |
| Bobbin-holder | H. W. Scatchard | 745,528 | Dec. 1 | 402 | 92 | 107 | 1184 |
| Bobbin or cop builders. Yarn-guide-controlling mechanism for | P. Purcell | 726,570 | Apr. 28 | 4011 | 908 | 103 | 2053 |
| Bobbin-rougher | N. H. Shaw | 740,191 | Sept. 29 | 5091 | 1144 | 106 | 1155 |
| Bobbins, cops, &c. Machine for packing | D. G. Baker | 730,432 | June 9 | 1653 | 370, 371 | 104 | 1481 |
| Bodkin | G. E. Wheelhouse | 723,507 | Mar. 24 | 3467 | 776 | 103 | 770 |
| Bodkin | A. G. Sessums | 741,556 | Oct. 13 | 2244 | 499 | 106 | 1745 |
| Bodkin | G. J. Dixon | 742,606 | Oct. 27 | 4280 | 964 | 106 | 2196 |
| Body-brace | W. B. Dewees | 719,311 | Jan. 27 | 3403 | 759 | 102 | 766 |
| Body-brace | W. B. Dewees | 738,529 | Sept. 8 | 1989 | 433 | 106 | 443 |
| Body-brace and truss. Combined | S. R. Shepard | 748,426 | Dec. 29 | 5785 | 1319 | 107 | 2449 |
| Body-protector | J. Gamble | 745,007 | Nov. 24 | 4236 | 918 | 107 | 948 |
| Body-support | W. U. G. Martin | 741,521 | Oct. 13 | 2168 | 483 | 106 | 1729 |
| Bog-evener | A. Kepler | 720,525 | Feb. 10 | 2045 | 470 | 102 | 1270 |
| Boiler: *See* Cooking-boiler. Domestic boiler. Double boiler. Egg-boiler. Engine-boiler. Fire-flue boiler. Fire-tube boiler. Flash-boiler. Heating-boiler. Hot-water boiler. Locomotive-boiler. Marine boiler. Portable boiler. Return-flue boiler. Sectional boiler. Slag-boiler. Slag-heated boiler. Steam-boiler. Stovepipe-boiler. Sugar-boiler. Tubular boiler. Upright boiler. Washboiler. Water-tube boiler. | | | | | | | |
| Boiler | A. Jaeger | 719,224 | Jan. 27 | 3240 | 723, 724 | 102 | 729 |
| Boiler | N. Curtis | 719,439 | Feb. 3 | 52 | 12 | 102 | 837 |
| Boiler | R. Baggaley | 725,392 | Apr. 14 | 1796 | 403 | 103 | 1564 |
| Boiler | H. B. Hemphill | 726,683 | Apr. 28 | 4218 | 953 | 103 | 2096 |
| Boiler | W. D. Boyce | 736,354 | Aug. 18 | 2459 | 537, 538 | 105 | 1543 |
| Boiler | L. Grenthe | 737,095 | Aug. 25 | 3849 | 855 | 105 | 1853 |
| Boiler | F. E. Stanley | 737,517 | Aug. 25 | 4651 | 1044 | 105 | 2028 |
| Boiler | S. T. J. Bray | 737,903 | Sept. 1 | 693 | 148, 149 | 106 | 152 |
| Boiler | M. F. Kenely | 737,937 | Sept. 1 | 759 | 166 | 106 | 167 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|---|
| | | | | Spec. | Dr'g. | Vol. | Page. |
| Boiler | J. McWilliams | 740,304 | Sept. 29 | 5303 | 1194, 1195 | 106 | 1197 |
| Boiler | O. Carnes and M. Farley | 741,885 | Oct. 20 | 2865 | 639, 640 | 106 | 1892 |
| Boiler | O. S. Garretson | 742,306 | Oct. 27 | 3745 | 837, 838, 839 | 106 | 2085 |
| Boiler | J. M. McClellon | 742,477 | Oct. 27 | 4033 | 905 | 106 | 2144 |
| Boiler acid-proof lining | R. Panzl | 744,601 | Nov. 17 | 3482 | 751 | 107 | 772 |
| Boiler-alarm | W. C. Heitkamp | 738,442 | Sept. 8 | 1811 | 393 | 106 | 405 |
| Boiler-alarm | W. S. G. Harris | 747,420 | Dec. 22 | 3893 | 876 | 107 | 2008 |
| Boiler and furnace. Combined | W. W. Bonson | 745,998 | Dec. 8 | 1265 | 284, 285 | 107 | 1386 |
| Boiler attachment | C. L. Pagenhart | 731,213 | June 16 | 3091 | 685 | 104 | 1802 |
| Boiler-brace | J. P. Bauer | 724,533 | Apr. 7 | 209 | 51 | 103 | 1214 |
| Boiler-brace | J. A. Dailey | 744,300 | Nov. 17 | 2977 | 637 | 107 | 665 |
| Boiler-brace | J. F. Hottman, Jr | 746,511 | Dec. 8 | 2173 | 499 | 107 | 1583 |
| Boiler brace. Steam- | W. E. Niles | 726,450 | Apr. 28 | 3750 | 850 | 103 | 2005 |
| Boiler circulator. Steam- | J. P. Urbanek | 737,886 | Sept. 1 | 666 | 141 | 106 | 146 |
| Boiler-cleaner | D. F. Schuler | 729,425 | May 26 | 4837 | 1072 | 104 | 1073 |
| Boiler-cleaner and water-purifier | J. A. Ray | 726,346 | Apr. 28 | 3565 | 807 | 103 | 1968 |
| Boiler cleaner. Steam- | R. B. Hodge | 720,252 | Feb. 10 | 1555 | 356 | 102 | 1168 |
| Boiler-cleaning compound | J. D. and H. P. Scott | 728,627 | May 19 | 3419 | ------ | 104 | 766 |
| Boiler compound | J. Loudenslager | 720,267 | Feb. 10 | 1587 | ------ | 102 | 1175 |
| Boiler compound | J. I. Broughton | 745,147 | Nov. 24 | 4558 | ------ | 107 | 1014 |
| Boiler-controller | R. J. Flinn and G. P. Aborn | 746,485 | Dec. 8 | 2129 | 489, 490 | 107 | 1574 |
| Boiler cover-plate | C. B. Fairweather | 722,571 | Mar. 10 | 1708 | 380 | 103 | 383 |
| Boiler-covering and making same | H. C. Michell | 732,207 | June 30 | 4993 | 1111 | 104 | 2229 |
| Boiler draft attachment. Locomotive | J. J. De Lancey | 742,605 | Oct. 27 | 4279 | 964 | 106 | 2196 |
| Boiler draft device. Steam- | R. B. Hodge | 741,037 | Oct. 13 | 1195 | 271 | 106 | 1521 |
| Boiler fire-box | C. Vanderbilt | 726,382 | Apr. 28 | 3634 | 824 | 103 | 1982 |
| Boiler fire-box | W. H. Laughridge | 732,643 | June 30 | 5829 | 1291 | 104 | 2405 |
| Boiler fire-box. Locomotive- | L. and C. Glover and D. Crowther | 730,904 | June 16 | 2513 | 558 | 104 | 1686 |
| Boiler fitting. Hot-water- | J. J. Lawler | 738,208 | Sept. 8 | 1326 | 287 | 106 | 303 |
| Boiler-flue | T. F. Bower | 730,338 | June 9 | 1474 | 326 | 104 | 1444 |
| Boiler-flue cleaner | E.O.Henderson and J.B.Thompson | 721,889 | Mar. 3 | 427 | 94 | 103 | 94 |
| Boiler-flue cutter | J. T. Warner | 729,109 | May 26 | 4289 | 948 | 104 | 958 |
| Boiler-flue. Detachable | J. F. Drake | 718,609 | Jan. 20 | 2082 | 453 | 102 | 477 |
| Boiler-flue joints. Flue-expander for expanding | W. E. Donehower and S. Chilson | 741,636 | Oct. 20 | 2397 | 588 | 106 | 1792 |
| Boiler-flue roller | J. Ulrich | 737,302 | Aug. 25 | 4241 | 944 | 105 | 1935 |
| Boiler-furnace | J. Smith | 730,409 | June 9 | 1605 | 358 | 104 | 1471 |
| Boiler-furnace | J. J. Leach | 732,359 | June 30 | 5293 | 1173 | 104 | 2289 |
| Boiler-furnace | E. F. Edgar | 732,723 | July 7 | 49 | 13 | 105 | 13 |
| Boiler-furnace | E. F. Comber | 746,031 | Dec. 8 | 1328 | 298 | 107 | 1399 |
| Boiler-furnace | O. N. Morin | 747,207 | Dec. 15 | 3497 | 793 | 107 | 1903 |
| Boiler-furnace | C. Henry and R. A. Dillon | 748,374 | Dec. 29 | 5083 | 1296 | 107 | 2426 |
| Boiler furnace and flue. Steam- | E. Gearing | 720,418 | Feb. 10 | 1854 | 422 | 102 | 1232 |
| Boiler furnace. Steam- | E. Gibson | 717,567 | Jan. 6 | 81 | 21 | 102 | 20 |
| Boiler furnace. Steam- | J. F. Mock | 723,541 | Mar. 24 | 3522 | 788 | 103 | 782 |
| Boiler furnace. Steam- | E. R. R. Hoyt | 729,589 | June 2 | 121 | 31 | 104 | 1152 |
| Boiler furnace. Steam- | G. F. Gallagher | 731,171 | June 16 | 3020 | 670, 671 | 104 | 1788 |
| Boiler furnace. Steam- | E. J. Wood | 737,309 | Aug. 25 | 4254 | 947 | 105 | 1938 |
| Boiler furnace. Steam- | G. A. Fisher | 737,726 | Sept. 1 | 308 | 64.65 | 106 | 70 |
| Boiler furnace. Steam- | C. B. Rearick | 739,218 | Sept. 15 | 3262 | 723 | 106 | 729 |
| Boiler furnace. Steam- | P. J. Grau | 746,957 | Dec. 15 | 3029 | 695 | 107 | 1798 |
| Boiler furnace. Steam- | J. W. Stillwell | 747,797 | Dec. 22 | 4578 | 1033, 1034 | 107 | 2163 |
| Boiler furnace. Vertical- | J. MacCormack | 724,482 | Apr. 7 | 114 | 28 | 103 | 1193 |
| Boiler fusible plug. Steam- | M. K. Bowman | 729,088 | May 26 | 4165 | 922 | 104 | 934 |
| Boiler gage and alarm. Steam- | E. Thompson | 738,958 | Sept. 15 | 2805 | 622 | 106 | 634 |
| Boiler head. Steam- | H. Vail | 721,344 | Feb. 24 | 3636 | 826 | 102 | 1638 |
| Boiler header. Steam- | E. J. Moore | 738,563 | Sept. 8 | 2041 | 444, 445 | 106 | 454 |
| Boiler or other furnace | G. C. Way | 735,849 | Aug. 11 | 1562 | 333, 334 | 105 | 1333 |
| Boiler plug or cover | W. M. Jackson | 721,955 | Mar. 3 | 570 | 126 | 103 | 124 |
| Boiler safety appliance. Steam- | J. Beiser | 732,333 | June 30 | 5228 | 1161 | 104 | 2277 |
| Boiler safety device. Steam- | D. A. Reagan | 738,844 | Sept. 15 | 2615 | 577 | 106 | 593 |
| Boiler scale. Compound for removing steam- | J. N. Henderson | 719,002 | Jan. 27 | 2816 | ------ | 102 | 642 |
| Boiler scraper and cleaner | H. C. Miller | 745,642 | Dec. 1 | 598 | 138 | 107 | 1225 |
| Boiler separator. Steam- | R. H. Goacher | 725,698 | Apr. 21 | 2381 | 540 | 103 | 1703 |
| Boiler-setting | W. L. Minor | 721,060 | Feb. 17 | 3055 | 702 | 102 | 1498 |
| Boiler-setting | S. W. Davis | 735,473 | Aug. 4 | 844 | 180 | 105 | 1160 |
| Boiler setting or casing. Water-tube- | J. Cowan | 741,629 | Oct. 20 | 2383 | 534, 535 | 106 | 1790 |
| Boiler setting. Steam- | E. Gibson | 723,860 | Mar. 31 | 4100 | 925 | 103 | 920 |
| Boiler-superheater | C. Gottwald | 735,871 | Aug. 11 | 1607 | 343 | 105 | 1342 |
| Boiler superheater. Steam- | J. P. Sneddon. (Reissue) | 12,128 | June 30 | 5926 | 1314, 1315 | 104 | 2424 |
| Boiler superheater. Tubular- | W. Schmidt | 721,242 | Feb. 24 | 3469 | 789 | 102 | 1603 |
| Boiler system. Flash- | A. F. Macdonald | 726,442 | Apr. 28 | 3728 | 846 | 103 | 2000 |
| Boiler-tube cleaner | H. C. Ryding | 721,609 | Feb. 24 | 4148 | 942 | 102 | 1748 |
| Boiler-tube cleaner | E. M. Adams | 725,018 | Apr. 14 | 1116 | 253 | 103 | 1425 |
| Boiler-tube cleaner | H. F. Weinland | 730,994 | June 16 | 2681 | 597 | 104 | 1721 |
| Boiler-tube cleaner | C. B. Risley | 734,613 | July 28 | 3534 | 827 | 105 | 797 |
| Boiler-tube extractor | J. W. Matthews | 736,991 | Aug. 25 | 3674 | 815 | 105 | 1816 |
| Boiler-tube or flue scraper and cleaner | A. O. Cruzan | 728,085 | May 12 | 2378 | 528 | 104 | 523 |
| Boiler-tube-retarding device | L. D. Lovekin | 731,194 | June 16 | 3061 | 679 | 104 | 1796 |
| Boiler tube-sheet | G. H. Rheutan | 740,923 | Oct. 6 | 987 | 223 | 106 | 1457 |
| Boiler-tube stopper | H. T. Mason | 724,595 | Apr. 7 | 332 | 81 | 103 | 1239 |
| Boiler water-gage. Steam- | F. Strandberg | 718,228 | Jan. 13 | 1315 | 290 | 102 | 297 |
| Boiler water-gage. Steam- | T. W. Rudd | 722,410 | Mar. 10 | 1399 | 309 | 103 | 314 |
| Boiler-water purifier | I. V. Holmes | 743,385 | Nov. 3 | 1120 | 239 | 107 | 237 |
| Boiler water-purifying device. Mechanical | E. G. Rust | 726,193 | Apr. 21 | 3258 | 739 | 103 | 1888 |
| Boiler water-regulator. Steam- | B. Walker, Jr | 727,503 | May 5 | 1257 | 281 | 104 | 270 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Boilers. Apparatus for controlling level of water in steam- | H. A. Fleuss | 737,728 | Sept. 1 | 315 | 66 | 106 | 71 |
| Boilers. Apparatus for indicating the water-level in | P. A Renaux | 723,621 | Mar. 24 | 3663 | 821 | 103 | 810 |
| Boilers. Baffle for water-tube | J. Miyabara | 743,541 | Nov. 10 | 1493 | 312 | 107 | 336 |
| Boilers clean. Device for keeping | J. W. Robinson | 744,619 | Nov. 17 | 3513 | 758 | 107 | 778 |
| Boilers. Compound for the removal and prevention of incrustation in steam- | W. B. Fitzpatrick | 743,380 | Nov. 3 | 1114 | ..... | 107 | 236 |
| Boilers. Device for cutting tubes and flues from | P. S. Fitch | 747,320 | Dec. 15 | 3716 | 838 | 107 | 1951 |
| Boilers. Device for maintaining the water-level in | O. Berger | 719,424 | Feb. 3 | 25 | 6 | 102 | 831 |
| Boilers. Draft appliance for locomotive- | W. B. Warren | 748,325 | Dec. 29 | 5596 | 1276 | 107 | 2406 |
| Boilers. Fusible plug for steam- | J. Philp | 726,567 | Apr. 28 | 4008 | 907 | 103 | 2053 |
| Boilers. Glass-tube water-gage for steam- | W. Bright | 718,046 | Jan. 6 | 983 | 219 | 102 | 212 |
| Boilers, &c. Pressure-gage for steam- | F. Mitchell | 724,724 | Apr. 7 | 579 | 138 | 103 | 1292 |
| Boilers. Prevention and removal of incrustation in steam- | R. L. Gamlen | 734,168 | July 21 | 2712 | ..... | 105 | 607 |
| Boilers. Product for prevention of furring in | P. Bez | 748,341 | Dec. 29 | 5622 | ..... | 107 | 2412 |
| Boiling apparatus. Water- | R. C. Sayer | 734,049 | Mar. 31 | 4483 | 1010 | 103 | 997 |
| Boiling by electricity. Apparatus for | R. C. Sayer | 737,848 | May 13 | 1944 | 433 | 104 | 432 |
| Bolster | H. T. Krakau | 720,528 | Feb. 10 | 2053 | 473 | 102 | 1272 |
| Bolster | J. C. Wands | 721,131 | Feb. 17 | 3226 | 738 | 102 | 1540 |
| Bolster | J. C. Wands | 724,633 | Apr. 7 | 402 | 95 | 103 | 1255 |
| Bolster | T. Mitchell | 728,270 | May 19 | 2741 | 609 | 104 | 623 |
| Bolster | T. Mitchell | 730,283 | June 9 | 1389 | 305 | 104 | 1426 |
| Bolster | G. G. Floyd | 732,403 | June 30 | 5378 | 1191 | 104 | 2309 |
| Bolster | C. B. Albree | 733,791 | July 14 | 1946 | 458 | 105 | 428 |
| Bolster | T. Mitchell | 734,188 | July 21 | 2753 | 646 | 105 | 615 |
| Bolster | W. H. Scott | 737,158 | Aug. 25 | 3949 | 878 | 105 | 1874 |
| Bolster | W. H. Scott | 737,159 | Aug. 25 | 3952 | 878 | 105 | 1875 |
| Bolster | C. F. Huntoon | 743,288 | Nov. 3 | 917 | 199 | 107 | 196 |
| Bolster | A. Christianson | 743,451 | Nov. 10 | 1308 | 269 | 107 | 294 |
| Bolster | J. M. and J. H. Ames | 748,332 | Dec. 29 | 5603 | 1278 | 107 | 2408 |
| Bolster and truck | S. Otis | 739,917 | Sept. 29 | 4593 | 1032 | 106 | 1049 |
| Bolster. Body- | S. Otis | 739,916 | Sept. 29 | 4590 | 1032 | 106 | 1048 |
| Bolster-roll | J. B. Jones | 732,864 | July 7 | 298 | 75 | 105 | 66 |
| Bolster-spring | N. Halvorsen | 719,000 | Jan. 27 | 2815 | 631 | 102 | 642 |
| Bolster-spring | A. Burull | 724,801 | Apr. 7 | 721 | 168 | 103 | 1324 |
| Bolster. Trussed | W. H. Scott | 737,160 | Aug. 25 | 3953 | 879 | 105 | 1876 |
| Bolt: *See* Double-headed bolt. Locking-bolt. Expansion-bolt. Self-locking bolt. Lewis-bolt. Stay-bolt. | | | | | | | |
| Bolt | O. O. Bahle | 732,817 | July 7 | 226 | 57 | 105 | 51 |
| Bolt | G. E. Woodbury | 739,250 | Sept. 15 | 3330 | 739 | 106 | 744 |
| Bolt-anchor | S. S. Newton | 725,278 | Apr. 14 | 1588 | 359 | 103 | 1521 |
| Bolt-anchor | S. S. Newton | 725,279 | Apr. 14 | 1590 | 359 | 103 | 1521 |
| Bolt-anchor | D. M. Field | 731,560 | June 23 | 3758 | 838 | 104 | 1958 |
| Bolt and nut locking device | G. W. Oliver | 744,388 | Nov. 17 | 3130 | 672 | 107 | 699 |
| Bolt-blanks, rivets, rods, &c. Apparatus for heating | W. W. Mulford and F. C. Caldwell | 737,126 | Aug. 25 | 3895 | 865, 866 | 105 | 1862 |
| Bolt-clipper | H. K. Porter | 721,232 | Feb. 24 | 3444 | 782 | 102 | 1598 |
| Bolt-clipper | G. Binder | 737,198 | Aug. 25 | 4033 | 894 | 105 | 1892 |
| Bolt-clipper | H. K. Porter | 745,905 | Dec. 1 | 1092 | 244 | 107 | 1331 |
| Bolt-cutter | A. L. Moore | 720,835 | Feb. 17 | 2625 | 606 | 102 | 1406 |
| Bolt-cutter | N. Lamb | 743,003 | Nov. 3 | 354 | 76 | 107 | 74 |
| Bolt-head-milling machine | B. F. Paist | 727,426 | May 5 | 1113 | 243, 244, 245 | 104 | 240 |
| Bolt-heading machine | C. W. Richards | 733,998 | July 21 | 2371 | 557 | 105 | 532 |
| Bolt-holder | W. J. Phillips | 729,508 | May 26 | 4970 | 1101 | 104 | 1103 |
| Bolt-holder | N. Grandchamp and J. A. Schlehr | 740,553 | Oct. 6 | 323 | 67 | 106 | 1313 |
| Bolt-holder, wrench, and bolt-extractor. Combined | G. W. Seddelmeyer | 742,914 | Nov. 3 | 163 | 38 | 107 | 36 |
| Bolt-holding implement | J. R. Harrison | 735,251 | Aug. 4 | 419 | 81 | 105 | 1070 |
| Bolt-holding tool | M. C. McDaniel | 744,930 | Nov. 24 | 4096 | 883 | 107 | 920 |
| Bolt-lock | P. J. Wagener | 720,642 | Feb. 17 | 2310 | 529 | 102 | 1338 |
| Bolt-locking device | J. F. Clegg | 733,541 | July 14 | 1508 | 360 | 105 | 336 |
| Bolt or spike puller | O. Giltner | 728,096 | May 12 | 2398 | 534 | 104 | 528 |
| Bolt-protector | L. B. Millhausen | 731,931 | June 23 | 4428 | 987 | 104 | 2098 |
| Bolts or rivets. Manufacture of | A. H. Fox | 744,183 | Nov. 17 | 2760 | 587 | 107 | 617 |
| Bolts, screws, or similar articles in soft substances, such as wood. Means for fixing | J. V. E. Thiollier | 730,585 | June 9 | 1939 | 431 | 104 | 1544 |
| Bolts to slabs. Means for securing | E. J. Blakesley | 737,323 | Aug. 25 | 4284 | 952 | 105 | 1944 |
| Bolts, &c. Tool for applying metal fittings for | J. V. E. Thiollier | 731,719 | June 23 | 4047 | 903 | 104 | 2014 |
| Bolting-cloth. Brush device for cleaning | C. W. Mann | 733,858 | July 14 | 2087 | 494 | 105 | 455 |
| Bolting-machine sieve-cleaner | W. Griscom and C. H. Loutzenhiser | 743,863 | Nov. 10 | 2079 | 442 | 107 | 459 |
| Bolting-machine. Undulatory | E. R. Draver | 735,730 | Aug. 11 | 1324 | 286 | 105 | 1280 |
| Bolting-machines. Cleaning device for use in connection with | R. A. Stubbs | 721,251 | Feb. 24 | 3483 | 792 | 102 | 1606 |
| Bolting or other machines. Feeding device for | R. A. Stubbs | 734,631 | July 28 | 3568 | 835 | 105 | 803 |
| Bolting-reel | J. F. Gent | 735,663 | Aug. 4 | 1200 | 254 | 105 | 1236 |
| Bolting-sieve cloths. Device for cleaning | J. C. Mann | 726,319 | Apr. 28 | 3515 | 796 | 103 | 1956 |
| Bomb. Despatch- | H. B. Littlepage | 743,302 | Nov. 3 | 945 | 206 | 107 | 203 |
| Bonbons, &c. Packing for | H. Finne, Jr | 728,386 | May 19 | 2954 | 651 | 104 | 666 |
| Bone-cutting machine | F. W. Mann | 730,140 | June 2 | 1111 | 249 | 104 | 1353 |
| Bone-cutting machine | C. Trick | 744,647 | Nov. 17 | 3558 | 767 | 107 | 787 |
| Bonnet. Child's | M. E. Higgins | 727,793 | May 12 | 1845 | 412 | 104 | 411 |
| Book | J. B. Lyons | 743,530 | Nov. 10 | 1473 | 308 | 107 | 332 |
| Book. Account- | J. H. Rand | 744,793 | Nov. 24 | 3857 | 831 | 107 | 870 |
| Book. Account- | J. H. Rand | 746,156 | Dec. 8 | 1552 | 347 | 107 | 1452 |
| Book and binding therefor | N. Bach | 722,418 | Mar. 10 | 1414 | 312 | 103 | 317 |
| Book and carbon-carrier therefor. Manifold- | G. B. Doyle | 718,106 | Jan. 13 | 1100 | 243 | 102 | 252 |
| Book. Blank | H. B. Hooper and J. I. Myles | 735,258 | Aug. 4 | 432 | 85 | 105 | 1072 |
| Book. Car-report | F. M. Lucore | 727,164 | May 5 | 655 | 141 | 104 | 142 |
| Book. Carbon-copy letter- | G. Spence | 737,035 | Aug. 25 | 3749 | 832 | 105 | 1833 |
| Book-carrier and scholar's companion. Combined | R. Lincoln | 738,462 | Sept. 8 | 1852 | 403 | 106 | 412 |
| Book-casing. Metal | M. J. A. Deydier | 718,827 | Jan. 20 | 2475 | 550 | 102 | 555 |
| Book- Check- | J. Franc | 735,081 | Aug. 4 | 57 | 16 | 105 | 994 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|---|
| | | | | Spec. | Drg. | Vol. | Page. |
| Book. Check- | M. P. Exline | 736,832 | Aug. 18 | 3378 | 747 | 105 | 1734 |
| Book-cloth, leather-cloth, &c. Manufacture of | J. A. Sackville | 724,616 | Apr. 7 | 373 | | 103 | 1249 |
| Book. Combination check and pocket | F. J. Cook | 730,096 | June 2 | 1039 | 233 | 104 | 1339 |
| Book. Compartment record- | C. D. Chichester | 738,098 | Sept. 1 | 1068 | 236 | 106 | 231 |
| Book copy-holder. Note- | C. H. Glass | 722,010 | Mar. 3 | 664 | 148 | 103 | 144 |
| Book. Coupon- | C. V. Sanderson | 717,930 | Jan. 6 | 776 | 174 | 102 | 166 |
| Book-cover | B. E. Schrenk | 737,969 | Sept. 1 | 825 | 181 | 106 | 181 |
| Book-cover protector | E. P. Cushman | 732,524 | June 30 | 5612 | 1244 | 104 | 2356 |
| Book-covering machine | A. H. Morton and L. P. Sherman | 747,999 | Dec. 29 | 5001 | 1130, 1131 | 107 | 2278 |
| Book. Deposit-credit | T. D. Taylor | 722,391 | Mar. 10 | 1364 | 302 | 103 | 306 |
| Book. Diagram- | M. S. Calcutt | 747,936 | Dec. 29 | 4873 | 1100 | 107 | 2250 |
| Book. Duplicate-order | M. L. Davidson | 724,995 | Apr. 7 | 1070 | 244, 245 | 103 | 1397 |
| Book. Duplicating sales- | N. S. Wright | 733,309 | July 7 | 1089 | 259 | 105 | 229 |
| Book-edge-cutting machine | E. Grosse | 741,002 | Oct. 6 | 1138 | 256, 257, 258 | 106 | 1487 |
| Book-edge-cutting machine | E. Grosse | 741,003 | Oct. 6 | 1141 | 258, 259 | 106 | 1488 |
| Book. Electric light and power station account- | W. E. Jenkinson | 726,538 | Apr. 28 | 3940 | 890, 891 | 103 | 2040 |
| Book. Entry- | G. F. Rockafellow and J. P. Squires | 721,835 | Mar. 3 | 321 | 70, 71 | 103 | 71 |
| Book for county records, &c. Abstract- | J. E. Lutz | 719,481 | Feb. 3 | 124 | 29 | 102 | 851 |
| Book for streets, railways, rivers, or the like. Guide- | C. Loewe | 738,555 | Sept. 8 | 2031 | 441 | 106 | 452 |
| Book handle or carrier | A. J. Sleght | 745,251 | Nov. 24 | 4745 | 1037 | 107 | 1054 |
| Book-holder | H. B. Smith, Sr. | 719,386 | Jan. 27 | 3549 | 792 | 102 | 797 |
| Book-holder | G. Boden | 738,763 | Sept. 15 | 2445 | 536 | 106 | 555 |
| Book holder. Account- | A. J. Shaul | 740,321 | Sept. 29 | 5338 | 1203 | 106 | 1205 |
| Book-holder bracket. Adjustable swivel swing | W. J. Walsh. (Reissue) | 12,076 | Jan. 27 | 3608 | 807 | 102 | 808 |
| Book holder. Manifold- | C. S. Binner | 725,926 | Apr. 21 | 2795 | 634 | 103 | 1794 |
| Book holder. Order- | C. S. Binner | 728,662 | May 19 | 3491 | 775 | 104 | 781 |
| Book. Hymn- | C. Campion | 721,148 | Feb. 24 | 3268 | 748 | 102 | 1564 |
| Book. Index- | C. J. Seidensticker and U. S. G. Neligh. | 736,159 | Aug. 11 | 2123 | 455 | 105 | 1452 |
| Book. Index- | J. A. Best | 738,599 | Sept. 8 | 2109 | 460, 461 | 106 | 469 |
| Book index-leaf | H. J. Browne | 718,816 | Jan. 20 | 2460 | 546 | 102 | 552 |
| Book. Index memorandum- | C. H. Heeley, A. D. Page, and A. G. Macandrew. | 737,232 | Aug. 25 | 4107 | 913 | 105 | 1907 |
| Book-leaf holder and marker | B. S. Gorby | 726,675 | Apr. 28 | 4200 | 949 | 103 | 2092 |
| Book-leaf turner | W. Gumnitz and M. J. Seydel | 739,308 | Sept. 22 | 3434 | 765 | 106 | 782 |
| Book. Loose-leaf | H. C. Miller | 717,697 | Jan. 6 | 310 | 76 | 102 | 67 |
| Book. Loose-leaf | S. Seemann | 719,886 | Feb. 3 | 858 | 201 | 102 | 1005 |
| Book. Manifold account and sales | G. A. Holm | 733,841 | July 14 | 2057 | 486 | 105 | 449 |
| Book. Manifold sales- | H. H. Winslow | 719,930 | Feb. 3 | 921 | 215 | 102 | 1019 |
| Book. Manifold sales- | J. F. Laning | 722,593 | Mar. 10 | 1740 | 387 | 103 | 389 |
| Book. Manifold sales- | W. F. Beck | 732,257 | June 30 | 5095 | 1133 | 104 | 2249 |
| Book. Manifolding- | E. B. Williams | 718,685 | Jan. 20 | 2219 | 486, 487 | 102 | 504 |
| Book. Manifolding sales- | C. Fester | 742,176 | Oct. 27 | 3489 | 779 | 106 | 2032 |
| Book-mark | P. Swan | 718,291 | Jan. 13 | 1439 | 320 | 102 | 325 |
| Book-mark | A. G. Bauer | 727,572 | May 12 | 1408 | 317 | 104 | 321 |
| Book-mark | J. L. Thompson | 738,376 | Sept. 8 | 1687 | 365 | 106 | 379 |
| Book mark or indicator | S. C. Straker | 726,005 | Apr. 21 | 2927 | 665 | 103 | 1820 |
| Book or periodical | I. Kitsee | 733,218 | July 7 | 924 | 223 | 105 | 193 |
| Book or tablet. Manifolding | G. Guilbert | 744,536 | Nov. 17 | 3389 | 730 | 107 | 754 |
| Book. Orders-out | E. M. Davis | 732,717 | July 7 | 40 | 10 | 105 | 12 |
| Book page-marker | R. R. Miller | 733,326 | July 7 | 1117 | 265 | 105 | 235 |
| Book-protector | G. B. Norton | 744,598 | Nov. 17 | 3474 | 750 | 107 | 770 |
| Book rack. Pass- | M. J. Robinson | 736,879 | Aug. 18 | 3460 | 767 | 105 | 1751 |
| Book-racks. Sheet-metal structure for | P. M. Wege | 723,428 | Mar. 24 | 3309 | 741 | 103 | 739 |
| Book. Sales-check | E. A. Henkle | 726,058 | Apr. 21 | 3004 | 683 | 103 | 1836 |
| Book. Sample- | H. O. S. Carlson | 722,283 | Mar. 10 | 1175 | 260 | 103 | 265 |
| Book-sheets. Reinforcement for | W. M. Byrne | 740,086 | Sept. 29 | 4905 | 1100 | 106 | 1115 |
| Book-stitching machine | F. Kugler | 723,535 | Mar. 24 | 3511 | 786 | 103 | 779 |
| Book stub. Check- | W. C. McCarter | 741,407 | Oct. 13 | 1946 | 431 | 106 | 1682 |
| Book-support | C. P. Bley | 734,218 | July 21 | 2798 | 656 | 105 | 625 |
| Book support and container | J. J. Eugster | 747,392 | Dec. 22 | 3847 | 866 | 107 | 1997 |
| Book-trimming machine | C. W. Lovell and D. Williamson | 734,907 | July 28 | 4106 | 956, 957 | 105 | 913 |
| Books and cutting the edges thereof. Machine for feeding | E. Grosse | 729,331 | May 26 | 4685 | 1034, 1035 | 104 | 1042 |
| Books. Apparatus for gathering sheets or signatures of | G. E. Reinhardt | 731,221 | June 16 | 3102 | 688 | 104 | 1804 |
| Books. Device for fastening loose-leaf | J. A. Waldo, Jr. | 722,061 | Mar. 3 | 750 | 167 | 103 | 162 |
| Books. Leaf for loose-leaf | H. C. Miller | 737,261 | Aug. 25 | 4163 | 927 | 105 | 1919 |
| Books, &c. Machine for trimming | E. B. Stimpson | 736,166 | Aug. 11 | 2136 | 459 | 105 | 1455 |
| Books. System of reference for account or other memorandum | I. B. Hendrickson | 730,650 | June 9 | 2050 | 456 | 104 | 1568 |
| Bookbinder | G. S. Ring | 722,903 | Mar. 17 | 2345 | 524 | 103 | 529 |
| Bookbinder | W. Feldmann | 737,356 | Aug. 25 | 4716 | 1058 | 105 | 2042 |
| Bookbinder's vise | A. H. Whiteside and S. G. Campbell | 727,520 | May 5 | 1292 | 288, 289 | 104 | 278 |
| Bookbinding | L. P. Hughes | 735,259 | Aug. 4 | 43? | 85 | 105 | 1073 |
| Bookbinding | R. D. McCartie | 747,200 | Dec. 15 | 3500 | 794 | 107 | 1904 |
| Bookbinding-machine | G. Wallner | 732,910 | July 7 | 381 | 92, 93 | 105 | 83 |
| Bookcase | E. von der Groeben | 729,859 | June 2 | 628 | 137 | 104 | 1256 |
| Bookcase-door, Sectional | F. Macey | 726,957 | May 5 | 240 | 56 | 104 | 51 |
| Bookcase, Folding | D. Scarborough | 732,760 | Mar. 17 | 2082 | 466 | 103 | 476 |
| Bookcase, Revolving | D. A. B. Stoddart | 720,190 | Feb. 10 | 1437 | 328 | 102 | 1144 |
| Bookcase, Sectional | W. R. Wolf | 728,150 | May 12 | 2493 | 554 | 104 | 548 |
| Bookcase, Sectional | R. Hatch | 729,494 | May 26 | 4948 | 1097 | 104 | 1098 |
| Bookcase, Sectional | A. J. Gilmour | 734,537 | July 28 | 3404 | 795 | 105 | 768 |
| Bookcase, Sectional | J. L. Kershaw | 739,007 | Sept. 15 | 2879 | 639 | 106 | 650 |
| Bookcase, Sectional | W. A. Shimer | 746,589 | Dec. 8 | 2315 | 530 | 107 | 1617 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|---|
| | | | | Spec. | Dr'g. | Vol. | Page. |
| Bookcase. Sectional | R. Bauch | 746,915 | Dec. 15 | 2932 | 676<br>677 | 107 | 1775 |
| Bookcases or the like. Door for | O. O. Buice | 729,270 | May 26 | 4575 | 1010 | 104 | 1019 |
| Bookkeeping | J. C. Macnamara | 724,306 | Mar. 31 | 5005 | 1120<br>1121 | 103 | 1103 |
| Bookkeeping | E. E. Crandall | 743,151 | Nov. 3 | 640 | 138 | 107 | 134 |
| Bookkeeping-register | E. Schumacher | 728,625 | May 19 | 3416 | 756 | 104 | 765 |
| Boom-fastening device | T. S. Laughlin | 737,118 | Aug. 25 | 3885 | 862 | 105 | 1860 |
| Boot | W. Cassie | 721,668 | Mar. 3 | 37 | 9 | 103 | 10 |
| Bootblack-stand foot-support | F. Hodes | 729,585 | June 2 | 117 | 29 | 104 | 1151 |
| Boot-calk | A. B. Lipscomb | 736,121 | Aug. 11 | 2063 | 442 | 105 | 1440 |
| Boot-finishing-machine wheel | G. H. Catt | 733,577 | July 14 | 1580 | 376 | 105 | 352 |
| Boot or shoe | J. E. Randall | 725,009 | Apr. 7 | 1098 | 249<br>250 | 103 | 1403 |
| Boot or shoe | L. A. Daniels | 728,679 | May 19 | 3514 | 781 | 104 | 786 |
| Boot or shoe | J. E. Jackson | 737,244 | Aug. 25 | 4133 | 919 | 105 | 1913 |
| Boot or shoe | D. W. Corey | 741,012 | Oct. 13 | 1161 | 262 | 106 | 1514 |
| Boot or shoe | J. N. Moulton | 744,592 | Nov. 17 | 3468 | 748 | 107 | 769 |
| Boot or shoe cleaner | D. McEachern | 718,861 | Jan. 20 | 2544 | 566 | 102 | 571 |
| Boot or shoe cleaner | L. C. Smith | 719,894 | Feb. 3 | 870 | 204 | 102 | 1007 |
| Boot or shoe cleaner | A. Bartoszek | 747,031 | Dec. 15 | 3158 | 724 | 107 | 1826 |
| Boot or shoe edge trimming machine | W. Thompson | 721,398 | Feb. 24 | 3734 | 850 | 102 | 1659 |
| Boot or shoe fastening | R. Snapper | 722,638 | Mar. 10 | 1820 | 405 | 103 | 407 |
| Boot or shoe form | C. A. Batchelder | 723,574 | Mar. 24 | 3578 | 800 | 103 | 792 |
| Boot or shoe form or last | J. E. Bete | 737,321 | Aug. 25 | 4280 | 951 | 105 | 1943 |
| Boot or shoe holder | A. H. Baker | 728,533 | May 19 | 3224 | 715 | 104 | 723 |
| Boot or shoe inner sole | W. H. Adams | 740,351 | Sept. 29 | 5386 | 1214 | 106 | 1215 |
| Boot or shoe instep-supporter | G. N. Phelps | 741,826 | Oct. 20 | 2759 | 614 | 106 | 1869 |
| Boot or shoe jack | H. Perry | 726,745 | Apr. 28 | 4339 | 977 | 103 | 2121 |
| Boot or shoe. Leather | G. E. McCormack | 730,555 | June 9 | 1878 | 420 | 104 | 1531 |
| Boot or shoe leveling apparatus | H. A. Webster | 745,980 | Dec. 1 | 1224 | 275<br>276 | 107 | 1361 |
| Boot or shoe lining | J. A. Burleigh | 735,459 | Aug. 4 | 820 | 175 | 105 | 1154 |
| Boot or shoe polishing machine | C. Biladeau and A. P. Chapdelaine | 738,976 | Sept. 15 | 2833 | 628 | 106 | 640 |
| Boot or shoe stretcher | B. A. Waggaman | 748,239 | Dec. 29 | 5453 | 1242 | 107 | 2375 |
| Boot or shoe trimming machine | E. E. Angell | 719,414 | Feb. 3 | 3 | 1, 2 | 102 | 827 |
| Boot or shoe welt | C. T. Wood | 740,507 | Oct. 6 | 239 | 47 | 106 | 1297 |
| Boot or shoe welting. Welt | G. E. Rollins | 747,642 | Dec. 22 | 4299 | 967 | 107 | 2099 |
| Boot-tree | W. F. Packard | 743,322 | Nov. 3 | 975 | 211 | 107 | 209 |
| Bootjack | S. S. Thompson | 744,260 | Nov. 17 | 2895 | 620 | 107 | 647 |
| Boots and overshoes therefor. Protector and snow-excluder for felt | S. W. Wehn and C. W. Oler | 732,609 | June 30 | 5769 | 1279 | 104 | 2393 |
| Boots or shoes. Article for use in the manufacture of | E. P. Worth | 744,850 | Nov. 24 | 3964 | 854 | 107 | 893 |
| Boots or shoes. Making | H. Alberts | 742,372 | Oct. 27 | 3857 | 866<br>867 | 106 | 2109 |
| Boots or shoes. Means for repairing | G. W. Case and D. L. Swinton, Jr. | 731,281 | June 16 | 3206 | 714 | 104 | 1825 |
| Boots or shoes. Mechanical hammering device for use in the manufacture of | G. Kron | 733,974 | July 21 | 2329 | 547 | 105 | 523 |
| Borax-rubbing machine | A. La Francis and F. J. Krumeich | 740,146 | Sept. 29 | 5010 | 1125<br>1126 | 106 | 1138 |
| Bordeaux mixture and making same | F. J. Smith | 718,537 | Jan. 13 | 1929 | ------ | 102 | 430 |
| Bordeaux mixture and preparing same | F. J. Smith | 718,538 | Jan. 13 | 1930 | ------ | 102 | 430 |
| Boring and reaming machine | G. A. Ensign | 726,662 | Apr. 28 | 4176 | 943 | 103 | 2088 |
| Boring and tenoning machine | J. Wilson | 737,987 | Sept. 1 | 863 | 189 | 106 | 189 |
| Boring-apparatus boring tube or rod | A. McNamara and J. Schanke | 744,873 | Nov. 24 | 4000 | 863 | 107 | 900 |
| Boring-bar | W. H. Boardman | 744,286 | Nov. 17 | 2949 | 631 | 107 | 659 |
| Boring-bit. Extension | J. C. Beyer | 722,481 | Mar. 10 | 1552 | 341 | 103 | 348 |
| Boring holes for screw-pins or dowels in wooden railway-sleepers, &c. Tool for | F. Stahl | 733,340 | July 7 | 1153 | 273 | 105 | 243 |
| Boring-machine | R. W. Lyle | 723,891 | Mar. 31 | 4158 | 937 | 103 | 932 |
| Boring-machine | A. Falkenau | 734,051 | July 21 | 2493 | 581<br>582 | 105 | 561 |
| Boring-machine | F. and R. Croft, Jr | 734,825 | July 28 | 3969 | 927 | 105 | 883 |
| Boring-machine | A. M. Newell | 735,896 | Aug. 11 | 1649 | 352 | 105 | 1351 |
| Boring-machine | E. Hipolito | 738,612 | Sept. 8 | 2126 | 466 | 106 | 473 |
| Boring-machine | H. B. Binsse | 739,381 | Sept. 22 | 3563 | 796 | 106 | 809 |
| Boring machine. Deep- | V. Petit | 718,876 | Jan. 20 | 2578 | 574<br>575<br>576 | 102 | 577 |
| Boring-machine indicator | C. B. Weidlog | 741,087 | Oct. 13 | 1295 | 297 | 106 | 1543 |
| Boring-machine. Variety | M. L. Andrew | 733,115 | July 7 | 740 | 179<br>180 | 105 | 157 |
| Boring or cutting tool holder | F. H. Löser | 721,056 | Feb. 17 | 3048 | 699 | 102 | 1497 |
| Boring or drilling angular holes. Apparatus for | R. Bartholomäus | 724,422 | Apr. 7 | 9 | 2, 3 | 103 | 1172 |
| Boring or drilling machine. Multiple-spindle horizontal | F. L. Eberhardt | 744,859 | Nov. 24 | 3978 | 858 | 107 | 896 |
| Boring or milling machine | C. C. Newton | 735,570 | Aug. 4 | 1036 | 220 | 105 | 1201 |
| Boring or planing concave or cylindroidal surfaces. Automatic tool for | M. E. Knight and J. M. Benjamin | 743,293 | Nov. 3 | 931 | 202 | 107 | 200 |
| Boring-tool | G. R. Rich | 728,013 | May 12 | 2249 | 500 | 104 | 496 |
| Boring-tool | E. W. Williams and J. H. L. Trevorrow. | 729,469 | May 26 | 4908 | 1087 | 104 | 1090 |
| Boring-tool | C. K. Sheets and W. L. Hill | 730,709 | June 9 | 2159 | 479 | 104 | 1591 |
| Boring tool. Deep- | F. Buschmann | 718,909 | Jan. 20 | 2639 | 592 | 102 | 590 |
| Bottle | F. M. Norris | 718,017 | Jan. 6 | 945 | 209 | 102 | 203 |
| Bottle | D. Knowlton | 720,819 | Feb. 17 | 2599 | 601 | 102 | 1400 |
| Bottle | J. A. Ames | 722,477 | Mar. 10 | 1539 | 338 | 103 | 345 |
| Bottle | P. J. Richardson | 723,210 | Mar. 17 | 2894 | 648 | 103 | 643 |
| Bottle | J. M. Culp | 724,443 | Apr. 7 | 41 | 11 | 103 | 1178 |
| Bottle | C. W. Hayes | 724,999 | Apr. 7 | 1077 | 246 | 103 | 1398 |
| Bottle | H. De Rocco | 725,419 | Apr. 14 | 1843 | 413 | 103 | 1575 |
| Bottle | P. C. Traver | 726,594 | Apr. 28 | 4062 | 917 | 103 | 2064 |
| Bottle | J. Savoie | 726,992 | May 5 | 338 | 73 | 104 | 73 |
| Bottle | W. F. Hutchinson | 729,071 | May 26 | 4225 | 934 | 104 | 946 |
| Bottle | P. J. Wilson | 729,475 | May 26 | 4916 | 1089 | 104 | 1091 |
| Bottle | A. Heusler | 729,583 | June 2 | 114 | 29 | 104 | 1150 |
| Bottle | A. Boisclaire | 734,804 | July 28 | 3936 | 918 | 105 | 787 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|---|
| | | | | Spec. | Dr'g. | Vol. | Page. |
| Bottle | S. E. George and J. R. Norris | 735,240 | Aug. 4 | 396 | 77 | 105 | 1065 |
| Bottle | N. D. Asdell | 735,439 | Aug. 4 | 783 | 166 | 105 | 1147 |
| Bottle | P. J. Wilson | 735,642 | Aug. 4 | 1165 | 247 | 105 | 1228 |
| Bottle | M. A. Lazareff | 737,638 | Sept. 1 | 145 | 32 | 106 | 34 |
| Bottle | J. P. Harrison | 738,032 | Sept. 1 | 943 | 209 | 106 | 205 |
| Bottle | A. F. Oxley | 739,616 | Sept. 22 | 4002 | 892 | 106 | 904 |
| Bottle | A. A. Boschelli | 741,879 | Oct. 20 | 2854 | 637 | 106 | 1889 |
| Bottle | C. E. McClellan | 744,385 | Nov. 17 | 3125 | 671 | 107 | 698 |
| Bottle and stopper | C. Holloway | 737,739 | Sept. 1 | 343 | 72 | 106 | 78 |
| Bottle and stopper. Combined | W. Stender | 722,053 | Mar. 3 | 738 | 164 | 103 | 159 |
| Bottle and stopper therefor | H. R. Bell | 724,655 | Apr. 7 | 439 | 106 | 103 | 1263 |
| Bottle attachment | W. J. Lowenstein | 728,735 | May 19 | 3613 | 802 | 104 | 806 |
| Bottle attachment | C. J. Rowe | 734,754 | July 28 | 3820 | 890 | 105 | 852 |
| Bottle-cap | E. Norton | 730,561 | June 9 | 1892 | 422 | 104 | 1534 |
| Bottle-cap | H. S. Brewington | 733,352 | July 7 | 1171 | 277 | 105 | 246 |
| Bottle-cap | H. D. Jones | 734,561 | July 28 | 3443 | 803 | 105 | 777 |
| Bottle-cap | E. Norton | 736,001 | Aug. 11 | 1852 | 396 | 105 | 1395 |
| Bottle-cap | A. J. Martin | 736,988 | Aug. 25 | 3672 | 814 | 105 | 1816 |
| Bottle-cap shaper | J. Gilbert | 730,634 | June 9 | 2019 | 448 | 104 | 1563 |
| Bottle-capping machine | M. E. Noyes | 720,175 | Feb. 10 | 1403 | 320 | 102 | 1137 |
| Bottle-capping machine | C. L. Du Vivier | 720,570 | Feb. 17 | 2162 | 502 | 102 | 1309 |
| Bottle-capping machine | J. W. Madison | 738,219 | Sept. 8 | 1338 | 290 | 106 | 305 |
| Bottle-capsules. Machine for the manufacture of | W. Langbein | 726,800 | Apr. 28 | 4439 | 1001, 1002 | 103 | 2142 |
| Bottle-carrier | A. L. Rosmann and F. Barthold | 745,674 | Dec. 1 | 650 | 154 | 107 | 1236 |
| Bottle-carrier for testers | T. L. Valerius | 742,759 | Oct. 27 | 4537 | 1028 | 106 | 2253 |
| Bottle-cleaning machine | A. F. Cramer | 737,355 | Aug. 25 | 4339 | 966, 967 | 105 | 1957 |
| Bottle-cleansing machine | J. H. Koehler and G. Linde | 723,881 | Mar. 31 | 4135 | 932 | 103 | 927 |
| Bottle closing-head or stopper | G. G. Campbell | 719,184 | Jan. 27 | 3166 | 704 | 102 | 713 |
| Bottle-closure | E. M. Gilmore | 720,016 | Feb. 10 | 1111 | 254 | 102 | 1075 |
| Bottle-closure | E. W. Kempter | 723,679 | Mar. 24 | 3753 | 843 | 103 | 829 |
| Bottle-closure | L. S. and C. H. Bartlett | 724,779 | Apr. 7 | 679 | 159 | 103 | 1314 |
| Bottle-closure | C. W. Scott, C. E. Shipley, and H. Hughes. | 725,153 | Apr. 14 | 1371 | 309 | 103 | 1475 |
| Bottle-closure | C. J. Gustaveson | 728,909 | May 26 | 3936 | 874 | 104 | 887 |
| Bottle-closure | W. J. Moran | 731,934 | June 23 | 4431 | 988 | 104 | 2099 |
| Bottle-closure | W. Harrison | 734,323 | July 21 | 3020 | 711 | 105 | 672 |
| Bottle-closure | R. A. Hall | 734,545 | July 28 | 3421 | 798 | 105 | 772 |
| Bottle-closure | G. Morris | 738,467 | Sept. 8 | 1860 | 405 | 106 | 414 |
| Bottle-closure | H. Hatch and J. O. Cricks | 738,679 | Sept. 8 | 2275 | 500 | 106 | 502 |
| Bottle-closure | J. F. Perry | 745,380 | Dec. 1 | 123 | 28 | 107 | 1126 |
| Bottle-closure and brush | E. Weber and F. C. Frey | 722,170 | Mar. 3 | 939 | 208 | 103 | 199 |
| Bottle closure. Milk- | J. C. Kimsey | 745,195 | Nov. 24 | 4656 | 1014 | 107 | 1035 |
| Bottle-destroying stopper | F. Birchbauer | 723,812 | Mar. 31 | 4000 | 902 | 103 | 900 |
| Bottle detector. Refilled- | A. C. Nickloy | 728,963 | May 26 | 4027 | 895 | 104 | 905 |
| Bottle detector. Refilled- | H. V. Scott | 732,592 | June 30 | 5739 | 1274 | 104 | 2385 |
| Bottle dose-indicator. Medicine- | N. S. Lea | 727,645 | May 12 | 1542 | 348 | 104 | 350 |
| Bottle dropping-mouthpiece | W. L. Strauss | 718,801 | Jan. 20 | 2436 | 540 | 102 | 548 |
| Bottle-filler | A. Schneider | 717,627 | Jan. 6 | 187 | 47 | 102 | 41 |
| Bottle-filler | S. B. Goff | 745,051 | Nov. 24 | 4346 | 939 | 107 | 971 |
| Bottle-filler | J. W. Dunfee | 747,052 | Dec. 15 | 3214 | 733 | 107 | 1842 |
| Bottle-filler attachment | A. L. Neubert and S. T. Wiedenbeck | 719,846 | Feb. 3 | 782 | 183 | 102 | 989 |
| Bottle filler. Siphon- | C. S. Dolley | 720,682 | Feb. 17 | 2377 | 544 | 102 | 1353 |
| Bottle filler. Siphon- | C. M. Earl | 736,945 | Aug. 25 | 3595 | 797 | 105 | 1800 |
| Bottle filling and sealing machine | E. D. Schmitt | 735,911 | Aug. 11 | 1676 | 357, 358 | 105 | 1357 |
| Bottle filling, corking, and labeling | S. Fyfe | 732,539 | June 30 | 5639 | 1250, 1251 | 104 | 2362 |
| Bottle-filling machine | E. H. Schofield | 717,720 | Jan. 6 | 352 | 86 | 102 | 76 |
| Bottle-filling machine | L. Strebel | 723,065 | Mar. 17 | 2613 | 588, 589 | 103 | 584 |
| Bottle-filling machine | N. Glab | 732,065 | June 30 | 4704 | 1050, 1051 | 104 | 2168 |
| Bottle-filling machine | W. E. Brown | 734,809 | July 28 | 3944 | 920 | 105 | 878 |
| Bottle-filling machine | G. Norton | 740,899 | Oct. 6 | 945 | 212, 213 | 106 | 1449 |
| Bottle-filling machine | J. K. Weed | 740,997 | Oct. 6 | 1128 | 254 | 106 | 1486 |
| Bottle-filling-machine sight-feed housing | L. Strebel | 725,504 | Apr. 14 | 2020 | 455, 456 | 103 | 1613 |
| Bottle-filling machines. Filling-tube for | S. C. Miller | 738,622 | Sept. 8 | 2148 | 471 | 106 | 477 |
| Bottle for containing sauce, condiments, &c | L. A. Calhoun | 726,402 | Apr. 28 | 3664 | 830 | 103 | 1987 |
| Bottle funnel-neck. Water- | R. D. Bradley | 733,899 | July 14 | 2166 | 511 | 105 | 472 |
| Bottle-holder | R. L. McMurran | 743,914 | Nov. 10 | 2168 | 467 | 107 | 477 |
| Bottle holder and protector | J. W. Graeme | 732,936 | July 7 | 425 | 104 | 105 | 91 |
| Bottle holder or support | W. T. Holton | 717,995 | Jan. 6 | 899 | 202 | 102 | 193 |
| Bottle. Hot-water | J. Holland | 735,876 | Aug. 11 | 1616 | 345 | 105 | 1345 |
| Bottle-making machine | A. S. Reeves | 738,845 | Sept. 15 | 2617 | 577 | 106 | 593 |
| Bottle manufacturing machine. Glass- | T. W. Simpson | 732,902 | July 7 | 360 | 88, 89 | 105 | 79 |
| Bottle. Medicine- | C. W. McShane. (Reissue) | 12,097 | Mar. 10 | 1855 | 413 | 103 | 414 |
| Bottle. Milk- | S. L. Egenas | 743,841 | Nov. 10 | 2042 | 433 | 107 | 452 |
| Bottle-mouth dust-protector | M. Haas | 736,719 | Aug. 18 | 3161 | 697 | 105 | 1689 |
| Bottle-neck supporter | J. J. Cappelen | 720,665 | Feb. 17 | 2351 | 539 | 102 | 1347 |
| Bottle. Non-refillable | A. G. Stevens | 718,031 | Jan. 6 | 964 | 214 | 102 | 208 |
| Bottle. Non-refillable | W. Flatten and J. C. Ahrens | 719,451 | Feb. 3 | 69 | 16 | 102 | 840 |
| Bottle. Non-refillable | R. Koch | 720,035 | Feb. 10 | 1153 | 263 | 102 | 1074 |
| Bottle. Non-refillable | H. A. Daniels | 720,230 | Feb. 10 | 1517 | 348 | 102 | 1180 |
| Bottle. Non-refillable | S. W. Plummer and F. Davis | 720,476 | Feb. 10 | 1950 | 446 | 102 | 1260 |
| Bottle. Non-refillable | L. E. Shogren | 720,746 | Feb. 17 | 2488 | 572 | 102 | 1356 |
| Bottle. Non-refillable | P. J. Atzberger and F. W. Peters | 721,493 | Feb. 24 | 3907 | 888 | 102 | 1674 |
| Bottle. Non-refillable | H. Van Wie | 721,759 | Mar. 3 | 179 | 41 | 103 | 39 |
| Bottle. Non-refillable | C. F. Hately | 722,016 | Mar. 3 | 677 | 150 | 103 | 146 |
| Bottle. Non-refillable | H. Koorie and J. Turpangy | 722,718 | Mar. 17 | 2003 | 447 | 103 | 459 |
| Bottle. Non-refillable | H. Hafften | 722,974 | Mar. 17 | 2455 | 550 | 103 | 551 |
| Bottle. Non-refillable | F. A. Morley | 723,004 | Mar. 17 | 2504 | 563 | 103 | 561 |
| Bottle. Non-refillable | C. H. Pelton | 723,018 | Mar. 17 | 2528 | 567 | 103 | 566 |
| Bottle. Non-refillable | J. A. Lahn | 723,536 | Mar. 24 | 3513 | 786 | 103 | 780 |

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| Invention. | Name. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | | Spec. | Dr'g. | Vol. | Page. |
| Bottle. Non-refillable | E. C. Shilling | 724,958 | Apr. 7 | 992 | 228 | 103 | 1381 |
| Bottle. Non-refillable | J. B. Conger | 724,992 | Apr. 7 | 1061 | 242 | 103 | 1395 |
| Bottle. Non-refillable | T. C. De Hart | 725,051 | Apr. 14 | 1172 | 265 | 103 | 1435 |
| Bottle. Non-refillable | J. C. Rosenkranz | 725,146 | Apr. 14 | 1359 | 307 | 103 | 1473 |
| Bottle. Non-refillable | L. D. Parks | 725,283 | Apr. 14 | 1595 | 360 | 103 | 1523 |
| Bottle. Non-refillable | A. A. Donham and I. D. Pearce | 725,944 | Apr. 21 | 2830 | 642 | 103 | 1800 |
| Bottle. Non-refillable | E. Hoerichs | 726,223 | Apr. 21 | 3304 | 749 | 103 | 1899 |
| Bottle. Non-refillable | L. C. Edwards | 726,519 | Apr. 28 | 3912 | 885 | 103 | 2034 |
| Bottle. Non-refillable | G. Aurnhamer | 726,811 | Apr. 28 | 4461 | 1007 | 103 | 2146 |
| Bottle. Non-refillable | S. Wilkinson | 727,244 | May 5 | 790 | 169 | 104 | 170 |
| Bottle. Non-refillable | S. M. Cawker | 727,534 | May 5 | 1317 | 294 | 104 | 283 |
| Bottle. Non-refillable | J. R. Latham | 727,643 | May 12 | 1538 | 346<br>347 | 104 | 349 |
| Bottle. Non-refillable | J. C. Gustaveson | 728,099 | May 12 | 2402 | 535 | 104 | 529 |
| Bottle. Non-refillable | M. and M. B. O'Meara | 728,127 | May 12 | 2453 | 546 | 104 | 540 |
| Bottle. Non-refillable | C. W. Jones and J. J. Wagner | 728,241 | May 19 | 2675 | 598 | 104 | 308 |
| Bottle. Non-refillable | W. B. Hargan | 729,162 | May 26 | 4386 | 967 | 104 | 979 |
| Bottle. Non-refillable | B. Clemens | 730,003 | June 2 | 889 | 198 | 104 | 1309 |
| Bottle. Non-refillable | C. A. Lindstrom | 730,380 | June 9 | 1559 | 347 | 104 | 1462 |
| Bottle. Non-refillable | F. M. Arrington | 731,332 | June 16 | 3311 | 739 | 104 | 1848 |
| Bottle. Non-refillable | E. T. Griffith | 731,357 | June 16 | 3346 | 747 | 104 | 1855 |
| Bottle. Non-refillable | C. J. Gustaveson | 731,773 | June 23 | 4151 | 926 | 104 | 2036 |
| Bottle. Non-refillable | H. F. Buttner | 731,852 | June 23 | 4288 | 955 | 104 | 2068 |
| Bottle. Non-refillable | R. Byers | 731,854 | June 23 | 4290 | 955 | 104 | 2068 |
| Bottle. Non-refillable | L. F. Bizouarne and E. Kugler | 732,506 | June 30 | 5581 | 1236 | 104 | 2348 |
| Bottle. Non-refillable | E. M. and T. H. Mars | 733,062 | July 7 | 644 | 156 | 105 | 137 |
| Bottle. Non-refillable | G. H. Spafford | 733,293 | July 7 | 1069 | 255 | 105 | 225 |
| Bottle. Non-refillable | L. Brand | 734,039 | July 21 | 2467 | 576 | 105 | 554 |
| Bottle. Non-refillable | F. Jost | 734,881 | July 28 | 4063 | 947 | 105 | 903 |
| Bottle. Non-refillable | I. Morgenroth | 734,924 | July 28 | 4131 | 962 | 105 | 918 |
| Bottle. Non-refillable | L. C. McCarty | 735,130 | Aug. 4 | 158 | 36 | 105 | 1015 |
| Bottle. Non-refillable | A. Diemer | 735,349 | Aug. 4 | 588 | 121 | 105 | 1107 |
| Bottle. Non-refillable | H. Parker | 735,407 | Aug. 4 | 700 | 150 | 105 | 1130 |
| Bottle. Non-refillable | W. S. Palmer | 736,434 | Aug. 18 | 2602 | 571 | 105 | 1573 |
| Bottle. Non-refillable | J. L. Prior | 737,137 | Aug. 25 | 3915 | 870 | 105 | 1867 |
| Bottle. Non-refillable | D. W. Turk | 737,301 | Aug. 25 | 4239 | 944 | 105 | 1935 |
| Bottle. Non-refillable | C. R. Schumacher and D. Speelman | 737,498 | Aug. 25 | 4613 | 1034 | 105 | 2018 |
| Bottle. Non-refillable | W. E. Johnson | 738,686 | Sept. 8 | 2294 | 503 | 106 | 506 |
| Bottle. Non-refillable | H. Mackenzie | 739,265 | Sept. 15 | 3356 | 745 | 106 | 750 |
| Bottle. Non-refillable | H. Koorie | 740,285 | Sept. 29 | 5273 | 1188 | 106 | 1191 |
| Bottle, &c. Non-refillable | P. B. Jagger | 740,363 | Sept. 29 | 5412 | 1219 | 106 | 1221 |
| Bottle. Non-refillable | F. Ondra | 740,773 | Oct. 6 | 739 | 166 | 106 | 1403 |
| Bottle. Non-refillable | F. Ondra | 740,774 | Oct. 6 | 740 | 167 | 106 | 1403 |
| Bottle. Non-refillable | J. M. Stafford | 740,995 | Oct. 6 | 1125 | 253 | 106 | 1485 |
| Bottle. Non-refillable | E. Risse | 741,372 | Oct. 13 | 1887 | 416 | 106 | 1670 |
| Bottle. Non-refillable | E. C. Rosenaw | 741,374 | Oct. 13 | 1889 | 416 | 106 | 1670 |
| Bottle. Non-refillable | C. C. Guernsey | 741,578 | Oct. 13 | 2288 | 511 | 106 | 1753 |
| Bottle. Non-refillable | S. C. Kindig and T. J. Spicer | 741,912 | Oct. 20 | 2931 | 654 | 106 | 1904 |
| Bottle. Non-refillable | M. C. Johnson | 742,328 | Oct. 27 | 3782 | 847 | 106 | 2093 |
| Bottle. Non-refillable | H. A. Clinton | 742,592 | Oct. 27 | 4254 | 958 | 106 | 2190 |
| Bottle. Non-refillable | R. Hearns | 742,985 | Nov. 3 | 288 | 65 | 107 | 63 |
| Bottle. Non-refillable | C. H. Miller | 743,907 | Nov. 10 | 2160 | 465 | 107 | 476 |
| Bottle. Non-refillable | W. B. Cockrell | 743,974 | Nov. 10 | 2288 | 491 | 107 | 505 |
| Bottle. Non-refillable | M. M. Kearney | 744,556 | Nov. 17 | 3421 | 737 | 107 | 760 |
| Bottle. Non-refillable | W. S. Barnett | 744,674 | Nov. 17 | 3608 | 778 | 107 | 799 |
| Bottle. Non-refillable | W. S. Barnett | 744,675 | Nov. 17 | 3610 | 778 | 107 | 800 |
| Bottle. Non-refillable | G. W. Shook | 744,695 | Nov. 17 | 3643 | 785 | 107 | 806 |
| Bottle. Non-refillable | B. W. Glass | 744,746 | Nov. 24 | 3780 | 814 | 107 | 854 |
| Bottle. Non-refillable | M. M. Addison | 745,552 | Dec. 1 | 442 | 104 | 107 | 1192 |
| Bottle. Non-refillable | I. N. Burke | 745,566 | Dec. 1 | 463 | 109 | 107 | 1195 |
| Bottle. Non-refillable | S. C. Kindig and T. J. Spicer | 746,102 | Dec. 8 | 1449 | 325 | 107 | 1428 |
| Bottle. Non-refillable | S. C. Kindig and T. J. Spicer | 746,103 | Dec. 8 | 1450 | 325 | 107 | 1428 |
| Bottle. Non-refillable | H. Engel | 746,313 | Dec. 8 | 1843 | 419 | 107 | 1512 |
| Bottle. Non-refillable | T. S. Philpott | 746,374 | Dec. 8 | 1943 | 443 | 107 | 1533 |
| Bottle. Non-refillable | J. J. Darragh, Jr | 746,681 | Dec. 15 | 2498 | 571 | 107 | 1678 |
| Bottle. Non-refillable | E. S. Irvin and F. B. Jackson | 746,842 | Dec. 15 | 2797 | 644 | 107 | 1745 |
| Bottle. Non-refillable | Z. Wiseman | 747,826 | Dec. 22 | 4634 | 1047 | 107 | 2176 |
| Bottle. Non-refillable | O. C. Berchtold | 748,042 | Dec. 29 | 5090 | 1150 | 107 | 2297 |
| Bottle, Non-refillable | E. T. Curran | 748,051 | Dec. 29 | 5110 | 1155 | 107 | 2301 |
| Bottle. Non-refilling | L. E. Wentworth | 718,407 | Jan. 13 | 1638 | 360 | 102 | 397 |
| Bottle. Non-reusable | C. H. Spinney, 2d | 728,319 | May 19 | 2844 | 629 | 104 | 644 |
| Bottle. Nursing- | M. Bonnefont | 730,337 | June 9 | 1473 | 325 | 104 | 1444 |
| Bottle. Nursing- | M. Cantwell | 735,707 | Aug. 11 | 1295 | 277 | 105 | 1274 |
| Bottle. Nursing- | A. M. White | 747,025 | Dec. 15 | 3149 | 721 | 107 | 1824 |
| Bottle-opener | I. E. Newell | 725,277 | Apr. 14 | 1587 | 359 | 103 | 1521 |
| Bottle or flask | F. R. Johnston | 745,858 | Dec. 1 | 1007 | 227 | 107 | 1314 |
| Bottle or jar cap | J. S. Alston | 719,715 | Feb. 3 | 552 | 125 | 102 | 969 |
| Bottle or jar safety-closure | J. V. Hull | 734,177 | July 21 | 2732 | 642 | 105 | 611 |
| Bottle or jar stopper | D. L. Bollermann | 740,620 | Oct. 6 | 462 | 101 | 106 | 1345 |
| Bottle or other closures. Cap or cover for | J. F. J. Gunning | 724,851 | Apr. 7 | 814 | 187 | 103 | 1343 |
| Bottle or other vessel | Z. F. Jones | 737,741 | Sept. 1 | 345 | 73 | 106 | 78 |
| Bottle or similar receptacle closure | W. L. Rose | 728,981 | May 26 | 4059 | 901 | 104 | 912 |
| Bottle or the like closure | C. B. Overbaugh | 738,230 | Sept. 8 | 1357 | 294 | 106 | 309 |
| Bottle or vessel stopper device | G. P. Sullivan and Z. P. Freeman | 733,344 | July 7 | 1158 | 275 | 105 | 244 |
| Bottle-package | F. Jones | 739,604 | Sept. 22 | 3983 | 888<br>889 | 106 | 900 |
| Bottle registering attachment | M. S. Simon | 737,290 | Aug. 25 | 4221 | 940 | 105 | 1931 |
| Bottle-rinser | M. W. Norkewitz | 721,824 | Mar. 3 | 301 | 66 | 103 | 66 |
| Bottle-rinsing apparatus | D. Wickham | 723,792 | Mar. 24 | 3953 | 892 | 103 | 873 |
| Bottle-rinsing machine | F. N. Young | 742,269 | Oct. 27 | 3672 | 820<br>821 | 106 | 2079 |
| Bottle. Self-sealing | W. E. Forster | 747,402 | Dec. 22 | 3864 | 869 | 107 | 2001 |
| Bottle. Siphon- | L. Magidson | 722,523 | Mar. 10 | 1623 | 358 | 103 | 365 |
| Bottle. Siphon- | O. Palotai | 732,027 | June 23 | 4628 | 1034<br>1035 | 104 | 2139 |
| Bottle. Siphon- | W. H. Birchmore | 732,038 | June 30 | 4656 | 1040 | 104 | 2159 |
| Bottle. Siphon- | J. G. Henrich | 741,965 | Oct. 20 | 3049 | 680 | 106 | 1928 |

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| | | | | Spec. | Dr'g. | Vol. | Page. |
| Bottle-soaking machine | S. Volz | 736,037 | Aug. 11 | 1912 | 408 | 105 | 1408 |
| Bottle-soaking machine | T. J. Barry, A. Wehmiller, and J. W. Dawson. | 737,195 | Aug. 25 | 4025 | 892 | 105 | 1890 |
| Bottle-stand | F. Renken | 731,710 | June 23 | 4031 | 900 | 104 | 2011 |
| Bottle-stopper | M. Hartog | 721,299 | Feb. 24 | 3546 | 806 | 102 | 1630 |
| Bottle-stopper | J. L. Ruger | 721,330 | Feb. 24 | 3609 | 820 | 102 | 1623 |
| Bottle-stopper | H. Campbell | 721,541 | Feb. 24 | 3986 | 908 | 102 | 1732 |
| Bottle, &c., stopper | H. Bouton | 722,802 | Mar. 17 | 2161 | 483 | 103 | 492 |
| Bottle-stopper | M. J. Conroy | 722,814 | Mar. 17 | 2189 | 488 | 103 | 497 |
| Bottle-stopper | G. F. Hardinge | 722,978 | Mar. 17 | 2462 | 551 | 103 | 553 |
| Bottle, &c., stopper | D. C. Demarest | 723,370 | Mar. 24 | 3209 | 719 | 103 | 717 |
| Bottle-stopper | H. Gramlich | 723,598 | Mar. 24 | 3623 | 810 | 103 | 802 |
| Bottle-stopper | W. H. Sherman | 723,741 | Mar. 24 | 3866 | 869 | 103 | 854 |
| Bottle-stopper | H. S. Brewington | 724,794 | Apr. 7 | 705 | 165 | 103 | 1320 |
| Bottle-stopper | A. J. Kempien | 725,970 | Apr. 21 | 2867 | 650 | 103 | 1808 |
| Bottle-stopper | W. B. Langan | 727,388 | May 5 | 1050 | 228 | 104 | 226 |
| Bottle-stopper | F. B. Thatcher | 727,711 | May 12 | 1692 | 377 | 104 | 382 |
| Bottle-stopper | O. Grözinger | 728,907 | May 26 | 3932 | 873 | 104 | 886 |
| Bottle-stopper | G. S. Barnes and S. Ruffin | 729,835 | June 2 | 583 | 129 | 104 | 1247 |
| Bottle-stopper | J. R. Greenaway | 730,254 | June 9 | 1338 | 294 | 104 | 1414 |
| Bottle-stopper | F. R. Magan | 730,939 | June 16 | 2569 | 572 | 104 | 1699 |
| Bottle-stopper | E. J. Bennett | 731,659 | June 23 | 3946 | 878 | 104 | 1995 |
| Bottle-stopper | A. Lucas | 731,798 | June 23 | 4195 | 935 | 104 | 2046 |
| Bottle-stopper | A. T. Otto | 734,191 | July 21 | 2759 | 647 | 105 | 616 |
| Bottle-stopper | E. A. Nugent | 736,430 | Aug. 18 | 2595 | 569 | 105 | 1571 |
| Bottle-stopper | G. West | 736,466 | Aug. 18 | 2655 | 583 | 105 | 1585 |
| Bottle-stopper | S. H. Rogers | 737,025 | Aug. 25 | 3734 | 828 | 105 | 1830 |
| Bottle-stopper | A. J. Kempien | 738,917 | Sept. 15 | 2737 | 605 | 106 | 620 |
| Bottle-stopper | W. S. Barnett | 744,676 | Nov. 17 | 3611 | 778 | 107 | 800 |
| Bottle-stopper | A. Frederiksen | 745,175 | Nov. 24 | 4617 | 1001 | 107 | 1027 |
| Bottle-stopper | J. C. Bowers | 745,477 | Dec. 1 | 320 | 75 | 107 | 1167 |
| Bottle-stopper | W. H. Sherman | 747,004 | Dec. 15 | 3112 | 712 | 107 | 1816 |
| Bottle-stopper | T. R. Stetson | 747,498 | Dec. 22 | 4033 | 906 | 107 | 2040 |
| Bottle-stopper | A. Buckman | 748,161 | Dec. 29 | 5318 | 1208 | 107 | 2347 |
| Bottle stopper and fitting | J. F. Fitzsimmons | 726,039 | Apr. 21 | 2979 | 677 | 103 | 1831 |
| Bottle-stopper attachment. Dose-measuring | J. W. Patterson | 730,044 | June 2 | 956 | 214 | 104 | 1322 |
| Bottle-stopper head | G. Limbach | 722,596 | Mar. 10 | 1744 | 388 | 103 | 390 |
| Bottle-stopper head | L. Strebel | 725,505 | Apr. 14 | 2021 | 456 | 103 | 1613 |
| Bottle-stopper head | L. Strebel | 728,142 | May 12 | 2478 | 551 | 104 | 545 |
| Bottle stopper. Nursing- | W. H. Morton | 721,722 | Mar. 3 | 123 | 27 | 103 | 27 |
| Bottle stopper or seal | C. Schönert | 731,509 | June 23 | 3663 | 817 | 104 | 1940 |
| Bottle stopper. Paste or mucilage | A. Merrill | 726,724 | Apr. 28 | 4291 | 969 | 103 | 2112 |
| Bottle-stopper rubber-disk attacher | T. H. Alcorn and E. L. Chatfield | 728,351 | May 19 | 2901 | 641 | 104 | 656 |
| Bottle-stopper. Self-closing | F. W. Johnson | 745,191 | Nov. 24 | 4648 | 1012 | 107 | 1034 |
| Bottle-stoppering apparatus | S. Burkman | 726,505 | Apr. 28 | 3883 | 879 | 103 | 2029 |
| Bottle-stoppering device | W. R. Green | 742,312 | Oct. 27 | 3758 | 841 | 106 | 2088 |
| Bottle-stoppering device | W. R. Green | 743,638 | Nov. 10 | 1680 | 353 | 107 | 375 |
| Bottle-stoppering machines, &c. Automatic feeder mechanism for | F. O. Woodland | 732,987 | July 7 | 507 | 126 | 105 | 109 |
| Bottle-stopping device | R. Gross | 723,459 | Mar. 24 | 3360 | 752 | 103 | 750 |
| Bottle support. Nursing- | B. E. Ives | 747,973 | Dec. 29 | 4957 | 1119 | 107 | 2268 |
| Bottle-tin-foiling machine | J. F. Schneider | 732,656 | June 30 | 5857 | 1297, 1298, 1299, 1300 | 104 | 2411 |
| Bottle-tin-foiling machine | C. R. Twitchell and W. E. Brown | 733,771 | July 14 | 1908 | 450 | 105 | 419 |
| Bottle-unstoppering device. Aerated-water- | R. W. McGowan | 734,929 | July 28 | 4139 | 964 | 105 | 919 |
| Bottle valve mechanism | D. H. Monks | 746,551 | Dec. 8 | 2245 | 515 | 107 | 1600 |
| Bottle-washer | H. S. Brewington | 723,818 | Mar. 31 | 4012 | 904 | 103 | 902 |
| Bottle washing and rinsing machine | C. C. Parker | 736,769 | Aug. 18 | 3242 | 716, 717 | 105 | 1705 |
| Bottle-washing apparatus | R. A. Parker and F. Goebel | 740,990 | Oct. 6 | 1113 | 251 | 106 | 1483 |
| Bottle-washing apparatus | O. Eick | 743,155 | Nov. 3 | 649 | 140 | 107 | 136 |
| Bottle washing, filling, and corking machine | F. L. Seely | 740,320 | Sept. 29 | 5334 | 1201, 1202 | 106 | 1204 |
| Bottle-washing machine | B. Gallagher | 717,671 | Jan. 6 | 266 | 67 | 102 | 51 |
| Bottle-washing machine | J. A. Prince | 721,233 | Feb. 24 | 3446 | 783 | 102 | 1598 |
| Bottle-washing machine | W. J. Cunningham | 721,673 | Mar. 3 | 43 | 10 | 103 | 11 |
| Bottle-washing machine | E. B. Poggensee | 728,006 | May 12 | 2238 | 498 | 104 | 494 |
| Bottle-washing machine | A. B. Park | 728,754 | May 19 | 3643 | 810 | 104 | 812 |
| Bottle-washing machine | J. G. Hauck | 734,063 | July 21 | 2514 | 587, 588 | 105 | 565 |
| Bottle-washing machine | A. A. Busch, R. Gull, and T. J. Barry | 736,209 | Aug. 11 | 2206 | 475 | 105 | 1471 |
| Bottle-washing machine | V. Lapp | 736,272 | Aug. 11 | 2310 | 500, 501 | 105 | 1494 |
| Bottle-washing machine | A. L. Rosmann and F. Barthold | 737,150 | Aug. 25 | 3936 | 874, 875 | 105 | 1871 |
| Bottle-washing machine | J. A. Prince | 738,937 | Sept. 15 | 2769 | 613 | 106 | 627 |
| Bottle-washing machine | N. Glab | 741,241 | Oct. 13 | 1596 | 359 | 106 | 1607 |
| Bottle-washing machine | W. E. Brown | 743,821 | Nov. 10 | 2006 | 426 | 107 | 443 |
| Bottle-washing machine | H. C. Vogel | 744,443 | Nov. 17 | 3234 | 693 | 107 | 722 |
| Bottle-washing machine | H. C. Kennedy | 744,560 | Nov. 17 | 3426 | 738 | 107 | 761 |
| Bottle-washing-machine bottle-holder | B. F. Schirmer | 733,558 | July 14 | 1537 | 366 | 105 | 342 |
| Bottle-wire cutter | J. Trafford | 729,241 | May 26 | 4529 | 997 | 104 | 1009 |
| Bottle-wire detacher | P. F. Cassidy | 735,466 | Aug. 4 | 833 | 177 | 105 | 1157 |
| Bottle with spherical or ball-valve stopper | A. W. Woodward | 724,405 | Mar. 31 | 5209 | 1168 | 103 | 1147 |
| Bottles after having been washed. Conveying and draining device for | A. A. Pindstofte | 724,734 | Apr. 7 | 595 | 141 | 103 | 1295 |
| Bottles. Apparatus for simultaneously corking a number of | S. Hydén and K. A. Simonsson | 721,803 | Mar. 3 | 262 | 58, 59 | 103 | 58 |
| Bottles. Apparatus for simultaneously filling a number of | S. Hydén and K. A. Simonsson | 718,206 | Jan. 13 | 1278 | 280, 281 | 102 | 290 |
| Bottles, cans, &c. Top for tooth-powder | H. B. Kent | 747,978 | Dec. 29 | 4967 | 1121 | 107 | 2270 |
| Bottles. Device for preventing refilling of | F. W. Johnson | 737,633 | Sept. 1 | 135 | 30 | 106 | 32 |
| Bottles for aerated waters or other liquids under pressure. Stopper for | F. Illés | 746,841 | Dec. 15 | 2796 | 644 | 107 | 1745 |
| Bottles, jars, &c. Cap or closure for | E. Norton | 726,451 | Apr. 28 | 3751 | 850 | 103 | 2005 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Bottles, jars, &c. Closure for | A. L. Weissenthanner | 724,147 | Mar. 31 | 4687 | 1053 | 103 | 1040 |
| Bottles, jars, &c. Closure for | T. W. Taliaferro | 747,269 | Dec. 15 | 3618 | 816 | 107 | 1929 |
| Bottles, jars, &c. Device for stoppering | H. I. F. Strandh | 725,294 | Apr. 14 | 1614 | 364 | 103 | 1527 |
| Bottles, jars, &c. Metallic closure for | A. L. Weissenthanner | 745,702 | Dec. 1 | 698 | 160 | 107 | 1247 |
| Bottles, jars, or similar receptacles. Stopper for | F. R. Wilkins | 739,628 | Sept. 22 | 4031 | 899 | 106 | 912 |
| Bottles, jars, &c. Protector for | J. W. Steel | 719,527 | Feb. 3 | 203 | 48 | 102 | 866 |
| Bottles, jars, &c. Stopper or closure for | W. S. Dorman | 740,631 | Oct. 6 | 473 | 104 | 106 | 1348 |
| Bottles, &c. Machine for filling | R. W. Huss | 718,711 | Jan. 20 | 2269 | 499 | 102 | 514 |
| Bottles, &c. Machine for hermetically closing | C. Jovignot | 741,249 | Oct. 13 | 1609 | 362 | 106 | 1610 |
| Bottles. Machine for producing glass | T. C. Duffield | 736,708 | Aug. 18 | 3141 | 692 / 693 | 105 | 1685 |
| Bottles. Means and device for closing | W. Wüst | 730,729 | June 9 | 2186 | 486 | 104 | 1597 |
| Bottles. Means for preventing refilling of | J. Reid | 738,238 | Sept. 8 | 1375 | 297 | 106 | 313 |
| Bottles non-refillable. Cork for making | H. Melchior | 731,485 | June 23 | 3617 | 807 | 104 | 1930 |
| Bottles or glasses. Packing for | D. H. Russell | 719,612 | Feb. 3 | 357 | 82 | 102 | 896 |
| Bottles or jars. Metal cap for | C. A. Calleson | 731,096 | June 16 | 2875 | 638 | 104 | 1761 |
| Bottles or jugs with aerated liquids. Apparatus for filling | A. Schroedter | 740,931 | Oct. 6 | 996 | 225 / 226 | 106 | 1459 |
| Bottles or similar articles. Machine for washing | B. Gallagher | 717,670 | Jan. 6 | 263 | 66 | 102 | 56 |
| Bottles or similar vessels. Closure device for | F. C. Miner | 732,877 | July 7 | 324 | 80 | 105 | 71 |
| Bottles or the like. Machine or apparatus for corking and labeling | W. Higgins and W. G. Edmonds | 745,840 | Dec. 1 | 976 | 219 | 107 | 1307 |
| Bottles or tubes of liquefied carbonic acid, &c. Apparatus for discharging | J. Camus | 726,214 | Apr. 21 | 3285 | 746 | 103 | 1894 |
| Bottles or vessels. Closing | E. Ritsert | 744,617 | Nov. 17 | 3510 | 757 | 107 | 777 |
| Bottles or vessels. Fitting and case for ink or like | J. F. Fitzsimmons | 726,038 | Apr. 21 | 2977 | 676 | 103 | 1830 |
| Bottles. Packing | A. Mauser | 723,174 | Mar. 17 | 2810 | 633 / 634 | 103 | 625 |
| Bottles, &c. Packing | A. Mauser | 733,242 | July 7 | 968 | 233 / 234 | 105 | 230 |
| Bottles previous to cleaning and rinsing. Machine for soaking | A. A. Pindstofte | 724,499 | Apr. 7 | 146 | 35 | 103 | 1201 |
| Bottles, &c. Stopper-confiner for flexible | C. F. Cushing | 745,421 | Dec. 1 | 202 | 46 | 107 | 1142 |
| Bottles, &c. Stopper device for non-refillable | J. Guthrie | 731,048 | June 16 | 2779 | 619 | 104 | 1741 |
| Bottled goods. Treating | R. Birkholz | 727,575 | May 12 | 1411 | 317 | 104 | 322 |
| Bottler's protective device | E. J. Sheehan | 725,881 | Apr. 21 | 2714 | 617 | 103 | 1777 |
| Bottling and corking machine | F. O. Jerram | 728,396 | May 19 | 2971 | 654 / 655 | 104 | 670 |
| Bottling apparatus | J. Beiser | 721,854 | Mar. 3 | 361 | 79 | 103 | 79 |
| Bottling apparatus | E. E. Ford | 732,678 | June 30 | 5897 | 1308 / 1309 | 104 | 2419 |
| Bottling apparatus. Liquid- | G. F. Sumner | 722,263 | Mar. 10 | 1132 | 250 / 251 | 103 | 256 |
| Bottling-machine | A. Schneider | 732,123 | June 30 | 4820 | 1075 | 104 | 2192 |
| Bouquet-holder | D. Rait, Jr | 740,178 | Sept. 29 | 5071 | 1140 | 106 | 1150 |
| Bouquet-holder. Fountain | E. Buchan | 742,832 | Nov. 3 | 27 | 6 | 107 | 8 |
| Bow | J. J. Adams | 736,051 | Aug. 11 | 1935 | 413 | 105 | 1413 |
| Bowl-holder | G. Grimm | 722,228 | Mar. 10 | 1068 | 235 | 103 | 243 |
| Bowls. Manufacture of integral stems and bases for blown | C. G. Drew | 735,732 | Aug. 11 | 1330 | 287 | 105 | 1281 |
| Bowling-alley | W. H. Wiggins | 722,340 | Mar. 10 | 1278 | 284 | 103 | 287 |
| Bowling-alley | E. Reisky | 732,444 | June 30 | 5448 | 1211 | 104 | 2325 |
| Bowling-alley. Loop-the-loop | L. W. Maddaus | 738,558 | Sept. 8 | 2036 | 443 | 106 | 453 |
| Bowling-alley pin-spotter | C. L. Bastian | 729,118 | May 26 | 4301 | 951 | 104 | 960 |
| Bowling-ball | J. T. Rice | 746,576 | Dec. 8 | 2289 | 525 | 107 | 1610 |
| Bowling game | O. Schwidetzky | 718,391 | Jan. 13 | 1611 | 354 | 102 | 360 |
| Bowling-game apparatus. Coin-operated | R. E. Gatter | 718,338 | Jan. 13 | 1525 | 338 | 102 | 343 |
| Bowling-pin | B. A. Stevens | 720,982 | Feb. 17 | 2912 | 668 | 102 | 1466 |
| Bowling-pin | B. A. Stevens | 721,976 | Mar. 3 | 606 | 135 | 103 | 132 |
| Box: | | | | | | | |
| *See* Air-tight box. | | | | | | | |
| *See* Annealing-box. | | | | | | | |
| *See* Axle-box. | | | | | | | |
| *See* Bait-box. | | | | | | | |
| *See* Ballot-box. | | | | | | | |
| *See* Battery-box. | | | | | | | |
| *See* Berry-box. | | | | | | | |
| *See* Candy-box. | | | | | | | |
| *See* Ceiling or wall box. | | | | | | | |
| *See* Cigar-box. | | | | | | | |
| *See* Cigar-display box. | | | | | | | |
| *See* Coal-box. | | | | | | | |
| *See* Collapsible box. | | | | | | | |
| *See* Collapsible or folding box. | | | | | | | |
| *See* Covered box. | | | | | | | |
| *See* Deposit-box. | | | | | | | |
| *See* Display-box. | | | | | | | |
| *See* Egg or fruit box. | | | | | | | |
| *See* Exhibiting-box. | | | | | | | |
| *See* Fare-box. | | | | | | | |
| *See* Feed-box. | | | | | | | |
| *See* Floor-box. | | | | | | | |
| *See* Folding box. | | | | | | | |
| *See* Freezing-box. | | | | | | | |
| *See* Fruit-box. | | | | | | | |
| *See* Garbage-box. | | | | | | | |
| *See* Hat-box. | | | | | | | |
| *See* Horseshoer's tool-box. | | | | | | | |
| *See* Ice-box. | | | | | | | |
| *See* Journal-box. | | | | | | | |
| *See* Letter-box. | | | | | | | |
| *See* Lock-box. | | | | | | | |
| *See* Locomotive smoke-box. | | | | | | | |
| *See* Lunch-box. | | | | | | | |
| *See* Mail-box. | | | | | | | |
| *See* Mail-delivery box. | | | | | | | |
| *See* Match-box. | | | | | | | |
| *See* Messenger-box. | | | | | | | |
| *See* Metallic box. | | | | | | | |
| *See* Miter-box. | | | | | | | |
| *See* Money-box. | | | | | | | |
| *See* Money-saving box. | | | | | | | |
| *See* Newspaper-box. | | | | | | | |
| *See* Packing-box. | | | | | | | |
| *See* Packing or shipping box. | | | | | | | |
| *See* Packing-ring box. | | | | | | | |
| *See* Paint-box. | | | | | | | |
| *See* Paper box. | | | | | | | |
| *See* Salt-box. | | | | | | | |
| *See* Sand-box. | | | | | | | |
| *See* Sheet-metal box. | | | | | | | |
| *See* Snuff or tobacco box. | | | | | | | |
| *See* Sound-box. | | | | | | | |
| *See* Stereotype casting-box. | | | | | | | |
| *See* Street-box. | | | | | | | |
| *See* Stuffing-box. | | | | | | | |
| *See* Talking-machine sound-box. | | | | | | | |
| *See* Tobacco-box. | | | | | | | |
| *See* Tooth-powder box. | | | | | | | |
| *See* Turpentine-box. | | | | | | | |
| *See* Vehicle dumping-box. | | | | | | | |
| *See* Wagon-box. | | | | | | | |
| *See* Work-box. | | | | | | | |
| *See* Worsted-box. | | | | | | | |
| *See* Zinc-box. | | | | | | | |
| Box | H. H. Belknap | 727,531 | May 5 | 1312 | 292 | 104 | 282 |
| Box | W. C. Doscher | 727,600 | May 12 | 1448 | 325 | 104 | 330 |
| Box | A. Bauer | 732,156 | June 30 | 4899 | 1090 | 104 | 2208 |

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| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Box | E. Gerbereux | 732,844 | July 7 | 266 | 66 | 105 | 59 |
| Box | H. P. Guyton | 732,848 | July 7 | 271 | 68 | 105 | 60 |
| Box | A. Bauer | 735,013 | July 28 | 4299 | 1000 | 105 | 952 |
| Box | A. Gallo | 736,244 | Aug. 11 | 2265 | 490 | 105 | 1483 |
| Box | W. W. W. Green | 740,009 | Sept. 29 | 4767 | 1072, 1073 | 106 | 1086 |
| Box | I. W. Allen | 742,271 | Oct. 27 | 3675 | 821 | 106 | 2071 |
| Box | E. A. G. Bierwirth | 744,284 | Nov. 17 | 2948 | 630 | 107 | 659 |
| Box | G. Becker and R. J. Sprenger | 744,855 | Nov. 24 | 3971 | 855 | 107 | 894 |
| Box | W. B. Brooks, Jr | 747,932 | Dec. 29 | 4869 | 1099 | 107 | 2249 |
| Box and cover therefor | C. J. Sundstrom | 727,226 | May 5 | 762 | 163 | 104 | 164 |
| Box and reel. Combined | W. H. Atkinson | 741,391 | Oct. 13 | 1920 | 424 | 106 | 1676 |
| Box-blank cutting and creasing roll | E. A. McMillin | 725,863 | Apr. 21 | 2684 | 611 | 103 | 1771 |
| Box-blank pasting and folding machine | E. G. Staude | 730,410 | June 9 | 1606 | 358, 359, 360 | 104 | 1472 |
| Box, cabinet, &c | J. T. Hoyt | 729,345 | May 26 | 4710 | 1041 | 104 | 1047 |
| Box-corner-cutting machine | G. E. Priest | 738,483 | Sept. 8 | 1897 | 414, 415 | 106 | 422 |
| Box-counter | H. G. Roth | 737,777 | Sept. 1 | 410 | 87 | 106 | 90 |
| Box-cover. Detachable | H. G. Roth | 737,776 | Sept. 1 | 409 | 86, 87 | 106 | 90 |
| Box-cover. Sectional | T. H. Brady | 738,195 | May 19 | 2578 | 575 | 104 | 588 |
| Box-covering and corner-staying machine | T. Morgan | 742,343 | Oct. 27 | 3808 | 853 | 106 | 2099 |
| Box-covering machine | P. S. Smith | 744,122 | Nov. 17 | 2619 | 559, 560 | 107 | 587 |
| Box-covering-machine form-block | P. S. Smith | 748,022 | Dec. 29 | 5052 | 1141 | 107 | 2289 |
| Box-ending machine | C. W. Hobbs | 743,642 | Nov. 10 | 1685 | 354, 355 | 107 | 376 |
| Box-fastener | C. B. Baldwin | 719,553 | Feb. 3 | 259 | 60 | 102 | 878 |
| Box-fastener | W. Baker, Sr | 724,242 | Mar. 31 | 4895 | 1096 | 103 | 1080 |
| Box-fastener | J. M. Sias | 724,343 | Mar. 31 | 5077 | 1135, 1136 | 103 | 1117 |
| Box-fastener | P. V. Day | 729,288 | May 26 | 4614 | 1020 | 104 | 1027 |
| Box-fastener | C. M. Johnson | 729,595 | June 2 | 131 | 32 | 104 | 1154 |
| Box-fastener | A. Bennett | 730,336 | June 9 | 1472 | 325 | 104 | 1444 |
| Box-fastener | G. E. McVey | 731,603 | June 23 | 3842 | 856 | 104 | 1974 |
| Box-fastener | C. M. Johnson | 737,411 | Aug. 25 | 4449 | 998 | 105 | 1981 |
| Box-fastener | E. Samuel | 738,490 | Sept. 8 | 1909 | 417 | 106 | 424 |
| Box-fastener | C. W. Beehler | 739,639 | Sept. 22 | 4052 | 904 | 106 | 916 |
| Box-fastener | C. W. Beehler | 739,640 | Sept. 22 | 4053 | 904 | 106 | 916 |
| Box-fastener | C. W. Beehler | 740,732 | Oct. 6 | 645 | 145 | 106 | 1386 |
| Box-fastener | C. W. Beehler | 742,563 | Oct. 27 | 4204 | 947 | 106 | 2179 |
| Box-fastener | C. W. Beehler | 745,188 | Nov. 24 | 4520 | 978 | 107 | 1008 |
| Box-fastener | W. A. Anger and A. C. Brenckle | 745,986 | Dec. 8 | 1240 | 280 | 107 | 1382 |
| Box-fastener | C. W. Beehler | 747,035 | Dec. 15 | 3162 | 725 | 107 | 1827 |
| Box filling and closing machine. Paper- | R. P. Brown | 732,703 | July 7 | 21 | 5, 6 | 105 | 8 |
| Box-filling machine | W. H. Wyman | 736,668 | Aug. 18 | 3047 | 673 | 105 | 1665 |
| Box for bottles, candy-boxes, &c | C. A. Brackett | 718,081 | Jan. 13 | 1056 | 235 | 102 | 242 |
| Box-forming machine | C. W. Miles | 732,769 | July 7 | 127 | 35, 36 | 105 | 31 |
| Box label and lid holder | E. J. Mitchell | 747,997 | Dec. 29 | 4998 | 1129 | 107 | 2277 |
| Box-lid and tag holder | H. J. Wieneke | 735,328 | Aug. 4 | 557 | 114 | 105 | 1100 |
| Box-lid fastener | C. W. Walters | 744,138 | Nov. 17 | 2646 | 564 | 107 | 593 |
| Box-lid holder | C. Jack | 722,652 | Mar. 10 | 1841 | 411 | 103 | 411 |
| Box-lid support | J. C. Hatch | 739,544 | Sept. 22 | 3862 | 865 | 106 | 874 |
| Box-lid supports, &c | E. C. Luks | 727,983 | May 12 | 2196 | 489 | 104 | 487 |
| Box lock. Collapsible | J. R. Van Wormer | 734,449 | July 21 | 3231 | 761 | 105 | 716 |
| Box locking attachment | F. H. Chase | 734,255 | July 21 | 2884 | 674 | 105 | 645 |
| Box-machine | G. R. Wyman | 731,729 | June 23 | 4066 | 907 | 104 | 2018 |
| Box-machine | G. R. Wyman | 731,730 | June 23 | 4069 | 907, 908 | 104 | 2019 |
| Box making and filling machine | W. H. Butler | 721,667 | Mar. 3 | 30 | 6, 7, 8 | 103 | 8 |
| Box-making machine | F. M. Wade | 732,668 | June 30 | 5878 | 1304 | 104 | 2414 |
| Box-opener | J. W. Mellor | 735,125 | Aug. 4 | 151 | 33 | 105 | 1014 |
| Box or case | B. L. Gale | 718,616 | Jan. 20 | 2093 | 456 | 102 | 479 |
| Box or case | J. Nevelson | 742,747 | Nov. 10 | 1863 | 393 | 107 | 415 |
| Box or package and material therefor | J. H. Greenstreet | 722,423 | Mar. 10 | 1422 | 314 | 103 | 319 |
| Box or receptacle | L. H. Rogers | 736,021 | Aug. 11 | 1884 | 403 | 105 | 1402 |
| Box-plate and attachment therefor | H. McCann | 737,950 | Sept. 1 | 787 | 172 | 106 | 173 |
| Box-setting-up machine. Dovetail- | J. E. Erickson | 740,000 | Sept. 29 | 4749 | 1067, 1068 | 106 | 1082 |
| Box-shooks. Machine for making | F. C. Irvine | 738,197 | Sept. 8 | 1304 | 282, 283, 284 | 106 | 298 |
| Box stand or bracket | H. Luensmann | 729,619 | June 2 | 170 | 41 | 104 | 1162 |
| Box-stuff sawing and assorting machine | G. A. Smith | 725,630 | Apr. 14 | 2246 | 508 | 103 | 1662 |
| Box-tool | E. Marcille | 729,372 | May 26 | 4747 | 1050 | 104 | 1054 |
| Boxes. Apparatus for the manufacture of cardboard | K. E. Beschorner | 742,383 | Oct. 27 | 3875 | 870 | 106 | 2114 |
| Boxes, &c. Implement for opening | N. Savaria | 718,882 | Jan. 20 | 2588 | 578 | 102 | 580 |
| Boxes. Machine for making folding partition-packing for shipping- | C. A. Haas, W. B. Knight, and B. Kochs. | 746,325 | Dec. 8 | 1862 | 424, 425 | 107 | 1516 |
| Boxes. Machine for making shooks for | H. W. Morgan | 726,329 | Apr. 28 | 3534 | 800 | 103 | 1961 |
| Boxes. Machine for pressing necks in | P. S. Smith | 748,429 | Dec. 29 | 5790 | 1320 | 107 | 2450 |
| Boxes. Making | J. Schmidt, Jr | 744,414 | Nov. 17 | 3177 | 681 | 107 | 709 |
| Boxes or other receptacles. Corner-stay for | G. W. Dyarman | 728,688 | May 19 | 3528 | 785 | 104 | 788 |
| Boxing articles. Apparatus for | H. Sévène and E. D. Cahen | 737,502 | Aug. 25 | 4623 | 1035, 1036, 1037 | 105 | 2021 |
| Brace: *See* Angle-brace. Axle-brace. Bed-brace. Body-brace. Boiler brace. Corner-brace. Dash-brace. Fence-brace. Furniture-brace. Post-brace. Rail-brace. Railway-rail brace. Ratchet and drill brace. Riveting-brace. Waist-brace. | | | | | | | |
| Brace | S. Clawson | 721,861 | Mar. 3 | 382 | 84 | 103 | 83 |

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| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Brace | J. Holley | 745,059 | Nov. 24 | 4363 | 942 | 107 | 975 |
| Brace | A. S. E. Metcalf | 747,746 | Dec. 22 | 4476 | 1009 | 107 | 2139 |
| Bracelet | S. O. Bigney | 737,064 | Aug. 25 | 3796 | 840 | 105 | 1842 |
| Bracelet or belt. Automatically-adjustable | F. Mason | 728,741 | May 19 | 3624 | 805 | 104 | 808 |
| Bracelet or the like | E. P. Davis | 725,322 | Apr. 14 | 1671 | 377 | 103 | 1538 |
| Bracelets, rings, &c. Apparatus for making and ornamenting | J. Aranyi | 745,555 | Dec. 1 | 446 | 105 | 107 | 1192 |
| Bracket: *See* Baby-jumper bracket. Curtain-bracket. Curtain-pole bracket. Curtain-rod bracket. Feed-pan bracket. Gas-bracket. Hanger-bracket. Hanging bracket. Insulator-bracket. Knockdown bracket. Lamp-bracket. Mirror-bracket. Mirror or lamp bracket. Picture-molding bracket. Pipe-bracket. Portable bracket. Roof-bracket. Scaffold-bracket. Shade-bracket. Shade and curtain bracket. Shade and curtain-pole bracket. Shade-roller bracket. Shingle-bracket. Shingling-bracket. Telephone-bracket. Window-shelf bracket. | | | | | | | |
| Bracket | C. F. Kade | 723,677 | Mar. 24 | 3751 | 842 | 103 | 289 |
| Bracket | H. G. Voight | 734,780 | July 28 | 3867 | 901 | 105 | 862 |
| Bracket for supporting rods or tubes | A. I. Grainger | 734,059 | July 21 | 2507 | 584 | 105 | 564 |
| Bracket-holder | G. F. Price | 734,948 | July 28 | 4176 | 971 | 105 | 927 |
| Bracket or clamp | A. Sonsthagen | 746,188 | Dec. 8 | 1611 | 359 | 107 | 1464 |
| Brackets, &c. Support for | H. F. Keil | 742,330 | Oct. 27 | 3784 | 848 | 106 | 2094 |
| Braid | M. Mittendorff | 746,548 | Dec. 8 | 2242 | 514 | 107 | 1599 |
| Braiding-machine | W. Mundt | 722,183 | Mar. 3 | 967 | 214 / 215 | 103 | 205 |
| Braiding-machine | J. J. Feeley | 727,926 | May 12 | 2098 | 466 | 104 | 465 |
| Braiding-machine | J. Lundgren | 736,856 | Aug. 18 | 3422 | 757 / 758 | 105 | 1744 |
| Braiding-machine | L. W. Whitehead | 746,215 | Dec. 8 | 1657 | 368 | 107 | 1474 |
| Braiding-machine spindle | L. W. Whitehead | 738,383 | Sept. 8 | 1700 | 369 | 106 | 381 |
| Brake: *See* Air-brake. Air or similar brake. Autocar-brake. Automatic brake. Automatic friction-brake. Automobile-brake. Back-pedaling brake. Bicycle-brake. Bicycle coaster-brake. Car-brake. Carriage-brake. Centrifugal-machine brake. Coaster-brake. Cycle or vehicle brake. Derailment-brake. Electric brake. Electromagnetic brake. Elevator-brake. Emergency-brake. Fluid-pressure brake. Friction-brake. Gun-brake. Gun recoil-brake. Hoisting-machine brake. Hydraulic brake. Pneumatic brake. Railway-brake. Railway-vehicle brake. Spring-brake. Track-brake. Vehicle-brake. Vehicle storage-brake. Vehicle-wheel brake. Wagon-brake. | | | | | | | |
| Brake | J. E. Berry | 720,777 | Feb. 17 | 2537 | 585 | 102 | 1387 |
| Brake | R. Saltsman | 723,036 | Mar. 17 | 2558 | 575 | 103 | 573 |
| Brake | U. de Civry | 726,862 | May 5 | 51 | 12 | 104 | 14 |
| Brake | G. E. Moffett | 736,997 | Aug. 25 | 3685 | 817 | 105 | 1819 |
| Brake | J. H. Pick | 744,792 | Nov. 24 | 3856 | 830 | 107 | 870 |
| Brake | J. B. Gaston | 747,410 | Dec. 22 | 3875 | 872 | 107 | 2004 |
| Brake | G. E. Babcock | 747,672 | Dec. 22 | 4352 | 983 | 107 | 2111 |
| Brake | D. F. Earnest | 748,355 | Dec. 29 | 5646 | 1288 | 107 | 2417 |
| Brake and friction operating mechanism. Combined | H. N. Covell | 718,916 | Jan. 20 | 2651 | 594 | 102 | 593 |
| Brake apparatus | F. L. Clark | 726,864 | May 5 | 54 | 13 | 104 | 15 |
| Brake apparatus | P. J. Conboy | 747,378 | Dec. 22 | 3818 | 859 | 107 | 1990 |
| Brake apparatus. Automatic fluid-pressure | M. Corrington | 721,428 | Feb. 24 | 3794 | 863 | 102 | 1671 |
| Brake apparatus. Automatic fluid-pressure | G. Westinghouse | 727,039 | May 5 | 431 | 90 | 104 | 94 |
| Brake apparatus. Automatic fluid-pressure | G. Westinghouse | 727,040 | May 5 | 432 | 90, 91 | 104 | 94 |
| Brake apparatus. Fluid-pressure | J. Reichmann | 732,375 | June 30 | 5322 | 1178 / 1179 | 104 | 2296 |
| Brake appliance. Fluid-pressure | A. G. Turlay | 742,103 | Oct. 20 | 3356 | 748 / 749 | 106 | 1989 |
| Brake applicable to motor-cars, other railway-vehicles, and revolving shafts generally. | E. Wadey | 722,930 | Mar. 17 | 2382 | 533 | 103 | 536 |
| Brake-beam | J. H. Baker | 718,812 | Jan. 20 | 2453 | 543 / 544 | 102 | 551 |
| Brake-beam | S. A. Crone | 720,676 | Feb. 17 | 2369 | 543 | 102 | 1351 |
| Brake-beam | S. A. Crone | 720,677 | Feb. 17 | 2370 | 543 | 102 | 1351 |
| Brake-beam | S. A. Crone | 720,678 | Feb. 17 | 2372 | 543 | 102 | 1351 |
| Brake-beam | H. C. Buhoup | 721,664 | Mar. 3 | 23 | 5 | 103 | 7 |
| Brake-beam | R. H. Hornbrook | 725,709 | Apr. 21 | 2405 | 545 | 103 | 1709 |
| Brake-beam | L. A. Shepard | 727,317 | May 5 | 750 | 160 | 104 | 161 |
| Brake-beam | L. A. Shepard | 727,318 | May 5 | 752 | 161 | 104 | 162 |
| Brake-beam | L. A. Shepard | 727,319 | May 5 | 753 | 161 | 104 | 163 |
| Brake-beam | C. M. Carnahan | 729,487 | May 26 | 4934 | 1093 / 1094 | 104 | 1095 |
| Brake-beam | H. Vissering | 729,707 | June 2 | 319 | 74 | 104 | 1194 |
| Brake-beam | H. W. Frost | 729,924 | June 2 | 727 | 162 | 104 | 1276 |
| Brake-beam | S. A. Crone | 731,668 | June 23 | 3959 | 881 | 104 | 1997 |
| Brake-beam | S. A. Crone | 731,865 | June 23 | 4303 | 960 | 104 | 2071 |

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| | | | | Spec. | Dr'g. | Vol. | Page. |
| Brake-beam | L. A. Shepard | 733,433 | July 14 | 1327 | 313 | 105 | 297 |
| Brake-beam | P. T. Handiges | 733,839 | July 14 | 2054 | 485 | 105 | 448 |
| Brake-beam | A. Lipschutz | 733,854 | July 14 | 2084 | 493 | 105 | 454 |
| Brake-beam | H. Pries | 735,296 | Aug. 4 | 503 | 101 | 105 | 1088 |
| Brake-beam | J. F. Scott and T. M. Gallagher | 741,380 | Oct. 13 | 1900 | 419 | 106 | 1672 |
| Brake-beam | H. C. Buhoup | 742,388 | Oct. 27 | 3883 | 872 | 106 | 2113 |
| Brake-beam | J. M. Hansen | 743,498 | Nov. 10 | 1413 | 294 | 107 | 318 |
| Brake-beam | W. P. Bettendorf | 744,027 | Nov. 17 | 2436 | 523 | 107 | 550 |
| Brake-beam | S. A. Crone | 744,723 | Nov. 24 | 3741 | 807 | 107 | 846 |
| Brake-beam | H. W. Wolff and A. Lipschutz | 747,288 | Dec. 15 | 3654 | 826, 827 | 107 | 1938 |
| Brake-beam fulcrum | F. W. Cooloaugh | 722,565 | Mar. 10 | 1697 | 378 | 103 | 380 |
| Brake-beam fulcrum | G. B. F. Cooper | 742,597 | Oct. 27 | 4265 | 961 | 106 | 2193 |
| Brake-beam fulcrum-block | R. P. Lamont | 743,004 | Nov. 3 | 354 | 76 | 107 | 75 |
| Brake-beam reversible fulcrum | C. H. Williams, Jr. | 722,655 | Mar. 10 | 1846 | 412 | 103 | 412 |
| Brake-beam strut | H. C. Buhoup | 731,541 | June 23 | 3729 | 830, 831 | 104 | 1952 |
| Brake-beam. Trussed | C. F. Huntoon and H. B. Robischung. | 721,564 | Feb. 24 | 4031 | 916 | 102 | 1721 |
| Brake-beams. Manufacture of substance for filling holiow | F. Schubert | 723,319 | Mar. 24 | 3093 | ------ | 103 | 698 |
| Brake-block | O. Whitmore | 735,636 | Aug. 4 | 1152 | 244 | 105 | 1226 |
| Brake block and shoe. Separable | W. D. Sargent | 748,220 | Dec. 29 | 5425 | 1235 | 107 | 2369 |
| Brake-coupling. Automatic fluid-pressure | H. Kelley and F. M. Colvin | 735,884 | Aug. 11 | 1627 | 347, 348 | 105 | 1347 |
| Brake-cylinder. Compound | R. L. Rickman | 747,772 | Dec. 22 | 4530 | 1021 | 107 | 2152 |
| Brake-fitting | O. Whitmore | 727,045 | May 5 | 439 | 92 | 104 | 96 |
| Brake for electric or other tram-cars or vehicles | G. Atherton | 732,914 | July 7 | 389 | 94 | 105 | 84 |
| Brake-handle | J. Grady | 733,185 | July 7 | 858 | 208 | 105 | 180 |
| Brake-head | J. J. Kinzer | 734,568 | July 28 | 3455 | 806 | 105 | 779 |
| Brake-head | W. D. Sargent | 748,106 | Dec. 29 | 5216 | 1181 | 107 | 2325 |
| Brake-lever | J. White | 727,869 | May 12 | 1981 | 441 | 104 | 438 |
| Brake-lever | E. M. Akers | 730,431 | June 9 | 1652 | 370 | 104 | 1481 |
| Brake mechanism | J. King | 719,813 | Feb. 3 | 735 | 172 | 102 | 978 |
| Brake mechanism | W. H. Wendeler | 734,207 | July 21 | 2781 | 652, 653 | 105 | 621 |
| Brake mechanism. Fluid- | J. F. Mallinckrodt | 728,485 | May 19 | 3139 | 694 | 104 | 706 |
| Brake mechanism. High-speed | E. G. Shortt | 725,995 | Apr. 21 | 2912 | 661, 662 | 103 | 1817 |
| Brake mechanism. Railway- | F. W. Chaffee | 745,569 | Dec. 1 | 466 | 110 | 107 | 1196 |
| Brake-operating apparatus | L. T. Canfield and J. D. Murray | 742,834 | Nov. 3 | 30 | 6 | 107 | 9 |
| Brake-operating device | M. O'Brien | 741,160 | Oct. 13 | 1429 | 327 | 106 | 1570 |
| Brake-operating mechanism. Automatic | M. A. Born | 725,611 | Apr. 14 | 2205 | 498 | 103 | 1654 |
| Brake retainer. Automatic driver- | W. Hamilton and W. Holmes | 734,859 | July 28 | 4029 | 941 | 105 | 895 |
| Brake-rigging | E. A. Curtis | 737,713 | Sept. 1 | 279 | 58, 59 | 106 | 63 |
| Brake-shoe | D. and H. Rawstron | 717,620 | Jan. 6 | 174 | 44 | 102 | 39 |
| Brake-shoe | O. M. Stimson and P. Parke | 721,526 | Feb. 24 | 3966 | 903, 904 | 102 | 1707 |
| Brake-shoe | A. L. Streeter | 723,334 | Mar. 24 | 3116 | 701 | 103 | 702 |
| Brake-shoe | W. E. Gorton | 725,336 | Apr. 14 | 1696 | 382 | 103 | 1544 |
| Brake-shoe | D. Rawstron | 725,587 | Apr. 14 | 2156 | 489 | 103 | 1643 |
| Brake-shoe | W. E. Steinhauser | 727,224 | May 5 | 760 | 162 | 104 | 164 |
| Brake-shoe | J. J. Kinzer | 734,566 | July 28 | 3452 | 805 | 105 | 779 |
| Brake-shoe | J. J. Kinzer | 734,567 | July 28 | 3453 | 806 | 105 | 779 |
| Brake-shoe | J. B. Perry | 734,745 | July 28 | 3793 | 885 | 105 | 847 |
| Brake-shoe | J. S. Thompson | 735,426 | Aug. 4 | 752 | 160 | 105 | 1140 |
| Brake-shoe | T. M. Bell | 736,350 | Aug. 18 | 2454 | 536 | 105 | 1542 |
| Brake-shoe | A. L. Streeter | 738,856 | Sept. 15 | 2633 | 581 | 106 | 597 |
| Brake-shoe | H. Jones | 739,605 | Sept. 22 | 3985 | 889 | 106 | 900 |
| Brake-shoe | J. D. Gallagher | 747,912 | Dec. 22 | 4807 | 1087 | 107 | 2213 |
| Brake-shoe and making same | W. D. Sargent | 746,172 | Dec. 8 | 1581 | 354 | 107 | 1458 |
| Brake-shoe key | A. L. Streeter | 737,674 | Sept. 1 | 212 | 45 | 106 | 49 |
| Brake-shoe key-bolt | E. L. Adreon, Jr. | 743,793 | Nov. 10 | 1954 | 414 | 107 | 433 |
| Brake-shoe key-bolt | E. L. Adreon, Jr. | 743,794 | Nov. 10 | 1956 | 414 | 107 | 434 |
| Brake-shoe. Railway | J. Meehan | 720,167 | Feb. 10 | 1388 | 318 | 102 | 1135 |
| Brake-shoe. Railway | J. Player | 726,339 | Apr. 28 | 3552 | 805 | 103 | 1965 |
| Brake-shoe. Railway | B. Willhide | 737,185 | Aug. 25 | 4009 | 889 | 105 | 1887 |
| Brake-shoe. Removable | C. W. Larson | 745,359 | Dec. 1 | 80 | 20 | 107 | 1118 |
| Brake-shoes. Making | J. Timms and S. P. Bush | 721,845 | Mar. 3 | 343 | ------ | 103 | 75 |
| Brake-shoes. Making | W. D. Sargent | 739,791 | Sept. 22 | 4327 | 969 | 106 | 978 |
| Brake slack-adjuster | E. E. Crowell | 740,814 | Oct. 6 | 813 | 182, 183 | 106 | 1419 |
| Brake system. Electric | C. E. Barry | 722,936 | Mar. 17 | 2396 | 535 | 103 | 539 |
| Brake system. Electric | F. E. Case | 733,900 | July 14 | 2167 | 511 | 105 | 472 |
| Brake-wheel | P. D. Schenck | 725,780 | Apr. 21 | 2539 | 576 | 103 | 1739 |
| Brakes. Inertia-governor for fluid-pressure | R. A. Parke | 739,918 | Sept. 29 | 4595 | 1033 | 106 | 1050 |
| Brakes. Operating electric | F. E. Case | 736,914 | Aug. 18 | 3520 | 782, 783 | 105 | 1764 |
| Braking device. Automatic adjustable | M. M. Miller | 728,174 | May 12 | 2542 | 565 | 104 | 558 |
| Braking moving loads | F. E. Case | 733,901 | July 14 | 2173 | 512 | 105 | 473 |
| Braking system | F. E. Case | 729,734 | June 2 | 388 | 88 | 104 | 1208 |
| Branding and heating iron. Pneumatic | J. H. Belz | 723,230 | Mar. 24 | 2936 | 657 | 103 | 666 |
| Branding apparatus | A. Hayes | 728,710 | May 19 | 3564 | 792 | 104 | 796 |
| Branding fluid | T. H. Brown and J. E. Staples | 720,779 | Feb. 17 | 2542 | ------ | 102 | 1388 |
| Branding-iron | A. A. Phipps | 736,149 | Aug. 11 | 2107 | 452 | 105 | 1449 |
| Branding-iron. Self-heating | W. A. King | 728,116 | May 12 | 2424 | 540 | 104 | 535 |
| Branding-machine | H. Goehring | 724,177 | Mar. 31 | 4739 | 1062 | 103 | 1051 |
| Brauner-feeder. Automatic | A. J. Maskrey | 740,295 | Sept. 29 | 5286 | 1190 | 106 | 1194 |
| Brauner feeding mechanism | A. J. Maskrey | 740,294 | Sept. 29 | 5283 | 1190 | 106 | 1194 |
| Bread | G. H. Hosmer | 740,858 | Oct. 6 | 882 | 197 | 106 | 1434 |
| Bread and cake rack | J. Kopp | 725,851 | Apr. 21 | 2662 | 606 | 103 | 1766 |
| Bread and kneading board | L. C. Hartsock | 738,322 | Sept. 8 | 1584 | 343 | 106 | 357 |
| Bread and making same. Malted | R. Graham | 726,283 | Apr. 28 | 3432 | ------ | 103 | 1940 |
| Bread-cutter | A. Anderson | 718,944 | Jan. 20 | 2710 | 606 | 102 | 606 |
| Bread-cutter | J. S. Sackett | 731,818 | June 23 | 4233 | 943 | 104 | 2056 |
| Bread-cutter | W. H. Busser | 748,344 | Dec. 29 | 5627 | 1282 | 107 | 2412 |

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| | | | | Spec. | Dr'g. | Vol. | Page. |
| Bread-cutting machine | L. J. Odell | 741,161 | Oct. 13 | 1431 | 327 | 106 | 1570 |
| Bread-making machine | C. Kessler | 745,018 | Nov. 24 | 4248 | 921, 922, 923 | 107 | 951 |
| Bread mixer and kneader | J. F. Stevens | 733,763 | July 14 | 1893 | 447 | 105 | 416 |
| Bread mixer and kneader | J. F. Stevens. (Reissue) | 12,167 | Nov. 3 | 1206 | 249 | 107 | 258 |
| Breaker-bar | M. F. Williams | 738,507 | Sept. 8 | 1948 | 425 | 106 | 433 |
| Breast and pole strap fastener | E. Z. Smithpeter | 747,012 | Dec. 15 | 3129 | 716 | 107 | 1819 |
| Breastpin pin-tongue and hinge-joint | G. H. Tilford | 731,245 | June 16 | 3143 | 698 | 104 | 1812 |
| Breastpin-tongues. Hinge-joint for | E. W. Morehouse | 729,383 | May 26 | 4766 | 1054 | 104 | 1058 |
| Breast-strap | J. W. Kavetzki | 744,967 | Nov. 24 | 4171 | 902 | 107 | 935 |
| Breast-supporter | P. D. Beeman | 719,075 | Jan. 27 | 2961 | 661 | 102 | 672 |
| Breech-cloth supporter | H. G. Northfield | 727,188 | May 5 | 690 | 148 | 104 | 149 |
| Breech mechanism | J. F. Meigs | 724,597 | Apr. 7 | 335 | 82 | 103 | 1240 |
| Breech mechanism | J. B. Moore | 734,347 | July 21 | 3054 | 719, 720 | 105 | 680 |
| Breech-operating mechanism | H. G. Jakobsson | 746,706 | Dec. 15 | 2536 | 583 | 107 | 1687 |
| Brew-house-apparatus equipment | M. Henius | 732,350 | June 30 | 5275 | 1170 | 104 | 2286 |
| Brewers' grain. Drying | L. Atwood | 741,436 | Oct. 13 | 1991 | 441 | 106 | 1691 |
| Brewers' hose. Machine for cleaning | E. Pehl | 728,287 | May 19 | 2775 | 616 | 104 | 631 |
| Brewery construction | A. L. Neubert and S. T. Wiedenbeck | 737,453 | Aug. 25 | 4530 | 1015 | 105 | 1999 |
| Brewing | H. A. Hobson | 730,651 | June 9 | 2051 | 456 | 104 | 1569 |
| Brewing | H. E. Frees | 746,320 | Dec. 8 | 1853 | ..... | 107 | 1515 |
| Brewing apparatus | W. Griesser | 733,189 | July 7 | 863 | 209, 210 | 105 | 181 |
| Brick | J. B. Dunlap | 721,030 | Feb. 17 | 3001 | ..... | 102 | 1485 |
| Brick | G. Hering | 724,288 | Mar. 31 | 4976 | 1114 | 103 | 1097 |
| Brick | J. L. Braun | 729,918 | June 2 | 720 | 160, 161 | 104 | 1275 |
| Brick | M. J. Murphy | 733,069 | July 7 | 657 | 158 | 105 | 139 |
| Brick. Adhesive | W. Hayhow | 721,441 | Feb. 24 | 3812 | 867 | 102 | 1674 |
| Brick. Baffle-wall | K. Park | 747,329 | Dec. 15 | 3734 | 842 | 107 | 1955 |
| Brick. Building- | E. H. Vordtriede | 729,023 | May 26 | 4142 | 918 | 104 | 930 |
| Brick-clay crusher-rolls | J. H. Bach | 728,831 | May 26 | 3800 | 847 | 104 | 861 |
| Brick-column die | C. Schlickeysen | 720,972 | Feb. 17 | 2894 | 663 | 102 | 1462 |
| Brick construction | E. D. Scott | 721,751 | Mar. 3 | 169 | 39 | 103 | 37 |
| Brick-cut-off table | W. Frey | 720,797 | Feb. 17 | 2570 | 592 | 102 | 1394 |
| Brick-cut-off table | W. Frey | 734,124 | July 21 | 2636 | 622 | 105 | 590 |
| Brick-cutter | B. E. Bechtel | 719,722 | Feb. 3 | 563 | 127, 128 | 102 | 941 |
| Brick cutting and delivering apparatus | A. P. Steele | 720,751 | Feb. 17 | 2494 | 575 | 102 | 1378 |
| Brick-cutting machine | C. W. Raymond and D. Brown | 723,181 | Mar. 17 | 2835 | 637 | 103 | 632 |
| Brick-drier | T. M. Wilson | 721,988 | Mar. 3 | 631 | 140 | 103 | 137 |
| Brick-drying apparatus | H. H. Walsh | 732,978 | July 7 | 491 | 122 | 105 | 106 |
| Brick-drying floor | H. W. Croft | 741,630 | Oct. 20 | 2386 | 535 | 106 | 1790 |
| Brick-edge-smoothing blade | W. Frey. (Reissue) | 12,101 | Mar. 17 | 2921 | 654 | 103 | 649 |
| Brick. Fire- | J. Ayling | 731,653 | June 23 | 3937 | ..... | 104 | 1993 |
| Brick for heating purposes. Porous | J. J. Lawler | 742,879 | Nov. 3 | 104 | 24 | 107 | 24 |
| Brick handling and drying system | F. W. Dennis | 725,323 | Apr. 14 | 1673 | 377, 378 | 103 | 1539 |
| Brick-handling device | F. H. Jackson and G. M. Pierce | 747,181 | Dec. 15 | 3437 | 779 | 107 | 1891 |
| Brick-kiln | C. B. Platt | 718,022 | Jan. 6 | 950 | 210, 211 | 102 | 204 |
| Brick-kiln | J. H. Park | 718,871 | Jan. 20 | 2570 | 572 | 102 | 576 |
| Brick-kiln | J. Peck | 723,620 | Mar. 24 | 3662 | 821 | 103 | 810 |
| Brick-kiln | C. Cebulla | 736,492 | Aug. 18 | 2718 | 596 | 105 | 1597 |
| Brick-kiln | J. W. Aregood | 743,215 | Nov. 3 | 763 | 167 | 107 | 160 |
| Brick-kiln door | S. A. and J. M. West | 729,026 | May 26 | 4146 | 919 | 104 | 931 |
| Brick-kiln. Downdraft continuous | A. Yates | 719,974 | Feb. 3 | 1002 | 233 | 102 | 1036 |
| Brick-laying machine | J. H. Knight | 741,507 | Oct. 13 | 2139 | 476 | 106 | 1723 |
| Brick-machine | H. McIntosh | 717,707 | Jan. 6 | 331 | 79, 80, 81 | 102 | 72 |
| Brick-machine | C. E. Hendricks | 718,123 | Jan. 13 | 1124 | 248, 249 | 102 | 257 |
| Brick-machine | S. C. Brush | 720,218 | Feb. 10 | 1497 | 343 | 102 | 1155 |
| Brick-machine | A. L. and M. T. Symmonds | 727,489 | May 5 | 1236 | 275 | 104 | 267 |
| Brick-machine | D. B. Price | 729,094 | May 26 | 4262 | 941 | 104 | 953 |
| Brick-machine | H. G. Smith | 733,338 | July 7 | 1148 | 272 | 105 | 242 |
| Brick-machine | T. M. Boggs | 735,058 | Aug. 4 | 17 | 5,6 | 105 | 985 |
| Brick-machine | W. C. Burgum | 738,406 | Sept. 8 | 1740 | 378 | 106 | 390 |
| Brick-machine | C. W. Kilborn | 739,881 | Sept. 29 | 4529 | 1017 | 106 | 1034 |
| Brick machine. Cement- | J. D. Luttrell and W. C. Cantrell | 741,516 | Oct. 13 | 2157 | 481 | 106 | 1727 |
| Brick, &c. Machine for making | T. and W. L. Cole | 731,860 | June 23 | 4297 | 958, 959 | 104 | 2070 |
| Brick. Machine for making sand or chemical | C. W. Boyle | 742,574 | Oct. 27 | 4223 | 951 | 106 | 2184 |
| Brick-machine lubricating device | C. Chambers, Jr | 721,152 | Feb. 24 | 3271 | 749 | 102 | 1564 |
| Brick-machine mold | H. J. Flood | 725,619 | Apr. 14 | 2224 | 503 | 103 | 1057 |
| Brick-machine transferring device | A. F. Potvin | 732,221 | June 30 | 5028 | 1119 | 104 | 2236 |
| Brick-making machine | E. H. Janes | 720,928 | Feb. 17 | 2806 | 643, 644 | 102 | 1444 |
| Brick-making machine | R. C. Bishop | 725,025 | Apr. 14 | 1133 | 256 | 103 | 1427 |
| Brick-making machine | W. A. Houts | 737,842 | Sept. 1 | 553 | 120 | 106 | 123 |
| Brick-making machine | E. R. Sutcliffe | 744,430 | Nov. 17 | 3203 | 687, 688 | 107 | 715 |
| Brick-making plant | R. Laughray | 747,443 | Dec. 22 | 3932 | 885 | 107 | 2017 |
| Brick-manufacturing apparatus | E. Eaton | 727,113 | May 5 | 558 | 120 | 104 | 121 |
| Brick-manufacturing apparatus | E. Eaton | 727,114 | May 5 | 560 | 121 | 104 | 122 |
| Brick-mold | J. A. Heintz | 727,945 | May 12 | 2136 | 476 | 104 | 473 |
| Brick mold. Cement- | S. M. Kimble | 740,024 | Sept. 29 | 4807 | 1078 | 106 | 1095 |
| Brick-mold drying-shed | F. Danks | 725,940 | Apr. 21 | 2822 | 640 | 103 | 1798 |
| Brick-mold-handling machine | J. E. Grinder | 746,827 | Dec. 15 | 2765 | 637 | 107 | 1738 |
| Brick-molding machine | W. J. Leary | 727,646 | May 12 | 1542 | 348 | 104 | 350 |
| Brick or article. Refractory | F. J. Tone | 735,022 | July 28 | 4311 | ..... | 105 | 955 |
| Brick or briquet making machine | J. W. and G. W. Ferguson | 725,690 | Apr. 21 | 2366 | 535 | 103 | 1700 |
| Brick or tile. Building | J. Soss | 747,495 | Dec. 22 | 4030 | 905 | 107 | 2040 |

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| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Brick or tile cutting machines. Receiving-table for | J. Bensing | 718,078 | Jan. 13 | 1048 | 234 | 102 | 240 |
| Brick-package | W. Griesser | 733,190 | July 7 | 864 | 210 | 105 | 181 |
| Brick, &c. Press for making | W. Owen | 747,327 | Dec. 15 | 3730 | 840 841 | 107 | 1954 |
| Brick. Reflector- | J. W. Ivery | 741,497 | Oct. 13 | 2121 | 473 | 106 | 1719 |
| Brick tile | D. W. Anderson | 741,993 | Oct. 20 | 3106 | 692 | 106 | 1939 |
| Brick, tile, or other machines. Machine for feeding clay or other material to | C. G. Rust | 731,073 | June 16 | 2832 | 629 | 104 | 1752 |
| Brick, tile, or pottery kiln | W. B. Hughes | 744,200 | Nov. 17 | 2787 | 594 595 | 107 | 623 |
| Brick-truck | G. Barrall | 737,564 | Sept. 1 | 7 | 2 | 106 | 5 |
| Brick-truck | C. A. Carlson | 740,629 | Oct. 6 | 471 | 103 | 106 | 1347 |
| Brick-truck | A. A. Scott | 743,040 | Nov. 3 | 428 | 93 | 107 | 90 |
| Brick-truck | I. C. Jones | 746,520 | Dec. 8 | 2189 | 502 | 107 | 1587 |
| Bricks, &c. Apparatus for drying | C. Berhenke | 736,060 | Aug. 11 | 1965 | 418 | 105 | 1420 |
| Bricks for furnaces. Manufacture of | J. E. Kirkpatrick | 735,528 | Aug. 4 | 956 | ..... | 105 | 1184 |
| Bricks. Making glazed | W. E. Jaques | 723,279 | Mar. 24 | 3022 | 680 | 103 | 684 |
| Bricks. Manufacture of | S. T. H. Bradley | 727,071 | May 5 | 481 | 103 | 104 | 105 |
| Bricks. Manufacture of | M. Perkiewicz | 740,040 | Sept. 29 | 4833 | 1084 | 106 | 1101 |
| Bricks, &c. Means for burning | J. and E. A. Walsh | 747,283 | Dec. 15 | 3646 | 823 824 | 107 | 1936 |
| Bricks or blocks. Making | E. R. Sutcliffe | 744,431 | Nov. 17 | 3206 | ..... | 107 | 715 |
| Bricks or bodies for refractory linings, &c., and the products thereof. Making | E. W. Engels | 734,458 | July 21 | 3245 | ..... | 105 | 719 |
| Bricks or bodies for refractory linings, &c. Making | E. W. Engels | 734,457 | July 21 | 3243 | ..... | 105 | 719 |
| Bricks. System of building- | C. Nathan | 740,683 | Oct. 6 | 553 | 124 | 106 | 1366 |
| Brickwork metallic bond | H. E. Grant | 733,187 | July 7 | 861 | 209 | 105 | 181 |
| Bridge | J. B. Strauss | 738,954 | Sept. 15 | 2796 | 619 620 | 106 | 632 |
| Bridge-anchor | P. P. Jacob | 729,591 | June 2 | 124 | 31 | 104 | 1152 |
| Bridge. Bascule- | A. H. Scherzer and C. F. T. Kandeler. | 721,918 | Mar. 3 | 500 | 110 111 | 103 | 111 |
| Bridge. Bascule- | J. W. Page | 731,321 | June 16 | 3292 | 733 | 104 | 1844 |
| Bridge. Bascule- | J. W. Page | 731,322 | June 16 | 3293 | 734 | 104 | 1845 |
| Bridge. Bascule- | A. H. Scherzer and C. F. T. Kandeler. | 735,414 | Aug. 4 | 714 | 152 153 | 105 | 1132 |
| Bridge construction | J. F. Morton | 725,753 | Apr. 21 | 2484 | 563 | 103 | 1728 |
| Bridge construction | J. Tomlinson | 729,016 | May 26 | 4132 | 915 | 104 | 928 |
| Bridge construction | W. F. Walker | 737,537 | Aug. 25 | 4689 | 1051 | 105 | 2036 |
| Bridge construction | J. Tomlinson | 747,511 | Dec. 22 | 4058 | 913 | 107 | 2045 |
| Bridge construction. Combined clamp and hanger-rod for | G. F. Ernst | 746,317 | Dec. 8 | 1849 | 420 | 107 | 1514 |
| Bridge. Ferry- | J. Anderson | 747,836 | Dec. 22 | 4650 | 1051 | 107 | 2179 |
| Bridge. Floating | H. Kampmann | 745,192 | Nov. 24 | 4650 | 1012 | 107 | 1034 |
| Bridge-guard | J. S. Richardson | 726,348 | Apr. 28 | 3567 | 808 | 103 | 1968 |
| Bridge. Iron railway- | J. A. L. Waddell and I. G. Hedrick | 737,679 | Sept. 1 | 220 | 47 | 106 | 51 |
| Bridge or culvert | E. P. Spaulding | 743,946 | Nov. 10 | 2224 | 481 | 107 | 490 |
| Bridge. Road- | H. Friend | 725,695 | Apr. 21 | 2375 | 538 | 103 | 1702 |
| Bridge. Rolling lift- | S. T. Smetters | 719,153 | Jan. 27 | 3116 | 693 694 | 102 | 703 |
| Bridge. Suspension- | S. B. Cross and A. S. Ours | 746,679 | Dec. 15 | 2496 | 570 571 | 107 | 1677 |
| Bridge. Transfer- | A. H. Mallery | 743,901 | Nov. 10 | 2151 | 463 | 107 | 474 |
| Bridges. Automatic derailer for draw- | J. P. Cowing | 738,297 | Sept. 8 | 1507 | 326 | 106 | 339 |
| Bridle | H. E. von Kubin | 721,572 | Feb. 24 | 4067 | 922 923 | 102 | 1731 |
| Bridle | J. E. Noble | 725,626 | Apr. 14 | 2236 | 506 | 103 | 1660 |
| Bridle | O. W. Stiegler | 734,004 | July 21 | 2380 | 559 | 105 | 534 |
| Bridle-bit | C. Davis | 720,679 | Feb. 17 | 2374 | 543 | 102 | 1352 |
| Bridle-bit | W. T. Temple | 733,769 | July 14 | 1906 | 449 | 105 | 419 |
| Bridle-bit and horse-controlling device | J. O. Fowler, Jr | 739,163 | Sept. 15 | 3166 | 700 | 106 | 708 |
| Bridle-bit attachment | J. P. Bowmaker | 724,791 | Apr. 7 | 698 | 164 | 103 | 1318 |
| Bridle-bit. Reversible | H. P. Smith | 718,539 | Jan. 13 | 1931 | 423 | 102 | 430 |
| Bridle-check | G. E. Lattimer | 725,852 | Apr. 21 | 2664 | 606 | 103 | 1766 |
| Brine-cooler | A. H. Hutchinson | 736,852 | Aug. 18 | 3417 | 756 | 105 | 1742 |
| Brine. Purifying | G. N. Vis | 725,896 | Apr. 21 | 2740 | ..... | 103 | 1782 |
| Brine. Purifying | T. T. Gaff and J. F. Gent | 731,105 | June 16 | 2890 | 642 | 104 | 1763 |
| Brine-purifying apparatus | T. T. Gaff and J. F. Gent | 731,106 | June 16 | 2891 | 642 | 104 | 1764 |
| Briquet | W. J. Roussel | 719,047 | Jan. 27 | 2901 | ..... | 102 | 660 |
| Briquet | A. W. Chase | 728,369 | May 19 | 2926 | ..... | 104 | 661 |
| Briquet-binder | F. B. Merrill | 733,987 | July 21 | 2355 | ..... | 105 | 528 |
| Briquet-machine | F. Meyer | 745,968 | Dec. 1 | 1204 | 269 270 271 | 107 | 1357 |
| Briquet-making machine | E. B. A. Zwoyer | 718,043 | Jan. 6 | 980 | 217 218 | 102 | 211 |
| Briquet-mold | J. W. Bramwell | 726,136 | Apr. 21 | 3145 | 711 | 103 | 1865 |
| Briquets. Manufacture of | E. S. Meade | 719,830 | Feb. 3 | 762 | ..... | 102 | 984 |
| Briqueting-machine | W. A. Köneman | 724,588 | Apr. 7 | 313 | 76 77 78 | 103 | 1235 |
| Briqueting-machine | A. Johnson and J. C. Crofts | 724,876 | Apr. 7 | 855 | 196 197 | 103 | 1352 |
| Briqueting-machine | H. G. Layng | 741,511 | Oct. 13 | 2147 | 478 | 106 | 1725 |
| Bristle-combing machine | B. M. Schauman | 747,650 | Dec. 22 | 4312 | 969 970 | 107 | 2102 |
| Broiler | G. C. Parish | 745,376 | Dec. 1 | 114 | 26 | 107 | 1125 |
| Broiler for gas-stoves | H. H. Phillips | 739,214 | Sept. 15 | 3253 | 720 | 106 | 727 |
| Broiling meat or flesh of animals, &c. Apparatus for | F. Rademacher | 722,897 | Mar. 17 | 2337 | 523 | 103 | 527 |
| Bromids from bromin-containing solutions. Manufacturing | H. H. Dow | 733,467 | July 14 | 1383 | 327 | 105 | 310 |
| Bromin. Extracting | A. W. Smith | 725,161 | Apr. 14 | 1384 | ..... | 103 | 1478 |
| Bromin from brine. Extracting | H. H. Dow | 741,637 | Oct. 20 | 2398 | 538 | 106 | 1792 |
| Bromin. Manufacturing | H. H. Dow | 733,466 | July 14 | 1383 | 326 | 105 | 310 |
| Bromin. Recovering | C. D. Grove | 728,566 | May 19 | 3296 | ..... | 104 | 737 |
| Bronze-powder. Manufacturing | K. Huth | 726,932 | May 5 | 188 | 44 | 104 | 42 |

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| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Bronzing-machine | A. Weber | 748,125 | Dec. 29 | 5255 | 1193 | 107 | 2333 |
| Brooch | E. B Hough | 728,921 | May 26 | 3953 | 879 | 104 | 890 |
| Brooches, &c. Safety-catch for | G. W. Washburn | 719,919 | Feb. 3 | 906 | 212 | 102 | 1016 |
| Brooder | M. M. Johnson | 718,631 | Jan. 20 | 2114 | 460 | 102 | 483 |
| Brooder | J. H. Swayze | 722,437 | Mar. 10 | 1445 | 320 | 103 | 324 |
| Brooder | C. Staaff | 727,474 | May 5 | 1213 | 268 | 104 | 262 |
| Brooder | O. H. Grosland | 730,640 | June 9 | 2027 | 450 | 104 | 1564 |
| Brooder | I. Morrow | 733,863 | July 14 | 2101 | 495, 496 | 105 | 458 |
| Brooder | E. Bates | 733,938 | July 21 | 2242 | 527 | 105 | 506 |
| Brooder | E. Schill | 735,827 | Aug. 11 | 1517 | 325 | 105 | 1323 |
| Brooder | I. Morrow | 736,423 | Aug. 18 | 2583 | 566 | 105 | 1569 |
| Brooder. Chicken- | H. E. Bradshaw | 729,125 | May 26 | 4314 | 953 | 104 | 963 |
| Brooder. Chicken- | C. Mittelstadt | 738,466 | Sept. 8 | 1859 | 404, 405 | 106 | 414 |
| Brooder. Poultry- | J. B. Ranney | 730,296 | June 9 | 1410 | 309 | 104 | 1431 |
| Broom | R. Rosenbaum | 720,488 | Feb. 10 | 1968 | 450 | 102 | 1255 |
| Broom | J. F. Ossenfort | 726,096 | Apr. 21 | 3062 | 695 | 103 | 1848 |
| Broom and dusting-utensil holder | W. F. Rocole | 732,448 | June 30 | 5464 | 1212 | 104 | 2326 |
| Broom attachment | I. P. Kilgore | 734,887 | July 28 | 4073 | 950 | 105 | 905 |
| Broom attachment | C. D. Winne | 746,428 | Dec. 8 | 2037 | 467 | 107 | 1553 |
| Broom-binder | H. W. Langham | 744,211 | Nov. 17 | 2813 | 601 | 107 | 630 |
| Broom-bridle | J. R. Ross | 723,490 | Mar. 24 | 3443 | 770 | 103 | 766 |
| Broom-clasp | F. S. Smith | 739,230 | Sept. 15 | 3288 | 728 | 106 | 734 |
| Broom-filling machine. Circular- | W. Franz | 737,381 | Aug. 25 | 4378 | 976 | 105 | 1966 |
| Broom-filling table. Rotary- | L. J. Remmele | 743,328 | Nov. 3 | 987 | 214, 215 | 107 | 211 |
| Broom-handling tumbling-barrel | C. H. Porter | 723,180 | Mar. 17 | 2833 | 636 | 103 | 632 |
| Broom-hanger | W. S. De Woody | 735,725 | Aug. 11 | 1320 | 284 | 105 | 1279 |
| Broom-head holder and shaper. Combined | T. M. Gill | 734,428 | July 21 | 3194 | 752 | 105 | 708 |
| Broom-holder | W. J. Ashby | 721,412 | Feb. 24 | 3762 | 855 | 102 | 1664 |
| Broom-holder | H. P. Lanerd | 721,811 | Mar. 3 | 280 | 62 | 103 | 62 |
| Broom-holder | G. M. Eidt | 736,831 | Aug. 18 | 3377 | 746 | 105 | 1734 |
| Broom-holder | C. N. Pollock | 737,472 | Aug. 25 | 4560 | 1022 | 105 | 2006 |
| Broom-holder, clothes-rack, and towel-hanger. Combined | O. S. Perkins | 729,403 | May 26 | 4802 | 1064 | 104 | 1065 |
| Broom or brush. Rotary | L. J. Remmele | 743,195 | Nov. 3 | 723 | 158 | 107 | 151 |
| Broom-rack | A. B. Lehman | 718,005 | Jan. 6 | 923 | 205, 206 | 102 | 199 |
| Broom-rack | R. E. Wilder | 731,642 | June 23 | 3915 | 872 | 104 | 1989 |
| Broom-rack | F. F. Burtch | 742,581 | Oct. 27 | 4236 | 954 | 106 | 2186 |
| Broom-trimmer | L. Pelton | 743,554 | Nov. 10 | 1512 | 316 | 107 | 340 |
| Broom. Whisk- | H. L. Harris | 748,370 | Dec. 29 | 5677 | 1295 | 107 | 2425 |
| Brooms. Device for the protection, preservation, and convenience in the keeping of | C. W. McKellar | 743,746 | Nov. 10 | 1862 | 393 | 107 | 414 |
| Brush | J. R. Grundy | 718,341 | Jan. 13 | 1530 | 339 | 102 | 343 |
| Brush | C. E. Graham | 718,999 | Jan. 27 | 2814 | 631 | 102 | 642 |
| Brush | L. Johnson | 719,227 | Jan. 27 | 3248 | 725 | 102 | 731 |
| Brush | J. Moss and E. R. Blanchard | 720,051 | Feb. 10 | 1178 | 269 | 102 | 1090 |
| Brush | J. R. Sanford | 720,847 | Feb. 17 | 2653 | 613 | 102 | 1412 |
| Brush | W. A. Phinney | 721,601 | Feb. 24 | 4123 | 938 | 102 | 1743 |
| Brush | E. T. Baskin | 722,666 | Mar. 17 | 1889 | 420 | 103 | 436 |
| Brush | A. Hart | 723,462 | Mar. 24 | 3368 | 754 | 103 | 751 |
| Brush | T. Brantley | 723,579 | Mar. 24 | 3590 | 802 | 103 | 795 |
| Brush | M. M. Lahue | 726,544 | Apr. 28 | 3952 | 893 | 103 | 2042 |
| Brush | D. F. Maher | 726,716 | Apr. 28 | 4282 | 967 | 103 | 2110 |
| Brush | W. A. Mills | 726,727 | Apr. 28 | 4299 | 970 | 103 | 2113 |
| Brush | W. P. Van Loan | 727,035 | May 5 | 425 | 89 | 104 | 93 |
| Brush | J. R. Grundy | 727,354 | May 5 | 993 | 216 | 104 | 214 |
| Brush | H. L. King | 729,187 | May 26 | 4426 | 975, 976 | 104 | 988 |
| Brush | A. Steele | 729,515 | May 26 | 4985 | 1105 | 104 | 1106 |
| Brush | M. McCarthy | 735,797 | Aug. 11 | 1452 | 312 | 105 | 1308 |
| Brush | H. M. Schwartz | 737,970 | Sept. 1 | 826 | 181 | 106 | 181 |
| Brush | J. F. Runkle | 740,696 | Oct. 6 | 576 | 129 | 106 | 1372 |
| Brush | L. G. Kelly | 744,558 | Nov. 17 | 3423 | 738 | 107 | 760 |
| Brush | J. E. Currie, Jr | 745,420 | Dec. 1 | 201 | 46 | 107 | 1142 |
| Brush | J. J. Brokenshire | 745,775 | Dec. 1 | 823 | 187 | 107 | 1274 |
| Brush | A. R. Wiens | 746,217 | Dec. 8 | 1663 | 370 | 107 | 1475 |
| Brush | W. H. Bennett | 747,902 | Dec. 22 | 4789 | 1082 | 107 | 2209 |
| Brush | W. H. Bennett | 747,903 | Dec. 22 | 4790 | 1083 | 107 | 2210 |
| Brush. Air- | W. H. Shepler | 734,473 | July 21 | 3277 | 770 | 105 | 725 |
| Brush and making same | W. J. Wallace | 729,458 | May 26 | 4894 | 1084 | 104 | 1087 |
| Brush and mop and wringer therefor. Combined scrub- | R. H. Thomas | 728,332 | May 19 | 2872 | 634 | 104 | 650 |
| Brush and soap holder. Shaving | A. Q. Walsh | 723,563 | Mar. 24 | 3556 | 795 | 103 | 788 |
| Brush appliance. Tooth- | C. R. Lane | 736,607 | Aug. 18 | 2947 | 646 | 105 | 1645 |
| Brush attachment | J. F. Spence | 741,733 | Oct. 20 | 2592 | 577 | 106 | 1833 |
| Brush. Automatic bicycle- | J. M. Peterson | 719,608 | Feb. 3 | 348 | 81 | 102 | 895 |
| Brush. Automatic screen- | M. R. Crofoot | 735,713 | Aug. 11 | 1304 | 281 | 105 | 1276 |
| Brush-back drilling and filling machine | C. E. Flemming | 735,737 | Aug. 11 | 1345 | 289 | 105 | 1285 |
| Brush-backs. Machine for placing material in | C. W. Smith | 734,625 | July 28 | 3549 | 831, 832, 833 | 105 | 800 |
| Brush. Bath- | L. Lauterbach | 719,596 | Feb. 3 | 333 | 77 | 102 | 891 |
| Brush. Bath- | T. L. Newport | 727,993 | May 12 | 2214 | 493 | 104 | 490 |
| Brush. Bicycle- | W. Henn, Jr | 725,843 | Apr. 21 | 2649 | 603 | 103 | 1763 |
| Brush-clearing implement | F. X. Vallée | 734,287 | July 21 | 2951 | 688 | 105 | 658 |
| Brush. Combination floor, carpet, and wall | F. H. Loveless | 717,878 | Jan. 6 | 692 | 154 | 102 | 147 |
| Brush-cover | T. B. Flower | 741,321 | Oct. 13 | 1762 | 392 | 106 | 1639 |
| Brush-cutter | L. E. Gannett | 719,784 | Feb. 3 | 683 | 158 | 102 | 968 |
| Brush. Electric | C. T. Richmond | 736,154 | Aug. 11 | 2115 | 454 | 105 | 1451 |
| Brush for bran-dusters, bolters, scalpers, grain-scourers, and separators. | G. R. Davidson | 738,166 | Sept. 8 | 1248 | 271 | 106 | 286 |
| Brush for cleaning type | J. F. McPherson | 722,131 | Mar. 3 | 865 | 193 | 103 | 185 |
| Brush. Fountain- | J. F. Spence | 719,156 | Jan. 27 | 3121 | 695 | 102 | 704 |

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| | | | | Spec. | Dr'g. | Vol. | Page. |
| Brush. Fountain- | H. Brown | 722,281 | Mar. 10 | 1173 | 259 | 103 | 265 |
| Brush. Fountain- | G. C. Madison | 734,910 | July 28 | 4112 | 958 | 105 | 914 |
| Brush. Fountain- | C. Platner | 737,471 | Aug. 25 | 4559 | 1022 | 105 | 2006 |
| Brush. Fountain- | J. T. Langill | 745,503 | Dec. 1 | 363 | 84 | 107 | 1177 |
| Brush. Fountain blacking- | E. R. King | 738,455 | Sept. 8 | 1839 | 399 | 106 | 410 |
| Brush. Fountain tooth- | H. C. McKinley and A. Diegel | 730,040 | June 2 | 949 | 213 | 104 | 1321 |
| Brush. Hair- | G. N. Holland | 719,336 | Jan. 27 | 3453 | 769 | 102 | 776 |
| Brush. Hair- | D. M. Newbro and E. E. Gallogly | 734,354 | July 21 | 3069 | 722 | 105 | 683 |
| Brush. Hat- | J. Oberseider, Jr | 720,955 | Feb. 17 | 2861 | 654 | 102 | 1456 |
| Brush-holder | W. W. Beeler | 717,656 | Jan. 6 | 231 | 59 | 102 | 51 |
| Brush-holder | I. L. Landis | 723,165 | Mar. 17 | 2797 | 630 | 103 | 622 |
| Brush-holder | A. F. Batchelder | 727,571 | May 12 | 1406 | 316 | 104 | 321 |
| Brush-holder | H. Geisenhöner | 728,222 | May 19 | 2632 | 587 | 104 | 599 |
| Brush-holder | E. W. Mix | 728,273 | May 19 | 2746 | 610 | 104 | 624 |
| Brush-holder | H. Geisenhöner | 728,565 | May 19 | 3294 | 730 | 104 | 736 |
| Brush-holder | T. L. Hawkins | 729,338 | May 26 | 4697 | 1037, 1038 | 104 | 1044 |
| Brush-holder | A. Churchward | 732,171 | June 30 | 4926 | 1095 | 104 | 2214 |
| Brush-holder | L. E. Underwood | 732,240 | June 30 | 5065 | 1126 | 104 | 2243 |
| Brush-holder | C. A. Eck | 740,635 | Oct. 6 | 480 | 106 | 106 | 1349 |
| Brush-holder | H. K. Brooks | 746,450 | Dec. 8 | 2071 | 477 | 107 | 1561 |
| Brush-holder | H. Geisenhöner | 747,696 | Dec. 22 | 4395 | 991 | 107 | 2121 |
| Brush holder. Electric- | H. T. Maker | 719,824 | Feb. 3 | 751 | 176 | 102 | 982 |
| Brush holder. Electric- | N. A. Christensen | 724,544 | Apr. 7 | 231 | 56 | 103 | 1219 |
| Brush-holder. Equalizing | E. J. Murphy | 728,596 | May 19 | 3368 | 746 | 104 | 754 |
| Brush-machine | C. C. Harlow and A. Lindgren | 717,988 | Jan. 6 | 885 | 197 | 102 | 190 |
| Brush-machine | E. F. Abbey | 724,231 | Mar. 31 | 4866 | 1090, 1091 | 103 | 1075 |
| Brush-machine | E. F. Abbey | 724,232 | Mar. 31 | 4873 | 1091, 1092 | 103 | 1077 |
| Brush-machine | E. F. Abbey | 724,371 | Mar. 31 | 5136 | 1149, 1150 | 103 | 1131 |
| Brush-machines. Tuft-fastener guide for | C. E. Fisher and M. Young | 746,943 | Dec. 15 | 3005 | 690, 691 | 107 | 1793 |
| Brush-making. Machine for preparing bristles for | B. M. Schauman | 747,651 | Dec. 22 | 4313 | 970 | 107 | 2102 |
| Brush. Metal-finishing | H. H. Hirsch | 717,851 | Jan. 6 | 647 | 143 | 102 | 138 |
| Brush or broom | S. M. Musgrave | 744,784 | Nov. 24 | 3843 | 828 | 107 | 868 |
| Brush or cushioned roll. Rotary | H. A. Webster | 735,632 | Aug. 4 | 1145 | 242 | 105 | 1224 |
| Brush. Paint- | E. Vegiard dit Labonté | 745,405 | Dec. 1 | 170 | 38 | 107 | 1136 |
| Brush. Paint- | J. P. Knuehmann | 748,193 | Dec. 29 | 5378 | 1222 | 107 | 2359 |
| Brush. Paper-hanging | W. W. Kerns and J. W. Ackley | 746,099 | Dec. 8 | 1445 | 324 | 107 | 1427 |
| Brush. Polishing- | A. E. Watkins | 721,263 | Feb. 24 | 3502 | 796 | 102 | 1610 |
| Brush. Rotary | H. R. Atwater | 727,256 | May 5 | 807 | 173 | 104 | 174 |
| Brush. Rotary | F. G. Farnham | 741,643 | Oct. 20 | 2409 | 539 | 106 | 1795 |
| Brush. Scrubbing- | M. B. Tate | 726,480 | Apr. 28 | 3821 | 863 | 103 | 2018 |
| Brush. Scrubbing- | J. Beeby | 728,837 | May 26 | 3811 | 849 | 104 | 862 |
| Brush. Shower bath- | S. E. Robinson | 735,592 | Aug. 4 | 1070 | 227 | 105 | 1208 |
| Brush soap-feeding attachment | J. C. Gabel, Jr | 727,780 | May 12 | 1826 | 408 | 104 | 408 |
| Brush-strap fastener | F. H. Loveless | 746,576 | Oct. 6 | 383 | 79 | 106 | 1328 |
| Brush-support | J. P. Erie | 733,952 | July 21 | 2283 | 537 | 105 | 515 |
| Brush. Toilet- | W. Wallach | 730,497 | June 9 | 1781 | 399 | 104 | 1510 |
| Brush. Toilet- | C. S. Baylor | 739,638 | Sept. 22 | 4051 | 904 | 106 | 916 |
| Brush. Tooth- | C. A. Torrance and G. S. Stone | 728,048 | May 12 | 2313 | 514 | 104 | 509 |
| Brush. Tooth- | W. B. Ryder and C. L. Reynolds | 741,722 | Oct. 20 | 2577 | 573 | 106 | 1830 |
| Brush. Tooth- | W. S. Stein | 743,582 | Nov. 10 | 1576 | 330 | 107 | 353 |
| Brush. Traveler's | W. L. Cheney | 723,365 | Mar. 24 | 3200 | 718 | 103 | 716 |
| Brush. Tuft-cleaning | W. T. Rolph and H. R. Kuersten | 738,487 | Sept. 8 | 1905 | 416 | 106 | 423 |
| Brush wiper and holder. Painter's | J. Domagola | 731,289 | June 16 | 3235 | 720 | 104 | 1832 |
| Brush. Wire | W. O. Bement | 729,528 | June 2 | 18 | 5 | 104 | 1130 |
| Brushes. Device for securing bristles in | P. Möbius | 725,269 | Apr. 14 | 1578 | 357 | 103 | 1519 |
| Brushes. Making | J. Morrison | 734,079 | July 21 | 2544 | 593 | 105 | 572 |
| Brushes. Manufacture of | J. J. Hayden and J. P. Powers | 722,017 | Mar. 3 | 679 | 150 | 103 | 146 |
| Brushes. Manufacture of | J. F. Mumford | 733,251 | July 7 | 983 | 237 | 105 | 206 |
| Brushes or similar toilet articles. Back for | G. F. Kolb | 723,611 | Mar. 24 | 3644 | 815 | 103 | 806 |
| Brusher. Fruit or vegetable | F. Stebler | 734,284 | July 21 | 2944 | 687, 688 | 105 | 658 |
| Bubble-blower | W. E. Allen | 721,135 | Feb. 24 | 3244 | 742 | 102 | 1559 |
| Bubble-blower | P. D. Horton | 721,373 | Feb. 24 | 3683 | 839 | 102 | 1647 |
| Bubble-blower | P. D. Horton | 727,952 | May 12 | 2145 | 479 | 104 | 476 |
| Bucket | T. Babin and A. O. Hebert | 735,440 | Aug. 4 | 784 | 166 | 105 | 1148 |
| Bucket | G. McElhany | 737,449 | Aug. 25 | 4520 | 1013 | 105 | 1996 |
| Bucket | G. H. Williams | 747,818 | Dec. 22 | 4623 | 1043, 1044 | 107 | 2173 |
| Bucket and stand. Paste- | F. H. and W. C. Warren | 717,643 | Jan. 6 | 212 | 53 | 102 | 46 |
| Bucket. Candy- | A. Bell | 730,511 | June 9 | 1811 | 403 | 104 | 1516 |
| Bucket. Clam-shell | E. F. Atherton | 723,571 | Mar. 24 | 3574 | 798 | 103 | 792 |
| Bucket. Clam-shell | S. Swedenborg | 725,794 | Apr. 21 | 2562 | 580, 581 | 103 | 1745 |
| Bucket. Clam-shell | J. C. Slocum | 736,795 | Aug. 18 | 3301 | 732 | 105 | 1717 |
| Bucket. Clam-shell | J. C. Slocum | 736,796 | Aug. 18 | 3302 | 732 | 105 | 1717 |
| Bucket. Clam-shell | R. R. McKechnie and G. H. Williams | 747,210 | Dec. 15 | 3501 | 794, 795 | 107 | 1904 |
| Bucket. Clam-shell | G. H. Williams | 747,819 | Dec. 22 | 4625 | 1044, 1045 | 107 | 2173 |
| Bucket. Coal- | J. C. Burgess | 733,002 | July 7 | 531 | 131 | 105 | 113 |
| Bucket-dumping apparatus | W. R. Wilcox | 719,400 | Jan. 27 | 3575 | 799 | 102 | 802 |
| Bucket-dumping apparatus | T. E. Anderson | 723,771 | Mar. 24 | 3916 | 882 | 103 | 865 |
| Bucket-dumping apparatus | H. K. McCaughey | 748,558 | Dec. 29 | 6056 | 1371 | 107 | 2570 |
| Bucket. Garbage- | E. C. Seaman | 723,215 | Mar. 17 | 2901 | 650 | 103 | 645 |
| Bucket. Grab- | A. E. Brown | 723,133 | Mar. 17 | 2736 | 614, 615 | 103 | 610 |
| Bucket. Grab- | J. W. Seaver | 747,783 | Dec. 22 | 4553 | 1027, 1028 | 107 | 2158 |
| Bucket or conveyer | W. F. Jones | 735,105 | Aug. 4 | 107 | 24 | 105 | 1006 |
| Bucket or other vessel handle. Coal- | R. L. Miller | 735,554 | Aug. 4 | 1010 | 213 | 105 | 1194 |
| Bucket or pail. Collapsible | E. C. Brown | 724,255 | Mar. 31 | 4915 | 1100 | 103 | 1084 |

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| Bucket. Ore or dredging | R. J. Mefford | 730,280 | June 9 | 1379 | 303 | 104 | 1424 |
| Bucket. Paint- | J. E. Lucas | 733,984 | July 21 | 2350 | 551<br>552 | 105 | 527 |
| Bucket-suspension device | J. H. Hayward | 748,371 | Dec. 29 | 5678 | 1295 | 107 | 2425 |
| Bucket. Well- | G. P. Hobbs | 734,330 | July 21 | 3031 | 714 | 105 | 675 |
| Buckets. Apparatus for automatically discharging | W. P. Sherman | 721,333 | Feb. 24 | 3615 | 821<br>822 | 102 | 1634 |
| Buckets. Means for adjusting intermediate | O. D. H. Bentley | 735,054 | Aug. 4 | 12 | 4 | 105 | 983 |
| Buckets. Suspension device for two-rope | H. L. Reynolds | 748,419 | Dec. 29 | 5771 | 1317 | 107 | 2446 |
| Buckle | J. F. Atwood | 717,524 | Jan. 6 | 4 | 1 | 102 | 3 |
| Buckle | E. W. Hadley | 717,743 | Jan. 6 | 415 | 97 | 102 | 91 |
| Buckle | F. Barr | 718,240 | Jan. 13 | 1336 | 296 | 102 | 302 |
| Buckle | J. S. Sourek. (Reissue) | 12,086 | Feb. 24 | 4229 | 961 | 102 | 1767 |
| Buckle | J. P. Hunt | 722,511 | Mar. 10 | 1602 | 353 | 103 | 360 |
| Buckle | H. Kerngood | 724,585 | Apr. 7 | 310 | 76 | 103 | 1235 |
| Buckle | H. Kerngood | 724,586 | Apr. 7 | 311 | 76 | 103 | 1235 |
| Buckle | A. W. Kruemling | 726,312 | Apr. 28 | 3503 | 793 | 103 | 1954 |
| Buckle | R. A. Brown | 726,856 | May 5 | 37 | 9 | 104 | 11 |
| Buckle | D. M. McLean | 727,992 | May 12 | 2213 | 493 | 104 | 490 |
| Buckle | W. F. Crafts | 728,206 | May 19 | 2593 | 580 | 104 | 592 |
| Buckle | J. B. Heinold | 730,120 | June 2 | 1078 | 242 | 104 | 1347 |
| Buckle | G. W. Moores | 730,551 | June 9 | 1873 | 418 | 104 | 1530 |
| Buckle | E. M. Turner | 730,846 | June 9 | 2379 | 526 | 104 | 1638 |
| Buckle | J. E. Mitchell | 732,368 | June 30 | 5307 | 1176 | 104 | 2293 |
| Buckle | J. E. Mitchell | 733,248 | July 7 | 978 | 236 | 105 | 205 |
| Buckle | H. Engelman | 734,686 | July 28 | 3674 | 860 | 105 | 824 |
| Buckle | C. S. Comstock | 735,343 | Aug. 4 | 580 | 119 | 105 | 1105 |
| Buckle | R. C. Pool | 738,063 | Sept. 1 | 991 | 221 | 106 | 216 |
| Buckle | E. M. Sharpe | 738,948 | Sept. 15 | 2784 | 617 | 106 | 629 |
| Buckle | W. Freeman | 740,266 | Sept. 29 | 5232 | 1177 | 106 | 1183 |
| Buckle | G. S. Geddes | 740,417 | Oct. 6 | 50 | 12 | 106 | 1255 |
| Buckle | J. S. Sourek | 740,706 | Oct. 6 | 591 | 132 | 106 | 1374 |
| Buckle | H. Uhlrig | 740,951 | Oct. 6 | 1037 | 237 | 106 | 1467 |
| Buckle | E. Cleary | 741,226 | Oct. 13 | 1577 | 355 | 106 | 1603 |
| Buckle | N. I. Hecht | 741,244 | Oct. 13 | 1604 | 360 | 106 | 1609 |
| Buckle | E. J. Kraetzer | 741,677 | Oct. 20 | 2470 | 552 | 106 | 1808 |
| Buckle | J. A. Gavitt | 747,693 | Dec. 22 | 4385 | 989 | 107 | 2118 |
| Buckle. Belt- | F. Dodge | 726,654 | Apr. 28 | 4162 | 938 | 103 | 2084 |
| Buckle. Belt- | B. Wilentshik | 728,641 | May 19 | 3444 | 764 | 104 | 771 |
| Buckle. Belt- | J. Ueding | 731,247 | June 16 | 3146 | 699 | 104 | 1813 |
| Buckle. Belt- | J. L. Brower | 739,645 | Sept. 22 | 4061 | 906 | 106 | 918 |
| Buckle. Belt- | L. Sanders | 740,928 | Oct. 6 | 993 | 225 | 106 | 1459 |
| Buckle. Cinch- | G. W. Gugler | 730,256 | June 9 | 1342 | 294 | 104 | 1416 |
| Buckle. Clamp- | C. B. Granger | 718,835 | Jan. 20 | 2488 | 553 | 102 | 557 |
| Buckle. Cotton-bale-tie | J. F. Matthews | 720,166 | Feb. 10 | 1386 | 317 | 102 | 1135 |
| Buckle. Cotton-tie | P. L. Howlett | 717,856 | Jan. 6 | 653 | 145 | 102 | 139 |
| Buckle. Cotton-tie | D. E. Eddleman | 733,950 | July 21 | 2277 | 536 | 105 | 514 |
| Buckle. Cross-line | W. A. Nock and B. F. Petry | 731,808 | June 23 | 4215 | 940 | 104 | 2052 |
| Buckle. Cross-line | J. McCrossin | 737,448 | Aug. 25 | 4519 | 1013 | 105 | 1996 |
| Buckle. Cross-line | H. S. Englebright | 737,597 | Sept. 1 | 78 | 15 | 106 | 20 |
| Buckle. Cross-line | H. C. Guttridge | 745,602 | Dec. 1 | 530 | 124 | 107 | 1210 |
| Buckle-fastening | T. Morton | 745,884 | Dec. 1 | 1059 | 238 | 107 | 1324 |
| Buckle. Harness- | W. Houghton | 718,710 | Jan. 20 | 2269 | 498 | 102 | 514 |
| Buckle. Harness- | M. E. Zeller | 735,650 | Aug. 4 | 1176 | 249 | 105 | 1231 |
| Buckle. Harness- | M. E. Zeller | 738,650 | Sept. 8 | 2211 | 483 | 106 | 490 |
| Buckle. Harness- | E. Davidson | 743,254 | Nov. 3 | 849 | 185 | 107 | 178 |
| Buckle. Harness- | F., E., and H. Boldt | 744,714 | Nov. 24 | 3726 | 804 | 107 | 843 |
| Buckle. Harness- | J. Holets | 745,495 | Dec. 1 | 349 | 81 | 107 | 1174 |
| Buckle-opening device | G. F. Carey | 743,145 | Nov. 3 | 631 | 137 | 107 | 132 |
| Buckle. Safety- | A. Englerth and H. Schuett | 740,932 | Oct. 6 | 999 | 226 | 106 | 1459 |
| Buckle-shield | D. E. White | 720,201 | Feb. 10 | 1454 | 332 | 102 | 1147 |
| Buckle. Slide- | J. F. Molloy | 722,375 | Mar. 10 | 1341 | 296 | 103 | 301 |
| Buckle. Slide- | R. E. Neal | 737,451 | Aug. 25 | 4525 | 1014 | 105 | 1997 |
| Buckle. Stirrup-strap | C. H. Nix | 746,873 | Dec. 15 | 2862 | 659 | 107 | 1759 |
| Buckle. Suspender- | S. S. Singer | 725,997 | Apr. 21 | 2916 | 663 | 103 | 1818 |
| Buckle. Suspender- | J. F. Molloy | 731,487 | June 23 | 3619 | 807 | 104 | 1931 |
| Buckle. Suspender- | D. L. Smith and J. J. Buchanan | 741,416 | Oct. 13 | 1957 | 433 | 106 | 1684 |
| Buckle. Tongueless | J. H. Frees | 721,947 | Mar. 3 | 554 | 121 | 103 | 122 |
| Buckle. Trace- | J. B. Bunkers | 719,737 | Feb. 3 | 594 | 133 | 102 | 947 |
| Buckle. Trace- | J. Fisher | 729,854 | June 2 | 613 | 135 | 104 | 1253 |
| Buckle. Trace- | G. W. Williams | 742,267 | Oct. 27 | 3670 | 820 | 106 | 2070 |
| Buckle. Tug- | F. E. Russell | 723,317 | Mar. 24 | 3091 | 696 | 103 | 697 |
| Buffer | J. S. Thompson | 725,797 | Apr. 21 | 2567 | 582 | 103 | 1746 |
| Buffer | T. Robinson | 727,557 | May 5 | 1368 | 308 | 104 | 295 |
| Buffer | J. H. Lovely and P. Batchder | 728,480 | May 19 | 3133 | 693 | 104 | 705 |
| Buffer | F. Bruning | 738,288 | Sept. 8 | 1490 | 322 | 106 | 336 |
| Buffer | W. M. Fulton | 747,409 | Dec. 22 | 3874 | 872 | 107 | 2003 |
| Buffer and coupling. Central | G. Johnston | 726,068 | Apr. 21 | 3019 | 686 | 103 | 1839 |
| Buffer. Differential | E. G. Shortt | 741,558 | Oct. 13 | 2247 | 500 | 106 | 1746 |
| Buffer-wheel | J. Hormby | 747,426 | Dec. 22 | 3901 | 878 | 107 | 2010 |
| Buffing-head | F. J. Kane | 736,736 | Aug. 18 | 3189 | 705 | 105 | 1694 |
| Buffing-machine | J. A. Pine | 718,154 | Jan. 13 | 1178 | 262 | 102 | 269 |
| Buffing-machine | J. A. Pine | 718,155 | Jan. 13 | 1179 | 262 | 102 | 269 |
| Buffing-machine | S. W. Ladd | 721,052 | Feb. 17 | 3044 | 698 | 102 | 1496 |
| Buffing-machine | A. Buteau | 729,274 | May 26 | 4581 | 1012 | 104 | 1020 |
| Buffing-pad holder | T. Robinson | 743,035 | Nov. 3 | 418 | 90 | 107 | 88 |
| Bug-gatherer | F. Keener | 756,098 | Dec. 8 | 1443 | 324 | 107 | 1426 |
| Buggy attachment | C. Brown | 736,814 | Aug. 18 | 3333 | 738 | 105 | 1724 |
| Buggy attachment | A. M. Rye | 744,113 | Nov. 17 | 2606 | 557 | 107 | 584 |
| Buggy. Baby- | S. C. Wolfskill | 733,889 | July 14 | 2144 | 506 | 105 | 467 |
| Buggy-boot | M. C. Weiglein and L. A. Brodbeck | 720,766 | Feb. 17 | 2521 | 581 | 102 | 1384 |
| Buggy-boot | J. W. Simmons | 742,748 | Oct. 27 | 4522 | 1024 | 106 | 2249 |
| Buggy-seat-support brace | J. S. Jones | 720,437 | Feb. 10 | 1885 | 429 | 102 | 1238 |
| Buggy-step | E. Besse | 724,155 | Mar. 31 | 4699 | 1055 | 103 | 1042 |
| Buggy. Storm- | R. Heinzelman | 742,319 | Oct. 27 | 3770 | 844<br>845 | 106 | 2090 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|---|
| | | | | Spec. | Dr'g. | Vol. | Page. |
| Buggy storm-curtain | B. S. D. S. Martin | 724,593 | Apr. 7 | 327 | 80 | 103 | 1238 |
| Buggy-top | E. A. Rhinesmith | 719,044 | Jan. 27 | 2895 | 649 | 102 | 659 |
| Buggy-top adjuster | A. F. Swasic | 738,706 | Sept. 8 | 2324 | 510 | 106 | 512 |
| Buggy-top attachment | E. Walter | 719,538 | Feb. 3 | 222 | 52 | 102 | 870 |
| Buggy-top support | W. F. Brown | 721,538 | Feb. 24 | 3981 | 907 | 102 | 1711 |
| Buggy-top support | S. D. Fry | 737,731 | Sept. 1 | 323 | 68 | 106 | 73 |
| Buggy-top support | W. H. Tully | 746,607 | Dec. 8 | 2345 | 538 | 107 | 1623 |
| Building-block | L. P. Normandin | 721,825 | Mar. 3 | 303 | 67 | 103 | 67 |
| Building-block | J. H. Pfirsch | 723,404 | Mar. 24 | 3268 | 732 | 103 | 730 |
| Building-block | P. Brandner | 729,535 | June 2 | 29 | 8 | 104 | 1133 |
| Building-block | L. Cuatt and W. J. Annis | 732,832 | July 7 | 249 | 62 | 105 | 56 |
| Building-block | H. E. Goodwin | 735,870 | Aug. 11 | 1606 | 342 | 105 | 1342 |
| Building-block | B. F. Van Camp | 738,643 | Sept. 8 | 2196 | 480 | 106 | 487 |
| Building block and wall | J. A. Ferguson | 733,928 | July 14 | 2225 | 522 | 105 | 483 |
| Building block and wall | F. E. Kidder | 742,094 | Oct. 20 | 3341 | 745 | 106 | 1986 |
| Building block and wall | F. E. Kidder | 743,391 | Nov. 3 | 1136 | 241 | 107 | 240 |
| Building block and wall construction | A. C. Waterman | 734,022 | July 21 | 2429 | 568 | 105 | 546 |
| Building-block grapple | H. B. Stephens | 725,169 | Apr. 14 | 1401 | 317 | 103 | 1481 |
| Building-block. Hollow | H. L. Bynum | 744,480 | Nov. 17 | 3298 | 709 | 107 | 734 |
| Building-block. Hollow concrete | F. S. Appleman and W. McDuffie | 732,152 | June 30 | 4893 | 1088 | 104 | 2207 |
| Building-block lifter | L. P. Normandin | 718,506 | Jan. 13 | 1871 | 410 | 102 | 419 |
| Building-block lifter | L. P. Normandin | 732,884 | July 7 | 335 | 82 | 105 | 74 |
| Building-block-manufacturing machine | L. P. Normandin | 718,507 | Jan. 13 | 1873 | 411 | 102 | 419 |
| Building-block mold | E. W. Dietz and H. W. Spalding | 747,386 | Dec. 22 | 3837 | 863 | 107 | 1994 |
| Building-block-molding machine | P. L. Britain | 741,451 | Oct. 13 | 2018 | 448, 449 | 106 | 1696 |
| Building-block-molding machine | J. B. Cottom | 748,049 | Dec. 29 | 5106 | 1154 | 107 | 2300 |
| Building-blocks | W. D. Kilbourn | 731,309 | June 16 | 3277 | 728, 729 | 104 | 1841 |
| Building-blocks. Kindergarten | E. B. Woodson | 741,949 | Oct. 20 | 3004 | 667 | 106 | 1921 |
| Building-blocks. Metallic matrix for | W. C. Lyon | 718,009 | Jan. 6 | 931 | 207 | 102 | 200 |
| Building-blocks or artificial stone. Machine for molding | C. H. Hutchings | 730,212 | June 2 | 1228 | 274, 275 | 104 | 1377 |
| Building-blocks or the like. Flask for molding | E. G. Durant | 738,423 | Sept. 8 | 1769 | 385 | 106 | 396 |
| Building-blocks. Supporting-stand and mold for making | L. P. Normandin | 729,887 | June 2 | 675 | 149 | 104 | 1266 |
| Building. Combination | L. B. Valk | 723,426 | Mar. 24 | 3306 | 740 | 103 | 738 |
| Building construction | H. D. Conway | 718,429 | Jan. 13 | 1680 | 371 | 102 | 374 |
| Building construction | C. D. Higgins | 721,188 | Feb. 24 | 3339 | 763 | 102 | 1577 |
| Building construction | J. Roemer | 721,747 | Mar. 3 | 164 | 38 | 103 | 36 |
| Building construction | J. G. Meyers | 723,175 | Mar. 17 | 2813 | 634 | 103 | 625 |
| Building construction | T. O'Shea | 723,483 | Mar. 24 | 3434 | 768 | 103 | 763 |
| Building construction | G. Y. Bonus | 727,579 | May 12 | 1419 | 319 | 104 | 324 |
| Building construction | J. P. Angell | 729,913 | June 2 | 712 | 159 | 104 | 1274 |
| Building construction | J. T. Simpson and M. N. Shoemaker | 739,030 | Sept. 15 | 2911 | 646 | 106 | 657 |
| Building construction | F. W. Spencer | 739,737 | Sept. 22 | 4230 | 947 | 106 | 955 |
| Building construction | T. O'Shea | 741,066 | Oct. 13 | 1254 | 285 | 106 | 1535 |
| Building construction | A. Menczarski | 745,068 | Nov. 24 | 4385 | 946 | 107 | 979 |
| Building construction | L. N. Blydenburgh | 747,579 | Dec. 22 | 4167 | 936 | 107 | 2070 |
| Building construction. Sidehill | G. C. Scott | 726,998 | May 5 | 349 | 75 | 104 | 75 |
| Building material. Manufacture of artificial | A. Seigle | 740,188 | Sept. 29 | 5086 | ..... | 106 | 1154 |
| Building. Metallic | J. Spelman | 733,435 | July 14 | 1330 | 314 | 105 | 298 |
| Building or roofing block or material | S. C. Davidson | 740,099 | Sept. 29 | 4930 | 1105 | 106 | 1121 |
| Building. Semipermanent portable | J. Kulhánek | 728,471 | May 19 | 3122 | 690 | 104 | 702 |
| Building-stirrup | W. B. Gervais | 744,527 | Nov. 17 | 3370 | 726 | 107 | 751 |
| Building structure | C. M. Ellinger and L. Kopczynski | 743,262 | Nov. 3 | 864 | 188, 189 | 107 | 181 |
| Building substructures. Making | J. M. Ewen | 718,441 | Jan. 13 | 1699 | 374, 375 | 102 | 379 |
| Buildings. Construction of hospitals, sanatoriums, or other | D. Sarason | 736,158 | Aug. 11 | 2122 | 455 | 105 | 1452 |
| Buildings in course of construction. Inclosure for | C. G. Canfield | 746,789 | Dec. 15 | 2689 | 621 | 107 | 1720 |
| Buildings, &c. Material for the construction of | L. Millet | 719,243 | Jan. 27 | 3275 | 732 | 102 | 737 |
| Buildings, &c. Metallic finish for | N. Poulson | 741,545 | Oct. 13 | 2224 | 495 | 106 | 1740 |
| Buildings, &c. Moving heavy | H. Sheeler | 722,256 | Mar. 10 | 1123 | 248 | 103 | 254 |
| Bulkhead-door | W. B. Cowles | 721,024 | Feb. 17 | 2990 | 687, 688 | 102 | 1483 |
| Bulkhead-doors. Means for operating | A. Du Bois-Reymond | 718,973 | Jan. 27 | 2761 | 618 | 102 | 630 |
| Bulkhead-doors. Means for operating | P. Hoppe | 719,669 | Feb. 3 | 456 | 104 | 102 | 917 |
| Bulkhead or other doors. Mechanism for operating | G. C. Ralston | 733,745 | July 14 | 1855 | 438, 439 | 105 | 408 |
| Bulldozer | J. S. Goldberg | 740,421 | Oct. 6 | 55 | 13, 14 | 106 | 1256 |
| Bullet-mold | J. W. Anderson, Jr | 748,460 | Dec. 29 | 5856 | 1332 | 107 | 2464 |
| Bumping-screen | H. L. King | 735,525 | Aug. 4 | 943 | 200, 201 | 105 | 1181 |
| Bundle-carrier | E. A. Peck | 728,408 | May 19 | 2993 | 658 | 104 | 675 |
| Bundle-carrier | P. E. Le Fevre | 748,293 | Dec. 29 | 5552 | 1267 | 107 | 2397 |
| Bundle-loader | G. Briggs | 730,605 | June 9 | 1975 | 439, 440 | 104 | 1552 |
| Bundling apparatus | F. P. Wiseburn and L. Buhle | 734,488 | July 21 | 3303 | 775 | 105 | 729 |
| Bung-pulling implement | E. N. Greenwood | 740,122 | Sept. 29 | 4966 | 1114 | 106 | 1128 |
| Bung. Racking | C. L. Schalitz | 746,386 | Dec. 8 | 1967 | 449 | 107 | 1539 |
| Bung, stopper, or the like for casks, &c | J. Ross and A. W. MacKenzie | 739,929 | Sept. 29 | 4619 | 1036 | 106 | 1054 |
| Bung. Tapping | A. F. Lent and J. W. Hatt | 729,367 | May 26 | 4739 | 1047 | 104 | 1053 |
| Bunk or mattress-frame | J. P. Lein | 723,405 | July 14 | 1274 | 302 | 105 | 286 |
| Bunsen burner | A. B. Redell | 728,296 | May 19 | 2796 | 619 | 104 | 635 |
| Bunsen burner | A. B. Redell | 733,424 | July 14 | 1305 | 308 | 105 | 293 |
| Bunsen burner | R. C. H. Sieverts | 734,244 | July 21 | 2854 | 669 | 105 | 637 |
| Bunsen burner | A. H. Humphrey | 742,990 | Nov. 3 | 303 | 68 | 107 | 66 |
| Bunsen tube for incandescent light, heating, or cooking apparatus | C. P. Ehmann | 729,298 | May 26 | 4633 | 1024 | 104 | 1031 |
| Buoy | W. H. Allison | 747,114 | Dec. 15 | 3318 | 755 | 107 | 1866 |
| Buoy. Body-indicating | H. Condren | 736,692 | Aug. 18 | 3111 | 686 | 105 | 1678 |
| Buoy. Gas | R. M. Dixon | 741,119 | Oct. 13 | 1357 | 311 | 106 | 1556 |
| Buoyant seat or couch | H. S. Carley | 723,647 | Mar. 24 | 3708 | 831 | 103 | 820 |
| Burglar-alarm | F. Puschnerus | 717,921 | Jan. 6 | 761 | 171 | 102 | 163 |

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| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Burglar-alarm | J. Wagner | 719,963 | Feb. 3 | 985 | 229 | 102 | 1032 |
| Burglar-alarm | G. W. Mills | 723,478 | Mar. 24 | 3425 | 765 | 103 | 762 |
| Burglar-alarm | R. M. Dunkin | 726,149 | Apr. 21 | 3162 | 716 | 103 | 1869 |
| Burglar-alarm | B. Arthurs | 729,252 | May 26 | 4543 | 1001 | 104 | 1012 |
| Burglar-alarm | R. J. Fletcher | 732,727 | July 7 | 55 | 15 | 105 | 15 |
| Burglar-alarm | F. Walder | 738,963 | Sept. 15 | 2813 | 624 | 106 | 635 |
| Burglar-alarm | P. Lievens and G. Jahn | 739,429 | Sept. 22 | 3679 | 818 | 106 | 836 |
| Burglar-alarm | W. H. Fletcher | 741,122 | Oct. 13 | 1361 | 312 | 106 | 1556 |
| Burglar-alarm and sash-lock | L. H. Handy and C. S. Hosford | 735,872 | Aug. 11 | 1609 | 343 | 105 | 1343 |
| Burglar-alarm. Electric | S. Schwarzschild | 723,320 | Mar. 24 | 3094 | 696, 697 | 103 | 698 |
| Burglar-alarm. Electric | S. Schwarzschild | 734,967 | July 28 | 4213 | 979 | 105 | 934 |
| Burglar-alarm. Electric | B. F. Schubert | 742,073 | Oct. 20 | 3306 | 736 | 106 | 1979 |
| Burglar-alarm for vaults, safes, &c. Electric | C. O. Miller | 729,952 | June 2 | 785 | 174, 175, 176 | 104 | 1288 |
| Burglar-alarm system | E. T. Holmes | 726,292 | Apr. 28 | 3450 | 783, 784 | 103 | 1944 |
| Burglar-trap | W. Lawrence | 727,812 | May 12 | 1879 | 418 | 104 | 418 |
| Burglar-trap | J. M. Tyler | 738,258 | Sept. 8 | 1410 | 306 | 106 | 320 |
| Burial apparatus | J. E. Lawrence | 741,583 | Oct. 13 | 2297 | 513, 514 | 106 | 1755 |
| Burial-case | C. J. Duncan | 729,921 | June 2 | 723 | 162 | 104 | 1276 |
| Burial-case for caskets. Outside | C. W. Neuendorf and E. H. Myers | 723,902 | Mar. 31 | 4176 | 941 | 103 | 936 |
| Burial-case protector | H. D. Clark | 721,355 | Feb. 24 | 3654 | 831 | 102 | 1642 |
| Burial-casket | A. J. Blair | 723,638 | Mar. 24 | 3696 | 828 | 103 | 817 |
| Burial-casket | J. P. Brady | 727,277 | May 5 | 849 | 182 | 104 | 182 |
| Burial-casket | F. J. Feineman | 735,354 | Aug. 4 | 597 | 123 | 105 | 1109 |
| Burial-casket | J. Stan | 739,357 | Sept. 22 | 3510 | 785 | 106 | 798 |
| Burial-casket | P. J. McGuire | 743,395 | Nov. 3 | 1145 | 242 | 107 | 242 |
| Burial-casket handle | M. F. Davoran and F. Warther | 723,993 | Mar. 31 | 4378 | 983 | 103 | 979 |
| Burial-caskets. Rough box for | P. D. Skahen | 734,196 | July 21 | 2766 | 649 | 105 | 618 |
| Burial purposes. Metallic box for | A. E. Lockhart | 737,641 | Sept. 1 | 149 | 32 | 106 | 35 |
| Burial-receptacle | J. C. F. McGriff | 735,998 | Aug. 11 | 1844 | 395 | 105 | 1394 |
| Burner: | | | | | | | |
| *See* Acetylene-burner. | | | | | | | |
| *See* Alcohol-burner. | | | | | | | |
| *See* Antivibrating burner. | | | | | | | |
| *See* Blowpipe-burner. | | | | | | | |
| *See* Bunsen burner. | | | | | | | |
| *See* Flash-light gas-burner. | | | | | | | |
| *See* Fuel-burner. | | | | | | | |
| *See* Furnace petroleum-burner. | | | | | | | |
| *See* Garbage-burner. | | | | | | | |
| *See* Gas-burner. | | | | | | | |
| *See* Gas-heater burner. | | | | | | | |
| *See* Gas heating-burner. | | | | | | | |
| *See* Gas-light burner. | | | | | | | |
| *See* Gas or gasolene burner. | | | | | | | |
| *See* Gas-regulating burner. | | | | | | | |
| *See* Gaseous-fuel burner. | | | | | | | |
| *See* Gasolene-burner. | | | | | | | |
| *See* Hydrocarbon-burner. | | | | | | | |
| *See* Hydrocarbon-vapor burner. | | | | | | | |
| *See* Incandescent burner. | | | | | | | |
| *See* Incandescent-lighting burner. | | | | | | | |
| *See* Injector-burner. | | | | | | | |
| *See* Liquid and gaseous fuel burner. | | | | | | | |
| *See* Liquid-fuel burner. | | | | | | | |
| *See* Liquid-fuel and air burner. | | | | | | | |
| *See* Liquid-fuel-heater burner. | | | | | | | |
| *See* Liquid or pulverized fuel burner. | | | | | | | |
| *See* Molasses-burner. | | | | | | | |
| *See* Oil-burner. | | | | | | | |
| *See* Oil-vapor burner. | | | | | | | |
| *See* Oxyhydrocarbon-burner. | | | | | | | |
| *See* Petroleum-burner. | | | | | | | |
| *See* Petroleum blue burner. | | | | | | | |
| *See* Pyrographic burner. | | | | | | | |
| *See* Refuse-burner. | | | | | | | |
| *See* Sulfur-burner. | | | | | | | |
| *See* Vapor-burner. | | | | | | | |
| *See* Welsbach or other burner. | | | | | | | |
| Burner | H. Oberlin | 720,466 | Feb. 10 | 1936 | 442 | 102 | 1248 |
| Burner | N. Shaeffer | 724,957 | Apr. 7 | 991 | 228 | 103 | 1381 |
| Burner | R. Livingston | 725,974 | Apr. 21 | 2872 | 651 | 103 | 1809 |
| Burner | T. Stites, J. H. Goss, and A. J. Wolff | 731,392 | June 16 | 3428 | 705 | 104 | 1872 |
| Burner | M. L. Ross | 732,224 | June 30 | 5035 | 1120 | 104 | 2237 |
| Burner | R. M. Shaffer | 732,455 | June 30 | 5181 | 1215 | 104 | 2329 |
| Burner | G. Machlet, Jr | 733,235 | July 7 | 954 | 230 | 105 | 200 |
| Burner | G. Machlet, Jr | 733,236 | July 7 | 956 | 230 | 105 | 200 |
| Burner | F. A. Ray | 735,298 | Aug. 4 | 505 | 101 | 105 | 1088 |
| Burner | J. T. Burr | 738,290 | Sept. 8 | 1492 | 323 | 106 | 336 |
| Burner | F. F. Dow | 738,779 | Sept. 15 | 2477 | 544 | 106 | 563 |
| Burner | A. H. Humphrey | 740,017 | Sept. 29 | 4782 | 1076 | 106 | 1088 |
| Burner | A. J. Coghe | 743,148 | Nov. 3 | 635 | 137 | 107 | 133 |
| Burner | S. A. Rosenthal | 744,800 | Nov. 24 | 3870 | 893 | 107 | 873 |
| Burner | F. B. Pettengill | 745,518 | Dec. 1 | 383 | 88 | 107 | 1181 |
| Burner | G. Machlet, Jr | 745,872 | Dec. 1 | 1039 | 234 | 107 | 1320 |
| Burner and automatic valve | E. H. J. C. Gillett | 739,667 | Sept. 22 | 4105 | 915 | 106 | 927 |
| Burner globe-holder | G. F. Klemm | 734,569 | July 28 | 3455 | 806, 807 | 105 | 780 |
| Burner-grate | J. F. Swarens | 744,883 | Nov. 24 | 4017 | 866 | 107 | 904 |
| Burner-tip | J. Doorenbos | 741,316 | Oct. 13 | 1755 | 391 | 106 | 1637 |
| Burning apparatus. Coal-dust- | B. W. May | 746,864 | Dec. 15 | 2842 | 655 | 107 | 1754 |
| Burning liquid fuel. Injector or apparatus for | J. Holden | 719,801 | Feb. 3 | 711 | 166, 167 | 102 | 973 |
| Burnishing-machine | W. J. and J. R. Mitchell | 718,013 | Jan. 6 | 939 | 208 | 102 | 202 |
| Burnishing-machine | J. G. Schneider | 728,503 | May 19 | 3165 | 701 | 104 | 711 |
| Bushing and bung. Bung- | S. Schlangen | 742,071 | Oct. 20 | 3304 | 736 | 106 | 1979 |
| Bushing. Barrel- | F. C. Schoenthaler, Jr | 723,553 | Mar. 24 | 3540 | 792 | 103 | 785 |
| Bushing. Bung- | T. Pendergast | 739,557 | Sept. 22 | 3881 | 870 | 106 | 879 |
| Bushing-expander | G. Staiger | 736,647 | Aug. 18 | 3009 | 664 | 105 | 1657 |
| Bushing for split pulleys | C. H. Bicalky | 736,927 | Aug. 25 | 3552 | 788 | 105 | 1790 |
| Bust-developer | S. P. Madeira and J. J. Purcell | 738,339 | Sept. 8 | 1613 | 350, 351 | 106 | 363 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Bustle | H. H. Taylor | 741,184 | Oct. 13 | 1488 | 337 | 106 | 1583 |
| Bustle and hip-form. Ventilated | C. H. Scott | 723,495 | Mar. 24 | 3449 | 772 | 103 | 766 |
| Butcher's blade-bone extractor | K. Wintsch, Jr | 740,964 | Oct. 6 | 1064 | 242 | 106 | 1474 |
| Butter-cutter | P. M. Scanlan | 724,050 | Mar. 31 | 4484 | 1010 | 103 | 997 |
| Butter, lard, &c. Cutting device for | B. Hamblet | 727,939 | May 12 | 2119 | 471<br>472 | 104 | 469 |
| Butter-mold | W. S. Farnsworth | 740,746 | Oct. 6 | 667 | 151 | 106 | 1790 |
| Butter-molding machine | A. C. Dodge | 734,680 | July 28 | 3661 | 857<br>858 | 105 | 821 |
| Butter-packing machine | P. F. Gibbons | 743,485 | Nov. 10 | 1387 | 285 | 107 | 311 |
| Butter-pat-forming machine | E. O. Sutton | 737,792 | Sept. 1 | 440 | 94 | 106 | 97 |
| Butter-printer | T. L. Valerius | 740,608 | Oct. 6 | 445 | 97 | 106 | 1342 |
| Butter-printing machine | A. Anderson | 719,413 | Feb. 3 | 1 | 1 | 102 | 827 |
| Butter. Refining and preserving | H. Iscovesco | 726,065 | Apr. 21 | 3015 | 685 | 103 | 1838 |
| Butter-treating compound | G. W. Nelson | 726,334 | Apr. 28 | 3543 | ..... | 103 | 1963 |
| Butterin and making same | A. Bergman | 722,276 | Mar. 10 | 1164 | ..... | 103 | 263 |
| Button | W. G. Brown | 726,630 | Apr. 28 | 4124 | 930 | 103 | 2076 |
| Button | F. H. Larter | 728,172 | May 12 | 2537 | 564 | 104 | 557 |
| Button | C. W. Garis | 736,954 | Aug. 25 | 3611 | 800 | 105 | 1804 |
| Button | J. W. Force | 739,070 | Sept. 15 | 2996 | 664 | 106 | 674 |
| Button | J. Kearney | 739,185 | Sept. 15 | 3200 | 708 | 106 | 715 |
| Button and button-fastening | G. W. McGill | 726,448 | Apr. 28 | 3747 | 849 | 103 | 2005 |
| Button and necktie-fastener. Combined collar- | E. A. Herr | 729,582 | June 2 | 112 | 28 | 104 | 1150 |
| Button and tie-holder. Combined | E. Stempel | 748,434 | Dec. 29 | 5805 | 1322 | 107 | 2453 |
| Button-attaching machine | A. Hall | 738,435 | Sept. 8 | 1797 | 391 | 106 | 402 |
| Button-attaching or other machines. Automatic feed for | H. M. Radcliffe | 740,177 | Sept. 29 | 5068 | 1139<br>1140 | 106 | 1150 |
| Button. Badge- | A. Phelps | 720,473 | Feb. 10 | 1946 | 444<br>445 | 102 | 1249 |
| Button. Bar- | E. L. Ashley | 742,145 | Oct. 27 | 3432 | 765 | 106 | 2021 |
| Button-clasp | B. F. Lentz | 730,136 | June 2 | 1107 | 248 | 104 | 1352 |
| Button. Clench- | R. L. Ellery | 731,441 | June 23 | 3532 | 786 | 104 | 1913 |
| Button. Collar- | H. G. Quimby | 717,714 | Jan. 6 | 345 | 84 | 102 | 74 |
| Button. Collar- | B. B. Mayer | 719,828 | Feb. 3 | 759 | 178 | 102 | 984 |
| Button. Collar- | H. Landman | 721,203 | Feb. 24 | 3397 | 771 | 102 | 1588 |
| Button. Collar- | M. H. Mallory | 726,717 | Apr. 28 | 4283 | 967 | 103 | 2110 |
| Button. Collar- | M. H. Mallory | 726,719 | Apr. 28 | 4285 | 968 | 103 | 2110 |
| Button. Collar- | J. M. Kane | 727,638 | May 12 | 1524 | 343 | 104 | 346 |
| Button. Collar- | W. Birdzell | 738,977 | Sept. 15 | 2835 | 628 | 106 | 640 |
| Button. Collar- | F. G. Neuberth | 748,411 | Dec. 29 | 5758 | 1313 | 107 | 2443 |
| Button. Collar or cuff | A. H. Stemme | 718,168 | Jan. 13 | 1206 | 267 | 102 | 275 |
| Button. Cuff- | H. A. Libaire | 730,277 | June 9 | 1374 | 303 | 104 | 1423 |
| Button-cutting machine | M. H. Hess | 743,506 | Nov. 10 | 1427 | 298<br>299 | 107 | 321 |
| Button-drilling machine | S. P. MacCordy | 725,734 | Apr. 21 | 2445 | 554<br>555 | 103 | 1718 |
| Button, &c., fastening | C. Weaver | 727,239 | May 5 | 783 | 168 | 104 | 169 |
| Button-hook | J. L. Sommer | 725,166 | Apr. 14 | 1395 | 315 | 103 | 1480 |
| Button keeper-ring | A. H. Bryant | 740,352 | Sept. 29 | 5389 | 1215 | 106 | 1216 |
| Button. Linen | H. Kirchhoff | 748,287 | Dec. 29 | 5541 | 1263 | 107 | 2395 |
| Button. Link- | E. W. Morehouse | 722,529 | Mar. 10 | 1634 | 360 | 103 | 367 |
| Button-machine. Automatic centering and drilling | N. G. Baker | 722,796 | Mar. 17 | 2150 | 481 | 103 | 489 |
| Button-making machine | G. W. Pelton | 740,991 | Oct. 6 | 1114 | 251<br>252 | 106 | 1484 |
| Button-making-machine tool-holder | G. W. Pelton | 718,578 | Jan. 13 | 2030 | 441 | 102 | 452 |
| Button or fastener | W. Walter and W. Künstner | 733,443 | July 14 | 1342 | 316 | 105 | 301 |
| Button or fastener. Cuff | F. J. Meerlender | 731,930 | June 23 | 4427 | 987 | 104 | 2098 |
| Button or hook. Collar | J. W. Tinch | 741,740 | Oct. 20 | 2600 | 579 | 106 | 1835 |
| Button or stud. Collar or cuff | R. Benedict | 740,615 | Oct. 6 | 456 | 99 | 106 | 1344 |
| Button-pad | J. A. Stuart | 724,403 | Mar. 31 | 5204 | 1166 | 103 | 1146 |
| Button-polisher | J. P. Vordermark | 725,897 | Apr. 21 | 2741 | 624 | 103 | 1782 |
| Button. Separable | L. G. Kunze | 727,546 | May 5 | 1341 | 301 | 104 | 288 |
| Button. Separable | W. M. H. Jockin | 734,334 | July 21 | 3036 | 715 | 105 | 676 |
| Button. Separable | C. Yeomans | 745,089 | Nov. 24 | 4434 | 959 | 107 | 988 |
| Button-setting machine | G. W. Gwinn and H. C. Smith | 719,939 | Feb. 3 | 935 | 218 | 102 | 1022 |
| Button-setting machine | F. E. Stanley | 732,230 | June 30 | 5048 | 1123 | 104 | 2240 |
| Button-setting machine | E. B. Stimpson | 740,200 | Sept. 29 | 5113 | 1148<br>1149 | 106 | 1158 |
| Button shanks. Fastening ivory- | H. Ehrlich | 747,053 | Dec. 15 | 3216 | 733 | 107 | 1842 |
| Button. Snapping- | E. D. Conklin | 724,545 | Apr. 7 | 232 | 56 | 103 | 1219 |
| Button. Spring- | J. Wetzler | 719,067 | Jan. 27 | 2941 | 657 | 102 | 668 |
| Button-turning machine | H. A. Berger | 722,479 | Mar. 10 | 1543 | 338<br>339<br>340 | 103 | 346 |
| Button-working machine | H. Chalmers | 740,231 | Sept. 29 | 5173 | 1162<br>1163 | 106 | 1171 |
| Buttons. Forming wire into collar or sleeve | E. P. Linch | 724,719 | Apr. 7 | 565 | 135 | 103 | 1289 |
| Buttons. Machine for filling character depressions in | S. Thyberg and A. C. L. Chapman | 746,407 | Dec. 8 | 1998 | 455<br>456 | 107 | 1545 |
| Buttons to fabrics. Means for securing | J. W. Darley, Jr | 747,047 | Dec. 15 | 3181 | 729 | 107 | 1831 |
| Buttoner. Collar- | W. D. Paterson | 719,035 | Jan. 27 | 2883 | 646 | 102 | 656 |
| Buttonhole cutting and stitching machine | E. B. Allen | 731,495 | July 28 | 3326 | 779 | 105 | 751 |
| Buttonhole cutting and stitching machine | E. B. Allen | 736,471 | Aug. 18 | 2661 | 585<br>586<br>587 | 105 | 1586 |
| Buttonhole cutting and stitching machine | E. B. Allen | 743,212 | Nov. 3 | 757 | 165 | 107 | 159 |
| Buttonhole cutting and stitching machine | E. B. Allen | 743,213 | Nov. 3 | 759 | 166 | 107 | 159 |
| Buttonhole-finishing machine | F. L. Harmon | 724,468 | Apr. 7 | 90 | 22 | 103 | 1188 |
| Buttonhole-machine | J. Gutmann | 723,460 | Mar. 24 | 3361 | 753<br>754 | 103 | 750 |
| Buttonhole-shears | C. B. Goldsmith | 726,156 | Apr. 21 | 3172 | 718 | 103 | 1871 |
| Buttonhole. Stitched | E. B. Allen | 735,433 | Aug. 4 | 769 | 163 | 105 | 1144 |
| Buttonhole-stitching machine | E. B. Allen | 735,434 | Aug. 4 | 770 | 163<br>164 | 105 | 1145 |
| Buttonhole-stitching-machine cutting mechanism | C. A. Dahl and G. S. Hill | 723,247 | Mar. 24 | 2965 | 666 | 103 | 672 |
| Buttonhole substitute | J. Boyle | 721,419 | Feb. 24 | 3773 | 857 | 102 | 1667 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|---|
| | | | | Spec. | Dr'g. | Vol. | Page. |
| Cabinet | W. G. Hullhorst | 724,870 | Apr. 7 | 845 | 194 | 103 | 1349 |
| Cabinet | M. R. Maher | 727,985 | May 12 | 2200 | 490 | 104 | 487 |
| Cabinet | S. C. Price | 730,046 | June 2 | 958 | 215 | 104 | 1323 |
| Cabinet | E. W. Woodruff | 731,330 | June 16 | 3307 | 738 | 104 | 1847 |
| Cabinet | A. D. Acers | 738,091 | Sept. 1 | 1050 | 234 | 106 | 227 |
| Cabinet | B. W. Sholty | 739,729 | Sept. 22 | 4217 | 943<br>944 | 106 | 952 |
| Cabinet | B. W. Sholty | 739,730 | Sept. 22 | 4219 | 944 | 106 | 953 |
| Cabinet | R. T. Anderson | 741,434 | Oct. 13 | 1986 | 440 | 106 | 1690 |
| Cabinet | H. D. Hermany | 742,646 | Oct. 27 | 4354 | 979 | 106 | 2212 |
| Cabinet | J. H. Stiggleman | 746,758 | Dec. 15 | 2628 | 604<br>605 | 107 | 1707 |
| Cabinet and examining or operating table. Combined | G. H. Prindle | 724,125 | Mar. 31 | 4638 | 1044 | 103 | 1031 |
| Cabinet. Automatic lift and drop | W. S. Carlisle | 732,168 | June 30 | 4919 | 1094 | 104 | 2212 |
| Cabinet. Clothes- | R. Weir | 724,977 | Apr. 7 | 1033 | 236<br>237 | 103 | 1389 |
| Cabinet. Dining-room | S. J. Givan | 740,420 | Oct. 6 | 54 | 13 | 106 | 1256 |
| Cabinet. Disappearing-door | A. Pederson | 746,569 | Dec. 8 | 2275 | 522 | 107 | 1607 |
| Cabinet. Document- | R. K. Davis | 740,098 | Sept. 29 | 4928 | 1105 | 106 | 1121 |
| Cabinet. Door-step | F. Burns | 726,138 | Apr. 21 | 3148 | 712 | 103 | 1866 |
| Cabinet. Hot-meal portable | H. H. Cooke | 724,547 | Apr. 7 | 235 | 57 | 103 | 1226 |
| Cabinet. Kitchen- | M. J. Carr | 721,860 | Mar. 3 | 381 | 83 | 103 | 83 |
| Cabinet. Kitchen- | A. K. Wilson | 723,964 | Mar. 31 | 4315 | 968<br>969 | 103 | 966 |
| Cabinet. Kitchen- | L. Hockman | 736,728 | Aug. 18 | 3175 | 701<br>702 | 105 | 1691 |
| Cabinet. Kitchen- | M. H. Shanley | 744,808 | Nov. 24 | 3884 | 835<br>836 | 107 | 877 |
| Cabinet. Kitchen- | G. L. Craig | 745,574 | Dec. 1 | 475 | 112<br>113 | 107 | 1198 |
| Cabinet. Kitchen- | C. F. Boule | 747,581 | Dec. 22 | 4170 | 937 | 107 | 2071 |
| Cabinet. Knockdown | M. Loeffel | 729,368 | May 26 | 4741 | 1047 | 104 | 1053 |
| Cabinet. Machine-bearing | T. Kundtz | 719,233 | Jan. 27 | 3256 | 727<br>728 | 102 | 733 |
| Cabinet or dark room. Collapsible | L. T. Wilson | 737,988 | Sept. 1 | 865 | 189 | 106 | 189 |
| Cabinet. Record- | L. Nevius | 742,347 | Oct. 27 | 3814 | 854 | 106 | 2100 |
| Cabinet. Revolving | G. W. Chaffin | 727,586 | May 12 | 1429 | 320 | 104 | 325 |
| Cabinet. Sheet-metal | C. Stollberg | 723,940 | Mar. 31 | 4270 | 960 | 103 | 957 |
| Cabinet. Sheet-metal carton- | C. Stollberg | 723,941 | Mar. 31 | 4273 | 960 | 103 | 958 |
| Cabinet. Store- | H. H. Flanagin | 740,001 | Sept. 29 | 4753 | 1069 | 106 | 1082 |
| Cabinet. Toilet- | M. Wohl | 747,527 | Dec. 22 | 4085 | 918 | 107 | 2051 |
| Cabinet. Wall- | J. M. Decker | 742,012 | Oct. 20 | 3140 | 701 | 106 | 1946 |
| Cable and drill-tool socket. Union | E. Strickland | 730,414 | June 9 | 1616 | 362 | 104 | 1474 |
| Cable conveyer | M. Garland | 747,160 | Dec. 15 | 3407 | 772 | 107 | 1885 |
| Cable-coupling | J. W. Cover | 730,235 | June 9 | 1295 | 286 | 104 | 1406 |
| Cable. Driving- | G. S. Ingle | 734,068 | July 21 | 2525 | 589 | 105 | 568 |
| Cable-grip | S. S. McCain | 720,458 | Feb. 10 | 1921 | 438 | 102 | 1245 |
| Cable-grip | W. O. Gunckel | 743,381 | Nov. 3 | 1115 | 237 | 107 | 236 |
| Cable grip or clutch device | L. Schuler and J. Ericson | 734,435 | July 21 | 3208 | 755 | 105 | 712 |
| Cable-hanger | E. S. Marsh | 733,064 | July 7 | 648 | 157 | 105 | 137 |
| Cable-hanger | J. J. Smith | 740,326 | Sept. 29 | 5345 | 1204 | 106 | 1206 |
| Cable-holder. Manhole | H. C. Baker, Jr | 743,805 | Nov. 10 | 1975 | 420 | 107 | 437 |
| Cable-laying device. Submarine- | B. Roberts | 734,615 | July 28 | 3537 | 828 | 105 | 798 |
| Cable-laying device. Submarine- | B. Roberts | 737,021 | Aug. 25 | 3729 | 827<br>828 | 105 | 1829 |
| Cable-lubricator | M. J. McGill | 733,255 | July 7 | 993 | 239 | 105 | 208 |
| Cable or wire shield for suspended cable-track roads | H. M. Harding | 717,570 | Jan. 6 | 88 | 21, 22 | 102 | 21 |
| Cable-terminal | J. J. O'Connell | 727,829 | May 12 | 1903 | 425 | 104 | 423 |
| Cables or the like. Grip for | O. M. Sackett | 725,486 | Apr. 14 | 1984 | 447 | 103 | 1605 |
| Cables or wires. Ground-anchor for | A. Bearse | 742,279 | Oct. 27 | 3696 | 826 | 106 | 2076 |
| Cables. Roller-hanger for aerial | H. H. Loth | 746,718 | Dec. 15 | 2556 | 588 | 107 | 1691 |
| Cables. Water-tight union for lead | G. L. Martin | 731,195 | June 16 | 3063 | 679 | 104 | 1796 |
| Cableway | T. S. Miller | 736,996 | Aug. 25 | 3683 | 817 | 105 | 1818 |
| Cableway | T. S. Miller | 748,295 | Dec. 29 | 5555 | 1267 | 107 | 2397 |
| Cableway. Elevated | W. Kirry | 720,443 | Feb. 10 | 1892 | 431 | 102 | 1240 |
| Cableway system | F. H. Lamb | 719,478 | Feb. 3 | 119 | 28 | 102 | 850 |
| Cableway-system bridle | F. H. Lamb | 722,721 | Mar. 17 | 2009 | 448 | 103 | 460 |
| Cabs. Front-sash supporting and operating apparatus for hansom- | W. C. Yelton | 719,975 | Feb. 3 | 1005 | 234 | 102 | 1037 |
| Caddy-bag | G. L. Pierce | 725,764 | Apr. 21 | 2506 | 569 | 103 | 1732 |
| Caddy or cabinet. Measuring | J. M. Kinnard | 731,577 | June 23 | 3799 | 847 | 104 | 1965 |
| Cage and cable releasing device | R. LeRoy | 728,588 | May 19 | 3356 | 743 | 104 | 751 |
| Cages. Lifting rails for self-dumping | H. L. Jackson | 718,463 | Jan. 13 | 1763 | 391 | 102 | 391 |
| Caisson or coffer-dam | D. E. Moran and E. S. Jarrett | 725,751 | Apr. 21 | 2479 | 562<br>563 | 103 | 1727 |
| Cake-beater | E. E. Ricker | 723,407 | Mar. 24 | 3272 | 733 | 103 | 731 |
| Cake-beater | G. Friedman | 740,751 | Oct. 6 | 680 | 154 | 106 | 1392 |
| Cake-cooler | A. T. Mayo | 728,742 | May 19 | 3626 | 805 | 104 | 809 |
| Cake-dropping machine. Cup- | W. J. Meikleham | 740,582 | Oct. 6 | 390 | $1.82 | 106 | 1329 |
| Cake or doughnut cutter | C. H. Brown | 717,537 | Jan. 6 | 24 | 7 | 102 | 8 |
| Cake-turner and culinary article | G. S. Ressler | 725,628 | Apr. 14 | 2239 | 506 | 103 | 1661 |
| Cakes from polygonal blanks. Manufacture of | J. J. Forster | 721,173 | Feb. 24 | 3314 | 757 | 102 | 1572 |
| Calcimine composition and producing same | C. Adams | 730,505 | June 9 | 1797 | ------ | 104 | 1518 |
| Calcining apparatus | A. Lawrence | 745,067 | Nov. 24 | 4384 | 946 | 107 | 979 |
| Calcining-furnace | C. T. Hennig | 726,915 | May 5 | 153 | 37 | 104 | 35 |
| Calcining furnace. Quicksilver-ore- | J. M. Cutler | 740,539 | Oct. 6 | 303 | 62 | 106 | 1309 |
| Calcining or decomposing furnace | W. Hasenbach | 726,911 | May 5 | 147 | 35 | 104 | 34 |
| Calcining purposes. Kiln or apparatus for | J. R. Horton | 723,528 | Mar. 24 | 3500 | 783 | 103 | 777 |
| Calcium-carbid package | J. Ewing, Jr | 728,889 | May 26 | 3900 | 867 | 104 | 880 |
| Calcium carbid. Preparing | E. F. Price | 731,070 | June 16 | 2826 | ------ | 104 | 1751 |
| Calcium-carbid refuse and product thereof. Utilizing | G. E. Cox | 727,095 | May 5 | 526 | ------ | 104 | 114 |
| Calcium peroxid. Making hydrated | G. F. Jaubert | 730,767 | June 2 | 451 | ------ | 104 | 1220 |
| Calculating and recording machine | C. D. Baird | 748,039 | Dec. 29 | 5076 | 1148<br>1149 | 107 | 2295 |
| Calculating apparatus | C. A. N. Wallich | 734,288 | July 21 | 2952 | 689 | 105 | 659 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|---|
| | | | | Spec. | Dr'g. | Vol. | Page. |
| Calculating device | W. T. Williams | 727,523 | May 5 | 1300 | 290 | 104 | 280 |
| Calculating device | E. B. Alley | 733,930 | July 21 | 2229 | 523 | 105 | 503 |
| Calculating device | T. Finigan and E. F. W. Wieda | 745,586 | Dec. 1 | 503 | 119 | 107 | 1205 |
| Calculating instrument | H. N. Pierce | 748,566 | Dec. 29 | 6070 | 1375 | 107 | 2513 |
| Calculating-machine | J. A. Turck | 720,086 | Feb. 10 | 1238 | 285, 286, 287 | 102 | 1102 |
| Calculating-machine | D. J. T. Hiett | 724,007 | Mar. 31 | 4407 | 991, 992, 993 | 103 | 983 |
| Calculating-machine | N. Goldfarb | 725,242 | Apr. 14 | 1534 | 349 | 103 | 1509 |
| Calculating-machine | F. C. Rinsche | 726,803 | Apr. 28 | 4444 | 1004, 1005 | 103 | 2143 |
| Calculating-machine | E. Peycke and L. Sonnenschein | 731,944 | June 23 | 4452 | 993 | 104 | 2103 |
| Calculating-machine | C. F. Pidgin | 735,291 | Aug. 4 | 493 | 98, 99 | 105 | 1086 |
| Calculating-machine | H. E. Goldberg | 741,961 | Oct. 20 | 3034 | 675, 676, 677, 678, 679 | 106 | 1927 |
| Calculating-machine | C. Stahlberg | 744,697 | Nov. 17 | 3649 | 786, 787, 788, 789, 790, 791 | 107 | 808 |
| Calculating-machine | J. Mallmann | 745,024 | Nov. 24 | 4275 | 926, 927, 928 | 107 | 957 |
| Calculating-machine | A. R. Boynton | 745,144 | Nov. 24 | 4528 | 980, 981, 982, 983, 984 | 107 | 1010 |
| Calculating-machine | W. L. Bundy and A. R. Boynton | 745,149 | Nov. 24 | 4559 | 989, 990, 991, 992 | 107 | 1014 |
| Calculating-machine | A. E. Bergey | 745,562 | Dec. 1 | 459 | 108 | 107 | 1195 |
| Calculating-machine | A. E. Bergey | 745,995 | Dec. 8 | 1259 | 283, 284 | 107 | 1385 |
| Calculating-machine | O. E. Cloud and A. F. Wood | 746,924 | Dec. 15 | 2950 | 681, 682, 683 | 107 | 1780 |
| Calculating-machine | H. Kaussen | 747,977 | Dec. 29 | 4965 | 1120, 1121 | 107 | 2270 |
| Calculating-machine. Electrically-operated | F. C. Rinsche | 717,762 | Jan. 6 | 455 | 106 | 102 | 99 |
| Calculating-machine keyboard | W. T. Treadway | 718,176 | Jan. 13 | 1218 | 269, 270 | 102 | 277 |
| Calculating-machine keyboard | W. T. Treadway | 722,438 | Mar. 10 | 1446 | 320 | 103 | 324 |
| Calculating, printing, or analogous machine attachment | A. R. Boynton | 748,158 | Dec. 29 | 5312 | 1206, 1207 | 107 | 2346 |
| Calculator | J. M. Steele | 719,701 | Feb. 3 | 513 | 116, 117 | 102 | 931 |
| Calculator | B. B. Holmes | 732,301 | June 30 | 5176 | 1150 | 104 | 2266 |
| Calculator | E. C. Duncan | 745,167 | Nov. 24 | 4604 | 998, 999 | 107 | 1024 |
| Calendar | A. F. Hoffman | 722,020 | Mar. 3 | 683 | 151 | 103 | 147 |
| Calendar | F. C. W. Stelter | 722,924 | Mar. 17 | 2375 | 531 | 103 | 535 |
| Calendar | F. F. Pulver | 725,869 | Apr. 21 | 2695 | 613 | 103 | 1773 |
| Calendar | M. O'Marra | 726,979 | May 5 | 303 | 67 | 104 | 65 |
| Calendar | G. G. Graessle | 728,904 | May 26 | 3927 | 872 | 104 | 885 |
| Calendar | G. H. T. Scribner | 729,427 | May 26 | 4839 | 1072 | 104 | 1073 |
| Calendar | F. C. W. Stelter. (Reissue) | 12,163 | Oct. 20 | 3427 | 764 | 106 | 2003 |
| Calendar and pen-rack. Combined | T. von der Lühe and W. H. Bartholomew. | 746,540 | Dec. 8 | 2226 | 510, 511 | 107 | 1596 |
| Calendar. Clock- | J. L. Woods | 746,225 | Dec. 8 | 1675 | 372 | 107 | 1478 |
| Calendar holder. Memorandum- | G. G. Greenburg | 741,128 | Oct. 13 | 1373 | 315 | 106 | 1559 |
| Calendar. Perpetual | W. M. Finch | 725,431 | Apr. 14 | 1872 | 419 | 103 | 1581 |
| Calendar-support | F. H. Smith | 732,763 | Mar. 17 | 2089 | 467 | 103 | 477 |
| Calendar. Wall- | W. C. Norman | 730,685 | June 9 | 2117 | 470 | 104 | 1583 |
| Calender-machine | J. Kleinewefers | 728,937 | May 26 | 3984 | 886, 887 | 104 | 896 |
| Calender-press | F. H. Turner | 727,229 | May 5 | 765 | 164 | 104 | 165 |
| Calender-roll | F. C. Smith | 732,190 | Mar. 3 | 983 | 218 | 103 | 208 |
| Calender-roll safety-clamp | H. A. Owen | 731,122 | June 16 | 2928 | 650 | 104 | 1770 |
| Calendering-machine | W. J. Foley | 745,340 | Dec. 1 | 42 | 9 | 107 | 1109 |
| Calendering-machine folding attachment | M. Newgarden | 732,212 | June 30 | 5003 | 1112 | 104 | 2231 |
| Calipers | Z. T. Furbish | 719,783 | Feb. 3 | 684 | 158 | 102 | 967 |
| Calipers | A. G. Spaulding | 724,963 | Apr. 7 | 1002 | 230 | 103 | 1383 |
| Calipers | F. A. Hatch | 726,287 | Apr. 28 | 3441 | 782 | 103 | 1942 |
| Calipers | W. A. Mcdonald | 745,229 | Nov. 24 | 4705 | 1027 | 107 | 1046 |
| Calipers and dividers | O. Stoddard | 732,463 | June 30 | 5494 | 1218 | 104 | 2331 |
| Calipers. Beam- | C. E. Billings | 744,028 | Nov. 17 | 2437 | 524 | 107 | 550 |
| Calipers, compasses, dividers, &c. Combined | H. A. J. Brown | 723,237 | Mar. 24 | 2948 | 661 | 103 | 668 |
| Calipers. Micrometer- | R. Miller | 720,947 | Feb. 17 | 2842 | 651 | 102 | 1452 |
| Calipers. Micrometer- | F. Spalding | 729,970 | June 2 | 826 | 185 | 104 | 1296 |
| Calipers or dividers | N. E. Martin | 721,379 | Feb. 24 | 3700 | 842 | 102 | 1652 |
| Calipers or gage | W. Reilly | 744,796 | Nov. 24 | 3863 | 832 | 107 | 871 |
| Calipers. Outside | M. H. Ball | 720,773 | Feb. 17 | 2531 | 584 | 102 | 1386 |
| Calipers. Vernier and micrometer | F. G. Marbach | 718,266 | Jan. 13 | 1390 | 310 | 102 | 315 |
| Calking seams of vessels. Apparatus for | C. G. Hightower | 725,340 | Apr. 14 | 1701 | 384 | 103 | 1545 |
| Call. Carriage- | T. J. Gorman | 734,538 | July 28 | 3406 | 795 | 105 | 769 |
| Call-service. Restaurant | R. W. Jennings | 724,874 | Apr. 7 | 852 | 196 | 103 | 1351 |
| Caloric-engine | H. Essex | 723,660 | Mar. 24 | 3728 | 835 | 103 | 824 |
| Cam | W. H. Daily | 740,816 | Oct. 6 | 816 | 183 | 106 | 1419 |
| Cam | M. Gorman | 743,713 | Nov. 10 | 1806 | 381 | 107 | 402 |

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| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Camera | H. W. Locke | 720,040 | Feb. 10 | 1159 | 263 | 102 | 1085 |
| Camera | M. Schell | 725,488 | Apr. 14 | 1987 | 448 | 103 | 1606 |
| Camera | C. W. Schober | 726,356 | Apr. 28 | 3586 | 814, 815 | 103 | 1972 |
| Camera | W. K. L. Dickson | 728,584 | May 19 | 3347 | 741, 742 | 104 | 749 |
| Camera | H. Goodwin | 729,325 | May 26 | 4672 | 1032, 1033 | 104 | 1039 |
| Camera | G. H. Lee | 729,363 | May 26 | 4734 | 1046 | 104 | 1052 |
| Camera | G. H. Lee | 729,364 | May 26 | 4736 | 1046 | 104 | 1052 |
| Camera | C. Bornmann | 731,537 | June 23 | 3731 | 829 | 104 | 1951 |
| Camera | M. Schell | 738,073 | Sept. 1 | 1009 | 225 | 106 | 219 |
| Camera | H. G. Mutschler | 741,695 | Oct. 20 | 2518 | 562, 563 | 106 | 1819 |
| Camera adjustable focusing-stop | A. Mutschler | 741,694 | Oct. 20 | 2517 | 562 | 106 | 1819 |
| Camera attachment | W. R. Smith | 733,292 | July 7 | 1068 | 254 | 105 | 225 |
| Camera attachment | W. E. Mulhollan | 744,783 | Nov. 24 | 3840 | 827, 828 | 107 | 867 |
| Camera. Automatic photographic | S. N. Navascuez | 738,120 | Sept. 1 | 1122 | 248, 249 | 106 | 242 |
| Camera-back | C. E. Hutchings | 741,668 | Oct. 20 | 2453 | 549 | 106 | 1805 |
| Camera-back. Reversible | F. B. Case | 736,212 | Aug. 11 | 2210 | 476 | 105 | 1471 |
| Camera-controller | W. D. Macdonald | 729,193 | May 26 | 4437 | 978, 979 | 104 | 990 |
| Camera detachable lens-board | F. B. Case | 739,587 | Sept. 22 | 3953 | 883 | 106 | 894 |
| Camera feeding device. Magazine- | J. C. Fyfe and V. Odquist | 735,746 | Aug. 11 | 1364 | 294 | 105 | 1289 |
| Camera. Film- | O. Moh | 723,401 | Mar. 24 | 3263 | 731 | 103 | 729 |
| Camera. Film- | D. Graf | 731,046 | June 16 | 2775 | 619 | 104 | 1740 |
| Camera. Film and plate | R. Mayer | 746,975 | Dec. 15 | 3057 | 701 | 107 | 1804 |
| Camera focusing device | M. Schell | 738,072 | Sept. 1 | 1008 | 225 | 106 | 219 |
| Camera focusing-hood | E. N. Lake | 721,898 | Mar. 3 | 444 | 98 | 103 | 98 |
| Camera focusing-hood | F. B. La May and W. C. Whitlock | 736,271 | Aug. 11 | 2308 | 500 | 105 | 1493 |
| Camera-front | F. B. Case | 739,585 | Sept. 22 | 3951 | 882 | 106 | 894 |
| Camera lens-board clamp | F. B. Case | 739,586 | Sept. 22 | 3952 | 882 | 106 | 894 |
| Camera lens-board guide and holder | D. Graf | 731,047 | June 16 | 2778 | 619 | 104 | 1740 |
| Camera lens-carrier. Photographic- | F. B. Case | 746,459 | Dec. 8 | 2085 | 480 | 107 | 1564 |
| Camera. Magazine photographic | J. Guimarães | 741,399 | Oct. 13 | 1935 | 428 | 106 | 1680 |
| Camera magazine-plate-changing apparatus. Photographic- | A. A. Brooks | 743,614 | Nov. 10 | 1643 | 344 | 107 | 367 |
| Camera multiplying attachment | A. L. Swartz | 745,688 | Dec. 1 | 679 | 156 | 107 | 1243 |
| Camera multiplying attachment. Photographic- | W. D. Himes | 728,104 | May 12 | 2409 | 537 | 104 | 531 |
| Camera. Ocular | W. G. Randall | 730,965 | June 16 | 2622 | 584 | 104 | 1709 |
| Camera. Panoramic | C. Mills | 744,922 | Nov. 24 | 4092 | 882 | 107 | 919 |
| Camera. Panoramic photographic | J. E. Lenahan | 726,313 | Apr. 28 | 3504 | 793 | 103 | 1954 |
| Camera. Photographic | L. Borsum | 720,217 | Feb. 10 | 1493 | 342, 343 | 102 | 1154 |
| Camera. Photographic | L. J. R. Holst | 720,586 | Feb. 17 | 2188 | 507 | 102 | 1314 |
| Camera. Photographic | L. J. R. Holst | 720,693 | Feb. 17 | 2398 | 549 | 102 | 1357 |
| Camera. Photographic | L. J. R. Holst | 720,694 | Feb. 17 | 2401 | 549, 550 | 102 | 1357 |
| Camera. Photographic | G. N. Collins | 724,085 | Mar. 31 | 4552 | 1025 | 103 | 1012 |
| Camera. Photographic | F. A. Brownell | 725,034 | Apr. 14 | 1147 | 259, 260 | 103 | 1430 |
| Camera. Photographic | T. B. Mills | 730,468 | June 9 | 1732 | 387 | 104 | 1498 |
| Camera. Photographic | F. B. Case | 736,211 | Aug. 11 | 2208 | 475 | 105 | 1471 |
| Camera. Photographic | S. Wachtl | 739,240 | Sept. 15 | 3310 | 734 | 106 | 740 |
| Camera. Photographic | L. Borsum | 741,102 | Oct. 13 | 1324 | 304 | 106 | 1549 |
| Camera. Photographic | F. W. Brehm | 744,024 | Nov. 17 | 2433 | 522 | 107 | 549 |
| Camera. Photographic | H. W. Hales | 746,327 | Dec. 8 | 1868 | 426 | 107 | 1517 |
| Camera. Photographic-film | J. A. Robertson | 743,563 | Nov. 10 | 1530 | 320 | 107 | 344 |
| Camera plate-holder-changing box | L. Darlington | 744,498 | Nov. 17 | 3327 | 716 | 107 | 741 |
| Camera-plate holders. Light-excluding attachment for | R. A. Bacon | 743,216 | Nov. 3 | 766 | 167 | 107 | 161 |
| Camera range-finder. Photographic- | A. L. Lewis | 729,948 | June 2 | 775 | 172 | 104 | 1286 |
| Camera-shutter | W. K. Holmes | 730,916 | June 16 | 2532 | 564 | 104 | 1689 |
| Camera-shutter | J. C. Fyfe and V. Odquist | 731,296 | June 16 | 3250 | 723 | 104 | 1835 |
| Camera-shutter | E. V. and K. F. Conley | 732,175 | June 30 | 4934 | 1097 | 104 | 2216 |
| Camera-shutter | F. V. and K. E. Conley | 739,834 | Sept. 29 | 4412 | 990 | 106 | 1012 |
| Camera-shutter | I. M. Macy | 747,992 | Dec. 29 | 4989 | 1127, 1128 | 107 | 2275 |
| Camera shutter. Automatic photographic- | S. N. Navascuez | 738,119 | Sept. 1 | 1121 | 248 | 106 | 242 |
| Camera sighting device | F. M. Steadman | 745,258 | Nov. 24 | 4760 | 1040 | 107 | 1057 |
| Camera. Sketching- | W. L. Beebe and T. A. McFarland | 735,697 | Aug. 11 | 1277 | 273 | 105 | 1270 |
| Camera-stand | J. H. Smith | 734,763 | July 28 | 3835 | 894 | 105 | 855 |
| Camera-stand | J. H. and J. A. Smith | 734,764 | July 28 | 3836 | 895 | 105 | 855 |
| Camera, stereoscope, and opera-glass. Combined | L. Rancoule | 728,977 | May 26 | 4054 | 899 | 104 | 911 |
| Camera. Stereoscopic | H. M. Reichenbach | 738,066 | Sept. 1 | 994 | 222 | 106 | 216 |
| Camera-support | H. W. Howe | 730,458 | June 9 | 1716 | 383 | 104 | 1495 |
| Camera-support | S. R. Howard and W. Hewett | 747,178 | Dec 15 | 3435 | 778 | 107 | 1890 |
| Cameras. Connection for the swinging elements of | F. B. Case | 736,213 | Aug. 11 | 2211 | 476 | 105 | 1472 |
| Cameras. Focusing view-finder for photographic | E. H. Williamson, Jr | 736,899 | Aug. 18 | 3489 | 775 | 105 | 1757 |
| Cameras. Sensitized plate for photographic | A. A. Brooks and G. A. Watson | 718,242 | Jan. 13 | 1337 | 296 | 102 | 302 |
| Camphene. Making | K. Stephan | 725,890 | Apr. 21 | 2730 | ..... | 103 | 1781 |
| Camphidin and preparing same | J. Tafel | 727,026 | May 5 | 408 | ..... | 104 | 89 |
| Camphidon. Manufacture of | J. Tafel | 727,024 | May 5 | 406 | ..... | 104 | 89 |
| Camping utensil | D. T. Abercrombie | 730,731 | June 9 | 2188 | 487 | 104 | 1598 |
| Can: | | | | | | | |
| *See* Ash-can. Ash or garbage can. Blacking-can. Creaming-can. Dispensing-can. Friction-top can. Garbage-can. Heating-can. Ice-cream-packing can. Ice-freezing can. Key-opening can. Milk-can. Oil-can. Paint-can. Self-heating can. Self-measuring can. Sheet-metal can. | | | | | | | |
| Can | J. Kroehler | 722,025 | Mar. 3 | 690 | 153 | 103 | 149 |

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| | | | | Spec. | Drg. | Vol. | Page |
| Can | G. R. Turner | 725,515 | Apr. 14 | 2036 | 461 | 103 | 1616 |
| Can | W. T. Coghlan | 728,869 | May 26 | 3869 | 861 | 104 | 874 |
| Can | E. Eckart | 738,892 | Sept. 15 | 2692 | 594 | 106 | 610 |
| Can | J. C. Achterman | 744,991 | Nov. 24 | 4211 | 911 | 107 | 943 |
| Can | R. E. Pearce | 748,213 | Dec. 29 | 5411 | 1231 | 107 | 2363 |
| Can attachment | R. E. Gold | 735,088 | Aug. 4 | 73 | 19 | 105 | 997 |
| Can attachment. Oil- | M. J. Irlbacher | 735,519 | Aug. 4 | 933 | 198 | 105 | 1179 |
| Can attachment. Oil- | W. L. Chrysler and J. H. Day | 740,529 | Oct. 6 | 285 | 56 | 106 | 1306 |
| Can-bodies. Manufacture of key-opening tongued-tearing-strip | B. H. Larkin | 735,783 | Aug. 11 | 1419 | 304 | 105 | 1301 |
| Can-body-blank-feed mechanism | A. Lotz | 733,983 | July 21 | 2345 | 550, 551 | 105 | 527 |
| Can-body-blank-feed mechanism for can-body-making machines. | T. J. Harben | 723,383 | Mar. 24 | 3237 | 726 | 103 | 723 |
| Can-body-flanging machine | H. L. Guenther | 723,602 | Mar. 24 | 3627 | 810, 811, 812, 813 | 103 | 803 |
| Can-body forming and seaming machine | H. C. Black | 731,157 | June 16 | 2993 | 664, 665 | 104 | 1784 |
| Can-body forming and seaming machine | H. C. Black | 747,578 | Dec. 22 | 4165 | 936 | 107 | 2070 |
| Can-body-forming machine | J. McGinnis | 730,039 | June 2 | 946 | 212, 213 | 104 | 1320 |
| Can-body machine | C. B. McDonald | 718,860 | Jan. 20 | 2537 | 564 | 102 | 569 |
| Can-body machine | W. H. Smyth | 737,291 | Aug. 25 | 4222 | 940 | 105 | 1931 |
| Can-body-making machine | G. F. Leiger | 732,004 | June 23 | 4575 | 1020, 1021, 1022, 1023 | 104 | 2128 |
| Can-body-making machine | E. Zeh | 734,648 | July 28 | 3596 | 842, 843 | 105 | 809 |
| Can-body-making machine | A. P. Wolfe | 737,989 | Sept. 1 | 868 | 189, 190, 191 | 106 | 190 |
| Can-cap | C. S. Bucklin | 730,739 | June 9 | 2201 | 490 | 104 | 1600 |
| Can-capping machine | F. L. Baker | 724,240 | Mar. 31 | 4889 | 1094, 1095 | 103 | 1079 |
| Can-capping machine. Friction-top- | F. Neal | 746,564 | Dec. 8 | 2265 | 519 | 107 | 1604 |
| Can-ending machine | L. Lambin | 726,799 | Apr. 28 | 4437 | 999, 1000 | 103 | 2141 |
| Can ends. Cutting | J. Lee | 745,505 | Dec. 1 | 365 | 84 | 107 | 1177 |
| Can-filling apparatus | W. B. Hodges | 741,792 | Oct. 20 | 2705 | 603 | 106 | 1856 |
| Can-filling apparatus | H. J. Hain | 746,326 | Dec. 8 | 1867 | 425, 426 | 107 | 1517 |
| Can-filling device | W. H. Sedberry | 720,492 | Feb. 10 | 1975 | 452 | 102 | 1256 |
| Can-filling machine | C. H. Avars | 722,075 | Mar. 3 | 769 | 172 | 103 | 166 |
| Can-filling machine | J. W. Carnochan | 735,209 | Aug. 4 | 342 | 65, 66 | 105 | 1054 |
| Can-filling machine | P. Mitchell | 736,762 | Aug. 18 | 3233 | 714 | 105 | 1703 |
| Can-filling machine | A. Cerruti | 744,048 | Nov. 17 | 2477 | 532 | 107 | 558 |
| Can-filling machine | A. Cerruti | 744,049 | Nov. 17 | 2479 | 532, 533 | 107 | 558 |
| Can-floating machine. Round- | W. Rubin | 743,567 | Nov. 10 | 1544 | 322, 323 | 107 | 347 |
| Can folding support | W. L. Jasinski | 721,307 | Feb. 24 | 3561 | 810 | 102 | 1623 |
| Can forming and seaming machine | C. Puddefoot | 727,837 | May 12 | 1924 | 428, 429 | 104 | 427 |
| Can-forming machine | R. J. Good and J. H. Schlafly | 725,070 | Apr. 14 | 1204 | 273, 274, 275 | 103 | 1441 |
| Can handling and cooling apparatus | W. Smith | 734,441 | July 21 | 3217 | 757, 758 | 105 | 713 |
| Can-head-fastening machine | C. Stecher | 740,199 | Sept. 29 | 5108 | 1147, 1148 | 106 | 1158 |
| Can-header | L. C. Sharp | 723,047 | Mar. 17 | 2575 | 580, 581 | 103 | 577 |
| Can-header | C. E. Forry | 737,216 | Aug. 25 | 4068 | 903, 904 | 105 | 1899 |
| Can-header attachment | R. D. Townsend | 738,642 | Sept. 8 | 2195 | 479 | 106 | 487 |
| Can heading and double-seaming machine | G. J. Record | 737,868 | Sept. 1 | 607 | 133, 134 | 106 | 134 |
| Can-heading machine | J. A. Gray | 740,008 | Sept. 29 | 4762 | 1071, 1072 | 106 | 1085 |
| Can-heading machine | W. H. Smyth | 740,599 | Oct. 6 | 420 | 91 | 106 | 1336 |
| Can-heading machine | W. H. Smyth | 740,600 | Oct. 6 | 423 | 91, 92, 93 | 106 | 1337 |
| Can-heading machine | A. P. Wolfe | 741,869 | Oct. 20 | 2835 | 632, 633 | 106 | 1885 |
| Can-heading machine | C. Stecher and P. Fulford | 744,698 | Nov. 17 | 3679 | 791, 792, 793, 794, 795 | 107 | 817 |
| Can-heading machine | J. Black and F. J. Smith | 746,662 | Dec. 15 | 2469 | 564, 565 | 107 | 1671 |
| Can lid or the like. Milk- | W. Gorman | 720,421 | Feb. 10 | 1859 | 423 | 102 | 1233 |
| Can-making machine | E. Small | 725,886 | Apr. 21 | 2723 | 619, 620 | 103 | 1779 |
| Can-making machine | W. D. Brooks | 741,620 | Oct. 20 | 2369 | 530, 531 | 106 | 1786 |
| Can-opener | N. Kalischer | 723,609 | Mar. 24 | 3642 | 815 | 103 | 806 |
| Can-opener | F. Peffer | 725,131 | Apr. 14 | 1331 | 300 | 103 | 1467 |
| Can-opener | L. T. Weiss | 725,305 | Apr. 14 | 1632 | 368 | 103 | 1531 |
| Can-opener | N. Cleveland | 727,905 | May 12 | 2049 | 456 | 104 | 454 |
| Can-opener | H. Till | 731,329 | June 16 | 3306 | 738 | 104 | 1847 |
| Can-opener | G. F. Hall | 733,194 | July 7 | 873 | 211 | 105 | 183 |
| Can-opener | G. O. Redpath | 741,276 | Oct. 13 | 1659 | 375 | 106 | 1619 |

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| Invention. | Name. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|---|
| | | | | Spec. | Drg. | Vol. | Page. |
| Can-opener | R. O. Hammond | 742,418 | Oct. 27 | 3942 | 885 | 106 | 2125 |
| Can-opener | H. B. Landis | 743,735 | Nov. 10 | 1842 | 388 | 107 | 410 |
| Can-opener | M. L. Hawks | 744,914 | Nov. 24 | 4068 | 877 | 107 | 914 |
| Can-opener. Adjustable | F. L. Stork | 746,195 | Dec. 8 | 1621 | 361 | 107 | 1467 |
| Can-opener and fruit-jar clamp. Combined | J. R. Fretwell | 731,034 | June 16 | 2758 | 615 | 104 | 1736 |
| Can opening or closing implement | J. B. Aikin | 747,831 | Dec. 22 | 4643 | 1049 | 107 | 2178 |
| Can or box structure | W. I. Tuttle | 743,597 | Nov. 10 | 1606 | 336 | 107 | 359 |
| Can or container for volatile oils, liquids, &c | C. M. Goold | 730,530 | June 9 | 1839 | 411 | 104 | 1522 |
| Can or jar | W. A. Lorenz | 747,451 | Dec. 22 | 3944 | 887 | 107 | 2019 |
| Can or jar | C. W. Millett | 747,461 | Dec. 22 | 3961 | 890 | 107 | 2022 |
| Can or receptacle for ashes, &c | H. Dolid | 730,100 | June 2 | 1046 | 234 | 104 | 1341 |
| Can or vessel | E. M. Jones | 732,862 | July 7 | 296 | 74 | 105 | 65 |
| Can or vessel safety attachment | L. Kessler | 718,475 | Jan. 13 | 1783 | 396 | 102 | 395 |
| Can-press | F. Klaus | 722,853 | Mar. 17 | 2255 | 505 | 103 | 509 |
| Can-salting machine | W. E. Dement | 718,987 | Jan. 27 | 2791 | 624, 625 | 102 | 637 |
| Can-spout | F. J. Spiegler | 720,854 | Feb. 17 | 2660 | 614 | 102 | 1413 |
| Can-testing apparatus | J. G. and M. O. Rehfuss | 725,589 | Apr. 14 | 2160 | 489, 490 | 103 | 1644 |
| Can top and bottom conveying apparatus | J. G. and M. O. Rehfuss | 725,588 | Apr. 14 | 2158 | 489 | 103 | 1643 |
| Can washer. Milk- | T. L. Valerius | 734,015 | July 21 | 2415 | 564, 565 | 105 | 543 |
| Cans for shipment. Preparing | D. Cameron, C. E. Bell, and A. T. Barnes. | 732,046 | June 30 | 4670 | 1043 | 104 | 2161 |
| Cans, &c. Machine for operating on | C. H. Hanford | 748,368 | Dec. 29 | 5668 | 1292, 1293, 1294 | 107 | 2422 |
| Cans. Manufacture of key-opening tongued-tearing-strip | G. W. Weber | 735,850 | Aug. 11 | 1565 | 334 | 105 | 1334 |
| Cans or jars or the like. Device for closing or fastening fruit | G. B. Ertell | 739,593 | Sept. 22 | 2965 | 885 | 106 | 896 |
| Cans or other receptacles. Apparatus for filling | S. L. Troupe | 731,526 | June 23 | 3692 | 823, 824 | 104 | 1945 |
| Cans or other vessels. Ejector mechanism for oil- | R. Spence | 737,515 | Aug. 25 | 4647 | 1042, 1043 | 105 | 2027 |
| Cans or tins. Machine for forming seating-flanges on | W. Moir and J. Robertson | 731,202 | June 16 | 3071 | 681, 682 | 104 | 1798 |
| Canned goods. Apparatus for steaming and processing | J. Jennings | 740,981 | Oct. 6 | 1100 | 248 | 106 | 1480 |
| Canned goods. Apparatus for treating | R. B. Polk | 742,488 | Oct. 27 | 4053 | 910, 911, 912 | 106 | 2149 |
| Canned-goods-processing apparatus | R. D. Bradley | 743,234 | Nov. 3 | 807 | 176 | 107 | 169 |
| Cannery-hoist | J. C. West | 746,767 | Dec. 15 | 2648 | 611 | 107 | 1711 |
| Canning apparatus | W. Smith | 729,689 | June 2 | 292 | 67 | 104 | 1189 |
| Canning foods | A. T. Jones | 732,083 | June 30 | 4744 | 1059 | 104 | 2176 |
| Canning. Machine for preparing fruit for | W. J. Latchford | 746,530 | Dec. 8 | 2207 | 506, 507 | 107 | 1591 |
| Canning. Machine for preparing fruit for | W. J. Latchford | 746,531 | Dec. 8 | 2211 | 507 | 107 | 1592 |
| Canal and power-generating system | C. S. Bradley | 725,927 | Apr. 21 | 2796 | 634 | 103 | 1794 |
| Canal system. Electric | F. Adams | 728,823 | May 26 | 3787 | 844 | 104 | 859 |
| Canals, docks, or other hydraulic works. Apparatus for controlling flow of water from rivers, &c., to | C. E. Livesay | 726,316 | Apr. 28 | 3509 | 794, 795 | 103 | 1955 |
| Candelabrum | J. J. Ferry | 729,745 | June 2 | 405 | 91, 92 | 104 | 1211 |
| Candelabrum | X. B. Konkel | 742,039 | Oct. 20 | 3198 | 714 | 106 | 1959 |
| Candelabrum | W. Schimpf | 747,780 | Dec. 22 | 4546 | 1024 | 107 | 2157 |
| Candle attachment | M. L. Bush | 745,151 | Nov. 24 | 4574 | 992 | 107 | 1016 |
| Candle-extinguisher | R. v. Todenwarth | 728,427 | May 19 | 3029 | 665 | 104 | 683 |
| Candle-holder | A. Graef | 745,599 | Dec. 1 | 526 | 123 | 107 | 1209 |
| Candle-molding apparatus | J. Burpitt | 742,883 | Nov. 3 | 28 | 6 | 107 | 9 |
| Candle. Ornamental multiple | W. S. De Woody | 735,724 | Aug. 11 | 1319 | 284 | 105 | 1279 |
| Candlestick | W. Haussermann | 730,645 | June 9 | 2036 | 453 | 104 | 1566 |
| Candlestick | W. Nicol and J. H. Stewart | 744,596 | Nov. 17 | 3473 | 749 | 107 | 770 |
| Candlestick | W. Nicol and J. H. Stewart | 744,597 | Nov. 17 | 3473 | 749 | 107 | 770 |
| Candlestick drip-cup | T. M. Mulkerins | 732,318 | Mar. 10 | 1234 | 274 | 103 | 279 |
| Candlestick. Miner's | S. Peterson and C. E. Fielding | 735,578 | Aug. 4 | 1047 | 223 | 105 | 1203 |
| Candlestick. Miner's | R. P. Rasmussen | 738,571 | Sept. 8 | 2053 | 447 | 106 | 457 |
| Candy-box | C. A. Adams | 732,199 | Mar. 10 | 1017 | 224 | 103 | 231 |
| Candy-crimping machine | S. Morgan | 719,490 | Feb. 3 | 145 | 32 | 102 | 854 |
| Candy-dipper | F. C. Spang | 719,896 | Feb. 3 | 873 | 205 | 102 | 1008 |
| Candy-dripping machine | E. F. W. Wieda | 723,103 | Mar. 17 | 2679 | 603, 604 | 103 | 599 |
| Candy-machine | W. J. Morrison and J. C. Wharton | 717,756 | Jan. 6 | 443 | 103 | 102 | 96 |
| Candy-making apparatus. Rock- | T. Suzuki | 748,321 | Dec. 29 | 5590 | 1274, 1275 | 107 | 2405 |
| Candy-making machine | J. Friend and W. W. Price | 718,997 | Jan. 27 | 2809 | 629, 630 | 102 | 641 |
| Candy. Pulling | C. Thibodeau | 736,313 | Aug. 11 | 2391 | 520, 521 | 105 | 1513 |
| Candy-pulling machine | W. E. Henry | 731,681 | June 23 | 3981 | 887 | 104 | 2001 |
| Candy-pulling machine | C. D. Frankinson | 748,060 | Dec. 29 | 5133 | 1161 | 107 | 2307 |
| Candy pulling or aerating machine | M. E. Berrye, J. A. Kane, and J. E. Stengard. | 728,075 | May 12 | 2359 | 525 | 104 | 519 |
| Cane | J. L. Brink | 726,854 | May 5 | 33 | 8 | 104 | 10 |
| Cane and camp-stool. Combined | J. Halin | 723,382 | Mar. 24 | 3234 | 725, 726 | 103 | 722 |
| Cane and chair. Combined | R. C. Dulin | 731,291 | June 16 | 3237 | 720 | 104 | 1832 |
| Cane and stool. Combined | C. W. Heeg and C. A. Klise | 725,960 | Apr. 21 | 2851 | 647 | 103 | 1805 |
| Cane and umbrella or parasol. Combined | R. Kronenberg | 741,678 | Oct. 20 | 2473 | 552 | 106 | 1808 |
| Cane and whip. Combined | H. H. Brandes | 741,219 | Oct. 13 | 1663 | 352 | 106 | 1600 |
| Cane. Bleaching | H. C. Meyer and E. Besenbruch | 732,869 | Mar. 17 | 2274 | 509 | 103 | 513 |
| Cane-cart | J. E. Gamalielson | 730,901 | June 16 | 2509 | 557 | 104 | 1685 |
| Cane. Combination- | L. Robertson | 741,373 | Oct. 13 | 1888 | 416 | 106 | 1670 |
| Cane-cutting apparatus. Sugar- | J. H. N. Wilson | 747,027 | Dec. 15 | 3151 | 722, 723 | 107 | 1825 |
| Cane-cutting knife and stripper | N. Asbell | 725,811 | Apr. 21 | 2602 | 591 | 103 | 1752 |

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| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Cane-cutting machine | T. W. Sloane | 724,345 | Mar. 31 | 5081 | 1137 | 103 | 1118 |
| Cane-display attachment | L. Robertson | 746,880 | Dec. 15 | 2871 | 661 | 107 | 1762 |
| Cane, &c. Electrical rotary portable machine for cutting sugar- | S. J. Hylton-Bravo | 733,587 | July 14 | 1594 | 379 | 105 | 355 |
| Cane fabrics. Machine for inserting diagonal strands in woven- | L. Janson | 745,062 | Nov. 24 | 4368 | 943, 944 | 107 | 976 |
| Cane-fork | L. B. Lotz | 730,669 | June 9 | 2091 | 465 | 104 | 1577 |
| Cane, &c., in the field. Machine for cutting sugar- | H. W. Schmidt | 724,620 | Apr. 7 | 376 | 90 | 103 | 1250 |
| Cane-loader | L. B. Lotz | 731,923 | June 23 | 4416 | 984 | 104 | 2095 |
| Cane-loader | A. J. Savoie | 745,911 | Dec. 1 | 1099 | 246 | 107 | 1333 |
| Cane. Magazine cap-exploding | J. R. Stanley and F. S. Howard | 723,218 | Mar. 17 | 2905 | 650 | 103 | 645 |
| Cane. Magazine torpedo- | J. H. Rese | 732,587 | June 30 | 5733 | 1273 | 104 | 2384 |
| Cane. Magazine torpedo- | D. D. Weisell | 738,379 | Sept. 8 | 1691 | 366 | 106 | 380 |
| Cane or corn topper | E. Jones and T. W. Cline | 743,516 | Nov. 10 | 1447 | 302 | 107 | 326 |
| Cane-stripper | D. S. Spurlock | 735,309 | Aug. 4 | 525 | 107 | 105 | 1093 |
| Cane stripper and header | H. H. Mohler | 747,462 | Dec. 22 | 3963 | 890, 891 | 107 | 2022 |
| Cane. Treating sugar- | M. Weinrich | 747,520 | Dec. 22 | 4073 | 916 | 107 | 2048 |
| Cane-weaving machine | E. H. Odom | 729,958 | June 2 | 804 | 179 | 104 | 1290 |
| Canes or like articles. Handle or head for | G. B. Keplinger | 729,353 | May 26 | 4722 | 1043 | 104 | 1049 |
| Cannon | W. H. Vivian | 734,779 | July 28 | 3865 | 901 | 105 | 861 |
| Cannon-pinion remover | E. Hanson | 736,964 | Aug. 25 | 3628 | 803 | 105 | 1807 |
| Canopy and supporting-frame. Combined | I. E. Palmer | 724,733 | Apr. 7 | 594 | 141 | 103 | 1295 |
| Canopy-support | J. Mugfur | 718,370 | Jan. 13 | 1574 | 348 | 102 | 353 |
| Canopy-support | W. J. Slyder | 719,268 | Jan. 27 | 3316 | 742 | 102 | 746 |
| Canopy-supporting frame | I. E. Palmer | 739,024 | Sept. 15 | 2904 | 645 | 106 | 655 |
| Cant-hook | E. Counts | 720,567 | Feb. 17 | 2150 | 499 | 102 | 1308 |
| Cant-hook | D. H. Langan | 725,347 | Apr. 14 | 1721 | 387 | 103 | 1549 |
| Cant-hook | W. O. Leduc | 742,457 | Oct. 27 | 4006 | 899 | 106 | 2139 |
| Cant-hook and binder. Combined | W. E. Martin | 747,079 | Dec. 15 | 3260 | 742 | 107 | 1852 |
| Cant-hook. Double | E. F. Cunningham | 734,162 | July 21 | 2702 | 636 | 105 | 605 |
| Canvas-stretcher | W. J. Dorgan | 725,422 | Apr. 14 | 1849 | 414 | 103 | 1576 |
| Cap | C. S. Tobias | 723,946 | Mar. 31 | 4282 | 962 | 103 | 960 |
| Cap and girder-support. Combined | H. Russel | 720,623 | Feb. 17 | 2277 | 522 | 102 | 1331 |
| Cap. Bathing- | H. Lemmermann | 734,578 | July 28 | 3472 | 811 | 105 | 783 |
| Cap or cartridge receptacle | J. W. Grubbs | 735,757 | Aug. 11 | 1380 | 297 | 105 | 1292 |
| Cap or closure for receptacles. Safety | F. B. Joy | 733,213 | July 7 | 916 | 221 | 105 | 191 |
| Cap or closure. Screw | J. C. Potter | 743,189 | Nov. 3 | 708 | 155 | 107 | 147 |
| Cape | C. M. Stein | 723,750 | Mar. 24 | 3879 | 873 | 103 | 857 |
| Cape, blanket, and shelter-tent. Combined | C. Stacey | 719,899 | Feb. 3 | 877 | 206 | 102 | 1009 |
| Capping-block | C. C. McDonald, G. L. Brown, and W. H. Teare. | 739,697 | Sept. 22 | 4156 | 929 | 106 | 938 |
| Capstan. Electric | W. D. Baldwin and A. Sundh | 741,995 | Oct. 20 | 3108 | 693 | 106 | 1940 |
| Capsule-tubes. Manufacture of | G. H. Paine | 722,881 | Mar. 17 | 2308 | 515 | 103 | 521 |
| Car | J. H. Fassett and J. E. Warren | 726,663 | Apr. 28 | 4179 | 944 | 103 | 2088 |
| Car | E. W. Summers | 728,044 | May 12 | 2299 | 511, 512 | 104 | 507 |
| Car | S. E. Jackman | 737,410 | Aug. 25 | 4447 | 998 | 105 | 1981 |
| Car adjustable housing | J. A. de Macedo | 728,736 | May 19 | 3614 | 802 | 104 | 806 |
| Car and air-brake coupling. Combined street- | L. C. Cary | 720,325 | Feb. 10 | 1693 | 384 | 102 | 1197 |
| Car and car-truck bolster | S. P. Bush and J. H. McCormick | 734,665 | July 28 | 3635 | 851 | 105 | 817 |
| Car and car-truck bolster | S. P. Bush | 734,814 | July 28 | 3950 | 921 | 105 | 879 |
| Car and door therefor. Hopper gondola | R. V. Sage | 746,885 | Dec. 8 | 1962 | 449 | 107 | 1538 |
| Car and line indicator for street-railways | H. D. Haggerty | 744,068 | Nov. 17 | 2520 | 539 | 107 | 566 |
| Car and metallic-car construction. Tank- | C. Vanderbilt | 747,278 | Dec. 15 | 3633 | 818, 819, 820 | 107 | 1932 |
| Car and metallic-car construction. Tank- | C. Vanderbilt | 747,279 | Dec. 15 | 3638 | 820, 821 | 107 | 1934 |
| Car and system of mounting and wiring electrical apparatus thereon. Electric-motor | G. Gibbs | 730,251 | June 9 | 1380 | 292 | 104 | 1413 |
| Car annunciator. Street- | W. H. Herrick | 731,900 | June 23 | 4372 | 975 | 104 | 2086 |
| Car appliance. Railway- | A. J. Brislin | 747,370 | Dec. 22 | 3809 | 857 | 107 | 1989 |
| Car attachment for shipping hogs in hot weather. Stock- | M. C. Beck | 741,875 | Oct. 20 | 2847 | 635 | 106 | 1888 |
| Car automatic air-coupling | T. M. D. Earheart | 746,801 | Dec. 15 | 2707 | 624 | 107 | 1724 |
| Car. Bank or mine | G. D. Williams and A. J. Coney | 740,725 | Oct. 6 | 624 | 140 | 106 | 1381 |
| Car body-bolster. Railway- | G. S. Hastings | 734,324 | July 21 | 3022 | 712 | 105 | 673 |
| Car body-bolster. Railway- | J. W. Seaver | 734,372 | July 21 | 3098 | 729 | 105 | 689 |
| Car-body extension-top | F. S. Ingoldsby | 720,923 | Feb. 17 | 2800 | 642 | 102 | 1442 |
| Car-body. Folding | G. S. Grant | 732,847 | July 7 | 269 | 67, 68 | 105 | 60 |
| Car bogie. Railway- | G. H. Sheffield and J. D. Twinberrow. | 731,626 | June 23 | 3886 | 864, 865 | 104 | 1982 |
| Car-bolster | G. H. Goodell | 720,238 | Feb. 10 | 1530 | 350 | 102 | 1162 |
| Car-bolster | S. P. Bush | 747,934 | Dec. 29 | 4871 | 1100 | 107 | 2250 |
| Car bolster. Hopper- | J. M. Hansen | 719,464 | Feb. 3 | 93 | 22, 23 | 102 | 845 |
| Car bolster. Hopper- | A. Christianson | 720,221 | Feb. 10 | 1505 | 345 | 102 | 1157 |
| Car bolster. Hopper- | J. M. Hansen | 720,246 | Feb. 10 | 1541 | 352, 353 | 102 | 1164 |
| Car bolster. Railway- | J. A. Thorsell | 725,175 | Apr. 14 | 1411 | 319 | 103 | 1483 |
| Car bolster. Railway- | J. E. Lombard and J. R. Bowlind | 728,479 | May 19 | 3132 | 692 | 104 | 705 |
| Car bolster. Railway- | A. Stucki | 745,262 | Nov. 24 | 4765 | 1041 | 107 | 1058 |
| Car-bottom | E. W. Summers | 746,602 | Dec. 8 | 2338 | 535 | 107 | 1622 |
| Car. Bottom-dumping | R. H. Hornbrook | 725,710 | Apr. 21 | 2406 | 546 | 103 | 1710 |
| Car. Bottom-dumping | S. Otis | 739,914 | Sept. 29 | 4586 | 1031 | 106 | 1047 |
| Car. Box or produce | J. M. Hansen | 727,620 | May 12 | 1488 | 334, 335 | 104 | 338 |
| Car-brake | H. Jones | 720,151 | Feb. 10 | 1361 | 311, 312 | 102 | 1129 |
| Car-brake | R. E. Kimball | 720,359 | Feb. 10 | 1760 | 399 | 102 | 1122 |
| Car-brake | F. X. Bérubé | 722,201 | Mar. 10 | 1020 | 224, 225 | 103 | 232 |
| Car-brake | F. Theilengerdes | 722,266 | Mar. 10 | 1148 | 253, 254 | 103 | 259 |
| Car-brake | H. J. Powell and O. H. Schneider | 725,286 | Apr. 14 | 1600 | 361 | 103 | 1523 |
| Car-brake | M. J. Doner | 727,108 | May 5 | 551 | 118 | 104 | 120 |

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| Invention. | Name. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|---|
| | | | | Spec. | Dr'g. | Vol. | Page. |
| Car-brake | F. W. Rock | 727,451 | May 5 | 1167 | 258 | 104 | 252 |
| Car-brake | C. A. Kleiner | 729,358 | May 26 | 4727 | 1045 | 104 | 1050 |
| Car-brake | B. von Philp | 729,658 | June 2 | 243 | 57 | 104 | 1178 |
| Car-brake | A. Christensen | 732,516 | June 30 | 5596 | 1240 | 104 | 2352 |
| Car-brake | S. H. Graden | 735,246 | Aug. 4 | 405 | 80 | 105 | 1067 |
| Car-brake | A. R. Moore | 738,693 | Sept. 8 | 2306 | 506 | 106 | 509 |
| Car-brake | T. E. McCollum | 738,833 | Sept. 15 | 2591 | 572 | 106 | 587 |
| Car-brake | F. P. Thomas | 740,487 | Oct. 6 | 199 | 39 | 106 | 1288 |
| Car-brake | H. E. Brown and R. D. Moon | 741,621 | Oct. 20 | 2373 | 531, 532 | 106 | 1787 |
| Car-brake | C. P. Moran | 742,798 | Oct. 27 | 4603 | 1043 | 106 | 2267 |
| Car-brake | A. M. Kendall | 744,079 | Nov. 17 | 2540 | 543, 544 | 107 | 570 |
| Car-brake | J. B. Lau | 744,569 | Nov. 17 | 3441 | 741 | 107 | 764 |
| Car-brake | W. D. Rearwin | 744,981 | Nov. 24 | 4192 | 906, 907 | 107 | 939 |
| Car-brake | W. W. Hopkins | 745,848 | Dec. 1 | 989 | 222, 223 | 107 | 1310 |
| Car-brake | W. W. Hopkins | 745,849 | Dec. 1 | 992 | 223 | 107 | 1310 |
| Car-brake | V. Waid | 746,613 | Dec. 8 | 2352 | 540 | 107 | 1625 |
| Car-brake attachment | G. E. Terpe | 732,604 | June 30 | 5759 | 1277 | 104 | 2390 |
| Car brake-beam. Railway- | S. A. Crone | 742,169 | Oct. 27 | 3473 | 776 | 106 | 2030 |
| Car brake-beam. Railway- | S. A. Crone | 744,722 | Nov. 24 | 3739 | 807 | 107 | 846 |
| Car brake-beams. Brake-head for railway- | S. A. Crone | 740,092 | Sept. 29 | 4914 | 1102 | 106 | 1117 |
| Car-brake. Beamless | J. S. Cary | 736,686 | Aug. 18 | 3097 | 683 | 105 | 1674 |
| Car-brake. Combined rail and wheel | C. V. Rote | 724,508 | Apr. 7 | 158 | 37, 38, 39 | 103 | 1203 |
| Car-brake. Combined rail and wheel | W. M. Deal | 738,299 | Sept. 8 | 1510 | 327, 328 | 106 | 340 |
| Car-brake. Emergency | H. Fresh | 718,448 | Jan. 13 | 1727 | 384 | 102 | 384 |
| Car-brake. Emergency | A. Perry | 730,377 | Feb. 10 | 1788 | 405 | 102 | 1217 |
| Car-brake. Emergency | J. M. Ross | 730,048 | June 2 | 960 | 215 | 104 | 1323 |
| Car-brake. Emergency | W. B. and V. Storch | 732,600 | June 30 | 5755 | 1276 | 104 | 2389 |
| Car-brake. Emergency | J. M. Hedrick | 737,624 | Sept. 1 | 122 | 26 | 106 | 29 |
| Car brake mechanism | J. Shelton | 719,148 | Jan. 27 | 3105 | 691 | 102 | 701 |
| Car brake mechanism | J. Shelton | 722,154 | Mar. 3 | 911 | 202, 203 | 103 | 194 |
| Car brake mechanism | W. S. Howland | 740,860 | Oct. 6 | 884 | 198 | 106 | 1435 |
| Car brake-operating mechanism. Railway- | J. H. Bruce | 743,144 | Nov. 3 | 627 | 136 | 107 | 131 |
| Car brake. Railway- | J. J. Kennelly | 732,989 | Mar. 17 | 2478 | 557 | 103 | 556 |
| Car brake. Railway- | J. E. Bozell | 723,642 | Mar. 24 | 3701 | 829 | 103 | 818 |
| Car-brake ratchet-handle | P. C. Baggerman | 725,393 | Apr. 14 | 1798 | 403 | 103 | 1565 |
| Car-brake rods. Brake-jaw for | A. Lipschutz | 733,853 | July 14 | 2083 | 492 | 105 | 454 |
| Car-brake safety attachment | L. S. Barber | 728,654 | May 19 | 3470 | 770 | 104 | 776 |
| Car-brake shoe | F. R. Spear | 719,897 | Feb. 3 | 874 | 205 | 102 | 1008 |
| Car brake. Street-railway- | J. Wetzler and A. Green | 743,966 | Nov. 10 | 2260 | 486 | 107 | 499 |
| Car broom or brush holder | D. Flagg | 730,206 | June 2 | 1217 | 272 | 104 | 1375 |
| Car-buffer | C. Rettig | 720,619 | Feb. 17 | 2270 | 521 | 102 | 1330 |
| Car-buffer | W. F. Richards | 745,667 | Dec. 1 | 639 | 148 | 107 | 1234 |
| Car buffer. Railway- | T. L. McKeen | 729,787 | June 2 | 484 | 107, 108 | 104 | 1227 |
| Car bumper. Railway- | T. Collins | 737,709 | Sept. 1 | 268 | 57 | 106 | 61 |
| Car bumper. Railway- | E. M. Smith | 740,325 | Sept. 29 | 5343 | 1204 | 106 | 1206 |
| Car bunter. Electric- | J. Brennan | 732,041 | June 30 | 4661 | 1041 | 104 | 2160 |
| Car. Burglar-proof express- | C. Fleischhauer | 722,830 | Mar. 17 | 2220 | 498 | 103 | 503 |
| Car. Burglar-proof express- | J. W. Vaughan | 732,802 | July 7 | 197 | 50 | 105 | 45 |
| Car. Burglar-proof mail and express | C. Zimmerman | 734,650 | July 28 | 3605 | 843, 844 | 105 | 810 |
| Car. Center-dumping | R. H. Hornbrook | 721,892 | Mar. 3 | 434 | 95 | 103 | 96 |
| Car. Center-dumping | R. H. Hornbrook | 725,564 | Apr. 14 | 2117 | 480 | 103 | 1633 |
| Car center plate. Railway- | L. A. Shepard | 729,967 | June 2 | 823 | 184 | 104 | 1295 |
| Car center sill. Railway- | O. S. Pulliam | 732,442 | June 30 | 5456 | 1211 | 104 | 2324 |
| Car chair and berth. Sleeping- | H. F. Holland and A. L. Wheeler | 743,872 | Nov. 10 | 2092 | 446, 447 | 107 | 462 |
| Car cinder-guard | L. C. Maxson and C. M. Denison | 734,583 | July 28 | 3477 | 812, 813 | 105 | 784 |
| Car closure. Street- | C. S. Sapp | 740,929 | Oct. 6 | 994 | 225 | 106 | 1459 |
| Car. Combination- | C. V. Keegan | 738,202 | Sept. 8 | 1313 | 285 | 106 | 300 |
| Car. Combination steel | W. Rohrbacher | 728,016 | May 12 | 2254 | 501 | 104 | 497 |
| Car. Compartment sleeping- | H. F. Holland | 719,802 | Feb. 3 | 714 | 167 | 102 | 974 |
| Car construction | H. C. Buhoup | 725,213 | Apr. 14 | 1485 | 337, 338 | 103 | 1499 |
| Car construction | G. I. King | 728,800 | May 19 | 3732 | 833 | 104 | 829 |
| Car construction | C. W. Mourer | 732,425 | June 30 | 5420 | 1203 | 104 | 2317 |
| Car construction | A. B. Du Pont and G. J. Kobusch | 734,409 | July 21 | 3161 | 743 | 105 | 701 |
| Car construction | D. C. Courtney | 748,166 | Dec. 29 | 5328 | 1210, 1211 | 107 | 2349 |
| Car construction. Metallic- | H. C. Buhoup | 717,540 | Jan. 6 | 29 | 8, 9 | 102 | 9 |
| Car construction. Steel- | W. F. Kiesel, Jr | 726,169 | Apr. 21 | 3194 | 722 | 103 | 1875 |
| Car construction. Steel- | A. B. Bellows | 726,499 | Apr. 28 | 3876 | 876 | 103 | 2027 |
| Car construction. Steel- | T. F. Burke | 740,804 | Oct. 6 | 792 | 178 | 106 | 1414 |
| Car controller. Street or railway | G. A. Brooks | 723,359 | Mar. 24 | 3186 | 716 | 103 | 714 |
| Car. Convertible | J. A. Brill and H. E. Haddock | 732,280 | Mar. 10 | 1168 | 258, 259 | 103 | 263 |
| Car. Convertible | H. W. Covert | 736,941 | Aug. 25 | 3586 | 794, 795 | 105 | 1798 |
| Car. Convertible | H. Romünder | 743,198 | Nov. 3 | 727 | 159 | 107 | 152 |
| Car. Convertible | J. O'Leary | 746,987 | Dec. 15 | 3081 | 705, 706 | 107 | 1809 |
| Car. Convertible dump- | H. S. Hart | 719,796 | Feb. 3 | 702 | 164, 165 | 102 | 971 |
| Car. Convertible passenger- | A. Kimble | 743,291 | Nov. 3 | 923 | 201 | 107 | 198 |
| Car-conveyer | H. J. Smith | 721,336 | Feb. 24 | 3621 | 823 | 102 | 1636 |
| Car-coupling | A. L. Sherwood | 717,633 | Jan. 6 | 200 | 49 | 102 | 43 |
| Car-coupling | E. Fabian and F. Widmark | 717,663 | Jan. 6 | 242 | 61 | 102 | 52 |

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| Invention. | Name. | No. | Date. | Monthly volume. Spec | Monthly volume. Drg | Official Gazette. Vol. | Official Gazette. Page |
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| Car-coupling | E. Fabian and F. Widmark | 717,664 | Jan. 6 | 244 | 61 | 102 | 53 |
| Car-coupling | E. Fabian and F. Widmark | 717,665 | Jan. 6 | 245 | 62 | 102 | 53 |
| Car-coupling | E. H. Janney | 717,686 | Jan. 6 | 294 | 73 | 102 | 63 |
| Car-coupling | C. S. Enright | 717,740 | Jan. 6 | 406 | 96 | 102 | 89 |
| Car-coupling | E. O. Evans | 718,706 | Jan. 20 | 2261 | 497 | 102 | 512 |
| Car-coupling | J. Timms | 718,889 | Jan. 20 | 2599 | 581 | 102 | 582 |
| Car-coupling | P. T. Handiges | 719,792 | Feb. 3 | 694 | 160 | 102 | 960 |
| Car-coupling | B. Brand | 720,398 | Feb. 10 | 1814 | 413 | 102 | 1223 |
| Car-coupling | W. Graupner | 720,687 | Feb. 17 | 2389 | 547 | 102 | 1355 |
| Car-coupling | G. P. Ritter | 720,738 | Feb. 17 | 2478 | 570, 571 | 102 | 1375 |
| Car-coupling | W. H. Sanders | 721,095 | Feb. 17 | 3133 | 720 | 102 | 1517 |
| Car-coupling | S. L. Trueblood | 722,192 | Mar. 3 | 989 | 219 | 103 | 209 |
| Car-coupling | J. and J. O. Timms | 722,267 | Mar. 10 | 1150 | 254 | 103 | 260 |
| Car-coupling | T. P. Bellows | 722,708 | Mar. 17 | 2155 | 482 | 103 | 491 |
| Car-coupling | H. S. Worthington | 723,349 | Mar. 24 | 3150 | 708 | 103 | 707 |
| Car-coupling | W. S. Schroeder and A. P. Lindholm | 723,410 | Mar. 24 | 3276 | 734 | 103 | 732 |
| Car-coupling | T. I. Duffy | 724,087 | Mar. 31 | 4555 | 1025 | 103 | 1013 |
| Car-coupling | W. S. Jones | 724,712 | Apr. 7 | 554 | 132 | 103 | 1287 |
| Car-coupling | C. E. Lucas | 725,105 | Apr. 14 | 1281 | 289 | 103 | 1457 |
| Car-coupling | W. S. Schroeder and A. P. Lindholm | 725,150 | Apr. 14 | 1365 | 308 | 103 | 1474 |
| Car-coupling | W. S. Schroeder and A. P. Lindholm | 725,151 | Apr. 14 | 1368 | 308 | 103 | 1475 |
| Car-coupling | J. Sines | 726,197 | Apr. 21 | 3263 | 741 | 103 | 1889 |
| Car-coupling | P. T. Handiges | 727,133 | May 5 | 602 | 129 | 104 | 130 |
| Car-coupling | J. G. L. Myers | 727,408 | May 5 | 1083 | 237 | 104 | 234 |
| Car-coupling | E. C. Washburn | 727,721 | May 12 | 1708 | 382, 383 | 104 | 385 |
| Car-coupling | C. A. Tower | 728,049 | May 12 | 2315 | 514 | 104 | 510 |
| Car-coupling | C. A. Tower | 728,182 | May 12 | 2553 | 568 | 104 | 561 |
| Car-coupling | P. C. Ewart | 728,888 | May 26 | 3897 | 866 | 104 | 879 |
| Car-coupling | C. C. Bowen, F. Newnham, and M. J. Barnett. | 729,037 | May 26 | 4161 | 922 | 104 | 934 |
| Car-coupling | J. C. Yeiser | 729,483 | May 26 | 4928 | 1092 | 104 | 1094 |
| Car-coupling | J. Longinotte | 730,033 | June 2 | 938 | 210 | 104 | 1319 |
| Car-coupling | G. C. Harlin | 730,910 | June 16 | 2521 | 561 | 104 | 1687 |
| Car-coupling | G. W. Smillie | 730,978 | June 16 | 2647 | 589, 590 | 104 | 1714 |
| Car-coupling | C. M. McClune | 731,318 | June 16 | 3288 | 732 | 104 | 1843 |
| Car-coupling | C. F. Springer | 731,415 | June 16 | 3469 | 775 | 104 | 1879 |
| Car-coupling | C. F. Springer | 731,416 | June 16 | 3471 | 776 | 104 | 1880 |
| Car-coupling | J. E. and J. H. Stubblebine | 731,520 | June 23 | 3682 | 821 | 104 | 1943 |
| Car-coupling | H. F. A. Kleinschmidt | 731,788 | June 23 | 4177 | 931 | 104 | 2042 |
| Car-coupling | O. S. Pulliam | 732,441 | June 30 | 5455 | 1211 | 104 | 2324 |
| Car-coupling | W. L. Kendall | 732,642 | June 30 | 5828 | 1291 | 104 | 2405 |
| Car-coupling | J. W. Smith | 732,790 | July 7 | 172 | 44 | 105 | 40 |
| Car-coupling | J. W. Smith | 732,791 | July 7 | 173 | 44 | 105 | 40 |
| Car-coupling | P. Brown | 733,620 | July 14 | 1646 | 390 | 105 | 366 |
| Car-coupling | C. A. Tower | 734,146 | July 21 | 2679 | 630 | 105 | 600 |
| Car-coupling | J. Timms | 734,776 | July 28 | 3861 | 900 | 105 | 861 |
| Car-coupling | S. P. Bush | 734,813 | July 28 | 3948 | 921 | 105 | 879 |
| Car-coupling | S. K. Dunkle | 734,835 | July 28 | 3985 | 931 | 105 | 887 |
| Car-coupling | W. A. Palmer | 734,935 | July 28 | 4149 | 965 | 105 | 922 |
| Car-coupling | J. Timms | 734,999 | July 28 | 4278 | 995 | 105 | 948 |
| Car-coupling | P. Baker | 735,695 | Aug. 11 | 1275 | 273 | 105 | 1269 |
| Car-coupling | W. S. Lee | 735,888 | Aug. 11 | 1634 | 349 | 105 | 1349 |
| Car-coupling | J. C. Yeiser | 736,330 | Aug. 11 | 2415 | 527 | 105 | 1518 |
| Car-coupling | M. L. Gaskill | 737,605 | Sept. 1 | 89 | 19 | 106 | 22 |
| Car-coupling | R. B. Stearns and F. D. Ward | 737,673 | Sept. 1 | 209 | 45 | 106 | 48 |
| Car-coupling | A. H. Renshaw | 737,772 | Sept. 1 | 402 | 85 | 106 | 88 |
| Car-coupling | H. Kelley | 738,203 | Sept. 8 | 1315 | 285, 286 | 106 | 300 |
| Car-coupling | S. C. Mason | 738,727 | Sept. 8 | 2355 | 516, 517 | 106 | 519 |
| Car-coupling | C. A. Tower | 738,738 | Sept. 8 | 2367 | 520 | 106 | 522 |
| Car-coupling | W. N. Hensley | 740,013 | Sept. 29 | 4773 | 1075 | 106 | 1087 |
| Car-coupling | S. Tobin | 740,490 | Oct. 6 | 207 | 41 | 106 | 1289 |
| Car-coupling | P. Luther | 741,264 | Oct. 13 | 1636 | 369 | 106 | 1615 |
| Car-coupling | J. Kelso | 741,970 | Oct. 20 | 3056 | 681, 682, 683 | 106 | 1930 |
| Car-coupling | J. W. Barth | 742,380 | Oct. 27 | 3871 | 869, 870 | 106 | 2111 |
| Car-coupling | G. Wiley | 742,944 | Nov. 3 | 216 | 49 | 107 | 47 |
| Car-coupling | J. B. Strauss | 743,110 | Nov. 3 | 558 | 120 | 107 | 116 |
| Car-coupling | S. E. Jackman | 743,169 | Nov. 3 | 675 | 147 | 107 | 141 |
| Car-coupling | J. W. Smith | 743,767 | Nov. 10 | 1896 | 401, 402 | 107 | 421 |
| Car-coupling | C. A. Tower | 745,265 | Nov. 24 | 4770 | 1042 | 107 | 1059 |
| Car-coupling | W. McConway and J. Kelso. (Reissue.) | 12,175 | Nov. 24 | 4893 | 1068 | 107 | 1083 |
| Car-coupling | T. Chew | 746,025 | Dec. 8 | 1317 | 295 | 107 | 1397 |
| Car-coupling | P. Hien | 746,079 | Dec. 8 | 1407 | 315, 316 | 107 | 1418 |
| Car-coupling | L. C. Carter | 746,458 | Dec. 8 | 2083 | 480 | 107 | 1564 |
| Car-coupling | M. McConway, Jr. | 746,561 | Dec. 8 | 2261 | 518 | 107 | 1604 |
| Car-coupling | S. Morris | 746,728 | Dec. 15 | 2572 | 592 | 107 | 1695 |
| Car-coupling | S. Morris | 746,729 | Dec. 15 | 2573 | 592 | 107 | 1695 |
| Car-coupling | S. Morris | 746,730 | Dec. 15 | 2574 | 592 | 107 | 1695 |
| Car-coupling | G. A. Hermanson | 747,971 | Dec. 29 | 4955 | 1119 | 107 | 2267 |
| Car-coupling | P. J. Dugan | 748,173 | Dec. 29 | 5340 | 1215 | 107 | 2351 |
| Car-coupling | F. Lehrmann | 748,384 | Dec. 29 | 5696 | 1300 | 107 | 2429 |
| Car-coupling and train-pipe coupling combined | D. T. Granbery | 724,004 | Mar. 31 | 4403 | 990, 991 | 103 | 983 |
| Car-coupling, Automatic | G. A. Hermanson | 717,746 | Jan. 6 | 420 | 98 | 102 | 92 |
| Car-coupling, Automatic | O. C. Moore | 736,864 | Aug. 18 | 3435 | 761 | 105 | 1746 |
| Car-coupling, Automatic | J. W. Barth | 742,379 | Oct. 27 | 3868 | 869 | 106 | 2111 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|---|
| | | | | Spec. | Dr'g. | Vol. | Page. |
| Car-coupling. Automatic | W. E. Crook | 745,794 | Dec. 1 | 863 | 195 | 107 | 1284 |
| Car-coupling auxiliary connection | W. N. Shephard | 746,588 | Dec. 8 | 2312 | 530 | 107 | 1616 |
| Car-coupling centering device | E. F. Chaffee. (Reissue) | 12,106 | Apr. 28 | 4517 | 1017 | 103 | 2159 |
| Car-coupling. Emergency | B. B. Carlisle and J. R. Elder | 745,093 | Nov. 24 | 4442 | 961 | 107 | 990 |
| Car-coupling gravity pin-lifter | W. B. Dievendorf | 719,096 | Jan. 27 | 3019 | 672 | 102 | 684 |
| Car-coupling. Lateral | F. Köhn | 722,114 | Mar. 3 | 841 | 187 | 103 | 181 |
| Car-coupling operating mechanism. Railway | W. F. Richards | 741,277 | Oct. 13 | 1661 | 375 | 106 | 1620 |
| Car-coupling-repairing device | O. P. Wilhelm | 744,658 | Nov. 17 | 3576 | 770, 771 | 107 | 791 |
| Car-coupling. Safety | S. D. Barnett | 717,525 | Jan. 6 | 5 | 2 | 102 | 4 |
| Car-coupling wearing device | W. F. Gould | 720,686 | Feb. 17 | 2387 | 547 | 103 | 1355 |
| Car-couplings. Emergency-yoke for | A. P. Laverty | 736,983 | Aug. 25 | 3667 | 813 | 105 | 1815 |
| Car-couplings. Flexible joint for | G. E. Tomlinson | 736,892 | Aug. 18 | 3479 | 773 | 105 | 1755 |
| Car. Derrick | J. A. McManus | 719,247 | Jan. 27 | 3280 | 733 | 102 | 737 |
| Car-despatcher's time apparatus | S. A. Riggs and T. J. Haworth | 720,484 | Feb. 10 | 1962 | 448 | 102 | 1253 |
| Car-door | F. L. Greer | 718,248 | Jan. 13 | 1345 | 298 | 102 | 304 |
| Car-door | W. A. Scott and P. J. Scholl | 720,289 | Feb. 10 | 1628 | 372, 373 | 102 | 1183 |
| Car-door | P. Brown | 722,941 | Mar. 17 | 2403 | 537, 538 | 103 | 541 |
| Car-door | W. Thornburgh | 727,029 | May 5 | 411 | 86 | 104 | 90 |
| Car-door | S. J. Johnson | 732,947 | July 7 | 441 | 109 | 105 | 95 |
| Car-door | G. I. Barnes and F. E. Woodford | 734,155 | July 21 | 2691 | 633 | 105 | 603 |
| Car-door | F. L. Monson | 735,556 | Aug. 4 | 1014 | 214 | 105 | 1195 |
| Car-door | W. T. Spillane | 736,890 | Aug. 18 | 3476 | 772 | 105 | 1754 |
| Car-door | E. J. Lasher | 746,109 | Dec. 8 | 1458 | 327, 328 | 107 | 1430 |
| Car-door | H. Carlton | 746,456 | Dec. 8 | 2080 | 479 | 107 | 1562 |
| Car-door attachment | E. A. Hill | 724,474 | Apr. 7 | 102 | 25 | 103 | 1191 |
| Car-door bearing | C. Beatty | 728,657 | May 19 | 3479 | 772 | 104 | 779 |
| Car door. Box | E. F. Luce | 720,368 | Feb. 10 | 1772 | 401, 402 | 102 | 1214 |
| Car door. Box | F. J. Hanrahan | 724,858 | Apr. 7 | 827 | 190 | 103 | 1346 |
| Car-door fastener. Automatic | L. B. Perriu | 737,657 | Sept. 1 | 182 | 38 | 106 | 43 |
| Car-door fastening | E. A. Gauchet | 730,758 | June 9 | 2234 | 496 | 104 | 1609 |
| Car-door fastenng | F. C. Anderson | 742,110 | Oct. 20 | 3369 | 752 | 106 | 1992 |
| Car door. Freight | D. E. McLaughlin | 725,581 | Apr. 14 | 2150 | 487 | 103 | 1641 |
| Car door. Freight | P. McMullen | 738,834 | Sept. 15 | 2593 | 572, 573 | 106 | 588 |
| Car door. Grain | H. V. Kuhlman and G. A. Woodman | 719,815 | Feb. 3 | 739 | 173 | 102 | 979 |
| Car door. Grain | J. H. A. Huck | 722,108 | Mar. 3 | 830 | 185 | 103 | 179 |
| Car door. Grain | J. L. Hamel | 722,578 | Mar. 10 | 1717 | 382 | 103 | 384 |
| Car door. Grain | J. W. Church and M. J. O'Gorman | 728,203 | May 19 | 2589 | 579 | 104 | 591 |
| Car door. Grain | F. R. Finberg | 729,052 | May 26 | 4199 | 928, 929 | 104 | 941 |
| Car door. Grain | S. A. Vickers | 732,666 | June 30 | 5876 | 1303 | 104 | 2414 |
| Car door. Grain | E. J. Geske | 738,791 | Sept. 15 | 2506 | 551 | 106 | 569 |
| Car door. Grain | F. W. Canales | 739,149 | Sept. 15 | 3143 | 695 | 106 | 703 |
| Car door. Grain | C. L. Robbins | 742,744 | Oct. 27 | 4517 | 1023 | 106 | 2248 |
| Car door. Grain | A. G. Steinbrenner | 745,259 | Nov. 24 | 4762 | 1040 | 107 | 1057 |
| Car door. Grain | A. G. Steinbrenner | 746,400 | Dec. 8 | 1988 | 453, 454 | 107 | 1543 |
| Car door. Grain | R. G. Jenckes | 748,281 | Dec. 29 | 5534 | 1261 | 107 | 2393 |
| Car-door hanger | J. Goettel | 741,031 | Oct. 13 | 1185 | 268 | 106 | 1519 |
| Car-door hanger. Freight | A. O. and G. E. Banks | 747,117 | Dec. 15 | 3323 | 756 | 107 | 1868 |
| Car-door lock | W. H. Fulton | 732,007 | Mar. 3 | 661 | 147 | 103 | 143 |
| Car-door opening or closing device. Trolley | W. H. Cook | 732,422 | Mar. 10 | 1421 | 313 | 103 | 318 |
| Car-door operating device. Hopper | A. Christianson | 737,587 | May 12 | 1430 | 321 | 104 | 826 |
| Car-door operating gear. Coal or coke | W. F. Kiesel, Jr | 726,541 | Apr. 28 | 3946 | 891, 892 | 103 | 2041 |
| Car door or slide. Railway | L. Daniel | 718,702 | Jan. 20 | 2255 | 495, 496 | 102 | 511 |
| Car-door reinforcing and locking means | W. W. Tobey | 747,664 | Dec. 22 | 4339 | 979 | 107 | 2108 |
| Car doors. Adjustable fastener for grain | J. W. Davis | 747,150 | Dec. 15 | 3389 | 769 | 107 | 1881 |
| Car. Double-decked freight | H. M. Lytle | 735,123 | Aug. 4 | 148 | 33 | 105 | 1014 |
| Car draft and buffing gear | I. O. Wright and W. H. Stem | 740,349 | Sept. 29 | 5380 | 1213 | 106 | 1214 |
| Car draft and buffing gear or rigging | I. O. Wright, W. H. Stem, and J. H. Farlow. | 739,769 | Sept. 22 | 4271 | 957 | 106 | 964 |
| Car draft attachment | H. Martin | 721,059 | Feb. 17 | 3053 | 701 | 102 | 1498 |
| Car draft attachment. Railway | P. W. Agnell | 743,411 | Nov. 10 | 1211 | 250 | 107 | 273 |
| Car draft-block attachment. Freight | T. M. Baughan | 719,989 | Feb. 10 | 1041 | 242 | 102 | 1060 |
| Car draft-gear | S. F. Klohs | 718,638 | Jan. 20 | 2127 | 464 | 102 | 486 |
| Car draft-gear. Railway | A. Stucki | 727,485 | May 5 | 1229 | 273 | 104 | 265 |
| Car draft-rigging | H. T. Krakau | 727,386 | May 5 | 1046 | 227, 228 | 104 | 225 |
| Car draft-rigging | I. O. Wright and J. H. Farlow | 739,770 | Sept. 22 | 4274 | 958 | 106 | 965 |
| Car draft-rigging. Railway | H. Bruns | 718,563 | Jan. 13 | 1989 | 433, 434 | 102 | 442 |
| Car draft-rigging. Railway | G. P. Ritter | 719,610 | Feb. 3 | 352 | 82 | 102 | 895 |
| Car draft-rigging. Railway | E. W. Hartough | 728,227 | May 19 | 2650 | 592, 593 | 104 | 603 |
| Car draft-rigging. Railway | J. M. Waugh | 731,725 | June 23 | 4056 | 905 | 104 | 2016 |
| Car draft-rigging. Railway | T. W. Saling | 735,302 | Aug. 4 | 510 | 103 | 105 | 1090 |
| Car draft-rigging. Railway | H. C. Williamson and H. Pries | 738,865 | Sept. 15 | 2648 | 583 | 106 | 601 |
| Car draft-rigging. Railway | H. C. Williamson and H. Pries | 738,866 | Sept. 15 | 2649 | 583 | 106 | 601 |
| Car draft-rigging. Railway | S. Otis | 739,912 | Sept. 29 | 4583 | 1031 | 106 | 1046 |
| Car draw-bar spring. Railway | J. F. O'Connor | 717,602 | Jan. 6 | 146 | 38 | 102 | 33 |
| Car draw-gear and buffing apparatus. Railway | C. E. Felt and D. A. Kimbark | 717,667 | Jan. 6 | 248 | 62, 63 | 102 | 54 |
| Car draw-gear. Railway | J. F. Courson | 732,521 | June 30 | 5606 | 1242, 1243 | 104 | 2354 |
| Car draw-gear. Railway | J. F. Courson | 736,823 | Aug. 18 | 3363 | 742 | 105 | 1730 |
| Car draw-gear. Railway | J. F. Courson | 736,824 | Aug. 18 | 3365 | 743 | 105 | 1731 |
| Car draw-head | J. F. Courson | 737,712 | Sept. 1 | 277 | 58 | 106 | 62 |
| Car drop brake-handle | A. U. Willing, J. Christenson, and G. A. McLean. | 726,129 | Apr. 21 | 3133 | 709 | 103 | 1863 |
| Car drop-doors and operating mechanism | D. C. Courtney | 748,165 | Dec. 29 | 5327 | 1209 | 107 | 2348 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'gs | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Car. Dump- | H. S. Hart | 719,794 | Feb. 3 | 697 | 162, 163 | 102 | 970 |
| Car. Dump- | H. S. Hart | 719,795 | Feb. 3 | 699 | 163, 164 | 102 | 971 |
| Car. Dump- | F. S. Ingoldsby | 720,031 | Feb. 10 | 1140 | 260, 261, 262 | 102 | 1081 |
| Car. Dump- | E. D. Haven | 721,300 | Feb. 24 | 3547 | 806, 807 | 102 | 1620 |
| Car. Dump- | F. A. Delano | 723,516 | Mar. 24 | 3484 | 779 | 103 | 773 |
| Car. Dump- | J. B. Rhodes | 723,921 | Mar. 31 | 4218 | 949 | 103 | 946 |
| Car. Dump- | J. V. Domingue | 730,886 | June 16 | 2473 | 549 | 104 | 1678 |
| Car. Dump- | H. W. Wolff and A. Lipschutz | 733,786 | July 14 | 1937 | 456, 457 | 105 | 426 |
| Car. Dump- | W. McCabe | 735,129 | Aug. 4 | 157 | 35 | 105 | 1015 |
| Car. Dump- | H. S. Hart | 739,863 | Sept. 29 | 4468 | 1003 | 106 | 1023 |
| Car. Dump- | H. S. Hart and O. W. Meissner | 739,864 | Sept. 29 | 4470 | 1004 | 106 | 1023 |
| Car. Dump- | G. B. Maltby | 739,892 | Sept. 29 | 4547 | 1021 | 106 | 1038 |
| Car. Dump- | G. B. Maltby | 739,893 | Sept. 29 | 4549 | 1021, 1022 | 106 | 1039 |
| Car. Dump- | G. B. Maltby | 739,894 | Sept. 29 | 4551 | 1022 | 106 | 1039 |
| Car. Dump- | S. Otis | 739,913 | Sept. 29 | 4584 | 1031 | 106 | 1047 |
| Car. Dump- | S. Otis and G. B. Maltby | 739,915 | Sept. 29 | 4588 | 1032 | 106 | 1048 |
| Car. Dump- | H. S. Hart | 743,278 | Nov. 3 | 894 | 195 | 107 | 189 |
| Car. Dump- | H. S. Hart | 744,195 | Nov. 17 | 2778 | 593 | 107 | 620 |
| Car. Dump- | F. S. Ingoldsby and J. R. Bowling | 744,201 | Nov. 17 | 2789 | 595, 596 | 107 | 623 |
| Car. Dump- | R. S. Cox | 747,381 | Dec. 22 | 3826 | 860 | 107 | 1992 |
| Car. Dump- | F. S. Ingoldsby and J. R. Bowling | 747,431 | Dec. 22 | 3910 | 880, 881 | 107 | 2012 |
| Car. Dump- | G. L. Pratt | 747,762 | Dec. 22 | 4512 | 1017 | 107 | 2148 |
| Car. Dump- | J. D. McGrath | 748,299 | Dec. 29 | 5562 | 1268 | 107 | 2399 |
| Car-dump | F. S. Ingoldsby | 728,467 | May 19 | 3116 | 689 | 104 | 701 |
| Car. Dumping- | H. W. Wolff and V. R. Willoughby | 717,788 | Jan. 6 | 515 | 115 | 102 | 111 |
| Car. Dumping- | J. A. McManus | 719,248 | Jan. 27 | 3282 | 733, 734 | 102 | 738 |
| Car. Dumping- | E. S. Hart | 719,793 | Feb. 3 | 695 | 160, 161 | 102 | 969 |
| Car. Dumping- | C. D. Page | 721,323 | Feb. 24 | 3590 | 816, 817 | 102 | 1629 |
| Car. Dumping- | J. L. Hamel | 722,100 | Mar. 3 | 820 | 182 | 103 | 177 |
| Car. Dumping- | J. B. Rhodes | 723,920 | Mar. 31 | 4214 | 948 | 103 | 945 |
| Car. Dumping- | S. F. Swanson | 727,487 | May 5 | 1233 | 274 | 104 | 266 |
| Car. Dumping- | A. J. Twiggs | 728,634 | May 19 | 3430 | 761 | 104 | 768 |
| Car. Dumping- | A. D. Harrison | 732,348 | June 30 | 5272 | 1169 | 104 | 2285 |
| Car. Dumping- | R. Jonas | 739,880 | Sept. 29 | 4529 | 1017 | 106 | 1034 |
| Car. Dumping- | W. H. Davis | 740,819 | Oct. 6 | 821 | 184, 185 | 106 | 1420 |
| Car. Dumping- | E. S. Hart | 743,504 | Nov. 10 | 1424 | 298 | 107 | 321 |
| Car. Dumping- | S. J. Johnson | 746,519 | Dec. 8 | 2185 | 502 | 107 | 1585 |
| Car. Dumping- | E. I. Morey | 746,555 | Dec. 8 | 2251 | 516 | 107 | 1601 |
| Car. Dumping box- | G. E. Simonton | 734,977 | July 28 | 4229 | 982, 983, 984 | 105 | 937 |
| Car dumping-doors. Attachment for winding-shafts for | A. Filer | 729,746 | June 2 | 407 | 92 | 104 | 1212 |
| Car dust-proof journal-box | J. Rogers | 721,836 | Mar. 3 | 324 | 71 | 103 | 71 |
| Car. Electric | G. C. Hawkins | 725,079 | Apr. 14 | 1233 | 278 | 103 | 1447 |
| Car. Electric | M. Rounds | 747,489 | Dec. 22 | 4017 | 903 | 107 | 2037 |
| Car electric alarm-signal. Railway- | D. N. Jordan | 744,354 | Nov. 17 | 3097 | 658 | 107 | 685 |
| Car ends. Safety-platform for | P. Campbell | 738,658 | Sept. 8 | 2224 | 487 | 106 | 493 |
| Car. Express or mail protection | G. V. Booco and J. W. Henault | 728,078 | May 12 | 2366 | 526 | 104 | 521 |
| Car-fender | J. B. Robidon | 718,025 | Jan. 6 | 956 | 212 | 102 | 206 |
| Car-fender | J. F. Verner | 718,292 | Jan. 13 | 1440 | 320 | 102 | 325 |
| Car-fender | C. A. Taylor | 718,888 | Jan. 20 | 2599 | 580, 581 | 102 | 582 |
| Car-fender | J. Quern | 719,256 | Jan. 27 | 3298 | 738 | 102 | 741 |
| Car-fender | J. P. Thom | 720,502 | Feb. 10 | 1994 | 457, 458 | 102 | 1260 |
| Car-fender | G. E. Wright | 721,350 | Feb. 24 | 3645 | 829 | 102 | 1640 |
| Car-fender | J. Roclandt | 721,607 | Feb. 24 | 4145 | 941, 942 | 102 | 1748 |
| Car-fender | J. J. White | 724,979 | Apr. 7 | 1037 | 237 | 103 | 1390 |
| Car-fender | J. H. Hulings | 725,446 | Apr. 14 | 1908 | 427 | 103 | 1589 |
| Car-fender | W. E. Zachry | 726,390 | Apr. 28 | 3644 | 826 | 103 | 1983 |
| Car-fender | J. P. Clark | 727,290 | May 5 | 869 | 187, 188 | 104 | 186 |
| Car-fender | A. L. Igou | 727,953 | May 12 | 2147 | 479 | 104 | 476 |
| Car-fender | W. Johnston | 733,048 | July 7 | 614 | 150 | 105 | 131 |
| Car-fender | F. R. Keith | 734,181 | July 21 | 2740 | 643 | 105 | 612 |
| Car-fender | J. D. Price | 734,362 | July 21 | 3078 | 725 | 105 | 685 |
| Car-fender | H. P. Eskelsen | 734,411 | July 21 | 3163 | 743 | 105 | 702 |
| Car-fender | A. Miesse | 734,587 | July 28 | 3493 | 816 | 105 | 787 |
| Car-fender | D. B. Dibble | 734,830 | July 28 | 3976 | 930 | 105 | 885 |
| Car-fender | T. Terzano | 735,315 | Aug. 4 | 537 | 109 | 105 | 1095 |
| Car-fender | R. C. Layton | 735,535 | Aug. 4 | 969 | 205 | 105 | 1187 |
| Car-fender | H. Thiele | 737,528 | Aug. 25 | 4674 | 1049 | 105 | 2033 |
| Car-fender | W. J. Westgate and C. E. Herrick | 737,806 | Sept. 1 | 469 | 104 | 106 | 106 |
| Car-fender | J. A. Williams and L. B. Britton | 738,647 | Sept. 8 | 2205 | 482 | 106 | 489 |
| Car-fender | J. Haskins | 740,129 | Sept. 29 | 4977 | 1117 | 106 | 1131 |
| Car-fender | T. J. Glynn | 744,913 | Nov. 24 | 4067 | 876 | 107 | 914 |
| Car fender and sweeper. Automatic | C. P. Cathcart | 729,543 | June 2 | 42 | 10, 11 | 104 | 1135 |
| Car fender and sweeper. Automatic | C. P. Cathcart | 737,076 | Aug. 25 | 3813 | 845, 846 | 105 | 1845 |
| Car-fender safety device. Trolley- | D. P. Powell | 723,916 | Mar. 31 | 4208 | 947 | 103 | 943 |

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| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Car-fender. Self-adjusting | A. O. Lamson | 748,195 | Dec. 29 | 5380 | {1222 1223} | 107 | 2359 |
| Car fender. Street- | L. Devers | 721,163 | Feb. 24 | 3301 | 755 | 102 | 1569 |
| Car fender. Street- | J. Rawles | 724,937 | Apr. 7 | 951 | 219 | 103 | 1373 |
| Car fender. Street- | S. H. Barton | 730,335 | June 9 | 1470 | 325 | 104 | 1444 |
| Car fender. Street- | H. P. Schneider | 731,508 | June 23 | 3661 | {816 817} | 104 | 1939 |
| Car fender. Street- | E. Melzer | 740,985 | Oct. 6 | 1108 | 249 | 106 | 1482 |
| Car fender. Street- | M. Duffner | 743,699 | Nov. 10 | 1785 | {376 377} | 107 | 397 |
| Car-fender with brake attachment. Automatic | W. K. Given | 738,909 | Sept. 15 | 2706 | 598 | 106 | 613 |
| Car. Fish-transportation | S. W. Parham | 729,653 | June 2 | 235 | 53 | 104 | 1176 |
| Car. Flat- | J. M. Hansen | 743,499 | Nov. 10 | 1415 | 294 | 107 | 319 |
| Car floor-frame | H. Carlton | 746,457 | Dec. 8 | 2082 | 479 | 107 | 1563 |
| Car for railway-trains. Safety or buffer | C. Noever | 724,490 | Apr. 7 | 135 | 32 | 103 | 1198 |
| Car for shipping musical instruments. Freight- | C. A. Glover | 721,886 | Mar. 3 | 422 | 92, 93 | 103 | 93 |
| Car-frame | H. P. Field, Jr., and I. A. Randel | 717,668 | Jan. 6 | 249 | 63 | 102 | 54 |
| Car frame. Mine- | J. E. Jones | 746,092 | Dec. 8 | 1431 | 322 | 107 | 1424 |
| Car frame. Motor- | A. Poidatz | 727,682 | May 12 | 1614 | 367 | 104 | 365 |
| Car frame. Motor- | P. Arbel | 742,272 | Oct. 27 | 3676 | 822 | 106 | 2071 |
| Car frame. Motor- | J. J. MacMulkin | 744,775 | Nov. 24 | 3825 | 825 | 107 | 864 |
| Car. Freight- | H. A. Turner | 725,178 | Apr. 14 | 1416 | {320 321} | 103 | 1484 |
| Car. Freight- | H. R. Keithley | 725,849 | Apr. 21 | 2658 | 605 | 103 | 1764 |
| Car. Freight- | H. A. Turner | 729,452 | May 26 | 4878 | 1081 | 104 | 1082 |
| Car. Freight- | A. J. Adamson | 731,420 | June 23 | 3489 | 779 | 104 | 1903 |
| Car. Freight- | H. R. Keithley | 740,142 | Sept. 29 | 5002 | {1123 1124} | 106 | 1136 |
| Car friction draft-rigging. Railway- | J. J. Hennessey | 717,676 | Jan. 6 | 275 | 68 | 102 | 59 |
| Car friction draft-rigging. Railway- | J. J. Hennessey | 717,677 | Jan. 6 | 277 | 69 | 102 | 59 |
| Car friction draft-rigging. Railway- | J. J. Hennessey | 733,961 | July 21 | 2301 | 541 | 105 | 518 |
| Car friction draft-rigging. Railway- | F. B. Townsend | 734,011 | July 21 | 2404 | 563 | 105 | 540 |
| Car friction draft-rigging. Railway- | C. H. Wellman, J. W. Seaver, and C. F. Street. | 734,480 | July 21 | 3290 | {772 773} | 105 | 727 |
| Car gas-reservoir. Railway- | C. Goldstuecker | 720,237 | Feb. 10 | 1529 | 350 | 102 | 1162 |
| Car gate-opener. Railway- | F. Weimar | 728,639 | May 19 | 3441 | 763 | 104 | 770 |
| Car-gate-operating apparatus | B. Rivkin | 717,928 | Jan. 6 | 772 | 173 | 102 | 165 |
| Car. Gondola | W. H. Woodcock and R. H. Hornbrook. | 723,800 | Mar. 24 | 3969 | 895 | 103 | 876 |
| Car. Gondola | J. M. Hansen | 727,622 | May 12 | 1492 | {336 337} | 104 | 339 |
| Car. Gondola | J. M. Hansen | 743,497 | Nov. 10 | 1410 | {292 293} | 107 | 317 |
| Car grain-door | H. Pries and J. W. Meyer | 737,018 | Aug. 25 | 3723 | 826 | 105 | 1827 |
| Car grain-door. Freight- | J. Riley | 719,875 | Feb. 3 | 840 | {196 197} | 102 | 1001 |
| Car grain-door. Railway- | D. B. Arnold | 720,653 | Feb. 17 | 2334 | 534 | 102 | 1343 |
| Car grain-door. Railway- | T. C. Thomas | 731,524 | June 23 | 3685 | 822 | 104 | 1944 |
| Car grain-door. Railway- | F. Hachmann | 742,983 | Nov. 3 | 286 | 64 | 107 | 62 |
| Car grain-doors. Device for fastening | F. H. Bennett | 734,801 | July 28 | 3932 | 917 | 105 | 876 |
| Car grain-loader | H. L. Moebeck | 740,453 | Oct. 6 | 134 | 27 | 106 | 1274 |
| Car guard-rail. Freight- | W. Harrison | 732,409 | June 30 | 5389 | 1194 | 104 | 2311 |
| Car hand-brake mechanism | H. A. Paquette | 734,429 | July 21 | 3197 | 752 | 105 | 709 |
| Car hand-strap attachment. Street- | C. Andress | 740,792 | Oct. 6 | 772 | 174 | 106 | 1410 |
| Car handling and dumping device | E. Ramsay | 721,089 | Feb. 17 | 3116 | {715 716 717} | 102 | 1512 |
| Car-haul | A. M. Acklin | 743,611 | Nov. 10 | 1633 | 342 | 107 | 365 |
| Car-haul | A. M. Acklin | 743,612 | Nov. 10 | 1636 | 343 | 107 | 365 |
| Car-heater | W. A. Joseph | 743,726 | Nov. 10 | 1826 | 385 | 107 | 407 |
| Car-heater. Electric | E. M. Herr | 741,662 | Oct. 20 | 2438 | 547 | 106 | 1801 |
| Car-heater. Electric | E. E. Gold | 742,310 | Oct. 27 | 3754 | {840 841} | 106 | 2087 |
| Car-heater. Electric | J. F. McElroy | 743,654 | Nov. 10 | 1707 | 360 | 107 | 380 |
| Car heating apparatus. Railway- | T. Parker | 740,462 | Oct. 6 | 154 | 31 | 106 | 1279 |
| Car-heating system and steam-trap therefor | W. H. Pearce | 719,363 | Jan. 27 | 3512 | 781 | 102 | 788 |
| Car. Hopper- | J. M. Hansen | 727,616 | May 12 | 1477 | {330 331 332} | 104 | 335 |
| Car. Hopper-bottom | I. A. Randel | 719,868 | Feb. 3 | 816 | {191 192} | 102 | 995 |
| Car. Hopper-bottom | J. M. Hansen | 722,299 | Mar. 10 | 1205 | 266 | 103 | 273 |
| Car. Hopper-bottom | G. E. Russell | 731,817 | June 23 | 4230 | 943 | 104 | 2055 |
| Car. Hopper-bottom freight- | H. R. Keithley | 741,250 | Oct. 13 | 1611 | {363 364} | 106 | 1610 |
| Car-icing system | J. A. Werner | 739,962 | Sept. 29 | 4672 | 1051 | 106 | 1066 |
| Car interlocking center bearing | J. E. Norwood | 719,496 | Feb. 3 | 155 | 35 | 102 | 856 |
| Car-lever | G. B. Sullivan | 737,522 | Aug. 25 | 4662 | 1047 | 105 | 2031 |
| Car life-guard. Railway- | G. Geiger | 746,692 | Dec. 15 | 2514 | {577 578} | 107 | 1681 |
| Car life-guard. Tram- | G. Geiger | 722,691 | Mar. 17 | 1959 | {437 438} | 103 | 451 |
| Car-lighting system | R. F. Hall | 745,830 | Dec. 1 | 949 | {213 214 215} | 107 | 1301 |
| Car-loader | E. H. Reynolds | 728,298 | May 19 | 2799 | 620 | 104 | 635 |
| Car-loader | D. H. Claudon | 735,858 | Aug. 11 | 1584 | 337 | 105 | 1337 |
| Car-loader | S. K. Smith | 739,939 | Sept. 29 | 4638 | 1041 | 106 | 1059 |
| Car-loading apparatus | R. Baggaley | 746,250 | Dec. 8 | 1721 | 387 | 107 | 1487 |
| Car-loading apparatus | R. Baggaley | 746,252 | Dec. 8 | 1725 | {388 389} | 107 | 1488 |
| Car. Low-side gondola | J. M. Hansen | 727,619 | May 12 | 1485 | 334 | 104 | 337 |
| Car lubricating device. Railway- | J. Schanamen and W. J. Davis | 743,934 | Nov. 10 | 2205 | 476 | 107 | 486 |
| Car. Metal dump- | S Otis and G. B. Maltby | 744,224 | Nov. 17 | 2830 | 605 | 107 | 633 |
| Car. Metallic | E. W. Summers | 723,067 | Mar. 17 | 2617 | {589 590} | 103 | 585 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Car. Metallic | E. W. Summers | 738,128 | Sept. 1 | 1134 | 252 | 106 | 245 |
| Car. Metallic | C. M. Carnahan | 739,290 | Sept. 22 | 3404 | 757, 758 | 106 | 776 |
| Car. Metallic | J. A. Driver | 742,846 | Nov. 3 | 49 | 12 | 107 | 13 |
| Car. Mine- | W. H. Roach | 734,958 | July 28 | 4192 | 976 | 105 | 930 |
| Car. Mine- | T. Stagg | 736,561 | Aug. 18 | 2837 | 662 | 105 | 1624 |
| Car. Mine- | W. H. Morris | 744,872 | Nov. 24 | 3998 | 62 | 107 | 900 |
| Car. Motor- | H. Austin | 721,413 | Feb. 24 | 3763 | 855 | 102 | 1665 |
| Car. Motor- | R. H. Hassler | 740,273 | Sept. 29 | 5245 | 1180, 1181, 1182 | 106 | 1186 |
| Car. Motor- | E. Hospitalier | 745,441 | Dec. 1 | 245 | 56, 57 | 107 | 1152 |
| Car-motor ventilator | H. B. Rowland | 724,950 | Apr. 7 | 971 | 225 | 103 | 1377 |
| Car-mover | A. J. Maine | 728,484 | May 19 | 3138 | 694 | 104 | 706 |
| Car-mover | R. Miller | 739,017 | Sept. 15 | 2892 | 642 | 106 | 653 |
| Car-mover | N. E. Bunting | 742,157 | Oct. 27 | 3450 | 769 | 106 | 2024 |
| Car-mover. Portable | F. D. Roper | 726,764 | Apr. 28 | 4378 | 985 | 103 | 2129 |
| Car-moving mechanism | J. Barnes | 745,034 | Nov. 24 | 4311 | 931, 932 | 107 | 964 |
| Car. Observation | J. Pejchar | 746,371 | Dec. 8 | 1940 | 442 | 107 | 1532 |
| Car-operated automatic tramway-switch mechanism. | F. Davison | 724,821 | Apr. 7 | 757 | 176 | 103 | 1332 |
| Car-operated door. Mine- | A. T. Flint and I. Whitney | 719,577 | Feb. 3 | 303 | 70 | 102 | 886 |
| Car or locomotive coupling or uncoupling mechanism. | A. C. Hone | 746,838 | Dec. 15 | 2790 | 643 | 107 | 1743 |
| Car or other vehicle fender | G. Hipwood | 730,913 | June 16 | 2526 | 562, 563 | 104 | 1688 |
| Car or other vehicle stopping device | J. P. Angell | 739,135 | Sept. 15 | 3119 | 690 | 106 | 698 |
| Car or vehicle propulsion | P. Pfeil | 723,727 | Mar. 24 | 3846 | 864, 865 | 103 | 850 |
| Car. Ore- | A. Stucki | 731,242 | June 16 | 3139 | 697 | 104 | 1812 |
| Car. Ore- | J. M. Hansen | 743,501 | Nov. 10 | 1418 | 296, 297 | 107 | 319 |
| Car. Ore- | G. G. Newcomb | 745,113 | Nov. 24 | 4477 | 968, 969 | 107 | 998 |
| Car. Passenger or baggage | F. Parsons | 719,362 | Jan. 27 | 3510 | 781 | 102 | 788 |
| Car pipe-coupling. Railway- | C. Mahon | 741,050 | Oct. 13 | 1220 | 277 | 106 | 1527 |
| Car platform-frame. Railway- | J. G. Lawler | 735,394 | Aug. 4 | 673 | 144 | 105 | 1124 |
| Car-platform gate | F. Dix | 741,774 | Oct. 20 | 2668 | 596 | 106 | 1849 |
| Car-platform vestibule | G. Gibbs and H. Pearson | 722,097 | Mar. 3 | 811 | 181 | 103 | 175 |
| Car, &c. Postal | L. M. Rich | 738,846 | Sept. 15 | 2618 | 577, 578 | 106 | 594 |
| Car. Protected | E. C. Mangelsdorf | 738,220 | Sept. 8 | 1340 | 290 | 106 | 306 |
| Car-protecting device | C. Zimmerman | 732,988 | July 7 | 511 | 127 | 105 | 110 |
| Car. Push- | M. C. Hamilton | 733,390 | July 14 | 1249 | 296 | 105 | 280 |
| Car. Railway- | C. Zimmerman | 718,236 | Jan. 13 | 1331 | 294 | 102 | 301 |
| Car. Railway- | G. E. Smith | 720,291 | Feb. 10 | 1632 | 373 | 102 | 1184 |
| Car. Railway- | S. F. Swanson | 727,488 | May 5 | 1235 | 274 | 104 | 266 |
| Car. Railway- | W. K. Auchincloss | 727,876 | May 12 | 1995 | 444, 445 | 104 | 442 |
| Car. Railway- | L. A. Shepard | 728,029 | May 12 | 2272 | 505 | 104 | 501 |
| Car. Railway- | C. Vanderbilt | 728,051 | May 12 | 2320 | 515, 516 | 104 | 511 |
| Car. Railway- | S. T. Wellman and C. F. Street | 728,813 | May 19 | 3756 | 838, 839 | 104 | 835 |
| Car. Railway- | C. Zimmerman | 731,149 | June 16 | 2980 | 662 | 104 | 1781 |
| Car. Railway- | F. H. Rapley | 732,113 | June 30 | 4801 | 1070, 1071 | 104 | 2188 |
| Car. Railway- | L. A. Shepard | 733,285 | July 7 | 1055 | 252 | 105 | 221 |
| Car. Railway- | W. S. Glover | 736,515 | Aug. 18 | 2764 | 604 | 105 | 1608 |
| Car. Railway- | L. J. Harris | 737,403 | Aug. 25 | 4434 | 992, 993, 994 | 105 | 1978 |
| Car. Railway- | H. J. Bayard | 744,155 | Nov. 17 | 2688 | 573 | 107 | 601 |
| Car. Railway- | J. M. Hetfield | 745,839 | Dec. 1 | 974 | 218, 219 | 107 | 1306 |
| Car. Railway- | C. Vanderbilt | 748,030 | Dec. 29 | 5063 | 1144, 1145 | 107 | 2292 |
| Car. Railway- | C. Vanderbilt | 748,122 | Dec. 29 | 5251 | 1191, 1192 | 107 | 2333 |
| Car. Railway repair- | G. L. Bender | 721,856 | Mar. 3 | 365 | 80 | 103 | 79 |
| Car. Railway tank- | J. W. Van Dyke | 738,259 | Sept. 8 | 1412 | 306, 307 | 106 | 320 |
| Car. Railway tank- | J. W. Van Dyke | 738,260 | Sept. 8 | 1422 | 307 | 106 | 323 |
| Car. Railway tank- | J. W. Van Dyke | 738,261 | Sept. 8 | 1425 | 307, 308 | 106 | 323 |
| Car-record device | J. R. Cavanagh, J. B. Hannan, and J. D. Clarke. | 734,817 | July 28 | 3953 | 922, 923 | 105 | 880 |
| Car-reflector | D. F. Cargill | 748,346 | Dec. 29 | 5630 | 1283 | 107 | 2413 |
| Car reflector. Street- | F. M. Livingston | 742,687 | Oct. 27 | 4424 | 999 | 106 | 2227 |
| Car registering and annunciating device | A. G. Abizaid | 744,704 | Nov. 24 | 3705 | 800 | 107 | 839 |
| Car-replacer | O. W. Johnson | 717,862 | Jan. 6 | 667 | 148 | 102 | 142 |
| Car-replacer | T. Maroney | 724,194 | Mar. 31 | 4777 | 1071 | 103 | 1057 |
| Car-replacer | J. H. Fowler | 724,277 | Mar. 31 | 4957 | 1109 | 103 | 1092 |
| Car-replacer | J. D. Care and J. F. Phillips | 728,541 | May 19 | 3246 | 720 | 104 | 727 |
| Car-replacer | T. N. Renfroe | 731,387 | June 16 | 3421 | 763 | 104 | 1871 |
| Car-replacer | W. H. Pritchard | 734,611 | July 28 | 3532 | 827 | 105 | 796 |
| Car-replacer | O. W. Johnson | 735,266 | Aug. 4 | 453 | 90 | 105 | 1077 |
| Car-replacer | W. Schott and W. Ewer | 738,632 | Sept. 8 | 2172 | 475 | 106 | 482 |
| Car-replacer | J. D. Green | 741,127 | Oct. 13 | 1372 | 314 | 106 | 1559 |
| Car-replacer | A. Bouvier | 742,154 | Oct. 27 | 3446 | 768 | 106 | 2024 |
| Car-replacer | E. Showalter | 747,655 | Dec. 22 | 4326 | 977 | 107 | 2106 |
| Car-replacing frog | H. C. Harrar | 719,215 | Jan. 27 | 3215 | 717 | 102 | 724 |
| Car rocker side bearing. Railway- | A. O. Buckius, Jr. | 725,315 | Apr. 14 | 1656 | 374 | 103 | 1535 |
| Car rocker side bearing. Railway- | W. H. Miner | 725,350 | Apr. 14 | 1724 | 388 | 103 | 1550 |
| Car rocker side bearing. Railway- | F. B. Townsend | 725,380 | Apr. 14 | 1771 | 398 | 103 | 1559 |

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| Invention. | Name. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|---|
| | | | | Spec. | Drg. | Vol. | Page. |
| Car-roller side bearing | E. W. Summers | 723,756 | Mar. 24 | 3889 | 875 | 103 | 859 |
| Car-roof | J. J. McCarthy | 718,145 | Jan. 13 | 1163 | 258 | 102 | 265 |
| Car-roof | W. J. McCulley | 720,949 | Feb. 17 | 2846 | 651<br>652 | 102 | 1452 |
| Car-roof | C. W. Crees | 722,817 | Mar. 17 | 2192 | 488 | 103 | 498 |
| Car-roof | L. S. Flatau | 740,838 | Oct. 6 | 857 | 191 | 106 | 1429 |
| Car-roof | S. Herbert | 743,158 | Nov. 3 | 655 | 141 | 107 | 137 |
| Car roping-iron. Railway- | U. S. Drayer | 728,212 | May 19 | 2605 | 582 | 104 | 594 |
| Car safety brake apparatus. Motor- | C. F. Peel, Jr | 720,376 | Feb. 10 | 1786 | 405 | 102 | 1217 |
| Car safety-chain fastening | A. Christianson | 720,224 | Feb. 10 | 1509 | 346 | 102 | 1158 |
| Car safety-guard. Street- | C. A. Willard | 724,766 | Apr. 7 | 645 | 151 | 103 | 1306 |
| Car safety mechanism. Motor- | C. J. Eckroad | 737,596 | Sept. 1 | 73 | 15 | 106 | 18 |
| Car. Sand- | A. F. McConnell | 748,210 | Dec. 29 | 5406 | 1229<br>1230 | 107 | 2365 |
| Car sash and panel cleaner and polisher | D. McCaffery | 725,119 | Apr. 14 | 1307 | 294 | 103 | 1462 |
| Car-seat | C. K. Pickels | 724,610 | Apr. 7 | 359 | 87 | 103 | 1245 |
| Car-seat | J. E. Siegel | 725,996 | Apr. 21 | 2915 | 662<br>663 | 103 | 1818 |
| Car-seat | L. Janson | 728,238 | May 19 | 2670 | 596<br>597 | 104 | 606 |
| Car-seat | G. C. Hawkins | 731,361 | June 16 | 3354 | 750 | 104 | 1856 |
| Car-seat | J. S. Johnston | 734,560 | July 28 | 3440 | 802 | 105 | 776 |
| Car-seat | H. S. Hale | 741,032 | Oct. 13 | 1186 | 268 | 106 | 1519 |
| Car-seat | H. S. Hale | 741,033 | Oct. 13 | 1189 | 269 | 106 | 1520 |
| Car-seat | H. Witte | 743,210 | Nov. 3 | 755 | 165 | 107 | 158 |
| Car-seat | F. K. Fassett | 747,957 | Dec. 29 | 4914 | 1112 | 107 | 2257 |
| Car-seat mechanism | H. Tesseyman | 717,723 | Jan. 6 | 357 | 87, 88 | 102 | 77 |
| Car-seat movement | E. T. McKaig | 731,204 | June 16 | 3073 | 682 | 104 | 1798 |
| Car-seat movement | E. T. McKaig | 731,205 | June 16 | 3075 | 682<br>683 | 104 | 1799 |
| Car-seat. Reversible | F. Kohout | 730,853 | June 9 | 2388 | ..... | 104 | 1640 |
| Car. Self-propelling automatic dumping- | V. P. Keller | 731,783 | June 23 | 4166 | 928<br>929 | 104 | 2039 |
| Car. Semiconvertible | G. M. Brill | 723,644 | Mar. 24 | 3703 | 830 | 103 | 819 |
| Car. Semiconvertible | W. M. Smith | 739,794 | Sept. 22 | 4333 | 970 | 106 | 979 |
| Car side bearing | J. E. Norwood | 719,951 | Feb. 3 | 955 | 222<br>223 | 102 | 1026 |
| Car side bearing | J. E. Norwood | 719,952 | Feb. 3 | 959 | 223 | 102 | 1027 |
| Car side bearing | H. D. Laughlin | 722,995 | Mar. 17 | 2486 | 559 | 103 | 558 |
| Car side bearing | H. M. Perry | 728,757 | May 19 | 3649 | 811 | 104 | 814 |
| Car. Side-dumping | R. H. Hornbrook | 748,188 | Dec. 29 | 5367 | 1219 | 107 | 2358 |
| Car-sign | J. W. Bailey | 737,815 | Sept. 1 | 487 | 108 | 106 | 109 |
| Car-sign. Electric | I. B. Brower | 719,180 | Jan. 27 | 3158 | 703 | 102 | 711 |
| Car-sign. Illuminated | H. F. Bristol and G. W. D. Upton | 731,749 | June 23 | 4104 | 916 | 104 | 2026 |
| Car sign. Removable street- | J. K. Coleman and J. G. Harner | 735,946 | Aug. 11 | 1738 | 372 | 105 | 1371 |
| Car-sign. Shiftable | E. H. Barney | 743,676 | Nov. 10 | 1742 | 368 | 107 | 388 |
| Car sign. Street- | J. J. Gill | 738,430 | Sept. 8 | 1787 | 389 | 106 | 399 |
| Car sign. Street- | C. L. Penfield | 738,569 | Sept. 8 | 2050 | 447 | 106 | 456 |
| Car-signal | M. L. Akers | 729,911 | June 2 | 709 | 158 | 104 | 1273 |
| Car. Single-rail | H. H. Tunis | 730,586 | June 9 | 1940 | 431 | 104 | 1545 |
| Car spring-bumper, draw-bar, and automatic coupling. Mine- | R. S. Weitzell | 734,640 | July 28 | 3581 | 838 | 105 | 806 |
| Car stake and making same. Railway- | J. M. Hansen | 743,502 | Nov. 10 | 1421 | 297 | 107 | 320 |
| Car stake-holder. Railway- | W. T. Edney | 730,242 | June 9 | 1304 | 288 | 104 | 1408 |
| Car-stake pocket | J. F. McKechnie | 742,050 | Oct. 20 | 3212 | 718 | 106 | 1952 |
| Car-starter | J. R. Trott and S. H. Sutphin | 738,086 | Sept. 1 | 1032 | 230 | 106 | 224 |
| Car. Steel caboose- | T. J. Glynn | 739,304 | Sept. 22 | 3429 | 764 | 106 | 781 |
| Car. Steel freight- | E. S. Eberlein | 731,672 | June 23 | 3964 | 882 | 104 | 1998 |
| Car. Steel gondola | A. B. Bellows | 729,257 | May 26 | 4551 | 1003<br>1004 | 104 | 1013 |
| Car-step | G. T. Andrews, G. A. Isbell, and A. L. Martin. | 722,074 | Mar. 3 | 767 | 171<br>172 | 103 | 165 |
| Car-step | C. Sellergren | 745,916 | Dec. 1 | 1110 | 249 | 107 | 1335 |
| Car-step. Adjustable | A. J. Coover | 720,002 | Feb. 10 | 1070 | 248 | 102 | 1066 |
| Car-step. Folding | G. E. Cunningham | 727,755 | May 12 | 1764 | 397 | 104 | 397 |
| Car-step. Folding | N. Gray | 728,097 | May 12 | 2399 | 534 | 104 | 528 |
| Car-step. Folding | T. G. Clifford | 731,164 | June 16 | 3008 | 667 | 104 | 1786 |
| Car-step. Folding | J. F. Grika | 734,320 | July 21 | 3016 | 710 | 105 | 671 |
| Car-step. Folding | A. P. Gunn | 741,486 | Oct. 13 | 2105 | 468 | 106 | 1716 |
| Car-step. Sliding extension | S. Painter | 723,721 | Mar. 24 | 3834 | 862 | 103 | 847 |
| Car. Stock- | J. M. Hansen | 727,623 | May 12 | 1494 | 337<br>338 | 104 | 339 |
| Car-stop | C. R. Claghorn | 736,691 | Aug. 18 | 3109 | 685<br>686 | 105 | 1678 |
| Car-stop | C. R. Claghorn | 736,818 | Aug. 18 | 3353 | 740<br>741 | 105 | 1728 |
| Car. Street- | J. A. Brill | 734,253 | July 21 | 2872 | 672<br>673<br>674 | 105 | 641 |
| Car. Street- | J. A. Brill | 739,582 | Sept. 22 | 3947 | 881 | 106 | 893 |
| Car. Street- | W. P. Michel | 744,780 | Nov. 24 | 3835 | 827 | 107 | 866 |
| Car. Street- | J. A. Kratz | 747,075 | Dec. 15 | 3254 | 741 | 107 | 1851 |
| Car switch. Automatic street- | L. Devers | 720,006 | Feb. 10 | 1079 | 249 | 102 | 1068 |
| Car switch-operating apparatus. Tramway or other. | A. King | 748,508 | Dec. 29 | 5949 | 1350 | 107 | 2485 |
| Car switch-operating mechanism. Street- | R. A. Brock | 721,279 | Feb. 24 | 3522 | 801 | 102 | 1615 |
| Car-switching | J. E. Swonson | 718,674 | Jan. 20 | 2198 | 480<br>481 | 102 | 498 |
| Car-switching mechanism | T. A. Ennis | 718,993 | Jan. 27 | 2803 | 628 | 102 | 640 |
| Car systems. Group-indicator for freight- | E. B. Johns | 738,911 | Sept. 15 | 2727 | 602 | 106 | 617 |
| Car tandem-spring draft-rigging. Railway- | C. F. Street | 728,781 | May 19 | 3696 | 825 | 104 | 821 |
| Car. Tank- | C. L. Rogers and M. S. Shotwell | 723,312 | Mar. 24 | 3080 | 693 | 103 | 695 |
| Car track-sanding device. Tram- | C. W. Langridge | 741,048 | Oct. 13 | 1216 | 275<br>276 | 106 | 1526 |
| Car. Transfer stock- | F. C. Roberts | 735,300 | Aug. 4 | 508 | 102 | 105 | 1089 |
| Car. Transfer stock- | F. C. Roberts | 746,381 | Dec. 8 | 1957 | 447<br>448 | 107 | 1537 |
| Car-transfer. Suspended | C. A. P. Turner | 719,979 | Feb. 3 | 1012 | 236 | 102 | 1038 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drgs. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Car. Transportation- | E. A. Trapp | 731,525 | June 23 | 3688 | 822, 823 | 104 | 1945 |
| Car-uncoupling device | E. O. Hutsell | 735,262 | Aug. 4 | 446 | 88 | 105 | 1076 |
| Car underframe. Railway- | H. R. Keithley | 741,799 | Oct. 20 | 2713 | 604, 605 | 106 | 1858 |
| Car underframing. Railway- | J. M. Ames | 731,733 | June 23 | 4077 | 909 | 104 | 2020 |
| Car underframing. Railway- | G. I. King | 736,739 | Aug. 18 | 3193 | 706 | 105 | 1695 |
| Car underframing. Railway- | G. I. King and J. H. Frank | 746,340 | Dec. 8 | 1888 | 430 | 107 | 1521 |
| Car-unloader and carrier-feeder | J. S. Williams | 744,660 | Nov. 17 | 3581 | 771, 772 | 107 | 792 |
| Car-unloading apparatus | C. R. Claghorn | 736,690 | Aug. 18 | 3104 | 684, 685 | 105 | 1676 |
| Car-unloading plow | I. B. Richards and G. H. Gilman | 733,999 | July 21 | 2374 | 557, 558 | 105 | 533 |
| Car ventilator | A. T. Fox | 721,556 | Feb. 24 | 4012 | 912 | 102 | 1716 |
| Car-ventilator | E. F. Crowther | 729,282 | May 26 | 4600 | 1017, 1018 | 104 | 1024 |
| Car-ventilator. Exhaust | L. C. Lanphear | 743,005 | Nov. 3 | 355 | 77 | 107 | 75 |
| Car-vestibule diaphragm | S. D. Fuller | 746,062 | Dec. 8 | 1382 | 309 | 107 | 1413 |
| Car-wheel | H. I. McGuire | 722,378 | Mar. 10 | 1344 | 297 | 103 | 302 |
| Car-wheel | R. P. Tomassek | 729,450 | May 26 | 4875 | 1080 | 104 | 1081 |
| Car-wheel | H. Bacon | 734,113 | July 21 | 2615 | 615 | 105 | 586 |
| Car-wheel | D. H. Nickerson | 744,221 | Nov. 17 | 2824 | 603, 604 | 107 | 632 |
| Car-wheel | G. Newland | 745,650 | Dec. 1 | 611 | 141 | 107 | 1228 |
| Car-wheel | H. V. Loss | 746,538 | Dec. 8 | 2224 | 510 | 107 | 1595 |
| Car-wheel | G. S. Kyle | 747,983 | Dec. 29 | 4975 | 1123 | 107 | 2272 |
| Car-wheel and track therefor | T. W. Kester | 719,939 | Jan. 27 | 3459 | 770 | 102 | 777 |
| Car-wheel bearing | J. Stuart | 729,446 | May 26 | 4868 | 1078 | 104 | 1080 |
| Car wheel-fender. Railway- | F. Schwinger, Jr | 734,968 | July 28 | 4215 | 979 | 105 | 935 |
| Car wheel. Mine- | E. E. McConnell | 727,183 | May 5 | 683 | 147 | 104 | 148 |
| Car-wheels. Apparatus for hardening treads of | T. Mitchell | 728,272 | May 19 | 2745 | 610 | 104 | 624 |
| Car-wheels. Casting steel | T. Mitchell | 728,956 | May 26 | 4017 | 893 | 104 | 904 |
| Car-wheels. Hardening treads of cast-steel | T. Mitchell | 728,271 | May 19 | 2742 | 610 | 104 | 623 |
| Car-wheels. Manufacturing | H. C. Buhoup and G. P. Ritter | 717,538 | Jan. 6 | 26 | 7, 8 | 102 | 8 |
| Car-wheels. Manufacturing | H. C. Buhoup and G. P. Ritter | 721,632 | Feb. 24 | 4185 | 952 | 102 | 1757 |
| Car-wheels. Molding | A. F. Howe | 736,102 | Aug. 11 | 2027 | 431 | 105 | 1433 |
| Car-wheels, tires, &c. Manufacture of | H. C. Buhoup and G. P. Ritter | 734,041 | July 21 | 2469 | 577 | 105 | 554 |
| Car-window | C. E. Gale | 743,633 | Nov. 10 | 1675 | 351 | 107 | 373 |
| Car-window antifrosting attachment | A. Le Blanc | 732,087 | June 30 | 4754 | 1062 | 104 | 2178 |
| Car-window lock | C. Graham | 748,064 | Dec. 29 | 5139 | 1162 | 107 | 2308 |
| Car window. Street- | W. O. Mundy | 745,645 | Dec. 1 | 601 | 139 | 107 | 1226 |
| Car with drop-doors. Gondola | J. M. Hansen | 743,500 | Nov. 10 | 1416 | 295 | 107 | 319 |
| Car with flush door. Flat-bottom | J. M. Hansen | 730,245 | Feb. 10 | 1539 | 352 | 102 | 1164 |
| Car with flush doors. Hopper- | J. M. Hansen | 727,621 | May 12 | 1489 | 335, 336 | 104 | 338 |
| Car with metallic underframing | J. M. Hansen | 743,496 | Nov. 10 | 1408 | 291 | 107 | 317 |
| Car with truss-rods | J. M. Hansen | 727,617 | May 12 | 1482 | 332, 333 | 104 | 337 |
| Car. Wrecking supply- | H. H. Warner and G. H. Gilman | 734,021 | July 21 | 2427 | 568 | 105 | 546 |
| Cars. Adjustable stirrup-step for | A. J. Coover | 720,001 | Feb. 10 | 1068 | 247 | 102 | 1066 |
| Cars. Apparatus for controlling the working of electrically-driven | A. Siemens | 736,794 | Aug. 18 | 3298 | 730, 731 | 105 | 1716 |
| Cars. Arm-rest for semiconvertible or other | S. M. Curwen | 739,799 | Sept. 22 | 4345 | 974 | 106 | 981 |
| Cars. Automatic coupling for steam, air, or other pipes of railway- | F. F. Lipps | 724,720 | Apr. 7 | 566 | 136 | 103 | 1290 |
| Cars. Automatic life-guard or fender for tram- | W. T. Watson | 728,636 | May 19 | 3433 | 762 | 104 | 768 |
| Cars. Automatic wheel-guard for tram- | W. T. Watson | 728,637 | May 19 | 3437 | 762 | 104 | 769 |
| Cars, &c. Burglar-proof compartment for railway- | C. Zimmerman | 732,989 | July 7 | 512 | 127 | 105 | 110 |
| Cars. Car-strap for street- | J. S. Navarro | 736,620 | Aug. 18 | 2971 | 653 | 105 | 1649 |
| Cars. Crippled draw-bar for locomotive railway- | M. C. Blakeslee | 745,771 | Dec. 1 | 817 | 186 | 107 | 1272 |
| Cars. Device for decreasing noise resulting from vibration in railway- | H. G. Farr | 719,098 | Jan. 27 | 3022 | ..... | 102 | 684 |
| Cars. Door for self-discharging hoppers of railway or other freight- | G. H. Sheffield and J. D. Twinberrow. | 741,075 | Oct. 13 | 1269 | 288, 289, 290, 291 | 106 | 1538 |
| Cars. Electric illumination for railway- | M. Büttner | 734,298 | July 21 | 2982 | 701, 702 | 105 | 664 |
| Cars. Electric-lighting apparatus for railway- | R. M. Newbold | 740,461 | Oct. 6 | 151 | 31 | 106 | 1278 |
| Cars. Electrical annunciator for trolley- | I. J. Bradshaw | 746,001 | Dec. 8 | 1275 | 286 | 107 | 1388 |
| Cars, &c. Folding step for | G. F. Stansbury | 724,753 | Apr. 7 | 626 | 146 | 103 | 1302 |
| Cars. Loading | S. K. Smith | 741,731 | Oct. 20 | 2589 | 576 | 106 | 1833 |
| Cars. Means for operating reversing-switches on electric | E. R. Gill | 728,901 | May 26 | 3921 | 871 | 104 | 884 |
| Cars. Metallic end yoke for railway- | S. W. Kimbrough, W. E. Watkins, and J. W. McCarley. | 744,356 | Nov. 17 | 3070 | 659 | 107 | 686 |
| Cars on inclines. Means for handling cable-drawn | T. A. Edison | 722,502 | Mar. 10 | 1589 | 351 | 103 | 357 |
| Cars or other outside places. Seat for use on tram- | D. B. Foster | 727,338 | May 5 | 966 | 210 | 104 | 209 |
| Cars or similarly-propelled vehicles. Safety-guard for electric tram- | R. S. Burn | 730,740 | June 9 | 2202 | 290 | 104 | 1601 |
| Cars or the like. Life-saving guard for tram- | W. T. G. Ellis | 737,914 | Sept. 1 | 717 | 155 | 106 | 157 |
| Cars or the like. Sand-box for railway- | H. E. Haddock | 739,803 | Sept. 22 | 4356 | 977 | 106 | 985 |
| Cars, &c. Pneumatic safety appliance for street- | J. Enright | 741,020 | Oct. 13 | 1173 | 265 | 106 | 1516 |
| Cars. Radial buffing and draft rigging for railway- | H. H. Sessions, A. P. Dennis, and R. D. Gallagher, Jr. | 719,519 | Feb. 3 | 187 | 43, 44 | 102 | 863 |
| Cars, railway-carriages, &c. Bogie or truck for tram or railway | A. S. Nelson, A. Stewart, and T. J. Foster. | 732,882 | July 7 | 333 | 82 | 105 | 73 |
| Cars. Side bearing for railway- | C. E. Havens | 719,589 | Feb. 3 | 324 | 75 | 102 | 889 |
| Cars. Speed-changing device for motor- | A. Angst | 732,993 | July 7 | 519 | 129 | 105 | 111 |
| Cars. Switch-turner for traction-railway | T. W. Heatley | 723,867 | Mar. 31 | 4113 | 928 | 103 | 922 |
| Cars. System of electric lighting for | C. P. Tolman | 744,261 | Nov. 17 | 2895 | 620 | 107 | 647 |
| Cars. System of underframing for railway- | G. W. Scott | 740,187 | Sept. 29 | 5084 | 1143 | 106 | 1153 |
| Cars. Tandem-spring friction draft-rigging for railway- | F. B. Townsend | 734,012 | July 21 | 2406 | 564 | 105 | 540 |
| Cars to rails or tracks. Device for locking | G. G. Newcomb | 737,454 | Aug. 25 | 4533 | 1016 | 105 | 1999 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Cars to tracks. Device for locking ore | G. G. Newcomb | 737,006 | Aug. 25 | 3701 | 821 | 105 | 1822 |
| Cars upon inclines. Apparatus for controlling movement of | W. A. Snyder | 737,513 | Aug. 25 | 4645 | 1042 | 105 | 2027 |
| Cars. Ventilating device for electric motors for | H. B. Rowland | 724,949 | Apr. 7 | 969 | 225 | 103 | 1376 |
| Cars. Ventilator for electric motors for | H. B. Rowland | 724,948 | Apr. 7 | 968 | 224 | 103 | 1376 |
| Cars. Walking-beam for hand- | P. J. Garrison | 737,604 | Sept. 1 | 88 | 18 | 106 | 21 |
| Caramel cutting and wrapping machine | H. Y. Armstrong | 744,019 | Nov. 17 | 2421 | 519, 520 | 107 | 547 |
| Caramel cutting and wrapping machine | H. Y. Armstrong | 744,020 | Nov. 17 | 2425 | 520, 521 | 107 | 548 |
| Carbid blocks or ingots. Subdividing | J. Scales | 719,882 | Feb. 3 | 853 | 200 | 102 | 1004 |
| Carbon-black. Apparatus for the manufacture of | F. W. Porsch | 726,341 | Apr. 28 | 3554 | 805 | 103 | 1965 |
| Carbon-brush holders. Clamp for use in connection with socket | O. M. Stiegler | 738,436 | July 14 | 1332 | 314 | 105 | 298 |
| Carbon chlorids and silicon. Producing | F. J. Machalske | 745,637 | Dec. 1 | 589 | 137 | 107 | 1223 |
| Carbon chlorids. Producing | F. J. Machalske | 742,340 | Oct. 27 | 3802 | 851 | 106 | 2098 |
| Carbon compounds. Obtaining | K. C. Wideen | 732,480 | June 30 | 5528 | ..... | 104 | 2338 |
| Carbon dioxid. Treating substances with nascent | W. Smethurst | 725,786 | Apr. 21 | 2548 | 578 | 103 | 1741 |
| Carbon of great decolorizing power. Obtaining | R. Ostrejko | 739,104 | Sept. 15 | 3064 | 680 | 106 | 687 |
| Carbon. Producing chlorids of | F. J. Machalske | 737,123 | Aug. 25 | 3891 | 864 | 105 | 1862 |
| Carbon sheet or paper holder, lifter, and separator | G. W. Donning | 742,610 | Oct. 27 | 4286 | 966 | 106 | 2197 |
| Carbon tetrachlorid | C. Combes | 735,948 | Aug. 11 | 1740 | 372 | 105 | 1371 |
| Carbons. Manufacturing electrolytic or electric-light | H. H. Dow | 718,437 | Jan. 13 | 1695 | ..... | 102 | 378 |
| Carbons. Manufacturing electrolytic or electric-light | H. H. Dow | 718,438 | Jan. 13 | 1696 | ..... | 102 | 378 |
| Carbonaceous substances. Apparatus for separating and collecting condensable | L. P. Lowe | 745,870 | Dec. 1 | 1037 | 234 | 107 | 1320 |
| Carbonates and chlorids. Producing | G. F. Rendall | 721,091 | Feb. 17 | 3126 | ..... | 102 | 1515 |
| Carbonating apparatus | J. C. Murphy | 721,723 | Mar. 3 | 124 | 27, 28 | 103 | 27 |
| Carbonating apparatus | B. Adriance and A. Calleson | 725,531 | Apr. 14 | 2062 | 467, 468 | 103 | 1622 |
| Carbonating apparatus | H. A. Hopkins | 736,521 | Aug. 18 | 2774 | 607 | 105 | 1610 |
| Carbonating apparatus | H. A. Hopkins | 736,523 | Aug. 18 | 2777 | 608 | 105 | 1611 |
| Carbonating device | G. C. Wiedenmayer | 718,683 | Jan. 20 | 2214 | 485, 486 | 102 | 502 |
| Carbonating or other apparatus. Means for separating air from liquid in | C. L. Bastian | 727,570 | May 12 | 1405 | 316 | 104 | 320 |
| Carbonator | R. Collings and A. C. Griscom | 721,671 | Mar. 3 | 40 | 9 | 103 | 10 |
| Carbonator | E. E. Murphy | 724,727 | Apr. 7 | 583 | 139 | 103 | 1293 |
| Carbonizing | B. Zwillinger | 744,667 | Nov. 17 | 3595 | 774, 775 | 107 | 796 |
| Carbonizing and cooling down the charge | B. Zwillinger | 744,669 | Nov. 17 | 3600 | 776 | 107 | 797 |
| Carbonizing apparatus | G. W. Curtiss | 723,654 | Mar. 24 | 3719 | 833, 834 | 103 | 822 |
| Carbonizing apparatus | B. Zwillinger | 744,666 | Nov. 17 | 3593 | 774 | 107 | 796 |
| Carbonizing apparatus | B. Zwillinger | 744,668 | Nov. 17 | 3597 | 775, 776 | 107 | 797 |
| Carbonizing-car | C. W., A., and J. Mettler | 741,356 | Oct. 13 | 1854 | 410 | 106 | 1663 |
| Carbonizing material | B. Zwillinger | 744,670 | Nov. 17 | 3602 | 776 | 107 | 798 |
| Carbonizing wood, &c. Retort for | P. L. Laurell | 731,059 | June 16 | 2802 | 624 | 104 | 1745 |
| Carboy-holder | H. A. Dorr | 742,399 | Oct. 27 | 3904 | 877 | 106 | 2118 |
| Carbureter | C. Robinson | 720,485 | Feb. 10 | 1963 | 449 | 102 | 1253 |
| Carbureter | A. H. Rife and J. R. Carper | 720,968 | Feb. 17 | 2887 | 661 | 102 | 1461 |
| Carbureter | A. Wolff | 721,268 | Feb. 24 | 3507 | 797 | 102 | 1611 |
| Carbureter | J. Ruthven | 725,148 | Apr. 14 | 1362 | 307 | 103 | 1473 |
| Carbureter | J. T. Wood | 728,644 | May 19 | 3451 | 765, 766 | 104 | 772 |
| Carbureter | R. Dempster | 729,142 | May 26 | 4343 | 958, 959 | 104 | 970 |
| Carbureter | D. J. Esser | 730,627 | June 9 | 2008 | 446 | 104 | 1560 |
| Carbureter | L. F. Washburne | 733,444 | July 14 | 1343 | 317 | 105 | 301 |
| Carbureter | G. H. Maurer | 733,498 | July 14 | 1431 | 336 | 105 | 320 |
| Carbureter | G. L. Hogan | 742,321 | Oct. 27 | 3774 | 845 | 106 | 2091 |
| Carbureter | B. de Laitte | 742,452 | Oct. 27 | 3995 | 897 | 106 | 2136 |
| Carbureter | E. Walther | 742,533 | Oct. 27 | 4159 | 934 | 106 | 2170 |
| Carbureter | E. D. Parrott | 744,877 | Nov. 24 | 4007 | 864 | 107 | 902 |
| Carbureter | G. S. Goslee | 745,489 | Dec. 1 | 339 | 79 | 107 | 1172 |
| Carbureter | C. E. Sayre | 746,173 | Dec. 8 | 1582 | 354 | 107 | 1458 |
| Carbureter air-pump | R. G. Speer | 731,136 | June 16 | 2953 | 657 | 104 | 1776 |
| Carbureter and governor. Hydrocarbon-engine | L. T. Hagan | 731,999 | June 23 | 4555 | 1016, 1017 | 104 | 2124 |
| Carbureter. Explosion-engine | F. H. Smith | 742,920 | Nov. 3 | 172 | 40 | 107 | 38 |
| Carbureter. Explosion-engine | T. L. and T. J. Sturtevant | 744,257 | Nov. 17 | 2888 | 619 | 107 | 645 |
| Carbureter. Explosion-engine | T. L. and T. J. Sturtevant | 747,264 | Dec. 15 | 3600 | 814 | 107 | 1924 |
| Carbureter. Explosion-motor | J. Corne, P. Duffau, and P. Barathié | 731,547 | June 23 | 3740 | 833 | 104 | 1954 |
| Carbureter. Explosive-engine | C. A. Hedstrom | 730,649 | June 9 | 2046 | 456 | 104 | 1568 |
| Carbureter. Explosive-engine | W. A. Gill | 734,848 | July 28 | 4009 | 936 | 105 | 892 |
| Carbureter. Explosive-engine | E. F. Clark | 741,224 | Oct. 13 | 1574 | 354 | 106 | 1602 |
| Carbureter. Explosive-engine | J. D. Anderson | 743,416 | Nov. 10 | 1218 | 252 | 107 | 275 |
| Carbureter. Explosive-motor | F. and G. Longuemare | 746,119 | Dec. 8 | 1485 | 332 | 107 | 1437 |
| Carbureter-feed | J. A. Bower | 743,430 | Nov. 10 | 1281 | 262, 263 | 107 | 289 |
| Carbureter for carbureting-lamps | F. W. Warner | 737,683 | Sept. 1 | 230 | 49 | 106 | 53 |
| Carbureter for internal-combustion engines | F. H. Messinger | 719,486 | Feb. 3 | 140 | 32 | 102 | 853 |
| Carbureter for liquid-fuel engines | J. H. Saris | 747,235 | Dec. 15 | 3539 | 803 | 107 | 1911 |
| Carbureter for motor-bicycles | A. Clément | 733,625 | July 14 | 1655 | 392 | 105 | 367 |
| Carbureter for petroleum-motors. Pulverizing- | F. Charron and L. Girardot | 733,695 | July 14 | 1765 | 419 | 105 | 389 |
| Carbureter. Gas-engine | H. A. Davis | 722,357 | Mar. 10 | 1302 | 289 | 103 | 293 |
| Carbureter. Gas-engine | A. Peteler | 726,986 | May 5 | 319 | 69, 70 | 104 | 69 |
| Carbureter. Gas-engine | T. B. Jeffery | 727,635 | May 12 | 1519 | 342 | 104 | 345 |
| Carbureter. Gas-engine | P. H. Brennan | 746,449 | Dec. 8 | 2069 | 477 | 107 | 1560 |
| Carbureter. Gasolene-engine | G. Kingston | 727,972 | May 12 | 2178 | 485 | 104 | 482 |
| Carbureter. Gasolene-engine | P. Jenness | 745,063 | Nov. 24 | 4376 | 945 | 107 | 978 |
| Carbureter muffler or silencer | I. E. Butler | 728,200 | May 19 | 2584 | 577 | 104 | 589 |
| Carbureter-regulator. Explosive-engine | J. Grouvelle and H. Arquembourg | 741,962 | Oct. 20 | 3045 | 679 | 106 | 1928 |

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| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page |
|---|---|---|---|---|---|---|---|
| Carbureter-retort | J. T. Wood | 728,645 | May 19 | 3453 | 766 | 104 | 773 |
| Carbureting apparatus | R. G. Speer | 731,137 | June 16 | 2955 | 657 | 104 | 1776 |
| Carbureting apparatus | A. Carissimo, G. Crotti, and E. Antonioli. | 738,604 | Sept. 8 | 2116 | 462<br>463 | 106 | 471 |
| Carbureting apparatus | W. Kahle | 743,085 | Nov. 3 | 513 | 111 | 107 | 107 |
| Carbureting apparatus. Air- | T. H. J. Leckband | 718,361 | Jan. 13 | 1559 | 344 | 102 | 349 |
| Carbureting apparatus. Air- | T. H. J. Leckband | 727,161 | May 5 | 651 | 140 | 104 | 141 |
| Carbureting apparatus. Air- | A. S. Avery and C. R. Smith | 735,011 | July 28 | 4294 | 999 | 105 | 951 |
| Carbureting device for explosive-engines | T. J. Richards | 723,487 | Mar. 24 | 3438 | 769 | 103 | 764 |
| Carbureting device for explosive-engines | M. F. Bates | 729,254 | May 26 | 4547 | 1003 | 104 | 1013 |
| Carbureting device for internal-combustion engines | A. P. Brush | 730,608 | June 9 | 1981 | 441 | 104 | 1554 |
| Card | E. B. Carpenter | 740,228 | Sept. 29 | 5170 | 1161 | 106 | 1170 |
| Card-clamp | F. H. Stewart and G. J. Neth | 742,805 | Oct. 27 | 4618 | 1047 | 106 | 2270 |
| Card-clothing | M. E. Sullivan | 745,974 | Dec. 1 | 1215 | 273 | 107 | 1359 |
| Card-clothing. Means for securing | E. Jones and D. White | 718,469 | Jan. 13 | 1771 | 393 | 102 | 392 |
| Card-cutting machine | J. Cornelius and J. S. Eubank | 720,896 | Feb. 17 | 2739 | 630<br>631 | 102 | 1429 |
| Card-cutting machine. Jacquard- | V. Royle | 740,694 | Oct. 6 | 568 | 127<br>128<br>129 | 106 | 1370 |
| Card-holder | S. H. Owens | 735,802 | Aug. 11 | 1459 | 314 | 105 | 1309 |
| Card-holder for envelops or wallets | A. Bushnell, Jr | 720,324 | Feb. 10 | 1693 | 384 | 102 | 1197 |
| Card holder or file | E. W. Woodruff | 723,116 | Mar. 17 | 2707 | 609 | 103 | 604 |
| Card or picker machine fire-extinguisher | G. B. Stover | 726,200 | Apr. 21 | 3267 | 741 | 103 | 1890 |
| Card or picture mount | W. H. H. Hutton, Jr | 739,315 | Sept. 22 | 3447 | 769 | 106 | 785 |
| Card. Playing- | V. R. Coxe | 718,917 | Jan. 20 | 2653 | 595 | 102 | 593 |
| Card-punching machine. Jacquard- | W. W. Hodgson | 729,495 | May 26 | 4949 | 1097 | 104 | 1098 |
| Card-punching machine. Jacquard- | M. Mertens | 734,729 | July 28 | 3767 | 879 | 105 | 842 |
| Card-punching machine. Piano | J. B. Davidson | 724,674 | Apr. 7 | 478 | 115 | 103 | 1271 |
| Card-punching machines. Apparatus applicable to jacquard- | T. Hill and P. Pearson | 729,340 | May 26 | 4701 | 1038 | 104 | 1045 |
| Card punching or stamping machine | W. W. Hodgson | 742,789 | Oct. 27 | 4582 | 1039 | 106 | 2263 |
| Card-stamping machine. Jacquard- | W. W. Hodgson | 747,918 | Dec. 22 | 4825 | 1091 | 107 | 2218 |
| Cards. Machine for cutting or punching jacquard- | V. Royle | 729,897 | June 2 | 689 | 152<br>153 | 104 | 1269 |
| Cards. Playing- | J. W. Tavenner | 741,984 | Oct. 20 | 3083 | 689 | 106 | 1935 |
| Cards. Playing- | H. S. Delamere | 744,502 | Nov. 17 | 3332 | 717 | 107 | 742 |
| Cards. Playing- | C. C. Meriwether | 745,879 | Dec. 1 | 1050 | 236 | 107 | 1322 |
| Cards. Playing- | A. J. Seymour | 746,750 | Dec. 15 | 2618 | 601 | 107 | 1705 |
| Cards. Playing- | S. A. Moulton | 746,868 | Dec. 15 | 2849 | 657<br>658 | 107 | 1756 |
| Cardboard-scoring machine | M. D. Knowlton | 725,453 | Apr. 14 | 1917 | 429<br>430<br>431 | 103 | 1590 |
| Carding-engine | G. Laurency | 718,261 | Jan. 13 | 1370 | 305 | 102 | 310 |
| Carding-engine | C. Mills | 729,632 | June 2 | 194 | 45, 46 | 104 | 1167 |
| Carding-engine puppet | W. H. Eddy | 743,261 | Nov. 3 | 863 | 188 | 107 | 181 |
| Carding-engine. Traveling-flat | W. Batten and W. Hayes | 736,496 | Apr. 28 | 3870 | 876 | 103 | 2025 |
| Carding-machine | M. J. Gahagan | 733,383 | July 14 | 1236 | 292<br>293 | 105 | 277 |
| Carding-machine feed mechanism | H. Kemp | 718,130 | Jan. 13 | 1137 | 252<br>253 | 102 | 260 |
| Carding-machine feed-roll attachment | M. H. Gallagher | 746,322 | Dec. 8 | 1856 | 422 | 107 | 1515 |
| Carding-roll teeth. Tool for straightening | N. G. Huffstickler | 733,394 | July 14 | 1255 | 297 | 105 | 282 |
| Cargoes. Means for discharging | H. A. Middaugh | 747,560 | Dec. 22 | 4141 | 930 | 107 | 2064 |
| Carom-gun | L. E. Eickelberg | 727,603 | May 12 | 1453 | 326 | 104 | 331 |
| Carpenter's and joiner's jack. Folding | W. F. Soety | 741,562 | Oct. 13 | 2254 | 503 | 106 | 1747 |
| Carpenter's gage | G. W. Peyton | 722,381 | Mar. 10 | 1347 | 298 | 103 | 303 |
| Carpenter's gage | L. Shireman | 732,379 | June 30 | 5335 | 1182 | 104 | 2299 |
| Carpenter's tool. Combination | W. Potter | 730,568 | June 9 | 1910 | 425 | 104 | 1538 |
| Carpentry-joint | G. B. Lee | 724,897 | Apr. 7 | 886 | 203 | 103 | 1359 |
| Carpet-beater | W. A. McDaniel | 738,470 | Sept. 8 | 1869 | 407 | 106 | 416 |
| Carpet-beating machine | F. Muhl | 738,117 | Sept. 1 | 1118 | 247 | 106 | 242 |
| Carpet-cleaner | G. A. Cowgill | 724,441 | Apr. 7 | 38 | 10 | 103 | 1178 |
| Carpet-cleaner | G. A. Cowgill | 724,442 | Apr. 7 | 40 | 11 | 103 | 1178 |
| Carpet-cleaner | E. B. Ferris | 734,841 | July 28 | 4000 | 934 | 105 | 890 |
| Carpet-cleaner | G. A. Cowgill | 744,721 | Nov. 24 | 3737 | 806 | 107 | 845 |
| Carpet-cleaning machine | J. Lewandowfski | 739,611 | Sept. 22 | 3994 | 891 | 106 | 902 |
| Carpet-cutting machine | J. Silberstein | 736,644 | Aug. 18 | 3004 | 663 | 105 | 1656 |
| Carpet fabric. Woven | T. Daffin | 746,298 | Dec. 8 | 1818 | 412 | 107 | 1507 |
| Carpet fabric. Woven pile | A. Webb | 720,764 | Feb. 17 | 2519 | 581 | 102 | 1384 |
| Carpet-fastener | W. J. Doan | 717,554 | Jan. 6 | 63 | 16 | 102 | 16 |
| Carpet-fastener | S. D. Costenbader | 723,586 | Mar. 24 | 3603 | 805 | 103 | 798 |
| Carpet-fastener | J. R. Russell | 728,767 | May 19 | 3665 | 816 | 104 | 817 |
| Carpet-fastener | J. O. Dedman, G. L. Webb, and D. V. Hanna. | 730,240 | June 9 | 1301 | 288 | 104 | 1407 |
| Carpet-fastener | M. Schick | 738,074 | Sept. 1 | 1011 | 225 | 106 | 219 |
| Carpet fastener. Stair- | C. W. Leslie | 720,447 | Feb. 10 | 1905 | 434 | 102 | 1242 |
| Carpet fastener. Stair- | A. Turvill | 740,785 | Oct. 6 | 763 | 172 | 106 | 1408 |
| Carpet-fastening device | C. W. Harris | 728,911 | May 26 | 3939 | 875 | 104 | 887 |
| Carpet holder. Stair- | J. D. Miller | 745,220 | Nov. 24 | 4694 | 1024 | 107 | 1044 |
| Carpet-lining | J. McGwin | 744,091 | Nov. 17 | 2559 | 548 | 107 | 574 |
| Carpet or rug beater | H. G. Cady | 726,025 | Apr. 21 | 2959 | 673 | 103 | 1827 |
| Carpet or rug edge holder | J. L. Kingston | 724,885 | Apr. 7 | 868 | 199 | 103 | 1355 |
| Carpet-renovator | J. S. Thurman | 725,299 | Apr. 14 | 1624 | 366<br>367 | 103 | 1529 |
| Carpet-renovator | J. S. Thurman | 744,437 | Nov. 17 | 3216 | 689 | 107 | 717 |
| Carpet-stretcher | H. C. Fehrmann | 717,829 | Jan. 6 | 605 | 134 | 102 | 130 |
| Carpet-stretcher | C. O. Devilbiss | 722,216 | Mar. 10 | 1048 | 230 | 103 | 239 |
| Carpet-stretcher | J. A. Sandy | 723,924 | Mar. 31 | 4229 | 952 | 103 | 948 |
| Carpet-stretcher | H. Ripley | 732,446 | June 30 | 5462 | 1212 | 104 | 2325 |
| Carpet-stretcher | T. J. Hall | 733,716 | July 14 | 1807 | 428 | 105 | 398 |
| Carpet-stretcher | P. Kirst | 739,009 | Sept. 15 | 2880 | 639 | 106 | 650 |
| Carpet-stretcher | W. F. Kallberg | 739,183 | Sept. 15 | 3198 | 707 | 106 | 715 |
| Carpet-stretcher | F. L. Foss | 743,629 | Nov. 10 | 1671 | 351 | 107 | 373 |
| Carpet stretcher and tacker | J. W. Quilling | 736,873 | Aug. 18 | 3449 | 765 | 105 | 1749 |
| Carpet stretcher and tacker | E. S. Bragg | 738,520 | Sept. 8 | 1973 | 429 | 106 | 439 |

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| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Carpet-strip-cutting machine | W. B. Cobb | 718,982 | Jan. 27 | 2776 | 622 | 102 | 633 |
| Carpet-sweeper | J. W. Sykes | 722,642 | Mar. 10 | 1825 | 406 | 103 | 408 |
| Carpet-sweeper | C. King | 724,111 | Mar. 31 | 4609 | 1038 | 103 | 1024 |
| Carpet-sweeper | A. H. Dodd | 733,904 | July 14 | 2180 | 513 | 105 | 474 |
| Carpet-sweeper | T. I. Duffy | 743,838 | Nov. 10 | 2034 | 432, 433 | 107 | 450 |
| Carpet-sweeper | G. L. Reenstierna | 748,560 | Dec. 29 | 6060 | 1373 | 107 | 2511 |
| Carpet sweeper and beater | A. V. Fedor | 738,019 | Sept. 1 | 926 | 205 | 106 | 203 |
| Carpet-sweeper bail-handle | T. I. Duffy | 744,312 | Nov. 17 | 2996 | 642 | 107 | 669 |
| Carpets, &c. Apparatus for cleaning | F. J. Farrell | 725,689 | Apr. 21 | 2365 | 535 | 103 | 1700 |
| Carpets, floors, &c. Pneumatic device for cleaning | A. Lotz | 742,880 | Nov. 3 | 105 | 25 | 107 | 24 |
| Carriage and hearse. Combined | C. Anderson | 717,652 | Jan. 6 | 227 | 57, 58 | 102 | 50 |
| Carriage-apron | A. B. Keys | 729,186 | May 26 | 4425 | 975 | 104 | 987 |
| Carriage attachment. Baby- | H. Huston | 723,777 | Mar. 24 | 3933 | 887 | 103 | 869 |
| Carriage. Baby- | C. F. Thayer | 717,945 | Jan. 6 | 800 | 180 | 102 | 171 |
| Carriage. Baby- | T. Murray | 732,426 | June 30 | 5421 | 1203 | 104 | 2318 |
| Carriage. Baby- | M. Gross | 740,123 | Sept. 29 | 4967 | 1114, 1115 | 106 | 1129 |
| Carriage. Baby- | F. Huber | 745,619 | Dec. 1 | 557 | 130 | 107 | 1216 |
| Carriage-bodies. Umbrella-receptacle for attachment to | F. N. Young | 732,022 | June 23 | 4621 | 1032 | 104 | 2138 |
| Carriage-body | R. Stone | 720,294 | Feb. 10 | 1634 | 374 | 102 | 1184 |
| Carriage-body corner | J. Ahr | 747,572 | Dec. 22 | 4157 | 934 | 107 | 2068 |
| Carriage-bow filler and support | H. W. Cole | 730,094 | June 2 | 1034 | 232 | 104 | 1338 |
| Carriage brake. Baby- | W. H. Ramscar | 717,922 | Jan. 6 | 764 | 171 | 102 | 163 |
| Carriage. Cableway- | J. G. Crowdes | 741,633 | Oct. 20 | 2391 | 536, 537 | 106 | 1791 |
| Carriage-call box | I. T. Smith | 721,337 | Feb. 24 | 3623 | 824 | 102 | 1636 |
| Carriage. Child's | E. S. Tillinghast | 742,100 | Oct. 20 | 3348 | 747 | 106 | 1988 |
| Carriage. Collapsible baby- | J. P. Olofsson | 729,651 | June 2 | 229 | 51, 52 | 104 | 1175 |
| Carriage. Combination cutunder | M. H. Kashian | 745,108 | Nov. 24 | 4467 | 967 | 107 | 996 |
| Carriage. Convertible baby- | H. Ysskin | 732,023 | June 23 | 4621 | 1032, 1033 | 104 | 2138 |
| Carriage-curtain fastener | B. Richmond | 735,153 | Aug. 4 | 211 | 42 | 105 | 1028 |
| Carriage-curtain fastener | J. H. Marsh | 743,903 | Nov. 10 | 2153 | 464 | 107 | 474 |
| Carriage-door | J. Polya | 729,409 | May 26 | 4809 | 1067 | 104 | 1066 |
| Carriage door and window | J. B. Le Maitre | 727,978 | May 12 | 2187 | 487, 488 | 104 | 484 |
| Carriage door and window | J. B. Le Maitre | 727,979 | May 12 | 2188 | 488 | 104 | 484 |
| Carriage-door handle | J. C. Konrad | 742,448 | Oct. 27 | 3990 | 896 | 106 | 2135 |
| Carriage-escapement dog | C. B. Yaw | 726,489 | Apr. 28 | 3842 | 868 | 103 | 2021 |
| Carriage. Folding | G. Holtz | 729,177 | May 26 | 4405 | 972 | 104 | 983 |
| Carriage. Folding baby- | J. Mehlferber | 718,056 | Jan. 6 | 998 | 223 | 102 | 215 |
| Carriage for track-cables | C. A. Case | 720,781 | Feb. 17 | 2544 | 586 | 102 | 1388 |
| Carriage mechanism | J. J. Green | 729,327 | May 26 | 4677 | 1033 | 104 | 1040 |
| Carriage pump mechanism. Steam- | R. H. White | 734,029 | July 21 | 2445 | 571 | 105 | 549 |
| Carriage running-gear | P. Klett | 746,710 | Dec. 15 | 2544 | 584 | 107 | 1688 |
| Carriage-seat | J. R. Davidson | 735,070 | Aug. 4 | 39 | 12 | 105 | 990 |
| Carriage-seat. Folding | J. Broenen | 736,355 | Aug. 18 | 2460 | 538 | 105 | 1543 |
| Carriage-seat shifting rail | J. Cummings | 743,621 | Nov. 10 | 1660 | 349 | 107 | 371 |
| Carriage shifting rail | J. P. Smith | 738,497 | Sept. 8 | 1928 | 420, 421 | 106 | 429 |
| Carriage-spring | J. Maillé | 718,137 | Jan. 13 | 1151 | 256 | 102 | 263 |
| Carriage-spring | T. B. Dowsley | 718,704 | Jan. 20 | 2257 | 496 | 102 | 511 |
| Carriage-spring | L. G. Mayer | 732,575 | June 30 | 5712 | 1269 | 104 | 2379 |
| Carriage-step | C. E. Hopper | 744,863 | Nov. 24 | 3985 | 859 | 107 | 897 |
| Carriage-top | W. H. Kelly | 735,270 | Aug. 4 | 461 | 91 | 105 | 1079 |
| Carriage-top joint-breaking device | C. A. Collen | 739,391 | Sept. 22 | 3584 | 801 | 106 | 813 |
| Carriage-top-operating device | J. H. King | 735,779 | Aug. 11 | 1415 | 303 | 105 | 1300 |
| Carriage-top prop | F. A. Neider | 744,219 | Nov. 17 | 2822 | 603 | 107 | 631 |
| Carriage-top support | E. H. Mason | 736,990 | Aug. 25 | 3673 | 815 | 105 | 1816 |
| Carriage-top valance | R. C. Schemmel | 732,589 | June 30 | 5735 | 1273 | 104 | 2384 |
| Carriage. Traction- | I. S. Freeman | 726,897 | May 5 | 123 | 29, 30 | 104 | 29 |
| Carriage. Tramway- | F. H. Lamb | 719,477 | Feb. 3 | 117 | 27 | 102 | 850 |
| Carriage-wheel joint-support | J. Scannell | 732,899 | July 7 | 356 | 87 | 105 | 78 |
| Carriages. Condenser mechanism for steam- | R. H. White | 740,207 | Sept. 29 | 5130 | 1152 | 106 | 1162 |
| Carriages. Stack construction for steam- | R. H. White | 740,208 | Sept. 29 | 5132 | 1152 | 106 | 1163 |
| Carrier: *See* Account-carrier. Bicycle trailer package-carrier. Book-carrier. Bottle-carrier. Bundle-carrier. Cartridge-carrier. Cash-carrier. Egg-carrier. Elevated carrier. Fall-rope carrier. Flax-carrier. Folding carrier. Fruit-carrier. Game-carrier. Hay-carrier. Luggage-carrier. Mail-carrier. Mail-box carrier. Manure-carrier. Package-carrier. Parcel-carrier. Pneumatic carrier. Pneumatic-tube carrier. Sheaf-carrier. Shingle-carrier. Spittoon-carrier. Tray-carrier. | | | | | | | |
| Carrier | J. H. McGehee and L. J. Lathwesen | 728,403 | May 19 | 2987 | 657 | 104 | 674 |
| Carrier | S. H. Patterson | 731,125 | June 16 | 2933 | 652 | 104 | 1771 |
| Carrier | M. E. Schmidt and G. A. Mayland | 747,090 | Dec. 15 | 3275 | 746 | 107 | 1855 |
| Carrier apparatus. Suspension | J. Record | 728,294 | May 19 | 2791 | 618 | 104 | 634 |
| Carrier-apron | C. Colahan | 726,257 | Apr. 28 | 3374 | 767 | 103 | 1928 |
| Cart. Ash- | F. C. W. Stelter | 732,459 | June 30 | 5488 | 1217 | 104 | 2330 |
| Cart. Ash- | J. C. Lehr | 739,012 | Sept. 15 | 2884 | 640, 641 | 106 | 651 |
| Cart. Double dump- | T. Sunderland | 732,824 | June 30 | 5211 | 1157 | 104 | 2273 |
| Cart. Dumping- | A. Brenzinger | 729,266 | May 26 | 4565 | 1008 | 104 | 1016 |
| Cart. Dumping- | F. C. Davis | 740,252 | Sept. 29 | 5209 | 1171 | 106 | 1179 |
| Cart or other vehicle | T. Hill | 742,428 | Oct. 27 | 3961 | 889 | 106 | 2128 |
| Cart or wagon. Dump | G. Streich | 722,165 | Mar. 3 | 933 | 206 | 103 | 198 |
| Cart or wagon. Dumping | T. M. Murphy | 743,312 | Nov. 3 | 956 | 208 | 107 | 205 |

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| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Cart protector. Push- | J. W. Heath | 721,301 | Feb. 24 | 3550 | 807 | 102 | 1621 |
| Cart. Road- | H. J. Miller | 729,080 | May 26 | 4240 | 937 | 104 | 948 |
| Carton | J. H. McGehee and M. T. Brower | 728,404 | May 19 | 2988 | 657 | 104 | 674 |
| Carton-closing-machine flap-folder | C. Redd and G. H. Cormack | 733,510 | July 14 | 1457 | 346, 347 | 105 | 326 |
| Carton ends. Block for machines for forming | C. Redd | 733,509 | July 14 | 1455 | 345, 346 | 105 | 325 |
| Carton ends. Machine for closing and sealing up | C. Redd | 733,506 | July 14 | 1445 | 340, 341, 342, 343 | 105 | 323 |
| Carton-holder for machines for folding and gluing the end flaps of cartons. | G. H. Cormack | 733,460 | July 14 | 1371 | 323, 324 | 105 | 307 |
| Carton-making machine | E. C. Lovell | 726,553 | Apr. 28 | 3968 | 897, 898, 899 | 103 | 2046 |
| Cartons or the like. Machine for setting up and filling | W. H. Doble | 736,237 | Aug. 11 | 2247 | 485, 486, 487 | 105 | 1480 |
| Cartridge | F. K. Young and J. E. Sheriff | 740,790 | Oct. 6 | 769 | 173 | 106 | 1409 |
| Cartridge. Blank | O. Schütte | 726,579 | Apr. 28 | 4030 | 911 | 103 | 2057 |
| Cartridge. Blasting- | T. F. Durham | 721,432 | Feb. 24 | 3799 | 864 | 102 | 1672 |
| Cartridge capping, decapping, and loading device | J. E. Krewson | 744,364 | Nov. 17 | 3085 | 661 | 107 | 689 |
| Cartridge-carrier | E. Krough, C. and J. E. Hogan | 724,190 | Mar. 31 | 4768 | 1069 | 103 | 1055 |
| Cartridge-case | A. Barrallon | 725,395 | Apr. 14 | 1801 | 404 | 103 | 1565 |
| Cartridge-decapping tool | H. M. Olney | 746,368 | Dec. 8 | 1936 | 441 | 107 | 1531 |
| Cartridge-fuses. Electrical contact for | C. D. Platt | 719,859 | Feb. 3 | 806 | 180 | 102 | 993 |
| Cartridge. Gun- | W. C. Bush | 743,242 | Nov. 3 | 820 | 178 | 107 | 171 |
| Cartridge-loading device | C. B. Helm | 747,422 | Dec. 22 | 3896 | 877 | 107 | 2009 |
| Cartridge-packet | C. H. A. F. L. Ross | 724,127 | Mar. 31 | 4641 | 1045 | 103 | 1031 |
| Cartridge-primer | J. Gardner | 733,638 | July 14 | 1678 | 398 | 105 | 371 |
| Cartridge-recapper | J. B. Crepeau | 723,838 | Mar. 31 | 4048 | 914 | 103 | 908 |
| Cartridge. Safety blasting- | T. F. Durham | 734,684 | July 28 | 3671 | 859 | 105 | 823 |
| Cartridge-shell | M. Dreger and C. Pohlit | 735,351 | Aug. 4 | 590 | 122 | 105 | 1107 |
| Cartridge-shell decapping and recapping tool | M. Chick | 739,151 | Sept. 15 | 3146 | 695 | 106 | 704 |
| Cartridge-shell resizing, decapping, and recapping apparatus. | E. L. Wetzig | 742,768 | Oct. 27 | 4552 | 1031 | 106 | 2256 |
| Cartridges. Guide for inside tubes of blasting- | T. F. Durham | 721,431 | Feb. 24 | 3798 | 864 | 102 | 1671 |
| Carver-fork and guard | E. C. Martin | 724,906 | Apr. 7 | 903 | 206 | 103 | 1363 |
| Carving-machine | E. Thern | 724,969 | Apr. 7 | 1017 | 233 | 103 | 1386 |
| Carving-machine bit | V. Winquist | 740,506 | Oct. 6 | 238 | 47 | 106 | 1297 |
| Carving-tool | A. Deaton | 726,516 | Apr. 28 | 3906 | 884 | 103 | 2033 |
| Case: *See* Banana-shipping case. Bookcase. Burial-case. Cigar-case. Display-case. Display and vending case. Dress-suit case. Egg-case. Egg or fruit case. Extensible case. File-case. Filing-case. Folding case. Instrument-case. Mail-case. Measure-case. Meat-case. Needle-case. Packing-case. Pencil-case. Pencil-holding case. Pocket-case. Revolving case. Shipping-case. Shipping or traveling case. Show-case. Syringe-case. Ticket-case. Toilet-case. Traveling-case. Watchcase. Watch-holding case. Whist-case. | | | | | | | |
| Case | D. H. Sanders | 718,387 | Jan. 13 | 1605 | 353 | 102 | 359 |
| Case for the reception and display of salable articles | L. W. Faber | 721,874 | Mar. 3 | 404 | 89 | 103 | 88 |
| Casein. Preparing fat-free | O. Eberhard | 745,097 | Nov. 24 | 4454 | | 107 | 993 |
| Casein. Producing | A. D. Charles | 721,999 | Mar. 3 | 649 | | 103 | 141 |
| Casement | A. R. Huskisson | 718,844 | Jan. 20 | 2501 | 557 | 102 | 560 |
| Cash and credit account cabinet | C. Yorger | 739,630 | Sept. 22 | 4035 | 899, 900, 901 | 106 | 913 |
| Cash-carrier | W. L. Churchill | 743,060 | Nov. 3 | 467 | 102 | 107 | 97 |
| Cash-carrier | J. L. Baldwin | 745,951 | Dec. 1 | 1167 | 262 | 107 | 1349 |
| Cash-carrier and apparatus therefor | M. J. Robertson | 722,905 | Mar. 17 | 2348 | 525 | 103 | 529 |
| Cash-check | F. J. Walker | 737,049 | Aug. 25 | 3766 | 836 | 105 | 1836 |
| Cash-register | J. P. Cleal | 718,565 | Jan. 13 | 1994 | 435, 436 | 102 | 443 |
| Cash-register | B. K. Hoppock | 720,431 | Feb. 10 | 1873 | 427 | 102 | 1236 |
| Cash-register | C. Laurick | 720,531 | Feb. 10 | 2057 | 474, 475 | 102 | 1273 |
| Cash-register | J. H. McCormick | 721,459 | Feb. 24 | 3841 | 874, 875 | 102 | 1681 |
| Cash-register | A. Pfaff | 721,915 | Mar. 3 | 475 | 104, 105, 106, 107 | 103 | 104 |
| Cash-register | A. Pfaff | 721,916 | Mar. 3 | 490 | 107, 108, 109 | 103 | 108 |
| Cash-register | F. J. Hull | 722,510 | Mar. 10 | 1600 | 352, 353 | 103 | 359 |
| Cash-register | O. F. Mayer | 723,475 | Mar. 24 | 3419 | 764 | 103 | 761 |
| Cash-register | F. C. Osborn | 723,906 | Mar. 31 | 4180 | 942, 943, 944, 945 | 103 | 937 |
| Cash-register | J. P. Cleal | 724,378 | Mar. 31 | 5148 | 1153, 1154 | 103 | 1134 |

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| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Cash-register | P. Lalor | 724,409 | Mar. 31 | 5217 | 1169, 1170 | 103 | 1148 |
| Cash-register | E. S. Smith and H. Giles | 724,516 | Apr. 7 | 176 | 43, 44, 45 | 103 | 1207 |
| Cash-register | H. Giles | 731,448 | June 23 | 3540 | 793 | 104 | 1915 |
| Cash-register | J. C. Vahjen | 731,981 | June 23 | 4516 | 1008, 1009 | 104 | 2117 |
| Cash-register | A. Godefroid | 733,476 | July 14 | 1397 | 329 | 105 | 313 |
| Cash-register | C. F. Crowder | 733,815 | July 14 | 1997 | 470, 471 | 105 | 438 |
| Cash-register | J. P. Cleal and A. Macauley | 735,066 | Aug. 4 | 32 | 10 | 105 | 988 |
| Cash-register | R. W. Hudson | 738,330 | Sept. 8 | 1595 | 346, 347 | 106 | 359 |
| Cash-register | W. A. Zimmerman | 739,530 | Sept. 22 | 3839 | 860 | 106 | 870 |
| Cash-register | J. P. Cleal | 739,649 | Sept. 22 | 4066 | 907 | 106 | 919 |
| Cash-register | F. J. Nutting | 739,706 | Sept. 22 | 4168 | 932 | 106 | 941 |
| Cash-register | M. Giesel | 745,595 | Dec. 1 | 521 | 122 | 107 | 1208 |
| Cash-register | E. J. Von Pein | 745,937 | Dec. 1 | 1143 | 256, 257 | 107 | 1343 |
| Cash-register | T. E. Davis | 746,300 | Dec. 8 | 1820 | 403 | 107 | 1508 |
| Cash-register | G. Browning | 747,128 | Dec. 15 | 3342 | 759, 760 | 107 | 1871 |
| Cash-register | T. Carney | 748,259 | Dec. 29 | 5480 | 1249, 1250 | 107 | 2381 |
| Cash-register | T. Carney | 748,260 | Dec. 29 | 5484 | 1250, 1251 | 107 | 2383 |
| Cash-register | J. P. Cleal | 748,261 | Dec. 29 | 5489 | 1251, 1252, 1253 | 107 | 2384 |
| Cash-register | W. H. Muzzy | 748,406 | Dec. 29 | 5737 | 1310, 1311 | 107 | 2438 |
| Cash register and indicator | A. De Vilbiss, Jr., and N. M. Hansen | 747,597 | Dec. 22 | 4201 | 945, 946 | 107 | 2077 |
| Cash register and indicator | J. E. Kelly | 747,613 | Dec. 22 | 4240 | 954 | 107 | 2086 |
| Cash-register attachment | T. Craney | 741,229 | Oct. 13 | 1580 | 355 | 106 | 1604 |
| Cash-register. Electrical | J. C. Vahjen | 721,981 | Mar. 3 | 612 | 136, 137 | 103 | 133 |
| Cash register, indicator, and recorder | J. Pfeifer | 742,060 | Oct. 20 | 3227 | 723, 724, 725 | 106 | 1965 |
| Cash-register. Pocket | A. G. Huettel | 733,045 | July 7 | 610 | 150 | 105 | 130 |
| Cashier. Mechanical | C. F. Bassett | 720,552 | Feb. 17 | 2118 | 488, 489, 490, 491, 492 | 102 | 1301 |
| Cashier. Mechanical | I. S. Dement and F. J. Hull | 739,481 | Sept. 22 | 3766 | 841, 842 | 106 | 855 |
| Casing and tubing elevator | K. Chickering | 729,846 | June 2 | 600 | 132 | 104 | 1251 |
| Casing and tubing elevator | J. Scott | 729,902 | June 2 | 696 | 154 | 104 | 1270 |
| Casing-manufacturing machine | A. Mauser | 733,241 | July 7 | 966 | 232 | 105 | 203 |
| Casing or tubing elevator | K. Chickering | 730,233 | June 9 | 1290 | 285 | 104 | 1405 |
| Casing-perforator | P. H. Mack | 724,904 | Apr. 7 | 900 | 206 | 103 | 1362 |
| Casing-puller | S. W. Munn | 743,543 | Nov. 10 | 1497 | 313 | 107 | 337 |
| Casing-spear | E. C. Wilson | 736,907 | Aug. 18 | 3507 | 780 | 105 | 1762 |
| Casing-spear | W. W. Stockton and W. Helfenstein | 739,454 | Sept. 22 | 3719 | 828 | 106 | 844 |
| Casing water-packer | C. Haas | 730,257 | June 9 | 1344 | 295 | 104 | 1416 |
| Casings. Machine for the manufacture of | A. Mauser | 733,728 | July 14 | 1823 | 432 | 105 | 402 |
| Cask. Hermetic gaseous-liquid-compress | W. B. Dolsen | 738,531 | Sept. 8 | 1993 | 434 | 106 | 444 |
| Cask. Reinforced cylindrical | W. G. Avery | 732,995 | July 7 | 524 | 130 | 105 | 112 |
| Casks, &c. Apparatus for cleaning the interiors of | L. Broux and R. Gregoire | 746,785 | Dec. 15 | 2679 | 619 | 107 | 1717 |
| Casket | J. D. Ripson | 739,509 | Sept. 22 | 3808 | 853 | 106 | 864 |
| Casket. Couch- | F. N. Watt and H. C. Keelor | 739,764 | Sept. 22 | 4266 | 956 | 106 | 963 |
| Casket-fastener | F. I. Hoefle | 729,865 | June 2 | 639 | 140 | 104 | 1259 |
| Casket-receptacle. Artificial-stone or concrete | L. L. Parry | 738,696 | Sept. 8 | 2311 | 508 | 106 | 510 |
| Casket-trimmings. Machine for embossing | H. T. Loomis | 719,238 | Jan. 27 | 3267 | 730 | 102 | 735 |
| Caskets over the boxes. Device for carrying | G. H. Fuller | 736,377 | Aug. 18 | 2494 | 548 | 105 | 1550 |
| Caskets. Supplemental bottom for transportation | C. A. Genung | 744,186 | Nov. 17 | 2764 | 588, 589 | 107 | 617 |
| Cast hollow ware. Coring openings in the walls of | P. J. McGuire | 721,730 | Mar. 3 | 136 | 32 | 103 | 31 |
| Cast-off | R. F. Bartel | 728,073 | May 12 | 2356 | 524 | 104 | 519 |
| Cast-off | C. R. Harris | 734,861 | July 28 | 4031 | 941 | 105 | 896 |
| Cast-off | R. F. Bartel | 744,279 | Nov. 17 | 2938 | 627 | 107 | 657 |
| Cast-steel wheel | T. B. Zell | 736,190 | Aug. 11 | 2178 | 467 | 105 | 1465 |
| Cast-steel wheel | J. P. S. Lawrance | 742,684 | Oct. 27 | 4421 | 998 | 106 | 2227 |
| Casts. Photomechanical process of producing finished and plastic | C. Pietzner | 737,435 | May 5 | 1138 | 250 | 104 | 246 |
| Caster | G. A. Rentschler and J. Kaefer | 718,521 | Jan. 13 | 1904 | 418 | 102 | 425 |
| Caster | A. B. Diss | 720,790 | Feb. 17 | 2554 | 589 | 102 | 1391 |
| Caster | A. B. Diss | 725,325 | Apr. 14 | 1677 | 378 | 103 | 1540 |
| Caster | R. L. Dorsey | 725,423 | Apr. 14 | 1850 | 414 | 103 | 1576 |
| Caster | H. McDonnell | 726,447 | Apr. 28 | 3745 | 849 | 103 | 2004 |
| Caster | C. Stengel | 735,838 | Aug. 11 | 1536 | 329 | 105 | 1327 |
| Caster | F. Gamble | 740,267 | Sept. 29 | 5234 | 1177 | 106 | 1183 |
| Caster | M. W. Owens | 743,552 | Nov. 10 | 1509 | 315 | 107 | 339 |
| Caster | M. G. Daniels | 744,169 | Nov. 17 | 2716 | 579 | 107 | 607 |
| Caster | J. W. Lawrence | 746,636 | Dec. 8 | 2405 | 550 | 107 | 1037 |
| Caster | D. Nickel | 747,211 | Dec. 15 | 3502 | 795 | 107 | 1904 |
| Caster and socket | B. H. Noelting | 742,218 | Oct. 27 | 3572 | 798 | 106 | 2048 |
| Caster. Ball- | M. Hagle | 718,343 | Jan. 13 | 1532 | 339 | 102 | 344 |
| Caster. Ball- | R. M. Grove | 725,076 | Apr. 14 | 1226 | 277 | 103 | 1446 |
| Caster. Ball- | F. P. Magoun | 725,108 | Apr. 14 | 1286 | 290 | 103 | 1458 |
| Caster. Ball- | C. Thomson | 725,174 | Apr. 14 | 1409 | 319 | 103 | 1483 |
| Caster. Ball- | H. S. Cross | 747,947 | Dec. 29 | 4895 | 1109 | 107 | 2254 |
| Caster-removing device | E. G. Lewis | 744,081 | Nov. 17 | 2543 | 544 | 107 | 571 |

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| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Casting | H. H. Franklin | 748,061 | Dec. 29 | 5134 | 1161 | 107 | 2307 |
| Casting. Alloy | E. Gates | 729,756 | June 2 | 429 | 97 | 104 | 1216 |
| Casting alloys | E. Gates | 729,754 | June 2 | 423 | 96 | 104 | 1215 |
| Casting alloys. Apparatus for | E. Gates | 729,755 | June 2 | 426 | 97 | 104 | 1215 |
| Casting and article made thereby | C. D. Cannon | 719,744 | Feb. 3 | 607 | 136 | 102 | 950 |
| Casting apparatus. Ingot- | A. J. Lustig | 727,397 | May 5 | 1063 | 231 | 104 | 230 |
| Casting apparatus. Ingot- | H. W. Lash | 730,274 | June 9 | 1370 | 301 / 302 | 104 | 1422 |
| Casting apparatus. Metal- | R. W. Davies | 726,878 | May 5 | 85 | 22 | 104 | 21 |
| Casting apparatus. Metal- | A. M. Acklin | 741,752 | Oct. 20 | 2629 | 587 | 106 | 1840 |
| Casting crucible-steel ingots | J. F. McGrath | 720,374 | Feb. 10 | 1783 | 404 | 102 | 1217 |
| Casting cylinders | A. Walder and J. T. Schaffer | 724,353 | Mar. 31 | 5097 | 1141 | 103 | 1122 |
| Casting hollow metal bodies. Apparatus for | P. de Hemptinne | 743,077 | Nov. 3 | 498 | 108 | 107 | 104 |
| Casting ingots | A. Sauveur and J. Whiting | 735,596 | Aug. 4 | 1077 | 228 / 229 | 105 | 1209 |
| Casting-machine | W. A. McAdams | 721,381 | Feb. 24 | 3702 | 842 / 843 | 102 | 1653 |
| Casting-machine | E. Strauch | 738,372 | Sept. 8 | 1680 | 364 | 106 | 377 |
| Casting-machine | S. W. Bradley | 738,880 | Sept. 15 | 2676 | 589 / 590 | 106 | 607 |
| Casting-machine | F. N. Cline | 739,062 | Sept. 15 | 2977 | 660 / 661 | 106 | 670 |
| Casting-machine | R. Baggaley | 746,237 | Dec. 8 | 1698 | 378 / 379 | 107 | 1483 |
| Casting-machine | R. Baggaley | 746,244 | Dec. 8 | 1708 | 381 | 107 | 1485 |
| Casting machine. Metal- | R. Baggaley | 746,245 | Dec. 8 | 1710 | 382 | 107 | 1485 |
| Casting machine. Pig- | J. S. Fielding | 721,878 | Mar. 3 | 410 | 90 | 103 | 90 |
| Casting metals | A. M. Acklin | 741,751 | Oct. 20 | 2626 | 587 | 106 | 1840 |
| Casting mold. Chain- | J. Bone and M. Reid | 736,678 | Aug. 18 | 3080 | 679 | 105 | 1671 |
| Casting mold. Ring- | W. H. Ford | 746,944 | Dec. 15 | 3007 | 691 | 107 | 1793 |
| Casting packing-rings. Mold mechanism for | S. B. Mack | 720,269 | Feb. 10 | 1589 | 363 | 102 | 1176 |
| Casting small steel ingots | A. B. Chantraine | 741,460 | Oct. 13 | 2035 | 452 | 106 | 1699 |
| Casting small steel ingots. Arrangement for | A. B. Chantraine | 747,137 | Dec. 15 | 3366 | 764 | 107 | 1876 |
| Casting solid metallic bodies | B. A. Mick | 736,419 | Aug. 18 | 2573 | 564 | 105 | 1568 |
| Casting with hardened portions and making same. Steel | H. W. Falk | 728,217 | May 19 | 2619 | 585 | 104 | 596 |
| Castings. Composition for use in producing metal | C. W. Link | 729,617 | June 2 | 168 | ------ | 104 | 1161 |
| Castings. Making | J. C. Davis | 727,103 | May 5 | 542 | 116 | 104 | 118 |
| Castings. Making | C. H. Bierbaum | 740,733 | Oct. 6 | 646 | 146 | 106 | 1386 |
| Castings. Making | W. D. Sargent | 741,377 | Oct. 13 | 1896 | 418 | 106 | 1671 |
| Castings. Making metal | A. Sauveur | 735,303 | Aug. 4 | 512 | 103 | 105 | 1090 |
| Castings. Making metal | W. A. Bole | 741,618 | Oct. 20 | 2366 | 529 | 106 | 1786 |
| Castings. Making steel | W. E. Coyan | 729,281 | May 26 | 4598 | 1017 | 104 | 1023 |
| Castings. Manufacturing homogeneous metal | H. Goldschmidt and W. Mathesius | 733,957 | July 21 | 2291 | ------ | 105 | 517 |
| Castings. Mold for making brass | F. J. Friese and J. E. Gilbert | 745,005 | Nov. 24 | 4233 | 916 | 107 | 948 |
| Castings. Producing carbon-steel | J. C. Davis | 746,039 | Dec. 8 | 1339 | ------ | 107 | 1402 |
| Catamenial appliance | H. A. and A. L. Ische | 743,877 | Nov. 10 | 2099 | 448 | 107 | 463 |
| Catamenial napkin | T. C. Asplund | 728,432 | May 19 | 3035 | 667 | 104 | 684 |
| Catamenial sack | L. H. Mallalieu and M. Coke | 737,258 | Aug. 25 | 4161 | 926 | 105 | 1919 |
| Catch | E. G. Schriefer | 727,462 | May 5 | 1188 | 262 | 104 | 257 |
| Catch for instrument-cases, &c | H. L. Curren | 724,164 | Mar. 31 | 4716 | 1058 | 103 | 1046 |
| Catch. Safety- | C. D. Heaton | 740,648 | Oct. 6 | 497 | 109 | 106 | 1353 |
| Catching and delivering apparatus | T. H. Patenall | 720,058 | Feb. 10 | 1188 | 272 | 102 | 1092 |
| Cathode | C. J. Henry | 724,862 | Apr. 7 | 831 | 191 | 103 | 1346 |
| Cathode for electric detinning-baths | M. Laernoes and J. Dunn | 737,423 | Aug. 25 | 4474 | 1003 | 105 | 1986 |
| Cathode-holder | J. Matthews and W. Davies | 727,549 | May 5 | 1347 | 303 | 104 | 289 |
| Cattle-delivering means | H. Bargeboer | 745,992 | Dec. 8 | 1255 | 283 | 107 | 1384 |
| Cattle-guard | C. J. Richardson | 718,795 | Jan. 20 | 2426 | 538 | 102 | 546 |
| Cattle-guard | I. Rimbey | 719,509 | Feb. 3 | 170 | 39 | 102 | 859 |
| Cattle-guard | G. A. Preston | 722,043 | Mar. 3 | 722 | 160 / 161 | 103 | 156 |
| Cattle-guard | E. Cook | 723,833 | Mar. 31 | 4039 | 912 | 103 | 907 |
| Cattle-guard | D. W. Emerson and P. Keenan | 727,765 | May 12 | 1792 | 401 | 104 | 402 |
| Cattle-guard | G. G. Welsh | 729,465 | May 26 | 4904 | 1086 | 104 | 1089 |
| Cattle-guard | L. W. Carden | 730,002 | June 2 | 888 | 192 | 104 | 1309 |
| Cattle-guard | J. W. Bireley | 730,224 | June 9 | 1271 | 282 | 104 | 1402 |
| Cattle-guard | G. C. Frownfelter | 739,165 | Sept. 15 | 3169 | 701 | 106 | 709 |
| Cattle-guard | F. M. Wright | 744,450 | Nov. 17 | 3248 | 696 | 107 | 724 |
| Cattle-guard | W. E. Dement and D. N. Prendergast | 746,685 | Dec. 15 | 2508 | 576 | 107 | 1680 |
| Cattle-guard | W. H. McLaren | 746,985 | Dec. 15 | 3078 | 705 | 107 | 1808 |
| Cattle-mark | R. Schumann | 726,104 | Apr. 21 | 3075 | 698 | 103 | 1851 |
| Cattle or stock guard | W. E. Parker | 732,007 | June 23 | 4594 | 1025 | 104 | 2132 |
| Cautery | J. P. Müller | 718,142 | Jan. 13 | 1158 | 257 | 102 | 264 |
| Cave | F. J. and G. W. Hubbell | 744,199 | Nov. 17 | 2786 | 594 | 107 | 623 |
| Ceiling-anchor | M. Murray | 733,671 | July 14 | 1735 | 409 | 105 | 383 |
| Ceiling construction | W. D. Ryan and L. L. Sagendorph | 741,593 | Oct. 13 | 2319 | 519 | 106 | 1760 |
| Ceiling construction | W. D. Ryan | 744,692 | Nov. 17 | 3636 | 784 | 107 | 805 |
| Ceiling. Metal | A. Friedley | 740,843 | Oct. 6 | 863 | 192 | 106 | 1430 |
| Ceiling or floor construction | H. Eggert | 742,849 | Nov. 3 | 54 | 13, 14 | 107 | 14 |
| Ceiling or wall box | J. T. Robb | 727,842 | May 12 | 1933 | 431 | 104 | 429 |
| Ceiling or wall plate. Metal | L. L. Sagendorph | 735,679 | Aug. 4 | 1234 | 262 | 105 | 1243 |
| Ceiling-switch | H. R. Sargent | 730,573 | June 9 | 1921 | 427 | 104 | 1540 |
| Ceilings, roofs, &c. Construction of | J. Kulhanek | 724,717 | Apr. 7 | 563 | 135 | 103 | 1289 |
| Celery-shaving device | J. F. Luhrman | 727,396 | May 5 | 1063 | 231 | 104 | 229 |
| Cell-case | J. H. Carter | 741,306 | Oct. 13 | 1738 | 388 | 106 | 1634 |
| Cell-cases or egg-trays. Machine for making | W. B. Sheperd | 722,329 | Mar. 10 | 1250 | 278 / 279 | 103 | 282 |
| Celluloid compound and making same | E. Zühl | 729,990 | June 2 | 869 | ------ | 104 | 1304 |
| Celluloid or pyroxylin compound and making same | E. Zühl | 733,110 | July 7 | 732 | ------ | 105 | 155 |
| Cellulose esters. Making | G. W. Miles | 733,729 | July 14 | 1824 | ------ | 105 | 402 |
| Cellulose films or filaments. Preparing | F. and A. Lehner | 724,020 | Mar. 31 | 4440 | ------ | 103 | 989 |
| Cement | T. B. Joseph | 732,640 | June 30 | 5826 | ------ | 104 | 2405 |
| Cement and artificial-stone composition | A. C. Schulz | 723,494 | Mar. 24 | 3449 | ------ | 103 | 766 |
| Cement and gravel separator | J. Behm | 726,498 | Apr. 28 | 3873 | 876 | 103 | 2026 |
| Cement and making same | H. Passow | 747,919 | Dec. 22 | 4827 | ------ | 107 | 2218 |
| Cement and producing same | H. Passow | 747,920 | Dec. 22 | 4830 | 1092 | 107 | 2219 |

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| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Cement and producing same | H. Passow | 747,921 | Dec. 22 | 4837 | ..... | 107 | 2220 |
| Cement. Apparatus for construction of buildings of | C. G. Canfield | 732,167 | June 30 | 4916 | 1094 | 104 | 2212 |
| Cement. Composition for acid-proof | H. Gallinowsky | 723,263 | Mar. 24 | 2995 | ..... | 103 | 677 |
| Cement. Composition of painting- | J. Senft | 732,326 | June 30 | 5042 | ..... | 104 | 2239 |
| Cement for uniting wood | J. H. J. Bartels | 725,816 | Apr. 21 | 2610 | ..... | 103 | 1754 |
| Cement-kiln | W. W. Maclay | 725,975 | Apr. 21 | 2873 | 651, 652 | 103 | 1810 |
| Cement-kiln | S. R. Malone | 739,196 | Sept. 15 | 3220 | 712 | 106 | 720 |
| Cement-lined pipe | J. T. Langford | 724,892 | Apr. 7 | 882 | 203 | 103 | 1358 |
| Cement. Making | H. E. Rüsager | 718,729 | Jan. 20 | 2304 | ..... | 102 | 520 |
| Cement. Manufacture of | W. A. O. Wuth | 738,388 | Sept. 8 | 1709 | ..... | 106 | 383 |
| Cement. Manufacture of | W. A. O. Wuth | 738,389 | Sept. 8 | 1710 | ..... | 106 | 383 |
| Cement. Manufacture of | C. von Forell | 747,882 | Dec. 22 | 4752 | ..... | 107 | 2202 |
| Cement. Manufacture of Portland | H. K. G. Bamber | 743,218 | Nov. 3 | 769 | 168 | 107 | 161 |
| Cement. Manufacture of white | O. Friz | 730,630 | June 9 | 2013 | ..... | 104 | 1561 |
| Cement-mixer | W. Clark | 742,591 | Oct. 27 | 4252 | 958 | 106 | 2189 |
| Cement-molding apparatus | L. G. Haase | 734,854 | July 28 | 4021 | 938, 939 | 105 | 894 |
| Cement or artificial stone. Machine for making products of | W. E. Jaques | 738,910 | Sept. 15 | 2722 | 602 | 106 | 617 |
| Cement or concrete structures with hollow walls, flues, &c. Device for building | W. H. Cadwell | 725,038 | Apr. 14 | 1155 | 261 | 103 | 1431 |
| Cement pipes or the like. Apparatus for manufacturing | B. Nöldner | 745,291 | Nov. 24 | 4825 | 1052 | 107 | 1070 |
| Cement plaster. Composition of matter for | A. De Monco | 734,678 | July 28 | 3658 | ..... | 105 | 821 |
| Cement plaster. Composition of matter for | A. De Monco | 734,679 | July 28 | 3660 | ..... | 105 | 821 |
| Cement post | H. McMaster | 744,976 | Nov. 24 | 4185 | 904 | 107 | 938 |
| Cement-post mold | L. H. Stoner | 723,064 | Mar. 17 | 2611 | 588 | 103 | 584 |
| Cement-receptacle mold | J. A. Johnson and J. G. Young | 736,973 | Aug. 25 | 3641 | 807 | 105 | 1810 |
| Cement shingle | G. C. Zwerk | 748,141 | Dec. 29 | 5287 | 1208 | 107 | 2340 |
| Cement shingles. Machine for making | G. C. Zwerk | 748,140 | Dec. 29 | 5286 | 1201 | 107 | 2340 |
| Cement. Strengthened cast | J. Daime | 725,544 | Apr. 14 | 2089 | 473 | 103 | 1627 |
| Cement-testing machine | J. W. Bramwell | 733,133 | July 7 | 772 | 187 | 105 | 163 |
| Cement water-tanks. Apparatus for forming | J. T. Donahoo | 744,509 | Nov. 17 | 3342 | 720 | 107 | 744 |
| Cementation process | A. Frank | 718,335 | Jan. 13 | 1520 | ..... | 102 | 342 |
| Cementing substances | W. M. Kimberlin | 725,094 | Apr. 14 | 1260 | ..... | 103 | 1452 |
| Cementitious products or artificial stone. Making | W. E. Jaques | 723,281 | Mar. 24 | 3025 | 681 | 103 | 684 |
| Censer | B. W. Ahne | 721,133 | Feb. 24 | 3241 | 742 | 102 | 1559 |
| Centerboard | A. P. Stokes | 724,217 | Mar. 31 | 4820 | 1080, 1081 | 103 | 1066 |
| Centering and holding tool | P. Gagnon | 729,322 | May 26 | 4669 | 1031 | 104 | 1039 |
| Centering. Collapsible | B. H. Muehle | 732,881 | July 7 | 331 | 82 | 105 | 73 |
| Centering. Hanger for temporary | G. B. Waite | 736,040 | Aug. 11 | 1917 | 409 | 105 | 1410 |
| Centering-support. Extensible | G. B. Waite | 724,146 | Mar. 31 | 4685 | 1052 | 103 | 1040 |
| Centering-tool | S. G. Twambley | 724,759 | Apr. 7 | 634 | 149 | 103 | 1304 |
| Centrifugal apparatus | F. Kessler | 735,524 | Aug. 4 | 941 | 200 | 105 | 1181 |
| Centrifugal drier | M. O. Kasson | 726,696 | Apr. 28 | 4244 | 960 | 103 | 2101 |
| Centrifugal drier | H. Monk | 745,223 | Nov. 24 | 4698 | 1025, 1026 | 107 | 1044 |
| Centrifugal extractor | E. F. Moore | 724,725 | Apr. 7 | 581 | 138 | 103 | 1292 |
| Centrifugal machine | J. J. Berrigan | 717,802 | Jan. 6 | 540 | 120, 121 | 102 | 116 |
| Centrifugal machine | J. J. Berrigan | 717,803 | Jan. 6 | 542 | 121 | 102 | 117 |
| Centrifugal machine | J. J. Berrigan | 717,804 | Jan. 6 | 544 | 121, 122 | 102 | 117 |
| Centrifugal machine | J. Laidlaw | 719,476 | Feb. 3 | 116 | 27 | 102 | 850 |
| Centrifugal machine | E. D. Mackintosh | 721,714 | Mar. 3 | 115 | 24 | 103 | 25 |
| Centrifugal machine | J. W. Macfarlane and A. R. Robertson. | 722,730 | Mar. 17 | 2022 | 451, 452 | 103 | 464 |
| Centrifugal machine | W. G. Hall and W. A. Ramsay | 725,440 | Apr. 14 | 1896 | 424, 425 | 103 | 1586 |
| Centrifugal machine | F. Hampl | 725,560 | Apr. 14 | 2111 | 478, 479 | 103 | 1632 |
| Centrifugal machine | J. W. Macfarlane | 728,737 | May 19 | 3616 | 802, 803 | 104 | 807 |
| Centrifugal machine | M. Güttner and R. Baeger | 730,114 | June 2 | 1068 | 240 | 104 | 1344 |
| Centrifugal machine | H. Winter | 731,258 | June 16 | 3159 | 704 | 104 | 1816 |
| Centrifugal machine | G. Pott, J. H. and D. Y. Cassels, R. Williamson, and A. M. Stuart. | 732,220 | June 30 | 5027 | 1119 | 104 | 2235 |
| Centrifugal machine | J. J. Berrigan | 737,063 | Aug. 25 | 3794 | 840 | 105 | 1841 |
| Centrifugal machine | J. D. Kennon | 737,416 | Aug. 25 | 4460 | 1000, 1001 | 105 | 1983 |
| Centrifugal machine | H. Winter | 739,247 | Sept. 15 | 3326 | 738 | 106 | 743 |
| Centrifugal machine | P. Boulanger | 741,909 | Oct. 20 | 3115 | 695 | 106 | 1941 |
| Centrifugal machine | J. A. Willard | 744,659 | Nov. 17 | 3577 | 771 | 107 | 791 |
| Centrifugal machine | M. Güttner and R. Baeger | 747,604 | Dec. 22 | 4218 | 948, 949 | 107 | 2082 |
| Centrifugal machine | M. H. Barker | 748,465 | Dec. 29 | 5870 | 1335 | 107 | 2467 |
| Centrifugal-machine brake | G. Pott and R. Williamson | 728,974 | May 26 | 4046 | 898 | 104 | 909 |
| Centrifugal-machine driving mechanism | H. Feldmeier | 725,832 | Apr. 21 | 2631 | 599 | 103 | 1758 |
| Centrifugal-machine driving mechanism | G. Engel | 733,377 | July 14 | 1224 | 290 | 105 | 274 |
| Centrifugal-machine driving mechanism | G. Engel | 733,378 | July 14 | 1228 | 290 | 105 | 275 |
| Centrifugal-machine electric driving apparatus | L. Hirt | 736,397 | Aug. 18 | 2535 | 557 | 105 | 1559 |
| Centrifugal regulator. Indirectly-acting | C. Schmitthenner | 718,231 | Jan. 13 | 1304 | 288, 289 | 102 | 295 |
| Centrifugal separator | E. Bardolle | 717,963 | Jan. 6 | 828 | 187 | 102 | 178 |
| Centrifugal separator | P. L. Kimball | 720,154 | Feb. 10 | 1367 | 313, 314 | 102 | 1130 |
| Centrifugal separator | J. P. Hultgren | 720,810 | Feb. 17 | 2588 | 597 | 102 | 1397 |
| Centrifugal separator | R. A. Lucas and O. Jeppson | 722,522 | Mar. 10 | 1621 | 358 | 103 | 364 |
| Centrifugal separator | C. J. Pihl | 725,868 | Apr. 21 | 2693 | 612, 613 | 103 | 1772 |
| Centrifugal separator | O. Anderson | 727,052 | May 5 | 453 | 95 | 104 | 99 |
| Centrifugal separator | T. S. Patterson | 731,215 | June 16 | 3094 | 686 | 104 | 1802 |
| Centrifugal separator | H. B. Keiper | 736,977 | Aug. 25 | 3651 | 809, 810 | 105 | 1811 |
| Centrifugal separator | H. B. Keiper | 736,978 | Aug. 25 | 3657 | 810 | 105 | 1813 |

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|---|---|---|---|---|---|---|---|
| Centrifugal separator | A. L. Christenson | 739,648 | Sept. 22 | 4065 | 906 | 106 | 918 |
| Centrifugal separator | H. C. Beckman | 743,428 | Nov. 10 | 1257 | 257 | 107 | 283 |
| Centrifugal separator | A. C. Van Kirk | 745,696 | Dec. 1 | 690 | 158 | 107 | 1245 |
| Centrifugal separators. Driving mechanism for | M. L. Hoyt | 744,966 | Nov. 24 | 4167 | 901 | 107 | 934 |
| Centrifugal separators. Driving mechanism for spindles of | M. L. Hoyt | 724,103 | Mar. 31 | 4582 | 1032 | 103 | 1019 |
| Centrifugal way. Aerial | C. L. Hagen | 738,434 | Sept. 8 | 1792 | 390<br>391 | 106 | 400 |
| Centripetal trap | A. J. Greenaway | 724,847 | Apr. 7 | 805 | 185 | 103 | 1341 |
| Cesspool | H. D. Gardner | 746,949 | Dec. 15 | 3019 | 693 | 107 | 1795 |
| Cetyl-guaiacyl and making same | M. W. Beylik | 736,061 | Aug. 11 | 1967 | | 105 | 1420 |
| Chafe-iron. Roller | A. P. Smith, Jr | 733,513 | July 14 | 1463 | 348 | 105 | 327 |
| Chaffer and sieve. Adjustable | B. F. Martien | 734,467 | July 21 | 3265 | 767 | 105 | 722 |
| Chain | F. R. Willson, Jr | 736,904 | Aug. 18 | 3500 | 779 | 105 | 1760 |
| Chain | C. W. Levalley | 745,361 | Dec. 1 | 85 | 20 | 107 | 1119 |
| Chain and sprocket-wheel therefor. Drive- | F. V. Hetzel | 736,256 | Aug. 11 | 2282 | 493 | 105 | 1487 |
| Chain. Conveyer- | M. Garland | 743,070 | Nov. 3 | 488 | 106 | 107 | 102 |
| Chain-coupling device | C. H. Smith | 721,397 | Feb. 24 | 3733 | 850 | 102 | 1658 |
| Chain. Detachable-link drive- | J. M. Dodge | 722,001 | Mar. 3 | 652 | 145 | 103 | 141 |
| Chain. Drive- | F. W. Schirmer | 724,400 | Mar. 31 | 5199 | 1165 | 103 | 1145 |
| Chain. Drive- | Z. T. Furbish | 726,669 | Apr. 28 | 4189 | 946 | 103 | 2090 |
| Chain. Drive- | C. W. Levalley | 737,749 | Sept. 1 | 357 | 76 | 106 | 80 |
| Chain. Drive- | W. M. Butler and C. E. Whitney | 741,453 | Oct. 13 | 2022 | 449 | 106 | 1697 |
| Chain. Fob- | S. O. Bigney | 727,883 | May 12 | 2004 | 447 | 104 | 444 |
| Chain for conveyers, elevators, &c | A. D. Swegle | 741,851 | Oct. 20 | 2799 | 623 | 106 | 1879 |
| Chain-guard | P. Mullen | 747,563 | Dec. 22 | 4144 | 931 | 107 | 2065 |
| Chain hook. Watch- | C. H. Keuscher | 732,358 | June 30 | 5292 | 1173 | 104 | 2289 |
| Chain-link | J. M. Dodge | 717,975 | Jan. 6 | 860 | 192 | 102 | 186 |
| Chain-link | G. Wilke | 723,429 | Mar. 24 | 3311 | 742 | 103 | 739 |
| Chain-link | A. Drost | 742,402 | Oct. 27 | 3907 | 878 | 106 | 2119 |
| Chain link. Conveyer- | J. L. Pittman | 728,972 | May 26 | 4042 | 972 | 104 | 908 |
| Chain link. Sprocket- | F. L. Sweany | 745,975 | Dec. 1 | 1216 | 273 | 107 | 1359 |
| Chain-links. Making | D. Carroll | 746,287 | Dec. 8 | 1789 | 406 | 107 | 1501 |
| Chain-making apparatus | J. H. Baker | 718,810 | Jan. 20 | 2452 | 543 | 102 | 550 |
| Chain-making machine | L. Bruckmann | 724,798 | Apr. 7 | 709 | 166<br>167 | 103 | 1321 |
| Chain-tightener | E. W. Burgess | 727,083 | May 5 | 502 | 108 | 104 | 110 |
| Chain-tightening device | E. J. O'Malley | 721,635 | Feb. 24 | 4190 | 953 | 102 | 1758 |
| Chain. Watch-protecting fob- | D. Summa | 741,564 | Oct. 13 | 2257 | 504 | 106 | 1748 |
| Chain wrench | G. W. Bufford | 743,058 | Nov. 3 | 462 | 101 | 107 | 96 |
| Chain wrench | G. R. Cheesman | 746,674 | Dec. 15 | 2488 | 569 | 107 | 1676 |
| Chains. Detachable connection for | J. Solberg | 738,498 | Sept. 8 | 1929 | 421 | 106 | 429 |
| Chains. Detachable open link for drive- | J. M. Dodge | 722,002 | Mar. 3 | 653 | 145 | 103 | 141 |
| Chains. Manufacture of | J. H. Baker | 718,811 | Jan. 20 | 2453 | 543 | 102 | 550 |
| Chair: | | | | | | | |
| *See* Adjustable chair. | Railway-coach chair. | | | | | | |
| Angle-chair. | Reclining-chair. | | | | | | |
| Barber-chair. | Rocking-chair. | | | | | | |
| Bed-chair. | Surgical chair. | | | | | | |
| Car-chair. | Theater-chair. | | | | | | |
| Convertible chair. | Type-writer chair. | | | | | | |
| Dental chair. | Window-cleaning chair. | | | | | | |
| Folding chair. | Window-cleaning safety-chair. | | | | | | |
| Knockdown chair. | | | | | | | |
| Nursery-chair. | | | | | | | |
| Chair | H. B. Morris | 723,006 | Mar. 17 | 2508 | 563 | 103 | 562 |
| Chair | A. N. Hornung, Jr | 723,465 | Mar. 24 | 3372 | 755 | 103 | 752 |
| Chair | J. A. Whitcomb | 725,186 | Apr. 14 | 1431 | 324 | 103 | 1487 |
| Chair | E. A. Farish | 727,119 | May 5 | 573 | 123 | 104 | 124 |
| Chair | J. R. Brott | 727,741 | May 12 | 1740 | 390 | 104 | 392 |
| Chair | J. G. Hallstrom | 732,550 | June 30 | 5662 | 1256 | 104 | 2367 |
| Chair | A. Gruenwald | 732,736 | July 7 | 70 | 19 | 105 | 18 |
| Chair | H. E. Knauss | 733,659 | July 14 | 1713 | 406 | 105 | 378 |
| Chair | C. C. Black | 733,803 | July 14 | 1969 | 463<br>464 | 105 | 433 |
| Chair | J. A. Manahan | 733,857 | July 14 | 2086 | 493 | 105 | 454 |
| Chair | G. A. Dutton | 736,709 | Aug. 18 | 3144 | 693 | 105 | 1685 |
| Chair | D. R. Cotner | 736,822 | Aug. 18 | 3361 | 742 | 105 | 1730 |
| Chair | L. H. Clark | 740,531 | Oct. 6 | 288 | 57 | 106 | 1306 |
| Chair | O. C. Dorney | 740,825 | Oct. 6 | 832 | 187 | 106 | 1423 |
| Chair | G. H. Hersey | 745,104 | Nov. 24 | 4462 | 965 | 107 | 995 |
| Chair | G. A. Dutton | 745,334 | Dec. 1 | 33 | 7 | 107 | 1107 |
| Chair adjustment | H. W. Bolens | 740,619 | Oct. 6 | 461 | 101 | 106 | 1345 |
| Chair and couch. Convertible | F. S. Bown | 746,446 | Dec. 8 | 2065 | 476 | 107 | 1559 |
| Chair attachment | J. F. Bloch | 722,482 | Mar. 10 | 1553 | 341 | 103 | 348 |
| Chair attachment | H. M. Young | 731,148 | June 16 | 2979 | 662 | 104 | 1781 |
| Chair attachment. Barber- | C. L. Wendt | 739,524 | Sept. 22 | 3830 | 858 | 106 | 868 |
| Chair attachment. Pneumatic | G. B. Anderson | 739,972 | Sept. 29 | 4694 | 1055 | 106 | 1070 |
| Chair attachment. Rocking- | F. Siegrist | 718,394 | Jan. 13 | 1620 | 356 | 102 | 363 |
| Chair attachment. Rocking- | W. H. Howe | 740,278 | Sept. 29 | 5263 | 1186 | 106 | 1189 |
| Chair-back adjustable support | J. Luppino | 724,901 | Apr. 7 | 894 | 205 | 103 | 1361 |
| Chair-back adjustable support | P. H. Leckinger | 740,240 | Sept. 29 | 5279 | 1189 | 106 | 1192 |
| Chair base. Rocking- | A. White | 735,185 | Aug. 4 | 300 | 59 | 105 | 1044 |
| Chair book-support | T. Donohue | 723,144 | Mar. 17 | 2757 | 620 | 103 | 614 |
| Chair-bottom | W. J. Kelly | 740,022 | Sept. 29 | 4793 | 1077 | 106 | 1091 |
| Chair foot-rest | J. E. Berry | 735,450 | Aug. 4 | 804 | 171 | 105 | 1151 |
| Chair foot-rest | C. F. Mundy | 741,692 | Oct. 20 | 2513 | 561 | 106 | 1818 |
| Chair head-rest | R. S. Gibson | 729,324 | May 26 | 4671 | 1032 | 104 | 1039 |
| Chair iron. Tilting- | J. M. Germanson | 729,571 | June 2 | 89 | 22 | 104 | 1146 |
| Chair-pad | E. E. Davenport | 720,788 | Feb. 17 | 2551 | 588 | 102 | 1390 |
| Chair seat | H. B. Morris | 719,601 | Feb. 3 | 339 | 79 | 102 | 893 |
| Chair, step-ladder, and trestle. Combined | E. J. Darling | 739,395 | Sept. 22 | 3590 | 802 | 106 | 814 |
| Chair table attachment | J. A. Dale | 741,019 | Oct. 13 | 1173 | 265 | 106 | 1516 |
| Chairs, &c. Locking device for | T. W. Washburn | 727,866 | May 12 | 1979 | 441 | 104 | 438 |
| Chairs. Machine for making saddle-seats for | W. H. Hobby | 737,235 | Aug. 25 | 4110 | 913<br>914 | 105 | 1908 |
| Chairs. Revolving twin | G. C. Hawkins | 720,692 | Feb. 17 | 2396 | 549 | 102 | 1356 |

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| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Chalk-holder | J. B. Gury | 720,240 | Feb. 10 | 1533 | 351 | 102 | 1163 |
| Chalk-holder | F. A. Daniels | 730,237 | June 9 | 1299 | 287 | 104 | 1406 |
| Chalking line. Self- | F. J. Stanley | 747,497 | Dec. 22 | 4032 | 906 | 107 | 2040 |
| Chamber utensil and attachment therefor | P. H. Dando | 717,972 | Jan. 6 | 848 | 191 | 102 | 181 |
| Champagne fermented in bottles. Clearing and purifying | K. Kiefer | 737,634 | Sept. 1 | 137 | 30 | 106 | 33 |
| Chandelier. Gas-distributing | J. C. Jennings | 737,632 | Sept. 1 | 134 | 29 | 106 | 32 |
| Change-feed mechanism | J. Edgar | 734,837 | July 28 | 3988 | 932 | 105 | 888 |
| Change-feed mechanism | J. Edgar | 734,838 | July 28 | 3991 | 932 | 105 | 888 |
| Change-maker | J. Pfeifer | 737,958 | Sept. 1 | 801 | 175, 176, 177 | 106 | 176 |
| Change-maker | J. M. Butcher and A. E. Parnall | 744,478 | Nov. 17 | 3291 | 707, 708 | 107 | 733 |
| Change-making apparatus | J. W. Munson | 736,133 | Aug. 11 | 2084 | 446, 447 | 105 | 1444 |
| Change-receiver | W. Sinclair and H. S. Benson | 744,635 | Nov. 17 | 3541 | 763 | 107 | 784 |
| Channel-laying machine | M. T. Harrigan | 737,617 | Sept. 1 | 109 | 24 | 106 | 26 |
| Channels. Apparatus for forming navigable | L. W. Bates | 725,203 | Apr. 14 | 1466 | 331, 332, 333 | 103 | 1495 |
| Channels. Forming navigable | L. W. Bates | 725,202 | Apr. 14 | 1463 | 331 | 103 | 1495 |
| Channeling-tool | A. D. Puerner and T. G. Heine | 738,355 | Sept. 8 | 1649 | 357 | 106 | 371 |
| Chaplet | C. T. Pratt | 735,147 | Aug. 4 | 204 | 41 | 105 | 1026 |
| Chaplet and shrine of the holy rosary | T. Sault | 719,263 | Jan. 27 | 3308 | 741 | 102 | 744 |
| Chaplet-pointer | J. A. Poole | 718,023 | Jan. 6 | 951 | 211 | 102 | 205 |
| Char-drier | G. M. Newhall | 742,723 | Oct. 27 | 4483 | 1014 | 106 | 2240 |
| Charring and dry distillation of organic substances. Apparatus for continual | H. C. Aminoff | 748,457 | Dec. 29 | 5851 | 1331 | 107 | 2462 |
| Charcoal and conserving the vaporous distillates thereof. Making | F. W. Newberger | 724,601 | Apr. 7 | 344 | 83 | 103 | 1243 |
| Charcoal or coke oven | A. T. Wilson | 744,700 | Nov. 17 | 3693 | 796, 797 | 107 | 820 |
| Charging apparatus | C. Mercader | 739,198 | Sept. 15 | 3224 | 714 | 106 | 720 |
| Charging-machine | H. Aiken | 733,929 | July 21 | 2227 | 523 | 105 | 503 |
| Charging-machine | D. H. Lentz | 738,114 | Sept. 1 | 1107 | 245, 246 | 106 | 239 |
| Charging-switch | M. R. Hutchison | 735,384 | Aug. 4 | 652 | 138 | 105 | 1120 |
| Chariot. Cycloidal | W. D. Cronin | 745,159 | Nov. 24 | 4591 | 995 | 107 | 1020 |
| Chart. Garment-drafting | O. Hillmann | 739,178 | Sept. 15 | 3189 | 705 | 106 | 713 |
| Chart. Harmony and transposition | E. W. Curtiss | 741,017 | Oct. 13 | 1170 | 264 | 106 | 1515 |
| Chart. Pattern- | G. F. Parker and M. E. M. Whiting | 740,172 | Sept. 29 | 5059 | 1138 | 106 | 1148 |
| Chart-table | J. C. Collamore | 729,736 | June 2 | 391 | 88 | 104 | 1208 |
| Chart-table | J. C. Collamore and G. W. Kerst | 729,847 | June 2 | 601 | 132 | 104 | 1251 |
| Chart. Transposition- | L. O. Woods | 718,065 | Jan. 6 | 1014 | 226 | 102 | 219 |
| Chatelaine-bag, &c | O. Greenbaum and C. W. F. Kroll | 720,131 | Feb. 10 | 1335 | 306 | 102 | 1124 |
| Chatelaine-clasp | B. vom Eigen | 737,912 | Sept. 1 | 709 | 153, 154 | 106 | 155 |
| Chatelaine-pin | N. F. Valentine | 742,087 | Oct. 20 | 3333 | 743 | 106 | 1984 |
| Check and sales slip holder | W. Morton | 736,288 | Aug. 11 | 2348 | 510 | 105 | 1503 |
| Check. Bank- | A. O. Kittredge | 747,187 | Dec. 15 | 3448 | 782 | 107 | 1894 |
| Check. Closure- | F. L. Rosentreter | 719,510 | Feb. 3 | 171 | 40 | 102 | 859 |
| Check-controlled lock | A. Frederiksen | 735,082 | Aug. 4 | 59 | 16 | 105 | 994 |
| Check-controlled machines. Slot feeding mechanism for | E. E. Jones | 731,462 | June 23 | 3572 | 796 | 104 | 1920 |
| Check for hotels, restaurants, &c. Control and guest's pay- | M. Gellér | 719,209 | Jan. 27 | 3206 | 715 | 102 | 722 |
| Check holder and cutter. Cash- | A. D. Joslin | 722,234 | Mar. 10 | 1088 | 240 | 103 | 248 |
| Check-hook | J. H. Allison | 730,592 | June 9 | 1950 | 434 | 104 | 1547 |
| Check-hook | C. Buckley and I. C. Hollinger | 734,160 | July 21 | 2699 | 635 | 105 | 604 |
| Check-hook | L. C. Hiller | 740,432 | Oct. 6 | 99 | 20 | 106 | 1268 |
| Check-hook and rein-piece | T. L. Cooper | 736,498 | Aug. 18 | 2730 | 598 | 105 | 1600 |
| Check-hook. Spring | F. Clark | 733,903 | July 14 | 2179 | 513 | 105 | 474 |
| Check or the like. Bank- | S. W. Finch | 741,900 | Oct. 20 | 2889 | 644, 645 | 106 | 1897 |
| Check or ticket holder | G. E. Reynolds | 747,222 | Dec. 15 | 3524 | 800 | 107 | 1908 |
| Check perforating and printing machine | G. F. Robertson | 748,421 | Dec. 29 | 5776 | 1317 | 107 | 2447 |
| Check-protector | E. Ocumpaugh | 734,932 | July 28 | 4144 | 964 | 105 | 920 |
| Check-register. Stop-payment | J. H. Rand | 737,478 | Aug. 25 | 4568 | 1024 | 105 | 2008 |
| Check-row-wire anchor | F. Haack | 727,131 | May 5 | 600 | 129 | 104 | 130 |
| Check-system recorder | J. H. McTague | 731,602 | June 23 | 3839 | 856 | 104 | 1973 |
| Checks. Record attachment for waiters' or merchandise | A. Wyse | 728,649 | May 19 | 3461 | 768 | 104 | 774 |
| Checkrein-fastener | G. C. Wyland | 724,070 | Mar. 31 | 4520 | 1017 | 103 | 1005 |
| Checkrein-fastener | M. MacMillan | 744,580 | Nov. 17 | 3454 | 744 | 107 | 767 |
| Checkrein-holder | J. V. Emmitt | 737,723 | Sept. 1 | 304 | 63 | 106 | 69 |
| Checkrein-hook | J. H. Royer | 732,963 | July 7 | 466 | 116 | 105 | 101 |
| Checkrein-hook for gig-saddles | C. Stack | 724,751 | Apr. 7 | 622 | 146 | 103 | 1301 |
| Checkrein-spring. Over- | J. R. Cooper | 739,152 | Sept. 15 | 3148 | 695 | 106 | 704 |
| Cheese-cutter | E. Z. and Z. H. Crowell | 718,920 | Jan. 20 | 2657 | 596 | 102 | 594 |
| Cheese-cutter | J. Birch | 721,658 | Mar. 3 | 10 | 3 | 103 | 5 |
| Cheese-cutter | C. G. Winn | 725,530 | Apr. 14 | 2060 | 466, 467 | 103 | 1621 |
| Cheese-cutter | W. G. Templeton | 728,181 | May 12 | 2550 | 567 | 104 | 560 |
| Cheese-cutter | E. Niggli | 741,535 | Oct. 13 | 2206 | 491 | 106 | 1736 |
| Cheese-cutter | A. H. Hill | 746,081 | Dec. 8 | 1412 | 316 | 107 | 1420 |
| Cheese-cutter and slice-discharger | J. H. Rose | 724,334 | Mar. 31 | 5059 | 1132 | 103 | 1114 |
| Cheese. Making | W. Cole | 731,432 | June 23 | 3506 | ..... | 104 | 1906 |
| Cheese-press | I. E. Marsh | 731,482 | June 23 | 3611 | 805 | 104 | 1929 |
| Cheese-press | E. L. McKinnon | 735,133 | Aug. 4 | 172 | 37 | 105 | 1019 |
| Chemical compound | W. J. Knox | 743,733 | Nov. 10 | 1840 | ..... | 107 | 409 |
| Chemical compound | J. Mellinger | 744,584 | Nov. 17 | 3459 | ..... | 107 | 768 |
| Chemical-mixer | A. G. Stevens | 748,319 | Dec. 29 | 5585 | 1273 | 107 | 2404 |
| Cherry-seeder | E. D. Parker | 719,131 | Jan. 27 | 3083 | 686 | 102 | 697 |
| Cherry-seeding apparatus | J. Goodspeed | 743,860 | Nov. 10 | 2074 | 441 | 107 | 457 |
| Cherry-stoner | J. G. Baker | 724,241 | Mar. 31 | 4894 | 1095 | 103 | 1080 |

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| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Cherry-stoning device | H. von Uffel and G. E. Lengert | 741,194 | Oct. 13 | 1511 | 341 | 106 | 1589 |
| Chest: *See* Tool-chest. | | | | | | | |
| Chicken eye-protector | A. Jackson, Jr | 730,918 | June 16 | 2537 | 564 | 104 | 1691 |
| Chicken or fowl fountain | S. H. Church | 746,790 | Dec. 15 | 2690 | 621 | 107 | 1720 |
| Child's block | C. L. Pruyn | 738,570 | Sept. 8 | 2052 | 447 | 105 | 457 |
| Chime-ringing device | H. A. Wende | 720,541 | Feb. 10 | 2086 | 481, 482 | 102 | 1377 |
| Chimney | B. H. Miller | 717,696 | Jan. 6 | 309 | 76 | 102 | 67 |
| Chimney | C. Weber | 748,242 | Dec. 29 | 5457 | 1243, 1244 | 107 | 2376 |
| Chimney-block | H. N. Jasper | 722,712 | Mar. 17 | 1995 | 446 | 103 | 457 |
| Chimney-cap | T. J. Miquel | 719,489 | Feb. 3 | 144 | 32 | 102 | 854 |
| Chimney-cap | J. L. Woodside | 734,790 | July 28 | 3881 | 905 | 105 | 864 |
| Chimney-cap | G. R. Cross | 740,247 | Sept. 29 | 5203 | 1170 | 106 | 1177 |
| Chimney-cowl | F. W. Stein | 733,762 | July 14 | 1892 | 446 | 105 | 416 |
| Chimney-cowl | T. B. Samuel | 737,493 | Aug. 25 | 4606 | 1032 | 105 | 2016 |
| Chimney-flue cleaner | J. A. Stine | 730,717 | June 9 | 2170 | 482 | 104 | 1593 |
| Chimney-flue thimble | H. Anderson | 732,912 | July 7 | 387 | 94 | 105 | 84 |
| Chimney-protector | W. I. F. Harden | 726,160 | Apr. 21 | 3179 | 719 | 103 | 1872 |
| Chimney-top | F. Wunderlich | 720,210 | Feb. 10 | 1471 | 334 | 102 | 1150 |
| Chimney-top | E. H. Le Beau | 744,570 | Nov. 17 | 3443 | 741 | 107 | 765 |
| Chimney-top and ventilator | J. F. Le Beau | 736,748 | Aug. 18 | 3209 | 709 | 105 | 1698 |
| Chip-rack | S. A. Cohen | 740,236 | Sept. 29 | 5184 | 1165 | 106 | 1173 |
| Chip-rack | A. Blach | 742,567 | Oct. 27 | 4211 | 948 | 106 | 2181 |
| Chisel | N. H. Smith | 740,937 | Oct. 6 | 1009 | 228 | 106 | 1461 |
| Chisel attachment | G. W. Parker | 719,607 | Feb. 3 | 347 | 81 | 102 | 894 |
| Chisel. Carpenter's | W. S. Ward | 718,040 | Jan. 6 | 975 | 217 | 102 | 210 |
| Chisel. Mortising- | G. L. Hill | 729,584 | June 2 | 116 | 29 | 104 | 1150 |
| Chlorate powder | W. M. Spore | 739,356 | Sept. 22 | 3510 | ..... | 106 | 798 |
| Chlorates and perchlorates. Electrolytic manufacture of | P. Lederlin | 727,813 | May 12 | 1880 | 419 | 104 | 418 |
| Chlorates and perchlorates. Electrolytic manufacture of | P. Lederlin | 732,753 | July 7 | 100 | 28 | 105 | 25 |
| Chlorination-barrel | J. B. Heffernan | 719,664 | Feb. 3 | 445 | 101 | 102 | 915 |
| Chlorination-barrel | D. C. Mosher | 746,867 | Dec. 15 | 2848 | 656, 657 | 107 | 1755 |
| Chlorination-barrel | W. J. Armbruster | 748,461 | Dec. 29 | 5858 | 1332 | 107 | 2464 |
| Chlorination-barrel | W. J. Armbruster | 748,462 | Dec. 29 | 5860 | 1333 | 107 | 2465 |
| Chock-block | R. T. Wilson | 719,288 | Jan. 27 | 3356 | 749 | 102 | 754 |
| Chocolate blocks or tablets. Machine for molding | P. R. Franke | 725,237 | Apr. 14 | 1528 | 347 | 103 | 1508 |
| Chocolate-coating machine | G. Carlson | 717,969 | Jan. 6 | 839 | 190 | 102 | 180 |
| Chocolate-dipping machine | P. J. Costello | 740,811 | Oct. 6 | 801 | 180, 181, 182 | 106 | 1415 |
| Chocolate-manufacturing machine | E. P. F. Magniez | 735,890 | Aug. 11 | 1636 | 350 | 105 | 1349 |
| Chopper: *See* Cotton-chopper. Cotton or rice chopper. Food-chopper. Fruit-chopper. Meat-chopper. | | | | | | | |
| Chopping-knife | T. J. Lavender | 726,707 | Apr. 28 | 4266 | 964 | 103 | 2106 |
| Chopping-machine | A. Schyia | 737,783 | Sept. 1 | 421 | 91 | 106 | 92 |
| Christmas tree | A. H. Zahl | 735,010 | July 28 | 4292 | 999 | 105 | 951 |
| Christmas-tree candle-holder | C. Schroeder | 737,157 | Aug. 25 | 3947 | 878 | 105 | 1874 |
| Christmas-tree candle-holder | P. Rummelin | 737,966 | Sept. 1 | 822 | 180 | 106 | 180 |
| Christmas-tree holder | A. Wegener | 729,462 | May 26 | 4899 | 1085 | 104 | 1088 |
| Chromatrope | G. Wells | 730,501 | June 9 | 1787 | 400 | 104 | 1511 |
| Chromium compound and alkalies. Production of | H. Specketer | 738,778 | May 19 | 3691 | 824 | 104 | 821 |
| Chromium from chrome-iron ore. Extracting | R. Suchy and H. Specketer | 743,668 | Nov. 10 | 1732 | 365 | 107 | 386 |
| Chronometer-escapement | J. W. Nunamaker | 731,605 | June 23 | 3845 | 857 | 104 | 1974 |
| Chuck | E. J. Skinner | 721,753 | Mar. 3 | 173 | 40 | 103 | 38 |
| Chuck | H. F. Neumeyer | 734,600 | Apr. 7 | 339 | 83 | 103 | 1241 |
| Chuck | P. F. Krug | 725,346 | Apr. 14 | 1718 | 386, 387 | 103 | 1549 |
| Chuck | G. C. Gammell | 733,546 | July 14 | 1514 | 361 | 105 | 337 |
| Chuck | J. Jecklin | 746,707 | Dec. 15 | 2537 | 583 | 107 | 1687 |
| Chuck and boring-tool | J. J. Kearney | 727,639 | May 12 | 1526 | 344 | 104 | 346 |
| Chuck. Centering- | J. Rusche | 733,753 | July 14 | 1877 | 443 | 105 | 413 |
| Chuck. Dredge- | J. J. Hayman | 741,334 | Oct. 13 | 1796 | 399 | 106 | 1647 |
| Chuck. Drill- | F. P. Gates | 722,575 | Mar. 10 | 1712 | 381 | 103 | 383 |
| Chuck. Drill- | H. M. Reynolds | 724,737 | Apr. 7 | 600 | 142 | 103 | 1296 |
| Chuck. Drill- | J. J. McDonough | 725,273 | Apr. 14 | 1582 | 358 | 103 | 1520 |
| Chuck. Drill- | E. C. Wysong | 726,388 | Apr. 28 | 3642 | 826 | 103 | 1983 |
| Chuck. Drill- | K. O. Muehlberg | 728,276 | May 19 | 2751 | 611 | 104 | 626 |
| Chuck. Drill- | C. A. Svensson | 747,017 | Dec. 15 | 3136 | 717, 718 | 107 | 1821 |
| Chuck. Drill- | W. G. Middleton | 748,398 | Dec. 29 | 5721 | 1307 | 107 | 2435 |
| Chuck. Fluid-pressure-operated | B. M. W. Hanson | 728,458 | May 19 | 3094 | 683, 684 | 104 | 696 |
| Chuck. Fluid-pressure-operated | B. M. W. Hanson | 728,572 | May 19 | 3311 | 733 | 104 | 740 |
| Chuck for drills, &c | H. F. Hagedorn | 720,688 | Feb. 17 | 2389 | 547 | 102 | 1355 |
| Chuck-jaw | E. P. Bullard | 729,727 | June 2 | 379 | 86 | 104 | 1206 |
| Chuck. Lathe- | C. G. Richardson | 725,774 | Apr. 21 | 2527 | 573 | 103 | 1737 |
| Chuck. Lathe- | C. C. Harris | 745,346 | Dec. 1 | 53 | 12 | 107 | 1112 |
| Chuck. Nipple- | B. Borden | 741,954 | Oct. 20 | 3016 | 669 | 106 | 1923 |
| Chuck or work-holder for pipe-threading machines | B. Borden | 745,773 | Dec. 1 | 820 | 186 | 107 | 1273 |
| Chuck. Plate- | J. W. Carleton | 746,284 | Dec. 8 | 1786 | 405 | 107 | 1500 |
| Chuck. Rock-drilling-machine | F. Henderson | 747,423 | Dec. 22 | 3898 | 878 | 107 | 2009 |
| Chuck. Scroll- | J. C. Potter and J. Johnston | 726,099 | Apr. 21 | 3065 | 696, 697 | 103 | 1849 |
| Chuck swivel-stand. Lathe- | C. E. Thiebaud | 741,081 | Oct. 13 | 1285 | 293, 294 | 106 | 1541 |
| Chuck. Work-holding | G. de Laval and C. W. Chisholm | 718,573 | Jan. 13 | 2010 | 438 | 102 | 447 |
| Churn | G. G. Beynon | 717,531 | Jan 6 | 18 | 5 | 102 | 7 |
| Churn | C. W. Van Deursen | 718,743 | Jan. 20 | 2332 | 514 | 102 | 526 |

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|---|---|---|---|---|---|---|---|
| | | | | Spec. | Drg. | Vol. | Page. |
| Churn | D. O. Kneeland | 718,849 | Jan. 20 | 2509 | 558, 559 | 102 | 561 |
| Churn | J. Burge and S. B. Cornell | 719,739 | Feb. 3 | 597 | 134 | 102 | 948 |
| Churn | T. J. Cheney | 720,513 | Feb. 10 | 2016 | 464 | 102 | 1264 |
| Churn | L. Van Olst | 721,255 | Feb. 24 | 3490 | 793 | 102 | 1607 |
| Churn | F. Swallow | 723,757 | Mar. 24 | 3891 | 876 | 103 | 860 |
| Churn | I. M. Murphy | 723,900 | Mar. 31 | 4173 | 940 | 103 | 935 |
| Churn | C. J. Edney | 724,269 | Mar. 31 | 4340 | 1105 | 103 | 1089 |
| Churn | M. Kelley | 724,584 | Apr. 7 | 308 | 75 | 103 | 1235 |
| Churn | G. Geer | 724,998 | Apr. 7 | 1075 | 246 | 103 | 1398 |
| Churn | W. B. Preston | 726,753 | Apr. 28 | 4358 | 980 | 103 | 2125 |
| Churn | N. J. Tubbs | 727,032 | May 5 | 418 | 87 | 104 | 91 |
| Churn | J. W. Connett | 727,094 | May 5 | 525 | 113 | 104 | 114 |
| Churn | L. C. Martin | 728,262 | May 19 | 2719 | 606 | 104 | 617 |
| Churn | M. F. Still | 730,172 | June 2 | 1159 | 261 | 104 | 1363 |
| Churn | J. G. Frederick | 734,535 | July 28 | 3401 | 794 | 105 | 768 |
| Churn | J. S. Hudson | 737,241 | Aug. 25 | 4128 | 917, 918 | 105 | 1911 |
| Churn | J. N. Stokes | 739,944 | Sept. 29 | 4647 | 1043 | 106 | 1061 |
| Churn | B. Vessels | 740,065 | Sept. 29 | 4874 | 1092 | 106 | 1109 |
| Churn | J. Moore | 740,297 | Sept. 29 | 5290 | 1191 | 106 | 1195 |
| Churn | C. S. Fitzhugh | 742,017 | Oct. 20 | 3152 | 703 | 106 | 1949 |
| Churn | W. L. Bashford | 742,823 | Nov. 3 | 11 | 3 | 107 | 5 |
| Churn | T. H. Banks | 745,762 | Dec. 1 | 792 | 182 | 107 | 1267 |
| Churn | G. Geer | 746,629 | Dec. 8 | 2388 | 547 | 107 | 1633 |
| Churn and butter-worker. Combined | F. Richardson, J. J. Hendricks, and F. Markey. | 730,159 | June 2 | 1136 | 256 | 104 | 1358 |
| Churn and egg-beater | C. Truelsen | 741,946 | Oct. 20 | 2998 | 666 | 106 | 1919 |
| Churn-cover | R. J. Poole | 740,691 | Oct. 6 | 564 | 126 | 106 | 1369 |
| Churn-dasher | M. V. Wisker | 720,545 | Feb. 10 | 2093 | 483 | 102 | 1279 |
| Churn-dasher | J. W. Morris | 742,712 | Oct. 27 | 4463 | 1010 | 106 | 2235 |
| Churn-dasher | E. A. Franklin | 743,479 | Nov. 10 | 1376 | 282 | 107 | 309 |
| Churn-dasher fan attachment | A. F. Moody | 748,203 | Dec. 29 | 5396 | 1227 | 107 | 2363 |
| Churn-dasher. Rotary | M. J. Stetson | 718,227 | Jan. 13 | 1313 | 290 | 102 | 297 |
| Churn. Double-dasher | A. J. Williams | 724,225 | Mar. 31 | 4835 | 1084, 1085 | 103 | 1070 |
| Churn-motor | G. W. Stiles | 719,056 | Jan. 27 | 2920 | 653 | 102 | 664 |
| Churn-motor | R. B. Thompson | 725,606 | Apr. 14 | 2196 | 496, 497 | 103 | 1652 |
| Churn-motor. Manual | T. D. A. Faubion | 730,772 | June 9 | 2221 | 494 | 104 | 1606 |
| Churn-operating mechanism | I. W. Beeler | 748,155 | Dec. 29 | 5308 | 1206 | 107 | 2345 |
| Churn-power | F. F. Sims | 725,597 | Apr. 14 | 2179 | 493 | 103 | 1648 |
| Churn. Rocking | L. Van Olst | 737,047 | Aug. 25 | 3764 | 836 | 105 | 1836 |
| Churn. Rotary | J. T. Marsh | 724,308 | Mar. 31 | 5009 | 1122 | 103 | 1104 |
| Churn. Rotary | H. E. Bonney | 739,283 | Sept. 22 | 3390 | 755 | 106 | 773 |
| Chute | W. J. Patterson | 727,998 | May 12 | 2227 | 495 | 104 | 492 |
| Chute. Coal- | R. K. Teller | 721,977 | Mar. 3 | 607 | 135 | 103 | 132 |
| Chute. Coal- | M. J. Brennan | 741,450 | Oct. 13 | 2015 | 447, 448 | 106 | 1696 |
| Chute. Conveyer- | G. F. Conner | 741,770 | Oct. 20 | 2662 | 595 | 106 | 1842 |
| Chute-head. Swivel | P. B. Clarke | 718,092 | Jan. 13 | 1071 | 237, 238 | 102 | 245 |
| Chute. Ore or coal | H. Greer, Jr | 745,433 | Dec. 1 | 229 | 52 | 107 | 1148 |
| Chute. Spiral barrel- | G. W. Allen | 745,985 | Dec. 8 | 1239 | 279 | 107 | 1382 |
| Cider-press | E. R. Bowman | 732,040 | June 30 | 4659 | 1041 | 104 | 2160 |
| Cigar and mouthpiece therefor | J. Kraus | 726,946 | May 5 | 215 | 51 | 104 | 47 |
| Cigar-band | L. M. Weiller | 743,208 | Nov. 3 | 751 | 164 | 107 | 157 |
| Cigar-band | T. Englehardt | 747,540 | Dec. 22 | 4107 | 922 | 107 | 2056 |
| Cigar-box | M. P. Farrell, C. R. Heath, and W. I. Tay. | 719,097 | Jan. 27 | 3020 | ..... | 102 | 684 |
| Cigar-box | H. H. Ziemer | 720,390 | Feb. 10 | 1803 | 410 | 102 | 1221 |
| Cigar-box | A. Nederland | 723,012 | Mar. 17 | 2521 | 565 | 103 | 565 |
| Cigar-box | M. Brown | 729,999 | June 2 | 884 | 197 | 104 | 1308 |
| Cigar-box | M. Brown | 732,919 | July 7 | 396 | 96 | 105 | 85 |
| Cigar-box-dampening device | G. D. Woodworth | 735,648 | Aug. 4 | 1174 | 249 | 105 | 1230 |
| Cigar-box-lid supporter | A. G. Shade | 739,563 | Sept. 22 | 3891 | 872 | 106 | 881 |
| Cigar-box or similar receptacle | E. C. Thurnau | 732,664 | June 30 | 5873 | 1302 | 104 | 2413 |
| Cigar-branding machine | I. Liberman | 747,990 | Dec. 29 | 4986 | 1126, 1127 | 107 | 2274 |
| Cigar-bunch cutter | T. A. Anderson | 739,278 | Sept. 22 | 3384 | 753 | 106 | 771 |
| Cigar-bunches by expansion. Forming | S. S. Williamson | 730,324 | June 9 | 1456 | 321 | 104 | 1441 |
| Cigar bunching and wrapping machine | J. A. Bach | 747,353 | Dec. 22 | 3779 | 850 | 107 | 1982 |
| Cigar-bunching machine | J. E. Smith | 738,636 | Sept. 8 | 2177 | 476, 477 | 106 | 484 |
| Cigar-bunching machine | F. C. Smalstig | 740,934 | Oct. 6 | 1002 | 227 | 106 | 1460 |
| Cigar-bunching machine | H. W. Albright | 744,951 | Nov. 24 | 4143 | 895, 896 | 107 | 929 |
| Cigar-case | O. L. Parmenter | 736,770 | Aug. 18 | 3245 | 717, 718 | 105 | 1706 |
| Cigar-case | O. L. Parmenter | 736,771 | Aug. 18 | 3250 | 718 | 105 | 1707 |
| Cigar-case | W. W. Pugh | 743,926 | Nov. 10 | 2190 | 472 | 107 | 483 |
| Cigar-cutter | E. A. Willard | 719,165 | Jan. 27 | 3135 | 698 | 102 | 707 |
| Cigar-cutter | J. W. Field | 730,818 | June 9 | 2332 | 517 | 104 | 1629 |
| Cigar-cutter and mirror | J. W. Farley and G. F. Ballasch | 734,688 | July 28 | 3677 | 861 | 105 | 825 |
| Cigar-cutter, pipe-tamper, and pipe-cleaner. Combined | D. S. Blanpied | 734,295 | July 21 | 2975 | 698 | 105 | 662 |
| Cigar-display box | D. C. Uffelman | 721,758 | Mar. 3 | 178 | 41 | 103 | 39 |
| Cigar-holder | S. Craig | 747,147 | Dec. 15 | 3382 | 768 | 107 | 1879 |
| Cigar holder and shaper | S. S. Williamson | 719,546 | Feb. 3 | 236 | 55 | 102 | 873 |
| Cigar-lighter | F. Kraemer | 721,450 | Feb. 24 | 3826 | 870 | 102 | 1677 |
| Cigar-lighter | J. J. Fleming | 725,061 | Apr. 14 | 1190 | 270 | 103 | 1439 |
| Cigar-lighting device. Electric | J. W. Gray | 745,600 | Dec. 1 | 527 | 123 | 107 | 1209 |
| Cigar-machine | E. Kuhne | 742,877 | Nov. 3 | 102 | 24 | 107 | 23 |
| Cigar-machines. Pneumatic transferring mechanism for | O. Tyberg | 719,379 | Jan. 27 | 3336 | 745 | 102 | 750 |
| Cigar-maker's knife | O. L. Buehler | 722,282 | Mar. 10 | 1174 | 260 | 103 | 265 |

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| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Cigar-maker's work-box | E. J. Castillo | 720,111 | Feb. 10 | 1298 | 297 | 102 | 1116 |
| Cigar-making machine | D. Cousinne | 733,576 | July 14 | 1576 | 375, 376 | 105 | 351 |
| Cigar-moistener | E. F. Brown | 743,819 | Nov. 10 | 2002 | 425 | 107 | 443 |
| Cigar mold and lifter | I. Brach | 740,622 | Oct. 6 | 464 | 102 | 106 | 1346 |
| Cigar or cigarette holder | W. E. Davidson | 720,232 | Feb. 10 | 1521 | 349 | 102 | 1161 |
| Cigar or cigarette mouthpiece | J. and L. Przedecki | 722,383 | Mar. 10 | 1350 | 298 | 103 | 303 |
| Cigar or pipe tray | J. B. Crapp | 743,253 | Nov. 3 | 848 | 185 | 107 | 178 |
| Cigar-perforator | F. M. Slocum | 719,267 | Jan. 27 | 3315 | 742 | 102 | 746 |
| Cigar-perforator | W. K. Holmes | 745,846 | Dec. 1 | 984 | 221 | 107 | 1309 |
| Cigar-piercer | W. J. Bailey | 720,715 | June 2 | 336 | 76 | 104 | 1198 |
| Cigar-piercer | W. J. Bailey | 744,893 | Nov. 24 | 4029 | 869 | 107 | 907 |
| Cigar-piercing device | W. J. Bailey | 735,333 | Aug. 4 | 564 | 115 | 105 | 1102 |
| Cigar-pipe | W. Assman | 732,252 | June 30 | 5087 | 1131 | 104 | 2247 |
| Cigar-pressing apparatus | R. Woerner | 743,368 | Nov. 3 | 1091 | 232, 233 | 107 | 231 |
| Cigar-protector | R. G. Fraser | 724,689 | Apr. 7 | 506 | 120 | 103 | 1277 |
| Cigar-punch | L. J. Hopkins | 738,540 | Sept. 8 | 2008 | 437 | 106 | 447 |
| Cigar-shield. Pocket | H. F. Drake | 717,556 | Jan. 6 | 65 | 16 | 102 | 16 |
| Cigar-tip cutter | S. Y. Tabb | 728,425 | May 19 | 3027 | 665 | 104 | 683 |
| Cigar-tray. Combination | J. A. Hyle | 721,566 | Feb. 24 | 4036 | 917 | 102 | 1723 |
| Cigar-trimmer | M. E. Pugh | 740,693 | Oct. 6 | 567 | 127 | 106 | 1369 |
| Cigar-wrapper-cutting machine | F. E. Kelsey | 726,540 | Apr. 28 | 3944 | 891 | 103 | 2040 |
| Cigar-wrapper-cutting mechanism | O. Tyberg | 723,947 | Mar. 31 | 4283 | 962 | 103 | 960 |
| Cigars, cigarettes, &c. Lighter for | L. E. Butcher | 739,982 | Sept. 29 | 4718 | 1061 | 106 | 1075 |
| Cigars. Machine for simultaneously cutting and branding | I. W. Heysinger | 730,264 | June 9 | 1354 | 297 | 104 | 1418 |
| Cigars. Manufacture of | B. Wertheimer | 724,148 | Mar. 31 | 4691 | 1053 | 103 | 1041 |
| Cigarette-box, &c | S. L. Feiber | 742,301 | Oct. 27 | 3737 | 835 | 106 | 2084 |
| Cigarette-cartridges with tobacco. Machine for filling | J. Wojciechowski | 741,208 | Oct. 13 | 1539 | 347, 348 | 106 | 1595 |
| Cigarette-cutting mechanism | J. Wojciechowski | 732,330 | June 30 | 5222 | 1160 | 104 | 2275 |
| Cigarette-former | C. O. Beatley | 729,256 | May 26 | 4550 | 1003 | 104 | 1013 |
| Cigarette-machine | T. Moesinger | 739,897 | Sept. 29 | 4554 | 1023, 1024, 1025 | 106 | 1040 |
| Cigarette-machine | E. B. White | 740,498 | Oct. 6 | 225 | 44 | 106 | 1294 |
| Cigarette-machine | A. Greilsammer | 741,242 | Oct. 13 | 1600 | 360 | 106 | 1608 |
| Cigarette-machine delivery mechanism | W. T. Coalter | 739,987 | Sept. 29 | 4725 | 1063 | 106 | 1076 |
| Cigarette machines. Creasing device for continuous- | F. J. Ludington | 742,338 | Oct. 27 | 3796 | 850 | 106 | 2096 |
| Cigarette-making machine | L. B. Baron | 718,813 | Jan. 20 | 2455 | 544, 545 | 102 | 551 |
| Cigarette-making machine | L. B. Baron | 721,533 | Feb. 24 | 3976 | 906 | 102 | 1710 |
| Cigarette-making machine | A. Fernandez y Fernandez | 722,829 | Mar. 17 | 2213 | 495, 496, 497 | 103 | 502 |
| Cigarette-making machines. Device for producing continuous strings of tobacco for | J. Paul | 722,746 | Mar. 17 | 2059 | 460 | 103 | 471 |
| Cigarette-mouthpiece-applying machine | J. S. Beeman | 739,376 | Sept. 22 | 3546 | 792, 793 | 106 | 806 |
| Cigarette. Oval | G. P. Butler | 725,671 | Apr. 21 | 2340 | 528 | 103 | 1695 |
| Cigarette-paper with tips. Means for providing | M. Nast | 725,122 | Apr. 14 | 1812 | 295 | 103 | 1463 |
| Cigarette-wrappers with mouthpieces. Machine for making | S. D. S. and S. S. D. Rakowitzky | 721,087 | Feb. 17 | 3104 | 713, 714 | 102 | 1510 |
| Cigarette-wrapping tube | C. Simon | 739,935 | Sept. 29 | 4629 | 1039 | 106 | 1056 |
| Cigarettes from continuous filler-rod. Machine for making | F. J. Ludington | 743,739 | Nov. 10 | 1849 | 390, 391 | 107 | 411 |
| Cigarettes or like goods. Machine for packing | A. Godfrey | 736,592 | Aug. 18 | 2907 | 634, 635, 636 | 105 | 1637 |
| Cinch-plate | A. P. Weeks | 730,321 | June 9 | 1450 | 320 | 104 | 1440 |
| Cinder-guard | S. F. B. Morse and S. R. Tuggle | 726,330 | Apr. 28 | 3537 | 802 | 103 | 1962 |
| Cinder-hopper | J. Berg | 721,139 | Feb. 24 | 3250 | 744 | 102 | 1560 |
| Cipher-code system | S. T. Beveridge | 724,786 | Apr. 7 | 692 | 163 | 103 | 1317 |
| Circuit-breaker | H. P. Ball | 721,273 | Feb. 24 | 3513 | 799 | 102 | 1612 |
| Circuit-breaker | R. H. Read | 723,183 | Mar. 17 | 2842 | 638 | 103 | 633 |
| Circuit-breaker | S. T. Hutton | 724,704 | Apr. 7 | 535 | 127 | 103 | 1283 |
| Circuit-breaker | R. H. Read | 728,293 | May 19 | 2789 | 618 | 104 | 633 |
| Circuit-breaker | C. H. Norwood | 729,211 | May 26 | 4469 | 984 | 104 | 996 |
| Circuit-breaker | H. P. Ball | 732,253 | June 30 | 5089 | 1132 | 104 | 2247 |
| Circuit-breaker | H. P. Ball | 732,254 | June 30 | 5090 | 1132 | 104 | 2248 |
| Circuit-breaker | E. P. Warner | 736,041 | Aug. 11 | 1919 | 409, 410 | 105 | 1410 |
| Circuit-breaker | T. E. Daniels, Jr | 736,502 | Aug. 18 | 2737 | 599 | 105 | 1602 |
| Circuit-breaker | E. W. Stull | 739,947 | Sept. 29 | 4651 | 1043 | 106 | 1061 |
| Circuit-breaker | J. D. Forrer | 741,239 | Oct. 13 | 1593 | 358 | 106 | 1606 |
| Circuit-breaker | S. B. Stewart, Jr | 744,125 | Nov. 17 | 2627 | 561 | 107 | 589 |
| Circuit-breaker | E. M. Hewlett and C. C. Badeau | 745,348 | Dec. 1 | 58 | 12, 13 | 107 | 1113 |
| Circuit-breaker. Automatic | E. M. Hewlett | 745,347 | Dec. 1 | 55 | 12 | 107 | 1112 |
| Circuit-breaker for jump-spark coils | A. H. Deisher | 736,703 | Aug. 18 | 3127 | 689 | 105 | 1681 |
| Circuit-breaker-operating system | W. B. Potter and C. D. Clark | 732,009 | June 23 | 4596 | 1026 | 104 | 2132 |
| Circuit-breaker or switch for high potentials | E. M. Hewlett | 728,797 | May 19 | 3727 | 831 | 104 | 828 |
| Circuit-breaker. Return-current | C. C. Chesney | 734,046 | July 21 | 2485 | 579, 580 | 105 | 558 |
| Circuit-changing apparatus | W. Meyer | 748,397 | Dec. 29 | 5719 | 1306 | 107 | 2434 |
| Circuit-closer | W. J. Bell | 727,064 | May 5 | 471 | 99 | 104 | 103 |
| Circuit-closer | T. A. Long and G. W. Cofran | 734,905 | July 28 | 4099 | 955 | 105 | 911 |
| Circuit-closer. Periodic | C. D. Haskins | 727,625 | May 12 | 1498 | 339 | 104 | 340 |
| Circuit-closer. Thermostatic | R. W. W. Grigsby | 747,166 | Dec. 15 | 3415 | 774 | 107 | 1886 |
| Circuit-closing device | H. P. Ball | 725,195 | Apr. 14 | 1449 | 328 | 103 | 1491 |
| Circuit-closing device | O. B. Thompson and W. G. Midgley | 746,604 | Dec. 8 | 2341 | 536 | 107 | 1622 |
| Circuit-controller | J. S. Hobson | 722,301 | Mar. 10 | 1211 | 268, 269 | 103 | 274 |
| Circuit-controller | W. W. Alexander | 734,793 | July 28 | 3894 | 910 | 105 | 867 |

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| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Circuit-controller | E. J. McAllister | 737,949 | Sept. 1 | 781 | 171, 172 | 106 | 171 |
| Circuit-controller | A. Lungen | 741,804 | Oct. 20 | 2721 | 606 | 106 | 1860 |
| Circuit-controller | A. Lungen | 744,215 | Nov. 17 | 2817 | 602 | 107 | 630 |
| Circuit controller. Alternating-current- | C. D. Ehret | 742,976 | Nov. 3 | 273 | 62 | 107 | 59 |
| Circuit-controller. Time-limit | C. D. Haskins | 727,624 | May 12 | 1496 | 339 | 104 | 340 |
| Circuit making and breaking device | A. J. Wurts | 728,830 | May 19 | 3767 | 841 | 104 | 838 |
| Circuit-protector. Thermal | O. C. Hoffmann | 744,197 | Nov. 17 | 2783 | 593 | 107 | 621 |
| Circuits. Current-transformer for high-voltage | A. R. Everest | 729,308 | May 26 | 4646 | 1027 | 104 | 1034 |
| Circuits. Means for regulating alternating-current | W. A. Layman and F. Schwedtmann. | 740,447 | Oct. 6 | 121 | 25 | 106 | 1272 |
| Circuits. Potential-regulator for alternating-current | H. R. Stuart | 742,926 | Nov. 3 | 181 | 42 | 107 | 40 |
| Circuits. Regulation of alternating | T. J. Johnston | 726,935 | May 5 | 192 | 45 | 104 | 43 |
| Cistern | D. Lemley | 718,483 | Jan. 13 | 1795 | 399 | 102 | 397 |
| Cistern | J. Nelson | 737,859 | Sept. 1 | 592 | 130 | 106 | 130 |
| Cistern-forming device. Adjustable | N. Brown | 733,810 | July 14 | 1985 | 467 | 105 | 436 |
| Cisterns, &c. Form for | G. G. F. Boswell | 732,509 | June 30 | 5585 | 1237 | 104 | 2349 |
| Cisterns or the like. Means for constructing | W. Skinner and C. Lindsey | 748,224 | Dec. 29 | 5432 | 1238 | 107 | 2371 |
| Cithern | C. T. Menze | 726,084 | Apr. 21 | 3041 | 691 | 103 | 1844 |
| Clamp: | | | | | | | |
| *See* Artist's holding and separating clamp. | | | | | | | |
| *See* Bedstead corner-clamp. | | | | | | | |
| *See* Bicycle-seat-post clamp. | | | | | | | |
| *See* Card-clamp. | | | | | | | |
| *See* Clothes-clamp. | | | | | | | |
| *See* Clothes-line clamp. | | | | | | | |
| *See* Colter-clamp. | | | | | | | |
| *See* Column-clamp. | | | | | | | |
| *See* Dental clamp. | | | | | | | |
| *See* Dentist's clamp. | | | | | | | |
| *See* Desk-clamp. | | | | | | | |
| *See* Display-clamp. | | | | | | | |
| *See* Electrical contact-clamp. | | | | | | | |
| *See* Flanging-clamp. | | | | | | | |
| *See* Flask-clamp. | | | | | | | |
| *See* Floor-clamp. | | | | | | | |
| *See* Flooring-clamp. | | | | | | | |
| *See* Grinding-stone clamp. | | | | | | | |
| *See* Guy-clamp. | | | | | | | |
| *See* Hair-clamp. | | | | | | | |
| *See* Hose-clamp. | | | | | | | |
| *See* Hose-supporter clamp. | | | | | | | |
| *See* Jar-clamp. | | | | | | | |
| *See* Joiner's clamp. | | | | | | | |
| *See* Lumber-drying clamp. | | | | | | | |
| *See* Machine-clamp. | | | | | | | |
| *See* Miter-clamp. | | | | | | | |
| *See* Non-arcing clamp. | | | | | | | |
| *See* Pipe-clamp. | | | | | | | |
| *See* Plumber's clamp. | | | | | | | |
| *See* Printer's base-clamp. | | | | | | | |
| *See* Quick-acting clamp. | | | | | | | |
| *See* Rail-clamp. | | | | | | | |
| *See* Railway-clamp. | | | | | | | |
| *See* Railway-rail clamp. | | | | | | | |
| *See* Rope-clamp. | | | | | | | |
| *See* Roving-clamp. | | | | | | | |
| *See* Saw-clamp. | | | | | | | |
| *See* Screw-clamp. | | | | | | | |
| *See* Shaft-clamp. | | | | | | | |
| *See* Spring-clamp. | | | | | | | |
| *See* Square-clamp. | | | | | | | |
| *See* Stovepipe-clamp. | | | | | | | |
| *See* Timber-clamp. | | | | | | | |
| *See* Tobacco-clamp. | | | | | | | |
| *See* Trolley-wire clamp. | | | | | | | |
| *See* Tube or rod clamp. | | | | | | | |
| *See* Type-holding clamp. | | | | | | | |
| *See* Wire-clamp. | | | | | | | |
| *See* Wire-stretcher clamp. | | | | | | | |
| *See* Work-clamp. | | | | | | | |
| Clamp | W. S. Graham | 718,757 | Jan. 20 | 2359 | 522 | 102 | 532 |
| Clamp | H. F. A. Kleinschmidt | 720,256 | Feb. 10 | 1562 | 357 | 102 | 1170 |
| Clamp | E. C. Karl | 720,816 | Feb. 17 | 2594 | 599 | 102 | 1399 |
| Clamp | R. H. Makowsky | 727,986 | May 12 | 2202 | 491 | 104 | 488 |
| Clamp | J. Black | 732,160 | June 30 | 4906 | 1091 | 104 | 2210 |
| Clamp | J. W. Marshall | 732,309 | June 30 | 5186 | 1152 | 104 | 2268 |
| Clamp | F. J. Herbert | 734,553 | July 28 | 3432 | 800 | 105 | 774 |
| Clamp | F. J. Herbert | 734,554 | July 28 | 3433 | 800 | 105 | 775 |
| Clamp | J. Turck | 736,174 | Aug. 11 | 2147 | 462 | 105 | 1458 |
| Clamp | W. T. Harrison | 737,404 | Aug. 25 | 4437 | 994 | 105 | 1979 |
| Clamp | N. K. Teilborg | 737,527 | Aug. 25 | 4672 | 1048 | 105 | 2033 |
| Clamp | J. Vogt | 739,365 | Sept. 22 | 3528 | 788 | 106 | 802 |
| Clamp | J. Kirschbaum | 743,646 | Nov. 10 | 1692 | 356 | 107 | 377 |
| Clamp-collar | D. M. Lester | 748,385 | Dec. 29 | 5697 | 1300 | 107 | 2429 |
| Clamp for suspending books or the like | J. B. Connolly | 733,945 | July 21 | 2262 | 532 | 105 | 511 |
| Clapboard-machine | J. C. Killam | 723,470 | Mar. 24 | 3390 | 758, 759, 760, 761, 762 | 103 | 755 |
| Clarifier cover. Centrifugal | W. W. Price | 720,479 | Feb. 10 | 1954 | 447 | 102 | 1251 |
| Clarifying apparatus | T. W. Manning | 733,726 | July 14 | 1820 | 431 | 105 | 401 |
| Clarinet | P. Evette | 729,309 | May 26 | 4648 | 1027 | 104 | 1035 |
| Clasp: | | | | | | | |
| *See* Apparel-clasp. | | | | | | | |
| *See* Broom-clasp. | | | | | | | |
| *See* Button-clasp. | | | | | | | |
| *See* Chatelaine-clasp. | | | | | | | |
| *See* Collar-fastening clasp. | | | | | | | |
| *See* Corset-clasp. | | | | | | | |
| *See* Curtain-clasp. | | | | | | | |
| *See* Eyeglass-clasp. | | | | | | | |
| *See* Garment-clasp. | | | | | | | |
| *See* Garment-supporter clasp. | | | | | | | |
| *See* Hose-supporter clasp. | | | | | | | |
| *See* Lace-clasp. | | | | | | | |
| *See* Suspender-end clasp. | | | | | | | |
| *See* Swingletree-clasp. | | | | | | | |
| *See* Tag-clasp. | | | | | | | |
| *See* Tent-wall clasp. | | | | | | | |
| Clasp | F. A. Wernig | 721,264 | Feb. 24 | 3503 | 796 | 102 | 1610 |
| Clasp | A. Roehm | 723,028 | Mar. 17 | 2548 | 573 | 103 | 571 |
| Clasp | H. C. Frank | 731,103 | June 16 | 2886 | 640 | 104 | 1763 |
| Clasp | C. Pelmulder | 732,008 | June 23 | 4595 | 1025 | 104 | 2132 |
| Clasp | C. H. Tomlinson | 732,798 | July 7 | 186 | 47 | 105 | 43 |
| Clasp | J. H. Pilkington | 734,089 | July 21 | 2562 | 598 | 105 | 577 |
| Clasp | W. T. Spillane | 734,984 | July 28 | 4251 | 988 | 105 | 942 |
| Clasp | F. M. Chandler | 736,935 | Aug. 25 | 3570 | 792 | 105 | 1794 |
| Clasp | F. King | 737,418 | Aug. 25 | 4467 | 1002 | 105 | 1985 |
| Clasp | J. Goldberg | 737,834 | Sept. 1 | 526 | 116 | 106 | 117 |
| Clasp | T. S. Bennett | 739,477 | Sept. 22 | 3756 | 838 | 106 | 853 |
| Clasp | C. J. White | 739,766 | Sept. 22 | 4269 | 956 | 106 | 964 |
| Clasp | G. M. Hubbard | 743,286 | Nov. 3 | 914 | 198 | 107 | 196 |

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| Invention. | Name | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Clasp | C. H. Cohn | 743,454 | Nov. 10 | 1318 | 271 | 107 | 296 |
| Clasp | G. B. Adams | 744,017 | Nov. 17 | 2417 | 518 | 107 | 547 |
| Clasp | H. R. Baker | 745,990 | Dec. 8 | 1245 | 281 | 107 | 1383 |
| Clasp for garters, &c | C. E. Schaffner | 748,423 | Dec. 29 | 5780 | 1318 | 107 | 2448 |
| Clasp for garters or the like | C. M. Simpson | 730,710 | June 9 | 2160 | 479 | 104 | 1592 |
| Clasp or fastener | A. P. Lewis | 727,162 | May 5 | 653 | 140 | 104 | 141 |
| Classifier | W. Hoffman | 727,797 | May 12 | 1851 | 413 / 414 | 104 | 413 |
| Classifier. Hydraulic | C. W. Merrill | 728,487 | May 19 | 3142 | 695 | 104 | 706 |
| Classifier or sizer. Hydraulic | J. F Isbell | 729,764 | June 2 | 446 | 101 | 104 | 1218 |
| Classifying or sizing apparatus | A. Ten Winkel | 741,565 | Oct. 13 | 2258 | 504 | 106 | 1748 |
| Clavier. Practice- | A. C. Bergman | 736,923 | Aug. 25 | 3545 | 787 | 105 | 1789 |
| Claw-bar | C. W. and C. H. Threlkeld | 724,523 | Apr. 7 | 192 | 48 | 103 | 1210 |
| Claw-bar | F. D. Holbrook | 746,083 | Dec. 8 | 1415 | 317 | 107 | 1420 |
| Clay articles. Delivery-table for green | W. R. Waggoner | 742,105 | Oct. 20 | 3361 | 750 | 106 | 1990 |
| Clay articles. Machine for enameling | F. Macarthy | 720,594 | Feb. 17 | 2203 | 510 / 511 | 102 | 1317 |
| Clay-block grooving or scoring apparatus | I. L. Conkling | 717,546 | Jan. 6 | 46 | 12 | 102 | 12 |
| Clay-block-trimming apparatus | I. L. Conkling | 717,544 | Jan. 6 | 37 | 11 | 102 | 11 |
| Clay-mill pans. Device for emptying | R. Kyler | 728,940 | May 26 | 3987 | 888 | 104 | 897 |
| Clay mixer and carrier | J. J. Sullivan | 723,753 | Mar. 24 | 3884 | 874 | 103 | 858 |
| Clay petrifaction | B. J. Fallon | 729,562 | June 2 | 76 | 19 | 104 | 1143 |
| Cleaner: *See* Beer-pipe cleaner. Boiler-cleaner. Boiler-flue cleaner. Boiler-tube cleaner. Boot or shoe cleaner. Carpet-cleaner. Chimney-flue cleaner. Cotton-cleaner. Dish-cleaner. Eraser-cleaner. Flue-cleaner. Foot-cleaner. Fruit or vegetable cleaner. Gin-saw cleaner. Grain-cleaner. Grinding-mill cleaner. Gun-cleaner. Intestine-cleaner. Knife-cleaner. Knife and fork cleaner. Lamp-chimney cleaner. Nail-cleaner. Pen-cleaner. Pipe-cleaner. Sack-cleaner. Screen-cleaner. Seed-cleaner. Shoe-cleaner. Soot-cleaner. Tire-cleaner. Tube-cleaner. Wall-cleaner. Well or cistern cleaner. Winding-machine cleaner. Window-cleaner. Wood-cleaner. | | | | | | | |
| Cleaning and polishing compound | P. Levi | 721,053 | Feb. 17 | 3045 | ..... | 102 | 1496 |
| Cleaning and polishing device | L. A. K. and W. Love | 731,583 | June 23 | 3809 | 848 | 104 | 1967 |
| Cleaning and scrubbing appliance | G. Bruhn | 723,223 | Mar. 17 | 2912 | 652 | 103 | 647 |
| Cleaning-knife. Electric | F. Nettleton and E. R. Dempsey | 734,353 | July 21 | 3067 | 722 | 105 | 682 |
| Cleaning-machine | D. A. Kennedy | 747,980 | Dec. 29 | 4970 | 1122 | 107 | 2271 |
| Cleaning smooth surfaces. Composition for | M. Peryer | 722,454 | Mar. 10 | 1492 | ..... | 103 | 334 |
| Cleaning surfaces | C. C. Mason | 729,624 | June 2 | 179 | 42 | 104 | 1164 |
| Cleat for theatrical or other portable properties | G. S. and E. A. Hall | 731,451 | June 23 | 3561 | 793 | 104 | 1918 |
| Cleats to barrels, &c. Machine or tool for applying holding- | A. T. Pope | 733,743 | July 14 | 1850 | 437 | 105 | 407 |
| Cleaver and knife. Combined | E. P. Donnelly | 745,162 | Nov. 24 | 4594 | 996 | 107 | 1021 |
| Clevis | H. Wescott | 721,530 | Feb. 24 | 3973 | 905 | 102 | 1709 |
| Clevis | R. Wolf | 724,986 | Apr. 7 | 1054 | 240 | 103 | 1393 |
| Clevis | W. R. Jenkins | 740,865 | Oct. 6 | 894 | 200 | 106 | 1437 |
| Clevis. Draft-equalizing | J. G. Evans | 741,319 | Oct. 13 | 1759 | 392 | 106 | 1638 |
| Clevis. Plow- | J. L. Bay | 744,854 | Nov. 24 | 3969 | 855 | 107 | 894 |
| Clevises, &c. Pin-locking mechanism for | H. A. Bergom | 748,043 | Dec. 29 | 5091 | 1150 | 107 | 2298 |
| Clinometer | W. A. Stallsmith and M. G. Beard | 730,579 | June 9 | 1931 | 429 | 104 | 1543 |
| Clinometer | F. T. Cable | 738,407 | Sept. 8 | 1742 | 379 | 106 | 390 |
| Clip: *See* Bicycle toe-clip. Connecting-clip. Detector-bar clip. Doubletree-clip. Dress-clip. Harness-clip. Haulage-clip. Mailing-tube clip. Metal clip. Paper-clip. Paper-holding clip. Rope-clip. Sickle-bar clip. Spring-clip. Tag-clip. Thill or pole clip. Tramway bucket-clip. Whiffletree-clip. Wire clip. | | | | | | | |
| Clip | L. C. McNeal | 727,418 | May 5 | 1099 | 241 | 104 | 237 |
| Clip | L. Steinberger | 732,598 | June 30 | 5748 | 1276 | 104 | 2387 |
| Clip-applier | G. J. van Schott | 721,480 | Feb. 24 | 3889 | 885 | 102 | 1690 |
| Clip for attaching goods to ropes or rods | H. W. Metcalfe | 724,310 | Mar. 31 | 5013 | 1123 | 103 | 1104 |
| Clip or fastener | J. A. Bedworth | 742,150 | Oct. 27 | 3441 | 766 | 106 | 2023 |
| Clipper. Animal- | A. Hawtree | 720,915 | Feb. 17 | 2786 | 639 | 102 | 1439 |
| Clipper. Hair- | G. H. Coates | 718,095 | Jan. 13 | 1076 | 239 | 102 | 247 |
| Clipper. Hair- | G. H. Coates | 723,650 | Mar. 24 | 3711 | 832 | 103 | 821 |
| Clipper. Hair- | M. S. Black | 736,198 | Aug. 11 | 2189 | 471 | 105 | 1467 |
| Clipper. Hair- | W. J. Long | 736,854 | Aug. 18 | 3419 | 756 | 105 | 1743 |
| Clipper. Hair- | J. K. Priest | 748,416 | Dec. 29 | 5768 | 1316 | 107 | 2446 |
| Clipping-machine. Electric | J. Cornu | 726,795 | Apr. 28 | 4432 | 998 | 103 | 2140 |
| Clock | E. Fitch | 724,460 | Apr. 7 | 79 | 19, 20 | 103 | 1186 |
| Clock | E. Fitch | 726,276 | Apr. 28 | 3422 | 778 / 779 | 103 | 1938 |
| Clock | W. S. Scales | 730,302 | June 9 | 1421 | 313 | 104 | 1434 |
| Clock | E. Fitch | 733,180 | July 7 | 851 | 206 | 105 | 179 |
| Clock | M. Wortmann | 748,250 | Dec. 29 | 5468 | 1246 | 107 | 2379 |
| Clock. Alarm- | J. Hauser | 720,801 | Feb. 17 | 2576 | 593 | 102 | 1395 |
| Clock. Angelus- | G. W. Adams | 736,918 | Aug. 25 | 3535 | 785 | 105 | 1787 |
| Clock-chimes | A. Fuhrer | 747,408 | Dec. 22 | 3873 | 872 | 107 | 2003 |
| Clock-dial | D. S. Kanstoroom | 744,355 | Nov. 17 | 3069 | 658 | 107 | 686 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Clock. Electric | W. J. Dudley | 718,610 | Jan. 20 | 2083 | 453 | 102 | 477 |
| Clock. Electric | V. and V. Himmer, Jr | 719,465 | Feb. 3 | 94 | 23 | 102 | 846 |
| Clock. Electric | J. A. Carruthers | 731,279 | June 16 | 3204 | 713 | 104 | 1825 |
| Clock. Electric | J. A. Carruthers | 731,280 | June 16 | 3205 | 713 | 104 | 1825 |
| Clock. Electric | O. Romanze | 731,621 | June 23 | 3873 | 862, 863 | 104 | 1980 |
| Clock. Electric | U. L. Collins | 733,159 | July 7 | 812 | 196, 197 | 105 | 171 |
| Clock. Electric | H. Rempe | 734,366 | July 21 | 3088 | 727 | 105 | 687 |
| Clock. Electric | W. E. Palmer | 740,038 | Sept. 29 | 4829 | 1083 | 106 | 1100 |
| Clock. Electric | F. W. Moore | 741,358 | Oct. 13 | 1856 | 410 | 106 | 1663 |
| Clock. Electric | V. Himmer, Jr | 747,305 | Dec. 15 | 3686 | 831 | 107 | 1946 |
| Clock. Electric program- | E. T. Ackerman | 741,431 | Oct. 13 | 1979 | 439 | 106 | 1688 |
| Clock. Electric program- | J. W. Portis | 744,608 | Nov. 17 | 3491 | 753, 754 | 107 | 774 |
| Clock. Electric receiver- | J. W. H. Uytenbogaart | 746,903 | Dec. 15 | 2914 | 673 | 107 | 1771 |
| Clock. Geographical | I. F. Pheils | 718,579 | Jan. 13 | 2033 | 442 | 102 | 452 |
| Clock. Geographical | H. Schumacher | 745,680 | Dec. 1 | 662 | 153 | 107 | 1239 |
| Clock. Geographical | G. Jeager | 746,517 | Dec. 8 | 2183 | 501 | 107 | 1585 |
| Clock hand-setting mechanism | T. Schäffer | 726,994 | May 5 | 343 | 74 | 104 | 74 |
| Clock. Illuminated | W. T. Bell | 738,281 | Sept. 8 | 1478 | 319, 320 | 106 | 333 |
| Clock-key | O. C. Eggers | 722,290 | Mar. 10 | 1185 | 262 | 103 | 268 |
| Clock-movement | F. A. Jones | 744,203 | Nov. 17 | 2800 | 598, 599 | 107 | 627 |
| Clock-pendulum | W. H. Thompson | 731,244 | June 16 | 3142 | 698 | 104 | 1812 |
| Clock. Pendulum | J. W. Daily | 737,587 | Sept. 1 | 53 | 12 | 106 | 13 |
| Clock. Pneumatic | E. Girod | 736,958 | Aug. 25 | 3617 | 801, 802 | 105 | 1805 |
| Clock. Program- | F. M. Schmidt | 746,998 | Dec. 15 | 3103 | 710, 711 | 107 | 1814 |
| Clock. Secondary electric | T. H. Wurmb and R. Baumann | 734,389 | July 21 | 3131 | 736 | 105 | 696 |
| Clock. Self-winding electric | O. A. En Holm | 732,684 | Mar. 17 | 1943 | 433 | 103 | 447 |
| Clock. Self-winding electric | C. M. Crook | 734,674 | July 28 | 3651 | 856 | 105 | 820 |
| Clock. Self-winding electric | H. Rempe | 737,019 | Aug. 25 | 3725 | 826, 827 | 105 | 1828 |
| Clock. Self-winding electric | E. Schultz | 737,781 | Sept. 1 | 516 | 88, 89 | 106 | 91 |
| Clock. Striking- | H. M. Hunt | 735,261 | Aug. 4 | 437 | 86, 87 | 105 | 1073 |
| Clock striking mechanism | A. C. Schuman | 724,956 | Apr. 7 | 989 | 228 | 103 | 1380 |
| Clock striking mechanism | F. G. Berling | 747,676 | Dec. 22 | 4357 | 984 | 107 | 2112 |
| Clock striking mechanism | A. C. Schuman | 748,108 | Dec. 29 | 5221 | 1182, 1183 | 107 | 2326 |
| Clock. Universal | A. Rosenbusch | 723,489 | Mar. 24 | 3442 | 770 | 103 | 765 |
| Clock. Watchman's | A. E. Waggoner | 730,420 | June 9 | 1625 | 364 | 104 | 1476 |
| Clock. Watchman's | A. Huberty | 747,608 | Dec. 22 | 4225 | 950 | 107 | 2083 |
| Clock-winding mechanism. Automatic | W. M. Fulton | 737,093 | Aug. 25 | 3843 | 854 | 105 | 1852 |
| Clock winding-reminder | J. C. Fisher | 741,647 | Oct. 20 | 2415 | 540 | 106 | 1797 |
| Clocks. Gravity-escapement for | W. Willmann | 739,245 | Sept. 15 | 3322 | 737 | 106 | 743 |
| Clocks. Pawl-and-ratchet mechanism for electric | A. Barr, W. Stroud, and L. Becker | 729,253 | May 26 | 4545 | 1002 | 104 | 1012 |
| Clod-crusher | J. G. Finley | 721,170 | Feb. 24 | 3310 | 757 | 102 | 1571 |
| Clod-crusher | F. E. Caton | 747,536 | Dec. 22 | 4102 | 920 | 107 | 2055 |
| Clod cutter and pulverizer. Adjustable | J. P. Hoops | 720,587 | Feb. 17 | 2190 | 508 | 102 | 1315 |
| Closet: *See* Antifreezing closet. Drying-closet. Dry closet. Water-closet. | | | | | | | |
| Closet-basin seats. Sanitary cover for | H. W. Leitch | 721,576 | Feb. 24 | 4071 | 924 | 102 | 1732 |
| Closet or case | A. F. Conant | 729,279 | May 26 | 4590 | 1014 | 104 | 1022 |
| Closet-seat | J. Hansen | 724,181 | Mar. 31 | 4753 | 1066 | 103 | 1053 |
| Closet-seat catch | F. M. Alexander | 723,973 | Mar. 31 | 4330 | 971, 972 | 103 | 969 |
| Closet-seat collapsible protecting device | I. Franken | 747,960 | Dec. 29 | 4923 | 1114 | 107 | 2260 |
| Closet-seat cover | W. D. Lauer | 746,111 | Dec. 8 | 1463 | 328 | 107 | 1431 |
| Closet ventilation | J. J. Donovan | 728,448 | May 19 | 3060 | 674 | 104 | 690 |
| Closets, &c. Siphon-reservoir for toilet | A. M. Morrison | 748,401 | Dec. 29 | 5727 | 1308 | 107 | 2436 |
| Closure | E. E. Chapman | 741,307 | Oct. 13 | 1739 | 388 | 106 | 1634 |
| Closure | E. E. Chapman | 747,373 | Dec. 22 | 3812 | 858 | 107 | 1989 |
| Cloth-cutter | J. T. Freston | 737,768 | Sept. 1 | 394 | 84 | 106 | 87 |
| Cloth-cutting gage | N. A. Morse | 738,224 | Sept. 8 | 1345 | 292 | 106 | 307 |
| Cloth-cutting machine | W. Cormany | 720,227 | Feb. 10 | 1512 | 347 | 102 | 1159 |
| Cloth-cutting machine | R. P. Wright | 722,475 | Mar. 10 | 1534 | 337 | 103 | 344 |
| Cloth-cutting machine | C. A. Amelang | 725,391 | Apr. 14 | 1794 | 402 | 103 | 1564 |
| Cloth-cutting machine | F. Buchwald | 729,127 | May 26 | 4318 | 953, 954 | 104 | 964 |
| Cloth-cutting machine | E. M. Waring | 735,848 | Aug. 11 | 1559 | 333 | 105 | 1332 |
| Cloth-cutting machine. Electrical | P. Howe | 724,869 | Apr. 7 | 843 | 194 | 103 | 1349 |
| Cloth-drying machines. Presser-wheel for the chains of | J. J. Scholfield | 743,990 | Nov. 10 | 2325 | 497 | 107 | 516 |
| Cloth-folding device | A. Maxson | 740,581 | Oct. 6 | 389 | 81 | 106 | 1329 |
| Cloth-folding machine | W. H. Howard | 731,905 | June 23 | 4383 | 977 | 104 | 2089 |
| Cloth-folding mechanism | F. D. Taylor | 720,081 | Feb. 10 | 1229 | 283, 284 | 102 | 1100 |
| Cloth-governing apparatus for guiding and straightening woven fabrics. | A. Wood and E. Nightingale | 739,968 | Sept. 29 | 4687 | 1054 | 106 | 1069 |
| Cloth-holder | L. S. Winterbotham | 748,131 | Dec. 29 | 5264 | 1195 | 107 | 2335 |
| Cloth on the bias. Instrument for cutting | W. H. Blandin | 735,201 | Aug. 4 | 327 | 63 | 105 | 1051 |
| Cloth. Ornamenting | L. and T. David | 722,447 | Mar. 10 | 1480 | 326 | 103 | 331 |
| Cloth-piler | W. O. Crain and G. W. Gwinn | 718,699 | Jan. 20 | 2248 | 493, 494 | 102 | 509 |
| Cloth-pressing device | J. Lynn | 739,499 | Sept. 22 | 3790 | 849 | 106 | 861 |
| Cloth-shearing machines. Lifting mechanism for the cutting parts of | E. H. Marble | 721,903 | Mar. 3 | 453 | 100 | 103 | 100 |
| Cloth-steaming apparatus | F. I. Burgher | 745,321 | Dec. 1 | 15 | 3 | 107 | 1104 |
| Cloth-tentering-machine stop-motion | J. L. Dabbs | 737,910 | Sept. 1 | 705 | 152 | 106 | 154 |
| Cloth. Tenting- | A. Mitchelsen | 718,499 | Jan. 13 | 1856 | 408 | 102 | 415 |
| Cloth thin-place detector and preventer | B. F. S. Austin | 735,050 | Aug. 4 | 6 | 2 | 105 | 859 |
| Cloth-treating machine | D. Gessner | 744,744 | Nov. 24 | 3776 | 814 | 107 | 823 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Des. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Cloth-unrolling machine | J. E. Windle | 725,907 | Apr. 21 | 2755 | 627 | 103 | 1784 |
| Clothes-clamp | S. Brown | 745,777 | Dec. 1 | 826 | 187 | 107 | 1274 |
| Clothes-draining device | C. Shefferd | 724,131 | Mar. 31 | 4652 | 1046 | 103 | 1032 |
| Clothes-drier | C. H. Macklin | 730,675 | June 9 | 2100 | 467 | 104 | 1579 |
| Clothes-drier | R. Shull | 734,622 | July 28 | 3547 | 831 | 105 | 800 |
| Clothes-drier | W. A. Kester | 736,603 | Aug. 18 | 2938 | 643 | 105 | 1643 |
| Clothes-drier | M. S. Nolan | 739,705 | Sept. 22 | 4167 | 932 | 106 | 941 |
| Clothes-drier | E. J. Williams | 740,068 | Sept. 29 | 4878 | 1094 | 106 | 1109 |
| Clothes-drier | W. J. Coulter | 740,243 | Sept. 29 | 5198 | 1168 | 106 | 1176 |
| Clothes-drier | G. M. G. and W. H. Weston | 741,202 | Oct. 13 | 1526 | 344 | 106 | 1592 |
| Clothes-drier | G. F. Schrader | 743,758 | Nov. 10 | 1881 | 397 | 107 | 418 |
| Clothes-drier | S. Butterworth | 744,901 | Nov. 24 | 4044 | 872 | 107 | 909 |
| Clothes-drier | R. N. West | 746,768 | Dec. 15 | 2650 | 612 | 107 | 1712 |
| Clothes-drier. Foldable | J. K. Champ | 719,186 | Jan. 27 | 3169 | 705 | 102 | 714 |
| Clothes-drier. Folding | G. Church | 726,641 | Apr. 28 | 4143 | 934 | 103 | 2080 |
| Clothes-drier. Laundry | W. M. Esterly and J. E. Mannen | 731,445 | June 23 | 3536 | 788 | 104 | 1914 |
| Clothes-drier. Laundry | J. E. Mannen and W. M. Esterly | 731,481 | June 23 | 3610 | 805 | 104 | 1928 |
| Clothes-drying apparatus | D. P. Prescott | 736,777 | Aug. 18 | 3265 | 721, 722 | 105 | 1710 |
| Clothes-drying apparatus. Centrifugal | F. J. Bird | 724,250 | Mar. 31 | 4905 | 1098 | 103 | 1082 |
| Clothes-drying attachment. Steam-radiator | S. L. Richardson | 726,349 | Apr. 28 | 3568 | 808 | 103 | 1968 |
| Clothes-drying-machine goods-support | W. M. Barnes | 746,659 | Dec. 15 | 2463 | 563 | 107 | 1670 |
| Clothes-drying-machine indicator apparatus | W. M. Barnes | 731,656 | June 23 | 3941 | 877 | 104 | 1993 |
| Clothes-hanger | E. H. Lunau | 730,546 | June 9 | 1866 | 417 | 104 | 1528 |
| Clothes-hanger | J. Webster | 730,992 | June 16 | 2678 | 597 | 104 | 1720 |
| Clothes-hanging device | C. F. Cox | 737,828 | Sept. 1 | 517 | 114 | 106 | 116 |
| Clothes-hook | J. M. Merrill | 725,111 | Apr. 14 | 1293 | 291 | 103 | 1459 |
| Clothes-line | F. S. Brown | 718,086 | Jan. 13 | 1062 | 236 | 102 | 244 |
| Clothes-line | A. L. Richard | 728,761 | May 19 | 3656 | 813 | 104 | 815 |
| Clothes-line and curtain-stretcher | T. B. Lee | 740,291 | Sept. 29 | 5280 | 1189 | 106 | 1193 |
| Clothes-line apparatus | J. L. Knight and H. W. Roby | 743,001 | Nov. 3 | 346 | 75 | 107 | 73 |
| Clothes-line clamp | O. H. Grosland | 732,293 | June 30 | 5164 | 1147 | 104 | 2263 |
| Clothes-line clamp | J. Rupp and A. Loehr | 744,241 | Nov. 17 | 2860 | 613 | 107 | 640 |
| Clothes-line holder | A. K. Rosenbeck | 735,593 | Aug. 4 | 1072 | 227 | 105 | 1208 |
| Clothes-line holder | C. J. Archibald | 738,873 | Sept. 15 | 2662 | 587 | 106 | 604 |
| Clothes-line holder | W. P. Sampson | 746,171 | Dec. 8 | 1580 | 353 | 107 | 1458 |
| Clothes-line hook and elevator | D. M. Chamberland | 732,711 | July 7 | 34 | 8 | 105 | 10 |
| Clothes-line. Pinless | W. A. Jennings | 725,447 | Apr. 14 | 1910 | 427 | 103 | 1589 |
| Clothes-line prop | W. B. Barbour and B. W. Meredith | 725,917 | Apr. 21 | 2772 | 631 | 103 | 1788 |
| Clothes-line prop | E. J. Prest | 726,457 | Apr. 28 | 3761 | 852 | 103 | 2007 |
| Clothes-line-prop attachment | F. G. Kimman | 724,713 | Apr. 7 | 557 | 133 | 103 | 1288 |
| Clothes-line reel | J. McKee | 726,449 | Apr. 28 | 3749 | 849 | 103 | 2005 |
| Clothes-line reel | J. P. Sundin | 727,486 | May 5 | 1232 | 273 | 104 | 266 |
| Clothes-line reel | C. A. F. G. Brown | 730,868 | June 16 | 2424 | 536 | 104 | 1667 |
| Clothes-line. Traveling | S. A. Brown | 747,586 | Dec. 22 | 4186 | 941 | 107 | 2074 |
| Clothes or mop wringer | A. S. Lenna | 723,687 | Mar. 24 | 3770 | 846 | 103 | 834 |
| Clothes-peg | R. Haweridge | 721,702 | Mar. 3 | 95 | 20 | 103 | 21 |
| Clothes-pin | D. S. Boyles | 723,130 | Mar. 17 | 2733 | 613 | 103 | 609 |
| Clothes-pin | A. W. Alexander | 728,824 | May 26 | 3788 | 844 | 104 | 859 |
| Clothes-pin | J. G. Howard | 745,617 | Dec. 1 | 555 | 129 | 107 | 1216 |
| Clothes-pin machinery | R. Richardi | 734,957 | July 28 | 4190 | 975 | 105 | 930 |
| Clothes-pounder | N. B. Bacon | 730,811 | June 9 | 2319 | 515 | 104 | 1625 |
| Clothes-pounder | D. C. Clinton and J. S. Keel | 731,021 | June 16 | 2735 | 610 | 104 | 1732 |
| Clothes-pounder | S. Harper | 734,860 | July 28 | 4031 | 941 | 105 | 896 |
| Clothes-pounder | O. Oines | 741,409 | Oct. 13 | 1948 | 431 | 106 | 1682 |
| Clothes-pounder | L. S. and E. M. Elliott | 744,518 | Nov. 17 | 3353 | 722 | 107 | 746 |
| Clothes-pounder | I. N. Hollingsworth | 746,835 | Dec. 15 | 2786 | 642 | 107 | 1742 |
| Clothes-rack | F. F. Witt | 723,114 | Mar. 17 | 2704 | 608 | 103 | 603 |
| Clothes-rack | M. S. Churchill | 742,394 | Oct. 27 | 3893 | 874, 875 | 106 | 2116 |
| Clothes-rack for furniture | L. Jones | 724,582 | Apr. 7 | 306 | 74 | 103 | 1234 |
| Clothes-reel | P. K. Young | 742,270 | Oct. 27 | 3674 | 821 | 106 | 2070 |
| Clothes scraper and cleaner | A. Beardsley | 739,813 | Sept. 29 | 4382 | 982 | 106 | 1006 |
| Clothes-stick | H. Sarasin | 741,933 | Oct. 20 | 2967 | 661 | 106 | 1912 |
| Clothes stick or lifter | T. F. Condon | 736,497 | Aug. 18 | 2730 | 598 | 105 | 1600 |
| Clothes-washer | S. A. Newcomer | 736,870 | Aug. 18 | 3445 | 763, 764 | 105 | 1748 |
| Clothes-wringer | R. C. Beekman | 721,138 | Feb. 24 | 3249 | 743 | 102 | 1560 |
| Clothes-wringer | D. Hall | 731,049 | June 16 | 2781 | 619 | 104 | 1741 |
| Clothes-wringer | F. Hooker | 746,963 | Dec. 15 | 3040 | 698 | 107 | 1800 |
| Clothes-wringer gear-casing | J. W. Nowak | 726,737 | Apr. 28 | 4324 | 974 | 103 | 2119 |
| Clothing-hanger | T. D. Sugrue | 736,171 | Aug. 11 | 2142 | 461 | 105 | 1456 |
| Clothing-hanger. Traveling | A. Pederson | 744,701 | Nov. 17 | 3694 | 797 | 107 | 820 |
| Clover-buncher | C. C. Behm | 717,529 | Jan. 6 | 15 | 4 | 102 | 6 |
| Clover-buncher | J. K. Sharpe, Jr | 736,450 | Aug. 18 | 2627 | 577 | 105 | 1578 |
| Clover-buncher | J. F. Wheeler and A. Boice | 744,840 | Nov. 24 | 3947 | 850, 851 | 107 | 889 |
| Clover-buncher | A. R. Nicholas | 747,469 | Dec. 22 | 3976 | 894 | 107 | 2025 |
| Clover-cutter | H. B. Humphrey | 741,246 | Oct. 13 | 1606 | 361 | 106 | 1609 |
| Clover-huller | L. S. Whiting | 738,646 | Sept. 8 | 2203 | 481, 482 | 106 | 488 |
| Clover hulling and threshing machine | W. C. Robby | 747,226 | Dec. 15 | 3528 | 801 | 107 | 1909 |
| Cluster-switch | H. Hubbell | 734,876 | July 28 | 4053 | 946 | 105 | 901 |
| Clutch | V. T. Payne | 719,856 | Feb. 3 | 800 | 187 | 102 | 992 |
| Clutch | A. R. Patten | 719,954 | Feb. 3 | 962 | 223 | 102 | 1027 |
| Clutch | Z. R. Tucker | 721,925 | Mar. 3 | 515 | 113 | 103 | 114 |
| Clutch | E. W. Miller | 721,964 | Mar. 3 | 581 | 129 | 103 | 127 |
| Clutch | F. Claus | 722,492 | Mar. 10 | 1570 | 345, 346 | 103 | 353 |
| Clutch | E. Dysterud | 723,196 | Mar. 17 | 2871 | 644 | 103 | 639 |
| Clutch | P. J. Shouvlin | 727,003 | May 5 | 369 | 78 | 104 | 80 |
| Clutch | C. E. Pollard | 727,683 | May 12 | 1614 | 367 | 104 | 365 |
| Clutch | W. F. Jaenecke | 728,720 | May 19 | 3589 | 797 | 104 | 801 |
| Clutch | F. Weimar and S. P. Smurr | 730,724 | June 9 | 2180 | 485 | 104 | 1596 |
| Clutch | P. A. Houghtaling | 731,303 | June 16 | 3267 | 726 | 104 | 1839 |
| Clutch | M. McHale and J. Trainner | 731,383 | June 16 | 3410 | 762 | 104 | 1869 |

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| Invention. | Name. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|---|
| | | | | Spec. | Dr'g. | Vol. | Page. |
| Clutch | G. A. Ede | 732,402 | June 30 | 5376 | 1191 | 104 | 2308 |
| Clutch | J. H. Moss | 734,733 | July 28 | 3774 | 880<br>881 | 105 | 844 |
| Clutch | C. L. Grohmann | 736,517 | Aug. 18 | 2768 | 605 | 105 | 1609 |
| Clutch | E. F. Bradley and W. R. Pidgeon | 739,255 | Sept. 15 | 3337 | 740<br>741 | 106 | 745 |
| Clutch | P. E. Varney | 742,816 | Oct. 27 | 4641 | 1051 | 106 | 2275 |
| Clutch | E. C. Henn | 743,078 | Nov. 3 | 500 | 108 | 107 | 105 |
| Clutch | G. M. Beard | 745,559 | Dec. 1 | 454 | 106<br>107 | 107 | 1194 |
| Clutch | T. Carroll | 747,298 | Dec. 15 | 3670 | 829 | 107 | 1942 |
| Clutch and brake mechanism. Electrical | A. P. Steckel | 744,423 | Nov. 17 | 3190 | 683<br>684 | 107 | 711 |
| Clutch and brake operating mechanism | A. C. Hilsinger | 731,683 | June 23 | 3984 | 889 | 104 | 2001 |
| Clutch apparatus. Frictional | G. W. Starr and J. H. Cogswell | 727,477 | May 5 | 1217 | 269 | 104 | 263 |
| Clutch. Automatic release | H. J. Hinde | 744,548 | Nov. 17 | 3409 | 734 | 107 | 757 |
| Clutch. Cone | A. C. Krebs | 734,893 | July 28 | 4082 | 951 | 105 | 906 |
| Clutch coupling. Friction | T. C. Walker, Jr | 740,719 | Oct. 6 | 613 | 137 | 106 | 1379 |
| Clutch device | P. Diehl | 732,398 | June 30 | 5370 | 1189 | 104 | 2307 |
| Clutch device. Fluid-controlled friction | T. Matson | 731,483 | June 23 | 3612 | 806 | 104 | 1929 |
| Clutch. Electromagnetic | E. V. Beals | 727,573 | May 12 | 1408 | 317 | 104 | 321 |
| Clutch. Electromagnetic friction | L. J. Le Pontois | 731,471 | June 23 | 3594 | 801 | 104 | 1925 |
| Clutch. Electromagnetic friction | W. Schuster and H. Ast | 736,789 | Aug. 18 | 3285 | 726 | 105 | 1714 |
| Clutch. Engraver's | J. Hoffman | 723,671 | Mar. 24 | 3743 | 840 | 103 | 828 |
| Clutch. Fluid | B. B. Chandler, Jr | 719,746 | Feb. 3 | 611 | 137 | 102 | 951 |
| Clutch. Fluid-controlled | M. O. Casson | 731,464 | June 23 | 3578 | 797 | 104 | 1922 |
| Clutch for drilling-swivels. Ratchet | J. Kunny, H. G. Arundell, and P. R. Kunny. | 742,332 | Oct. 27 | 3787 | 848 | 106 | 2094 |
| Clutch. Friction | C. R Gabriel | 717,836 | Jan. 6 | 617 | 136 | 102 | 132 |
| Clutch. Friction | C. E. Ellicott and J. B. Norris | 719,204 | Jan. 27 | 3198 | 714 | 102 | 720 |
| Clutch. Friction | T. F. Carver | 719,434 | Feb. 3 | 43 | 9 | 102 | 834 |
| Clutch. Friction | M. Campbell | 719,993 | Feb. 10 | 1049 | 244 | 102 | 1062 |
| Clutch. Friction | M. C. Harris | 721,799 | Mar. 3 | 256 | 57 | 103 | 57 |
| Clutch. Friction | G. L Scott | 722,150 | Mar. 3 | 902 | 200 | 103 | 193 |
| Clutch. Friction | F. J. Nutting | 722,244 | Mar. 10 | 1103 | 243 | 103 | 251 |
| Clutch. Friction | C. R. Greuter | 722,697 | Mar. 17 | 1970 | 440 | 103 | 453 |
| Clutch. Friction | A. Bolzani | 722,800 | Mar. 17 | 2159 | 482 | 103 | 491 |
| Clutch. Friction | C. E. Ellicott and J. B Norris | 722,959 | Mar. 17 | 2428 | 543 | 103 | 546 |
| Clutch. Friction | J. H. McLennan and F. W. Wandless | 723,715 | Mar. 24 | 3825 | 860 | 103 | 845 |
| Clutch. Friction | A. Soderling | 724,749 | Apr. 7 | 620 | 145 | 103 | 1301 |
| Clutch. Friction | W. A. Young | 726,609 | Apr. 28 | 4090 | 923 | 103 | 2069 |
| Clutch. Friction | M. R. Conway | 726,646 | Apr. 28 | 4149 | 936 | 103 | 2081 |
| Clutch. Friction | G. W. Ruth | 728,622 | May 19 | 3412 | 755 | 104 | 765 |
| Clutch. Friction | S. Griffin | 730,112 | June 2 | 1064 | 239 | 104 | 1344 |
| Clutch. Friction | R. C. Hills | 730,372 | June 9 | 1541 | 342<br>343 | 104 | 1458 |
| Clutch. Friction | A. L. Stanford | 730,580 | June 9 | 1932 | 429 | 104 | 1543 |
| Clutch. Friction | A. Herisson | 730,767 | June 9 | 2248 | 499 | 104 | 1612 |
| Clutch. Friction | J. C. Potter and J. Johnston | 730,962 | June 16 | 2616 | 583 | 104 | 1708 |
| Clutch. Friction | E. Liken | 733,406 | July 14 | 1275 | 302 | 105 | 286 |
| Clutch. Friction | C. W. Hunt | 735,517 | Aug. 4 | 930 | 197 | 105 | 1179 |
| Clutch. Friction | R. M. Phillips | 735,811 | Aug. 11 | 1483 | 318 | 105 | 1315 |
| Clutch. Friction | L. Mayer | 739,434 | Sept. 22 | 3691 | 821<br>822 | 106 | 838 |
| Clutch. Friction | J. H. Hendrickson | 740,564 | Oct. 6 | 349 | 73 | 106 | 1320 |
| Clutch. Friction | E. J Moore | 742,209 | Oct. 27 | 3553 | 793 | 106 | 2044 |
| Clutch. Friction | C. E Torrance | 742,524 | Oct. 27 | 4145 | 932 | 106 | 2167 |
| Clutch. Friction | N. Fox | 745,959 | Dec. 1 | 1189 | 266 | 107 | 1353 |
| Clutch. Hoisting-machine | P. F. Dundon | 735,862 | Aug. 11 | 1595 | 340 | 105 | 1339 |
| Clutch. Magnetic | E. R Douglas | 721,678 | Mar. 3 | 53 | 12 | 103 | 13 |
| Clutch. Magnetic | E. R. Douglas | 721,679 | Mar. 3 | 58 | 12 | 103 | 14 |
| Clutch. Magnetic | E. Knowlton | 727,641 | May 12 | 1530 | 345 | 104 | 347 |
| Clutch. Magnetic | H. G. Reist | 727,689 | May 12 | 1626 | 369 | 104 | 368 |
| Clutch. Magnetic | A. C. Eastwood | 730,621 | June 9 | 1999 | 444 | 104 | 1358 |
| Clutch. Magnetic | C. I Earll | 741,895 | Oct. 20 | 2881 | 643 | 106 | 1895 |
| Clutch. Magnetic | C. Jenatzy, Fils | 743,514 | Nov. 10 | 1444 | 302 | 107 | 325 |
| Clutch. Magnetic | E. M. Hewlett | 747,706 | Dec. 22 | 4414 | 994 | 107 | 2125 |
| Clutch mechanism | A. E. Norris. (Reissue) | 12,085 | Feb. 24 | 4226 | 960<br>961 | 102 | 1766 |
| Clutch mechanism | G. A. Ensign | 723,593 | Mar. 24 | 3615 | 807 | 103 | 800 |
| Clutch mechanism | O. Miller | 728,954 | May 26 | 4012 | 892 | 104 | 903 |
| Clutch mechanism | C. Jenatzy, Fils | 732,943 | July 7 | 435 | 108 | 105 | 94 |
| Clutch mechanism. Friction | P. H. Mack | 725,735 | Apr. 21 | 2453 | 555 | 103 | 1721 |
| Clutch mechanism. Friction | G F. Wissman | 729,478 | May 26 | 4920 | 1000 | 104 | 1092 |
| Clutch mechanism. Lever-actuated interlocking | B. W. Grist | 742,630 | Oct. 27 | 4324 | 973 | 106 | 2206 |
| Clutch-operating mechanism | E. Turney | 728,521 | May 19 | 3195 | 708<br>709 | 104 | 717 |
| Clutch-operating mechanism | C. L. Taylor | 746,761 | Dec. 15 | 2634 | 606 | 107 | 1708 |
| Clutch. Planter | W. L. Beall | 734,502 | July 28 | 3337 | 781 | 105 | 754 |
| Coach platform-gear | J. Knapp | 717,690 | Jan. 6 | 300 | 74 | 102 | 65 |
| Clutch. Pneumatic | C. B Goodspeed | 725,243 | Apr. 14 | 1538 | 349 | 103 | 1510 |
| Clutch-trip | W. A. Murphy | 725,756 | Apr. 21 | 2488 | 565 | 103 | 1729 |
| Coach-windows, &c. Antirattling cushion for | I. H. Mulford | 724,199 | Mar. 31 | 4791 | 1074 | 103 | 1060 |
| Coal. Apparatus for separating bone, slate, &c., from | C. H. Boardman and J. W. Miskell | 734,219 | July 21 | 2799 | 656<br>657 | 105 | 625 |
| Coal-bag. Canvas | W. M Morris and E. M. Staples | 724,316 | Mar. 31 | 5022 | 1125 | 103 | 1107 |
| Coal-box | C. Burwell | 732,706 | July 7 | 28 | 7 | 105 | 9 |
| Coal bricks, particularly from bituminous brown coal. Manufacturing | J. M. Schwarz | 734,002 | July 21 | 2377 | ------ | 105 | 533 |
| Coal. Briquetting | A. Waddell | 720,088 | Feb. 10 | 1257 | 287 | 102 | 1106 |
| Coal-burning device. Pulverized | B. J. Walker | 739,957 | Sept. 29 | 4667 | 1049 | 106 | 1065 |
| Coal. Burning pulverized | B. J. Walker | 739,958 | Sept. 29 | 4668 | 1049 | 106 | 1065 |
| Coal compound. Compressed | G. H. Becker | 739,815 | Sept. 29 | 4385 | ------ | 106 | 1006 |
| Coal-compressing device | J. B. Ladd | 731,374 | June 16 | 3381 | 756 | 104 | 1863 |
| Coal-digger | Z. Scott | 729,426 | May 26 | 4838 | 1072 | 104 | 1073 |
| Coal-drill support | A. Walker | 733,775 | July 14 | 1918 | 452 | 105 | 421 |

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| Invention. | Name. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|---|
| | | | | Spec. | Dr'g. | Vol. | Page. |
| Coal-drilling machine | J. W. Shallenberger | 722,412 | Mar. 10 | 1405 | 310 | 103 | 315 |
| Coal-elevator. Self-dumping | D. W. Jones | 719,009 | Jan. 27 | 2826 | 633<br>634 | 102 | 644 |
| Coal furnace. Soft- | C. S. Hood | 746,084 | Dec. 8 | 1416 | 317 | 107 | 1420 |
| Coal-handling machinery | T. A. Coffin | 732,923 | July 7 | 402 | 97, 98 | 105 | 87 |
| Coal-hod and sieve. Combined | W. H. Byar | 741,454 | Oct. 13 | 2024 | 450 | 106 | 1697 |
| Coal-hoist | G. Gillfoy | 735,965 | Aug. 11 | 1769 | 379 | 105 | 1377 |
| Coal-loading apparatus | C. Allison | 748,331 | Dec. 29 | 5601 | 1277 | 107 | 2407 |
| Coal, &c. Machine for conveying, trimming, and transferring | J. McBride, Sr | 730,554 | June 9 | 1876 | 419<br>420 | 104 | 1531 |
| Coal, &c. Means for cutting | H. V. Neukirch | 733,073 | July 7 | 665 | 159 | 105 | 141 |
| Coal or other materials. Classifying apparatus for | F. Blanc | 735,855 | Aug. 11 | 1580 | 336 | 105 | 1336 |
| Coal or rock drill | L. K. Koontz | 721,895 | Mar. 3 | 440 | 97 | 103 | 97 |
| Coal or rock drill | L. K. Koontz | 721,896 | Mar. 3 | 441 | 97 | 103 | 97 |
| Coal or rock drill | I. Wantling | 740,720 | Oct. 6 | 615 | 137<br>138 | 106 | 1379 |
| Coal or wood bag | F. S. Converse | 733,542 | July 14 | 1509 | 360 | 105 | 336 |
| Coal-screen | J. P. Burke | 742,158 | Oct. 27 | 3450 | 769<br>770 | 106 | 2025 |
| Coal screener and bagger | J. H. Gmelin | 741,398 | Oct. 13 | 1934 | 427 | 106 | 1679 |
| Coal-scuttle bottom | H. E. Detmers | 738,300 | Sept. 8 | 1516 | 328 | 106 | 342 |
| Coal storing and delivering apparatus | C. H. Boardman | 743,434 | Nov. 10 | 1270 | 261 | 107 | 286 |
| Coal-tar composition and pitches. Manufacture of | F. J. Warren | 738,966 | Sept. 15 | 2817 | ------ | 106 | 636 |
| Coaling-station or storehouse for coal, &c | F. Snare, W. G. Triest, and J. A. McNicol. | 731,965 | June 23 | 4490 | 1001<br>1002 | 104 | 2112 |
| Coaster-brake | E. W. Clark | 721,018 | Feb. 17 | 2979 | 685 | 102 | 1480 |
| Coaster-brake | C. Glover | 721,437 | Feb. 24 | 3807 | 866 | 102 | 1673 |
| Coaster-brake | C. Glover | 721,438 | Feb. 24 | 3809 | 866 | 102 | 1673 |
| Coaster-brake | F. Schmitz | 732,121 | June 30 | 4814 | 1074 | 104 | 2191 |
| Coaster-brake | C. Glover | 735,087 | Aug. 4 | 70 | 19 | 105 | 996 |
| Coaster-brake | A. F. Rockwell | 745,672 | Dec. 1 | 646 | 149 | 107 | 1236 |
| Coaster-brake | G. F. Barton | 747,576 | Dec. 22 | 4160 | 935 | 107 | 2069 |
| Coaster-brake. Back-pedaling | J. Redding | 728,295 | May 19 | 2793 | 618<br>619 | 104 | 634 |
| Coat | J. G. Weimer | 728,640 | May 19 | 3443 | 763<br>764 | 104 | 770 |
| Coat | M. Wenzel | 736,654 | Aug. 18 | 3018 | 666 | 105 | 1659 |
| Coat | W. E. Smith | 746,185 | Dec. 8 | 1603 | 358 | 107 | 1463 |
| Coat and hat hanger | C. Schlicker | 718,731 | Jan. 20 | 2307 | 510 | 102 | 521 |
| Coat and hat hanger | G. B. Willett | 722,548 | Mar. 10 | 1662 | 366 | 103 | 373 |
| Coat and hat rack | R. E. Hart | 725,441 | Apr. 14 | 1900 | 425 | 103 | 1587 |
| Coat and hat rack. Coin-operated | E. G. Lindheimer | 717,874 | Jan. 6 | 684 | 152<br>153 | 102 | 146 |
| Coat breast-stay | M. M. Marks | 743,304 | Nov. 3 | 948 | 206 | 107 | 204 |
| Coat-collar. Detachable | W. Joel | 744,351 | Nov. 17 | 3061 | 657 | 107 | 684 |
| Coat-hanger | H. C. Hinchcliff | 725,082 | Apr. 14 | 1239 | 279 | 103 | 1448 |
| Coat-hanger | J. J. Fuller | 727,342 | May 5 | 974 | 211 | 104 | 210 |
| Coat-hanger | I. F. Baer | 735,443 | Aug. 4 | 791 | 168 | 105 | 1149 |
| Coat-hanger | J. E. Twitchell | 735,624 | Aug. 4 | 1129 | 239 | 105 | 1221 |
| Coat-holder | J. L. Seitz | 738,575 | Sept. 8 | 2057 | 448 | 106 | 458 |
| Coat-lining | M. Weber | 733,780 | July 14 | 1931 | 454 | 105 | 424 |
| Coat-rack. Automatic | A. J. Battle | 718,688 | Jan. 20 | 2229 | 488 | 102 | 505 |
| Coat-stay | C. Richman | 743,928 | Nov. 10 | 2195 | 473 | 107 | 483 |
| Coats, hats, &c. Lock-hanger for | J. C. Backus | 727,056 | May 5 | 458 | 96 | 104 | 100 |
| Coated articles. Apparatus for removing surplus metal from | G. Porter | 720,283 | Feb. 10 | 1619 | 371 | 102 | 1181 |
| Coated plate. Bronze- | C. P. H. Ahrle | 731,831 | June 23 | 4256 | 947 | 104 | 2061 |
| Coating. Antifouling | G. D. Coleman | 741,228 | Oct. 13 | 1579 | ------ | 106 | 1604 |
| Coating apparatus. Electrolytic | H. W. Bötz | 725,208 | Apr. 14 | 1474 | 335 | 103 | 1497 |
| Coating for metal structures. Antifouling | G. D. Coleman | 741,769 | Oct. 20 | 2659 | ------ | 106 | 1847 |
| Coating iron with zinc. Electrolytically | E. Goldberg | 733,028 | July 7 | 579 | ------ | 105 | 124 |
| Coating metal pipes or conduits. Apparatus for | T. E. Dwyer | 737,595 | Sept. 1 | 71 | 14 | 106 | 18 |
| Coating metal pipes or conduits. Apparatus for | G. W. Harrington | 737,618 | Sept. 1 | 111 | 24 | 106 | 26 |
| Coating metal with silver. Composition for | E. D. Kendall | 724,108 | Mar. 31 | 4602 | ------ | 103 | 1023 |
| Coating with metal | C. E. Munroe | 724,317 | Mar. 31 | 5024 | ------ | 103 | 1107 |
| Coating with tin, &c. Machinery for pickling plates for | J. E. Lewis | 717,585 | Jan. 6 | 112 | 29 | 102 | 26 |
| Coatings. Making antifouling | G. D. Coleman | 741,227 | Oct. 13 | 1578 | ------ | 106 | 1603 |
| Coatings on metallic objects. Depositing metallic | A. Darlay | 744,170 | Nov. 17 | 2717 | ------ | 107 | 607 |
| Cock. Automatic cylinder- | E. L. Jones | 719,809 | Feb. 3 | 727 | 171 | 102 | 977 |
| Cock. Automatic cylinder- | J. N. Mowery | 722,872 | Mar. 17 | 2280 | 510 | 103 | 514 |
| Cock. Automatic gage- | G. T. Voorhees | 731,826 | June 23 | 4247 | 946 | 104 | 2059 |
| Cock. Ball- | A. Nelson | 737,955 | Sept. 1 | 796 | 174 | 106 | 174 |
| Cock. Bath- | H. M. Weaver | 743,602 | Nov. 10 | 1618 | 338 | 107 | 361 |
| Cock. Bib- | J. H. Savill | 730,165 | June 2 | 1150 | 259 | 104 | 1362 |
| Cock. Blow-off | G. H. Truman | 725,893 | Apr. 21 | 2737 | 623 | 103 | 1782 |
| Cock. Check and waste | W. F. Brunt | 722,419 | Mar. 10 | 1416 | 312 | 103 | 317 |
| Cock. Compression stop- | E. Scheiber and E. Kwaysser | 729,423 | May 26 | 4835 | 1071 | 104 | 1072 |
| Cock. Convertible stop- | C. Hirsch | 731,684 | June 23 | 3986 | 889 | 104 | 2002 |
| Cock. Cylinder- | J. M. Galey | 737,383 | Aug. 25 | 4381 | 977 | 105 | 1966 |
| Cock for air-brake systems. Angle- | A. De Hodell | 731,867 | June 23 | 4306 | 961 | 104 | 2071 |
| Cock. Four-way | P. McDonald | 717,899 | Jan. 6 | 725 | 162 | 102 | 155 |
| Cock. Four-way | P. McDonald | 743,744 | Nov. 10 | 1861 | 392<br>393 | 107 | 414 |
| Cock. Gage- | F. D. Philp | 727,195 | May 5 | 700 | 150 | 104 | 151 |
| Cock. Gage- | W. Guethler | 733,548 | July 14 | 1518 | 361 | 105 | 338 |
| Cock. Gage- | H. B. Souders, C. C. Cotter, and C. S. Wilson. | 740,941 | Oct. 6 | 1018 | 230 | 106 | 1463 |
| Cock. Gage- | A. W. Cadman | 742,002 | Oct. 20 | 3119 | 696 | 106 | 1942 |
| Cock. Gage- | A. J. Fink, Jr. | 743,702 | Nov. 10 | 1788 | 377 | 107 | 398 |
| Cock. Gas- | W. E. Hawkins | 720,027 | Feb. 10 | 1135 | 259 | 102 | 1080 |
| Cock. Gas- | E. D. Booz | 731,271 | June 16 | 3184 | 709 | 104 | 1821 |
| Cock. Gas- | G. A. Brachhausen | 734,505 | July 28 | 3341 | 782 | 105 | 754 |
| Cock. Gas-regulating | A. M. Gummer | 746,500 | Dec. 8 | 2157 | 496 | 107 | 1579 |
| Cock. High-pressure ball- | O. J. Fabian | 719,447 | Feb. 3 | 64 | 15 | 102 | 839 |
| Cock lock. Gas- | F. S. Martin | 719,241 | Jan. 27 | 3272 | 731 | 102 | 736 |

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| Cock-operating device for steam-engines. Automatic | O. Weitzel | 735,633 | Aug. 4 | 1147 | 242 | 105 | 1225 |
| Cock-operating mechanism. Drain- | H. W. McCombs | 728,491 | May 19 | 3147 | 696 | 104 | 707 |
| Cock or valve. Ball | J. H. Cable | 738,523 | Sept. 8 | 1978 | 430 | 106 | 440 |
| Cock or valve. Oil | H. E. Brunner and E. J. Patterson | 727,743 | May 12 | 1742 | 391 | 104 | 392 |
| Cock repair-spindle | E. J. Gallagher | 728,699 | May 19 | 3544 | 788 | 104 | 792 |
| Cock. Safety gas- | L. Jensen and J. Christensen | 721,308 | Feb. 24 | 3563 | 811 | 102 | 1623 |
| Cock. Safety gas- | G. E. Biot | 725,660 | Apr. 21 | 2325 | 525 | 103 | 1691 |
| Cock. Safety gas- | H. J. Doll | 748,487 | Dec. 29 | 5905 | 1342 | 107 | 2475 |
| Cock. Stop- | P. R. Fern | 722,092 | Mar. 3 | 801 | 178 | 103 | 173 |
| Cock. Stop and waste | S. Resek | 722,752 | Mar. 17 | 2067 | 462 | 103 | 473 |
| Cock. Time-controlled gas- | H. H. Ward | 732,243 | June 30 | 5070 | 1127<br>1128 | 104 | 2244 |
| Cock. Water-gage | J. C. Jensen | 728,722 | May 19 | 3592 | 798 | 104 | 802 |
| Cock. Water-gage | C. C. Wakefield | 743,354 | Nov. 3 | 1051 | 225 | 107 | 224 |
| Cocoa and making same. Soluble | J. C. Haley | 731,563 | June 23 | 3762 | | 104 | 1959 |
| Cocoa substitutes. Manufacturing | J. Meinl | 737,432 | Aug. 25 | 4492 | | 105 | 1990 |
| Coffee concentrate and making same | S. Kato | 735,777 | Aug. 11 | 1412 | | 105 | 1299 |
| Coffee-cooker | P. Renner | 741,547 | Oct. 13 | 2227 | 496 | 106 | 1741 |
| Coffee extract. Apparatus for the manufacture of | H. Eschwege | 731,028 | June 16 | 2745 | 612 | 104 | 1734 |
| Coffee-making machine | L. Bezzera | 726,793 | Apr. 28 | 4428 | 997<br>998 | 103 | 2139 |
| Coffee. Manufacturing | W. E. Baker | 726,812 | Apr. 28 | 4462 | 1007 | 103 | 2147 |
| Coffee-mill | W. Pearcy | 718,515 | Jan. 13 | 1893 | 415 | 102 | 423 |
| Coffee-mill | A. E. Bronson, Jr. | 743,818 | Nov. 10 | 2001 | 425 | 107 | 442 |
| Coffee or tea infuser and strainer | F. A. Wegner | 739,470 | Sept. 22 | 3743 | 835 | 106 | 850 |
| Coffee or tea pot | E. Wilkinson | 726,810 | Apr. 28 | 4460 | 1007 | 103 | 2146 |
| Coffee or tea pot percolator | W. R. Montgomery | 745,883 | Dec. 1 | 1058 | 238 | 107 | 1324 |
| Coffee-pot | A. E. Block | 719,727 | Feb. 3 | 573 | 129 | 102 | 943 |
| Coffee-pot | T. C. De Hart | 722,213 | Mar. 10 | 1043 | 230 | 103 | 238 |
| Coffee-pot | C. H. Atkins | 725,193 | Apr. 14 | 1441 | 327 | 103 | 1489 |
| Coffee-pot | M. C. Crawley | 730,747 | June 9 | 2213 | 492 | 104 | 1603 |
| Coffee-pot | H. W. Higgins | 731,454 | June 23 | 3564 | 794 | 104 | 1919 |
| Coffee-pot | J. W. Vogan | 741,196 | Oct. 13 | 1514 | 342 | 106 | 1590 |
| Coffee-pot | C. A. Robertson | 746,165 | Dec. 8 | 1566 | 350<br>351 | 107 | 1455 |
| Coffee-pot | J. Heinrichs | 747,705 | Dec. 22 | 4412 | 994 | 107 | 2125 |
| Coffee-pot | T. B. Ferguson | 748,491 | Dec. 29 | 5916 | 1343 | 107 | 2477 |
| Coffee-pot indicator | A. Uhalt | 745,744 | Dec. 1 | 767 | 175 | 107 | 1262 |
| Coffee-roaster | C. Constine | 742,168 | Oct. 27 | 3472 | 776 | 106 | 2029 |
| Coffee-roaster. Electric | G. C. Lester | 718,135 | Jan. 13 | 1146 | 255 | 102 | 262 |
| Coffee. Roasting | L. Giacomini | 726,279 | Apr. 28 | 3426 | 779 | 103 | 1938 |
| Coffee-roasting apparatus | J. Arbuckle | 719,717 | Feb. 3 | 555 | 126 | 102 | 939 |
| Coffee-roasting apparatus | L. Giacomini | 726,280 | Apr. 28 | 3427 | 780 | 103 | 1939 |
| Coffee substitute | M. H. Just | 741,041 | Oct. 13 | 1203 | | 106 | 1523 |
| Coffee. Treating | W. E. Baker | 736,346 | Aug. 18 | 2448 | 535 | 105 | 1541 |
| Coffer-dam | T. A. Dungan | 732,401 | June 30 | 5375 | 1191 | 104 | 2308 |
| Coffer-dam and caisson. Combined | W. T. Pool | 728,497 | May 19 | 3156 | 698<br>699 | 104 | 709 |
| Coffer-dam and foundation | D. D. McBean | 745,455 | Dec. 1 | 274 | 65, 66 | 107 | 1157 |
| Coffin | R. E. Van Patten | 718,803 | Jan. 20 | 2440 | 541 | 102 | 548 |
| Coffin-frame | M. L. Carpenter | 737,580 | Sept. 1 | 39 | 8 | 106 | 11 |
| Coffin-guide | W. Koeper | 748,510 | Dec. 29 | 5954 | 1351 | 107 | 2485 |
| Coffin-lowering device | C. W. Wellman | 717,727 | Jan. 6 | 365 | 89 | 102 | 78 |
| Coffins. Device for the preservation of | O. R. Hahn | 724,696 | Apr. 7 | 516 | 122 | 103 | 1279 |
| Coherer system. Self-decohering | A. Popoff | 722,139 | Mar. 3 | 878 | 196 | 103 | 188 |
| Coil-forming apparatus | E. L. Aiken | 744,671 | Nov. 17 | 3603 | 777 | 107 | 798 |
| Coil-heating furnace | C. Mercâder | 726,556 | Apr. 28 | 3979 | 901 | 103 | 2047 |
| Coil. Spark- | C. P. L. Noxon | 747,755 | Dec. 22 | 4494 | 1013 | 107 | 2144 |
| Coil-spring | V. Meyer | 736,333 | Aug. 11 | 2420 | 528 | 105 | 1519 |
| Coils. Forming | J. W. Lundskog | 733,234 | July 7 | 952 | 230 | 105 | 199 |
| Coils. Forming | L. F. Fales | 747,598 | Dec. 22 | 4203 | 946 | 107 | 2078 |
| Coils. Winding | J. W. Lundskog | 733,233 | July 7 | 950 | 229 | 105 | 199 |
| Coiler-head | C. L. Hildreth. (Reissue) | 12,109 | May 12 | 2560 | 570 | 104 | 563 |
| Coiler-head | C. L. Hildreth. (Reissue) | 12,110 | May 12 | 2561 | 570 | 104 | 563 |
| Coiler-head | C. L. Hildreth | 737,406 | Aug. 25 | 4439 | 995 | 105 | 1979 |
| Coiling-machine | A. Schweitzer and A. Hausold | 742,360 | Oct. 27 | 3834 | 860<br>861 | 106 | 2104 |
| Coin-bunching machine | J. Rice | 720,070 | Feb. 10 | 1207 | 277<br>278 | 102 | 1096 |
| Coin-controlled apparatus | H. P. Gillette | 727,123 | May 5 | 578 | 125 | 104 | 125 |
| Coin-controlled apparatus | S. Wollheim | 730,068 | June 2 | 995 | 223 | 104 | 1330 |
| Coin-controlled apparatus | J. C. A. Riecké | 732,115 | June 30 | 4805 | 1072 | 104 | 2189 |
| Coin-controlled apparatus. Fraud-preventive for | H. S. Mills | 717,891 | Jan. 6 | 712 | 159 | 102 | 152 |
| Coin-controlled device | W. H. Walter | 737,304 | Aug. 25 | 4243 | 944<br>945 | 105 | 1936 |
| Coin-controlled machine | E. de Kleist | 723,878 | Mar. 31 | 4130 | 931 | 103 | 926 |
| Coin-controlled machine | B. Holz, Jr | 724,184 | Mar. 31 | 4757 | 1067 | 103 | 1053 |
| Coin-controlled machine | W. W. Rosenfield | 743,931 | Nov. 10 | 2199 | 474<br>475 | 107 | 484 |
| Coin-controlled-machine coin-controlled feeding apparatus. | E. S. Scheble | 742,909 | Nov. 3 | 158 | 36 | 107 | 35 |
| Coin-controlled mechanism | L. Pedersen | 747,216 | Dec. 15 | 3513 | 797 | 107 | 1906 |
| Coin-controlled mirror-receptacle | J. A. Miller | 729,631 | June 2 | 193 | 45 | 104 | 1167 |
| Coin-counting device | H. Goetze and L. M. Sanford | 719,459 | Feb. 3 | 83 | 20 | 102 | 843 |
| Coin-counting machine | C. W. Johnson | 726,067 | Apr. 21 | 3017 | 686 | 103 | 1839 |
| Coin-delivery apparatus | A. Quambusch | 729,794 | June 2 | 496 | 110 | 104 | 1229 |
| Coin-detective | G. W. Brown | 735,702 | Aug. 11 | 1287 | 275 | 105 | 1272 |
| Coin-detector chute | O. Jaeger | 732,746 | July 7 | 85 | 24 | 105 | 21 |
| Coin-freed mechanism | W. J. Wilson | 726,387 | Apr. 28 | 3641 | 825 | 103 | 1983 |
| Coin-freed mechanism for gas or other fluid meters | B. R. Beale and A. E. Bagnall | 722,554 | Mar. 10 | 1671 | 369<br>370 | 103 | 375 |
| Coin-holder | A. G. Bowen | 734,806 | July 28 | 3940 | 919 | 105 | 877 |
| Coin-holder | P. C. Fish | 736,080 | Aug. 11 | 1994 | 424 | 105 | 1426 |
| Coin-indicating device. Electrical | R. B. Hazlett | 734,127 | July 21 | 2640 | 623<br>624 | 105 | 591 |

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| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Coin-indicating device. Electrical | R. B. Hazlett | 734,176 | July 21 | 2729 | 642 | 105 | 610 |
| Coin-indicating device. Electrical | R. B. Hazlett | 734,461 | July 21 | 3248 | 764 | 105 | 719 |
| Coin-operated lock | S. R. Parkes | 730,691 | June 9 | 2128 | 472 | 104 | 1586 |
| Coin-operated machine | H. S. Jarboe and P. Keller | 741,921 | Nov. 24 | 4080 | 879 | 107 | 917 |
| Coin-package | C. S. Batdorf | 717,964 | Jan. 6 | 829 | 187 | 102 | 178 |
| Coin-receptacle | J. I. Warman and C. Winter | 721,262 | Feb. 24 | 3499 | 795, 796 | 102 | 1609 |
| Coin-receptacle | A. Gross | 721,887 | Mar. 3 | 424 | 93 | 103 | 93 |
| Coin-receptacle | J. A. Steinmetz | 742,512 | Oct. 27 | 4105 | 925 | 106 | 2159 |
| Coin-receptacle | H. J. Valentine | 746,205 | Dec. 8 | 1641 | 365 | 107 | 1471 |
| Coin-slot | J. Loch | 737,640 | Sept. 1 | 147 | 32 | 106 | 35 |
| Coin-slot device | F. B. Hoffman | 720,028 | Feb. 10 | 1136 | 259 | 102 | 1081 |
| Coin-wrapper | C. A. Herr | 723,871 | Mar. 31 | 4119 | 929 | 103 | 924 |
| Coke and gas. Making | J. A. Potter | 731,949 | June 23 | 4461 | 995 | 104 | 2105 |
| Coke, &c. Apparatus for cooling | I. W. Pike | 720,065 | Feb. 10 | 1200 | 276 | 102 | 1094 |
| Coke. Apparatus for the manufacture of | P. Naef | 745,290 | Nov. 24 | 4821 | 1051, 1052 | 107 | 1069 |
| Coke-conveyer | E. G. B. Körting | 736,115 | Aug. 11 | 2048 | 436, 437 | 105 | 1437 |
| Coke conveyer. Hot- | M. Graham | 728,390 | May 19 | 2958 | 652 | 104 | 667 |
| Coke conveyer. Hot- | M. Graham | 732,545 | June 30 | 5650 | 1253 | 104 | 2364 |
| Coke conveyer. Hot- | M. Graham | 741,657 | Oct. 20 | 2428 | 544, 545 | 106 | 1799 |
| Coke-drawer | W. S. Jones and J. P. Donohoe | 721,519 | Feb. 24 | 3950 | 900 | 102 | 1704 |
| Coke-drawer | W. Kearns | 742,037 | Oct. 20 | 3191 | 712 | 106 | 1957 |
| Coke-drawer | D. Ferguson | 746,055 | Dec. 8 | 1369 | 305 | 107 | 1409 |
| Coke-drawing machine | B. J. Matteson | 722,599 | Mar. 10 | 1749 | 390, 391 | 103 | 391 |
| Coke-drawing machine | J. A. Hebb | 727,790 | May 12 | 1839 | 410, 411 | 104 | 410 |
| Coke-drawing machine | J. A. Hebb | 727,942 | May 12 | 2126 | 474, 475 | 104 | 471 |
| Coke-drawing machine | J. A. Hebb | 727,943 | May 12 | 2132 | 475, 476 | 104 | 473 |
| Coke-drawing machine | J. A. Hebb | 728,101 | May 12 | 2405 | 535, 536 | 104 | 530 |
| Coke-drawing machine | J. A. Hebb | 728,102 | May 12 | 2407 | 536, 537 | 104 | 530 |
| Coke-drawing-machine conveying mechanism | J. A. Hebb | 728,168 | May 12 | 2528 | 562 | 104 | 555 |
| Coke-lorry | G. D. Macdougall | 748,390 | Dec. 29 | 5704 | 1302 | 107 | 2431 |
| Coke. Manufacturing | J. F. Wilcox | 725,904 | Apr. 21 | 2751 | 626 | 103 | 1784 |
| Coke-oven | M. E. Rothberg | 718,027 | Jan. 6 | 958 | 213 | 102 | 206 |
| Coke-oven | M. E. Rothberg | 720,971 | Feb. 17 | 2892 | 662, 663 | 102 | 1462 |
| Coke-oven | G. F. Myers | 724,032 | Mar. 31 | 4458 | 1003, 1004 | 103 | 992 |
| Coke-oven | G. M. Miller | 728,953 | May 26 | 4011 | 892 | 104 | 902 |
| Coke-oven | G. S. Ramsay | 733,872 | July 14 | 2117 | 499 | 105 | 461 |
| Coke-oven | T. von Bauer | 740,078 | Sept. 29 | 4893 | 1096, 1097 | 106 | 1112 |
| Coke-oven and gas-producer | J. A. Potter | 731,950 | June 23 | 4464 | 996 | 104 | 2105 |
| Coke-oven construction | E. A. Moore | 725,750 | Apr. 21 | 2478 | 562 | 103 | 1726 |
| Coke-oven-discharging machine | J. E. Jones | 731,911 | June 23 | 4393 | 979, 980 | 104 | 2090 |
| Coke-oven-discharging machine | J. E Jones | 731,913 | June 23 | 4401 | 981 | 104 | 2092 |
| Coke-oven-discharging mechanism | J. E. Jones | 731,912 | June 23 | 4397 | 980 | 104 | 2091 |
| Coke-oven door | E. A. Moore | 725,745 | Apr. 21 | 2472 | 559 | 103 | 1725 |
| Coke-oven door | G. D. Macdougall | 736,281 | Aug. 11 | 2336 | 507, 508 | 105 | 1501 |
| Coke-oven-door frame. Water-cooled | E. A. Moore | 725,747 | Apr. 21 | 2475 | 560 | 103 | 1726 |
| Coke-oven door. Water-cooled | E. A. Moore | 725,746 | Apr. 21 | 2474 | 559, 560 | 103 | 1725 |
| Coke-oven doors. Means for removing | E. A. Moore | 725,471 | Apr. 14 | 1953 | 438, 439 | 103 | 1598 |
| Coke-oven foundation or substructure | E. A. Moore | 725,748 | Apr. 21 | 2476 | 560, 561, 562, 563, 564, 565, 566 | 103 | 1726 |
| Coke-oven lorry | C. W. Umholtz | 718,742 | Jan. 20 | 2329 | 514 | 102 | 525 |
| Coke-oven-operating apparatus | P. B. Hasbrouck | 733,036 | July 7 | 590 | 144 | 105 | 125 |
| Coke-oven. Regenerative | H. Koppers | 738,918 | Sept. 15 | 2739 | 605 | 106 | 620 |
| Coke-oven. Retort | M. Updike | 731,088 | June 16 | 2858 | 634, 635 | 104 | 1758 |
| Coke-oven-watering apparatus | D. B. Stauft | 724,350 | Mar. 31 | 5091 | 1140 | 103 | 1120 |
| Coke-ovens. Apparatus for compressing and charging coal into | J. Haug | 747,172 | Dec. 15 | 3424 | 776 | 107 | 1888 |
| Coke-ovens. Apparatus for making briquets for circular | J. W. Seaver | 722,151 | Mar. 3 | 904 | 200, 201 | 103 | 193 |
| Coke-ovens. Apparatus for pushing coke from | C. H. Wellman and A. Ernst | 731,252 | June 16 | 3152 | 701 | 104 | 1814 |
| Coke-ovens. Combined charging and discharging device for | C. H. Wellman, A. Ernst, and F. H. Moyer. | 731,251 | June 16 | 3151 | 700, 701 | 104 | 1814 |
| Coke-ovens. Means for protecting | E. A. Moore | 725,749 | Apr. 21 | 2477 | 561 | 103 | 1726 |
| Coke-pusher | E. A. Moore | 723,479 | Mar. 24 | 3426 | 765, 766 | 103 | 762 |
| Coke-pusher. Double | F. W. C. Schniewind | 723,493 | Mar. 24 | 3448 | 771, 772 | 103 | 766 |
| Coke receiver and loader | J. M. McClellon | 734,592 | July 28 | 3503 | 818 | 105 | 789 |
| Coke. Removing silica from | C. M. Hall | 733,389 | July 14 | 1247 | 295 | 105 | 280 |
| Coking-kiln | C. W., A., and J. Mettler | 732,097 | June 30 | 4768 | 1064, 1065 | 104 | 2180 |
| Coking-oven | L. J. Hirt | 722,982 | Mar. 17 | 2468 | 553 | 103 | 554 |
| Coking-oven | R. S. Moss | 725,646 | Apr. 14 | 2291 | 518 | 103 | 1670 |
| Collapsible box | W. Van Horn | 723,343 | Mar. 24 | 3138 | 705 | 103 | 705 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|---|
| | | | | Spec. | Dr'g. | Vol. | Page. |
| Collapsible box | L. A. McCord | 728,749 | May 19 | 3635 | 808 | 104 | 811 |
| Collapsible box or crate | C. Richter | 728,617 | May 19 | 3402 | 753 | 104 | 762 |
| Collapsible gate | C. Meyer | 730,036 | June 2 | 942 | 211 | 104 | 1319 |
| Collapsible or folding box for fruit, confectionery, pastry, &c. | G. W. King | 744,563 | Nov. 17 | 3430 | 739 | 107 | 762 |
| Collapsible table | C. E. Wehn | 737,805 | Sept. 1 | 467 | 104 | 106 | 105 |
| Collar and hame-fastener. Horse- | C. J. Dolley | 743,624 | Nov. 10 | 1665 | 349 | 107 | 372 |
| Collar-blank | G. J. Dormandy | 744,511 | Nov. 17 | 3344 | 720 | 107 | 744 |
| Collar-blanks, &c. Machine for folding | G. J. Dormandy | 725,326 | Apr. 14 | 1679 | 378<br>379<br>380 | 103 | 1540 |
| Collar. Breast- | G. E. Pratt | 721,388 | Feb. 24 | 3718 | 845 | 102 | 1655 |
| Collar-fastener | W. M. Shewry | 724,342 | Mar. 31 | 5076 | 1135 | 103 | 1117 |
| Collar-fastener | W. J. Baker | 745,135 | Nov. 24 | 4512 | 977 | 107 | 1005 |
| Collar-fastener | A. Reed | 746,575 | Dec. 8 | 2288 | 524 | 107 | 1610 |
| Collar fastener. Horse | S. H. Hull | 722,304 | Mar. 10 | 1217 | 270 | 103 | 275 |
| Collar fastener. Horse- | J. R. Rose | 748,017 | Dec. 29 | 5046 | 1139 | 107 | 2288 |
| Collar-fastening | J. W. Alexander | 743,795 | Nov. 10 | 1957 | 415 | 107 | 434 |
| Collar-fastening clasp | C. Lassén | 740,289 | Sept. 29 | 5277 | 1189 | 106 | 1192 |
| Collar. Fold- | J. M. Beiermeister | 723,575 | Mar. 24 | 3580 | 800 | 103 | 793 |
| Collar. Fold- | W. Hess, Jr. | 746,078 | Dec. 8 | 1405 | 314<br>315 | 107 | 1418 |
| Collar-foundation | A. M. Weber | 718,294 | Jan. 13 | 1443 | 321 | 102 | 326 |
| Collar-holder | O. S. Lucas | 718,716 | Jan. 20 | 2282 | 503 | 102 | 516 |
| Collar. Horse- | P. Olson | 723,904 | Mar. 31 | 4177 | 941<br>942 | 103 | 936 |
| Collar. Horse- | W. C. Lawson | 733,911 | July 14 | 2194 | 516 | 105 | 477 |
| Collar. Horse- | A. I. Butler | 734,399 | July 21 | 3146 | 739 | 105 | 699 |
| Collar. Horse- | A. G. Couch | 743,832 | Nov. 10 | 2021 | 429<br>430 | 107 | 447 |
| Collar. Metallic horse- | D. F. O'Loughlin | 737,459 | Aug. 25 | 4541 | 1018 | 105 | 2001 |
| Collar or cuff. Woven | A. L. Willard | 745,305 | Nov. 24 | 4864 | 1061<br>1062 | 107 | 1078 |
| Collar or the like. Horse- | J. E. Chiloteguy | 747,375 | Dec. 22 | 3815 | 858 | 107 | 1990 |
| Collar pad. Horse- | J. R. Roach | 732,961 | July 7 | 464 | 116 | 105 | 100 |
| Collar-retainer | R. P. Schilling | 733,680 | July 14 | 1744 | 413 | 105 | 385 |
| Collar. Safety set- | C. Cloukey | 732,714 | July 7 | 37 | 9 | 105 | 11 |
| Collar shield. Horse- | B. F. George | 735,747 | Aug. 11 | 1366 | 294 | 105 | 1289 |
| Collar. Split | H. W. Stauffer and A. H. Riegner | 727,707 | May 12 | 1687 | 376 | 104 | 381 |
| Collar stretching and measuring apparatus | J. C. and R. A. Doring | 746,048 | Dec. 8 | 1359 | 303 | 107 | 1407 |
| Collar-supporter | A. P. Howes | 744,344 | Nov. 17 | 3046 | 654 | 107 | 681 |
| Collar throat-brace. Horse- | J. H. Miller | 736,128 | Aug. 11 | 2075 | 444 | 105 | 1442 |
| Collar turning and dampening device | C. C. Gridley | 734,542 | July 28 | 3415 | 797 | 105 | 771 |
| Collars. Manufacturing | G. J. Dormandy | 742,400 | Oct. 27 | 3905 | 877<br>878 | 106 | 2118 |
| Collars, stocks, &c. Means for supporting | M. George | 744,329 | Nov. 17 | 3019 | 648 | 107 | 675 |
| Color-carriages. Mechanism for propelling | A. Fornander | 737,917 | Sept. 1 | 721 | 156 | 106 | 158 |
| Color-exhibiting device | H. Westfahl | 720,646 | Feb. 17 | 2316 | 531 | 102 | 1339 |
| Color-plates, &c. Holding and registering hook for | O. H. Quetsch | 726,572 | Apr. 28 | 4015 | 909 | 103 | 2054 |
| Coloring-matter. Blue | R. Bohn | 739,579 | Sept. 22 | 3942 | ------ | 106 | 892 |
| Coloring-matter containing halogen and making same. Indigo | P. E. Oberreit | 730,148 | June 2 | 1122 | ------ | 104 | 1356 |
| Coloring-matter. Disazo | E. Schleicher and A. Dorrer | 741,936 | Oct. 20 | 2970 | ------ | 106 | 1913 |
| Coloring-matter for washable fabrics. Removable | M. L. Fisher | 721,290 | Feb. 24 | 3535 | ------ | 102 | 1618 |
| Coloring relief or raised ornamentations on fabrics. Apparatus for | J. Bennett | 724,660 | Apr. 7 | 446 | 108<br>109 | 103 | 1265 |
| Colter and plow | H. J. Hughes | 728,236 | May 19 | 2668 | 596 | 104 | 606 |
| Colter-clamp | J. Clayton | 733,155 | July 7 | 805 | 195 | 105 | 170 |
| Colter scraper attachment. Plow- | R. E. Miller | 717,698 | Jan. 6 | 316 | 77 | 102 | 68 |
| Columbarium-cell | W. J. Mathews | 741,355 | Oct. 13 | 1853 | 410 | 106 | 1663 |
| Column | F. P. Angell | 724,420 | Apr. 7 | 7 | 2 | 103 | 1172 |
| Column | G. J. Pfahl | 730,150 | June 2 | 1125 | 252 | 104 | 1356 |
| Column and beam. Composite | W. N. Wight | 732,485 | June 30 | 5540 | 1229 | 104 | 2340 |
| Column. Built-up | A. Mertes | 730,191 | June 2 | 1190 | 267 | 104 | 1370 |
| Column-clamp | A. A. Loetscher | 727,651 | May 12 | 1555 | 350 | 104 | 352 |
| Column construction | A. G. Perkins | 724,495 | Apr. 7 | 141 | 34 | 103 | 1200 |
| Column, girder, or structure. Metal | E. Zeh and W. D. Forsyth | 742,549 | Oct. 27 | 4185 | 941 | 106 | 2175 |
| Column glued joint. Turned- | J. Neill | 730,789 | June 9 | 2284 | 507 | 104 | 1618 |
| Column lock-joint | W. L. Taylor | 727,862 | May 12 | 1973 | 440 | 104 | 437 |
| Column. Metal | J. F. Clutter | 738,163 | Sept. 8 | 1244 | 270 | 106 | 285 |
| Column. Metal | J. Lanz | 747,441 | Dec. 22 | 3929 | 884 | 107 | 2016 |
| Column-support | T. L. Beaufait | 745,315 | Dec. 1 | 7 | 2 | 107 | 1102 |
| Column with ball-bearing. Concrete | H. Becher | 731,743 | June 23 | 4097 | 915 | 104 | 2025 |
| Column. Wood | E. Koll | 744,566 | Nov. 17 | 3436 | 740 | 107 | 763 |
| Columns. Making metallic | J. F. Clutter | 739,650 | Sept. 22 | 4072 | 907 | 106 | 920 |
| Columns or posts. Construction of | L. J. Sicke | 743,765 | Nov. 10 | 1893 | 400 | 107 | 421 |
| Comb:<br>*See* Currycomb. Hair-comb.<br>Fountain-comb. Hair-drying comb.<br>Gas-heated comb. Puff-comb. | | | | | | | |
| Comb | J. E. Head | 718,054 | Jan. 6 | 994 | 222 | 102 | 214 |
| Comb | C. Moeschl | 722,315 | Mar. 10 | 1231 | 274 | 103 | 278 |
| Comb | E. B. Kingman | 726,699 | Apr. 28 | 4249 | 961 | 103 | 2103 |
| Comb | T. Douglas | 727,312 | May 5 | 912 | 198 | 104 | 197 |
| Comb | J. L. Gillum | 732,543 | June 30 | 5648 | 1252 | 104 | 2364 |
| Comb | E. B. Kingman | 735,115 | Aug. 4 | 130 | 29 | 105 | 1010 |
| Comb | V. Montain | 739,898 | Sept. 29 | 4558 | 1025 | 106 | 1040 |
| Comb | H. Traun | 740,338 | Sept. 29 | 5365 | 1208 | 106 | 1211 |
| Comb | J. Koenig | 744,768 | Nov. 24 | 3815 | 822 | 107 | 861 |
| Comb | H. Prevear | 745,073 | Nov. 24 | 4399 | 950 | 107 | 982 |
| Comb | M. H. Richardson and G. F. Wright | 748,420 | Dec. 29 | 5774 | 1317 | 107 | 2447 |
| Comb-dabbing brush mechanism | A. J. O'Reilly | 744,389 | Nov. 17 | 3132 | 672 | 107 | 699 |
| Comb for holding false hair | A. Roehm and H. Schirmer | 739,560 | Sept. 22 | 3887 | 871 | 106 | 880 |
| Comb holder and cleaner | L. F. Ferrell | 719,775 | Feb. 3 | 675 | 155 | 102 | 965 |
| Combs. Manufacturing | W. S. Bechtold | 732,997 | July 7 | 526 | 130 | 105 | 113 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Combers, &c. Cam-race pin for cotton- | A. C. Arey, Jr | 728,431 | May 19 | 3034 | 667 | 104 | 684 |
| Combing-machine | J. W. Nasmith | 724,119 | Mar. 31 | 4624 | 1042 1043 | 103 | 1028 |
| Combing-machine | H. Hoyle and E. Scarborough | 733,043 | July 7 | 608 | 149 | 105 | 130 |
| Combing-machine | C. F. Ainsworth and S. Anderton | 734,652 | July 28 | 3608 | 845 | 105 | 811 |
| Combing-machine | I. Hey | 742,425 | Oct. 27 | 3956 | 887 888 | 106 | 2127 |
| Combing-machine. Circular | J. H. and A. R. Whitehead and W. E. Layland. | 741,088 | Oct. 13 | 1296 | 297 | 106 | 1543 |
| Combing-machine drawing-motion. Cotton- | J. Slater | 730,711 | June 9 | 2162 | 479 480 | 104 | 1592 |
| Combing-machine drawing-off attachment | W. B. Jefferson | 730,021 | June 2 | 919 | 206 | 104 | 1315 |
| Combing-machine drawing-off mechanism | W. B. Lee and W. Fisher | 719,676 | Feb. 3 | 467 | 106 107 | 102 | 920 |
| Combing-machine stop-motion | O. L. Owen | 737,268 | Aug. 25 | 4176 | 930 | 105 | 1922 |
| Combing machine. Wool- | T. A. Jackson and W. E. Thompson | 735,980 | Aug. 11 | 1805 | 386 | 105 | 1386 |
| Combing-machines. Pressure-applying device for rolls of | P. Smith and S. Ambler | 718,285 | Jan. 13 | 1428 | 317 | 102 | 323 |
| Combing-needle filling-machine | T. Townsend | 723,080 | Mar. 17 | 2648 | 596 597 | 103 | 593 |
| Combination-heater | C. A. Mansfield and G. D. Hayes | 723,538 | Mar. 24 | 3516 | 787 | 103 | 780 |
| Combination-lock | J. B. Miller | 717,889 | Jan. 6 | 710 | 159 | 102 | 151 |
| Combination-lock | J. and C. Arner | 724,774 | Apr. 7 | 671 | 157 | 103 | 1311 |
| Combination-lock | C. F. Keller | 729,940 | June 2 | 760 | 168 | 104 | 1283 |
| Combination-lock | W. Almstalden | 747,116 | Dec. 15 | 3320 | 756 | 107 | 1867 |
| Combustible fluid. Producing | C. A. Kuenzel, Jr | 721,957 | Mar. 3 | 572 | 127 | 103 | 125 |
| Combustion. Device for securing more perfect | E. Honess | 720,695 | Feb. 17 | 2404 | 550 | 102 | 1358 |
| Combustion in coal. Compound for promoting | G. M. Dallas | 744,908 | Nov. 24 | 4055 | ------ | 107 | 912 |
| Combustion of fuel | R. Thomson | 726,115 | Apr. 21 | 3109 | 704 | 103 | 1859 |
| Combustion-regulating attachment | J. M. W. Kitchen | 747,440 | Dec. 22 | 3925 | 883 884 | 107 | 2015 |
| Commode | J. N. McGrew | 726,729 | Apr. 28 | 4303 | 971 | 103 | 2114 |
| Commutating and current-shaping device | F. H. Loring | 734,424 | July 21 | 3185 | 749 750 | 105 | 707 |
| Commutator | C. J. Roach | 742,743 | Oct. 27 | 4515 | 1023 | 106 | 2247 |
| Commutator | C. H. Ingalls | 744,077 | Nov. 17 | 2537 | 543 | 107 | 570 |
| Commutator | H. F. T. Erben | 747,873 | Dec. 22 | 4741 | 1071 | 107 | 2200 |
| Commutator-bar | W. L. R. Emmet | 745,336 | Dec. 1 | 37 | 8 | 107 | 1108 |
| Commutator-brush | N. C. Bassett | 731,740 | June 23 | 4091 | 914 | 104 | 2024 |
| Commutator-brush | C. Wirt | 736,048 | Aug. 11 | 1929 | 412 | 105 | 1412 |
| Commutator-brush holder | C. H. Hines | 735,375 | Aug. 4 | 635 | 132 | 105 | 1116 |
| Commutator-meter | J. F. Kelly | 720,152 | Feb. 10 | 1363 | 312 | 102 | 1130 |
| Commutators for dynamos or motors. Device for filing | J. B. MacIntosh | 723,399 | Mar. 24 | 3260 | 730 | 103 | 728 |
| Comparative register | R. W. Messenger | 735,551 | Aug. 4 | 1005 | 212 | 105 | 1193 |
| Compass | W. Schwarzer | 723,041 | Mar. 17 | 2565 | 577 | 103 | 575 |
| Compass attachment | J. L. Bliss | 725,399 | Apr. 14 | 1808 | 405 | 103 | 1567 |
| Compass. Beam- | J. F. Ellsworth | 718,923 | Jan. 20 | 2661 | 597 | 102 | 594 |
| Compass. Beam- | J. A. Traut | 734,014 | July 21 | 2413 | 564 | 105 | 542 |
| Compass or scriber | H. E. Seymour | 719,381 | Jan. 27 | 3542 | 790 | 102 | 795 |
| Compass. Recording- | E. Hedenstrom | 734,064 | July 21 | 2517 | 588 | 105 | 566 |
| Compasses | E. M. Ostlund | 723,720 | Mar. 24 | 3833 | 862 | 103 | 847 |
| Compasses | G. Oberbeck | 730,388 | June 9 | 1572 | 350 | 104 | 1464 |
| Compasses. Alidade or indicator for ships' | W. S. Burgess | 731,751 | June 23 | 4108 | 917 | 104 | 2027 |
| Compasses. Drawing- | H. R. Beasley | 729,717 | June 2 | 340 | 77 | 104 | 1199 |
| Compasses. Drawing- | J. Wild | 741,425 | Oct. 13 | 1969 | 436 | 106 | 1686 |
| Compasses. Ellipse or circle | J. W. Griffith | 743,490 | Nov. 10 | 1399 | 290 | 107 | 314 |
| Compasses. Locking | F. J. McCabe | 732,106 | June 30 | 4789 | 1068 | 104 | 2186 |
| Compasses or dividers | C. E. Hand | 724,697 | Apr. 7 | 517 | 123 | 103 | 1279 |
| Compasses. Pencil- | J. H. Miller | 731,200 | June 16 | 3069 | 681 | 104 | 1797 |
| Compensating system | F. G. Baum | 738,757 | Sept. 15 | 2435 | 534 | 106 | 553 |
| Compensating system | E. E. F. Creighton | 743,458 | Nov. 10 | 1331 | 273 | 107 | 299 |
| Compensating system | E. E. F. Creighton | 743,459 | Nov. 10 | 1334 | 274 | 107 | 300 |
| Compensator | F. G. Baum | 738,756 | Sept. 15 | 2433 | 534 | 106 | 552 |
| Compiling statistics. Schedule for | C. F. Pidgin | 740,041 | Sept. 29 | 4834 | 1084 1085 | 106 | 1101 |
| Composing-board in form of a galley for storing up composing-columns. | O. Friese | 730,526 | June 9 | 1835 | 409 | 104 | 1521 |
| Composing or like machines. Machine for producing perforated strips for | J. Lagarde | 734,576 | July 28 | 3466 | 810 | 105 | 782 |
| Composite material | A. Leisel | 732,569 | June 30 | 5704 | 1267 | 104 | 2377 |
| Composite post | A. B. Probasco | 725,770 | Apr. 21 | 2522 | 571 | 103 | 1736 |
| Composite structure | J. O. Ellinger | 735,228 | Aug. 4 | 379 | 73 | 105 | 1061 |
| Composite tube | R. W. Traylor | 730,845 | June 9 | 2378 | 525 | 104 | 1638 |
| Composition | G. F. Averill | 723,124 | Mar. 17 | 2723 | ------ | 103 | 607 |
| Composition | L. C. Gauvreau | 745,050 | Nov. 24 | 4345 | ------ | 107 | 971 |
| Composition material | G. H. Moore | 746,553 | Dec. 8 | 2248 | ------ | 107 | 1600 |
| Composition of matter | F. Padberg | 722,536 | Mar. 10 | 1645 | ------ | 103 | 369 |
| Composition of matter | S. Richman | 724,043 | Mar. 31 | 4475 | ------ | 103 | 996 |
| Composition of matter | E. H. Amet | 724,416 | Apr. 7 | 1 | 1 | 103 | 1171 |
| Composition of matter | E. P. Smith | 726,776 | Apr. 28 | 4397 | ------ | 103 | 2133 |
| Composition of matter | G. Blenio | 729,036 | May 26 | 4160 | ------ | 104 | 934 |
| Composition of matter | H. Molchin | 729,202 | May 26 | 4455 | ------ | 104 | 993 |
| Composition of matter | H. Molchin | 729,203 | May 26 | 4455 | ------ | 104 | 994 |
| Composition of matter | H. L. Kubbernuss | 731,310 | June 16 | 3278 | ------ | 104 | 1842 |
| Composition of matter | K. N. Lundblad | 733,407 | July 14 | 1278 | ------ | 105 | 287 |
| Composition of matter | B. F. Schwier | 740,994 | Oct. 6 | 1124 | ------ | 106 | 1485 |
| Composition of matter | W. A. Lawrence | 741,259 | Oct. 13 | 1629 | ------ | 106 | 1613 |
| Composition of matter. Making | E. P. Smith | 726,582 | Apr. 28 | 4039 | ------ | 103 | 2059 |
| Compositions of matter. Forming | H. Molchin | 729,204 | May 26 | 4456 | ------ | 104 | 994 |
| Compositor's stick | F. W. Weeks | 741,423 | Oct. 13 | 1967 | 436 | 106 | 1686 |
| Compositor's stick and type-chase. Combined | F. W. Weeks | 744,838 | Nov. 24 | 3941 | 849 850 | 107 | 888 |
| Compound engine | E. M. Coryell | 725,935 | Apr. 21 | 2813 | 638 | 103 | 1796 |
| Compound engine | G. B. Petsche | 731,126 | June 16 | 2935 | 652 | 104 | 1772 |

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| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Compound engine | C. C. Hill | 740,565 | Oct. 6 | 350 | 73, 74, 75 | 106 | 1321 |
| Compound engine | A. J. Peet | 748,559 | Dec. 29 | 6058 | 1372 | 107 | 2511 |
| Compound expansion-fluid engine | F., G., and R. Goodfellow | 720,343 | Feb. 10 | 1721 | 391 | 102 | 1203 |
| Compress. Cold | H. Enax | 743,473 | Nov. 10 | 1365 | 280 | 107 | 307 |
| Compressed-air elevator for fluids | J. W. Sloan | 728,180 | May 12 | 2549 | 567 | 104 | 560 |
| Compressing material into form. Machine for | H. J. Flood | 734,531 | July 28 | 3392 | 792 | 105 | 766 |
| Compressing system | C. W. Vollmann | 730,495 | June 9 | 1776 | 398 | 104 | 1508 |
| Compression-coupling | M. P. Boss | 729,534 | June 2 | 28 | 7, 8 | 104 | 1132 |
| Compression-coupling | J. Hutchison | 738,809 | Sept. 15 | 2543 | 559 | 106 | 577 |
| Compressor | W. J. Francke | 719,454 | Feb. 3 | 74 | 18 | 102 | 841 |
| Compressor and valve for same | E. Reynolds and C. Robinson | 719,142 | Jan. 27 | 3097 | 688, 689 | 102 | 699 |
| Compressor discharge-valve | B. V. Nordberg | 721,221 | Feb. 24 | 3432 | 779 | 102 | 1595 |
| Compressor suction-valve | E. A. Menking | 735,549 | Aug. 4 | 1001 | 211 | 105 | 1193 |
| Computer. Interest- | L. M. Landing | 733,054 | July 7 | 631 | 153, 154 | 105 | 134 |
| Computer. Pay-roll | H. B. Carlton | 740,394 | Oct. 6 | 16 | 4 | 106 | 1247 |
| Computing and recording machine | F. S. Baldwin | 745,991 | Dec. 8 | 1246 | 281, 282 | 107 | 1383 |
| Computing device | W. M. Wheildon | 721,405 | Feb. 24 | 3750 | 852 | 102 | 1662 |
| Computing device | B. E. and F. J. Anglund | 744,275 | Nov. 17 | 2930 | 626 | 107 | 655 |
| Computing-machine | J. W. Todd | 743,113 | Nov. 3 | 563 | 121, 122 | 107 | 117 |
| Concave-support | W. E. Bartholow | 740,215 | Sept. 29 | 5143 | 1154 | 106 | 1165 |
| Conceal filling and sealing machine | F. A. Robinson | 745,972 | Dec. 1 | 1210 | 272 | 107 | 1358 |
| Concentrating apparatus | A. Ten Winkel | 728,331 | May 19 | 2870 | 634 | 104 | 649 |
| Concentrating apparatus | G. R. Tucker and G. W. Goddard | 744,823 | Nov. 24 | 3912 | 841, 842 | 107 | 882 |
| Concentrating-machine | T. H. Hicks | 739,081 | Sept. 15 | 3015 | 668 | 106 | 678 |
| Concentrating-surfaces. Preparing | A. D. Foote | 744,322 | Nov. 17 | 3010 | 646 | 107 | 673 |
| Concentrating-table | A. R. Wilfley | 719,402 | Jan. 27 | 3579 | 800 | 102 | 803 |
| Concentrating-table slimer attachment | C. T. Arkins | 719,409 | Jan. 27 | 3593 | 803 | 102 | 805 |
| Concentrating-table slimer attachment | C. T. Arkins | 730,732 | June 9 | 2189 | 487 | 104 | 1598 |
| Concentrator | J. S. Brownell | 717,805 | Jan. 6 | 546 | 122 | 102 | 118 |
| Concentrator | L. Sutton | 736,309 | Aug. 11 | 2385 | 519 | 105 | 1512 |
| Concentrator | E. Schutz | 741,725 | Oct. 20 | 2581 | 575 | 106 | 1831 |
| Concentrator | C. H. Snow | 742,510 | Oct. 27 | 4102 | 924 | 106 | 2158 |
| Concentrator | J. J. Montgomery | 742,889 | Nov. 3 | 122 | 28, 29 | 107 | 27 |
| Concentrator-table | R. T. Schraubstadter | 738,493 | Sept. 8 | 1923 | 419 | 106 | 428 |
| Concrete and metal construction | J. Kahn | 736,602 | Aug. 18 | 2936 | 642, 643 | 105 | 1643 |
| Concrete-arch construction | W. C. Parmley | 740,039 | Sept. 29 | 4831 | 1083, 1084 | 106 | 1100 |
| Concrete beams, girders, &c., with iron bars inlaid for building purposes. Manufacture of | H. Siegwart | 720,747 | Feb. 17 | 2489 | 573 | 102 | 1376 |
| Concrete-block mold | E. W. Seamans | 720,536 | Feb. 10 | 2079 | 480 | 102 | 1276 |
| Concrete-block mold | F. A. Sicklesteel and C. W. Ballard | 737,032 | Aug. 25 | 3741 | 831 | 105 | 1831 |
| Concrete-block mold | H. H. Spears | 747,496 | Dec. 22 | 4031 | 906 | 107 | 2040 |
| Concrete-block-molding machine | G. Brady | 735,061 | Aug. 4 | 24 | 7, 8 | 105 | 986 |
| Concrete-body-molding machine | M. A. Winget | 734,487 | July 21 | 3300 | 774, 775 | 105 | 729 |
| Concrete building-blocks. Machine for forming | J. H. Stewart | 737,881 | Sept. 1 | 659 | 140 | 106 | 145 |
| Concrete building-blocks. Machine for manufacturing hollow | F. A. Borst and J. Groscop | 735,938 | Aug. 11 | 1726 | 368, 369 | 105 | 1369 |
| Concrete building-blocks. Machine for molding hollow | H. S. Palmer | 727,427 | May 5 | 1118 | 245, 246, 247 | 104 | 241 |
| Concrete building-blocks. Machine for molding hollow | H. S. Palmer | 727,428 | May 5 | 1123 | 247 | 104 | 242 |
| Concrete building-blocks. Machine for molding hollow | H. S. Palmer | 731,323 | June 16 | 3296 | 734, 735, 736 | 104 | 1845 |
| Concrete-building construction | F. W. Garrettson | 724,462 | Apr. 7 | 83 | 20 | 103 | 1187 |
| Concrete buildings and nail-plug therefor. Construction of | F. W. Garrettson | 724,461 | Apr. 7 | 82 | 20 | 103 | 1187 |
| Concrete-column mold | W. A. Staples | 724,754 | Apr. 7 | 627 | 146 | 103 | 1302 |
| Concrete conduits. Form or center for molding the inverts of | W. F. Learned | 725,098 | Apr. 14 | 1268 | 286 | 103 | 1454 |
| Concrete construction. Steel- | W. W. Guest | 735,759 | Aug. 11 | 1383 | 298 | 105 | 1292 |
| Concrete-flume machine. Rotary | C. R. Cook | 723,243 | Mar. 24 | 2961 | 665 | 103 | 671 |
| Concrete-making apparatus | C. R. Weaver | 722,782 | Mar. 17 | 2125 | 475 | 103 | 484 |
| Concrete-making machine | G. S. Tiffany | 732,471 | June 30 | 5509 | 1222 | 104 | 2334 |
| Concrete-mixer | E. S. Bryant | 733,942 | July 21 | 2259 | 531 | 105 | 510 |
| Concrete-mixer | D. Erter | 734,687 | July 28 | 3675 | 861 | 105 | 824 |
| Concrete-mixer | L. G. Haase | 735,970 | Aug. 11 | 1779 | 381, 382 | 105 | 1380 |
| Concrete-mixer | W. A. Fritz | 746,947 | Dec. 15 | 3013 | 692 | 107 | 1794 |
| Concrete-mixer. Rotary | W. J. Judd | 717,580 | Jan. 6 | 101 | 26, 27 | 102 | 24 |
| Concrete mixing and measuring machine | W. H. Brown | 718,905 | Jan. 20 | 2633 | 591 | 102 | 588 |
| Concrete-mixing apparatus | P. Kühne | 735,530 | Aug. 4 | 959 | 203 | 105 | 1185 |
| Concrete-mold | A. Ferguson | 745,585 | Dec. 1 | 502 | 118 | 107 | 1204 |
| Concrete or cement building-block | J. H. Jones | 741,040 | Oct. 13 | 1202 | 272 | 106 | 1523 |
| Concrete or plastic material. Mold for making articles of | J. A. McNamee | 733,735 | July 14 | 1834 | 434 | 105 | 404 |
| Concrete piles. Forming | F. Shuman | 733,336 | July 7 | 1145 | 271 | 105 | 241 |
| Concrete piles. Forming | F. Shuman | 733,337 | July 7 | 1146 | 272 | 105 | 241 |
| Concrete piles. Making | F. Shuman | 735,680 | Aug. 4 | 1236 | 262 | 105 | 1243 |
| Concrete piles. Making | F. Shuman | 739,268 | Sept. 15 | 3361 | 746 | 106 | 751 |
| Concrete-post mold | H. H. Clough | 742,166 | Oct. 27 | 3468 | 775 | 106 | 2029 |
| Concrete structure | A. A. Firestone | 732,535 | June 30 | 5632 | 1248 | 104 | 2361 |
| Concrete. Structure of strengthened | W. E. Williams | 738,268 | Sept. 8 | 1452 | 313 | 106 | 328 |
| Concrete-tank framing. Metallic | J. W. Seaver and J. E. A. Moore | 737,500 | Aug. 25 | 4616 | 1034, 1035 | 105 | 2018 |
| Concrete-wall mold or form | W. A. Kirk | 739,549 | Sept. 22 | 3868 | 867 | 106 | 876 |

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| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Concrete walls. Mold for | A. S. Cramer | 735,214 | Aug. 4 | 350 | 67 | 105 | 1056 |
| Condenser | F. Lamplough | 718,851 | Jan. 20 | 2511 | 559 | 102 | 562 |
| Condenser | F. Lamplough | 720,707 | Feb. 17 | 2429 | 555 | 102 | 1363 |
| Condenser | T. M. Eynon | 720,908 | Feb. 17 | 2765 | 636 | 102 | 1435 |
| Condenser | A. Snyder and J. B. Connolly | 723,324 | Mar. 24 | 3100 | 698 | 103 | 699 |
| Condenser | R. D. Tomlinson | 724,970 | Apr. 7 | 1019 | 233, 234 | 103 | 1386 |
| Condenser | R. D. Tomlinson | 724,972 | Apr. 7 | 1024 | 234, 235 | 103 | 1387 |
| Condenser | W. T. Leman | 727,391 | May 5 | 1054 | 229 | 104 | 227 |
| Condenser | C. F. Splitdorf | 728,780 | May 19 | 3695 | 824, 825 | 104 | 821 |
| Condenser | L. J. Le Pontois | 731,469 | June 23 | 3590 | 800 | 104 | 1924 |
| Condenser | C. A. Parsons | 741,270 | Oct. 13 | 1646 | 371, 372 | 106 | 1617 |
| Condenser | H. D. Baragwanath | 745,312 | Dec. 1 | 3 | 1 | 107 | 1101 |
| Condenser and heater | R. F. Piatt | 720,614 | Feb. 17 | 2263 | 519 | 102 | 1329 |
| Condenser for nitric or other acids | W. Bate and F. G. Orme | 733,452 | July 14 | 1358 | 319 | 105 | 304 |
| Condenser. Injector- | W. H. Coughlin | 721,158 | Feb. 24 | 3281 | 750 | 102 | 1566 |
| Condenser. Jet- | L. R. Alberger | 723,972 | Mar. 31 | 4326 | 971 | 103 | 968 |
| Condenser. Steam- | C. E. Nicholas | 717,599 | Jan. 6 | 141 | 36 | 102 | 32 |
| Condenser. Steam- | W. Irving | 719,671 | Feb. 3 | 458 | 104 | 102 | 918 |
| Condenser. Steam- | R. H. Hornbrook | 729,070 | May 26 | 4224 | 933 | 104 | 946 |
| Condenser. Steam- | R. H. Hornbrook | 737,104 | Aug. 25 | 3862 | 858 | 105 | 1855 |
| Condenser. Steam- | R. H. Hornbrook | 745,186 | Nov. 24 | 4640 | 1007, 1008 | 107 | 1033 |
| Condenser. Steam surface | J. R. Richmond | 722,627 | Mar. 10 | 1795 | 399, 400 | 103 | 401 |
| Condenser. Steam surface | J. R. Richmond | 722,628 | Mar. 10 | 1796 | 400 | 103 | 403 |
| Condenser. Surface | H. Junkers | 721,310 | Feb. 24 | 3566 | 811 | 102 | 1624 |
| Condenser. Surface | R. D. Tomlinson | 724,971 | Apr. 7 | 1022 | 234 | 103 | 1387 |
| Condenser. Surface | W. Hayner | 725,841 | Apr. 21 | 2646 | 602, 603 | 103 | 1762 |
| Condenser system | W. C. Brown | 725,212 | Apr. 14 | 1483 | 336, 337 | 103 | 1499 |
| Condenser system | L. R. Alberger | 731,832 | June 23 | 4257 | 948 | 104 | 2061 |
| Condensing apparatus. Steam- | C. V. A. Eley | 734,525 | July 28 | 3373 | 788 | 105 | 761 |
| Condiment-holder | J. W. Graeme | 727,350 | May 5 | 985 | 215 | 104 | 212 |
| Condiment-holder | H. B. Beach | 730,510 | June 9 | 1809 | 403 | 104 | 1516 |
| Condiment-holder | H. Drewery | 734,165 | July 21 | 2708 | 637 | 105 | 606 |
| Condiment-holder | J. B. Williamson | 748,329 | Dec. 29 | 5600 | 1277 | 107 | 2407 |
| Condiment-holder. Pulverizing | C. B. Overbaugh | 732,214 | June 30 | 5006 | 1113 | 104 | 2231 |
| Condiment-holder. Pulverizing | C. B. Overbaugh | 737,267 | Aug. 25 | 4174 | 929 | 105 | 1921 |
| Conductivity-bridge | W. Hoopes | 739,001 | Sept. 15 | 2865 | 636 | 106 | 647 |
| Conductor | G. E. Tinker | 730,058 | June 2 | 978 | 219 | 104 | 1327 |
| Conductor guard. Flexible- | G. R. Pimlott | 734,090 | July 21 | 2563 | 598 | 105 | 577 |
| Conduit and sewer rod coupling | A. W. Case | 730,186 | June 2 | 1184 | 265 | 104 | 1369 |
| Conduit for hose, cables, electric wires, or the like | J. Burnsen | 746,920 | Dec. 15 | 2941 | 679 | 107 | 7771 |
| Conduit-joint mold-box | E. L. Du Bois | 746,051 | Dec. 8 | 1365 | 304 | 107 | 1408 |
| Conduit or culvert | L. Lane | 735,533 | Aug. 4 | 965 | 204 | 105 | 1186 |
| Conduit outlet-box. Interior- | W. F. Bossert | 725,664 | Apr. 21 | 2330 | 526 | 103 | 1693 |
| Conduit-section dowel-pin | C. J. Field and L. J. Doolittle | 746,628 | Dec. 8 | 2387 | 547 | 107 | 1633 |
| Conduit-section for manhole-terminals | G. M. Gest | 739,853 | Sept. 29 | 4453 | 1000 | 106 | 1020 |
| Conduit-sections. Machine for beveling the inner walls of | R. W. Lyle | 720,717 | Feb. 17 | 2443 | 559 | 102 | 1366 |
| Conduit-threading device | A. H. Knott | 734,267 | July 21 | 2903 | 679 | 105 | 649 |
| Conduits. Apparatus for ascertaining the condition of pipe- | K. E. Stuart | 721,476 | Feb. 24 | 3881 | 882, 883 | 102 | 1688 |
| Conduits. Construction of underground | T. E. Devonshire | 719,763 | Feb. 3 | 645 | 145, 146, 147, 148 | 102 | 958 |
| Conduits. Coupling for conveyers or rods for purposes of underground | T. J. Cope | 721,427 | Feb. 24 | 3793 | 863 | 102 | 1671 |
| Conduits. Implement for laying underground | M. Kondolf | 744,362 | Nov. 17 | 3081 | 661 | 107 | 688 |
| Conduits. Ring-bushing for interior | W. F. Bossett and F. T. Foxenberger. | 731,426 | June 23 | 3498 | 781 | 104 | 1905 |
| Cone-arbor | G. W. Foster | 747,406 | Dec. 22 | 3871 | 871 | 107 | 2003 |
| Confection and making same. Malt-sugar | C. H. Burckett | 722,807 | Mar. 17 | 2169 | 484 | 103 | 491 |
| Confection-dipping machine | E. J. Jenner | 733,968 | July 21 | 2316 | 544, 545 | 105 | 521 |
| Confection-making apparatus | J. Friend | 734,536 | July 28 | 3402 | 794 | 105 | 768 |
| Confectioner's table and melter | G. F. Dickson | 730,748 | June 9 | 2214 | 492, 493 | 104 | 1604 |
| Confectionery-coating machine | G. Carlson | 717,970 | Jan. 6 | 842 | 190 | 102 | 181 |
| Confectionery. Manufacture of sweetmeats or similar articles of | E. W. Barratt | 743,219 | Nov. 3 | 769 | 168 | 107 | 161 |
| Confessionary instrument. Auricular | W. H. Greis | 739,541 | Sept. 22 | 3859 | 865 | 106 | 874 |
| Connecting and strain-equalizing device | F. Hackmann | 733,322 | July 7 | 1109 | 263, 264 | 105 | 233 |
| Connecting-clip. Sectional | W. C. Lyon | 734,275 | July 21 | 2923 | 683 | 105 | 653 |
| Connecting-rod | C. W. Hart | 746,699 | Dec. 15 | 2526 | 580 | 107 | 1684 |
| Connection terminal and plug | W. W. Dean | 747,911 | Dec. 22 | 4805 | 1086 | 107 | 2213 |
| Consecutive-view apparatus | T. Scherf | 740,318 | Sept. 29 | 5325 | 1199, 1200, 1201 | 106 | 1202 |
| Contact-breaker | C. F. Splitdorf | 728,632 | May 19 | 3427 | 760, 761 | 104 | 768 |
| Contact device | H. R. Sargent | 730,975 | June 16 | 2641 | 588 | 104 | 1713 |
| Contact parts. Non-interchangeable | R. Hundhausen | 731,779 | June 23 | 4158 | 927 | 104 | 2037 |
| Contact parts. Non-interchangeable | R. Hundhausen | 738,909 | Sept. 15 | 2720 | 601 | 106 | 616 |
| Contact structure. Surface- | E. M. Hewlett | 719,003 | Jan. 27 | 2817 | 631 | 102 | 642 |
| Container-joint | W. L. Austin | 746,440 | Dec. 8 | 2055 | 473 | 107 | 1557 |
| Continuous kiln | W. P. Grath | 730,820 | June 9 | 2337 | 518 | 104 | 1630 |
| Continuous kiln | W. A. Butler | 735,462 | Aug. 4 | 827 | 176 | 105 | 1156 |
| Continuous press | J. Ingleby | 720,150 | Feb. 10 | 1360 | 311 | 102 | 1129 |

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| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Controller | T. von Zweigbergk | 723,119 | Mar. 17 | 2715 | 610 | 103 | 606 |
| Controller | J. B. Linn | 725,730 | Apr. 21 | 2438 | 553 | 103 | 1716 |
| Controller | T. von Zweigbergk | 744,665 | Nov. 17 | 3590 | 773, 774 | 107 | 795 |
| Controller apparatus | P. S. Barrett and J. P. Durkin | 730,334 | June 9 | 1468 | 325 | 104 | 1443 |
| Controller-handle lock | J. B. Linn | 728,590 | May 19 | 3358 | 744 | 104 | 752 |
| Controller mechanism | C. Gulland | 745,491 | Dec. 1 | 343 | 80 | 107 | 1173 |
| Controlling mechanism | A. P. S. Macquisten | 724,307 | Mar. 31 | 5007 | 1121 | 103 | 1103 |
| Converter | W. B. Burrow | 737,578 | Sept. 1 | 37 | 8 | 106 | 11 |
| Converter | R. Baggaley | 746,238 | Dec. 8 | 1700 | 379, 380 | 107 | 1483 |
| Converter-coupling. Universal | T. H. Tracy | 743,406 | Nov. 3 | 1192 | 247 | 107 | 255 |
| Converter for making iron or steel | W. B. Burrow | 737,577 | Sept. 1 | 35 | 7 | 106 | 10 |
| Convertible chair | W. W. Lepard | 728,943 | May 26 | 3994 | 889 | 104 | 899 |
| Convertible chair | W. D. and F. N. Russell | 742,069 | Oct 20 | 3301 | 735 | 106 | 1979 |
| Convertible device | W. L. Bear | 742,381 | Oct. 27 | 3873 | 870 | 106 | 2111 |
| Convertible furnace | F. Fiebeger | 721,506 | Feb. 24 | 3926 | 894 | 102 | 1698 |
| Conveyer | W. E. Winant | 718,745 | Jan. 20 | 2333 | 515, 516 | 102 | 526 |
| Conveyer | R. Blum | 719,178 | Jan. 27 | 3155 | 702 | 102 | 711 |
| Conveyer | A. D. Shaw | 719,890 | Feb. 3 | 864 | 202, 203 | 102 | 1006 |
| Conveyer | A. M. Acklin | 723,971 | Mar. 31 | 4324 | 970 | 103 | 968 |
| Conveyer | H. E. Brett | 724,540 | Apr. 7 | 221 | 54, 55 | 103 | 1217 |
| Conveyer | J. B. Pitchford | 726,098 | Apr. 21 | 3064 | 696 | 103 | 1849 |
| Conveyer | J. Harmon | 726,286 | Apr. 28 | 3441 | 782 | 103 | 1941 |
| Conveyer | R. H. Gray | 727,127 | May 5 | 591 | 127 | 104 | 128 |
| Conveyer | H. M. Crites | 727,911 | May 12 | 2062 | 459 | 104 | 457 |
| Conveyer | M. C. Schwab | 728,626 | May 19 | 3417 | 757, 758 | 104 | 766 |
| Conveyer | J. Fern | 730,448 | June 9 | 1688 | 378 | 104 | 1489 |
| Conveyer | S. F. Joor | 730,539 | June 9 | 1851 | 413 | 104 | 1525 |
| Conveyer | S. F. Joor | 730,540 | June 9 | 1854 | 414 | 104 | 1526 |
| Conveyer | S. F. Joor | 730,541 | June 9 | 1856 | 414, 415 | 104 | 1526 |
| Conveyer | F. R. Willson, Jr | 731,003 | June 16 | 2698 | 601, 602 | 104 | 1725 |
| Conveyer | M. Schou | 731,713 | June 23 | 4036 | 901 | 104 | 2012 |
| Conveyer | J. F. Cook | 733,373 | July 14 | 1215 | 288 | 105 | 272 |
| Conveyer | F. E. Blaisdell | 733,804 | July 14 | 1972 | 464 | 105 | 433 |
| Conveyer | G. C. Horst | 733,965 | July 21 | 2311 | 543 | 105 | 520 |
| Conveyer | L. Abraham | 734,151 | July 21 | 2685 | 631 | 105 | 601 |
| Conveyer | A. J. Webster | 735,921 | Aug. 11 | 1692 | 361 | 105 | 1360 |
| Conveyer | F. R. Willson, Jr | 736,901 | Aug. 18 | 3493 | 776 | 105 | 1758 |
| Conveyer | G. A. Bronder | 743,613 | Nov. 10 | 1640 | 344 | 107 | 366 |
| Conveyer | C. Rasmussen | 745,739 | Dec. 1 | 759 | 173 | 107 | 1260 |
| Conveyer | G. F. Greenwood | 745,821 | Dec. 1 | 931 | 209, 210 | 107 | 1297 |
| Conveyer | W. T. James | 746,088 | Dec. 8 | 1421 | 318, 319 | 107 | 1422 |
| Conveyer | J. F. White | 747,285 | Dec. 15 | 3649 | 825 | 107 | 1937 |
| Conveyer | W. H. Garrett | 747,546 | Dec. 22 | 4116 | 924 | 107 | 2058 |
| Conveyer and elevator. Endless | T. A. Coffin and M. C. Lewis | 748,481 | Dec. 29 | 5896 | 1340 | 107 | 2473 |
| Conveyer apparatus | T. Robins, Jr | 735,301 | Aug. 4 | 509 | 102, 103 | 105 | 1089 |
| Conveyer-apron | S. G. Touchstone | 736,315 | Aug. 11 | 2394 | 521 | 105 | 1513 |
| Conveyer. Belt or like | W. R. Laurie and T. H. Wilson | 739,884 | Sept. 29 | 4533 | 1018 | 106 | 1035 |
| Conveyer. Bucket | A. L. Le Grand | 725,573 | Apr. 14 | 2135 | 483, 484 | 103 | 1638 |
| Conveyer-carriage | F. H. Lamb | 722,720 | Mar. 17 | 2006 | 447 | 103 | 459 |
| Conveyer controlling system | A. C. Eastwood | 748,488 | Dec. 29 | 5906 | 1342 | 107 | 2475 |
| Conveyer. Dumping- | F. Head | 745,183 | Nov. 24 | 4635 | 1006 | 107 | 1031 |
| Conveyer. Endless | W. L. McCabe | 721,725 | Mar. 3 | 127 | 28, 29 | 103 | 28 |
| Conveyer feeding device | C. Mittag | 733,988 | July 21 | 2355 | 553 | 105 | 528 |
| Conveyer for separators, &c. Cross- | S. B. Hart | 728,460 | May 19 | 3099 | 684, 685 | 104 | 697 |
| Conveyer for transporting sand, gravel, &c. Belt | J. and W. Titus | 723,504 | Mar. 24 | 3465 | 775 | 103 | 769 |
| Conveyer or elevator. Endless | J. L. Giles | 727,783 | May 12 | 1829 | 409 | 104 | 408 |
| Conveyer. Passenger- | D. A. Casalonga | 723,240 | Mar. 24 | 2953 | 662, 663 | 103 | 669 |
| Conveyer. Pneumatic | J. R. Burgess | 721,145 | Feb. 24 | 3262 | 747 | 102 | 1562 |
| Conveyer. Pneumatic | W. W. Annable | 741,435 | Oct. 13 | 1988 | 440, 441 | 106 | 1690 |
| Conveyer. Portable | W. L. McCabe | 735,564 | Aug. 4 | 1026 | 217, 218 | 105 | 1198 |
| Conveyer. Portable | W. L. McCabe | 742,717 | Oct. 27 | 4471 | 1012 | 106 | 2237 |
| Conveyer. Portable | J. A. Brown | 744,163 | Nov. 17 | 2702 | 576 | 107 | 604 |
| Conveyer. Reciprocating | F. H. Schule | 724,054 | Mar. 31 | 4492 | 1011, 1012 | 103 | 999 |
| Conveyer-support | C. Metzger | 721,215 | Feb. 24 | 3421 | 776 | 102 | 1593 |
| Conveyer system | H. W. Blaisdell | 741,447 | Oct. 13 | 2010 | 446 | 106 | 1694 |
| Conveyer. Traveling | E. Baltzley | 739,574 | Sept. 22 | 3925 | 878 | 106 | 889 |
| Conveyer. Traveling | E. Baltzley | 739,575 | Sept. 22 | 3928 | 879 | 106 | 889 |
| Conveyer. Traveling | E. Baltzley | 744,457 | Nov. 17 | 3258 | 698, 699 | 107 | 726 |
| Conveyers. Device for operating trippers for belt | A. M. Acklin | 745,031 | Nov. 24 | 4302 | 930 | 107 | 962 |
| Conveyers. Device for operating trippers for belt | A. M. Acklin | 745,032 | Nov. 24 | 4305 | 931 | 107 | 963 |
| Conveyers. Rope-carrier for movable bucket | G. E. Titcomb | 742,753 | Oct. 27 | 4529 | 1026 | 106 | 2251 |
| Conveying and cooling apparatus | K. F. Snow | 719,524 | Feb. 3 | 198 | 46, 47 | 102 | 865 |
| Conveying and loading crops or merchandise. Machine for | R. Scott | 718,732 | Jan. 20 | 2308 | 510 | 102 | 521 |
| Conveying and loading machine | J. A. Low | 743,008 | Nov. 3 | 360 | 78 | 107 | 76 |
| Conveying apparatus | G. A. Amsden | 718,185 | Jan. 13 | 1238 | 272 | 102 | 283 |
| Conveying apparatus | F. R. Willson, Jr | 736,902 | Aug. 18 | 3494 | 776, 777 | 105 | 1759 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Conveying apparatus | F. R. Willson, Jr | 736,903 | Aug. 18 | 3497 | 777<br>778 | 105 | 1759 |
| Conveying apparatus | G. W. Smith | 745,253 | Nov. 24 | 4748 | 1038 | 107 | 1055 |
| Cooker | I. E. Miller | 745,451 | Dec. 1 | 268 | 62 | 107 | 1156 |
| Cooker | M. M. Archerd | 747,888 | Dec. 22 | 4654 | 1052 | 107 | 2180 |
| Cooker and mixer. Combined corn | J. F. Rutter | 739,350 | Sept. 22 | 3501 | 782<br>783 | 106 | 796 |
| Cooker. Electric | E. E. Gold | 730,252 | June 9 | 1332 | 292<br>293 | 104 | 1414 |
| Cooker lid. Steam- | C. F. Kaul | 747,438 | Dec. 22 | 3923 | 883 | 107 | 2014 |
| Cooker. Rotary steam- | A. Johnson | 731,573 | June 23 | 3790 | 844 | 104 | 1964 |
| Cooker. Steam- | W. S. Hunt | 718,629 | Jan. 20 | 2111 | 459 | 102 | 482 |
| Cooker. Steam- | W. R. Flack | 722,964 | Mar. 17 | 2440 | 546 | 103 | 548 |
| Cooker. Steam- | E. C. Peters | 735,806 | Aug. 11 | 1471 | 316 | 105 | 1312 |
| Cooker. Steam- | A. M. Amos | 737,193 | Aug. 25 | 4020 | 891<br>892 | 105 | 1890 |
| Cooker. Steam- | F. A. Dixon | 747,151 | Dec. 15 | 3390 | 769 | 107 | 1882 |
| Cooking apparatus. Electrical | J. I. Ayer | 726,241 | Apr. 28 | 3348 | 760 | 103 | 1922 |
| Cooking apparatus. Steam feed- | M. W. Williams | 720,649 | Feb. 17 | 2321 | 532 | 102 | 1340 |
| Cooking attachment. Muffler | J. H. Fox | 748,493 | Dec. 29 | 5918 | 1344 | 107 | 2478 |
| Cooking-boiler | L. J. Renoy | 738,698 | Sept. 8 | 2314 | 509 | 106 | 510 |
| Cooking utensil | R. T. Astle | 717,655 | Jan. 6 | 231 | 59 | 102 | 51 |
| Cooking utensil | P. J. and E. H. Gates | 719,786 | Feb. 3 | 687 | 159 | 102 | 968 |
| Cooking utensil | E. V. Santee | 721,750 | Mar. 3 | 167 | 39 | 103 | 37 |
| Cooking utensil | A. H. Raymond | 731,613 | June 23 | 3861 | 860 | 104 | 1977 |
| Cooking utensil | S. Szentjánossy | 737,171 | Aug. 25 | 3989 | 884 | 105 | 1883 |
| Cooking utensil | R. V. Jones | 739,422 | Sept. 22 | 3665 | 815 | 106 | 832 |
| Cooking utensil | M. J. Wheeler | 740,723 | Oct. 6 | 621 | 138 | 106 | 1380 |
| Cooking utensil | O. A. Lane | 741,348 | Oct. 13 | 1845 | 407 | 106 | 1661 |
| Cooking utensil | C. D. Augur | 742,955 | Nov. 3 | 238 | 53 | 107 | 51 |
| Cooking utensil | A. G. Boone | 742,961 | Nov. 3 | 245 | 55 | 107 | 53 |
| Cooking utensils. Inner containing vessel for | A. Siebelist | 748,316 | Dec. 29 | 5583 | 1273 | 107 | 2403 |
| Cooking utensils. Jacket attachment for steam | W. F. Stubinger | 745,261 | Nov. 24 | 4765 | 1041 | 107 | 1058 |
| Cooler:<br>*See* Air-cooler. Beer-cooler. Brine-cooler. Cake-cooler. Cream-cooler. Evaporative cooler. Gas-cooler. Journal-cooler. Keg or cask cooler. Liquid-cooler. Milk-cooler. Surface-cooler. Water-cooler. Wine-cooler. | | | | | | | |
| Cooler | F. Guttenberg | 719,212 | Jan. 27 | 3209 | 716 | 102 | 723 |
| Cooler | C. F. Conover | 730,612 | June 9 | 1987 | 442 | 104 | 1555 |
| Cooling and filling apparatus | A. Juif | 738,915 | Sept. 15 | 2734 | 604 | 106 | 619 |
| Cooling apparatus | M. Wulff | 737,690 | Sept. 1 | 241 | 51 | 106 | 56 |
| Cooling-board | C. E. Windom | 746,223 | Dec. 8 | 1672 | 371<br>372 | 107 | 1477 |
| Cooling-board | A. H. Emigh | 746,311 | Dec. 8 | 1840 | 418<br>419 | 107 | 1512 |
| Cooling-board attachment | E. A. Fuller | 729,751 | June 2 | 414 | 93 | 104 | 1213 |
| Cooling device | A. Glebsattel | 740,847 | Oct. 6 | 869 | 194 | 106 | 1431 |
| Cooling-jacket | W. R. Hamm | 745,054 | Nov. 24 | 4352 | 940 | 107 | 972 |
| Coop for poultry. Folding | W. H. Warner, Jr | 744,827 | Nov. 24 | 3925 | 844 | 107 | 884 |
| Cop-tube | E. H. Thorne | 737,531 | Aug. 25 | 4677 | 1049 | 105 | 2034 |
| Cops on spindles. Device for loading | J. Vanpeteghen | 739,952 | Sept. 29 | 4661 | 1046 | 106 | 1063 |
| Copper and nickel from mattes or ores. Electrolytic separation of | E. A. Sjöstedt and J. H. James | 725,998 | Apr. 21 | 2917 | ------ | 103 | 1818 |
| Copper from carbonate and oxid ores. Extracting | H. R. Ellis | 725,548 | Apr. 14 | 2094 | 474 | 103 | 1428 |
| Copper from its ores. Extracting | A. von Gernet | 717,565 | Jan. 6 | 78 | 20 | 102 | 19 |
| Copper from ores. Separating | G. D. Van Arsdale | 723,949 | Mar. 31 | 4287 | ------ | 103 | 961 |
| Copper-leaching | G. H. Waterbury | 724,414 | Mar. 31 | 5232 | 1171 | 103 | 1152 |
| Copper matte. Converting | R. Baggaley | 746,249 | Dec. 8 | 1719 | 386 | 107 | 1486 |
| Copper matte into metallic copper. Converting | G. Mitchell | 719,488 | Feb. 3 | 143 | ------ | 102 | 854 |
| Copper, nickel or zinc ores containing precious metals. Ammonia-cyanid process of treating | D. Mosher | 730,835 | June 9 | 2361 | ------ | 104 | 1635 |
| Copper ores and ores of copper and nickel. Treating | H. G. C. Thofehrn and B. de Saint Seine. | 723,500 | Mar. 24 | 3456 | 773 | 103 | 768 |
| Copper ores. Treating | W. Payne, J. H Gillies, and A. Gondolf. | 719,132 | Jan. 27 | 3084 | ------ | 102 | 697 |
| Copper. Refining | R. Baggaley | 746,246 | Dec. 8 | 1711 | 382<br>383 | 107 | 1485 |
| Copy-holder | H. L. Massey | 722,239 | Mar. 10 | 1096 | 241 | 103 | 249 |
| Copy-holder | C. B. Towers and W. A. Cameron | 723,079 | Mar. 17 | 2645 | 595<br>596 | 103 | 592 |
| Copy-holder | F. S. Towle | 724,629 | Apr. 7 | 396 | 94 | 103 | 1254 |
| Copy-holder | S. C. Hoyle | 727,369 | May 5 | 1019 | 221 | 104 | 220 |
| Copy-holder | J. A. Murphy | 729,955 | June 2 | 801 | 178 | 104 | 1290 |
| Copy-holder | K. R. Williams | 730,426 | June 9 | 1641 | 368 | 104 | 1479 |
| Copy-holder | W. H. Peak | 736,005 | Aug. 11 | 1859 | 397 | 105 | 1397 |
| Copy-holder | A. J. Harpole | 736,848 | Aug. 18 | 3408 | 754 | 105 | 1741 |
| Copy-holder | H. C. Hinchcliff | 740,652 | Oct. 6 | 502 | 111 | 106 | 1354 |
| Copy-holder | F. M. Durham and A. Peek | 741,894 | Oct. 20 | 2879 | 643 | 106 | 1894 |
| Copy-holder | F. C. Shobert and M. H. Reno | 748,537 | Dec. 29 | 6006 | 1361 | 107 | 2498 |
| Copy-holder. Folding and adjustable | C. V. Harrod | 735,252 | Aug. 4 | 420 | 82 | 105 | 1070 |
| Copy-holding attachment | E. W. Briggs | 740,520 | Oct. 6 | 266 | 53 | 106 | 1303 |
| Copy-pad | T. B. Ferguson | 719,774 | Feb. 3 | 672 | 154<br>155 | 102 | 964 |
| Copy-pad | T. B. Ferguson | 748,555 | Dec. 29 | 6048 | 1369 | 107 | 2508 |
| Copying apparatus. Carbon | J. W. Irish | 731,187 | June 16 | 3048 | 677 | 104 | 1792 |
| Copying bath. Letter- | R. Spurgin | 718,669 | Jan. 20 | 2191 | 479 | 102 | 497 |
| Copying-machine | F. Soennecken | 721,338 | Feb. 24 | 3625 | 824 | 102 | 1637 |
| Copying machine. Letter- | E. J. Mankiewicz | 739,197 | Sept. 15 | 3221 | 712<br>713 | 106 | 720 |
| Copying-press | H. L. Davidson | 719,759 | Feb. 3 | 636 | 142<br>143 | 102 | 956 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|---|
| | | | | Spec. | Drg. | Vol. | Page. |
| Copying-press | L. Bailey | 724,653 | Apr. 7 | 432 | 105 | 103 | 1262 |
| Copying-press | L. Bailey and W. Eddy | 726,840 | May 5 | 11 | 3 | 104 | 5 |
| Copying-press | H. L. Davison and D. J. Woolley | 732,833 | July 7 | 251 | 62 | 105 | 56 |
| Copying-ribbon | J. O. Deckert | 747,861 | Dec. 22 | 4705 | 1062 | 107 | 2192 |
| Corborundum and alumina. Treating kaolin for production of | F. C. Weber | 728,528 | May 19 | 3209 | 712 | 104 | 720 |
| Cord ball-bearing holder | R. A. Moore, Jr. | 725,005 | Apr. 7 | 1090 | 248 | 103 | 1402 |
| Cord holding and serving device | A. A. Low | 747,557 | Dec. 22 | 4136 | 928 | 107 | 2063 |
| Cord knotter. Wrapping | F. Terwilleger | 743,347 | Nov. 3 | 1027 | 221, 222 | 107 | 219 |
| Cord-making apparatus. Covered | A. C. Buschner | 734,508 | July 28 | 3345 | 783 | 105 | 755 |
| Cord or rope coupling | J. P. Tolman | 723,339 | Mar. 24 | 3125 | 703 | 103 | 703 |
| Cord or rope making machine | T. W. Norman | 723,178 | Mar. 17 | 2821 | 636 | 103 | 627 |
| Cord-shortening device | J. H. Seaman | 746,178 | Dec. 8 | 1590 | 355 | 107 | 1460 |
| Cord-tip | J. R. Barrett | 734,500 | July 28 | 3334 | 780 | 105 | 753 |
| Cord-tip | W. Kaisling | 738,545 | Sept. 8 | 2013 | 438 | 106 | 448 |
| Cordage-machine | W. H. Avis | 723,806 | Mar. 31 | 3981 | 898, 899 | 103 | 896 |
| Cordage-machine | J. P. Tolman | 744,987 | Nov. 24 | 4201 | 909 | 107 | 941 |
| Core anchor. Sand | J. G. Emrich | 720,011 | Feb. 10 | 1097 | 252 | 102 | 1072 |
| Core and tire. Resilient | C. Miller | 743,309 | Nov. 3 | 952 | 207 | 107 | 204 |
| Core-bar | W. D. Ross | 721,837 | Mar. 3 | 325 | 71, 72 | 103 | 71 |
| Core-bar. Contractible | C. E. Crosby and E. C. Aurin | 718,700 | Jan. 20 | 2250 | 494 | 102 | 510 |
| Core-barrel. Collapsible | C. W. McWane | 740,772 | Oct. 6 | 737 | 166 | 106 | 1403 |
| Core. Collapsible mold | A. S. Cramer | 733,313 | July 7 | 1095 | 261 | 105 | 231 |
| Core composition | E. F. Myers | 729,637 | June 2 | 206 | | 104 | 1170 |
| Core-cutting machine | E. R. Smith | 723,935 | Mar. 31 | 4252 | 956, 957 | 103 | 953 |
| Core-forming machine. Sand | S. C. Weeks and L. O'Brien | 727,517 | May 5 | 1287 | 288 | 104 | 277 |
| Core-making apparatus | W. Weaver | 743,121 | Nov. 3 | 577 | 124, 125 | 107 | 121 |
| Core-making machine | H. E. Pridmore | 727,556 | May 5 | 1367 | 307, 308 | 104 | 294 |
| Core-making machine | W. M. McCallum | 736,618 | Aug. 18 | 2964 | 651, 652 | 105 | 1648 |
| Core of rhombic or lens-shaped section. Instrument | W. Sabel | 728,500 | May 19 | 3160 | 700 | 104 | 710 |
| Cores. Machine or appliance for forming | W. Jones and E. Wright | 724,105 | Mar. 31 | 4592 | 1033 | 103 | 1021 |
| Cork | H. Helbing | 734,551 | July 28 | 3430 | | 105 | 774 |
| Cork-extractor | R. T. Fetrow | 726,373 | Apr. 28 | 3413 | 774 | 103 | 1936 |
| Cork or stopper | W. G. Aikin and J. T. Pulliam | 722,657 | Mar. 17 | 1871 | 416 | 103 | 433 |
| Cork-puller | H. Tscherning | 728,517 | May 19 | 3186 | 706, 707 | 104 | 715 |
| Cork-puller | H. Tscherning | 728,518 | May 19 | 3188 | 707 | 104 | 715 |
| Cork-puller | H. Tscherning | 728,519 | May 19 | 3191 | 707, 708 | 104 | 716 |
| Cork-puller | H. Tscherning | 728,520 | May 19 | 3193 | 708 | 104 | 717 |
| Cork-puller | R. H. Wiles | 728,642 | May 19 | 3446 | 764, 765 | 104 | 771 |
| Cork-puller | C. Morgan | 728,806 | May 19 | 3745 | 835 | 104 | 832 |
| Cork-puller | R. Dressler | 730,007 | June 2 | 895 | 199 | 104 | 1310 |
| Cork-retainer | W. E. Brown | 736,202 | Aug. 11 | 2194 | 472 | 105 | 1468 |
| Cork-sorting machine | G. H. Vincke | 717,726 | Jan. 6 | 363 | 89 | 102 | 78 |
| Cork-sorting machine | F. Bender | 746,916 | Dec. 15 | 2935 | 677 | 107 | 1776 |
| Cork washer or disk and making same | C. D. Armstrong | 742,553 | Oct. 27 | 4191 | 943 | 106 | 2177 |
| Corking apparatus | E. Berliner | 726,621 | Apr. 28 | 4111 | 928 | 103 | 2073 |
| Corking-machine | A. A. Pindstofte | 727,437 | May 5 | 1140 | 251 | 104 | 246 |
| Corking-machine | J. Coomber | 743,251 | Nov. 3 | 838 | 183, 184 | 107 | 175 |
| Corkscrew | H. D. Armstrong | 747,351 | Dec. 22 | 3778 | 850 | 107 | 1981 |
| Corkscrew and cork-holder | G. H. Brinton | 723,581 | Mar. 24 | 3593 | 802 | 103 | 795 |
| Corn. Apparatus for degermination and decortication of | J. F. Gent | 735,664 | Aug. 4 | 1203 | 254, 255 | 105 | 1236 |
| Corn-carver | A. M. Furrow | 726,524 | Apr. 28 | 3920 | 886 | 103 | 2036 |
| Corn-cribbing apparatus | W. C. Tichenor | 731,085 | June 16 | 2851 | 633 | 104 | 1756 |
| Corn cutter. Broom | G. W. Duvall | 735,478 | Aug. 4 | 852 | 181 | 105 | 1161 |
| Corn cutting and crushing machine | J. S. Bloom | 733,454 | July 14 | 1363 | 321 | 105 | 305 |
| Corn-eradicator | J. B. Abler | 720,311 | Feb. 10 | 1669 | 380 | 102 | 1191 |
| Corn-fodder shredder | W. H. Beidler | 736,196 | Aug. 11 | 2186 | 470 | 105 | 1466 |
| Corn from the ear. Machine for cutting green | J. C. McIntyre | 722,874 | Mar. 17 | 2286 | 512 | 103 | 515 |
| Corn header. Kafir | R. M. Hammond | 744,684 | Nov. 17 | 3626 | 782 | 107 | 803 |
| Corn-heading attachment. Binder | J. L. Williams and E. W. Arrasmith | 742,141 | Oct. 20 | 3419 | 762 | 106 | 2001 |
| Corn-husker | L. A. Aspinwall | 727,875 | May 12 | 1992 | 444 | 104 | 441 |
| Corn-husker | H. Coad and W. G. Miller | 739,390 | Sept. 22 | 3583 | 800 | 106 | 813 |
| Corn-husker | H. C. Chapman | 743,450 | Nov. 10 | 1305 | 268, 269 | 107 | 294 |
| Corn-husker | J. Hovey | 746,704 | Dec. 15 | 2532 | 581, 582 | 107 | 1686 |
| Corn-husker and fodder-shredder | I. G. Berry | 718,902 | Jan. 20 | 2629 | 590 | 102 | 587 |
| Corn-husker and fodder-shredder | J. R. Hall | 731,178 | June 16 | 3029 | 673 | 104 | 1789 |
| Corn husker and shredder | G. W. Tice | 723,944 | Mar. 31 | 4277 | 961 | 103 | 959 |
| Corn husker and shredder | C. E. Curtiss | 727,300 | May 5 | 885 | 192, 193 | 104 | 190 |
| Corn husker and shredder | W. Gutenkunst | 736,961 | Aug. 25 | 3623 | 802 | 105 | 1806 |
| Corn husker and shredder | G. W. Witte | 741,868 | Oct. 20 | 2832 | 631, 632 | 106 | 1885 |
| Corn husker and silker. Green | A. M. Furrow | 725,951 | Apr. 21 | 2838 | 644 | 103 | 1802 |
| Corn-husker corn-separating device | W. Gutenkunst | 738,321 | Sept. 8 | 1584 | 342 | 106 | 357 |
| Corn-husker ear-agitating guide | J. V. Ross | 736,785 | Aug. 18 | 3278 | 725 | 105 | 1712 |
| Corn-husker feeder | J. C. Shekey and F. H. Shephard | 743,576 | Nov. 10 | 1564 | 327, 328 | 107 | 351 |
| Corn-husker feeder | C. W. Brierton | 746,005 | Dec. 8 | 1282 | 288 | 107 | 1390 |
| Corn husker. Green | C. H. Deering and W. F. Goodwin | 742,172 | Oct. 27 | 3479 | 777 | 106 | 2031 |
| Corn huskers and shredders. Knife cylinder for | E. Wisner | 737,543 | Aug. 25 | 4697 | 1053 | 105 | 2038 |
| Corn-husking and fodder preparing machine | C. E. Curtiss | 745,483 | Dec. 1 | 327 | 76, 77 | 107 | 1169 |
| Corn-husking and fodder-shredding machine | S. S. Creider and I. Korn | 738,776 | Sept. 15 | 2467 | 541, 542 | 106 | 560 |

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| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Corn husking and shredding machine | A. Rosenthal | 738,488 | Sept. 8 | 1906 | 416 | 106 | 423 |
| Corn husking and shredding machine band-cutter and self-feeder. | A. A. Coburn and F. Harnden | 739,988 | Sept. 29 | 4728 | 1064 | 106 | 1077 |
| Corn-husking device | P. A. Waller | 728,429 | May 19 | 3030 | 666 | 104 | 683 |
| Corn-husking device | W. L. Switzer | 746,647 | Dec. 8 | 2423 | 554 | 107 | 1641 |
| Corn-husking implement | F. D. Kees | 728,113 | May 12 | 2420 | 539 | 104 | 534 |
| Corn-husking implement | G. Marshall | 742,696 | Oct. 27 | 4441 | 1002 | 106 | 2231 |
| Corn-husking machine | F. C. Ielfield | 718,462 | Jan. 13 | 1757 | 390, 391 | 102 | 390 |
| Corn-husking machine | F. J. Fitzpatrick | 722,448 | Mar. 10 | 1481 | 327 | 103 | 332 |
| Corn-husking machine | W. Schultz | 727,851 | May 12 | 1951 | 435, 436 | 104 | 433 |
| Corn-husking machine | L. D. Swart | 731,393 | June 16 | 3430 | 765 | 104 | 1873 |
| Corn-husking machine | L. D. Swart | 732,468 | June 30 | 5504 | 1220 | 104 | 2333 |
| Corn-husking machine | J. W. Bellairs and J. H. Langton | 734,035 | July 21 | 2456 | 575 | 105 | 552 |
| Corn-husking machine | C. E. Dunn | 735,224 | Aug. 4 | 370 | 71, 72 | 105 | 1060 |
| Corn-husking machine | J. E. Goodhue | 739,540 | Sept. 22 | 3855 | 863, 864 | 106 | 873 |
| Corn-husking machine | H. T. Minick | 743,651 | Nov. 10 | 1700 | 358, 359 | 107 | 379 |
| Corn-husking machine | J., H., and H. Koelling | 746,526 | Dec. 8 | 2201 | 505 | 107 | 1590 |
| Corn-husking-machine roller | L. D. Swart | 732,469 | June 30 | 5506 | 1221 | 104 | 2333 |
| Corn-husking-machine snapping-rolls | F. Hagen | 721,798 | Mar. 3 | 255 | 57 | 103 | 56 |
| Corn-husking rolls. Agitator for | C. G. Bort | 742,387 | Oct. 27 | 3882 | 872 | 106 | 2113 |
| Corn-kernel-splitting machine | J. F. Gent | 735,662 | Aug. 4 | 1198 | 253, 254 | 105 | 1236 |
| Corn-knife | O. P. Müller | 729,386 | May 26 | 4771 | 1056 | 104 | 1059 |
| Corn. Machine for removing the silk from green | J. C. McIntyre | 743,655 | Nov. 10 | 1708 | 361 | 107 | 380 |
| Corn or grain dump elevator | J. Mabus and F. L. Hay | 722,997 | Mar. 17 | 2490 | 560 | 103 | 558 |
| Corn-picker | J. M. Gallaher | 718,337 | Jan. 13 | 1522 | 337, 338 | 102 | 342 |
| Corn picker and husker. Combined | J. P. Hoops | 740,135 | Sept. 29 | 4986 | 1120, 1121 | 106 | 1133 |
| Corn-plaster. Sectional | W. Mahler | 730,035 | June 2 | 941 | 211 | 104 | 1319 |
| Corn-popping apparatus | C. Cretors | 728,550 | May 19 | 3264 | 723 | 104 | 730 |
| Corn-preparing-machine rolls | W. R. Teeguarden | 729,698 | June 2 | 304 | 71 | 104 | 1191 |
| Corn-receiver | N. Edwards | 732,838 | July 7 | 257 | 64 | 105 | 57 |
| Corn-sheller | A. H. and H. A. Berns | 728,661 | May 19 | 3489 | 774, 775 | 104 | 780 |
| Corn-sheller | F. C. Patten | 730,563 | June 9 | 1894 | 422, 423 | 104 | 1534 |
| Corn-sheller | A. H. Patch | 732,217 | June 30 | 5024 | 1118 | 104 | 2235 |
| Corn-sheller | A. R. Montgomery | 736,615 | Aug. 18 | 2961 | 650 | 105 | 1647 |
| Corn-sheller | J. R. Duhachek | 744,313 | Nov. 17 | 2998 | 643 | 107 | 670 |
| Corn-shelling implement | A. C. Hurrell | 740,657 | Oct. 6 | 511 | 112 | 106 | 1356 |
| Corn-shelling machines. Automatic corn-feeder and regulator for | C. Petersen | 745,116 | Nov. 24 | 4482 | 970 | 107 | 1000 |
| Corn-shock-binding device | W. Battice | 747,365 | Dec. 22 | 3804 | 856 | 107 | 1988 |
| Corn-shock compressor | F. H. Schwark | 735,159 | Aug. 4 | 217 | 44 | 105 | 1029 |
| Corn-shock frame | H. H. Schenk | 720,072 | Feb. 10 | 1213 | 278 | 102 | 1097 |
| Corn-shocker | J. M. Shively | 723,623 | Mar. 24 | 3667 | 822 | 103 | 811 |
| Corn-shocker | J. M. Shively | 724,515 | Apr. 7 | 172 | 42, 43 | 103 | 1207 |
| Corn-shocker | O. S. Ellithorp | 726,891 | May 5 | 112 | 26 | 104 | 26 |
| Corn-shocker | O. S. Ellithorp | 726,892 | May 5 | 113 | 27 | 104 | 27 |
| Corn-shocker | J. M. Shively | 734,973 | July 28 | 4221 | 981 | 105 | 936 |
| Corn-shocker | P. C. Knutson | 736,526 | Aug. 18 | 2781 | 609 | 105 | 1612 |
| Corn-shocker | T. L. Creath | 743,833 | Nov. 10 | 2023 | 430 | 107 | 447 |
| Corn-shocker | W. B. Martin | 745,733 | Dec. 1 | 748 | 171, 172 | 107 | 1258 |
| Corn-shocker shock-forming post | B. R Benjamin | 722,397 | Mar. 10 | 1372 | 304 | 103 | 308 |
| Corn-shocking-machine knot-tying device | O. S. Ellithorp | 720,572 | Feb. 17 | 2168 | 503 | 102 | 1310 |
| Corn shredder and husker | H. F. Snyder | 735,308 | Aug. 4 | 519 | 105, 106 | 105 | 1092 |
| Corn shredders and huskers. Band-cutter and feeder for | N. G. Robinson | 733,275 | July 7 | 1041 | 249 | 105 | 218 |
| Corn shredding and husking machine | W. B. Martindale | 722,429 | Mar. 10 | 1429 | 316, 317 | 103 | 320 |
| Corn-shredding-machine band-cutter and feeder | J. Crosby | 729,739 | June 2 | 396 | 89, 90 | 104 | 1209 |
| Corn-shucker | N. Ostiguy | 742,896 | Nov. 3 | 134 | 31 | 107 | 30 |
| Corn-shucker | N. Ostiguy | 742,897 | Nov. 3 | 136 | 31 | 107 | 30 |
| Corn snapping, husking, and fodder-shredding machines. Feed mechanism for | J. O. Thompson | 719,962 | Feb. 3 | 984 | 228 | 102 | 1032 |
| Corn sorter. Seed- | L. P. Graham | 742,785 | Oct. 27 | 4576 | 1037 | 106 | 2262 |
| Corn-thinner | H. G. Horn | 720,807 | Feb. 17 | 2586 | 596 | 102 | 1397 |
| Corncob-pipe-turning machine | C. O. Strutz | 743,587 | Nov. 10 | 1585 | 332 | 107 | 355 |
| Cornstalk-shredder | L. D. Swart | 729,239 | May 26 | 4525 | 997 | 104 | 1008 |
| Cornstalks, &c. Manufacturing products from | G. R. Sherwood | 720,850 | Feb. 17 | 2655 | ..... | 102 | 1412 |
| Cornstalks, &c. Manufacturing products from | G. R. Sherwood | 720,851 | Feb. 17 | 2656 | ..... | 102 | 1412 |
| Cornstalks, sugar-cane, &c. Manufacturing products from | V. Drewsen | 731,290 | June 16 | 3236 | ..... | 104 | 1832 |
| Corner-bead. Plasterer's | L. Schuller | 727,463 | May 5 | 1190 | 262 | 104 | 257 |
| Corner-brace | J. P. Johnson | 717,687 | Jan. 6 | 296 | 73 | 102 | 64 |
| Corner-plate. Sanitary | E. Funke | 721,176 | Feb. 24 | 3317 | 758 | 102 | 1572 |
| Corner-post pocket | A. Christianson | 720,222 | Feb. 10 | 1507 | 345 | 102 | 1157 |
| Corner-shield | F. A. Stevens | 734,445 | July 21 | 3225 | 759 | 105 | 715 |
| Corner-staying machine | W. F. Morse | 741,691 | Oct. 20 | 2508 | 559, 560, 561 | 106 | 1815 |
| Corner-strip | F. L. Union | 741,288 | Oct. 13 | 1702 | 380 | 106 | 1627 |
| Cornet | H. C. Martin | 736,756 | Aug. 18 | 3220 | 712 | 105 | 1701 |
| Cornet | C. G. Conn | 745,788 | Dec. 1 | 847 | 192 | 107 | 1279 |
| Cornet-mouthpiece | C. G. Conn | 747,591 | Dec. 22 | 4195 | 943 | 107 | 2076 |
| Cornice-break cutting attachment | G. R. Byde | 727,895 | May 12 | 2032 | 452 | 104 | 450 |
| Cornice-break machine | H. Schott | 722,149 | Mar. 3 | 901 | 199 | 103 | 193 |
| Cornice-jack | J. W. Thomas | 727,028 | May 5 | 410 | 86 | 104 | 89 |

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| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Cornice-mold. Self-mitering | M. D. Lewis | 727,647 | May 12 | 1547 | 349 | 104 | 350 |
| Corrugating-machine | C. Puddefoot | 744,231 | Nov. 17 | 2843 | 608 | 107 | 636 |
| Corrugating-press | J. P. Sneddon | 745,255 | Nov. 24 | 4751 | {1038 {1039 | 107 | 1055 |
| Corrugating-tool | J. Blumer | 733,131 | July 7 | 768 | 186 | 105 | 162 |
| Corrugator | T. F. Rowland | 737,277 | Aug. 25 | 4193 | {934 {935 | 105 | 1925 |
| Corset | L. Lawrence | 720,363 | Feb. 10 | 1765 | 400 | 102 | 1213 |
| Corset | J. H. Thornton | 721,621 | Feb. 24 | 4166 | 946 | 102 | 1752 |
| Corset | S. Meyer | 723,893 | Mar. 31 | 4163 | 937 | 103 | 933 |
| Corset | P. J. Menahan | 725,980 | Apr. 21 | 2883 | 654 | 103 | 1811 |
| Corset | D. Kops | 727,385 | May 5 | 1044 | 227 | 104 | 225 |
| Corset | M. P. S. Nottelle | 730,147 | June 2 | 1121 | 252 | 104 | 1355 |
| Corset | D. Kops. (Reissue) | 12,120 | June 16 | 3477 | 777 | 104 | 1881 |
| Corset | J. Schufflay | 732,591 | June 30 | 5737 | 1274 | 104 | 2385 |
| Corset | R. S. Oliver | 734,083 | July 21 | 2553 | 596 | 105 | 575 |
| Corset | J. Siegel | 734,623 | July 28 | 3548 | 831 | 105 | 800 |
| Corset | N. Temple | 735,843 | Aug. 11 | 1546 | 331 | 105 | 1329 |
| Corset | T. Schottlander | 736,029 | Aug. 11 | 1895 | 405 | 105 | 1405 |
| Corset | M. A. Osburn | 738,058 | Sept. 1 | 984 | 219 | 106 | 214 |
| Corset | A. M. Donshea | 740,824 | Oct. 6 | 830 | 186 | 106 | 1423 |
| Corset | E. Savoye | 740,930 | Oct. 6 | 995 | 225 | 106 | 1459 |
| Corset | A. P. McGraw | 741,697 | Oct. 20 | 2521 | 563 | 106 | 1820 |
| Corset | J. M. Van Orden | 743,407 | Nov. 3 | 1194 | 247 | 107 | 255 |
| Corset | A. V. Case | 744,484 | Nov. 17 | 3303 | 710 | 107 | 735 |
| Corset. Abdominal | C. H. Schopbach | 732,378 | June 30 | 5333 | 1182 | 104 | 2298 |
| Corset attachment | E. Bell | 718,899 | Jan. 20 | 2617 | 585 | 102 | 585 |
| Corset-busks. Means for securing | R. Scales | 728,305 | May 19 | 2812 | 622 | 104 | 638 |
| Corset-busks. Metal clasp for | E. D. Etienne | 741,237 | Oct. 13 | 1592 | 358 | 106 | 1606 |
| Corset-clasp | S. Kennedy | 725,258 | Apr. 14 | 1559 | 353 | 103 | 1515 |
| Corset-clasp attachment | P. Lippmann | 731,475 | June 23 | 3599 | 803 | 104 | 1926 |
| Corset-fastening | E. S. Bowker | 723,234 | Mar. 24 | 2943 | 660 | 103 | 667 |
| Corset. Maternity- | M. E. Leighton | 721,575 | Feb. 24 | 4070 | {923 {924 | 102 | 1732 |
| Corset. Orthopedic | F. Haas | 738,995 | Sept. 15 | 2856 | 634 | 106 | 645 |
| Corset-shaper | P. J. Menahan | 725,979 | Apr. 21 | 2880 | 653 | 103 | 1811 |
| Corset skirt-hook attachment | M. B. Hammond | 742,188 | Oct. 27 | 3512 | 784 | 106 | 2036 |
| Cot and tent. Combined | I. L. Gleason | 732,733 | July 7 | 64 | 18 | 105 | 17 |
| Cot. Folding | C. G. Rundgvist | 718,159 | Jan. 13 | 1187 | 264 | 102 | 271 |
| Cot. Folding | A. Cantor | 729,486 | May 26 | 4931 | 1093 | 104 | 1095 |
| Cot. Folding | H. P. Snyder and E. S. Bedford | 739,940 | Sept. 29 | 4641 | {1041 {1042 | 106 | 1059 |
| Cot. Knockdown | J. Linden, P. Peirson, and C. E. Josephsan. | 732,755 | July 7 | 102 | 29 | 105 | 25 |
| Cotarnin phthalate and making same | H. Vieth | 742,532 | Oct. 27 | 4159 | ..... | 106 | 2170 |
| Cotter | E. W. Merrill, Jr | 733,669 | July 14 | 1731 | 409 | 105 | 382 |
| Cotter | H. Jung | 745,728 | Dec. 1 | 743 | 170 | 107 | 1256 |
| Cotton-beater | C. J. Morgan | 729,635 | June 2 | 204 | 46 | 104 | 1170 |
| Cotton-chopper | G. C. Talley | 721,618 | Feb. 24 | 4161 | 945 | 102 | 1751 |
| Cotton-chopper | T. M. Short | 723,931 | Mar. 31 | 4244 | 954 | 103 | 951 |
| Cotton-chopper | F. F. Gerding | 732,934 | July 7 | 423 | 104 | 105 | 91 |
| Cotton-chopper | H. F. Mackey | 733,237 | July 7 | 957 | 231 | 105 | 200 |
| Cotton-chopper | J. A. Carlton and H. L. Harrell | 738,659 | Sept. 8 | 2226 | {487 {488 | 106 | 493 |
| Cotton-chopper | H. C. Stringfellow | 745,925 | Dec. 1 | 1124 | {251 {252 | 107 | 1338 |
| Cotton chopper and cultivator | C. E. Delano | 723,444 | Mar. 24 | 3333 | {747 {748 | 103 | 744 |
| Cotton chopper and cultivator | J. N. McAda | 723,542 | Mar. 24 | 3523 | 788 | 103 | 782 |
| Cotton chopper and cultivator | W. D. Wilson | 731,990 | June 23 | 4537 | 1012 | 104 | 2121 |
| Cotton chopper and cultivator. Combined | M. A. Beard | 723,126 | Mar. 17 | 2726 | 612 | 103 | 607 |
| Cotton chopper and cultivator. Combined | J. W. Parmer | 743,919 | Nov. 10 | 2177 | 469 | 107 | 480 |
| Cotton chopper and plow | T. McPherson | 731,601 | June 23 | 3838 | 855 | 104 | 1973 |
| Cotton-cleaner | E. B. Ham | 730,763 | June 9 | 2241 | 498 | 104 | 1611 |
| Cotton cleaner and feeder | M. F. and J. H. Seward | 744,807 | Nov. 24 | 3881 | 835 | 107 | 876 |
| Cotton. Cleaning ginned | H. Rembert | 730,158 | June 2 | 1134 | 255 | 104 | 1358 |
| Cotton-compress | J. K. Cochran | 734,813 | Apr. 7 | 738 | {173 {174 | 103 | 1328 |
| Cotton-compress | P. K. Crowell | 730,347 | June 9 | 1498 | {332 {333 | 104 | 1450 |
| Cotton-compress | R. D. Crow | 730,881 | June 16 | 2456 | {544 {545 | 104 | 1674 |
| Cotton-conveyer. Pneumatic | G. E. Richmond | 721,743 | Mar. 3 | 158 | 36, 37 | 103 | 35 |
| Cotton-feeders. Automatic alarm for | O. A. Bremer | 744,468 | Nov. 17 | 3277 | {703 {704 | 107 | 730 |
| Cotton-gin | P. F. King | 718,635 | Jan. 20 | 2120 | {461 {462 {463 | 102 | 484 |
| Cotton-gin | J. Brandon | 731,273 | June 16 | 3192 | 711 | 104 | 1822 |
| Cotton-gin | J. Brandon | 735,455 | Aug. 4 | 810 | {172 {173 | 105 | 1153 |
| Cotton-gin | A. M. Dastur | 736,227 | Aug. 11 | 2234 | 482 | 105 | 1476 |
| Cotton-gin | C. J. McPherson | 739,905 | Sept. 29 | 4572 | 1028 | 106 | 1044 |
| Cotton-gin | W. H. Baskin | 741,443 | Oct. 13 | 2001 | 444 | 106 | 1693 |
| Cotton-gin attachment | J. C. W. Stanley | 738,370 | Sept. 8 | 1676 | 363 | 106 | 376 |
| Cotton-gin brush | T. Brantley | 732,999 | July 7 | 528 | 131 | 105 | 113 |
| Cotton-gin brush | T. Brantley | 745,273 | Nov. 24 | 4786 | 1045 | 107 | 1062 |
| Cotton. Ginning | B. D. Brantley | 747,315 | Dec. 15 | 3706 | ..... | 107 | 1950 |
| Cotton-handling machinery | J. R. Fordyce | 732,625 | June 30 | 5795 | {1285 {1286 | 104 | 2398 |
| Cotton huller, cleaner, and gin-feeder | E. B. Larson | 732,869 | July 7 | 306 | 77 | 105 | 68 |
| Cotton in cotton-boxes. Means for equalizing the distribution of | M. A. Stephenson | 732,969 | July 7 | 474 | 118 | 105 | 102 |
| Cotton-opener grid | H. S. Houghton | 744,864 | Nov. 24 | 3987 | 859 | 107 | 898 |
| Cotton opening and cleaning machine | R. E. Evans | 735,076 | Aug. 4 | 49 | 14 | 105 | 992 |

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| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drgs. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Cotton opening and cleaning machine | D. J. Winn | 739,246 | Sept. 15 | 3324 | 737, 738 | 106 | 743 |
| Cotton or rice chopper | H. E. W. Kirkland | 745,864 | Dec. 1 | 1019 | 229 | 107 | 1317 |
| Cotton-picker | J. Griffin | 732,546 | June 30 | 5653 | 1254 | 104 | 2365 |
| Cotton-picker | H. Wiswall, Jr | 732,681 | June 30 | 5905 | 1310 | 104 | 2420 |
| Cotton-picking sack or receptacle | L. J. and C. W. Wilson | 730,325 | June 9 | 1457 | 322 | 104 | 1441 |
| Cotton-press | E. D. Carter | 719,083 | Jan. 27 | 2974 | 664 | 102 | 674 |
| Cotton-press | J. J. Atkinson | 733,451 | July 14 | 1353 | 319 | 105 | 303 |
| Cotton-press | J. T. Fuller | 734,695 | July 28 | 3688 | 864, 865 | 105 | 827 |
| Cotton-press | E. E. Hanna | 735,368 | Aug. 4 | 622 | 127, 128, 129 | 105 | 1114 |
| Cotton-press | R. D. Crow | 739,898 | Sept. 29 | 4418 | 991, 992 | 106 | 1013 |
| Cotton-press bat feeding and forming apparatus | J. R. Fordyce | 731,764 | June 23 | 4134 | 923 | 104 | 2033 |
| Cotton-press. Oscillating | S. J. Webb | 741,085 | Oct. 13 | 1292 | 295, 296 | 106 | 1543 |
| Cotton-separator | R. Sobotka and W. B. Smith | 739,733 | Sept. 22 | 4224 | 946 | 106 | 954 |
| Cotton-stalk puller | G. W. Hardin and J. D. Mead | 738,795 | Sept. 15 | 2515 | 553 | 106 | 571 |
| Cotton-thinner | G. L. Green | 718,451 | Jan. 13 | 1735 | 385, 386 | 102 | 385 |
| Cotton-waste. Apparatus for treating | R. R. Boyd | 743,813 | Nov. 10 | 1990 | 423 | 107 | 440 |
| Cotton-waste. Treating | R. R. Boyd | 743,814 | Nov. 10 | 1994 | 423 | 107 | 441 |
| Couch | J. R. Hardtmann | 748,184 | Dec. 29 | 5362 | 1218 | 107 | 2356 |
| Couch and chair. Combined | H. H. Pattee | 731,810 | June 23 | 4217 | 940 | 104 | 2052 |
| Couch and chest. Combined | G. A. Alger | 719,712 | Feb. 3 | 548 | 124 | 102 | 938 |
| Couch and folding bed. Combined | D. T. Owen. (Reissue) | 12,078 | Feb. 3 | 1021 | 237 | 102 | 1040 |
| Couch. Box- | H. M. Bedell | 734,659 | July 28 | 3621 | 848 | 105 | 814 |
| Couch-frame. Detachable collapsible | A. Schrock | 735,600 | Aug. 4 | 1081 | 230 | 105 | 1210 |
| Couch head-rest support | J. Luppino | 722,372 | Mar. 10 | 1337 | 295, 296 | 103 | 301 |
| Counter | W. L. Sandage | 728,502 | May 19 | 3162 | 700 | 104 | 710 |
| Counter and bin. Combined | D. H. Bragunier | 739,581 | Sept. 22 | 3946 | 881 | 106 | 893 |
| Counter and index | J. M. Cory | 733,626 | July 14 | 1656 | 392, 393 | 105 | 367 |
| Counter. Lunch- | F. H. Secord | 723,043 | Mar. 17 | 2568 | 578 | 103 | 575 |
| Counter-skiving machine | W. C. Stewart | 740,483 | Oct. 6 | 190 | 37, 38 | 106 | 1286 |
| Counter-support | G. H. Harland | 729,761 | June 2 | 442 | 100 | 104 | 1218 |
| Counterboring-tool | C. H. Schade and G. T. Strite | 740,047 | Sept. 29 | 4843 | 1086 | 106 | 1103 |
| Countersink | J. M. Taylor | 724,520 | Apr. 7 | 189 | 47 | 103 | 1210 |
| Countersink | G. W. Brackin | 727,580 | May 12 | 1420 | 319 | 104 | 324 |
| Counting and indicating machine | W. Ackerman | 747,922 | Dec. 29 | 4845 | 1094, 1095 | 107 | 2243 |
| Counting-machine | J. B. Sleeman | 743,579 | Nov. 10 | 1569 | 329 | 107 | 352 |
| Counting mechanism | F. C. Rinsche | 723,213 | Mar. 17 | 2898 | 649 | 103 | 644 |
| Counting mechanism | G. A. Wall | 738,962 | Sept. 15 | 2811 | 623 | 106 | 635 |
| Counting mechanism | F. C. Rinsche | 744,407 | Nov. 17 | 3162 | 679 | 107 | 706 |
| Counting pieces of goods. Apparatus for | A. Christersson | 729,133 | May 26 | 4325 | 955, 956 | 104 | 966 |
| Coupling: | | | | | | | |
| *See* Air-brake coupling. | | | | | | | |
| Air-brake-hose coupling. | | | | | | | |
| Air-conduit coupling. | | | | | | | |
| Auger-section coupling. | | | | | | | |
| Automatic coupling. | | | | | | | |
| Bed-coupling. | | | | | | | |
| Bed-rail coupling. | | | | | | | |
| Bedstead-coupling. | | | | | | | |
| Boat-coupling. | | | | | | | |
| Cable-coupling. | | | | | | | |
| Car-coupling. | | | | | | | |
| Car automatic air-coupling. | | | | | | | |
| Car or locomotive coupling. | | | | | | | |
| Car pipe-coupling. | | | | | | | |
| Clutch-coupling. | | | | | | | |
| Compression-coupling. | | | | | | | |
| Converter-coupling. | | | | | | | |
| Cord or rope coupling. | | | | | | | |
| Cultivator-coupling. | | | | | | | |
| Draft-coupling. | | | | | | | |
| Electric coupling. | | | | | | | |
| Electrical-conduit coupling. | | | | | | | |
| Engine-coupling. | | | | | | | |
| Faucet-coupling. | | | | | | | |
| Fire-hose coupling. | | | | | | | |
| Fluid-pressure coupling. | | | | | | | |
| Friction-coupling. | | | | | | | |
| Furniture-coupling. | | | | | | | |
| Hose-coupling. | | | | | | | |
| Hose or pipe coupling. | | | | | | | |
| Hose-pipe coupling. | | | | | | | |
| Meter-coupling. | | | | | | | |
| Pipe-coupling. | | | | | | | |
| Pipe or hose coupling. | | | | | | | |
| Pole-coupling. | | | | | | | |
| Pole and thill coupling. | | | | | | | |
| Pump-coupling. | | | | | | | |
| Pump-rod coupling. | | | | | | | |
| Railway-carriage coupling. | | | | | | | |
| Railway-rail coupling. | | | | | | | |
| Railway-vehicle coupling. | | | | | | | |
| Railway-wagon coupling. | | | | | | | |
| Rod-coupling. | | | | | | | |
| Rod or pipe coupling. | | | | | | | |
| Rolling-mill coupling. | | | | | | | |
| Shaft-coupling. | | | | | | | |
| Shafting-coupling. | | | | | | | |
| Suspender-belt coupling. | | | | | | | |
| Swivel-coupling. | | | | | | | |
| Thill-coupling. | | | | | | | |
| Thill or pole coupling. | | | | | | | |
| Tire-valve coupling. | | | | | | | |
| Trip-coupling. | | | | | | | |
| Tube-coupling. | | | | | | | |
| Universal coupling. | | | | | | | |
| Valve-coupling. | | | | | | | |
| Vehicle-coupling. | | | | | | | |
| Coupling | G. Krebs | 730,777 | June 9 | 2263 | 503 | 104 | 1615 |
| Coupling | P. H. Mack | 733,408 | July 14 | 1279 | 302 | 105 | 287 |
| Coupling | E. O. Warner | 734,782 | July 28 | 3870 | 902 | 105 | 862 |
| Coupling | W. McConway, Jr | 738,729 | Sept. 8 | 2357 | 517, 518 | 106 | 519 |
| Coupling | J. R. Carter | 740,527 | Oct. 6 | 279 | 55 | 106 | 1305 |
| Coupling | R. B. Hinton | 743,870 | Nov. 10 | 2089 | 445 | 107 | 461 |
| Coupling | R. M. Dixon | 744,505 | Nov. 17 | 3338 | 718 | 107 | 743 |
| Coupling | R. M. Dixon | 744,506 | Nov. 17 | 3338 | 719 | 107 | 743 |

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| | | | | Spec. | Dr'g. | Vol. | Page. |
| Coupling | W. Miles | 745,219 | Nov. 24 | 4693 | 1024 | 107 | 1043 |
| Coupling-centering device | E. F. Chaffee | 727,901 | May 12 | 2043 | 455 | 104 | 453 |
| Coupling-centering device | H. H. Forsyth | 727,929 | May 12 | 2105 | 468 | 104 | 466 |
| Coupling-centering device | H. H. Forsyth | 727,930 | May 12 | 2107 | 468 | 104 | 467 |
| Coupling device | F. G. Hughes | 721,304 | Feb. 24 | 3556 | 809 | 102 | 1622 |
| Coupling device | J. Pellington | 747,633 | Dec. 22 | 4279 | 962 | 107 | 2095 |
| Coupling device. Auxiliary | C. H. McLaughlin | 742,720 | Oct. 27 | 4476 | 1012, 1013 | 106 | 2238 |
| Coupling for air or other ducts | S. L. McAdams | 746,360 | Dec. 8 | 1921 | 439 | 107 | 1528 |
| Coupling for drill-rods, line-shafts, &c | F. J. Thoring | 734,107 | July 21 | 2606 | 613 | 105 | 584 |
| Coupling for straight-edges | H. Boussemaere | 735,060 | Aug. 4 | 23 | 6, 7 | 105 | 986 |
| Coupling for textile-roller sections | G. H. Milward | 747,561 | Dec. 22 | 4142 | 930 | 107 | 2064 |
| Coupling-knuckle | E. C. Washburn | 721,345 | Feb. 24 | 3637 | 826, 827 | 102 | 1639 |
| Coupling-pin | J. F. Schweigerer | 726,829 | Apr. 28 | 4495 | 1014 | 103 | 2154 |
| Coupling pivot-pin | C. A. Tower | 735,000 | July 28 | 4279 | 996 | 105 | 948 |
| Coupling-release rigging | G. P. Ritter | 743,560 | Nov. 10 | 1522 | 318, 319 | 107 | 342 |
| Coupling-release rigging | G. P. Ritter | 743,561 | Nov. 10 | 1525 | 319 | 107 | 343 |
| Coupling-rod jaws. Manufacture of | P. Meyer | 732,876 | July 7 | 323 | 80 | 105 | 71 |
| Course and bearing correcting device | J. Baxter | 745,314 | Dec. 1 | 5 | 1 | 107 | 1102 |
| Cover | H. P. Childress | 746,675 | Dec. 15 | 2489 | 569 | 107 | 1676 |
| Cover and strainer. Milk-pail | E. M. Haymaker | 739,080 | Sept. 15 | 3013 | 668 | 106 | 677 |
| Cover. Culinary-vessel | J. Stone | 736,169 | Aug. 11 | 2140 | 460 | 105 | 1456 |
| Cover. Frying-pan | M. B. Covert | 738,986 | Sept. 15 | 2845 | 631 | 106 | 642 |
| Cover. Kettle | G. C. Bulgin | 722,082 | Mar. 3 | 778 | 175 | 103 | 168 |
| Cover lock. Vessel | R. O. Bingham | 724,425 | Apr. 7 | 13 | 4 | 103 | 1173 |
| Cover. Receptacle | F. O. Soderstrom | 728,318 | May 19 | 2842 | 628, 629 | 104 | 644 |
| Cover. Receptacle | E. J. Gorman | 733,580 | July 14 | 1583 | 377 | 105 | 352 |
| Cover support. Vessel | C. F. Reichelt | 746,878 | Dec. 15 | 2868 | 660 | 107 | 1761 |
| Covered box | J. H. Fearis | 739,406 | Sept. 22 | 3640 | 809 | 106 | 827 |
| Cow-tail holder | W. Noxon | 717,712 | Jan. 6 | 341 | 83 | 102 | 74 |
| Cows' tails. Device for preventing the switching of | D. McLellan | 718,273 | Jan. 13 | 1407 | 313 | 102 | 318 |
| Cows' tails while milking. Device for securing | J. Badgerow | 743,671 | Nov. 10 | 1735 | 366 | 107 | 387 |
| Cowl | W. J. Kayser | 743,390 | Nov. 3 | 1135 | 240 | 107 | 240 |
| Coyote-alarm | J. S. Barnes | 726,131 | Apr. 21 | 3138 | 709 | 103 | 1863 |
| Crab-shell-cleansing apparatus | J. W. P. Insley | 732,637 | June 30 | 5821 | 1290 | 104 | 2404 |
| Cracker-box rack | O. G. Anderson | 721,992 | Mar. 3 | 638 | 142 | 103 | 138 |
| Cracker or biscuit machine | F. M. Peters | 724,609 | Apr. 7 | 357 | 86, 87 | 103 | 1245 |
| Cracker or cake stacking machine | C. J. Alfred | 738,749 | Sept. 15 | 2419 | 530, 531 | 106 | 549 |
| Cradle | J. Barta | 744,993 | Nov. 24 | 4213 | 942 | 107 | 944 |
| Cradle | L. Moody | 747,562 | Dec. 22 | 4143 | 930 | 107 | 2065 |
| Cradle motor attachment | M. W. Robinson | 746,166 | Dec. 8 | 1568 | 351 | 107 | 1455 |
| Crane | A. L. and O. Anderson | 725,312 | Apr. 14 | 1645 | 371, 372 | 103 | 1583 |
| Crane | L. S. Fleckenstein | 728,095 | May 12 | 2396 | 533, 534 | 104 | 527 |
| Crane | A. P. Van Tuyl | 734,019 | July 21 | 2424 | 567 | 105 | 545 |
| Crane | J. Matthews | 734,187 | July 21 | 2750 | 645, 646 | 105 | 614 |
| Crane and appurtenances | A. A. de Bonneville and A. Johnston | 744,464 | Nov. 17 | 3270 | 701, 702 | 107 | 729 |
| Crane-arm | E. O. and C. W. Rood | 746,168 | Dec. 8 | 1573 | 352 | 107 | 1456 |
| Crane. Electric | J. H. Holland | 717,994 | Jan. 6 | 894 | 199, 200, 201, 202 | 102 | 192 |
| Crane. Erecting | J. H. Ames | 728,825 | May 26 | 3790 | 844, 845 | 104 | 859 |
| Crane. High-speed-train staff | T. H. Patenall | 720,059 | Feb. 10 | 1190 | 272, 273 | 102 | 1092 |
| Crane. Hoisting | W. E. Boden | 723,128 | Mar. 17 | 2730 | 613 | 103 | 608 |
| Crane or like hoisting or lowering apparatus | A. H. Mitchell | 741,525 | Oct. 13 | 2183 | 485 | 106 | 1731 |
| Crane. Overhead traveling | C. L. Taylor | 718,676 | Jan. 20 | 2202 | 482, 483 | 102 | 499 |
| Crane. Overhead traveling | G. Mitchell | 722,868 | Mar. 17 | 2273 | 509 | 103 | 513 |
| Crane. Overhead traveling | H. A. Otto | 728,495 | May 19 | 3153 | 697, 698 | 104 | 708 |
| Crane. Wharf | J. W. Seaver, C. H. Wellman, and T. R. Morgan. | 731,231 | June 16 | 3117 | 691 | 104 | 1807 |
| Cranes and derricks. Chain-block for overhead | A. L. Roberts | 722,755 | Mar. 17 | 2070 | 463, 464 | 103 | 473 |
| Cranes. Automatic rail gripping or locking device for electric | S. T. Wellman and J. E. A. Moore | 722,066 | Mar. 3 | 757 | 169 | 103 | 163 |
| Cranes. Means for preventing the overwinding of hoist-chains of | G. Mitchell | 722,867 | Mar. 17 | 2272 | 509 | 103 | 513 |
| Crank and crank connection | T. L. and T. J. Sturtevant | 736,457 | Aug. 18 | 2637 | 579 | 105 | 1581 |
| Crank and yoke connection | F. C. Olin | 734,595 | July 28 | 3508 | 819 | 105 | 790 |
| Crank-arm connection | J. S. Fritz | 737,603 | Sept. 1 | 87 | 18 | 106 | 21 |
| Crank disks or gears against end movement. Means for securing | J. Thomson | 725,510 | Apr. 14 | 2028 | 458, 459 | 103 | 1615 |
| Crank-pin-setting gage | W. A. Nunnally | 737,560 | Aug. 25 | 4723 | 1059 | 105 | 2043 |
| Crate | R. De Wright | 725,942 | Apr. 21 | 2827 | 640, 641 | 103 | 1799 |
| Crate | A. Vaught | 731,984 | June 23 | 4529 | 1010 | 104 | 2120 |
| Crate | W. M. Woodworth | 738,588 | Sept. 8 | 2079 | 454 | 106 | 462 |
| Crate | E. M. Averill | 740,213 | Sept. 29 | 5139 | 1153 | 106 | 1164 |
| Crate. Animal | W. A. Stewart | 744,641 | Nov. 17 | 3549 | 765 | 107 | 785 |
| Crate. Banana | A. Sansone | 741,551 | Oct. 13 | 2237 | 498 | 106 | 1744 |
| Crate. Basket | A. B. Porter | 730,153 | June 2 | 1129 | 253 | 104 | 1357 |
| Crate. Bottle | P. Linker | 717,586 | Jan. 6 | 113 | 30 | 102 | 27 |
| Crate. Bottle | W. E. Brown | 724,796 | Apr. 7 | 707 | 165 | 103 | 1320 |
| Crate. Bottle | W. E Brown | 724,797 | Apr. 7 | 708 | 166 | 103 | 1320 |
| Crate. Collapsible | W. B. Boutwell | 721,003 | Feb. 17 | 2952 | 678 | 102 | 1474 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | | Spec. | Dr'g. | Vol. | Page. |
| Crate. Collapsible | S. Greer | 740,753 | Oct. 6 | 683 | 155 | 106 | 1393 |
| Crate. Collapsible | W. H. Orr | 745,892 | Dec. 1 | 1069 | 240 | 107 | 1326 |
| Crate. Collapsible folding and adjustable | E. Hornaday and W. J. Corner | 734,493 | July 21 | 3312 | 777 | 105 | 731 |
| Crate corner-strap | E. F. Gilbert | 722,692 | Mar. 17 | 1964 | 438 | 103 | 452 |
| Crate. Demijohn- | J. J. Clifford | 723,649 | Mar. 24 | 3710 | 832 | 103 | 820 |
| Crate. Egg- | W. O. Anderson | 718,807 | Jan. 20 | 2447 | 542 | 102 | 549 |
| Crate. Egg- | A. T. Bodle | 743,232 | Nov. 3 | 804 | 175 | 107 | 168 |
| Crate. Egg- | D. T. White and M. J. Wagner, Jr. | 744,842 | Nov. 24 | 3949 | 851 | 107 | 889 |
| Crate-filler | W. A. Melrose | 742,704 | Oct. 27 | 4451 | 1006 | 106 | 2233 |
| Crate. Folding | A. A. Smith | 719,893 | Feb. 3 | 869 | 204 | 102 | 1007 |
| Crate. Folding | G. J. Cline | 720,328 | Feb. 10 | 1698 | 385 | 102 | 1198 |
| Crate. Folding | J. H. Gray | 721,296 | Feb. 24 | 3543 | 805 | 102 | 1619 |
| Crate. Folding | J. A. Stewart | 722,161 | Mar. 3 | 927 | 205 | 103 | 197 |
| Crate. Folding | E. G. Solomon | 734,477 | July 21 | 3286 | 771 | 105 | 727 |
| Crate. Folding | B. K. Boyd | 735,939 | Aug. 11 | 1728 | 369 | 105 | 1369 |
| Crate. Folding | J. S. Hilyard | 738,109 | Sept. 1 | 1094 | 242 | 106 | 237 |
| Crate. Folding | C. A. Beittenmiller | 743,808 | Nov. 10 | 1979 | 421 | 107 | 438 |
| Crate. Folding egg- | S. M. Hunt | 732,412 | June 30 | 5392 | 1195 | 104 | 2312 |
| Crate. Folding poultry- | A. McDonald | 726,333 | Apr. 28 | 3541 | 802 | 103 | 1963 |
| Crate. Folding poultry-shipping | L. E. Trachsel | 720,702 | June 2 | 312 | 72 | 104 | 1193 |
| Crate for carboys, &c. | E. G. Howe | 745,015 | Nov. 24 | 4244 | 920 | 107 | 950 |
| Crate. Fruit or vegetable | C. E. and J. O. Mansfield | 737,259 | Aug. 25 | 4161 | 926 | 105 | 1919 |
| Crate. Knockdown | G. M. Kertz | 726,941 | May 5 | 205 | 48 | 104 | 45 |
| Crate. Knockdown | O. C. Crumpton | 744,299 | Nov. 17 | 2977 | 637 | 107 | 665 |
| Crate. Knockdown | J. E. Symes and B. K. Boyd | 746,199 | Dec. 8 | 1627 | 362, 363 | 107 | 1468 |
| Crate. Metallic | R. S. Johnson | 739,006 | Sept. 15 | 2878 | 639 | 106 | 650 |
| Crate or box. Collapsible | J. O. Black | 745,092 | Nov. 24 | 4441 | 960 | 107 | 990 |
| Crate or box. Folding | W. H. Crossley | 745,796 | Dec. 1 | 865 | 195, 196 | 107 | 1284 |
| Crate or case | J. A. Taylor | 722,771 | Mar. 17 | 2101 | 470 | 103 | 480 |
| Crate. Shipping- | E. G. Tufts | 718,402 | Jan. 13 | 1630 | 358 | 102 | 365 |
| Crate. Shipping- | C. Q. C. Leigh | 719,819 | Feb. 3 | 744 | 175 | 102 | 980 |
| Crate. Shipping- | D. T. Shocklin and G. Schwartz | 719,891 | Feb. 3 | 865 | 203 | 102 | 1006 |
| Crate. Shipping- | H. J. Williams | 721,642 | Feb. 24 | 4201 | 955 | 102 | 1760 |
| Crate. Shipping- | G. L. Walburn | 725,898 | Apr. 21 | 2743 | 624 | 103 | 1783 |
| Crate. Shipping- | G. E. Hallaron | 746,075 | Dec. 8 | 1401 | 313 | 107 | 1417 |
| Crayon-holder | S. H. Decker | 734,445 | Apr. 7 | 43 | 11 | 103 | 1179 |
| Crayon-molding machine | W. F. Hanson | 732,408 | June 30 | 5387 | 1194 | 104 | 2311 |
| Crayons, &c. Holder for | V. Johnson | 724,877 | Apr. 7 | 858 | 197 | 103 | 1352 |
| Cream and butter separator | J. G. Cunningham | 718,319 | Jan. 13 | 1489 | 330 | 102 | 335 |
| Cream cooler and aerator | F. O. Hague | 728,392 | May 19 | 2963 | 653 | 104 | 668 |
| Cream cooler and aerator | A. C. Lifquist | 734,075 | July 21 | 2537 | 592 | 105 | 571 |
| Cream-regulating device for separators | W. W. Price | 733,273 | July 7 | 1036 | 248, 249 | 105 | 216 |
| Cream-separator | L. E. Siebenhaar | 717,936 | Jan. 6 | 789 | 177 | 102 | 169 |
| Cream-separator | M. Johnsrud | 718,936 | Jan. 20 | 2694 | 603 | 102 | 603 |
| Cream-separator | J. W. Whitlock | 724,640 | Apr. 7 | 411 | 97 | 103 | 1257 |
| Cream-separator | H. Galer | 727,781 | May 12 | 1827 | 408 | 104 | 408 |
| Cream-separator | W. A. Odell and T. F. Egan | 732,886 | July 7 | 340 | 83 | 105 | 75 |
| Cream-separator | A. D. Lugibihl and H. D. Zebrbach | 735,122 | Aug. 4 | 147 | 32 | 105 | 1013 |
| Cream-separator | H. D. Zehrbach | 736,570 | Aug. 18 | 2852 | 624 | 105 | 1626 |
| Cream-separator | J. A. Rector | 737,139 | Aug. 25 | 3917 | 870 | 105 | 1867 |
| Cream-separator | H. S. Hunt | 738,807 | Sept. 15 | 2541 | 558 | 106 | 577 |
| Cream-separator | S. A. Jones | 739,423 | Sept. 22 | 3666 | 815 | 106 | 832 |
| Cream-separator | B. F. Bradbury | 744,023 | Nov. 17 | 2431 | 522 | 107 | 594 |
| Cream-separator | H. H. Stüssy | 745,083 | Nov. 24 | 4424 | 957 | 107 | 986 |
| Cream-separator | S. R. Barhite | 746,264 | Dec. 8 | 1747 | 397 | 107 | 1492 |
| Cream-separator | H. H. Masterson and A. V. Franklin. | 746,861 | Dec. 15 | 2834 | 653, 654 | 107 | 1753 |
| Cream-separator and churn | A. D. Frederick | 733,545 | July 14 | 1513 | 361 | 105 | 337 |
| Cream-separator and churn | J. Klein | 742,095 | Oct. 20 | 3342 | 745, 746 | 106 | 1986 |
| Cream-separator and churn. Combined | W. Ferguson | 723,851 | Mar. 31 | 4076 | 919, 920 | 103 | 914 |
| Cream-separator and churn. Combined | J. A. Rosback | 748,104 | Dec. 29 | 5314 | 1180 | 107 | 2325 |
| Cream-separator brake | J. W. Spencer | 731,628 | June 23 | 3888 | 866 | 104 | 1983 |
| Cream-separator. Centrifugal | E. F. and L. J. Hedderich | 721,186 | Feb. 24 | 3333 | 762 | 102 | 1576 |
| Cream-separator. Centrifugal | O. Anderson | 726,237 | Apr. 28 | 3340 | 758, 759 | 103 | 1921 |
| Cream-separator. Centrifugal | W. C. Hartmann | 729,163 | May 26 | 4387 | 968 | 104 | 979 |
| Cream-separator. Centrifugal | J. J. Berrigan | 729,532 | June 2 | 26 | 7 | 104 | 1132 |
| Cream-separator. Centrifugal | P. L. Kimball | 732,750 | July 7 | 97 | 27 | 105 | 24 |
| Cream-separator cylinders. Mechanism for operating | M. Johnsrud | 729,596 | June 2 | 132 | 33 | 104 | 1154 |
| Cream-separator-operating mechanism | J. F. Persoons | 743,186 | Nov. 3 | 703 | 154 | 107 | 147 |
| Cream-separator. Tubular | J. C. and A. D. Frederick | 727,121 | May 5 | 575 | 124 | 104 | 125 |
| Cream-whipping machine | F. E. A. Brock | 733,456 | July 14 | 1366 | 322 | 105 | 306 |
| Creamer. Centrifugal | O. Anderson | 723,354 | Mar. 24 | 3163 | 710 | 103 | 710 |
| Creamer. Centrifugal | H. B. Keiper | 736,976 | Aug. 25 | 3647 | 808, 809 | 105 | 1811 |
| Creamer. Centrifugal | O. Anderson | 744,892 | Nov. 24 | 4028 | 869 | 107 | 906 |
| Creaming-can | C. S. Obetz | 744,789 | Nov. 24 | 3852 | 829 | 107 | 869 |
| Creel | G. Ohleyer | 727,190 | May 5 | 693 | 149 | 104 | 150 |
| Cremating machine. Sputa- | O. J. Jordan | 727,803 | May 12 | 1866 | 415 | 104 | 415 |
| Cremating putrescible waste materials. Apparatus for | W. M. Wheildon | 723,959 | Mar. 31 | 4300 | 965, 966 | 103 | 963 |
| Crematory. Domestic refuse- | J. H. Cotter | 730,004 | June 2 | 891 | 198 | 104 | 1309 |
| Crematory for garbage or like substances | F. P. Smith | 727,011 | May 5 | 380 | 80, 81 | 104 | 83 |
| Crib. Folding | M. C. Collier | 732,618 | June 30 | 5785 | 1283 | 104 | 2396 |
| Crib. Infant's | T. H. Churchill | 730,514 | June 9 | 1815 | 404 | 104 | 1517 |
| Crib, sofa, and lounge. Combined | T. Hanley | 743,495 | Nov. 10 | 1407 | 291 | 107 | 316 |
| Crochet-form | A. J. Barber | 742,148 | Oct. 27 | 3439 | 766 | 106 | 2022 |
| Crop conveying and loading machine | F. L. Webster | 740,066 | Sept. 29 | 4875 | 1093 | 106 | 1109 |
| Crop gathering and loading machine | J. A. Low | 742,044 | Oct. 20 | 3203 | 715, 716 | 106 | 1960 |

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| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Croquet board. Parlor | B. T. White | 721,764 | Mar. 3 | 185 | 43 | 103 | 41 |
| Crossbow | H. Schramm | 728,504 | May 19 | 3167 | 701 | 104 | 711 |
| Cross for church-towers | J. A. Blenke | 738,601 | Sept. 8 | 2111 | 461 | 106 | 470 |
| Cross-head | B. J. Reilly | 722,900 | Mar. 17 | 2341 | 524 | 103 | 528 |
| Cross-head | D. C. Berry | 738,975 | Sept. 15 | 2832 | 628 | 106 | 610 |
| Cross-head and pitman connection | E. Farmer | 743,701 | Nov. 10 | 1787 | 377 | 107 | 398 |
| Cross-head pins. Machine for turning | C. A. Matheny | 745,214 | Nov. 24 | 4681 | 1020 | 107 | 1041 |
| Cross-head slippers. Adjusting means for | F. H. Blanding | 727,739 | May 12 | 1738 | 390 | 104 | 391 |
| Cross-tie and clamp. Metallic | J. Olloman | 718,952 | Jan. 20 | 2725 | 609 | 102 | 609 |
| Cross-tie and rail fastening | A. B. Allen | 718,238 | Jan. 13 | 1333 | 295 | 102 | 301 |
| Crossing-alarm. Automatic | J. P. Church | 733,698 | July 14 | 1767 | 419, 420 | 105 | 389 |
| Crossing and double slip-switch with movable center point. Combination | W. C. Lee and M. F. Moore | 736,119 | Aug. 11 | 2055 | 439, 440, 441 | 105 | 1438 |
| Crossing. Noiseless | P. J. Lassen | 746,529 | Dec. 8 | 2206 | 506 | 107 | 1591 |
| Crowbar | M. F. Cahill | 727,284 | May 5 | 859 | 184, 185 | 104 | 184 |
| Croze. Cooper's | G. W. M. Delfs | 721,028 | Feb. 17 | 2098 | 689 | 102 | 1485 |
| Crucible-furnace | J. D. Swindell | 747,019 | Dec. 15 | 3139 | 718, 719 | 107 | 1822 |
| Crucible-shaker | W. S. Mather | 718,494 | Jan. 13 | 1846 | 405, 406 | 102 | 413 |
| Cruller-frying frame | H. Grimm | 747,700 | Dec. 22 | 4402 | 992 | 107 | 2123 |
| Crupper | W. W. Lyon and J. L. Davis | 739,195 | Sept. 15 | 3218 | 712 | 106 | 719 |
| Crupper-blind | R. B. Benford | 729,035 | May 26 | 4159 | 921 | 104 | 933 |
| Crupper-former | J. B. Bastian and J. H. Sussman | 719,637 | Feb. 3 | 404 | 92 | 102 | 907 |
| Crupper-shield | W. P. Burke | 723,136 | Mar. 17 | 2744 | 616 | 103 | 612 |
| Crupper-stuffer | J. B. Bastian and J. H. Sussman | 725,535 | Apr. 14 | 2075 | 469 | 103 | 1624 |
| Crusher: *See* Clod-crusher. Vegetable-crusher. Ore-crusher. | | | | | | | |
| Crusher | T. E. Hurley | 734,332 | July 21 | 3033 | 714 | 105 | 676 |
| Crusher | W. W. Case | 741,458 | Oct. 13 | 2031 | 451 | 106 | 1699 |
| Crusher and pulverizer | M. F. Williams | 726,602 | Apr. 28 | 4074 | 919 | 103 | 2067 |
| Crusher and pulverizer | M. J. Williams | 730,503 | June 9 | 1793 | 401 | 104 | 1512 |
| Crushing and pulverizing mill | E. C. Griffin | 742,982 | Nov. 3 | 282 | 63 | 107 | 61 |
| Crushing-mill | H. U. Prindle | 720,480 | Feb. 10 | 1956 | 447 | 102 | 1252 |
| Crushing-mill. Three-roll | J. J. E. Bekker | 733,125 | July 7 | 760 | 184 | 105 | 161 |
| Crushing-roll | W. C. Madge | 721,208 | Feb. 24 | 3404 | 773 | 102 | 1589 |
| Crushing-roll | M. Condula | 744,296 | Nov. 17 | 2972 | 626 | 107 | 664 |
| Crushing-rolls | J. H. Montgomery | 727,177 | May 5 | 676 | 145 | 104 | 146 |
| Crushing-rolls | C. W. McArthur and F. Cazin | 737,130 | Aug. 25 | 3903 | 867 | 105 | 1864 |
| Crushing-rolls | W. G. Dodd | 741,892 | Oct. 20 | 2875 | 642 | 106 | 1894 |
| Crutch | G. C. Calentine | 725,612 | Apr. 14 | 2207 | 499 | 103 | 1654 |
| Crutch | H. Maass | 730,466 | June 9 | 1729 | 386 | 104 | 1498 |
| Crutch | J. H. Hammond and W. Bridgewater | 748,068 | Dec. 29 | 5149 | 1165 | 107 | 2310 |
| Crutch arm-rest | H. S. Cole | 736,072 | Aug. 11 | 1983 | 422 | 105 | 1424 |
| Crutch. Tubular metal | J. Conu | 724,382 | Mar. 31 | 5167 | 1158 | 103 | 1137 |
| Cryptograph | L. H. Weston | 723,566 | Mar. 24 | 3560 | 796 | 103 | 789 |
| Cryptographic codes. Cipher-key for | H. S. Lewis | 723,288 | Mar. 24 | 3034 | 683 | 103 | 686 |
| Cryptographic perforator | A. L. Day | 739,398 | Sept. 22 | 3602 | 804, 805 | 106 | 818 |
| Cryptographic perforator | A. L. Day | 739,399 | Sept. 22 | 3611 | 805, 806 | 106 | 820 |
| Crystallization | C. Hitzl | 724,477 | Apr. 7 | 105 | 26 | 103 | 1191 |
| Crystallizing | G. E. Stadtegger | 723,496 | Mar. 24 | 3451 | 772 | 103 | 767 |
| Crystallizing apparatus | H. Winter | 742,544 | Oct. 27 | 4176 | 939 | 106 | 2173 |
| Cuff | C. H. Knapp | 734,570 | July 28 | 3456 | 807 | 105 | 780 |
| Cuff | F. X. Mudd | 745,644 | Dec. 1 | 600 | 139 | 107 | 1226 |
| Cuff-holder | H. S. Pond | 717,919 | Jan. 6 | 759 | 170 | 102 | 163 |
| Cuff-holder | F. A. Wernig | 723,095 | Mar. 17 | 2666 | 600 | 103 | 597 |
| Cuff-holder | C. A. Foster | 723,454 | Mar. 24 | 3350 | 751 | 103 | 748 |
| Cuff-holder | W. T. Robinson | 728,415 | May 19 | 3005 | 661 | 104 | 677 |
| Cuff-holder | J. H. and A. I. Dwork | 729,295 | May 26 | 4628 | 1023 | 104 | 1030 |
| Cuff-holder | J. L. Havlin | 729,337 | May 26 | 4695 | 1037 | 104 | 1044 |
| Cuff-holder | J. Jenkins | 729,768 | June 2 | 452 | 102 | 104 | 1220 |
| Cuff-holder | C. H. Leach | 732,305 | June 30 | 5182 | 1151 | 104 | 2267 |
| Cuff-holder | J. B. Hough | 735,381 | Aug. 4 | 646 | 134 | 105 | 1119 |
| Cuff-holder | A. A. Rodman | 737,664 | Sept. 1 | 194 | 41 | 106 | 45 |
| Cuff-holder | E. T. Specht | 737,878 | Sept. 1 | 655 | 139 | 106 | 144 |
| Cuff-holder | M. L. Hawks | 742,421 | Oct. 27 | 3950 | 886 | 106 | 2126 |
| Cuff-holder | E. A. Clark | 743,617 | Nov. 10 | 1654 | 347 | 107 | 369 |
| Cuff-holder | H. H. Walley | 744,137 | Nov. 17 | 2645 | 564 | 107 | 592 |
| Cuff-holder | G. G. Corbet | 744,298 | Nov. 17 | 2975 | 637 | 107 | 664 |
| Cuff. Sleeve | J. B. Potter | 730,697 | June 9 | 2139 | 475 | 104 | 1588 |
| Culinary articles. Ventilating lid or cover for | E. L. Bauer | 737,694 | Sept. 1 | 248 | 53 | 106 | 57 |
| Culinary device | A. M. Stocking | 720,293 | Feb. 10 | 1633 | 373 | 102 | 1184 |
| Culinary device | W. H. Barnes | 740,384 | Oct. 6 | 1 | 1 | 106 | 1245 |
| Culinary scraper | B. Donaldson | 745,717 | Dec. 1 | 725 | 166 | 107 | 1253 |
| Culinary utensil | W. G. Browne | 727,742 | May 12 | 1741 | 391 | 104 | 392 |
| Culinary utensil | J. Hoff | 735,513 | Aug. 4 | 924 | 195 | 105 | 1178 |
| Culinary vessel | W. M. Merritt | 718,367 | Jan. 13 | 1570 | 347 | 102 | 352 |
| Cultivating-implement attachment | H. Downer | 743,698 | Nov. 10 | 1783 | 376 | 107 | 397 |
| Cultivator | J. S. Howell | 717,578 | Jan. 6 | 99 | 26 | 102 | 24 |
| Cultivator | A. B. Marsh | 718,780 | Jan. 20 | 2399 | 532 | 102 | 540 |
| Cultivator | W. S. Neal | 718,787 | Jan. 20 | 2413 | 535 | 102 | 543 |
| Cultivator | A. Psota | 719,138 | Jan. 27 | 3092 | 687 | 102 | 698 |
| Cultivator | G. K. Spitzenberg | 719,898 | Feb. 3 | 876 | 205, 206 | 102 | 1009 |
| Cultivator | E. Haiman and G. N. Murray | 720,135 | Feb. 10 | 1340 | 307 | 102 | 1125 |
| Cultivator | T. Hanson | 720,247 | Feb. 10 | 1542 | 353, 354 | 102 | 1165 |
| Cultivator | C. L. Swanson | 722,264 | Mar. 10 | 1144 | 251, 252 | 103 | 258 |
| Cultivator | J. McCoy | 722,319 | Mar. 10 | 1235 | 275 | 103 | 279 |

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| Invention. | Name. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | | Spec. | Drg. | Vol. | Page. |
| Cultivator | S. H. and D. Garst | 722,690 | Mar. 17 | 1958 | 437 | 103 | 450 |
| Cultivator | G. L. Wallis | 723,190 | Mar. 17 | 2862 | 642 | 103 | 637 |
| Cultivator | J. R. Graves | 723,380 | Mar. 24 | 3232 | 725 | 103 | 732 |
| Cultivator | C. L. Swanson | 723,422 | Mar. 24 | 3298 | 738 | 103 | 736 |
| Cultivator | A. A. Thogersen | 724,220 | Mar. 31 | 4826 | 1082 | 103 | 1068 |
| Cultivator | M. G. Graham | 725,074 | Apr. 14 | 1222 | 276, 277 | 103 | 1445 |
| Cultivator | J. B. Bartholomew | 725,200 | Apr. 14 | 1458 | 329, 330 | 103 | 1493 |
| Cultivator | J. B. Bartholomew | 725,201 | Apr. 14 | 1461 | 330 | 103 | 1494 |
| Cultivator | J. Schalk | 725,487 | Apr. 14 | 1986 | 448 | 103 | 1606 |
| Cultivator | L. E. Waterman | 726,596 | Apr. 28 | 4065 | 917, 918 | 103 | 2064 |
| Cultivator | W. J. Wiswall | 727,048 | May 5 | 443 | 93 | 104 | 97 |
| Cultivator | G. W. Whitehurst | 727,519 | May 5 | 1291 | 288 | 104 | 278 |
| Cultivator | G. A. Steinback | 730,980 | June 16 | 2652 | 590, 591 | 104 | 1715 |
| Cultivator | E. Merrill | 731,591 | June 23 | 3819 | 850 | 104 | 1969 |
| Cultivator | C. H. Grassing | 733,031 | July 7 | 582 | 142 | 105 | 124 |
| Cultivator | C. L. Swanson | 733,516 | July 14 | 1469 | 349 | 105 | 328 |
| Cultivator | S. P. Kimball | 735,886 | Aug. 11 | 1631 | 348 | 105 | 1348 |
| Cultivator | W. R. Knaub | 736,113 | Aug. 11 | 2045 | 435, 436 | 105 | 1437 |
| Cultivator | H. M. Phillips | 736,872 | Aug. 18 | 3448 | 764 | 105 | 1749 |
| Cultivator | J. M. Rettig | 737,272 | Aug. 25 | 4183 | 931 | 105 | 1923 |
| Cultivator | I. A. Weaver | 738,265 | Sept. 8 | 1440 | 311 | 106 | 326 |
| Cultivator | S. L. Allen | 739,372 | Sept. 22 | 3538 | 790, 791 | 106 | 804 |
| Cultivator | W. McCloskey | 740,030 | Sept. 29 | 4818 | 1080, 1081 | 106 | 1098 |
| Cultivator | J. H. Elward | 741,780 | Oct. 20 | 2683 | 598 | 106 | 1852 |
| Cultivator | J. H. Martin | 743,535 | Nov. 10 | 1485 | 310 | 107 | 334 |
| Cultivator | G. W. Hamilton | 744,753 | Nov. 24 | 3789 | 816 | 107 | 856 |
| Cultivator | F. Bateman | 747,841 | Dec. 22 | 4668 | 1055 | 107 | 2184 |
| Cultivator | O. R. Baldwin. (Reissue) | 12,186 | Dec. 22 | 4841 | 1093 | 107 | 2221 |
| Cultivator and cotton-chopper. Combined | F. Bandy | 744,708 | Nov. 24 | 3714 | 802 | 107 | 841 |
| Cultivator and grader. Roller | C. E. Dungan and C. F. Stelle | 733,634 | July 14 | 1671 | 396, 397 | 105 | 370 |
| Cultivator and harrow. Combined | H. C. Farris | 732,624 | June 30 | 5794 | 1285 | 104 | 2398 |
| Cultivator and weed-exterminator | C. I. J. Barker | 747,118 | Dec. 15 | 3224 | 756 | 107 | 1868 |
| Cultivator arch-bar | C. M. Sullins | 719,159 | Jan. 27 | 3126 | 696 | 102 | 705 |
| Cultivator attachment | J. M. Brewer | 717,733 | Jan. 6 | 398 | 93 | 102 | 87 |
| Cultivator attachment | W. Hoffert | 718,350 | Jan. 13 | 1542 | 341 | 102 | 346 |
| Cultivator attachment | W. L. Schmidt | 719,885 | Feb. 3 | 857 | 201 | 102 | 1005 |
| Cultivator attachment | O. C. Bateman | 721,277 | Feb. 24 | 3520 | 800 | 102 | 1614 |
| Cultivator attachment | C. B. Harrison and F. R. Wetzell | 731,679 | June 23 | 3978 | 886 | 104 | 2000 |
| Cultivator attachment | W. H. McElree | 733,734 | July 14 | 1833 | 433 | 105 | 404 |
| Cultivator attachment | R. O. Faubion, C. W. and C. G. Workman. | 737,378 | Aug. 25 | 4374 | 975 | 105 | 1965 |
| Cultivator. Corn- | J. M. Richmond | 734,095 | July 21 | 2569 | 600 | 105 | 578 |
| Cultivator. Cotton and cane | J. A. Dodd | 738,169 | Sept. 8 | 1251 | 272 | 106 | 287 |
| Cultivator cotton-chopping attachment | C. W. McMillan | 728,405 | May 19 | 2989 | 658 | 104 | 674 |
| Cultivator, cotton-planter, and fertilizer-distributer. Combined | L. R. Randall | 733,873 | July 14 | 2121 | 500 | 105 | 462 |
| Cultivator-coupling | R. W. E. Hayes | 722,231 | Mar. 10 | 1080 | 238 | 103 | 246 |
| Cultivator. Disk | N. S. Barger | 743,220 | Nov. 3 | 772 | 168, 169 | 107 | 162 |
| Cultivator. Disk listed | S. D. Poole | 719,863 | Feb. 3 | 810 | 189 | 102 | 994 |
| Cultivator drag-bar-adjusting device | J. A. Smethers | 741,729 | Oct. 20 | 2586 | 575, 576 | 106 | 1832 |
| Cultivator. Garden- | D. H. Moore | 735,038 | July 28 | 4337 | 1008 | 105 | 960 |
| Cultivator. Harrow- | S. M. Davis | 718,434 | Jan. 13 | 1691 | 373 | 102 | 377 |
| Cultivator harrow attachment | W. E. Mauldin | 747,744 | Dec. 22 | 4473 | 1009 | 107 | 2139 |
| Cultivator. Lister- | A. C. Lindgren | 720,266 | Feb. 10 | 1584 | 362 | 102 | 1175 |
| Cultivator. Lister- | T. S. Warner | 744,699 | Nov. 17 | 3690 | 796 | 107 | 819 |
| Cultivator. Lister- | O. E. Johnston | 746,633 | Dec. 8 | 2299 | 548, 549 | 107 | 1636 |
| Cultivator, lister, and grader | S. Mower | 740,456 | Oct. 6 | 139 | 28 | 106 | 1275 |
| Cultivator. Middle | M. A. Piper | 720,066 | Feb. 10 | 1202 | 276 | 102 | 1095 |
| Cultivator planter attachment | W. F. Taylor and J. T. Williams | 729,808 | June 2 | 529 | 116, 117 | 104 | 1236 |
| Cultivator planting attachment | J. H. Hutcherson | 721,306 | Feb. 24 | 3558 | 810 | 102 | 1623 |
| Cultivator planting attachment | J. W. Benton | 733,801 | July 14 | 1966 | 463 | 105 | 432 |
| Cultivator replanting attachment | J. and T. M. Hendrickson | 717,573 | Jan. 6 | 92 | 23 | 102 | 22 |
| Cultivator. Revolving | S. I. Titus | 731,977 | June 23 | 4507 | 1006 | 104 | 2115 |
| Cultivator. Riding or walking | W. L. Beall | 734,657 | July 28 | 3615 | 846, 847 | 105 | 813 |
| Cultivator seed-planting attachment | T. O. Kirk | 718,938 | Jan. 20 | 2698 | 603, 604 | 102 | 604 |
| Cultivator-shovel | A. L. Johnson | 725,448 | Apr. 14 | 1910 | 428 | 103 | 1589 |
| Cultivator-tooth mounting | F. Bateman | 748,466 | Dec. 29 | 5873 | 1335 | 107 | 2468 |
| Cultivator. Tree- | J. M. Collins | 720,113 | Feb. 10 | 1304 | 297 | 102 | 1117 |
| Cultivator. Two-row disk | L. Kirlin | 722,235 | Mar. 10 | 1090 | 240 | 103 | 248 |
| Cultivator. Two-row disk | A. Holtz | 728,798 | May 19 | 3730 | 832 | 104 | 829 |
| Cultivator. Vineyard or orchard | I. B. Kilgore | 735,986 | Aug. 11 | 1818 | 390 | 105 | 1389 |
| Cultivator weed-destroying attachment | O. C. Pennington | 730,394 | June 9 | 1584 | 353 | 104 | 1466 |
| Cultivator. Wheel- | J. A. Smethers | 721,335 | Feb. 24 | 3619 | 822, 823 | 102 | 1635 |
| Cultivator. Wheel- | E. S. Slough | 725,159 | Apr. 14 | 1382 | 312 | 103 | 1478 |
| Cultivators. Adjustable arch for | H. B. Porter | 742,735 | Oct. 27 | 4504 | 1019 | 106 | 2244 |
| Cultivators, &c. Balancing device for | F. M. Dwight | 726,150 | Apr. 21 | 3163 | 716 | 103 | 1869 |
| Cultivators. Jointed beam for | I. A. Brock | 745,478 | Dec. 1 | 320 | 75 | 107 | 1167 |
| Culvert | F. S. and F. H. Beach | 722,396 | Mar. 10 | 1371 | 303 | 103 | 308 |
| Culvert | E. C. Krupp | 739,686 | Sept. 22 | 4140 | 924 | 106 | 935 |
| Culvert | A. Lauridtzen | 746,112 | Dec. 8 | 1463 | 328, 329 | 107 | 1432 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Cup: *See* Grease-cup. Varnish or color cup. Oil-cup. | | | | | | | |
| Cupboard and refrigerator. Combined | A. C. Campbell | 724,802 | Apr. 7 | 723 | 168 | 103 | 1325 |
| Cupboard extension | J. H. Waite | 748,446 | Dec. 29 | 5820 | 1326 | 107 | 2456 |
| Cupola | T. Holland | 731,300 | June 16 | 3260 | 725 | 104 | 1838 |
| Cuprous magnetic oxid. Making | W. J. Knox | 743,732 | Nov. 10 | 1839 | | 107 | 409 |
| Curb and conduit. Combined | R. Raby | 746,153 | Dec. 8 | 1546 | 346 | 107 | 1450 |
| Curb and gutter. Combined | W. H. Ferguson | 728,693 | May 19 | 3535 | 786 | 104 | 790 |
| Curb and gutter. Combined | G. M. Gest | 739,854 | Sept. 29 | 4454 | 1000 | 106 | 1020 |
| Curb box and cock support | J. R. Flinn | 741,477 | Oct. 13 | 2091 | 464 | 106 | 1713 |
| Curbing. Metal-bound | H. H. Wainwright | 727,233 | May 5 | 775 | 166 | 104 | 167 |
| Curbing-plate fastener | I. L. Landis | 738,334 | Sept. 8 | 1600 | 348 | 106 | 360 |
| Curler. Hair- | J. D. Smith | 728,422 | May 19 | 3020 | 664 | 104 | 681 |
| Curling-iron | C. O. Sterling | 744,426 | Nov. 17 | 3196 | 686 | 107 | 713 |
| Curling-iron. Electric | M. Shepherd | 727,468 | May 5 | 1202 | 266 | 104 | 259 |
| Curling-iron heater | M. M. Buck and J. F. Mallinckrodt | 727,893 | May 12 | 2027 | 451 | 104 | 449 |
| Curling-iron heater | C. E. Huff | 729,346 | May 26 | 4712 | 1041 | 104 | 1047 |
| Curling-iron heater | J. M. Lawlor | 746,532 | Dec. 8 | 2214 | 507 | 107 | 1593 |
| Curling or waving appliance. Hair | G. L. Hogan | 729,587 | June 2 | 118 | 30 | 104 | 1151 |
| Currency-holder | F. E. Walker | 742,088 | Oct. 20 | 3334 | 744 | 106 | 1985 |
| Current and propulsion wheel | I. L. Roberts | 747,775 | Dec. 22 | 4529 | 1022 | 107 | 2155 |
| Current apparatus. Alternating- | J. F. Kelly and C. C. Chesney | 725,091 | Apr. 14 | 1254 | 283 | 103 | 1451 |
| Current apparatus. Alternating- | J. F. Kelly and C. C. Chesney | 725,092 | Apr. 14 | 1256 | 283, 284 | 103 | 1451 |
| Current apparatus. Phase-adjusting method and means for alternating- | O. B. Shallenberger | 740,190 | Sept. 29 | 5089 | 1143 | 106 | 1154 |
| Current-collector | E. D. Priest | 728,614 | May 19 | 3397 | 753 | 104 | 761 |
| Current compensating system. Alternating- | L. A. Hawkins | 738,799 | Sept. 15 | 2524 | 555 | 106 | 572 |
| Current-controlling device. Automatic | P. R. Owens | 746,140 | Dec. 8 | 1520 | 340 | 107 | 1445 |
| Current indicator. Reverse- | L. Andrews | 743,417 | Nov. 10 | 1220 | 252 | 107 | 276 |
| Current induction-motor. Polyphase alternating- | W. Langdon-Davies and A. Soames | 735,118 | Aug. 4 | 135 | 30 | 105 | 1011 |
| Current-interrupter | T. A. Houghton | 745,280 | Nov. 24 | 4801 | 1048 | 107 | 1065 |
| Current machine and apparatus. Continuous- | M. Deri | 741,234 | Oct. 13 | 1588 | 357 | 106 | 1605 |
| Current machines. Starting alternating- | J. E. Woodbridge | 728,817 | May 19 | 3763 | 840 | 104 | 837 |
| Current machinery. Means for avoiding hunting of alternate- | H. C. Leake | 726,952 | May 5 | 223 | 52, 53, 54 | 104 | 49 |
| Current meter. Alternating- | G. Stern and A. Lotz | 745,461 | Dec. 1 | 288 | 69 | 107 | 1160 |
| Current-motor | C. W. Vliet | 733,304 | July 7 | 1083 | 258 | 105 | 228 |
| Current motor. Alternating- | A. W. Schramm | 723,786 | Mar. 24 | 3945 | 890 | 103 | 871 |
| Current motor. Alternating- | A. W. Schramm | 725,596 | Apr. 14 | 2178 | 493 | 103 | 1648 |
| Current motor. Alternating- | F. P. McBerty | 727,411 | May 5 | 1088 | 239 | 104 | 235 |
| Current motor. Alternating- | C. P. Steinmetz | 729,441 | May 26 | 4860 | 1077 | 104 | 1078 |
| Current motor. Alternating- | A. J. Churchward | 730,343 | June 9 | 1492 | 329 | 104 | 1448 |
| Current motor. Alternating- | F. L. O'Bryan | 736,292 | Aug. 11 | 2353 | 511 | 105 | 1504 |
| Current motor. Alternating- | A. J. Churchward | 745,325 | Dec. 1 | 21 | 5 | 107 | 1105 |
| Current motor. Alternating- | A. J. Churchward | 745,326 | Dec. 1 | 24 | 5 | 107 | 1106 |
| Current motor. Alternating- | A. Churchward | 745,957 | Dec. 1 | 1187 | 266 | 107 | 1353 |
| Current motor system. Alternating- | S. Krohn | 725,454 | Apr. 14 | 1925 | 431 | 103 | 1592 |
| Current motors. Device for varying the number of poles in alternate- | R. Dahlander and K. A. Lindström | 725,415 | Apr. 14 | 1836 | 411 | 103 | 1573 |
| Current-regulator | J. J. Wood | 720,305 | Feb. 10 | 1658 | 378 | 102 | 1189 |
| Current-regulator | J. P. Erie | 733,951 | July 21 | 2278 | 536, 537 | 105 | 514 |
| Current-regulator | G. A. Cardwell | 746,669 | Dec. 15 | 2479 | 566, 567 | 107 | 1674 |
| Current regulator. Alternating- | T. E. Adams | 724,073 | Mar. 31 | 4532 | 1020 | 103 | 1008 |
| Current regulator. Alternating- | C. C. Chesney and W. J. Lloyd | 731,430 | June 23 | 3503 | 783 | 104 | 1906 |
| Current rotary converter. Constant- | R. Fleming | 730,629 | June 9 | 2012 | 447 | 104 | 1561 |
| Current traction system. Alternate- | W. M. Mordey | 719,024 | Jan. 27 | 2851 | 640 | 102 | 649 |
| Current transformer. Alternating- | J. J. Frank | 729,748 | June 2 | 410 | 93 | 104 | 1212 |
| Current transformer. Alternating- | D. C Jackson | 739,004 | Sept. 15 | 2871 | 637 | 106 | 648 |
| Current transformer. Constant- | D. O. Hull | 735,103 | Aug. 4 | 103 | 24 | 105 | 1005 |
| Current-transmitter. Coin-controlled adjustable | M. D. Compton | 739,291 | Sept. 22 | 3407 | 758, 759 | 106 | 777 |
| Currents. Generating alternating | C. S. Bradley | 718,083 | Jan. 13 | 1058 | 235 | 102 | 243 |
| Currents. Generating alternating | C. S. Bradley | 718,084 | Jan. 13 | 1060 | 235 | 102 | 243 |
| Currents. Generating alternating | C. P. Steinmetz | 723,061 | Mar. 17 | 2606 | 587 | 103 | 583 |
| Currents. Generating alternating | A. D. Lunt | 730,673 | June 9 | 2096 | 467 | 104 | 1578 |
| Currents of low periodicity. Means for producing alternating | W. Meissner | 745,508 | Dec. 1 | 367 | 85, 86 | 107 | 1178 |
| Currents. Rectifying alternating | E. Thomson | 723,189 | Mar. 17 | 2858 | 642 | 103 | 637 |
| Currycomb | C. Lind | 720,448 | Feb. 10 | 1906 | 435 | 102 | 1242 |
| Currycomb | J. H. A. Wille | 725,529 | Apr. 14 | 2059 | 466 | 103 | 1621 |
| Currycomb attachment | W. Lewis | 736,984 | Aug. 25 | 3668 | 813 | 105 | 1815 |
| Curtain | E. H. Duchemin | 730,440 | June 9 | 1673 | 375 | 104 | 1486 |
| Curtain | E. H. Duchemin | 730,441 | June 9 | 1674 | 375 | 104 | 1486 |
| Curtain | E. H. Duchemin | 730,442 | June 9 | 1675 | 375 | 104 | 1486 |
| Curtain | E. H. Duchemin | 730,443 | June 9 | 1677 | 376 | 104 | 1486 |
| Curtain. Adjustable window- | F. A. Frenzel | 747,407 | Dec. 22 | 3872 | 872 | 107 | 2003 |
| Curtain and shade fixture. Combined | W. N. Packer | 745,895 | Dec. 1 | 1073 | 241 | 107 | 1327 |
| Curtain and shade holder. Adjustable | J. B. Casady | 731,544 | June 23 | 3734 | 831 | 104 | 1953 |
| Curtain and shade support. Adjustable | G. W. Murphey | 732,104 | June 30 | 4787 | 1068 | 104 | 2185 |
| Curtain attachment. Window- | O. A. Essig | 728,216 | May 19 | 2618 | 585 | 104 | 596 |
| Curtain-bracket. Adjustable | G. W. Wiggins and G. E. Quittmeyer. | 736,467 | Aug. 18 | 2656 | 584 | 105 | 1585 |
| Curtain bracket. Combination lace and roller | J. Yonker | 748,330 | Dec. 29 | 5601 | 1277 | 107 | 2407 |
| Curtain clasp and holder. Window- | R. F. Murray | 736,867 | Aug. 18 | 3442 | 762 | 105 | 1747 |
| Curtain-cord catch-pulley | G. M. Frampton | 718,447 | Jan. 13 | 1725 | 384 | 102 | 383 |
| Curtain-cord winder | E. G. Bennett and A. G. Hunting | 746,270 | Dec. 8 | 1761 | 399 | 107 | 1495 |
| Curtain-draping device | E. J. Cook | 742,008 | Oct. 20 | 3134 | 699 | 106 | 1945 |
| Curtain-drying apparatus | H. S. Hildebrand | 733,718 | July 14 | 1809 | 428 | 105 | 398 |
| Curtain-fastener | M. L. Thomas | 744,819 | Nov. 24 | 3907 | 840 | 107 | 881 |
| Curtain-fixture | H. E. Keeler | 721,448 | Feb. 24 | 3822 | 869 | 102 | 1676 |
| Curtain-fixture | H. E. Keeler | 721,449 | Feb. 24 | 3824 | 870 | 102 | 1677 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Curtain-fixture | E. A. Kraut and H. Fischer | 723,284 | Mar. 24 | 3030 | 682 | 103 | 685 |
| Curtain-fixture | L. C. Knoth and O. Willmanowsky | 725,724 | Apr. 21 | 2432 | 552 | 103 | 1715 |
| Curtain-fixture | H. H. Forsyth | 725,950 | Apr. 21 | 2837 | 643 | 103 | 1802 |
| Curtain-fixture | H. E. Keeler | 727,378 | May 5 | 1033 | 224 | 104 | 223 |
| Curtain-fixture | J. Lewandowfski | 728,120 | May 12 | 2441 | 543 | 104 | 538 |
| Curtain-fixture | B. Kuchborth | 728,585 | May 19 | 3352 | 742 | 104 | 750 |
| Curtain-fixture | A. Farland | 732,932 | July 7 | 418 | 102 | 105 | 90 |
| Curtain-fixture | W. Murphey | 735,562 | Aug. 4 | 1023 | 217 | 105 | 1197 |
| Curtain-fixture | W. Wishart | 737,188 | Aug. 25 | 4012 | 890 | 105 | 1888 |
| Curtain-fixture | H. E. Keeler | 737,248 | Aug. 25 | 4144 | 922 | 105 | 1915 |
| Curtain-fixture | W. C. Brown | 737,700 | Sept. 1 | 257 | 55 | 106 | 59 |
| Curtain-fixture | H. D. Whipple | 739,129 | Sept. 15 | 3111 | 688 | 106 | 697 |
| Curtain-fixture | J. M. Mays | 739,554 | Sept. 22 | 3878 | 869 | 106 | 878 |
| Curtain-fixture | J. A. Lyons | 739,888 | Sept. 29 | 4539 | 1020 | 106 | 1036 |
| Curtain-fixture | J. A. Lyons | 739,889 | Sept. 29 | 4541 | 1020 | 106 | 1036 |
| Curtain-fixture | J. A. Lyons | 739,890 | Sept. 29 | 4543 | 1020 | 106 | 1037 |
| Curtain-fixture | F. L. Bailey | 741,572 | Oct. 13 | 2278 | 508 | 106 | 1751 |
| Curtain-fixture | H. W. Fosnaugh | 741,649 | Oct. 20 | 2417 | 541 | 106 | 1797 |
| Curtain-fixture | P. G. Emery | 742,776 | Oct. 27 | 4563 | 1034 | 106 | 2259 |
| Curtain-fixture | F. D. Gimenez | 743,712 | Nov. 10 | 1805 | 381 | 107 | 402 |
| Curtain-fixture | J. Trierweiler | 743,775 | Nov. 10 | 1920 | 406 | 107 | 426 |
| Curtain-fixture | H. H. Forsyth | 744,861 | Nov. 24 | 3982 | 858 | 107 | 896 |
| Curtain-fixture | T. Ebert | 745,426 | Dec. 1 | 215 | 48 | 107 | 1145 |
| Curtain-fixture | H. E. Keeler | 746,097 | Dec. 8 | 1441 | 324 | 107 | 1426 |
| Curtain-fixture | A. L. Foy | 748,180 | Dec. 29 | 5355 | 1216 1217 | 107 | 2354 |
| Curtain fixture. Window- | C. E. Heinrich | 736,391 | Aug. 18 | 2525 | 554 | 105 | 1558 |
| Curtain-frame | R. Loge and G. W. Zoell | 739,886 | Sept. 29 | 4536 | 1019 | 106 | 1036 |
| Curtain guide. Cabinet- | P. M. Wege | 721,403 | Feb. 24 | 3747 | 852 | 102 | 1661 |
| Curtain-hanger | J. S. Hamilton | 732,632 | June 30 | 5813 | 1289 | 104 | 2403 |
| Curtain-hanger | L. E. Trax | 733,519 | July 14 | 1475 | 351 | 105 | 329 |
| Curtain-hanging apparatus. Window- | T E. and J. C. Shevill | 731,410 | June 16 | 3459 | 773 | 104 | 1878 |
| Curtain-holder | L. S. Björnstad | 731,747 | June 23 | 4102 | 916 | 104 | 2026 |
| Curtain-operating mechanism | B. Leon | 725,728 | Apr. 21 | 2436 | 553 | 103 | 1716 |
| Curtain or awning | J. A. Charlton | 748,347 | Dec. 29 | 5632 | 1283 1284 | 107 | 2414 |
| Curtain or portière holder | A. M. Brush | 718,976 | Jan. 27 | 2768 | 620 | 102 | 632 |
| Curtain-pole | W. A. Hunt and R. W. Russell | 720,354 | Feb. 10 | 1746 | 396 | 102 | 1209 |
| Curtain-pole | D. R. Kinsell | 723,203 | Mar. 17 | 2883 | 646 | 103 | 641 |
| Curtain-pole | E. S. Long | 726,078 | Apr 21 | 3034 | 689 | 103 | 1842 |
| Curtain-pole | G. W. Wise | 731,259 | June 16 | 3162 | 704 | 104 | 1817 |
| Curtain-pole | J. E. Walz | 735,180 | Aug. 4 | 290 | 56 | 105 | 1043 |
| Curtain-pole | F. M. Michael and T. V. Scott | 738,691 | Sept. 8 | 2304 | 506 | 106 | 508 |
| Curtain pole and hanger | H. P. Roberts | 724,506 | Apr. 7 | 155 | 37 | 103 | 1203 |
| Curtain-pole attachment | M. J. Steckman | 727,016 | May 5 | 394 | 83 | 104 | 86 |
| Curtain-pole bracket | C. H. F. Daily | 719,307 | Jan. 27 | 3399 | 758 | 102 | 765 |
| Curtain-pole bracket | J. A. Larson | 726,950 | May 5 | 221 | 52 | 104 | 48 |
| Curtain-pole bracket | H. Bitner | 732,821 | July 7 | 230 | 58 | 105 | 51 |
| Curtain-pole bracket | A. Zimmerly and W. H. Lindewirth | 748,455 | Dec. 29 | 5845 | 1330 | 107 | 2462 |
| Curtain-pole bracket. Adjustable | G. Quackenbush | 732,652 | June 30 | 5851 | 1295 | 104 | 2410 |
| Curtain-pole bracket and shade-holder | C. P. Searles and J. R. Greenaway | 730,304 | June 9 | 1424 | 314 | 104 | 1435 |
| Curtain-pole hanger | R. A. E. Reigard | 720,069 | Feb. 10 | 1205 | 277 | 102 | 1095 |
| Curtain-pole hanger | C. L. Sharp and J. R. Williams | 727,852 | May 12 | 1958 | 436 | 104 | 434 |
| Curtain pole or rod | E. C. Phillips | 718,021 | Jan. 6 | 949 | 210 | 102 | 204 |
| Curtain-pole socket | W. B. McCarthy | 736,619 | Aug. 18 | 2970 | 653 | 105 | 1649 |
| Curtain-pole support | E. A. Porter | 744,691 | Nov. 17 | 3635 | 783 | 107 | 805 |
| Curtain-pole-tip fastener | C. B. Dawes | 726,265 | Apr. 28 | 3393 | 771 | 103 | 1931 |
| Curtain pole. Window- | T. Hoffman | 720,430 | Feb. 10 | 1873 | 426 | 102 | 1236 |
| Curtain-protector | C. Hoffmann | 747,709 | Dec. 22 | 4421 | 995 996 | 107 | 2127 |
| Curtain-ring | J. W. Leslie | 722,370 | Mar. 10 | 1332 | 294 | 103 | 299 |
| Curtain-rod bracket. Sash- | A. L. McCarty | 726,970 | May 5 | 284 | 64 | 104 | 61 |
| Curtain-roller | E. H. Duchemin | 730,444 | June 9 | 1678 | 376 | 104 | 1486 |
| Curtain-roller bracket | H. Reimann | 721,833 | Mar. 3 | 319 | 70 | 103 | 70 |
| Curtain-securer | J. J. Russell, Jr | 725,778 | Apr. 21 | 2584 | 575 | 103 | 1739 |
| Curtain shade and pole hanger. Combined | M. D. Powers | 733,272 | July 7 | 1035 | 248 | 105 | 216 |
| Curtain-stretcher | M. M. Hedden | 725,339 | Apr. 14 | 1700 | 383 | 103 | 1545 |
| Curtain-stretcher | J. F. Koepp | 726,703 | Apr. 28 | 4258 | 963 | 103 | 2105 |
| Curtain-stretcher frame | J. J. Deal | 740,543 | Oct. 6 | 308 | 63 | 106 | 1310 |
| Curtain-stretcher lock and hinge | R. S. Corlett | 732,277 | June 30 | 5134 | 1141 | 104 | 2258 |
| Curtain-support | M. E. Brown | 738,287 | Sept. 8 | 1489 | 322 | 106 | 336 |
| Curtain-support | C. A. Needham | 740,684 | Oct. 6 | 554 | 124 | 106 | 1367 |
| Curtain-support | L. A. Emery | 744,318 | Nov. 17 | 3004 | 644 | 107 | 671 |
| Curtain-support ring | G. W. Cohen | 740,090 | Sept. 29 | 4912 | 1102 | 106 | 1116 |
| Curtain-support. Sliding | D. L. Crossley | 737,585 | Sept. 1 | 47 | 10 | 106 | 12 |
| Curtain support. Storm- | C. M. Abbott | 723,431 | Mar. 24 | 3313 | 742 | 103 | 740 |
| Curtains. Adjustable support for roller- | W. J. Lightner and J. J. Hollearn | 717,693 | Jan. 6 | 305 | 75 | 102 | 66 |
| Cushion. *See* Billiard or pool table cushion. Pincushion. Seat-cushion. | | | | | | | |
| Cushion | F. Buob | 721,936 | Mar. 3 | 535 | 118 | 103 | 118 |
| Cushion | D. Hogan and C. W. Meinecke | 726,164 | Apr. 21 | 3185 | 720 | 103 | 1873 |
| Cushion | C. R. Burdick | 727,079 | May 5 | 494 | 106 | 104 | 108 |
| Cushion | J. H. Donaldson | 737,089 | Aug. 25 | 3836 | 853 | 105 | 1850 |
| Cushion for chairs, &c | W. and B. Ritter | 718,524 | Jan. 13 | 1907 | 419 | 102 | 426 |
| Cushion for reciprocating beds or other moving parts. | T. M. North | 733,331 | July 7 | 1132 | 267 268 | 105 | 239 |
| Cushion-frame | E. G. Ashley | 735,194 | Aug. 4 | 313 | 61 | 105 | 1047 |
| Cushion-spring | W. R. Smith | 718,541 | Jan. 13 | 1933 | 423 | 102 | 431 |
| Cushion spring. Upholstered- | E. B. Smith | 719,155 | Jan. 27 | 3120 | 695 | 102 | 704 |
| Cushion-tired wheel | M. Halfpenny | 726,908 | May 5 | 141 | 33 | 104 | 32 |
| Cushion-wheel and hub therefor | R. C. Hilton | 747,304 | Dec. 15 | 3685 | 830 | 107 | 1945 |
| Cuspidor | S. L. Feathers | 718,612 | Jan. 20 | 2087 | 454 | 102 | 478 |
| Cuspidor | W. R. McClanahan and C. E. Bell | 718,650 | Jan. 20 | 2147 | 468 | 102 | 489 |
| Cuspidor | C. A. Payne | 721,085 | Feb. 17 | 3102 | 712 | 102 | 1509 |
| Cuspidor | G. W. Shade and P. S. Knapp | 733,431 | July 14 | 1324 | 312 | 105 | 296 |

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| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Cuspidor | S. S. Williamson | 737,542 | Aug. 25 | 4696 | 1053 | 105 | 2138 |
| Cuspidor | B. Z. Judie | 740,761 | Oct. 6 | 717 | 161 | 106 | 1399 |
| Cuspidor | C. E. Carter | 743,446 | Nov. 10 | 1298 | 266 | 107 | 292 |
| Cuspidor | M. Rosenzweig | 744,621 | Nov. 17 | 3516 | 759 | 107 | 779 |
| Cuspidor | S. Fisher | 747,877 | Dec. 22 | 4746 | 1073 | 107 | 2200 |
| Cuspidor. Automatically-emptying | A. M. Carter | 739,388 | Sept. 22 | 3579 | 800 | 106 | 812 |
| Cuspidor collector and carrier | J. P. Johnson | 726,539 | Apr. 28 | 3942 | 891 | 103 | 2040 |
| Cuspidor. Floor- | A. R. Candy | 725,672 | Apr. 21 | 2341 | 529 | 103 | 1695 |
| Cuspidor. Fountain- | J. V. Trenaman | 731,246 | June 16 | 3145 | 698 | 104 | 1813 |
| Cuspidor. Pocket- | W. C. Mitchell | 743,394 | Nov. 3 | 1143 | 242 | 107 | 242 |
| Cuspidor. Railway-car | N. Davis | 745,484 | Dec. 1 | 332 | 78 | 107 | 1170 |
| Cuspidor. Sanitary | M. E. Headland | 738,680 | Sept. 8 | 2277 | 501 | 106 | 503 |
| Cuspidor. Sanitary pocket- | J. Tobin | 735,043 | July 28 | 4348 | 1011 | 105 | 962 |
| Cut-off and drain cock. Combined | J. H. Jennings | 734,179 | July 21 | 2737 | 643 | 105 | 612 |
| Cut-off and filter. Automatic | W. W. Bays | 740,217 | Sept. 29 | 5147 | 1156 | 106 | 1166 |
| Cut-off and means for operating same | D. L. Eustice | 720,907 | Feb. 17 | 2763 | 635 | 102 | 1435 |
| Cut-off and self-cleaning filter. Automatic cistern | A. B. B. Harris | 736,388 | Aug. 18 | 2515 | 553 | 105 | 1555 |
| Cut-off. Automatic | B. F. D. Miller | 718,012 | Jan. 6 | 937 | 208 | 102 | 202 |
| Cut-off. Automatic | R. P. Barnstead | 729,116 | May 26 | 4298 | 950 | 104 | 960 |
| Cut-off for cisterns. Automatic | A. Deming and J. T. Tully | 722,214 | Mar. 10 | 1044 | 230 | 103 | 238 |
| Cut-off for cisterns. Automatic | C. S. Grindell | 731,771 | June 23 | 4147 | 925 | 104 | 2035 |
| Cut-off for drain-pipes. Automatic | L. E. Lemley | 718,134 | Jan. 13 | 1145 | 254 | 102 | 261 |
| Cut-off for house-plumbing | C. G. Woods | 733,788 | July 14 | 1941 | 457 | 105 | 427 |
| Cut-off mechanism | S. T. Murchie | 739,555 | Sept. 22 | 3879 | 869, 870 | 106 | 879 |
| Cut-off water-conductor | S. D. Noel | 728,281 | May 19 | 2761 | 613 | 104 | 628 |
| Cut-offs. Automatic attachment for eaves-trough | O. E. Hunt | 740,436 | Oct. 6 | 103 | 22 | 106 | 1269 |
| Cut-out | O. B. Williams | 734,361 | Mar. 31 | 5110 | 1144 | 103 | 1125 |
| Cut-out | W. M. Hall and W. K. Eldridge | 736,598 | Aug. 18 | 2926 | 640 | 105 | 1641 |
| Cut-out and controlling switch. Combined | L. S. Chadwick | 743,246 | Nov. 3 | 826 | 180 | 107 | 172 |
| Cut-out. Automatic | I. Kitsee | 725,259 | Apr. 14 | 1560 | 353 | 103 | 1515 |
| Cut-out. Automatic | C. A. Borein and L. P. Desimone | 746,273 | Dec. 8 | 1765 | 400, 401 | 107 | 1496 |
| Cut-out or circuit-changer. Thermal | G. E. Hoglund | 738,803 | Sept. 15 | 2531 | 557 | 106 | 574 |
| Cut-out switch for electric lighting, &c | G. W. Nistle | 724,730 | Apr. 7 | 590 | 140 | 103 | 1294 |
| Cutlery and making same | G. T. Drabble | 747,050 | Dec. 15 | 3212 | 732 | 107 | 1841 |
| Cutlery-polishing machine | W. T. Queen | 726,100 | Apr. 21 | 3067 | 697 | 103 | 1850 |
| Cutlery-polishing machine | W. C. and J. B. Mallinson | 748,391 | Dec. 29 | 5704 | 1302, 1303 | 107 | 2431 |
| Cutter: | | | | | | | |
| *See* Band-cutter. | Hay or straw cutter. | | | | | | |
| Beet-root cutter. | Hog-nose cutter. | | | | | | |
| Bias-cutter. | Ice-cutter. | | | | | | |
| Boiler-flue cutter. | Meat-cutter. | | | | | | |
| Bolt-cutter. | Noodle-cutter. | | | | | | |
| Bottle-wire cutter. | Paper-cutter. | | | | | | |
| Bread-cutter. | Pipe-cutter. | | | | | | |
| Brick-cutter. | Propeller weed-cutter. | | | | | | |
| Brush-cutter. | Rivet-cutter. | | | | | | |
| Butter-cutter. | Root-cutter. | | | | | | |
| Cake or doughnut cutter. | Rope-cutter. | | | | | | |
| Cheese-cutter. | Rotary cutter. | | | | | | |
| Cigar-cutter. | Routing-cutter. | | | | | | |
| Cigar-bunch cutter. | Shade-cutter. | | | | | | |
| Cigar-tip cutter. | Soap-cutter. | | | | | | |
| Clod-cutter. | Sod-cutter. | | | | | | |
| Cloth-cutter. | Stalk-cutter. | | | | | | |
| Clover-cutter. | String-cutter. | | | | | | |
| Corn-cutter. | Tailor's cloth-cutter. | | | | | | |
| Disk cutter. | Thread-cutter. | | | | | | |
| Dough-cutter. | Threshing-machine band-cutter. | | | | | | |
| Dredge-cutter. | Twine-cutter. | | | | | | |
| Feed-cutter. | Vegetable-cutter. | | | | | | |
| Flue-cutter. | Vegetable or meat cutter. | | | | | | |
| Formed cutter. | Veneer-cutter. | | | | | | |
| Fruit-cutter. | Wire or like cutter. | | | | | | |
| Glass-cutter. | | | | | | | |
| Cutter and boring bar centering device | C. Sternberger and J. C. Busch | 746,894 | Dec. 15 | 2902 | 669 | 107 | 1769 |
| Cutter and tool-grinder | W. Oesterlein | 717,605 | Jan. 6 | 151 | 39 | 102 | 34 |
| Cutter-bar | W. H. Marsee | 723,697 | Mar. 24 | 3785 | 850 | 103 | 837 |
| Cutter-bar-alining device | J. L. Patterson | 723,724 | Mar. 24 | 3840 | 863 | 103 | 848 |
| Cutter-bar-lining device | J. Geiger | 741,655 | Oct. 20 | 2426 | 543 | 106 | 1799 |
| Cutter-bar section. Self-alining | G. L. Phelps | 731,068 | June 16 | 2823 | 628 | 104 | 1751 |
| Cutter-bar sections. Machine for testing | G. G. Barker and H. Corl | 733,794 | July 14 | 1950 | 460, 461 | 105 | 429 |
| Cutter-guard | A. Lemmon | 720,039 | Feb. 10 | 1157 | 264 | 102 | 1085 |
| Cutter-guard | F. L. Forster | 727,336 | May 5 | 964 | 209 | 104 | 208 |
| Cutter-head | E. S. Shimer | 719,266 | Jan. 27 | 3315 | 742 | 102 | 746 |
| Cutter-head | F. Stutzman | 723,066 | Mar. 17 | 2616 | 589 | 103 | 585 |
| Cutter-head | J. M. Kuebler | 733,221 | July 7 | 927 | 224 | 105 | 194 |
| Cutter-head | C. Seewald | 742,242 | Oct. 27 | 3625 | 810 | 106 | 2061 |
| Cutter-head | F. Stutzman | 743,047 | Nov. 3 | 438 | 95, 96 | 107 | 92 |
| Cutter-head | J. Bresman | 743,374 | Nov. 3 | 1104 | 235 | 107 | 234 |
| Cutter-head. Expansion | E. S. Shimer | 724,959 | Apr. 7 | 995 | 228, 229 | 103 | 1381 |
| Cutter-head. Rotary | M. W. Mattison | 723,207 | Mar. 17 | 2890 | 647 | 103 | 642 |
| Cutters. Mechanism for driving and adjusting rotary | C. R. Gabriel | 736,243 | Aug. 11 | 2262 | 489 | 105 | 1483 |
| Cutting and countersinking tool. Combined | A. E. J. Luckhurst | 730,670 | June 9 | 2092 | 465 | 104 | 1577 |
| Cutting and stamping apparatus | W. M. Rockstroh | 724,614 | Apr. 7 | 370 | 89 | 103 | 1249 |
| Cutting and trimming machine | W. R. Miller | 737,758 | Sept. 1 | 375 | 80 | 106 | 83 |
| Cutting apparatus | A. Stevens | 742,923 | Nov. 3 | 177 | 41 | 107 | 39 |
| Cutting-apparatus guards. Supplemental finger for | W. Webber | 745,940 | Dec. 1 | 1149 | 257 | 107 | 1344 |
| Cutting device | H. Del Mar | 723,841 | Mar. 31 | 4053 | 915 | 103 | 910 |
| Cutting-machine | W. Ross | 733,427 | July 14 | 1311 | 310 | 105 | 294 |

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| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Cutting machine. Vertical-feed transverse- | C. W. H. Blood | 742,772 | Oct. 27 | 4557 | {1032 1033} | 106 | 2257 |
| Cutting mechanism | J. West | 738,380 | Sept. 8 | 1693 | 367 | 106 | 380 |
| Cutting-out press | F. B. Morris | 732,101 | June 30 | 4778 | {1066 1067} | 104 | 2183 |
| Cutting-tool | C. T. Ridgely | 733,511 | July 14 | 1460 | 347 | 105 | 326 |
| Cutting-tool. Yielding | L. W. Gates | 745,101 | Nov. 24 | 4459 | 964 | 107 | 994 |
| Cuttlebone mold | A. A. Geiger, D. C. Bauer, and J. Pejchar. | 722,361 | Mar. 10 | 1308 | 291 | 103 | 294 |
| Cyan-methyl derivatives of aromatic amids. Making | O. J. Graul | 718,340 | Jan. 13 | 1528 | ------ | 102 | 343 |
| Cyanid solutions. Treating | W. H. Davis | 741,231 | Oct. 13 | 1583 | 356 | 106 | 1604 |
| Cyanids and acetone. Making | C. B. Jacobs | 719,223 | Jan. 27 | 3238 | 723 | 102 | 729 |
| Cyanogen compounds. Producing | J. Bueb | 720,402 | Feb. 10 | 1821 | 415 | 102 | 1225 |
| Cycle | A. Oleszkiewicz | 735,573 | Aug. 4 | 1042 | 221 | 105 | 1202 |
| Cycle-crank dead-point position. Device for overcoming | E. Johow | 728,240 | May 19 | 2673 | {597 598} | 104 | 607 |
| Cycle cushion-truss | C. E. Becker | 739,476 | Sept. 22 | 3754 | 838 | 106 | 852 |
| Cycle driving and brake mechanism | A. F. Rockwell | 745,524 | Dec. 1 | 393 | 91 | 107 | 1183 |
| Cycle frame. Motor- | H. W. Freed and A. S. Clegg | 739,664 | Sept. 22 | 4100 | 914 | 106 | 926 |
| Cycle gear. Motor- | E. Mathieu | 729,197 | May 26 | 4446 | 980 | 104 | 992 |
| Cycle. Motor- | S. Nechlediel and J. Pawlitschek | 731,207 | June 16 | 3078 | 683 | 104 | 1799 |
| Cycle. Motor- | J. F. Merkel | 740,676 | Oct. 6 | 543 | 121 | 106 | 1364 |
| Cycle. Motor- | H. B. Ruggles | 743,755 | Nov. 10 | 1876 | 397 | 107 | 417 |
| Cycle. Motor- | J. G. Accles, F. H. de Veulle, and W. Starley. | 746,652 | Dec. 15 | 2447 | 559 | 107 | 1667 |
| Cycle or air tubes. Protecting-mantle for | C. A. Leske | 744,574 | Nov. 17 | 3449 | 743 | 107 | 766 |
| Cycle or vehicle brake | J. Kelland and H. Lawry | 735,113 | Aug. 4 | 125 | 28 | 105 | 1009 |
| Cycle propelling-gear | D. E. Norton | 720,278 | Feb. 10 | 1611 | 369 | 102 | 1179 |
| Cycle-saddle | J. A. Kruseman | 718,850 | Jan. 20 | 2510 | 559 | 102 | 562 |
| Cycle-saddle back-rest | H. E. C. Stubbs | 735,313 | Aug. 4 | 535 | 109 | 105 | 1095 |
| Cycle safety apparatus | A. Kühn | 736,409 | Aug. 18 | 2551 | 560 | 105 | 1562 |
| Cycle steering-head. Motor- | C. F. Thoms | 723,075 | Mar. 17 | 2636 | 594 | 103 | 590 |
| Cycle wheel. Motor- | A. Clément | 718,094 | Jan. 13 | 1075 | 238 | 102 | 246 |
| Cycles. Chair-seat above front wheels of | J. Otterbein | 740,905 | Oct. 6 | 958 | 214 | 106 | 1451 |
| Cycles, &c. Driving-gear for | B. R. Avery | 719,417 | Feb. 3 | 8 | 2 | 102 | 828 |
| Cycles for use as a hand-rest or parcel-carrier. Attachment for | T. R. Ellison | 717,662 | Jan. 6 | 241 | 61 | 102 | 52 |
| Cyclorama | J. W. Reno | 734,093 | July 21 | 2566 | 599 | 105 | 577 |
| Cylinder-lock | J. A. Horne | 721,802 | Mar. 3 | 260 | 58 | 103 | 58 |
| Cylinder. Metal | E. E. Arnold | 742,821 | Nov. 3 | 8 | 2 | 107 | 4 |
| Cylinder-perforating machine | J. L. Boyle and H. E. Brett | 747,582 | Dec. 22 | 4171 | 938 | 107 | 2071 |
| Cylindrical bodies. Producing | J. L. Boyle and H. E. Brett | 747,583 | Dec. 22 | 4175 | 939 | 107 | 2072 |
| Cylindrical surfaces. Instrument for truing up | J. M. Griffin and O. P. Allen | 729,329 | May 26 | 4683 | 1034 | 104 | 1042 |
| Dam | R. C. Beardsley | 733,123 | July 7 | 758 | 183 | 105 | 160 |
| Dam | N. F. Ambursen | 734,796 | July 28 | 3923 | 915 | 105 | 874 |
| Dam construction | O. B. Clarke | 734,222 | July 21 | 2809 | 659 | 105 | 627 |
| Dam construction | M. D. Rochford | 740,590 | Oct. 6 | 406 | 85, 86 | 106 | 1333 |
| Dam. Irrigating-ditch | C. D. W. Smith | 731,077 | June 16 | 2898 | 631 | 104 | 1754 |
| Dam. Movable | S. C. Irwin and A. M. Bowman | 735,387 | Aug. 4 | 660 | {140 141} | 105 | 1121 |
| Dampener. Spring- | E. Denegre | 746,043 | Dec. 8 | 1349 | 301 | 107 | 1405 |
| Dampening and ironing machine. Combined | T. S. Wiles | 736,661 | Aug. 18 | 3034 | 671 | 105 | 1662 |
| Dampening-machine | T. S. Wiles | 736,660 | Aug. 18 | 3032 | {670 671} | 105 | 1662 |
| Damper | C. A. Dunbar | 723,372 | Mar. 24 | 3212 | {720 721} | 103 | 718 |
| Damper. Automatic | T. W. King | 727,971 | May 12 | 2177 | 485 | 104 | 482 |
| Damper. Automatic stove- | T. B. Denton | 737,086 | Aug. 25 | 3832 | 852 | 105 | 1849 |
| Damper. Fireplace- | M. E. Stokes | 732,380 | June 30 | 5336 | 1182 | 104 | 2299 |
| Damper mechanism. Time | E. S. and G. B. Walker | 724,354 | Mar. 31 | 5098 | 1141 | 103 | 1122 |
| Damper mechanism. Time | J. N. Crocker | 726,873 | May 5 | 73 | 19 | 104 | 18 |
| Damper. Pipe- | H. J. Noyes | 733,737 | July 14 | 1837 | 434 | 105 | 404 |
| Damper-regulator | A. Carmichael | 717,810 | Jan. 6 | 554 | 124 | 102 | 119 |
| Damper-regulator. Automatic | H. Fatic | 734,052 | July 21 | 2495 | 582 | 105 | 561 |
| Damper-regulator. Electric | A. M. Butz | 736,490 | Aug. 18 | 2713 | 595 | 105 | 1596 |
| Damper-regulator. Steam-boiler | F. H. Cyrenius | 718,100 | Jan. 13 | 1091 | 241 | 102 | 250 |
| Damper. Stove- | W. G. Montgomery | 727,178 | May 5 | 677 | 145 | 104 | 147 |
| Damper. Stove or furnace pipe | E. N. La Veine | 733,404 | July 14 | 1273 | 301 | 105 | 286 |
| Damper. Stovepipe- | L. F. Cutten | 721,429 | Feb. 24 | 3795 | 863 | 102 | 1671 |
| Damper time-controller | E. Zwicker | 733,530 | July 14 | 1494 | 356 | 105 | 333 |
| Darning-machine | F. Bélanger | 724,783 | Apr. 7 | 685 | 160 | 103 | 1315 |
| Dash brace. Vehicle- | N. B. Stone | 746,192 | Dec. 8 | 1617 | 360 | 107 | 1466 |
| Dash-pot | W. C. Beauvais | 725,656 | Apr. 21 | 2321 | 524 | 103 | 1690 |
| Davit for ships. Boat- | N. Murchison | 720,274 | Feb. 10 | 1606 | {367 368} | 102 | 1178 |
| Dead. Preserving the | J. Karwowski | 748,284 | Dec. 29 | 5538 | 1262 | 107 | 2394 |
| Deaf and blind mutes. Communicating language for | J. Reese | 720,068 | Feb. 10 | 1204 | 277 | 102 | 1095 |
| Death-determining instrument | J. E. Storms, Jr | 745,685 | Dec. 1 | 671 | 155 | 107 | 1241 |
| Debranning apparatus | S. S. Foote and J. C. McKee | 738,669 | Sept. 8 | 2251 | 495 | 106 | 498 |
| Decolorizing and clarifying material. Manufacturing | R. L. Jenks | 729,350 | May 26 | 4719 | ------ | 104 | 1049 |
| Decorated surface | A. B. Porter | 734,135 | July 21 | 2655 | 626 | 105 | 594 |
| Decorated surface and producing same | A. B. Porter | 734,134 | July 21 | 2652 | 626 | 105 | 594 |
| Decorated surface. Angular | A. B. Porter | 734,361 | July 21 | 3077 | 724 | 105 | 585 |
| Decorating. Transfer | B. Walker | 741,746 | Oct. 20 | 2612 | 581 | 106 | 1837 |
| Decoration | J. D. Kyle and A. J. Baum | 742,122 | Oct. 20 | 3387 | 756 | 106 | 1995 |
| Decoration and making same | J. D. Kyle | 744,209 | Nov. 17 | 2811 | 600 | 107 | 629 |
| Decoration. Festoon | W. C. Lucas | 720,367 | Feb. 10 | 1770 | 401 | 102 | 1214 |
| Decoration. Transparent | C. H. Heartfield | 723,604 | Mar. 24 | 3634 | 813 | 103 | 804 |
| Decorative device | J. Braun | 732,513 | June 30 | 5593 | 1239 | 104 | 2351 |
| Decoy | H. S. Dills | 722,682 | Mar. 17 | 1940 | 432 | 103 | 447 |
| Decoy | R. H. Syms | 735,314 | Aug. 4 | 536 | 109 | 105 | 1095 |
| Decoy | G. E. Loeble | 740,293 | Sept. 29 | 5282 | 1190 | 106 | 1193 |
| Decoy-duck | F. H. Yorke | 717,790 | Jan. 6 | 518 | 116 | 102 | 112 |

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| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Decoy-duck | A. Kremer | 747,732 | Dec. 22 | 4458 | 1005 | 107 | 2135 |
| Deed. Warranty | T. M. Ferguson | 747,057 | Dec. 15 | 3221 | 734 | 107 | 1845 |
| Defibrator. Four-way | J. F. Beard and R. Hayne | 744,281 | Nov. 17 | 2940 | 628, 629 | 107 | 657 |
| Dehorner | G. J. Grabowenski | 737,606 | Sept. 1 | 90 | 19 | 106 | 22 |
| Dehorning implement | W. Forker | 737,215 | Aug. 25 | 4067 | 902 | 105 | 1898 |
| Dehorning-knife | J. D. De Celle | 725,546 | Apr. 14 | 2091 | 474 | 103 | 1628 |
| Delivery of goods, &c. Apparatus for the lateral | F. Hartmann | 729,580 | June 2 | 111 | 28 | 104 | 1149 |
| Demagnetizer | W. J. Forster | 733,637 | July 14 | 1677 | 398 | 105 | 371 |
| Demijohns or similar receptacles. Covering for | G. Porta | 736,626 | Aug. 18 | 2979 | 655 | 105 | 1651 |
| Demonstration and instruction strip. Combined | F. A. Glidden | 735,749 | Aug. 11 | 1368 | 294 | 105 | 1289 |
| Dental appliance | S. E. Fish | 724,838 | Apr. 7 | 789 | 183 | 103 | 1338 |
| Dental appliance | E. W. Witter | 730,184 | June 2 | 1180 | 264 | 104 | 1368 |
| Dental appliance | L. A. de Rosa | 741,071 | Oct. 13 | 1263 | 286 | 106 | 1537 |
| Dental bite-taker | D. T. Huber | 730,658 | June 9 | 2064 | 460 | 104 | 1571 |
| Dental bridgework | V. von Unruh | 726,381 | Apr. 28 | 3633 | 823 | 103 | 1981 |
| Dental bridgework-riveting device | F. A., Jr., and F. A. Brewer, Sr. | 743,817 | Nov. 10 | 1999 | 424 | 107 | 442 |
| Dental broach | W. J. Miles, Jr. | 717,594 | Jan. 6 | 134 | 34 | 102 | 30 |
| Dental cabinet | D. A. Evans | 723,661 | Mar. 24 | 3729 | 836 | 103 | 825 |
| Dental chair | I. N. Brigham | 725,033 | Apr. 14 | 1145 | 259 | 103 | 1429 |
| Dental charcoal point | L. Arndt | 720,394 | Feb. 10 | 1808 | 411 | 102 | 1228 |
| Dental clamp | W. A. McCarter | 722,033 | Mar. 3 | 703 | 156 | 103 | 152 |
| Dental clamp | P. B. Laskey | 734,072 | July 21 | 2533 | 591 | 105 | 570 |
| Dental crown-holder | J. W. Place | 723,546 | Mar. 24 | 3530 | 790 | 103 | 783 |
| Dental crown-slitter | G. K. Heist | 734,865 | July 28 | 4038 | 943 | 105 | 897 |
| Dental crowns. Manufacture of | E. V. Williams | 719,928 | Feb. 3 | 917 | 215 | 102 | 1012 |
| Dental cuspidor | H. E. Weber | 728,638 | May 19 | 3440 | 763 | 104 | 770 |
| Dental cutting-tool | W. C. Gillespie | 740,551 | Oct. 6 | 320 | 66 | 106 | 1312 |
| Dental dam | H. Craigie | 741,890 | Oct. 20 | 2874 | 641 | 106 | 1893 |
| Dental dam-holder | D. Murlless | 730,038 | June 2 | 944 | 212 | 104 | 1320 |
| Dental dam-holder | E. S. Rinehart | 747,484 | Dec. 22 | 4001 | 900 | 107 | 2032 |
| Dental dies. Making | C. A. Holmes | 745,615 | Dec. 1 | 551 | 128 | 107 | 1215 |
| Dental disk-holder | E. J. Douhet | 719,312 | Jan. 27 | 3404 | 759 | 102 | 766 |
| Dental-drill obtunding attachment | C. R. Basford | 727,736 | May 12 | 1732 | 389 | 104 | 390 |
| Dental engine | J. B. Wantz | 732,387 | June 30 | 5351 | 1185 | 104 | 2303 |
| Dental-engine attachment | C. R. Basford | 718,561 | Jan. 13 | 1988 | 433 | 102 | 441 |
| Dental-engine attachment | J. C. Holson | 731,302 | June 16 | 3265 | 726 | 104 | 1839 |
| Dental-engine chip-blower and syringe attachment | I. Lyman | 743,529 | Nov. 10 | 1471 | 307, 308 | 107 | 331 |
| Dental engines Circuit-controller for surgico- | J. S. Letord, W. W. Alexander, and H. Letord. | 730,379 | June 9 | 1553 | 346, 347 | 104 | 1461 |
| Dental engines. Circuit-controller for surgico- | W. W. Alexander | 742,374 | Oct. 27 | 3859 | 867, 868 | 106 | 2109 |
| Dental filling-tool | H. P. Kelly | 742,446 | Oct. 27 | 3987 | 895 | 106 | 2134 |
| Dental finishing-strip package | J. A. Thomas | 718,40 | Jan. 13 | 1629 | 358 | 102 | 365 |
| Dental flask | J. Hood | 723,275 | Mar. 24 | 3016 | 678, 679 | 103 | 682 |
| Dental flask | J. H. Feagan | 723,998 | Mar. 31 | 4395 | 988 | 103 | 981 |
| Dental flask-press | T. G. Lewis | 722,726 | Mar. 17 | 2017 | 450 | 103 | 463 |
| Dental flask-press | W. Finn | 731,030 | June 16 | 2750 | 613 | 104 | 1735 |
| Dental forceps | K. Felsch | 732,288 | June 30 | 5160 | 1146 | 104 | 2262 |
| Dental handpiece | W. Homann | 723,872 | Mar. 31 | 4119 | 929 | 103 | 924 |
| Dental impression-cup | G. A. Brouillet | 720,105 | Feb. 10 | 1288 | 295 | 102 | 1113 |
| Dental instrument | H. B. Harrell | 737,616 | Sept. 1 | 108 | 24 | 106 | 26 |
| Dental instrument | A. T. McMillin | 738,929 | Sept. 15 | 2758 | 609 | 106 | 624 |
| Dental instrument | W. J. Miles, Jr. | 739,333 | Sept. 22 | 3476 | 776 | 106 | 791 |
| Dental jaw-prop | E. L. Mason | 742,698 | Oct. 27 | 4443 | 1003 | 106 | 2232 |
| Dental jig | W. E. Griswold | 733,321 | July 7 | 1108 | 263 | 105 | 233 |
| Dental lip and cheek supporter | J. B. Jordan | 744,204 | Nov. 17 | 2803 | 599 | 107 | 627 |
| Dental-machine frictional gearing | L. L. Bosworth | 733,807 | July 14 | 1982 | 466 | 105 | 435 |
| Dental mandrel | J. Harris | 723,384 | Mar. 24 | 3238 | 726 | 103 | 723 |
| Dental manikin | E. P. Wright | 728,818 | May 19 | 3764 | 840, 841 | 104 | 837 |
| Dental matrix-retainer | J. Mills | 719,834 | Feb. 3 | 766 | 179 | 102 | 985 |
| Dental medicine-receptacle | G. B. Smith | 732,662 | June 30 | 5870 | 1302 | 104 | 2413 |
| Dental mixing-mortar | C. P. Schultz | 737,287 | Aug. 25 | 4218 | 939 | 105 | 1931 |
| Dental mixing-tablet | J. N. Woolverton | 735,929 | Aug. 11 | 1709 | 363 | 105 | 1364 |
| Dental mold | W. Streetman | 723,942 | Mar. 31 | 4276 | 960 | 103 | 959 |
| Dental mouth-mirror | C. S. Street | 727,483 | May 5 | 1227 | 272 | 104 | 265 |
| Dental mouth-mirror attachment | D. C. Franklin | 726,895 | May 5 | 119 | 28 | 104 | 28 |
| Dental mouth-prop, mirror, and tongue-protector | W. Hare | 735,762 | Aug. 11 | 1388 | 298 | 105 | 1293 |
| Dental napkin-holder | H. A. King | 718,772 | Jan. 20 | 2389 | 530 | 102 | 538 |
| Dental or other uses. Blast-controlling device for | N. K. Garhart | 742,305 | Oct. 27 | 3743 | 837 | 106 | 2085 |
| Dental plate | S. G. Supplee | 725,506 | Apr. 14 | 2022 | 456 | 103 | 1613 |
| Dental plate | S. G. Supplee | 728,633 | May 19 | 3428 | 761 | 104 | 768 |
| Dental plate and making same | H. L. Finnell | 731,674 | June 23 | 3969 | 883 | 104 | 1999 |
| Dental plates. Means for fixing artificial teeth to | L. E. Evslin and G. Ott | 746,804 | Dec. 15 | 2710 | 625 | 107 | 1724 |
| Dental pliers | C. S. Case | 731,337 | June 16 | 3318 | 740 | 104 | 1849 |
| Dental pliers | V. W. Gilbert | 740,549 | Oct. 6 | 318 | 66 | 106 | 1312 |
| Dental plugger | A. Bush | 732,044 | June 30 | 4666 | 1042 | 104 | 2161 |
| Dental preparation for use in the operation of capping pulps. | A. L. Bower | 731,849 | June 23 | 4284 | ------ | 104 | 2067 |
| Dental securing device | W. E. Griswold | 733,320 | July 7 | 1106 | 263 | 105 | 233 |
| Dental spraying apparatus | J. C. Holson | 739,674 | Sept. 22 | 4121 | 918 | 106 | 930 |
| Dental students. Educational appliance for | C. F. Bryant | 739,980 | Sept. 29 | 4714 | 1060, 1061 | 106 | 1074 |
| Dental suction-plate | I. Malone | 729,621 | June 2 | 174 | 42 | 104 | 1163 |
| Dental swaging-machine | C. F. Lauderdale | 727,811 | May 12 | 1877 | 418 | 104 | 417 |
| Dental tool | G. B. Hough | 736,101 | Aug. 11 | 2026 | 431 | 105 | 1433 |
| Dental tool | C. M. Freeman | 745,732 | Dec. 1 | 731 | 167 | 107 | 1254 |
| Dental vulcanizer | C. A. Davis | 728,375 | May 19 | 2936 | 648 | 104 | 662 |
| Dentimeter | C. T. Kinsman | 744,358 | Nov. 17 | 3074 | 659 | 107 | 687 |
| Dentist's clamp | V. Malizan and J. G. Prochaska | 735,543 | Aug. 4 | 981 | 208 | 105 | 1189 |
| Dentist's flask | A. S. Steigerwald | 722,765 | Mar. 17 | 2091 | 468 | 103 | 478 |
| Dentist's or physician's pneumatic apparatus | P. H. Stehley and J. H. Hulings | 730,714 | June 9 | 2166 | 480, 481 | 104 | 1593 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|---|
| | | | | Spec. | Dr'g. | Vol. | Page. |
| Dentist's spreading-screw elevator | H. T. McCune | 723,710 | Mar. 24 | 3814 | 858 | 103 | 843 |
| Dentists' tapers. Composition for | L. C. Mandel | 733,061 | July 7 | 644 | ..... | 105 | 137 |
| Dentist's tool for crimping edges of metal crowns | E. Betts | 738,152 | Sept. 8 | 1194 | 263 | 106 | 273 |
| Denture. Anchored | C. M. Carr | 744,291 | Nov. 17 | 2960 | 633 | 107 | 662 |
| Denture. Anchored | C. M. Carr | 744,292 | Nov. 17 | 2963 | 633 | 107 | 662 |
| Denture. Artificial | G. J. Davison | 742,011 | Oct. 20 | 3138 | 700 | 106 | 1946 |
| Deodorizing device | R. C. De La Hunt | 732,926 | July 7 | 408 | 99 | 105 | 88 |
| Deodorizing or disinfecting apparatus | M. Jacobs | 725,086 | Apr. 14 | 1244 | 280 | 103 | 1449 |
| Depilatory and making it | A. H. Stone | 732,323 | June 30 | 5210 | ..... | 104 | 2272 |
| Deposit-box. Safety | E. A. Strauss | 738,251 | Sept. 8 | 1395 | 302 | 106 | 317 |
| Depth-gage | H. C. Hansen | 740,646 | Oct. 6 | 494 | 109 | 106 | 1352 |
| Depurator | C. E. H. Armbruster | 726,791 | Apr. 28 | 4423 | 996<br>997 | 103 | 2138 |
| Depurator | A. W. Ottignon | 734,238 | July 21 | 2842 | 666 | 105 | 636 |
| Depurator | L. H. Richards | 735,591 | Aug. 4 | 1068 | 227 | 105 | 1208 |
| Derail | E. C. Carter | 725,316 | Apr. 14 | 1658 | 374 | 103 | 1536 |
| Derailer | G. L. Mansfield | 728,740 | May 19 | 3621 | 804 | 104 | 807 |
| Derailer | M. P. Layton and J. W. Van Doren | 735,534 | Aug. 4 | 967 | 205 | 105 | 1186 |
| Derailment-brake | W. R. Carroll | 732,921 | July 7 | 399 | 96 | 105 | 86 |
| Derrick | E. P. Arsneau | 718,897 | Jan. 20 | 2614 | 585 | 102 | 584 |
| Derrick | E. P. Arsneau | 723,434 | Mar. 24 | 3317 | 743 | 103 | 740 |
| Derrick | C. J. Reise | 723,731 | Mar. 24 | 3853 | 866<br>867 | 103 | 851 |
| Derrick | J. L. De Vou | 739,955 | Sept. 29 | 4665 | 1048 | 106 | 1064 |
| Derrick | W. S. Jacobs | 742,995 | Nov. 3 | 310 | 70 | 107 | 67 |
| Derrick-cableway | G. H. Evans | 718,611 | Jan. 20 | 2086 | 453 | 102 | 478 |
| Derrick. Combination- | J. B. Martin | 727,658 | May 12 | 1566 | 354 | 104 | 354 |
| Derrick-hoist | J. M. Cornell | 724,668 | Apr. 7 | 464 | 112 | 103 | 1268 |
| Designs and jacquards for same. Apparatus for making | I. Kitsee | 732,948 | July 7 | 444 | 109<br>110 | 105 | 96 |
| Desk | J. A. Hodges | 718,627 | Jan. 20 | 2109 | 459 | 102 | 482 |
| Desk | A. F. Wernicke | 727,241 | May 5 | 787 | 168 | 104 | 170 |
| Desk. Adjustable | J. N. Stokes | 735,312 | Aug. 4 | 534 | 109 | 105 | 1095 |
| Desk and seat | A. C. Henderson | 739,868 | Sept. 29 | 4504 | 1013 | 106 | 1029 |
| Desk and seat attachment. School- | J. H. Foster | 726,153 | Apr. 21 | 3167 | 717 | 103 | 1870 |
| Desk and type-writer cabinet. Combined | J. Gramelspacher | 727,126 | May 5 | 587 | 126 | 104 | 127 |
| Desk attachment | J. R. Wasson | 739,959 | Sept. 29 | 4669 | 1050 | 106 | 1065 |
| Desk attachment | J. Hoffman | 741,495 | Oct. 13 | 2118 | 472 | 106 | 1718 |
| Desk-clamp | A. R. Fergusson | 722,828 | Mar. 17 | 2211 | 494 | 103 | 501 |
| Desk frame and attachment therefor. School- | J. C. Gilson and D. H. Rowe | 724,844 | Apr. 7 | 800 | 184 | 103 | 1340 |
| Desk implement. Combination | W. R. Owens | 744,934 | Nov. 24 | 4101 | 884 | 107 | 921 |
| Desk. Knockdown | J. Holmes | 723,464 | Mar. 24 | 3371 | 755 | 103 | 751 |
| Desk-lock | W. H. Collins | 729,549 | June 2 | 52 | 13 | 104 | 1137 |
| Desk-lock | A. R. Fergusson | 739,407 | Sept. 22 | 3641 | 809 | 106 | 827 |
| Desk. Office- | R. Huddleston | 742,118 | Oct. 20 | 3380 | 754<br>755 | 106 | 1994 |
| Desk. Office- | E. G. Widman and A. J. Messler | 744,888 | Nov. 24 | 4022 | 867<br>868 | 107 | 905 |
| Desk. Portable | J. B. Elliott | 735,865 | Aug. 11 | 1600 | 341 | 105 | 1341 |
| Desk. School- | J. Karpen | 719,338 | Jan. 27 | 3456 | 769<br>770 | 102 | 776 |
| Desk. School- | R. G. Litsey | 723,692 | Mar. 24 | 3778 | 849 | 103 | 836 |
| Desk. School- | J. W. H. Piner | 727,438 | May 5 | 1143 | 251 | 104 | 247 |
| Desk. School- | J. A. McLaughlin | 731,206 | June 16 | 3077 | 683 | 104 | 1799 |
| Desk. School or other | C. W. Robbins and S. F. Poynor | 730,973 | June 16 | 2637 | 587 | 104 | 1712 |
| Desk shelf attachment | A. J. Throm | 719,625 | Feb. 3 | 379 | 87 | 102 | 901 |
| Desks. Support for attachment to | W. J. Bell | 735,853 | Aug. 11 | 1574 | 335 | 105 | 1335 |
| Despatch system. Vacuum | J. A. Watson | 747,104 | Dec. 15 | 3300 | 751 | 107 | 1862 |
| Despatch systems. Receiving apparatus for tubular | G. G. Powell | 737,271 | Aug. 25 | 4181 | 931 | 105 | 1923 |
| Detector:<br>*See* Bottle-detector. Ground-detector.<br>Electric-circuit ground-detector. | | | | | | | |
| Detector-bar | J. T. Hambay | 732,296 | June 30 | 5168 | 1148 | 104 | 2264 |
| Detector-bar clip | G. Smith | 721,975 | Mar. 3 | 604 | 134 | 103 | 131 |
| Detector-bar clip | J. P. Coleman | 724,439 | Apr. 7 | 35 | 9, 10 | 103 | 1177 |
| Detector-bar clip and link | T. G. Stiles | 748,229 | Dec. 29 | 5439 | 1240 | 107 | 2373 |
| Detergent | H. C. Jones | 729,600 | June 2 | 141 | ..... | 104 | 1156 |
| Detinned scraps. Apparatus for transferring | M. Laernoes and J. Dunn | 737,117 | Aug. 25 | 3883 | 862 | 105 | 1860 |
| Detonating composition | H. von Dahmen | 740,355 | Sept. 29 | 5392 | ..... | 106 | 1217 |
| Detonating-machine | J. W. and C. See | 747,245 | Dec. 15 | 3566 | 807 | 107 | 1917 |
| Detonator. Repeating | J. C. Caloun and E. R. Disbro | 737,338 | Aug. 25 | 4305 | 957 | 105 | 1949 |
| Developer | J. G. Dubler | 721,029 | Feb. 17 | 3000 | 689 | 102 | 1485 |
| Developing photographic pictures | F. Fischer and H. Guntrum | 736,374 | Aug. 18 | 2490 | ..... | 105 | 1550 |
| Developing-tray | W. H. C. Dudley, Jr | 740,828 | Oct. 6 | 838 | 188 | 106 | 1424 |
| Dial. Educational, advertising, computing, recitation, exhibition, and display | E. S. Morton | 739,201 | Sept. 15 | 3228 | 715 | 106 | 722 |
| Dial-plate | J. F. Stevens | 746,600 | Dec. 8 | 2335 | 534 | 107 | 1621 |
| Dials. Device for protecting combination- | H. Lietz | 732,197 | June 30 | 4974 | 1106 | 104 | 2224 |
| Diamagnetic metal from sands, &c. Separating | E. Gates | 731,043 | June 16 | 2771 | 618 | 104 | 1739 |
| Diamagnetic separation | E. Gates | 731,036 | June 16 | 2761 | 615 | 104 | 1737 |
| Diamagnetic separation | E. Gates | 731,040 | June 16 | 2767 | 617 | 104 | 1738 |
| Diamagnetic separation | E. Gates | 731,042 | June 16 | 2770 | 617<br>618 | 104 | 1739 |
| Diamagnetic separation | E. Gates | 731,044 | June 16 | 2774 | 618 | 104 | 1740 |
| Diamagnetic separator | E. Gates | 731,035 | June 16 | 2760 | 615 | 104 | 1737 |
| Diamagnetic separator | E. Gates | 731,037 | June 16 | 2763 | 616 | 104 | 1737 |
| Diamagnetic separator | E. Gates | 731,038 | June 16 | 2764 | 616 | 104 | 1738 |
| Diamagnetic separator | E. Gates | 731,039 | June 16 | 2765 | 616 | 104 | 1738 |
| Diamagnetic separator | E. Gates | 731,041 | June 16 | 2768 | 617 | 104 | 1739 |
| Diamagnetic separator | E. Gates | 731,045 | June 16 | 2774 | 618 | 104 | 1740 |
| Diamond-splitting machine | A. J. Benjamins | 724,536 | Apr. 7 | 213 | 52, 53 | 103 | 1215 |
| Diaper | F. L. Reid | 723,306 | Mar. 24 | 3070 | 691 | 103 | 693 |
| Diaper. Infant's | P. E. Kent | 719,811 | Feb. 3 | 732 | 171<br>172 | 102 | 978 |
| Dictionary. Thesaurus | J. W. Buel | 723,823 | Mar. 31 | 4018 | 905<br>906 | 103 | 903 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Die: *See* Auger-blank die. Battery-plate-forming die. Brick-column die. Embossing-die. Hat-die. Hat-shaping die. Pipe-die. Screw-cutting die. Self-opening die. Welding-die. Wire-drawing die. | | | | | | | |
| Die | J. C. Forster | 721,172 | Feb. 24 | 3311 | 757 | 102 | 1571 |
| Die | J. R. Blakeslee | 721,659 | Mar. 3 | 16 | 3 | 103 | 6 |
| Die | E. B. Roth | 723,314 | Mar. 24 | 3083 | 694 | 103 | 696 |
| Die | J. M. Stetter | 734,199 | July 21 | 2769 | 650 | 105 | 618 |
| Die | F. E. Smith | 734,762 | July 28 | 3834 | 894 | 105 | 855 |
| Die and press-stamping tool | G. Higginson | 735,097 | Aug. 4 | 90 | 22 | 105 | 1002 |
| Die and reamer. Combined | A. O'Brien | 746,137 | Dec. 8 | 1514 | 339 | 107 | 1444 |
| Die-cutting machine | J. F. Keller | 739,086 | Sept. 15 | 3024 | 670 | 106 | 679 |
| Die-cutting machine | H. W. Kupfer and C. E. Schoder | 739,090 | Sept. 15 | 3032 | 672 | 106 | 681 |
| Die-cutting-machine work-holder | B. J. Abbott | 732,691 | July 7 | 1 | 1 | 105 | 3 |
| Die-socket | G. A. Kenner | 720,441 | Feb. 10 | 1890 | 430 | 102 | 1239 |
| Die-stock | J. J. Mullany | 724,200 | Mar. 31 | 4792 | 1074 | 103 | 1060 |
| Die-stock | N. Sawyer | 730,156 | June 2 | 1151 | 259 | 104 | 1362 |
| Die-stock | R. Bartholomäus | 734,034 | July 21 | 2455 | 574, 575 | 105 | 551 |
| Die-stock | W. Haythorn | 743,982 | Nov. 10 | 2312 | 494 | 107 | 513 |
| Die-stock. Adjustable | B. Borden | 744,465 | Nov. 17 | 3272 | 702, 703 | 107 | 729 |
| Diffusing-cells. Circulating apparatus for | F. Hinze and F. J. Wagner | 746,962 | Dec. 15 | 3039 | 697 | 107 | 1800 |
| Diffusion apparatus | E. H. Schofield | 728,308 | May 19 | 2818 | 623, 624 | 104 | 639 |
| Diffusion-battery | E. G. Wickersham | 737,184 | Aug. 25 | 4008 | 889 | 105 | 1887 |
| Diffusion process | C. Steffen | 718,030 | Jan. 6 | 963 | ..... | 102 | 207 |
| Digester | T. W. McFarland | 741,530 | Oct. 13 | 2196 | 487 | 106 | 1734 |
| Digester-lining | G. Lanzendoerfer | 744,769 | Nov. 24 | 3815 | 822 | 107 | 861 |
| Digester-linings. Composition for | E. Hentschel | 719,216 | Jan. 27 | 3217 | 718, 719, 720 | 102 | 724 |
| Digesters. Composition for acid-proof lining of | R. Panzl | 744,689 | Nov. 17 | 3633 | ..... | 107 | 805 |
| Digesters. Composition for acid-proof lining of | R. Panzl | 744,690 | Nov. 17 | 3634 | ..... | 107 | 805 |
| Digger: *See* Beet-digger. Coal-digger. Post-hole digger. Potato-digger. | | | | | | | |
| Digging-machine | H. Sörensen | 734,766 | July 28 | 3841 | 896, 897 | 105 | 857 |
| Digging-machine | S. B. Fleming | 747,400 | Dec. 22 | 3861 | 869 | 107 | 2000 |
| Digging machine. Trench- | J. H. W. Libbe | 743,300 | Nov. 3 | 939 | 204, 205 | 107 | 201 |
| Dilating-bougie | F. R. Bachler | 734,498 | July 28 | 3332 | 780 | 105 | 752 |
| Dilator | W. E. Minor | 719,487 | Feb. 3 | 141 | 32 | 102 | 854 |
| Dilator-indicator | C. G. Heynemann | 747,068 | Dec. 15 | 3239 | 738 | 107 | 1848 |
| Dimensioning apparatus | B. M. W. Hanson | 732,184 | June 30 | 4948 | 1100, 1101 | 104 | 2219 |
| Dining and other table for playing games. Combined | G. Spalt | 747,097 | Dec. 15 | 3290 | 749 | 107 | 1860 |
| Dining-room service. Continuous | H. I. Washburn | 746,615 | Dec. 8 | 2355 | 541, 542 | 107 | 1626 |
| Dipper-handle | B. H. Coffey | 745,329 | Dec. 1 | 28 | 6 | 107 | 1106 |
| Dipper-holder | H. L. Beaman | 725,655 | Apr. 21 | 2320 | 523 | 103 | 1690 |
| Dipper or skimmer | G. T. Kinch | 744,206 | Nov. 17 | 2805 | 599 | 107 | 628 |
| Dipping-machine | W. S. Foster | 735,064 | Apr. 14 | 1195 | 271 | 103 | 1440 |
| Direction in marching or traveling. Instrument for ascertaining | J. von Bézard | 736,925 | Aug. 25 | 3549 | 787 | 105 | 1789 |
| Directory. Commercial | E. S. Brooks | 721,132 | Feb. 17 | 3229 | 739 | 102 | 1541 |
| Directory or name board | F. W. Leuthesser | 731,795 | June 23 | 4190 | 934 | 104 | 2045 |
| Dirt-receptacle. Wheeled | R. C. Menzies | 735,126 | Aug. 4 | 152 | 34 | 105 | 1014 |
| Discount-card | C. J. Huber | 723,673 | Mar. 24 | 3746 | 840 | 103 | 828 |
| Diseases by electromusical vibrations. Means for treating nervous | H. Fleetwood | 729,317 | May 26 | 4660 | 1030 | 104 | 1037 |
| Dish-cleaner | M. D. Colbath | 719,936 | Feb. 3 | 931 | 217 | 102 | 1021 |
| Dish-cleaner | M. D. Colbath | 735,657 | Aug. 4 | 1189 | 251, 252 | 105 | 1233 |
| Dish-cleaner | J. W. and B. C. Read | 747,220 | Dec. 15 | 3519 | 799 | 107 | 1907 |
| Dish-drainer | F. Cleek | 725,825 | Apr. 21 | 2619 | 596 | 103 | 1756 |
| Dish-drainer | M. G. Reeves | 746,159 | Dec. 8 | 1558 | 349 | 107 | 1453 |
| Dish-mop | C. G. Townsend | 739,747 | Sept. 22 | 4244 | 950 | 106 | 958 |
| Dish-mop. Self-soaping | B. B. Babbitt | 743,132 | Nov. 3 | 603 | 131 | 107 | 126 |
| Dish or plate | J. D. Bates | 730,082 | June 2 | 1016 | 227 | 104 | 1334 |
| Dish-pan | V. A. Cassell | 743,447 | Nov. 10 | 1299 | 266 | 107 | 293 |
| Dish-washer | A. M. Dunder | 718,107 | Jan. 13 | 1101 | 243 | 102 | 252 |
| Dish-washer | S. J. Brown | 729,536 | June 2 | 30 | 8 | 104 | 1133 |
| Dish-washer | J. Strelitzer | 735,840 | Aug. 11 | 1538 | 330 | 105 | 1328 |
| Dish-washer | G. W. Hunt | 745,352 | Dec. 1 | 63 | 15 | 107 | 1114 |
| Dish-washing machine | L. E. Beardemphl | 724,535 | Apr. 7 | 213 | 52 | 103 | 1215 |
| Dish-washing machine | C. H. Blanchard | 726,016 | Apr. 21 | 2943 | 669 | 103 | 1824 |
| Dish-washing machine | J. G. Cochrane | 731,341 | June 16 | 3322 | 741 | 104 | 1850 |
| Dish-washing machine | L. B. Gregg | 740,642 | Oct. 6 | 489 | 108 | 106 | 1351 |
| Dish-washing machine | H. H. Jones | 748,077 | Dec. 29 | 5164 | 1167 | 107 | 2313 |
| Dish-washing tray | N. G. Blackwood | 724,252 | Mar. 31 | 4908 | 1099 | 103 | 1083 |
| Dishing and flanging machine | C. Gabriel | 738,428 | Sept. 8 | 1777 | 386, 387, 388, 389 | 106 | 397 |
| Disinfectant | G. Chism | 731,340 | June 16 | 3321 | ..... | 104 | 1850 |
| Disinfectant and making same | J. Choulet | 747,138 | Dec. 15 | 3367 | 764 | 107 | 1876 |
| Disinfectant-block | C. C. Jenkins | 739,317 | Sept. 22 | 3449 | 769 | 106 | 785 |
| Disinfectant-distributing device | S. Hesketh | 720,918 | Feb. 17 | 2791 | 640 | 102 | 1440 |
| Disinfectant-graduator | J. H. Venners | 730,494 | June 9 | 1774 | 398 | 104 | 1508 |
| Disinfectant-vaporizer | S. Trenner | 719,277 | Jan. 27 | 3331 | 745 | 102 | 749 |

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| Invention. | Name. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|---|
| | | | | Spec. | Drg. | Vol. | Page. |
| Disinfectant vessel | H. Pflüger | 744,978 | Nov. 24 | 4188 | 905 | 107 | 938 |
| Disinfectants. Manufacturing | C. Spengler | 739,941 | Sept. 29 | 4643 | ..... | 106 | 1060 |
| Disinfectants to water-closets. Apparatus for applying | F. W. Norris | 721,909 | Mar. 3 | 465 | 102 | 103 | 102 |
| Disinfecting and fumigating apparatus | J. F. Valentine | 731,982 | June 23 | 4527 | 1010 | 104 | 2119 |
| Disinfecting apparatus | J., W. H., and E. R. Williams | 719,929 | Feb. 3 | 918 | 215 | 102 | 1018 |
| Disinfecting apparatus | E. Fournier | 722,503 | Mar. 10 | 1591 | 351 | 103 | 358 |
| Disinfecting apparatus | E. Fournier | 728,220 | May 19 | 2627 | 586<br>587 | 104 | 598 |
| Disinfecting apparatus | E. Fournier | 728,221 | May 19 | 2629 | 587 | 104 | 598 |
| Disinfecting apparatus | C. J. Walz | 729,459 | May 26 | 4896 | 1084 | 104 | 1087 |
| Disinfecting apparatus | M. Otto | 733,673 | July 14 | 1737 | 410 | 105 | 383 |
| Disinfecting apparatus | F. M. Wise | 743,127 | Nov. 3 | 592 | 128 | 107 | 123 |
| Disinfecting apparatus | P. Simundt | 743,340 | Nov. 3 | 1017 | 219 | 107 | 217 |
| Disinfecting apparatus | L. Vandam | 746,413 | Dec. 8 | 2010 | 458 | 107 | 1548 |
| Disinfecting apparatus | F. C. Nye | 748,413 | Dec. 29 | 5763 | 1314 | 107 | 2445 |
| Disinfecting compounds. Producing | R. G. Groppler | 740,424 | Oct. 6 | 76 | ..... | 106 | 1263 |
| Disinfecting device | L. E. Jones | 719,228 | Jan. 27 | 3249 | 726 | 102 | 731 |
| Disinfecting device | W. H. Dayton | 739,297 | Sept. 22 | 3419 | 762 | 106 | 779 |
| Disinfecting device. Telephone- | N. J. Tubbs | 743,353 | Nov. 3 | 1048 | 224 | 107 | 223 |
| Disinfecting or fire-extinguishing purposes. Water-directing appliance for | A. Verschuren | 730,723 | June 9 | 2179 | 484 | 104 | 1595 |
| Disinfecting or other purposes. Composition for | H. S. Blackmore. (Reissue) | 12,084 | Feb. 24 | 4225 | ..... | 102 | 1766 |
| Disinfecting telephone-transmitter mouthpieces. Means for | M. Griffin, S. Sanker, and B. Keith | 744,337 | Nov. 17 | 3035 | 651 | 107 | 678 |
| Disinfection apparatus | A. Ghirelli | 734,698 | July 28 | 3699 | 866 | 105 | 829 |
| Disintegrator | J. M. Schutz | 739,227 | Sept. 15 | 3281 | 727 | 106 | 733 |
| Disintegrator | E. S. Peck | 742,227 | Oct. 27 | 3589 | 802 | 106 | 2052 |
| Disk cutter | J. Brooks | 742,000 | Oct. 20 | 3117 | 695 | 106 | 1942 |
| Disk cutters. Means for adjustably spacing | H. Y. Armstrong | 737,194 | Aug. 25 | 4024 | 892 | 105 | 1890 |
| Disk drill | S. E. Davis | 718,825 | Jan. 20 | 2472 | 549 | 102 | 554 |
| Disk drill | W. A. Van Brunt | 734,016 | July 21 | 2418 | 565<br>566 | 105 | 543 |
| Disk drill | F. R. Packham | 745,655 | Dec. 1 | 618 | 144 | 107 | 1230 |
| Disk drill. Double- | W. A. Van Brunt | 734,017 | July 21 | 2419 | 566 | 105 | 544 |
| Disk drill. Double- | W. A. Van Brunt | 734,018 | July 21 | 2421 | 566<br>567 | 105 | 544 |
| Disk drill. Double- | W. A. Dynes and J. M. Pierce | 736,369 | Aug. 18 | 2484 | 545 | 105 | 1549 |
| Disk drill. Single- | J. M. Pierce | 736,440 | Aug. 18 | 2611 | 573 | 105 | 1575 |
| Disks. Machine for producing apertured | G. A. Ensign | 727,320 | May 5 | 925 | 201<br>202 | 104 | 199 |
| Dispensing apparatus | D. B. de Waltoff | 730,989 | June 16 | 2672 | 595 | 104 | 1719 |
| Dispensing-cabinet | L. E. Campbell and W. B. Weaver | 726,635 | Apr. 28 | 4131 | 932 | 103 | 2077 |
| Dispensing-cabinet and measuring-scoop therefor | W. S. Thomas | 744,129 | Nov. 17 | 2632 | 562 | 107 | 590 |
| Dispensing-can | H. Gould | 722,099 | Mar. 3 | 817 | 182 | 103 | 176 |
| Display and vending case | W. Meyer | 743,182 | Nov. 3 | 695 | 153 | 107 | 145 |
| Display apparatus | S. R. De Long | 728,879 | May 26 | 3883 | 863 | 104 | 876 |
| Display apparatus | F. Woodbridge | 743,128 | Nov. 3 | 594 | 128 | 107 | 124 |
| Display apparatus. Color-changing | F. Woodbridge | 743,129 | Nov. 3 | 595 | 128 | 107 | 124 |
| Display apparatus. Curtain- | M. J. Bebb and E. G. Eaton | 737,318 | Aug. 25 | 4277 | 950 | 105 | 1943 |
| Display-box | F. W. Smith | 731,237 | June 16 | 3133 | 695 | 104 | 1810 |
| Display box. Neckwear- | J. H. Louder | 734,343 | July 21 | 3047 | 718 | 105 | 678 |
| Display-bracket for show-cases, windows, &c. Interchangeable and adjustable | C. E. Latshaw | 747,442 | Dec. 22 | 3930 | 884 | 107 | 2016 |
| Display-cabinet | W. E. Howry | 717,997 | Jan. 6 | 902 | 203 | 102 | 193 |
| Display-cabinet | C. V. Findley | 718,752 | Jan. 20 | 2351 | 519<br>520 | 102 | 530 |
| Display-cabinet | J. H. Tracey | 720,504 | Feb. 10 | 1999 | 459 | 102 | 1216 |
| Display-cabinet | F. Hendrickx | 730,209 | June 2 | 1223 | 273 | 104 | 1376 |
| Display-cabinet | C. J. and R. T. Van Valkenburg | 730,493 | June 9 | 1773 | 398 | 104 | 1508 |
| Display-cabinet | J. L. Tandy | 730,718 | June 9 | 2171 | 482 | 104 | 1594 |
| Display-cabinet | J. L. Tandy | 736,311 | Aug. 11 | 2389 | 520 | 105 | 1512 |
| Display-cabinet | H. A. Warren | 737,684 | Sept. 1 | 231 | 49 | 106 | 53 |
| Display-cabinet | J. U. Lasso | 742,878 | Nov. 3 | 103 | 24 | 107 | 23 |
| Display cabinet. Hat- | A. R. Du Boise | 720,411 | Feb. 10 | 1837 | 419 | 103 | 1229 |
| Display cabinet. Package- | J. M. Callander | 730,871 | June 16 | 2437 | 538 | 104 | 1670 |
| Display cabinet. Ribbon- | N. Lafon | 719,234 | Jan. 27 | 3358 | 728 | 102 | 733 |
| Display-card | H. Brosius | 721,143 | Feb. 24 | 3257 | 745<br>746 | 102 | 1561 |
| Display-card | E. Zöller | 732,810 | July 7 | 214 | 54 | 105 | 48 |
| Display-cards, &c. Back-rest for | J. H. Kevorkian | 730,027 | June 2 | 927 | 208 | 104 | 1316 |
| Display-carton | H. Clauss | 735,467 | Aug. 4 | 834 | 178 | 105 | 1157 |
| Display-case | J. J. Donnelly | 720,119 | Feb. 10 | 1315 | 300<br>301 | 102 | 1119 |
| Display-case | C. E. Latshaw | 725,572 | Apr. 14 | 2133 | 482<br>483 | 103 | 1637 |
| Display-case | R. A. Stevens | 735,614 | Aug. 4 | 1110 | 236 | 105 | 1217 |
| Display-clamp | A. L. Young | 720,389 | Feb. 10 | 1802 | 409 | 102 | 1221 |
| Display-counter | I. N. Landauer | 717,870 | Jan. 6 | 678 | 151 | 102 | 144 |
| Display-counter | I. N. Landauer | 720,036 | Feb. 10 | 1154 | 264 | 102 | 1084 |
| Display-counter | S. J. Sherer | 729,684 | June 2 | 287 | 66 | 104 | 1188 |
| Display device | J. C. P. Webber | 737,888 | Sept. 1 | 668 | 142 | 106 | 147 |
| Display device. Card- | R. B. Friend | 744,326 | Nov. 17 | 3014 | 647 | 107 | 674 |
| Display device. Extensible | M. M. Fletcher and E. R. Bradley | 744,702 | Nov. 17 | 3697 | 797 | 107 | 821 |
| Display-frame | J. T. Henshaw | 738,443 | Sept. 8 | 1812 | 393 | 106 | 405 |
| Display-frame | W. A. Decker | 744,174 | Nov. 17 | 2736 | 583 | 107 | 611 |
| Display frame for show-windows | J. B. Allen | 727,252 | May 5 | 802 | 172 | 104 | 173 |
| Display-front for boxes | F. Davis | 747,950 | Dec. 29 | 4903 | 1110 | 107 | 2256 |
| Display-front for drawers, &c | A. A. Middleton | 727,663 | May 12 | 1577 | 355 | 104 | 356 |
| Display-holder | R. H. Walk | 719,164 | Jan. 27 | 3133 | 698 | 102 | 706 |
| Display-holder for ladies' hats | F. P. Rabin | 748,008 | Dec. 29 | 5024 | 1134 | 107 | 2283 |
| Display-light | D. J. O'Brien | 747,212 | Dec. 15 | 3504 | 795<br>796 | 107 | 1904 |
| Display mechanism. Automatic | A. Klumpp | 730,132 | June 2 | 1094 | 245<br>246 | 104 | 1350 |
| Display mechanism. Curtain- | A. M. Davy | 722,568 | Mar. 10 | 1703 | 379 | 103 | 382 |

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| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Display or advertising device | G. Birch | 735,451 | Aug. 4 | 805 | 171 | 105 | 1152 |
| Display or exhibiting box | D. K. Ferguson | 724,996 | Apr. 7 | 1071 | 245 | 103 | 1397 |
| Display-package | P. R. Hazeltine | 720,345 | Feb. 10 | 1726 | 392 | 102 | 1204 |
| Display-package for powder, shot, &c | C. E. Roberts | 719,876 | Feb. 3 | 842 | 197 | 102 | 1001 |
| Display-rack | A. V. Thomas | 719,060 | Jan. 27 | 2929 | 655 | 102 | 666 |
| Display-rack | G. A. Weeks | 721,113 | Feb. 17 | 3162 | 728 | 102 | 1523 |
| Display-rack | J. D. Clark | 721,424 | Feb. 24 | 3788 | 862 | 102 | 1669 |
| Display-rack | J. H. James | 721,806 | Mar. 3 | 268 | 60 | 103 | 59 |
| Display-rack | C. E. Brackbill | 722,279 | Mar. 10 | 1167 | 257, 258 | 103 | 263 |
| Display-rack | W. E. Lambden | 723,885 | Mar. 31 | 4148 | 935 | 103 | 930 |
| Display-rack | W. N. Wilbanks | 726,127 | Apr. 21 | 3130 | 708 | 103 | 1862 |
| Display-rack | A. S. and W. H. Strickler | 728,040 | May 12 | 2292 | 509 | 104 | 505 |
| Display-rack | L. Feldmann, Jr., and C. A. Haas | 728,219 | May 19 | 2624 | 586 | 104 | 597 |
| Display-rack | E. B. Weston | 730,322 | June 9 | 1452 | 320 | 104 | 1440 |
| Display-rack | L. B. Lindquist and E. Agle | 731,922 | June 23 | 4415 | 984 | 104 | 2095 |
| Display-rack | D. Sullivan | 734,995 | July 28 | 4271 | 993 | 105 | 947 |
| Display-rack | T. Rabe | 736,296 | Aug. 11 | 2361 | 513 | 105 | 1506 |
| Display-rack | C. M. Turner and H. Lyons | 739,950 | Sept. 29 | 4659 | 1046 | 106 | 1063 |
| Display-rack | T. P. Long | 742,883 | Nov. 3 | 110 | 26 | 107 | 25 |
| Display-rack | R. F. Hatch | 745,012 | Nov. 24 | 4241 | 920 | 107 | 950 |
| Display-rack | J. V. Brooke | 745,776 | Dec. 1 | 825 | 187 | 107 | 1274 |
| Display rack. Carpet- | J. H. Davis | 730,239 | June 9 | 1300 | 287 | 104 | 1407 |
| Display rack. Curtain- | J. A. Gemmill | 736,379 | Aug. 18 | 2497 | 549 | 105 | 1551 |
| Display rack or stand | S. Erb | 746,315 | Dec. 8 | 1846 | 420 | 107 | 1513 |
| Display-stand | P. Misner | 718,498 | Jan. 13 | 1854 | 407 | 102 | 415 |
| Display-stand | F. Simon | 721,245 | Feb. 24 | 3473 | 789 | 102 | 1604 |
| Display-stand | H. I. and M. A. Lurye | 725,625 | Apr. 14 | 2235 | 505 | 103 | 1660 |
| Display-stand | H. Stahmer. (Reissue) | 12,140 | Aug. 4 | 1257 | 267 | 105 | 1249 |
| Display-stand | C. F. Nye | 736,141 | Aug. 11 | 2097 | 450 | 105 | 1447 |
| Display-stand | G. D. Bailey | 737,314 | Aug. 25 | 4271 | 949 | 105 | 1941 |
| Display-stand | J. L. Moore | 738,345 | Sept. 8 | 1631 | 353 | 106 | 367 |
| Display-stand | J. H. Kamerer | 739,085 | Sept. 15 | 3023 | 670 | 106 | 679 |
| Display-stand | J. C. Hexom and C. G. Houx | 741,663 | Oct. 20 | 2439 | 547 | 106 | 1802 |
| Display-stand | J. S. Suffern | 743,048 | Nov. 3 | 439 | 96 | 107 | 92 |
| Display-stand and truck. Combined | J. A. Kelly | 733,847 | July 14 | 2065 | 488 | 105 | 450 |
| Display-stand for doors, &c | G. W. Raum | 739,027 | Sept. 15 | 2907 | 645 | 106 | 655 |
| Display stand. Jewelry- | W. J. Drain, Jr | 730,619 | June 9 | 1997 | 444 | 104 | 1558 |
| Display-stand. Portable | J. A. Marsh | 747,741 | Dec. 22 | 4468 | 1007, 1008 | 107 | 2137 |
| Display-stand. Rotating | I. A. Nash | 729,642 | June 2 | 210 | 48 | 104 | 1171 |
| Display system. Electrical | F. L. O'Bryan | 743,024 | Nov. 3 | 395 | 85, 86 | 107 | 83 |
| Display-table | C. W. Winfield | 734,645 | July 28 | 3592 | 840, 841 | 105 | 808 |
| Display-tray | J. H. Smith | 731,964 | June 23 | 4488 | 1001 | 104 | 2111 |
| Displaying advertising-cards, display-signs, &c. Mechanism for | C. S. Sinclair | 745,532 | Dec. 1 | 406 | 93 | 107 | 1185 |
| Displaying and stretching device. Glove | M. V. Hammack | 743,276 | Nov. 3 | 892 | 194 | 107 | 189 |
| Displaying drawings or prints. Frame for | H. D. Pursell | 740,466 | Oct. 6 | 160 | 32 | 106 | 1280 |
| Displaying lace curtains, rugs, embroideries, tapestries, &c Frame for | W. A. McDougall | 745,288 | Nov. 24 | 4817 | 1051 | 107 | 1068 |
| Dissolving organic or inorganic substances. Apparatus for | C. H. Rider | 748,217 | Dec. 29 | 5420 | 1233, 1234 | 107 | 2368 |
| Distance instrument | G. N. Saegmuller and G. M. Searle | 738,631 | Sept. 8 | 2168 | 475 | 106 | 481 |
| Distance-meter or range-finder | J. P. Sörensen | 722,435 | Mar. 10 | 1441 | 319 | 103 | 323 |
| Distance or range finder | E. Nicholson | 737,956 | Sept. 1 | 797 | 174 | 106 | 175 |
| Distillation of ammoniacal liquors. Apparatus for the | G. Wilton | 745,470 | Dec. 1 | 302 | 72, 73 | 107 | 1164 |
| Distillation of petroleum. Apparatus for continuous fractional | W. D. Perkins | 731,943 | June 23 | 4448 | 992, 993 | 104 | 2102 |
| Distillers' wash. Treating | C. G. Sudre and C. V. Thierry | 732,234 | June 30 | 5053 | 1124 | 104 | 2241 |
| Distilling apparatus | N. H. Hiller. (Reissue) | 12,092 | Mar. 3 | 1013 | 222 | 103 | 215 |
| Distilling apparatus | W. E. Lummus | 731,799 | June 23 | 4195 | 936 | 104 | 2046 |
| Distilling apparatus | J. Stocker | 748,564 | Dec. 29 | 6067 | 1374 | 107 | 2512 |
| Distilling apparatus. Portable | J. Kirkaldy | 718,209 | Jan. 13 | 1285 | 282, 283 | 102 | 291 |
| Distilling apparatus. Turpentine- | J. I. Pittman | 742,351 | Oct. 27 | 3820 | 856 | 106 | 2102 |
| Distilling apparatus. Water- | J. Ellison | 718,991 | Jan. 27 | 2799 | 627 | 102 | 639 |
| Distilling apparatus. Water- | J. F. Chase | 720,671 | Feb. 17 | 2360 | 541 | 102 | 1348 |
| Distilling apparatus. Water- | J. M. Coffman | 732,831 | July 7 | 248 | 62 | 105 | 55 |
| Distilling apparatus. Wood- | C. M. Palmer | 737,461 | Aug. 25 | 4543 | 1018 | 105 | 2002 |
| Distilling apparatus. Wood- | C. W. Bilfinger | 738,153 | Sept. 8 | 1196 | 263, 264 | 106 | 274 |
| Distilling apparatus. Wood- | A. A. McKethan | 741,157 | Oct. 13 | 1423 | 325 | 106 | 1569 |
| Distilling petroleum. Apparatus for continuously | M. Livingston | 728,257 | May 19 | 2708 | 604, 605 | 104 | 615 |
| Distributer or salt and pepper shaker | J. S. Duffie | 743,626 | Nov. 10 | 1668 | 350 | 107 | 372 |
| Distribution system | A. S. Hubbard | 720,350 | Feb. 10 | 1736 | 394 | 102 | 1206 |
| Distribution system | A. S. Hubbard | 720,351 | Feb. 10 | 1739 | 395 | 102 | 1207 |
| Distribution system | J. L. Creveling | 720,675 | Feb. 17 | 2366 | 542 | 102 | 1350 |
| Distribution system | A. D. Lunt | 725,463 | Apr. 14 | 1941 | 435 | 103 | 1596 |
| Distribution system | C. P. Steinmetz | 745,460 | Dec. 1 | 286 | 69 | 107 | 1160 |
| Ditcher | J. D. Brown | 732,702 | July 7 | 21 | 5 | 105 | 8 |
| Ditching and ridging machine | L. L. Hardin | 717,846 | Jan. 6 | 637 | 141 | 102 | 136 |
| Ditching-machine | J. H. Sylvestersen | 719,058 | Jan. 27 | 2925 | 654 | 102 | 665 |
| Ditching-machine | J. A. Fox | 726,041 | Apr. 21 | 2981 | 677, 678 | 103 | 1831 |
| Ditching-machine | W. H. Johnston | 732,747 | July 7 | 86 | 24, 25 | 105 | 22 |
| Ditching-machine | B. M. Rolph | 735,677 | Aug. 4 | 1229 | 260, 261 | 105 | 1242 |
| Ditching-machine | F. J. Beckley | 736,348 | Aug. 18 | 2451 | 535, 536 | 105 | 1541 |
| Ditching-machine | P. Berglund | 738,597 | Sept. 8 | 2105 | 459, 460 | 106 | 468 |
| Ditching-machine | A. J. Williams and M. M. Heptonstall. | 743,604 | Nov. 10 | 1621 | 339, 340 | 107 | 362 |

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|---|---|---|---|---|---|---|---|
| Dividers | H. C. Adamson | 722,551 | Mar. 10 | 1665 | 367 | 103 | 374 |
| Dividers | J. C. Edgar | 724,088 | Mar. 31 | 4557 | 1026 | 103 | 1013 |
| Dividers | J. V. Steenbergen | 724,625 | Apr. 7 | 391 | 93 | 103 | 1252 |
| Dividers. Proportional | C. Fosby | 730,105 | June 2 | 1052 | 235 | 104 | 1342 |
| Diving apparatus | J. L. Watson | 735,323 | Aug. 4 | 547 | 112 | 105 | 1098 |
| Diving apparatus | E. B. Petrie and J. E. Martin | 735,809 | Aug. 11 | 1476 | 317 | 105 | 1313 |
| Dobby | W. Crutchlow | 745,041 | Nov. 24 | 4327 | 935 | 107 | 968 |
| Dock. Dry- | J. F. O'Rourke | 721,222 | Feb. 24 | 3433 | 780 | 102 | 1596 |
| Dock. Dry- | J. F. O'Rourke | 721,223 | Feb. 24 | 3434 | 780 | 102 | 1596 |
| Dock. Dry- | T. Nelssen | 735,569 | Aug. 4 | 1035 | 219 | 105 | 1200 |
| Dock. Floating | L. E. Clark | 731,858 | June 23 | 4295 | 957 | 104 | 2069 |
| Dock. Floating | H. F. Hansson | 736,725 | Aug. 18 | 3170 | 700 | 105 | 1691 |
| Dock. Floating | H. Hylander | 736,732 | Aug. 18 | 3182 | 702 / 703 | 105 | 1692 |
| Dock. Floating | G. E. Titcomb | 738,084 | Sept. 1 | 1024 | 229 | 106 | 222 |
| Dock. Floating | O. H. Ehlers | 741,958 | Oct. 20 | 3029 | 674 / 675 | 106 | 1925 |
| Dock. Ore- | E. C. Carter | 745,038 | Nov. 24 | 4321 | 934 | 107 | 966 |
| Document holder and exhibitor | C. C. Lee | 719,597 | Feb. 3 | 333 | 78 | 102 | 892 |
| Doffer. Fiber-machine | D. M. Sullivan | 720,298 | Feb. 10 | 1640 | 375 | 102 | 1186 |
| Doffer-guard | J. Kilburn | 719,812 | Feb. 3 | 733 | 172 | 102 | 978 |
| Dog-training device | F. H. Erb, Jr | 731,876 | June 23 | 4329 | 966 | 104 | 2077 |
| Dog-training device | F. H. Erb, Jr | 745,806 | Dec. 1 | 891 | 201 | 107 | 1289 |
| Doll | W. A. Gay | 721,948 | Mar. 3 | 555 | 122 | 103 | 122 |
| Doll | G. D. Decker | 724,822 | Apr. 7 | 761 | 177 | 103 | 1333 |
| Doll-head | O. Krampe | 720,703 | Feb. 17 | 2424 | 554 | 102 | 1362 |
| Doll, puppet, or the like | F. Reinhardt | 738,628 | Sept. 8 | 2163 | 474 | 106 | 480 |
| Dolly-bar | W. A. Miller | 720,723 | Feb. 17 | 2454 | 562 | 102 | 1369 |
| Dolly-bar | J. Macbeth and L. T. Johnson | 726,080 | Apr. 21 | 3036 | 690 | 103 | 1843 |
| Domestic boiler | M. Flynn | 725,948 | Apr. 21 | 2835 | 643 | 103 | 1801 |
| Domestic boiler | H. A. Miller | 733,730 | July 14 | 1828 | 432 | 105 | 402 |
| Domestic boiler | A. A. Frost | 734,054 | July 21 | 2500 | 583 | 105 | 562 |
| Door | A. Ritter | 742,355 | Oct. 27 | 3825 | 857 | 106 | 2102 |
| Door | J. P. Hull | 744,918 | Nov. 24 | 4074 | 878 | 107 | 916 |
| Door. Air- | F. Schwitalla and P. Fiebig | 743,572 | Nov. 10 | 1557 | 325 | 107 | 349 |
| Door-alarm | A. R. Strahan | 746,196 | Dec. 8 | 1622 | 361 | 107 | 1467 |
| Door and hanger therefor. Pocket-ball-bearing | J. K. Thoma | 748,544 | Dec. 29 | 6029 | 1365 | 107 | 2504 |
| Door apparatus. Basement- | S. M. Berry and K. W. Gale | 740,080 | Sept. 29 | 4896 | 1098 | 106 | 1113 |
| Door. Automatically opening or closing sliding | B. H. Löffler | 733,493 | July 14 | 1424 | 334 / 335 | 105 | 318 |
| Door. Automatically-operating | J. H. Whitaker | 738,134 | Sept. 1 | 1146 | 255 / 256 | 106 | 248 |
| Door catch and lock | J. L. Zesiger | 719,976 | Feb. 3 | 1006 | 234 | 102 | 1037 |
| Door-check | G. E. Colman | 717,813 | Jan. 6 | 559 | 125 | 102 | 121 |
| Door-check | J. C. Skidmore and A. Tyer | 721,334 | Feb. 24 | 3617 | 822 | 102 | 1635 |
| Door-check | C. A. Wissel | 721,989 | Mar. 3 | 633 | 141 | 103 | 137 |
| Door-check | S. N. Shank | 723,216 | Mar. 17 | 2902 | 650 | 103 | 645 |
| Door-check | W. M. Teeter | 724,521 | Apr. 7 | 190 | 47 | 103 | 1210 |
| Door-check | H. B. Handley | 725,702 | Apr. 21 | 2394 | 542 | 103 | 1707 |
| Door-check | G. J. Connor | 726,645 | Apr. 28 | 4148 | 935 | 103 | 2081 |
| Door-check | W. T. Adams | 727,051 | May 5 | 451 | 95 | 104 | 99 |
| Door-check | F. H. Ogden | 730,686 | June 9 | 2118 | 471 | 104 | 1583 |
| Door-check | J. F. Scott | 736,639 | Aug. 18 | 2999 | 662 | 105 | 1655 |
| Door check and closer | J. L. Pearl | 724,325 | Mar. 31 | 5039 | 1129 | 103 | 1110 |
| Door check and closer | F. H. Ogden | 747,757 | Dec. 22 | 4500 | 1014 | 107 | 2145 |
| Door check and closer. Combination | W. H. Taylor | 730,417 | June 9 | 1621 | 363 / 364 | 104 | 1475 |
| Door check and closer. Combined | R. C. Hills and H. A. Gross | 736,850 | Aug. 18 | 3414 | 755 | 105 | 1742 |
| Door check and closer lever-arm | W. H. Taylor | 729,697 | June 2 | 302 | 70 | 104 | 1191 |
| Door check and fastener | A. Kalb and A. A. R. Berger | 741,673 | Oct. 20 | 2459 | 550 / 551 | 106 | 1806 |
| Door check and lock. Combined | A. Kalb and A. A. R. Berger | 741,674 | Oct. 20 | 2463 | 551 | 106 | 1807 |
| Door check and spring | V. Beauregard and C. S. Gooding | 734,658 | July 28 | 3617 | 848 | 105 | 813 |
| Door check and spring | O. C. Rixson | 735,822 | Aug. 11 | 1506 | 322 / 323 | 105 | 1320 |
| Door-check. Liquid | C. H. Ocumpaugh | 732,369 | June 30 | 5308 | 1176 | 104 | 2293 |
| Door-closer | L. M. Albright | 737,991 | Sept. 1 | 878 | 192 | 106 | 191 |
| Door closer and check | A. J. Rosentreter | 720,489 | Feb. 10 | 1969 | 450 / 451 | 102 | 1255 |
| Door closer and check | J. Bardsley | 723,808 | Mar. 31 | 3989 | 900 | 103 | 897 |
| Door closer and check | M. Klingler | 733,219 | July 7 | 925 | 223 | 105 | 193 |
| Door closer and check | J. Bardsley and A. J. Rosentreter | 744,709 | Nov. 24 | 3717 | 802 / 803 | 107 | 841 |
| Door-closer and insect-excluder. Combined | J. A. Ramsey | 718,581 | Jan. 13 | 2038 | 443 | 102 | 453 |
| Door closer. Sliding- | A. Krause | 735,393 | Aug. 4 | 672 | 143 | 105 | 1124 |
| Door-closer. Spring | H. J. Valentine | 734,448 | July 21 | 3229 | 760 | 105 | 716 |
| Door-closing and bucket-tilting device | J. R. Rule | 739,111 | Sept. 15 | 3078 | 682 / 683 | 106 | 689 |
| Door-closing device. Thermal | F. M. Edmonds | 738,714 | Sept. 8 | 2336 | 513 | 106 | 514 |
| Door-closing mechanism. Automatic | W. A. Cross | 727,097 | May 5 | 528 | 114 | 104 | 115 |
| Door. Combined screen and storm | L. J. R. De Vries | 736,802 | Aug. 18 | 3314 | 734 | 105 | 1720 |
| Door-controlling means | A. D. Caywood | 733,624 | July 14 | 1654 | 392 | 105 | 367 |
| Door. Electrically-operating | J. Chambers, Jr | 722,446 | Mar. 10 | 1476 | 326 | 103 | 330 |
| Door-equalizer | V. P. De Knight | 726,411 | Apr. 28 | 3678 | 834 | 103 | 1990 |
| Door-equalizer | G. M. Haney | 730,118 | June 2 | 1076 | 242 | 104 | 1346 |
| Door-equalizing device | F. W. Tobey | 726,117 | Apr. 21 | 3114 | 706 | 103 | 1859 |
| Door fastener. Sliding- | L. Coin | 727,293 | May 5 | 873 | 189 | 104 | 187 |
| Door fastener. Sliding- | W. Vordemfelde | 729,980 | June 2 | 848 | 189 | 104 | 1301 |
| Door fastener. Sliding- | F. G. Dickey | 740,821 | Oct. 6 | 824 | 185 | 106 | 1421 |
| Door. Grain- | M. C. Rowcliff | 723,034 | Mar. 17 | 2556 | 574 | 103 | 573 |
| Door. Grain- | V. F. W. Berford | 724,784 | Apr. 7 | 686 | 161 | 103 | 1315 |
| Door. Grain- | J. Isaacson and E. Evans | 730,461 | June 9 | 1722 | 384 / 385 | 104 | 1497 |
| Door. Grain- | J. E. Drake | 740,407 | Oct. 6 | 35 | 8 | 106 | 1251 |
| Door. Grain- | J. O. Oakley | 740,686 | Oct. 6 | 556 | 125 | 106 | 1367 |
| Door-hanger | M. C. Richards | 723,922 | Mar. 31 | 4220 | 949 | 103 | 947 |

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| Invention. | Name. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | | Spec. | Dr'g. | Vol. | Page. |
| Door-hanger | A. E. Randle | 726,190 | Apr. 21 | 3252 | 738 | 103 | 1887 |
| Door-hanger | H. L. and H. J. Ferris | 731,350 | June 16 | 3336 | 745 | 104 | 1852 |
| Door-hanger | G. W. Holly | 733,041 | July 7 | 605 | 147, 148 | 105 | 129 |
| Door-hanger | J. H. Burkholder | 741,221 | Oct. 13 | 1568 | 353 | 106 | 1601 |
| Door-hanger | E. Brent | 743,141 | Nov. 3 | 619 | 134 | 107 | 129 |
| Door-hanger | H. C. Smith | 743,341 | Nov. 3 | 1018 | 219 | 107 | 217 |
| Door-hanger | A. F. Coulter | 745,716 | Dec. 1 | 724 | 166 | 107 | 1253 |
| Door-hanger | W. B. Smith. (Reissue) | 12,181 | Dec. 8 | 2435 | 556 | 107 | 1644 |
| Door hanger. Sliding- | J. F. Millerick | 721,819 | Mar. 3 | 290 | 64 | 103 | 64 |
| Door hanger. Sliding- | P. A. Myers | 729,638 | June 2 | 206 | 47 | 104 | 1170 |
| Door hanger. Sliding- | J. A. Einfalt | 736,510 | Aug. 18 | 2755 | 602 | 105 | 1606 |
| Door-holder | J. R. Carroll | 720,560 | Feb. 17 | 2139 | 495 | 102 | 1305 |
| Door-holder | T. W. Brittingham | 726,626 | Apr. 28 | 4118 | 929 | 103 | 2075 |
| Door-hook | A. E. Strang | 718,169 | Jan. 13 | 1206 | 267 | 102 | 275 |
| Door. Inside grain- | A. S. Swenson | 733,517 | July 14 | 1470 | 349 | 105 | 328 |
| Door-lock | E. Tóth | 720,757 | Feb. 17 | 2506 | 578 | 102 | 1381 |
| Door-lock | C. Ashmusen | 730,593 | June 9 | 1952 | 435, 436 | 104 | 1547 |
| Door-lock and alarm device | W. N. Greer | 732,067 | June 30 | 4710 | 1052 | 104 | 2169 |
| Door-lock and burglar-alarm | L. H. Handy and C. S. Hosford | 718,454 | Jan. 13 | 1739 | 387 | 102 | 386 |
| Door lock and pull. Sliding- | A. J. Butler | 723,239 | Mar. 24 | 2951 | 662 | 103 | 669 |
| Door lock. Double- | J. E. Keverline | 742,876 | Nov. 3 | 99 | 23 | 107 | 23 |
| Door-lock. Portable | A. W. Swanburg | 718,673 | Jan. 20 | 2197 | 480 | 102 | 498 |
| Door lock. Sliding- | E. McKean | 739,903 | Sept. 29 | 4567 | 1027 | 106 | 1043 |
| Door locking attachment | W. H. Gartz | 735,962 | Aug. 11 | 1764 | 378 | 105 | 1376 |
| Door-mat | H. J. H. Bruhn | 736,358 | Aug. 18 | 2464 | 539 | 105 | 1544 |
| Door. Metallic | C. Dahlstrom | 747,149 | Dec. 15 | 3386 | 768 | 107 | 1881 |
| Door opener and holder | J. D. Gendron | 736,714 | Aug. 18 | 3153 | 695 | 105 | 1687 |
| Door opener or closer | T. L. How and E. T. Winkler | 744,552 | Nov. 17 | 3415 | 736 | 107 | 759 |
| Door-opening device | O. M. Edwards | 748,178 | Dec. 29 | 5347 | 1216 | 107 | 2353 |
| Door operating and locking mechanism | G. Gibbs and H. Pearson | 731,676 | June 23 | 3972 | 885 | 104 | 1999 |
| Door-operating appliance | F. L. Brewer | 720,399 | Feb. 10 | 1815 | 413 | 102 | 1223 |
| Door-operating machine | R. R. Macdonald and G. T. Warwick. | 719,682 | Feb. 3 | 478 | 108, 109 | 102 | 923 |
| Door-operating mechanism | G. T. Warwick and R. R. Macdonald. | 719,917 | Feb. 3 | 902 | 212 | 102 | 1015 |
| Door or gate brace and cover for same. Adjustable | J. Shields | 740,383 | Sept. 29 | 5449 | 1225 | 106 | 1228 |
| Door or window. Screen | L. H. Hixson | 720,144 | Feb. 10 | 1351 | 309 | 102 | 1127 |
| Door. Revolving | O. Cobb | 729,548 | June 2 | 48 | 12, 13 | 104 | 1137 |
| Door. Rotating storm- | J. L. Carter | 724,804 | Apr. 7 | 724 | 169, 170 | 103 | 1325 |
| Door. Rotating storm- | J. L. Carter | 724,805 | Apr. 7 | 726 | 170 | 103 | 1326 |
| Door. Rotating storm- | J. L. Carter | 724,806 | Apr. 7 | 728 | 171 | 103 | 1326 |
| Door. Screen and storm | M. F. Byrne | 732,274 | June 30 | 5130 | 1140 | 104 | 2257 |
| Door-securer | A. Fleeger | 724,686 | Apr. 7 | 501 | 120 | 103 | 1276 |
| Door-securer | C. R. Fleischmann | 743,978 | Nov. 10 | 2308 | 493 | 107 | 512 |
| Door-securer | C. W. Gray | 746,824 | Dec. 15 | 2761 | 636 | 107 | 1737 |
| Door-sill | W. O. and F. H. Jewell | 719,672 | Feb. 3 | 459 | 104 | 102 | 918 |
| Door. Sliding | P. H. Puschel | 728,008 | May 12 | 2241 | 499 | 104 | 494 |
| Door. Sliding | I. E. McCracken | 730,289 | June 9 | 1398 | 307 | 104 | 1428 |
| Door. Sliding | J. J. Hennessey | 735,766 | Aug. 11 | 1398 | 300 | 105 | 1296 |
| Door. Sliding | E. E. Manter | 736,124 | Aug. 11 | 2069 | 443 | 105 | 1441 |
| Door. Sliding | W. W. Schouler | 738,075 | Sept. 1 | 1012 | 226 | 106 | 219 |
| Door-spring | J. H. Anderson | 724,152 | Mar. 31 | 4696 | 1054 | 103 | 1041 |
| Door-stop | W. Platt | 741,410 | Oct. 13 | 1949 | 432 | 106 | 1682 |
| Door-stop | A. A. Terry | 748,543 | Dec. 29 | 6028 | 1365 | 107 | 2503 |
| Door stop and holder | G. B. Thorpe | 723,219 | Mar. 17 | 2907 | 651 | 103 | 646 |
| Door stop and holder | N. N. and J. F. Neher | 739,906 | Sept. 29 | 4575 | 1029 | 106 | 1044 |
| Door stop and securer | J. H. Coffman | 731,342 | June 16 | 3324 | 741 | 104 | 1850 |
| Door-strip | A. Snorin | 745,396 | Dec. 1 | 157 | 36 | 107 | 1133 |
| Door. Swinging | W. R. Pitt | 731,407 | June 16 | 3454 | 771, 772 | 104 | 1877 |
| Door-switch. Safety | E. R. Renfrow | 733,997 | July 21 | 2370 | 557 | 105 | 532 |
| Door-telltale | T. O'Toole | 718,377 | Jan. 13 | 1589 | 350, 351 | 102 | 355 |
| Door track and hanger. Sliding- | T. C. Prouty | 725,135 | Apr. 14 | 1337 | 301, 302 | 103 | 1468 |
| Door track. Rolling- | T. C. Prouty | 725,136 | Apr. 14 | 1339 | 302 | 103 | 1468 |
| Door track. Sliding- | H. C. Smith | 730,712 | June 9 | 2163 | 480 | 104 | 1592 |
| Door water-shed. Cellar- | T. K. Clark | 732,275 | June 30 | 5131 | 1140 | 104 | 2257 |
| Door, window, &c., closing device | G. A. Chaddock | 745,783 | Dec. 1 | 836 | 189, 190 | 107 | 1277 |
| Doors. Device for opening laterally-moving | T. W. Heermans | 717,745 | Jan. 6 | 417 | 97, 98 | 102 | 91 |
| Doors. Gang locking mechanism for cell- | A. J. Horgan | 733,203 | July 7 | 900 | 217 | 105 | 188 |
| Doors, hatches, or the like. Electrically-operated system for closing water-tight | W. B. Cowles | 729,280 | May 26 | 4591 | 1014, 1015, 1016 | 104 | 1022 |
| Doors. Manufacture of | W. D. Plue | 721,231 | Feb. 24 | 3443 | 782 | 102 | 1597 |
| Doors. Means for closing double-action or swing | F. W. Adams | 723,432 | Mar. 24 | 3314 | 742, 743 | 103 | 740 |
| Doors or covers to casings. Means for securing circular | H. C. Lowrie | 739,328 | Sept. 22 | 3467 | 773, 774 | 106 | 789 |
| Doors. Overhead-track covering for outside | J. E. Whitacre | 736,656 | Aug. 18 | 3022 | 667 | 105 | 1660 |
| Doors. Rotary fly-brush attachment for screen- | S. G. Scholz | 724,052 | Mar. 31 | 4487 | 1011 | 103 | 998 |
| Doorway | A. F. Gerald | 725,552 | Apr. 14 | 2101 | 476 | 103 | 1630 |
| Double and swingle tree | A. C. James | 735,982 | Aug. 11 | 1809 | 387 | 105 | 1387 |
| Double boiler | A. J. Wentzel | 746,213 | Dec. 8 | 1654 | 368 | 107 | 1473 |
| Double claw or grip device | H. Sheeler | 722,257 | Mar. 10 | 1125 | 248 | 103 | 254 |
| Double furnace | A. Emy | 731,555 | June 23 | 3751 | 835 | 104 | 1956 |
| Double-headed bolt and lock | J. W. Dixon and J. D. Devine | 727,913 | May 12 | 2065 | 460 | 104 | 458 |
| Doubletree-clip | C. W. McGlashan | 734,736 | July 28 | 3781 | 883 | 105 | 845 |
| Doubletree spring attachment | A. Holritz | 745,014 | Nov. 24 | 4243 | 920 | 107 | 950 |
| Doubling and rewinding machinery | J. D. Conant | 719,090 | Jan. 27 | 2991 | 667 | 102 | 678 |
| Doubling apparatus | U. E. Dennis | 739,156 | Sept. 15 | 3152 | 696, 697 | 106 | 705 |
| Dough cutter or slicer | E. P. Mössner | 722,452 | Mar. 10 | 1490 | 329 | 103 | 334 |

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| | | | | Spec. | Dr'g. | Vol. | Page. |
| Dough cutting and weighing machine | H. P. P. West | 719,923 | Feb. 3 | 910 | 213 | 102 | 1016 |
| Dough-divider | F. H. Van Houten | 719,280 | Jan. 27 | 3339 | 746 | 102 | 751 |
| Dough dividing and compressing or molding apparatus. | J. Callow | 733,143 | July 7 | 789 | 191 | 105 | 167 |
| Dough dividing and shaping machine | H. F. W. Hueg | 719,116 | Jan. 27 | 3059 | 679, 680 | 102 | 691 |
| Dough-dividing machine | F. H. Van Houten | 722,545 | Mar. 10 | 1655 | 365 | 103 | 371 |
| Dough-dividing machine | F. J. Ferguson | 730,104 | June 2 | 1050 | 235 | 104 | 1341 |
| Dough-dividing machine | P. Mieleke | 738,692 | Sept. 8 | 2306 | 506 | 106 | 509 |
| Dough making and mixing machine | W. S. and C. I. Corby | 724,162 | Mar. 31 | 4711 | 1057 | 103 | 1045 |
| Dough-mixer | R. Robinson | 717,929 | Jan. 6 | 774 | 174 | 102 | 166 |
| Dough-mixer | J. Koelner | 722,112 | Mar. 3 | 838 | 187 | 103 | 180 |
| Dough-mixer | C. G. Garrigus and A. A. Warner | 736,956 | Aug. 25 | 3613 | 801 | 105 | 1804 |
| Dough mixing and kneading apparatus | J. Koelner | 743,090 | Nov. 3 | 526 | 114 | 107 | 110 |
| Dough mixing and kneading machine | G. T. Allen and W. W. Moore | 726,491 | Apr. 28 | 3847 | 868 | 103 | 2022 |
| Dough mixing and kneading machine | J. W. Ruger | 735,678 | Aug. 4 | 1232 | 261 | 105 | 1242 |
| Dough mixing and raising machine | G. T. Allen and W. W. Moore | 722,658 | Mar. 17 | 1872 | 416 | 103 | 433 |
| Dough-mixing apparatus | H. H. Wilson | 719,070 | Jan. 27 | 2950 | 659 | 102 | 670 |
| Dough-mixing machine | H. H. Wilson | 741,603 | Oct. 13 | 2332 | 522, 523 | 106 | 1764 |
| Dough-raiser | G. Weiler | 727,868 | May 12 | 1981 | 441 | 104 | 438 |
| Dough-raiser | L. McCombs | 728,962 | May 26 | 4026 | 895 | 104 | 905 |
| Dough. Raising | J. W. Garrick | 734,847 | July 28 | 4008 | ..... | 105 | 891 |
| Dough to the form required for loaves Machine for automatically shaping | F. J. De Witt | 747,901 | Dec. 22 | 4787 | 1082 | 107 | 2209 |
| Dovetailing-machine | J. T. T. Grim | 724,850 | Apr. 7 | 807 | 186, 187 | 103 | 1342 |
| Dowel forming and setting machine | A. Baldenweg | 739,811 | Sept. 29 | 4378 | 982 | 106 | 1005 |
| Dowels or rivets. Machine for manufacturing | A. Baldenweg | 739,810 | Sept. 29 | 4376 | 981 | 106 | 1005 |
| Downdraft-kiln. Double | F. W. Dennis | 738,419 | Sept. 8 | 1762 | 383 | 106 | 394 |
| Draft and buffing mechanism | P. T. Handiges | 736,724 | Aug. 18 | 3168 | 699 | 105 | 1690 |
| Draft and buffing rigging | R. D. Gallagher, Jr. | 746,813 | Dec. 15 | 2732 | 629, 630 | 107 | 1730 |
| Draft and steering device | H. J. Eifler and G. A. Nauman | 731,875 | June 23 | 4328 | 966 | 104 | 2077 |
| Draft apparatus | M. Weires | 717,786 | Jan. 6 | 513 | 115 | 102 | 110 |
| Draft apparatus. Forced- | R. C. Peabody | 740,370 | Sept. 29 | 5426 | 1221 | 106 | 1223 |
| Draft appliance | S. H. Tinsman | 726,481 | Apr. 28 | 3822 | 864 | 103 | 2018 |
| Draft appliance. Detachable | M. Segal | 726,769 | Apr. 28 | 4388 | 987 | 103 | 2131 |
| Draft attachment | F. W. Riedler | 727,447 | May 5 | 1163 | 256 | 104 | 251 |
| Draft-coupling | L. Kreitinger | 743,891 | Nov. 10 | 2136 | 459, 460 | 107 | 470 |
| Draft device | T. V. Elliott | 724,272 | Mar. 31 | 4945 | 1107 | 103 | 1091 |
| Draft-enhancing apparatus | S. C. Davidson | 744,003 | Nov. 10 | 2356 | 506 | 107 | 522 |
| Draft-equalizer | B. Washam | 718,180 | Jan. 13 | 1225 | 271 | 102 | 279 |
| Draft-equalizer | N. E. Bailey | 718,239 | Jan. 13 | 1334 | 295 | 102 | 302 |
| Draft-equalizer | H. J. Zempel | 719,550 | Feb. 3 | 249 | 58 | 102 | 876 |
| Draft-equalizer | W. A. Campbell and A. J. Henderson. | 719,564 | Feb. 3 | 272 | 63 | 102 | 880 |
| Draft-equalizer | D. Lawrence and J. Vincent | 720,037 | Feb. 10 | 1156 | 264 | 102 | 1085 |
| Draft-equalizer | P. J. Grady | 721,034 | Feb. 17 | 3006 | 691 | 102 | 1486 |
| Draft-equalizer | P. Yeager | 722,347 | Mar. 10 | 1290 | 286 | 103 | 290 |
| Draft-equalizer | M. Whiteside | 723,101 | Mar. 17 | 2675 | 603 | 103 | 599 |
| Draft-equalizer | O. Sanoden | 724,047 | Mar. 31 | 4482 | 1009 | 103 | 996 |
| Draft-equalizer | P. J. Girard | 724,463 | Apr. 7 | 84 | 21 | 103 | 1187 |
| Draft-equalizer | S. A. Bates | 725,819 | Apr. 21 | 2613 | 594 | 103 | 1755 |
| Draft-equalizer | W. W. Laingor | 726,440 | Apr. 28 | 3726 | 845 | 103 | 2000 |
| Draft-equalizer | W. H. Shell | 727,853 | May 12 | 1959 | 436 | 104 | 434 |
| Draft-equalizer | W. M. James | 727,956 | May 12 | 2154 | 480 | 104 | 478 |
| Draft-equalizer | E. E. Louder | 731,113 | June 16 | 2910 | 646 | 104 | 1767 |
| Draft-equalizer | O. Torgerson | 731,142 | June 16 | 2967 | 658 | 104 | 1778 |
| Draft-equalizer | H. J. Heider | 731,568 | June 23 | 3782 | 842 | 104 | 1962 |
| Draft-equalizer | F. B. Stout | 732,465 | June 30 | 5497 | 1219 | 104 | 2332 |
| Draft-equalizer | F. Bahler | 736,191 | Aug. 11 | 2179 | 468 | 105 | 1465 |
| Draft-equalizer | J. B. Yeagley | 738,590 | Sept. 8 | 2083 | 455 | 106 | 463 |
| Draft-equalizer | R. Trett and C. H. Roudybush | 739,123 | Sept. 15 | 3099 | 686 | 106 | 694 |
| Draft-equalizer | S. L. Pattison | 740,464 | Oct. 6 | 157 | 32 | 106 | 1279 |
| Draft-equalizer | P. E. Little | 742,461 | Oct. 27 | 4013 | 900 | 106 | 2140 |
| Draft-equalizer | M. F. Richardson | 742,741 | Oct. 27 | 4512 | 1022 | 106 | 2247 |
| Draft-equalizer | C. J. Jones | 743,515 | Nov. 10 | 1445 | 302 | 107 | 325 |
| Draft-equalizer | W. H. Shell | 745,681 | Dec. 1 | 663 | 153 | 107 | 1239 |
| Draft-equalizer | H. R. Tomson | 746,649 | Dec. 8 | 2426 | 554, 555 | 107 | 1642 |
| Draft-equalizer. Three-horse | O. E. Abbey | 726,611 | Apr. 28 | 4093 | 924 | 103 | 2070 |
| Draft-evener | A. B. Fogle | 741,124 | Oct. 13 | 1366 | 313 | 106 | 1558 |
| Draft-evener | B. Firebaugh | 741,646 | Oct. 20 | 2414 | 540 | 106 | 1796 |
| Draft-evener | C. La Dow | 741,800 | Oct. 20 | 2715 | 605 | 106 | 1859 |
| Draft-evener | F. J. Schulz | 742,747 | Oct. 27 | 4520 | 1024 | 106 | 2249 |
| Draft-evener | C. C. and W. D. Dillavon | 744,177 | Nov. 17 | 2739 | 583 | 107 | 612 |
| Draft-gear and buffing apparatus. Friction | J. Timms | 740,378 | Sept. 29 | 5441 | 1224 | 106 | 1226 |
| Draft-gear. Friction | A. Christianson | 736,071 | Aug. 11 | 1981 | 421 | 105 | 1423 |
| Draft-gear. Friction | J. Timms | 740,334 | Sept. 29 | 5357 | 1207 | 106 | 1209 |
| Draft-gear. Hydraulic | P. H. Peterson | 720,472 | Feb. 10 | 1944 | 444 | 102 | 1249 |
| Draft-gearing and buffing apparatus. Friction | J. Timms | 740,335 | Sept. 29 | 5359 | 1207 | 106 | 1210 |
| Draft-hook. Emergency | C. Wahl | 720,198 | Feb. 10 | 1448 | 331 | 102 | 1146 |
| Draft-hook. Emergency | C. Wahl | 720,199 | Feb. 10 | 1450 | 331 | 102 | 1146 |
| Draft-producing device | C. Scott-Snell | 733,339 | July 7 | 1150 | 272, 273 | 105 | 242 |
| Draft-regulator | S. F. Hicks | 718,125 | Jan. 13 | 1129 | 250 | 102 | 258 |
| Draft regulator. Automatic forced- | H. E. Parson | 742,128 | Oct. 20 | 3396 | 758 | 106 | 1997 |
| Draft-rigging | W. M. Piper | 717,615 | Jan. 6 | 167 | 41, 42 | 102 | 37 |
| Draft-rigging | G. W. Friesz | 718,615 | Jan. 20 | 2091 | 455 | 102 | 479 |
| Draft-rigging | H. T. Krakau | 720,526 | Feb. 10 | 2046 | 470, 471 | 102 | 1270 |
| Draft-rigging | H. T. Krakau | 720,527 | Feb. 10 | 2049 | 471, 472 | 102 | 1271 |
| Draft-rigging | H. T. Krakau | 720,529 | Feb. 10 | 2054 | 473, 474 | 102 | 1272 |

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| Draft-rigging | A. Lipschutz | 723,169 | Mar. 17 | 2804 | 632 | 103 | 623 |
| Draft-rigging | H. T. Krakau | 727,545 | May 5 | 1336 | 298, 299, 300, 301 | 104 | 287 |
| Draft-rigging | L. A. Hoerr | 730,914 | June 16 | 2530 | 563 | 104 | 1689 |
| Draft-rigging | W. Thornburgh | 733,094 | July 7 | 708 | 172 | 105 | 150 |
| Draft-rigging | H. C. Priebe | 740,779 | Oct. 6 | 749 | 168 | 106 | 1405 |
| Draft-rigging | H. C. Williamson and H. Pries | 741,948 | Oct. 20 | 3002 | 667 | 106 | 1920 |
| Draft-rigging | H. T. Krakau. (Reissue) | 12,178 | Dec. 1 | 1230 | 277, 278 | 107 | 1362 |
| Draft-rigging | H. C. Priebe | 747,637 | Dec. 22 | 4292 | 964 | 107 | 2098 |
| Draft-rigging attachment | H. T. Krakau | 721,570 | Feb. 24 | 4063 | 921, 922 | 102 | 1730 |
| Draft-rigging. Combined friction and direct-acting | J. J. Hennessey | 717,678 | Jan. 6 | 278 | 69, 70 | 102 | 60 |
| Draft-rigging. Combined friction and direct-acting | J. J. Hennessey | 717,679 | Jan. 6 | 281 | 70 | 102 | 61 |
| Draft-rigging. Friction | F. B. Townsend | 734,009 | July 21 | 2399 | 562, 563 | 105 | 538 |
| Draft-rigging. Friction | J. C. Herrmann | 742,320 | Oct. 27 | 3771 | 845 | 106 | 2090 |
| Draft-rigging. Solid | E. Lewis | 733,720 | July 14 | 1812 | 429 | 105 | 399 |
| Draft-sill. Pressed-metal | C. S. Shallenberger | 723,046 | Mar. 17 | 2573 | 579, 580 | 103 | 577 |
| Draft. Traveler's | F. L. Gray | 735,665 | Aug. 4 | 1206 | 255, 256 | 105 | 1237 |
| Drafting instrument. Combination | J. Leitschuh | 717,871 | Jan. 6 | 681 | 151 | 102 | 145 |
| Drag. Field- | J. F. Rodgers | 744,112 | Nov. 17 | 2605 | 557 | 107 | 584 |
| Drainage conveyer-trough | F. G. Wolfe | 719,406 | Jan. 27 | 3586 | 801 | 102 | 804 |
| Drainage system | B. F. Suddath | 725,793 | Apr. 21 | 2560 | 580 | 103 | 1744 |
| Draining-machine | F. A. Toups | 723,341 | Mar. 24 | 3128 | 703 | 103 | 704 |
| Draining or sewerage system | J. G. Richert | 727,446 | May 5 | 1160 | 256 | 104 | 251 |
| Drapery. Frame for attaching | A. Brower | 744,955 | Nov. 24 | 4152 | 897 | 107 | 931 |
| Draw-bar | C. E. Rhoads | 726,759 | Apr. 28 | 4373 | 983 | 103 | 2128 |
| Draw-bar | J. M. Ames | 745,132 | Nov. 24 | 4506 | 975 | 107 | 1004 |
| Draw-bar attachment | F. C. Anderson | 724,372 | Mar. 31 | 5139 | 1150 | 103 | 1132 |
| Draw-bar equipment | J. J. O'Brien | 721,523 | Feb. 24 | 3961 | 902 | 102 | 1706 |
| Draw-bar rigging | R. W. Fox | 725,550 | Apr. 14 | 2098 | 475 | 103 | 1629 |
| Draw-bench | G. B. Lamb and D. C. Griggs | 736,605 | Aug. 18 | 2941 | 644, 645 | 105 | 1644 |
| Draw-gear and buffing apparatus | J. H. McCormick | 719,949 | Feb. 3 | 952 | 222 | 102 | 1025 |
| Draw-gear and buffing apparatus | J. H. McCormick | 738,469 | Sept. 8 | 1867 | 406, 407 | 106 | 415 |
| Draw-gear and buffing apparatus | E. M. Herr | 740,429 | Oct. 6 | 90 | 19 | 106 | 1266 |
| Draw-gear and buffing apparatus | W. S. Jones | 742,791 | Oct. 27 | 4585 | 1039, 1040 | 106 | 2264 |
| Draw-gear and buffing apparatus | W. S. Jones | 742,792 | Oct. 27 | 4588 | 1040 | 106 | 2264 |
| Draw-gear and buffing apparatus | W. S. Jones | 742,793 | Oct. 27 | 4592 | 1041 | 106 | 2265 |
| Draw-gear and buffing apparatus | M. E. Dayton | 745,425 | Dec. 1 | 214 | 48 | 107 | 1145 |
| Draw-pull | C. F. Mosman | 740,300 | Sept. 29 | 5296 | 1192 | 106 | 1196 |
| Drawer | J. L. Dunning | 732,721 | July 7 | 47 | 12 | 105 | 13 |
| Drawer | W. H. Coye | 747,685 | Dec. 22 | 4370 | 987 | 107 | 2115 |
| Drawer-bottom | E. Ohnstrand | 741,362 | Oct. 13 | 1864 | 412 | 106 | 1665 |
| Drawer-bottom support | J. N. Eames and A. W. Roberts | 734,122 | July 21 | 2635 | 622 | 105 | 590 |
| Drawer. Cash- | H. H. Chesbrough | 734,400 | July 21 | 3147 | 740 | 105 | 699 |
| Drawer. Dust-proof | O. C. Monsen and E. Ericksen | 740,677 | Oct. 6 | 544 | 121 | 106 | 1364 |
| Drawer. Extension- | D. E. Hunter | 729,180 | May 26 | 4415 | 973 | 104 | 985 |
| Drawer. Furniture- | S. Shick | 723,050 | Mar. 17 | 2587 | 583 | 103 | 580 |
| Drawer-guide | J. Schaad | 742,132 | Oct. 20 | 3404 | 759 | 106 | 1999 |
| Drawer-lock | A. Stoeffler | 732,971 | July 7 | 479 | 119 | 105 | 103 |
| Drawer. Portfolio- | R. Bankmann | 731,654 | June 23 | 3938 | 876 | 104 | 1993 |
| Drawer-pull | C. F. Mosman | 737,647 | Sept. 1 | 169 | 36 | 106 | 40 |
| Drawer-pull stud | D. W. Tower | 742,526 | Oct. 27 | 4149 | 932 | 106 | 2168 |
| Drawer-support | A. A. Anderson | 734,497 | July 28 | 3330 | 779 | 105 | 752 |
| Drawer-supporting device. Sliding- | F. Tramblay | 740,337 | Sept. 29 | 5362 | 1208 | 106 | 1210 |
| Drawers | T. F. Trimble and W. A. Harder | 737,975 | Sept. 1 | 840 | 184 | 106 | 184 |
| Drawers-supporter | J. H. Roper | 734,097 | July 21 | 2580 | 605 | 105 | 580 |
| Drawing-board and T-square | E. Ellison | 723,518 | Mar. 24 | 3488 | 780 | 103 | 774 |
| Drawing-board trestle | L. F. Schilling | 721,637 | Feb. 24 | 4193 | 954 | 102 | 1759 |
| Drawing-frame | L. J. Wrigley | 723,630 | Mar. 24 | 3683 | 826 | 103 | 814 |
| Drawing-frame | L. J. Wrigley | 731,401 | June 16 | 3443 | 769 | 104 | 1875 |
| Drawing-frames. Shipper-lock for | H. A. and O. L. Owen | 737,862 | Sept. 1 | 597 | 131 | 106 | 131 |
| Drawing-frames. Shipper-lock for | H. A. and O. L. Owen | 737,963 | Sept. 1 | 598 | 131 | 106 | 132 |
| Drawing parallel lines. Apparatus for | E. Möller | 725,859 | Apr. 21 | 2676 | 609 | 103 | 1769 |
| Drawing-press | F. C. B. Page | 736,433 | Aug. 18 | 2599 | 571 | 105 | 1572 |
| Drawing-press | F. M. Leavitt | 738,335 | Sept. 8 | 1602 | 348, 349, 400 | 106 | 361 |
| Drawing-press | F. M Leavitt | 738,459 | Sept. 8 | 1844 | 401, 402 | 106 | 411 |
| Drawing-press | O. S. Beyer | 739,378 | Sept. 22 | 3554 | 793, 794 | 106 | 808 |
| Drawing-press | O. S. Beyer | 739,379 | Sept. 22 | 3558 | 794, 795 | 106 | 808 |
| Drawing-press | W. Klocke | 739,427 | Sept. 22 | 3676 | 816, 817 | 106 | 835 |
| Dredge | F. H. Stolp | 720,983 | Feb. 17 | 2913 | 668 | 102 | 1467 |
| Dredge | R. R. Osgood | 746,566 | Dec. 8 | 2269 | 520 | 107 | 1606 |
| Dredge-bucket | F. Z. Hunt and H. J. Reiling | 747,719 | Dec. 22 | 4436 | 1000 | 107 | 2130 |
| Dredge-cutter | L. W. Bates | 725,817 | Apr. 21 | 2610 | 593 | 103 | 1754 |
| Dredge cutter-head | A. W. Robinson | 727,691 | May 12 | 1630 | 370 | 104 | 369 |
| Dredge cutter. Suction- | L. W. Bates | 725,818 | Apr. 21 | 2611 | 593, 594 | 103 | 1754 |
| Dredge. Electric clam- | E. Chaquette | 718,695 | Jan. 20 | 2241 | 490, 491 | 102 | 508 |
| Dredge floating discharge-pipe and means for connecting same to dredges. Hydraulic- | A. W. Robinson | 746,995 | Dec. 15 | 3095 | 709 | 107 | 1812 |
| Dredge. Gravel or sand | R. Hosford | 727,632 | May 12 | 1510 | 341 | 104 | 343 |
| Dredge. Hydraulic | J. Andersen | 723,122 | Mar. 17 | 2720 | 611 | 103 | 607 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Dredge. Hydraulic | J. W. Reno | 724,501 | Apr. 7 | 148 | 35,36 | 103 | 1201 |
| Dredge. Land- | W. W. Jones | 735,522 | Aug. 4 | 936 | 199 | 105 | 1180 |
| Dredges. Self-contained back-geared headstall for elevator-bucket | G. L. Holmes | 724,868 | Apr. 7 | 839 | 193, 194 | 103 | 1348 |
| Dredges. Suction-pipe for hydraulic | A. W. Robinson | 746,994 | Dec. 15 | 3093 | 708 | 107 | 1812 |
| Dredger | R. A. Perry | 718,276 | Jan. 13 | 1410 | 314 | 102 | 318 |
| Dredger | R. A. Perry | 723,485 | Mar. 24 | 3435 | 769 | 103 | 764 |
| Dredger | R. A. Perry | 726,213 | Apr. 21 | 3284 | 746 | 103 | 1894 |
| Dredger | S. Beer | 731,976 | June 23 | 4505 | 1006 | 104 | 2115 |
| Dredger | F. W. Thunen and L. L. Cheshire | 732,538 | June 30 | 5636 | 1249 | 104 | 2361 |
| Dredger | W. H. Fulcher | 743,751 | Nov. 10 | 1870 | 395 | 107 | 416 |
| Dredger | R. A. Perry | 725,409 | Apr. 14 | 1828 | 409, 410 | 103 | 1571 |
| Dredger. Canal- | E. Chaquette | 744,703 | Nov. 17 | 3699 | 798 | 107 | 821 |
| Dredger cutter-head. Suction- | M. C. Harris | 746,996 | Dec. 15 | 3099 | 710 | 107 | 1813 |
| Dredging and distributing the dredged material. Apparatus for hydraulic | A. W. Robinson | 719,567 | Feb. 3 | 278 | 64, 65 | 102 | 881 |
| Dredging and excavating machine | J. J. Conlin | 739,382 | Sept. 22 | 3564 | 796, 797 | 106 | 809 |
| Dredging apparatus | D. F. Breslin | 726,640 | Apr. 28 | 4141 | 934 | 103 | 2079 |
| Dredging-bucket | R. W. Christian | 720,749 | Feb. 17 | 2491 | 574 | 102 | 1377 |
| Dredging-machine | C. Sonderegger | 722,595 | Mar. 10 | 1742 | 388 | 103 | 389 |
| Dredging-machine | W. W. Lea | 724,703 | Apr. 7 | 533 | 126, 127 | 103 | 1283 |
| Dredging-machine | J. W. Humphreys | 744,636 | Nov. 17 | 3542 | 764 | 107 | 784 |
| Dredging-machine bearing | P. Small | 743,979 | Nov. 10 | 2308 | 493 | 107 | 513 |
| Dredging purposes. Hydraulic elevator for | B. Flood | 748,403 | Dec. 29 | 5730 | 1309 | 107 | 2437 |
| Dress-clip | T. Morton | 737,175 | Aug. 25 | 3995 | 886 | 105 | 1884 |
| Dress-form | C. A. Ufford | 731,759 | June 23 | 4126 | 920 | 104 | 2031 |
| Dress-protector | A. A. Dieter | 717,830 | Jan. 6 | 607 | 135 | 102 | 130 |
| Dress-shield | L. M. Ferguson | 719,636 | Feb. 3 | 403 | 92 | 102 | 906 |
| Dress-shield | D. Basch | 722,057 | Mar. 3 | 744 | 165, 166 | 103 | 160 |
| Dress-shield | M. G. Tilney | 722,395 | Mar. 10 | 1369 | 303 | 103 | 307 |
| Dress-shield | D. Basch | 724,112 | Mar. 31 | 4611 | 1038 | 103 | 1024 |
| Dress-shield | S. E. King | 726,357 | Apr. 28 | 3590 | 815 | 103 | 1973 |
| Dress-shield | F. A. Schultz | 721,366 | Feb. 24 | 3673 | 836 | 102 | 1645 |
| Dress-shield attachment | V. Guinzburg | 719,039 | Jan. 27 | 2888 | 647 | 102 | 657 |
| Dress-shield fastener | C. O. Pettersson | 737,364 | Aug. 25 | 4352 | 970 | 105 | 1960 |
| Dress-shield holder | T. Davis | 732,983 | July 7 | 498 | 123 | 105 | 107 |
| Dress-suit case | J. R. Whitney | 745,133 | Nov. 24 | 4507 | 976 | 107 | 1005 |
| Dress-suit case | M. Axelman | 735,698 | Aug. 11 | 1280 | 274 | 105 | 1270 |
| Dress-suit cases or trunks. Strap-holder for | I. Bienenstock | 733,767 | July 14 | 1901 | 448, 449 | 105 | 418 |
| Dress-suit cases. Traveler's reclining attachment for | C. C. Taylor | 736,126 | Aug. 11 | 2073 | 444 | 105 | 1442 |
| Dress-supporting pin | C. Metternich | 724,300 | Mar. 31 | 4997 | 1118 | 103 | 1102 |
| Dresser | J. L. Larson | 728,586 | May 19 | 3353 | 742 | 104 | 750 |
| Dresser | J. L. Larson | 731,115 | June 16 | 2913 | 647 | 104 | 1767 |
| Dressmaker's guide | | | | | | | |
| Drier: *See* Brick-drier. Centrifugal drier. Char-drier. Clothes-drier. Fruit-drier. Grain-drier. Hair-drier. Rotary drier. Sand-drier. Sheet-drier. Steam-drier. Window-drier. | | | | | | | |
| Drier | J. Waterhouse | 727,513 | May 5 | 1276 | 283, 284 | 104 | 275 |
| Drier | A. Schoellhorn and H. S. Albrecht | 732,451 | June 30 | 5467 | 1213 | 104 | 2326 |
| Drier | A. T. Hagen and D. M. Cooper | 735,366 | Aug. 4 | 617 | 127 | 105 | 1113 |
| Drier | C. W. Stanton | 735,607 | Aug. 4 | 1099 | 234 | 105 | 1214 |
| Drier | C. W. Stanton | 735,609 | Aug. 4 | 1100 | 234 | 105 | 1214 |
| Drier | C. W. Stanton | 735,610 | Aug. 4 | 1102 | 235 | 105 | 1214 |
| Drier | J. H. Morong | 735,895 | Aug. 11 | 1648 | 352 | 105 | 1351 |
| Drier | K. F. Snow | 737,292 | Aug. 25 | 4225 | 941 | 105 | 1933 |
| Drier | T. B. Howe | 739,547 | Sept. 22 | 3866 | 866, 867 | 106 | 875 |
| Drier | J. E. Turney | 740,607 | Oct. 6 | 442 | 96 | 106 | 1341 |
| Drier | E. S. Peck | 742,228 | Oct. 27 | 3590 | 802, 803 | 106 | 2052 |
| Drier | R. F. Wentz | 742,265 | Oct. 27 | 3666 | 819 | 106 | 2069 |
| Drier | E. R. Edson and B. F. Silliman | 744,179 | Nov. 17 | 2748 | 585 | 107 | 614 |
| Drier | E. R. Edson and B. F. Silliman | 744,180 | Nov. 17 | 2751 | 586 | 107 | 614 |
| Drier-feeding apparatus | M. M. Graves | 732,735 | July 7 | 68 | 19 | 105 | 18 |
| Driers. Filling or emptying apparatus for vacuum- | E. Passburg | 748,414 | Dec. 29 | 5764 | 1315 | 107 | 2445 |
| Dry battery | E. M. Fishell and M. H. Moffett | 733,178 | July 7 | 848 | 206 | 105 | 178 |
| Dry-cell battery | E. R. Gill | 738,025 | Sept. 1 | 935 | 207 | 106 | 204 |
| Dry closet | S. Davis | 725,050 | Apr. 14 | 1171 | 264 | 103 | 1435 |
| Dry closet. Portable | J. Danner | 743,834 | Nov. 10 | 2027 | 431 | 107 | 448 |
| Dry-closet system | J. Danner | 727,303 | May 5 | 899 | 194, 195 | 104 | 194 |
| Dry-kiln truck | H. B. Gillette | 734,057 | July 21 | 2504 | 584 | 105 | 563 |
| Dry-kiln truck | C. A. Goddard | 746,816 | Dec. 15 | 2738 | 631 | 107 | 1732 |
| Drying apparatus | J. Radcliffe | 723,547 | Mar. 24 | 3531 | 790 | 103 | 783 |
| Drying apparatus | M. Hecking | 738,800 | Sept. 15 | 2526 | 556 | 106 | 573 |
| Drying apparatus | M. M. Graves | 742,021 | Oct. 20 | 3158 | 705 | 106 | 1950 |
| Drying apparatus | W. Straw | 744,429 | Nov. 17 | 3199 | 686, 687 | 107 | 713 |
| Drying apparatus | J. Olsen and E. I. Noxon | 745,514 | Dec. 1 | 378 | 87 | 107 | 1180 |
| Drying apparatus | G. R. Gorham | 746,822 | Dec. 15 | 2757 | 635, 636 | 107 | 1736 |
| Drying apparatus | J. J. Smith | 747,788 | Dec. 22 | 4561 | 1030 | 107 | 2160 |
| Drying apparatus. Laundry | J. Lingo | 736,274 | Aug. 11 | 2314 | 502 | 105 | 1494 |
| Drying apparatus. Vacuum | W. C. Perkins | 730,564 | June 9 | 1898 | 423, 424 | 104 | 1535 |
| Drying-closet | M. A. O'Conor | 719,130 | Jan. 27 | 3082 | 685 | 102 | 696 |
| Drying-cylinder | C. H. Fish | 720,794 | Feb. 17 | 2567 | 591 | 102 | 1393 |
| Drying-cylinders. Swivel water-displacer for | S. Smith | 739,354 | Sept. 22 | 3506 | 784 | 106 | 797 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Drying-frame | E. A. Messerly | 745,641 | Dec. 1 | 596 | 138 | 107 | 1225 |
| Drying-furnace | L. E. Rodgers and J. O. Trautwein | 731,619 | June 23 | 3869 | 862 | 104 | 1979 |
| Drying industrial wastes. Apparatus for | E. Löwi | 742,337 | Oct. 27 | 3795 | 850 | 106 | 2096 |
| Drying-kiln | L. C. Van Duzer | 745,085 | Nov. 24 | 4427 | 958 | 107 | 987 |
| Drying, lustering, and stretching machine | J. Boivin | 739,253 | Sept. 15 | 3334 | 740 | 106 | 745 |
| Drying-machine | L. G. Laprade | 739,688 | Sept. 22 | 4142 | 925 | 106 | 935 |
| Drying-machine | E. G. Smith | 747,787 | Dec. 22 | 4558 | {1029 {1030 | {107 | 2159 |
| Drying machine. Fabric- | J. M. Levy | 733,224 | July 7 | 931 | 225 | 105 | 195 |
| Drying or cooling apparatus | O. M. Hillig | 731,682 | June 23 | 3982 | {887 {888 | {104 | 2001 |
| Drying-press. Steam | W. E. Wines | 730,326 | June 9 | 1458 | 322 | 104 | 1441 |
| Drying-rack | I. L. Gleason | 726,905 | May 5 | 138 | 32 | 104 | 32 |
| Drying-rack curtain or canopy | A. A. Scott | 743,039 | Nov. 3 | 427 | 92, 93 | 107 | 90 |
| Drying-reel | J. D. Guthrie | 745,825 | Dec. 1 | 942 | {211 {212 | {107 | 1300 |
| Drying roll or cylinder | G. Murgatroyd | 727,822 | May 12 | 1892 | 422 | 104 | 420 |
| Drying-room | K. Reyscher | 743,196 | Nov. 3 | 725 | 159 | 107 | 151 |
| Drill: *See* Coal or rock drill. Disk drill. Fertilizer-drill. Grain-drill. Grain and fertilizer drill. Grain or fertilizer drill. Hydraulic drill. Mechanical drill. Pneumatic drill. Radial drill. Rock-drill. Rotary drill. Seed-drill. Seed or fertilizer drill. Twist or like drill. Well-drill. Well-boring drill. | | | | | | | |
| Drill | G. W. Hays and J. E. Douglas | 717,992 | Jan. 6 | 890 | 199 | 102 | 191 |
| Drill | R. J. Brothem | 721,009 | Feb. 17 | 2959 | {680 {681 | {102 | 1475 |
| Drill | C. A. Wessman | 723,097 | Mar. 17 | 2669 | 601 | 103 | 597 |
| Drill | J. Meyers | 739,501 | Sept. 22 | 3793 | {849 {850 | {106 | 861 |
| Drill | C. Straub | 739,946 | Sept. 29 | 4650 | 1043 | 106 | 1061 |
| Drill and reamer. Combined | J. E. Fuhrer | 745,048 | Nov. 24 | 4342 | 938 | 107 | 971 |
| Drill apparatus for drilling rock, mining, &c | W. A. Box and E. Y. Sayer | 720,319 | Feb. 10 | 1683 | {382 {383 | {102 | 1194 |
| Drill attachment | L. A. Hardison | 743,639 | Nov. 10 | 1682 | 353 | 107 | 375 |
| Drill attachment for drill-presses. Multiple- | F. A. Kehl and W. Goers | 733,719 | July 14 | 1810 | {428 {429 | {105 | 399 |
| Drill-bit | W. H. Clark and F. J. Currier | 726,255 | Apr. 28 | 3371 | 766 | 103 | 1927 |
| Drill-bit or other tool | W. Harvey | 735,667 | Aug. 4 | 1210 | 256 | 105 | 1237 |
| Drill bit. Rock- | H. Collins | 734,515 | July 28 | 3355 | 785 | 105 | 757 |
| Drill-blank-twisting machine | R. L. Barclay | 719,988 | Feb. 10 | 1039 | 242 | 102 | 1060 |
| Drill-brace, &c., attaching device | J. F. Steckenreiter | 729,905 | June 2 | 701 | 155 | 104 | 1271 |
| Drill-cleaning device. Disk- | O. A. Poirier | 733,593 | July 14 | 1600 | 380 | 105 | 356 |
| Drill-coupling device. Screw- | C. Christiansen | 745,039 | Nov. 24 | 4323 | 934 | 107 | 967 |
| Drill-device bearing | O. A. Poirier | 735,815 | Aug. 11 | 1492 | 320 | 105 | 1318 |
| Drill-operating mechanism | J. D. Cloud and J. Marple | 729,043 | May 26 | 4177 | 924 | 104 | 937 |
| Drill-press | S. C. Schauer | 738,246 | Sept. 8 | 1387 | 300 | 106 | 316 |
| Drill-press attachment | H. N. Hinckley | 736,395 | Aug. 18 | 2533 | 556 | 105 | 1559 |
| Drill-press gearing | H. Dreses | 728,213 | May 19 | 2606 | {582 {583 | {104 | 594 |
| Drill press. Multiple- | F. J. Nutting | 734,082 | July 21 | 2549 | 595 | 105 | 574 |
| Drill-press. Portable | O. Gustafsen | 721,797 | Mar. 3 | 254 | 56, 57 | 103 | 56 |
| Drill-press reversing mechanism | H. R. Isler | 727,142 | May 5 | 619 | 133 | 104 | 134 |
| Drill pressure device | E. H. Ackerman | 746,432 | Dec. 8 | 2041 | 469 | 107 | 1554 |
| Drill scraper. Disk- | W. Fetzer | 735,487 | Aug. 4 | 870 | 185 | 105 | 1166 |
| Drill shaper and sharpener | J. Retallack | 719,874 | Feb. 3 | 837 | 196 | 102 | 1000 |
| Drill-socket driver | C. C. Roberts | 727,450 | May 5 | 1166 | 257 | 104 | 252 |
| Drill-straightening machine. Twist- | R. L. Barclay | 720,215 | Feb. 10 | 1490 | 341 | 102 | 1153 |
| Drill-truck mechanism | W. Fetzer | 723,662 | Mar. 24 | 3731 | 836 | 103 | 825 |
| Drills, &c. Adjustable support for | G. C. Gaucher | 731,173 | June 16 | 3022 | 672 | 104 | 1788 |
| Drills, &c. Device for extracting | C. A. Horan | 725,844 | Apr. 21 | 2650 | 604 | 103 | 1763 |
| Drilling and boring machine. Horizontal spindle | G. H. Smith | 718,956 | Jan. 20 | 2731 | 611 | 102 | 610 |
| Drilling and boring machines. Adjustable attachment for horizontal spindle | G. H. Smith | 718,955 | Jan. 20 | 2730 | 611 | 102 | 610 |
| Drilling apparatus | J. C. Swan | 726,111 | Apr. 21 | 3089 | {701 {702 | {103 | 1853 |
| Drilling apparatus | C. A. Ott | 741,364 | Oct. 13 | 1866 | 412 | 106 | 1665 |
| Drilling apparatus | C. T. Upton and G. S. Gilman | 746,204 | Dec. 8 | 1640 | 365 | 107 | 1470 |
| Drilling-bit | R. C. Baker | 747,575 | Dec. 22 | 4160 | 935 | 107 | 2069 |
| Drilling-engine | J. B. Damas | 738,416 | Sept. 8 | 1757 | 382 | 106 | 393 |
| Drilling-jar | F. H. Norris | 723,782 | Mar. 24 | 3941 | 889 | 103 | 870 |
| Drilling-machine | E. M. Couch | 719,569 | Feb. 3 | 282 | {65 {66 {67 | {102 | 882 |
| Drilling-machine | A. W. Wigglesworth | 735,645 | Apr. 14 | 2285 | {516 {517 | {103 | 1669 |
| Drilling-machine | A. Marek | 736,284 | Aug. 11 | 2341 | {508 {509 | {105 | 1502 |
| Drilling-machine | W. M. and C. M. Denning | 737,911 | Sept. 1 | 706 | 153 | 106 | 155 |
| Drilling-machine | B. F. Mohr | 738,344 | Sept. 8 | 1624 | 352 | 106 | 365 |
| Drilling-machine | G. B. Pickop | 744,395 | Nov. 17 | 3141 | 674 | 107 | 701 |
| Drilling-machine | G. B. Pickop | 744,397 | Nov. 17 | 3144 | 675 | 107 | 702 |
| Drilling-machine | W. A. Kagelmacher, Jr | 746,521 | Dec. 8 | 2191 | {502 {503 | {107 | 1587 |
| Drilling-machine anchoring device | I. Wantling | 722,778 | Mar. 17 | 2112 | 473 | 103 | 482 |
| Drilling-machine. Automatic | J. W. Brown, Jr | 726,137 | Apr. 21 | 3146 | {711 {712 | {103 | 1865 |
| Drilling-machine tool-actuating attachment | W. H. Zellers | 721,930 | Mar. 3 | 522 | {114 {115 | {103 | 116 |
| Drilling or tapping machine. Portable | H. J. Gosling | 723,267 | Mar. 24 | 3002 | 675 | 103 | 679 |
| Drilling-tool | T. Murphy | 730,786 | June 9 | 2279 | 506 | 104 | 1617 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|---|
| | | | | Spec. | Drg. | Vol. | Page. |
| Drink-shaker | N. Lattard and A. C. Schott | 740,446 | Oct. 6 | 120 | 25 | 106 | 1272 |
| Drinking-fountain | C. H. Smith | 731,517 | June 23 | 3679 | 820 | 104 | 1943 |
| Drinking-receptacle | R. E. Bourke and H. Wittekind | 747,123 | Dec. 15 | 3332 | 758 | 107 | 1869 |
| Drinking-trough for domestic animals | J. F. Weitzel | 729,821 | June 2 | 552 | 121 | 104 | 1241 |
| Drinking vessel | W. A. Scott | 727,212 | May 5 | 736 | 158 | 104 | 159 |
| Drip-pan | B. McCaughey | 744,785 | Nov. 24 | 3845 | 828 | 107 | 868 |
| Drip-pan signal device | V. Ayotte, Jr | 730,733 | June 9 | 2191 | 487 | 104 | 1598 |
| Drive-pipe | J. A. and H. W. Hock | 745,842 | Dec. 1 | 979 | 220 | 107 | 1308 |
| Driveway-gate | C. Nielsen | 742,217 | Oct. 27 | 3570 | 797<br>798 | 106 | 2047 |
| Driver's seat. Adjustable | T. M. Ramsay | 746,154 | Dec. 8 | 1548 | 346 | 107 | 1451 |
| Driving apparatus | J. H. Inggoldsby | 722,985 | Mar. 17 | 2471 | 555<br>556 | 103 | 554 |
| Driving apparatus | A. E. Norris | 748,412 | Dec. 29 | 5758 | 1313<br>1314 | 107 | 2444 |
| Driving-band | G. Fouillaron | 720,340 | Feb. 10 | 1718 | 390 | 102 | 1202 |
| Driving mechanism | W. Scott | 722,388 | Mar. 10 | 1354 | 300 | 103 | 304 |
| Driving mechanism | C. R. Otis and A. M. Coyle | 722,744 | Mar. 17 | 2054 | 459<br>460 | 103 | 470 |
| Driving mechanism | F. C. Rinsche | 731,501 | June 23 | 3644 | 813<br>814 | 104 | 1936 |
| Driving mechanism | C. Stollewerk | 736,564 | Aug. 18 | 2842 | 623 | 105 | 1625 |
| Driving mechanism | G. H. Fry | 744,741 | Nov. 24 | 3773 | 813 | 107 | 853 |
| Driving mechanism. Change-speed | A. King | 738,817 | Sept. 15 | 2558 | 562<br>563 | 106 | 580 |
| Driving mechanism. Change-speed | A. L. Cushman | 739,257 | Sept. 15 | 3339 | 741 | 106 | 746 |
| Driving mechanism for motor-driven machinery. Reversible | F. T. Currier | 727,100 | May 5 | 537 | 115 | 104 | 117 |
| Driving mechanism. Reversibly-changed-speed | R. M. Head | 743,867 | Nov. 10 | 2085 | 444 | 107 | 460 |
| Driving mechanism. Variable-speed and reversing-motion | F. Charron and L. Girardot | 737,208 | Aug. 25 | 4055 | 899 | 105 | 1896 |
| Driving mechanism. Yielding | C. P. Sester and F. J. Feldt | 719,619 | Feb. 3 | 367 | 85 | 102 | 899 |
| Driving-wheel. Traction-motor | E. Boniecki | 722,278 | Mar. 10 | 1165 | 257 | 103 | 263 |
| Drop-curtain. Mirror | H. M. Williams | 722,342 | Mar. 10 | 1282 | 285 | 103 | 288 |
| Drop-light. Portable | L. A. Rockwell and J. H. Christian | 724,615 | Apr. 7 | 372 | 89 | 103 | 1249 |
| Dropper:<br>*See* Medicine-dropper. Seed-dropper. Potato-dropper. | | | | | | | |
| Drowning. Prevention from | J. A. Steenken and A. Schulz | 747,793 | Dec. 22 | 4573 | 1032 | 107 | 2162 |
| Druggist's mass-divider | J. W. Jackson | 731,188 | June 16 | 3049 | 677 | 104 | 1792 |
| Drum | J. Hennl | 725,842 | Apr. 21 | 2648 | 603 | 103 | 1762 |
| Drum and fuel-economizer. Combined heating- | S. J. McDonald | 730,386 | June 9 | 1570 | 349 | 104 | 1464 |
| Drum. Heating- | A. C. Selleck | 732,454 | June 30 | 5476 | 1215 | 103 | 2328 |
| Drum. Heating- | J. J. Gunther and F. E. Geiger | 738,320 | Sept. 8 | 1583 | 342 | 106 | 356 |
| Drum. Heating- | E. V. Coulston | 738,414 | Sept. 8 | 1754 | 381 | 106 | 393 |
| Drum-rack. Portable | J. W. Pepper | 726,455 | Apr. 28 | 3758 | 852 | 103 | 2007 |
| Drum-tug | W. R. Dunbar | 730,008 | June 2 | 897 | 200 | 104 | 1310 |
| Drumhead | W. H. Heybeck | 729,936 | June 2 | 748 | 167 | 104 | 1281 |
| Duck-call | A. R. Kuhlemeier | 742,680 | Oct. 22 | 4413 | 996 | 106 | 2225 |
| Dumb-bell | F. W. Hale | 729,064 | May 26 | 4215 | 932 | 104 | 944 |
| Dumb-bell | F. Harris | 734,062 | July 21 | 2513 | 587 | 105 | 565 |
| Dumb-waiter | J. E. Ortner | 719,852 | Feb. 3 | 792 | 185 | 102 | 990 |
| Dumb-waiter | E. B. Everingham | 745,807 | Dec. 1 | 892 | 201 | 107 | 1289 |
| Dumb-waiter-operating mechanism | N. Beckwith | 740,614 | Oct. 6 | 454 | 99 | 106 | 1344 |
| Dumb-waiter safety appliance | H. Donohoe | 718,328 | Jan. 13 | 1505 | 334 | 102 | 339 |
| Dump-cantaliver | J. P. Gallagher | 725,696 | Apr. 21 | 2378 | 538<br>539 | 103 | 1703 |
| Dumping and elevating apparatus | P. J. Mauger | 738,620 | Sept. 8 | 2142 | 469<br>470<br>471 | 106 | 476 |
| Dumping apparatus | W. J. Newman | 731,118 | June 16 | 2919 | 648<br>649 | 104 | 1769 |
| Dumping apparatus | A. E. Norris | 735,139 | Aug. 4 | 183 | 39 | 105 | 1021 |
| Dumping-elevator. Automatic | W. H. Hultgren | 747,071 | Dec. 15 | 3245 | 739 | 107 | 1849 |
| Duplex furnace | J. B. Conger | 724,993 | Apr. 7 | 1063 | 243<br>244 | 103 | 1395 |
| Duplicating device. Manifold | H. H. Norrington | 728,601 | May 19 | 3374 | 747 | 104 | 756 |
| Duplicating-machine | H. C. Gammeter | 722,404 | Mar. 10 | 1382 | 306 | 103 | 310 |
| Duplicating-machine | A. D. Klaber | 732,002 | June 23 | 4565 | 1018 | 104 | 2126 |
| Duplicating or stencil machine | I. Juricic | 727,636 | May 12 | 1521 | 343 | 104 | 346 |
| Dust-arrester | L. D. Young | 741,210 | Oct. 13 | 1548 | 349 | 106 | 1597 |
| Dust-arrester for hot-air pipes | L. D. Young | 718,591 | Jan. 13 | 2053 | 446 | 102 | 457 |
| Dust-arresting bag | J. S. Thurman | 720,084 | Feb. 10 | 1235 | 284 | 102 | 1101 |
| Dust-beater | R. O. Hammond | 745,434 | Dec. 1 | 231 | 53 | 107 | 1148 |
| Dust-catcher and blast-heater. Combined | W. E. Koch and J. W. MacDonald | 720,257 | Feb. 10 | 1563 | 358 | 102 | 1171 |
| Dust-collector | E. R. Draver | 720,791 | Feb. 17 | 2556 | 589<br>590 | 102 | 1391 |
| Dust-collector | E. R. Draver | 721,360 | Feb. 24 | 3661 | 833<br>834 | 102 | 1643 |
| Dust-collector | O. M. Morse. (Reissue) | 12,102 | Mar. 17 | 2922 | 655 | 103 | 649 |
| Dust-collector | F. Prinz | 727,439 | May 5 | 1147 | 252 | 104 | 248 |
| Dust-collector | R. W. Southerland | 734,627 | July 28 | 3561 | 833 | 105 | 802 |
| Dust-collector | W. A. Derby | 735,954 | Aug. 11 | 1751 | 374 | 105 | 1373 |
| Dust-collector | L. C. Meyerott | 737,438 | Aug. 25 | 4502 | 1010 | 105 | 1992 |
| Dust-collector | J. S. Thurman | 744,645 | Nov. 17 | 3555 | 766<br>767 | 107 | 787 |
| Dust-collector | J. M. Schutz | 745,076 | Nov. 24 | 4403 | 951 | 107 | 982 |
| Dust-collector | E. R. Draver. (Reissue) | 12,174 | Nov. 24 | 4889 | 1066<br>1067<br>1068 | 107 | 1082 |
| Dust-collectors, &c. Dust-proof joint-packing for | H. C. Draver | 735,731 | Aug. 11 | 1328 | 287 | 105 | 1281 |
| Dust-guard | J. W. Green | 718,452 | Jan. 13 | 1737 | 386 | 102 | 385 |
| Dust-guard | J. J. Koller | 727,155 | May 5 | 641 | 138 | 104 | 138 |
| Dust-guard | R. J. Evans | 729,307 | May 26 | 4646 | 1026 | 104 | 1034 |
| Dust-guard | J. J. Busenbenz and E. Lange | 740,524 | Oct. 6 | 275 | 54 | 106 | 1304 |
| Dust-guard | G. H. S. Soule | 741,383 | Oct. 13 | 1906 | 421 | 106 | 1674 |
| Dust-guard | W. M. Ryan | 742,907 | Nov. 3 | 155 | 36 | 107 | 34 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|---|
| | | | | Spec. | Drg. | Vol. | Page. |
| Dust-guard | J. Maltry | 743,177 | Nov. 3 | 688 | 151 | 107 | 144 |
| Dust-pan | G. G. Tichenor | 717,639 | Jan. 6 | 207 | 52 | 102 | 45 |
| Dust-pan | G. A. McIntire | 718,783 | Jan. 20 | 2406 | 534 | 102 | 542 |
| Dust-pan | C. W. Hopkins | 719,943 | Feb. 3 | 943 | 220 | 102 | 1023 |
| Dust-pan | E. P. Wade | 720,761 | Feb. 17 | 2511 | 579 | 102 | 1382 |
| Dust-pan | E. Green | 721,365 | Feb. 24 | 3672 | 836 | 102 | 1645 |
| Dust-pan | M. Rice | 732,445 | June 30 | 5461 | 1212 | 104 | 2325 |
| Dust-pan | A. M. Furrow | 735,360 | Aug. 4 | 605 | 125 | 105 | 1111 |
| Dust-pan | W. F. McCarthy | 735,565 | Aug. 4 | 1030 | 218 | 105 | 1199 |
| Dust-pan | P. H. Gross and A. Peterson | 742,859 | Nov. 3 | 70 | 17 | 107 | 17 |
| Dust-pan attachment | E. S. Wheeler | 737,688 | Sept. 1 | 237 | 50 | 106 | 54 |
| Dust. Separator for apparatus for removing | D. T. Kenney | 739,263 | Sept. 15 | 3350 | 744 | 106 | 748 |
| Dust-van | F. Strasser | 744,127 | Nov. 17 | 2630 | 561 | 107 | 589 |
| Dwelling-block | M. F. Peirce | 734,938 | July 28 | 4155 | 967 | 105 | 923 |
| Dye and making same. Acridin | C. Ris and A. Mylius | 740,468 | Oct. 6 | 165 | ..... | 106 | 1281 |
| Dye and making same. Acridin | C. L. Müller | 746,981 | Dec. 15 | 3072 | ..... | 107 | 1807 |
| Dye and making same. Anthracene | M. H. Isler | 738,614 | Sept. 8 | 2132 | ..... | 106 | 474 |
| Dye and making same. Azo | W. Voigtlaender-Tetzner | 718,032 | Jan. 6 | 966 | ..... | 102 | 208 |
| Dye and making same. Azo | A. Bertschmann | 724,078 | Mar. 31 | 4540 | ..... | 103 | 1010 |
| Dye and making same. Azo | E. A. Fourneaux | 728,388 | May 19 | 2956 | ..... | 104 | 667 |
| Dye and making same. Azo | E. A. Fourneaux | 728,455 | May 19 | 3082 | ..... | 104 | 693 |
| Dye and making same. Azo | M. Kahn | 729,601 | June 2 | 141 | ..... | 104 | 1156 |
| Dye and making same. Black azo | A. Schmidt | 728,021 | May 12 | 2261 | ..... | 104 | 499 |
| Dye and making same. Black mordant | A. L. Laska | 740,768 | Oct. 6 | 728 | ..... | 106 | 1401 |
| Dye and making same. Blue | R. Bohn | 724,789 | Apr. 7 | 695 | ..... | 103 | 1317 |
| Dye and making same. Blue | H. Laubmann | 727,389 | May 5 | 1051 | ..... | 104 | 226 |
| Dye and making same. Blue anthraquinone | E. Hepp and C. Hartmann | 734,866 | July 28 | 4039 | ..... | 105 | 897 |
| Dye and making same. Blue anthraquinone | E. Hepp and C. Hartmann | 748,375 | Dec. 29 | 5685 | ..... | 107 | 2427 |
| Dye and making same. Blue basic | E. A. Fourneaux | 726,667 | Apr. 28 | 4187 | ..... | 103 | 2090 |
| Dye and making same. Blue polyazo | I. Levinstein and C. Mensching | 722,860 | Mar. 17 | 2264 | ..... | 103 | 511 |
| Dye and making same. Blue sulfur | R. Herz | 723,154 | Mar. 17 | 2780 | ..... | 103 | 618 |
| Dye and making same. Blue sulfur | E. Kraus | 727,387 | May 5 | 1048 | ..... | 104 | 226 |
| Dye and making same. Blue sulfur | A. Schmidt and F. Bethmann | 728,623 | May 19 | 3413 | ..... | 104 | 765 |
| Dye and making same. Blue sulfur | I. and H. Levinstein | 732,090 | June 30 | 4757 | ..... | 104 | 2178 |
| Dye and making same. Blue sulfur | R. Gley | 736,380 | Aug. 18 | 2500 | ..... | 105 | 1552 |
| Dye and making same. Blue sulfur | R. Herz | 742,189 | Oct. 27 | 3513 | ..... | 106 | 2036 |
| Dye and making same. Blue wool- | A. Weinberg | 718,181 | Jan. 13 | 1226 | ..... | 102 | 279 |
| Dye and making same. Brown sulfur | H. Ebeling | 723,448 | Mar. 24 | 3341 | ..... | 103 | 746 |
| Dye and making same. Green anthracene | O. Bally | 723,125 | Mar. 17 | 2724 | ..... | 103 | 607 |
| Dye and making same. Green anthraquinone | O. Hess | 734,325 | July 21 | 3024 | ..... | 105 | 674 |
| Dye and making same. Green sulfur | E. Culmann | 731,669 | June 23 | 3961 | ..... | 104 | 1997 |
| Dye and making same. Green sulfur | R. Gley | 741,030 | Oct. 13 | 1184 | ..... | 106 | 1519 |
| Dye and making same. Indigo-blue sulfur | O. Kaltwasser and M. Gaumer | 736,403 | Aug. 18 | 2543 | ..... | 105 | 1561 |
| Dye and making same. Mixed disazo | C. Schraube and W. Voigtländer-Tetzner. | 718,028 | Jan. 6 | 959 | ..... | 102 | 207 |
| Dye and making same. Monoazo | O. Sohst | 739,118 | Sept. 15 | 3090 | ..... | 106 | 692 |
| Dye and making same. Monoazo | R. Gley and O. Siebert | 743,071 | Nov. 3 | 489 | ..... | 107 | 102 |
| Dye and making same. Mordant disazo | A. L. Laska | 740,767 | Oct. 6 | 727 | ..... | 106 | 1401 |
| Dye and making same. Olive-green sulfur | A. L. Laska | 729,874 | June 2 | 656 | ..... | 104 | 1262 |
| Dye and making same. Orange to yellow brown sulfur | E. Culmann | 746,926 | Dec. 15 | 2973 | ..... | 107 | 1786 |
| Dye and making same. Red azo | C. Schirmacher | 724,743 | Apr. 7 | 613 | ..... | 103 | 1299 |
| Dye and making same. Red azo | K. Schirmacher | 733,280 | July 7 | 1047 | ..... | 105 | 220 |
| Dye and making same. Substantive black | A. F. Poirrier | 740,465 | Oct. 6 | 158 | ..... | 106 | 1270 |
| Dye and making same. Sulfurized cotton- | L. Haas | 718,342 | Jan. 13 | 1531 | ..... | 102 | 344 |
| Dye and making same. Violet azo | A. L. Laska | 724,893 | Apr. 7 | 882 | ..... | 103 | 1359 |
| Dye and making same. Violet-red azo | F. Schmidt | 737,967 | Sept. 1 | 823 | ..... | 106 | 180 |
| Dye and making same. Wool- | M. Kahn | 722,715 | Mar. 17 | 1998 | ..... | 103 | 458 |
| Dye and making same. Wool- | M. Kahn | 722,716 | Mar. 17 | 1999 | ..... | 103 | 458 |
| Dye and making same. Yellow | J. Turner | 743,778 | Nov. 10 | 1926 | ..... | 107 | 427 |
| Dye and making same. Yellow acridin | K. Jedlicka | 730,771 | June 9 | 2254 | ..... | 104 | 1613 |
| Dye and making same. Yellow acridinium | O. Sohst | 739,117 | Sept. 15 | 3088 | ..... | 106 | 691 |
| Dye and making same. Yellow azo | F. Runkel | 719,048 | Jan. 27 | 2002 | ..... | 102 | 660 |
| Dye and making same. Yellow azo | F. Runkel | 719,049 | Jan. 27 | 2003 | ..... | 102 | 660 |
| Dye and making same. Yellow sulfur | C. Ris and A. Mylius | 722,630 | Mar. 10 | 1803 | ..... | 103 | 403 |
| Dye and making same. Yellow sulfur | R. Gley | 737,027 | Sept. 1 | 937 | ..... | 106 | 204 |
| Dye. Anthracene | M. Kugel | 729,073 | May 26 | 4227 | ..... | 104 | 946 |
| Dye. Anthracene | R. Bohn | 739,145 | Sept. 15 | 3138 | ..... | 106 | 702 |
| Dye. Azo | M. Kahn | 727,962 | May 12 | 2168 | ..... | 104 | 480 |
| Dye. Azo | M. Kahn | 727,963 | May 12 | 2169 | ..... | 104 | 481 |
| Dye. Azo | M. Kahn | 727,965 | May 12 | 2171 | ..... | 104 | 481 |
| Dye. Black azo | M. Kahn | 725,848 | Apr. 21 | 2657 | ..... | 103 | 1764 |
| Dye. Black azo | M. Kahn | 726,695 | Apr. 28 | 4243 | ..... | 103 | 2101 |
| Dye. Black azo | M. Kahn | 727,967 | May 12 | 2173 | ..... | 104 | 481 |
| Dye. Blue disazo | A. L. Laska | 728,477 | May 19 | 3129 | ..... | 104 | 704 |
| Dye. Bluish-violet azo | A. Israel and O. Dressel | 731,460 | June 23 | 3570 | ..... | 104 | 1920 |
| Dye. Making black polyazo | J. Dedichen | 717,550 | Jan. 6 | 55 | ..... | 102 | 14 |
| Dye. Monoazo | M. Kahn | 727,964 | May 12 | 2170 | ..... | 104 | 481 |
| Dye. Monoazo | M. Kahn | 727,966 | May 12 | 2172 | ..... | 104 | 481 |
| Dye. Red | O. Nastvogel | 738,227 | Sept. 8 | 1351 | ..... | 106 | 308 |
| Dye. Red azo | P. Julius | 718,356 | Jan. 13 | 1552 | ..... | 102 | 348 |
| Dye. Red azo | C. Schraube and W. Voigtlaender-Tetzner. | 718,389 | Jan. 13 | 1608 | ..... | 102 | 360 |
| Dye. Red mordant azo | O. Ernst and F. Scholl | 739,069 | Sept. 15 | 2995 | ..... | 106 | 674 |
| Dye. Reddish-brown azo | E. Münch | 737,445 | Aug. 25 | 4516 | ..... | 105 | 1995 |
| Dye. Substantive sulfur | P. Julius and F. Reubold | 735,775 | Aug. 11 | 1410 | ..... | 105 | 1299 |
| Dye. Trisazo | A. Israel and R. Kothe | 748,076 | Dec. 29 | 5162 | ..... | 107 | 2313 |
| Dyes. Making azo | F. Scholl | 741,552 | Oct. 13 | 2239 | ..... | 106 | 1744 |
| Dyeing | O. Jaeck | 717,749 | Jan. 6 | 428 | ..... | 102 | 93 |
| Dyeing | M. Kahn | 725,847 | Apr. 21 | 2656 | ..... | 103 | 1764 |
| Dyeing and printing in anilin-black | F. Cleff | 727,292 | May 5 | 872 | ..... | 104 | 187 |
| Dyeing apparatus | J. A. Willard | 744,147 | Nov. 17 | 2669 | 569 | 107 | 597 |
| Dyeing, &c. Apparatus for | J. A. Willard | 723,795 | Mar. 24 | 3958 | 893 | 103 | 874 |
| Dyeing brown | E. A. Fourneaux | 739,071 | Sept. 15 | 2996 | ..... | 106 | 674 |
| Dyeing card-slivers. Apparatus for | D. Mattei | 746,863 | Dec. 15 | 2838 | { 654 655 | { 107 | 1753 |
| Dyeing-machine | J. A. Willard | 721,630 | Feb. 24 | 4180 | 951 | 102 | 1756 |

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| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Dyeing machine. Skein- | W. H. Fletcher | 727,775 | May 12 | 1819 | 406 | 104 | 406 |
| Dyeing or bleaching apparatus | F. A. Weller | 735,183 | Aug. 4 | 296 | 58 | 105 | 1043 |
| Dyeing raw stock | W. J. McConville | 718,651 | Jan. 20 | 2149 | 469 | 102 | 490 |
| Dyeing textile fiber blue | R. Bohn | 746,784 | Dec. 15 | 2678 | ..... | 107 | 1717 |
| Dyeing with sulfur dyes | E. Voetter | 724,631 | Apr. 7 | 400 | 95 | 103 | 1255 |
| Dyeings. Increasing the fastness of indigo | A. J. Stiegelmann | 720,501 | Feb. 10 | 1993 | ..... | 102 | 1260 |
| Dyestuff and making same. Blue sulfur | N. Rongger | 747,643 | Dec. 22 | 4301 | ..... | 107 | 2100 |
| Dyestuff and making same. Red to violet | A. L. Laska | 724,894 | Apr. 7 | 883 | ..... | 103 | 1359 |
| Dyestuff and making same. Yellow monoazo | W. Dollfus and R. Hagenbach | 731,670 | June 23 | 3962 | ..... | 104 | 1998 |
| Dyestuffs. Printing sulfur | E. Bourcart | 747,295 | Dec. 15 | 3664 | ..... | 107 | 1941 |
| Dynamic force of bodies. Device for overcoming the | A. J. Myer | 731,116 | June 16 | 2914 | 647 | 104 | 1768 |
| Dynamo | J. D. Spence | 743,044 | Nov. 3 | 434 | 95 | 107 | 91 |
| Dynamo brush-holder | E. Gaud | 725,239 | Apr. 14 | 1530 | 348 | 103 | 1509 |
| Dynamo driving mechanism | J. L. Creveling | 721,025 | Feb. 17 | 2991 | 688 | 102 | 1483 |
| Dynamo-gearing for railway-vehicles | H. Weston | 736,183 | Aug. 11 | 2161 | 464<br>465 | 105 | 1461 |
| Dynamo-governor | T. S. Tague | 744,986 | Nov. 24 | 4199 | 908 | 107 | 941 |
| Dynamo-machine | D. C. Jackson | 743,082 | Nov. 3 | 509 | 110 | 107 | 107 |
| Dynamos. Automatic potential-regulator for | A. A. Tirrill | 725,799 | Apr. 21 | 2571 | 582<br>583<br>584 | 103 | 1746 |
| Dynamos. Automatic regulator for constant-current | F. B. O'Hanlon | 732,535 | Mar. 10 | 1642 | 362 | 103 | 369 |
| Dynamos. Inclosing casing for the driving-gear of car- | P. Kennedy | 741,971 | Oct. 20 | 3058 | 683 | 106 | 1930 |
| Dynamos on railway-trucks. Mechanism for driving | P. Kennedy | 740,982 | Oct. 6 | 1102 | 248 | 106 | 1481 |
| Dynamos to railway-cars. Device for attaching | J. F. McElroy | 731,382 | June 16 | 3408 | 761<br>762 | 104 | 1868 |
| Dynamometer for electric current | M. E. Turner | 743,958 | Nov. 10 | 2247 | 484 | 107 | 496 |
| Ear ornament | A. A. Geiger, D. C. Bauer, and J. Pejchar. | 718,708 | Jan. 20 | 2265 | 498 | 102 | 513 |
| Ear-pump | J. B. Wantz | 728,526 | May 19 | 3206 | 711<br>712 | 104 | 719 |
| Earth-breaking apparatus | W. Cole | 732,173 | June 30 | 4931 | 1096 | 104 | 2215 |
| Earthenware. Manufacture of | E. G. Acheson | 722,791 | Mar. 17 | 2142 | ..... | 103 | 488 |
| Earthworks. Apparatus for performing | F. Pawel | 720,841 | Feb. 17 | 2633 | 608 | 102 | 1407 |
| Earthy substances. Apparatus for drying | C. W. Stanton | 746,892 | Dec. 15 | 2900 | 668 | 107 | 1768 |
| Easel | R. T. Anthony | 728,653 | May 19 | 3469 | 769 | 104 | 776 |
| Easel | E. W. Kingsbury | 730,774 | June 9 | 2258 | 501 | 104 | 1614 |
| Easel | F. P. Dean | 735,346 | Aug. 4 | 583 | 120 | 105 | 1105 |
| Easel. Album- | J. Berbecker | 727,574 | May 12 | 1410 | 317 | 104 | 322 |
| Easel. Sketching- | S. H. Esbjörn | 736,589 | Aug. 18 | 2893 | 631 | 105 | 1634 |
| Eaves-trough | J. B. Ralston | 737,138 | Aug. 25 | 3916 | 870 | 105 | 1867 |
| Eaves-trough | B. H. Gedge | 741,027 | Oct. 13 | 1182 | 267 | 106 | 1518 |
| Eaves-trough hanger | E. E. Brott | 718,085 | Jan. 13 | 1061 | 236 | 102 | 244 |
| Eaves-trough hanger | A. A. Schroder | 720,743 | Feb. 17 | 2485 | 572 | 102 | 1376 |
| Eaves-trough hanger | B. H. Gedge | 741,028 | Oct. 13 | 1183 | 268 | 106 | 1518 |
| Eaves-trough hanger | H. E. Adams and J. Mulvey | 742,371 | Oct. 27 | 3856 | 866 | 106 | 2109 |
| Eccentric | J. Pincin | 719,133 | Jan. 27 | 3085 | 686 | 102 | 697 |
| Eccentric | J. W. Davis | 729,287 | May 26 | 4613 | 1020 | 104 | 1027 |
| Eccentric | M. Topliff | 732,606 | June 30 | 5761 | 1278 | 104 | 2391 |
| Eccentric | C. W. Lee | 733,852 | July 14 | 2081 | 492 | 105 | 453 |
| Eccentric. Movable | W. T. James | 725,716 | Apr. 21 | 2415 | 548 | 103 | 1711 |
| Eccentric or cam | R. A. Stubbs | 738,252 | Sept. 8 | 1396 | 302 | 106 | 317 |
| Eccentrics. Adjustable strap for | W. Harling | 736,847 | Aug. 18 | 3407 | 753 | 105 | 1740 |
| Edge-gage | E. A. Stiggins | 718,586 | Jan. 13 | 2044 | 445 | 102 | 455 |
| Edge-setter | E. I. Williamson | 734,789 | July 28 | 3880 | 905 | 105 | 864 |
| Edge-trimmer. Rotary | M. J. McGrath | 729,085 | May 26 | 4245 | 938 | 104 | 949 |
| Edging for open-work goods | S. Borton | 736,200 | Aug. 11 | 2192 | 472 | 105 | 1467 |
| Educational and puzzle block | R. W. Mansfield | 740,451 | Oct. 6 | 131 | 26 | 106 | 1274 |
| Educational apparatus | L. S. Pratt | 723,022 | Mar. 17 | 2537 | 569 | 103 | 569 |
| Educational appliance | T. E. Thompson | 723,425 | Mar. 24 | 3304 | 739<br>740 | 103 | 738 |
| Educational appliance | O. P. Austin | 730,859 | June 16 | 2411 | 532<br>533 | 104 | 1664 |
| Educational appliance | H. O. Dunn | 746,305 | Dec. 8 | 1831 | 415 | 107 | 1510 |
| Educational appliance | L. M. Hollingsworth | 747,711 | Dec. 22 | 4424 | 996 | 107 | 2128 |
| Educational art text-sheet | W. Seegmiller | 720,187 | Feb. 10 | 1434 | 327 | 102 | 1143 |
| Educational device | W. C. Williams | 720,510 | Feb. 10 | 2008 | 463 | 102 | 1263 |
| Educational device | J. T. Goodman | 731,175 | June 16 | 3025 | 672 | 104 | 1789 |
| Educational frame | J. H. Prosser | 718,520 | Jan. 13 | 1903 | 417 | 102 | 425 |
| Educational material | W. Seegmiller | 736,448 | Aug. 18 | 2625 | 576 | 105 | 1578 |
| Egg-beater | C. Bentley | 724,246 | Mar. 31 | 4899 | 1097 | 103 | 1081 |
| Egg-beater | C. A. Taplin | 725,507 | Apr. 14 | 2024 | 456 | 103 | 1614 |
| Egg-beater | W. G. Browne | 733,621 | July 14 | 1648 | 390 | 105 | 366 |
| Egg-beater | R. A. Eifert | 735,353 | Aug. 4 | 595 | 122 | 105 | 1108 |
| Egg-beater | M. Smith and W. Sherwood | 736,161 | Aug. 11 | 2127 | 456 | 105 | 1453 |
| Egg-beater | L. M. Galatius and N. R. Minor | 739,488 | Sept. 22 | 3777 | 844 | 106 | 858 |
| Egg-beater | F. Maurer | 741,586 | Oct. 13 | 2301 | 515 | 106 | 1756 |
| Egg-beater | B. E. Weber | 742,264 | Oct. 27 | 3665 | 819 | 106 | 2069 |
| Egg-beater | G. E. Collins | 743,149 | Nov. 3 | 637 | 138 | 107 | 133 |
| Egg boiler and server | L. A. and C. N. King | 745,196 | Nov. 24 | 4657 | 1014 | 107 | 1036 |
| Egg-carrier | H. S. Jenne | 722,512 | Mar. 10 | 1603 | 353 | 103 | 360 |
| Egg-case | R. W. Hurd | 732,413 | June 30 | 5394 | 1195 | 104 | 2312 |
| Egg-case | M. E. Chamberlain | 737,905 | Sept. 1 | 696 | 149 | 106 | 153 |
| Egg-case | E. F. Ward | 747,518 | Dec. 22 | 4070 | 915 | 107 | 2048 |
| Egg-cutter guide and regulating device | G. J. Haslam | 746,505 | Dec. 8 | 2165 | 497 | 107 | 1581 |
| Egg opener | W. R. Hartigan | 747,549 | Dec. 22 | 4122 | 925 | 107 | 2060 |
| Egg or fruit box | H. C. Sumpter | 726,478 | Apr. 28 | 3815 | 863 | 103 | 2017 |
| Egg or fruit case | W. Wilson | 720,206 | Feb. 10 | 1463 | 333 | 102 | 1149 |
| Egg-preserving compound | J. M. Brooks | 726,627 | Apr. 28 | 4121 | ..... | 103 | 2075 |
| Egg-preserving compound | W. F. Brown | 747,372 | Dec. 22 | 3811 | ..... | 107 | 1989 |
| Egg separator | J. L. Voigt | 718,179 | Jan. 13 | 1224 | 270 | 102 | 278 |
| Egg-separator | W. D. Evert | 743,474 | Nov. 10 | 1366 | 280 | 107 | 307 |
| Egg-tester | F. W. Wilson | 735,027 | July 28 | 4317 | 1003<br>1004 | 105 | 956 |

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| Invention. | Name. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | | Spec. | Dr'g. | Vol. | Page. |
| Egg-testing device | G. A. White | 728,061 | May 12 | 2335 | 520 | 104 | 515 |
| Eggs. Composition of ingredients for improving storage | B. Prikryl | 748,099 | Dec. 29 | 5206 | ..... | 107 | 2323 |
| Eggs. Preserving | C. Bache-Wiig | 739,137 | Sept. 15 | 3123 | ..... | 106 | 699 |
| Eggs. Preserving | J. W. Green | 744,750 | Nov. 24 | 3785 | 815 | 107 | 855 |
| Eggs. Preserving compound for packing | C. C. Therkildsen | 739,519 | Sept. 22 | 3824 | ..... | 106 | 867 |
| Elastic bands to articles of manufacture. Machine for applying | M. Setter | 720,493 | Feb. 10 | 1977 | 452 | 102 | 1256 |
| Elastic wheel | K. O. Ahlquist | 747,343 | Dec. 22 | 3765 | 848 | 107 | 1979 |
| Elbows. Making | C. Williams | 720,989 | Feb. 17 | 2923 | 670 | 102 | 1468 |
| Electric accumulator | A. Schmidt-Predari | 724,619 | Apr. 7 | 375 | ..... | 103 | 1250 |
| Electric accumulator-plate | A. Bainville | 719,418 | Feb. 3 | 11 | 3 | 102 | 829 |
| Electric accumulator-plate | D. Tommasi | 727,496 | May 5 | 1248 | 277 | 104 | 269 |
| Electric accumulator-plates. Making | J. J. H. Hunte | 724,012 | Mar. 31 | 4429 | ..... | 103 | 986 |
| Electric accumulator. Portable | L. A. Lammerts | 734,896 | July 28 | 4086 | 952 | 105 | 907 |
| Electric accumulators. Active material for | S. A. Rosenthal | 733,918 | July 14 | 2210 | ..... | 105 | 480 |
| Electric alarm-lock | O. E. F. Himmighoefer | 739,272 | Sept. 15 | 3370 | 748 | 106 | 753 |
| Electric alarm. Time-controlled | A. L. Ronell | 737,965 | Sept. 1 | 819 | 179<br>180 | 106 | 180 |
| Electric apparatus is attached. Winding device for cables to which movable | G. Ackermann and G. Engisch | 747,571 | Dec. 22 | 4156 | 934 | 107 | 2068 |
| Electric-arc-breaking apparatus | H. Hastings | 743,384 | Nov. 3 | 1119 | 238<br>239 | 107 | 237 |
| Electric-arc light | W. C. Fish | 729,315 | May 26 | 4656 | 1029 | 104 | 1036 |
| Electric-arc light | F. Buchanan | 733,135 | July 7 | 776 | 188 | 105 | 164 |
| Electric battery | M. R. Hutchison | 718,205 | Jan. 13 | 1276 | 280 | 102 | 289 |
| Electric battery | H. Halsey | 719,660 | Feb. 3 | 440 | 100 | 102 | 914 |
| Electric battery | H. Halsey | 719,661 | Feb. 3 | 442 | 101 | 102 | 914 |
| Electric battery | E. R. Gill | 720,577 | Feb. 17 | 2177 | 505 | 102 | 1312 |
| Electric battery | M. M. Kohn | 720,592 | Feb. 17 | 2198 | 509<br>510 | 102 | 1316 |
| Electric battery | V. G. Apple | 720,652 | Feb. 17 | 2333 | 533 | 102 | 1342 |
| Electric battery | E. Tweedy, I. L. Roberts, and G. R. Tweedy. | 729,240 | May 26 | 4526 | 997 | 104 | 1008 |
| Electric battery | H. Halsey | 734,547 | July 28 | 3424 | 799 | 105 | 772 |
| Electric battery | H. Halsey | 734,548 | July 28 | 3426 | 799 | 105 | 773 |
| Electric battery | H. Halsey | 734,549 | July 28 | 3427 | 799 | 105 | 773 |
| Electric battery | H. Csányi | 734,826 | July 28 | 3970 | 927 | 105 | 883 |
| Electric battery | H. Halsey | 734,857 | July 28 | 4027 | 940 | 105 | 895 |
| Electric battery | H. Halsey | 734,858 | July 28 | 4028 | 940 | 105 | 895 |
| Electric battery | H. Halsey | 735,971 | Aug. 11 | 1783 | 382 | 105 | 1381 |
| Electric battery | H. Halsey | 736,248 | Aug. 11 | 2271 | 491 | 105 | 1485 |
| Electric battery | H. Halsey | 737,613 | Sept. 1 | 105 | 23 | 106 | 25 |
| Electric battery | H. Halsey | 737,614 | Sept. 1 | 106 | 23 | 106 | 25 |
| Electric battery | H. Halsey | 743,273 | Nov. 3 | 886 | 193 | 107 | 187 |
| Electric battery | H. Halsey | 743,274 | Nov. 3 | 888 | 193 | 107 | 188 |
| Electric battery | H. Halsey | 743,275 | Nov. 3 | 890 | 194 | 107 | 188 |
| Electric battery | E. Tweedy | 743,598 | Nov. 10 | 1608 | 336 | 107 | 359 |
| Electric battery | S. Yai | 746,227 | Dec. 8 | 1678 | 373 | 107 | 1478 |
| Electric battery | M. R. Hutchison | 746,514 | Dec. 8 | 2179 | 500 | 107 | 1584 |
| Electric battery for body wear | R. Wingren | 727,525 | May 5 | 1304 | 290 | 104 | 281 |
| Electric bells, &c. Automatic circuit opener or closer for | C. C. and H. P. Rasmussen | 725,010 | Apr. 7 | 1100 | 250 | 103 | 1404 |
| Electric boosters. Controlling | M. J. Wightman | 731,000 | June 16 | 2695 | 600 | 104 | 1724 |
| Electric brake | F. E. Case | 719,566 | Feb. 3 | 275 | 64 | 102 | 880 |
| Electric brake | J. C. Henry | 720,917 | Feb. 17 | 2789 | 640 | 102 | 1440 |
| Electric brake | F. C. Newell | 720,951 | Feb. 17 | 2848 | 652<br>653 | 102 | 1453 |
| Electric brake | E. R. Hill | 731,455 | June 23 | 3565 | 794 | 104 | 1919 |
| Electric brake | W. B. Potter | 733,271 | July 7 | 1032 | 247<br>248 | 105 | 216 |
| Electric brake | G. A. Le Fevre | 736,120 | Aug. 11 | 2060 | 441<br>442 | 105 | 1439 |
| Electric brake | F. E. Case | 736,817 | Aug. 18 | 3347 | 740 | 105 | 1727 |
| Electric brake | F. C. Newell | 737,265 | Aug. 25 | 4171 | 929 | 105 | 1921 |
| Electric braking | F. E. Case | 739,588 | Sept. 22 | 3955 | 883 | 106 | 895 |
| Electric cable | R. F. Hall | 720,023 | Feb. 10 | 1126 | 257 | 102 | 1078 |
| Electric cable | K. T. Bennet and J. T. Johansson | 736,351 | Aug. 18 | 2456 | 536<br>537 | 105 | 1542 |
| Electric-cable trough or conduit. Underground | T. E. Devonshire | 733,169 | July 7 | 832 | 202 | 105 | 175 |
| Electric cables. Machine for making armored | E. T. Greenfield | 724,571 | Apr. 7 | 277 | 68, 69 | 103 | 1228 |
| Electric cables. Manufacturing armored | E. T. Greenfield | 724,570 | Apr. 7 | 274 | 66, 67 | 103 | 1228 |
| Electric-carrier attachment. Overhead | H. M. Harding | 724,860 | Apr. 7 | 829 | 191 | 103 | 1346 |
| Electric carriers. Means for varying the speed of overhead | H. M. Harding | 733,035 | July 7 | 589 | 144 | 105 | 125 |
| Electric carrying apparatus | J. J. Hill | 742,426 | Oct. 27 | 3957 | 888 | 106 | 2128 |
| Electric circuit | E. F. Northrup | 726,734 | Apr. 28 | 4311 | 973 | 103 | 2116 |
| Electric-circuit and polarity indicator | V. G. Apple | 720,550 | Feb. 17 | 2115 | 488 | 102 | 1301 |
| Electric-circuit breaker | J. J. Wood | 724,228 | Mar. 31 | 4839 | 1086<br>1087 | 103 | 1071 |
| Electric-circuit breaker | R. H. Read | 730,704 | June 9 | 2149 | 477 | 104 | 1590 |
| Electric-circuit breaker | M. Skinner | 734,624 | July 28 | 3548 | 831 | 105 | 800 |
| Electric-circuit breakers. Retarding device for | A. R. Cheyney | 747,853 | Dec 22 | 4686 | 1059 | 107 | 2188 |
| Electric-circuit closer | C. Hubert | 737,107 | Aug. 25 | 3868 | 859 | 105 | 1857 |
| Electric-circuit closer and breaker | T. H. McQuown | 745,370 | Dec. 1 | 102 | 24 | 107 | 1122 |
| Electric-circuit connector | W. H. Kelsey | 747,553 | Dec. 22 | 4128 | 926<br>927 | 107 | 2061 |
| Electric-circuit controller. Automatic | H. W. Leonard | 719,018 | Jan. 27 | 2838 | 637 | 102 | 647 |
| Electric-circuit controller. Thermostatic | C. and G. Klopfanstein | 739,685 | Sept. 22 | 4139 | 923 | 106 | 935 |
| Electric-circuit-controlling mechanism | G. A. Tate | 726,479 | Apr. 28 | 3818 | 863 | 103 | 2017 |
| Electric-circuit cut-out | E. M. North | 742,895 | Nov. 3 | 133 | 30 | 107 | 29 |
| Electric-circuit ground-detector | T. W. Varley | 727,865 | May 12 | 1976 | 440 | 104 | 437 |
| Electric circuit. Loaded | H. S. Warren and G. A. Campbell | 729,709 | June 2 | 322 | 74, 75 | 104 | 1195 |
| Electric-circuit making and breaking mechanism | H. B. Wren | 729,482 | May 26 | 4926 | 1091<br>1092 | 104 | 1094 |
| Electric-circuit-regulating device | M. H. Baker | 748,144 | Dec. 29 | 5292 | 1203 | 107 | 2342 |
| Electric-circuit-regulating device | M. H. Baker | 748,149 | Dec. 29 | 5301 | 1204 | 107 | 2343 |

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| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Electric-circuit regulation | C. F. Burgess and B. Frankenfield. | 720,884 | Feb. 17 | 2712 | 626, 627 | 102 | 1423 |
| Electric-circuit repeating break | L. Daft and A. Williams | 730,236 | June 9 | 1296 | 286, 287 | 104 | 1406 |
| Electric-circuit resistance | G. Wright | 743,607 | Nov. 10 | 1627 | 341 | 107 | 363 |
| Electric-circuit switch | J. J. Wood | 721,410 | Feb. 24 | 3758 | 854, 855 | 102 | 1664 |
| Electric circuits. Apparatus for maintaining uniform resistance in | F. A. Gilbert and E. O. Lundin | 727,611 | May 12 | 1468 | 329 | 104 | 334 |
| Electric circuits. Apparatus for regulating the flow of current in | I. Kitsee | 743,887 | Nov. 10 | 2124 | 455 | 107 | 469 |
| Electric circuits. Constant-power-factor regulator for | M. H. Baker | 748,146 | Dec. 29 | 5295 | 1203 | 107 | 2342 |
| Electric circuits. Means for regulating self-inductance in | C. F. Burgess and B. Frankenfield. | 743,444 | Nov. 10 | 1292 | 265, 266 | 107 | 291 |
| Electric circuits. Mercury safety attachment for | E. Mies | 736,127 | Aug. 11 | 2074 | 444 | 105 | 1442 |
| Electric circuits. Regulating | M. H. Baker | 748,145 | Dec. 29 | 5293 | 1203 | 107 | 2342 |
| Electric circuits. Regulating | M. H. Baker | 748,147 | Dec. 29 | 5297 | 1203 | 107 | 2343 |
| Electric circuits. Thermal cut-out or fuse for | R. Hundhausen | 738,908 | Sept. 15 | 2718 | 601 | 106 | 616 |
| Electric coil | R. Varley | 736,319 | Aug. 11 | 2399 | 523 | 105 | 1515 |
| Electric-coil terminal | R. Varley | 744,650 | Nov. 17 | 3564 | 768 | 107 | 788 |
| Electric-communication system | J. T. Armstrong and A. Orling | 743,999 | Nov. 10 | 2349 | 504, 505 | 107 | 521 |
| Electric-communication system | J. T. Armstrong and A. Orling | 744,000 | Nov. 10 | 2352 | 505 | 107 | 521 |
| Electric condensers. Manufacturing | J. A. Wotton | 719,973 | Feb. 3 | 1001 | 233 | 102 | 1036 |
| Electric conducting-cable | R. Spaulding | 717,778 | Jan. 6 | 506 | 113 | 102 | 109 |
| Electric conductor | J. D. Nicholson | 723,717 | Mar. 24 | 3829 | 860 | 103 | 846 |
| Electric conductor | A. E. Lytle | 744,926 | Nov. 24 | 4090 | 881 | 107 | 919 |
| Electric conductor | C. M. Clark | 746,463 | Dec. 8 | 2090 | 481 | 107 | 1565 |
| Electric conductor | V. Löwendahl | 747,454 | Dec. 22 | 3949 | 888 | 107 | 2019 |
| Electric-conductor conduit and trough | T. E. Devonshire | 733,631 | July 14 | 1664 | 395 | 105 | 369 |
| Electric conductor or cable | F. Tremain | 727,031 | May 5 | 416 | 87 | 104 | 91 |
| Electric-conductor tile or conduit | R. W. Lyle | 723,892 | Mar. 31 | 4161 | 937 | 103 | 933 |
| Electric control mechanism | E. Thomson | 726,593 | Apr. 28 | 4060 | 916, 917 | 103 | 2063 |
| Electric control of devices at a distance. Apparatus for | D. M. Moore | 723,176 | Mar. 17 | 2817 | 635 | 103 | 626 |
| Electric controller | R. W. Brown | 719,991 | Feb. 10 | 1043 | 243 | 102 | 1061 |
| Electric controller | J. H. Holland | 721,372 | Feb. 24 | 3680 | 838, 839 | 102 | 1647 |
| Electric controller | F. A. Merrick | 722,527 | Mar. 10 | 1629 | 360 | 103 | 366 |
| Electric controller | C. T. J. Oppermann | 724,928 | Apr. 7 | 936 | 214, 215 | 103 | 1370 |
| Electric controller | G. W. Gilmore and D. Kendall | 731,298 | June 16 | 3256 | 724 | 104 | 1837 |
| Electric controller | J. A. Little | 732,201 | June 30 | 4979 | 1108 | 104 | 2225 |
| Electric controller | D. L. Lindquist | 733,551 | July 14 | 1524 | 363, 364 | 105 | 339 |
| Electric controller | A. Sundh | 733,563 | July 14 | 1550 | 369, 370 | 105 | 345 |
| Electric controller | A. Sundh | 733,564 | July 14 | 1555 | 370 | 105 | 346 |
| Electric controller | A. Sundh | 733,565 | July 14 | 1559 | 371 | 105 | 347 |
| Electric controller | A. Sundh | 733,566 | July 14 | 1562 | 371, 372 | 105 | 348 |
| Electric controller | A. Sundh | 733,567 | July 14 | 1565 | 372 | 105 | 349 |
| Electric controller | A. Sundh | 744,818 | Nov. 24 | 3904 | 839 | 107 | 880 |
| Electric coupling. Equalizing | J. Klopfenstein | 740,284 | Sept. 29 | 5271 | 1187 | 106 | 1191 |
| Electric-current controller | J. J. Murphy | 722,453 | Mar. 10 | 1491 | 329 | 103 | 334 |
| Electric-current controller | L. Bradley | 723,817 | Mar. 31 | 4008 | 903, 904 | 103 | 901 |
| Electric-current regulator | T. Spencer | 728,034 | May 12 | 2278 | 506 | 104 | 502 |
| Electric-current regulator | P. Kennedy | 745,194 | Nov. 24 | 4652 | 1012, 1013 | 107 | 1035 |
| Electric-current-shunting device | E. R. Cliff | 725,826 | Apr. 21 | 2620 | 596 | 103 | 1756 |
| Electric currents. Apparatus for changing character of | N. S. Harter | 738,437 | Sept. 8 | 1802 | 392 | 106 | 403 |
| Electric currents. Apparatus for the generation and direct electrolytic application of | F. E. Elmore | 726,659 | Apr. 28 | 4171 | 941 | 103 | 2086 |
| Electric currents for electrolysis. Apparatus for the generation and application of | F. E. Elmore | 736,331 | Aug. 11 | 2417 | 528 | 105 | 1518 |
| Electric currents for low-potential use. Means for modifying high-potential | H. L. Carpenter | 745,715 | Dec. 1 | 721 | 165 | 107 | 1252 |
| Electric cut-out | C. Wagner | 718,405 | Jan. 13 | 1635 | 359 | 102 | 366 |
| Electric cut-out | L. J. Mulvaney | 726,331 | Apr. 28 | 3539 | 802 | 103 | 1962 |
| Electric cut-out | J. Erikson | 740,745 | Oct. 6 | 666 | 151 | 106 | 1390 |
| Electric cut-out | L. W. Miller | 743,540 | Nov. 10 | 1492 | 312 | 107 | 336 |
| Electric cut-out. Fusible | W. P. Burke | 729,729 | June 2 | 381 | 86 | 104 | 1206 |
| Electric cut-out. Thermal | T. E. Scantlin | 718,660 | Jan. 20 | 2170 | 475 | 102 | 494 |
| Electric display apparatus. Interchangeable | D. Levy | 728,944 | May 26 | 3995 | 889 | 104 | 899 |
| Electric distributing system | R. Thury | 745,929 | Dec. 1 | 1130 | 253 | 107 | 1340 |
| Electric-distribution regulating system | L. Lyndon | 736,280 | Aug. 11 | 2335 | 507 | 105 | 1501 |
| Electric elevator | F. B. Rae | 728,292 | May 19 | 2783 | 617 | 104 | 632 |
| Electric elevator. Automatic | H. Rowntree | 724,951 | Apr. 7 | 972 | 225, 226 | 103 | 1377 |
| Electric energy to translating devices. Controlling the supply of | H. W. Leonard | 717,584 | Jan. 6 | 108 | 29 | 102 | 26 |
| Electric engine | W. T. Clark | 721,669 | Mar. 3 | 38 | 9 | 103 | 10 |
| Electric engine | W. T. Clark | 721,670 | Mar. 3 | 39 | 9 | 103 | 10 |
| Electric fixture | K. Shaffer | 743,991 | Nov. 10 | 2326 | 497 | 107 | 516 |
| Electric-fixture tripod-box | J. E. Ercanbrack | 746,316 | Dec. 8 | 1847 | 420 | 107 | 1513 |
| Electric fixtures. Support for | C. A. Hannan | 739,671 | Sept. 22 | 4114 | 917 | 106 | 929 |
| Electric furnace | E. G. Acheson | 718,892 | Jan. 20 | 2604 | 582 | 102 | 583 |
| Electric furnace | H. N. Potter | 719,507 | Feb. 3 | 167 | 38 | 102 | 859 |
| Electric furnace | J. F. Hammond | 720,024 | Feb. 10 | 1127 | 257, 258 | 102 | 1079 |
| Electric furnace | P. L. T. Héroult | 721,703 | Mar. 3 | 95 | 21 | 103 | 21 |
| Electric furnace | A. A. Shade | 722,411 | Mar. 10 | 1401 | 310 | 103 | 314 |

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| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Electric furnace | C. S. Bradley | 723,643 | Mar. 24 | 3701 | 829, 830 | 103 | 819 |
| Electric furnace | R. Winter | 724,069 | Mar. 31 | 4519 | 1017 | 103 | 1005 |
| Electric furnace | E. G. Acheson. (Reissue) | 12,104 | Apr. 7 | 1112 | 252 | 103 | 1406 |
| Electric furnace | E. A. Sjöstedt | 726,364 | Apr. 28 | 3600 | 817 | 103 | 1975 |
| Electric furnace | J. M. Carrerè | 726,860 | May 5 | 45 | 11 | 104 | 12 |
| Electric furnace | P. L. T. Héroult | 733,040 | July 7 | 603 | 147 | 105 | 129 |
| Electric furnace | F. E. J. Hatch | 741,333 | Oct. 13 | 1794 | 399 | 106 | 1647 |
| Electric furnace | H. Harmet | 742,315 | Oct. 27 | 3763 | 843 | 106 | 2089 |
| Electric furnace | H. Harmet | 742,419 | Oct. 27 | 3944 | 885, 886 | 106 | 2125 |
| Electric furnace | W. S. Franklin | 742,852 | Nov. 3 | 60 | 14, 15 | 107 | 15 |
| Electric furnace or oven | A. Eimer | 736,509 | Aug. 18 | 2753 | 602 | 105 | 1606 |
| Electric-generator attachment | E. A. Terpening | 724,144 | Mar. 31 | 4681 | 1052 | 103 | 1039 |
| Electric generator for intermittent currents | M. P. Ryder | 748,534 | Dec. 29 | 6000 | 1359 | 107 | 2496 |
| Electric generator. Multivoltage | G. H. Gibson | 745,594 | Dec. 1 | 519 | 121 | 107 | 1207 |
| Electric generator. Turbine | E. H. Porter and B. Currier | 741,271 | Oct. 13 | 1648 | 372, 373 | 106 | 1617 |
| Electric generator. Turbine | E. H. Porter and B. Currier | 748,215 | Dec. 29 | 5413 | 1231, 1232 | 107 | 2367 |
| Electric generators. Automatic regulator for | W. A. Turbayne | 732,238 | June 30 | 5059 | 1125 | 104 | 2242 |
| Electric generators. Automatic regulator for | W. A. Turbayne and A. S. Hubbard | 732,239 | June 30 | 5062 | 1126 | 104 | 2242 |
| Electric generators. Direct and alternating current reverse mechanism for | O. Higgins | 741,665 | Oct. 20 | 2443 | 548 | 106 | 1802 |
| Electric heater | E. F. Porter | 728,973 | May 26 | 4043 | 898 | 104 | 908 |
| Electric heater | M. Loewenthal | 729,369 | May 26 | 4742 | 1048, 1049 | 104 | 1053 |
| Electric heater | T. J. Johnston | 729,771 | June 2 | 455 | 102 | 104 | 1220 |
| Electric heater | J. F. Hewitt and C. W. Spatig | 729,862 | June 2 | 634 | 139 | 104 | 1258 |
| Electric heater | W. A. Fuller | 731,768 | June 23 | 4141 | 924 | 104 | 2034 |
| Electric heater | G. C. Hawkins | 732,349 | June 30 | 5273 | 1169 | 104 | 2286 |
| Electric heater | J. F. McElroy | 735,798 | Aug. 11 | 1453 | 312 | 105 | 1308 |
| Electric heater | W. S. Hadaway, Jr. | 737,227 | Aug. 25 | 4100 | 911 | 105 | 1906 |
| Electric heater | J. H. Hallberg | 740,125 | Sept. 29 | 4971 | 1115 | 106 | 1129 |
| Electric heater | E. F. Porter | 741,927 | Oct. 20 | 2956 | 658 | 106 | 1910 |
| Electric heater | J. F. McElroy | 744,974 | Nov. 24 | 4182 | 904 | 107 | 937 |
| Electric heater | F. W. Kelley and J. F. McElroy | 747,185 | Dec. 15 | 3444 | 781 | 107 | 1893 |
| Electric heater or radiator | E. G. Rivers | 738,734 | Sept. 8 | 2363 | 519 | 106 | 521 |
| Electric heater or rheostat | C. Wirt | 737,689 | Sept. 1 | 238 | 51 | 106 | 55 |
| Electric ignition-generator | B. P. Remy | 729,662 | June 2 | 249 | 58 | 104 | 1180 |
| Electric-incandescent-light wires. Fire-arrester for | O. H. R. Schulze | 733,876 | July 14 | 2125 | 501 | 105 | 463 |
| Electric induction-motor | E. H. Porter and B. Currier | 741,272 | Oct. 13 | 1650 | 373 | 106 | 1618 |
| Electric light and power self-regulating system | M. Moskowitz | 729,206 | May 26 | 4459 | 983 | 104 | 994 |
| Electric-light circuits. Automatic cut-out for | R. J. Patterson | 745,899 | Dec. 1 | 1080 | 243 | 107 | 1328 |
| Electric-light fixture | J. J. Wood | 735,647 | Aug. 4 | 1173 | 248 | 105 | 1230 |
| Electric-light fixture | J. J. Wood | 740,347 | Sept. 29 | 5378 | 1212 | 106 | 1213 |
| Electric-light hanger | J. P. Hebendahl and J. J. Gaffney | 726,912 | May 5 | 148 | 36 | 104 | 34 |
| Electric-light mounting | S. H. Anderson | 739,973 | Sept. 29 | 4695 | 1056 | 106 | 1070 |
| Electric-light-pole attachment | I. Levi | 723,886 | Mar. 31 | 4149 | 935 | 103 | 930 |
| Electric light. Portable | H. S. MacKaye | 740,671 | Oct. 6 | 533 | 118 | 106 | 1361 |
| Electric-light shade and reflector | O. A. Mygatt | 732,211 | June 30 | 5002 | 1112 | 104 | 2231 |
| Electric-light signal | V. Taboulevitsch | 739,359 | Sept. 22 | 3512 | 786 | 106 | 798 |
| Electric-light-supporting drum | C. W. Riley | 745,670 | Dec. 1 | 644 | 149 | 107 | 1235 |
| Electric-light switch | E. L. Etheridge | 744,911 | Nov. 24 | 4062 | 875 | 107 | 913 |
| Electric lighter | W. Roche | 725,992 | Apr. 21 | 2908 | 660 | 103 | 1816 |
| Electric lighter | C. Hubert | 742,661 | Oct. 27 | 4377 | 986 | 106 | 2217 |
| Electric lighter | C. Hubert | 743,724 | Nov. 10 | 1821 | 384 | 107 | 406 |
| Electric-lighting apparatus | B. G. Lamme | 731,467 | June 23 | 3586 | 798 | 104 | 1923 |
| Electric-lighting apparatus. Portable | E. R. Gill | 744,530 | Nov. 17 | 3373 | 727 | 107 | 751 |
| Electric-lighting device | H. C. Graybill | 733,188 | July 7 | 862 | 209 | 105 | 181 |
| Electric-lighting system | J. F. McElroy | 720,604 | Feb. 17 | 2218 | 514, 515 | 102 | 1320 |
| Electric-lighting system | J. F. McElroy | 720,606 | Feb. 17 | 2234 | 516 | 102 | 1323 |
| Electric-lighting system | J. F. McElroy | 720,607 | Feb. 17 | 2239 | 516, 517 | 102 | 1324 |
| Electric-lighting system | J. F. McElroy | 720,609 | Feb. 17 | 2249 | 518 | 102 | 1326 |
| Electric-lighting system | J. F. McElroy | 720,610 | Feb. 17 | 2254 | 518 | 102 | 1327 |
| Electric-lighting system | H. Leitner and R. N. Lucas | 738,113 | Sept. 1 | 1104 | 244 | 106 | 239 |
| Electric-lighting system | J. F. McElroy | 739,204 | Sept. 15 | 3234 | 716 | 106 | 723 |
| Electric-lighting system | J. F. McElroy | 746,361 | Dec. 8 | 1923 | 439, 440 | 107 | 1529 |
| Electric-lighting system | J. F. McElroy | 747,889 | Dec. 22 | 4763 | 1076 | 107 | 2205 |
| Electric lines. Apparatus for locating short circuits in | W. W. Woodruff | 739,569 | Sept. 22 | 3910 | 876 | 106 | 886 |
| Electric lock | W. H. Hollar | 737,840 | Sept. 1 | 547 | 118, 119 | 106 | 121 |
| Electric lock | W. MacMillan | 738,824 | Sept. 15 | 2578 | 568, 569 | 106 | 585 |
| Electric-machine brush | C. R. Phillips | 738,478 | Sept. 8 | 1886 | 410 | 106 | 420 |
| Electric-machine brush. Dynamo- | W. D. Litchfield | 728,256 | May 19 | 2707 | 604 | 104 | 614 |
| Electric-machine brush-holder and brush. Dynamo- | R. Lundell | 729,878 | June 2 | 661 | 145 | 104 | 1263 |
| Electric-machine brush-holder. Dynamo- | H. M. Acly | 738,747 | Sept. 15 | 2417 | 530 | 106 | 549 |
| Electric-machine brush-holder. Dynamo- | M. E. Thompson | 741,945 | Oct. 20 | 2994 | 666 | 106 | 1918 |
| Electric-machine coil. Dynamo- | H. F. T. Erben | 734,310 | July 21 | 3000 | 706 | 105 | 668 |
| Electric machine. Dynamo- | V. G. Apple | 727,568 | May 12 | 1399 | 315 | 104 | 320 |
| Electric machine. Dynamo- | H. G. Reist | 729,219 | May 26 | 4485 | 988 | 104 | 1000 |
| Electric machine. Dynamo- | H. G. Reist | 730,967 | June 16 | 2625 | 585 | 104 | 1710 |
| Electric machine. Dynamo- | C. P. Steinmetz | 732,906 | July 7 | 371 | 90, 91 | 105 | 81 |
| Electric machine. Dynamo- | H. M. Acly | 737,192 | Aug. 25 | 4020 | 891 | 105 | 1889 |
| Electric machine. Dynamo- | E. A. Edwards | 738,782 | Sept. 15 | 2485 | 545 | 106 | 565 |
| Electric machine. Dynamo- | G. Macloskie | 744,084 | Nov. 17 | 2547 | 545 | 107 | 571 |
| Electric machine. Dynamo- | H. Geisenhöner | 747,698 | Dec. 22 | 4399 | 992 | 107 | 2122 |
| Electric-machine field-winding | E. Ziehl | 736,910 | Aug. 18 | 3512 | 781 | 105 | 1762 |
| Electric-machine frame. Dynamo- | R. Pfeifer | 723,019 | Mar. 17 | 2530 | 567 | 103 | 567 |
| Electric machine or motor. Dynamo- | E. R. Cox, Jr | 742,600 | Oct. 27 | 4270 | 962 | 106 | 2194 |
| Electric-machine system. Dynamo- | F. H. Jeannin | 728,579 | May 19 | 3336 | 737 | 104 | 747 |
| Electric machines. Antihunting device for dynamo- | H. F. T. Erben | 727,605 | May 12 | 1455 | 326 | 104 | 331 |
| Electric machines. Cooling dynamo- | E. D. Priest | 727,685 | May 12 | 1617 | 368 | 104 | 366 |

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| Electric machines. Magnet-core for dynamo- | W. B. Burrow | 737,576 | Sept. 1 | 34 | 7 | 106 | 10 |
| Electric machines. Maintaining synchronous rotation of dynamo- | E. W. Rice, Jr., and E. J. Berg | 732,114 | June 30 | 4802 | 1071 | 104 | 2189 |
| Electric machines. Means for cooling dynamo- | E. D. Priest | 727,686 | May 12 | 1619 | 368<br>369 | 104 | 367 |
| Electric machines. Means for maintaining synchronous rotation of dynamo- | E. W. Rice, Jr., and E. J. Berg | 732,654 | June 30 | 5853 | 1296 | 104 | 2410 |
| Electric machines. Mechanical ventilation of | A. C. E. Rateau | 730,401 | June 9 | 1594 | 355<br>356 | 104 | 1469 |
| Electric machines. Pole-shoe for dynamo- | A. Churchward | 723,989 | Mar. 31 | 4369 | 981 | 103 | 977 |
| Electric machines. Regulating dynamo- | H. G. Reist | 729,795 | June 2 | 498 | 110 | 104 | 1230 |
| Electric machines. Suspension of dynamo- | J. F. McElroy | 744,975 | Nov. 24 | 4183 | 904 | 107 | 938 |
| Electric machines. Winding dynamo- | J. B. Wiard | 744,144 | Nov. 17 | 2662 | 567<br>568 | 107 | 596 |
| Electric machines. Winding for dynamo- | J. B. Wiard | 744,145 | Nov. 17 | 2665 | 568<br>569 | 107 | 596 |
| Electric machinery. Dynamo- | H. M. Hobart | 729,175 | May 26 | 4403 | 971 | 104 | 982 |
| Electric machinery. Dynamo- | H. Leitner and R. N. Lucas | 731,581 | June 23 | 3806 | 848 | 104 | 1967 |
| Electric machinery. Dynamo- | H. Chitty | 736,302 | Aug. 18 | 2470 | 540 | 105 | 1545 |
| Electric meter | F. Holden | 725,708 | Apr. 21 | 2404 | 545 | 103 | 1709 |
| Electric meter | E. J. King | 727,640 | May 12 | 1527 | 344 | 104 | 347 |
| Electric meter | E. Hartmann | 730,262 | June 9 | 1350 | 296 | 104 | 1417 |
| Electric meter | L. Gutmann and R. C. Lanphier | 738,902 | Sept. 15 | 2708 | 598<br>599 | 106 | 614 |
| Electric meter | G. Stern | 744,124 | Nov. 17 | 2625 | 560<br>561 | 107 | 589 |
| Electric meter | L. Gutmann | 747,968 | Dec. 29 | 4947 | 1118 | 107 | 2266 |
| Electric-meter bearing | G. H. Alton | 733,611 | July 14 | 1630 | 386 | 105 | 362 |
| Electric meter. Coin-controlled | R. E. Bates | 724,654 | Apr. 7 | 434 | 105<br>106 | 103 | 1262 |
| Electric-meter prepayment attachment | T. L. Arnold and F. E. Brown | 728,531 | May 19 | 3215 | 713 | 104 | 721 |
| Electric-meter prepayment attachment | H. A. Robertson | 742,745 | Oct. 27 | 4518 | 1023 | 106 | 2248 |
| Electric meters. Compensating friction in | F. P. Cox | 732,176 | June 30 | 4935 | 1097 | 104 | 2216 |
| Electric metering system | E. Thomson | 729,811 | June 2 | 533 | 117 | 104 | 1237 |
| Electric motor | E. S. Pillsbury | 718,518 | Jan. 13 | 1896 | 416 | 102 | 424 |
| Electric motor | A. C. Eastwood | 724,827 | Apr. 7 | 769 | 179 | 103 | 1335 |
| Electric motor | B. A. Stowe | 728,039 | May 12 | 2289 | 508<br>509 | 104 | 505 |
| Electric motor | E. G. Richards | 729,664 | June 2 | 251 | 58 | 104 | 1180 |
| Electric motor | W. V. Ash | 731,836 | June 23 | 4264 | 949<br>950 | 104 | 2063 |
| Electric motor | P. E. Chapman | 731,857 | June 23 | 4293 | 956<br>957 | 104 | 2069 |
| Electric motor | P. Swan | 732,235 | June 30 | 5054 | 1124 | 104 | 2241 |
| Electric motor | N. C. Bassett | 735,052 | Aug. 4 | 9 | 3 | 105 | 983 |
| Electric motor | T. A. Seitz | 735,160 | Aug. 4 | 218 | 44 | 105 | 1029 |
| Electric motor | H. Lindenberger | 737,253 | Aug. 25 | 4153 | 923<br>924 | 105 | 1917 |
| Electric motor | A. K. Braun | 737,553 | Aug. 25 | 4711 | 1057 | 105 | 2041 |
| Electric motor | J. H. Blair | 742,280 | Oct. 27 | 3698 | 826 | 106 | 2077 |
| Electric motor | E. B. Wilford and A. W. Schramm | 743,364 | Nov. 3 | 1082 | 230 | 107 | 236 |
| Electric motor | R. Eickemeyer | 744,680 | Nov. 17 | 3617 | 780 | 107 | 802 |
| Electric motor | G. H. Ennis | 745,805 | Dec. 1 | 888 | 200 | 107 | 1289 |
| Electric motor | L. S. Pfouts | 747,217 | Dec. 15 | 3515 | 797<br>798 | 107 | 1906 |
| Electric-motor actuating and controlling device | O. C. Britsch | 728,537 | May 19 | 3234 | 717<br>718 | 104 | 724 |
| Electric motor. Alternating-current | B. A. Stowe | 728,038 | May 12 | 2286 | 508 | 104 | 504 |
| Electric motor and brake | A. A. Thresher | 736,461 | Aug. 18 | 2643 | 581 | 105 | 1582 |
| Electric motor and generator | A. L. Bolen and G. E. Krause | 736,928 | Aug. 25 | 3554 | 788 | 105 | 1790 |
| Electric motor. Continuous and pulsatory current | C. M. Palmer | 740,171 | Sept. 29 | 5057 | 1138 | 106 | 1148 |
| Electric-motor control | F. A. Merrick | 735,893 | Aug. 11 | 1642 | 351 | 105 | 1350 |
| Electric-motor control. Apparatus for remote | W. V. Ash | 738,393 | Sept. 8 | 1718 | 373 | 106 | 385 |
| Electric-motor-control system | A. C. Eastwood | 745,168 | Nov. 24 | 4606 | 999 | 107 | 1025 |
| Electric-motor controller | O. Holz | 720,029 | Feb. 10 | 1138 | 260 | 102 | 1081 |
| Electric-motor controller | J. B. Linn | 730,667 | June 9 | 2087 | 464 | 104 | 1576 |
| Electric-motor controller | E. R. Whitney | 732,247 | June 30 | 5076 | 1129 | 104 | 2245 |
| Electric-motor controller | F. A. Merrick and E. W. Stull | 732,875 | July 7 | 320 | 80 | 105 | 71 |
| Electric-motor controller | W. H. Chapman | 736,493 | Aug. 18 | 2721 | 596 | 105 | 1598 |
| Electric-motor controller | C. W. Kennedy and F. A. Pocock | 739,186 | Sept. 15 | 3200 | 708 | 106 | 715 |
| Electric-motor controller | W. N. Vance | 742,933 | Nov. 3 | 192 | 44, 45 | 107 | 42 |
| Electric-motor controller | H. H. Cutler | 743,463 | Nov. 10 | 1345 | 275 | 107 | 303 |
| Electric-motor-controlling device | W. B. Potter | 724,611 | Apr. 7 | 361 | 87, 88 | 103 | 1246 |
| Electric-motor-controlling means | R. Lundell | 734,724 | July 28 | 3754 | 877 | 105 | 839 |
| Electric-motor-controlling means | J. D. Ihlder | 735,386 | Aug. 4 | 654 | 139<br>140 | 105 | 1120 |
| Electric-motor electric controller | W. K. Liggett | 731,375 | June 16 | 3384 | 757<br>758 | 104 | 1864 |
| Electric-motor friction-gear | J. B. Wantz | 732,386 | June 30 | 5350 | 1185 | 104 | 2302 |
| Electric motor or engine | J. Massey | 726,177 | Apr. 21 | 3210 | 728 | 103 | 1878 |
| Electric motor or generator | J. A. Titzel, Sr | 718,588 | Jan. 13 | 2048 | 445 | 102 | 456 |
| Electric-motor-regulation system | P. J. Collins | 722,563 | Mar. 10 | 1693 | 377 | 103 | 379 |
| Electric-motor speed-indicator | E. J. Berg | 734,294 | July 21 | 2973 | 698 | 105 | 662 |
| Electric-motor speed-indicator | E. J. Berg | 734,455 | July 21 | 3240 | 763 | 105 | 718 |
| Electric-motor starting-switch | A. R. Everest | 735,077 | Aug. 4 | 50 | 14 | 105 | 992 |
| Electric-motor system | W. B. Potter | 727,684 | May 12 | 1616 | 367 | 104 | 365 |
| Electric-motor system | G. O. Baker | 730,860 | June 16 | 2413 | 533 | 104 | 1664 |
| Electric motors. Controlling | W. H. Chapman | 718,910 | Jan. 20 | 2640 | 592 | 102 | 590 |
| Electric motors. Controlling | J. W. Kellogg | 730,376 | June 9 | 1547 | 344<br>345 | 104 | 1460 |
| Electric motors. Controlling | H. W. Buck | 739,776 | Sept. 22 | 4291 | 962 | 106 | 968 |
| Electric motors. Controlling | M. Waddell. (Reissue) | 12,180 | Dec. 8 | 2434 | 556 | 107 | 1644 |
| Electric motors. Device for automatically cutting out starting resistances of | G. H. Whittingham | 728,814 | May 19 | 3759 | 839 | 104 | 836 |
| Electric motors. Device for maintaining constant speed in | J. G. Roberts | 725,140 | Apr. 14 | 1347 | 304 | 103 | 1470 |
| Electric motors. Electrohydraulic controller for | A. Sundh | 733,562 | July 14 | 1547 | 368<br>369 | 105 | 345 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Electric motors. Means for controlling | M. Waddell. (Reissue) | 12,179 | Dec. 8 | 2432 | 556 | 107 | 1643 |
| Electric motors. Means for controlling the speed of | A. P. Warner | 743,601 | Nov. 10 | 1613 | 337, 338 | 107 | 361 |
| Electric motors. Means for operating alternating-current | R. Eickemeyer | 730,891 | June 16 | 2480 | 550, 551, 552 | 104 | 1680 |
| Electric motors. Method of and means for driving | G. Westinghouse, Jr | 731,726 | June 23 | 4060 | 905 | 104 | 2017 |
| Electric motors. Operating | W. A. Dick | 740,101 | Sept. 29 | 4933 | 1107 | 106 | 1121 |
| Electric motors. Operating alternating-current | R. Eickemeyer | 731,996 | June 23 | 4547 | 1015, 1016 | 104 | 2123 |
| Electric operating apparatus. Means for controlling | K. Hertwig | 736,393 | Aug. 18 | 2527 | 554, 555 | 105 | 1558 |
| Electric pocket for lighting purposes | A. Olenin | 742,348 | Oct. 27 | 3815 | 854 | 106 | 2101 |
| Electric protective device | C. P. Steinmetz | 729,236 | May 26 | 4517 | 995 | 104 | 1007 |
| Electric protective system | J. Weatherby, Jr | 730,422 | June 9 | 1629 | 365, 366 | 104 | 1476 |
| Electric protective system | J. Weatherby, Jr | 735,324 | Aug. 4 | 548 | 112 | 105 | 1098 |
| Electric regulator | E. W. Rice, Jr | 728,300 | May 19 | 2804 | 621 | 104 | 636 |
| Electric regulator | G. Wright and H. M. Acly | 738,870 | Sept. 15 | 2655 | 585 | 106 | 603 |
| Electric resistance apparatus | R. Hopfelt | 739,181 | Sept. 15 | 3194 | 706 | 106 | 714 |
| Electric resistance structure | H. Geisenhöner and T. Van Aller | 728,564 | May 19 | 3292 | 729, 730 | 104 | 736 |
| Electric safety appliance | L. Klentschi | 743,888 | Nov. 10 | 2125 | 455 | 107 | 469 |
| Electric safety-signal. Automatic | W. W. Keener | 736,975 | Aug. 25 | 3644 | 807, 808 | 105 | 1811 |
| Electric sectional furnace | A. Eimer | 736,917 | Aug. 18 | 3527 | 784 | 105 | 1765 |
| Electric separation means | E. Gates | 743,710 | Nov. 10 | 1802 | 380 | 107 | 401 |
| Electric shovel | A. Musso | 740,165 | Sept. 29 | 5043 | 1134, 1135 | 106 | 1145 |
| Electric signal | A. E. Caughey | 729,276 | May 26 | 4585 | 1013 | 104 | 1021 |
| Electric signal | G. F. Hilton | 732,559 | June 30 | 5683 | 1262 | 104 | 2373 |
| Electric signal | H. L. Lee | 734,341 | July 21 | 3046 | 717 | 105 | 678 |
| Electric signal | H. A. Fessenden | 740,261 | Sept. 29 | 5221 | 1174 | 106 | 1181 |
| Electric socket | A. P. Seymour | 719,265 | Jan. 27 | 3312 | 741 | 102 | 745 |
| Electric socket | W. S. Stapley | 733,759 | July 14 | 1886 | 445 | 105 | 415 |
| Electric socket and receptacle attachment | A. F. Hauss | 722,979 | Mar. 17 | 2463 | 551 | 103 | 555 |
| Electric sparker | D. Hanauer | 730,259 | June 9 | 1346 | 295 | 104 | 1416 |
| Electric stop mechanism | S. G. Colt | 737,210 | Aug. 25 | 4057 | 900 | 105 | 1896 |
| Electric switch | W. R. Thompson | 717,724 | Jan. 6 | 361 | 88 | 102 | 77 |
| Electric switch | R. N. Chamberlain | 720,327 | Feb. 10 | 1696 | 385 | 102 | 1198 |
| Electric switch | A. W. Horn | 721,194 | Feb. 24 | 3350 | 766 | 102 | 1579 |
| Electric switch | C. W. Rogers | 723,732 | Mar. 24 | 3855 | 867 | 103 | 851 |
| Electric switch | G. W. Hart | 723,866 | Mar. 31 | 4110 | 928 | 103 | 922 |
| Electric switch | T. Cope | 725,221 | Apr. 14 | 1499 | 342 | 103 | 1502 |
| Electric switch | V. Royle | 727,206 | May 5 | 717 | 153, 154 | 104 | 156 |
| Electric switch | J. L. Steeb | 727,478 | May 5 | 1219 | 269 | 104 | 263 |
| Electric switch | V. G. Apple | 727,567 | May 12 | 1395 | 314, 315 | 104 | 319 |
| Electric switch | H. Bayer | 729,255 | May 26 | 4548 | 1003 | 104 | 1013 |
| Electric switch | T. Muller and C. O. Thompson | 729,503 | May 26 | 4960 | 1099 | 104 | 1101 |
| Electric switch | C. F. Splitdorf | 731,966 | June 23 | 4492 | 1002 | 104 | 2112 |
| Electric switch | T. O. Chouinard | 732,170 | June 30 | 4923 | 1095 | 104 | 2213 |
| Electric switch | I. G. Waterman | 732,477 | June 30 | 5521 | 1224, 1225 | 104 | 2336 |
| Electric switch | H. P. Ball | 732,672 | June 30 | 5889 | 1306, 1307 | 104 | 2417 |
| Electric switch | C. F. Autenrieth | 732,695 | July 7 | 6 | 2 | 105 | 4 |
| Electric switch | J. D. Ihlder | 732,745 | July 7 | 83 | 23, 24 | 105 | 21 |
| Electric switch | J. J. Ruddick | 734,098 | July 21 | 2581 | 606 | 105 | 580 |
| Electric switch | G. Hail | 735,249 | Aug. 4 | 411 | 80 | 105 | 1068 |
| Electric switch | H. Gilmore | 735,363 | Aug. 4 | 613 | 126 | 105 | 1112 |
| Electric switch | W. L. Bliss | 735,452 | Aug. 4 | 806 | 171 | 105 | 1152 |
| Electric switch | H. O. Swoboda | 735,841 | Aug. 11 | 1540 | 330 | 105 | 1328 |
| Electric switch | C. C. Gould | 735,966 | Aug. 11 | 1771 | 380 | 105 | 1378 |
| Electric switch | W. M. Scott | 736,447 | Aug. 18 | 3623 | 576 | 105 | 1577 |
| Electric switch | A. H. Babcock | 738,752 | Sept. 15 | 2427 | 532 | 106 | 551 |
| Electric switch | W. H. Spiller | 738,952 | Sept. 15 | 2792 | 618, 619 | 106 | 631 |
| Electric switch | B. W. Woldridge | 738,969 | Sept. 15 | 2821 | 625 | 106 | 637 |
| Electric switch | J. Harisberger | 739,672 | Sept. 22 | 4116 | 918 | 106 | 930 |
| Electric switch | J. H. Rusby | 741,168 | Oct. 13 | 1449 | 330 | 106 | 1574 |
| Electric switch | J. T. Robb | 742,906 | Nov. 3 | 153 | 36 | 107 | 34 |
| Electric switch | G. B. Thomas | 743,348 | Nov. 3 | 1032 | 223 | 107 | 220 |
| Electric switch | C. F. Ziegler | 743,970 | Nov. 10 | 2269 | 488 | 107 | 501 |
| Electric switch | C. E. Felt | 744,736 | Nov. 24 | 3763 | 811 | 107 | 850 |
| Electric switch | A. Rivenburgh | 746,577 | Dec. 8 | 2290 | 525 | 107 | 1610 |
| Electric switch | C. C. Badeau | 747,673 | Dec. 22 | 4353 | 983 | 107 | 2111 |
| Electric switch | I. G. Waterman | 748,123 | Dec. 29 | 5253 | 1192 | 107 | 2333 |
| Electric switch. Automatic | W. Lasar | 719,122 | Jan. 27 | 3069 | 682 | 102 | 694 |
| Electric switch. Automatic | W. S. Guthrie | 746,695 | Dec. 15 | 2519 | 579 | 107 | 1682 |
| Electric switch. Push-button | C. G. Perkins | 732,890 | July 7 | 344 | 84, 85 | 105 | 76 |
| Electric switch. Push-button | W. C. Tregoning | 741,853 | Oct. 20 | 2800 | 623 | 106 | 1879 |
| Electric switch. Ratchet-operated | W. Kingsland | 743,173 | Nov. 3 | 679 | 149, 150 | 107 | 142 |
| Electric switch system | A. L. De Leeuw | 721,942 | Mar. 3 | 544 | 119, 120 | 103 | 120 |
| Electric switches, cut-outs, &c. Means for protecting the exposed or live parts of | W. McDevitt | 733,502 | July 14 | 1437 | 337, 338 | 105 | 322 |
| Electric terminal | H. R. Young | 741,605 | Oct. 13 | 2336 | 523 | 106 | 1764 |
| Electric terminal | H. Brooks | 743,441 | Nov. 10 | 1285 | 264 | 107 | 290 |
| Electric time-controller | J. Weatherby, Jr | 725,900 | Apr. 21 | 2746 | 625 | 103 | 1783 |
| Electric time-controller | F. W. Schneider | 741,723 | Oct. 20 | 2577 | 574 | 106 | 1830 |
| Electric time-switch | J. J. Stockall, Jr | 719,390 | Jan. 27 | 3554 | 794 | 102 | 798 |
| Electric time-switch | A. W. Lauter, Sr | 721,205 | Feb. 24 | 3399 | 772 | 102 | 1588 |
| Electric time-switch | H. C. Froelich | 722,292 | Mar. 10 | 1189 | 263 | 103 | 269 |

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| Invention. | Name. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|---|
| | | | | Spec. | Drg. | Vol. | Page. |
| Electric time-switch | E. Hemphill | 725,444 | Apr. 14 | 1904 | 426 | 103 | 1588 |
| Electric time-switch | W. C. Blundell and C. F. Brower | 727,578 | May 12 | 1416 | 318 | 104 | 323 |
| Electric time-switch | M. A. Nickerson | 727,828 | May 12 | 1902 | 425 | 104 | 423 |
| Electric time-switch | H. J. Cogswell | 730,234 | June 9 | 1292 | 285, 286 | 104 | 1406 |
| Electric time-switch | I. S. and E. F. Callender | 733,369 | July 14 | 1206 | 286 | 105 | 270 |
| Electric time-switch | J. M. Joy | 746,708 | Dec. 15 | 2539 | 583, 584 | 107 | 1687 |
| Electric track-circuit and insulating same | E. A. Everett | 726,269 | Apr. 28 | 3401 | 773 | 103 | 1933 |
| Electric traction | A. Mégroz | 729,882 | June 2 | 668 | 147 | 104 | 1264 |
| Electric traction. Preventing leakage of current to studs in surface-contact systems of | B. H. Bedell | 738,651 | Sept. 8 | 2213 | 484 | 106 | 491 |
| Electric-traction system | L. T. Gibbs | 744,187 | Nov. 17 | 2766 | 589 | 107 | 618 |
| Electric train-lighting | J. F. McElroy | 720,608 | Feb. 17 | 2244 | 517 | 102 | 1325 |
| Electric train-lighting system | J. F. McElroy | 720,605 | Feb. 17 | 2223 | 515, 516 | 102 | 1321 |
| Electric translating apparatus | P. C. Hewitt | 738,802 | Sept. 15 | 2529 | 556 | 106 | 574 |
| Electric transmission system | R. A. Ripley | 736,548 | Aug. 18 | 2814 | 616 | 105 | 1620 |
| Electric trip mechanism | C. C. Ely and A. Kobelt | 736,511 | Aug. 18 | 2756 | 603 | 105 | 1607 |
| Electric vapor appliance | M. von Recklinghausen | 733,423 | July 14 | 1304 | 308 | 105 | 293 |
| Electric-wire support | B. Cullen | 726,651 | Apr. 28 | 4159 | 937 | 103 | 2083 |
| Electric-wire terminal tip | H. L. Worthington | 731,400 | June 16 | 3442 | 769 | 104 | 1875 |
| Electric wires. Device for handling live | B. Wilbur | 731,145 | June 16 | 2972 | 660 | 104 | 1780 |
| Electrical and selective distribution | J. S. Stone | 726,368 | Apr. 28 | 3605 | 818 | 103 | 1976 |
| Electrical and selective distribution | J. S. Stone | 726,476 | Apr. 28 | 3809 | 862 | 103 | 2016 |
| Electrical and selective distribution | J. S. Stone | 729,103 | May 26 | 4276 | 945 | 104 | 956 |
| Electrical and selective distribution. Electrical apparatus and circuits for | J. S. Stone | 729,104 | May 26 | 4279 | 945, 946 | 104 | 957 |
| Electrical apparatus | W. J. Lloyd | 738,823 | Sept. 15 | 2575 | 568 | 106 | 584 |
| Electrical apparatus. Apparatus for making coils for | E. L. Aiken | 720,092 | Feb. 10 | 1262 | 289 | 102 | 1108 |
| Electrical-apparatus coil | E. L. Aiken | 720,093 | Feb. 10 | 1267 | 290 | 102 | 1109 |
| Electrical apparatus for use of ultra-violet rays | F. F. Strong | 733,343 | July 7 | 1157 | 274 | 105 | 244 |
| Electrical apparatus. Forming coils for | E. L. Aiken | 744,018 | Nov. 17 | 2419 | 518 | 107 | 547 |
| Electrical-apparatus switch | E. R. Carichoff | 733,146 | July 7 | 795 | 192 | 105 | 168 |
| Electrical characters and means for forming same. System of | D. J. O'Brien | 740,585 | Oct. 6 | 396 | 83 | 106 | 1331 |
| Electrical coil | R. Varley | 736,177 | Aug. 11 | 2154 | 463 | 105 | 1460 |
| Electrical coils. Winding | R. Varley | 728,183 | May 12 | 2555 | 568 | 104 | 561 |
| Electrical coils. Winding | R. Varley | 743,779 | Nov. 10 | 1927 | 407 | 107 | 427 |
| Electrical communications. Apparatus for transmitting | C. M. Jacobs and A. H. Nicholson | 743,512 | Nov. 10 | 1440 | 301 | 107 | 324 |
| Electrical conductor. Flexible | L. Van Gilder and E. M. Post | 730,847 | June 9 | 2380 | 526 | 104 | 1639 |
| Electrical-conductor support | R. Orr and J. Morrison | 747,470 | Dec. 22 | 3977 | 894 | 107 | 2026 |
| Electrical conductors. Automatic coupling for | C. Mahon | 741,052 | Oct. 13 | 1228 | 278 | 106 | 1529 |
| Electrical conductors. Means for removing sleet, &c., from | E. E. Ries | 743,331 | Nov. 3 | 993 | 215, 216 | 107 | 212 |
| Electrical-conduit attachment | A. McMurtrie | 729,505 | May 26 | 4963 | 1100 | 104 | 1101 |
| Electrical-conduit coupling | A. McMurtrie | 729,506 | May 26 | 4965 | 1100 | 104 | 1102 |
| Electrical conduit. Split | E. N. Lake | 742,453 | Oct. 27 | 3996 | 897 | 106 | 2136 |
| Electrical connection | F. J. Russell | 746,580 | Dec. 8 | 2295 | 527 | 107 | 1612 |
| Electrical-connection binding-screw | G. W. Goodridge | 721,559 | Feb. 24 | 4021 | 914 | 102 | 1718 |
| Electrical connections. Swivel attachment-plug for | T. Van Aller | 740,952 | Oct. 6 | 1038 | 237 | 106 | 1468 |
| Electrical connector | J. G. Swain | 743,346 | Nov. 3 | 1026 | 221 | 107 | 219 |
| Electrical contact-brush and producing same | H. N. Motsinger | 722,606 | Mar. 10 | 1765 | 393 | 103 | 394 |
| Electrical contact-clamp | F. J. Esmond | 740,358 | Sept. 29 | 5400 | 1216 | 106 | 1218 |
| Electrical contacts. Means for accentuating | E. Thomson | 727,713 | May 12 | 1694 | 378, 379 | 104 | 382 |
| Electrical controller | G. C. Marx | 739,433 | Sept. 22 | 3689 | 821 | 106 | 837 |
| Electrical controlling apparatus | J. D. Ihlder | 742,031 | Oct. 20 | 3177 | 709 | 106 | 1954 |
| Electrical cut-out and regulator | H. Leitner and R. N. Lucas | 728,942 | May 26 | 3990 | 888, 889 | 104 | 898 |
| Electrical cut-out. Automatic | D. R. Bruce | 731,428 | June 23 | 3501 | 782 | 104 | 1905 |
| Electrical devices. Screw-attaching means for | H. T. Paiste | 738,059 | Sept. 1 | 985 | 219 | 106 | 215 |
| Electrical distributing system | L. Andrews | 726,837 | May 5 | 1 | 1, 2 | 104 | 3 |
| Electrical distribution | S. L. Naphtaly, E. C. Jones, and F. H. Varney. | 728,752 | May 19 | 3639 | 808 | 104 | 812 |
| Electrical distribution and transforming system | C. M. Palmer | 735,406 | Aug. 4 | 698 | 149 | 105 | 1129 |
| Electrical distribution. Multiple-series system of | F. H. Loveridge and C. D. Haskins | 721,128 | Feb. 17 | 3218 | 736, 737 | 102 | 1538 |
| Electrical-distribution regulating system | L. Lyndon | 735,990 | Aug. 11 | 1825 | 391 | 105 | 1390 |
| Electrical distribution. Self-regulating system of | A. S. Hubbard | 720,352 | Feb. 10 | 1742 | 395 | 102 | 1208 |
| Electrical-distribution system | J. L. Creveling | 719,753 | Feb. 3 | 624 | 141 | 102 | 953 |
| Electrical-distribution system | J. L. Creveling | 720,674 | Feb. 17 | 2363 | 541, 542 | 102 | 1349 |
| Electrical-distribution system | N. Rowe | 725,777 | Apr. 21 | 2533 | 575 | 103 | 1738 |
| Electrical-distribution system | A. D. Lunt | 728,259 | May 19 | 2713 | 605 | 104 | 615 |
| Electrical-distribution system | E. W. Rice, Jr | 728,299 | May 19 | 2802 | 620 | 104 | 636 |
| Electrical-distribution system | C. P. Steinmetz | 728,321 | May 19 | 2848 | 630 | 104 | 645 |
| Electrical-distribution system | C. P. Steinmetz | 728,322 | May 19 | 2851 | 630 | 104 | 646 |
| Electrical-distribution system | C. W. Stone | 728,325 | May 19 | 2856 | 631 | 104 | 647 |
| Electrical-distribution system | C. P. Steinmetz | 729,234 | May 26 | 4513 | 995 | 104 | 1006 |
| Electrical-distribution system | C. P. Steinmetz | 729,235 | May 26 | 4515 | 995 | 104 | 1006 |
| Electrical-distribution system | A. D. Lunt | 729,778 | June 2 | 470 | 105 | 104 | 1224 |
| Electrical-distribution system | M. O. Troy | 729,812 | June 2 | 536 | 118 | 104 | 1238 |
| Electrical-distribution system | S. B. Stewart, Jr | 735,171 | Aug. 4 | 245 | 48 | 105 | 1034 |
| Electrical-distribution system | G. S. Dunn | 735,352 | Aug. 4 | 591 | 122 | 105 | 1107 |
| Electrical-distribution system | O. B. Shallenberger | 740,189 | Sept. 29 | 5087 | 1143 | 106 | 1154 |
| Electrical-distribution system | A. E. Doman | 740,973 | Oct. 6 | 1080 | 245 | 106 | 1477 |
| Electrical-distribution system | J. H. Hallberg | 742,861 | Nov. 3 | 73 | 17 | 107 | 18 |
| Electrical-distribution system | J. H. Hallberg | 746,074 | Dec. 8 | 1399 | 313 | 107 | 1416 |
| Electrical-distribution system | J. H. Hallberg | 746,697 | Dec. 15 | 2523 | 580 | 107 | 1683 |
| Electrical diverter | A. C. Gilgen | 742,626 | Oct. 27 | 4318 | 972 | 106 | 2205 |
| Electrical elevator | R. C. Smith | 745,534 | Dec. 1 | 409 | 94 | 107 | 1186 |
| Electrical influence-machine | S. Lemström | 720,711 | Feb. 17 | 2434 | 557 | 102 | 1364 |
| Electrical interrupter | G. P. McDonnell | 720,729 | Feb. 17 | 2462 | 564, 565 | 102 | 1371 |

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| Invention. | Name. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | | Spec. | Dr'g. | Vol. | Page. |
| Electrical-knife-switch clip | C. D. Platt | 720,475 | Feb. 10 | 1950 | 446 | 102 | 1250 |
| Electrical loop-lines. Automatic bridge for | G. E. Brett | 734,456 | July 21 | 3242 | 763 | 105 | 718 |
| Electrical-machine brush-holder | J. F. McElroy | 747,890 | Dec. 22 | 4767 | 1077 | 107 | 2205 |
| Electrical-machine coil | I. De Kaiser | 747,595 | Dec. 22 | 4199 | 944 | 107 | 2077 |
| Electrical machine. Static | T. Archer | 744,707 | Nov. 24 | 3712 | 801, 802 | 107 | 840 |
| Electrical-machine synchronizing apparatus | P. M. Lincoln | 735,786 | Aug. 11 | 1427 | 307 | 105 | 1302 |
| Electrical machines and appliances. Winding of | R. Rongé | 728,766 | May 19 | 3661 | 815 | 104 | 816 |
| Electrical machines driven by steam-motors. Regulating device for | C. E. L. Brown | 720,661 | Feb. 17 | 2345 | 537 | 102 | 1345 |
| Electrical motor | H. Rowntree | 732,377 | June 30 | 5329 | 1181, 1182 | 104 | 2298 |
| Electrical oscillations. Detection of | L. H. Walter and J. A. Ewing | 741,570 | Oct. 13 | 2273 | 507, 508 | 106 | 1751 |
| Electrical outlet-box | H. Krantz | 726,945 | May 5 | 215 | 50 | 104 | 47 |
| Electrical outlet-box | H. Krantz | 740,663 | Oct. 6 | 521 | 115 | 106 | 1358 |
| Electrical propulsion of carriers. System for the | A. D. Swegle | 724,627 | Apr. 7 | 394 | 94 | 103 | 1253 |
| Electrical protective device | E. B. Ellicott | 727,764 | May 12 | 1789 | 401 | 104 | 402 |
| Electrical protector | C. A. Rolfe | 724,507 | Apr. 7 | 156 | 37 | 103 | 1203 |
| Electrical purposes. Liquid-resistance switch for | J. H. Woolliscroft | 719,549 | Feb. 3 | 247 | 58 | 102 | 875 |
| Electrical receptacle | P. H. Fielding | 745,173 | Nov. 24 | 4615 | 1001 | 107 | 1027 |
| Electrical receptacle | P. H. Fielding | 746,483 | Dec. 8 | 2127 | 489 | 107 | 1574 |
| Electrical-regulation system | M. Moskowitz | 746,558 | Dec. 8 | 2257 | 517 | 107 | 1602 |
| Electrical-regulation system | J. L. Creveling | 747,686 | Dec. 22 | 4371 | 987 | 107 | 2115 |
| Electrical regulator | C. P. Philbrick | 717,918 | Jan. 6 | 757 | 170 | 102 | 162 |
| Electrical resistance device or heater | J. F. Bölling | 725,663 | Apr. 21 | 2328 | 525, 526 | 103 | 1692 |
| Electrical rosette cut-out | C. D. Platt | 730,696 | June 9 | 2138 | 475 | 104 | 1588 |
| Electrical storage-cell | J. A. Lyons and E. C. Broadwell | 744,216 | Nov. 17 | 2818 | 602 | 107 | 631 |
| Electrical switch | R. L. Border | 736,063 | Aug. 11 | 1970 | 419 | 105 | 1420 |
| Electrical switch | A. E. Handy | 741,490 | Oct. 13 | 2112 | 470 | 106 | 1717 |
| Electrical switch | H. and R. Lomax and J. Tomlinson | 744,924 | Nov. 24 | 4088 | 881 | 107 | 918 |
| Electrical switch | G. J. Crossland | 747,537 | Dec. 22 | 4103 | 921 | 107 | 2055 |
| Electrical switch. Quick-break | F. A. La Roche | 718,775 | Jan. 20 | 2393 | 531 | 102 | 539 |
| Electrical testing apparatus | H. A. Lewis | 723,205 | Mar. 17 | 2886 | 647 | 103 | 642 |
| Electrical tools. Automatic switch-handle for | J. I. Ayer | 738,594 | Sept. 8 | 2099 | 458 | 106 | 467 |
| Electrical transformer | A. R. Everest | 730,893 | June 16 | 2492 | 552 | 104 | 1681 |
| Electrical transformers. Automatic cut-out device for | D. C. Conkling | 732,174 | June 30 | 4932 | 1096 | 104 | 2215 |
| Electrical windings from static strains. Means for protecting | J. Pearson and F. R. M. Cutcheon | 745,379 | Dec. 1 | 119 | 27, 28 | 107 | 1126 |
| Electrical-wire support | B. Cullen | 746,469 | Dec. 8 | 2099 | 483 | 107 | 1567 |
| Electrically-controlled lock | J. Corbett | 730,346 | June 9 | 1497 | 331, 332 | 104 | 1449 |
| Electrically-heated handle | R. A. Fliess | 744,739 | Nov. 24 | 3769 | 812 | 107 | 852 |
| Electricity for sectional circuits. Bar for collecting | H. Dolter | 748,053 | Dec. 29 | 5114 | 1155, 1156 | 107 | 2302 |
| Electricity. Generating | J. H. Reid | 736,016 | Aug. 11 | 1875 | 400, 401 | 105 | 1400 |
| Electricity in electric therapeutics and electric treatment. | L. Williams | 745,128 | Nov. 24 | 4502 | 974 | 107 | 1004 |
| Electricity-meter | L. J. Aron | 739,251 | Sept. 15 | 3331 | 739 | 106 | 744 |
| Electricity-meter | W. M. Mordey and G. C. Fricker | 739,695 | Sept. 22 | 4151 | 927, 928 | 106 | 937 |
| Electricity-meter | W. M. Mordey and G. C. Fricker | 741,527 | Oct. 13 | 2185 | 486 | 106 | 1732 |
| Electricity-meter prepayment attachment | C. O. Bastian | 740,216 | Sept. 29 | 5144 | 1154, 1155 | 106 | 1165 |
| Electrode | J. Hargreaves, J. W. Stubbs, and J. Kearsley. | 731,453 | June 23 | 3563 | 794 | 104 | 1918 |
| Electrode | W. R. Chipman | 732,047 | June 30 | 4671 | ..... | 104 | 2162 |
| Electrode | H. Blackman | 745,412 | Dec. 1 | 185 | 41 | 107 | 1139 |
| Electrode and conductor | C. E. Acker | 743,410 | Nov. 10 | 1209 | 250 | 107 | 273 |
| Electrode. Arc-lamp | H. Bremer | 743,236 | Nov. 3 | 808 | 177 | 107 | 169 |
| Electrode. Cataphoric | S. H. Linn | 725,731 | Apr. 21 | 2439 | 554 | 103 | 1716 |
| Electrode for electric-tube lamps | D. M. Moore | 745,367 | Dec. 1 | 96 | 32 | 107 | 1122 |
| Electrode for electrolytic apparatus. Secondary | P. Imhoff | 722,583 | Mar. 10 | 1727 | 384 | 103 | 386 |
| Electrode frame. Battery- | H. Cottrell | 722,946 | Mar. 17 | 2410 | 539 | 103 | 542 |
| Electrode. Reversible galvanic-battery | H. Cottrell | 722,947 | Mar. 17 | 2411 | 539 | 103 | 542 |
| Electrode. Secondary-battery | J. Hahmann | 724,856 | Apr. 7 | 825 | 190 | 103 | 1345 |
| Electrode. Storage-battery | L. Paget | 717,607 | Jan. 6 | 154 | 39 | 102 | 34 |
| Electrode. Storage-battery | L. Paget | 717,609 | Jan. 6 | 158 | 40 | 102 | 35 |
| Electrode. Storage-battery | T. A. Edison | 723,449 | Mar. 24 | 3343 | 749, 750 | 103 | 746 |
| Electrodes for electric accumulators. Producing | E. W. Jungner | 731,308 | June 16 | 3274 | 727, 728 | 104 | 1841 |
| Electrodes. Forming accumulator- | G. J. Scott | 726,468 | Apr. 28 | 3781 | 856 | 103 | 2011 |
| Electrodes. Manufacture of | J. J. Heilmann | 724,287 | Mar. 31 | 4973 | 1113 | 103 | 1097 |
| Electrodes. Preparing storage-battery | L. Paget | 717,608 | Jan. 6 | 156 | 40 | 102 | 35 |
| Electrodynamic equipment for schools | H. J. Evans and T. B. Hatch | 742,408 | Oct. 27 | 3919 | 881 | 106 | 2121 |
| Electrolytes. Applying heat to | C. F. Burgess and C. Hambuechen | 732,616 | June 30 | 5782 | 1282 | 104 | 2396 |
| Electrolytes. Preparing | W. Gardiner | 732,843 | July 7 | 265 | ..... | 105 | 59 |
| Electrolytic and mechanical interrupter. Combined | H. R. Smith | 727,471 | May 5 | 1209 | 267 | 104 | 261 |
| Electrolytic apparatus | M. Haas | 718,249 | Jan. 13 | 1347 | 299 | 102 | 305 |
| Electrolytic apparatus | C. J. Reed | 719,870 | Feb. 3 | 822 | 192 | 102 | 997 |
| Electrolytic apparatus | C. J. Reed | 719,871 | Feb. 3 | 824 | 193 | 102 | 998 |
| Electrolytic apparatus | C. J. Reed | 719,872 | Feb. 3 | 827 | 193 | 102 | 998 |
| Electrolytic apparatus | C. J. Reed | 719,873 | Feb. 3 | 830 | 194, 195 | 102 | 999 |
| Electrolytic apparatus | F. J. Briggs | 727,889 | May 12 | 2014 | 448, 449 | 104 | 446 |
| Electrolytic apparatus | L. Gurwitsch | 733,643 | July 14 | 1685 | 400 | 105 | 373 |
| Electrolytic apparatus | L. P. Burrows | 737,554 | Aug. 25 | 4712 | 1058 | 105 | 2041 |
| Electrolytic apparatus | G. and G. W. Bell | 737,566 | Sept. 1 | 10 | 3 | 106 | 5 |
| Electrolytic apparatus | W. M. Johnson | 742,443 | Oct. 27 | 3982 | 894 | 106 | 2133 |
| Electrolytic apparatus | E. Hannon | 742,863 | Nov. 3 | 76 | 18 | 107 | 18 |

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| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Electrolytic apparatus | H. B. Ford | 745,588 | Dec. 1 | 506 | 119 | 107 | 1205 |
| Electrolytic cell | R. Grisson | 719,791 | Feb. 3 | 693 | 160 | 102 | 969 |
| Electrolytic cell | R. Johanns | 724,580 | Apr. 7 | 303 | 74 | 103 | 1233 |
| Electrolytic cell | H. K. Moore | 728,274 | May 19 | 2749 | 610 | 104 | 625 |
| Electrolytic cells. Operating | E. A. Le Sueur | 723,398 | Mar. 24 | 3259 | 730 | 103 | 728 |
| Electrolytic deposition. Composition of matter for | E. D. Kendall | 724,107 | Mar. 31 | 4602 | ..... | 103 | 1023 |
| Electrolytic diaphragm | E. A. Byrnes | 735,464 | Aug. 4 | 829 | 177 | 105 | 1156 |
| Electrolytic diaphragm | I. L. Roberts | 741,592 | Oct. 13 | 2317 | 518 | 106 | 1760 |
| Electrolytic diaphragm and making same | H. Rodman | 720,741 | Feb. 17 | 2483 | ..... | 102 | 1375 |
| Electrolytic process | A. Brichaux | 738,094 | Sept. 1 | 1064 | 235 | 106 | 230 |
| Electrolytic process | E. Hannon | 742,864 | Nov. 3 | 79 | 18 | 107 | 19 |
| Electrolytic process | E. Hannon | 742,865 | Nov. 3 | 80 | 18 | 107 | 19 |
| Electrolytic processes. Apparatus for the continuous practice of | P. G. Salom | 727,457 | May 5 | 1178 | 260 | 104 | 254 |
| Electrolytic reduction of organic compounds by means of titanium compounds. | M. Moest, H. Hertlein, and E. Oppermann. | 742,797 | Oct. 27 | 4602 | ..... | 106 | 2267 |
| Electromagnet | W. Baxter, Jr | 731,741 | June 23 | 4092 | 914 | 104 | 2024 |
| Electromagnet | C. A. Brust | 732,273 | June 30 | 5130 | 1140 | 104 | 2257 |
| Electromagnet | I. G. Waterman | 733,097 | July 7 | 713 | 173 | 105 | 151 |
| Electromagnet | I. G. Waterman | 733,305 | July 7 | 1084 | 258 | 105 | 228 |
| Electromagnet | D. L. Lindquist | 733,549 | July 14 | 1519 | 362 | 105 | 338 |
| Electromagnet | A. Green | 735,755 | Aug. 11 | 1378 | 296 | 105 | 1291 |
| Electromagnet | W. M. Davis | 737,589 | Sept. 1 | 57 | 13 | 106 | 14 |
| Electromagnet | J. Duncan | 737,720 | Sept. 1 | 293 | 61 | 106 | 66 |
| Electromagnet | C. M. Hedman | 738,801 | Sept. 15 | 2528 | 556 | 106 | 573 |
| Electromagnet | D. L. Lindquist | 744,773 | Nov. 24 | 3822 | 824 | 107 | 863 |
| Electromagnetic brake | F. C. Newell | 725,985 | Apr. 21 | 2892 | 655, 656 | 103 | 1813 |
| Electromagnetic motor | A. Pol y Aguirre | 732,042 | Mar. 3 | 720 | 160 | 103 | 156 |
| Electromagnetic vibrating reed | S. F. Jones | 731,056 | June 16 | 2797 | 622, 623 | 104 | 1744 |
| Electromagnetic-wave receiver | R. A. Fessenden | 727,327 | May 5 | 947 | 206 | 104 | 205 |
| Electromagnetic-wave receiver | R. A. Fessenden | 727,331 | May 5 | 956 | 207, 208 | 104 | 206 |
| Electromagnetic-wave receiver | R. A. Fessenden. (Reissue) | 12,115 | May 26 | 4994 | 1109 | 104 | 1108 |
| Electromechanical movement | E. S. Lorimer | 718,212 | Jan. 13 | 1289 | 283, 284 | 102 | 292 |
| Electromedical apparatus | G. S. Rider | 720,483 | Feb. 10 | 1961 | 448 | 102 | 1253 |
| Electromobile charging device | C. D. Haskins | 735,505 | Aug. 4 | 905 | 192, 193 | 105 | 1174 |
| Electromotive-force regulator | B. G. Lamme | 740,147 | Sept. 29 | 5013 | 1126 | 106 | 1138 |
| Electromotors with rotating fields. Means for starting | P. J. M. Girault | 730,013 | June 2 | 904 | 201 | 104 | 1312 |
| Electroplating apparatus | J. Walters | 721,402 | Feb. 24 | 3745 | 852 | 102 | 1661 |
| Electroplating apparatus | A. R. Pritchard | 741,274 | Oct. 13 | 1657 | 374 | 106 | 1619 |
| Electroplating apparatus | C. T. Pratt | 742,131 | Oct. 20 | 3403 | 759 | 106 | 1998 |
| Electroplating small metallic articles. Apparatus for | J. F. Shelton | 737,162 | Aug. 25 | 3956 | 879 | 105 | 1877 |
| Electrostatic instrument | E. J. King | 731,787 | June 23 | 4176 | 931 | 104 | 2041 |
| Electrostatic motor | E. Thomson | 735,621 | Aug. 4 | 1125 | 238 | 105 | 1220 |
| Electrostatic separator | C. E. Dolbear | 724,679 | Apr. 7 | 489 | 117 | 103 | 1273 |
| Electrotherapeutic apparatus | W. H. Ames and E. E. Clement | 718,896 | Jan. 20 | 2609 | 583, 584 | 102 | 584 |
| Electrotherapeutic apparatus | S. B. Zink | 735,687 | Aug. 4 | 1253 | 265, 266 | 105 | 1248 |
| Electrotherapeutic apparatus. Hydro- | D. C. Fisher | 738,897 | Sept. 15 | 2703 | 597 | 106 | 612 |
| Electrotherapeutic appliance | W. B. Bassell | 740,385 | Oct. 6 | 2 | 1 | 106 | 1245 |
| Electrothermal diffuser | F. de Mare | 743,534 | Nov. 10 | 1484 | 310 | 107 | 334 |
| Electrothermally treating materials. Apparatus for | H. Maxim | 719,484 | Feb. 3 | 135 | 31 | 102 | 853 |
| Electrothermic instrument | A. J. Downes | 728,883 | May 26 | 3890 | 865 | 104 | 877 |
| Electrothermic ventilator | F. de Mare | 745,507 | Dec. 1 | 367 | 85 | 107 | 1178 |
| Electrotype plates and molds. Machine for planing | A. Elliott and M. Shaen | 718,245 | Jan. 13 | 1341 | 297 | 102 | 303 |
| Electrotyper's builder-iron | P. A. H. Reinisch | 735,587 | Aug. 4 | 1061 | 225 | 105 | 1206 |
| Electrotyper's connecting-hook | J. W. Cornelius and J. Niemer | 737,353 | Aug. 25 | 4331 | 965 | 105 | 1955 |
| Electrotyping. Machine for oxidizing matrices for | C. M. Oliver | 719,953 | Feb. 3 | 961 | 223 | 102 | 1027 |
| Electrotyping mechanism | C. W. Eberhard | 742,616 | Oct. 27 | 4301 | 969 | 106 | 2201 |
| Elevated carrier | O. O. Jones | 724,881 | Apr. 7 | 862 | 198 | 103 | 1353 |
| Elevated carrier | H. H. Drew | 741,236 | Oct. 13 | 1590 | 357, 358 | 106 | 1605 |
| Elevating and dumping apparatus | R. Hollopeter | 739,000 | Sept. 15 | 2864 | 636 | 106 | 646 |
| Elevating and supporting weights. Device for | E. Hornaday | 726,928 | May 5 | 183 | 42 | 104 | 41 |
| Elevating or hoisting apparatus | G. C. Mackrow and H. G. Cameron | 741,918 | Oct. 20 | 2940 | 655, 656 | 106 | 1906 |
| Elevator: *See* Automatic elevator. Belt-driven elevator. Casing and tubing elevator. Casing or tubing elevator. Coal-elevator. Compressed-air elevator. Corn or grain dump elevator. Dumping-elevator. Electric elevator. Electrical elevator. Grain-elevator. Hay-elevator. Hod-elevator. Hydraulic elevator. Ice-elevator. Material-elevator. Package-elevator. Painter's elevator. Plunger-elevator. Pneumatic elevator. Portable elevator. Sidewalk-elevator. Spiral elevator. Tidal elevator. Wagon-box elevator. Water-elevator. Water or grain elevator. | | | | | | | |
| Elevator | W. H. B. Teamer | 718,230 | Jan. 13 | 1319 | 291, 292 | 102 | 298 |
| Elevator | G. W. Nistle | 718,374 | Jan. 13 | 1581 | 349 | 102 | 353 |
| Elevator | N. Hiss | 719,114 | Jan. 27 | 3053 | 678, 679 | 102 | 690 |

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| Invention. | Name. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|---|
| | | | | Spec. | Dr'g. | Vol. | Page. |
| Elevator | A. B. Roney | 720,487 | Feb. 10 | 1967 | 449<br>450 | 102 | 1254 |
| Elevator | G. W. Kramer | 721,571 | Feb. 24 | 4064 | 922 | 102 | 1730 |
| Elevator | W. L. Holman | 722,364 | Mar. 10 | 1316 | 292 | 103 | 296 |
| Elevator | J. Rice | 724,504 | Apr. 7 | 152 | 36 | 103 | 1202 |
| Elevator | J. G. Scott | 725,491 | Apr. 14 | 1996 | 450<br>451 | 103 | 1609 |
| Elevator | J. T. Ham | 728,100 | May 12 | 2404 | 535 | 104 | 529 |
| Elevator | A. C. Smith | 729,433 | May 26 | 4848 | 1074 | 104 | 1075 |
| Elevator | A. C. Smith | 729,434 | May 26 | 4849 | 1074 | 104 | 1076 |
| Elevator | D. R. Macpherson | 733,238 | July 7 | 959 | 231<br>232 | 105 | 201 |
| Elevator | J. S. Mucklé | 733,864 | July 14 | 2103 | 496 | 105 | 458 |
| Elevator | O. Schüler | 734,371 | July 21 | 3097 | 729 | 105 | 689 |
| Elevator | J. F. White | 739,243 | Sept. 15 | 3315 | 735 | 106 | 741 |
| Elevator | J. F. Sanderson. (Reissue) | 12,157 | Sept. 15 | 3374 | 749<br>750 | 106 | 754 |
| Elevator | F. D. Potter | 741,827 | Oct. 20 | 2759 | 615 | 106 | 1870 |
| Elevator | W. Hamilton | 743,717 | Nov. 10 | 1812 | 382 | 107 | 403 |
| Elevator | W. H. Hultgren | 744,346 | Nov. 17 | 3049 | 655 | 107 | 681 |
| Elevator | N. Hiss and H. S. MacKaye | 747,707 | Dec. 22 | 4415 | 995 | 107 | 2126 |
| Elevator | A. and T. E. Winiarski | 748,449 | Dec. 29 | 5825 | 1327 | 107 | 2458 |
| Elevator | A. R. Willley | 748,551 | Dec. 29 | 6042 | 1368 | 107 | 2507 |
| Elevator alarm-signal | E. L. and G. Hail | 732,737 | July 7 | 72 | 20 | 105 | 18 |
| Elevator alarm-signal | E. L. and G. Hail | 743,493 | Nov. 10 | 1403 | 290 | 107 | 315 |
| Elevator and dump | J. W. King | 744,767 | Nov. 24 | 3813 | 822 | 107 | 861 |
| Elevator and dump. Combined | G. D. Walker | 740,609 | Oct. 6 | 447 | 97 | 106 | 1343 |
| Elevator apparatus | I. H. Venn | 728,338 | May 19 | 2882 | 636 | 104 | 652 |
| Elevator attachment | W. H. Dolbey | 743,258 | Nov. 3 | 856 | 186<br>187 | 107 | 179 |
| Elevator automatic stopping device | J. Kobos | 732,868 | July 7 | 303 | 76 | 105 | 67 |
| Elevator-bin | J. A. Jamieson | 745,017 | Nov. 24 | 4246 | 921 | 107 | 951 |
| Elevator-brake | J. P. McCurdy | 729,640 | June 2 | 208 | 47 | 104 | 1171 |
| Elevator-brake | J. Gavelek | 742,185 | Oct. 27 | 3504 | 782 | 106 | 2034 |
| Elevator brake and governor. Fluid-actuated | C. Hoff | 721,303 | Feb. 24 | 3554 | 808 | 102 | 1622 |
| Elevator brake attachment | G. W. Chamberlain | 720,403 | Feb. 10 | 1822 | 415 | 102 | 1225 |
| Elevator brake mechanism. Electric- | T. W. Eaton | 720,903 | Feb. 17 | 2752 | 634 | 102 | 1431 |
| Elevator-bucket | J. F. White | 740,499 | Oct. 6 | 228 | 45 | 106 | 1295 |
| Elevator-bucket | S. E. Flock | 746,486 | Dec. 8 | 2132 | 490 | 107 | 1575 |
| Elevator-cable guard | O. Greenwald | 735,093 | Aug. 4 | 85 | 21 | 105 | 1001 |
| Elevator-cage stop-latch | E. Pocher | 725,584 | Apr. 14 | 2153 | 488 | 103 | 1642 |
| Elevator-car-operating device | P. F. Foley | 742,623 | Oct. 27 | 4312 | 971 | 106 | 2203 |
| Elevator-car signaling apparatus | C. A. Reiners | 733,750 | July 14 | 1866 | 441<br>442 | 105 | 411 |
| Elevator controlling device | A. H. Buckelew | 724,662 | Apr. 7 | 451 | 110 | 103 | 1266 |
| Elevator controlling mechanism | T. W. Heermans | 728,228 | May 19 | 2654 | 593 | 104 | 603 |
| Elevator-door | E. McClure | 723,707 | Mar. 24 | 3811 | 857 | 103 | 842 |
| Elevator-door | E. McClure | 723,708 | Mar. 24 | 3812 | 857 | 103 | 842 |
| Elevator-door | H. Bitner | 723,813 | Mar. 31 | 4002 | 902 | 103 | 900 |
| Elevator-door | H. Bitner | 735,055 | Aug. 4 | 13 | 4 | 105 | 984 |
| Elevator-door automatically-operating device | C. W. Kirsch | 743,886 | Nov. 10 | 2122 | 454 | 107 | 468 |
| Elevator-door fastener | H. C. Clausen | 739,061 | Sept. 15 | 2975 | 660 | 106 | 670 |
| Elevator-door opening or closing device | H. M. Jenkins | 740,569 | Oct. 6 | 368 | 76 | 106 | 1325 |
| Elevator-door-operating device | J. L. Kail | 719,470 | Feb. 3 | 105 | 25 | 102 | 847 |
| Elevator-door-operating device | M. P. White and H. Steuer | 734,484 | July 21 | 3297 | 773 | 105 | 728 |
| Elevator-door-operating mechanism | H. Bitner | 735,056 | Aug. 4 | 15 | 4 | 105 | 984 |
| Elevator-door-operating mechanism | F. A. Winslow | 737,308 | Aug. 25 | 4253 | 946 | 105 | 1938 |
| Elevator-door-operating mechanism | F. K. Fassett | 738 176 | Sept. 8 | 1266 | 274<br>275 | 106 | 290 |
| Elevator-door-operating mechanism | H. C. Seipp | 744,118 | Nov. 17 | 2613 | 558 | 107 | 586 |
| Elevator-doors. Locking attachment for sidewalk | P. H. Jackson | 733,652 | July 14 | 1701 | 403 | 105 | 376 |
| Elevator-doors, &c. Operating mechanism for | F. K. Fassett | 730,896 | June 16 | 2498 | 554<br>555 | 104 | 1682 |
| Elevator driving mechanism | M. A. Clennam | 724,663 | Apr. 7 | 455 | 111 | 103 | 1266 |
| Elevator electric alarm | F. O. Kinnecom | 737,635 | Sept. 1 | 139 | 30 | 106 | 33 |
| Elevator electrical appliance | J. H. Roberts | 722,756 | Mar. 17 | 2072 | 464<br>465 | 103 | 474 |
| Elevator electrical control | J. D. Ihlder | 726,302 | Apr. 28 | 3472 | 787<br>788 | 103 | 1948 |
| Elevator electrical controlling system | C. O. Mailloux | 724,722 | Apr. 7 | 573 | 137 | 103 | 1291 |
| Elevator-frame | S. K. Dennis | 735,722 | Aug. 11 | 1317 | 283 | 105 | 1279 |
| Elevator-gate | C. Anderson | 719,071 | Jan. 27 | 2953 | 659<br>660 | 102 | 671 |
| Elevator-gate | W. H. Mechlin | 741,523 | Oct. 13 | 2179 | 484 | 106 | 1731 |
| Elevator-gate-operating device | C. W. Kirsch | 722,590 | Mar. 10 | 1737 | 386<br>387 | 103 | 388 |
| Elevator-gate-operating device | H. J. Guth | 736,090 | Aug. 11 | 2008 | 428 | 105 | 1429 |
| Elevator-gate-operating mechanism | J. E. W. Fogal | 724,385 | Mar. 31 | 5173 | 1159<br>1160 | 103 | 1139 |
| Elevator-gate-operating mechanism | J. E. W. Fogal | 725,236 | Apr. 14 | 1526 | 346<br>347 | 103 | 1508 |
| Elevator-gate-operating mechanism | C. L. Colby | 733,459 | July 14 | 1370 | 323 | 105 | 306 |
| Elevator-guard | C. D. B. Fisk and W. W. C. Spencer. | 728,453 | May 19 | 3078 | 680 | 104 | 693 |
| Elevator-guard | C. D. B. Fisk and W. W. C. Spencer. | 734,225 | July 21 | 2817 | 661 | 105 | 630 |
| Elevator hatch-covers. Automatic device for operating | S. E. Austin | 737,312 | Aug. 25 | 4261 | 948 | 105 | 1939 |
| Elevator-hatchway door-lock. Automatic | A. Magnuson and T. Eskilsson | 740,154 | Sept. 29 | 5024 | 1128 | 106 | 1141 |
| Elevator hoisting mechanism | T. W. Heermans | 727,136 | May 5 | 606 | 130<br>131 | 104 | 131 |
| Elevator indicating mechanism | F. S. Payne | 734,744 | July 28 | 3791 | 885 | 105 | 847 |
| Elevator-leg | L. Burmeister | 718,907 | Jan. 20 | 2635 | 591 | 102 | 589 |
| Elevator-locking device | D. C. Jenkins | 740,568 | Oct. 6 | 366 | 76 | 106 | 1325 |
| Elevator-locking device | H. M. Jenkins | 740,570 | Oct. 6 | 369 | 77 | 106 | 1326 |
| Elevator mechanism | A. Cowperthwait | 732,522 | June 30 | 5609 | 1243 | 104 | 2355 |
| Elevator mechanism | E. Wright | 734,249 | July 21 | 2862 | 671 | 105 | 639 |
| Elevator mechanism | G. Visco | 740,956 | Oct. 6 | 1049 | 239 | 106 | 1470 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|---|
| | | | | Spec. | Drg. | Vol. | Page. |
| Elevator mechanism | J. Dillon | 742,173 | Oct. 27 | 3482 | 778 | 106 | 2031 |
| Elevator-operating system. Electric- | W. Baxter, Jr | 743,426 | Nov. 10 | 1248 | 257 | 107 | 282 |
| Elevator or storage bin construction | B. H. Stahr | 727,706 | May 12 | 1685 | 376 | 104 | 380 |
| Elevator safety appliance | S. B. Trapp | 725,892 | Apr. 21 | 2732 | 622, 623 | 103 | 1781 |
| Elevator safety appliance | W. Lasar | 744,568 | Nov. 17 | 3439 | 740 | 107 | 764 |
| Elevator safety appliance. Electric | E. L. and G. Hail | 733,715 | July 14 | 1804 | 427 | 105 | 397 |
| Elevator safety appliance or attachment | G. Holger | 740,566 | Oct. 6 | 363 | 75 | 106 | 1324 |
| Elevator safety appliances. Electric system for | G. Hail | 719,463 | Feb. 3 | 89 | 21,22 | 102 | 844 |
| Elevator safety attachment | W. O. Day | 720,332 | Feb. 10 | 1705 | 387 | 102 | 1200 |
| Elevator safety-catch | J. Genisio | 734,318 | July 21 | 3013 | 709 | 105 | 670 |
| Elevator safety-clutch | F. D. Potter | 722,894 | Mar. 17 | 2332 | 522 | 103 | 526 |
| Elevator safety-clutch | J. A. Bridges | 733,455 | July 14 | 1365 | 322 | 105 | 305 |
| Elevator safety-cushion | W. D. Baker | 747,357 | Dec. 22 | 3793 | 853 | 107 | 1985 |
| Elevator safety device | E. H. Price | 719,692 | Feb. 3 | 498 | 112, 113 | 102 | 928 |
| Elevator safety device | W. N. Martin | 721,816 | Mar. 3 | 284 | 63, 64 | 103 | 63 |
| Elevator safety device | A. H. Meech | 722,736 | Mar. 17 | 2029 | 454 | 103 | 465 |
| Elevator safety device | A. H. Meech | 722,737 | Mar. 17 | 2035 | 455 | 103 | 466 |
| Elevator safety device | F. D. Potter | 722,893 | Mar. 17 | 2331 | 521 | 103 | 525 |
| Elevator safety device | E. H. Price | 725,132 | Apr. 14 | 1331 | 300 | 103 | 1467 |
| Elevator safety device | J. Drum and M. Doyle | 726,656 | Apr. 28 | 4165 | 939 | 103 | 2085 |
| Elevator safety device | J. Hosler | 729,344 | May 26 | 4708 | 1040, 1041 | 104 | 1047 |
| Elevator safety device | G. Hail | 729,575 | June 2 | 103 | 26 | 104 | 1148 |
| Elevator safety device | P. Bending | 730,865 | June 16 | 2421 | 535 | 104 | 1666 |
| Elevator safety device | W. H. Wilsey | 734,384 | July 21 | 3116 | 733, 734 | 105 | 692 |
| Elevator safety device | W. G. Miller | 737,440 | Aug. 25 | 4507 | 1011 | 105 | 1993 |
| Elevator safety device | G. Hail | 739,078 | Sept. 15 | 3007 | 667 | 106 | 676 |
| Elevator safety device | G. Hail | 739,782 | Sept. 22 | 4313 | 966 | 106 | 974 |
| Elevator safety device | W. S. Fulwider | 741,481 | Oct. 13 | 2098 | 466 | 106 | 1714 |
| Elevator safety device | F. H. Wilson | 742,542 | Oct. 27 | 4174 | 938 | 106 | 2173 |
| Elevator safety device | W. and J. Floss | 742,621 | Oct. 27 | 4309 | 971 | 106 | 2203 |
| Elevator safety device | F. D. Potter | 743,923 | Nov. 10 | 2185 | 471, 472 | 107 | 481 |
| Elevator safety device. Electric- | A. Sundh | 726,370 | Apr. 28 | 3612 | 819 | 103 | 1977 |
| Elevator safety device. Electric- | G. T. Rennerfelt | 732,586 | June 30 | 5731 | 1272 | 104 | 2383 |
| Elevator safety-stop | N. O. Lindstrom | 735,395 | Aug. 4 | 675 | 144, 145 | 105 | 1124 |
| Elevator safety stopping device | I. H. Venn | 729,022 | May 26 | 4140 | 917 | 104 | 929 |
| Elevator-shaft damper | J. A. Craig | 719,437 | Feb. 3 | 48 | 10, 11 | 102 | 835 |
| Elevator-shaft door-lock | J. E. Boyce and L. Shonnard | 726,018 | Apr. 21 | 2946 | 670 | 103 | 1824 |
| Elevator-shaft floor-covering and the lifting and deposition of same. | W. G. Kett and L. R. Hossenlopp | 722,850 | Mar. 17 | 2251 | 504 | 103 | 509 |
| Elevator-shaft safety-guard | W. Sheridon | 736,642 | Aug. 18 | 3002 | 663 | 105 | 1655 |
| Elevator signaling apparatus | J. McLean | 748,408 | Dec. 29 | 5744 | 1312 | 107 | 2440 |
| Elevator signaling apparatus | J. McLean | 748,409 | Dec. 29 | 5750 | 1312 | 107 | 2442 |
| Elevator stop device. Automatic | G. W. Nistle | 718,375 | Jan. 13 | 1584 | ..... | 102 | 354 |
| Elevator well-door | W. A. Cross | 727,098 | May 5 | 531 | 114 | 104 | 116 |
| Elevator-wells. Mechanism for opening or closing gates of | J. Rashkin | 745,384 | Dec. 1 | 129 | 29, 30 | 107 | 1128 |
| Elevators. Automatic control system for | B. N. Jones | 726,307 | Apr. 28 | 3493 | 791 | 103 | 1952 |
| Elevators. Electric controller for hydraulic | J. W. Moore | 733,553 | July 14 | 1527 | 364 | 105 | 340 |
| Elevators. Locking device for the shipper mechanism of | R. Thompson | 735,620 | Aug. 4 | 1123 | 238 | 105 | 1220 |
| Elevators. Rotatable grain-distributer for | J. C. Spangler | 747,897 | Dec. 22 | 4782 | 1080 | 107 | 2208 |
| Elevators, stairways, &c. Casing or housing for | J. J. Plucker | 734,606 | July 28 | 3527 | 825 | 105 | 795 |
| Ellipsograph | R. Carlton | 731,018 | June 16 | 2731 | 609 | 104 | 1731 |
| Elliptic spring | T. A. Shea | 718,734 | Jan. 20 | 2312 | 511 | 102 | 522 |
| Elliptical spring | E. B. Smith and E. Funk | 724,213 | Mar. 31 | 4815 | 1079 | 103 | 1066 |
| Embalmer's table | T. B. Hennessy | 723,605 | Mar. 24 | 3635 | 814 | 103 | 804 |
| Embankment-protector | E. M. Boynton | 722,445 | Mar. 10 | 1474 | 325 | 103 | 330 |
| Embossing-die | E. D. Macfee, Jr | 732,762 | July 7 | 114 | 31 | 105 | 28 |
| Embossing-machine | J. Kirschbaum | 741,914 | Oct. 20 | 2935 | 654 | 106 | 1905 |
| Embossing-molds. Preparing | E. O. Loveland | 733,856 | July 14 | 2086 | 493 | 105 | 454 |
| Embossing or punching machine | H. Casler | 735,709 | Aug. 11 | 1298 | 278, 279 | 105 | 1274 |
| Embossing-press | C. Seybold | 735,880 | Aug. 11 | 1523 | 326, 327 | 105 | 1324 |
| Embossing-roll automatic feed-stopping mechanism. | C. R. Baker | 731,091 | June 16 | 2865 | 637 | 104 | 1759 |
| Embroidering-machine | J. A. Groebli | 717,843 | Jan. 6 | 632 | 139, 140 | 102 | 135 |
| Embroidering-machine | R. Cornely | 728,370 | May 19 | 2927 | 646 | 104 | 661 |
| Embroidering-machine | F. Mueller | 735,559 | Aug. 4 | 1018 | 215, 216 | 105 | 1196 |
| Embroidering-machine work-holding attachment | J. Henderson | 721,126 | Feb. 17 | 3216 | 736 | 102 | 1537 |
| Embroidery and manufacturing same. Ornamented | E. U. Buff | 741,302 | Oct. 13 | 1733 | 387 | 106 | 1633 |
| Embroidery-frame | P. H. Walt | 737,804 | Sept. 1 | 466 | 103 | 106 | 105 |
| Embroidery-goods holder | W. N. Houden | 730,827 | June 9 | 2349 | 520 | 104 | 1633 |
| Embroidery goods. Means for holding | W. N. Houden | 730,826 | June 9 | 2348 | 520 | 104 | 1633 |
| Embroidery-hoop. Adjustable | H. A. Harmes | 744,070 | Nov. 17 | 2525 | 540 | 107 | 567 |
| Embroidery-machine | F. P. Ledreux | 736,612 | Aug. 18 | 2955 | 647, 648, 649 | 105 | 1647 |
| Embroidery-seam | C. E. Bentley | 726,245 | Apr. 28 | 3353 | 761 | 103 | 1923 |
| Embroidery-silk frame | M. V. Westbrook | 746,214 | Dec. 8 | 1656 | 368 | 107 | 1473 |
| Embroidery-silk. Reinforcing-tag for holding | F. H. Weaver | 737,181 | Aug. 25 | 4004 | 888 | 105 | 1886 |
| Embryotractor | W. A. Hill | 742,026 | Oct. 20 | 3170 | 708 | 106 | 1953 |
| Emergency-brake. Safety | W. T. Sears | 719,699 | Feb. 3 | 508 | 115 | 102 | 930 |
| Emery-wheel dressers. Hand device for holding | W. H. Gilbert | 746,068 | Dec. 8 | 1391 | 311 | 107 | 1414 |
| Emery-wheels. Disintegrating | J. Rice | 747,483 | Dec. 22 | 4000 | ..... | 107 | 2032 |
| Empyema drainage device | M. Chisholm | 733,152 | July 7 | 801 | 194 | 105 | 169 |
| Enameling-machine | H. Claus | 721,155 | Feb. 24 | 3276 | 749 | 102 | 1565 |
| Enameling. Work-holder for | S. H. Frist | 733,831 | July 14 | 2041 | 481 | 105 | 446 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| End-gate | A. J. Diggins | 718,196 | Jan. 13 | 1256 | 275 | 102 | 286 |
| End-gate | J. E. Gibbs | 719,107 | Jan. 27 | 3037 | 676 | 102 | 688 |
| End-gate | J. C. and C. C. Butler | 729,840 | June 2 | 589 | 130 | 104 | 1248 |
| End-gate and shoveling-board | F. J. Weston | 741,200 | Oct. 13 | 1521 | 343<br>344 | 106 | 1591 |
| End-gate and shoveling-board. Combined | F. J. Weston | 741,201 | Oct. 13 | 1524 | 344 | 106 | 1592 |
| End-gate. Dumping | H. Boyd | 723,815 | Mar. 31 | 4005 | 903 | 103 | 900 |
| End-gate fastener | W. R. Dunkel | 726,148 | Apr. 21 | 3161 | 715 | 103 | 1868 |
| End-gate fastener | W. H. Bailey | 731,739 | June 23 | 4090 | 913 | 104 | 2023 |
| End-gate fastener | W. F. Davis and J. C. Mikkelson | 733,165 | July 7 | 825 | 200 | 105 | 173 |
| End-gate fastener | D. E. Leonard | 745,205 | Nov. 24 | 4670 | 1017 | 107 | 1039 |
| End-gate fastening. Vehicle | W. K. Clarke | 743,452 | Nov. 10 | 1309 | 269 | 107 | 295 |
| End-gate fastening. Wagon | H. A. Schermerhorn | 732,965 | July 7 | 469 | 117 | 105 | 101 |
| End-gate lock | F. M. Oakes | 718,788 | Jan. 20 | 2415 | 536 | 102 | 543 |
| End-gate rod | J. H. Lyford | 723,890 | Mar. 31 | 4156 | 937 | 103 | 931 |
| End-gate. Vehicle | A. Fiscus | 718,115 | Jan. 13 | 1111 | 245 | 102 | 254 |
| End-gate. Wagon | F. G. Nagley | 718,786 | Jan. 20 | 2412 | 535 | 102 | 543 |
| End-gate. Wagon | A. C. Bowker | 728,846 | May 26 | 3829 | 852 | 104 | 867 |
| End-play device | H. Geisenhöner | 739,598 | Sept. 22 | 3971 | 886 | 106 | 897 |
| End-post pocket | A. Christianson | 720,223 | Feb. 10 | 1508 | 345 | 102 | 1158 |
| Endoscope or other optical instrument | R. H. Wappler | 723,790 | Mar. 24 | 3951 | 891 | 103 | 872 |
| Engine:<br>*See* Air and gas engine.<br>Beating-engine.<br>Blowing-engine.<br>Caloric-engine.<br>Carding-engine.<br>Compound engine.<br>Compound expansion-fluid engine.<br>Dental engine.<br>Electric engine.<br>Explosion-engine.<br>Explosive-engine.<br>Fluid-pressure engine.<br>Gas-engine.<br>Gas or explosive engine.<br>Gas or gasolene engine.<br>Gas or oil engine.<br>Gas or vapor engine.<br>Gasolene-engine.<br>Heat-engine.<br>Hot-air engine.<br>Hydrocarbon-engine.<br>Hydropneumatic engine.<br>Internal-combustion engine.<br>Kerosene-engine.<br>Locomotive-engine.<br>Mixing and bleaching engine.<br>Motive-power engine.<br>Multiple engine.<br>Multiple-expansion engine.<br>Oil-engine.<br>Oil or gas engine.<br>Oil-vapor or gas engine.<br>Oscillating engine.<br>Paper-mill engine.<br>Paper-pulp-refining engine.<br>Paper-stock-refining engine.<br>Petroleum-engine.<br>Pneumatic engine.<br>Portable engine.<br>Pulp-beating engine.<br>Pump-engine.<br>Pumping-engine.<br>Reciprocating-piston engine.<br>Refining-engine.<br>Rotary engine.<br>Rotary-cylinder engine.<br>Rotary expansion-engine.<br>Rotary explosive-engine.<br>Rotary fluid-engine.<br>Rotary gas-engine.<br>Rotary-piston engine.<br>Rotary steam-engine.<br>Rotating steam-engine.<br>Steam-engine.<br>Steam or similar engine.<br>Tandem engine.<br>Tandem compound engine.<br>Traction-engine.<br>Turbine-engine.<br>Vibratory engine. | | | | | | | |
| Engine | H. F. Shaw | 719,053 | Jan. 27 | 2907 | 651 | 102 | 661 |
| Engine | P. F. McMonegal | 721,908 | Mar. 3 | 463 | 101 | 103 | 102 |
| Engine | F. H. Sleeper | 722,259 | Mar. 10 | 1128 | 249 | 103 | 255 |
| Engine | W. A. Alsterlund | 725,911 | Apr. 21 | 2764 | 630 | 103 | 1787 |
| Engine | W. E. Kichline | 726,943 | May 5 | 207 | 49 | 104 | 46 |
| Engine | E. H. Amet | 727,562 | May 12 | 1384 | 312 | 104 | 317 |
| Engine | G. Colombo | 727,908 | May 12 | 2056 | 457 | 104 | 455 |
| Engine | T. Officer and H. H. Mercer | 728,283 | May 19 | 2765 | 614<br>615 | 104 | 629 |
| Engine | W. R. Haney | 731,565 | June 23 | 3767 | 840 | 104 | 1959 |
| Engine | J. J. E. Philips | 736,438 | Aug. 18 | 2606 | 572<br>573 | 105 | 1574 |
| Engine | A. F. Hall | 737,609 | Sept. 1 | 94 | 20, 21 | 106 | 23 |
| Engine | A. F. Hall | 737,610 | Sept. 1 | 98 | 21, 22 | 106 | 24 |
| Engine | W. S. McKinney | 741,531 | Oct. 13 | 2197 | 488<br>489<br>490 | 106 | 1735 |
| Engine | A. W. Ofeldt | 742,481 | Oct. 27 | 4040 | 906<br>907 | 106 | 2146 |
| Engine | W. T. Fox | 743,478 | Nov. 10 | 1371 | 281<br>282 | 107 | 308 |
| Engine and power-transmitting means therefor | P. Murray | 728,807 | May 19 | 3747 | 835<br>836 | 104 | 833 |
| Engine attachment. Traction- | J. Saunders and E. G. Rowlands | 741,379 | Oct. 13 | 1898 | 419 | 106 | 1672 |
| Engine-bed anchor device | C. E. Baker | 728,834 | May 26 | 3805 | 848 | 104 | 862 |
| Engine belt-guide. Traction- | W. H. George | 730,902 | June 16 | 2510 | 557 | 104 | 1685 |
| Engine body. Hydrocarbon-traction- | F. A. and H. F. Klocksiem | 731,689 | June 23 | 3994 | 892 | 104 | 2003 |
| Engine boiler. Straw-burning traction- | C. E. Chambers | 723,241 | Mar. 24 | 2956 | 663 | 103 | 670 |
| Engine. Combination internal-combustion and compressed or liquid gas or compressed or liquid air | F. Bryan and A. H. Bayley | 734,220 | July 21 | 2801 | 657 | 105 | 626 |
| Engine-controlling apparatus | R. J. Sheehy | 722,917 | Mar. 17 | 2365 | 529 | 103 | 533 |
| Engine-controlling apparatus | R. J. Sheehy | 723,413 | Mar. 24 | 3284 | 735 | 103 | 733 |
| Engine-controlling device. Automatic | H. J. Mohlenhoff | 740,454 | Oct. 6 | 135 | 27 | 106 | 1275 |
| Engine controlling means | O. C. Duryea and M. C. White | 735,863 | Aug. 11 | 1596 | 340<br>341 | 105 | 1340 |
| Engine controlling mechanism. Gas- | L. S. Chadwick | 744,486 | Nov. 17 | 3306 | 711 | 107 | 736 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Engine cooling apparatus. Internal-combustion- | G. McCadden | 748,001 | Dec. 29 | 5009 | 1132 | 107 | 2280 |
| Engine cooling attachment. Internal-combustion- | J. W. Sutton | 740,711 | Oct. 6 | 599 | 134 | 106 | 1376 |
| Engine cooling device. Explosion- | R. B. Weaver | 745,701 | Dec. 1 | 696 | 160 | 107 | 1247 |
| Engine cooling device. Explosive- | C. A. Bailey | 720,995 | Feb. 17 | 2934 | 672 | 102 | 1471 |
| Engine cooling device. Explosive- | M. Offenbacher | 734,356 | July 21 | 3071 | 723 | 105 | 683 |
| Engine cooling device. Explosive- | R. J. Voss | 737,048 | Aug. 25 | 3765 | 836 | 105 | 1836 |
| Engine cooling means. Explosive- | F. A. Law | 718,482 | Jan. 13 | 1794 | 399 | 102 | 397 |
| Engine cooling means. Explosive- | H. Gross | 719,326 | Jan. 27 | 3433 | 766 | 102 | 772 |
| Engine coupling. Traction- | W. H. Putnam | 731,707 | June 23 | 4028 | 899 | 104 | 2011 |
| Engine crank-shaft | R. B. Weaver | 745,700 | Dec. 1 | 695 | 159 | 107 | 1246 |
| Engine-cranks. Manufacturing | J. P. Brophy | 718,422 | Jan. 13 | 1669 | 368 | 102 | 372 |
| Engine current-breaker. Hydrocarbon- | G. R. Albaugh | 733,894 | July 14 | 2156 | 509 | 105 | 470 |
| Engine cylinder. Explosive- | L. M. Johnston | 722,846 | Mar. 17 | 2242 | 502 | 103 | 507 |
| Engine-cylinder lubricator | O. Luhr and T. Andresen | 723,290 | Mar. 24 | 3038 | 684 | 103 | 687 |
| Engine cylinder. Oil, spirit, or gas | H. Austin | 731,265 | June 16 | 3173 | 707 | 104 | 1818 |
| Engine cylinders. Apparatus for cooling gasolene- | D. C. Stover | 722,767 | Mar. 17 | 2095 | 469 | 103 | 478 |
| Engine driving-gear | C. Phillips | 725,285 | Apr. 14 | 1598 | 361 | 103 | 1523 |
| Engine electric igniter. Explosive- | G. A. Goodson | 725,556 | Apr. 14 | 2105 | {476 / 477 | {103 | 1630 |
| Engine electric igniter. Explosive- | G. A. Goodson | 725,644 | Apr. 14 | 2283 | 516 | 103 | 1669 |
| Engine electric igniter. Explosive- | A. L. Riker | 734,138 | July 21 | 2667 | 627 | 105 | 597 |
| Engine electric igniter. Gas- | G. J. Rathbun | 746,377 | Dec. 8 | 1949 | 445 | 107 | 1534 |
| Engine electric igniter. Hydrocarbon- | H. M. McCall | 728,747 | May 19 | 3633 | 807 | 104 | 810 |
| Engine electrical igniter. Explosive- | C. E. Sargent | 731,134 | June 16 | 2951 | 656 | 104 | 1775 |
| Engine electrical ignition apparatus. Gas- | W. E. Dow | 728,882 | May 26 | 3889 | 864 | 104 | 877 |
| Engine exhaust-box or silencer. Explosion- | A. Krebs | 746,527 | Dec. 8 | 2202 | 505 | 107 | 1590 |
| Engine exhaust-muffler | F. T. Cable | 738,160 | Sept. 8 | 1239 | 269 | 106 | 284 |
| Engine expansion-joint | A. T. Keller | 729,872 | June 2 | 652 | 144 | 104 | 1262 |
| Engine-fire-box attachment | W. J. Seavolt | 720,744 | Feb. 17 | 2486 | 572 | 102 | 1376 |
| Engine for derricks and cableways. Convertible | A. Lambert | 724,890 | Apr. 7 | 877 | 201 | 103 | 1357 |
| Engine for ringing bells or for other purposes | O. A. Alexander | 722,072 | Mar. 3 | 764 | 171 | 103 | 165 |
| Engine fuel-feed governor. Explosive- | I. Lauster | 729,613 | June 2 | 164 | 39 | 104 | 1160 |
| Engine fuel-feed regulator. Explosive- | C. A. Miller | 725,741 | Apr. 21 | 2466 | 558 | 103 | 1723 |
| Engine fuel-governor. Oil- | A. Krebs | 734,421 | July 21 | 3181 | 747 | 105 | 706 |
| Engine gasolene and air feed device. Gas- | R. P. Thompson and E. Koeb | 740,488 | Oct. 6 | 200 | 40 | 106 | 1288 |
| Engine guide-support. Locomotive- | J. Player | 722,892 | Mar. 17 | 2330 | 521 | 103 | 525 |
| Engine igniter apparatus. Gas- | W. P. Flint | 718,334 | Jan. 13 | 1518 | 337 | 102 | 341 |
| Engine igniter. Explosive- | T. B. Jeffery | 731,781 | June 23 | 4162 | 928 | 104 | 2038 |
| Engine igniter. Explosive- | W. H. Jones | 735,036 | July 28 | 4332 | 1007 | 105 | 959 |
| Engine igniter. Gas- | L. P. Mooers | 731,065 | Feb. 17 | 3061 | 703 | 102 | 1499 |
| Engine igniter. Gas- | J. Cereghino | 731,285 | Feb. 24 | 3529 | 803 | 102 | 1616 |
| Engine igniter. Gas- | J. MacHaffie | 729,499 | May 26 | 4954 | 1098 | 104 | 1099 |
| Engine igniter. Gas- | P. P. G. Hall, Jr | 737,923 | Sept. 1 | 731 | 158 | 106 | 160 |
| Engine igniter. Gasolene- | J. McCluer | 726,971 | May 5 | 285 | 64 | 104 | 61 |
| Engine igniter. Internal-combustion- | H. G. Mears and H. W. Aylward | 732,365 | June 30 | 5302 | 1175 | 104 | 2291 |
| Engine igniters. Current-distributer and circuit-breaker for gas- | T. B. Jeffery | 740,020 | Sept. 29 | 4788 | 1077 | 106 | 1090 |
| Engine igniting attachment. Explosive- | J. D. McFarland, Jr | 735,997 | Aug. 11 | 1842 | 395 | 105 | 1393 |
| Engine ignition-chamber. Gas- | A. A. Low | 725,104 | Apr. 14 | 1279 | {288 / 289 | {103 | 1456 |
| Engine ignition device. Explosion- | H. Guillou | 741,329 | Oct. 13 | 1786 | 397 | 106 | 1645 |
| Engine ignition device. Explosive- | W. Remington | 743,327 | Nov. 3 | 984 | 214 | 107 | 211 |
| Engine ignition-plug. Explosive- | W. Roche | 724,945 | Apr. 7 | 964 | 222 | 103 | 1375 |
| Engine incandescent igniter. Gas- | J. S. Lang | 737,158 | May 5 | 645 | 138 | 104 | 139 |
| Engine-indicator | O. Tuch | 737,298 | Aug. 25 | 4236 | 943 | 105 | 1934 |
| Engine indicator. Steam- | F. Aberle | 740,211 | Sept. 29 | 5136 | 1153 | 106 | 1164 |
| Engine indicator. Steam- | L. T. Snow | 743,944 | Nov. 10 | 2221 | 480 | 107 | 489 |
| Engine lubricating device | J. P. Kleber | 743,523 | Nov. 10 | 1462 | 306 | 107 | 329 |
| Engine-lubricator filler. Steam- | A. M. Crowl | 748,483 | Dec. 29 | 5898 | 1340 | 107 | 2473 |
| Engine lubricator. Gas- | H. Morningstar | 719,836 | Feb. 3 | 769 | 180 | 102 | 986 |
| Engine lubricator. Steam- | G. C. Full | 728,698 | May 19 | 3542 | 787 | 104 | 791 |
| Engine mixer. Explosive-gasolene- | G. W. Starr and J. H. Cogswell | 727,476 | May 5 | 1215 | 268 | 104 | 262 |
| Engine mixer. Gas- | H. F. Wallmann | 743,780 | Nov. 10 | 1928 | 408 | 107 | 428 |
| Engine mixer. Hydrocarbon- | C. C. Chamberlain | 742,774 | Oct. 27 | 4561 | 1034 | 106 | 2258 |
| Engine-muffler | R. P. Thompson | 725,379 | Apr. 14 | 1769 | 397 | 103 | 1559 |
| Engine muffler. Explosive- | R. C. Shepherd | 744,418 | Nov. 17 | 3182 | 682 | 107 | 710 |
| Engine muffler. Gas or gasolene | J. F. Kurtis and H. F. Miller | 718,131 | Jan. 13 | 1139 | 253 | 102 | 260 |
| Engine oil-cup | G. F. Clarke | 741,309 | Oct. 13 | 1742 | 389 | 106 | 1634 |
| Engine oil-injector. Gas- | R. P. Thompson | 741,986 | Oct. 20 | 3090 | 690 | 106 | 1937 |
| Engine or motor | F. W. Rogler | 724,333 | Mar. 31 | 5056 | 1131 | 103 | 1113 |
| Engine-piston | H. M. Quick | 725,138 | Apr. 14 | 1344 | 303 | 103 | 1469 |
| Engine piston. Steam- | J. Swan | 744,643 | Nov. 17 | 3551 | 766 | 107 | 786 |
| Engine piston. Steam- | J. Swan | 748,233 | Dec. 29 | 5446 | 1241 | 107 | 2374 |
| Engine platform. Traction- | D. R. Gardiner | 734,055 | July 21 | 2501 | 583 | 105 | 562 |
| Engine power-transmitting means | J. C. Blevney | 721,995 | Mar. 3 | 643 | 143 | 103 | 140 |
| Engine regulating device. Internal-combustion- | F. Reichenbach | 728,297 | May 19 | 2797 | 619 | 104 | 635 |
| Engine regulator. Gas- | V. G. Apple | 727,564 | May 12 | 1389 | 313 | 104 | 318 |
| Engine-reversing apparatus. Steam- | C. F. Saylor | 742,070 | Oct. 20 | 3302 | 735 | 106 | 1979 |
| Engine reversing-gear | J. G. Fairbanks and G. L. Sauer | 722,217 | Mar. 10 | 1049 | 231 | 103 | 239 |
| Engine reversing-gear. Gas- | M. H. Neff | 730,683 | June 9 | 2114 | 470 | 104 | 1582 |
| Engine reversing gear mechanism | J. P. Moskop | 737,001 | Aug. 25 | 3693 | 819 | 105 | 1821 |
| Engine reversing mechanism | C. E. Mack | 726,443 | Apr. 28 | 3731 | 846 | 103 | 2001 |
| Engine reversing mechanism | G. W. Anderson | 730,856 | June 16 | 2406 | 531 | 104 | 1663 |
| Engine sparker. Gas- | J. A. McGee | 741,923 | Oct. 20 | 2947 | 657 | 106 | 1908 |
| Engine sparking coil. Gas- | E. J. Stoddard | 743,405 | Nov. 3 | 1191 | 247 | 107 | 254 |
| Engine sparking device. Gas- | J. M. Wilson | 735,923 | Aug. 11 | 1699 | 362 | 105 | 1362 |
| Engine sparking igniter. Explosive- | A. Evensen | 721,873 | Mar. 3 | 403 | 89 | 103 | 88 |
| Engine sparking igniter. Explosive- | C. E. Duryea | 722,005 | Mar. 3 | 657 | 146 | 103 | 142 |
| Engine sparking igniter. Explosive- | E. Maerky | 727,399 | May 5 | 1068 | 232 | 104 | 231 |
| Engine sparking igniter. Explosive- | A. C. Mather | 728,950 | May 26 | 4005 | 891 | 104 | 901 |
| Engine sparking igniter. Explosive- | C. A. Stickney | 730,056 | June 2 | 974 | 218 | 104 | 1326 |
| Engine sparking igniter. Explosive- | W. C. Matthias | 735,674 | Aug. 4 | 1224 | 259 | 105 | 1241 |
| Engine sparking igniter. Explosive- | A. A. and D. E. Karcher | 736,737 | Aug. 18 | 3190 | 705 | 105 | 1694 |
| Engine sparking igniter. Gas- | B. L. Toquet | 737,532 | Aug. 25 | 4678 | {1049 / 1050 | {105 | 2034 |
| Engine sparking mechanism | A. M. Zimmerman | 724,649 | Apr. 7 | 427 | 103 | 103 | 1261 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|---|
| | | | | Spec. | Dr'g. | Vol. | Page. |
| Engine speed-regulator. Explosive- | L. A. Frayer | 720,126 | Feb. 10 | 1326 | 304 | 102 | 1122 |
| Engine speed-regulator. Explosive- | H. A. Gilman | 733,384 | July 14 | 1237 | 293 | 105 | 278 |
| Engine speed-regulator. Kerosene-oil- | F. C. Hirsch | 741,791 | Oct. 20 | 2704 | 602 | 106 | 1856 |
| Engine speed-regulator. Kerosene-oil- | F. C. Hirsch | 742,651 | Oct. 27 | 4361 | 981 | 106 | 2214 |
| Engine speed-regulator. Oil- | W. A. Whiting | 725,528 | Apr. 14 | 2056 | 465<br>466 | 103 | 1620 |
| Engine speed-regulator. Traction- | L. Branche, Jr | 721,005 | Feb. 17 | 2955 | 679 | 102 | 1474 |
| Engine starter. Automatic gas- | G. S. Billman | 742,566 | Oct. 27 | 4208 | 947<br>948 | 106 | 2180 |
| Engine starter. Gas- | R. A. Mitchell and L. L. Lewis | 728,123 | May 12 | 2446 | 545 | 104 | 539 |
| Engine starting device. Gas- | D. F. Graham and F. A. Fox | 743,637 | Nov. 10 | 1678 | 353 | 107 | 374 |
| Engine starting mechanism. Explosive- | C. N. Cook | 744,857 | Nov. 24 | 3975 | 857 | 107 | 895 |
| Engine starting mechanism. Oil or gasolene- | F. C. Hirsch | 735,356 | Aug. 4 | 429 | 84 | 105 | 1072 |
| Engine steering-gear. Traction- | G. F. Conner | 721,020 | Feb. 17 | 2982 | 686 | 102 | 1481 |
| Engine steering-gear. Traction- | W. F. McBeth | 721,724 | Mar. 3 | 126 | 28 | 103 | 28 |
| Engine steering mechanism. Traction- | G. E. Wilkinson | 740,504 | Oct. 6 | 235 | 46 | 106 | 1296 |
| Engine steering-wheel. Traction- | D. W. McLaughlin | 745,511 | Dec. 1 | 374 | 86 | 107 | 1179 |
| Engine-stop | W. H. Dunn | 720,683 | Feb. 17 | 2378 | 544<br>545 | 102 | 1353 |
| Engine-stop | J. H. Cary | 735,210 | Aug. 4 | 343 | 66 | 105 | 1055 |
| Engine-stop | J. H. Cary | 746,672 | Dec. 15 | 2484 | 568 | 107 | 1675 |
| Engine stroke-varying mechanism. Explosive- | A. F. Parks | 719,855 | Feb. 3 | 798 | 186 | 102 | 992 |
| Engine supporting-frame. Pumping- | E. T. Adams | 744,851 | Nov. 24 | 3966 | 854 | 107 | 893 |
| Engine synchronizing device. Duplex-steam- | E. M. Coryell | 741,013 | Oct. 13 | 1162 | 262<br>263 | 106 | 1514 |
| Engine-tender coaling device | F. J. McCalmont | 737,131 | Aug. 25 | 3904 | 867<br>868 | 105 | 1864 |
| Engine tender. Traction- | G. M. Nellans | 739,703 | Sept. 22 | 4165 | 931 | 106 | 940 |
| Engine tender. Traction- | T. H. Pitzer | 747,635 | Dec. 22 | 4283 | 963<br>964 | 107 | 2096 |
| Engine vapor feeder and throttle. Gas- | E. H. Rousseau | 731,238 | Feb. 24 | 3457 | 786 | 102 | 1601 |
| Engine vaporizer. Explosive- | G. A. Gemmer | 726,671 | Apr. 28 | 4192 | 946 | 103 | 2091 |
| Engine vaporizer. Explosive- | C. F. Pearson | 737,463 | Aug. 25 | 4546 | 1019 | 105 | 2003 |
| Engine vaporizer. Gas- | A. M. Zimmerman | 724,648 | Apr. 7 | 426 | 102 | 103 | 1261 |
| Engine vaporizer. Gasolene- | G. A. Ede | 720,336 | Feb. 10 | 1710 | 389 | 102 | 1201 |
| Engine vaporizer. Hydrocarbon- | V. J. Emery | 741,959 | Oct. 20 | 3031 | 675 | 106 | 1926 |
| Engine vaporizer. Internal-combustion- | O. B. Perkins | 731,218 | June 16 | 3099 | 687 | 104 | 1803 |
| Engine vaporizer or carbureter. Explosive- | H. W Tuttle | 719,536 | Feb. 3 | 219 | 51 | 102 | 870 |
| Engine wheel or disk. Steam- | J. Stumpf | 737,042 | Aug 25 | 3757 | 834 | 105 | 1834 |
| Engines. Air and gas mixer for explosive- | T. Charlton | 733,902 | July 14 | 2177 | 512 | 105 | 473 |
| Engines. Apparatus for preventing the racing of marine | E. Hope | 728,576 | May 19 | 3329 | 736 | 104 | 745 |
| Engines. Auxiliary fluid-pressure apparatus for instantly starting steam- | K. G. M. Reichel | 730,157 | June 2 | 1134 | 255 | 104 | 1358 |
| Engines. Balanced piston for steam- | D. E. Rice | 736,781 | Aug. 18 | 3273 | 723 | 105 | 1711 |
| Engines. Belt-tightener for traction- | H. C. Clay | 738,162 | Sept. 8 | 1243 | 269 | 106 | 285 |
| Engines. Charge-inlet device for explosive- | F. Charron and L. Girardot | 738,772 | Sept. 15 | 2458 | 540 | 106 | 558 |
| Engines. Circulating apparatus for internal-combustion | G. J. Murdock | 746,358 | Dec. 8 | 1918 | 439 | 107 | 1528 |
| Engines. Combined regulator and safety mechanism for explosive- | L. G. Woolley | 719,407 | Jan. 27 | 3588 | 801<br>802 | 102 | 804 |
| Engines. Commutator for causing the ignition of the charges in explosion | W. G. Wilson | 746,770 | Dec. 15 | 2654 | 613 | 107 | 1713 |
| Engines. Constant-level liquid-hydrocarbon vaporizer for oil- | C. M. Mohler | 741,810 | Oct. 20 | 2733 | 608<br>609 | 106 | 1863 |
| Engines. Controlling mechanism for internal-combustion | C. O. Hedstrom | 727,944 | May 12 | 2134 | 476 | 104 | 473 |
| Engines. Cooling attachment for internal-combustion | J. W. Sutton | 741,419 | Oct. 13 | 1960 | 434 | 106 | 1684 |
| Engines. Cooling means for gas- | C. F. Hitchcock | 737,737 | Sept. 1 | 339 | 72 | 106 | 77 |
| Engines. Cooling-tank for internal-combustion | C. O. White | 723,098 | Mar. 17 | 2672 | 601<br>602 | 103 | 598 |
| Engines. Detachable fuel-box for traction- | H. C. Clay | 737,209 | Aug. 25 | 4056 | 899 | 105 | 1896 |
| Engines. Detachable trunnion and supplemental wheel for traction- | H. C. Clay | 738,884 | Sept. 15 | 2682 | 591 | 106 | 608 |
| Engines. Electric igniter for explosion- | G. A. Goodson | 734,852 | July 28 | 4018 | 937<br>938 | 105 | 892 |
| Engines. Electric igniter for explosive- | G. A. Goodson | 734,851 | July 28 | 4014 | 937 | 105 | 892 |
| Engines. Electric igniter for hydrocarbon- | J. W. Packard | 741,365 | Oct. 13 | 1868 | 412 | 106 | 1666 |
| Engines. Electric igniter for internal-combustion | L. Jones | 736,734 | Aug. 18 | 3186 | 703<br>704 | 105 | 1693 |
| Engines. Electric igniting device for internal-combustion | F. R. McMullin | 717,902 | Jan. 6 | 729 | 163 | 102 | 155 |
| Engines. Electric sparker for explosion- | E. C. Richard | 740,924 | Oct. 6 | 988 | 223<br>224 | 106 | 1458 |
| Engines. Electrical sparking igniter for gas- | T. L. and T. J. Sturtevant | 740,781 | Oct. 6 | 752 | 169<br>170 | 106 | 1406 |
| Engines. Exhaust-coupling for double-cylinder | E. B. Gallaher | 742,409 | Oct. 27 | 3923 | 882 | 106 | 2122 |
| Engines. Feeding and igniting device for explosive- | W. Remington | 748,011 | Dec. 29 | 5027 | 1135 | 107 | 2284 |
| Engines. Fuel-mixing and charge-controlling device for explosive- | P. Gaeth and A. Griebel | 734,415 | July 21 | 3171 | 745 | 105 | 703 |
| Engines. Governor-block and oil-receptacle for explosive- | B. V. de Sutter | 743,977 | Nov. 10 | 2306 | 492 | 107 | 512 |
| Engines. Hoisting mechanism for portable or traction | F. Bender | 721,001 | Feb. 17 | 2951 | 677 | 102 | 1473 |
| Engines. Hydrocarbon mixer and regulator for | G. C Eskholme | 735,483 | Aug. 4 | 861 | 183<br>184 | 105 | 1163 |
| Engines. Igniter-operating mechanism for explosive- | T. C. Menges | 723,540 | Mar. 24 | 3520 | 787 | 103 | 781 |
| Engines. Means for controlling fluid-pressure | H. Swanton | 720,299 | Feb. 10 | 1641 | 375<br>376 | 102 | 1186 |
| Engines. Means for regulating the pressure in evaporators of cold-vapor | E. Josse | 726,433 | Apr. 28 | 3718 | 843 | 103 | 1998 |
| Engines. Means for supplying water to the pistons of gas- | H. Richter | 745,669 | Dec. 1 | 643 | 148 | 107 | 1235 |
| Engines. Mixing device for explosive- | H. F. Wallmann | 718,552 | Jan. 13 | 1965 | 430<br>431 | 102 | 438 |
| Engines. Rebound-preventing device for gas- | C. Schrotz | 735,912 | Aug. 11 | 1681 | 358 | 105 | 1358 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Engines. Reversing-gear for steam or other | H. Lentz | 733,058 | July 7 | 640 | 155 | 105 | 136 |
| Engines. Spark-igniting mechanism for explosive- | C. G. Annesley | 719,072 | Jan. 27 | 2955 | 660, 661 | 102 | 671 |
| Engines. Steam and governor connection for twin- | H. C. Clay | 724,438 | Apr. 7 | 34 | 9 | 103 | 1177 |
| Engines. Superheating the driving mediums of cold-vapor | A. Houkowsky | 740,859 | Oct. 6 | 883 | 197 | 106 | 1434 |
| Engines. System of producing electrical sparks for igniting the charges of explosive- | G. W. Euker | 722,176 | Mar. 3 | 951 | 211 | 103 | 201 |
| Engines. Variable cut-off for steam- | W. H. Bates and R. C. Douglass | 738,147 | Sept. 8 | 1186 | 261, 262 | 106 | 272 |
| Engines. Water-cooler for motive-power | E. L. Cooper and D. T. Davies | 739,293 | Sept. 22 | 3412 | 760 | 106 | 777 |
| Engines with explosive mixtures. Apparatus for supplying explosive- | C. G. Dean | 745,578 | Dec. 1 | 484 | 115 | 107 | 1200 |
| Engineer's alarm. Locomotive | E. Watson | 742,535 | Oct. 27 | 4162 | 935, 936 | 106 | 2171 |
| Engraved-plate wiper | F. E. Blaisdell | 742,091 | Oct. 20 | 3337 | 744 | 106 | 1985 |
| Engraved plates when printing therefrom. Wiper for cleaning the surfaces of | F. E. Blaisdell | 731,334 | June 16 | 3314 | 739 | 104 | 1849 |
| Engraver's block | F. Thirion | 740,713 | Oct. 6 | 601 | 134 | 106 | 1377 |
| Engraver's tool | E. C. Muller | 737,761 | Sept. 1 | 379 | 81 | 106 | 84 |
| Engraving | H. C. Osborn | 724,929 | Apr. 7 | 937 | 216 | 103 | 1370 |
| Engraving | N. S. Amstutz | 744,852 | Nov. 24 | 3968 | 855 | 107 | 893 |
| Engraving-machine | W. S. Eaton | 728,556 | May 19 | 3277 | 725, 726, 727 | 104 | 733 |
| Engraving-machine | W. T. Goodnow and W. S. Eaton | 729,758 | June 2 | 432 | 98, 99 | 104 | 1216 |
| Engraving-machine | R. Trentzsch | 732,472 | June 30 | 5512 | 1222 | 104 | 2335 |
| Engraving-machine | J. T. Austin | 732,694 | July 7 | 4 | 2 | 105 | 3 |
| Engraving-machine | I. R. Beam | 738,149 | Sept. 8 | 1189 | 262 | 106 | 272 |
| Engraving-machine | P. V. Avril, E. E. Marinier, and E. L. Navoit. | 743,052 | Nov. 3 | 446 | 97, 98, 99 | 107 | 94 |
| Engraving. Machine- | M. Barr | 732,154 | June 30 | 4895 | 1088 | 104 | 2208 |
| Engraving-machine cipher-type | A. E. Francis | 742,180 | Oct. 27 | 3495 | 780 | 106 | 2033 |
| Engraving-machine monogram-type | A. C. Francis | 735,358 | Aug. 4 | 602 | 124 | 105 | 1110 |
| Engraving-machine. Pantograph | M. Barr | 725,654 | Apr. 21 | 2318 | 523 | 103 | 1690 |
| Engraving-machine. Pantograph | M. Barr | 731,533 | June 23 | 3712 | 827 | 104 | 1949 |
| Engraving-machine. Pantograph | M. Barr | 741,442 | Oct. 13 | 1999 | 443, 444 | 106 | 1692 |
| Engraving-machine. Three-dimension | M. Barr | 736,475 | Aug. 18 | 2678 | 589 | 105 | 1589 |
| Engraving-machine tool-holder | A. E. Francis | 739,537 | Sept. 22 | 3852 | 862 | 106 | 873 |
| Engraving or carving machine | H. M. Albee | 734,792 | July 28 | 3885 | 906, 907, 908, 909 | 105 | 865 |
| Engraving processes. Screen or grating for half-tone photomechanical | H. Lyon | 727,816 | May 12 | 1885 | 420 | 104 | 419 |
| Ensilage-machine | E. W. Silver | 733,289 | July 7 | 1063 | 253 | 105 | 224 |
| Entomological, botanical, or natural-history specimens. Mount for | W. D. and R. W. Denton | 735,475 | Aug. 4 | 847 | 180 | 105 | 1160 |
| Entrance-closing apparatus | J. Wendler | 732,982 | July 7 | 498 | 123 | 105 | 107 |
| Envelop | M. L. Hinchman | 717,993 | Jan. 6 | 892 | 199 | 102 | 192 |
| Envelop | E. H. Christensen | 718,426 | Jan. 13 | 1674 | 370 | 102 | 374 |
| Envelop | F. P. Pidgeon | 722,038 | Mar. 3 | 714 | 159 | 103 | 154 |
| Envelop | W. N. Bebout | 722,076 | Mar. 3 | 772 | 173 | 103 | 166 |
| Envelop | J. Van Beers | 723,083 | Mar. 17 | 2653 | 598 | 103 | 594 |
| Envelop | A. E. Patterson | 725,866 | Apr. 21 | 2689 | 612 | 103 | 1772 |
| Envelop | F. S. Boedefeld | 729,123 | May 26 | 4310 | 952 | 104 | 963 |
| Envelop | S. N. Flieger | 729,318 | May 26 | 4662 | 1030 | 104 | 1037 |
| Envelop | L. W. Pritzkow | 736,014 | Aug. 11 | 1870 | 399 | 105 | 1399 |
| Envelop | P. E. Johannsen | 736,853 | Aug. 18 | 3419 | 756 | 105 | 1743 |
| Envelop | C. C. Peterson | 739,505 | Sept. 22 | 3803 | 852 | 106 | 863 |
| Envelop | J. H. Nelson | 739,615 | Sept. 22 | 4001 | 892 | 106 | 905 |
| Envelop, &c | W. Myers | 743,314 | Nov. 3 | 957 | 208 | 107 | 206 |
| Envelop and writing-sheet | A. H. Lewis, J. C. Shields, and A. G. Quimby. | 725,459 | Apr. 14 | 1933 | 433 | 103 | 1594 |
| Envelop. Clasp- | J. C. Kimsey | 744,562 | Nov. 17 | 3429 | 739 | 107 | 762 |
| Envelop-fastener | M. H. Bolsinger | 728,841 | May 26 | 3824 | 851 | 104 | 866 |
| Envelop-fastener | C. W. Allen | 729,832 | June 2 | 580 | 128 | 104 | 1246 |
| Envelop. File- | W. F. Crafts | 722,816 | Mar. 17 | 2190 | 488 | 103 | 497 |
| Envelop-machine | G. H. Haslop | 721,701 | Mar. 3 | 93 | 20 | 103 | 21 |
| Envelop-machine | F. B. Powers | 725,479 | Apr. 14 | 1967 | 443 | 103 | 1601 |
| Envelop-machines. Back-folder for | G. T. Lemelin | 738,553 | Sept. 8 | 2028 | 441 | 106 | 451 |
| Envelop-machines, paper-bag machines, &c. Adjustable folding-flap for | A. Tellschow | 746,898 | Dec. 15 | 2907 | 671 | 107 | 1770 |
| Envelop-opener | P. G. Muenchinger | 720,049 | Feb. 10 | 1176 | 267 | 102 | 1089 |
| Envelop-opener, folder, and rule. Combination | D. K. Alden | 742,373 | Oct. 27 | 3858 | 867 | 106 | 2109 |
| Envelop-opener or paper-cutter | W. O. Thompson | 719,906 | Feb. 3 | 886 | 208 | 102 | 1011 |
| Envelop or paper fastener | S. D. Ruth | 747,087 | Dec. 15 | 3271 | 745 | 107 | 1855 |
| Envelop. Postal | A. M. Pelletreau | 723,911 | Mar. 31 | 4201 | 946 | 103 | 942 |
| Envelop. Safety- | G. W. Fletcher | 720,413 | Feb. 10 | 1839 | 419 | 102 | 1229 |
| Envelop. Safety- | J. N. Tabler | 721,757 | Mar. 3 | 177 | 41 | 103 | 39 |
| Envelop. Safety- | E. C. Thumb | 726,375 | Apr. 28 | 3623 | 821 | 103 | 1979 |
| Envelop. Safety- | J. F. Naugle | 743,317 | Nov. 3 | 969 | 210 | 107 | 208 |
| Envelops. Making | J. West | 738,381 | Sept. 8 | 1695 | 367, 368, 369 | 106 | 381 |
| Envelops or the like. Machine for making | A. Tellschow | 747,021 | Dec. 15 | 3142 | 720 | 107 | 1822 |
| Envelops, paper bags, or the like. Machine for manufacturing | C. R. Bergmann | 746,917 | Dec. 15 | 2936 | 677, 678 | 107 | 1776 |
| Envelops, papers, &c. Holder for | A. Burson | 720,109 | Feb. 10 | 1293 | 296 | 102 | 1114 |
| Equalizer. Four-horse | J. W. Gamble | 733,832 | July 14 | 2042 | 481 | 105 | 446 |
| Equalizing mechanism for reciprocating machines | A. C. Eastwood | 741,470 | Oct. 13 | 2080 | 461 | 106 | 1710 |
| Eraser | H. B. Tooker | 745,084 | Nov. 24 | 4426 | 957 | 107 | 987 |
| Eraser-cleaner | R. J. Riley | 721,237 | Feb. 24 | 3456 | 786 | 102 | 1600 |
| Eraser. Combination- | E. M. Wilson | 726,208 | Apr. 21 | 3279 | 744 | 103 | 1892 |
| Eraser-holder | F. W. Hock | 739,259 | Sept. 15 | 3344 | 742 | 106 | 747 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|---|
| | | | | Spec. | Drg. | Vol. | Page. |
| Eraser. Rubber | F. A. Schultz | 732,658 | June 30 | 5866 | 1301 | 104 | 2412 |
| Eraser-shield | H. E. Gero | 739,062 | May 26 | 4212 | 931 | 104 | 943 |
| Erasing-shield | J. M. Keep | 742,445 | Oct. 27 | 3986 | 895 | 106 | 2134 |
| Etching apparatus | J. A. Holmström | 721,445 | Feb. 24 | 3817 | 868 | 102 | 1675 |
| Etching-machine | W. G. Thorpe | 740,204 | Sept. 29 | 5123 | 1150 | 106 | 1160 |
| Evaporating apparatus | O. M. Nilson | 720,465 | Feb. 10 | 1934 | 442 | 102 | 1247 |
| Evaporating apparatus | H. Howard | 728,395 | May 19 | 2967 | 653, 654 | 104 | 669 |
| Evaporating apparatus | W. C. Anderson | 737,812 | Sept. 1 | 483 | 107 | 106 | 108 |
| Evaporating apparatus | G. D. Harris | 743,383 | Nov. 3 | 1117 | 238 | 107 | 236 |
| Evaporating apparatus. Brine- | O. Sachse | 747,645 | Dec. 22 | 4303 | 967, 968 | 107 | 2100 |
| Evaporating apparatus. Liquid- | H. Deininger and H. André | 735,348 | Aug. 4 | 586 | 121 | 105 | 1106 |
| Evaporating apparatus. Liquid- | G. Stade | 745,921 | Dec. 1 | 1118 | 250 | 107 | 1337 |
| Evaporating liquor | E. N. Trump | 743,552 | Nov. 3 | 1045 | 224 | 107 | 222 |
| Evaporating-pan | J. E. Burnett | 720,323 | Feb. 10 | 1691 | 384 | 102 | 1197 |
| Evaporating-pan | E. R. Shaw | 722,636 | Mar. 10 | 1815 | 404 | 103 | 406 |
| Evaporative cooler or condenser | W. H. Miller | 748,296 | Dec. 29 | 5556 | 1267 | 107 | 2398 |
| Evaporator | E. R. Edson | 724,171 | Mar. 31 | 4730 | 1060 | 103 | 1049 |
| Evaporator | J. J. Coffey | 737,583 | Sept. 1 | 43 | 9 | 106 | 12 |
| Evaporator | H. J. Lyman | 744,867 | Nov. 24 | 3990 | 860 | 107 | 898 |
| Evaporator. Brine- | O. Sachse | 718,798 | Jan. 20 | 2432 | 539 | 102 | 547 |
| Evaporator for hot-air registers | M. V. Hayes | 738,438 | Sept. 8 | 1805 | 392 | 106 | 403 |
| Evaporator. Fruit, vegetable, or cereal | E. R. Goings | 722,693 | Mar. 17 | 1965 | 438, 439 | 103 | 452 |
| Evaporator. Salt-brine | H. Holmes | 730,210 | June 2 | 1224 | 273, 274 | 104 | 1377 |
| Evaporator. Solar | J. B. Blanchard | 737,551 | Aug. 25 | 4708 | 1057 | 105 | 2040 |
| Evaporator-tube | S. M. Lillie | 740,449 | Oct. 6 | 126 | 26 | 106 | 1273 |
| Excavating and dredging bucket or grapple | C. A. Marrder | 745,448 | Dec. 1 | 254 | 59, 60 | 107 | 1154 |
| Excavating apparatus | A. J. Mason | 729,195 | May 26 | 4443 | 980 | 104 | 991 |
| Excavating apparatus | J. G. Bump | 730,228 | June 9 | 1281 | 283, 284 | 104 | 1404 |
| Excavating apparatus | G. McKay | 730,558 | June 9 | 1881 | 421 | 104 | 1532 |
| Excavating apparatus. Rock- | C. T. Drake | 747,867 | Dec. 22 | 4729 | 1068 | 107 | 2196 |
| Excavating-bucket | H. L. Reynolds | 747,479 | Dec. 22 | 3990 | 898 | 107 | 2028 |
| Excavating-bucket | H. L. Reynolds | 747,480 | Dec. 22 | 3992 | 899 | 107 | 2029 |
| Excavating-bucket | H. L. Reynolds | 747,481 | Dec. 22 | 3995 | 899 | 107 | 2030 |
| Excavating-bucket | H. L. Reynolds | 747,482 | Dec. 22 | 3998 | 900 | 107 | 2031 |
| Excavating, conveying, and loading ballast. Machine for | A. Torrey. (Reissue) | 12,087 | Feb. 24 | 4230 | 961 | 102 | 1767 |
| Excavating cutting-machine | T. E. Daniels | 726,877 | May 5 | 80 | 21 | 104 | 20 |
| Excavating-machine | E. A. Mathers | 717,589 | Jan. 6 | 125 | 32 | 102 | 28 |
| Excavating-machine | D. W. Miller | 718,854 | Jan. 20 | 2516 | 560, 561 | 102 | 563 |
| Excavating-machine | C. N. Alderman | 719,408 | Jan. 27 | 3590 | 802 | 102 | 804 |
| Excavating-machine | F. M. Bisbee | 733,939 | July 21 | 2244 | 528, 529, 530 | 105 | 506 |
| Excavating-machine | T. H. Garland | 734,315 | July 21 | 3008 | 708 | 105 | 669 |
| Excavating-machine | D. S. White | 735,634 | Aug. 4 | 1148 | 243 | 105 | 1225 |
| Excavating-machine | T. E. Daniels | 740,095 | Sept. 29 | 4920 | 1103, 1104 | 106 | 1118 |
| Excavating-machine | F. M. Bisbee | 741,099 | Oct. 13 | 1312 | 301, 302, 303 | 106 | 1547 |
| Excavating-machine | W. Cole | 744,490 | Nov. 17 | 3313 | 713 | 107 | 738 |
| Excavating-machine | C. T. Drake | 747,868 | Dec. 22 | 4730 | 1068, 1069 | 107 | 2197 |
| Excavating-machine | C. T. Drake | 747,869 | Dec. 22 | 4733 | 1069 | 107 | 2197 |
| Excavating mechanism | W. Cole | 732,172 | June 30 | 4929 | 1096 | 104 | 2215 |
| Excavating mechanism | W. Cole | 744,491 | Nov. 17 | 3315 | 714 | 107 | 738 |
| Excavator | W. H. Fulcher | 717,835 | Jan. 6 | 613 | 136 | 102 | 131 |
| Excavator | P. Nielsen | 724,603 | Apr. 7 | 347 | 84 | 103 | 1243 |
| Excavator | W. E. and P. J. Maloney | 727,656 | May 12 | 1562 | 353 | 104 | 353 |
| Excavator | E. V. Grant and N. W. Shears | 728,391 | May 19 | 2959 | 652 | 104 | 668 |
| Excavator | P. J Raymond | 733,422 | July 14 | 1303 | 308 | 105 | 292 |
| Excavator | E. J. Beard | 745,137 | Nov. 24 | 4515 | 977, 978 | 107 | 1006 |
| Exercising and amusement apparatus. Child's | P. F. Chase | 726,028 | Apr. 21 | 2962 | 674 | 103 | 1827 |
| Exercising apparatus | F. D. Smith | 722,462 | Mar. 10 | 1509 | 332 | 103 | 338 |
| Exercising apparatus | A. J. Thornley | 723,625 | Mar. 24 | 3671 | 823 | 103 | 812 |
| Exercising apparatus | C. H. Roche | 725,876 | Apr. 21 | 2705 | 615, 616 | 103 | 1775 |
| Exercising apparatus | J. E. Nightingale | 726,095 | Apr. 21 | 3061 | 695 | 103 | 1848 |
| Exercising apparatus | H. M. Hansen | 732,740 | July 7 | 77 | 21 | 105 | 19 |
| Exercising apparatus | A. W. Urwick | 735,319 | Aug. 4 | 543 | 110 | 105 | 1097 |
| Exercising apparatus | G. Yoerger | 737,889 | Sept. 1 | 670 | 142 | 106 | 147 |
| Exercising apparatus | A. E. Terry | 743,204 | Nov. 3 | 743 | 163 | 107 | 155 |
| Exercising apparatus. Lung- | P. von Boeckmann | 734,252 | July 21 | 2870 | 672 | 105 | 640 |
| Exercising device | C. Hernsheim | 741,966 | Oct. 20 | 3050 | 680 | 106 | 1929 |
| Exercising device | W. H. Chellis and F. W. McAnanny | 742,393 | Oct. 27 | 3892 | 874 | 106 | 2116 |
| Exercising device and striking-bag support | A. A. Hendrickson | 724,473 | Apr. 7 | 101 | 24 | 103 | 1191 |
| Exercising-machine | M. B. Ryan | 730,477 | June 9 | 1745 | 391 | 104 | 1501 |
| Exercising-machine | W. H. Chellis and F. W. McAnanny | 735,065 | Aug. 4 | 30 | 9 | 105 | 988 |
| Exercising-machine | J. C. Korth | 740,443 | Oct. 6 | 114 | 24 | 106 | 1271 |
| Exercising-machine | F. H. Chlada | 745,154 | Nov. 24 | 4578 | 993 | 107 | 1017 |
| Exhaust-head | G. I. Roberts | 731,816 | June 23 | 4229 | 942 | 104 | 2054 |
| Exhaust-head | W. F. Warden | 745,930 | Dec. 1 | 1147 | 257 | 107 | 1344 |
| Exhaust mechanism | E. Karrer | 732,748 | July 7 | 93 | 25, 26 | 105 | 23 |
| Exhaust-silencer | M. Crawford | 732,567 | Mar. 10 | 1700 | 379 | 103 | 381 |
| Exhibit-frame for lace draperies | G. J. Bicknell | 732,158 | June 30 | 4904 | 1091 | 104 | 2209 |
| Exhibiting and vending machine | A. E. Bennett | 728,534 | May 19 | 3225 | 715, 716 | 104 | 723 |
| Exhibiting apparatus | E. Barthélemy | 733,796 | July 14 | 1954 | 461, 462 | 105 | 430 |

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| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Exhibiting apparatus. Merchandise- | T. R. Field | 729,563 | June 2 | 77 | 19, 20 | 104 | 1143 |
| Exhibiting-box | M. E. Francisco and J. F. Martin | 739,662 | Sept. 22 | 4098 | 913 | 106 | 925 |
| Exhibiting curtains for sale. Device for | H. Hay | 718,839 | Jan. 20 | 2493 | 555 | 102 | 558 |
| Exhibiting device. Goods- | M. J. Bebb and E. G. Eaton | 744,461 | Nov. 17 | 3267 | 700 | 107 | 728 |
| Exhibiting mechanism | S. Trepp | 735,176 | Aug. 4 | 254 | 51 | 105 | 1037 |
| Exhibiting reflected images. Apparatus for | W. K. Dickson | 732,836 | July 7 | 255 | 63, 64 | 105 | 57 |
| Exhibiting works of art. Device for | W. Wood | 721,767 | Mar. 3 | 190 | 44 | 103 | 42 |
| Exhibition apparatus | F. W. Kremer | 728,246 | May 19 | 2681 | 599, 600 | 104 | 609 |
| Exhibitor | G. W. Freese | 719,322 | Jan. 27 | 3426 | 764 | 102 | 770 |
| Exhibitor | A. G. and D. H. McCulloch | 719,843 | Feb. 3 | 777 | 182 | 102 | 988 |
| Exhibitor. Card, picture, or sign | J. B. Leatherbarrow | 737,940 | Sept. 1 | 764 | 167, 168 | 106 | 168 |
| Exhibitor. Curtain- | P., Jr., and H. Roush | 731,504 | June 23 | 3652 | 815 | 104 | 1938 |
| Exhibitor. Curtain- | D. J. Haviland and C. S. Sicklesteel | 746,506 | Dec. 8 | 2166 | 498 | 107 | 1582 |
| Exhibitor. Goods- | S. Stenger and J. C. Mallory | 734,444 | July 21 | 3223 | 759 | 105 | 715 |
| Expanding and flanging tool | L. D. Lovekin | 734,271 | July 21 | 2911 | 680, 681 | 105 | 651 |
| Expanding and flanging tool | L. D. Lovekin | 734,274 | July 21 | 2919 | 682 | 105 | 652 |
| Expanding and upsetting tool | L. D. Lovekin | 733,289 | Mar. 24 | 3036 | 683 | 103 | 686 |
| Expanding-tool | L. D. Lovekin | 734,272 | July 21 | 2913 | 681 | 105 | 651 |
| Expanding-tool | C. O. Schellenbach | 735,413 | Aug. 4 | 712 | 152 | 105 | 1132 |
| Expansion-bolt | W. C. Boone | 719,426 | Feb. 3 | 29 | 7 | 102 | 832 |
| Expansion-bolt | N. H. Steward | 724,216 | Mar. 31 | 4819 | 1080 | 103 | 1066 |
| Expansion-bolt | W. C. Boone | 739,124 | May 26 | 4312 | 952 | 104 | 963 |
| Expansion-bolt | C. Dorn | 737,555 | Aug. 25 | 4715 | 1058 | 105 | 2042 |
| Expansion-bolt | N. H. Steward | 741,983 | Oct. 20 | 3082 | 689 | 106 | 1935 |
| Expansion-joint | R. E. Vail | 748,546 | Dec. 29 | 6034 | 1366 | 107 | 2505 |
| Expectoration-pouch | E. L. Calahan | 743,826 | Nov. 10 | 2014 | 427 | 107 | 445 |
| Explosion-chambers. Apparatus for loading | F. Anschütz | 748,035 | Dec. 29 | 5071 | 1147 | 107 | 2294 |
| Explosion-chambers. Device for cleaning | F. Anschütz | 748,034 | Dec. 29 | 5070 | 1146 | 107 | 2293 |
| Explosion-engine | J. A. Ostenberg | 718,511 | Jan. 13 | 1880 | 412, 413 | 102 | 421 |
| Explosion-engine | L. F. Spitt | 725,789 | Apr. 21 | 2551 | 579 | 103 | 1742 |
| Explosion-engine | M. H. Rumpf | 727,455 | May 5 | 1172 | 259, 260 | 104 | 253 |
| Explosion-engine | L. M. Foster | 727,777 | May 12 | 1821 | 407 | 104 | 407 |
| Explosion-engine | J. C. White | 729,467 | May 26 | 4906 | 1087 | 104 | 1089 |
| Explosion-engine | M. Pivert | 730,695 | June 9 | 2136 | 474 | 104 | 1587 |
| Explosion-engine | K. Schäfferkötter | 731,507 | June 23 | 3660 | 816 | 104 | 1939 |
| Explosion-engine | G. F. Jaubert | 740,864 | Oct. 6 | 893 | 199, 200 | 106 | 1436 |
| Explosion-engine | F. H. Smith | 741,559 | Oct. 13 | 2250 | 501 | 106 | 1746 |
| Explosion-engine | W. C. Weatherholt | 746,212 | Dec. 8 | 1653 | 367 | 107 | 1473 |
| Explosion-motor. Double-acting four-cycle | A. Thiéry | 723,071 | Mar. 17 | 2627 | 591, 592, 593 | 103 | 588 |
| Explosive and making same | M. W. Beardsley | 727,062 | May 5 | 468 | ------ | 104 | 103 |
| Explosive charge | L. Gathmann | 726,901 | May 5 | 129 | 31 | 104 | 31 |
| Explosive-engine | H. J. Hurd | 718,933 | Jan. 20 | 2690 | 601, 602 | 102 | 601 |
| Explosive-engine | B. Niles | 719,249 | Jan. 27 | 3284 | 734 | 102 | 738 |
| Explosive-engine | J. Willoughby | 719,547 | Feb. 3 | 239 | 56 | 102 | 873 |
| Explosive-engine | H. W. Tuttle | 720,759 | Feb. 17 | 2508 | 578, 579 | 102 | 1381 |
| Explosive-engine | A. Evensen | 721,872 | Mar. 3 | 399 | 88 | 103 | 88 |
| Explosive-engine | F. W. Toedt | 722,774 | Mar. 17 | 2106 | 471 | 103 | 481 |
| Explosive-engine | C. W. Weiss | 723,956 | Mar. 31 | 4296 | 965 | 103 | 963 |
| Explosive-engine | A. Krastin | 726,226 | Apr. 21 | 3308 | 750 | 103 | 1899 |
| Explosive-engine | E. E. Williams | 731,001 | June 16 | 2697 | 601 | 104 | 1724 |
| Explosive-engine | W. Walke | 735,627 | Aug. 4 | 1133 | 240 | 105 | 1222 |
| Explosive-engine | J. D. Lyon | 738,690 | Sept. 8 | 2301 | 505, 506 | 106 | 508 |
| Explosive-engine | W. W. Tuck, A. A. Low, and A. Wassmann. | 738,860 | Sept. 15 | 2638 | 582 | 106 | 599 |
| Explosive-engine | W. J. Wright | 739,050 | Sept. 15 | 2956 | 655 | 106 | 666 |
| Explosive-engine | J. H. Redfield | 739,219 | Sept. 15 | 3264 | 724 | 106 | 729 |
| Explosive-engine | J. H. Redfield | 739,220 | Sept. 15 | 3270 | 724 | 106 | 731 |
| Explosive-engine | C. W. Sponsel | 741,178 | Oct. 13 | 1471 | 334 | 106 | 1575 |
| Explosive-engine | F. Sproehnle | 741,179 | Oct. 13 | 1475 | 335 | 106 | 1579 |
| Explosive-engine | W. J. Wright | 742,143 | Oct. 20 | 3424 | 763, 764 | 106 | 2002 |
| Explosive-engine | M. H. Roberts | 743,332 | Nov. 3 | 1001 | 216 | 107 | 214 |
| Explosive-engine | B. G. Holz | 744,342 | Nov. 17 | 3043 | 653 | 107 | 680 |
| Explosive-engine | H. Söhnlein | 744,881 | Nov. 24 | 4012 | 866 | 107 | 903 |
| Explosive-engine | R. Harris | 745,055 | Nov. 24 | 4353 | 940, 941 | 107 | 973 |
| Explosive-engine | C. R. Daellenbach | 745,422 | Dec. 1 | 203 | 46 | 107 | 1142 |
| Explosive-engine | C. R. Daellenbach | 745,423 | Dec. 1 | 206 | 47 | 107 | 1143 |
| Explosive-engine | W., C., and S. Hibbard | 746,701 | Dec. 15 | 2529 | 581 | 107 | 1685 |
| Explosive-engine | H. J. Hurd | 746,840 | Dec. 15 | 2794 | 644 | 107 | 1744 |
| Explosive-engine | B. Wright | 747,828 | Dec. 22 | 4637 | 1047 | 107 | 2176 |
| Explosive-engine | H. G. Underwood | 748,029 | Dec. 29 | 5062 | 1144 | 107 | 2392 |
| Explosive-engine. Oscillating-piston | J. A. Jenney | 725,087 | Apr. 14 | 1246 | 280, 281 | 103 | 1449 |
| Explosive liquids. Spout for vessels containing | G. Lichtenberg | 746,854 | Dec. 15 | 2818 | 650 | 107 | 1749 |
| Explosive-motor | H. Spühl | 742,079 | Oct. 20 | 3318 | 739, 740 | 106 | 1981 |
| Explosives, celluloid, or the like. Manufacture of | R. Robertson and W. Rintoul | 723,311 | Mar. 24 | 3078 | 692, 693 | 103 | 695 |
| Explosives. Making | H. Wasbers | 724,764 | Apr. 7 | 642 | ------ | 103 | 1305 |
| Explosives. Manufacturing safety- | A. McCracken | 730,288 | June 9 | 1397 | ------ | 104 | 1428 |
| Extensible case | E. G. Schriefer | 739,725 | Sept. 22 | 4208 | 941, 942 | 106 | 950 |
| Extensible round-top table | E. B. Gregory | 722,577 | Mar. 10 | 1715 | 381, 382 | 103 | 384 |

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| Invention. | Name. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|---|
| | | | | Spec. | Dr'g. | Vol. | Page. |
| Extension-bit | C. F. Seblom | 737,501 | Aug. 25 | 4621 | 1035 | 105 | 2020 |
| Extension-bit or drilling-tool | D. L. Luddington | 744,925 | Nov. 24 | 4090 | 881 | 107 | 919 |
| Extension-table | H. Johnson | 720,590 | Feb. 17 | 2195 | 509 | 102 | 1316 |
| Extension-table | C. J. Cook | 723,140 | Mar. 17 | 2751 | 618<br>619 | 103 | 613 |
| Extension-table | C. N. Smith | 724,961 | Apr. 7 | 998 | 229<br>230 | 103 | 1382 |
| Extension-table | J. F. Arnold | 726,838 | May 5 | 7 | 2 | 104 | 4 |
| Extension-table | H. Borgmann | 726,853 | May 5 | 32 | 8 | 104 | 10 |
| Extension-table | G. Palladino | 730,473 | June 9 | 1740 | 389 | 104 | 1500 |
| Extension-table | G. H. Wood | 730,850 | June 9 | 2385 | 527 | 104 | 1639 |
| Extension-table | H. Johnson | 732,354 | June 30 | 5286 | 1172 | 104 | 2288 |
| Extension-table | G. R. Roughley | 734,961 | July 28 | 4199 | 977 | 105 | 932 |
| Extension-table | L. Welker, Sr. | 735,008 | July 28 | 4290 | 998 | 105 | 950 |
| Extension-table | G. E. Russell | 737,492 | Aug. 25 | 4603 | 1031<br>1032 | 105 | 2016 |
| Extension-table | C. E. Smith | 738,367 | Sept. 8 | 1671 | 362 | 106 | 376 |
| Extension-table | H. Johnson | 741,910 | Oct. 20 | 2929 | 653 | 106 | 1904 |
| Extension-table | G. C. Calentine | 742,003 | Oct. 20 | 3120 | 696 | 106 | 1942 |
| Extension-table | A. M. Petersen | 745,115 | Nov. 24 | 4481 | 969<br>970 | 107 | 999 |
| Extension-table. Pedestal | J. Luger, Jr., and J. Muller | 741,049 | Oct. 13 | 1218 | 276 | 106 | 1526 |
| Exterminator | F. MacFarland | 724,305 | Mar. 31 | 5093 | 1120 | 103 | 1103 |
| Extinguisher | J. H. Simpson | 731,963 | June 23 | 4487 | 1001 | 104 | 2111 |
| Extracting apparatus | E. Heimann | 733,200 | July 7 | 884 | 214 | 105 | 185 |
| Extractor:<br>*See* Boiler-tube extractor. Centrifugal extractor. Cork-extractor. Pen-extractor. Root-extractor. Spike-extractor. Stopper-extractor. Stump-extractor. Tack-extractor. Tincture-extractor. Tube-extractor. Valve-extractor. Well-rod extractor. | | | | | | | |
| Eye. Apparatus for treating the | H. F. Garey | 723,456 | Mar. 24 | 3355 | 752 | 103 | 749 |
| Eye-forming machine | C. M. Lamb and J. W. Snedeker | 740,444 | Oct. 6 | 116 | 24 | 106 | 1271 |
| Eye-shade | W. F. Mahony | 729,500 | May 26 | 4955 | 1099 | 104 | 1100 |
| Eye-shade | T. Little | 733,721 | July 14 | 1814 | 430 | 105 | 400 |
| Eye-shade | O. B. Lester | 734,270 | July 21 | 2909 | 680 | 105 | 650 |
| Eye-testing devices. Cabinet for exhibiting | J. M. Johnston | 728,112 | May 12 | 2419 | 539 | 104 | 534 |
| Eye-testing devices. Cabinet for exhibiting | J. M. Johnston | 730,023 | June 2 | 923 | 206<br>207 | 104 | 1315 |
| Eye-testing instrument | C. F. Kautlehner | 745,627 | Dec. 1 | 573 | 133<br>134 | 107 | 1219 |
| Eyes. Means for inspecting or testing | J. E. Chambers | 745,784 | Dec. 1 | 840 | 190 | 107 | 1278 |
| Eyeglass | J. F. Volle | 722,059 | Mar. 3 | 746 | 166 | 103 | 161 |
| Eyeglass bow-spring | I. Fox | 730,450 | June 9 | 1695 | 380 | 104 | 1490 |
| Eyeglass-bridge | W. H. Ely | 744,317 | Nov. 17 | 3003 | 644 | 107 | 671 |
| Eyeglass-cases. Machine for covering | E. W. Lindquist | 721,054 | Feb. 17 | 3046 | 699 | 102 | 1496 |
| Eyeglass-clasp | G. Lowres | 737,943 | Sept. 1 | 770 | 168 | 106 | 169 |
| Eyeglass-fitting | J. C. Schmidt | 746,175 | Dec. 8 | 1586 | 354 | 107 | 1459 |
| Eyeglass-frame | A. S. Van Denburgh | 746,608 | Dec. 8 | 2346 | 538 | 107 | 1624 |
| Eyeglass-frame. Bar-spring | H. Tremblay | 733,520 | July 14 | 1476 | 351 | 105 | 329 |
| Eyeglass-guard | S. A. Bromberg | 722,080 | Mar. 3 | 776 | 174 | 103 | 167 |
| Eyeglass-guard | W. E. Cawood, Sr | 734,667 | July 28 | 3637 | 852 | 105 | 818 |
| Eyeglass-guard | J. C. Wells | 740,721 | Oct. 6 | 619 | 138 | 106 | 1380 |
| Eyeglass-holder | M. A. Jordan | 730,663 | June 9 | 2075 | 462 | 104 | 1573 |
| Eyeglass-holder | L. F. Adt | 735,431 | Aug. 4 | 762 | 162 | 105 | 1142 |
| Eyeglass-holder | M. A. Jordan | 746,844 | Dec. 15 | 2800 | 645 | 107 | 1745 |
| Eyeglass-mounting | C. Goodwin | 739,855 | Sept. 29 | 4456 | 1001 | 106 | 1021 |
| Eyeglass nose-clip | F. G. Schmidt | 741,842 | Oct. 20 | 2782 | 620 | 106 | 1875 |
| Eyeglass nose-guard | H. Borsch. (Reissue) | 12,070 | Jan. 6 | 1017 | 227 | 102 | 219 |
| Eyeglass nose-guard | A. G. French | 719,780 | Feb. 3 | 680 | 157 | 102 | 967 |
| Eyeglass nose-guard | R. B. Finch | 724,407 | Mar. 31 | 5213 | 1169 | 103 | 1147 |
| Eyeglass nose-guard | J. C. Nourie | 739,439 | Sept. 22 | 3697 | 823 | 106 | 839 |
| Eyeglass nose-piece | W. F. Kornemann | 743,175 | Nov. 3 | 686 | 151 | 107 | 144 |
| Eyeglass-spring | G. W. Wells | 729,464 | May 26 | 4903 | 1086 | 104 | 1089 |
| Eyeglass spring and guard-lock | H. S. Peters | 725,478 | Apr. 14 | 1966 | 443 | 103 | 1601 |
| Eyeglass spring. Folding- | F. Birkenstein | 742,384 | Oct. 27 | 3876 | 871 | 106 | 2112 |
| Eyeglasses | E. L. Lembke | 722,521 | Mar. 10 | 1620 | 357 | 103 | 364 |
| Eyeglasses | L. F. Adt | 725,910 | Apr. 21 | 2763 | 629 | 103 | 1787 |
| Eyeglasses | O. Gillette | 726,281 | Apr. 28 | 3430 | 780 | 103 | 1939 |
| Eyeglasses | G. H. Chapel | 727,747 | May 12 | 1748 | 393 | 104 | 393 |
| Eyeglasses | E. A. Lewis | 729,616 | June 2 | 167 | 40 | 104 | 1161 |
| Eyeglasses | C. F. Ingold | 730,459 | June 9 | 1717 | 384 | 104 | 1495 |
| Eyeglasses | G. A. Stiles | 730,716 | June 9 | 2169 | 482 | 104 | 1593 |
| Eyeglasses | C. C. Stone | 731,081 | June 16 | 2844 | 632 | 104 | 1755 |
| Eyeglasses | W. A. Vescelius | 732,473 | June 30 | 5513 | 1223 | 104 | 2335 |
| Eyeglasses | F. X. Gartland | 733,639 | July 14 | 1679 | 399 | 105 | 371 |
| Eyeglasses | W. C. Newman | 734,739 | July 28 | 3785 | 884 | 105 | 845 |
| Eyeglasses | E. E. Shreiner and B. R. Tucker | 735,164 | Aug. 4 | 229 | 46 | 105 | 1031 |
| Eyeglasses | W. Bausch | 735,334 | Aug. 4 | 566 | 115 | 105 | 1102 |
| Eyeglasses | H. E. Bonschur | 737,327 | Aug. 25 | 4291 | 953 | 105 | 1946 |
| Eyeglasses | W. E. Cawood | 737,827 | Sept. 1 | 515 | 113 | 106 | 115 |
| Eyeglasses | H. Brinkhaus | 740,624 | Oct. 6 | 466 | 102 | 106 | 1346 |
| Eyeglasses | F. F. Finch and I. E. Weil | 741,475 | Oct. 13 | 2089 | 463 | 106 | 1712 |
| Eyeglasses | H. E. Bonschur | 741,953 | Oct. 20 | 3015 | 669 | 106 | 1923 |
| Eyeglasses | B. M. Levoy | 742,458 | Oct. 27 | 4008 | 899 | 106 | 2139 |
| Eyeglasses | W. L. Bemis | 743,679 | Nov. 10 | 1746 | 368 | 107 | 389 |
| Eyeglasses | W. H. Weaser | 743,962 | Nov. 10 | 2255 | 485 | 107 | 498 |
| Eyeglasses | E. W. Bancroft | 744,278 | Nov. 17 | 2936 | 627 | 107 | 656 |
| Eyeglasses | L. Kleb | 746,341 | Dec. 8 | 1890 | 430<br>431 | 107 | 1522 |
| Eyeglasses | G. H. Mayer | 746,543 | Dec. 8 | 2231 | 511 | 107 | 1597 |
| Eyeglasses | F. Kreuter | 746,711 | Dec. 15 | 2546 | 584 | 107 | 1688 |
| Eyeglasses | J. R. Clayton | 747,141 | Dec. 15 | 3371 | 765 | 107 | 1877 |

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| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Eyeglasses | G. A. Stiles | 747,262 | Dec. 15 | 3596 | 812 | 107 | 1924 |
| Eyeglasses | J. W. Corley | 748,554 | Dec. 29 | 6046 | 1368 | 107 | 2508 |
| Eyeglasses or spectacles | G. F Applegate | 729,914 | June 2 | 713 | 159 | 104 | 1274 |
| Eyeglasses or spectacles | A. Akeson | 732,991 | July 7 | 515 | 128 | 105 | 110 |
| Eyeglasses or spectacles. Mounting for rimless | H. A. Grossman | 742,860 | Nov. 3 | 71 | 17 | 107 | 17 |
| Eyeglasses. Pendent-lens | G. F. Applegate | 732,251 | June 30 | 5086 | 1131 | 104 | 2247 |
| Eyelet | A. A. Kuehlhorn | 724,716 | Apr. 7 | 562 | 134 | 103 | 1289 |
| Eyelet | G. E. McCormack. (Reissue) | 12,111 | May 19 | 3775 | 842 | 104 | 839 |
| Eyelet | A. F. Mitchell | 743,909 | Nov. 10 | 2163 | 466 | 107 | 476 |
| Eyelet. Boot or shoe | J. Frye | 744,059 | Nov. 17 | 2503 | 536 | 107 | 563 |
| Eyelet-machine | I. W. Giles | 719,788 | Feb. 3 | 690 | 159 | 102 | 969 |
| Eyelet safety-tie | J. K. Thoma | 743,954 | Nov. 10 | 2243 | 483 | 107 | 495 |
| Eyelet-setting machine | E. B. Stimpson | 736,164 | Aug. 11 | 2132 | 457 / 458 | 105 | 1454 |
| Eyeleting-machine | G. Knight | 719,475 | Feb. 3 | 114 | 27 | 102 | 849 |
| Eyeleting-machine | W. L. Whittemore | 729,825 | June 2 | 571 | 126 | 104 | 1244 |
| Eyeleting-machine | E. B. Stimpson | 736,163 | Aug. 11 | 2130 | 457 | 105 | 1454 |
| Fabric: *See* Carpet fabric. Fence fabric. Interlooped fabric. Metal fabric. Metallic fabric. Paper fabric. Paraffin fabric. Pattern fabric. Pile fabric. Rubber fabric. Terry fabric. Waterproof fabric. Wire fabric. Woven fabric. | | | | | | | |
| Fabric | A. M. Lougee | 737,751 | Sept. 1 | 360 | 77 | 106 | 81 |
| Fabric-coating machine | J. N. Myers | 738,347 | Sept. 8 | 1635 | 354 | 106 | 367 |
| Fabric cutting and folding machinery | E. H. Cottrell | 743,061 | Nov. 3 | 469 | 102 / 103 | 107 | 97 |
| Fabric-finishing machine | M. Ratignier and M. Clerc-Renaud | 727,443 | May 5 | 1157 | 255 | 104 | 250 |
| Fabric-folding machine | A. Dauvergne | 727,304 | May 5 | 900 | 195 | 104 | 194 |
| Fabric-marking apparatus | D. Anderson | 741,611 | Oct. 20 | 2355 | 527 | 106 | 1783 |
| Fabric-marking machine | A. J. Schmiedl | 719,516 | Feb. 3 | 179 | 42 | 102 | 861 |
| Fabric-milling machine | J. D. Asquith | 746,912 | Dec. 15 | 2927 | 675 | 107 | 1774 |
| Fabric-picking table | E. Zenger | 737,990 | Sept. 1 | 877 | 192 | 106 | 191 |
| Fabric-pin | G. W. McGill | 718,272 | Jan. 13 | 1404 | 312 / 313 | 102 | 317 |
| Fabric-pin | G. W. McGill | 734,735 | July 28 | 3780 | 882 | 105 | 844 |
| Fabric-racking machine | H. Bittner | 731,014 | June 16 | 2726 | 607 / 608 | 104 | 1730 |
| Fabric smoothing and ironing apparatus | G. B. Benns | 723,192 | Mar. 17 | 2866 | 643 | 103 | 638 |
| Fabric-stretching rollers | W. Birch | 731,745 | June 23 | 4100 | 916 | 104 | 2025 |
| Fabric-turfing machine | M. W. Pitner | 730,152 | June 2 | 1127 | 253 | 104 | 1356 |
| Fabrics. Border for the edges of | G. W. Merrow | 725,113 | Apr. 14 | 1296 | 292 | 103 | 1460 |
| Fabrics. Composition for coating | M. G. Peters and J. A. Shepherd | 718,151 | Jan. 13 | 1173 | ------ | 102 | 268 |
| Fabrics. Giving lisle-thread finish to vegetable | A. N. Dubois | 723,147 | Mar. 17 | 2761 | ------ | 103 | 615 |
| Fabrics. Machine for shaking out and opening textile | D. Welsh | 741,750 | Oct. 20 | 2624 | 586 / 587 | 106 | 1839 |
| Fabrics. Machine for shaping and trimming pieces of | H. Bryce | 748,476 | Dec. 29 | 5885 | 1337 / 1338 | 107 | 2471 |
| Fabrics. Manufacturing | A. Oesterheld | 722,246 | Mar. 10 | 1106 | ------ | 103 | 251 |
| Fabrics. Ornamenting | L. Pauly | 735,575 | Aug. 4 | 1044 | 222 | 105 | 1202 |
| Fabrics. Producing perforated or open-work patterns in | C. Casanovas y Amat | 725,823 | Apr. 21 | 2617 | 595 | 103 | 1755 |
| Fabrics. Rolls for compound indenting of sheet | J. Arkell | 728,829 | May 26 | 3797 | 846 | 104 | 860 |
| Fabrics. Thread-and-cord edge-finish for | H. A. Klemm | 726,311 | Apr. 28 | 3502 | 792 | 103 | 1954 |
| Face-shield. Sanitary | E. Dempsey | 737,591 | Sept. 1 | 66 | 13 | 106 | 17 |
| Facial defects. Device for correcting | A. C. Cloud | 724,812 | Apr. 7 | 737 | 173 | 103 | 1328 |
| Facing-block | E. E. Reilly and M. Burke | 723,730 | Mar. 24 | 3853 | 866 | 103 | 851 |
| Fair-stitch machine | E. F. Mower | 723,898 | Mar. 31 | 4171 | 939 | 103 | 935 |
| Fall-rope carrier | M. Bradfield | 723,816 | Mar. 31 | 4006 | 903 | 103 | 901 |
| Fall-rope carrier and operating device therefor | A. Lambert and J. G. Delaney | 722,518 | Mar. 10 | 1614 | 356 | 103 | 363 |
| Fan | W. G. Shults | 720,630 | Feb. 17 | 2289 | 525 | 102 | 1333 |
| Fan | W. E. Coleman | 721,156 | Feb. 24 | 3278 | 749 / 750 | 102 | 1566 |
| Fan | W. E. Coleman | 721,157 | Feb. 24 | 3279 | 750 | 102 | 1566 |
| Fan | C. A. Eck | 723,994 | Mar. 31 | 4381 | 983 | 103 | 979 |
| Fan | C. W. Lund | 725,107 | Apr. 14 | 1284 | 290 | 103 | 1457 |
| Fan | L. D. Nelke | 725,984 | Apr. 21 | 2890 | 655 | 103 | 1812 |
| Fan | C. A. Eck | 730,890 | June 16 | 2479 | 550 | 104 | 1679 |
| Fan | H. M. Kissling | 746,524 | Dec. 8 | 2198 | 504 | 107 | 1589 |
| Fan attachment | W. C. Norman | 719,688 | Feb. 3 | 488 | 110 | 102 | 925 |
| Fan attachment | B. Klein | 730,271 | June 9 | 1366 | 300 | 104 | 1421 |
| Fan attachment | W. C. Norman | 743,548 | Nov. 10 | 1504 | 314 | 107 | 338 |
| Fan attachment | G. Donnelly | 748,353 | Dec. 29 | 5644 | 1286 | 107 | 2417 |
| Fan. Automatic | D. C. Beltz | 730,736 | June 9 | 2194 | 489 | 104 | 1599 |
| Fan. Automatic | W. H. Vaufossen | 745,267 | Nov. 24 | 4774 | 1042 | 107 | 1060 |
| Fan construction | W. W. Burnes | 741,107 | Oct. 13 | 1333 | 306 | 106 | 1551 |
| Fan. Electric | R. P. Chandler | 722,208 | Mar. 10 | 1030 | 227 | 103 | 234 |
| Fan. Electrically-driven centrifugal blast | H. K. Grüll | 725,558 | Apr. 14 | 2109 | 478 | 103 | 1631 |
| Fan. Fly | F. R. Womeldorf | 736,469 | Aug. 18 | 2659 | 584 | 105 | 1585 |
| Fan. Foot-power | F. Marak | 732,363 | June 30 | 5299 | 1174 | 104 | 2291 |
| Fan for hammocks or cots. Self-acting | G. D. McElwee | 722,034 | Mar. 3 | 704 | 157 | 103 | 152 |
| Fan motor. Electrical ceiling | W. F. Phelps | 724,498 | Apr. 7 | 145 | 34, 35 | 103 | 1200 |
| Fan or blower. Centrifugal | J. Verner | 735,001 | July 28 | 4280 | 996 | 105 | 948 |
| Fan-sticks to fan-tops. Machine for fastening | L. E. Elson | 726,661 | Apr. 28 | 4174 | 942 | 103 | 2087 |
| Fan. Toilet | A. H. Miller | 747,996 | Dec. 29 | 4997 | 1129 | 107 | 2277 |
| Fans. Electric motor for ceiling | P. Swan | 730,985 | June 16 | 2662 | 593 | 104 | 1717 |
| Fans. Electric motor for ceiling | P. Swan | 732,602 | June 30 | 5757 | 1277 | 104 | 2390 |
| Fans. Means for supporting or carrying the inclosing casings of centrifugal | S. C. Davidson | 743,693 | Nov 10 | 1766 | 373 / 374 | 107 | 393 |
| Fans or other objects. Oscillatory support for | J. Devine | 732,341 | June 30 | 5256 | 1166 | 104 | 2282 |
| Fanning-mill | W. Sperry | 735,041 | July 28 | 4344 | 1010 | 105 | 961 |
| Fanning-mill | W. Sperry | 735,042 | July 28 | 4346 | 1011 | 105 | 961 |
| Fare-box | J. H. Coleman | 739,832 | Sept. 29 | 4408 | 989 | 106 | 1011 |

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| Fare-indicator | O. Kuntzen and A. Kahle | 718,259 | Jan. 13 | 1365 | 303, 304 | 102 | 309 |
| Fare-register | J. F. Ohmer | 718,869 | Jan. 20 | 2563 | 571, 572 | 102 | 574 |
| Fare-register | J. W. Fowler | 723,377 | Mar. 24 | 3226 | 723, 724 | 103 | 721 |
| Fare-register | O. N. Moore | 737,263 | Aug. 25 | 4166 | 928 | 105 | 1920 |
| Fare-register-operating device | B. B. Moad | 736,861 | Aug. 18 | 3431 | 760 | 105 | 1745 |
| Fare-registers. Means for operating | J. F. Ohmer | 718,868 | Jan. 20 | 2560 | 571 | 102 | 574 |
| Fare-registers. Mechanism for operating | J. F. Ohmer and H. Tyler | 718,867 | Jan. 20 | 2559 | 570, 571 | 102 | 573 |
| Fare-registering apparatus | G. A. Owen | 723,907 | Mar. 31 | 4196 | 945 | 103 | 941 |
| Farm-gate | J. J. Sigafoos | 719,150 | Jan. 27 | 3109 | 692 | 102 | 702 |
| Farm-gate | A. B. Blyholder | 726,396 | Apr. 28 | 3655 | 828, 829 | 103 | 1986 |
| Farm-gate | J. T. Yager | 727,528 | May 5 | 1309 | 291 | 104 | 281 |
| Farm-gate | D. Mathies | 727,661 | May 12 | 1571 | 355 | 104 | 355 |
| Farm-gate | E. Graham | 730,365 | June 9 | 1529 | 339 | 104 | 1456 |
| Farm-gate | S. Purvine | 741,832 | Oct. 20 | 2767 | 617 | 106 | 1871 |
| Farm-gate | B. H. Pursell | 745,663 | Dec. 1 | 631 | 147 | 107 | 1232 |
| Farm-gate | G. R. Clarke | 747,140 | Dec. 15 | 3369 | 765 | 107 | 1877 |
| Farm-gate | C. Wilson | 747,526 | Dec. 22 | 4085 | 918 | 107 | 2051 |
| Farming implement | W. B. Smith | 718,226 | Jan. 13 | 1313 | 290 | 102 | 297 |
| Farrier's knife | P. E. Heller | 719,797 | Feb. 3 | 705 | 165 | 102 | 972 |
| Farrier's rasp | G. K. Woods | 739,570 | Sept. 22 | 3913 | 876 | 106 | 886 |
| Farriery-machine | S. J. McDonald | 718,271 | Jan. 13 | 1400 | 312 | 102 | 317 |
| Fastener | L. W. Luellen | 720,451 | Feb. 10 | 1910 | 435 | 102 | 1243 |
| Fastener | C. H. Goodwin | 725,699 | Apr. 21 | 2382 | 540 | 103 | 1703 |
| Fastener | V. Kern | 730,129 | June 2 | 1091 | 244 | 104 | 1349 |
| Fastener | E. B. Stimpson | 736,165 | Aug. 11 | 2134 | 458 | 105 | 1455 |
| Fastener | M. D. Shipman | 737,874 | Sept. 1 | 642 | 137 | 106 | 141 |
| Fastener | M. D. Shipman | 737,875 | Sept. 1 | 643 | 137 | 106 | 141 |
| Fastener | L. Reiter | 739,222 | Sept. 15 | 3272 | 725 | 106 | 732 |
| Fastener | W. Wallenthin | 739,522 | Sept. 22 | 3828 | 857 | 106 | 868 |
| Fastener | E. S. Gardner | 745,813 | Dec. 1 | 914 | 204 | 107 | 1294 |
| Fastener | T. Giguere | 748,277 | Dec. 29 | 5530 | 1260 | 107 | 2393 |
| Fastener for posters, &c | W. D. Smith | 747,253 | Dec. 15 | 3577 | 810 | 107 | 1920 |
| Fastener. Metal | A. Raper | 734,951 | July 28 | 4182 | 973 | 105 | 928 |
| Fastener or clasp | J. B. Harris | 739,673 | Sept. 22 | 4119 | 918 | 106 | 930 |
| Fastening | C. E. Morgan | 735,794 | Aug. 11 | 1444 | 311 | 105 | 1307 |
| Fastening | G. W. Lee | 747,192 | Dec. 15 | 3459 | 784 | 107 | 1896 |
| Fastening attachment | W. G. Rasch | 730,400 | June 9 | 1593 | 355 | 104 | 1468 |
| Fastening device | E. Peelle | 720,735 | Feb. 17 | 2474 | 569 | 102 | 1374 |
| Fastening device | A. E. Smylie | 722,923 | Mar. 17 | 2374 | 531 | 103 | 535 |
| Fastening device | A. Stambach | 725,375 | Apr. 14 | 1764 | 396 | 103 | 1558 |
| Fastening device | W. F. Keyes | 726,942 | May 5 | 206 | 49 | 104 | 45 |
| Fastening device | L. C. Preston | 737,769 | Sept. 1 | 397 | 84 | 106 | 87 |
| Fastening device | H. F. Keil | 740,141 | Sept. 29 | 4999 | 1123 | 106 | 1135 |
| Fastening device | E. Carnduff | 746,670 | Dec. 15 | 2482 | 567 | 107 | 1674 |
| Fastening device | W. Kaisling | 748,078 | Dec. 29 | 5165 | 1168 | 107 | 2314 |
| Fastening for shoes, &c | F. Paschen and J. Duckro | 734,360 | July 21 | 3076 | 724 | 105 | 684 |
| Fastening-inserting machine | G. A. Ambler | 722,659 | Mar. 17 | 1873 | 416 | 103 | 433 |
| Fat and making same. Edible | N. N. Cronholm | 747,301 | Dec. 15 | 3678 | ------ | 107 | 1944 |
| Fat from entrails. Machine for removing | J. Boes | 731,536 | June 23 | 3719 | 828 | 104 | 1950 |
| Fat-like substance and making same | O. Liebreich | 748,511 | Dec. 29 | 5955 | ------ | 107 | 2486 |
| Fat-separating machine | P. Feiten | 734,840 | July 28 | 3997 | 933 | 105 | 889 |
| Fats. Purifying | I. Klimont | 719,014 | Jan. 27 | 2834 | ------ | 102 | 646 |
| Fats. Purifying | C. Fresenius | 722,832 | Mar. 17 | 2224 | 498 | 103 | 503 |
| Fatty substance and making same | O. Liebreich | 746,638 | Dec. 8 | 2409 | ------ | 107 | 1038 |
| Fatty substances. Making | O. Liebreich | 741,584 | Oct. 13 | 2299 | ------ | 106 | 1756 |
| Faucet | F. Schueler | 729,678 | June 2 | 276 | 63 | 104 | 1186 |
| Faucet | F. H. Havekotte | 730,646 | June 9 | 2037 | 454 | 104 | 1566 |
| Faucet | E. L. Walter | 731,639 | June 23 | 3910 | 871 | 104 | 1987 |
| Faucet | J. Brizard | 732,824 | July 7 | 234 | 59 | 105 | 52 |
| Faucet | W. T. Nichols | 734,355 | July 21 | 3070 | 723 | 105 | 683 |
| Faucet | J. Kingory | 735,526 | Aug. 4 | 945 | 201 | 105 | 1182 |
| Faucet | J. P. Pigrenet | 737,767 | Sept. 1 | 393 | 84 | 106 | 87 |
| Faucet | J. G. Huye | 742,327 | Oct. 27 | 3780 | 847 | 106 | 2093 |
| Faucet | A. R. Stone | 745,027 | Nov. 24 | 4297 | 929 | 107 | 960 |
| Faucet | J. Totham | 746,762 | Dec. 15 | 2635 | 606 | 107 | 1709 |
| Faucet | G. A. Soderlund | 748,115 | Dec. 29 | 5237 | 1188 | 107 | 2330 |
| Faucet attachment | C. A. Smith | 733,881 | July 14 | 2130 | 502 | 105 | 464 |
| Faucet. Bung- | W. F. Crowley | 734,404 | July 21 | 3155 | 741 | 105 | 701 |
| Faucet-coupling | C. T. White | 737,242 | May 5 | 789 | 169 | 104 | 170 |
| Faucet. Hot and cold water | J. A. Greene | 733,958 | July 21 | 2295 | 539 | 105 | 517 |
| Faucet. Lock- | J. F. Cunningham | 726,031 | Apr. 21 | 2965 | 675 | 103 | 1828 |
| Faucet. Measuring- | J. Sjostrom | 719,151 | Jan. 27 | 3111 | 692, 693 | 102 | 702 |
| Faucet. Measuring- | W. Goebel | 722,972 | Mar. 17 | 2453 | 549 | 103 | 551 |
| Faucet. Measuring- | A. J. Stephan | 738,737 | Sept. 8 | 2366 | 520 | 106 | 521 |
| Faucet. Mixing- | W. L. Ross and D. C. Tollinger | 736,023 | Aug. 11 | 1886 | 403 | 105 | 1402 |
| Faucet or cock | A. R. Pritchard | 746,740 | Dec. 15 | 2596 | 596 | 107 | 1699 |
| Faucet. Registering- | N. H. Eiler, J. E. Watkins, and E. C. Cress. | 724,172 | Mar. 31 | 4732 | 1061 | 103 | 1049 |
| Faucet safety attachment | A. Steele | 739,031 | Sept. 15 | 2914 | 647 | 106 | 657 |
| Faucet. Three-way | D. W. Dinneen | 726,653 | Apr. 28 | 4160 | 938 | 103 | 2084 |
| Faucet. Washbasin- | A. L. Grotewohl | 722,835 | Mar. 17 | 2227 | 499 | 103 | 504 |
| Feather tip or plume | E. W. Moch | 731,932 | June 23 | 4429 | 988 | 104 | 2098 |
| Feed and presser roll. Sectional | C. J. L. Meyer | 717,593 | Jan. 6 | 131 | 33, 34 | 102 | 30 |
| Feed and safety apparatus for steam-boilers. Automatic water- | O. J. and D. Coughlin | 736,940 | Aug. 25 | 3582 | 793, 794 | 105 | 1797 |
| Feed apparatus for steam-boilers | E. Schoof | 738,247 | Sept. 8 | 1388 | 301 | 106 | 316 |
| Feed apparatus. Portable | A. A. Hoyt | 728,923 | May 26 | 3956 | 879 | 104 | 891 |
| Feed attachment. Boiler- | W. W. Green | 722,696 | Mar. 17 | 1968 | 439 | 103 | 453 |
| Feed. Automatic water and fuel | J. N. Rice | 743,661 | Nov. 10 | 1721 | 363 | 107 | 383 |
| Feed-bag | G. H. Nissen | 729,396 | May 26 | 4789 | 1060 | 104 | 1063 |

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| Feed-bag | J. A. Gray | 733,032 | July 7 | 584 | 142 | 105 | 125 |
| Feed-box | W. R. Howard | 719,468 | Feb. 3 | 101 | 24 | 102 | 847 |
| Feed-box | E. M. Pumphrey | 738,938 | Sept. 15 | 2771 | 614 | 106 | 627 |
| Feed-box | R. W. Stimson and F. McManis | 743,950 | Nov. 10 | 2231 | 482 | 107 | 492 |
| Feed-box | G. L. Theige | 744,258 | Nov. 17 | 2893 | 619 | 107 | 647 |
| Feed-box for horses or cattle. Automatic | E. J. Faulkner | 727,925 | May 12 | 2097 | 466 | 104 | 465 |
| Feed-box. Poultry | G. C. Sproat | 719,387 | Jan. 27 | 3550 | 792 | 102 | 797 |
| Feed-box. Time | W. I. Baker | 727,058 | May 5 | 462 | 97 | 104 | 101 |
| Feed controller. Automatic boiler- | F. X. Brunelle | 726,813 | Apr. 28 | 4463 | 1008 | 103 | 2147 |
| Feed-cutter | W. G. St. John | 718,289 | Jan. 13 | 1435 | 319 | 102 | 325 |
| Feed-cutter | A. T. Heck | 723,869 | Mar. 31 | 4116 | 929 | 103 | 923 |
| Feed-cutter | J. V. Frederick | 738,535 | Sept. 8 | 1998 | 435 | 106 | 444 |
| Feed-cutters. Pneumatic conveyer attachment for | L. J. Lee | 747,987 | Dec. 29 | 4981 | 1124<br>1125 | 107 | 2274 |
| Feed for boilers. Automatic water- | C. Wilkins | 722,549 | Mar. 10 | 1662 | 367 | 103 | 373 |
| Feed measure and box | J. A. Leighton | 741,262 | Oct. 13 | 1634 | 368 | 106 | 1614 |
| Feed mechanism | S. Upton | 717,952 | Jan. 6 | 810 | 183<br>184 | 102 | 173 |
| Feed mechanism | I. K. MacKenzie | 723,400 | Mar. 24 | 3262 | 731 | 103 | 729 |
| Feed mechanism | C. E. Rhoades | 725,873 | Apr. 21 | 2701 | 614 | 103 | 1774 |
| Feed mechanism | W. P. Devine | 738,103 | Sept. 1 | 1082 | 239 | 106 | 234 |
| Feed mechanism. Automatic | M. C. White and O. C. Duryea | 736,325 | Aug. 11 | 2406 | 525 | 105 | 1516 |
| Feed mechanism. Automatic | M. C. White and O. C. Duryea | 736,896 | Aug. 18 | 3483 | 774 | 105 | 1756 |
| Feed or water pan. Poultry | F. B. Mills | 723,895 | Mar. 31 | 4165 | 938 | 103 | 934 |
| Feed-pan bracket | G. G. Jones | 730,374 | June 9 | 1545 | 343 | 104 | 1459 |
| Feed-rack | J. M. Shutts | 741,175 | Oct. 13 | 1463 | 332 | 106 | 1577 |
| Feed regulator for steam-boilers. Automatic water- | G. Weant | 726,123 | Apr. 21 | 3122 | 707 | 103 | 1861 |
| Feed-roll | G. A. Ensign. (Reissue) | 12,080 | Feb. 10 | 2112 | 487 | 102 | 1282 |
| Feed. Steam-boiler | G. W. MacDougall | 730,547 | June 9 | 1867 | 417 | 104 | 1529 |
| Feed-table. Universal | H. P. Elwell | 734,685 | July 28 | 3672 | 860 | 105 | 824 |
| Feed-tripping mechanism | J. Parker | 718,514 | Jan. 13 | 1889 | 414<br>415 | 102 | 422 |
| Feed-trough | J. J. Smith | 718,540 | Jan. 13 | 1932 | 423 | 102 | 430 |
| Feed-trough | W. L. Hollar | 722,107 | Mar. 3 | 829 | 184 | 103 | 179 |
| Feed-trough | J. J. Smith | 725,162 | Apr. 14 | 1385 | 313 | 103 | 1478 |
| Feed-trough | C. Baker | 731,841 | June 23 | 4273 | 951 | 104 | 2065 |
| Feed-trough | G. A. Sprow | 737,789 | Sept. 1 | 434 | 93 | 106 | 96 |
| Feed-trough. Animal | F. H. Hayes | 734,550 | July 28 | 3429 | 800 | 105 | 774 |
| Feed-trough. Animal | E. B. French | 747,543 | Dec. 22 | 4111 | 923 | 107 | 2057 |
| Feed-trough for animals | J. H. Snow | 718,287 | Jan. 13 | 1433 | 318 | 102 | 324 |
| Feed-water. Device for removing impurities from boiler | G. T. Conkling and C. C. Mitchell | 724,815 | Apr. 7 | 748 | 174 | 103 | 1330 |
| Feed-water filter | J. F. Barrett | 744,459 | Nov. 17 | 3263 | 699<br>700 | 107 | 727 |
| Feed-water for motor-vehicles. Heating | W. J. and G. Lane | 722,309 | Mar. 10 | 1222 | 272 | 103 | 273 |
| Feed-water heater | G. F. Conner | 718,819 | Jan. 20 | 2464 | 547 | 102 | 553 |
| Feed-water heater | H. G. Keasbey | 719,229 | Jan. 27 | 3250 | 726 | 102 | 731 |
| Feed-water heater | I. Watts | 720,200 | Feb. 10 | 1452 | 331<br>332 | 102 | 1147 |
| Feed-water heater | G. I. Roberts | 720,740 | Feb. 17 | 2482 | 571 | 102 | 1375 |
| Feed-water heater | F. C. Trauer | 724,413 | Mar. 31 | 5230 | 1171 | 103 | 1151 |
| Feed-water heater | D. B. Cumming | 729,283 | May 26 | 4603 | 1018 | 104 | 1025 |
| Feed-water heater | F. L. Patterson | 729,400 | May 26 | 4795 | 1062 | 104 | 1064 |
| Feed-water heater | A. E. Taber | 729,907 | June 2 | 704 | 156 | 104 | 1271 |
| Feed-water heater | F. C. Trauer | 730,177 | June 2 | 1169 | 262 | 104 | 1366 |
| Feed-water heater | W. Irving | 730,660 | June 9 | 2067 | 460 | 104 | 1571 |
| Feed-water heater | F. W. Luedke | 730,938 | June 16 | 2568 | 572 | 104 | 1698 |
| Feed-water heater | T. C. McBride | 731,065 | June 16 | 2814 | 627 | 104 | 1748 |
| Feed-water heater | R. H. Hornbrook | 732,077 | June 30 | 4727 | 1056 | 104 | 2172 |
| Feed-water heater | B. J. White | 733,783 | July 14 | 1934 | 455 | 105 | 425 |
| Feed-water heater | C. F. Ruby | 737,026 | Aug. 25 | 3735 | 829 | 105 | 1830 |
| Feed-water heater | E. T. Moore | 737,444 | Aug. 25 | 4515 | 1012 | 105 | 1935 |
| Feed-water heater | P. J. Snowden | 739,355 | Sept. 22 | 3507 | 784<br>785 | 106 | 797 |
| Feed-water heater | R. H. Hornbrook | 740,655 | Oct. 6 | 508 | 112 | 106 | 1356 |
| Feed-water heater | R. H. Fraser | 740,841 | Oct. 6 | 860 | 192 | 106 | 1430 |
| Feed-water heater | S. E. Flint | 742,303 | Oct. 27 | 3739 | 836<br>837 | 106 | 2084 |
| Feed-water heater | R. B. Benham, Jr | 743,809 | Nov. 10 | 1980 | 421<br>422 | 107 | 438 |
| Feed-water heater | H. J. Gebhardt | 744,525 | Nov. 17 | 3364 | 725 | 107 | 749 |
| Feed-water heater | W. M. Wright | 746,226 | Dec. 8 | 1676 | 373 | 107 | 1478 |
| Feed-water heater | W. Thurmond | 747,509 | Dec. 22 | 4055 | 912 | 107 | 2044 |
| Feed-water heater and circulator | R. B. Hodge | 744,341 | Nov. 17 | 3041 | 653 | 107 | 680 |
| Feed-water heater and condenser | H. C. Moore | 730,285 | June 9 | 1392 | 306 | 104 | 1427 |
| Feed-water heater and filter | A. de Bretteville | 724,661 | Apr. 7 | 449 | 109 | 103 | 1265 |
| Feed-water heater and purifier | J. Béha | 726,243 | Apr. 28 | 3351 | 761<br>762 | 103 | 1923 |
| Feed-water heater and purifier | C. E. Tudor and O. B. Kaiser | 731,979 | June 23 | 4512 | 1007 | 104 | 2116 |
| Feed-water heater and purifier | R. D. H. Anderson | 735,693 | Aug. 11 | 1271 | 272 | 105 | 1269 |
| Feed-water heater and purifier | C. K. Cunningham | 735,715 | Aug. 11 | 1307 | 281 | 105 | 1276 |
| Feed-water heater and purifier | J. Angell | 738,751 | Sept. 15 | 2424 | 532 | 106 | 550 |
| Feed-water heater and purifier | J. W. Pertz | 739,443 | Sept. 22 | 3701 | 824 | 106 | 840 |
| Feed-water heater and purifier | R. W. Jones | 741,502 | Oct. 13 | 2130 | 475 | 106 | 1721 |
| Feed-water heater and purifier | T. V. Elliott | 746,479 | Dec. 8 | 2123 | 488 | 107 | 1573 |
| Feed-water heater. Boiler | C. G. Taylor | 724,967 | Apr. 7 | 1013 | 232 | 102 | 1385 |
| Feed-water heater, circulator, and scummer. Combined | W. Cross | 745,797 | Dec. 1 | 867 | 196 | 107 | 1285 |
| Feed-water heater, filter, and purifier | M. P. Osbourn | 729,088 | May 26 | 4250 | 939 | 104 | 950 |
| Feed-water heater. Locomotive | A. T. Fox | 718,200 | Jan. 13 | 1270 | 278 | 102 | 288 |
| Feed-water heating system | T. C. McBride | 731,064 | June 16 | 2811 | 626 | 104 | 1748 |
| Feed-water heating system for multiple-expansion engines | B. V. Nordberg | 728,282 | May 19 | 2762 | 614 | 104 | 628 |
| Feed-water purifier | F. O. Mechlin | 729,628 | June 2 | 185 | 44 | 104 | 1165 |
| Feed-water purifier | T. O. Orgau | 740,904 | Oct. 6 | 955 | 214 | 106 | 1450 |

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| Feed-water purifier | E. P. Caldwell | 746,921 | Dec. 15 | 2942 | 679, 680 | 107 | 1777 |
| Feed-water-purifying apparatus. Boiler | T. Sault | 745,297 | Nov. 24 | 4832 | 1054 | 107 | 1071 |
| Feed-water. Purifying boiler | I. V. Holmes | 743,387 | Nov. 3 | 1127 | 240 | 107 | 238 |
| Feed-water-regulating means | J. N. Stephens | 727,018 | May 5 | 397 | 83 | 104 | 86 |
| Feed-water regulator | N. E. Hannemann | 722,700 | Mar. 17 | 1974 | 441 | 103 | 454 |
| Feed-water regulator | J. M. Williams | 723,225 | Mar. 17 | 2915 | 653 | 103 | 648 |
| Feed-water regulator | W. H. Berry | 726,792 | Apr. 28 | 4425 | 997 | 103 | 2138 |
| Feed-water regulator | A. G. Mumford and A. Anthony | 730,951 | June 16 | 2601 | 578, 579 | 104 | 1704 |
| Feed-water regulator | R. Learmonth | 731,191 | June 16 | 3053 | 678 | 104 | 1793 |
| Feed-water regulator | H. H. Westinghouse | [illegible] | Sept. 1 | 471 | 105 | 106 | 106 |
| Feed-water regulator | R. H. White | [illegible] | Sept. 1 | 857 | 188 | 106 | 187 |
| Feed-water regulator | C. C. Tozier | 747,514 | Dec. 22 | 4064 | 914 | 107 | 2046 |
| Feed-water regulator. Automatic | J. H. Rosenthal | 723,313 | Mar. 24 | 3082 | 694 | 103 | 696 |
| Feed-water regulator. Automatic | V. F. Casey and J. P. Stendebach | 723,440 | Mar. 24 | 3327 | 745 | 103 | 743 |
| Feed-water regulator. Automatic | H. Cook | 723,653 | Mar. 24 | 3717 | 833 | 103 | 822 |
| Feed-water regulator, indicator, and alarm. Combined | F. W. Collins and E. Tobias | 738,661 | Sept. 8 | 2229 | 488 | 106 | 494 |
| Feed-water strainer and catch-basin | W. G. Wilmington | 723,110 | Mar. 17 | 2691 | 606 | 103 | 601 |
| Feed-water system | D. W. Patterson | 732,438 | June 30 | 5446 | 1209, 1210 | 104 | 2322 |
| Feed-water to steam-boilers. Apparatus for controlling the supply of | H. A. Fleuss | 747,908 | Dec. 22 | 4797 | 1084, 1085, 1086 | 107 | 2211 |
| Feeder | L. F. Fales | 747,395 | Dec. 22 | 3850 | 866, 867 | 107 | 1998 |
| Feeder apparatus. Boiler- | J. M. Williams | 728,348 | May 19 | 2896 | 639 | 104 | 654 |
| Feeder. Automatic boiler- | S. Basch | 726,394 | Apr. 28 | 3650 | 827, 828 | 103 | 1985 |
| Feeder. Automatic poultry- | L. J. Davis | 728,378 | May 19 | 2941 | 649 | 104 | 664 |
| Feeder. Automatic stock- | I. Steinberg | 735,167 | Aug. 4 | 236 | 47 | 105 | 1033 |
| Feeder. Automatic stock- | J. M. Manifold | 745,506 | Dec. 1 | 365 | 85 | 107 | 1177 |
| Feeder. Boiler- | L. E. Hoffman | 725,707 | Apr. 21 | 2403 | 545 | 103 | 1709 |
| Feeder. Boiler- | H. J. Davis and P. G. Ault | 736,702 | Aug. 18 | 3124 | 688, 689 | 105 | 1680 |
| Feeder. Boiler- | A. L. Clark | 737,348 | Aug. 25 | 4327 | 964 | 105 | 1954 |
| Feeder. Boiler- | M. Castelnau | 741,459 | Oct. 13 | 2033 | 451 | 106 | 1699 |
| Feeder. Boiler- | H. J. Davis and P. G. Ault | 742,294 | Oct. 27 | 3721 | 831, 832 | 106 | 2081 |
| Feeder. Boiler- | W. Herrington | 744,965 | Nov. 24 | 4166 | 901 | 107 | 934 |
| Feeder. Calf- | F. W. Moseley | 718,370 | Jan. 13 | 1398 | 312 | 102 | 316 |
| Feeder. Calf- | I. H. Hall, Jr | 732,630 | June 30 | 5809 | 1288 | 104 | 2401 |
| Feeder for headed articles | J. M. Stetter | 735,310 | Aug. 4 | 527 | 107 | 105 | 1093 |
| Feeder. Gravity boiler | F. W. and H. L. Shupert | 744,250 | Nov. 17 | 2876 | 617 | 107 | 643 |
| Feeder. Lamb or calf | J. H. Cramer | 723,195 | Mar. 17 | 2870 | 643 | 103 | 638 |
| Feeder. Pneumatic | E. M. Bassler | 724,780 | Apr. 7 | 680 | 159 | 103 | 1314 |
| Feeder. Stock- | C. A. Wright | 745,709 | Dec. 1 | 713 | 163 | 107 | 1250 |
| Feeder. Suckling- | M. T. Phillips | 721,384 | Feb. 24 | 3708 | 843 | 102 | 1654 |
| Feeder. Time stock- | G. J. Stein | 717,637 | Jan. 6 | 204 | 51 | 102 | 44 |
| Feeder. Time stock- | M. Sarsfield | 729,675 | June 2 | 270 | 62 | 104 | 1184 |
| Feeder. Time stock- | G. A. Crotto | 741,310 | Oct. 13 | 1744 | 389 | 106 | 1635 |
| Feeders and band-cutters. Regulating means for self- | C. C. Palmer | 732,956 | July 7 | 455 | 113 | 105 | 98 |
| Feeding and band-cutting mechanism | F. S. Rich | 720,846 | Feb. 17 | 2648 | 611, 612 | 102 | 1411 |
| Feeding and band-cutting mechanism | F. S. Rich | 746,379 | Dec. 8 | 1952 | 446 | 107 | 1535 |
| Feeding apparatus. Boiler- | C. Crompton | 721,159 | Feb. 24 | 3282 | 751, 752 | 102 | 1566 |
| Feeding apparatus. Shell-head- | F. W. Olin | 736,622 | Aug. 18 | 2973 | 653, 654 | 105 | 1649 |
| Feeding device for sheets of stock. Automatic | W. C. Gilbert | 735,085 | Aug. 4 | 64 | 17, 18 | 105 | 995 |
| Feeding device. Horse- | H. Still | 734,103 | July 21 | 2594 | 608 | 105 | 582 |
| Feeding mechanism | C. W. Gay | 726,819 | Apr. 28 | 4475 | 1011 | 103 | 2150 |
| Feeding mechanism | J. Boylan | 730,602 | June 9 | 1972 | 438 | 104 | 1552 |
| Feeding mechanism | F. B. Pease | 732,651 | June 30 | 5848 | 1295 | 104 | 2409 |
| Feeding mechanism for powdered material | A. L. F. Mitchell and C. W. Aiken | 735,281 | Aug. 4 | 476 | 95 | 105 | 1082 |
| Feeding poultry or other creatures. Apparatus for automatically | E. Clapp | 742,969 | Nov. 3 | 257 | 57 | 107 | 56 |
| Feeding-regulator. Automatic | F. Woerner | 718,942 | Jan. 20 | 2707 | 606 | 102 | 606 |
| Feeding-regulator. Steam-boiler automatic | H. Ladislaw and L. Sgal | 730,465 | June 9 | 1728 | 386 | 104 | 1498 |
| Feeding-trough | J. F. Butz | 747,590 | Dec. 22 | 4194 | 943 | 107 | 2076 |
| Feeding-trough for stock | C. K. Shelhamer | 737,504 | Aug. 25 | 4629 | 1039 | 105 | 2022 |
| Feeding-trunk attachment. Pneumatic- | T. R. Marsden | 738,986 | July 21 | 2353 | 552, 553 | 105 | 528 |
| Feeding water to steam-boilers | S. M. Guss | 722,838 | Mar. 17 | 2232 | 500 | 103 | 505 |
| Feet. Device for preventing flat | C. L. Darby | 735,860 | Aug. 11 | 1586 | 338 | 105 | 1337 |
| Feet. Support for weak or deformed | P. J. M. Gunthorp | 730,366 | June 9 | 1530 | 339 | 104 | 1456 |
| Felly compressing and boring machine | G. A. Ensign | 742,015 | Oct. 20 | 3147 | 702, 703 | 106 | 1948 |
| Felly-retainer | C. Wagner and C. J. Barnes | 744,825 | Nov. 24 | 3922 | 843 | 107 | 883 |
| Felly. Vehicle-wheel | R. Kronenberg | 737,745 | Sept. 1 | 350 | 74 | 106 | 79 |
| Felt, fabric, or the like. Stretcher for | E. Dedicke | 728,682 | May 19 | 3518 | 782 | 104 | 786 |
| Felt. Making mineral-wool | C. C. Hall | 737,099 | Aug. 25 | 3855 | 856 | 105 | 1854 |
| Felt-picker | W. J. Bell | 731,535 | June 23 | 3718 | 828 | 104 | 1950 |
| Fence | I. N. Williams | 727,245 | May 5 | 792 | 169 | 104 | 171 |
| Fence | J. M. Nutt | 729,646 | June 2 | 220 | 50 | 104 | 1173 |
| Fence | E. L. Froggatt | 733,906 | July 14 | 2185 | 514 | 105 | 475 |
| Fence | D. F. Beard | 736,195 | Aug. 11 | 2185 | 469 | 105 | 1466 |
| Fence | J. A. Bonham | 739,821 | Sept. 29 | 4393 | 985, 986 | 106 | 1092 |
| Fence | W. C. Bayless and J. S. Dallas | 741,095 | Oct. 13 | 1306 | 300 | 106 | 1545 |
| Fence | H. Frey | 741,650 | Oct. 20 | 2418 | 541, 542 | 106 | 1797 |
| Fence | C. T. Hammack | 746,503 | Dec. 8 | 2162 | 497 | 107 | 1581 |
| Fence | T. B. Berry | 746,781 | Dec. 15 | 2675 | 618 | 107 | 1716 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Fence | W. Jenkins | 747,435 | Dec. 22 | 3918 | 882 | 107 | 2014 |
| Fence-brace | E. G. Horne | 734,873 | July 28 | 4050 | 945 | 105 | 900 |
| Fence-building implement. Wire- | E. F. Hall | 730,641 | June 9 | 2028 | 450, 451 | 104 | 1564 |
| Fence fabric. Wire- | J. L. Claudin | 739,798 | Sept. 22 | 4343 | 973, 974 | 106 | 981 |
| Fence fabric. Woven-wire- | J. L. Claudin | 739,797 | Sept. 22 | 4341 | 973 | 106 | 980 |
| Fence-fastener | C. I. Huxley | 735,263 | Aug. 4 | 448 | 88 | 105 | 1076 |
| Fence feeder and crimper. Wire- | M. D. Taylor | 735,842 | Aug. 11 | 1543 | 330, 331 | 105 | 1329 |
| Fence gate. Wire- | L. C. Lewison | 718,777 | Jan. 20 | 2395 | 532 | 102 | 539 |
| Fence gate. Wire- | H. F. Alverson | 726,011 | Apr. 21 | 2935 | 668 | 103 | 1822 |
| Fence. Hedge | M. Neil | 719,605 | Feb. 3 | 344 | 80 | 102 | 894 |
| Fence-joining device | S. M. Drake | 747,051 | Dec. 15 | 3213 | 732 | 107 | 1812 |
| Fence-lifter | B. Batdorff | 724,532 | Apr. 7 | 208 | 51 | 103 | 1214 |
| Fence-machine | W. W. Thompson | 739,520 | Sept. 22 | 3825 | 857 | 106 | 867 |
| Fence-machine | F. E. Smith | 741,177 | Oct. 13 | 1469 | 333 | 106 | 1579 |
| Fence machine. Wire- | W. T. Gaines | 723,262 | Mar. 24 | 2993 | 673 | 103 | 677 |
| Fence machine. Wire- | J. Harris | 724,699 | Apr. 7 | 520 | 123, 124, 125 | 103 | 1280 |
| Fence machine. Wire- | C. A. Forsberg | 725,694 | Apr. 21 | 2374 | 537 | 103 | 1702 |
| Fence machine. Wire- | A. J. Bates and J. A. Cocker | 732,155 | June 30 | 4896 | 1088, 1089 | 104 | 2208 |
| Fence machine. Wire- | G. W. Whittington | 736,658 | Aug. 18 | 3025 | 668, 669, 670 | 105 | 1661 |
| Fence machine. Wire- | W. S. Pugsley | 738,356 | Sept. 8 | 1650 | 357, 358 | 106 | 371 |
| Fence machine. Wire- | P. Frantz | 739,846 | Sept. 29 | 4435 | 995, 996, 997, 998 | 106 | 1017 |
| Fence machine. Wire- | A. C. Mills | 743,740 | Nov. 10 | 1855 | 391 | 107 | 413 |
| Fence machine. Wire- | B. Baumgartner | 743,806 | Nov. 10 | 1976 | 420 | 107 | 437 |
| Fence machine. Wire- | W. N. Parrish | 745,072 | Nov. 24 | 4391 | 947, 948, 949, 950 | 107 | 981 |
| Fence machine. Wire- | J. A. Cocker | 745,480 | Dec. 1 | 323 | 75, 76 | 107 | 1168 |
| Fence machine. Wire- | J. W. Dwiggins | 745,801 | Dec. 1 | 873 | 197, 198, 199 | 107 | 1286 |
| Fence machine. Woven-wire- | G. Jaeger | 739,679 | Sept. 22 | 4126 | 920, 921 | 106 | 931 |
| Fence-maker's tool | H. Cottrell | 724,669 | Apr. 7 | 466 | 113 | 103 | 1269 |
| Fence-making machine. Wire- | C. E. and E. L. Warner | 746,765 | Dec. 15 | 2638 | 607, 608, 609 | 107 | 1709 |
| Fence or gate | A. W. Knittel | 719,341 | Jan. 27 | 3462 | 772 | 102 | 778 |
| Fence. Panel | M. K. Manan | 729,779 | June 2 | 473 | 105 | 104 | 1225 |
| Fence. Portable | J. C. Simmons | 720,077 | Feb. 10 | 1225 | 282 | 102 | 1099 |
| Fence. Portable disappearing | I. B. Abraham | 745,471 | Dec. 1 | 305 | 73 | 107 | 1164 |
| Fence-post | J. T. Crow | 717,736 | Jan. 6 | 401 | 94 | 102 | 88 |
| Fence-post | F. E. Gregory | 719,789 | Feb. 3 | 691 | 159 | 102 | 969 |
| Fence-post | W. B. Wherry and J. B. Hill | 722,474 | Mar. 10 | 1533 | 336 | 103 | 344 |
| Fence-post | W. E. Owens | 722,615 | Mar. 10 | 1778 | 396 | 103 | 397 |
| Fence-post | W. S. Barker | 723,435 | Mar. 24 | 3320 | 744 | 103 | 741 |
| Fence-post | S. L. Eason | 723,657 | Mar. 24 | 3724 | 835 | 103 | 823 |
| Fence-post | C. A. Reed | 730,966 | June 16 | 2624 | 585 | 104 | 1710 |
| Fence-post | V. E. Randall | 731,612 | June 23 | 3860 | 860 | 104 | 1977 |
| Fence-post | E. L. and W. H. Cadwell | 731,752 | June 23 | 4113 | 917 | 104 | 2028 |
| Fence-post | J. G. Wait | 732,242 | June 30 | 5068 | 1127 | 104 | 2243 |
| Fence-post | S. F. Webb | 732,244 | June 30 | 5071 | 1128 | 104 | 2244 |
| Fence-post | R. T. Van Valkenburg | 732,974 | July 7 | 484 | 120 | 105 | 104 |
| Fence-post | P. Chapman | 733,150 | July 7 | 799 | 193 | 105 | 169 |
| Fence-post | S. Fielder | 734,690 | July 28 | 3680 | 862 | 105 | 825 |
| Fence-post | C. A. Bircher | 735,199 | Aug. 4 | 325 | 63 | 105 | 1050 |
| Fence-post | J. and W. H. Beazley | 736,058 | Aug. 11 | 1962 | 417 | 105 | 1419 |
| Fence-post | F. J. Peterson | 736,147 | Aug. 11 | 2105 | 452 | 105 | 1448 |
| Fence-post | I. M. Warner | 736,322 | Aug. 11 | 2402 | 524 | 105 | 1515 |
| Fence-post | C. B. Lombard | 737,642 | Sept. 1 | 151 | 33 | 106 | 35 |
| Fence-post | J. C. Simmons | 740,933 | Oct. 6 | 1001 | 226 | 106 | 1460 |
| Fence-post | J. F. Martin | 741,354 | Oct. 13 | 1851 | 409 | 106 | 1662 |
| Fence-post | W. R. Bordner | 741,761 | Oct. 20 | 2647 | 592 | 106 | 1844 |
| Fence-post | H. J. Cooper | 743,150 | Nov. 3 | 639 | 138 | 107 | 134 |
| Fence-post | A. M. Smith | 743,580 | Nov. 10 | 1573 | 330 | 107 | 353 |
| Fence-post | A. F. Hein | 744,072 | Nov. 17 | 2528 | 541 | 107 | 568 |
| Fence-post | C. H. E. Meyer | 744,688 | Nov. 17 | 3632 | 783 | 107 | 805 |
| Fence-post | J. D. Paldi | 744,790 | Nov. 24 | 3853 | 830 | 107 | 869 |
| Fence-post | J. W. Childress | 745,153 | Nov. 24 | 4577 | 993 | 107 | 1017 |
| Fence-post | I. Haws | 745,606 | Dec. 1 | 540 | 126 | 107 | 1212 |
| Fence-post | L. H. Evans and B. F. Erb | 747,156 | Dec. 15 | 3399 | 770 | 107 | 1884 |
| Fence-post | D. Bice | 747,361 | Dec. 22 | 3800 | 854 | 107 | 1987 |
| Fence-post. Cement | L. A. Pratt | 726,751 | Apr. 28 | 4354 | 979 | 103 | 2124 |
| Fence-post. Cement | A. P. Robertson | 732,447 | June 30 | 5463 | 1212 | 104 | 2325 |
| Fence-post. Composite | R. D. Hayward | 741,579 | Oct. 13 | 2289 | 511 | 106 | 1754 |
| Fence-post mold | W. W. Patton | 721,224 | Feb. 24 | 3435 | 780 | 102 | 1596 |
| Fence. Postless wire | M. H. Starling | 732,231 | June 30 | 5049 | 1123 | 104 | 2240 |
| Fence-rail | R. C., Jr., and W. A. Stewart | 743,046 | Nov. 3 | 436 | 95 | 107 | 92 |
| Fence-stapling device. Wire- | M. Church | 744,166 | Nov. 17 | 2710 | 578, 579 | 107 | 605 |
| Fence-stay fastener. Wire- | C. Kanavel | 732,190 | June 30 | 4960 | 1103 | 104 | 2221 |
| Fence-stay fastener. Wire- | S. E. Jackson | 738,810 | Sept. 15 | 2544 | 559 | 106 | 577 |
| Fence stay. Wire- | C. H. Senour | 730,406 | June 9 | 1602 | 357 | 104 | 1470 |
| Fence stretcher. Wire- | I. M. Warner | 723,221 | Mar. 17 | 2910 | 652 | 103 | 646 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|---|
| | | | | Spec. | Drg. | Vol. | Page. |
| Fence stretcher. Wire- | I. M. Warner | 728,057 | May 12 | 2329 | 519 | 104 | 513 |
| Fence stretcher. Wire- | I. M. Warner | 736,323 | Aug. 11 | 2404 | 524 | 105 | 1515 |
| Fence stretcher. Wire- | I. M. Warner | 745,979 | Dec. 1 | 1222 | 275 | 107 | 1361 |
| Fence tie. Wire- | S. S. Withington | 738,142 | Sept. 1 | 1175 | 259 | 106 | 253 |
| Fence tool. Wire- | F. Canfield | 718,243 | Jan. 13 | 1338 | 296<br>297 | 102 | 303 |
| Fence tool. Wire- | A. W. Post | 726,749 | Apr. 28 | 4349 | 978 | 103 | 2124 |
| Fence-top. Barbed-wire | F. D. Green | 731,890 | June 23 | 4355 | 972 | 104 | 2083 |
| Fence-weaving machine | E. G. Overholt | 746,139 | Dec. 8 | 1518 | 340 | 107 | 1444 |
| Fence-weaving machine. Wire- | G. W. Whittington | 732,984 | July 7 | 499 | 123<br>124<br>125 | 105 | 108 |
| Fence. Wire | B. B. Wood | 733,890 | July 14 | 2146 | 506 | 105 | 467 |
| Fence. Wire | J. Kaufman | 741,708 | Oct. 20 | 2711 | 604 | 106 | 1858 |
| Fence. Wire | J. S. Barnes | 746,441 | Dec. 8 | 2056 | 473 | 107 | 1558 |
| Fence-wire clamps. Implement for applying and clenching | G. H. Wright | 727,527 | May 5 | 1306 | 291 | 104 | 281 |
| Fence-wire fastener | C. B. Lombard | 735,121 | Aug. 4 | 146 | 32 | 105 | 1013 |
| Fence-wire-holding device | H. D. Whipple | 739,130 | Sept. 15 | 3112 | 688 | 106 | 697 |
| Fence-wire ratchet or tightener | C. A. Willmarth and J. S. Barnes | 735,026 | July 28 | 4315 | 1003 | 105 | 956 |
| Fence-wire staple | R. A. Winters | 727,248 | May 5 | 795 | 170 | 104 | 171 |
| Fence-wire staple | R. A. Winters | 732,486 | June 30 | 5543 | 1229 | 104 | 2340 |
| Fence-wire stretcher | C. W. Hoagland | 728,393 | May 19 | 2965 | 653 | 104 | 669 |
| Fence-wire tightener | R. A. Winters | 729,910 | June 2 | 708 | 158 | 104 | 1272 |
| Fences. Device for preventing animals from breaching wire | D. C. Benjamin | 747,577 | Dec. 22 | 4163 | 935 | 107 | 2070 |
| Fencing | J. W. Berry | 741,216 | Oct. 13 | 1558 | 351 | 106 | 1599 |
| Fencing purposes. Wire-stretcher for | F. Stordeur | 737,040 | Aug. 25 | 3754 | 834 | 105 | 1834 |
| Fencing. Wire | W. Grattan | 736,088 | Aug. 11 | 2006 | 428 | 105 | 1429 |
| Fender:<br>*See* Car-fender. Rein-fender.<br>Car or other vehicle fender. Vehicle-fender.<br>Wheel-fender.<br>Plow-fender. | | | | | | | |
| Fender | J. McGuire | 719,029 | Jan. 27 | 2866 | 643 | 102 | 652 |
| Fender-fastening | A. D. Ray | 726,345 | Apr. 28 | 3564 | 807 | 103 | 1967 |
| Ferrule-applying machine | G. H. F. Schrader | 741,073 | Oct. 13 | 1266 | 287 | 106 | 1537 |
| Ferrules. Die or mold for forming | J. B. Oelkers | 717,604 | Jan. 6 | 149 | 38 | 102 | 33 |
| Ferrules or rings of metal. Machine for expanding | H. B. Sherman | 743,400 | Nov. 3 | 1153 | 244 | 107 | 244 |
| Ferrules or the like. Manufacturing | J. B. Oelkers | 740,036 | Sept. 29 | 4826 | 1082 | 106 | 1099 |
| Ferruling hose and product thereof | G. H. F. Schrader | 724,129 | Mar. 31 | 4646 | 1046 | 103 | 1032 |
| Fertilizer | A. Frank and H. Freudenberg | 724,565 | Apr. 7 | 267 | ------ | 103 | 1226 |
| Fertilizer-distributer | E. F. Needham | 718,504 | Jan. 13 | 1865 | 410 | 102 | 418 |
| Fertilizer-distributer | E. L. Braxton | 721,142 | Feb. 24 | 3255 | 745 | 102 | 1561 |
| Fertilizer-distributer | F. L. Atwood | 721,272 | Feb. 24 | 3511 | 798 | 102 | 1612 |
| Fertilizer-distributer | W. Fetzer | 721,554 | Feb. 24 | 4008 | 941 | 102 | 1716 |
| Fertilizer-distributer | M. E. Lawrence | 737,637 | Sept. 1 | 144 | 31 | 106 | 34 |
| Fertilizer-distributer | R. G. Cartin | 738,605 | Sept. 8 | 2117 | 463<br>464 | 106 | 471 |
| Fertilizer-distributer | J. A. Neese | 742,051 | Oct. 20 | 3214 | 719 | 106 | 1962 |
| Fertilizer-distributer | R. H. Langston | 746,713 | Dec. 15 | 2547 | 585 | 107 | 1689 |
| Fertilizer-distributer | J. and J. D. Boyd | 748,343 | Dec. 29 | 5625 | 1282 | 107 | 2412 |
| Fertilizer-distributer and corn-planter. Combined | L. C. Gillespie | 720,420 | Feb. 10 | 1857 | 423 | 102 | 1232 |
| Fertilizer-distributer and seed-drill | W. L. Kennedy | 733,848 | July 14 | 2067 | 488<br>489 | 105 | 451 |
| Fertilizer-distributer and seed-dropper | S. S. Cudd | 734,405 | July 21 | 3156 | 742 | 105 | 701 |
| Fertilizer-drill | W. N. White | 748,549 | Dec. 29 | 6038 | 1367 | 107 | 2506 |
| Fertilizer-drying machine | W. T. Urie | 726,120 | Apr. 21 | 3117 | 706 | 103 | 1860 |
| Fertilizer-feeder | A. L. Miner and S. T. West | 722,528 | Mar. 10 | 1633 | 360 | 103 | 367 |
| Fertilizer-manufacturing carrier | A. J. Sackett | 731,132 | June 16 | 2948 | 655<br>656 | 104 | 1775 |
| Fertilizer-mixer | R. A. Moore | 738,925 | Sept. 15 | 2753 | 608 | 106 | 623 |
| Fertilizers. Producing | A. K. Jarecki | 731,461 | June 23 | 3571 | ------ | 104 | 1920 |
| Fiber-cleaning machine | M. Prieto | 730,701 | June 9 | 2146 | 476 | 104 | 1589 |
| Fiber-cleaning machine | M. Prieto | 733,080 | July 7 | 679 | 165<br>166 | 105 | 144 |
| Fiber-cleaning machine. Vegetable- | T. Finigan | 746,056 | Dec. 8 | 1371 | 306 | 107 | 1409 |
| Fiber. Cooking cellulose | F. E. Gore | 725,071 | Apr. 14 | 1211 | 275 | 103 | 1442 |
| Fiber-cutting machine. Wood- | G. L. Weller | 732,246 | June 30 | 5074 | 1128<br>1129 | 104 | 2245 |
| Fiber-drawing apparatus | W. Thompson and A. W. Glover | 739,744 | Sept. 22 | 4241 | 949 | 106 | 957 |
| Fiber from leaves. Machine for extracting | A. Parres | 734,936 | July 28 | 4151 | 966 | 105 | 922 |
| Fiber-manufacturing apparatus | F. E. Gore | 725,072 | Apr. 14 | 1215 | 275 | 103 | 1443 |
| Fiber-preparing machine | M. Prieto | 733,595 | July 14 | 1604 | 381 | 105 | 357 |
| Fiber. Treatment of peat | G. Py | 730,155 | June 2 | 1131 | 254 | 104 | 1357 |
| Fiber vessels. Machine for making | E. Hubbard | 719,115 | Jan. 27 | 3055 | 679 | 102 | 691 |
| Fibrous material. Pneumatic apparatus for producing mats or bats of | J. De Long | 735,217 | Aug. 4 | 358 | 69 | 105 | 1057 |
| Fibrous material. Producing mats or bats of | J. De Long | 735,218 | Aug. 4 | 361 | 69 | 105 | 1058 |
| Fibrous material. Stop-motion for machines for preparing | C. T. Hawley | 724,574 | Apr. 7 | 282 | 69,70 | 103 | 1229 |
| Fibrous material. Stop-motion for machines for preparing | C. T. Hawley | 724,575 | Apr. 7 | 288 | 71 | 103 | 1230 |
| Fibrous or filamentary material | C. N. Holmes | 737,236 | Aug. 25 | 4112 | ------ | 105 | 1908 |
| Fibrous plants. Machine for defibrating | W. S. Belding | 722,556 | Mar. 10 | 1674 | 370<br>371 | 103 | 375 |
| Fields, roads, &c. Machine for clearing | J. Zobel | 724,650 | Apr. 7 | 428 | 103<br>104 | 103 | 1261 |
| Fifth-wheel | F. M. Freeburg | 726,043 | Apr. 21 | 2984 | 678 | 103 | 1832 |
| Fifth-wheel | F. B. Whitlock | 727,727 | May 12 | 1717 | 385 | 104 | 387 |
| Fifth-wheel | J. Burns | 731,276 | June 16 | 3199 | 712 | 104 | 1824 |
| Fifth-wheel | C. A. Hennicke | 732,297 | June 30 | 5170 | 1148<br>1149 | 104 | 2264 |
| Fifth-wheel | H. C. Swan | 734,996 | July 28 | 4273 | 993 | 105 | 947 |
| Fifth-wheel | E. P. Gaines | 738,789 | Sept. 15 | 2503 | 550 | 106 | 568 |
| Fifth-wheel | W. B. Fletcher | 747,878 | Dec. 22 | 4747 | 1073 | 107 | 2201 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Fifth-wheel and king-bolt. Ball-bearing | H. W. Gander | 744,742 | Nov. 24 | 3774 | 813 | 107 | 853 |
| Fifth-wheel antirattler | F. E. Wilcox | 746,218 | Dec. 8 | 1664 | 370 | 107 | 1475 |
| Fifth-wheel connection | L. W. Mowery and T. E. Bishop | 744,593 | Nov. 17 | 3469 | 748 | 107 | 769 |
| Fifth-wheel. Vehicle | G. W. Way | 742,536 | Oct. 27 | 4165 | 936 | 106 | 2171 |
| Figure. Jointed | A. Schoenhut | 725,594 | Apr. 14 | 2173 | 492 / 493 | 103 | 1646 |
| Figure. Mechanical | C. W. Chafee | 722,207 | Mar. 10 | 1029 | 227 | 103 | 233 |
| Figure or show stand. Adjustable | C. Dargie | 720,231 | Feb. 10 | 1519 | 348 | 102 | 1160 |
| Filament-cleaning device | J. W. Howell | 744,076 | Nov. 17 | 2536 | 542 | 107 | 569 |
| Filaments. Electric furnace for the manufacture of | W. L. Voelker | 740,379 | Sept. 29 | 5443 | 1224 | 106 | 1227 |
| Filaments of glow-lamps. Apparatus for reinforcing and standardizing | F Fanta | 720,793 | Feb. 17 | 2564 | 590 / 591 | 102 | 1392 |
| Filaments, sheets, or films from cellulose. Manufacture of | C. H. Stearn and F. T. Woodley | 725,016 | Apr. 7 | 1111 | ------ | 103 | 1406 |
| File | J. Schaeffer | 720,972 | Feb. 17 | 2893 | 663 | 102 | 1462 |
| File. Account- | E. T. Randle | 735,907 | Aug. 11 | 1667 | 355 | 105 | 1355 |
| File and binder. Paper | H. G. Whitmore | 717,787 | Jan. 6 | 513 | 115 | 102 | 111 |
| File and binder. Paper | M. D. Kenyon | 732,192 | June 30 | 4963 | 1104 | 104 | 2222 |
| File and file-case | E. B. Jepson | 745,106 | Nov. 24 | 4465 | 966 | 107 | 996 |
| File and index. Paper | T. J Johnson | 742,035 | Oct. 20 | 3185 | 711 / 712 | 106 | 1956 |
| File and paper-holder. Bill- | J. M. Erickson | 729,301 | May 26 | 4639 | 1025 | 104 | 1033 |
| File and pocket attachment. Bill- | G. H. Maurer | 718,718 | Jan. 20 | 2287 | 504 | 102 | 517 |
| File and register for papers or documents. Letter- | R. Kolb | 718,258 | Jan. 13 | 1365 | 303 | 102 | 309 |
| File attachment. Binding- | E. T. A. Akass | 736,339 | Aug. 18 | 2438 | 533 | 105 | 1539 |
| File attachment. Index- | W E. Ball | 725,197 | Apr. 14 | 1452 | 328 | 103 | 1492 |
| File. Bill- | C. O. Grimes | 717,842 | Jan. 6 | 630 | 139 | 102 | 135 |
| File. Bill- | W. H. Detwiler | 739,655 | Sept. 22 | 4086 | 910 | 106 | 923 |
| File. Bill- | G. H. Maurer | 744,086 | Nov. 17 | 2549 | 546 | 107 | 572 |
| File-binder | E. A. Sharp | 719,888 | Feb. 3 | 861 | 202 | 102 | 1005 |
| File. Binding- | E. T. A. Akass | 736,338 | Aug. 18 | 2437 | 533 | 105 | 1539 |
| File. Binding- | E. T. A. Akass | 736,343 | Aug. 18 | 2444 | 534 | 105 | 1540 |
| File. Book- | C. C. Mumm and J. L. Strohm | 739,436 | Sept. 22 | 3693 | 822 | 106 | 838 |
| File-cabinet | C. Kline | 736,268 | Aug. 11 | 2305 | 499 | 105 | 1492 |
| File-cabinet | I. H. Athey | 744,276 | Nov. 17 | 2932 | 627 | 107 | 656 |
| File. Cabinet letter- | S. H. Wheeler | 724,639 | Apr. 7 | 409 | 97 | 103 | 1257 |
| File-cabinet partition. Adjustable | I. H. Athey | 748,335 | Dec. 29 | 5611 | 1279 | 107 | 2410 |
| File-cabinet. Rotary | L. S. Perkins | 717,713 | Jan. 6 | 342 | 83, 84 | 102 | 74 |
| File. Card- | C. Keck | 726,436 | Apr. 28 | 3723 | 844 | 103 | 1999 |
| File. Card- | C. Keck | 735,112 | Aug. 4 | 123 | 27, 28 | 105 | 1009 |
| File. Card or check | J. W. Hine | 726,430 | Apr. 28 | 3710 | 842 | 103 | 1996 |
| File-case | W C. Benbow | 743,429 | Nov. 10 | 1260 | 258 | 107 | 284 |
| File-cutting machine | M. Merk | 731,700 | June 23 | 4015 | 896 / 897 | 104 | 2008 |
| File-cutting machine | W. Branfield | 735,338 | Aug. 4 | 571 | 117 | 105 | 1103 |
| File. Detachable letter and bill | H. R. Gentsch | 739,073 | Sept. 15 | 2999 | 664 | 106 | 674 |
| File. Document- | W. O. Gottwals | 733,547 | July 14 | 1516 | 361 | 105 | 337 |
| File. Document- | B. R. Porter | 736,776 | Aug. 18 | 3264 | 721 | 105 | 1710 |
| File for checks, &c. Assorting- | W. S. Jewell | 744,350 | Nov. 17 | 3060 | 657 | 107 | 684 |
| File-holder. Office | J. C. Brandes | 729,040 | May 26 | 4168 | 923 | 104 | 935 |
| File, Index-card | C. A. Evans | 724,172 | Mar. 31 | 4733 | 1061 | 103 | 1050 |
| File. Letter- | W. Macgowan | 719,350 | Jan. 27 | 3489 | 776 | 102 | 783 |
| File. Letter- | C. Keck | 726,437 | Apr. 28 | 3724 | 844 | 103 | 1999 |
| File. Letter- | A. Dom | 740,406 | Oct. 6 | 34 | 8 | 106 | 1251 |
| File. Letter or bill | W. O. Gottwals | 747,416 | Dec. 22 | 3884 | 874 | 107 | 2006 |
| File. Letter or similar | W. J. Richardson | 725,484 | Apr. 14 | 1980 | 446 / 447 | 103 | 1604 |
| File. Newspaper- | F. R. Richards | 730,297 | June 9 | 1411 | 310 | 104 | 1432 |
| File. Paper- | L. W. Armstrong | 724,237 | Mar. 31 | 4884 | 1093 | 103 | 1078 |
| File. Paper- | S. Chiger | 735,710 | Aug. 11 | 1301 | 279 | 105 | 1275 |
| File. Paper- | P. Melzer | 739,332 | Sept. 22 | 3475 | 776 | 106 | 791 |
| File. Paper- | F. A. Weeks | 741,422 | Oct. 13 | 1966 | 435 | 106 | 1685 |
| File. Paper or card | E. W. Woodruff | 732,807 | July 7 | 208 | 53 | 105 | 1 |
| File. Prescription- | J. H. Lytle | 721,454 | Feb. 24 | 3832 | 871 / 872 | 102 | 1679 |
| File-scraper | H. L. Adams | 745,753 | Dec. 1 | 780 | 178 | 107 | 1264 |
| File. Separable letter or bill | H. R. Gentsch | 720,576 | Feb. 17 | 2176 | 504 | 102 | 1312 |
| File. Transfer- | L. G. Schult | 720,975 | Feb. 17 | 2897 | 664 | 102 | 1463 |
| File. Vertical | F. W. Tobey | 745,693 | Dec. 1 | 685 | 157 | 107 | 1241 |
| Files. Adjustable post for binder- | W. H. Kell | 731,914 | June 23 | 4405 | 982 | 104 | 2093 |
| Files, &c. Spring-lock attachment for bill- | R. B. Wilson | 721,349 | Feb. 24 | 3644 | 829 | 102 | 1640 |
| Filing-cabinet | M. M. Brown | 742,829 | Nov. 3 | 23 | 5 | 107 | 8 |
| Filing-cabinet | H. C. Yeiser | 742,950 | Nov. 3 | 231 | 51 | 107 | 50 |
| Filing-case | J. F. Beckbissinger | 727,881 | May 12 | 2002 | 446 | 104 | 443 |
| Filing-case | J. Lee | 729,076 | May 26 | 4235 | 936 | 104 | 947 |
| Filing-case | W. D. and J. D. Kelly | 734,183 | July 21 | 2744 | 644 | 105 | 613 |
| Filing-case | W. A. McFarland | 739,700 | Sept. 22 | 4159 | 929 / 930 | 106 | 939 |
| Filing-case index attachment | P. H. Yawman | 745,982 | Dec. 1 | 1229 | 276 / 277 | 107 | 1362 |
| Filing system. Expansible | D. E. Hunter | 722,709 | Mar. 17 | 1991 | 443 / 444 | 103 | 456 |
| Filling and indicating device. Liquid | J. W. Johnson | 727,144 | May 5 | 624 | 134 | 104 | 135 |
| Filling apparatus | W. H. Sheffield | 724,341 | Mar. 31 | 5073 | 1135 | 103 | 1117 |
| Filling-can | J. W. Jack | 733,486 | July 14 | 1411 | 332 | 105 | 316 |
| Filling-machine | R. W. Huss | 720,588 | Feb. 17 | 2191 | 508 | 102 | 1315 |
| Filling-machine | F. M. Peters | 726,565 | Apr. 28 | 3995 | 904 / 905 | 103 | 2050 |
| Filling-machine | G. W. Blake | 740,735 | Oct. 6 | 651 | 147 / 148 | 106 | 1386 |
| Filling-machine | G. Manierre | 743,533 | Nov. 10 | 1481 | 309 / 310 | 107 | 334 |
| Filling-machine. Automatic | W Koedding | 747,729 | Dec. 22 | 4454 | 1004 | 107 | 2134 |
| Filling vessels with liquids. Apparatus for | C F Mendham | 725,576 | Apr 14 | 2142 | 485 | 103 | 1640 |
| Film-holder | J. Becker | 726,843 | May 5 | 17 | 4 | 104 | 6 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|---|
| | | | | Spec. | Dr'g. | Vol. | Page. |
| Film washing and drying device | E. W. Newcomb | 720,464 | Feb. 10 | 1933 | 441, 442 | 102 | 1247 |
| Films. Adapter for containing a flat package of | C. E. Hutchings and J. A. Robertson. | 728,719 | May 19 | 3587 | 796 | 104 | 800 |
| Films on plate-glass or other transparent bodies. Production of | J. E. Reynolds and G. R. Grubb | 722,901 | Mar. 17 | 2342 | ..... | 103 | 528 |
| Films. Producing metalline | A. Huck, L. Fischer, H. Ahrle, and E. Schmieder. | 731,906 | June 23 | 4384 | 977 | 104 | 2089 |
| Filter | C. Scudder | 717,932 | Jan. 6 | 779 | 175 | 102 | 166 |
| Filter | J. M. Vaughan | 717,954 | Jan. 6 | 814 | 184 | 102 | 175 |
| Filter | G. M. Kueuper | 718,358 | Jan. 13 | 1554 | 343 | 102 | 348 |
| Filter | F. Stiner | 718,886 | Jan. 20 | 2595 | 579, 580 | 102 | 581 |
| Filter | R. W. Davis | 719,309 | Jan. 27 | 3401 | 758 | 102 | 765 |
| Filter | G. F. Hodkinson | 722,581 | Mar. 10 | 1721 | 383, 384 | 103 | 385 |
| Filter | F. Rothe | 722,632 | Mar. 10 | 1809 | 402 | 103 | 404 |
| Filter | L. V. Rood | 722,906 | Mar. 17 | 2350 | 525 | 103 | 530 |
| Filter | N. Stafford | 724,752 | Apr. 7 | 623 | 146 | 103 | 1302 |
| Filter | F. E. Roberts | 724,944 | Apr. 7 | 962 | 222 | 103 | 1375 |
| Filter | G. W. Johnston | 727,374 | May 5 | 1027 | 223 | 104 | 221 |
| Filter | G. Engel | 729,147 | May 26 | 4353 | 960 | 104 | 971 |
| Filter | A. Steinkoenig | 729,693 | June 2 | 298 | 69 | 104 | 1190 |
| Filter | V. A. Emond | 730,356 | June 9 | 1517 | 336 | 104 | 1453 |
| Filter | A. Fischer | 731,878 | June 23 | 4333 | 967 | 104 | 2078 |
| Filter | J. F. Wittemann | 732,682 | June 30 | 5907 | 1311 | 104 | 2420 |
| Filter | R. S. Brownlow | 733,622 | July 14 | 1650 | 390, 391 | 105 | 366 |
| Filter | E. M. Knight | 734,890 | July 28 | 4076 | 950 | 105 | 905 |
| Filter | L. B. Skinner | 735,834 | Aug. 11 | 1531 | 328 | 105 | 1326 |
| Filter | L. B. Skinner | 735,835 | Aug. 11 | 1532 | 328, 329 | 105 | 1326 |
| Filter | G. W. Johnston | 736,107 | Aug. 11 | 2036 | 433 | 105 | 1435 |
| Filter | F. Bommarias | 737,325 | Aug. 25 | 4287 | 952 | 105 | 1945 |
| Filter | S. P. Haller | 737,401 | Aug. 25 | 4431 | 991 | 105 | 1977 |
| Filter | W. H. Hodshon | 737,839 | Sept. 1 | 546 | 118 | 106 | 121 |
| Filter | J. Koštálek | 737,850 | Sept. 1 | 567 | 124 | 106 | 126 |
| Filter | L. E. Rogers | 738,486 | Sept. 8 | 1904 | 416 | 106 | 423 |
| Filter | J. P. Rummel | 738,630 | Sept. 8 | 2166 | 475 | 106 | 481 |
| Filter | F. Bommarius | 739,146 | Sept. 15 | 3139 | 694 | 106 | 702 |
| Filter | F. E. Bachman | 739,473 | Sept. 22 | 3746 | 836 | 106 | 850 |
| Filter | F. E. Bachman | 739,474 | Sept. 22 | 3750 | 836 | 106 | 851 |
| Filter | C. A. Baker | 739,809 | Sept. 29 | 4374 | 980 | 106 | 1004 |
| Filter | E. M. Knight | 740,365 | Sept. 29 | 5418 | 1220 | 106 | 1222 |
| Filter | E. M. Knight | 740,366 | Sept. 29 | 5420 | 1220 | 106 | 1222 |
| Filter | E. W. Hasenpflug | 740,381 | Sept. 29 | 5446 | 1225 | 106 | 1227 |
| Filter | A. H. Kohlmeyer | 740,574 | Oct. 6 | 379 | 78, 79 | 106 | 1327 |
| Filter | J. F. Ziegler | 741,090 | Oct. 13 | 1298 | 298 | 106 | 1544 |
| Filter | A. E. Cummer | 742,971 | Nov. 3 | 260 | 58 | 107 | 57 |
| Filter | H. Q. Hood | 745,497 | Dec. 1 | 351 | 81 | 107 | 1174 |
| Filter | E. and M. Schissel | 745,912 | Dec. 1 | 1102 | 247 | 107 | 1334 |
| Filter | A. N. Clark | 746,292 | Dec. 8 | 1797 | 408 | 107 | 1502 |
| Filter | J. B. Allen | 748,251 | Dec. 29 | 5470 | 1246 | 107 | 2379 |
| Filter and extractor press | J. G. Crossman | 719,438 | Feb. 3 | 49 | 11, 12 | 102 | 836 |
| Filter and press. Combined | L. Bolz | 722,172 | Mar. 3 | 942 | 209 | 103 | 200 |
| Filter. Barrel- | B. Tully | 718,680 | Jan. 20 | 2210 | 484, 485 | 102 | 501 |
| Filter. Barrel- | H. R. Cassel | 722,399 | Mar. 10 | 1375 | 305 | 103 | 309 |
| Filter. Barrel- | C. D. Grove | 736,597 | Aug. 18 | 2925 | 639, 640 | 105 | 1641 |
| Filter. Barrel- | E. D. Sloan | 740,193 | Sept. 29 | 5095 | 1145 | 106 | 1156 |
| Filter. Barrel- | A. E. Johnson | 741,499 | Oct. 13 | 2124 | 473 | 106 | 1719 |
| Filter-bed-cleaning apparatus. Sand- | H. W. Blaisdell | 729,718 | June 2 | 341 | 77, 78, 79 | 104 | 1199 |
| Filter-bed-cleaning apparatus. Sand- | H. W. Blaisdell | 729,719 | June 2 | 347 | 79, 80 | 104 | 1200 |
| Filter-bed-cleaning apparatus. Sand- | H. W. Blaisdell | 729,720 | June 2 | 354 | 80, 81 | 104 | 1201 |
| Filter-bed-cleaning apparatus. Sand- | H. W. Blaisdell | 729,721 | June 2 | 359 | 81, 82 | 104 | 1202 |
| Filter-bed-cleaning apparatus. Sand- | H. W. Blaisdell | 729,722 | June 2 | 365 | 83 | 104 | 1203 |
| Filter. Beer- | W. Haussermann | 726,427 | Apr. 28 | 3705 | 841 | 103 | 1996 |
| Filter. Centrifugal | G. Moore | 718,858 | Jan. 20 | 2533 | 563, 564 | 102 | 568 |
| Filter. Coffee or tea pot | P. A. Webb and G. A. Howell, Jr | 723,091 | Mar. 17 | 2662 | 599 | 103 | 596 |
| Filter construction and apparatus connected therewith. | S. H. Adams | 745,754 | Dec. 1 | 780 | 178 | 107 | 1265 |
| Filter. Disk | E. Simoneton | 730,485 | June 9 | 1755 | 393 | 104 | 1503 |
| Filter. Down-spout | W. H. Otis | 723,783 | Mar. 24 | 3941 | 889 | 103 | 870 |
| Filter. Hydrocarbon- | G. W. Stewart | 723,556 | Mar. 24 | 3548 | 794 | 103 | 787 |
| Filter. Liquid- | O. Selg and C. Guntrum | 739,562 | Sept. 22 | 3889 | 872 | 106 | 881 |
| Filter. Liquid- | O. Selg and C. Guntrum | 739,621 | Sept. 22 | 4011 | 896 | 106 | 906 |
| Filter. Metallurgical | J. and L. Stoveken | 730,195 | June 2 | 1195 | 269 | 104 | 1370 |
| Filter. Oil- | C. A. Conn | 718,428 | Jan. 13 | 1676 | 370 | 102 | 374 |
| Filter. Oil- | A. G. Norcutt and A. Hussel | 719,848 | Feb. 3 | 785 | 184 | 102 | 989 |
| Filter. Oil- | G. D. Taylor and J. E. Parrish | 728,047 | May 12 | 2310 | 513 | 104 | 509 |
| Filter. Oil- | B. L. Scott | 732,659 | June 30 | 5867 | 1301 | 104 | 2412 |
| Filter. Oil- | W. F. Warden | 740,957 | Oct. 6 | 1050 | 239* | 106 | 1471 |
| Filter-pad and making same | E. M. Knight | 740,367 | Sept. 29 | 5422 | 1221 | 106 | 1223 |
| Filter-pads. Mold for making | E. M. Knight | 739,087 | Sept. 15 | 3027 | 671 | 106 | 680 |
| Filter-press | W. Sommer | 718,397 | Jan. 13 | 1624 | 357 | 102 | 364 |
| Filter-press | J. and L. Stoveken | 729,807 | June 2 | 527 | 116 | 104 | 1235 |
| Filter-press | C. Kolb | 730,776 | June 9 | 2262 | 502, 503 | 104 | 1614 |
| Filter-press | A. James | 744,761 | Nov. 24 | 3801 | 819 | 107 | 858 |
| Filter. Revoluble | G. Moore | 746,552 | Dec. 8 | 2247 | 515, 516 | 107 | 1600 |
| Filter. Rotary | G. Moore | 743,652 | Nov. 10 | 1701 | 359 | 107 | 379 |

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| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Filter. Sand | G. Engel | 733,174 | July 7 | 842 | 204 | 105 | 177 |
| Filter. Water- | J. W. Burns | 723,238 | Mar. 24 | 2949 | 662 | 103 | 669 |
| Filter. Water- | D. J. Bliss | 723,639 | Mar. 24 | 3696 | 828 | 103 | 817 |
| Filter. Water- | T. Linke | 726,714 | Apr. 28 | 4277 | 966 | 103 | 2109 |
| Filter. Water- | W. G. Tousey | 733,885 | July 14 | 2139 | 505 | 105 | 466 |
| Filter. Water- | A. F. Stern | 742,254 | Oct. 27 | 3651 | 816 | 106 | 2066 |
| Filters. Cleaning | T. J. Zoeller | 736,669 | Aug. 18 | 3051 | 674 | 105 | 1666 |
| Filtering | O. H. and W. M. Jewell | 726,304 | Apr. 28 | 3483 | 789 | 103 | 1950 |
| Filtering and oiling system. Oil- | F. E. Collins | 721,426 | Feb. 24 | 3792 | 863 | 102 | 1670 |
| Filtering apparatus | J. P. Keane | 737,415 | Aug. 25 | 4459 | 1000 | 105 | 1983 |
| Filtering apparatus | J. Miller | 741,055 | Oct. 13 | 1236 | 280 | 106 | 1531 |
| Filtering apparatus | W. Kathol | 744,764 | Nov 24 | 3806 | 821 | 107 | 859 |
| Filtering material. Machine for washing | C. H. Loew and L. Bolz | 721,711 | Mar. 3 | 111 | 23, 24 | 103 | 25 |
| Filtering medium and making same | E. M. Knight | 737,116 | Aug. 25 | 3882 | 862 | 105 | 1860 |
| Filtering-plates, &c. Apparatus for transporting | V. Lapp | 734,898 | July 28 | 4090 | 953 | 105 | 908 |
| Filtering-press | V. Lapp | 733,663 | July 14 | 1720 | 407 | 105 | 379 |
| Filtering substance and making same | T. Wendling | 724,636 | Apr. 7 | 405 | ..... | 103 | 1256 |
| Filtering system | F. A. W. Davis | 730,518 | June 9 | 1823 | 406 | 104 | 1518 |
| Filtering system | G. Moore | 748,088 | Dec. 29 | 5181 | 1172, 1173 | 107 | 2318 |
| Filtering system. Water- | D. M. Pfautz | 748,095 | Dec. 29 | 5197 | 1175 | 107 | 2321 |
| Finder and means for determining focal distances. Combined | G. N. Pifer | 720,615 | Feb. 17 | 2265 | 519 | 102 | 1329 |
| Finger-guard | D. McMillan | 718,652 | Jan. 20 | 2150 | 469 | 102 | 490 |
| Finger-nail clipper | J. C. Ernst | 725,946 | Apr. 21 | 2832 | 642 | 103 | 1801 |
| Finger-nail trimmer | J. Petrelli | 741,709 | Oct. 20 | 2553 | 569 | 106 | 1825 |
| Finger-pad | J. G. Marsh | 719,352 | Jan. 27 | 3490 | 776 | 102 | 783 |
| Finger-ring | C. Gosling | 733,029 | July 7 | 580 | 141 | 105 | 124 |
| Finger-ring | H. Pizor | 744,605 | Nov. 17 | 3488 | 752 | 107 | 773 |
| Finger-ring | W. N. Rumely | 747,232 | Dec. 15 | 3536 | 803 | 107 | 1911 |
| Finger-ring mold | W. H. Ford | 747,058 | Dec. 15 | 3222 | 734 | 107 | 1844 |
| Finger-ring mold | W. H. Ford | 747,059 | Dec. 15 | 3224 | 734 | 107 | 1844 |
| Finger-ring. Ornamental | J. Anthony | 728,827 | May 26 | 3795 | 846 | 104 | 860 |
| Finger-rings, &c. Interchangeable initial letter or insignia for | J. A. Lieb, Jr | 727,648 | May 12 | 1549 | 349 | 104 | 351 |
| Fining | A. E. Berry | 738,151 | Sept. 8 | 1193 | ..... | 106 | 273 |
| Fire-alarm and fire-escape | T. S. Philpott and R. Hutchinson | 742,727 | Oct. 27 | 4490 | 1015 | 106 | 2241 |
| Fire-alarm and sprinkler system. Automatic | F. K. Ludlow | 740,450 | Oct. 6 | 128 | 26 | 106 | 1273 |
| Fire-alarm apparatus. Automatic | H. Plowman | 719,504 | Feb. 3 | 164 | 37, 38 | 102 | 858 |
| Fire-alarm. Automatic | D. Beaulieu | 730,864 | June 16 | 2419 | 534 | 104 | 1666 |
| Fire-alarm. Electric | G. B. Martin | 736,755 | Aug. 18 | 3219 | 711 | 105 | 1700 |
| Fire-alarm. Electric | J. W. H. Uytenbogaart | 743,600 | Nov. 10 | 1611 | 337 | 107 | 360 |
| Fire-alarm mechanism | T. A. Long and G. W. Cofran | 734,906 | July 28 | 4101 | 955, 956 | 105 | 911 |
| Fire-alarm pistol | C. E. Lombard | 718,211 | Jan. 13 | 1288 | 283 | 102 | 292 |
| Fire-alarm system | B. P. Ketcham | 731,520 | Feb. 24 | 3953 | 901 | 102 | 1705 |
| Fire-alarm system | A. J. Woodworth | 744,849 | Nov. 24 | 3959 | 853, 854 | 107 | 891 |
| Fire-alarm-system regulator | D. T. Spring, A. Long, and G. H. Ebeling. | 725,603 | Apr. 14 | 2189 | 496 | 103 | 1651 |
| Fire-alarm systems. Circuit-breaker for | D. T. Spring, A. Long, and G. H. Ebeling. | 725,602 | Apr. 14 | 2187 | 495 | 103 | 1650 |
| Fire-alarm. Thermal electric | T. B. and F. A. Duncan | 727,315 | May 5 | 918 | 200 | 104 | 198 |
| Fire-alarm transmitter and signal. Automatic audible | J. H. Munchausen | 724,917 | Apr. 7 | 917 | 210 | 103 | 1366 |
| Fire and burglar alarm | I. S. Bunker | 719,563 | Feb. 3 | 271 | 63 | 102 | 880 |
| Fire and police alarm call system | W. J. Hofstatter | 720,347 | Feb. 10 | 1729 | 393 | 102 | 1205 |
| Fire apparatus | E. F. Steck | 731,718 | June 23 | 4045 | 902, 903 | 104 | 2014 |
| Fire. Apparatus for rescuing persons from buildings in case of | M. Schröter | 724,745 | Apr. 7 | 614 | 144 | 103 | 1300 |
| Fire-box | L. and C. Glover and D. Crowther. | 730,905 | June 16 | 2514 | 559 | 104 | 1686 |
| Fire-box | L. Greaven | 731,449 | June 23 | 3558 | 790, 791, 792, 793 | 104 | 1918 |
| Fire-box | W. D. Boyce | 741,218 | Oct. 13 | 1561 | 352 | 106 | 1600 |
| Fire-box sheet | J. Conroy | 736,693 | Aug. 18 | 3112 | 686 | 105 | 1678 |
| Fire-curtain | J. W. Reno | 744,404 | Nov. 17 | 3157 | 677, 678 | 107 | 705 |
| Fire-door | C. E. Simpson | 727,854 | May 12 | 1960 | 437 | 104 | 434 |
| Fire-door | C. E. Simpson | 746,885 | Dec. 15 | 2879 | 666 | 107 | 1763 |
| Fire-door. Automatic | O. C. Donecker and J. A. Nagle | 726,034 | Apr. 21 | 2972 | 676 | 103 | 1829 |
| Fire-escape | H. Fahldiek | 717,666 | Jan. 6 | 246 | 62 | 102 | 53 |
| Fire-escape | R. Toennes | 718,037 | Jan. 6 | 973 | 215, 216 | 102 | 209 |
| Fire-escape | L. Casanova | 719,646 | Feb. 3 | 420 | 96 | 102 | 910 |
| Fire-escape | T. B. Barber | 720,996 | Feb. 17 | 2935 | 673 | 102 | 1471 |
| Fire-escape | W. J. Witham and J. H. Byrne | 721,488 | Feb. 24 | 3901 | 887 | 102 | 1693 |
| Fire-escape | J. J. Johnston | 732,110 | Mar. 3 | 834 | 186 | 103 | 180 |
| Fire-escape | E. Anderson | 732,552 | Mar. 10 | 1665 | 367, 368, 369 | 103 | 374 |
| Fire-escape | F. D. Wood and W. A. Royse | 732,648 | Mar. 10 | 1834 | 409 | 103 | 410 |
| Fire-escape | J. S. Johnson | 732,713 | Mar. 17 | 1996 | 446 | 103 | 457 |
| Fire-escape | D. Brown | 733,194 | Mar. 17 | 2869 | 643 | 103 | 638 |
| Fire-escape | L. H. Hébert | 733,868 | Mar. 31 | 4114 | 928 | 103 | 923 |
| Fire-escape | A. Boisclaire | 735,206 | Apr. 14 | 1472 | 334 | 103 | 1496 |
| Fire-escape | A. B. Holson | 735,251 | Apr. 14 | 1550 | 352 | 103 | 1513 |
| Fire-escape | J. Yost | 736,389 | Apr. 28 | 3643 | 826 | 103 | 1983 |
| Fire-escape | B. Tenenbom | 736,592 | Apr. 28 | 4059 | 916 | 103 | 2063 |
| Fire-escape | E. P. Le Compte | 736,708 | Apr. 28 | 4266 | 964 | 103 | 2106 |
| Fire-escape | T. May | 737,170 | May 5 | 663 | 142 | 104 | 143 |
| Fire-escape | D. Ward | 737,237 | May 5 | 780 | 167 | 104 | 169 |
| Fire-escape | H. R. Cole | 737,748 | May 12 | 1750 | 393 | 104 | 393 |
| Fire-escape | T. Kelly | 738,114 | May 12 | 2421 | 540 | 104 | 534 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Fire-escape | J. Triplett | 728,145 | May 12 | 2482 | 552 | 104 | 545 |
| Fire-escape | J. Spuck | 729,437 | May 26 | 4854 | 1075 | 104 | 1077 |
| Fire-escape | J. Aden | 730,072 | June 2 | 1002 | 224 | 104 | 1331 |
| Fire-escape | C. J. Peterson | 730,839 | June 9 | 2369 | 523 | 104 | 1636 |
| Fire-escape | W. H. Logan | 732,645 | June 30 | 5833 | 1292 | 104 | 2406 |
| Fire-escape | W. H. Yeager and E. R. Rixstine | 732,808 | July 7 | 211 | 53 | 105 | 48 |
| Fire-escape | C. N. Johnson | 732,946 | July 7 | 440 | 109 | 105 | 95 |
| Fire-escape | H. E. Smith | 734,440 | July 21 | 3216 | 757 | 105 | 713 |
| Fire-escape | E. Banhagel | 736,056 | Aug. 11 | 1956 | 416, 417 | 105 | 1418 |
| Fire-escape | M. O. Barke | 736,347 | Aug. 18 | 2449 | 535 | 105 | 1541 |
| Fire-escape | M. Ekman | 736,947 | Aug. 25 | 3599 | 798 | 105 | 1801 |
| Fire-escape | J. B. Howe and R. J. Vaughan | 737,106 | Aug. 25 | 3867 | 858, 859 | 105 | 1856 |
| Fire-escape | A. W. Riches | 737,145 | Aug. 25 | 3924 | 872 | 105 | 1868 |
| Fire-escape | W. Benney | 737,197 | Aug. 25 | 4030 | 893 | 105 | 1892 |
| Fire-escape | M. C. Young | 737,547 | Aug. 25 | 4704 | 1056 | 105 | 2039 |
| Fire-escape | M. Cody | 738,164 | Sept. 8 | 1245 | 270 | 106 | 285 |
| Fire-escape | W. F. Epperson | 738,785 | Sept. 15 | 2494 | 548 | 106 | 566 |
| Fire-escape | D. Heath | 738,998 | Sept. 15 | 2861 | 635 | 106 | 646 |
| Fire-escape | J. R. Prouty | 740,917 | Oct. 6 | 975 | 219, 220 | 106 | 1455 |
| Fire-escape | G. A. Netcott | 744,094 | Nov. 17 | 2567 | 549 | 107 | 576 |
| Fire-escape | M. C. Johnston | 744,762 | Nov. 24 | 3803 | 820 | 107 | 858 |
| Fire-escape | F. Bielhen | 745,140 | Nov. 24 | 4521 | 978, 979 | 107 | 1008 |
| Fire-escape | F. Bielhen | 745,141 | Nov. 24 | 4524 | 979 | 107 | 1009 |
| Fire-escape | S. M. Hunt | 747,720 | Dec. 22 | 4437 | 1001 | 107 | 2131 |
| Fire-escape | W. R. Smith | 748,114 | Dec. 29 | 5236 | 1188 | 107 | 2329 |
| Fire-escape | C. H. Parvin and M. L. Snyder | 748,305 | Dec. 29 | 5569 | 1270 | 107 | 2401 |
| Fire-escape | C. M. Petersen | 748,526 | Dec. 29 | 5982 | 1356 | 107 | 2491 |
| Fire-escape and ladder | H. Bracklo | 719,990 | Feb. 10 | 1042 | 243 | 102 | 1060 |
| Fire-escape and table | J. E. Burns | 731,160 | June 16 | 3001 | 666 | 104 | 1785 |
| Fire-escape apparatus | F. Hillier | 734,230 | July 21 | 2829 | 663, 664 | 105 | 633 |
| Fire-escape appliance | E. L. Evens | 735,484 | Aug. 4 | 864 | 184 | 105 | 1164 |
| Fire-escape balcony. Movable | M. L. Cronin | 719,755 | Feb. 3 | 628 | 141 | 102 | 954 |
| Fire-escape ladder | L. G. Pettis | 719,364 | Jan. 27 | 3516 | 781, 782 | 102 | 789 |
| Fire-escape ladder | R. Schapler | 723,925 | Mar. 31 | 4230 | 952 | 103 | 948 |
| Fire-escape. Pneumatic | I. Hogeland | 725,964 | Apr. 21 | 2857 | 648 | 103 | 1807 |
| Fire-escape. Portable | J. B. Lloyd | 727,980 | May 12 | 2188 | 488 | 104 | 484 |
| Fire-escape. Portable | W. B. Field | 731,352 | June 16 | 3338 | 745 | 104 | 1853 |
| Fire-escape. Portable | J. E. Qumn | 731,708 | June 23 | 4029 | 899 | 104 | 2011 |
| Fire-escapes. Life-saving apparatus for use in connection with | J. Haswell | 720,519 | Feb. 10 | 2035 | 468 | 102 | 1268 |
| Fire-extinguisher | E. S. Buckland | 717,967 | Jan. 6 | 834 | 189 | 102 | 179 |
| Fire-extinguisher | H. A. Bierley | 719,176 | Jan. 27 | 3153 | 701 | 102 | 710 |
| Fire-extinguisher | J. M. Miller | 727,174 | May 5 | 670 | 144 | 104 | 145 |
| Fire-extinguisher | C. J. Eichhorn | 735,480 | Aug. 4 | 854 | 181, 182 | 105 | 1162 |
| Fire-extinguisher | J. E. McWilliam | 739,016 | Sept. 15 | 2890 | 642 | 106 | 652 |
| Fire-extinguisher | E. J. Buckland | 742,156 | Oct. 27 | 3448 | 769 | 106 | 2024 |
| Fire-extinguisher | W. J. Fry | 744,061 | Nov. 17 | 2504 | 537 | 107 | 563 |
| Fire-extinguisher | W. C. Hickox | 746,702 | Dec. 15 | 2530 | 581 | 107 | 1685 |
| Fire-extinguisher acid-holder | J. L. Williams | 719,403 | Jan. 27 | 3581 | 800 | 102 | 803 |
| Fire extinguisher and alarm. Automatic | A. D. Löffler | 719,946 | Feb. 3 | 947 | 221 | 102 | 1024 |
| Fire-extinguisher apparatus | C. A. Teal | 724,968 | Apr. 7 | 1014 | 232, 233 | 103 | 1385 |
| Fire-extinguisher. Automatic | R. W. Newton | 728,280 | May 19 | 2759 | 613 | 104 | 627 |
| Fire-extinguisher. Automatic | F. M. Allen | 732,494 | June 30 | 5557 | 1232 | 104 | 2343 |
| Fire-extinguisher. Automatic | G. E. Hibbard | 733,962 | July 21 | 2303 | 541, 542 | 105 | 518 |
| Fire-extinguisher. Automatic | E. G. Gay | 736,514 | Aug. 18 | 2763 | 604 | 105 | 1608 |
| Fire-extinguisher. Automatic | I. Kitsee | 737,419 | Aug. 25 | 4468 | 1002 | 105 | 1985 |
| Fire-extinguisher. Automatic stationary | W. Esty | 720,013 | Feb. 10 | 1100 | 253 | 102 | 1073 |
| Fire-extinguisher. Automatic stationary | W. Esty | 744,057 | Nov. 17 | 2498 | 536 | 107 | 562 |
| Fire-extinguisher. Chemical | G. W. Coon | 724,440 | Apr. 7 | 36 | 10 | 103 | 1177 |
| Fire-extinguisher. Chemical | A. C. Badger | 730,333 | June 9 | 1466 | 324 | 104 | 1443 |
| Fire-extinguisher systems. Valve for dry-pipe | F. R. Noss | 737,861 | Sept. 1 | 595 | 130 | 106 | 131 |
| Fire-extinguisher truck | R. M. Green | 720,422 | Feb. 10 | 1860 | 424 | 102 | 1233 |
| Fire-extinguishers. Sprinkler-head for automatic | G. E. Hibbard | 733,646 | July 14 | 1690 | 401 | 105 | 374 |
| Fire-extinguishing apparatus | E. Zimmerman | 732,990 | July 7 | 513 | 127 | 105 | 110 |
| Fire-extinguishing apparatus | J. W. Rapp | 733,421 | July 14 | 1301 | 307 | 105 | 292 |
| Fire-extinguishing apparatus | W. D. Link | 739,327 | Sept. 22 | 3466 | 773 | 106 | 789 |
| Fire-extinguishing compound | J. B. Miller | 719,833 | Feb. 3 | 765 | ------ | 102 | 985 |
| Fire-extinguishing sprinkler. Automatic | W. L. Cooper | 718,566 | Jan. 13 | 2000 | 436 | 102 | 444 |
| Fire-extinguishing system | T. M. Collison and F. P. Currie | 740,238 | Sept. 29 | 5186 | 1166 | 106 | 1174 |
| Fire-flue boiler | D. L. Shaffer | 731,513 | June 23 | 3669 | 818 | 104 | 1941 |
| Fire-hose coupling | E. Mayer | 719,829 | Feb. 3 | 761 | 179 | 102 | 984 |
| Fire-hose. Means for bridging over | W. L. Doughty | 738,170 | Sept. 8 | 1253 | 272 | 106 | 287 |
| Fire-hose nozzle and nozzle device | E. F. Osborne | 735,404 | Aug. 4 | 692 | 148 | 105 | 1128 |
| Fire-hose wrench | G. N. Thompson | 741,082 | Oct. 13 | 1286 | 294 | 106 | 1541 |
| Fire-hydrant | C. E. Jones | 723,532 | Mar. 24 | 3507 | 785 | 103 | 779 |
| Fire-hydrant | W. W. Corey. (Reissue) | 12,122 | June 16 | 3481 | 778 | 104 | 1882 |
| Fire-kindler | L. S. Murdock | 719,839 | Feb. 3 | 773 | 181 | 102 | 987 |
| Fire-kindler | J. Adler | 739,131 | Sept. 15 | 3113 | 688 | 106 | 697 |
| Fire-kindler | J. A. Torney | 745,932 | Dec. 1 | 1135 | 255 | 107 | 1341 |
| Fire-kindler | B. Wallgren | 747,282 | Dec. 15 | 3645 | 823 | 107 | 1936 |
| Fire-kindler | G. H. Lotspike | 747,452 | Dec. 22 | 3946 | 887 | 107 | 2019 |
| Fire-kindler | E. C. Sachse | 748,312 | Dec. 29 | 5578 | 1272 | 107 | 2403 |
| Fire-kindler. Automatic | M. G. Hoffman and J. H. Hieb | 728,107 | May 12 | 2413 | 538 | 104 | 532 |
| Fire-kindler. Automatic | M. G. Hoffman and J. H. Hieb | 728,108 | May 12 | 2414 | 538 | 104 | 532 |
| Fire-kindler mold | E. C. Sachse | 741,169 | Oct. 13 | 1451 | 330 | 106 | 1575 |
| Fire-kindlers. Manufacture of | E. C. Sachse | 725,993 | Apr. 21 | 2909 | 660 | 103 | 1816 |
| Fire ladder and escape means. Combined | W. Hubartt | 736,104 | Aug. 11 | 2030 | 432 | 105 | 1434 |

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| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Fireman's helmet | C. Eagle and F. Vogt, Jr. | 737,373 | Aug. 25 | 4366 | 973 | 105 | 1963 |
| Fire or shipwreck. Apparatus for saving life from | F. E. Newsam | 726,185 | Apr. 21 | 3244 | 736 | 103 | 1885 |
| Fire-plug. Antifreezing | J. F. Kehr | 739,684 | Sept. 22 | 4138 | 923 | 106 | 934 |
| Fire-pot | E. S. Clare | 734,401 | July 21 | 3150 | 740 | 105 | 700 |
| Fire-protecting door for air or elevator shafts | H. Fischer | 736,711 | Aug. 18 | 3148 | 694 | 105 | 1686 |
| Fire-raking apparatus | J. C. McDonald | 719,358 | Jan. 27 | 3502 | 779 | 102 | 786 |
| Fire-resisting door | G. E. Walter | 734,205 | July 21 | 2778 | 652 | 105 | 620 |
| Fire-resisting material. Manufacture of flexible | R. J. Friswell | 737,557 | Aug. 25 | 4717 | | 105 | 2042 |
| Fire-resisting window | G. Hayes | 742,868 | Nov. 3 | 85 | 20 | 107 | 20 |
| Fire-shield | J. J. Plucker | 733,916 | July 14 | 2208 | 518 | 105 | 479 |
| Fire-shovel | H. C. Stiefel | 736,798 | Aug. 18 | 3306 | 733 | 105 | 1718 |
| Fire-shutter-releasing mechanism | P. Ebner | 735,227 | Aug. 4 | 377 | 73 | 105 | 1061 |
| Fire-signal | J. H. Dixon | 740,823 | Oct. 6 | 828 | 186 | 106 | 1422 |
| Fire-truck and fire-escape | C. A. Barnes | 738,395 | Sept. 8 | 1721 | 374, 375 | 106 | 386 |
| Fire-tube boiler | F. Burger and H. M. Williams | 743,825 | Nov. 10 | 2012 | 427 | 107 | 445 |
| Fire-wagon | J. J. Plucker | 735,410 | Aug. 4 | 708 | 151 | 105 | 1131 |
| Fires. Automatic sprinkler for extinguishing | J. G. Grimsley | 735,756 | Aug. 11 | 1379 | 296 | 105 | 1292 |
| Fires. Device for facilitating the rebuilding of | E. E. Moser | 727,181 | May 5 | 682 | 146 | 104 | 148 |
| Fires. Extinguishing | A. H. Van Riper and P. F. Guthrie | 732,143 | June 30 | 4877 | 1085 | 104 | 2204 |
| Fires in oil-filled receptacles. Extinguishing | R. D. Mershon | 744,585 | Nov. 17 | 3459 | 745 | 107 | 768 |
| Fires. Protector from | M. Murry | 718,782 | Jan. 20 | 2404 | 533 | 102 | 541 |
| Firing mechanism | R. P. Stout and F. G. Hughes | 734,005 | July 21 | 2382 | 559, 560 | 105 | 534 |
| Firearm | J. C. White | 717,958 | Jan. 6 | 822 | 185, 186 | 102 | 176 |
| Firearm | F. A. Beckwith | 720,775 | Feb. 17 | 2534 | 584 | 102 | 1386 |
| Firearm | M. Goss | 732,406 | June 30 | 5381 | 1193 | 104 | 2309 |
| Firearm | C. Hamilton | 739,412 | Sept. 22 | 3648 | 811 | 106 | 828 |
| Firearm attachment | R. M. G. Phillips | 724,327 | Mar. 31 | 5044 | 1129, 1130 | 103 | 1111 |
| Firearm. Automatic | A. H. Stow | 726,109 | Apr. 21 | 3085 | 699, 700 | 103 | 1852 |
| Firearm. Automatic | F. R. von Mannlicher | 728,739 | May 19 | 3619 | 804 | 104 | 807 |
| Firearm. Automatic | J. J. Reifgraber | 729,413 | May 26 | 4817 | 1068, 1069 | 104 | 1069 |
| Firearm. Automatic | J. T. S. Schouboe | 733,681 | July 14 | 1745 | 413 | 105 | 385 |
| Firearm. Automatic | H. Fuberg | 738,140 | Sept. 1 | 1170 | 258 | 106 | 252 |
| Firearm. Automatic | S. A. Huntley | 747,073 | Dec. 15 | 3248 | 740 | 107 | 1850 |
| Firearm. Automatic | J. M. Browning | 747,585 | Dec. 22 | 4179 | 940 | 107 | 2073 |
| Firearm. Automatically-cocking | E. Roth | 727,453 | May 5 | 1171 | 258 | 104 | 253 |
| Firearm. Barrel-lock | E. Sturgill | 728,326 | May 19 | 2857 | 631 | 104 | 647 |
| Firearm. Breech-loading | O. F. Mossberg | 745,885 | Dec. 1 | 1060 | 239 | 107 | 1324 |
| Firearm-ejector | C. W. Bartholmes | 730,862 | June 16 | 2416 | 534 | 104 | 1665 |
| Firearm-ejector | G. E. Humphreys | 732,187 | June 30 | 4957 | 1102 | 104 | 2221 |
| Firearm-ejector | H. L. Powell | 732,891 | July 7 | 346 | 85 | 105 | 76 |
| Firearm-extractor | T. G. Bennett | 747,675 | Dec. 22 | 4356 | 984 | 107 | 2112 |
| Firearm. Gas-operated | T. C. Johnson | 720,698 | Feb. 17 | 2410 | 551, 552 | 102 | 1379 |
| Firearm. Gas-operated | A. Burgess | 726,399 | Apr. 28 | 3659 | 830 | 103 | 1986 |
| Firearm. Gas-operated | S. N. McClean | 735,131 | Aug. 4 | 160 | 36, 37 | 105 | 1016 |
| Firearm-holster | R. M. G. Phillips | 726,824 | Apr. 28 | 4488 | 1012 | 103 | 2152 |
| Firearm. Magazine- | J. D. Pederson | 719,955 | Feb. 3 | 963 | 224, 225 | 102 | 1027 |
| Firearm. Magazine- | A. Mills | 722,125 | Mar. 3 | 856 | 191, 192 | 103 | 184 |
| Firearm-magazine | C. H. A. F. L. Ross | 747,777 | Dec. 22 | 4543 | 1023 | 107 | 2156 |
| Firearm magazine. Repeating- | H. Harris | 723,864 | Mar. 31 | 4106 | 926, 927 | 103 | 921 |
| Firearm. Recoil- | J. T. S. Schouboe | 730,801 | June 9 | 2303 | 512 | 104 | 1623 |
| Firearm recoil-minimizer | W. S. Simpson | 743,042 | Nov. 3 | 431 | 94 | 107 | 91 |
| Firearm. Recoil-operated | J. M. Browning | 730,870 | June 16 | 2427 | 537, 538 | 104 | 1668 |
| Firearm. Revolving | J. H. Wesson | 743,784 | Nov. 10 | 1939 | 410 | 107 | 430 |
| Firearm safety-lock | M. V. B. Allen | 741,754 | Oct. 20 | 2635 | 588 | 106 | 1842 |
| Firearm. Safety-sear | R. Bloomer | 728,791 | May 19 | 3712 | 828 | 104 | 825 |
| Firearm-sight | J. G. Hubbard | 722,844 | Mar. 17 | 2239 | 502 | 103 | 506 |
| Firearm-sight | J. T. Brayton | 727,073 | May 5 | 486 | 103 | 104 | 106 |
| Firearm-sight | L. L. Hepburn | 732,075 | June 30 | 4724 | 1055 | 104 | 2172 |
| Firearm-sight | C. Huber | 735,771 | Aug. 11 | 1403 | 302 | 105 | 1297 |
| Firearm-sight | G. H. Tansley | 737,677 | Sept. 1 | 216 | 46 | 106 | 50 |
| Firearm. Single-trigger | J. A. R. Elliott | 732,531 | June 30 | 5625 | 1247 | 104 | 2359 |
| Firearm. Single-trigger | A. E. Lard | 747,191 | Dec. 15 | 3454 | 783, 784 | 107 | 1895 |
| Firearm single-trigger mechanism | G. C. Cline | 748,263 | Dec. 29 | 5499 | 1253, 1254 | 107 | 2386 |
| Firearm. Subcaliber | G. H. Garrison | 732,540 | June 30 | 5643 | 1251 | 104 | 2363 |
| Firearm-support | R. J. Clyde | 721,425 | Feb. 24 | 3790 | 862 | 102 | 1670 |
| Firearm trigger mechanism | E. M. Liebert | 719,019 | Jan. 27 | 2843 | 637 | 102 | 648 |
| Firearm. Tubular-magazine | W. Mason and F. F. Burton | 748,395 | Dec. 29 | 5716 | 1306 | 107 | 2434 |
| Firearms. Adjustable head-rest for | J. Gaut | 737,732 | Sept. 1 | 324 | 68 | 106 | 74 |
| Firearms. Top snap and cylinder-catch for revolving | A. Fyrberg | 735,490 | Aug. 4 | 873 | 186 | 105 | 1166 |
| Fireplace | D. C. Simons | 746,182 | Dec. 8 | 1597 | 357 | 107 | 1461 |
| Fireplace | A. W. Hall | 748,497 | Dec. 29 | 5925 | 1346 | 107 | 2479 |
| Fireplace and grate | M. E. Travis | 741,192 | Oct. 13 | 1508 | 341 | 106 | 1589 |
| Fireplace appliance. Open- | W. P. Richardson | 730,798 | June 9 | 2296 | 510 | 104 | 1621 |
| Fireplace fire-box | J. J. M. Lange | 735,532 | Aug. 4 | 963 | 203, 204 | 105 | 1186 |
| Fireplace fuel-support. Open- | A. A. Low | 744,083 | Nov. 17 | 2545 | 545 | 107 | 571 |
| Fireplace-heater | T. B. Bayless | 728,355 | May 19 | 2907 | 642 | 104 | 657 |
| Fireproof-blind roller | W. M. Brunst | 742,155 | Oct. 27 | 3447 | 768 | 106 | 2024 |
| Fireproof-blind roller | J. Volp | 742,262 | Oct. 27 | 3661 | 818 | 106 | 2068 |
| Fireproof building | J. T. Simpson and M. N. Shoemaker | 737,670 | Sept. 1 | 206 | 44 | 106 | 47 |
| Fireproof building | J. Scully | 745,915 | Dec. 1 | 1108 | 243 | 107 | 1335 |

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| Invention. | Name. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|---|
| | | | | Spec. | Dr'g. | Vol. | Page. |
| Fireproof building construction | J. T. O'Brien | 718,214 | Jan. 13 | 1292 | 285 | 102 | 293 |
| Fireproof building construction | E. P. S. Wright and A. McCartney | 727,250 | May 5 | 798 | 171 | 104 | 172 |
| Fireproof building structure | C. M. Ellinger and L. Kopczynski | 729,299 | May 26 | 4634 | 1024 | 104 | 1031 |
| Fireproof building structure | W. Klinck | 743,000 | Nov. 3 | 343 | 75 | 107 | 72 |
| Fireproof buildings. Ceiling or wall construction for | W. Horn | 728,919 | May 26 | 3950 | 878 | 104 | 890 |
| Fireproof casing | J. J. Plucker | 734,603 | July 28 | 3523 | 823<br>824 | 105 | 794 |
| Fireproof casing | J. J. Plucker | 734,604 | July 28 | 3526 | 824 | 105 | 794 |
| Fireproof casing | J. J. Plucker | 734,605 | July 28 | 3526 | 825 | 105 | 795 |
| Fireproof casing for elevator-shafts | J. J. Plucker | 734,598 | July 28 | 3516 | 820<br>821 | 105 | 792 |
| Fireproof casing for elevator-shafts | J. J. Plucker | 734,599 | July 28 | 3518 | 821<br>822 | 105 | 793 |
| Fireproof casing for elevator-shafts | J. J. Plucker | 734,600 | July 28 | 3520 | 822 | 105 | 793 |
| Fireproof casing for elevator-shafts | J. J. Plucker | 734,601 | July 28 | 3521 | 822<br>823 | 105 | 793 |
| Fireproof casing for elevator-shafts | J. J. Plucker | 734,602 | July 28 | 3522 | 823 | 105 | 794 |
| Fireproof compound | G. O. Rosenleaf | 735,155 | Aug. 4 | 214 | ..... | 105 | 1028 |
| Fireproof construction | G. A. Schillinger | 732,460 | Mar. 10 | 1501 | 331 | 103 | 336 |
| Fireproof construction | J. A. Holmboe | 727,364 | May 5 | 1013 | 220 | 104 | 218 |
| Fireproof construction | N. Pelligreen | 731,216 | June 16 | 3096 | 686<br>687 | 104 | 1803 |
| Fireproof construction | W. N. Wight | 732,483 | June 30 | 5534 | 1228 | 104 | 2339 |
| Fireproof construction | C. H. Scammell | 741,934 | Oct. 20 | 2067 | 661 | 106 | 1912 |
| Fireproof construction | H. L. Kubbernuss | 743,295 | Nov. 3 | 934 | 203 | 107 | 200 |
| Fireproof construction | H. L. Kubbernuss | 746,345 | Dec. 8 | 1900 | 432<br>433 | 107 | 1524 |
| Fireproof-construction tension-rod | J. B. Hinchman | 729,937 | June 2 | 749 | 167 | 104 | 1281 |
| Fireproof door or shutter | J. C. Mallory | 725,575 | Apr. 14 | 2141 | 484<br>485 | 103 | 1639 |
| Fireproof floor | H. Maring | 718,267 | Jan. 13 | 1392 | 310<br>311 | 102 | 315 |
| Fireproof floor | W. N. Wight | 732,482 | June 30 | 5530 | 1227<br>1228 | 104 | 2338 |
| Fireproof floor and ceiling construction | J. T. Simpson and M. N. Shoemaker | 719,892 | Feb. 3 | 866 | 204 | 102 | 1007 |
| Fireproof floor and ceiling construction | J. T. Simpson and M. N. Shoemaker | 738,950 | Sept. 15 | 2787 | 617 | 106 | 630 |
| Fireproof floor and constructing same | W. N. Wight | 732,484 | June 30 | 5537 | 1228<br>1229 | 104 | 2339 |
| Fireproof floor construction | C. F. Buente | 728,857 | May 26 | 3848 | 856 | 104 | 870 |
| Fireproof floor construction | W. C. Lewis | 732,091 | June 30 | 4758 | 1062 | 104 | 2178 |
| Fireproof floor construction | P. T. Shields | 738,496 | Sept. 8 | 1927 | 420 | 106 | 429 |
| Fireproof floor construction | E. Merrick | 741,054 | Oct. 13 | 1235 | 279 | 106 | 1531 |
| Fireproof floors. Adjustable joist for supporting | T. O'Brien | 737,133 | Aug. 25 | 3910 | 868<br>869 | 105 | 1866 |
| Fireproof floors, &c. Construction of | T. A. Naylor | 727,187 | May 5 | 690 | 148 | 104 | 149 |
| Fireproof flooring | N. Poulson | 730,963 | June 16 | 2618 | 583 | 104 | 1708 |
| Fireproof girder or beam | W. N. Wight | 742,943 | Nov. 3 | 211 | 48, 49 | 107 | 47 |
| Fireproof metal window | J. A. Knisely and W. J. Klemm | 743,088 | Nov. 3 | 519 | 112 | 107 | 109 |
| Fireproof nailing-brick | J. T. Taylor | 741,185 | Oct. 13 | 1489 | 338 | 106 | 1583 |
| Fireproof partition | H. Maring | 721,962 | Mar. 3 | 579 | 128<br>129 | 103 | 126 |
| Fireproof partitions. Constructing | W. C. Lyon and K. Berle | 742,045 | Oct. 20 | 3205 | 716 | 106 | 1960 |
| Fireproof. Rendering fabrics | G. Blenio | 724,788 | Apr. 7 | 695 | ..... | 103 | 1317 |
| Fireproof rolling partition | W. McWorkman | 741,698 | Oct. 20 | 2521 | 563 | 106 | 1820 |
| Fireproof stairway | F. A. Winslow | 747,825 | Dec. 22 | 4633 | 1046 | 107 | 2176 |
| Fireproof structure | C. S. Bird | 735,335 | Aug. 4 | 567 | 116 | 105 | 1102 |
| Fireproof structure | N. Poulson | 741,544 | Oct. 13 | 2223 | 495 | 106 | 1740 |
| Fireproof wall, &c | J. Schratwieser | 724,744 | Apr. 7 | 613 | 143 | 103 | 1299 |
| Fireproof wall or building | G. W. Pickin | 729,408 | May 26 | 4807 | 1066 | 104 | 1066 |
| Fireproof window. Automatic | F. Voigtmann and S. H. Pomeroy | 731,636 | June 23 | 3904 | 870 | 104 | 1986 |
| Fireproof window casing and sash | C. Schroeder | 732,901 | July 7 | 358 | 88 | 105 | 78 |
| Fireproof window-sash | J. W. Rapp | 738,939 | Sept. 15 | 2771 | 614 | 106 | 627 |
| Fireproof wood, &c., and making same | J. L. Ferrell | 728,452 | May 19 | 3078 | ..... | 104 | 693 |
| Fireproofing construction | W. F. Wilmoth | 730,200 | June 2 | 1203 | 270 | 104 | 1372 |
| Fireproofing construction | W. F. Wilmoth, E. I. Smith, and S. Golliek. | 742,811 | Oct. 27 | 4628 | 1049 | 106 | 2272 |
| Fireproofing for books | C. D. Levey | 738,744 | Sept. 8 | 2398 | 527 | 106 | 529 |
| Fireproofing material | O. Mack | 720,941 | Feb. 17 | 2828 | 648 | 102 | 1449 |
| Fireproofing wood | A. M. Pierce | 737,468 | Aug. 25 | 4556 | ..... | 105 | 2005 |
| Fish and fish refuse. Apparatus for treating | J. Delattre | 720,789 | Feb. 17 | 2552 | 588 | 102 | 1390 |
| Fish-bait. Artificial | T. A. Bryan | 726,020 | Apr. 21 | 2950 | 671 | 103 | 1825 |
| Fish-bait. Artificial | T. A. Bryan | 726,021 | Apr. 21 | 2951 | 671 | 103 | 1825 |
| Fish-cleaning apparatus | J. Johnson | 719,226 | Jan. 27 | 3244 | 724<br>725 | 102 | 730 |
| Fish-cleaning machine | J. Kellington | 738,111 | Sept. 1 | 1097 | 243<br>244 | 106 | 238 |
| Fish-cleaning machine | J. F. Keller and H. R. Cartey | 745,861 | Dec. 1 | 1014 | 228 | 107 | 1315 |
| Fish cutting and cleaning apparatus | A. R. Rogers | 732,376 | June 30 | 5326 | 1180 | 104 | 2297 |
| Fish-cutting machine | W. Munn | 743,742 | Nov. 10 | 1857 | 392 | 107 | 413 |
| Fish-grapple | C. A. Bindhammer | 718,079 | Jan. 13 | 1053 | 234 | 102 | 241 |
| Fish-hook | C. J. Trakel | 719,704 | Feb. 3 | 523 | 117 | 102 | 933 |
| Fish-hook | M. J. Amsden | 720,392 | Feb. 10 | 1805 | 411 | 102 | 1221 |
| Fish-hook | W. G. Little | 720,449 | Feb. 10 | 1907 | 435 | 102 | 1242 |
| Fish-hook | J. A. Smith | 722,922 | Mar. 17 | 2373 | 530 | 103 | 534 |
| Fish-hook | F. H. Pardon | 740,775 | Oct. 6 | 741 | 167 | 106 | 1404 |
| Fish-hook | C. P. Krus | 741,916 | Oct. 20 | 2937 | 655 | 106 | 1906 |
| Fish-hook | J. T. Henderson and J. F. Edgar | 742,093 | Oct. 20 | 3340 | 745 | 106 | 1986 |
| Fish-hook | W. E. Koch | 745,066 | Nov. 24 | 4384 | 946 | 107 | 979 |
| Fish-hook | L. J. Hise | 745,437 | Dec. 1 | 237 | 54 | 107 | 1150 |
| Fish-hook-attaching device | C. A. Abbath | 745,131 | Nov. 24 | 4505 | 975 | 107 | 1004 |
| Fish-hook-attaching device | C. A. Abbath | 745,751 | Dec. 1 | 777 | 177 | 107 | 1264 |
| Fish-hook holder | E. W. Kurtz, Sr | 742,040 | Oct. 20 | 3199 | 714 | 106 | 1959 |
| Fish-hook releaser | J. Halliran | 720,136 | Feb. 10 | 1341 | 307 | 102 | 1125 |
| Fish-hook shield | A. W. Bishop | 744,462 | Nov. 17 | 3268 | 701 | 107 | 728 |
| Fish-hook. Weedless | J. N. Miller | 745,221 | Nov. 24 | 4695 | 1025 | 107 | 1044 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Fish-hooks. Combined card and book for holding | A. W. Connor | 726,509 | Apr. 28 | 3895 | 882 | 103 | 2031 |
| Fish-line reel | E. D. Rockwell | 731,226 | June 16 | 3110 | 689 | 104 | 1806 |
| Fish-line reel | E. D. Rockwell | 734,959 | July 28 | 4195 | 976 | 105 | 931 |
| Fish-line reel | E. D. Rockwell | 736,880 | Aug. 18 | 3461 | 768 | 105 | 1751 |
| Fish-line-reel-retaining device | C. A. Tredwell | 718,589 | Jan. 13 | 2050 | 446 | 102 | 456 |
| Fish mezzo-rilievo | J. W. Nash | 726,184 | Apr. 21 | 3243 | 735 | 103 | 1885 |
| Fish-net | G. L. Plumley | 719,802 | Feb. 3 | 809 | 189 | 102 | 994 |
| Fish-net | I. E. Palmer | 721,914 | Mar. 3 | 474 | 104 | 103 | 104 |
| Fish-net float | J. Koenig | 739,324 | Sept. 22 | 3463 | 772 | 106 | 788 |
| Fish opening and cleaning machine | T. Morris | 735,914 | Aug. 11 | 1830 | 392, 393 | 105 | 1391 |
| Fish or land animals. Apparatus for supplying food to | H. S. Hale | 742,415 | Oct. 27 | 3939 | 884 | 106 | 2124 |
| Fish or land animals. Machine for supplying food to | H. S. Hale | 742,414 | Oct. 27 | 3937 | 884 | 106 | 2124 |
| Fish or minnow trap | E. B. Cahoon | 744,903 | Nov. 24 | 4046 | 873 | 107 | 910 |
| Fish-pole | C. Hoglund | 734,870 | July 28 | 4045 | 944 | 105 | 899 |
| Fish-scaler | C. Whitford | 734,210 | July 21 | 2787 | 654 | 105 | 623 |
| Fish skinning and scaling device | W. Kadletz and W. J. Fuller | 720,439 | Feb. 10 | 1887 | 430 | 102 | 1238 |
| Fish-spear | A. J. Campbell | 746,455 | Dec. 8 | 2078 | 478 | 107 | 1562 |
| Fish-trap | I. E. Palmer | 721,913 | Mar. 3 | 472 | 103 | 103 | 104 |
| Fish-trap | J. E. Hill | 725,706 | Apr. 21 | 2402 | 544 | 103 | 1709 |
| Fish-trap | T. W. Haynie and E. G. Hall | 730,647 | June 9 | 2038 | 454 | 104 | 1566 |
| Fish-trap | O. Watson | 731,398 | June 16 | 3437 | 767 | 104 | 1874 |
| Fish-trap and set-net. Floating | L. Mayhew | 735,545 | Aug. 4 | 984 | 208, 209 | 105 | 1190 |
| Fish-trap. Floating | A. C. Burdick | 717,807 | Jan. 6 | 549 | 123 | 102 | 118 |
| Fish-trap. Floating | A. C. Burdick | 719,738 | Feb. 3 | 595 | 133, 134 | 102 | 947 |
| Fish-trap. Floating | J. A. Miller and C. S. Wallace | 730,949 | June 16 | 2596 | 577 | 104 | 1703 |
| Fish trap-hook | C. O. Cook | 739,989 | Sept. 29 | 4729 | 1064 | 106 | 1077 |
| Fish-trap pots or spillers. Means for lifting | A. F. Shadel | 735,601 | Aug. 4 | 1082 | 230 | 105 | 1211 |
| Fisherman's hat-band | W. A. Wetmore | 725,524 | Apr. 14 | 2050 | 464 | 103 | 1619 |
| Fishing and trapping device | R. F. Armstrong | 733,118 | July 7 | 748 | 180 | 105 | 158 |
| Fishing-bait and preparing same | T. H. Curtis and P. J. King | 742,293 | Oct. 27 | 3720 | ------ | 106 | 2081 |
| Fishing-bob | J. S. Scott | 740,474 | Oct. 6 | 173 | 34 | 106 | 1282 |
| Fishing-cork | W. W. Foust | 735,235 | Aug. 4 | 390 | 76 | 105 | 1064 |
| Fishing-float | J. W. Wilson | 721,267 | Feb. 24 | 3507 | 797 | 102 | 1611 |
| Fishing-float | H. J. Cook | 728,674 | May 19 | 3506 | 780 | 104 | 784 |
| Fishing-gear link | A. W. Wilson | 724,362 | Mar. 31 | 5111 | 1144 | 103 | 1125 |
| Fishing hook or bait guide | H. R. Stewart | 744,942 | Nov. 24 | 4115 | 887 | 107 | 924 |
| Fishing implement Odorized | T. B. Hodge | 717,681 | Jan. 6 | 285 | 71 | 102 | 62 |
| Fishing-line attachment | C. W. Smith | 729,687 | June 2 | 290 | 67 | 104 | 1189 |
| Fishing-line float | D. R. Lewis | 738,923 | Sept. 15 | 2748 | 608 | 106 | 622 |
| Fishing-net | T. C. and T. C. Lindsey, Jr., and M. U. Loree. | 737,428 | Aug. 25 | 4487 | 1006 | 105 | 1989 |
| Fishing-net | A. E. Butler | 742,160 | Oct. 27 | 3454 | 770 | 106 | 2026 |
| Fishing-reel | A. W. Bishop | 718,416 | Jan. 13 | 1658 | 365 | 102 | 371 |
| Fishing-reel | E. D. Rockwell | 724,208 | Mar. 31 | 4805 | 1077 | 103 | 1063 |
| Fishing-reel | W. G. Haas | 724,465 | Apr. 7 | 87 | 21 | 103 | 1187 |
| Fishing-reel | J. Dreiser | 726,655 | Apr. 28 | 4162 | 938, 939 | 103 | 2084 |
| Fishing-reel | R. L. Hunter | 728,717 | May 19 | 3579 | 795 | 104 | 799 |
| Fishing-reel | J. vom Hofe | 741,909 | Oct. 20 | 2928 | 653 | 106 | 1904 |
| Fishing-reel | H. E. Van Alstyne | 742,260 | Oct. 27 | 3659 | 817, 818 | 106 | 2068 |
| Fishing-reel | A. J. Arnold | 742,376 | Oct. 27 | 3863 | 868 | 106 | 2110 |
| Fishing-reel | H. B. Carlton and C. E. Hutchings. | 742,586 | Oct. 27 | 4242 | 956 | 106 | 2187 |
| Fishing-reel | E. M. Funk | 743,856 | Nov. 10 | 2064 | 439, 440 | 107 | 455 |
| Fishing-reel | O. Allen | 744,454 | Nov. 17 | 3254 | 698 | 107 | 725 |
| Fishing-reel brake mechanism | W. Shakespeare, Jr., and W. E. Marhoff. | 734,970 | July 28 | 4217 | 980 | 105 | 935 |
| Fishing-reel click mechanism | W. Shakespeare, Jr., and W. E. Marhoff. | 734,971 | July 28 | 4218 | 980 | 105 | 935 |
| Fishing-reel click mechanism | W. Shakespeare, Jr., and W. E. Marhoff. | 734,972 | July 28 | 4220 | 980 | 105 | 936 |
| Fishing-reel drag | H. W. Howe | 730,457 | June 9 | 1713 | 383 | 104 | 1495 |
| Fishing-reel side plate | J. E. Pflueger | 720,063 | Feb. 10 | 1197 | 274 | 102 | 1094 |
| Fishing-reel with adjustable head | A. F. and W. Meisselbach, Jr | 746,544 | Dec. 8 | 2231 | 512 | 107 | 1597 |
| Fishing-rod | A. E. Hall and W. G. Smith | 733,836 | July 14 | 2048 | 483, 484 | 105 | 447 |
| Fishing-rod | E. H. Crane | 735,471 | Aug. 4 | 841 | 179 | 105 | 1159 |
| Fishing-rod. Folding | H. M. McNamee | 719,603 | Feb. 3 | 342 | 80 | 102 | 893 |
| Fishing-rod holder | T. J. Briner | 729,485 | May 26 | 4931 | 1092 | 104 | 1094 |
| Fishing-rod reel | W. J. Harris and H. Case | 739,784 | Sept. 22 | 4316 | 966, 967 | 106 | 975 |
| Fishing-rod trimming | J. B. Hall | 734,544 | July 28 | 3419 | 798 | 105 | 771 |
| Fishing-spoon | C. F. Breidenstein | 728,360 | May 19 | 2914 | 643 | 104 | 658 |
| Fishing-tackle | J. W. Wallace | 720,643 | Feb. 17 | 2311 | 529 | 102 | 1338 |
| Fishing-tackle | T. J. Evans | 735,428 | Apr. 14 | 1859 | 415 | 103 | 1578 |
| Fish-plate | C. H. Riggle | 726,760 | Apr. 28 | 4374 | 984 | 103 | 2128 |
| Fish-plate and rail-fastener | W. H. Logan | 737,942 | Sept. 1 | 769 | 168 | 106 | 169 |
| Fish-plate-forming machine | R. B. Charlton | 729,488 | May 26 | 4936 | 1094 | 104 | 1096 |
| Flagpole-holder | W. H. Becroft | 726,015 | Apr. 21 | 2942 | 669 | 103 | 1823 |
| Flagstaff cap and truck. Combined | A. A. Brengel | 723,580 | Mar. 24 | 3591 | 802 | 103 | 795 |
| Flame-producing device | A. O. Kaplan | 739,425 | Sept. 22 | 3668 | 816 | 106 | 883 |
| Flange | F. C. Billings | 740,796 | Oct. 6 | 777 | 175 | 106 | 1411 |
| Flange-union | W. N. Dufford | 735,221 | Aug. 4 | 365 | 70 | 105 | 1059 |
| Flanging-clamp | J. H. Optenberg | 729,959 | June 2 | 807 | 180 | 104 | 1291 |
| Flanging-machine | D. O. Paige | 720,734 | Feb. 17 | 2471 | 567, 568, 569 | 102 | 1373 |
| Flanging-machine | T. F. Rowland, Jr., and W. H. Deming. | 732,186 | Mar. 3 | 974 | 216 | 103 | 206 |
| Flanging-machine | T. R. Johnson | 743,644 | Nov. 10 | 1688 | 355, 356 | 107 | 376 |

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| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Flash-boiler | A. A. Ball, Jr | 733,613 | July 14 | 1635 | 386 / 387 | 105 | 363 |
| Flash gas burners or lamps. Feed device for | R. Wright and C. J. Siddall | 748,454 | Dec. 29 | 5842 | 1330 | 107 | 2461 |
| Flash-lamp | J. Le May | 722,117 | Mar. 3 | 845 | 188 | 103 | 182 |
| Flash-lamp | A. Duthie | 733,705 | July 14 | 1782 | 423 | 105 | 393 |
| Flash-lamp | F. G. Walter | 744,652 | Nov. 17 | 3566 | 769 | 107 | 789 |
| Flash-lamp. Storage | M. Klaiber and I. G. McColl | 744,565 | Nov. 17 | 3433 | 740 | 107 | 762 |
| Flash-light apparatus | S. M. Brown | 720,881 | Feb. 17 | 2705 | 625 | 102 | 1422 |
| Flash-light apparatus | L. Susanka | 733,300 | July 7 | 1079 | 257 | 105 | 227 |
| Flash-light apparatus | C. A. Barrett and R. W. Page | 741,214 | Oct. 13 | 1554 | 350 / 351 | 106 | 1598 |
| Flash-light apparatus | E. C. Dodge | 747,388 | Dec. 22 | 3840 | 864 | 107 | 1995 |
| Flash-light apparatus for photographic purposes | J. F. Guimarães | 745,052 | Nov. 24 | 4348 | 939 | 107 | 972 |
| Flash-light attachment. Camera | J. H. Hammer | 744,540 | Nov. 17 | 3395 | 731 | 107 | 755 |
| Flash-light gas-burner | D. Ward and J. R. Taylor | 735,002 | July 28 | 4282 | 996 | 105 | 949 |
| Flasher and circuit therefor. Electric | H. C. Horstmann | 724,102 | Mar. 31 | 4578 | 1030 / 1031 | 103 | 1018 |
| Flask: *See* Dental flask. Dentist's flask. Mold-flask. Molder's flask. Molding-flask. Molding and casting flask. | | | | | | | |
| Flask-clamp | I. R. and L. A. Brown | 742,001 | Oct. 20 | 3118 | 695 | 106 | 1942 |
| Flat-iron | A. B. Atkins | 747,840 | Dec. 22 | 4657 | 1053 | 107 | 2181 |
| Flat-iron. Gas-heated | G. M. Spangler | 742,134 | Oct. 20 | 3408 | 760 | 106 | 1999 |
| Flat-iron holder | J. V. Askin | 741,007 | Oct. 13 | 1151 | 260 | 106 | 1512 |
| Flat-iron stand | M. Schubbert | 734,243 | July 21 | 2853 | 668 | 105 | 637 |
| Flax-balls and preserving the seeds. Machine for breaking | J. T. Smith | 737,510 | Aug. 25 | 4638 | 1041 | 105 | 2024 |
| Flax-breaking machine | G. H. Ellis | 738,893 | Sept. 15 | 2693 | 594 / 595 | 106 | 610 |
| Flax-carrier | J. Degendorfer | 740,820 | Oct. 6 | 823 | 185 | 106 | 1421 |
| Flax or hemp straw. Apparatus for spreading and thinning | J. T. Smith | 737,511 | Aug. 25 | 4640 | 1041 | 105 | 2025 |
| Flax stock and preparing same | B. C. Mudge | 732,103 | June 30 | 4782 | | 104 | 2184 |
| Flax-straw-preparing machine | G. H. Ellis | 738,783 | Sept. 15 | 2486 | 546 / 547 | 106 | 565 |
| Flax-straw. Treating | G. H. Ellis | 738,715 | Sept. 8 | 2337 | 513 | 106 | 515 |
| Flax-treating machine | G. H. Ellis | 738,668 | Sept. 8 | 2247 | 493 / 494 | 106 | 497 |
| Flea-trap | G. T. Godfrey | 718,834 | Jan. 20 | 2487 | 553 | 102 | 557 |
| Flesh-rubber | O. R. Burkart | 728,159 | May 12 | 2508 | 558 | 104 | 551 |
| Fleshing and shaving machine | E. Schroeder | 741,553 | Oct. 13 | 2239 | 499 | 106 | 1744 |
| Flexible bag | J. Müller | 735,560 | Aug. 4 | 1021 | 216 | 105 | 1197 |
| Flier | F. J. Rabbeth | 729,096 | May 26 | 4264 | 942 | 104 | 953 |
| Flier | M. Campbell | 747,134 | Dec. 15 | 3357 | 762 | 107 | 1874 |
| Float. Electrical-contact-controlling | I. G. Waterman | 732,608 | June 30 | 5768 | 1278 | 104 | 2302 |
| Floating battery | A. P. Stokes | 724,756 | Apr. 7 | 629 | 147 | 103 | 1303 |
| Flood-gate | B. Rastall | 729,962 | June 2 | 811 | 181 | 104 | 1292 |
| Floor and ceiling construction | J. Schratwieser | 719,378 | Jan. 27 | 3538 | 789 | 102 | 794 |
| Floor and ceiling construction | J. Schratwieser | 719,379 | Jan. 27 | 3540 | 789 | 102 | 795 |
| Floor and ceiling construction | J. Schratwieser | 719,380 | Jan. 27 | 3541 | 790 | 102 | 795 |
| Floor and ceiling construction | J. Schratwieser | 729,799 | June 2 | 510 | 112 | 104 | 1232 |
| Floor and hardwood scraper | J. R. Price | 725,480 | Apr. 14 | 1970 | 443 | 103 | 1602 |
| Floor and strengthening member therefor | P. M. Bruner | 746,009 | Dec. 8 | 1288 | 289 | 107 | 1391 |
| Floor and wall ventilator and register | J. H. Mills | 725,743 | Apr. 21 | 2469 | 558 | 103 | 1724 |
| Floor. Armored concrete | R. M. McDowall | 734,593 | July 28 | 3505 | 818 | 105 | 790 |
| Floor-box | H. Krantz | 738,688 | Sept. 8 | 2298 | 504 / 505 | 106 | 507 |
| Floor-clamp | W. Hoekstra | 719,335 | Jan. 27 | 3452 | 769 | 102 | 776 |
| Floor-cleaning apparatus | G. Swenson | 722,768 | Mar. 17 | 2096 | 469 | 103 | 479 |
| Floor construction | A. De Man | 730,616 | June 9 | 1992 | 443 | 104 | 1557 |
| Floor construction | J. Trunzer | 736,316 | Aug. 11 | 2395 | 522 | 105 | 1514 |
| Floor construction | C. A. Balph | 748,150 | Dec. 29 | 5302 | 1204 | 107 | 2344 |
| Floor-dressing machine | C. B. Wattles | 730,499 | June 9 | 1784 | 399 / 400 | 104 | 1510 |
| Floor-jack | M. Nesheim | 741,533 | Oct. 13 | 2204 | 490 | 106 | 1736 |
| Floor-joint. Water-closet | H. S. Renton | 748,418 | Dec. 29 | 5770 | 1316 | 107 | 2446 |
| Floor-machine | D. Adams | 737,691 | Sept. 1 | 242 | 51, 52 | 106 | 56 |
| Floor-mat. Flexible flat-metal | A. S. Burnell | 737,574 | Sept. 1 | 30 | 7 | 106 | 10 |
| Floor-mat. Metallic | E. J. Manning | 724,723 | Apr. 7 | 578 | 138 | 103 | 1292 |
| Floor-oiling device | J. C. O'Donal | 725,281 | Apr. 14 | 1592 | 360 | 103 | 1522 |
| Floor-oiling device | J. C. O'Donal | 725,282 | Apr. 14 | 1594 | 360 | 103 | 1522 |
| Floor plate or block. Parquet | C. Amendt | 745,554 | Dec. 1 | 444 | 104 / 105 | 107 | 1192 |
| Floor polisher or oiler | C. Weil | 733,098 | July 7 | 713 | 174 | 105 | 151 |
| Floor, roof, &c | P. H. Jackson | 725,846 | Apr. 21 | 2652 | 604 / 605 | 103 | 1764 |
| Floor-scraper | E. Goulette | 736,594 | Aug. 18 | 2920 | 638 | 105 | 1640 |
| Floor scraper. Hardwood- | O. B. Taylor | 741,944 | Oct. 20 | 2993 | 665 | 106 | 1918 |
| Floor surfacer, cleaner, and polisher | A. T. Spence, J. H. Prugh, and S. B. Zimmer. | 728,423 | May 19 | 3021 | 664 | 104 | 681 |
| Floors and ceilings for buildings. Construction of | J. C. Pelton | 719,038 | Jan. 27 | 2887 | 647 | 102 | 657 |
| Floors. Preventing the warping and undulating of xylolith | R. Zellenka | 747,110 | Dec. 15 | 3313 | 754 | 107 | 1865 |
| Floors, &c. Surface finish for | J. J. Blackman | 741,100 | Oct. 13 | 1320 | 303 | 106 | 1548 |
| Flooring | J. W. Heaton | 732,741 | July 7 | 79 | 21 | 105 | 20 |
| Flooring and constructing floors | F. L. Union | 741,289 | Oct. 13 | 1704 | 381 | 106 | 1627 |
| Flooring, boarded ceiling, &c. Separable | P. B. Guilhou | 735,969 | Aug. 11 | 1778 | 381 | 105 | 1380 |
| Flooring-clamp | W. H. Early | 721,681 | Mar. 3 | 63 | 13 | 103 | 15 |
| Flooring, table-top, &c | S. Fisher | 735,079 | Aug. 4 | 55 | 15 | 105 | 993 |
| Floral-design frame. Folding | P. Raysik | 745,295 | Nov. 24 | 4831 | 1053 | 107 | 1071 |
| Flour and lard rubbing machine | T. Westerman | 732,478 | June 30 | 5524 | 1225 / 1226 | 104 | 2337 |
| Flour-bolting brush | J. G. Peterson | 741,370 | Oct. 13 | 1884 | 415 | 106 | 1669 |
| Flour-bolting machine | C. L. White | 740,344 | Sept. 29 | 5370 | 1210 / 1211 | 106 | 1212 |

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| Flour-bolts, &c. Cloth-cleaning attachment for | J. Charles | 740,806 | Oct. 6 | 795 | 179 | 106 | 1414 |
| Flour-manufacturing apparatus | L. Korább | 726,172 | Apr. 21 | 3199 | 723, 724, 725 | 103 | 1876 |
| Flour-mill gearing attachment | N. H. Jorgensen and H. R. Palmer | 734,880 | July 28 | 4062 | 947 | 105 | 902 |
| Flour-packer | C. W. Geiger | 737,385 | Aug. 25 | 4383 | 978 | 105 | 1967 |
| Flour process and apparatus | E. F. Clark | 741,887 | Oct. 20 | 2868 | 640 | 106 | 1892 |
| Flour tank and sifter. Combined | R. N. Holmes | 719,337 | Jan. 27 | 3455 | 769 | 102 | 776 |
| Flour. Vegetable | G. Brown | 745,565 | Dec. 1 | 463 | ------ | 107 | 1195 |
| Flow-regulating device for solid material | G. Engel | 733,175 | July 7 | 844 | 204, 205 | 105 | 177 |
| Flower-bed | J. L. Dillon | 728,088 | May 12 | 2387 | 531 | 104 | 525 |
| Flower-holder | F. W. Green | 720,132 | Feb. 10 | 1336 | 306 | 102 | 1124 |
| Flower-pot | W. Schaefer | 726,766 | Apr. 28 | 4381 | 985 | 103 | 2130 |
| Flower-pot stand | W. H. Chapman | 737,581 | Sept. 1 | 41 | 9 | 106 | 11 |
| Flower-pot stand. Adjustable | A. Graefe | 740,120 | Sept. 29 | 4964 | 1114 | 106 | 1128 |
| Flower-stand | F. Struhs | 742,806 | Oct. 27 | 4619 | 1047 | 106 | 2270 |
| Flowers and making same. Tubular stalk for artificial | J. Jacobson | 742,438 | Oct. 27 | 3973 | 891, 892 | 106 | 2131 |
| Flue-cap | J. McIntyre | 736,537 | Aug. 18 | 2798 | 612 | 105 | 1615 |
| Flue-cleaner | H. A. Ruggles and C. T. Hower | 721,608 | Feb. 24 | 4146 | 942 | 102 | 1748 |
| Flue-cleaner | F. Olson | 727,995 | May 12 | 2216 | 494 | 104 | 490 |
| Flue-cleaner | R. S. and C. M. Ruggles | 734,617 | July 28 | 3541 | 829 | 105 | 799 |
| Flue-cleaner | A. M. Melcher | 739,435 | Sept. 22 | 3692 | 822 | 106 | 838 |
| Flue-cutter | E. E. Resor | 723,025 | Mar. 17 | 2544 | 572 | 103 | 570 |
| Flue-cutter | T. W. Hinde | 723,273 | Mar. 24 | 3011 | 678 | 103 | 681 |
| Flue-cutter | A. N. Lucas and C. W. Danglemyer | 725,856 | Apr. 21 | 2671 | 608 | 103 | 1768 |
| Flue-cutter | J. C. Groble | 733,642 | July 14 | 1684 | 399 | 105 | 372 |
| Flue-cutter | J. M. Sherman | 742,915 | Nov. 3 | 164 | 38 | 107 | 36 |
| Flue-cutter. Pneumatic | J. T. McGrath | 747,565 | Dec. 22 | 4147 | 932 | 107 | 2052 |
| Flue-dust. Reclaiming | E. H. Williams | 723,105 | Mar. 17 | 2683 | 604 | 103 | 600 |
| Flue-dust. Silicated | E. H. Williams | 723,106 | Mar. 17 | 2685 | ------ | 103 | 600 |
| Flue-expander | J. W. Faessler | 739,160 | Sept. 15 | 3160 | 698 | 106 | 707 |
| Flue expander and cutter | A. Nault | 732,313 | June 30 | 5190 | 1153 | 104 | 2269 |
| Flue-hole cutter | J. G. Dixon | 733,821 | July 14 | 2021 | 476 | 105 | 442 |
| Flue-scraper | F. Olson | 727,994 | May 12 | 2215 | 493 | 104 | 490 |
| Flue-scraper | P. F. Vogt | 735,846 | Aug. 11 | 1554 | 332 | 105 | 1331 |
| Flue. Smoke- | D. Einstein | 719,652 | Feb. 3 | 428 | 98 | 102 | 911 |
| Flue. Smoke and air | C. Faust | 740,835 | Oct. 6 | 850 | 190 | 106 | 1427 |
| Flue-stopper | J. L. Clark | 719,997 | Feb. 10 | 1055 | 246 | 102 | 1063 |
| Flue-stopper | M. L. Greenstreet | 729,328 | May 26 | 4682 | 1033 | 104 | 1042 |
| Flue-thimble. Adjustable | C. J. Kirch | 719,232 | Jan. 27 | 3254 | 727 | 102 | 732 |
| Fluid-agitator | A. P. Barney | 723,977 | Mar. 31 | 4340 | 974 | 103 | 971 |
| Fluid compression. Apparatus for elastic | H. Bland | 722,558 | Mar. 10 | 1683 | 372, 373 | 103 | 377 |
| Fluid-compressor | G. V. Mitchell | 728,955 | May 26 | 4013 | 892, 893 | 104 | 903 |
| Fluid-compressor | F. M. Rites | 747,773 | Dec. 22 | 4532 | 1021 | 107 | 2163 |
| Fluid-conducting pipe | R. J. Decker | 724,675 | Apr. 7 | 480 | 116 | 103 | 1272 |
| Fluid container or receptacle | C. F. Kade | 718,357 | Jan. 13 | 1553 | 343 | 102 | 348 |
| Fluid-controlling mechanism | J. A. Tilden | 742,136 | Oct. 20 | 3411 | 761 | 106 | 2000 |
| Fluid-extracting press | W. C. Marshall | 734,917 | July 28 | 4119 | 960 | 105 | 916 |
| Fluid-fuel heater and pumping system | R. G. Kirkwood | 742,333 | Oct. 27 | 3789 | 848 | 106 | 2094 |
| Fluid holder and dispenser | P. Lindemeyr | 742,201 | Oct. 27 | 3535 | 789 | 106 | 2040 |
| Fluid-mixer. Automatic | S. A Smith | 721,973 | Mar. 3 | 602 | 134 | 103 | 131 |
| Fluid-mixing apparatus | G. A. Loeben | 723,888 | Mar. 31 | 4152 | 936 | 103 | 930 |
| Fluid-motor | G. White | 735,684 | Aug. 4 | 1241 | 263, 264 | 105 | 1244 |
| Fluid-motor | W. E. Ewald | 739,405 | Sept. 22 | 3637 | 808, 809 | 106 | 826 |
| Fluid motor. Expansive- | J. A. Norton | 729,209 | May 26 | 4464 | 984 | 104 | 995 |
| Fluid motor. Expansive- | J. A. Norton and A. F. Rockwell | 729,210 | May 26 | 4467 | 984 | 104 | 996 |
| Fluid motor. Expansive- | J. A. Norton | 729,507 | May 26 | 4966 | 1100, 1101 | 104 | 1102 |
| Fluid-motor. Rotary | J. F. Cooley | 724,665 | Apr. 7 | 458 | 111 | 103 | 1267 |
| Fluid-motor. Rotary | S. J. Webb | 741,086 | Oct. 13 | 1294 | 296 | 106 | 1543 |
| Fluid-operated chair | A. N. Hornung, Jr | 743,508 | Nov. 10 | 1431 | 299, 300 | 107 | 352 |
| Fluid-operated engine | B. V. Nordberg | 741,536 | Oct. 13 | 2207 | 491, 492 | 106 | 1736 |
| Fluid-pressure brake | M. McComas | 722,128 | Mar. 3 | 862 | 192, 193 | 103 | 185 |
| Fluid-pressure brake | M. W. Hibbard | 723,386 | Mar. 24 | 3240 | 727 | 103 | 723 |
| Fluid-pressure coupling | M. G. Quackenbush | 743,659 | Nov. 10 | 1716 | 362, 363 | 107 | 382 |
| Fluid-pressure. Developing and utilizing | J. C. Fraley | 745,589 | Dec. 1 | 508 | 119, 120 | 107 | 1205 |
| Fluid-pressure. Developing and utilizing | J. C. Fraley | 746,318 | Dec. 8 | 1849 | 421 | 107 | 1514 |
| Fluid-pressure developing and utilizing apparatus | J. C. Fraley | 746,488 | Dec. 8 | 2136 | 490, 491 | 107 | 1575 |
| Fluid-pressure engine | F. W. Lanchester | 721,899 | Mar. 3 | 445 | 98 | 103 | 98 |
| Fluid-pressure engine | J. Pengilly | 734,282 | July 21 | 2939 | 686 | 105 | 657 |
| Fluid-pressure engine | M. N. Forney | 735,739 | Aug. 11 | 1348 | 290 | 105 | 1286 |
| Fluid-pressure engine | M. N. Forney | 735,740 | Aug. 11 | 1350 | 290 | 105 | 1286 |
| Fluid-pressure engine | M. N. Forney | 735,741 | Aug. 11 | 1353 | 291 | 105 | 1287 |
| Fluid-pressure engine | E. Thomson | 740,203 | Sept. 29 | 5120 | 1150 | 106 | 1160 |
| Fluid-pressure engine | M. N. Forney | 741,782 | Oct. 20 | 2687 | 599 | 106 | 1853 |
| Fluid-pressure mechanism | H. R. Mason | 718,491 | Jan. 13 | 1841 | 404, 405 | 102 | 412 |
| Fluid-pressure mechanism | H. R. Mason | 718,492 | Jan. 13 | 1844 | 405 | 102 | 412 |
| Fluid pressure mechanism | H. R. Mason | 718,493 | Jan. 13 | 1845 | 405 | 102 | 413 |
| Fluid-pressure mechanism | J. P. Coleman | 745,307 | Nov. 24 | 4866 | 1062, 1063 | 107 | 1078 |
| Fluid-pressure-operated device | B. M. W. Hanson | 719,109 | Jan. 27 | 3040 | 676, 677 | 102 | 688 |
| Fluid-pressure regulator | E. R. Cook | 744,297 | Nov. 17 | 2973 | 636 | 107 | 664 |

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| Invention. | Name. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | | Spec. | Dr'g. | Vol. | Page. |
| Fluid-pressure regulator | J. Hancock | 744,964 | Nov. 24 | 4165 | 900 | 107 | 934 |
| Fluid-pressure regulator | M. G. Reynolds | 746,879 | Dec. 15 | 2869 | 661 | 107 | 1761 |
| Fluid-pressure. System for controlling | E. D. Priest | 748,098 | Dec. 29 | 5203 | 1178 | 107 | 2322 |
| Fluid-receptacles. Delivery attachment for | E. Hey | 738,324 | Sept. 8 | 1587 | 343 | 106 | 357 |
| Fluid transfer-switch | E. A. July | 735,881 | Aug. 11 | 1622 | 346<br>347 | 105 | 1346 |
| Fluid under pressure. Means for transmitting | W. S. Halsey | 718,250 | Jan. 13 | 1349 | 299<br>300 | 102 | 305 |
| Fluid under pressure. Means or appliance for transmitting | S. H. Brooks | 726,628 | Apr. 28 | 4121 | 930 | 103 | 2075 |
| Fluids. Apparatus for electro-endosmotically freeing materials from | B. Schwerin | 720,186 | Feb. 10 | 1430 | 327 | 102 | 1142 |
| Fluids. Electrical method of dispersing | J. F. Cooley | 745,276 | Nov. 24 | 4790 | 1046 | 107 | 1063 |
| Fluids. Means for preventing meddling with the flow of | C. W. Geekie | 741,240 | Oct. 13 | 1595 | 359 | 106 | 1607 |
| Fluids or fluid mixtures. Apparatus for heating | F. S. Chapman | 731,339 | June 16 | 3320 | 740 | 104 | 1850 |
| Fluids. Regulating the supply of | F. Windhausen, Jr | 746,222 | Dec. 8 | 1671 | 371 | 107 | 1477 |
| Fluids. Traveling receiver for motor | J. L. Pilling | 743,921 | Nov. 10 | 2183 | 471 | 107 | 481 |
| Flume-gate rubbish-diverter | J. F. Peirce | 726,564 | Apr. 28 | 3993 | 904 | 103 | 2050 |
| Flume. Sheet-metal | M. H. Laybourn | 745,868 | Dec. 1 | 1033 | 233 | 107 | 1319 |
| Flush-tank feeder and cleaner | C. C. Ewing | 721,685 | Mar. 3 | 70 | 15 | 103 | 16 |
| Flush-tank for closets. Automatic operating | M. Connor | 743,618 | Nov. 10 | 1656 | 347 | 107 | 369 |
| Flush-tank-supply system | J. W. Nethery | 741,818 | Oct. 20 | 2748 | 612 | 106 | 1867 |
| Flushing apparatus | R. F. Gillin | 731,107 | June 16 | 2893 | 642 | 104 | 1764 |
| Flushing apparatus | C. N. Marcellus | 732,095 | June 30 | 4765 | 1064 | 104 | 2180 |
| Flushing apparatus | R. P. Jones | 732,416 | June 30 | 5402 | 1197 | 104 | 2314 |
| Flushing apparatus | H. F. Neumeyer | 732,776 | July 7 | 142 | 38 | 105 | 35 |
| Flushing apparatus | F. N. Dixon | 736,504 | Aug. 18 | 2740 | 600 | 105 | 1603 |
| Flushing apparatus | H. F. Neumeyer | 743,184 | Nov. 3 | 700 | 154 | 107 | 146 |
| Flushing apparatus | R. F. Gillin | 746,324 | Dec. 8 | 1859 | 423<br>424 | 107 | 1515 |
| Flushing apparatus | J. H. Byers | 748,046 | Dec. 29 | 5101 | 1153 | 107 | 2299 |
| Flushing apparatus. Closet | F. Light | 719,598 | Feb. 3 | 334 | 78 | 102 | 892 |
| Flushing apparatus. Closet | G. Hoffman | 738,446 | Sept. 8 | 1815 | 394<br>395 | 106 | 406 |
| Flushing apparatus. Closet | P. F. King | 747,439 | Dec. 22 | 3924 | 883 | 107 | 2015 |
| Flushing device | A. Roekel | 722,757 | Mar. 17 | 2078 | 465 | 103 | 475 |
| Flushing device. Drain-pipe | J. H. Doyle | 734,682 | July 28 | 3668 | 859 | 105 | 823 |
| Flushing drain-pipes. Means for | J. H. Doyle | 734,520 | July 28 | 3363 | 787 | 105 | 759 |
| Flushing-tank | W. A. Williams | 741,203 | Oct. 13 | 1527 | 345 | 106 | 1592 |
| Flushing-tank | F. H. Lindenberg | 747,447 | Dec. 22 | 3938 | 886 | 107 | 2018 |
| Flushing-tank. Closet | W. A. Williams | 718,560 | Jan. 13 | 1985 | 433 | 102 | 441 |
| Flute | A. Krantz | 723,613 | Mar. 24 | 3646 | 816 | 103 | 807 |
| Flux | H. R. Brocius and T. A. Eshelman | 728,079 | May 12 | 2367 | ------ | 104 | 521 |
| Fluxes and operating transformers. Shaping rotary | M. Leblanc | 730,215 | June 2 | 1243 | 277<br>278 | 104 | 1379 |
| Fly-catcher | J. E. Cox | 728,871 | May 26 | 3872 | 861 | 104 | 874 |
| Fly-catcher | C. Wenigmann | 734,208 | July 21 | 2784 | 653 | 105 | 622 |
| Fly-catcher | J. Schnell | 745,914 | Dec. 1 | 1106 | 248 | 107 | 1335 |
| Fly-catcher. Liquid | R. Schmidt | 741,937 | Oct. 20 | 2971 | 661 | 106 | 1913 |
| Fly-escape attachment for window-screens | W. H. Spake | 720,080 | Feb. 10 | 1228 | 282 | 102 | 1100 |
| Fly-escape. Window-screen | E. L. Hereford | 732,634 | June 30 | 5816 | 1289 | 104 | 2103 |
| Fly-killer stay | B. F. Douglass | 720,334 | Feb. 10 | 1708 | 388 | 102 | 1201 |
| Fly-net holder | H. C. Peters | 722,748 | Mar. 17 | 2061 | 461 | 103 | 472 |
| Fly or insect trap | J. A. Francis | 742,304 | Oct. 27 | 3742 | 837 | 106 | 2085 |
| Fly-paper holder | L. B. Truslow | 734,636 | July 28 | 3576 | 837 | 105 | 805 |
| Fly-paper holder. Sticky | A. Katzke | 744,866 | Nov. 24 | 3989 | 860 | 107 | 898 |
| Fly-paper. Sticky | E. F. Baker | 740,076 | Sept. 29 | 4890 | 1096 | 106 | 1112 |
| Fly-paper. Sticky | O. A. Jones | 740,870 | Oct. 6 | 900 | 202 | 106 | 1438 |
| Fly-screen | S. C. Daniel | 726,145 | Apr. 21 | 3157 | 715 | 103 | 1868 |
| Fly-screen | A. E. Walter | 730,809 | June 9 | 2315 | 514 | 104 | 1625 |
| Fly-trap | S. Rickersberg | 723,027 | Mar. 17 | 2547 | 572 | 103 | 571 |
| Fly-trap | J. W. Williamson | 726,604 | Apr. 28 | 4078 | 920 | 103 | 2067 |
| Fly-trap | H. A. Bierley | 731,842 | June 23 | 4274 | 951 | 104 | 2065 |
| Fly-trap | H. A. Bierley | 731,843 | June 23 | 4274 | 951<br>952 | 104 | 2065 |
| Fly-trap | F. J. Lampton | 734,340 | July 21 | 3045 | 717 | 105 | 678 |
| Fly-trap | E. F. Davison | 736,827 | Aug. 18 | 3371 | 744 | 105 | 1732 |
| Fly-wheel | J. F. Radebaugh | 737,477 | Aug. 25 | 4566 | 1023<br>1024 | 105 | 2007 |
| Fly-wheel | J. F. Radebaugh | 742,737 | Oct. 27 | 4506 | 1020 | 106 | 2245 |
| Fly-wheel | F. James | 748,380 | Dec. 29 | 5691 | 1299 | 107 | 2428 |
| Flying-machine | O. A. Kaehler | 727,377 | May 5 | 1031 | 223<br>224 | 104 | 222 |
| Fob-bar | E. A. Bennett | 737,062 | Aug. 25 | 3793 | 839 | 105 | 1841 |
| Focal-plane shutter | L. Borsum | 741,103 | Oct. 13 | 1328 | 305 | 106 | 1550 |
| Focusing-hood | G. H. Dorr | 720,900 | Feb. 17 | 2747 | 633 | 102 | 1430 |
| Fodder. Machine for the manufacture of molasses | R. Schrader | 740,699 | Oct. 6 | 580 | 130 | 106 | 1372 |
| Fodder-shredder cleaning device | C. E. Curtiss | 736,501 | Aug. 18 | 2735 | 599 | 105 | 1601 |
| Foldable seat | J. Sharkey | 743,938 | Nov. 10 | 2209 | 477 | 107 | 487 |
| Folding and creasing device | H. R. Plimpton, 2d | 734,943 | July 28 | 4165 | 969 | 105 | 925 |
| Folding and delivery mechanism. Rotary | R. T. Johnston | 729,597 | June 2 | 135 | 33, 34 | 104 | 1154 |
| Folding bench | W. A. K. Martin | 720,044 | Feb. 10 | 1165 | 267 | 102 | 1087 |
| Folding box | L. L. Claxton | 723,830 | Mar. 31 | 4035 | 911 | 103 | 906 |
| Folding box | Z. B. Webb | 727,722 | May 12 | 1711 | 383 | 104 | 385 |
| Folding box | Z. B. Webb | 727,723 | May 12 | 1712 | 384 | 104 | 385 |
| Folding box | F. M. Wade | 729,025 | May 26 | 4145 | 918 | 104 | 930 |
| Folding box | Z. B. Webb | 729,461 | May 26 | 4898 | 1085 | 104 | 1088 |
| Folding box | Z. B. Webb. (Reissue) | 12,121 | June 16 | 3480 | 778 | 104 | 1882 |
| Folding box | Z. B. Webb | 732,329 | June 30 | 5221 | 1159<br>1160 | 104 | 2275 |
| Folding box | G. H. Savacool | 732,964 | July 7 | 467 | 117 | 105 | 101 |
| Folding box | R. A. S. Bloomer | 734,217 | July 21 | 2797 | 656 | 105 | 625 |
| Folding box | M. Hirsch | 736,727 | Aug. 18 | 3173 | 701 | 105 | 1691 |
| Folding box | J. H. Garman | 736,955 | Aug. 25 | 3612 | 800 | 105 | 1804 |
| Folding box | W. E. Burton | 742,159 | Oct. 27 | 3452 | 770 | 106 | 2025 |

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| Invention. | Name | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Folding box | G. L. Morrison | 742,713 | Oct. 27 | 4465 | 1010 | 106 | 2236 |
| Folding box or crate | A. B. Jaquith | 718,255 | Jan. 13 | 1361 | 302 | 102 | 308 |
| Folding box or crate | J. W. Prasky | 735,906 | Aug. 11 | 1666 | 355 | 105 | 1354 |
| Folding box or crate | A. J. Coghe | 742,593 | Oct. 27 | 4255 | 958 | 106 | 2190 |
| Folding carrier | W. J. Best | 732,037 | June 30 | 4655 | 1040 | 104 | 2159 |
| Folding case | J. J. O'Brien | 736,871 | Aug. 18 | 3446 | 764 | 105 | 1748 |
| Folding chair | E. T. Zimmerman | 719,170 | Jan. 27 | 3146 | 700 | 102 | 709 |
| Folding chair | A. D. Truesdell | 719,908 | Feb. 3 | 889 | 209 | 102 | 1012 |
| Folding chair | A. R. Milner | 732,771 | July 7 | 133 | 37 | 105 | 32 |
| Folding chair | T. W. Washburn | 736,180 | Aug. 11 | 2158 | 464 | 105 | 1460 |
| Folding chair | C. M. Wagner | 737,680 | Sept. 1 | 221 | 47 | 106 | 51 |
| Folding chair | J. H. Stiggleman | 742,082 | Oct. 20 | 3325 | 741, 742 | 106 | 1982 |
| Folding chair | H. G. M. Howard | 746,085 | Dec. 8 | 1417 | 317 | 107 | 1421 |
| Folding chair. Combination | J. J. Flannery and M. B. Plunkett | 728,454 | May 19 | 3080 | 680, 681 | 104 | 693 |
| Folding gate | J. W. Sharrard | 719,621 | Feb. 3 | 371 | 86 | 102 | 899 |
| Folding-machine | A. J. Maskrey | 721,589 | Feb. 24 | 4096 | 932, 933 | 102 | 1737 |
| Folding-machine | L. E. Elson | 726,660 | Apr. 28 | 4173 | 941, 942 | 103 | 2087 |
| Folding-machine | E. Drake and H. Folsom | 727,313 | May 5 | 913 | 198, 199 | 104 | 197 |
| Folding-machine | W. Downing | 742,299 | Oct. 27 | 3731 | 833, 834 | 106 | 2083 |
| Folding-machine | J. J. Taylor, 2d, and R. G. Shiley | 747,803 | Dec. 22 | 4590 | 1036, 1037 | 107 | 2166 |
| Folding shade-chair | F. T. B. Mann | 725,348 | Apr. 14 | 1722 | 387 | 103 | 1549 |
| Folding stand | C. J. Widmer | 730,062 | June 2 | 984 | 220 | 104 | 1328 |
| Folding table | J. E. Turner | 726,787 | Apr. 28 | 4417 | 995 | 103 | 2137 |
| Folding table | J. A. Knight | 733,661 | July 14 | 1718 | 406 | 105 | 379 |
| Folding table | W. J. Noble | 737,455 | Aug. 25 | 4534 | 1016 | 105 | 2000 |
| Folding table | E. H. Harrod | 739,862 | Sept. 29 | 4467 | 1003 | 106 | 1023 |
| Folding table | J. P. Gaertner | 740,844 | Oct. 6 | 864 | 193 | 106 | 1430 |
| Folding, wrapping, and pasting machine | C. Owens | 722,879 | Mar. 17 | 2297 | 514 | 103 | 517 |
| Foliage and making same. Artificial | C. E. Akeley | 719,632 | Feb. 3 | 395 | 90 | 102 | 905 |
| Food. Apparatus for producing and preparing certain articles of | L. Romero and E. Rodriguez-y-Arce | 738,242 | Sept. 8 | 1380 | 298, 299 | 106 | 314 |
| Food-chopper | O. D. Woodruff | 717,959 | Jan. 6 | 823 | 186 | 102 | 177 |
| Food-chopper | M. A. Rollman | 726,991 | May 5 | 334 | 73 | 104 | 72 |
| Food-chopper | M. Griswold, Jr | 727,130 | May 5 | 599 | 128 | 104 | 130 |
| Food-chopper | W. K. Henry | 745,609 | Dec. 1 | 542 | 127 | 107 | 1212 |
| Food-chopper | J. C. Hall | 746,696 | Dec. 15 | 2521 | 579 | 107 | 1683 |
| Food compound | F. M. Libby | 737,119 | Aug. 25 | 3885 | ..... | 105 | 1860 |
| Food-container | A. Buntenbach | 738,981 | Sept. 15 | 2841 | 630 | 106 | 641 |
| Food. Obtaining cattle- | A. Clarke | 742,289 | Oct. 27 | 3713 | ..... | 106 | 2080 |
| Food product and making same. Dry | H. Wintruff | 748,249 | Dec. 29 | 5467 | ..... | 107 | 2378 |
| Food product and preparing same | F. Bunyan | 727,585 | May 12 | 1427 | ..... | 104 | 325 |
| Food product and producing same | A. A. Dunham | 732,929 | July 7 | 414 | ..... | 105 | 90 |
| Food products from whey. Producing | A. S. Ramage | 735,148 | Aug. 4 | 205 | ..... | 105 | 1026 |
| Food products. Preparing | J. P. Roche | 745,074 | Nov. 24 | 4399 | 950 | 107 | 982 |
| Food products. Preparing cereal | J. B. Espey | 720,122 | Feb. 10 | 1319 | 302 | 102 | 1120 |
| Food products. Producing | A. S. Ramage | 735,149 | Aug. 4 | 206 | ..... | 105 | 1026 |
| Foodstuffs, &c. Covering device for | M. M. Waite | 734,148 | July 21 | 2681 | 631 | 105 | 600 |
| Foot and body warmer. Portable | F. Batter | 719,638 | Feb. 3 | 405 | 92 | 102 | 907 |
| Foot-arch supporter. Electric | F. B. Lee | 730,545 | June 9 | 1865 | 417 | 104 | 1528 |
| Foot. Artificial | G. F. Ehrle | 726,889 | May 5 | 109 | 25 | 104 | 26 |
| Foot. Artificial | W. F. Mumberg | 734,926 | July 28 | 4134 | 963 | 105 | 919 |
| Foot attachment | J. Wright | 737,189 | Aug. 25 | 4014 | 890 | 105 | 1888 |
| Foot-ball | W. S. Jacobs | 723,606 | Mar. 24 | 3636 | 814 | 103 | 805 |
| Foot-ball | A. Crossley | 731,165 | June 16 | 3008 | 667, 668 | 104 | 1786 |
| Foot-cleaner or door-mat. Mechanical | A. Preuss and F. Jansson | 732,373 | June 30 | 5320 | 1178 | 104 | 2296 |
| Foot-pad | W. J. Conway | 723,442 | Mar. 24 | 3331 | 746 | 103 | 744 |
| Foot-power | O. H. Gentry | 725,551 | Apr. 14 | 2099 | 475 | 103 | 1629 |
| Foot-rest or seat | F. J. Allen | 740,071 | Sept. 29 | 4882 | 1095 | 106 | 1110 |
| Foot warmer and rest | J. Y. Skeels | 746,753 | Dec. 15 | 2621 | 602 | 107 | 1705 |
| Force-feed lubricator | B. Ivor and J. S. Ward | 734,069 | July 21 | 2527 | 589, 590 | 105 | 568 |
| Forced-draft furnace | F. J. Maly | 718,779 | Jan. 20 | 2397 | 532 | 102 | 540 |
| Forceps. Hemostatic | W. L. Nuttall | 724,034 | Mar. 31 | 4460 | 1004 | 103 | 993 |
| Forceps. Hernial | J. H. Kochenderfer | 724,889 | Apr. 7 | 875 | 201 | 103 | 1356 |
| Forceps. Obstetrical | J. A. Clifton | 746,791 | Dec. 15 | 2692 | 621 | 107 | 1721 |
| Forceps. Upper-cuspid | F. S. Manning | 731,586 | June 23 | 3812 | 849 | 104 | 1968 |
| Forge | R. Golze | 730,761 | June 9 | 2238 | 497 | 104 | 1610 |
| Forge. Portable | A. J. Gurney | 724,852 | Apr. 7 | 819 | 188 | 103 | 1344 |
| Forging apparatus | D. J. Morgan | 747,749 | Dec. 22 | 4480 | 1010, 1011 | 107 | 2140 |
| Forging-machine | J. R. Blakeslee | 737,065 | Aug. 25 | 3797 | 840, 841 | 105 | 1842 |
| Forging-machine | O. Briede | 741,301 | Oct. 13 | 1732 | 386, 387 | 106 | 1632 |
| Forging rock-drills | W. W. Word | 731,727 | June 23 | 4062 | 905, 906 | 104 | 2018 |
| Forgings. Apparatus for handling | R. F. Devine | 740,100 | Sept. 29 | 4931 | 1106 | 106 | 1121 |
| Fork: *See* Cane-fork. Carver-fork. Grappling-fork. Hay-fork. Laundry-fork. Pitchfork. Table-fork. Thrust-fork. Weft-fork. | | | | | | | |
| Fork | J. O. Cochran | 732,675 | June 30 | 5894 | 1307 | 104 | 2418 |
| Fork | J. A. Törnblom | 741,191 | Oct. 13 | 1506 | 341 | 106 | 1588 |
| Fork and spoon | A. G. Smart | 721,247 | Feb. 24 | 3476 | 790 | 102 | 1604 |
| Form. Bust- | A. M. Coleman | 745,787 | Dec. 1 | 846 | 191 | 107 | 1279 |
| Form. Display- | C. A. Ufford | 743,115 | Nov. 3 | 567 | 122 | 107 | 118 |

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|---|---|---|---|---|---|---|---|
| Form. Dress- | A. E. Scott | 727,464 | May 5 | 1191 | 262, 263 | 104 | 257 |
| Form. Garment- | A. Hoffmann | 722,983 | Mar. 17 | 2469 | 554 | 103 | 554 |
| Form. Garment- | W. F. Palmenberg | 739,212 | Sept. 15 | 3250 | 720 | 106 | 726 |
| Form. Garment- | A. K. Maxwell | 746,350 | Dec. 8 | 1907 | 436 | 107 | 1525 |
| Form. Sleeve- | M. F. Rocheleau | 739,620 | Sept. 22 | 4010 | 896 | 106 | 906 |
| Formed cutter | C. W. Brock | 733,311 | July 7 | 1091 | 260 | 105 | 230 |
| Forming-machine | B. W. Coghlin | 719,304 | Jan. 27 | 3394 | 757 | 102 | 763 |
| Forming-tool | W. C. Yeatman and C. F. Messinger | 718,961 | Jan. 20 | 2741 | 613 | 102 | 612 |
| Formaldehyde compound | R. Lepetit | 736,529 | Aug. 18 | 2785 | | 105 | 1613 |
| Formaldehyde-generating apparatus | E. F. Billings | 732,159 | June 30 | 4905 | 1091 | 104 | 2210 |
| Formaldehyde-generator | R. W. Johnson | 737,413 | Aug. 25 | 4456 | 1000 | 105 | 1983 |
| Formaldehyde-generator | R. N. Dyer | 746,935 | Dec. 15 | 2987 | 687 | 107 | 1788 |
| Fortune-telling attachment | C. L. Hurd | 724,392 | Mar. 31 | 5187 | 1163 | 103 | 1142 |
| Foundation | E. C. Hodges | 747,425 | Dec. 22 | 3900 | 878 | 107 | 2010 |
| Foundation construction | J. W. Kennedy | 235,390 | Aug. 4 | 666 | 142 | 105 | 1122 |
| Foundations and tunnels or other structures. Constructing | C. Sooysmith | 736,560 | Aug. 18 | 2835 | 621 | 105 | 1623 |
| Foundations. Establishing subaqueous | E. Becker | 720,997 | Feb. 17 | 2937 | 673, 674 | 102 | 1471 |
| Foundry-truck | W. F. and O. E. Mains | 741,352 | Oct. 13 | 1850 | 409 | 106 | 1662 |
| Fountain: *See* Chicken or fowl fountain. Drinking-fountain. Poultry-fountain. Soda-fountain. | | | | | | | |
| Fountain | G. W. Hawes | 735,017 | July 28 | 4305 | 1001 | 105 | 954 |
| Fountain-comb | J. R. Harrison | 734,704 | July 28 | 3711 | 868 | 105 | 832 |
| Fourdrinier-machine attachment | J. E. Webb and G. M. Pillsbury | 718,406 | Jan. 13 | 1637 | 359, 360 | 102 | 366 |
| Fowl catching and holding device | J. S. Orr | 721,829 | Mar. 3 | 311 | 68 | 103 | 69 |
| Fowl-catching device | H. C. Priebe | 721,917 | Mar. 3 | 499 | 110 | 103 | 111 |
| Frame: *See* Advertising-frame. Awning-frame. Bag, &c., frame. Bicycle cushion-frame. Bunk or mattress-frame. Canopy-supporting frame. Coffin-frame. Corn-shock frame. Couch-frame. Curtain-stretcher frame. Cushion-frame. Display-frame. Drawing-frame. Drying-frame. Educational frame. Embroidery-frame. Embroidery-silk frame. Mirror-frame. Passe-partout frame. Photographic-printing frame. Picture-frame. Plant-propagating frame. Printing-frame. Quilting-frame. Razor-frame. Soap-frame. Spinning-frame. Tobacco-picker's frame. Tufting-frame. Window-frame. | | | | | | | |
| Frame | J. Köster | 740,765 | Oct. 6 | 725 | 164 | 106 | 1407 |
| Frame or ring | H. J. Gaisman | 739,597 | Sept. 22 | 3969 | 886 | 106 | 892 |
| Framometer | C. W. Bones | 745,271 | Nov. 24 | 4782 | 1044 | 107 | 1060 |
| Freezing-box | A. E. Wilson | 743,126 | Nov. 3 | 591 | 128 | 107 | 123 |
| Freezing device. Milk or other liquid | J. W. MacDonald | 748,389 | Dec. 29 | 5703 | 1301 | 107 | 2430 |
| Freezing the ground | C. Sooysmith | 736,308 | Aug. 11 | 2383 | 518, 519 | 105 | 1511 |
| Freezing the ground and excavating or tunneling | C. P. Perin | 721,830 | Mar. 3 | 313 | 68, 69 | 103 | 69 |
| Friction-brake | R. R. Osgood | 719,853 | Feb. 3 | 704 | 186 | 102 | 991 |
| Friction-brake | A. E. Reynolds | 731,128 | June 16 | 2939 | 653, 654 | 104 | 1773 |
| Friction-brake | R. R. Osgood | 731,940 | June 23 | 4443 | 991, 992 | 104 | 2101 |
| Friction-brake | A. E. Reynolds | 745,386 | Dec. 1 | 133 | 30, 31 | 107 | 1129 |
| Friction-coupling | A. Leikem | 727,390 | May 5 | 1052 | 228, 229 | 104 | 226 |
| Friction element | K. G. Laub | 742,456 | Oct. 27 | 4005 | 898 | 106 | 2139 |
| Friction mechanism | P. C. Wilson, D. W. Bassett, and J. Dring. | 731,646 | June 23 | 3926 | 874 | 104 | 1991 |
| Friction-top can | H. H. Hull | 742,325 | Oct. 27 | 3778 | 846 | 106 | 2092 |
| Fringing-machine | A. S. Horlacher | 718,459 | Jan. 13 | 1746 | 388, 389 | 102 | 387 |
| Fruit. Apparatus for removing pulp from | H. H. Lyon | 746,720 | Dec. 15 | 2559 | 588, 589 | 107 | 1692 |
| Fruit-assorting machine | J. J. White | 731,828 | June 23 | 4251 | 946, 947 | 104 | 2060 |
| Fruit-box | R. H. Shoemaker, Jr | 718,666 | Jan. 20 | 2185 | 478 | 102 | 496 |
| Fruit-box | W. R. Stokely | 729,973 | June 2 | 840 | 187 | 104 | 1299 |
| Fruit-box extension-frame | J. Nicholas | 722,534 | Mar. 10 | 1641 | 362 | 103 | 368 |
| Fruit box or basket | H. O. Little | 734,721 | July 28 | 3749 | 876 | 105 | 839 |
| Fruit-carrier | G. W. Stevens | 733,683 | July 14 | 1748 | 414 | 105 | 385 |
| Fruit-carrier | S. H. Wilson | 747,822 | Dec. 22 | 4629 | 1046 | 107 | 2175 |
| Fruit chopper and press | E. Ernst | 744,519 | Nov. 17 | 3354 | 723 | 107 | 746 |
| Fruit-cutter | C. Harpold | 737,615 | Sept. 1 | 107 | 23 | 106 | 25 |
| Fruit. Desiccating | W. S. Keyes | 732,563 | June 30 | 5692 | 1264 | 104 | 2374 |
| Fruit-dipper | H. M. Barngrover | 739,531 | Sept. 22 | 3840 | 860 | 106 | 870 |
| Fruit-drier | G. W. Henkle | 736,849 | Aug. 18 | 3412 | 755 | 105 | 1741 |
| Fruit-drier | A. A. Quarnberg | 740,588 | Oct. 6 | 400 | 84, 85 | 106 | 1331 |
| Fruit-gatherer | J. A. Manor | 720,943 | Feb. 17 | 2830 | 649 | 102 | 1449 |
| Fruit-gatherer | E. E. Bennett and A. C. Allen | 733,128 | July 7 | 764 | 185 | 105 | 162 |
| Fruit-gatherer | L. Scarbrough | 736,028 | Aug. 11 | 1894 | 405 | 105 | 1404 |
| Fruit-gatherer | J. Hopkins | 742,432 | Oct. 27 | 3965 | 898 | 106 | 2129 |
| Fruit-grader | C. Rayburn | 726,756 | Apr. 28 | 4369 | 982, 983 | 103 | 2127 |
| Fruit-grader | R. Strain | 730,412 | June 9 | 1613 | 362 | 104 | 1473 |

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| Invention. | Name. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|---|
| | | | | Spec. | Dr'g. | Vol. | Page. |
| Fruit-harvester | G. H. Shellaberger | 722,413 | Mar. 10 | 1406 | 310<br>311 | 103 | 315 |
| Fruit into boxes. Device for pressing | W. C. Anderson and C. F. Fleming | 737,054 | Aug. 25 | 3774 | 838 | 105 | 1838 |
| Fruit-jar | E. A. Parker | 723,017 | Mar. 17 | 2527 | 566 | 103 | 566 |
| Fruit-jar | G. H. Ricke | 723,406 | Mar. 24 | 3271 | 733 | 103 | 731 |
| Fruit-jar | D. G. Carpenter | 725,407 | Apr. 14 | 1825 | 409 | 103 | 1570 |
| Fruit-jar | M. W. Owens | 745,375 | Dec. 1 | 113 | 26 | 107 | 1125 |
| Fruit or vegetable cleaner | O. H. and F. B. Perry | 745,658 | Dec. 1 | 625 | 145 | 107 | 1231 |
| Fruit-packing apparatus | C. A. Braun and W. M. Scott | 718,308 | Jan. 13 | 1460 | 324 | 102 | 330 |
| Fruit-picker | D. Butler | 721,013 | Feb. 17 | 2971 | 683 | 102 | 1478 |
| Fruit-picker | G. W. Clark | 721,154 | Feb. 24 | 3275 | 749 | 102 | 1565 |
| Fruit-picker | D. C. Eberhart | 723,658 | Mar. 24 | 3725 | 835 | 103 | 824 |
| Fruit-picker | J. S. Hamilton | 733,479 | July 14 | 1401 | 331 | 105 | 314 |
| Fruit-picker | S. H. Alden | 734,033 | July 21 | 2454 | 574 | 105 | 551 |
| Fruit-picker | M. Aksila | 736,671 | Aug. 18 | 3055 | 675 | 105 | 1667 |
| Fruit-picker | W. Penny | 738,061 | Sept. 1 | 988 | 219 | 106 | 215 |
| Fruit-picker | R. H. Libby | 740,292 | Sept. 29 | 5281 | 1189 | 106 | 1193 |
| Fruit-picker | F. Rohr | 743,754 | Nov. 10 | 1875 | 396 | 107 | 417 |
| Fruit-picker | J. B. Lawrence | 743,894 | Nov. 10 | 2141 | 460 | 107 | 472 |
| Fruit-picker's bag | J. B. Williams | 717,646 | Jan. 6 | 216 | 55 | 102 | 47 |
| Fruit-picker's receptacle | J. J. Jones | 719,810 | Feb. 3 | 730 | 171 | 102 | 977 |
| Fruit-pitter | O. L. Scott | 720,288 | Feb. 10 | 1626 | 372 | 102 | 1182 |
| Fruit-press | G. J. Fanner | 731,557 | June 23 | 3753 | 837 | 104 | 1957 |
| Fruit-pulp machine | C. R. Wilson | 741,428 | Oct. 13 | 1974 | 437 | 106 | 1687 |
| Fruit-seeder | W. E. Robinson | 740,315 | Sept. 29 | 5319 | 1198 | 106 | 1201 |
| Fruit-sizer | W. M. Black and H. F. Worrall | 738,092 | Sept. 1 | 1052 | 234 | 106 | 228 |
| Fruit-sizing machine | A. C. Burk | 746,011 | Dec. 8 | 1291 | 290 | 107 | 1392 |
| Fruit-sorter | A. C. Niemann | 729,395 | May 26 | 4788 | 1059<br>1060 | 104 | 1062 |
| Fruit sorting and distributing apparatus | C. Rayburn | 741,928 | Oct. 20 | 2958 | 659 | 106 | 1911 |
| Fruit-tray | J. H. Gunby | 737,607 | Sept. 1 | 91 | 20 | 106 | 22 |
| Fruit-washing-machine screen | E. J Kessler | 740,441 | Oct. 6 | 111 | 23 | 106 | 1270 |
| Fruit-wrapper and making same | E. Davènes | 724,266 | Mar. 31 | 4936 | ..... | 103 | 1088 |
| Fruits. Device for covering bush | D. V. Plants | 747,218 | Dec. 15 | 3517 | 798 | 107 | 1907 |
| Fruits. Machine for pricking prunes or like | J. H. Hammer | 722,840 | Mar. 17 | 2235 | 501 | 103 | 506 |
| Frying fish, &c. Means or apparatus for | L. H. Stocks | 734,630 | July 28 | 3566 | 835 | 105 | 803 |
| Frying-pan | A. Anderson | 721,491 | Feb. 24 | 3905 | 888 | 102 | 1694 |
| Fuel | H. B. Bayles | 743,677 | Nov. 10 | 1745 | ..... | 107 | 388 |
| Fuel and making same. Artificial | E. C. May | 732,574 | June 30 | 5711 | ..... | 104 | 2379 |
| Fuel. Artificial | H. M. Van Etten | 723,561 | Mar. 24 | 3554 | ..... | 103 | 788 |
| Fuel. Artificial | W. B. Smith | 724,214 | Mar. 31 | 4816 | ..... | 103 | 1066 |
| Fuel. Artificial | C. F. Russi and C. Cadena | 727,694 | May 12 | 1635 | ..... | 104 | 370 |
| Fuel. Artificial | F.C. von Heydebrand und der Lasa | 728,103 | May 12 | 2409 | ..... | 104 | 531 |
| Fuel. Artificial | M. F. Ward | 732,979 | July 7 | 493 | ..... | 105 | 106 |
| Fuel. Artificial | J. T. Smith | 739,936 | Sept. 29 | 4632 | 1039<br>1040 | 106 | 1057 |
| Fuel. Artificial | F. C. von Heydebrand und der Lasa | 741,493 | Oct. 13 | 2116 | ..... | 106 | 1718 |
| Fuel. Artificial | F. J. Bulask | 746,668 | Dec. 15 | 2479 | ..... | 107 | 1674 |
| Fuel blocks or briquets. Manufacturing | O. Neugebauer | 746,366 | Dec. 8 | 1933 | ..... | 107 | 1530 |
| Fuel briquets. Machine for making artificial | G. M. Fenn | 723,150 | Mar. 17 | 2766 | 622 | 103 | 616 |
| Fuel briquets. Machine for making artificial | G. M. Fenn | 729,149 | May 26 | 4355 | 962 | 104 | 972 |
| Fuel-burner | E. F. Gwynn | 738,537 | Sept. 8 | 2000 | 436 | 106 | 445 |
| Fuel-burner | A. Neu | 744,220 | Nov. 17 | 2823 | 603 | 107 | 631 |
| Fuel. Composition | F. C. Rockwell | 737,023 | Aug. 25 | 3732 | 828 | 105 | 1830 |
| Fuel. Composition of matter for artificial | A. Lohmann | 746,118 | Dec. 8 | 1484 | ..... | 107 | 1437 |
| Fuel. Composition of matter for use as | A. Paul | 734,743 | July 28 | 3791 | ..... | 105 | 847 |
| Fuel composition. Preparing | O. Francke | 729,321 | May 26 | 4667 | ..... | 104 | 1038 |
| Fuel compound | H. W. Morrow | 720,600 | Feb. 17 | 2213 | ..... | 102 | 1320 |
| Fuel compound. Emulsion | W. F. Browne | 728,854 | May 26 | 3843 | ..... | 104 | 869 |
| Fuel compound. Emulsion | W. F. Browne | 728,855 | May 26 | 3846 | ..... | 104 | 869 |
| Fuel. Device for producing and consuming hydrogenic | A. G. Ingalls | 740,759 | Oct. 6 | 714 | 161 | 106 | 1398 |
| Fuel-economizer | G. H. Burpee | 729,273 | May 26 | 4579 | 1011 | 104 | 1019 |
| Fuel-economizer | J. Milne | 744,929 | Nov. 24 | 4095 | 882 | 107 | 920 |
| Fuel feeder. Pulverized | J. J. de Kinder | 728,934 | May 26 | 3978 | 885 | 104 | 895 |
| Fuel-feeding apparatus | L. K. Davis | 718,985 | Jan. 27 | 2787 | 623<br>624 | 102 | 636 |
| Fuel-feeding apparatus | C. Wegener | 725,901 | Apr. 21 | 2747 | 625 | 103 | 1783 |
| Fuel-feeding apparatus | L. K. Davis | 730,883 | June 16 | 2468 | 548 | 104 | 1677 |
| Fuel-feeding apparatus | L. K. Davis | 730,884 | June 16 | 2470 | 548 | 104 | 1678 |
| Fuel-feeding apparatus | L. K. Davis | 740,097 | Sept. 29 | 4926 | 1105 | 106 | 1120 |
| Fuel-feeding apparatus. Fluid- | M. D. Compton | 739,292 | Sept. 22 | 3411 | 760 | 106 | 777 |
| Fuel-feeding device | N. E. Shontz | 717,935 | Jan. 6 | 786 | 177 | 102 | 168 |
| Fuel-feeding device | L. K. Davis | 727,305 | May 5 | 902 | 195<br>196 | 104 | 194 |
| Fuel-feeding mechanism | C. I. Filson | 726,664 | Apr. 28 | 4180 | 944 | 103 | 2088 |
| Fuel-feeding mechanism | J. J. de Kinder | 728,935 | May 26 | 3980 | 886 | 104 | 896 |
| Fuel for heating railway freight-cars, warehouses, &c. | R. J. Shimper | 741,728 | Oct. 20 | 2586 | ..... | 106 | 1832 |
| Fuel from brea. Manufacture of artificial | J. T. Davis | 728,680 | May 19 | 3516 | ..... | 104 | 786 |
| Fuel into combustion-chambers. Apparatus for injecting pulverized | C. H. Gifford | 746,493 | Dec. 8 | 2146 | 493<br>494 | 107 | 1578 |
| Fuel. Machine for making artificial | J. T. Smith | 739,937 | Sept. 29 | 4634 | 1040 | 106 | 1058 |
| Fuel. Making artificial | G. Adrot | 729,711 | June 2 | 328 | ..... | 104 | 1196 |
| Fuel. Manufacturing artificial | H. C B. Forester | 736,083 | Aug. 11 | 1997 | 424<br>425 | 105 | 1427 |
| Fuel pulverizing and feeding mechanism | L. B. Nash and R. E. Moore | 740,167 | Sept. 29 | 5047 | 1136 | 106 | 1146 |
| Fuel-saving apparatus | C. Smith | 734,626 | July 28 | 3559 | 833 | 105 | 802 |
| Fuel-saving briquet | H. Eggers | 748,356 | Dec. 29 | 5647 | ..... | 107 | 2418 |
| Fulling-machine | L. P. Hemmer | 722,363 | Mar 10 | 1315 | 291 | 103 | 296 |
| Fumes formed in volatilization processes. Apparatus for condensing | R. McKnight | 737,003 | Aug 25 | 3696 | 820 | 105 | 1821 |
| Fumes from ores. Apparatus for producing and depositing | W. W. Fyfe | 734,844 | July 28 | 4004 | 934<br>935 | 105 | 891 |
| Fumigating and disinfecting device | G. F. Hardinge | 734,229 | July 21 | 2828 | 663 | 105 | 632 |

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| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Fumigating apparatus | J. D. McReynolds | 732,774 | July 7 | 138 | 37 | 105 | 34 |
| Fumigating-candle | E. Kimmich | 744,766 | Nov. 24 | 3812 | 822 | 107 | 861 |
| Fumigating means | L. W. Cock | 742,838 | Nov. 3 | 36 | 8, 9 | 107 | 10 |
| Fumigating-tent | W. H. Payne | 731,610 | June 23 | 3857 | 859 | 104 | 1977 |
| Fumigator | G. E. Brown | 723,513 | Mar. 24 | 3476 | 778 | 103 | 772 |
| Fumigator | L. Feval | 746,942 | Dec. 15 | 3004 | 690 | 107 | 1792 |
| Fumigator. Formaldehyde- | L. Feval | 735,660 | Aug. 4 | 1194 | 252 | 105 | 1235 |
| Fumigator. Formaldehyde- | S. M. Morris | 746,731 | Dec. 15 | 2575 | 593 | 107 | 1695 |
| Fumigator. Formaldehyde- | R. W. Johnson | 747,184 | Dec. 15 | 3444 | 780 | 107 | 1893 |
| Funnel | B. Paulini | 740,689 | Oct. 6 | 562 | 126 | 106 | 1368 |
| Funnel and device for supporting same. Measuring- | L. H. Sternheimer | 733,294 | July 7 | 1071 | 255 | 105 | 225 |
| Furnace: | | | | | | | |
| *See* Annealing-furnace. | | | | | | | |
| *See* Assay-furnace. | | | | | | | |
| *See* Billet-heating furnace. | | | | | | | |
| *See* Blast-furnace. | | | | | | | |
| *See* Boiler-furnace. | | | | | | | |
| *See* Boiler or other furnace. | | | | | | | |
| *See* Calcining-furnace. | | | | | | | |
| *See* Calcining or decomposing furnace. | | | | | | | |
| *See* Coal-furnace. | | | | | | | |
| *See* Coil-heating furnace. | | | | | | | |
| *See* Convertible furnace. | | | | | | | |
| *See* Crucible-furnace. | | | | | | | |
| *See* Double furnace. | | | | | | | |
| *See* Drying-furnace. | | | | | | | |
| *See* Duplex furnace | | | | | | | |
| *See* Electric furnace. | | | | | | | |
| *See* Electric sectional furnace. | | | | | | | |
| *See* Forced-draft furnace. | | | | | | | |
| *See* Garbage-furnace. | | | | | | | |
| *See* Gas-furnace. | | | | | | | |
| *See* Gas-burning furnace. | | | | | | | |
| *See* Glass-tank furnace. | | | | | | | |
| *See* Heating-furnace. | | | | | | | |
| *See* High-temperature furnace. | | | | | | | |
| *See* Hot-air furnace. | | | | | | | |
| *See* Hot-water and hot-air furnace. | | | | | | | |
| *See* Hydrocarbon-furnace. | | | | | | | |
| *See* Ingot-heating furnace. | | | | | | | |
| *See* Liquid-fuel furnace. | | | | | | | |
| *See* Mechanical furnace. | | | | | | | |
| *See* Melting-furnace. | | | | | | | |
| *See* Metal-heating furnace. | | | | | | | |
| *See* Metal-treating furnace. | | | | | | | |
| *See* Metallurgical furnace. | | | | | | | |
| *See* Metallurgical and chemical furnace. | | | | | | | |
| *See* Movable furnace. | | | | | | | |
| *See* Muffle-furnace. | | | | | | | |
| *See* Open-air furnace. | | | | | | | |
| *See* Ore-roasting furnace. | | | | | | | |
| *See* Ore roasting and smelting furnace. | | | | | | | |
| *See* Oxidizing-furnace. | | | | | | | |
| *See* Perforated-bottom furnace. | | | | | | | |
| *See* Plumber's blast-furnace. | | | | | | | |
| *See* Quicksilver-furnace. | | | | | | | |
| *See* Reducing-furnace. | | | | | | | |
| *See* Regenerative furnace. | | | | | | | |
| *See* Regenerator-furnace. | | | | | | | |
| *See* Revolving furnace. | | | | | | | |
| *See* Roasting-furnace. | | | | | | | |
| *See* Rotary-grate furnace. | | | | | | | |
| *See* Slag-furnace. | | | | | | | |
| *See* Smelting-furnace. | | | | | | | |
| *See* Smoke-consuming furnace. | | | | | | | |
| *See* Smoke-consuming boiler-furnace. | | | | | | | |
| *See* Smoke-preventer furnace. | | | | | | | |
| *See* Smoke-preventing furnace. | | | | | | | |
| *See* Smokeless and coal-saving furnace. | | | | | | | |
| *See* Steam-generating furnace. | | | | | | | |
| *See* Steam-generator furnace. | | | | | | | |
| *See* Tempering-furnace. | | | | | | | |
| *See* Tobacco-curing furnace. | | | | | | | |
| *See* Vertical underfeed-furnace. | | | | | | | |
| *See* Warm-air furnace. | | | | | | | |
| Furnace | H. E. Kent | 717,582 | Jan. 6 | 104 | 27, 28 | 102 | 25 |
| Furnace | H. L. Meyer | 718,497 | Jan. 13 | 1852 | 407 | 102 | 414 |
| Furnace | S. P. Smith | 719,271 | Jan. 27 | 3320 | 743 | 102 | 747 |
| Furnace | G. W. Lyon | 720,370 | Feb. 10 | 1775 | 402, 403 | 102 | 1215 |
| Furnace | C. W. Robinson | 721,329 | Feb. 24 | 3607 | 820 | 102 | 1633 |
| Furnace | C. B. Miller and O. D. Cotton | 721,720 | Mar. 3 | 121 | 26 | 103 | 27 |
| Furnace | C. B. Miller and O. D. Cotton | 721,818 | Mar. 3 | 289 | 64 | 103 | 64 |
| Furnace | W. H. Fenner | 722,827 | Mar. 17 | 2207 | 492, 493, 494 | 103 | 501 |
| Furnace | J. Armstrong | 722,932 | Mar. 17 | 2387 | 534 | 103 | 537 |
| Furnace | E. A. Field and J. Lynn | 723,663 | Mar. 24 | 3733 | 837 | 103 | 825 |
| Furnace | A. W. Straight and G. B. Stone | 723,802 | Mar. 24 | 3973 | 896 | 103 | 877 |
| Furnace | R. H. Yeoman | 724,646 | Apr. 7 | 422 | 100, 101 | 103 | 1260 |
| Furnace | G. F. Rendall | 724,941 | Apr. 7 | 956 | 220 | 103 | 1374 |
| Furnace | A. J. Vaughan | 724,974 | Apr. 7 | 1028 | 235, 236 | 103 | 1388 |
| Furnace | E. H. Schwartz | 725,490 | Apr. 14 | 1992 | 449 | 103 | 1607 |
| Furnace | R. Thomson | 726,114 | Apr. 21 | 3106 | 703, 704 | 103 | 1858 |
| Furnace | H. H. Huff | 726,298 | Apr. 28 | 3464 | 786 | 103 | 1946 |
| Furnace | R. S. Thompson | 726,374 | Apr. 28 | 3619 | 820 | 103 | 1978 |
| Furnace | W. D. Zehnder | 727,050 | May 5 | 446 | 94 | 104 | 98 |
| Furnace | F. G. Cooper | 727,750 | May 12 | 1753 | 394 | 104 | 394 |
| Furnace | W. Railton and R. Campbell | 728,411 | May 19 | 2996 | 659 | 104 | 676 |
| Furnace | P. B. Harrison | 728,459 | May 19 | 3098 | 684 | 104 | 697 |
| Furnace | E. H. Carroll | 729,540 | June 2 | 37 | 9, 10 | 104 | 1134 |
| Furnace | T. G. Selleck | 729,681 | June 2 | 279 | 64 | 104 | 1186 |
| Furnace | G. T. Wyatt | 732,610 | June 30 | 5770 | 1279 | 104 | 2393 |
| Furnace | R. A. Carter | 735,064 | Aug. 4 | 29 | 9 | 105 | 987 |
| Furnace | J. E. Langford | 736,746 | Aug. 18 | 3204 | 708 | 105 | 1698 |
| Furnace | T. Murphy | 737,128 | Aug. 25 | 3900 | 866, 867 | 105 | 1863 |
| Furnace | W. W. Weaver | 738,132 | Sept. 1 | 1141 | 254, 255 | 106 | 247 |
| Furnace | C. McMillan | 738,226 | Sept. 8 | 1348 | 292, 293 | 106 | 307 |
| Furnace | D. M. Reel | 738,358 | Sept. 8 | 1656 | 359 | 106 | 372 |
| Furnace | G. Winston | 739,966 | Sept. 29 | 4684 | 1053 | 106 | 1068 |

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| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Furnace | H. B. Cary | 740,528 | Oct. 6 | 281 | 56 | 106 | 1305 |
| Furnace | J. MacCormack | 740,668 | Oct. 6 | 528 | 116, 117 | 106 | 1360 |
| Furnace | J. MacCormack | 740,669 | Oct. 6 | 530 | 117 | 106 | 1360 |
| Furnace | C. J. Monfort | 741,357 | Oct. 13 | 1855 | 410 | 106 | 1663 |
| Furnace | G. C. Cannon | 741,456 | Oct. 13 | 2027 | 450 | 106 | 1698 |
| Furnace | C. J. Monfort | 741,812 | Oct. 20 | 2737 | 610 | 106 | 1864 |
| Furnace | F. J. Doyle | 742,612 | Oct. 27 | 4289 | 966, 967 | 106 | 2198 |
| Furnace | D. R. Steele | 743,947 | Nov. 10 | 2224 | 481 | 107 | 490 |
| Furnace | E. H. Wade, J. L. Nicholson, and S. C. Smith. | 744,135 | Nov. 17 | 2642 | 563, 564 | 107 | 592 |
| Furnace | J. D. Roberts | 744,238 | Nov. 17 | 2854 | 610, 611 | 107 | 638 |
| Furnace | E. C. Brice | 744,954 | Nov. 24 | 4151 | 897 | 107 | 931 |
| Furnace | R. Martin and J. F. Busley | 745,365 | Dec. 1 | 92 | 21 | 107 | 1121 |
| Furnace | T. V. Elliott | 746,310 | Dec. 8 | 1839 | 418 | 107 | 1511 |
| Furnace | O. A. Stranahan, W. W. Churchill, and W. R. Roney. | 746,759 | Dec. 15 | 2630 | 605 | 107 | 1708 |
| Furnace | E. Yawger and W. W. Churchill | 746,908 | Dec. 15 | 2921 | 674 | 107 | 1773 |
| Furnace | J. D. Swindell | 747,020 | Dec. 15 | 3141 | 719 | 107 | 1822 |
| Furnace | F. Alsip | 747,346 | Dec. 22 | 3770 | 849 | 107 | 1980 |
| Furnace | H. H. Huff | 747,718 | Dec. 22 | 4434 | 1000 | 107 | 2130 |
| Furnace | W. V. Beasley | 748,468 | Dec. 29 | 5875 | 1335 | 107 | 2468 |
| Furnace air and steam feeding attachment. Boiler- | G. Marlow, Sr | 736,857 | Aug. 18 | 3427 | 758, 759 | 105 | 1744 |
| Furnace air-feeding apparatus | C. C. Macmillan and C. A. Whyte | 737,644 | Sept. 1 | 155 | 33, 34 | 106 | 36 |
| Furnace air-heater. Smelting- | J. L. Giroux | 718,755 | Jan. 20 | 2356 | 522 | 102 | 531 |
| Furnace apparatus | F. H. Foote and T. W. Robinson | 720,125 | Feb. 10 | 1324 | 303 | 102 | 1121 |
| Furnace ash-pit. Locomotive- | H. E. Parson | 742,129 | Oct. 20 | 3400 | 758 | 106 | 1998 |
| Furnace attachment. Roasting- | D. D. and J. O. Bailey | 744,992 | Nov. 24 | 4211 | 911 | 107 | 943 |
| Furnace bell-gear. Blast- | J. C. Cromwell and C. W. A. Koelkebeck. | 736,366 | Aug. 18 | 2478 | 542, 543, 544 | 105 | 1547 |
| Furnace blast apparatus. Downdraft- | R. W. Hamann | 718,453 | Jan. 13 | 1738 | 386, 387 | 102 | 386 |
| Furnace-botting apparatus | M. Killeen, J. F. Lewis, and A. P. Aiken. | 742,199 | Oct. 27 | 3531 | 787, 788 | 106 | 2039 |
| Furnace-bottom | J. Huxley | 728,578 | May 19 | 3334 | 737 | 104 | 746 |
| Furnace bridge. Boiler- | R. F. Sturrock | 724,517 | Apr. 7 | 186 | 45, 46 | 103 | 1209 |
| Furnace charges. Apparatus for forming blast- | A. S. Dwight | 721,505 | Feb. 24 | 3923 | 892, 893 | 102 | 1698 |
| Furnace charging and cleaning apparatus | T. Jones | 742,196 | Oct. 27 | 3524 | 786 | 106 | 2038 |
| Furnace-charging apparatus | C. H. Wellman | 723,094 | Mar. 17 | 2665 | 600 | 103 | 596 |
| Furnace-charging apparatus | J. F. Lewis | 729,877 | June 2 | 660 | 145 | 104 | 1263 |
| Furnace-charging apparatus | C. Eitle | 744,316 | Nov. 17 | 3002 | 643 | 107 | 671 |
| Furnace-charging apparatus. Blast- | J. C. Cromwell and C. W. A. Koelkebeck. | 727,753 | May 12 | 1762 | 395, 396 | 104 | 396 |
| Furnace-charging apparatus. Blast- | J. C. Cromwell | 727,754 | May 12 | 1763 | 397 | 104 | 396 |
| Furnace-charging apparatus. Blast- | A. P. Aiken | 729,831 | June 2 | 579 | 128 | 104 | 1246 |
| Furnace-charging apparatus. Blast- | E. G. Rust | 730,799 | June 9 | 2297 | 510, 511, 512 | 104 | 1621 |
| Furnace charging-car. Blast- | G. W. Bollman | 736,352 | Aug. 18 | 2457 | 537 | 105 | 1542 |
| Furnace charging, controlling, and distributing mechanism. | E. Ramsay and J. J. Shannon | 721,088 | Feb. 17 | 3112 | 714, 715 | 102 | 1511 |
| Furnace-charging device. Blast- | M. W. Johnson, Jr | 730,922 | June 16 | 2543 | 566 | 104 | 1692 |
| Furnace-charging machine | S. T. and C. H. Wellman | 721,627 | Feb. 24 | 4176 | 950 | 102 | 1754 |
| Furnace-charging-machine gripping device | S. T. and C. H. Wellman | 719,399 | Jan. 27 | 3573 | 798 | 102 | 801 |
| Furnace-cleaning apparatus | T. Jones | 742,197 | Oct. 27 | 3527 | 787 | 106 | 2039 |
| Furnace combustion-regulator. Locomotive- | H. E. Parson | 742,130 | Oct. 20 | 3402 | 759 | 106 | 1998 |
| Furnace construction | J. M. Scanlan | 747,648 | Dec. 22 | 4307 | 968, 969 | 107 | 2101 |
| Furnace-controlling apparatus. Smoke-consuming. | H. Kowitzke | 732,419 | June 30 | 5405 | 1198, 1199 | 104 | 2314 |
| Furnace distributer. Blast- | J. Cook | 736,074 | Aug. 11 | 1986 | 422 | 105 | 1424 |
| Furnace-door | J. S. Cooper | 736,222 | Aug. 11 | 2224 | 479 | 105 | 1474 |
| Furnace-door | J. Horváth | 737,105 | Aug. 25 | 3863 | 858 | 105 | 1855 |
| Furnace-door. Air-feeding | C. H. Eddins and C. Buddie | 722,957 | Mar. 17 | 2424 | 542 | 103 | 545 |
| Furnace-door for steam-boilers, &c | J. T. Lindahl | 746,855 | Dec. 15 | 2818 | 650, 651 | 107 | 1749 |
| Furnace-door opener | E. O. Henderson and J. B. Thompson. | 721,302 | Feb. 24 | 3552 | 807 | 102 | 1621 |
| Furnace-door opener | J. E. Swonson | 731,972 | June 23 | 4501 | 1004 | 104 | 2114 |
| Furnace-door-operating device | L. I. Newton | 740,987 | Oct. 6 | 1110 | 250 | 106 | 1483 |
| Furnace-draft. Auxiliary | T. Young | 740,509 | Oct. 6 | 241 | 48 | 106 | 1298 |
| Furnace draft device. Steam-boiler- | A. Herschmann | 740,361 | Sept. 29 | 5405 | 1217 | 106 | 1219 |
| Furnace draft-regulating apparatus | G. B. Tyler | 719,394 | Jan. 27 | 3562 | 795 | 102 | 799 |
| Furnace draft-regulating apparatus | A. Klein | 739,321 | Sept. 22 | 3453 | 771 | 106 | 786 |
| Furnace dust-chamber | F. Cazin and L. J. W. Jones | 734,818 | July 28 | 3955 | 923 | 105 | 881 |
| Furnace-feeder | W. T. Barker | 746,265 | Dec. 8 | 1749 | 397 | 107 | 1492 |
| Furnace feeding apparatus | C. W. Bray | 724,376 | Mar. 31 | 5145 | 1152 | 103 | 1133 |
| Furnace feeding apparatus | C. W. Bray | 724,377 | Mar. 31 | 5147 | 1153 | 103 | 1133 |
| Furnace fire-arch | H. A. Poppenhusen | 720,964 | Feb. 17 | 2879 | 659 | 102 | 1459 |
| Furnace fire-gate | H. A. Poppenhusen | 725,362 | Apr. 14 | 1740 | 392 | 103 | 1553 |
| Furnace-fires. Apparatus for enhancing draft through | S. C. Davidson | 743,694 | Nov. 10 | 1768 | 374, 375 | 107 | 393 |
| Furnace-firing machine | J. U. Hobbs | 732,635 | June 30 | 5816 | 1290 | 104 | 2403 |
| Furnace flues and tubes. Manufacturing corrugated | W. Rainforth | 743,193 | Nov. 3 | 720 | 157, 158 | 107 | 150 |
| Furnace for heating asphalt, &c | A. Montupet | 744,871 | Nov. 24 | 3996 | 861, 862 | 107 | 899 |
| Furnace for heating metal sheets | J. Stephens, J. G. Danks, and R. J. Beatty. | 729,101 | May 26 | 4272 | 944 | 104 | 955 |
| Furnace for heating or melting materials | W. P. Thompson | 725,173 | Apr. 14 | 1407 | 318 | 103 | 1482 |
| Furnace forced-draft appliance | J., Sr., T., and J. Vicars, Jr | 729,909 | June 2 | 706 | 157 | 104 | 1272 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Furnace fronts. Protective apparatus for boiler- | O. N. Morin | 747,464 | Dec. 22 | 3968 | 892 | 107 | 2023 |
| Furnace gas-bell | E. R. Stasch | 735,421 | Aug. 4 | 738 | 157 | 105 | 1137 |
| Furnace-grate | C. P. and G. P. Roberts | 723,622 | Mar. 24 | 3666 | 822 | 103 | 811 |
| Furnace-grate | H. E. Reed | 724,938 | Apr. 7 | 953 | 219 | 103 | 1373 |
| Furnace-grate | A. S. Coffin | 734,671 | July 28 | 3646 | 855, 856 | 105 | 819 |
| Furnace-grate | L. and S. Lehotzky | 735,537 | Aug. 4 | 971 | 205, 206 | 105 | 1187 |
| Furnace-grate | F. C. Armstead | 746,656 | Dec. 15 | 2454 | 561 | 107 | 1669 |
| Furnace grate-bars. Apparatus for shaking | J. A., F. E., and M. E. Normand | 736,768 | Aug. 18 | 3240 | 716 | 105 | 1705 |
| Furnace hearth. Blast- | M. M. Suppes | 729,105 | May 26 | 4282 | 946 | 104 | 957 |
| Furnace or stove fire-pot | F. D. Swaney | 744,644 | Nov. 17 | 3553 | 766 | 107 | 786 |
| Furnace peep-hole attachment. Blast- | A. L. Smith | 742,919 | Nov. 3 | 170 | 40 | 107 | 37 |
| Furnace petroleum-burner | E. D. Dennison | 733,463 | July 14 | 1377 | 326 | 105 | 308 |
| Furnace reversing-valve | J. W. Seigh | 730,708 | June 9 | 2156 | 478, 479 | 104 | 1591 |
| Furnace reversing-valve. Regenerative- | J. A. Herrick | 727,791 | May 12 | 1841 | 411, 412 | 104 | 411 |
| Furnace shaving-feeder | J. C. Leary | 730,934 | June 16 | 2561 | 571 | 104 | 1696 |
| Furnace spraying attachment | J. O. Morris | 740,986 | Oct. 6 | 1109 | 249 | 106 | 1482 |
| Furnace steam and air injector | R. Applegarth | 739,806 | Sept. 29 | 4369 | 979 | 106 | 1004 |
| Furnace straightener. Collapsed- | J. Todd | 746,899 | Dec. 15 | 2908 | 671 | 107 | 1771 |
| Furnace top. Blast- | J. C. Cromwell and C. W. A. Koelkebeck. | 724,670 | Apr. 7 | 467 | 113 | 103 | 1269 |
| Furnace top. Blast- | G. K. Hamfeldt and T. A. Tesch | 733,196 | July 7 | 878 | 212 | 105 | 184 |
| Furnace ventilating-door | J. Sidaway | 731,235 | June 16 | 3129 | 694 | 104 | 1809 |
| Furnace with automatic feeding | W. Josten | 742,198 | Oct. 27 | 3530 | 787 | 106 | 2039 |
| Furnaces. Air-heating apparatus for reverberatory | J. Reuleaux | 742,740 | Oct. 27 | 4510 | 1021, 1022 | 106 | 2246 |
| Furnaces and converters. Extracting moisture from air for blast- | J. Gayley | 746,814 | Dec. 15 | 2735 | 630, 631 | 107 | 1731 |
| Furnaces. Apparatus for feeding bagasse to | J. Fisher | 739,161 | Sept. 15 | 3161 | 699 | 106 | 707 |
| Furnaces. Apparatus for feeding fine fuel to | J. E. Baldwin, F. N. Van Zandt, and A. V. T. Day. | 732,031 | June 30 | 4641 | 1037, 1038 | 104 | 2156 |
| Furnaces. Apparatus for feeding pulverized fuel to | J. E. Baldwin | 735,932 | Aug. 11 | 1713 | 365, 366 | 105 | 1365 |
| Furnaces. Apparatus for feeding pulverulent and small fuel to | O. E. Wilson | 729,474 | May 26 | 4914 | 1089 | 104 | 1091 |
| Furnaces. Apparatus for preventing top explosions on blast- | R. Berg | 721,418 | Feb. 24 | 3770 | 857 | 102 | 1666 |
| Furnaces. Apparatus for the manufacture of corrugated | W. Rainforth | 743,192 | Nov. 3 | 713 | 156, 157 | 107 | 149 |
| Furnaces, &c. Attachment for | A. G. Ingalls | 735,772 | Aug. 11 | 1404 | 302 | 105 | 1297 |
| Furnaces. Automatic charger for busheling- | J. W. Arnold | 726,839 | May 5 | 8 | 2, 3 | 104 | 5 |
| Furnaces. Cinder or hot-metal car for blast- | E. A. Weimer | 719,706 | Feb. 3 | 532 | 118, 119 | 102 | 935 |
| Furnaces. Conveyer and shield used in connection with crucible smelting- | P. J. McDonald | 727,416 | May 5 | 1096 | 240, 241 | 104 | 237 |
| Furnaces. Device for continuously tapping pig-iron from blast- | A. von Kerpely | 728,727 | May 19 | 3601 | 799 | 104 | 803 |
| Furnaces. Device for feeding air and steam to | O. N. Guldlin | 721,695 | Mar. 3 | 84 | 17, 18 | 103 | 19 |
| Furnaces. Device for regulating and controlling the supply of gas and air to | D. Turk | 717,640 | Jan. 6 | 208 | 52 | 102 | 45 |
| Furnaces. Feeding mechanism for billet-heating | V. E. Edwards | 720,905 | Feb. 17 | 2759 | 635 | 102 | 1433 |
| Furnaces. Gas-seal for metallurgical | S. Stewart and H. Hughes | 737,520 | Aug. 25 | 4655 | 1045 | 105 | 2030 |
| Furnaces. Introducing carbon, fluxes, &c., into blast- | W. J. Foster | 719,320 | Jan. 27 | 3424 | 764 | 102 | 770 |
| Furnaces. Means for feeding fuel to | R. W. Grove | 737,921 | Sept. 1 | 727 | 157, 158 | 106 | 159 |
| Furnaces. Means for stoking | C. B. Miller and O. D. Cotton | 728,952 | May 26 | 4009 | 892 | 104 | 902 |
| Furnaces. Means for stoking | W. W. Weaver | 738,133 | Sept. 1 | 1144 | 255 | 106 | 247 |
| Furnaces. Means for utilizing liquid fuel in | J. Berg | 728,154 | May 12 | 2502 | 555, 556 | 104 | 550 |
| Furnaces. Means for utilizing oil or gas in ore-reducing | W. Kemp | 741,504 | Oct. 13 | 2133 | 475 | 106 | 1721 |
| Furnaces. Pipe-stove for heating the blast for blast- | E. P. Davis | 728,377 | May 19 | 2940 | 648, 649 | 104 | 663 |
| Furnaces. Plant for feeding material to blast- | W. Kennedy | 738,815 | Sept. 15 | 2552 | 561 | 106 | 579 |
| Furnaces. Support for cooling plates or coils in blast- | A. Farrell | 744,319 | Nov. 17 | 3005 | 644, 645 | 107 | 671 |
| Furnaces. Support-jacket or frame for cooling plates or coils in blast- | A. Farrell | 745,430 | Dec. 1 | 220 | 49 | 107 | 1147 |
| Furnaces. Treating materials by radiated heat in electric | C. G. P. de Laval | 729,614 | June 2 | 165 | 40 | 104 | 1161 |
| Furnaces. Utilizing the products of combustion of steam-boiler | G. A. Schütz | 740,700 | Oct. 6 | 581 | 130 | 106 | 1373 |
| Furnaces with fuel and promoting combustion thereof. Supplying | W. W. Weaver | 739,040 | Sept. 15 | 2932 | 650, 651 | 106 | 661 |
| Furniture | J. A. Staples | 742,252 | Oct. 27 | 3647 | 815 | 106 | 2062 |
| Furniture. Adjustable | R. P. Elliott | 728,887 | May 26 | 3894 | 866 | 104 | 878 |
| Furniture. Adjustable | R. P. Elliott | 730,623 | June 9 | 2002 | 445 | 104 | 1559 |
| Furniture. Article of | A. Lehmann | 735,277 | Aug. 4 | 471 | 94 | 105 | 1081 |
| Furniture-brace | W. D. Childress | 730,092 | June 2 | 1032 | 231 | 104 | 1337 |
| Furniture-brace | J. L. White | 742,266 | Oct. 27 | 3669 | 820 | 106 | 2070 |
| Furniture, &c. Brace for | J. H. Pace | 738,231 | Sept. 8 | 1358 | 294 | 106 | 309 |
| Furniture. Combination article of | J. Moran | 721,593 | Feb. 24 | 4102 | 934 | 102 | 1739 |
| Furniture construction | C. Singer | 740,192 | Sept. 29 | 5093 | 1144 | 106 | 1155 |
| Furniture. Convertible | G. Brown | 720,320 | Feb. 10 | 1687 | 383 | 102 | 1195 |
| Furniture-coupling | F. L. Forster | 721,292 | Feb. 24 | 3537 | 804 | 102 | 1618 |
| Furniture-coupling | E. Tannewitz | 735,618 | Aug. 4 | 1120 | 237 | 105 | 1220 |
| Furniture-fastening | V. E. Clark | 747,854 | Dec. 22 | 4688 | 1060 | 107 | 2189 |
| Furniture-fastening device | W. E. Nelson | 726,732 | Apr. 28 | 4307 | 972 | 103 | 2115 |
| Furniture-fastening device | D. W. Tower | 742,525 | Oct. 27 | 4146 | 932 | 106 | 2168 |
| Furniture fastening. Knockdown- | V. E. Clark | 747,683 | Dec. 22 | 4368 | 986 | 107 | 2114 |
| Furniture-fixture | C. Franck | 735,961 | Aug. 11 | 1763 | 378 | 105 | 1376 |
| Furniture. Knockdown | J. Richards | 731,323 | June 16 | 3106 | 689 | 104 | 1805 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Furniture. Leaf-support for articles of | O. R. Hunt | 733,046 | July 7 | 612 | 150 | 105 | 130 |
| Furniture. Means for securing casters to | C. F. Wheeler | 742,770 | Oct. 27 | 4555 | 1032 | 106 | 2257 |
| Furniture-member fastening device | J. P. Howard | 722,178 | Mar. 3 | 954 | 212 | 103 | 202 |
| Furniture-nail | R. L. Ellery | 718,331 | Jan. 13 | 1511 | 335 | 102 | 340 |
| Furniture-polish | W. H. Paxton | 737,015 | Aug. 25 | 3719 | ..... | 105 | 1827 |
| Furniture-polish | A. Studd | 746,760 | Dec. 15 | 2633 | ..... | 107 | 1708 |
| Furniture. Sectional | F. Macey | 727,654 | May 12 | 1558 | 352 | 104 | 353 |
| Furniture spring-bottom | W. E. Whittemore | 746,769 | Dec. 15 | 2652 | 612 | 107 | 1712 |
| Furniture-trimmings. Device for fastening | D. W. Tower | 745,404 | Dec. 1 | 168 | 38 | 107 | 1135 |
| Furniture, &c. Wrapper for | A. J. Bunnell | 718,906 | Jan. 20 | 2634 | 591 | 102 | 589 |
| Furring | C. T. Purdy | 741,412 | Oct. 13 | 1951 | 432 | 106 | 1683 |
| Furrow-opener attachment | C. S. Kemper | 732,191 | June 30 | 4962 | 1103 | 104 | 2221 |
| Furrow-opener. Disk | W. Bills | 744,711 | Nov. 24 | 3722 | 803 | 107 | 842 |
| Furrow-opener. Disk | F. R. Packham | 747,759 | Dec. 22 | 4507 | 1015 | 107 | 2147 |
| Furrow-opener. Double-disk | H. C. Ham | 736,963 | Aug. 25 | 3627 | 803 | 105 | 1807 |
| Furrow-opening disks. Equalizing device for | A. Pederson | 731,086 | Feb. 17 | 3103 | 713 | 102 | 1510 |
| Fuse | W. J. Lloyd | 737,254 | Aug. 25 | 4155 | 924 | 105 | 1917 |
| Fuse and fuse-magazine | W. P. Woodruff and D. J. McCarthy | 747,528 | Dec. 22 | 4086 | 918 | 107 | 2051 |
| Fuse apparatus. Protective- | W. L. Richards | 736,019 | Aug. 11 | 1880 | 402 | 105 | 1401 |
| Fuse-block | J. B. Morgan | 725,006 | Apr. 7 | 1091 | 248 | 103 | 1402 |
| Fuse-block | J. Sachs | 737,283 | Aug. 25 | 4210 | 938 | 105 | 1929 |
| Fuse-block | M. R. Utley and B. J. Clements | 745,691 | Dec. 1 | 686 | 157 | 107 | 1244 |
| Fuse-block. Magazine | G. Baskerville | 729,033 | May 26 | 4157 | 921 | 104 | 933 |
| Fuse-block or cut-out for electric circuits | L. C. Scrymser | 734,969 | July 28 | 4216 | 979, 980 | 105 | 935 |
| Fuse-box | J. K. Morgan | 721,217 | Feb. 24 | 3426 | 778 | 102 | 1594 |
| Fuse-box | E. A. Wilson | 726,605 | Apr. 28 | 4079 | 920, 921 | 103 | 2067 |
| Fuse-box. Electric | T. Van Aller | 720,087 | Feb. 10 | 1255 | 287 | 102 | 1106 |
| Fuse-box. Electric | J. J. Wood | 736,049 | Aug. 11 | 1930 | 412 | 105 | 1412 |
| Fuse casing and switch | L. W. Downes | 743,471 | Nov. 10 | 1362 | 279 | 107 | 306 |
| Fuse circuit-terminal | L. W. Downes | 734,407 | July 21 | 3159 | 742 | 105 | 701 |
| Fuse. Combination- | O. Hartmann | 737,229 | Aug. 25 | 4104 | 912 | 105 | 1907 |
| Fuse. Electric | G. B. Baby | 738,874 | Sept. 15 | 2662 | 587 | 106 | 604 |
| Fuse. Electric | H. Geisenhöner | 747,697 | Dec. 22 | 4397 | 991 | 107 | 2122 |
| Fuse. Electric-circuit inclosed | W. S. Atkinson | 730,594 | June 9 | 1960 | 436 | 104 | 1550 |
| Fuse for artillery projectiles. Time- | C. Bäker | 728,151 | May 12 | 2495 | 555 | 104 | 548 |
| Fuse for exploding shells. Impact- | K. Wieser | 731,989 | June 23 | 4536 | 1012 | 104 | 2121 |
| Fuse for exploding shells. Percussion- | K. Wieser | 744,448 | Nov. 17 | 3241 | 695 | 107 | 723 |
| Fuse for high-explosive shells. Safety- | L. Gathmann | 734,697 | July 28 | 3695 | 866 | 105 | 829 |
| Fuse for projectiles. Delayed-action | C. V. Wheeler and A. G. McKenna | 745,981 | Dec. 1 | 1225 | 276 | 107 | 1362 |
| Fuse-head and fuse. Electrical | N. Schmitt and J. Krannichfeldt | 720,073 | Feb. 10 | 1214 | 279 | 102 | 1097 |
| Fuse holder. Electric- | J. B. McCarthy | 745,969 | Dec. 1 | 1207 | 271 | 107 | 1357 |
| Fuse or cut-out. Electric | H. L. Morse | 719,025 | Jan. 27 | 2853 | 641 | 102 | 650 |
| Fuse or cut-out. Electric | H. L. Morse | 719,026 | Jan. 27 | 2857 | 641 | 102 | 651 |
| Fuse or cut-out. Electric | L. W. Downes | 737,369 | Aug. 25 | 4359 | 972 | 105 | 1961 |
| Fuse or cut-out. Electric | L. W. Downes | 746,050 | Dec. 8 | 1362 | 304 | 107 | 1408 |
| Fuse or cut-out. Electric safety- | L. W. Downes | 737,368 | Aug. 25 | 4356 | 971, 972 | 105 | 1961 |
| Fuse or junction box. Electrical | M. H. Johnson | 718,632 | Jan. 20 | 2116 | 461 | 102 | 483 |
| Fuse. Percussion- | E. Gathmann | 735,238 | Aug. 4 | 394 | 77 | 105 | 1065 |
| Fuse-plug | S. Rothschild | 723,032 | Mar. 17 | 2553 | 574 | 103 | 572 |
| Fuse. Plug- | H. C. Wirt | 731,005 | June 16 | 2704 | 602 | 104 | 1726 |
| Fuse. Plug- | J. H. Hanson | 745,493 | Dec. 1 | 346 | 80 | 107 | 1173 |
| Fuse. Safety- | J. Sachs | 718,797 | Jan. 20 | 2429 | 538 | 102 | 546 |
| Fuse. Safety- | J. Sachs | 737,280 | Aug. 25 | 4203 | 937, 938 | 105 | 1927 |
| Fuse. Safety- | J. Sachs | 737,281 | Aug. 25 | 4205 | 938 | 105 | 1928 |
| Fuse. Safety- | J. Sachs | 737,282 | Aug. 25 | 4207 | 938 | 105 | 1928 |
| Fuse. Safety- | J. Sachs | 737,284 | Aug. 25 | 4213 | 938 | 105 | 1929 |
| Fuse. Shell- | G. M. and C. F. Hathaway | 729,932 | June 2 | 742 | 165 | 104 | 1279 |
| Fuse. Shell percussion- | W. Ruegg | 718,282 | Jan. 13 | 1421 | 316 | 102 | 321 |
| Fuse-splitter and cap-crimper | J. Fischler | 723,520 | Mar. 24 | 3490 | 780 | 103 | 775 |
| Fuse switch-box. Electric | J. Sachs | 742,499 | Oct. 27 | 4082 | 918 | 106 | 2155 |
| Fuse-terminal | W. R. Goodman | 730,906 | June 16 | 2515 | 559 | 104 | 1686 |
| Fuses of cartridges, &c. Means for setting the time- | C. Röstel | 741,836 | Oct. 20 | 2771 | 618 | 106 | 1873 |
| Fused substances. Apparatus for the electrolysis of | C. W. Roepper | 736,020 | Aug. 11 | 1883 | 402 | 105 | 1402 |
| Fusible pattern | F. Baldt, Sr. | 724,243 | Mar. 31 | 4896 | ..... | 103 | 1081 |
| Fusible plug | H. D. Morton | 719,245 | Jan. 27 | 3278 | 732 | 102 | 737 |
| Gaff or boom iron | T. O. Otto and J. A. Russell | 747,471 | Dec. 22 | 3978 | 895 | 107 | 2026 |
| Gage: | | | | | | | |
| *See* Adjustable gage. | | | | | | | |
| Axle-gage. | | | | | | | |
| Boiler-gage. | | | | | | | |
| Boiler water-gage. | | | | | | | |
| Carpenter's gage. | | | | | | | |
| Cloth-cutting gage. | | | | | | | |
| Crank-pin-setting gage. | | | | | | | |
| Depth-gage. | | | | | | | |
| Edge-gage. | | | | | | | |
| Limit-gage. | | | | | | | |
| Liquid-depth gage. | | | | | | | |
| Manometric gage. | | | | | | | |
| Margin-gage. | | | | | | | |
| Measuring-gage. | | | | | | | |
| Mercury test-gage. | | | | | | | |
| Micrometer-gage. | | | | | | | |
| Mortise-gage. | | | | | | | |
| Oil-gage. | | | | | | | |
| Pressure-gage. | | | | | | | |
| Printing-press feeding-gage. | | | | | | | |
| Punching-machine gage. | | | | | | | |
| Railway-track gage. | | | | | | | |
| Rule-gage. | | | | | | | |
| Saw-filing gage. | | | | | | | |
| Saw-table gage. | | | | | | | |
| Screw-driver gage. | | | | | | | |
| Shingle-gage. | | | | | | | |
| Siding-gage. | | | | | | | |
| Skirt-gage. | | | | | | | |
| Slip and shrinkage gage. | | | | | | | |
| Stone-cutter's gage. | | | | | | | |
| Track-gage. | | | | | | | |
| Watchmaker's gage. | | | | | | | |
| Water-gage. | | | | | | | |
| Wheel-gage. | | | | | | | |
| Gage | S. E. Smith | 717,998 | Jan. 6 | 791 | 178 | 102 | 169 |
| Gage | A. Kuhlmann | 725,973 | Apr. 21 | 2870 | 651 | 103 | 1809 |
| Gage | C. E. Eldridge | 728,558 | May 19 | 3285 | 728 | 104 | 735 |
| Gage | S. D. Shriver | 730,407 | June 9 | 1602 | 357 | 104 | 1470 |
| Gage | F. T. Cable | 736,067 | Aug. 11 | 1975 | 420 | 105 | 1422 |
| Gage | A. A. Handley | 738,903 | Sept. 15 | 2711 | 599 | 106 | 614 |

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| | | | | Spec. | Dr'g. | Vol. | Page. |
| Gage | C. F. Anderson | 740,212 | Sept. 29 | 5138 | 1153 | 106 | 1164 |
| Gage | C. S. Labofish | 741,146 | Oct. 13 | 1402 | 321 | 106 | 1564 |
| Gage | J. W. Melvin | 745,877 | Dec. 1 | 1046 | 236 | 107 | 1322 |
| Gage and float therefor | E. L. Wickins | 745,942 | Dec. 1 | 1152 | 259 | 107 | 1345 |
| Gaining-machine | J. M. Strubel | 724,966 | Apr. 7 | 1007 | 231<br>232 | 103 | 1384 |
| Gaining-tool. Hand | R. P. Mathews | 717,883 | Jan. 6 | 699 | 156 | 102 | 149 |
| Gaiter. Congress | E. L. Keith | 724,188 | Mar. 31 | 4765 | 1069 | 103 | 1055 |
| Galley | P. J. Cooney | 719,194 | Jan. 27 | 3182 | 709 | 102 | 717 |
| Galley-lock | A. C. Ladd | 728,729 | May 19 | 3603 | 800 | 104 | 804 |
| Galvanic battery | H. Halsey | 719,659 | Feb. 3 | 437 | 100 | 102 | 913 |
| Galvanic battery | M. M. Bair | 722,662 | Mar. 17 | 1883 | 418 | 103 | 435 |
| Galvanic battery | J. R. Lord | 730,833 | June 9 | 2356 | 521 | 104 | 1634 |
| Galvanic battery | E. L. Anderson | 732,811 | July 7 | 215 | 54 | 105 | 49 |
| Galvanic battery | H. Halsey | 734,546 | July 28 | 3422 | 799 | 105 | 772 |
| Galvanic battery | D. L. Winters | 734,646 | July 28 | 3593 | 841 | 105 | 809 |
| Galvanic battery | C. B. Schoenmehl | 737,286 | Aug. 25 | 4216 | 939 | 105 | 1930 |
| Galvanic battery | C. W. Roberts | 742,802 | Oct. 27 | 4611 | 1045 | 106 | 2268 |
| Galvanic battery | D. L. Winters | 744,989 | Nov. 24 | 4205 | 910 | 107 | 942 |
| Galvanic battery. Reversible | T. A. Edison | 721,682 | Mar. 3 | 64 | ..... | 103 | 15 |
| Galvanic battery. Reversible | T. A. Edison | 723,450 | Mar. 24 | 3345 | ..... | 103 | 747 |
| Galvanic battery. Reversible | T. A. Edison | 727,117 | May 5 | 569 | ..... | 104 | 123 |
| Galvanic battery. Reversible | E. W. Jungner | 738,110 | Sept. 1 | 1095 | ..... | 106 | 237 |
| Galvanic cell | L. Fiedler | 738,718 | Sept. 8 | 2340 | 514 | 106 | 515 |
| Galvanic cell | L. Fiedler | 738,719 | Sept. 8 | 2341 | ..... | 106 | 516 |
| Galvanic cell | W. Strickland | 742,365 | Oct. 27 | 3843 | 863 | 106 | 2107 |
| Galvanizing apparatus. Metal-sheet | E. A. Davies | 748,350 | Dec. 29 | 5637 | 1285 | 107 | 2415 |
| Galvanometer | A. Blondel | 728,076 | May 12 | 2360 | 525 | 104 | 520 |
| Galvanometer. Reflecting | E. Weston | 730,061 | June 2 | 980 | 220 | 104 | 1328 |
| Gambrel | L. Neathamer | 733,672 | July 14 | 1736 | 410 | 105 | 383 |
| Game | C. H. Crandall | 721,544 | Feb. 24 | 3991 | 909 | 102 | 1713 |
| Game | W. H. Snyder | 723,058 | Mar. 17 | 2598 | 586 | 103 | 581 |
| Game | C. W. Fuller | 723,378 | Mar. 24 | 3229 | 724 | 103 | 721 |
| Game | C. Williamson | 726,833 | Apr. 28 | 4500 | 1015 | 103 | 2155 |
| Game | L. B. Lewis | 731,192 | June 16 | 3058 | 679 | 104 | 1795 |
| Game | R. S. Bradbury | 731,850 | June 23 | 4285 | 954 | 104 | 2067 |
| Game | C. L. Durboraw | 732,281 | June 30 | 5147 | 1143 | 104 | 2260 |
| Game | W. A. Justice | 734,883 | July 28 | 4068 | 949 | 105 | 904 |
| Game | A. J. Branham | 738,401 | Sept. 8 | 1733 | 377 | 106 | 389 |
| Game | A. E. Borland | 739,254 | Sept 15 | 3336 | 740 | 106 | 745 |
| Game | W. F. Moughler | 741,528 | Oct. 13 | 2188 | 486 | 106 | 1733 |
| Game | G. P. Hall | 742,416 | Oct. 27 | 3941 | 885 | 106 | 2124 |
| Game | E. H. Roy | 742,498 | Oct. 27 | 4081 | 918 | 106 | 2154 |
| Game | T. Sonne, Jr | 743,343 | Nov. 3 | 1020 | 220 | 107 | 218 |
| Game | L. H. Riddle | 745,387 | Dec. 1 | 137 | 31 | 107 | 1130 |
| Game | J. L. MacRae | 747,199 | Dec. 15 | 3480 | 790 | 107 | 1899 |
| Game and game-board | H. T. Reed | 734,092 | July 21 | 2565 | 599 | 105 | 577 |
| Game and game-table | O. Pryibil | 724,934 | Apr. 7 | 946 | 217 | 103 | 1372 |
| Game and toy | W. Maxwell | 735,789 | Aug. 11 | 1433 | 308 | 105 | 1304 |
| Game apparatus | R. Ireland | 718,353 | Jan. 13 | 1548 | 342 | 102 | 347 |
| Game apparatus | R. W. Harris and J. R. Holmes | 718,623 | Jan. 20 | 2105 | 458 | 102 | 481 |
| Game apparatus | F. P. de Grandchamp | 718,709 | Jan. 20 | 2267 | 498 | 102 | 513 |
| Game apparatus | J. A. De Lon | 718,986 | Jan. 27 | 2789 | 624 | 102 | 637 |
| Game apparatus | A. C. Schneider | 719,145 | Jan. 27 | 3102 | 690 | 102 | 700 |
| Game apparatus | W. C. Farnum | 719,448 | Feb. 3 | 65 | 15 | 102 | 839 |
| Game apparatus | D. Gailey | 719,456 | Feb. 3 | 77 | 18, 19 | 102 | 842 |
| Game apparatus | F. W. Baynes | 719,719 | Feb. 3 | 560 | 127 | 102 | 940 |
| Game apparatus | G. E. Mellen | 720,533 | Feb. 10 | 2076 | 479 | 102 | 1275 |
| Game apparatus | A. J. Musselman | 722,241 | Mar. 10 | 1099 | 242 | 103 | 250 |
| Game apparatus | C. A. Fowler | 722,359 | Mar. 10 | 1305 | 290 | 103 | 294 |
| Game apparatus | C. N. Morgan | 722,603 | Mar. 10 | 1762 | 392 | 103 | 394 |
| Game apparatus | W. R. Williams | 722,789 | Mar. 17 | 2139 | 479 | 103 | 487 |
| Game apparatus | J. M. Babbitt and A. C. Rumpel | 723,807 | Mar. 31 | 3987 | 900 | 103 | 897 |
| Game apparatus | E. Truslow | 724,223 | Mar. 31 | 4831 | 1083 | 103 | 1069 |
| Game apparatus | E. Bawden | 724,244 | Mar. 31 | 4897 | 1096 | 103 | 1081 |
| Game apparatus | H. J. Frysinger | 724,841 | Apr. 7 | 794 | 183 | 103 | 1339 |
| Game apparatus | S. A. McKelvey | 724,920 | Apr. 7 | 923 | 211 | 103 | 1367 |
| Game apparatus | A. Mueller | 725,118 | Apr. 14 | 1306 | 294 | 103 | 1462 |
| Game apparatus | F. F. Honeck | 726,062 | Apr. 21 | 3009 | 684 | 103 | 1837 |
| Game apparatus | M. A. Davies | 726,262 | Apr. 28 | 3387 | 769 | 103 | 1930 |
| Game apparatus | J. Brinkmann | 726,397 | Apr. 28 | 3657 | 829 | 103 | 1986 |
| Game apparatus | A. Reed | 727,196 | May 5 | 702 | 151 | 104 | 152 |
| Game apparatus | C. O. Sobinski | 728,317 | May 19 | 2840 | 628 | 104 | 643 |
| Game apparatus | C. Tanron | 728,327 | May 19 | 2858 | 631 | 104 | 647 |
| Game apparatus | B. Hurd | 730,659 | June 9 | 2066 | 460 | 104 | 1571 |
| Game apparatus | D. H. Talbert | 730,987 | June 16 | 2668 | 594 | 104 | 1718 |
| Game apparatus | C. K. Clark | 731,163 | June 16 | 3006 | 667 | 104 | 1786 |
| Game apparatus | G. T. Voorhees | 731,825 | June 23 | 4246 | 945 | 104 | 2059 |
| Game apparatus | A. Strahle | 731,968 | June 23 | 4495 | 1003 | 104 | 2113 |
| Game apparatus | C. J. McLeod | 732,312 | June 30 | 5189 | 1153 | 104 | 2269 |
| Game apparatus | E. G. Matthewson | 732,952 | July 7 | 450 | 111<br>112 | 105 | 97 |
| Game apparatus | M. S. Bliss | 733,365 | July 14 | 1200 | 285 | 105 | 268 |
| Game apparatus | J. N. Arriaga | 733,793 | July 14 | 1948 | 459 | 105 | 428 |
| Game apparatus | C. Koch and J. Fischer | 733,850 | July 14 | 2078 | 491 | 105 | 453 |
| Game apparatus | F. C. Ring | 734,752 | July 28 | 3818 | 890 | 105 | 852 |
| Game apparatus | F. E. Hunt | 734,877 | July 28 | 4056 | 946 | 105 | 901 |
| Game apparatus | J. McCutchen, Jr | 735,132 | Aug. 4 | 172 | 37 | 105 | 1018 |
| Game apparatus | C. M. Mumford | 735,995 | Aug. 11 | 1834 | 393 | 105 | 1392 |
| Game apparatus | J. E. Clark | 736,938 | Aug. 25 | 3574 | 792 | 105 | 1795 |
| Game apparatus | J. Chaboty | 737,207 | Aug. 25 | 4053 | 899 | 105 | 1896 |
| Game apparatus | E. F. Wilson | 738,586 | Sept. 8 | 2077 | 454 | 106 | 462 |
| Game apparatus | D. McRuer | 738,625 | Sept. 8 | 2158 | 473 | 106 | 479 |
| Game apparatus | J. E. Carney | 738,771 | Sept. 15 | 2457 | 540 | 106 | 558 |
| Game apparatus | W. L. Newman | 739,337 | Sept. 22 | 3481 | 777 | 106 | 792 |
| Game apparatus | S. Levin | 740,448 | Oct. 6 | 125 | 25 | 106 | 1272 |

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| Game apparatus | R. H. Smith | 741,846 | Oct. 20 | 2792 | 621 | 106 | 1877 |
| Game apparatus | G. H. Stults | 742,927 | Nov. 3 | 184 | 42 | 107 | 40 |
| Game apparatus | J. H. Wilson | 743,605 | Nov. 10 | 1625 | 340 | 107 | 363 |
| Game apparatus | M. S. Brown | 743,820 | Nov. 10 | 2004 | 425 | 107 | 443 |
| Game apparatus | H. C. Kramer | 745,865 | Dec. 1 | 1022 | 230 | 107 | 1317 |
| Game apparatus | J. A. McKenzie | 746,364 | Dec. 8 | 1931 | 440 | 107 | 1530 |
| Game apparatus | E. Sandstrom | 747,646 | Dec. 22 | 4305 | 968 | 107 | 2100 |
| Game apparatus | W. S. How | 747,716 | Dec. 22 | 4431 | 998<br>999 | 107 | 2129 |
| Game apparatus | H. K. Leonard | 747,989 | Dec. 29 | 4985 | 1126 | 107 | 2274 |
| Game apparatus | M. A. Bean | 748,467 | Dec. 29 | 5874 | 1335 | 107 | 2468 |
| Game apparatus. Base-ball | I. J. Jacob | 738,452 | Sept. 8 | 1825 | 396 | 106 | 407 |
| Game-board | J. E. Patton, Jr., and O. F. Humphreys. | 717,613 | Jan. 6 | 165 | 41 | 102 | 37 |
| Game-board | H. Busch and A. Jaeger | 726,023 | Apr. 21 | 2955 | 672 | 103 | 1826 |
| Game-board | C. J. Dorsey | 730,351 | June 9 | 1510 | 335 | 104 | 1452 |
| Game-board | H. H. Rolfe | 730,571 | June 9 | 1917 | 426 | 104 | 1539 |
| Game-board | C. J. Dorsey | 730,749 | June 9 | 2217 | 493 | 104 | 1605 |
| Game-board | H. L. Haskell | 733,644 | July 14 | 1687 | 400 | 105 | 373 |
| Game-board | C. H. Curran | 734,307 | July 21 | 2996 | 705 | 105 | 667 |
| Game-board | H. Frank | 734,313 | July 21 | 3006 | 707 | 105 | 669 |
| Game-board | E. T. Burrowes | 739,284 | Sept. 22 | 3391 | 755 | 106 | 773 |
| Game-board | E. T. Burrowes | 739,285 | Sept. 22 | 3394 | 756 | 106 | 773 |
| Game-board | H. A. Roat, Jr | 746,993 | Dec. 15 | 3092 | 708 | 107 | 1812 |
| Game-board and man or game-piece receptacle. Combined | H. Van Altena | 724,760 | Apr. 7 | 635 | 149 | 103 | 1304 |
| Game-board. Convertible | N. B. Stone | 718,290 | Jan. 13 | 1436 | 319 | 102 | 325 |
| Game-board. Kindergarten | K. H. Burrowes | 720,886 | Feb. 17 | 2720 | 627 | 102 | 1426 |
| Game-board. King-ring | C. J. Dorsey | 725,684 | Apr. 21 | 2358 | 534 | 103 | 1699 |
| Game-board. Wicket | C. J. Dorsey | 731,439 | June 23 | 3530 | 786 | 104 | 1912 |
| Game. Card | R. W. Test and H. Stabler | 726,232 | Apr. 21 | 3321 | 753<br>754 | 103 | 1901 |
| Game. Card | H. E. Gavitt | 746,492 | Dec. 8 | 2144 | 493 | 107 | 1577 |
| Game-carrier | M. C. Peters | 723,179 | Mar. 17 | 2832 | 636 | 103 | 631 |
| Game-counter | E. T. Burrowes | 729,839 | June 2 | 588 | 130 | 104 | 1248 |
| Game-counter | E. Sommers | 742,076 | Oct. 20 | 3310 | 737 | 106 | 1980 |
| Game-counter holder | E. Ocumpaugh | 739,209 | Sept. 15 | 3246 | 718 | 106 | 725 |
| Game device | J. L. Holmstrom | 721,953 | Mar. 3 | 564 | 125 | 103 | 124 |
| Game device | H. A. Stewart | 739,942 | Sept. 29 | 4644 | 1042 | 106 | 1060 |
| Game device. Puzzle | J. W. Hughes | 740,980 | Oct. 6 | 1099 | 247 | 106 | 1480 |
| Game. Electric field | G. Majno | 737,257 | Aug. 25 | 4159 | 925<br>926 | 105 | 1918 |
| Game. Indoor | S. B. Monson | 748,298 | Dec. 29 | 5561 | 1268 | 107 | 2399 |
| Game. Instructive | E. H. Ives | 739,678 | Sept. 22 | 4125 | 920 | 106 | 931 |
| Game of cricket. Table | C. E. Nicholas | 721,072 | Feb. 17 | 3073 | 705 | 102 | 1502 |
| Game of table or parlor cricket | E. M. Amphlett | 728,187 | May 19 | 2564 | 571 | 104 | 585 |
| Game-piece | F. A. Cigol | 729,489 | May 26 | 4938 | 1095 | 104 | 1096 |
| Game-piece. Conversational | W. Chaffin | 740,397 | Oct. 6 | 22 | 5 | 106 | 1249 |
| Game-table | J. T. Nientimp | 718,147 | Jan. 13 | 1166 | 259 | 102 | 266 |
| Game-table | J. L. Patton and A. F. Hochwalt | 728,756 | May 19 | 3648 | 811 | 104 | 813 |
| Game-table | G. A. White | 735,186 | Aug. 4 | 301 | 59 | 105 | 1044 |
| Games. Appliance for picking up balls employed in table-tennis or other | E. A. Jeffreys | 721,196 | Feb. 24 | 3354 | 766 | 102 | 1580 |
| Gang-plank | J. Riley | 733,598 | July 14 | 1609 | 382 | 105 | 357 |
| Gang-plank and loading-chute. Combined | C. B. Hallam | 733,959 | July 21 | 2296 | 539 | 105 | 517 |
| Garbage-box | T. E. Burrough | 745,322 | Dec. 1 | 16 | 4 | 107 | 1104 |
| Garbage-burner and water-heater | J. Mann | 718,490 | Jan. 13 | 1838 | 403<br>404 | 102 | 411 |
| Garbage can or receptacle | E. L. Schiefer | 719,515 | Feb. 3 | 178 | 41 | 102 | 861 |
| Garbage-crematory | C. A. Williams | 719,545 | Feb. 3 | 234 | 54,55 | 102 | 873 |
| Garbage-crematory | J. A. Forsyth | 731,032 | June 16 | 2752 | 613<br>614 | 104 | 1735 |
| Garbage-destructor | T. Rooke and J. Thrush | 747,488 | Dec. 22 | 4016 | 902<br>903 | 107 | 2037 |
| Garbage-digesters. Drainer for | E. S. Peck | 717,912 | Jan. 6 | 745 | 167 | 102 | 159 |
| Garbage furnace or crematory | E. J. Little, G. H Breymann, and D. C. Shaw. | 724,898 | Apr. 7 | 888 | 204 | 103 | 1360 |
| Garbage or other receptacle | W. Raster | 721,604 | Feb. 24 | 4127 | 939 | 102 | 1743 |
| Garbage plant | C. S. Wheelwright | 719,542 | Feb. 3 | 229 | 53 | 102 | 871 |
| Garbage-receptacle | J. Thiele | 748,119 | Dec. 29 | 5243 | 1190 | 107 | 2331 |
| Garbage-receptacle container | C. H. Stephenson | 722,766 | Mar. 17 | 2093 | 468<br>469 | 103 | 478 |
| Garbage. Treating | E. S. Peck | 742,224 | Oct. 27 | 3582 | 801 | 106 | 2050 |
| Garbage. Treating | E. S. Peck | 742,225 | Oct. 27 | 3585 | 801 | 106 | 2051 |
| Garbage. Treating | E. S. Peck and W. M. Scott | 742,226 | Oct. 27 | 3587 | 801 | 106 | 2051 |
| Garbage vault or receptacle | E. L. Schiefer | 723,318 | Mar. 24 | 3092 | 696 | 103 | 698 |
| Garden implement | R. Twohig | 748,439 | Dec. 29 | 5810 | 1324 | 107 | 2454 |
| Garden-tool | J. E. Beebe | 719,723 | Feb. 3 | 567 | 128 | 102 | 942 |
| Garment | E. A. Holston | 717,854 | Jan. 6 | 650 | 144 | 102 | 139 |
| Garment | G. J. Hudson | 724,011 | Mar. 31 | 4427 | 995 | 103 | 986 |
| Garment | G. Boxley | 737,070 | May 5 | 480 | 102 | 104 | 105 |
| Garment | W. E. Warner | 733,776 | July 14 | 1920 | 452 | 105 | 422 |
| Garment | W. G. Turner | 736,893 | Aug. 18 | 3479 | 773 | 105 | 1755 |
| Garment | E. W. Merrill | 737,260 | Aug. 25 | 4162 | 927 | 105 | 1919 |
| Garment and watch-chain support | J. V. Pilcher | 730,566 | June 9 | 1907 | 425 | 104 | 1537 |
| Garment attachment | J. Jenkins | 729,769 | June 2 | 453 | 102 | 104 | 1220 |
| Garment. Bifurcated | E. Arpin | 724,775 | Apr. 7 | 674 | 158 | 103 | 1312 |
| Garment-clasp | A. H. Cohn | 718,314 | Jan. 13 | 1470 | 326 | 102 | 332 |
| Garment-clasp | C. H. Reimard | 718,794 | Jan. 20 | 2425 | 537 | 102 | 545 |
| Garment-clasp | E. H. Gysling | 719,462 | Feb. 3 | 88 | 21 | 102 | 844 |
| Garment-clasp | M. Coffey | 721,782 | Mar. 3 | 221 | 49 | 103 | 49 |
| Garment-clasp | O. Kemper | 722,308 | Mar. 10 | 1221 | 271 | 103 | 276 |
| Garment-clasp | G. E. Hawes | 730,534 | June 9 | 1844 | 412 | 104 | 1523 |
| Garment-clasp | T. P. Taylor and R. B. Tunnicliffe | 732,138 | June 30 | 4861 | 1082 | 104 | 2200 |
| Garment-clasp | C. B. Hoy | 748,189 | Dec. 29 | 5369 | 1220 | 107 | 2357 |
| Garment-clasp or hose-supporter | A. H. Cohn | 722,285 | Mar. 10 | 1178 | 260 | 103 | 266 |

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| Garment. Combination- | R. E. Reznick | 742,904 | Nov. 3 | 149 | 35 | 107 | 33 |
| Garment. Combination outer | F. Wilcomb | 725,903 | Apr. 21 | 2749 | 626 | 103 | 1784 |
| Garment-creasing device | N. McDevitt | 721,822 | Mar. 3 | 295 | 65 | 103 | 65 |
| Garment-fastener | G. H. Dillin | 717,660 | Jan. 6 | 237 | 60 | 102 | 52 |
| Garment-fastener | S. S. Spofford | 717,940 | Jan. 6 | 794 | 179 | 102 | 170 |
| Garment-fastener | N. J. Young | 723,969 | Mar. 31 | 4321 | 970 | 103 | 968 |
| Garment-fastener | G. Schmitt | 724,211 | Mar. 31 | 4811 | 1078 | 103 | 1064 |
| Garment-fastener | T. O. Hegg | 733,199 | July 7 | 883 | 213 | 105 | 185 |
| Garment-fastener | A. J. Bradley | 735,653 | Aug. 4 | 1182 | 250 | 105 | 1232 |
| Garment-fastener | A. J. Bradley | 735,654 | Aug. 4 | 1184 | 250 | 105 | 1232 |
| Garment-fastener | A. J. Bradley | 735,655 | Aug. 4 | 1185 | 251 | 105 | 1233 |
| Garment-fastener | H. Booth | 736,811 | Aug. 18 | 3329 | 738 | 105 | 1723 |
| Garment-fastener | J. E. Pratt | 737,475 | Aug. 25 | 4563 | 1023 | 105 | 2007 |
| Garment-fastener | J. H. Simpson | 737,597 | Aug. 25 | 4633 | 1040 | 105 | 2024 |
| Garment-fastener | N. V. Croom and S. Ledger | 740,813 | Oct. 6 | 812 | 182 | 106 | 1418 |
| Garment-fastener | M. F. Eisner | 746,478 | Dec. 8 | 2122 | 487 | 107 | 1572 |
| Garment-fastener | F. Hussey | 747,721 | Dec. 22 | 4439 | 1001 | 107 | 2131 |
| Garment-fastening | F. C. Evans | 727,771 | May 12 | 1813 | 404 | 104 | 405 |
| Garment-fastening | E. A. Peffley | 741,540 | Oct. 13 | 2218 | 493 | 106 | 1739 |
| Garment-fastening device | H. E. Finney | 718,113 | Jan. 13 | 1108 | 245 | 102 | 254 |
| Garment-fastening or other holding device | J. F. J. Gunning | 728,796 | May 19 | 3724 | 831 | 104 | 827 |
| Garment-fastenings. Card or mount for | O. A. De Long | 719,442 | Feb. 3 | 58 | 13 | 102 | 838 |
| Garment-folding apparatus | J. McKay and G. L. Wenzell | 740,458 | Oct. 6 | 145 | 29,30 | 106 | 1277 |
| Garment-hanger | S. H. Kimball and A. G. Haver | 717,751 | Jan. 6 | 431 | 100 | 102 | 94 |
| Garment-hanger | F. Pratz | 719,041 | Jan. 27 | 2891 | 648 | 102 | 658 |
| Garment-hanger | A. F. Barnum | 720,396 | Feb. 10 | 1810 | 412 | 102 | 1222 |
| Garment-hanger | A. L. Ross | 723,031 | Mar. 17 | 2552 | 574 | 103 | 572 |
| Garment-hanger | T. M. Mulkerins | 724,118 | Mar. 31 | 4623 | 1041 | 103 | 1027 |
| Garment-hanger | S. W. Bonsall | 724,427 | Apr. 7 | 15 | 5 | 103 | 1173 |
| Garment-hanger | E. C. Cullum | 725,678 | Apr. 21 | 2351 | 531 | 103 | 1697 |
| Garment-hanger | F. P. Johnson | 728,239 | May 19 | 2672 | 597 | 104 | 607 |
| Garment-hanger | J. S. Heaton | 730,263 | June 9 | 1352 | 297 | 104 | 1418 |
| Garment-hanger | J. E. Knowlton | 734,128 | July 21 | 2645 | 624 | 105 | 592 |
| Garment-hanger | I. Scott | 736,030 | Aug. 11 | 1895 | 405 | 105 | 1405 |
| Garment-hanger | M. E. Pike | 736,150 | Aug. 11 | 2109 | 452 | 105 | 1449 |
| Garment-hanger | C. F. Hurst | 736,969 | Aug. 25 | 3636 | 805 | 105 | 1809 |
| Garment-hanger | F. W. Leimberger | 737,252 | Aug. 25 | 4153 | 923 | 105 | 1917 |
| Garment-hanger | A. H. Holland | 738,447 | Sept 8 | 1818 | 395 | 106 | 406 |
| Garment-hanger | A. Mieden | 742,207 | Oct. 27 | 3550 | 792 | 106 | 2043 |
| Garment-hanger | C. F. L. Hoepfinger | 745,961 | Dec. 1 | 1193 | 267 | 107 | 1354 |
| Garment holder and supporter | C. O. Barnes | 726,494 | Apr. 28 | 3867 | 875 | 103 | 2025 |
| Garment-hook | H. S. Brewington | 724,541 | Apr. 7 | 226 | 55 | 103 | 1218 |
| Garment-hook | H. Kerngood | 727,970 | May 12 | 2176 | 484 | 104 | 482 |
| Garment-hook | M. G. Roeder | 747,486 | Dec. 22 | 4012 | 902 | 107 | 2036 |
| Garment-hook. Coin-controlled | J. Scheibling | 729,900 | June 2 | 693 | 153 | 104 | 1269 |
| Garment-hook-forming machine | A. C. Campbell | 737,341 | Aug. 25 | 4313 | 959<br>960<br>961<br>962 | 105 | 1951 |
| Garment. Nether | J. Firsching | 721,687 | Mar. 3 | 72 | 15 | 103 | 16 |
| Garment. Nether | C. E. Taylor | 732,603 | June 30 | 5758 | 1277 | 104 | 2390 |
| Garment. Nether | A. F. Sipperley | 741,281 | Oct. 13 | 1668 | 377 | 106 | 1621 |
| Garment or placket fastener | W. B. Murphy | 729,782 | June 2 | 477 | 106 | 104 | 1226 |
| Garment-rack. Hygienic | J. F. Messick | 720,833 | Feb. 17 | 2623 | 605 | 102 | 1405 |
| Garment-retainer | M. H. Mallory | 726,718 | Apr. 28 | 4284 | 967 | 103 | 2110 |
| Garment-retainer | M. H. Mallory | 726,720 | Apr. 28 | 4286 | 968 | 103 | 2111 |
| Garment-retainer. Adjustable | E. L. Merrill | 737,435 | Aug. 25 | 4498 | 1009 | 105 | 1992 |
| Garment-sections. Marking and folding | P. J. Menahan | 719,485 | Feb. 3 | 137 | 31 | 102 | 853 |
| Garment-stretcher | E. Dambach | 740,249 | Sept 29 | 5205 | 1170 | 106 | 1178 |
| Garment-support | C. Rabenowitz | 719,368 | Jan. 27 | 3523 | 785 | 102 | 791 |
| Garment-support | F. M. Patterson | 726,337 | Apr. 28 | 3548 | 804 | 103 | 1964 |
| Garment-supporter | J. C. Strickland | 717,722 | Jan. 6 | 356 | 87 | 102 | 77 |
| Garment-supporter | H. Bavier | 718,304 | Jan. 13 | 1455 | 323 | 102 | 329 |
| Garment-supporter | J. J. Bloom and A. W. Mensor | 718,418 | Jan. 13 | 1660 | 366 | 102 | 371 |
| Garment-supporter | W. S. Radnedge | 719,369 | Jan. 27 | 3524 | 785 | 102 | 791 |
| Garment-supporter | F. Hirsh | 720,919 | Feb. 17 | 2793 | 641 | 102 | 1441 |
| Garment-supporter | W. S. Hunkins | 721,305 | Feb. 24 | 3557 | 809 | 102 | 1622 |
| Garment-supporter | O. S. Lippincott | 721,902 | Mar. 3 | 451 | 99 | 103 | 100 |
| Garment-supporter | W. C. Nye | 722,741 | Mar. 17 | 2047 | 457 | 103 | 469 |
| Garment-supporter | A. H. Cohn | 723,367 | Mar. 24 | 3202 | 719 | 103 | 716 |
| Garment-supporter | H. A. Hoopes | 723,390 | Mar. 24 | 3249 | 728 | 103 | 726 |
| Garment-supporter | H. C. Hine | 727,795 | May 12 | 1847 | 413 | 104 | 412 |
| Garment-supporter | J. R. McColl | 729,785 | June 2 | 481 | 107 | 104 | 1226 |
| Garment-supporter | O. Kraus | 730,029 | June 2 | 930 | 208<br>209 | 104 | 1317 |
| Garment-supporter | C. A. Williams | 730,726 | June 9 | 2183 | 485 | 104 | 1597 |
| Garment-supporter | S. G. Ginner | 732,183 | June 30 | 4947 | 1100 | 104 | 2218 |
| Garment-supporter | J. Wilkinson | 733,102 | July 7 | 718 | 175 | 105 | 152 |
| Garment-supporter | R. H. Waters | 733,306 | July 7 | 1084 | 257 | 105 | 229 |
| Garment-supporter | F. K. Hickok | 734,263 | July 21 | 2899 | 678 | 105 | 648 |
| Garment-supporter | M. Bew | 734,504 | July 28 | 3340 | 782 | 105 | 754 |
| Garment-supporter | H. T. Vaders | 736,567 | Aug. 18 | 2847 | 623 | 105 | 1625 |
| Garment-supporter | J. L. Moore | 737,262 | Aug. 25 | 4165 | 927 | 105 | 1919 |
| Garment-supporter | B. F. Orewiler | 738,474 | Sept. 8 | 1876 | 408 | 106 | 417 |
| Garment-supporter | J. A. Crandall | 738,775 | Sept. 15 | 2465 | 541 | 106 | 560 |
| Garment-supporter | H. L. Gall and E. L. Annan | 740,414 | Oct. 6 | 47 | 11 | 106 | 1254 |
| Garment-supporter | O. Kraus | 742,678 | Oct. 27 | 4410 | 995 | 106 | 2225 |
| Garment-supporter | A. Frankenstein | 743,630 | Nov. 10 | 1672 | 351 | 107 | 373 |
| Garment-supporter | D. Basch | 746,660 | Dec. 15 | 2464 | 563 | 107 | 1670 |
| Garment-supporter | F. C. McDonald | 746,983 | Dec. 15 | 3075 | 704 | 107 | 1808 |
| Garment-supporter | O. Kraus | 747,555 | Dec. 22 | 4132 | 927 | 107 | 2062 |
| Garment-supporter | C. E. Hawkes | 748,069 | Dec. 29 | 5150 | 1165 | 107 | 2310 |
| Garment-supporter | J. Jenkins | 748,282 | Dec. 29 | 5535 | 1262 | 107 | 2394 |
| Garment-supporter attachment | E. L. Pitts | 718,278 | Jan. 13 | 1414 | 314<br>315 | 102 | 319 |
| Garment-supporter clasp | B. F. Orewiler | 730,389 | June 9 | 1574 | 350 | 104 | 1464 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|---|
| | | | | Spec. | Drg. | Vol. | Page. |
| Garment-supporter clasp | D. L. Smith and J. J. Buchanan | 741,417 | Oct. 13 | 1958 | 434 | 106 | 1684 |
| Garment-supporter. Safety | E. E. Heilbron | 729,165 | May 26 | 4391 | 968 | 104 | 980 |
| Garment-supporting apparatus | M. M. Livingston | 730,137 | June 2 | 1108 | 248 | 104 | 1352 |
| Garment-supporting corset attachment | J. Jonas | 739,603 | Sept. 22 | 3982 | 888 | 106 | 900 |
| Garment-supporting device | G. C. Sleeth | 719,152 | Jan. 27 | 3114 | 693 | 102 | 703 |
| Garment-supporting girdle | L. Fagan | 738,175 | Sept. 8 | 1265 | 274 | 106 | 290 |
| Garment triple supporter and adjuster | H. E. Grebner | 733,388 | July 14 | 1246 | 295 | 105 | 280 |
| Garter | E. Gutmann | 717,844 | Jan. 6 | 635 | 140 | 102 | 136 |
| Garter | P. S. Bauer | 722,274 | Mar. 10 | 1162 | 257 | 103 | 262 |
| Garter-supporter | M. L. Buckau | 717,806 | Jan. 6 | 548 | 122 | 102 | 119 |
| Gas-administering apparatus | G. Clarke | 725,542 | Apr. 14 | 2086 | 472 | 103 | 1627 |
| Gas-analysis apparatus | M. Arndt | 717,654 | Jan. 6 | 230 | 58 | 102 | 50 |
| Gas-analyzing apparatus | M. Arndt | 725,533 | Apr. 14 | 2070 | 468, 469 | 103 | 1623 |
| Gas-analyzing apparatus | C. C. Tutwiler | 744,132 | Nov. 17 | 2637 | 563 | 107 | 591 |
| Gas and air mixer | J. F. W. Jost | 718,472 | Jan. 13 | 1776 | 394, 395 | 102 | 393 |
| Gas and air mixer | D. J. Archer | 726,238 | Apr. 28 | 3343 | 759 | 103 | 1921 |
| Gas and air regulating valve | E. E. Kerns | 717,688 | Jan. 6 | 297 | 73 | 102 | 64 |
| Gas and backwater trap and tide and flushing gate. Sewer- | F. W. Rathbun | 733,748 | July 14 | 1863 | 441 | 105 | 410 |
| Gas and tar separator | E. A. Moore | 724,030 | Mar. 31 | 4455 | 1002 | 103 | 991 |
| Gas apparatus. Acetylene- | D. Barnard | 725,198 | Apr. 14 | 1453 | 328, 329 | 103 | 1492 |
| Gas apparatus. Acetylene- | J. J. Hendler | 729,339 | May 26 | 4698 | 1038 | 104 | 1045 |
| Gas-apparatus dip-pipe | C. R. Faben, Jr. | 731,673 | June 23 | 3966 | 883 | 104 | 1998 |
| Gas. Apparatus for producing motive power from liquid | G. B. Fraley | 724,278 | Mar. 31 | 4958 | 1109 | 103 | 1093 |
| Gas-battery | J. H. Reid | 736,017 | Aug. 11 | 1877 | 401 | 105 | 1401 |
| Gas-bracket | D. Cavanagh | 724,434 | Apr. 7 | 27 | 8 | 103 | 1176 |
| Gas-burner | A. H. Humphrey | 717,747 | Jan. 6 | 422 | 99 | 102 | 92 |
| Gas-burner | J. Kelly | 717,866 | Jan. 6 | 672 | 149 | 102 | 143 |
| Gas-burner | U. S. McCormick | 720,275 | Feb. 10 | 1607 | 368 | 102 | 1179 |
| Gas-burner | W. B. Carrick | 721,997 | Mar. 3 | 647 | 144 | 103 | 140 |
| Gas-burner | C. F. Glocker | 722,226 | Mar. 10 | 1064 | 234 | 103 | 242 |
| Gas-burner | E. C. Merrill | 725,110 | Apr. 14 | 1290 | 291 | 103 | 1459 |
| Gas-burner | R. B. Fageol | 725,234 | Apr. 14 | 1524 | 346 | 103 | 1507 |
| Gas-burner | A. E. Hartel | 726,910 | May 5 | 145 | 34, 35 | 104 | 33 |
| Gas-burner | A. Bachner | 727,257 | May 5 | 808 | 174 | 104 | 174 |
| Gas-burner | W. C. Clarke | 727,588 | May 12 | 1432 | 322 | 104 | 326 |
| Gas-burner | C. M. Armstrong | 727,873 | May 12 | 1989 | 443 | 104 | 440 |
| Gas-burner | J. A. Scholz | 729,224 | May 26 | 4491 | 990 | 104 | 1002 |
| Gas-burner | C. T. Willson | 729,470 | May 26 | 4909 | 1088 | 104 | 1090 |
| Gas-burner | R. Steilberg | 729,516 | May 26 | 4987 | 1106 | 104 | 1106 |
| Gas-burner | J. H. Diehl and I. B. Taylor | 731,548 | June 23 | 3741 | 833 | 104 | 1954 |
| Gas-burner | L. F. Knoderer | 732,193 | June 30 | 4964 | 1104 | 104 | 2222 |
| Gas-burner | J. J. Johnston | 732,685 | June 30 | 5916 | 1312 | 104 | 2422 |
| Gas-burner | C. W. Taylor | 733,091 | July 7 | 701 | 171 | 105 | 149 |
| Gas-burner | B. Columbus | 733,160 | July 7 | 815 | 197 | 105 | 171 |
| Gas-burner | J. L. Graham | 738,433 | Sept. 8 | 1791 | 390 | 106 | 400 |
| Gas-burner | E. F. Gwynn | 738,536 | Sept. 8 | 1999 | 436 | 106 | 445 |
| Gas-burner | J. H. Rath | 739,558 | Sept. 22 | 3883 | 870 | 106 | 879 |
| Gas-burner | W. C. Bucknam | 739,584 | Sept. 22 | 3950 | 882 | 106 | 894 |
| Gas-burner | E. O. Daniels | 740,402 | Oct. 6 | 28 | 7 | 106 | 1250 |
| Gas-burner | J. Guimarães | 740,645 | Oct. 6 | 493 | 108 | 106 | 1352 |
| Gas-burner | W. Collins | 742,594 | Oct. 27 | 4256 | 958 | 106 | 2190 |
| Gas-burner | J. Harris | 742,642 | Oct. 27 | 4343 | 977 | 106 | 2210 |
| Gas-burner | C. C. F. Schmidt | 743,757 | Nov. 10 | 1880 | 397 | 107 | 418 |
| Gas-burner | W. B. Carrick | 744,290 | Nov. 17 | 2959 | 633 | 107 | 661 |
| Gas-burner | J. Hutchinson | 744,919 | Nov. 24 | 4077 | 879 | 107 | 916 |
| Gas-burner | W. A. Cook | 745,790 | Dec. 1 | 856 | 193 | 107 | 1282 |
| Gas-burner | C. W. Rice | 746,992 | Dec. 15 | 3091 | 708 | 107 | 1812 |
| Gas burner. Acetylene- | J. B. Carroll | 728,862 | May 26 | 3858 | 859 | 104 | 872 |
| Gas burner. Acetylene- | P. and C. Jacob | 731,907 | June 23 | 4385 | 978 | 104 | 2089 |
| Gas burner. Acetylene- | J. Reid | 740,043 | Sept. 29 | 4838 | 1085 | 106 | 1102 |
| Gas burner. Acetylene- | W. T. Free | 740,750 | Oct. 6 | 677 | 154 | 106 | 1392 |
| Gas-burner. Adjustable | W. E. Guese | 748,066 | Dec. 29 | 5145 | 1163 | 107 | 2309 |
| Gas burner and heater. Regenerating | J. W. McKnight | 746,129 | Dec. 8 | 1500 | 335 | 107 | 1441 |
| Gas-burner and pilot-light. Electrically-controlled | H. W. Webb | 732,980 | July 7 | 494 | 122 | 105 | 106 |
| Gas-burner and pilot-light. Manually-controlled | A. W. Webb | 737,305 | Aug. 25 | 4247 | 945 | 105 | 1936 |
| Gas-burner and regulator for same | A. A. Pratt | 724,612 | Apr. 7 | 366 | 88 | 103 | 1248 |
| Gas-burner and self-igniter | C. T. Willson | 729,471 | May 26 | 4911 | 1088 | 104 | 1090 |
| Gas-burner. Atmospheric | F. J. Beaumont | 730,735 | June 9 | 2194 | 488 | 104 | 1599 |
| Gas-burner attachment | J. M. O'Kelly | 719,252 | Jan. 27 | 3290 | 737 | 102 | 740 |
| Gas-burner. Automatic | C. A. Haas | 732,068 | June 30 | 4711 | 1052 | 104 | 2169 |
| Gas-burner. Automatic | W. J. Dudley | 747,244 | Dec. 15 | 3564 | 807 | 107 | 1916 |
| Gas-burner automatic cut-off | L. F. Ducker | 734,521 | July 28 | 3364 | 787 | 105 | 759 |
| Gas-burner cap. Incandescent- | J. N. Webb | 720,539 | Feb. 10 | 2084 | 481 | 102 | 1277 |
| Gas burner. Compound- | G. Axdorfer | 730,079 | June 2 | 1013 | 226 | 104 | 1333 |
| Gas-burner controller | P. F. Glazier | 745,818 | Dec. 1 | 920 | 207 | 107 | 1295 |
| Gas-burner cut-off | S. Haigh | 738,030 | Sept. 1 | 940 | 208 | 106 | 205 |
| Gas-burner cut-off. Automatic | J. Hentz, Jr | 738,037 | Sept. 1 | 952 | 212 | 106 | 207 |
| Gas-burner electric ignition device | H. de Thiersant | 740,062 | Sept. 29 | 4869 | 1091 | 106 | 1108 |
| Gas-burner guard | G. Schulz | 731,510 | June 23 | 3665 | 817 | 104 | 1940 |
| Gas-burner heating attachment | W. A. Köneman | 732,085 | June 30 | 4750 | 1060, 1061 | 104 | 2177 |
| Gas-burner. Incandescent | C. Scott-Snell | 718,532 | Jan. 13 | 1921 | 421 | 102 | 429 |
| Gas-burner. Incandescent | A. Grossmann | 723,667 | Mar. 24 | 3737 | 839 | 103 | 826 |
| Gas-burner. Incandescent | J. H. Findlay | 725,947 | Apr. 21 | 2833 | 643 | 103 | 1801 |
| Gas-burner. Incandescent | A. Farkas | 733,473 | July 14 | 1394 | 328 | 105 | 312 |
| Gas-burner. Incandescent | A. Bachner | 738,512 | Sept. 8 | 1955 | 426, 427 | 106 | 434 |
| Gas-burner. Incandescent | J. Joatton | 739,879 | Sept. 29 | 4527 | 1017 | 106 | 1034 |
| Gas-burner. Incandescent | E. W. Phelps | 741,068 | Oct. 13 | 1258 | 285 | 106 | 1536 |
| Gas-burner. Incandescent | L. J. Reinhardt | 742,234 | Oct. 27 | 3606 | 807 | 106 | 2056 |
| Gas-burner. Incandescent | R. C. H. Siewerts | 743,339 | Nov. 3 | 1016 | 218 | 107 | 217 |

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| | | | | Spec. | Dr'g. | Vol. | Page. |
| Gas-burner. Incandescent | J. Hutchinson | 743,510 | Nov. 10 | 1434 | 300 | 107 | 323 |
| Gas-burner. Incandescent | L. R. Hopton | 747,550 | Dec. 22 | 4123 | 925 | 107 | 2060 |
| Gas-burner. Incandescent | T. Gordon | 748,364 | Dec. 29 | 5661 | 1291 | 107 | 2421 |
| Gas-burner. Incandescent | C. A. Bluhm | 748,471 | Dec. 29 | 5878 | 1336 | 107 | 2469 |
| Gas-burner lighting attachment | A. G. Chubb | 738,711 | Sept. 8 | 2330 | 511, 512 | 106 | 513 |
| Gas-burner lighting device. Incandescent | J. and G. Keith | 728,242 | May 19 | 2676 | 598 | 104 | 608 |
| Gas-burner mantle-support | H. J. Siegel | 731,961 | June 23 | 4485 | 1000 | 104 | 2111 |
| Gas-burner mantles | E. Lippitt and W. C. Whitcomb | 746,536 | Dec. 8 | 2221 | 509 | 107 | 1595 |
| Gas burner. Petroleum | W. Ghiglieri | 744,528 | Nov. 17 | 3370 | 726 | 107 | 751 |
| Gas-burner regulating-valve | V. A. Rettich | 739,346 | Sept. 22 | 3493 | 781 | 106 | 794 |
| Gas-burner regulator | G. F. Moore | 740,163 | Sept. 29 | 5040 | 1133 | 106 | 1145 |
| Gas-burner regulator | W. G. Midgley | 746,546 | Dec. 8 | 2236 | 513 | 107 | 1598 |
| Gas-burner. Safety | J. B. Loughead | 722,027 | Mar. 3 | 692 | 153 | 103 | 149 |
| Gas-burner. Safety | H. W. Yerrington | 726,490 | Apr. 28 | 3845 | 868 | 103 | 2022 |
| Gas-burner. Safety | E. A. d'Aquila and B. Martelli | 738,418 | Sept. 8 | 1760 | 383 | 106 | 394 |
| Gas-burner. Safety | M. F. Kerrigan | 741,344 | Oct. 13 | 1838 | 406 | 106 | 1659 |
| Gas-burner. Safety | A. A. Lovejoy | 743,007 | Nov. 3 | 358 | 77 | 107 | 75 |
| Gas-burner. Safety | A. Dominick | 748,170 | Dec. 29 | 5336 | 1214 | 107 | 2350 |
| Gas-burner. Sectional | E. A. Hall | 741,130 | Oct. 13 | 1376 | 315 | 106 | 1560 |
| Gas-burner self-igniter | F. C. N. Parizot | 737,462 | Aug. 25 | 4545 | 1018 | 105 | 2002 |
| Gas-burner. Self-igniting | G. A. W. Barkowsky | 735,196 | Aug. 4 | 319 | 62 | 105 | 1049 |
| Gas-burners. Attachment for Welsbach or similar | G. M. and S. C. Clagett | 734,668 | July 28 | 3638 | 852 | 105 | 818 |
| Gas burners. Manufacturing acetylene | J. B. Carroll | 728,863 | May 26 | 3859 | 859 | 104 | 872 |
| Gas burners. Means for packing double-jet acetylene | J. W. Bray | 721,536 | Feb. 24 | 3979 | 907 | 102 | 1710 |
| Gas-burners. Shade-clip for incandescent | H. W. Royal | 739,110 | Sept. 15 | 3077 | 682 | 106 | 689 |
| Gas-burning apparatus. Fuel | W. H. Bradley | 735,337 | Aug. 4 | 570 | 116 | 105 | 1103 |
| Gas-burning furnace | E. Bumford | 747,533 | Dec. 22 | 4096 | 919 | 107 | 2054 |
| Gas-burning heater | L. F. Betts | 744,283 | Nov. 17 | 2946 | 630 | 107 | 658 |
| Gas-check | G. A. Brachhausen | 726,249 | Apr. 28 | 3360 | 763 | 103 | 1924 |
| Gas-check | G. A. Brachhausen | 733,618 | July 14 | 1643 | 389 | 105 | 365 |
| Gas-check | F. W. Howson | 735,101 | Aug. 4 | 98 | 23 | 105 | 1004 |
| Gas-check | U. G. Densten | 748,486 | Dec. 29 | 5904 | 1341 | 107 | 2475 |
| Gas-check. Adjustable | J. F. W. Jost | 725,089 | Apr. 14 | 1251 | 282 | 103 | 1451 |
| Gas-check. Adjustable | J. F. W. Jost | 738,199 | Sept. 8 | 1309 | 284 | 106 | 299 |
| Gas-check and vent apparatus | R. Byers | 738,095 | Sept. 1 | 1065 | 236 | 106 | 230 |
| Gas-check. Bunsen-burner | L. T. Weiss | 732,981 | July 7 | 496 | 122 | 105 | 107 |
| Gas-check for Bunsen burners | A. A. Ury | 729,243 | May 26 | 4532 | 998 | 104 | 1009 |
| Gas-compressing machine | T. McIntyre | 740,771 | Oct. 6 | 734 | 166 | 106 | 1402 |
| Gas-compressor | S. E. Alley | 720,872 | Feb. 17 | 2691 | 622, 623 | 102 | 1419 |
| Gas-consumer | T. V. Elliott | 746,936 | Dec. 15 | 2989 | 687 | 107 | 1788 |
| Gas-cooler | E. A. Moore | 723,003 | Mar. 17 | 2502 | 562, 563 | 103 | 561 |
| Gas-cooler | E. A. Moore | 724,031 | Mar. 31 | 4456 | 1003 | 103 | 992 |
| Gas cut-off. Automatic | J. E. Seymour | 732,124 | June 30 | 4826 | 1076 | 104 | 2193 |
| Gas cut-off. Automatic | V. E. Campbell | 740,805 | Oct. 6 | 793 | 179 | 106 | 1414 |
| Gas cut-off. Automatic | T. R. Jenkins, Jr., and J. Ebert | 741,498 | Oct. 13 | 2122 | 473 | 106 | 1719 |
| Gas-distributing apparatus | W. H. Wigmore | 718,941 | Jan. 20 | 2706 | 605 | 102 | 605 |
| Gas-distributing system | M. Toltz and A. Lipschutz | 730,807 | June 9 | 2311 | 514 | 104 | 1624 |
| Gas-drying apparatus | G. G. Smith | 729,514 | May 26 | 4983 | 1105 | 104 | 1105 |
| Gas-engine | P. Robertson and C. Matson | 718,658 | Jan. 20 | 2168 | 474 | 102 | 494 |
| Gas-engine | L. F. Burger | 722,671 | Mar. 17 | 1919 | 427 | 103 | 442 |
| Gas-engine | G. Westinghouse and E. Ruud | 722,787 | Mar. 17 | 2135 | 477, 478 | 103 | 487 |
| Gas-engine | A. H. Dingman | 723,844 | Mar. 31 | 4059 | 916, 917 | 103 | 911 |
| Gas-engine | H. C. Sträng | 725,295 | Apr. 14 | 1614 | 364, 365, 366 | 103 | 1527 |
| Gas-engine | W. J. McVicker | 726,731 | Apr. 28 | 4305 | 972 | 103 | 2115 |
| Gas-engine | J. MacHaffie | 729,194 | May 26 | 4440 | 979 | 104 | 991 |
| Gas-engine | R. P. Thompson and E. Koeb | 729,700 | June 2 | 306 | 71, 72 | 104 | 1192 |
| Gas-engine | J. M. Smelser | 731,236 | June 16 | 3131 | 694, 695 | 104 | 1810 |
| Gas-engine | C. Rossler | 731,956 | June 23 | 4474 | 998 | 104 | 2108 |
| Gas-engine | W. J. Wright | 732,683 | June 30 | 5909 | 1311 | 104 | 2421 |
| Gas-engine | W. E. Nageborn | 733,256 | July 7 | 994 | 239, 240 | 105 | 208 |
| Gas-engine | J. D. McFarland, Jr | 734,237 | July 21 | 2840 | 666 | 105 | 635 |
| Gas-engine | W. H. Jones | 735,035 | July 28 | 4331 | 1006 | 105 | 959 |
| Gas-engine | H. H. Mulherin | 736,132 | Aug. 11 | 2080 | 446 | 105 | 1443 |
| Gas-engine | E. B. and L. S. Cushman | 736,224 | Aug. 11 | 2227 | 479, 480 | 105 | 1475 |
| Gas-engine | G. Joranson | 740,571 | Oct. 6 | 371 | 77 | 106 | 1326 |
| Gas-engine | R. P. Thompson and E. Koeb | 741,985 | Oct. 20 | 3083 | 689 | 106 | 1935 |
| Gas-engine | E. E. Arnold and A. T. Kasley | 742,820 | Nov. 3 | 5 | 1, 2 | 107 | 4 |
| Gas-engine | E. N. Dickerson | 743,064 | Nov. 3 | 474 | 103, 104 | 107 | 98 |
| Gas-engine | C. W. Tremain | 745,266 | Nov. 24 | 4771 | 1042 | 107 | 1059 |
| Gas-engine | G. Westinghouse | 745,703 | Dec. 1 | 700 | 160 | 107 | 1247 |
| Gas-engine | G. Westinghouse | 745,704 | Dec. 1 | 702 | 161 | 107 | 1248 |
| Gas-engine | L. H. Nash | 746,133 | Dec. 8 | 1508 | 336, 337 | 107 | 1443 |
| Gas-engine. Compound | J. Babled | 724,239 | Mar. 31 | 4886 | 1093, 1094 | 103 | 1079 |
| Gas-engine. Direct-acting | P. Gervais | 736,715 | Aug. 18 | 3154 | 695, 696 | 105 | 1688 |
| Gas-engine generator | J. M. Stadel | 734,986 | July 28 | 4254 | 988 | 105 | 942 |
| Gas-engine. Two-cycle | A. M. Coburn | 730,345 | June 9 | 1495 | 331 | 104 | 1449 |
| Gas. Enriching | F. W. C. Schniewind | 728,991 | May 26 | 4077 | 905 | 104 | 916 |
| Gas-extinguisher. Automatic | V. A. Strom | 738,579 | Sept. 8 | 2062 | 450 | 106 | 459 |
| Gas-firing | J. F. Zaruba | 729,989 | June 2 | 868 | 193 | 104 | 1304 |
| Gas-fixture | H. M. Daggett | 727,102 | May 5 | 541 | 116 | 104 | 118 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|---|
| | | | | Spec. | Dr'g. | Vol. | Page. |
| Gas-fixture | S. Joseph | 727,961 | May 12 | 2167 | 484 | 104 | 480 |
| Gas-fixture | R. L. Smith and J. Warhurst, Jr. | 735,837 | Aug. 11 | 1535 | 329 | 105 | 1327 |
| Gas-fixture fitting. Incandescent | J. Hutchinson | 741,967 | Oct. 20 | 3051 | 681 | 106 | 1929 |
| Gas from gas-generators during stoking. Apparatus for preventing escape of | J. Hofmann and F. von Stach | 740,757 | Oct. 6 | 709 | 159 | 106 | 1397 |
| Gas-furnace | E. S. Clower | 723,514 | Mar. 24 | 3478 | 778 | 103 | 772 |
| Gas-furnace | J. W. Keller | 730,268 | June 9 | 1360 | 298 | 104 | 1420 |
| Gas-furnace | E. P. Reichhelm | 733,274 | July 7 | 1039 | 249 | 105 | 218 |
| Gas-furnace | P. S. Harvey | 735,765 | Aug. 11 | 1395 | 300 | 105 | 1295 |
| Gas-furnace. Recuperative | L. C. Hamlink | 723,668 | Mar. 24 | 3739 | 839 | 103 | 827 |
| Gas-furnace. Recuperator | K. M. Mitchell and J. Dell | 742,708 | Oct. 27 | 4457 | {1007 {1008 | 106 | 2234 |
| Gas. Generating acetylene | G. J. Atkins | 731,652 | June 23 | 3935 | 876 | 104 | 1993 |
| Gas generating and burning apparatus | J. C. Teller | 721,478 | Feb. 24 | 3886 | {883 {884 | 102 | 1689 |
| Gas-generating apparatus | G. C. Otten | 731,705 | June 23 | 4025 | {898 {899 | 104 | 2010 |
| Gas-generating apparatus. Acetylene | J. J. Hendler | 719,665 | Feb. 3 | 446 | 102 | 102 | 951 |
| Gas-generating apparatus. Acetylene | C. Busch | 726,139 | Apr. 21 | 3149 | 712 | 103 | 1866 |
| Gas-generating system | C. Whitfield | 724,357 | Mar. 31 | 5103 | 1142 | 103 | 1123 |
| Gas-generator | C. W. Turner | 726,379 | Apr. 28 | 3630 | 823 | 103 | 1981 |
| Gas-generator | A. Langen | 726,949 | May 5 | 220 | 52 | 104 | 48 |
| Gas-generator | W. C. Dillon | 738,420 | Sept. 8 | 1764 | 383 | 106 | 395 |
| Gas-generator | N. Goodyear | 746,818 | Dec. 15 | 2744 | {632 {633 | 107 | 1733 |
| Gas generator. Acetylene | J. de Dios Tejada | 717,661 | Jan. 6 | 237 | 60 | 102 | 52 |
| Gas generator. Acetylene | T. H. J. Leckband | 718,950 | Jan. 20 | 2721 | 608 | 102 | 608 |
| Gas generator. Acetylene | A. Davis | 719,091 | Jan. 27 | 2994 | {668 {669 | 102 | 678 |
| Gas generator. Acetylene | J. Choulet | 719,303 | Jan. 27 | 3392 | 756 | 102 | 763 |
| Gas generator. Acetylene | W. A. Robertson | 719,373 | Jan. 27 | 3529 | 787 | 102 | 792 |
| Gas generator. Acetylene | E. B. Stoner | 719,391 | Jan. 27 | 3557 | 794 | 102 | 798 |
| Gas generator. Acetylene | A. Davis | 719,570 | Feb. 3 | 287 | 67, 68 | 102 | 883 |
| Gas generator. Acetylene | R. J. Atkin and M. R. Eagleson | 719,633 | Feb. 3 | 397 | 90, 91 | 102 | 905 |
| Gas generator. Acetylene | J. K. Rush | 720,180 | Feb. 10 | 1409 | 322 | 102 | 1138 |
| Gas generator. Acetylene | W. E. Scofield | 720,976 | Feb. 17 | 2898 | 664 | 102 | 1463 |
| Gas generator. Acetylene | D. N. Long | 722,181 | Mar. 3 | 961 | 213 | 103 | 204 |
| Gas generator. Acetylene | W. Webb | 723,092 | Mar. 17 | 2663 | 600 | 103 | 596 |
| Gas generator. Acetylene | J. Condon | 723,138 | Mar. 17 | 2746 | {616 {617 | 103 | 612 |
| Gas generator. Acetylene | A. Schweitzer | 723,411 | Mar. 24 | 3279 | 734 | 103 | 732 |
| Gas generator. Acetylene | G. W. MacKenzie | 723,778 | Mar. 24 | 3934 | 887 | 103 | 869 |
| Gas generator. Acetylene | G. W. MacKenzie | 723,779 | Mar. 24 | 3936 | 888 | 103 | 869 |
| Gas generator. Acetylene | N. Goodyear | 724,280 | Mar. 31 | 4960 | 1110 | 103 | 1094 |
| Gas generator. Acetylene | N. Goodyear | 724,281 | Mar. 31 | 4963 | 1110 | 103 | 1094 |
| Gas generator. Acetylene | F. M. Ashley | 724,374 | Mar. 31 | 5142 | 1151 | 103 | 1132 |
| Gas generator. Acetylene | G. L. Wilson | 724,642 | Apr. 7 | 415 | 98, 99 | 103 | 1258 |
| Gas generator. Acetylene | N. A. Renstrom | 725,366 | Apr. 14 | 1748 | {393 {394 | 103 | 1554 |
| Gas generator. Acetylene | C. W. Metcalf | 725,466 | Apr. 14 | 1947 | {436 {437 | 103 | 1597 |
| Gas generator. Acetylene | A. Hunt and J. D. Baughman | 728,237 | May 19 | 2668 | 596 | 104 | 606 |
| Gas generator. Acetylene | H. L. Pyle | 729,510 | May 26 | 4972 | 1102 | 104 | 1103 |
| Gas generator. Acetylene | H. E. Marsh | 729,623 | June 2 | 176 | 42 | 104 | 1163 |
| Gas generator. Acetylene | H. Baumgarten | 730,221 | June 9 | 1266 | 281 | 104 | 1400 |
| Gas generator. Acetylene | J. H. Mount | 733,328 | July 7 | 1120 | 266 | 105 | 236 |
| Gas generator. Acetylene | J. S. Philpott | 733,740 | July 14 | 1842 | 435 | 105 | 405 |
| Gas generator. Acetylene | J. W. Tallmadge | 734,105 | July 21 | 2598 | 609 | 105 | 583 |
| Gas generator. Acetylene | T. O. Arneson | 734,394 | July 21 | 3140 | 738 | 105 | 698 |
| Gas generator. Acetylene | W. A. Feurt and H. H. Martin | 734,412 | July 21 | 3165 | 744 | 105 | 702 |
| Gas generator. Acetylene | F. K. Roberts | 734,616 | July 28 | 3538 | {828 {829 | 105 | 798 |
| Gas generator. Acetylene | H. A. F. B. H. Tönnies | 734,634 | July 28 | 3573 | 836 | 105 | 804 |
| Gas generator. Acetylene | I. L. Harris | 735,502 | Aug. 4 | 899 | 191 | 105 | 1173 |
| Gas generator. Acetylene | J. McLean | 735,800 | Aug. 11 | 1455 | 313 | 105 | 1309 |
| Gas generator. Acetylene | W. F. Bolly | 735,937 | Aug. 11 | 1725 | 368 | 105 | 1368 |
| Gas generator. Acetylene | J. M. and P. M. Flugstad | 736,836 | Aug. 18 | 3385 | {748 {749 | 105 | 1735 |
| Gas generator. Acetylene | H. and S. H. Hawkins | 736,967 | Aug. 25 | 3633 | 804 | 105 | 1808 |
| Gas generator. Acetylene | C. M. Stroud | 737,041 | Aug. 25 | 3755 | 834 | 105 | 1834 |
| Gas generator. Acetylene | R. H Welles | 737,183 | Aug. 25 | 4005 | {888 {889 | 105 | 1886 |
| Gas generator. Acetylene | C. W. Beck | 737,196 | Aug. 25 | 4026 | 893 | 105 | 1891 |
| Gas generator. Acetylene | J. Summerfield | 737,523 | Aug. 25 | 4663 | 1047 | 105 | 2031 |
| Gas generator. Acetylene | J. Summerfield | 737,524 | Aug. 25 | 4667 | {1047 {1048 | 105 | 2032 |
| Gas generator. Acetylene | J. Kuljis | 737,747 | Sept. 1 | 353 | 74, 75 | 106 | 80 |
| Gas generator. Acetylene | J. H. Ross | 738,070 | Sept. 1 | 1004 | {223 {224 | 106 | 218 |
| Gas generator. Acetylene | J. T. D. Heaton | 738,191 | Sept. 8 | 1293 | 280 | 106 | 295 |
| Gas generator. Acetylene | W. A. Gribble | 738,319 | Sept. 8 | 1580 | {341 {342 | 106 | 356 |
| Gas generator. Acetylene | G. E. Chandler | 738,410 | Sept. 8 | 1748 | 380 | 106 | 392 |
| Gas generator. Acetylene | C. Goodyear | 738,431 | Sept. 8 | 1788 | 389 | 106 | 399 |
| Gas generator. Acetylene | N. Goodyear | 738,432 | Sept. 8 | 1789 | 390 | 106 | 399 |
| Gas generator. Acetylene | C. W. Beck | 738,514 | Sept. 8 | 1960 | 427 | 106 | 436 |
| Gas generator. Acetylene | W. S. May | 738,827 | Sept. 15 | 2582 | 569 | 106 | 586 |
| Gas generator. Acetylene | L. Snyder | 738,855 | Sept. 15 | 2632 | 580 | 106 | 597 |
| Gas generator. Acetylene | C. M. Kemp | 739,426 | Sept. 22 | 3669 | 816 | 106 | 833 |
| Gas generator. Acetylene | F. M. Caler | 739,532 | Sept. 22 | 3843 | 860 | 106 | 871 |
| Gas generator. Acetylene | T. F. Williams | 740,726 | Oct. 6 | 626 | {140 {141 | 106 | 1382 |
| Gas generator. Acetylene | E. R. Angell | 741,006 | Oct. 13 | 1148 | 260 | 106 | 1511 |
| Gas generator. Acetylene | G. H. Davis | 741,771 | Oct. 20 | 2665 | 595 | 106 | 1848 |
| Gas generator. Acetylene | J. A. Mosher | 742,211 | Oct. 27 | 3555 | {793 {794 | 106 | 2044 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Gas generator. Acetylene- | P. E. Ward and S. Harris | 742,935 | Nov. 3 | 202 | 46 | 107 | 44 |
| Gas generator. Acetylene- | C. A. Butler | 745,037 | Nov. 24 | 4320 | 933 | 107 | 966 |
| Gas generator. Acetylene- | J. S. Harger and R. B. Baldwin | 745,603 | Dec. 1 | 531 | 124, 125 | 107 | 1210 |
| Gas generator. Acetylene- | J. J. Hendler | 745,837 | Dec. 1 | 970 | 217, 218 | 107 | 1305 |
| Gas generator. Acetylene- | O. Parker | 746,568 | Dec. 8 | 2272 | 521 | 107 | 1606 |
| Gas generator. Acetylene- | L. P. Powell | 746,571 | Dec. 8 | 2280 | 522, 523 | 107 | 1608 |
| Gas generator. Acetylene- | A. H. Francfort | 746,811 | Dec. 15 | 2728 | 629 | 107 | 1730 |
| Gas generator. Acetylene- | N. Goodyear | 746,819 | Dec. 15 | 2746 | 633 | 107 | 1734 |
| Gas generator. Acetylene- | N. Goodyear | 746,820 | Dec. 15 | 2749 | 633, 634 | 107 | 1734 |
| Gas generator. Acetylene- | N. Goodyear | 746,821 | Dec. 15 | 2752 | 634, 635 | 107 | 1735 |
| Gas generator. Acetylene- | N. T. Worthley and J. Heaton. (Reissue.) | 12,184 | Dec. 15 | 3760 | 847 | 107 | 1961 |
| Gas generator. Acetylene- | W. C. J. Guilford | 747,417 | Dec. 22 | 3886 | 875 | 107 | 2006 |
| Gas generator. Acetylene- | H. Symonds | 747,502 | Dec. 22 | 4042 | 908 | 107 | 2042 |
| Gas generator and burner for crude petroleum. Hydrocarbon- | D. F. Crowley | 735,472 | Aug. 4 | 843 | 179 | 105 | 1159 |
| Gas generator and lighting-buoy. Combined acetylene- | J. J. Luyten | 723,473 | Mar. 24 | 3413 | 762, 763 | 103 | 759 |
| Gas-generator feeding mechanism. Acetylene- | G. E. Franquist | 746,812 | Dec. 15 | 2729 | 629 | 107 | 1730 |
| Gas generator or lamp. Acetylene- | J. D. Tejada | 721,675 | Mar. 3 | 45 | 10, 11 | 103 | 12 |
| Gas generator. Water- | C. H. Schill and H. G. Hills | 736,636 | Aug. 18 | 2994 | 660, 661 | 105 | 1654 |
| Gas-governor | J. Zander | 718,592 | Jan. 13 | 2053 | 446 | 102 | 457 |
| Gas-governor | D. H. Bumpus | 729,271 | May 26 | 4577 | 1010 | 104 | 1019 |
| Gas-governor. Volumetric | L. J. Richards | 730,047 | June 2 | 959 | 215 | 104 | 1323 |
| Gas-heated comb | R. D. O. Johnson | 736,266 | Aug. 11 | 2302 | 498 | 105 | 1491 |
| Gas-heater | J. W. Carter | 735,063 | Aug. 4 | 27 | 8 | 105 | 987 |
| Gas-heater | J. C. Goodwin | 735,751 | Aug. 11 | 1372 | 295 | 105 | 1290 |
| Gas-heater | J. C. Goodwin | 735,752 | Aug. 11 | 1373 | 295 | 105 | 1291 |
| Gas-heater | J. R. Tyson | 737,977 | Sept. 1 | 842 | 185 | 106 | 184 |
| Gas-heater | J. G. Burns | 743,059 | Nov. 3 | 466 | 101 | 107 | 96 |
| Gas-heater | J. H. Brownlee | 744,898 | Nov. 24 | 4039 | 871 | 107 | 909 |
| Gas-heater | J. G. Rodgers | 745,673 | Dec. 1 | 649 | 150 | 107 | 1236 |
| Gas-heater burner | W. E. Fitch | 717,832 | Jan. 6 | 609 | 135 | 102 | 131 |
| Gas heater or stove | H. Maytrott | 745,287 | Nov. 24 | 4815 | 1050 | 107 | 1068 |
| Gas heating-burner. Bunsen | J. J. Lawler | 740,150 | Sept. 29 | 5016 | 1127 | 106 | 1139 |
| Gas-holder | J. H. Green | 722,834 | Mar. 17 | 2226 | 499 | 103 | 504 |
| Gas-igniter. Automatic | J. Jürgens | 731,782 | June 23 | 4165 | 928 | 104 | 2039 |
| Gas-igniting device | G. A. W. Barkowsky | 735,195 | Aug. 4 | 317 | 61 | 105 | 1049 |
| Gas-light | H. Herz | 720,805 | Feb. 17 | 2582 | 595 | 102 | 1396 |
| Gas-light burner. Incandescent- | W. H. A. and W. C. A. Sieverts | 739,934 | Sept. 29 | 4627 | 1039 | 106 | 1056 |
| Gas-light controller | P. Rademacher | 743,191 | Nov. 3 | 711 | 156 | 107 | 148 |
| Gas-light fixture. Incandescent- | J. Hutchinson | 720,433 | Feb. 10 | 1876 | 427 | 102 | 1236 |
| Gas-light heater | W. F. Young | 725,310 | Apr. 14 | 1640 | 370 | 103 | 1532 |
| Gas-light. Incandescent | G. S. Barrows | 725,199 | Apr. 14 | 1456 | 329 | 103 | 1493 |
| Gas-light. Incandescent | V. H. Slinack | 748,225 | Dec. 29 | 5433 | 1238 | 107 | 2371 |
| Gas-light. Incandescent | V. H. Slinack | 748,226 | Dec. 29 | 5435 | 1239 | 107 | 2371 |
| Gas-lights from a distance. Apparatus for lighting or extinguishing | E. A. P. Thiem | 737,172 | Aug. 25 | 3991 | 885 | 105 | 1883 |
| Gas-lighter | A. P. Storrs | 723,331 | Mar. 24 | 3112 | 700, 701 | 103 | 701 |
| Gas lighter and shut-off. Electric automatic | H. J. Lyons | 735,541 | Aug. 4 | 975 | 207 | 105 | 1188 |
| Gas-lighter. Automatic | S. H. Malpas | 724,027 | Mar. 31 | 4451 | 1001 | 103 | 991 |
| Gas lighter or extinguisher | H. Sparks | 747,014 | Dec. 15 | 3131 | 716 | 107 | 1820 |
| Gas lighting and heating apparatus | C. W. Hinman | 726,923 | May 5 | 167 | 40, 41 | 104 | 39 |
| Gas lighting and heating apparatus | C. W. Hinman | 726,924 | May 5 | 172 | 41 | 104 | 39 |
| Gas lighting and heating apparatus | C. W. Hinman | 726,925 | May 5 | 175 | 41, 42 | 104 | 40 |
| Gas-lighting apparatus | H. Rostin, O. Thielbeule, and H. Warschauer. | 748,310 | Dec. 29 | 5575 | 1272 | 107 | 2402 |
| Gas-lighting apparatus. Automatic | B. W. Harris | 742,024 | Oct. 20 | 3164 | 707 | 106 | 1952 |
| Gas-lighting apparatus. Incandescent- | T. Gordon | 730,364 | June 9 | 1528 | 338 | 104 | 1455 |
| Gas-lighting apparatus. Time | P. Rouget | 743,565 | Nov. 10 | 1542 | 321 | 107 | 346 |
| Gas-lighting attachment Automatic | C. F. Mason | 733,667 | July 14 | 1726 | 408 | 105 | 381 |
| Gas-lighting. Burner for incandescent | T. J. F. Ryland | 722,147 | Mar. 3 | 899 | 199 | 103 | 192 |
| Gas-main stopper | E. A. Behringer | 740,795 | Oct. 6 | 776 | 175 | 106 | 1410 |
| Gas. Making | B. Talbot | 718,887 | Jan. 20 | 2597 | 580 | 102 | 582 |
| Gas. Making | W. Kent | 735,272 | Aug. 4 | 464 | 92 | 105 | 1080 |
| Gas. Making | L. Mond | 744,218 | Nov. 17 | 2820 | 602, 603 | 107 | 631 |
| Gas. Making producer- | F. W. Matthiessen | 730,941 | June 16 | 2572 | 573 | 104 | 1699 |
| Gas. Manufacturing | H. S. Elworthy | 738,303 | Sept. 8 | 1523 | 329, 330 | 106 | 344 |
| Gas. Manufacturing | A. M. Gow | 742,412 | Oct. 27 | 3931 | 883, 884 | 106 | 2123 |
| Gas. Manufacturing | R. Dempster | 743,468 | Nov. 10 | 1356 | 277, 278 | 107 | 305 |
| Gas. Manufacturing | C. W. Lummis | 745,635 | Dec. 1 | 585 | 136 | 107 | 1222 |
| Gas. Manufacturing | C. F. Brush | 746,452 | Dec. 8 | 2074 | 478 | 107 | 1561 |
| Gas-manufacturing apparatus | G. Cothran | 731,434 | June 23 | 3508 | 783, 784 | 104 | 1907 |
| Gas-manufacturing apparatus | A. M. Gow | 742,411 | Oct. 27 | 3927 | 882, 883 | 106 | 2123 |
| Gas-meter | H. C. Dick and S. A. Ehrenzeller | 718,826 | Jan. 20 | 2474 | 550 | 102 | 554 |
| Gas-meter | J. W. Culmer | 721,026 | Feb. 17 | 2993 | 688 | 102 | 1484 |
| Gas-meter | H. H. Sprague | 722,389 | Mar. 10 | 1356 | 300, 301 | 103 | 305 |
| Gas-meter | H. H. Sprague | 722,390 | Mar. 10 | 1360 | 301, 302 | 103 | 305 |
| Gas-meter | J. J. Mulhall | 740,301 | Sept. 29 | 5297 | 1192, 1193 | 106 | 1196 |
| Gas-meter. Inferential | T. Thorp | 732,385 | June 30 | 5345 | 1185 | 104 | 2301 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Gas-meter prepayment attachment | R. L. Fersenheim | 743,068 | Nov. 3 | 484 | 105, 106 | 107 | 101 |
| Gas-meter register | J. C. Goodale, Jr | 744,332 | Nov. 17 | 3025 | 649 | 107 | 676 |
| Gas-meter support | T. B. Kinchla | 719,230 | Jan. 27 | 3251 | 726 | 102 | 731 |
| Gas mixer and injector | L. Patric | 734,087 | July 21 | 2558 | 597 | 105 | 576 |
| Gas-mixer. Convertible | W. E. Guese | 720,134 | Feb. 10 | 1338 | 306 | 102 | 1124 |
| Gas-motor. Rotary | C. Hoff | 729,069 | May 26 | 4222 | 933 | 104 | 945 |
| Gas or air tubing. Attaching-socket for | A. W. Nicholls | 748,301 | Dec. 29 | 5565 | 1269 | 107 | 2400 |
| Gas or electric light. Portable | J. E. Bohner | 725,027 | Apr. 14 | 1137 | 257 | 103 | 1428 |
| Gas or explosive engine | L. A. C. Letombe | 726,710 | Apr. 28 | 4273 | 965 | 103 | 2108 |
| Gas or gasolene burner | M. E. Ohrnstedt | 740,307 | Sept. 29 | 5307 | 1195 | 106 | 1198 |
| Gas or gasolene engine | B. Garllus | 722,223 | Mar. 10 | 1059 | 233 | 103 | 241 |
| Gas or liquid supply pipes. Cut-off apparatus for | F. W. A. Wiesebrock | 746,425 | Dec. 8 | 2032 | 466 | 107 | 1552 |
| Gas or oil engine | A. G. Melhuish | 745,215 | Nov. 24 | 4683 | 1021, 1022, 1023 | 107 | 1041 |
| Gas or oil motor | S. M. Balzer | 730,433 | June 9 | 1657 | 371, 372, 373 | 104 | 1482 |
| Gas or oil shut-off. Automatic | C. Fox and J. A. Waters | 726,522 | Apr. 28 | 3918 | 886 | 103 | 2036 |
| Gas or other burners. Apparatus for supplying air or other combustion-supporting fluid or substance to | T. J. Litle, Jr. | 731,376 | June 16 | 3392 | 758, 759 | 104 | 1865 |
| Gas or vapor burner valve | J. A. and A. H. Bedworth | 726,395 | Apr. 28 | 3654 | 828 | 103 | 1985 |
| Gas or vapor engine | R. A. F. Beilfuss | 730,084 | June 2 | 1018 | 228 | 104 | 1334 |
| Gas or vapor generator and motor. Combined | O. F. Good | 738,183 | Sept. 8 | 1279 | 277, 278 | 106 | 293 |
| Gas or vapor lighting. Antivibrator for incandescent | C. Scott-Snell | 743,573 | Nov. 10 | 1558 | 325 | 107 | 349 |
| Gas or vapor lighting. Apparatus for incandescent | W. Hooker | 740,857 | Oct. 6 | 881 | 197 | 106 | 1434 |
| Gas-pipe automatic cut-off | F. P. Somers | 729,969 | June 2 | 825 | 185 | 104 | 1295 |
| Gas-pipes. Automatic cut-off for | R. F. Kenehan | 737,113 | Aug. 25 | 3877 | 861 | 105 | 1858 |
| Gas plant | H. Gerdes | 739,665 | Sept. 22 | 4102 | 914 | 106 | 926 |
| Gas-pressure in burners. Apparatus for regulating the | M. Offenberg | 724,035 | Mar. 31 | 4461 | 1005 | 103 | 993 |
| Gas-pressure increasing and regulating apparatus | F. A. Ray | 743,103 | Nov. 3 | 546 | 117 | 107 | 114 |
| Gas-pressure-reducing apparatus | A. R. Bullock | 728,361 | May 19 | 2914 | 643 | 104 | 658 |
| Gas process | O. Oppelt | 719,360 | Jan. 27 | 3508 | 780 | 102 | 787 |
| Gas produced by fermentation in breweries. Collection and utilization of carbonic-acid | O. Zwietusch | 728,070 | May 12 | 2347 | 523 | 104 | 517 |
| Gas-producer | L. Geuty | 721,513 | Feb. 24 | 3936 | 896 | 102 | 1700 |
| Gas-producer | F. W. Matthiessen | 723,224 | Mar. 17 | 2913 | 653 | 103 | 647 |
| Gas-producer | C. H. Morgan | 723,897 | Mar. 31 | 4169 | 939 | 103 | 935 |
| Gas-producer | J. Reuleaux | 726,757 | Apr. 28 | 4371 | 983 | 103 | 2128 |
| Gas-producer | A. Leclere | 732,950 | July 7 | 448 | 111 | 105 | 97 |
| Gas-producer | J. W. Seaver and T. R. Morgan | 734,472 | July 21 | 3275 | 769, 770 | 105 | 725 |
| Gas-producer | J. W. Gayner | 735,492 | Aug. 4 | 876 | 187 | 105 | 1167 |
| Gas-producer | J. W. Gayner | 735,493 | Aug. 4 | 877 | 187 | 105 | 1167 |
| Gas-producer | J. W. Gayner | 735,494 | Aug. 4 | 878 | 187 | 105 | 1168 |
| Gas-producer | J. W. Gayner | 735,495 | Aug. 4 | 879 | 188 | 105 | 1168 |
| Gas-producer | J. S. and F. L. Daniels | 738,004 | Sept. 1 | 903 | 198 | 106 | 197 |
| Gas-producer | A. M. Gow | 739,305 | Sept. 22 | 3431 | 764, 765 | 106 | 782 |
| Gas-producer | J. R. George | 745,176 | Nov. 24 | 4618 | 1001 | 107 | 1027 |
| Gas-producer | G. Campion and M. Wyant | 745,781 | Dec. 1 | 831 | 188, 189 | 107 | 1276 |
| Gas-producer | J. R. George | 747,965 | Dec. 29 | 4933 | 1116 | 107 | 2262 |
| Gas-producer charger | G. Sieurin | 746,591 | Dec. 8 | 2319 | 531 | 107 | 1618 |
| Gas-producer plants. Apparatus for handling coal for | M. M. Suppes | 735,422 | Aug. 4 | 740 | 158 | 105 | 1137 |
| Gas-producer system | J. W. Gayner | 748,361 | Dec. 29 | 5656 | 1290 | 107 | 2419 |
| Gas-producers. Automatic fuel-feeding device for | J. G. Sanderson | 725,369 | Apr. 14 | 1754 | 394 | 103 | 1556 |
| Gas. Producing | J. F. Stacey | 718,884 | Jan. 20 | 2591 | 579 | 102 | 580 |
| Gas-producing plant | F. E. Bowman | 723,814 | Mar. 31 | 4004 | 903 | 103 | 900 |
| Gas-producing system | G. Westinghouse | 739,367 | Sept. 22 | 3529 | 789 | 106 | 803 |
| Gas-purifier | E. F. Lloyd | 732,756 | July 7 | 104 | 29 | 105 | 26 |
| Gas-purifier box | E. F. Lloyd | 741,350 | Oct. 13 | 1846 | 408 | 106 | 1661 |
| Gas-purifier. Centrifugal | H. A. Humphrey | 733,206 | July 7 | 905 | 218, 219 | 105 | 189 |
| Gas. Purifying | J. A. Bellon-Lencauchez, (called J. A. Lencauchez.) | 727,266 | May 5 | 822 | 177 | 104 | 177 |
| Gas. Purifying | E. Burschell | 737,579 | Sept. 1 | 38 | | 106 | 11 |
| Gas-purifying apparatus | C. I. Tenney | 743,591 | Nov. 10 | 1591 | 333, 334 | 107 | 356 |
| Gas receiver. Escape | J. E. Claytor | 732,712 | July 7 | 35 | 8 | 105 | 11 |
| Gas regulating and saving apparatus | H. H. Dikema | 737,593 | Sept. 1 | 68 | 14 | 106 | 17 |
| Gas-regulating burner | C. W. Taylor | 728,783 | May 19 | 3699 | 826 | 104 | 822 |
| Gas-regulating device for burners | C. W. Taylor | 730,057 | June 2 | 975 | 218 | 104 | 1326 |
| Gas-regulating means | E. E. Frederick | 733,954 | July 21 | 2285 | 538 | 105 | 516 |
| Gas-regulating system | G. R. Siefken | 721,972 | Mar. 3 | 600 | 133, 134 | 103 | 131 |
| Gas-regulating valve | T. Wilson | 718,959 | Jan. 20 | 2738 | 612 | 102 | 612 |
| Gas-regulating valve. Automatic | C. M. Holley and M. H. Rix | 722,302 | Mar. 10 | 1214 | 269, 270 | 103 | 275 |
| Gas-regulator | C. L. Nelson | 722,876 | Mar. 17 | 2292 | 513 | 103 | 516 |
| Gas-regulator | G. Metzger | 726,962 | May 5 | 254 | 59 | 104 | 54 |
| Gas-regulator | G. S. Bennett | 728,153 | May 12 | 2500 | 555 | 104 | 549 |
| Gas-regulator | C. C. Wilson | 731,255 | June 16 | 3155 | 702 | 104 | 1815 |
| Gas-regulator | A. M. Fisher | 731,997 | June 23 | 4553 | 1016 | 104 | 2123 |
| Gas-regulator | E. R. Cook | 744,679 | Nov. 17 | 3616 | 780 | 107 | 801 |
| Gas-retort | J. Bueb | 720,780 | Feb. 17 | 2543 | 585 | 102 | 1388 |
| Gas retort | W. E. Hartman | 748,499 | Dec. 29 | 5929 | 1347 | 107 | 2480 |
| Gas-retort discharging apparatus | W. R. Herring | 721,952 | Mar. 3 | 563 | 124 | 103 | 124 |
| Gas-reversing valve | O. N. Rauschenberg | 723,801 | Mar. 24 | 3971 | 895 | 103 | 877 |
| Gas. Safety means for distributing acetylene | M. Toltz and A. Lipschutz | 717,948 | Jan. 6 | 804 | 181 | 102 | 172 |

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| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Gas shut-off. Automatic | B. M. Sheets | 730,977 | June 16 | 2646 | 589 | 104 | 1714 |
| Gas shut-off. Automatic | J. L. L. Krook | 734,718 | July 28 | 3741 | 875 | 105 | 837 |
| Gas shut-off. Automatic | C. J. McCormick | 743,016 | Nov. 3 | 382 | 82 | 107 | 80 |
| Gas-storage apparatus | E. Fouché | 727,609 | May 12 | 1466 | 328 | 104 | 333 |
| Gas-supply-pipe attachment. Safety | F. W. Krohn | 740,145 | Sept. 29 | 5009 | 1125 | 106 | 1137 |
| Gas-supply-system regulator | R. M. Dixon | 742,775 | Oct. 27 | 4562 | 1034 | 106 | 2258 |
| Gas tap or cock | F. A. Andrews | 730,332 | June 9 | 1465 | 324 | 104 | 1443 |
| Gas-tip | W. Kramer | 736,604 | Aug. 18 | 2940 | 644 | 105 | 1644 |
| Gas. Treating | O. N. Guldlin | 731,412 | June 16 | 3462 | 774 | 104 | 1879 |
| Gas. Treating air for use in connection with the manufacture of | J. A. Bower | 737,901 | Sept. 1 | 689 | 147, 148 | 106 | 151 |
| Gas. Treating fermentation | J. F. Wittemann | 726,487 | Apr. 28 | 3836 | 867 | 103 | 2020 |
| Gas-tube-connection locking device | I. Lindner | 721,577 | Feb. 24 | 4073 | 924, 925 | 102 | 1732 |
| Gas-valve | L. M. Moore and W. J. Irvin | 723,402 | Mar. 24 | 3265 | 732 | 103 | 729 |
| Gas valve and burner. Combined | E. L. Moore | 718,857 | Jan. 20 | 2531 | 563 | 102 | 567 |
| Gas-valve. Thermal | W. C. Norton | 717,904 | Jan. 6 | 732 | 164 | 102 | 156 |
| Gas-valve. Time | H. McDuffie, Jr. | 733,254 | July 7 | 992 | 238 | 105 | 207 |
| Gas-valve water-seat | E. Bumford | 736,488 | Aug. 18 | 2710 | 594 | 105 | 1596 |
| Gas-works valve | E. A. Moore | 725,470 | Apr. 14 | 1552 | 437, 438 | 103 | 1598 |
| Gases. Apparatus for arresting impurities from furnace | R. Baggaley | 746,254 | Dec. 8 | 1730 | 390 | 107 | 1488 |
| Gases. Apparatus for disposing of foul | E. R. Edson | 736,946 | Aug. 25 | 3597 | 797 | 105 | 1801 |
| Gases. Apparatus for indicating the thermal quality of | W. F. Steele | 723,751 | Mar. 24 | 3880 | 873 | 103 | 857 |
| Gases. Apparatus for precipitating injurious fumes from smelter | R. Baggaley | 746,236 | Dec. 8 | 1696 | 377, 378 | 107 | 1482 |
| Gases. Apparatus for precipitating injurious fumes from smelter | R. Baggaley | 746,256 | Dec. 8 | 1734 | 392, 393 | 107 | 1489 |
| Gases. Apparatus for precipitating injurious fumes from smelter | R. Baggaley | 746,257 | Dec. 8 | 1737 | 394 | 107 | 1490 |
| Gases. Apparatus for removing impurities from furnace | R. Baggaley | 746,261 | Dec. 8 | 1744 | 395 | 107 | 1491 |
| Gases. Apparatus for separating and collecting impurities from metallurgical-furnace | E. J. McAleer | 725,352 | Apr. 14 | 1729 | 389 | 103 | 1550 |
| Gases. Apparatus for the treatment of furnace | R. Baggaley | 746,255 | Dec. 8 | 1731 | 390, 391, 392 | 107 | 1489 |
| Gases. Apparatus for treating | H. Pauling | 739,920 | Sept. 29 | 4603 | 1034 | 106 | 1051 |
| Gases. Apparatus for treating | H. Pauling | 739,921 | Sept. 29 | 4604 | 1034 | 106 | 1051 |
| Gases. Apparatus for treating liquids with | P. Naef | 723,011 | Mar. 17 | 2518 | 565 | 103 | 564 |
| Gases. Centrifugal apparatus for purifying | H. A. Humphrey | 737,932 | Sept. 1 | 748 | 164 | 106 | 164 |
| Gases. Cleansing fans operating on blast-furnace | B. H. Thwaite | 731,395 | June 16 | 3432 | 766 | 104 | 1873 |
| Gases containing sulfurous acids. Purifying | H. Rabe | 739,108 | Sept. 15 | 3074 | 682 | 106 | 688 |
| Gases into bath fluids. Device for introducing | L. von Orth | 727,425 | May 5 | 1111 | 243 | 104 | 240 |
| Gases. Means for controlling the flow of | H. H. Dow | 733,464 | July 14 | 1378 | 326 | 105 | 308 |
| Gases. Purifying blast-furnace | G. J. Snelus | 721,617 | Feb. 24 | 4160 | 945 | 102 | 1751 |
| Gases. Recovering values from smelter | R. Baggaley | 746,259 | Dec. 8 | 1740 | 395 | 107 | 1490 |
| Gases. Subjecting materials to the action of air or other | C. E. Mark | 728,261 | May 19 | 2717 | 606 | 104 | 617 |
| Gaseous-fuel burner | R. J. Miner | 725,003 | Apr. 7 | 1086 | 247 | 103 | 1401 |
| Gaseous-fuel burner | O. Falkenwalder | 733,828 | July 14 | 2036 | 479, 480 | 105 | 445 |
| Gasket | L. J. Lomasney | 747,448 | Dec. 22 | 3940 | 886 | 107 | 2018 |
| Gasket making and inserting machine | R. A. Hall | 725,701 | Apr. 21 | 2385 | 541, 542 | 103 | 1704 |
| Gasket. Water-gage | H. K. Gilbert | 740,640 | Oct. 6 | 485 | 107 | 106 | 1350 |
| Gaskets and applying them to sealing-caps. Machine for forming | L. M. Keizer | 734,564 | July 28 | 3448 | 804, 805 | 105 | 778 |
| Gasolene-burner | C. L. Hall | 725,078 | Apr. 14 | 1231 | 278 | 103 | 1446 |
| Gasolene-burner | A. J. Blackford | 739,144 | Sept. 15 | 3136 | 694 | 106 | 702 |
| Gasolene burner. Vapor | H. M. Burnell | 727,087 | May 5 | 509 | 109 | 104 | 112 |
| Gasolene-engine | J. A. Nickelson | 741,064 | Oct. 13 | 1250 | 283 | 106 | 1534 |
| Gasolene-engine | O. E. Pehrsson | 741,824 | Oct. 20 | 2757 | 614 | 106 | 1869 |
| Gasolene-engine | R. R. Gaskill | 742,184 | Oct. 27 | 3502 | 782 | 106 | 2034 |
| Gasolene-generating apparatus | B. C. Smith | 747,786 | Dec. 22 | 4557 | 1029 | 107 | 2159 |
| Gasolene. Means for volatilizing | F. E. and F. O. Stanley | 737,879 | Sept. 1 | 656 | 139 | 106 | 144 |
| Gasolene-motors. Fuel-regulator for | H. H. Hennegin | 746,833 | Dec. 15 | 2782 | 641 | 107 | 1741 |
| Gasometer | N. Goodyear | 739,258 | Sept. 15 | 3342 | 742 | 106 | 747 |
| Gastroscope | P. Poirier and P. Michel | 731,496 | June 23 | 3634 | 811, 812 | 104 | 1933 |
| Gate: *See* Automatic gate. Automatically-operated gate. Car-platform gate. Collapsible gate. Driveway-gate. Elevator-gate. End-gate. Farm-gate. Fence-gate. Flood-gate. Folding gate. Hatchway-gate. Head-gate. Lifting and dropping gate. Locomotive-tender gate. Mine-gate. Plastic gate. Race-starting gate. Railway-gate. Railway-crossing gate. Railway safety-gate. Safety-gate. Self-closing gate. Sliding gate. Starting-gate. Swinging gate. Water-gate. | | | | | | | |
| Gate | P. A. McCarville | 717,705 | Jan. 6 | 328 | 79 | 102 | 71 |
| Gate | J. Hodgens | 718,626 | Jan. 20 | 2108 | 458, 459 | 102 | 482 |
| Gate | J. H. Moss | 719,838 | Feb. 3 | 772 | 180 | 102 | 987 |
| Gate | L. V. Buford | 720,662 | Feb. 17 | 2346 | 537 | 102 | 1345 |
| Gate | F. F. Jackson | 720,925 | Feb. 17 | 2803 | 643 | 102 | 1443 |
| Gate | G. S. Patrick | 721,600 | Feb. 24 | 4121 | 938 | 102 | 1742 |
| Gate | L. Doerr | 722,358 | Mar. 10 | 1304 | 290 | 103 | 293 |
| Gate | F. M. Dann | 723,248 | Mar. 24 | 2967 | 666 | 103 | 672 |

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| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Gate | J. Y. McKinney | 723,901 | Mar. 31 | 4174 | 940 | 103 | 936 |
| Gate | A. B. Cameron | 725,039 | Apr. 14 | 1156 | 261 | 103 | 1432 |
| Gate | D. Warner | 725,806 | Apr. 21 | 2596 | 589, 590 | 103 | 1750 |
| Gate | J. Granger | 726,048 | Apr. 21 | 2991 | 679, 680 | 103 | 1833 |
| Gate | F. E. Williams and R. T. Van Valkenburg. | 726,601 | Apr. 28 | 4073 | 919 | 103 | 2066 |
| Gate | A. C. Hunt | 726,689 | Apr. 28 | 4228 | 955 | 103 | 2098 |
| Gate | J. W. Brown | 727,584 | May 12 | 1426 | 320 | 104 | 325 |
| Gate | J. M. Barley | 727,734 | May 12 | 1729 | 388 | 104 | 389 |
| Gate | G. Ogden | 728,603 | May 19 | 3378 | 748 | 104 | 757 |
| Gate | D. J. Fuller | 729,925 | June 2 | 728 | 163 | 104 | 1276 |
| Gate | J. L. Riter and E. W. Carlos | 730,570 | June 9 | 1914 | 426 | 104 | 1539 |
| Gate | J. C. Zumwalt | 730,730 | June 9 | 2187 | 486, 487 | 104 | 1597 |
| Gate | G. E. Slater | 731,716 | June 23 | 4041 | 902 | 104 | 2013 |
| Gate | G. H. Smith | 732,128 | June 30 | 4831 | 1077 | 104 | 2194 |
| Gate | W. S. Harmon | 733,197 | July 7 | 879 | 213 | 105 | 185 |
| Gate | H. Terry | 733,684 | July 14 | 1750 | 414 | 105 | 386 |
| Gate | G. M. Bates | 735,053 | Aug. 4 | 10 | 3 | 105 | 983 |
| Gate | E. Stickler | 737,038 | Aug. 25 | 3752 | 833 | 105 | 1833 |
| Gate | R. A. Bruce | 737,331 | Aug. 25 | 4296 | 955 | 105 | 1947 |
| Gate | T. F. Timby | 739,122 | Sept. 15 | 3097 | 685 | 106 | 693 |
| Gate | T. A. Hill | 739,870 | Sept. 29 | 4507 | 1013, 1014 | 106 | 1030 |
| Gate | S. A. Taylor | 740,783 | Oct. 6 | 755 | 170, 171 | 106 | 1407 |
| Gate | P. W. Robinson | 741,167 | Oct. 13 | 1447 | 329 | 106 | 1574 |
| Gate | H. R. Dansboe | 741,464 | Oct. 13 | 2041 | 453 | 106 | 1701 |
| Gate | W. A. Peeples | 741,539 | Oct. 13 | 2217 | 493 | 106 | 1739 |
| Gate | S. Ware | 742,763 | Oct. 27 | 4543 | 1029 | 106 | 2254 |
| Gate | W. T. Curtis | 743,462 | Nov. 10 | 1342 | 275 | 107 | 302 |
| Gate | G. M. Bates | 744,154 | Nov. 17 | 2686 | 572, 573 | 107 | 601 |
| Gate | A. L. Trumbo | 744,439 | Nov. 17 | 3220 | 690, 691 | 107 | 718 |
| Gate | V. R. Duvall | 744,731 | Nov. 24 | 3756 | 810 | 107 | 849 |
| Gate | J. W. Barnhill | 746,777 | Dec. 15 | 2668 | 616 | 107 | 1715 |
| Gate | L. Kievit and C. Blaauboer | 746,846 | Dec. 15 | 2804 | 646 | 107 | 1746 |
| Gate | P. A. McCarville | 746,871 | Dec. 15 | 2859 | 658 | 107 | 1759 |
| Gate | J. Steinbrecker | 748,023 | Dec. 29 | 5055 | 1141 | 107 | 2290 |
| Gate | B. G. Olson | 748,092 | Dec. 29 | 5190 | 1174 | 107 | 2320 |
| Gate attachment | O. U. Peterson | 728,288 | May 19 | 2777 | 616 | 104 | 631 |
| Gate attachment. Automatic | F. H. Warne | 736,568 | Aug. 18 | 2848 | 623, 624 | 105 | 1625 |
| Gate fastener. Frameless-wire | S. P. McCaslin | 726,332 | Apr. 28 | 3540 | 802 | 103 | 1962 |
| Gate for coal or other pockets | J. Campbell | 733,623 | July 14 | 1651 | 391 | 105 | 366 |
| Gate-operating device | R. P. Pierce | 748,214 | Dec. 29 | 5411 | 1231 | 107 | 2366 |
| Gate or end post and anchor therefor | A. H. and C. R. Cook and W. H. Hood | 743,250 | Nov. 3 | 837 | 183 | 107 | 174 |
| Gate-pattern | F. H. Arnold | 731,738 | June 23 | 4089 | 913 | 104 | 2023 |
| Gauze substitute | R. W. Johnson | 727,146 | May 5 | 626 | 135 | 104 | 135 |
| Gear-case and bracket | H. De Wallace | 744,308 | Nov. 17 | 2990 | 641 | 107 | 668 |
| Gear case. Miter | H. De Wallace | 744,310 | Nov. 17 | 2993 | 641 | 107 | 669 |
| Gear. Chain driving | E. F. Morse | 736,999 | Aug. 25 | 3687 | 818, 819 | 105 | 1820 |
| Gear. Change and reversing | W. G. Wilson | 730,066 | June 2 | 991 | 222 | 104 | 1329 |
| Gear. Change-speed | J. Latille | 729,875 | June 2 | 657 | 145 | 104 | 1262 |
| Gear. Changeable-speed | W. L. Marr | 736,415 | Aug. 18 | 2565 | 563 | 105 | 1565 |
| Gear. Changeable-speed | L. E. Krotz | 737,746 | Sept. 1 | 351 | 74 | 106 | 79 |
| Gear. Compensating | T. J. Lindsay | 724,393 | Mar. 31 | 5188 | 1163 | 103 | 1142 |
| Gear-cutting machine | H. E. Eberhardt | 727,760 | May 12 | 1771 | 398, 399 | 104 | 398 |
| Gear-cutting machine | H. E. and F. L. Eberhardt | 727,761 | May 12 | 1780 | 400 | 104 | 400 |
| Gear-cutting machine | C. D. Rice | 744,110 | Nov. 17 | 2596 | 554, 555, 556 | 107 | 583 |
| Gear for motors. Speed | A. B. Holson | 737,237 | Aug. 25 | 4114 | 914 | 105 | 1909 |
| Gear for presses or other machinery. Driving | O. Spahr | 747,792 | Dec. 22 | 4571 | 1031, 1032 | 107 | 2162 |
| Gear Friction | A. Sundh and D. L. Lindquist | 747,016 | Dec. 15 | 3133 | 717 | 107 | 1820 |
| Gear mechanism. Transmission | R. B. Hain | 719,327 | Jan. 27 | 3434 | 766 | 102 | 772 |
| Gear-planer | J. E. Gleason | 722,098 | Mar. 3 | 813 | 181, 182 | 103 | 176 |
| Gear. Reducing | H. H. Young | 741,089 | Oct. 13 | 1297 | 297 | 106 | 1544 |
| Gear. Reversible and variable friction | W. G. Gaum | 725,953 | Apr. 21 | 2840 | 644 | 103 | 1802 |
| Gear. Reversible driving | W. E. Gibbs | 745,814 | Dec. 1 | 915 | 205 | 107 | 1294 |
| Gear. Reversible transmission | J. A. Dickey | 740,822 | Oct. 6 | 825 | 185, 186 | 106 | 1421 |
| Gear. Reversing | H. Moon | 719,354 | Jan. 27 | 3493 | 777, 778 | 102 | 784 |
| Gear. Reversing | S. Guth | 735,094 | Aug. 4 | 86 | 21 | 105 | 1001 |
| Gear. Reversing | C. W. Weiss | 737,686 | Sept. 1 | 234 | 50 | 106 | 54 |
| Gear. Reversing | E. L. Shore | 744,249 | Nov. 17 | 2875 | 616 | 107 | 643 |
| Gear. Reversing | E. E. F. Fagerström | 745,337 | Dec. 1 | 38 | 8 | 107 | 1108 |
| Gear. Reversing | C. Felsing, Jr. | 747,056 | Dec. 15 | 3219 | 734 | 107 | 1843 |
| Gear. Self-adjusting friction | G. T. Rennerfelt | 726,461 | Apr. 28 | 3770 | 854 | 103 | 2009 |
| Gear-shipping mechanism | E. W. Burgess | 727,084 | May 5 | 503 | 108 | 104 | 110 |
| Gear. Speed | S. Diamant | 726,410 | Apr. 28 | 3677 | 833 | 103 | 1990 |
| Gear. Speed-changing | P. H. White | 727,726 | May 12 | 1716 | 385 | 104 | 386 |
| Gear. Transmission | W. W. Adams | 743,792 | Nov. 10 | 1953 | 414 | 107 | 433 |
| Gear. Transmitting | F. D. Howe | 741,038 | Oct. 13 | 1196 | 271 | 106 | 1521 |
| Gear. Variable driving | S. M. Balzer | 730,597 | June 9 | 1964 | 437 | 104 | 1550 |
| Gear. Variable-speed | F. Miller | 724,312 | Mar. 31 | 5015 | 1123, 1124 | 103 | 1105 |
| Gear. Variable-speed | W. N. Dumaresq | 724,449 | Apr. 7 | 49 | 12, 13 | 103 | 1180 |

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| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Gear. Variable-speed | W. N. Dumaresq | 724,450 | Apr. 7 | 52 | 13, 14, 15 | 103 | 1181 |
| Gear. Variable-speed | M. Crawford | 725,223 | Apr. 14 | 1502 | 342, 343 | 103 | 1503 |
| Gear. Variable-speed | J. J. H. Sturmey | 737,675 | Sept. 1 | 213 | 45, 46 | 106 | 49 |
| Gear. Variable-speed | J. S. Fairfax | 740,545 | Oct. 6 | 311 | 64 | 106 | 1310 |
| Gear. Variable-speed | J. S. Fairfax | 740,546 | Oct. 6 | 313 | 65 | 106 | 1311 |
| Gear. Variable-speed | R. P. B. Green | 741,904 | Oct. 20 | 2916 | 650 | 106 | 1901 |
| Gear. Variable-speed and reversing | R. Mathot | 729,501 | May 26 | 4957 | 1099 | 104 | 1100 |
| Gear. Variable-speed-transmission | V. G. Apple | 748,334 | Dec. 29 | 5606 | 1278, 1279 | 107 | 2409 |
| Gear-wheel | R. E. Evenden | 719,572 | Feb. 3 | 297 | 68, 69 | 102 | 884 |
| Gear-wheel | F. Saxon | 746,583 | Dec. 8 | 2302 | 528 | 107 | 1613 |
| Gear-wheel. Split | J. Carlson | 737,075 | Aug. 25 | 3813 | 845 | 105 | 1845 |
| Gear with adjustable stroke. Reversible | O. Caracciola | 741,624 | Oct. 20 | 2378 | 532 | 106 | 1788 |
| Gear. Worm- | G. Staehle | 718,398 | Jan. 13 | 1625 | 357 | 102 | 364 |
| Gears. Shaft-connecting device for change- | A. M. Harrison | 737,619 | Sept. 1 | 113 | 25 | 106 | 27 |
| Gears. Shaft-connecting device for change- | A. M. Harrison | 741,789 | Oct. 20 | 2700 | 601 | 106 | 1856 |
| Gearing | J. R. Carter | 721,149 | Feb. 24 | 3269 | 748 | 102 | 1564 |
| Gearing | J. R. Nye | 726,738 | Apr. 28 | 4325 | 975 | 103 | 2119 |
| Gearing | W. R. Green | 729,157 | May 26 | 4377 | 965, 966 | 104 | 977 |
| Gearing | M. F. Rondet | 731,502 | June 23 | 3649 | 814 | 104 | 1937 |
| Gearing | W. O. Dayton and L. E. Brennan | 732,834 | July 7 | 252 | 63 | 105 | 56 |
| Gearing | J. R. Carter | 735,465 | Aug. 4 | 832 | 177 | 105 | 1157 |
| Gearing | C. L. Haase, Jr | 741,659 | Oct. 20 | 2430 | 545, 546 | 106 | 1800 |
| Gearing | P. B. T. Berner | 742,382 | Oct. 27 | 3874 | 870 | 106 | 2112 |
| Gearing | A. Winton | 742,812 | Oct. 27 | 4630 | 1049, 1050 | 106 | 2273 |
| Gearing | M. E. and C. H. Bacon | 743,133 | Nov. 3 | 604 | 131 | 107 | 126 |
| Gearing | L. S. Clarke | 746,027 | Dec. 8 | 1320 | 295, 296 | 107 | 1397 |
| Gearing. Alternating rotary | J. E. Hausfeld | 722,704 | Mar. 17 | 1980 | 442 | 103 | 455 |
| Gearing. Back- | S. C. Davidson | 746,683 | Dec. 15 | 2504 | 574, 575 | 107 | 1679 |
| Gearing. Belt- | L. Rottenburg | 721,394 | Feb. 24 | 3727 | 848, 849 | 102 | 1657 |
| Gearing. Change-speed | L. P. Mooers | 737,442 | Aug. 25 | 4511 | 1011, 1012 | 105 | 1994 |
| Gearing. Compensating | E. Huber | 726,930 | May 5 | 185 | 43 | 104 | 42 |
| Gearing. Compensating | H. L. Warner | 732,327 | June 30 | 5216 | 1159 | 104 | 2274 |
| Gearing. Differential | H. L. Warner | 730,421 | June 9 | 1627 | 365 | 104 | 1476 |
| Gearing for centrifugal machines | G. M. Andersson | 720,094 | Feb. 10 | 1271 | 290 | 102 | 1109 |
| Gearing for grinding or other mills | J. C. Dell | 743,256 | Nov. 3 | 853 | 186 | 107 | 179 |
| Gearing for lathes, &c. Change-speed | H. L. Flather | 734,691 | July 28 | 3680 | 862, 863 | 105 | 826 |
| Gearing for motor-driven tools | A. Porterfield | 731,948 | June 23 | 4460 | 995 | 104 | 2104 |
| Gearing. Friction- | O. Marth. (Reissue) | 12,075 | Jan. 27 | 3606 | 807 | 102 | 808 |
| Gearing. Friction- | L. Maurer | 730,678 | June 9 | 2104 | 468 | 104 | 1580 |
| Gearing. Frictional | J. Kynoch | 728,400 | May 19 | 2982 | 656 | 104 | 673 |
| Gearing. Magneto frictional | G. H. Gibson | 745,593 | Dec. 1 | 517 | 121 | 107 | 1207 |
| Gearing. Power-transmission | C. G. Nye and F. E. Jenkins | 733,076 | July 7 | 670 | 160, 161 | 105 | 142 |
| Gearing. Power-transmission | G. E. Whiteside | 746,216 | Dec. 8 | 1659 | 369 | 107 | 1474 |
| Gearing. Power-transmitting | O. Dockstader | 721,943 | Mar. 3 | 546 | 120 | 103 | 120 |
| Gearing. Reducing and backing | G. F. Evans | 743,067 | Nov. 3 | 482 | 105 | 107 | 101 |
| Gearing. Reversing- | A. Hrncjar | 733,205 | July 7 | 903 | 218 | 105 | 189 |
| Gearing. Variable friction- | L. Sanders | 748,021 | Dec. 29 | 5051 | 1140 | 107 | 2289 |
| Gearing. Variable-speed | J. H. Braithwaite | 719,732 | Feb. 3 | 580 | 130, 131 | 102 | 944 |
| Gearing. Variable-speed | C. Upton | 721,401 | Feb. 24 | 3741 | 851 | 102 | 1660 |
| Gearing. Variable-speed | A. Peteler | 724,202 | Mar. 31 | 4796 | 1074, 1075 | 103 | 1061 |
| Gearing. Variable-speed | W. S. Austin | 725,812 | Apr. 21 | 2603 | 591, 592 | 103 | 1752 |
| Gearing. Variable-speed | F. L. Todd | 736,462 | Aug. 18 | 2645 | 581, 582 | 105 | 1583 |
| Gearing. Variable-speed | C. H. Heath | 739,545 | Sept. 22 | 3863 | 866 | 106 | 875 |
| Gearing. Variable-speed | W. N. Dumaresq | 740,829 | Oct. 6 | 839 | 188 | 106 | 1425 |
| Gearing. Variable-speed mechanism for back- | R. K. Le Blond and W. F. Groene | 725,099 | Apr. 14 | 1271 | 287 | 103 | 1454 |
| Gearing. Variable-speed-transmission | T. B. Rennell | 747,221 | Dec. 15 | 3520 | 799, 800 | 107 | 1907 |
| Gearing. Worm- | F. C. Wagner | 731,527 | June 23 | 3702 | 824 | 104 | 1947 |
| Gelatin. Making | W. Cormack | 728,205 | May 19 | 2592 | 580 | 104 | 592 |
| Gelatin. Manufacturing vegetable | A. L. Martin | 742,124 | Oct. 20 | 3390 | ------ | 106 | 1995 |
| Gem cutting and polishing machine | G. Purper, J. Moser, and R. Boeklen | 726,458 | Apr. 28 | 3762 | 853 | 103 | 2008 |
| Gem-setting | G. W. Dover | 717,824 | Jan. 6 | 588 | 131 | 102 | 127 |
| Gem-setting | G. W. Dover | 722,824 | Mar. 17 | 2203 | 492 | 103 | 500 |
| Gem-setting | F. R. Stafford | 739,759 | Sept. 22 | 4259 | 954 | 106 | 962 |
| Generator: *See* Acetylene-generator. Electric generator. Formaldehyde-generator. Gas-generator. Gas or vapor generator. Germicide-generator. Hydrocarbon-vapor generator. Ignition-generator. Magnetic generator. Magneto-generator. Magneto-electric generator. Ozone-generator. Pressure-generator. Ringing-generator. Steam-generator. Thermo-electric generator. Vapor-generator. Vinegar-generator. | | | | | | | |
| Generator or motor suspension | M. Waddell and H. K. Brooks | 746,610 | Dec. 8 | 2348 | 538, 539 | 107 | 1624 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | | Spec. | Drg. | Vol. | Page. |
| Geraniol derivative | F. Hofmann | 746,703 | Dec. 15 | 2532 | ..... | 107 | 1685 |
| Germicide-generator | F. MacFarland | 732,572 | June 30 | 5707 | 1268 | 104 | 2378 |
| Gilding-machine | C. Raschig | 747,639 | Dec. 22 | 4295 | 965 | 107 | 2099 |
| Gill-drawing frame | W. Holdsworth | 722,984 | Mar. 17 | 2470 | 554, 555 | 103 | 554 |
| Gin cotton-cleaner attachment | M. Ruth | 723,035 | Mar. 17 | 2557 | 575 | 103 | 573 |
| Gin-feeder and separator | J. W. Seifert | 727,700 | May 12 | 1645 | 373 | 104 | 372 |
| Gin. Roller- | L. L. Foss | 730,449 | June 9 | 1690 | 379 | 104 | 1489 |
| Gin. Roller- | L. L. Foss | 731,561 | June 23 | 3759 | 838, 839 | 104 | 1958 |
| Gin-saw cleaner | W. D. Stanifer | 730,803 | June 9 | 2305 | 513 | 104 | 1623 |
| Gin-saw sharpener | J. S. Garner | 720,416 | Feb. 10 | 1848 | 421 | 102 | 1231 |
| Gin system. Grabot- | S. Castleman | 731,855 | June 23 | 4291 | 955, 956 | 104 | 2069 |
| Ginning apparatus | J. T. Fuller | 734,696 | July 28 | 3693 | 865 | 105 | 828 |
| Girder, &c. Composite | G. A. Weber | 741,421 | Oct. 13 | 1964 | 435 | 106 | 1685 |
| Girder, &c. Concrete and iron | R. Grimm | 736,718 | Aug. 18 | 3160 | 697 | 105 | 1689 |
| Girders or beams. Cambering or straightening device for | W. M. Burdon | 732,164 | June 30 | 4914 | 1092, 1093 | 104 | 2211 |
| Girth | J. Wright | 721,769 | Mar. 3 | 193 | 45 | 103 | 42 |
| Glandular extractive product | J. Takamine | 730,176 | June 2 | 1166 | ..... | 104 | 1365 |
| Glass: *See* Opera-glass. Shaving-glass. | | | | | | | |
| Glass-annealing apparatus | W. D. Keyes | 718,257 | Jan. 13 | 1362 | 302 | 102 | 309 |
| Glass-annealing oven. Plate- | J. W. Cruikshank | 737,909 | Sept. 1 | 703 | 152 | 106 | 154 |
| Glass. Apparatus for manufacturing sheet- | P. T. Sievert | 725,498 | Apr. 14 | 2012 | 454 | 103 | 1116 |
| Glass. Apparatus for the manufacture of sheet- | W. A. Page and F. L. O. Wadsworth | 742,899 | Nov. 3 | 140 | 32, 33 | 107 | 31 |
| Glass articles. Apparatus for making hollow | J. Proeger | 744,008 | Nov. 10 | 2390 | 514 | 107 | 526 |
| Glass articles. Apparatus for producing hollow | P. T. Sievert and E. Klein | 745,391 | Dec. 1 | 148 | 33, 34 | 107 | 1131 |
| Glass articles. Drawing | J. H. Lubbers | 739,329 | Sept. 22 | 3470 | 774, 775 | 106 | 790 |
| Glass articles. Manufacture of hollow | W. J. Greenwood | 724,179 | Mar. 31 | 4742 | 1063 | 103 | 1051 |
| Glass articles. Manufacturing | J. I. and C. V. Arbogast | 730,077 | June 2 | 1009 | 226 | 104 | 1333 |
| Glass articles. Manufacturing hollow | P. T. Sievert | 742,506 | Oct. 27 | 4096 | 922, 923 | 106 | 2157 |
| Glass batch. Handling | A. M. Acklin | 741,753 | Oct. 20 | 2631 | 587, 588 | 106 | 1841 |
| Glass-beveling apparatus | C. L. Goehring and W. Troche | 737,387 | Aug. 25 | 4385 | 978, 979, 980, 981 | 105 | 1967 |
| Glass-beveling machine | C. L. Goehring and W. Troche | 737,389 | Aug. 25 | 4395 | 982, 983 | 105 | 1969 |
| Glass-beveling machine | C. L. Goehring and W. Troche | 737,391 | Aug. 25 | 4404 | 984, 985 | 105 | 1971 |
| Glass-beveling machine | P. E. Welton | 744,268 | Nov. 17 | 2904 | 632 | 107 | 649 |
| Glass-blower's tube | J. D. Blakeley | 733,130 | July 7 | 767 | 186 | 105 | 162 |
| Glass-blowing apparatus | P. T. Sievert | 742,505 | Oct. 27 | 4093 | 921, 922 | 106 | 2157 |
| Glass-blowing machine | J. Schies | 722,634 | Mar. 10 | 1811 | 403 | 103 | 405 |
| Glass-blowing machine | W. S. Teeple and S. C. Johnson | 726,112 | Apr. 21 | 3104 | 703 | 103 | 1858 |
| Glass-blowing machine | E. S. Hutton | 742,662 | Oct. 27 | 4380 | 986, 987, 988 | 106 | 2218 |
| Glass-blowing tool | A. Dewerpe | 747,049 | Dec. 15 | 3211 | 732 | 107 | 1841 |
| Glass bodies. Manufacturing hollow | O. Schott | 722,386 | Mar. 10 | 1352 | 299 | 103 | 304 |
| Glass bottles. Machine for making | L. Grote | 724,388 | Mar. 31 | 5179 | 1160, 1161, 1162 | 103 | 1140 |
| Glass bottles. Machine for manufacturing | T. W. Simpson | 723,933 | Mar. 31 | 4247 | 955, 956 | 103 | 952 |
| Glass bulbs or globes. Frosting | P. Kennedy | 733,972 | July 21 | 2326 | 546 | 105 | 523 |
| Glass. Cameo | A. H. Freeman | 727,932 | May 12 | 2110 | 470 | 104 | 468 |
| Glass carrier for leers. Sheet- | R. L. Frink and W. D. Lee | 722,689 | Mar. 17 | 1956 | 436 | 103 | 450 |
| Glass-chipping machine | F. H. Burch | 743,824 | Nov. 10 | 2009 | 426 | 107 | 444 |
| Glass. Clamp for holding plate- | M. E. Hunter | 737,109 | Aug. 25 | 3872 | 859 | 105 | 1858 |
| Glass. Curvilinear corrugated prismatic | C. C. Hartung | 720,139 | Feb. 10 | 1345 | 308 | 102 | 1126 |
| Glass. Curvilinear prismatic | C. C. Hartung | 720,138 | Feb. 10 | 1343 | 307 | 102 | 1126 |
| Glass-cutter | F. S. Fletcher | 742,179 | Oct. 27 | 3493 | 780 | 106 | 2033 |
| Glass-cutting apparatus | H. J. Sage | 728,417 | May 19 | 3008 | 661, 662 | 104 | 678 |
| Glass-cutting machine | L. Rouault | 725,288 | Apr. 14 | 1602 | 372 | 103 | 1524 |
| Glass-cutting machine | F. A. Hubbuch | 747,428 | Dec. 22 | 3904 | 879 | 107 | 2010 |
| Glass. Decorating art | S. Alke and S. A. Moss | 718,895 | Jan. 20 | 2608 | ..... | 102 | 584 |
| Glass-drawing bait | J. H. Lubbers | 743,898 | Nov. 10 | 2146 | 461, 462 | 107 | 473 |
| Glass-drawing machine | G. H. Harvey | 742,420 | Oct. 27 | 3945 | 886 | 106 | 2125 |
| Glass. Endless carrier for sheet- | R. L. Frink and W. D. Lee | 745,487 | Dec. 1 | 336 | 79 | 107 | 1171 |
| Glass. Etching | B. Z. Meth | 736,994 | Aug. 25 | 3681 | ..... | 105 | 1818 |
| Glass-finishing apparatus | J. H. Croskey | 742,601 | Oct. 27 | 4272 | 962, 963 | 106 | 2194 |
| Glass-flattening table. Sheet- | R. L. Frink and W. D. Lee | 722,688 | Mar. 17 | 1955 | 436 | 103 | 449 |
| Glass-furnaces. Device for feeding ash into | W. B. Cogswell | 722,812 | Mar. 17 | 2183 | 486 | 103 | 496 |
| Glass-grinding machine | C. L. Goehring and W. Troche | 737,390 | Aug. 25 | 4400 | 983, 984 | 105 | 1970 |
| Glass-grinding machine | C. L. Goehring and W. Troche | 737,392 | Aug. 25 | 4408 | 985, 986 | 105 | 1972 |
| Glass-grinding machine | C. L. Goehring and W. Troche | 737,393 | Aug. 25 | 4412 | 986, 987 | 105 | 1974 |
| Glass-grinding machine | C. L. Goehring and W. Troche | 737,394 | Aug. 25 | 4415 | 987 | 105 | 1974 |
| Glass-grinding machine | C. L. Goehring and W. Troche | 737,395 | Aug. 25 | 4417 | 988 | 105 | 1974 |
| Glass grinding or polishing machine | D. J. Murnane | 723,008 | Mar. 17 | 2511 | 564 | 103 | 562 |
| Glass. Machine for automatically gathering and delivering | W. F. Altenbaugh | 744,274 | Nov. 17 | 2917 | 624, 625, 626 | 107 | 652 |
| Glass-making apparatus. Sheet- | R. L. Frink and W. D. Lee | 720,517 | Feb. 10 | 2032 | 467 | 102 | 1267 |
| Glass. Making fire-polished sheet- | H. G. Slingluff | 746,335 | Dec. 15 | 3745 | 844 | 107 | 1958 |

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| Invention. | Name. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|---|
| | | | | Spec. | Dr'g. | Vol. | Page. |
| Glass-making machine. Sheet- | R. L. Frink and W. D. Lee | 722,687 | Mar. 17 | 1952 | 435, 436 | 103 | 449 |
| Glass-making machine. Sheet- | L. Appert | 735,048 | Aug. 4 | 2 | 1 | 105 | 981 |
| Glass. Making sheet- | H. G. Slingluff | 724,344 | Mar. 31 | 5077 | 1136 | 103 | 1118 |
| Glass. Making sheet- | N. Harrison and J. Wharton | 747,913 | Dec. 22 | 4809 | 1087 | 107 | 2214 |
| Glass making. Wire- | J. A. Swearer and C. E. Toynbee | 736,310 | Aug. 11 | 2388 | 520 | 105 | 1512 |
| Glass manufacture. Meshed wire for wire- | F. and A. Shuman | 727,004 | May 5 | 371 | 78 | 104 | 81 |
| Glass. Manufacture of sheet- | W. W. Pilkington | 737,470 | Aug. 25 | 4558 | 1022 | 105 | 2005 |
| Glass. Manufacture of sheet- | W. A. Page and F. L. O. Wadsworth | 742,898 | Nov. 3 | 138 | 31, 32 | 107 | 31 |
| Glass. Manufacture of wire- | F. and A. Shuman | 727,005 | May 5 | 373 | 79 | 104 | 81 |
| Glass manufacture. Plate- | A. M. Gow | 734,125 | July 21 | 2638 | 622 | 105 | 590 |
| Glass. Manufacturing | J. Hirst | 742,027 | Oct. 20 | 3171 | 708 | 106 | 1953 |
| Glass-manufacturing apparatus | J. Hirst | 742,028 | Oct. 20 | 3172 | 708 | 106 | 1953 |
| Glass. Manufacturing art | S. Alke and W. A. M. Hadley | 718,894 | Jan. 20 | 2607 | 583 | 102 | 584 |
| Glass. Manufacturing sheet- | P. T. Sievert | 725,497 | Apr. 14 | 2010 | 454 | 103 | 1611 |
| Glass. Manufacturing wire- | F. and A. Shuman | 727,006 | May 5 | 374 | 79 | 104 | 82 |
| Glass. Manufacturing wire- | F. and A. Shuman | 727,007 | May 5 | 376 | 79 | 104 | 82 |
| Glass. Manufacturing wire- | N. Franzen | 741,125 | Oct. 13 | 1367 | 313, 314 | 106 | 1558 |
| Glass. Means for manufacturing sheet- | A. G. Hamm | 726,530 | Apr. 28 | 3927 | 888 | 103 | 2037 |
| Glass. Melting | J. T. C. Kessmeier | 745,863 | Dec. 1 | 1018 | 229 | 107 | 1316 |
| Glass-mold | A. B. Scott | 736,790 | Aug. 18 | 3287 | 727 | 105 | 1714 |
| Glass-molding machine | S. Kribs | 730,665 | June 9 | 2076 | 463, 464 | 104 | 1573 |
| Glass-molding machine | F. H. Gibson | 739,666 | Sept. 22 | 4103 | 914, 915 | 106 | 926 |
| Glass-molding machine | F. H. Gibson | 743,268 | Nov. 3 | 876 | 191 | 107 | 184 |
| Glass or fabrics. Coating | H. Keppler | 743,522 | Nov. 10 | 1461 | 305 | 107 | 329 |
| Glass or glassware. Coloring | F. Scherhag | 743,338 | Nov. 3 | 1014 | ..... | 107 | 217 |
| Glass or other materials. Bar for holding together portions or sheets of | R. H. Raphael | 732,028 | June 23 | 4629 | 1035 | 104 | 2139 |
| Glass. Ornamenting | J. M. Conroy | 723,139 | Mar. 17 | 2749 | 617, 618 | 103 | 613 |
| Glass-ornamenting machine | J. M. Conroy | 731,667 | June 23 | 3957 | 880, 881 | 104 | 1997 |
| Glass-ornamenting machine | J. M. Conroy | 735,949 | Aug. 11 | 1742 | 372, 373 | 105 | 1371 |
| Glass plate. Illuminating | F. L. O. Wadsworth | 737,979 | Sept. 1 | 845 | 185 | 106 | 185 |
| Glass plates or sheets. Manufacture of | W. L. Kann | 747,437 | Dec. 22 | 3922 | ..... | 107 | 2014 |
| Glass plates or supports. Manufacture of strengthened | E. Offenbacher | 723,014 | Mar. 17 | 2523 | 566 | 103 | 565 |
| Glass-polishing machine | E. J. Hoffman | 721,191 | Feb. 24 | 3346 | 764, 765 | 102 | 1578 |
| Glass-press | S. McCaughtry | 726,088 | Apr. 21 | 3050 | 692, 693 | 103 | 1845 |
| Glass-press | E. Rogers and C. W. Sagee | 737,490 | Aug. 25 | 4597 | 1030 | 105 | 2014 |
| Glass reflectors. Making | O. A. Mygatt | 742,345 | Oct. 27 | 3812 | 854 | 106 | 2100 |
| Glass-rinsing device | F. G. Kammerer | 737,247 | Aug. 25 | 4141 | 922 | 105 | 1914 |
| Glass-rolling machine | N. Harrison and J. Wharton | 747,914 | Dec. 22 | 4810 | 1087, 1088 | 107 | 2214 |
| Glass-shaping apparatus | W. Buttler | 738,657 | Sept. 8 | 2222 | 486, 487 | 106 | 492 |
| Glass-shaping machine | W. M. Wolcott | 719,710 | Feb. 3 | 542 | 121, 122, 123, 124 | 102 | 937 |
| Glass-shearing device | E. Rogers and C. W. Sagee | 729,963 | June 2 | 813 | 181, 182 | 104 | 1293 |
| Glass-shearing device | W. J. H. Fetters | 734,258 | July 21 | 2888 | 675 | 105 | 645 |
| Glass-shearing machine | W. Stewart | 737,791 | Sept. 1 | 438 | 94 | 106 | 97 |
| Glass sheets or plates. Annealing | H. K. Hitchcock | 741,494 | Oct. 13 | 2117 | 471 | 106 | 1718 |
| Glass shingle | J. Simmerman | 734,976 | July 28 | 4228 | 982 | 105 | 937 |
| Glass-tank furnace | H. L. Dixon | 748,169 | Dec. 29 | 5333 | 1212, 1213 | 107 | 2350 |
| Glass tile. Manufacture of | H. J. Sage | 719,511 | Feb. 3 | 173 | 40 | 102 | 860 |
| Glass-tile-molding apparatus | L. R. Blackmore | 734,216 | July 21 | 2794 | 655, 656 | 105 | 624 |
| Glass tiles. Manufacture of | W. T. Nicholls | 739,338 | Sept. 22 | 3482 | 778 | 106 | 792 |
| Glass-tube-contracting machine | W. N. Packer | 741,823 | Oct. 20 | 2756 | 614 | 106 | 1869 |
| Glass vessel | A. J. Bennett | 746,780 | Dec. 15 | 2674 | 617 | 107 | 1716 |
| Glass. Working | O. A. Mygatt | 735,796 | Aug. 11 | 1450 | 312 | 105 | 1308 |
| Glassware. Apparatus for fire-finishing | A. R. Grotz | 746,498 | Dec. 8 | 2153 | 495 | 107 | 1579 |
| Glassware. Apparatus for making | M. H. Hart | 735,764 | Aug. 11 | 1391 | 299, 300 | 105 | 1294 |
| Glassware. Apparatus for making | J. Proeger | 744,009 | Nov. 10 | 2393 | 514 | 107 | 526 |
| Glassware. Apparatus for the manufacture of | J. Proeger | 744,006 | Nov. 10 | 2373 | 510, 511 | 107 | 524 |
| Glassware articles. Joint for | S. Hipkins | 729,863 | June 2 | 635 | 139 | 104 | 1258 |
| Glassware-chute | A. L. Bingham | 737,568 | Sept. 1 | 20 | 5 | 106 | 7 |
| Glassware. Finishing | J. H. Croskey | 742,602 | Oct. 27 | 4275 | 963 | 106 | 2195 |
| Glassware-grinding machine | E. C. Schrader | 731,230 | June 16 | 3115 | 690, 691 | 104 | 1807 |
| Glassware. Machine for making | J. Proeger | 744,010 | Nov. 10 | 2395 | 515 | 107 | 527 |
| Glassware. Machine for the manufacture of | C. E. Blue | 733,805 | July 14 | 1974 | 465 | 105 | 433 |
| Glassware. Machine for the manufacture of | C. E. Blue and W. B. Jones | 733,806 | July 14 | 1978 | 465 | 105 | 434 |
| Glassware. Manufacture of | J. Proeger | 744,007 | Nov. 10 | 2382 | 512, 513 | 107 | 525 |
| Glassware-manufacturing | J. L., C. V., F. J., F. L., and P. R. Arbogast. | 730,078 | June 2 | 1011 | 226 | 104 | 1333 |
| Glassware-manufacturing machine | J. F. Gegenheimer | 731,885 | June 23 | 4348 | 970 | 104 | 2082 |
| Glassware or like articles. Carrier for | W. B. Hughes | 745,621 | Dec. 1 | 560 | 131 | 107 | 1217 |
| Glazed structure | W. V. Hickerson | 736,968 | Aug. 25 | 3634 | 805 | 105 | 1808 |
| Glazier's tool | L. J. Klemm | 736,741 | Aug. 18 | 3197 | 707 | 105 | 1696 |
| Glazing conservatories, hothouses, &c | A. Tassain | 719,903 | Feb. 3 | 882 | 207 | 102 | 1010 |
| Glazing system | H. W. Waldmire | 723,953 | Mar. 31 | 4292 | 964 | 103 | 962 |
| Globe | E. N. Todd | 727,495 | May 5 | 1247 | 277 | 104 | 269 |

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| Invention. | Name. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| Globe-holder | B. M. Windoes | 720,544 | Feb. 10 | 2092 | 483 | 102 | 1279 |
| Globe or mantle protector | J. L. Cavanaugh | 746,460 | Dec. 8 | 2986 | 480 | 107 | 1564 |
| Globe or shade holder | W. Wishart and B. Seidel | 723,799 | Mar. 24 | 3968 | 894 | 103 | 876 |
| Glove | M. Torrens | 720,640 | Feb. 17 | 2308 | 529 | 102 | 1337 |
| Glove | R. Wilkens | 723,348 | Mar. 24 | 3149 | 708 | 103 | 707 |
| Glove | F. H. Busby | 729,731 | June 2 | 383 | 87 | 104 | 1207 |
| Glove | F. McConnell | 730,471 | June 9 | 1737 | 389 | 104 | 1500 |
| Glove | A. G. Hoegren | 731,572 | June 23 | 3789 | 843, 844 | 104 | 1964 |
| Glove | H. L. Northrop | 735,140 | Aug. 4 | 187 | 39 | 105 | 1022 |
| Glove | C. H. Chatfield | 735,342 | Aug. 4 | 579 | 118, 119 | 105 | 1105 |
| Glove | R. L. Thompson | 739,743 | Sept. 22 | 4239 | 949 | 106 | 957 |
| Glove | W. C. Wefel | 741,424 | Oct. 13 | 1968 | 436 | 106 | 1686 |
| Glove | C. Winkler | 745,088 | Nov. 24 | 4433 | 959 | 107 | 988 |
| Glove | F. H. Busby | 745,150 | Nov. 24 | 4572 | 992 | 107 | 1016 |
| Glove | E. B. Hallock | 747,169 | Dec. 15 | 3421 | 775 | 107 | 1887 |
| Glove | R. Kommer | 747,730 | Dec. 22 | 4456 | 1005 | 107 | 2135 |
| Glove. Bottler's | J. Krifka | 731,791 | June 23 | 4183 | 933 | 104 | 2043 |
| Glove-fastener | A. Bernauer | 725,536 | Apr. 14 | 2077 | 470 | 103 | 1625 |
| Glove-form | A. Foulds | 726,666 | Apr. 28 | 4186 | 945 | 103 | 2089 |
| Glove or garment fasteners. Stud member of | J. V. Washburne | 738,708 | Sept. 8 | 2326 | 511 | 106 | 512 |
| Glove or garment fasteners. Stud member of | J. V. Washburne | 739,762 | Sept. 22 | 4264 | 955 | 106 | 965 |
| Glove or mitt. Husking | O. M. Scott | 730,051 | June 2 | 964 | 216 | 104 | 1324 |
| Glove or mitten | S. Hollenbeck | 748,187 | Dec. 29 | 5366 | 1219 | 107 | 2357 |
| Glove-turning machine | W. S. Ayres | 748,463 | Dec. 29 | 5862 | 1333, 1334 | 107 | 2465 |
| Glucose. Making | L. Roth | 745,675 | Dec. 1 | 651 | 150 | 107 | 1236 |
| Glue and gelatin. Making | H. Weiss | 738,709 | Sept. 8 | 2328 | ------ | 106 | 513 |
| Glue-applying machine | G. A. Ensign | 739,159 | Sept. 15 | 3158 | 698 | 106 | 707 |
| Glue. Making | R. Arens | 721,852 | Mar. 3 | 359 | ------ | 103 | 78 |
| Gluing articles together | F. Renken | 729,220 | May 26 | 4487 | ------ | 104 | 1001 |
| Gluing-clamp carrier | N. J. Billstrom | 740,219 | Sept. 29 | 5154 | 1157 | 106 | 1166 |
| Gluing-machine | W. F. Epperson | 738,784 | Sept. 15 | 2492 | 547, 548 | 106 | 566 |
| Gluing-machine | J. A. Hrubecky | 741,135 | Oct. 13 | 1384 | 317 | 106 | 1561 |
| Gluing machine. Blank- | P. S. Smith | 726,473 | Apr. 28 | 3790 | 857, 858 | 103 | 2012 |
| Gluing machine. Neck- | P. S. Smith | 748,430 | Dec. 29 | 5793 | 1320 | 107 | 2450 |
| Gluing-wheel | C. Redd | 733,508 | July 14 | 1454 | 345 | 105 | 325 |
| Glutinous substances from seaweed. Extracting | A. Krefting | 737,421 | Aug. 25 | 4471 | ------ | 105 | 1986 |
| Glycerin and acidylated derivatives of aromatic bases and the product thereof. Producing | O. Liebreich | 741,585 | Oct. 13 | 2300 | ------ | 106 | 1756 |
| Go-cart | F. E. Southard | 746,189 | Dec. 8 | 1612 | 359, 360 | 107 | 1464 |
| Go-cart | F. E. Southard | 746,190 | Dec. 8 | 1615 | 360 | 107 | 1465 |
| Go-cart or chair. Child's | C. R. De la Sablière | 724,740 | Apr. 7 | 608 | 143 | 103 | 1298 |
| Goal | D. Fonlis | 718,924 | Jan. 20 | 2663 | 597 | 102 | 595 |
| Goggle. Strabismus- | J. E. Stierle | 742,081 | Oct. 20 | 3323 | 741 | 106 | 1982 |
| Gold and other metals from ores. Apparatus for extracting | E. L. Vander Naillen | 737,533 | Aug. 25 | 4680 | 1050 | 105 | 2035 |
| Gold and silver from ores. Extracting | C. A. Harp and J. F. Starkweather, Sr. | 735,501 | Aug. 4 | 897 | ------ | 105 | 1173 |
| Gold and silver. Treating refractory complex ores of | C. E. Baker and A. W. Burwell | 739,374 | Sept. 22 | 3544 | 792 | 106 | 805 |
| Gold and silver. Treating tellurid ores of | C. E. Baker and A. W. Burwell | 739,138 | Sept. 15 | 3123 | 691 | 106 | 699 |
| Gold, &c. Apparatus for the treatment of | W. B. McPherson | 725,864 | Apr. 21 | 2685 | 611 | 103 | 1771 |
| Gold-beater skins. Drying | E. H. and M. H. Swift | 730,314 | June 9 | 1438 | 317 | 104 | 1437 |
| Gold crowns. Apparatus for swaging | B. B. Brewer and W. M. H. Burfeind. (Reissue.) | 12,143 | Aug 11 | 2426 | 530 | 105 | 1520 |
| Gold-dredger | O. F. Barnes | 727,262 | May 5 | 816 | 176 | 104 | 175 |
| Gold. Extracting | M. V. Uslar and G. Erlwein | 725,895 | Apr. 21 | 2739 | ------ | 103 | 1782 |
| Gold. Extracting | T. B. Joseph | 732,639 | June 30 | 5823 | ------ | 104 | 2405 |
| Gold-extracting process | T. B. Joseph | 718,633 | Jan. 20 | 2117 | ------ | 102 | 484 |
| Gold-extracting process | T. B. Joseph | 728,397 | May 19 | 2978 | ------ | 104 | 672 |
| Gold-extraction process | T. B. Joseph | 725,257 | Apr. 14 | 1557 | ------ | 103 | 1515 |
| Gold from cyanid solutions. Precipitating | A. Prister | 722,455 | Mar. 10 | 1492 | ------ | 103 | 334 |
| Gold from ores. Apparatus for extracting | H. R. Cassel | 732,709 | July 7 | 31 | 8 | 105 | 10 |
| Gold from ores. Extracting | F. J. Hoyt | 726,294 | Apr. 28 | 3454 | 784 | 103 | 1944 |
| Gold from ores. Extracting | H. R. Cassel | 732,708 | July 7 | 30 | 7 | 105 | 9 |
| Gold from sea-water. Obtaining | J. F. Duke | 734,683 | July 28 | 3669 | 859 | 105 | 823 |
| Gold or silver from slimes. Extracting | J. T. Terry, Jr | 731,631 | June 23 | 3895 | 867 | 104 | 1985 |
| Gold-saving apparatus for dredging-machines | J. H. Gray. (Reissue) | 12,160 | Oct. 13 | 2342 | 524, 525 | 106 | 1766 |
| Gold-saving device | P. H. Carlyon | 738,291 | Sept. 8 | 1493 | 323 | 106 | 336 |
| Gold-saving device | S. C. Szemanski | 747,268 | Dec. 15 | 3615 | 815 | 107 | 1928 |
| Gold-separating apparatus for dredging-machines | J. H. Gray | 719,582 | Feb. 3 | 312 | 72 | 102 | 887 |
| Gold-separator | B. Westhaver | 732,149 | June 30 | 4887 | 1087 | 104 | 2206 |
| Gold-separator | D. C. Knowlton | 733,973 | July 21 | 2327 | 546 | 105 | 523 |
| Gold-separator | W. Snee | 739,231 | Sept. 15 | 3289 | 728 | 106 | 735 |
| Gold-separator | M. C. Wright | 745,949 | Dec. 1 | 1164 | 262 | 107 | 1348 |
| Gold, silver, brass, &c. Composition of matter for use in polishing | R. Scannell | 740,697 | Oct. 6 | 578 | ------ | 106 | 1372 |
| Gold-washing machine | T. F. Turner and H. B. Stewart | 736,464 | Aug. 18 | 2651 | 582, 583 | 105 | 1584 |
| Golf-ball | F. W. Smith, Jr | 720,852 | Feb. 17 | 2657 | 613 | 102 | 1413 |
| Golf-ball | F. H. Richards | 721,463 | Feb. 24 | 3855 | 877 | 102 | 1684 |
| Golf-ball | A. R. Spear | 723,938 | Mar. 31 | 4268 | 959 | 103 | 957 |
| Golf-ball | F. W. Smith, Jr | 726,471 | Apr. 28 | 3787 | 857 | 103 | 2012 |
| Golf-ball | G. Browning and C. E. Boutwood | 726,502 | Apr. 28 | 3879 | 878 | 103 | 2028 |
| Golf-ball | G. Browning and C. E. Boutwood | 726,503 | Apr. 28 | 3880 | 878 | 103 | 2028 |
| Golf-ball | G. Browning and C. E. Boutwood | 726,504 | Apr. 28 | 3882 | 878 | 103 | 2028 |
| Golf-ball | R. Hutchison | 730,127 | June 2 | 1088 | ------ | 104 | 1349 |
| Golf-ball | A. D. Seaman | 730,303 | June 9 | 1423 | 313 | 104 | 1437 |
| Golf-ball | R. Reach and G. B. Staples | 731,614 | June 23 | 3862 | 860 | 104 | 1974 |
| Golf-ball | C. T. Thompson | 731,821 | June 23 | 4239 | 944 | 104 | 2058 |

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| Golf-ball | E. Kempshall | 733,216 | July 7 | 919 | 222 | 105 | 192 |
| Golf-ball | A. W. P. Cramer | 734,256 | July 21 | 2885 | 674 | 105 | 645 |
| Golf-ball | C. T. Kingzett | 734,462 | July 21 | 3251 | 764 | 105 | 720 |
| Golf-ball | C. T. Kingzett | 734,463 | July 21 | 3253 | 765 | 105 | 720 |
| Golf-ball | C. Davis | 736,230 | Aug. 11 | 2237 | 482 | 105 | 1477 |
| Golf-ball | C. Davis | 736,231 | Aug. 11 | 2238 | 483 | 105 | 1477 |
| Golf-ball | C. Davis | 736,232 | Aug. 11 | 2238 | 483 | 105 | 1478 |
| Golf-ball | C. Davis | 736,233 | Aug. 11 | 2240 | 483 | 105 | 1478 |
| Golf-ball | W. M. Short | 737,031 | Aug. 25 | 3741 | 830 | 105 | 1831 |
| Golf-ball | C. E. Boutwood | 737,608 | Sept. 1 | 252 | 54 | 106 | 58 |
| Golf-ball | J. H. Roger | 743,105 | Nov. 3 | 549 | 118 | 107 | 114 |
| Golf-club | J. Govan | 732,011 | Mar. 3 | 666 | 148 | 103 | 144 |
| Golf-club | F. B. Felton | 733,258 | Mar. 24 | 2987 | 672 | 103 | 675 |
| Golf-club | A. F. Knight | 733,534 | Mar. 24 | 3510 | 785 | 103 | 779 |
| Golf-club | C. M. Burnam | 737,086 | May 5 | 507 | 109 | 104 | 111 |
| Golf-club | G. W. Mattern | 737,819 | May 12 | 1889 | 421 | 104 | 420 |
| Golf-club | F. W. Taylor | 732,136 | June 30 | 4858 | 1081 | 104 | 2200 |
| Golf-club | F. W. Taylor | 732,137 | June 30 | 4860 | 1082 | 104 | 2200 |
| Golf-club | O. Heeren | 734,065 | July 21 | 2519 | 588 | 105 | 566 |
| Golf-club | W. J. Travis | 739,458 | Sept. 22 | 3725 | 829 | 106 | 845 |
| Golf-club | R. H. White | 740,500 | Oct. 6 | 230 | 45 | 106 | 1295 |
| Golf-club | W. C. Carnegie | 742,004 | Oct. 20 | 3121 | 696 | 106 | 1942 |
| Golf-club | W. Dunn | 745,044 | Nov. 24 | 4333 | 937 | 107 | 969 |
| Golf game. Indoor- | H. H. Taylor | 730,191 | Feb. 10 | 1438 | 328 | 102 | 1144 |
| Golf or other club | J. D. Dunn | 736,885 | May 5 | 104 | 24 | 104 | 25 |
| Golf-stick | M. R. Swift | 722,927 | Mar. 17 | 2379 | 532 | 103 | 535 |
| Goods. Apparatus for collecting and hoisting | P. W. Sieurin | 739,933 | Sept. 29 | 4626 | 1038 | 106 | 1056 |
| Goods holding and displaying device | G. W. Boyd | 736,813 | Aug. 18 | 3332 | 738 | 105 | 1724 |
| Goods in vats. Machine for automatically folding | S. C. Turner | 717,950 | Jan. 6 | 807 | 182 | 102 | 173 |
| Goods. Means for packing | E. and F. Cranz | 723,245 | Mar. 24 | 2964 | 665 | 103 | 671 |
| Goose-call | D. S. Fuller | 726,277 | Apr. 28 | 3424 | 779 | 103 | 1938 |
| Gopher-trap | J. M. Merritt | 718,853 | Jan. 20 | 2515 | 560 | 102 | 563 |
| Gopher-trap | C. H. Birdsall | 744,029 | Nov. 17 | 2439 | 524 | 107 | 551 |
| Governing and reversing mechanism. Gas-engine | E. Loker | 732,202 | June 30 | 4981 | 1109 | 104 | 2226 |
| Governing fluid-pressure impulse-motors. Apparatus for | J. W. Macfarlane | 726,175 | Apr. 21 | 3207 | 726, 727, 728 | 103 | 1878 |
| Governing mechanism | F. C. Rinsche | 729,416 | May 26 | 4823 | 1070 | 104 | 1070 |
| Governing mechanism. Gas-engine | L. F. Burger | 725,668 | Apr. 21 | 2335 | 527 | 103 | 1694 |
| Governing mechanism. Speed- | L. F. Burger | 725,669 | Apr. 21 | 2338 | 528 | 103 | 1694 |
| Governing mechanism. Valve- | W. W. Spinney | 733,757 | July 14 | 1884 | 444, 445 | 105 | 414 |
| Governing-valve gear for explosive and internal-combustion engines. | F. M. Rites | 741,976 | Oct. 20 | 3065 | 685 | 106 | 1932 |
| Governor | L. J. Watson | 721,846 | Mar. 3 | 344 | 76 | 103 | 75 |
| Governor | R. Conrader | 722,564 | Mar. 10 | 1694 | 378 | 103 | 379 |
| Governor | E. T. Sederholm | 727,466 | May 5 | 1195 | 264, 265 | 104 | 258 |
| Governor | N. Lombard | 727,652 | May 12 | 1556 | 351 | 104 | 352 |
| Governor | H. M. McCall | 728,748 | May 19 | 3634 | 807 | 104 | 811 |
| Governor | W. P. O'Brien | 729,888 | June 2 | 677 | 149 | 104 | 1266 |
| Governor | A. R. Dodge | 730,350 | June 9 | 1506 | 334, 335 | 104 | 1451 |
| Governor | J. W. Neil | 734,737 | July 28 | 3783 | 883 | 105 | 845 |
| Governor | N. Lombard | 736,276 | Aug. 11 | 2317 | 502, 503, 504 | 105 | 1495 |
| Governor | G. B. Petsche | 736,542 | Aug. 18 | 2807 | 614 | 105 | 1618 |
| Governor | F. M. Rites | 737,275 | Aug. 25 | 4188 | 932, 933 | 105 | 1924 |
| Governor | F. M. Rites | 737,486 | Aug. 25 | 4587 | 1028 | 105 | 2012 |
| Governor | H. C. Sergeant | 738,634 | Sept. 8 | 2175 | 476 | 106 | 483 |
| Governor | J. Scherer | 740,473 | Oct. 6 | 172 | 33 | 106 | 1282 |
| Governor | J. B. O'Donnell | 740,688 | Oct. 6 | 561 | 125 | 106 | 1368 |
| Governor | R. Harris | 745,056 | Nov. 24 | 4357 | 941 | 107 | 974 |
| Governor | C. L. Funk | 746,948 | Dec. 15 | 3015 | 692 | 107 | 1795 |
| Governor | E. W. Evans | 748,357 | Dec. 29 | 5648 | 1288 | 107 | 2418 |
| Governor-adjusting mechanism | L. Skinner and J. C. Glenn | 748,223 | Dec. 29 | 5430 | 1238 | 107 | 2371 |
| Governor and gas and air mixer for explosive-engines. Combined | W. F. Meister and W. S. Pattin | 729,377 | May 26 | 4758 | 1052 | 104 | 1056 |
| Governor and throttle-valve-controlling mechanism | R. B. Hain | 719,328 | Jan. 27 | 3436 | 766 | 102 | 772 |
| Governor attachment | W. H. Beckett | 738,973 | Sept. 15 | 2830 | 627 | 106 | 639 |
| Governor. Automatic | A. R. Dodge | 742,842 | Nov. 3 | 41 | 11 | 107 | 11 |
| Governor. Automatic | O. Junggren | 742,874 | Nov. 3 | 95 | 23 | 107 | 22 |
| Governor. Centrifugal | E. Mathieu | 729,625 | June 2 | 181 | 43 | 104 | 1164 |
| Governor. Centrifugal | N. Lombard | 736,277 | Aug. 11 | 2324 | 504 | 105 | 1497 |
| Governor. Centrifugal-separator | H. F. Hassler | 745,057 | Nov. 24 | 4359 | 941 | 107 | 974 |
| Governor. Coupling- | W. D. Lindsay | 746,715 | Dec. 15 | 2550 | 586 | 107 | 1689 |
| Governor. Electromechanical | E. Gray | 719,325 | Jan. 27 | 3430 | 765 | 102 | 771 |
| Governor. Engine- | O. Hove | 720,432 | Feb. 10 | 1875 | 427 | 102 | 1236 |
| Governor. Engine- | J. H. Snell | 725,500 | Apr. 14 | 2014 | 454, 455 | 103 | 1612 |
| Governor. Engine- | J. Hardill | 728,707 | May 19 | 3560 | 791 | 104 | 795 |
| Governor. Engine- | C. R. McGahey | 730,472 | June 9 | 1738 | 389 | 104 | 1500 |
| Governor. Engine- | D. W. Payne | 735,408 | Aug. 4 | 702 | 150 | 105 | 1130 |
| Governor. Engine- | W. O. Worth | 735,930 | Aug. 11 | 1709 | 364, 365 | 105 | 1364 |
| Governor. Engine- | J. E. Wheelock | 738,382 | Sept. 8 | 1699 | 369 | 106 | 381 |
| Governor. Engine- | C. F. Knothe | 738,547 | Sept. 8 | 2019 | 439 | 106 | 449 |
| Governor. Engine- | E. M. Hewlett | 745,349 | Dec. 1 | 59 | 13 | 107 | 1113 |
| Governor. Explosive-engine | E. Uhlin | 732,016 | June 23 | 4608 | 1028 | 104 | 2135 |
| Governor for fluid-compressors. Automatic | N. A. Christensen | 738,161 | Sept. 8 | 1240 | 269 | 106 | 284 |
| Governor for gas-engines. Electric | V. G. Apple | 727,565 | May 12 | 1391 | 313 | 104 | 318 |
| Governor for gasolene-engines. Sparking-device | O. J. Root | 733,752 | July 14 | 1875 | 442, 443 | 105 | 412 |
| Governor for spring-motors. Speed- | F. R. Daudt | 743,465 | Nov. 10 | 1349 | 276 | 107 | 303 |

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| Governor for steam engines or pumps. Automatic pressure-actuated | J. H. Clark | 742,290 | Oct. 27 | 3713 | 829 | 106 | 2080 |
| Governor. Gas-engine | J. S. Thurman | 744,438 | Nov. 17 | 3218 | 690 | 107 | 718 |
| Governor. Hydrocarbon-engine | C. W. Weiss | 723,957 | Mar. 31 | 4298 | 965 | 103 | 963 |
| Governor. Inertia- | F. D. Howe and L. T. Gibbs | 744,198 | Nov. 17 | 2785 | 594 | 107 | 622 |
| Governor. Marine-engine | E. C. Buck | 721,012 | Feb. 17 | 2970 | 683 | 102 | 1478 |
| Governor. Marine-engine | P. V. Cornils | 726,647 | Apr. 28 | 4151 | 936 | 103 | 2081 |
| Governor. Marine-engine | G. F. Lasher | 732,567 | June 30 | 5699 | 1266 | 104 | 2376 |
| Governor. Marine-engine | I. Corneliussen | 736,363 | Aug. 18 | 2471 | 541 | 105 | 1546 |
| Governor mechanism. Explosive-engine | W. J. Wright | 735,029 | July 28 | 4321 | 1004 | 105 | 957 |
| Governor. Pneumatic-pressure | W. H. Nightingale | 730,791 | June 9 | 2286 | 507<br>508 | 104 | 1618 |
| Governor regulator. Speed- | I. E. Osman | 721,083 | Feb. 17 | 3097 | 712 | 102 | 1508 |
| Governor. Reversible shaft- | C. R. Minor | 747,626 | Dec. 22 | 4264 | 959 | 107 | 2092 |
| Governor. Rotary-engine | J. F. Craig and T. V. Fleming | 722,085 | Mar. 3 | 785 | 176 | 103 | 170 |
| Governor. Speed- | R. Weber | 719,283 | Jan. 27 | 3344 | 747 | 102 | 752 |
| Governor. Speed- | C. E. Sterne | 723,417 | Mar. 24 | 3292 | 736 | 103 | 735 |
| Governor. Speed- | M. C. White and O. C. Duryea | 724,765 | Apr. 7 | 643 | 151 | 103 | 1350 |
| Governor. Speed- | J. T. Rossiter | 725,591 | Apr. 14 | 2165 | 490<br>491 | 103 | 1645 |
| Governor. Speed- | W. S. McKinney | 741,590 | Oct. 13 | 2308 | 517 | 106 | 1757 |
| Governor speed-regulating device. Engine- | R. C. Kimble | 720,934 | Feb. 17 | 2816 | 646 | 102 | 1446 |
| Governor-spindle-actuating device | G. B. Petsche | 742,229 | Oct. 27 | 3592 | 803 | 106 | 2052 |
| Governor. Steam-engine | P. Richemond | 723,185 | Mar. 17 | 2850 | 640 | 103 | 635 |
| Governor. Steam-engine | W. O. Webber | 745,748 | Dec. 1 | 773 | 177 | 107 | 1263 |
| Governor. Vapor-engine | A. Buchner and E. P. McClure | 748,477 | Dec. 29 | 5888 | 1338 | 107 | 2471 |
| Gowns. Guide for the design of ladies' | A. B. Rheinheimer | 728,498 | May 19 | 3157 | 699 | 104 | 709 |
| Grab opening, closing, raising, or lowering apparatus. | H. Shoosmith | 743,577 | Nov. 10 | 1566 | 328 | 107 | 351 |
| Grader | J. Gottlander | 720,685 | Feb. 17 | 2384 | 546<br>547 | 102 | 1354 |
| Grader. Elevating- | T. R. McKnight | 727,671 | May 12 | 1591 | 359<br>360 | 104 | 360 |
| Grader. Pneumatic | W. S. Osborne and E. C. Bryant | 744,390 | Nov. 17 | 3133 | 673 | 107 | 700 |
| Grader. Road- | J. T. Hall and W. H. Hitchcock | 737,611 | Sept. 1 | 101 | 22 | 106 | 24 |
| Grader. Road- | J. T. Hall | 737,612 | Sept. 1 | 103 | 22 | 106 | 25 |
| Grading and ditching machine | T. J. Gray | 737,224 | Aug. 25 | 4085 | 907<br>908<br>909<br>910 | 105 | 1902 |
| Grading and ditching machine | T. J. Gray | 743,487 | Nov. 10 | 1390 | 285<br>286<br>287<br>288 | 107 | 312 |
| Grading and ditching machine. Road- | R. Russell | 727,693 | May 12 | 1634 | 371 | 104 | 370 |
| Grading-machine | B. F. Edes | 728,163 | May 12 | 2513 | 559 | 104 | 552 |
| Grading machine. Road- | H. K. Clemons | 741,768 | Oct. 20 | 2656 | 594 | 106 | 1846 |
| Graduate | C. H. Smith | 747,249 | Dec. 15 | 3570 | 808 | 107 | 1918 |
| Grain and fertilizer drill | F. N. Isham | 722,407 | Mar. 10 | 1394 | 307<br>308 | 103 | 313 |
| Grain and seed separator | J. K. White | 738,137 | Sept. 1 | 1158 | 256 | 106 | 249 |
| Grain bagging and weighing machine | J. B. Williams | 736,663 | Aug. 18 | 3039 | 671 | 105 | 1663 |
| Grain-bin | G. M. Moulton and J. M. Witherspoon. | 732,102 | June 30 | 4780 | 1067 | 104 | 2184 |
| Grain-bin ventilator | H. A. Hannum | 740,754 | Oct. 6 | 684 | 155 | 106 | 1393 |
| Grain-binder | J. W. Webster | 723,955 | Mar. 31 | 4295 | 964 | 103 | 962 |
| Grain-binder | C. Colahan | 726,256 | Apr. 28 | 3373 | 766 | 103 | 1927 |
| Grain-binder | C. R. Straughn | 745,082 | Nov. 24 | 4420 | 955<br>956<br>657 | 107 | 985 |
| Grain-binder | C. A. A. Rand | 746,155 | Dec. 8 | 1549 | 347 | 107 | 1451 |
| Grain-binder breastplate stripping device | E. A. Johnston | 732,355 | June 30 | 5287 | 1172 | 104 | 2288 |
| Grain-binder cord-holder | E. A. Johnston | 737,246 | Aug. 25 | 4138 | 920<br>921 | 105 | 1914 |
| Grain-binder cord-knotter | E. A. Johnston | 740,139 | Sept. 29 | 4996 | 1122<br>1123 | 106 | 1134 |
| Grain-binder knotter | W. Newman | 729,393 | May 26 | 4781 | 1058<br>1059 | 104 | 1061 |
| Grain-binder knotter | G. W. Whittington | 745,941 | Dec. 1 | 1150 | 258 | 107 | 1344 |
| Grain-binder knotting mechanism | J. F. Appleby | 744,153 | Nov. 17 | 2684 | 572 | 107 | 601 |
| Grain-binder needle | F. E. Van Loan | 720,861 | Feb. 17 | 2669 | 616 | 102 | 1415 |
| Grain-binder needle | P. H. Bieman | 745,769 | Dec. 1 | 815 | 185 | 107 | 1272 |
| Grain-binder shocker attachment | C. J. Dowling | 746,473 | Dec. 8 | 2111 | 485<br>486 | 107 | 1570 |
| Grain-binder twine-can | P. Hanson | 745,834 | Dec. 1 | 963 | 216<br>217 | 107 | 1304 |
| Grain-binder twine-can | P. Hanson | 745,835 | Dec. 1 | 966 | 217 | 107 | 1304 |
| Grain cleaner and distributer | J. Wilhelm | 732,248 | June 30 | 5079 | 1129<br>1130 | 104 | 2246 |
| Grain-cleaner riddle | E. Early | 744,516 | Nov. 17 | 3351 | 722 | 107 | 746 |
| Grain cleaning and scouring machine | H. C. Jeffers | 736,264 | Aug. 11 | 2297 | 497 | 105 | 1490 |
| Grain cleaning, scouring, and cooling device | F. W. Hess | 746,508 | Dec. 8 | 2169 | 499 | 107 | 1582 |
| Grain-conveyer | J. Mabus and F. L. Day | 737,643 | Sept. 1 | 152 | 33 | 106 | 36 |
| Grain-cradle | H. L. Hewitt | 724,182 | Mar. 31 | 4754 | 1066 | 103 | 1053 |
| Grain-cradle | J. C. Counts | 734,672 | July 28 | 3648 | 856 | 105 | 820 |
| Grain-dislodger | H. E. Koch | 723,880 | Mar. 31 | 4134 | 931 | 103 | 927 |
| Grain-divider | J. W. Pridmore | 742,489 | Oct. 27 | 4060 | 912 | 106 | 2150 |
| Grain-drier | J. G. King and J. Edwards | 723,680 | Mar. 24 | 3754 | 843 | 103 | 830 |
| Grain-drier | H. T. Goss | 733,030 | July 7 | 581 | 141 | 105 | 124 |
| Grain-drier | J. G. King | 748,079 | Dec. 29 | 5167 | 1168 | 107 | 2314 |
| Grain drier and cooler | C. F. Verrell | 726,805 | Apr. 28 | 4454 | 1006 | 103 | 2145 |
| Grain drier and cooler. Rotary | A. Johnson | 732,561 | June 30 | 5688 | 1263 | 104 | 2374 |
| Grain-drying means | L. W. Liles | 722,118 | Mar. 3 | 846 | 188<br>189 | 103 | 182 |
| Grain-drill | F. R. Packham | 718,512 | Jan. 13 | 1886 | 413<br>414 | 102 | 422 |

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| Grain-drill | J. Steep | 719,272 | Jan. 27 | 3322 | 743 | 102 | 747 |
| Grain-drill | F. E. Marsh | 720,720 | Feb. 17 | 2451 | 560 | 102 | 1368 |
| Grain-drill | C. H. Mason | 725,465 | Apr. 14 | 1945 | 436 | 103 | 1597 |
| Grain-drill | A. N. Norris | 728,492 | May 19 | 3149 | 696, 697 | 104 | 707 |
| Grain-drill | C. A. Hardy | 732,633 | June 30 | 5814 | 1289 | 104 | 2403 |
| Grain-drill | G. P. Oates and C. E. Patric | 737,010 | Aug. 25 | 3712 | 823, 824 | 105 | 1825 |
| Grain-drill | D. B. Saltsman | 737,152 | Aug. 25 | 3941 | 876 | 105 | 1873 |
| Grain-drill | D. B. Saltsman | 737,153 | Aug. 25 | 3942 | 876 | 105 | 1873 |
| Grain-drill | J. H. Kindsvater | 738,816 | Sept. 15 | 2553 | 561, 562 | 106 | 580 |
| Grain-drill | H. C. Ham | 739,172 | Sept. 15 | 3179 | 703 | 106 | 711 |
| Grain-drill | R. Cole | 740,091 | Sept. 29 | 4913 | 1102 | 106 | 1117 |
| Grain-drill | J. A. Lussier | 744,375 | Nov. 17 | 3104 | 667 | 107 | 693 |
| Grain-drill | D. B. Saltsman | 744,802 | Nov. 24 | 3873 | 833 | 107 | 874 |
| Grain-drill | G. M. Kingsbury | 745,197 | Nov. 24 | 4658 | 1014 | 107 | 1036 |
| Grain-drill and fertilizer-distributer | R. A. Coffee | 746,676 | Dec. 15 | 2491 | 569, 570 | 107 | 1676 |
| Grain-drill attachment | P. H. Murphy | 743,311 | Nov. 3 | 955 | 208 | 107 | 205 |
| Grain-drill discharge-tube | W. Fetzer | 737,379 | Aug. 25 | 4376 | 975 | 105 | 1965 |
| Grain-drill disk attachment | C. A. Hardy | 728,167 | May 12 | 2526 | 561 | 104 | 554 |
| Grain-drill disk furrow-opener | D. B. Saltsman | 737,151 | Aug. 25 | 3940 | 876 | 105 | 1872 |
| Grain-drill disk furrow-openers. Bearing for | F. R. Packham | 718,513 | Jan. 13 | 1888 | 414 | 102 | 422 |
| Grain-drill distributer | G. P. Oates | 737,011 | Aug. 25 | 3713 | 824 | 105 | 1826 |
| Grain-drill fertilizer attachment | H. C. Ham | 736,962 | Aug. 25 | 3625 | 803 | 105 | 1806 |
| Grain-drill gearing | C. H. Pelton | 736,436 | Aug. 18 | 2604 | 572 | 105 | 1573 |
| Grain-drill seed-tube | L. E. Roby | 745,671 | Dec. 1 | 645 | 149 | 107 | 1235 |
| Grain-drill seed-tube connection | F. R. Packham | 734,086 | July 21 | 2557 | 597 | 105 | 576 |
| Grain dump and elevator. Portable | J. Rocke | 721,466 | Feb. 24 | 3859 | 878 | 102 | 1685 |
| Grain dump and elevator. Portable | E. and H. V. Schroeder | 733,430 | July 14 | 1320 | 311, 312 | 105 | 296 |
| Grain-elevator | J. F. White | 722,788 | Mar. 17 | 2137 | 478 | 103 | 487 |
| Grain-elevator | J. B. Schuman | 728,771 | May 19 | 3671 | 817 | 104 | 818 |
| Grain-elevator | C. R. Benedict | 731,268 | June 16 | 3179 | 708 | 104 | 1820 |
| Grain-elevator | C. F. Dueringer | 733,824 | July 14 | 2028 | 477 | 105 | 443 |
| Grain elevator and weigher | C. Bradford | 732,335 | June 30 | 5231 | 1161 | 104 | 2277 |
| Grain-elevator construction | I. Cohen | 729,135 | May 26 | 4327 | 956 | 104 | 966 |
| Grain-elevator. Pneumatic | J. C. Rieth | 717,926 | Jan. 6 | 769 | 173 | 102 | 165 |
| Grain hulling and scouring machine | W. E. Larmon | 747,556 | Dec. 22 | 4134 | 927, 928 | 107 | 2063 |
| Grain-hulling machine | A. E. Hofland | 720,921 | Feb. 17 | 2795 | 641, 642 | 102 | 1441 |
| Grain-loader | D. Barnes | 734,292 | July 21 | 2970 | 698 | 105 | 661 |
| Grain loading or unloading machine | J. T. Smith | 734,983 | July 28 | 4246 | 986, 987 | 105 | 940 |
| Grain, &c. Machine for scouring | J. H. Pendleton | 721,649 | Feb. 24 | 4219 | 959 | 102 | 1765 |
| Grain. Machine for separating garlic and cockle from | J. H. Dawson | 718,321 | Jan. 13 | 1492 | 331, 332 | 102 | 336 |
| Grain-meter | J. S. Blakely | 742,959 | Nov. 3 | 242 | 54 | 107 | 52 |
| Grain or fertilizer drill or distributer | B. F. Robinson | 733,512 | July 14 | 1462 | 348 | 105 | 327 |
| Grain or other products. Apparatus for purifying | W. T. McCray | 737,855 | Sept. 1 | 578 | 127, 128 | 106 | 128 |
| Grain or the like. Appliance for elevating and discharging | J. and F. H. Haviland and J. Farmer | 738,798 | Sept. 15 | 2521 | 554, 555 | 106 | 572 |
| Grain-rick storm-protector | J. L. McFarlane | 720,611 | Feb. 17 | 2259 | 518 | 102 | 1328 |
| Grain scourer and cleaner | C. Stone | 742,518 | Oct. 27 | 4118 | 927 | 106 | 2163 |
| Grain scourer and separator | W. E. Larmon | 733,978 | July 21 | 2335 | 548 | 105 | 524 |
| Grain screen and riddle | G. H. Mood and E. R. Lyman | 729,883 | June 2 | 669 | 147 | 104 | 1265 |
| Grain-separating screen | C. Closz | 721,940 | Mar. 3 | 541 | 119 | 103 | 119 |
| Grain-separator | C. B. and C. T. Hixson | 723,670 | Mar. 24 | 3741 | 839, 840 | 103 | 827 |
| Grain-separator | J. E. Mitchell | 732,577 | June 30 | 5715 | 1270 | 104 | 2379 |
| Grain-separator | P. Eagen | 736,370 | Aug. 18 | 2485 | 545, 546 | 105 | 1549 |
| Grain-separator | R. S. Rinker | 738,699 | Sept. 8 | 2315 | 509 | 106 | 511 |
| Grain-separator | W. M. Russell | 739,349 | Sept. 22 | 3490 | 782 | 106 | 795 |
| Grain-separator | E. M. Kramer | 740,575 | Oct. 6 | 381 | 79 | 106 | 1328 |
| Grain-separator | E. B. Millard | 741,974 | Oct. 20 | 3062 | 684 | 106 | 1931 |
| Grain-separator | H. J. Silvis and H. White | 744,696 | Nov. 17 | 3645 | 786 | 107 | 807 |
| Grain separator and grader | B. F. Smith | 734,761 | July 28 | 3833 | 894 | 105 | 855 |
| Grain-separator attachment | J. Kennedy | 724,480 | Apr. 7 | 110 | 27 | 103 | 1193 |
| Grain-separator blower-pipe | J. Riester | 718,522 | Jan. 13 | 1905 | 418 | 102 | 426 |
| Grain-separator elevator | G. F. Conner | 722,945 | Mar. 17 | 2409 | 538 | 103 | 541 |
| Grain-separator seed-cleaner | L. Thortvedt | 718,741 | Jan. 20 | 2327 | 513, 514 | 102 | 525 |
| Grain separator. Tangled | A. A. Hamilton | 734,322 | July 21 | 3018 | 711 | 105 | 672 |
| Grain-shocker | E. F. Ponath | 723,020 | Mar. 17 | 2531 | 567, 568, 569 | 103 | 567 |
| Grain-shocker | C. E. Lovercheck | 747,195 | Dec. 15 | 3463 | 785, 786, 787 | 107 | 1896 |
| Grain sorter or separator | F. L. Block | 741,616 | Oct. 20 | 2362 | 528, 529 | 106 | 1785 |
| Grain-steaming apparatus | P. Provost | 741,831 | Oct. 20 | 2765 | 617 | 106 | 1871 |
| Grain-steepers. Combined clearer and lifter for | V. Lapp | 733,055 | July 7 | 633 | 154 | 105 | 134 |
| Grain-storage tank | G. H. Warren and S. Fontain | 741,600 | Oct. 13 | 2329 | 522 | 106 | 1763 |
| Grain. Treating | H. J. Caldwell and J. R. Barr | 724,258 | Mar. 31 | 4918 | 1100 | 103 | 1085 |
| Grain treating and drying apparatus | H. J. Caldwell and J. R. Barr | 728,859 | May 26 | 3851 | 856, 857 | 104 | 870 |
| Grain-treating apparatus | A. S. Stewart | 732,132 | June 30 | 4853 | 1080 | 104 | 2198 |
| Graining machine. Molding | B. W. Augustine | 731,011 | June 16 | 2715 | 606 | 104 | 1728 |
| Graining-tool | M. J. Davis | 746,684 | Dec. 15 | 2507 | 576 | 107 | 1680 |
| Gramophone-needle box | H. Sheble | 730,169 | June 2 | 1155 | 260 | 104 | 1363 |
| Gramophone or phonograph | H. Jones and R. L. Gibson | 726,937 | May 5 | 195 | 46 | 104 | 43 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|---|
| | | | | Spec. | Drg. | Vol. | Page. |
| Gramophone reproducer-support | E. R. Johnson | 742,666 | Oct. 27 | 4391 | 991 | 106 | 2221 |
| Gramophones in and out of operation. Device for throwing | T. Birnbaum | 732,820 | July 7 | 229 | 58 | 105 | 51 |
| Graphic processes. Developing, recording, or transmitting | G. B. Rossman | 742,065 | Oct. 20 | 3245 | 727, 728, 729, 730 | 106 | 1969 |
| Graphite lubricator | R. Pielicke | 744,101 | Nov. 17 | 2580 | 551 | 107 | 579 |
| Graphite lubricator. Flaked | A. D. Homard | 746,837 | Dec. 15 | 2789 | 643 | 107 | 1743 |
| Graphite or other materials from associated impurities. Apparatus for separating | I. F. Good | 745,960 | Dec. 1 | 1191 | 267 | 107 | 1354 |
| Graphite. Purifying | M. F. R. Glogner | 736,381 | Aug. 18 | 2501 | 549 | 105 | 1552 |
| Graphite-separator | J. H. Davis | 722,211 | Mar. 10 | 1038 | 229 | 103 | 236 |
| Graphophone | C. S. Tainter | 730,986 | June 16 | 2663 | 593, 594 | 104 | 1717 |
| Graphophone, phonograph, &c | W. C. Runge | 725,878 | Apr. 21 | 2708 | 616 | 103 | 1776 |
| Graphophone-reproducer | W. Hart | 727,357 | May 5 | 997 | 217 | 104 | 215 |
| Graphophone-reproducer | F. L. Capps | 727,899 | May 12 | 2038 | 454 | 104 | 452 |
| Grapple | W. Kirry | 720,700 | Feb. 17 | 2419 | 553 | 102 | 1361 |
| Grapple | P. Rasmussen | 726,826 | Apr. 28 | 4491 | 1013 | 103 | 2153 |
| Grapple | M. S. Meaders | 741,583 | Nov. 17 | 3457 | 745 | 107 | 767 |
| Grapple | F. M. Hamann | 747,065 | Dec. 15 | 3231 | 737 | 107 | 1845 |
| Grappling-fork | A. C. Houdyshell | 743,875 | Nov. 10 | 2097 | 448 | 107 | 462 |
| Grate | I. D. Smead | 718,536 | Jan. 13 | 1928 | 422 | 102 | 430 |
| Grate | C. Nunan | 723,705 | Mar. 24 | 3801 | 855 | 103 | 840 |
| Grate | B. McCaughey | 725,757 | Apr. 21 | 2491 | 565 | 103 | 1730 |
| Grate | W. Wewers | 737,540 | Aug. 25 | 4693 | 1052 | 105 | 2037 |
| Grate | C. C. Sanders | 739,724 | Sept. 22 | 4206 | 941 | 106 | 950 |
| Grate | L. F. Lyne | 740,153 | Sept. 29 | 5022 | 1128 | 106 | 1140 |
| Grate | H. E. Parson | 740,463 | Oct. 6 | 155 | 31 | 106 | 1279 |
| Grate and smoke-consuming fire-bridge. Combined | A. Weil | 730,993 | June 16 | 2679 | 597 | 104 | 1721 |
| Grate attachment | W. A. Moreland | 742,210 | Oct. 27 | 3554 | 793 | 106 | 2044 |
| Grate-bar | F. and J. F. Kernan | 730,772 | June 9 | 2255 | 501 | 104 | 1613 |
| Grate-bar | O. Schimansky | 737,156 | Aug. 25 | 3946 | 877 | 105 | 1873 |
| Grate-bar | T. J. Pritchard | 741,546 | Oct. 13 | 2225 | 495 | 106 | 1741 |
| Grate. Domestic fire | J. J. Chavasse | 718,603 | Jan. 20 | 2072 | 450, 451 | 102 | 475 |
| Grate. Dumping | F. Torry | 735,623 | Aug. 4 | 1127 | 238 | 105 | 1221 |
| Grate. Duplex | J. O. Little | 740,880 | Oct. 6 | 913 | 205 | 106 | 1441 |
| Grate. Fire | I. Schoeffler | 731,229 | June 16 | 3113 | 690 | 104 | 1807 |
| Grate. Foldable | C. A. Larson | 718,714 | Jan. 20 | 2276 | 500 | 102 | 515 |
| Grate. Hollow blast | S. P. Grey | 739,491 | Sept. 22 | 3779 | 845 | 106 | 858 |
| Grate. Rocking | E. F. Edgar | 732,722 | July 7 | 48 | 12 | 105 | 13 |
| Grate. Shaking | A. B. Marshall, R. Rouse, Jr., and G. G. Kniffin. | 725,738 | Apr. 21 | 2459 | 557 | 103 | 1722 |
| Grate. Shaking | G. A. Gumphert | 742,631 | Oct. 27 | 4326 | 973, 974 | 106 | 2206 |
| Grate. Tubular | F. C. Williams | 720,867 | Feb. 17 | 2682 | 619, 620 | 102 | 1418 |
| Grater | J. Eckhardt | 743,472 | Nov. 10 | 1364 | 279 | 107 | 307 |
| Grater | O. J. Schroeter | 744,416 | Nov. 17 | 3179 | 681, 682 | 107 | 709 |
| Grater and masher. Vegetable | E. Hemstram | 731,362 | June 16 | 3355 | 750 | 104 | 1857 |
| Grater. Nutmeg | A. H. Hill | 739,312 | Sept. 22 | 3440 | 767 | 106 | 784 |
| Grater. Rotary vegetable | H. H. Lyon | 744,774 | Nov. 24 | 3824 | 824 | 107 | 863 |
| Grater. Vegetable | F. L. Fahrenholz | 741,898 | Oct. 20 | 2887 | 644 | 106 | 1896 |
| Grating-machine | H. Cremer | 739,836 | Sept. 29 | 4415 | 991 | 106 | 1013 |
| Grating. Cell | P. H. Gorman | 728,456 | May 19 | 3084 | 681 | 104 | 693 |
| Grave-cope | E. B. Blood | 728,191 | May 19 | 2573 | 574 | 104 | 587 |
| Grave-covering | B. A. Buchanan | 728,081 | May 12 | 2370 | 527 | 104 | 522 |
| Grave-filler | S. Schlachter | 741,594 | Oct. 13 | 2320 | 519 | 106 | 1761 |
| Grave-protector | F. Sklenske | 726,470 | Apr. 28 | 3786 | 857 | 103 | 2012 |
| Gravity. Apparatus for demonstrating the laws of | J. S. Hemenway | 720,426 | Feb. 10 | 1866 | 425 | 102 | 1234 |
| Gravity-lock | G. H. Stout | 739,945 | Sept. 29 | 4648 | 1043 | 106 | 1061 |
| Gravity-lock | G. H. Stout | 740,061 | Sept. 29 | 4866 | 1090, 1091 | 106 | 1107 |
| Gravity-motor | J. R. Wright | 725,909 | Apr. 21 | 2760 | 628, 629 | 103 | 1786 |
| Grazing-stake | J. R. McGoron | 722,531 | Mar. 10 | 1636 | 361 | 103 | 367 |
| Grease, &c. Composition for removing | H. D. Sudman | 731,521 | June 23 | 3682 | ----- | 104 | 1943 |
| Grease-cup | F. B. Cosper | 721,023 | Feb. 17 | 2988 | 687 | 102 | 1482 |
| Grease-cup | G. Reimers | 723,209 | Mar. 17 | 2892 | 648 | 103 | 643 |
| Grease-cup | J. F. Lewis | 726,314 | Apr. 28 | 3506 | 793 | 103 | 1954 |
| Grease-cup. Automatic compression | D. B. Williams | 747,524 | Dec. 22 | 4081 | 917 | 107 | 2050 |
| Grease-cup. Compression | F. N. Gardner | 737,218 | Aug. 25 | 4075 | 905 | 105 | 1900 |
| Grease-extracting apparatus | S. L. Wolff | 747,108 | Dec. 15 | 3308 | 753 | 107 | 1864 |
| Grease-feeder | C. T. Prehn | 739,714 | Sept. 22 | 4188 | 936 | 106 | 946 |
| Grease. Separating | E. R. Edson | 729,207 | May 26 | 4630 | 1024 | 104 | 1031 |
| Grease-separating apparatus | E. R. Edson | 739,998 | Sept. 29 | 4743 | 1067 | 106 | 1080 |
| Grease-separator | R. Allert | 735,191 | Aug. 4 | 310 | 60 | 105 | 1047 |
| Grease-separator | R. Allert | 735,192 | Aug. 4 | 311 | 61 | 105 | 1047 |
| Grease-separator | R. Allert | 735,193 | Aug. 4 | 312 | 61 | 105 | 1047 |
| Grease-trap | A. S. Newton | 723,618 | Mar. 24 | 3656 | 818 | 103 | 809 |
| Greenhouse | F. S. Ford | 733,829 | July 14 | 2039 | 480 | 105 | 445 |
| Greenhouse-bench | P. M. Pierson | 737,469 | Aug. 25 | 4556 | 1021 | 105 | 2005 |
| Greenhouse construction | F. Rinker | 739,559 | Sept. 22 | 3884 | 871 | 106 | 880 |
| Greenhouse gutter and roof-support | W. O. Johnston and P. J. Foley | 737,110 | Aug. 25 | 3873 | 860 | 105 | 1858 |
| Greenhouse valley-gutter | J. L. Dillon | 728,089 | May 12 | 2388 | 531 | 104 | 526 |
| Griddle | R. Shults | 740,050 | Sept. 29 | 4847 | 1087 | 106 | 1103 |
| Griddle-greaser | C. H. Haight | 748,367 | Dec. 29 | 5666 | 1292 | 107 | 2422 |
| Grille. Extensible | C. W. Smith | 747,095 | Dec. 15 | 3288 | 748 | 107 | 1860 |
| Grinder-frame. Folding | E. A. Johnston | 719,008 | Jan. 27 | 2824 | 633 | 102 | 644 |
| Grinder. Knife | J. W. Latimer | 741,681 | Oct. 20 | 2477 | 554 | 106 | 1809 |
| Grinder. Tool | R. C. Greenerd | 736,843 | Aug. 18 | 3398 | 751 | 105 | 1738 |
| Grinding and polishing machine | G. W. Wells | 720,509 | Feb. 10 | 2007 | 462 | 102 | 1263 |
| Grinding and polishing machine | W. L. Godfrey and C. N. Rivers | 737,220 | Aug. 25 | 4078 | 906 | 105 | 1901 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Grinding and pulverizing mill | T. Breakell | 733,574 | July 14 | 1574 | 374 | 105 | 351 |
| Grinding apparatus | H. W. N. Cole | 736,939 | Aug. 25 | 3576 | 793 | 105 | 1795 |
| Grinding apparatus. Knife- | P. Belle | 744,002 | Nov. 10 | 2355 | 505 | 107 | 522 |
| Grinding curved work. Machine for | C. L. Goehring and W. Troche | 737,396 | Aug. 25 | 4420 | 989 | 105 | 1975 |
| Grinding-disk | D. J. Murnane | 747,208 | Dec. 15 | 3499 | 793, 794 | 107 | 1903 |
| Grinding file-blanks, &c. Machine for | J. Turner | 733,439 | July 14 | 1336 | 315 | 105 | 299 |
| Grinding knife-blades. Machine for automatically | A. Gonon | 727,614 | May 12 | 1475 | 330 | 104 | 335 |
| Grinding-machine | M. O. Kasson | 718,474 | Jan. 13 | 1781 | 396 | 102 | 394 |
| Grinding-machine | G. M. Luther | 718,488 | Jan. 13 | 1833 | 402, 403 | 102 | 410 |
| Grinding-machine | G. M. and C. J. Luther | 719,677 | Feb. 3 | 469 | 107 | 102 | 921 |
| Grinding-machine | G. M. and C. J. Luther | 719,678 | Feb. 3 | 472 | 107 | 102 | 921 |
| Grinding-machine | J. B. Michael and T. P. Roberts | 720,946 | Feb. 17 | 2838 | 650, 651 | 102 | 1451 |
| Grinding-machine | Z. R. Tucker | 721,400 | Feb. 24 | 3737 | 851 | 102 | 1659 |
| Grinding-machine | L. Passmore | 721,636 | Feb. 24 | 4191 | 953 | 102 | 1758 |
| Grinding-machine | J. Benge | 722,938 | Mar. 17 | 2400 | 536 | 103 | 540 |
| Grinding-machine | A. B. Landis | 724,891 | Apr. 7 | 879 | 201, 202 | 103 | 1357 |
| Grinding-machine | W. V. Robinson | 725,142 | Apr. 14 | 1354 | 305, 306 | 103 | 1471 |
| Grinding-machine | Z. R. Tucker | 727,033 | May 5 | 420 | 87, 88 | 104 | 92 |
| Grinding-machine | W. F. Lomasney | 727,981 | May 12 | 2189 | 488, 489 | 104 | 485 |
| Grinding-machine | W. V. Robinson | 729,667 | June 2 | 256 | 59, 60 | 104 | 1181 |
| Grinding-machine | O. S. Walker | 732,803 | July 7 | 200 | 51 | 105 | 45 |
| Grinding-machine | A. G. Cassidy | 734,221 | July 21 | 2804 | 657, 658, 659 | 105 | 626 |
| Grinding-machine | P. A. Whitney | 734,643 | July 28 | 3587 | 839 | 105 | 807 |
| Grinding-machine | J. Bercha | 735,448 | Aug. 4 | 801 | 170 | 105 | 1151 |
| Grinding-machine | H. D. Hibbard | 741,335 | Oct. 13 | 1797 | 399, 400 | 106 | 1647 |
| Grinding-machine | H. D. Hibbard | 741,336 | Oct. 13 | 1810 | 401 | 106 | 1652 |
| Grinding-machine | H. D. Hibbard | 741,337 | Oct. 13 | 1817 | 401, 402 | 106 | 1654 |
| Grinding-machine | H. A. Schnelbach and H. A. Heupel. | 745,677 | Dec. 1 | 657 | 152 | 107 | 1238 |
| Grinding-machine | A. A. Baker | 747,924 | Dec. 29 | 4850 | 1096 | 107 | 2344 |
| Grinding-machine | B. F. Bartrug | 748,339 | Dec. 29 | 5618 | 1281 | 107 | 2411 |
| Grinding-machine. Automatic | A. B. Landis | 734,897 | July 28 | 4087 | 952, 953 | 105 | 908 |
| Grinding-machine carriage-reversing mechanism | Z. R. Tucker | 731,087 | June 16 | 2854 | 634 | 104 | 1757 |
| Grinding machine. Cutter- | B. M. W. Hanson | 730,455 | June 9 | 1705 | 381, 382, 383 | 104 | 1492 |
| Grinding machine. Disk- | A. T. Shipp | 723,051 | Mar. 17 | 2588 | 583, 584 | 103 | 580 |
| Grinding machine. Drill- | C. Ridderhof | 743,033 | Nov. 3 | 413 | 89, 90 | 107 | 87 |
| Grinding-machine. Flat-surface | G. Gorton | 720,912 | Feb. 17 | 2770 | 637, 638 | 102 | 1436 |
| Grinding machine. Knife- | P. Nousse | 741,537 | Oct. 13 | 2211 | 492 | 106 | 1737 |
| Grinding machine. Tool- | J. S. Bancroft | 734,799 | July 28 | 3927 | 916, 917 | 105 | 874 |
| Grinding-machine tool-holder | J. Bath | 736,573 | Aug. 18 | 2859 | 626 | 105 | 1627 |
| Grinding-machines. Steady-rest for | C. H. Norton | 732,314 | June 30 | 5192 | 1154 | 104 | 2269 |
| Grinding-mill | J. C. Wegerif | 721,984 | Mar. 3 | 622 | 138, 139 | 103 | 134 |
| Grinding-mill | J. C. Wegerif | 725,521 | Apr. 14 | 2045 | 463 | 103 | 1618 |
| Grinding-mill | C. C Fusmer | 730,631 | June 9 | 2014 | 447 | 104 | 1562 |
| Grinding-mill | H. Scharbau | 733,875 | July 14 | 2124 | 501 | 105 | 463 |
| Grinding-mill | F. E. Whitham | 736,657 | Aug. 18 | 3024 | 668 | 105 | 1660 |
| Grinding-mill | C. N. McLaughlin | 737,953 | Sept. 1 | 792 | 173 | 106 | 174 |
| Grinding-mill | H. C. Groves | 739,492 | Sept. 22 | 3781 | 845, 846 | 106 | 858 |
| Grinding-mill | G. Zarniko | 741,606 | Oct. 13 | 2337 | 523 | 106 | 1765 |
| Grinding-mill | P. E. Hodgkin and R. Pemberton | 742,191 | Oct. 27 | 3516 | 784, 785 | 106 | 2037 |
| Grinding-mill | M. F. Abbé | 744,452 | Nov. 17 | 3251 | 697 | 107 | 725 |
| Grinding-mill | W. B. Collins | 744,492 | Nov. 17 | 3317 | 714 | 107 | 739 |
| Grinding-mill | J. Q. Adams | 744,705 | Nov. 24 | 3706 | 800, 801 | 107 | 839 |
| Grinding-mill | G. A. Bell | 745,560 | Dec. 1 | 455 | 107 | 107 | 1194 |
| Grinding-mill | J. C. Bowsher | 746,275 | Dec. 8 | 1768 | 401, 402 | 107 | 1496 |
| Grinding-mill | P. R. Janney | 747,610 | Dec. 22 | 4230 | 951 | 107 | 2084 |
| Grinding-mill. Ball | P. T. Lindhard | 737,750 | Sept. 1 | 358 | 76 | 106 | 80 |
| Grinding-mill. Ball | P. T. Lindhard | 740,879 | Oct. 6 | 912 | 205 | 106 | 1441 |
| Grinding-mill. Ball | M. F. Abbé | 743,791 | Nov. 10 | 1950 | 413 | 107 | 432 |
| Grinding-mill cleaner | H. D. Phillips | 728,289 | May 19 | 2779 | 616, 617 | 104 | 631 |
| Grinding-mill quick-release device | S. Snyder | 740,479 | Oct. 6 | 181 | 36 | 106 | 1284 |
| Grinding-mill quick-release device | S. Snyder | 740,480 | Oct. 6 | 184 | 36 | 106 | 1284 |
| Grinding or amalgamating mill muller | E. F. Knotts | 724,019 | Mar. 31 | 4438 | 997, 998 | 103 | 988 |
| Grinding or crushing head | V. W. Mason, Jr | 745,639 | Dec. 1 | 593 | 137 | 107 | 1224 |
| Grinding or crushing head or roll | V. W. Mason, Jr | 745,640 | Dec. 1 | 594 | 138 | 107 | 1224 |
| Grinding or other machine. Cutlery- | J. Oefinger | 747,756 | Dec. 22 | 4496 | 1013, 1014 | 107 | 2144 |
| Grinding or other machines. Work-holder for | F. Sticker | 740,529 | Sept. 29 | 5348 | 1205 | 106 | 1207 |
| Grinding or polishing cone | L. G. Koenig | 736,114 | Aug. 11 | 3048 | 436 | 105 | 1437 |
| Grinding or polishing machine | B. F. Merritt | 725,266 | Apr. 14 | 1569 | 355, 356 | 103 | 1517 |
| Grinding or polishing machine | E. Cramer | 726,510 | Apr. 28 | 3896 | 882 | 103 | 2031 |
| Grinding or polishing machine | J. B. Lobet | 742,688 | Oct. 27 | 4426 | 999 | 106 | 2228 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Grinding or polishing machine. Automatic | A. H. Hatfield | 741,907 | Oct. 20 | 2921 | 651, 652 | 106 | 1902 |
| Grinding or polishing machinery | D. L. Bisset | 732,505 | June 30 | 5578 | 1236 | 104 | 2348 |
| Grinding or sharpening device | I. M. Rose | 719,880 | Feb. 3 | 851 | 199 | 102 | 1003 |
| Grinding or sharpening device | I. M. Rose | 730,706 | June 9 | 2153 | 477 | 104 | 1590 |
| Grinding or sharpening machine | W. A. Van Berkel | 719,297 | Jan. 27 | 3373 | 753 | 102 | 758 |
| Grinding or sharpening machine | A. Mathieu | 729,196 | May 26 | 4445 | 980 | 104 | 992 |
| Grinding or smoothing machines. Apparatus for supplying abrasive material to | D. J. Murnane | 719,978 | Feb. 3 | 1010 | 235 | 102 | 1037 |
| Grinding-rolls | T. A. Edison | 727,116 | May 5 | 566 | 122, 123 | 104 | 123 |
| Grinding, smoothing, roughening, and polishing machine. | R. Ochschim | 723,481 | Mar. 24 | 3431 | 767 | 103 | 763 |
| Grinding-stone clamp | W. L. Messer | 743,308 | Nov. 3 | 951 | 207 | 107 | 204 |
| Grinding stone or wheel clamp | W. L. Messer | 743,307 | Nov. 3 | 950 | 207 | 107 | 204 |
| Grinding tracers and tools for engraving-machines. Machine for | M. Barr | 736,193 | Aug. 11 | 2181 | 468, 469 | 105 | 1465 |
| Grinding-wheels. Means for truing | G. E. Metcalf | 730,282 | June 9 | 1387 | 305 | 104 | 1426 |
| Grindstone-dresser | M. Gair | 747,883 | Dec. 22 | 4753 | 1074 | 107 | 2202 |
| Grip device. Intermittent | P. A. McCarville | 717,704 | Jan. 6 | 327 | 79 | 102 | 71 |
| Gripper mechanism | G. E. Pancoast | 747,213 | Dec. 15 | 3507 | 796 | 107 | 1905 |
| Gripping device | B. W. Truscott | 736,173 | Aug. 11 | 2146 | 461 | 105 | 1458 |
| Grocer's bin | A. H. Miller and F. A. England | 743,009 | Nov. 3 | 362 | 78, 79 | 107 | 77 |
| Grocery-bin | A. Monahan | 724,029 | Mar. 31 | 4454 | 1001 | 103 | 991 |
| Groove-cutting machine | W. G. Sanborn | 718,530 | Jan. 13 | 1917 | 421 | 102 | 428 |
| Grooving-machine | A. V. Allen | 718,968 | Jan. 27 | 2754 | 616 | 102 | 629 |
| Ground-anchor | J. L. Smith | 734,373 | July 21 | 3099 | 729, 730 | 105 | 689 |
| Ground-detector | C. C. Badeau | 730,595 | June 9 | 1961 | 436 | 104 | 1550 |
| Ground. Forming openings in the | F. Shuman | 733,335 | July 7 | 1144 | 271 | 105 | 241 |
| Ground-roller | F. B. Moore | 723,896 | Mar. 31 | 4168 | 938 | 103 | 934 |
| Growth. Regulating | E. E. Risien | 741,833 | Oct. 20 | 2768 | 618 | 106 | 1872 |
| Grubbing-machine | G. Olsen | 737,765 | Sept. 1 | 387 | 82 | 106 | 86 |
| Grubbing machine. Sage-brush- | A. Rowan | 741,979 | Oct. 20 | 3073 | 687 | 106 | 1933 |
| Grubbing sage-brush. Machine for | W. O. White | 717,644 | Jan. 6 | 213 | 54 | 102 | 46 |
| Guano-distributer | J. S. Byrd | 746,282 | Dec. 8 | 1782 | 404 | 107 | 1499 |
| Guide-wheel and guide | A. H. Mathesius | 720,454 | Feb. 10 | 1914 | 436 | 102 | 1243 |
| Guiding systems. Apparatus for ascertaining position relative to prearranged | R. B. Owens | 736,432 | Aug. 18 | 2597 | 570 | 105 | 1572 |
| Guitar attachment | E. Q. Bergren | 743,054 | Nov. 3 | 456 | 100 | 107 | 95 |
| Guitar. Pedal- | L. Farago and V. Elias | 738,018 | Sept. 1 | 925 | 204, 205 | 106 | 202 |
| Gum. Extracting | W. A. Lawrence | 741,256 | Oct. 13 | 1622 | 366 | 106 | 1612 |
| Gum-extracting apparatus | W. A. Lawrence | 741,257 | Oct. 13 | 1625 | 366 | 106 | 1613 |
| Gums. Devulcanizing | P. H. J. Chautard and H. Kessler | 722,944 | Mar. 17 | 2408 | ..... | 103 | 541 |
| Gums from trees. Collecting | J. G. Gardner | 735,869 | Aug. 11 | 1605 | 342 | 105 | 1342 |
| Gumming-machine | H. D. Sisson | 723,053 | Mar. 17 | 2591 | 584 | 103 | 580 |
| Gumming-machine | H. D. Sisson | 726,363 | Apr. 28 | 3598 | 816, 817 | 103 | 1974 |
| Gun. Air- | D. F. Polley | 742,734 | Oct. 27 | 4500 | 1019 | 106 | 2243 |
| Gun attachment. Magazine- | P. M. Offutt | 726,562 | Apr. 28 | 3990 | 903 | 103 | 2049 |
| Gun. Automatic | J. Weed | 718,062 | Jan. 6 | 1009 | 225 | 102 | 217 |
| Gun. Automatic | C. A. T. Sjogren | 739,732 | Sept. 22 | 4223 | 945 | 106 | 954 |
| Gun. Automatic machine- | T. Bergmann | 723,232 | Mar. 24 | 2938 | 658, 659 | 103 | 666 |
| Gun-barrel protector | B. Robbins | 728,302 | May 19 | 2808 | 621 | 104 | 967 |
| Gun-barrels or tubular articles. Apparatus for testing and straightening | A. H. M. Driver and G. Norman | 740,975 | Oct. 6 | 1085 | 245, 246 | 106 | 1477 |
| Gun-bearing | J. Strauss | 725,503 | Apr. 14 | 2019 | 455 | 103 | 1613 |
| Gun boring and burnishing machine | T. C. Histed | 727,363 | May 5 | 1012 | 219 | 104 | 218 |
| Gun-brake. Fluid | A. Resow and O. Lauber | 724,398 | Mar. 31 | 5195 | 1164, 1165 | 103 | 1144 |
| Gun. Breakdown | C. F. Lefever | 732,420 | June 30 | 5409 | 1200 | 104 | 2315 |
| Gun. Breech-loading breakdown | G. D. Potter | 741,273 | Oct. 13 | 1654 | 374 | 106 | 1619 |
| Gun-carriage | J. F. Meigs and H. R. Collins | 718,010 | Jan. 6 | 932 | 207 | 102 | 200 |
| Gun-carriage | O. Behnke and J. Friese | 719,724 | Feb. 3 | 568 | 128 | 102 | 942 |
| Gun-carriage | J. F. Meigs and R. P. Stout | 723,617 | Mar. 24 | 3651 | 817, 818 | 103 | 808 |
| Gun carriage. Field- | A. T. Dawson and G. T. Buckham | 733,166 | July 7 | 826 | 200, 201 | 105 | 173 |
| Gun-carriage for portable guns | J. Krone and O. Behnke | 723,684 | Mar. 24 | 3764 | 845 | 103 | 832 |
| Gun-carriage having a swinging barrel-carrier | O. Knoch | 735,392 | Aug. 4 | 670 | 143 | 105 | 1123 |
| Gun carriage. Machine or other | T. K. North | 744,222 | Nov. 17 | 2826 | 604 | 107 | 632 |
| Gun-carriage or limber or ammunition-car | A. T. Dawson and G. T. Buckham | 748,351 | Dec. 29 | 5640 | 1285 | 107 | 2416 |
| Gun-carriage. Separable | A. T. Dawson and G. T. Buckham | 742,973 | Nov. 3 | 267 | 60 | 107 | 58 |
| Gun-cleaner | J. M. Kersey | 721,050 | Feb. 17 | 3042 | 698 | 102 | 1495 |
| Gun-cleaning rod | H. A. Tellerson | 740,486 | Oct. 6 | 197 | 39 | 106 | 1287 |
| Gun ejector. Breech-loading- | G. A. Horne | 731,904 | June 23 | 4381 | 977 | 104 | 2088 |
| Gun. Field- | E. K. Rothe | 736,881 | Aug. 18 | 3464 | 768 | 105 | 1752 |
| Gun. Field- | E. K. Rothe | 738,629 | Sept. 8 | 2165 | 474 | 106 | 481 |
| Gun field-mount. Automatic machine- | L. V. Benét | 718,900 | Jan. 20 | 2618 | 585, 586, 587 | 102 | 586 |
| Gun firing device. Breech-loading- | V. C. Tasker | 745,301 | Nov. 24 | 4857 | 1059 | 107 | 1076 |
| Gun firing mechanism | A. T. Dawson and G. T. Buckham | 718,051 | Jan. 6 | 990 | 221 | 102 | 213 |
| Gun fluid-pressure brake | O. Behnke | 733,798 | July 14 | 1958 | 462 | 105 | 430 |
| Gun for shooting marbles | S. H. Strasser | 729,444 | May 26 | 4865 | 1078 | 104 | 1079 |
| Gun gas-check. Breech-loading- | V. C. Tasker | 740,782 | Oct. 6 | 754 | 170 | 106 | 1406 |
| Gun. Gopher- | C. Sims | 725,883 | Apr. 21 | 2716 | 618 | 103 | 1777 |
| Gun lock mechanism. Breakdown- | O. Kirmse | 741,506 | Oct. 13 | 2137 | 476 | 106 | 1722 |
| Gun locking device | A. F. O. von Augezd | 726,187 | Apr. 21 | 3247 | 736, 737 | 103 | 1885 |
| Gun. Machine- | W. G. Gass | 729,858 | June 2 | 620 | 136, 137 | 104 | 1255 |
| Gun. Magazine- | J. Hylard | 718,055 | Jan. 6 | 996 | 222, 223 | 102 | 215 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page |
|---|---|---|---|---|---|---|---|
| Gun. Magazine | C. F. Outlaw | 738,568 | Sept. 8 | 2048 | 446 | 106 | 456 |
| Gun. Magazine air | J. W. Wilford | 740,067 | Sept. 29 | 4877 | 1094 | 106 | 1109 |
| Gun. Magazine bolt | E. G. Parkhurst | 719,254 | Jan. 27 | 3292 | 737 | 102 | 740 |
| Gun. Magazine bolt | S. N. McClean | 723,706 | Mar 24 | 3802 | 855, 856, 857 | 103 | 841 |
| Gun. Magazine bolt | C. C. Brooks | 726,251 | Apr 28 | 3362 | 764 | 103 | 1925 |
| Gun-mounting | A. T. Dawson and G. T. Buckham | 718,050 | Jan 6 | 989 | 221 | 102 | 213 |
| Gun-mounting | A. T. Dawson and W Burton | 734,406 | July 21 | 3157 | 742 | 105 | 701 |
| Gun mounting or carriage | C. Holmström and A. Bremberg | 729,342 | May 26 | 4703 | 1039, 1040 | 104 | 1046 |
| Gun-pivot-locking device | G. Ehrhardt | 731,874 | June 23 | 4327 | 966 | 104 | 2077 |
| Gun. Powder | C. B. Riker | 727,449 | May 5 | 1165 | 257 | 104 | 252 |
| Gun. Quick-firing | A. T. Dawson and L. Silverman | 738,666 | Sept. 8 | 2243 | 491, 492 | 106 | 497 |
| Gun. Rapid-fire | J. F. Meigs and H. G. Jakobsson | 742,702 | Oct. 27 | 4447 | 1004, 1005 | 106 | 2232 |
| Gun recoil apparatus | A. T. Dawson and G. T. Buckham | 718,749 | Jan. 20 | 2347 | 518 | 102 | 529 |
| Gun recoil apparatus | E. K. Rothe | 724,335 | Mar. 31 | 5063 | 1133 | 103 | 1114 |
| Gun recoil-brake | O. Lauber | 722,724 | Mar. 17 | 2014 | 450 | 103 | 462 |
| Gun recoil-check | J. F. Meigs and R. P. Stout | 748,513 | Dec. 29 | 5957 | 1351 | 107 | 2486 |
| Gun shield-mount | J. F. Meigs and S. A. S. Hammar | 746,725 | Dec. 15 | 2567 | 590, 591 | 107 | 1694 |
| Gun-sight | J. Smith | 723,747 | Mar. 24 | 3875 | 872 | 103 | 856 |
| Gun-sight | E. W. Hubbard and S. C. Vestal | 728,716 | May 19 | 3576 | 794 | 104 | 799 |
| Gun-sight | W. L. Marble | 741,920 | Oct. 20 | 2944 | 656 | 106 | 1907 |
| Gun-sight | B. P. Vickery | 744,651 | Nov. 17 | 3565 | 768 | 107 | 789 |
| Gun-sight | H. B. Andrus | 747,350 | Dec. 22 | 3776 | 849 | 107 | 1981 |
| Gun-sight-lighting device | H. Schlaegel | 731,712 | June 23 | 4034 | 900 | 104 | 2012 |
| Gun-sight mounting | H. Grubb | 734,060 | July 21 | 2508 | 585, 586 | 105 | 564 |
| Gun-sight telescope | G. N. Saegmuller | 722,910 | Mar. 17 | 2356 | 526 | 103 | 531 |
| Gun sighting apparatus | C. P. E. Schneider and J. B. G. A. Canet | 728,990 | May 26 | 4074 | 905 | 104 | 916 |
| Gun sighting attachment | G. A. Schoeller | 722,761 | Mar. 17 | 2085 | 467 | 103 | 476 |
| Gun. Spring air | W. F. Markham | 718,646 | Jan 20 | 2141 | 467 | 102 | 489 |
| Gun-stock. Adjustable | J. C. Yount | 729,030 | May 26 | 4151 | 920 | 104 | 932 |
| Gun-stock and cartridge-magazine | A. D. Marble | 746,859 | Dec. 15 | 2829 | 653 | 107 | 1751 |
| Gun-stock. Cushioned | O. F. Ermel | 724,273 | Mar. 31 | 4947 | 1107 | 103 | 1091 |
| Gun. Trap | D. C. Townsend | 721,980 | Mar 3 | 611 | 136 | 103 | 133 |
| Gun trigger mechanism | K. Völler | 740,716 | Oct. 6 | 605 | 135 | 106 | 1378 |
| Gun. Tubular magazine | T. C. Johnson | 719,807 | Feb. 3 | 724 | 170 | 102 | 976 |
| Gun. Water | C. H. Radcliffe | 740,371 | Sept. 29 | 5426 | 1222 | 106 | 1223 |
| Gun with barrel-recoil having recuperator-spring | O. Lauber | 722,725 | Mar. 17 | 2016 | 450 | 103 | 462 |
| Guns. Adjusting-gage for subcaliber | V. C. Tasker | 741,183 | Oct. 13 | 1487 | 337 | 106 | 1583 |
| Guns and for testing the correctness of the aiming. Instrument for indicating and recording the aiming of naval | C. J. A. Dick | 729,290 | May 26 | 4618 | 1021 | 104 | 1028 |
| Guns, &c. Apparatus for tempering parts of | A. H. Emery | 720,337 | Feb. 10 | 1712 | 389 | 102 | 1201 |
| Guns. Automatic firing apparatus for ships' | H. von Péchy and V. Rea | 719,857 | Feb. 3 | 802 | 187, 188 | 102 | 993 |
| Guns. Automatic or semi-automatic attachment for quick-firing | L. V. Benét and H. A. Mercié | 747,848 | Dec. 22 | 4674 | 1056, 1057, 1058 | 107 | 2185 |
| Guns. Auxiliary barrel for breech-loading | V. C. Tasker | 741,079 | Oct. 13 | 1280 | 292, 293 | 106 | 1540 |
| Guns. Auxiliary barrel for breech-loading | V. C. Tasker | 745,464 | Dec. 1 | 292 | 70 | 107 | 1161 |
| Guns. Bearing for the elevating-screw apparatus of field or other | E. K. Rothe | 724,946 | Apr. 7 | 965 | 222 | 103 | 1376 |
| Guns. Combined recoil-check and counter-recoil check for | J. F. Meigs and S. A. S. Hammar | 717,884 | Jan. 6 | 701 | 157 | 102 | 149 |
| Guns. Constructing | A. H. Emery | 726,520 | Apr. 28 | 3913 | 885 | 103 | 2035 |
| Guns. Constructing and assembling | A. H. Emery | 727,766 | May 12 | 1793 | 402 | 104 | 403 |
| Guns. Constructing and assembling parts of | A. H. Emery | 727,767 | May 12 | 1797 | 402 | 104 | 403 |
| Guns. Coupling for the trail and limber of field | O. Stoeklé | 738,953 | Sept. 15 | 2796 | 619 | 106 | 632 |
| Guns. Device for regulating the recoil and counter-recoil of | K. Haussner | 726,531 | Apr. 28 | 3928 | 888 | 103 | 2038 |
| Guns. Electric firing-gear for breech-loading | J. F. Meigs, S. A. S. Hammar, and L. N. D. Mixsell. | 748,086 | Dec. 29 | 5178 | 1171, 1172 | 107 | 2317 |
| Guns. Elevating, traversing, and sighting apparatus for field | A. T. Dawson and G. T. Buckham | 743,255 | Nov. 3 | 850 | 185, 186 | 107 | 178 |
| Guns. Instrument for indicating and recording the aiming of naval | C. J. A. Dick | 729,491 | May 26 | 4942 | 1096 | 104 | 1097 |
| Guns. Mechanism for feeding cartridges into machine | T. K. North | 723,719 | Mar. 24 | 3831 | 861 | 103 | 846 |
| Guns or cradles. Saddle for | O. Behnke | 721,353 | Feb. 24 | 3651 | 831 | 102 | 1642 |
| Guns, &c. Sighting device for | J. B. de Mesquita | 723,476 | Mar. 24 | 3421 | 764 | 103 | 761 |
| Guns. Single-trigger mechanism for double-barrel | O. H. Peak | 745,657 | Dec. 1 | 622 | 144, 145 | 107 | 1231 |
| Guns. Two-tube gravity-charger for magazine | T. C. Johnson | 719,808 | Feb. 3 | 725 | 170, 171 | 102 | 976 |
| Guncotton-steaming apparatus | J. Selwig | 738,077 | Sept. 1 | 1014 | 227 | 106 | 220 |
| Guy-clamp | T. E. Hallett | 723,862 | Mar. 31 | 4104 | 926 | 103 | 920 |
| Gyrating machine | G. W. Combs | 720,114 | Feb. 10 | 1305 | 298 | 102 | 1117 |
| Hair. Artificial | R. Freericks | 729,749 | June 2 | 412 | | 104 | 1212 |
| Hair-clamp | W. J. Koenig | 732,566 | June 30 | 5698 | 1265 | 104 | 2375 |
| Hair-comb | J. Kahn | 722,714 | Mar. 17 | 1997 | 446 | 103 | 457 |
| Hair-confiner | A. B. Wood | 741,870 | Oct. 20 | 2840 | 633 | 106 | 1886 |
| Hair-crimper | N. McCarthy | 720,726 | Feb. 17 | 2459 | 563 | 102 | 1370 |
| Hair-crimper | M. A. Jordan | 721,197 | Feb. 24 | 3354 | 767 | 102 | 1580 |
| Hair-crimper | M. I. Connell | 731,861 | June 23 | 4299 | 959 | 104 | 2070 |
| Hair-crimper | C. R. Linthicum | 742,795 | Oct. 27 | 4598 | 1042 | 106 | 2266 |
| Hair-crimper | J. F. Martin | 748,393 | Dec. 29 | 5713 | 1305 | 107 | 2433 |
| Hair-drier | H. V. Halliwell | 738,186 | Sept. 8 | 1286 | 278, 279 | 106 | 294 |
| Hair-drying apparatus | J. A. Grant | 724,178 | Mar. 31 | 4741 | 1062 | 103 | 1051 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|---|
| | | | | Spec. | Drg. | Vol. | Page. |
| Hair-drying comb | R. D. O. Johnson and H. T. Bradner | 732,860 | July 7 | 292 | 73 | 105 | 65 |
| Hair-drying device | E. Burnham | 744,044 | Nov. 17 | 2463 | 529 | 107 | 555 |
| Hair-drying machine | E. Mink | 734,346 | July 21 | 3052 | 718<br>719 | 105 | 679 |
| Hair-fastener | J. Erikson | 720,515 | Feb. 10 | 2030 | 466 | 102 | 1266 |
| Hair-fastener | W. A. Sloan | 722,260 | Mar. 10 | 1129 | 249 | 103 | 255 |
| Hair. Means for promoting the growth of | F. W. Evans | 739,844 | Sept. 29 | 4432 | | 106 | 1016 |
| Hair or wool cutting or shearing machine | H. Austin | 726,014 | Apr. 21 | 2940 | 668 | 103 | 1823 |
| Hair-pin | E. Brown | 718,188 | Jan. 13 | 1243 | 273 | 102 | 284 |
| Hair-pin | R. G. Schutz | 719,697 | Feb. 3 | 506 | 114 | 102 | 930 |
| Hair-pin | W. E. Barcus | 730,080 | June 2 | 1013 | 226 | 104 | 1334 |
| Hair-pin | S. H. Goldberg | 748,278 | Dec. 29 | 5531 | 1261 | 107 | 2393 |
| Hair-pin and manicure implement | H. Rubens | 729,898 | June 2 | 690 | 153 | 104 | 1269 |
| Hair-pin. Safety | A. H. Mosher | 720,601 | Feb. 17 | 2214 | 513 | 102 | 1320 |
| Hair-pin. Safety | A. H. Mosher. (Reissue) | 12,154 | Sept. 8 | 2410 | 528 | 106 | 531 |
| Hair-singer | C. F. Lancaster | 743,893 | Nov. 10 | 2140 | 460 | 107 | 471 |
| Hair-supporter | H. A. Johnston | 731,575 | June 23 | 3795 | 845 | 104 | 1965 |
| Hair-waver | A. Dreés | 731,763 | June 23 | 4132 | 922 | 104 | 2032 |
| Hair-waver | M. S. McIntire | 748,407 | Dec. 29 | 5743 | 1311 | 107 | 2440 |
| Half-tone screen | J. Jacobson | 725,252 | Apr. 14 | 1552 | 352 | 103 | 1514 |
| Hall-rack and umbrella-stand. Combined | A. Johnson | 724,875 | Apr. 7 | 854 | 196 | 103 | 1352 |
| Halogenizing organic fluids | L. Marckwald | 721,961 | Mar. 3 | 577 | 128 | 103 | 126 |
| Halter | D. O. Fosgate | 723,999 | Mar. 31 | 4397 | 988 | 103 | 981 |
| Halter | J. G. Lewis | 734,903 | July 28 | 4096 | 955 | 105 | 910 |
| Halter | G. N. Barcus | 741,873 | Oct. 20 | 2843 | 634 | 106 | 1887 |
| Halter and hitching-rope. Combined | J. M. Little | 736,275 | Aug. 11 | 2316 | 502 | 105 | 1495 |
| Ham-cutting machine | W. Lacour, F. Fischer, and G. Lindenberg. | 733,976 | July 21 | 2331 | 547 | 105 | 524 |
| Hame | J. E. Keverline | 727,806 | May 12 | 1869 | 416 | 104 | 416 |
| Ham and horse-collar | R. J. Hotchkiss | 743,874 | Nov. 10 | 2095 | 447 | 107 | 462 |
| Hame and trace connection | A. L. Green | 721,796 | Mar. 3 | 253 | 56 | 103 | 56 |
| Hame and trace connection | W. C. Lawson | 734,074 | July 21 | 2536 | 591 | 105 | 570 |
| Hame and trace connector | C. L. Wiedrich | 721,987 | Mar. 3 | 630 | 140 | 103 | 136 |
| Hame and trace connector | T. E. Kellogg | 740,573 | Oct. 6 | 378 | 78 | 106 | 1327 |
| Hame and trace connector | F. E. Goodman | 747,415 | Dec 22 | 3883 | 874 | 107 | 2005 |
| Hame and trace hook | J. B. Gathright | 736,839 | Aug. 18 | 3388 | 749 | 105 | 1736 |
| Hame and tug connection | J. C. Curryer | 739,065 | Sept. 15 | 2991 | 662 | 106 | 673 |
| Hame attachment | I. Frank | 727,537 | May 5 | 1322 | 295 | 104 | 285 |
| Hame attachment | P. H. Du Bois | 729,742 | June 2 | 401 | 90 | 104 | 1210 |
| Hame-fastener | J. H. Parmelee | 723,298 | Mar. 24 | 3060 | 688 | 103 | 691 |
| Hame-fastener | G. W. Reyer | 727,197 | May 5 | 703 | 151 | 104 | 152 |
| Hame-fastener | R. Dodson | 745,485 | Dec. 1 | 334 | 78 | 107 | 1170 |
| Hame-fastener | G. B. Hoch | 747,708 | Dec. 22 | 4419 | 995 | 107 | 2127 |
| Hame. Sheet-metal | C. L. Wiedrich | 730,999 | June 16 | 2694 | 600 | 104 | 1724 |
| Hame-strap | W. H. Gailor | 739,167 | Sept. 15 | 3171 | 701 | 106 | 709 |
| Hame trace attachment. Adjustable | E. Littmann | 745,209 | Nov. 24 | 4675 | 1018 | 107 | 1040 |
| Hames, collars, or the like. Connection for | W. C. Lawson | 734,073 | July 21 | 2535 | 591 | 105 | 570 |
| Hammer | W. W. Brownell | 724,542 | Apr 7 | 227 | 55 | 103 | 1218 |
| Hammer | G. H. Rowe | 726,466 | Apr 28 | 3778 | 855 | 103 | 2010 |
| Hammer | B. F. Jinks and E. W. Davis | 736,265 | Aug. 11 | 2300 | 497<br>498 | 105 | 1491 |
| Hammer | G. J. Steele | 736,797 | Aug. 18 | 3304 | 732 | 105 | 1717 |
| Hammer | L. S. Starrett | 745,973 | Dec 1 | 1214 | 273 | 107 | 1359 |
| Hammer. Automatic | E. H. Swift | 720,636 | Feb. 17 | 2300 | 527 | 102 | 1336 |
| Hammer. Automatic | O. B. Roberts | 729,666 | June 2 | 254 | 59 | 104 | 1181 |
| Hammer. Automatic | A. Stromdahl | 732,466 | June 30 | 5500 | 1219<br>1220 | 104 | 2332 |
| Hammer. Automatic | C. R. McKibben | 737,952 | Sept. 1 | 791 | 173 | 106 | 173 |
| Hammer. Blacksmith's forging | C. Jewell | 724,294 | Mar. 31 | 4988 | 1116 | 103 | 1100 |
| Hammer. Drop | G. F. Fuller | 729,855 | June 2 | 614 | 135 | 104 | 1254 |
| Hammer drop-movement. Trip | D. Melcher | 739,331 | Sept. 22 | 3474 | 775 | 106 | 791 |
| Hammer. Electric | A. J. Woodworth | 734,387 | July 21 | 3126 | 735 | 105 | 695 |
| Hammer feeding device. Forge | P. R. Peiseler | 732,110 | June 30 | 4794 | 1070 | 104 | 2187 |
| Hammer. Foot-power | W. Baker and S. Horn | 747,925 | Dec. 29 | 4856 | 1096 | 107 | 2246 |
| Hammer for tinners' use | A. T. Nelson | 734,738 | July 28 | 3785 | 883 | 105 | 845 |
| Hammer-handle blank | A. J. Doughty | 730,887 | June 16 | 2475 | 549 | 104 | 1679 |
| Hammer-handle safety-fastening | F. Straub | 720,297 | Feb. 10 | 1639 | 375 | 102 | 1186 |
| Hammer. Horseshoer's | E. G. Weitz | 725,522 | Apr. 14 | 2046 | 463 | 103 | 1618 |
| Hammer or hatchet. Magazine | F. S. Vogue | 736,465 | Aug. 18 | 2652 | 583 | 105 | 1584 |
| Hammer or tool. Magazine | G. C. Fuller | 742,624 | Oct. 27 | 4314 | 972 | 106 | 2204 |
| Hammer. Pneumatic | W. T. McCook | 719,027 | Jan. 27 | 2858 | 641<br>642 | 102 | 651 |
| Hammer. Pneumatic | S. Oldham and J. J. Padbury | 722,614 | Mar. 10 | 1775 | 396 | 103 | 396 |
| Hammer. Pneumatic | F. M. Ier | 727,954 | May 12 | 2149 | 479 | 104 | 476 |
| Hammer. Pneumatic | A. C. Murphy | 747,751 | Dec. 22 | 4483 | 1012 | 107 | 2141 |
| Hammer. Pneumatic | A. C. Murphy | 747,752 | Dec. 22 | 4488 | 1012 | 107 | 2142 |
| Hammer. Power | J. Delane | 722,087 | Mar. 3 | 790 | 176<br>177 | 103 | 171 |
| Hammer. Power | G. E. Davis | 726,879 | May 5 | 89 | 22 | 104 | 22 |
| Hammer. Power | W. R. Jenkins | 736,971 | Aug. 25 | 3640 | 806 | 105 | 1809 |
| Hammer. Power | W. E. Sheehy | 743,763 | Nov. 10 | 1888 | 399<br>400 | 107 | 420 |
| Hammer. Tack | C. S. L. Kennedy | 743,519 | Nov. 10 | 1451 | 303<br>304<br>305 | 107 | 327 |
| Hammer. Vibrating | H. M. Baldwin | 723,572 | Mar. 24 | 3575 | 799 | 103 | 792 |
| Hammers, &c. Handle-securing device for | M. F. Powers | 747,636 | Dec. 22 | 4287 | 964 | 107 | 2097 |
| Hammers. Machine for manipulating automatic | C. R. McKibben | 720,052 | Feb. 10 | 1179 | 269<br>270 | 102 | 1090 |
| Hammers, &c. Nail-holding attachment for | G. W. Peek | 729,890 | June 2 | 681 | 150 | 104 | 1267 |
| Hammers. Throttle-valve lock for pneumatic | C. H. Haeseler | 734,700 | July 28 | 3703 | 867 | 105 | 830 |
| Hammers. Yieldable pitman for power | F. F. Davidson and G. T. Strite | 739,992 | Sept. 29 | 4735 | 1065 | 106 | 1079 |
| Hammock | I. E. Palmer | 725,475 | Apr. 14 | 1960 | 441 | 103 | 1600 |
| Hand. Artificial | H. Patton | 736,144 | Aug. 11 | 2101 | 451 | 105 | 1447 |
| Handcuff | N. A. Burdick | 738,983 | Sept 15 | 2843 | 630 | 106 | 642 |
| Handcuff attachment | J. W. Pettijohn | 727,193 | May 5 | 698 | 150 | 104 | 151 |
| Hand-hole cover | K. Park | 744,015 | Nov. 10 | 2405 | 516 | 107 | 529 |

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| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Hand-hole plate | L. Rauhauser | 739,790 | Sept. 22 | 4325 | 969 | 106 | 977 |
| Hand or foot heater. Electric | A. Zeckendorf | 721,270 | Feb. 24 | 3509 | 798 | 102 | 1612 |
| Hand-rail for moving stair-lifts | J. M. Dodge | 719,764 | Feb. 3 | 650 | 148 | 102 | 959 |
| Hand-rail. Moving | J. M. Dodge | 719,765 | Feb. 3 | 651 | 149 | 102 | 959 |
| Hand-strap | J. H. Myers | 733,866 | July 14 | 2106 | 497 | 105 | 459 |
| Hand-strap | J. H. Myers | 733,867 | July 14 | 2108 | 497 | 105 | 459 |
| Hand-strap | U. McClinchie | 744,973 | Nov. 24 | 4180 | 903 | 107 | 937 |
| Handle: *See* Bag, &c., handle. Book-handle. Bucket or other vessel handle. Carpet-sweeper bail-handle. Carriage-door handle. Dipper-handle. Electrically-heated handle. Implement-handle. Knife-handle. Pail-handle. Pick-handle. Plow-handle. Razor-handle. Sad-iron handle. Saw-handle. Soldering-iron handle. Spade-handle. Switch-handle. Toilet-article handle. Tool-heating handle. Trowel-handle. Umbrella-handle. | | | | | | | |
| Handle | J. M. Horton | 735,516 | Aug. 4 | 929 | 196 | 105 | 1179 |
| Handle-bar | J. Robertson | 729,418 | May 26 | 4825 | 1070 | 104 | 1070 |
| Handle-fastener | R. S., H. P., and E. C. Hoyt | 746,086 | Dec. 8 | 1418 | 318 | 107 | 1421 |
| Handle-fastening for traveling bags, cases, &c | W. S. Maxwell | 745,286 | Nov. 24 | 4814 | 1050 | 107 | 1068 |
| Handle for sheet-metal vessels | L. Reaser | 718,656 | Jan. 20 | 2164 | 474 | 102 | 493 |
| Handle for trunks, &c | R. Herrmann | 720,803 | Feb. 17 | 2580 | 595 | 102 | 1395 |
| Handle for valises, parcels, teapots, &c | B. Weber | 728,058 | May 12 | 2330 | 519 | 104 | 513 |
| Handling stored pulverized or granular materials. Apparatus for | E. H. Hurry and H. J. Seaman | 719,119 | Jan. 27 | 3065 | 681 | 102 | 693 |
| Hanger: *See* Adjustable extension-hanger. Banana-bunch hanger. Broom-hanger. Cable-hanger. Clothes-hanger. Clothing-hanger. Coat-hanger. Coat and hat hanger. Curtain-hanger. Curtain-pole hanger. Door-hanger. Eaves-trough hanger. Electric-light hanger. Garment-hanger. Harness-hanger. Hat and coat hanger. Insulator-hanger. Lamp-hanger. Locking-hanger. Meat-hanger. Picture-hanger. Razor-strop hanger. Sash-hanger. Shade-hanger. Shaft-hanger. Telephone-wire hanger. Tobacco-hanger. Tobacco-leaf hanger. Trolley-wire hanger. Trousers-hanger. Trousers or skirt hanger. Window-screen hanger. | | | | | | | |
| Hanger | L. Hill | 737,234 | Aug. 25 | 4109 | 913 | 105 | 1908 |
| Hanger | H. Barry | 747,119 | Dec. 15 | 3325 | 756 | 107 | 1868 |
| Hanger-bracket | O. S. Perkins | 729,404 | May 26 | 4803 | 1065 | 104 | 1065 |
| Hanging bracket | W. H. Perkins | 725,284 | Apr. 14 | 1597 | 361 | 103 | 1523 |
| Harmonica shell. Mouth- | M. Messner | 723,701 | Mar. 24 | 3791 | 851 | 103 | 838 |
| Harmonium | C. Hesse | 739,414 | Sept. 22 | 3651 | 811, 812 | 106 | 829 |
| Harmonium stop-key mechanism | C. Hesse | 736,255 | Aug. 11 | 2281 | 493 | 105 | 1487 |
| Harness | G. H. Hutchison | 728,924 | May 26 | 3958 | 879, 880 | 104 | 891 |
| Harness | S. Way | 733,887 | July 14 | 2142 | 506 | 105 | 466 |
| Harness | O. A. Swart | 737,295 | Aug. 25 | 4229 | 941 | 105 | 1933 |
| Harness | G. R. McCoy | 741,156 | Oct. 13 | 1422 | 325 | 106 | 1568 |
| Harness | T. Manners | 742,694 | Oct. 27 | 4438 | 1001, 1002 | 106 | 2231 |
| Harness | W. Horning | 745,440 | Dec. 1 | 243 | 56 | 107 | 1151 |
| Harness attachment | J. W. Beam | 719,721 | Feb. 3 | 562 | 127 | 102 | 941 |
| Harness attachment | J. S. Barclay | 729,032 | May 26 | 4155 | 921 | 104 | 933 |
| Harness attachment | G. F. Fehring | 734,528 | July 28 | 3388 | 791 | 105 | 765 |
| Harness attachment. Team- | F. L. Ainsworth | 726,236 | Apr. 28 | 3339 | 758 | 103 | 1921 |
| Harness box-loop | B. F. Shepherd | 744,809 | Nov. 24 | 3887 | 836 | 107 | 877 |
| Harness. Breast- | S. O. Barden | 748,152 | Dec. 29 | 5305 | 1205 | 107 | 2344 |
| Harness breast-bow | C. Severns | 746,180 | Dec. 8 | 1593 | 356 | 107 | 1461 |
| Harness breast-link. Double- | D. J. Cummings | 746,680 | Dec. 15 | 2497 | 571 | 107 | 1677 |
| Harness-clip | J. Reichert | 737,841 | May 12 | 1931 | 430 | 104 | 429 |
| Harness for breaking and training horses | W. D. Carson | 718,425 | Jan. 13 | 1674 | 369 | 102 | 373 |
| Harness-hanger | J. Reichert | 736,877 | Aug. 18 | 3456 | 766, 767 | 105 | 1750 |
| Harness-loop | J. H. R. Hauck and J. L. Warden | 732,000 | June 23 | 4558 | 1017 | 104 | 2125 |
| Harness making or mending device | S. Izant | 742,993 | Nov. 3 | 307 | 69 | 107 | 66 |
| Harness-oiling apparatus | L. Dare | 725,679 | Apr. 21 | 2352 | 531 | 103 | 1698 |
| Harness or heddle bars. Clamping device for | C. D. Whiting | 729,245 | May 26 | 4534 | 998 | 104 | 1010 |
| Harness-pad | W. Smith | 727,857 | May 12 | 1964 | 438 | 104 | 435 |
| Harness-peg | J. B. Fladby | 730,358 | June 9 | 1520 | 338 | 104 | 1454 |
| Harness-rosette | F. E. Shailor | 735,602 | Aug. 4 | 1084 | 230 | 105 | 1211 |
| Harness-tightening device | C. Beranek | 722,077 | Mar. 3 | 772 | 173 | 103 | 167 |
| Harp | W. Moerscher | 722,602 | Mar. 10 | 1759 | 392 | 103 | 393 |
| Harp | J. E. Childs | 739,647 | Sept. 22 | 4063 | 906 | 106 | 918 |
| Harp | J. A. Rath | 744,104 | Nov. 17 | 2585 | 552 | 107 | 580 |
| Harp | J. A. Rath | 744,105 | Nov. 17 | 2587 | 552 | 107 | 581 |
| Harrow | J. H. Davis | 722,287 | Mar. 10 | 1180 | 261 | 103 | 266 |
| Harrow | E. Riemenschneider | 724,505 | Apr. 7 | 154 | 37 | 103 | 1203 |
| Harrow | J. P. Pfeiffer and B. F. Morris | 725,359 | Apr. 14 | 1737 | 391 | 103 | 1552 |
| Harrow | W. L. Dempsey | 725,418 | Apr. 14 | 1842 | 412, 413 | 103 | 1575 |
| Harrow | G. Sloan | 726,775 | Apr. 28 | 4395 | 989 | 103 | 2133 |
| Harrow | L. W. Compton | 727,092 | May 5 | 522 | 112 | 104 | 114 |
| Harrow | W. S. Ross | 728,304 | May 19 | 2811 | 622 | 104 | 638 |

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|---|---|---|---|---|---|---|---|
| Harrow | F. Hanson | 729,066 | May 26 | 4218 | 932 | 104 | 944 |
| Harrow | O. K. Oppen | 730,793 | June 9 | 2289 | 508 | 104 | 1619 |
| Harrow | C. Shabley | 731,325 | June 16 | 3302 | 736 | 104 | 1846 |
| Harrow | A. W. England | 732,061 | June 30 | 4693 | 1048 | 104 | 2166 |
| Harrow | J. O. Avery | 732,331 | June 30 | 5225 | 1160 | 104 | 2276 |
| Harrow | G. D. Schlosser | 738,361 | Sept. 8 | 1662 | 360 | 106 | 374 |
| Harrow | J. F. Fulkerson | 738,671 | Sept. 8 | 2262 | 498 | 106 | 500 |
| Harrow | J. B. Kittinger | 738,687 | Sept. 8 | 2296 | 504 | 106 | 506 |
| Harrow | M. McDonald | 739,699 | Sept. 22 | 4158 | 929 | 106 | 939 |
| Harrow | H. Hailey | 741,487 | Oct. 13 | 2106 | 469 | 106 | 1716 |
| Harrow | O. C. Vaughn | 742,531 | Oct. 27 | 4158 | 934 | 106 | 2169 |
| Harrow | N. W. Thompson | 742,752 | Oct. 27 | 4527 | 1025 | 106 | 2250 |
| Harrow | S. Prejean and G. C. Bellocq | 744,609 | Nov. 17 | 3496 | 755 | 107 | 774 |
| Harrow | A. Broomfield | 744,715 | Nov. 24 | 3727 | 805 | 107 | 843 |
| Harrow | H. F. Allen | 747,573 | Dec. 22 | 4158 | 934 | 107 | 2068 |
| Harrow and cultivator. Combined | S. R. Stewart | 722,261 | Mar. 10 | 1129 | 249 | 103 | 255 |
| Harrow and cultivator. Combined | C. Koenig and N. D. Le Blanc | 734,234 | July 21 | 2836 | 665 | 105 | 634 |
| Harrow and cultivator. Convertible | W. F. Sheppard | 741,076 | Oct. 13 | 1272 | 291 | 106 | 1539 |
| Harrow. Disk | H. S. Howard | 742,988 | Nov. 3 | 298 | 67, 68 | 107 | 65 |
| Harrow. Disk | J. W. Ingle | 745,727 | Dec. 1 | 742 | 170 | 107 | 1256 |
| Harrow. Flexible | N. H. Bloom | 737,324 | Aug. 25 | 4285 | 952 | 105 | 1944 |
| Harrow. Moss- | W. Matouch | 724,596 | Apr. 7 | 333 | 81 | 103 | 1240 |
| Harrow or similar implement | W. F. Sheppard | 741,596 | Oct. 13 | 2322 | 520 | 106 | 1761 |
| Harrow. Riding- | A. T. Upton | 731,980 | June 23 | 4513 | {1007 {1008 | 104 | 2117 |
| Harrow. Riding- | M. Langellier | 740,875 | Oct. 6 | 908 | 204 | 106 | 1440 |
| Harrow. Riding- | R. H. Hartzell | 745,836 | Dec. 1 | 969 | 217 | 107 | 1305 |
| Harrow riding attachment | J. Mangan | 718,852 | Jan. 20 | 2512 | 560 | 102 | 562 |
| Harrow riding attachment | A. W. Perry | 746,146 | Dec. 8 | 1532 | 343 | 107 | 1447 |
| Harrow. Roller- | N. T. Nichols | 730,837 | June 9 | 2364 | 522 | 104 | 1635 |
| Harrow. Rotary | F. Hanson | 743,382 | Nov. 3 | 1116 | 237 | 107 | 236 |
| Harrow. Rotary | T. S. Wagoner | 746,208 | Dec. 8 | 1646 | 366 | 107 | 1471 |
| Harrow sulky attachment | G. F. Burtch | 734,507 | July 28 | 3344 | 783 | 105 | 755 |
| Harrow-tooth fastener | W. D. Whitney | 728,347 | May 19 | 2895 | 639 | 104 | 654 |
| Harrow-tooth fastener | W. D. Whitney | 730,725 | June 9 | 2181 | 485 | 104 | 1596 |
| Harvester | J. F. Appleby | 720,214 | Feb. 10 | 1488 | {340 {341 | 102 | 1153 |
| Harvester | E. A. Mainguet | 721,058 | Feb. 17 | 3050 | {700 {701 | 102 | 1497 |
| Harvester | W. N. Whitely | 730,998 | June 16 | 2689 | 599 | 104 | 1723 |
| Harvester | F. L. Kincaid | 731,465 | June 23 | 3580 | {797 {798 | 104 | 1922 |
| Harvester | E. A. Mainguet | 732,763 | July 7 | 115 | 31, 32 | 105 | 28 |
| Harvester | E. A. Mainguet | 739,690 | Sept. 22 | 4145 | 925 | 106 | 936 |
| Harvester | W. A. Lee | 739,885 | Sept. 29 | 4534 | 1019 | 106 | 1035 |
| Harvester | H. Traeger | 740,949 | Oct. 6 | 1033 | {235 {236 | 106 | 1466 |
| Harvester | L. Spencer | 742,078 | Oct. 20 | 3313 | {738 {739 | 106 | 1981 |
| Harvester | E. A. Calling | 743,243 | Nov. 3 | 820 | 179 | 107 | 171 |
| Harvester | H. J. Case | 744,956 | Nov. 24 | 4154 | {897 {898 | 107 | 931 |
| Harvester and husker. Corn | J. V., W. W., and W. Campton | 718,564 | Jan. 13 | 1991 | 434 | 102 | 442 |
| Harvester and husker. Corn | A. Forgy | 724,276 | Mar. 31 | 4954 | {1108 {1109 | 103 | 1092 |
| Harvester and husker. Corn | F. B. Pierce | 731,493 | June 23 | 3627 | {809 {810 | 104 | 1933 |
| Harvester and husker. Corn | O. O. Gilbertson | 746,952 | Dec. 15 | 3023 | {693 {694 | 107 | 1796 |
| Harvester and shocker. Corn | I. D. Highleyman and J. L. Lamb | 723,775 | Mar. 24 | 3930 | 886 | 103 | 868 |
| Harvester attachment | G. F. Vollborn | 723,084 | Mar. 17 | 2654 | 598 | 103 | 594 |
| Harvester attachment | L. Franzmeier | 728,561 | May 19 | 3289 | 729 | 104 | 735 |
| Harvester attachment | F. W. Seidl | 737,028 | Aug. 25 | 3738 | 829 | 105 | 1831 |
| Harvester attachment for raising and saving down grain. | W. M. Wadleigh | 733,442 | July 14 | 1340 | 316 | 105 | 300 |
| Harvester attachment for saving and securing down grain. | W. M. Wadleigh | 742,263 | Oct. 27 | 3663 | 818 | 106 | 2069 |
| Harvester. Bean- | W. H. Wilder | 723,962 | Mar. 31 | 4309 | {967 {968 | 103 | 965 |
| Harvester. Beet- | C. E. Bartlett | 721,496 | Feb. 24 | 3911 | {889 {890 | 102 | 1695 |
| Harvester. Beet- | E. Beer and F. Crane | 742,151 | Oct. 27 | 3442 | 767 | 106 | 2023 |
| Harvester-binder bundle-carrier and shock-former | L. T. Dery | 723,250 | Mar. 24 | 2969 | {667 {668 | 103 | 672 |
| Harvester-binders. Drive or master wheel divider for | J. Waldbrook | 744,136 | Nov. 17 | 2644 | 564 | 107 | 592 |
| Harvester binding mechanism. Grain- | S. K. Dennis | 735,721 | Aug. 11 | 1316 | 283 | 105 | 1278 |
| Harvester. Broom-corn | I. O. Baxter | 735,696 | Aug. 11 | 1276 | 273 | 105 | 1270 |
| Harvester. Broom-corn | J. W. Peifer | 735,805 | Aug. 11 | 1464 | {315 {316 | 105 | 1310 |
| Harvester bundle-carrier. Self-binding- | J. F. Appleby | 721,351 | Feb. 24 | 3647 | 830 | 102 | 1641 |
| Harvester-butter | J. J. Wiseman | 732,018 | June 23 | 4611 | 1029 | 104 | 2135 |
| Harvester. Cane- | G. D. Luce | 730,671 | June 9 | 2093 | 466 | 104 | 1577 |
| Harvester compressor and top-retainer. Corn- | E. W. Burgess | 727,081 | May 5 | 499 | 107 | 104 | 109 |
| Harvester. Corn- | W. E. Koch | 720,444 | Feb. 10 | 1894 | {431 {432 {433 | 102 | 1240 |
| Harvester. Corn- | A. M. Meyers | 721,216 | Feb. 24 | 3422 | {776 {777 | 102 | 1593 |
| Harvester. Corn- | A. S. Gove | 722,227 | Mar. 10 | 1066 | 234 | 103 | 243 |
| Harvester. Corn- | W. W. Burson | 722,487 | Mar. 10 | 1559 | {343 {344 | 103 | 349 |
| Harvester. Corn- | E. W. Burgess | 727,080 | May 5 | 495 | {106 {107 | 104 | 108 |
| Harvester. Corn- | D. Binns. (Reissue) | 12,116 | June 9 | 2390 | {528 {529 | 104 | 1641 |
| Harvester. Corn- | W. Smolley | 731,717 | June 23 | 4043 | 902 | 104 | 2013 |

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|---|---|---|---|---|---|---|---|
| Harvester. Corn- | N. Bader | 732,816 | July 7 | 224 | 55, 56, 57 | 105 | 50 |
| Harvester. Corn- | R. B. Robbins | 734,614 | July 28 | 3535 | 828 | 105 | 797 |
| Harvester. Corn- | R. C. and L. Beauchamp | 734,800 | July 28 | 3930 | 917 | 105 | 875 |
| Harvester. Corn- | G. D. Foster | 736,590 | Aug. 18 | 2894 | 631, 632 | 105 | 1634 |
| Harvester. Corn- | G. D. Foster | 736,591 | Aug. 18 | 2901 | 632, 633 | 105 | 1636 |
| Harvester. Corn- | J. F. Leeper | 744,571 | Nov. 17 | 3444 | 741, 742 | 107 | 765 |
| Harvester. Corn- | D. Binns | 745,091 | Nov. 24 | 4438 | 960 | 107 | 989 |
| Harvester. Corn- | W. E. Pelton | 746,738 | Dec. 15 | 2591 | 595 | 107 | 1698 |
| Harvester. Corn- | H. C. Streitwieser | 747,263 | Dec. 15 | 3597 | 813 | 107 | 1924 |
| Harvester. Corn- | E. A. Johnston | 747,611 | Dec. 22 | 4233 | 952, 953 | 107 | 2085 |
| Harvester. Cotton- | A. Campbell | 722,421 | Mar. 10 | 1419 | 313 | 103 | 318 |
| Harvester. Cotton- | R. Cannan | 723,985 | Mar. 31 | 4359 | 978, 979, 980 | 103 | 975 |
| Harvester. Cotton- | J. J. Faulkner | 723,997 | Mar. 31 | 4392 | 987, 988 | 103 | 981 |
| Harvester. Cotton- | I. Jefferson | 745,190 | Nov. 24 | 4647 | 1011 | 107 | 1034 |
| Harvester. Cotton- | J. M. Philbrick | 747,760 | Dec. 22 | 4508 | 1015, 1016 | 107 | 2147 |
| Harvester divider attachment | E. J. Birkett | 727,066 | May 5 | 473 | 100, 101 | 104 | 103 |
| Harvester draft device | C. A. A. Rand | 721,525 | Feb. 24 | 3964 | 903 | 102 | 1707 |
| Harvester ear-stripping device. Corn- | J. P. Lamasney | 729,610 | June 2 | 157 | 38 | 104 | 1159 |
| Harvester ejector attachment | W. M. Piatt | 745,902 | Dec. 1 | 1089 | 243 | 107 | 1330 |
| Harvester frame. Corn- | E. W. Burgess | 727,082 | May 5 | 501 | 108 | 104 | 110 |
| Harvester-frame raising or lowering device | E. W. Burgess | 728,199 | May 19 | 2583 | 576, 577 | 104 | 589 |
| Harvester. Grain- | J. F. Appleby | 720,096 | Feb. 10 | 1274 | 291 | 102 | 1110 |
| Harvester. Grain- | J. F. Steward | 720,635 | Feb. 17 | 2299 | 527 | 102 | 1335 |
| Harvester. Grain- | W. Maloney, E. and J. Dore | 722,182 | Mar. 3 | 964 | 213, 214 | 103 | 204 |
| Harvester. Grain- | G. L. Phelps | 732,219 | June 30 | 5026 | 1119 | 104 | 2235 |
| Harvester. Grain-binding | W. N. Whitely | 737,986 | Sept. 1 | 859 | 188 | 106 | 187 |
| Harvester. Grass- | H. H. and N. O. Michaelson | 738,223 | Sept. 8 | 1344 | 291, 292 | 106 | 306 |
| Harvester. Kafir-corn | M. Bonnell | 721,278 | Feb. 24 | 3521 | 800, 801 | 102 | 1615 |
| Harvester-machine platform-supports. Adjusting mechanism for | J. Macphail | 732,093 | June 30 | 4761 | 1063 | 104 | 2179 |
| Harvester or mower sickle-knife | J. W. Evans | 741,642 | Oct. 20 | 2407 | 539 | 106 | 1795 |
| Harvester. Pea- | F. W. Rapson | 722,326 | Mar. 10 | 1245 | 277 | 103 | 281 |
| Harvester. Pea- | T. G. Gordon | 729,063 | May 26 | 4213 | 931 | 104 | 943 |
| Harvester. Pea- | B. W. Thach | 747,507 | Dec. 22 | 4051 | 910, 911 | 107 | 2043 |
| Harvester pitman connection | E. A. Johnston | 730,022 | June 2 | 921 | 206 | 104 | 1315 |
| Harvester-platform | W. E. Mann | 739,693 | Sept. 22 | 4149 | 927 | 106 | 937 |
| Harvester. Potato- | O. Kirkham | 733,589 | July 14 | 1595 | 380 | 105 | 355 |
| Harvester-reel | M. V. Tucker | 718,038 | Jan. 6 | 973 | 216 | 102 | 210 |
| Harvester-reel | E. A. Johnston | 737,848 | Sept. 1 | 564 | 122, 123 | 106 | 125 |
| Harvester-reel | W. E. Mann | 739,692 | Sept. 22 | 4148 | 926 | 106 | 936 |
| Harvester-reel | L. V. Axtell | 742,557 | Oct. 27 | 4196 | 945 | 106 | 2178 |
| Harvester-reel | W. H. Lightcap | 746,534 | Dec. 8 | 2217 | 509 | 107 | 1594 |
| Harvester-reel | T. H. Berg | 747,362 | Dec. 22 | 3801 | 855 | 107 | 1987 |
| Harvester-reel rake attachment | C. E. Galbreath | 730,632 | June 9 | 2016 | 448 | 104 | 1562 |
| Harvester-reel support | J. F. Appleby | 732,994 | July 7 | 522 | 130 | 105 | 112 |
| Harvester. Shock-corn | G. T. Crobarger | 718,919 | Jan. 20 | 2655 | 595, 596 | 102 | 593 |
| Harvester shocking attachment. Corn- | D. T. Phillips | 746,148 | Dec. 8 | 1535 | 344 | 107 | 1448 |
| Harvester side drafts. Device for preventing | G. A. Smith, J. E. Phillips, and J. P. Smith. | 734,439 | July 21 | 3214 | 757 | 105 | 713 |
| Harvester snapping-roll. Corn- | H. L. Steel | 729,438 | May 26 | 4855 | 1075, 1076 | 104 | 1077 |
| Harvester snapping-roll. Corn- | E. D. Van Auken | 739,951 | Sept. 29 | 4660 | 1046 | 106 | 1063 |
| Harvester stubble-cutter attachment. Corn- | W. A. McCollough | 737,650 | Sept. 1 | 173 | 37 | 106 | 41 |
| Harvester. Sugar-cane | L. Decay | 741,314 | Oct. 13 | 1752 | 390 | 106 | 1637 |
| Harvester threshing-machine | A. Haertlein | 724,855 | Apr. 7 | 823 | 189 | 103 | 1345 |
| Harvester. Traveling | W. C. Matteson | 723,474 | Mar. 24 | 3416 | 763 | 103 | 760 |
| Harvester-truck | J. W. Pridmore and B. R. Benjamin | 730,700 | June 9 | 2143 | 476 | 104 | 1589 |
| Harvester wheat-shocking attachment. Self-binding- | C. B. Cummons | 726,260 | Apr. 28 | 3380 | 768, 769 | 103 | 1929 |
| Harvester wing. Corn- | H. M. Burdick | 733,140 | July 7 | 782 | 190 | 105 | 165 |
| Harvesters. Endless-belt-carrying frame for | J. Johnston | 725,088 | Apr. 14 | 1249 | 282 | 103 | 1450 |
| Harvesting and cleaning root crops. Machine for | J. L. Timmons | 745,931 | Dec. 1 | 1133 | 254 | 107 | 1341 |
| Harvesting attachment. Mowing-machine corn- | C. F. Blackburn | 747,122 | Dec. 15 | 3331 | 757 | 107 | 1869 |
| Harvesting implement | J. W. Feathers and G. Mills | 743,264 | Nov. 3 | 870 | 189 | 107 | 183 |
| Harvesting knife. Tobacco- | J. B. Gatewood | 742,981 | Nov. 3 | 282 | 63 | 107 | 61 |
| Harvesting-machine | P. B. Richards | 717,925 | Jan. 6 | 767 | 172 | 102 | 164 |
| Harvesting-machine | F. A. Ryther | 720,624 | Feb. 17 | 2278 | 523 | 102 | 1331 |
| Harvesting-machine | S. H. and J. H. Beiler | 725,023 | Apr. 14 | 1130 | 255 | 103 | 1426 |
| Harvesting-machine | N. P. Djunkofsky | 725,943 | Apr. 21 | 2829 | 641 | 103 | 1800 |
| Harvesting-machine | J. F. Appleby | 736,921 | Aug. 25 | 3540 | 786 | 105 | 1788 |
| Harvesting-machine | J. W. Taylor and W. J. Hunter | 740,947 | Oct. 6 | 1031 | 235 | 106 | 1466 |
| Harvesting-machine | J. F. Steward | 742,256 | Oct. 27 | 3654 | 816 | 106 | 2067 |
| Harvesting-machine | W. N. Whitely | 744,142 | Nov. 17 | 2656 | 566, 567 | 107 | 595 |
| Harvesting-machine | J. H. Brammer | 745,035 | Nov. 24 | 4314 | 932, 933 | 107 | 965 |
| Harvesting-machine. Broom-corn, &c | L. A. Sproul | 729,971 | June 2 | 827 | 185, 186 | 104 | 1296 |
| Harvesting machine. Corn- | V. R. McDole and A. Hollenbeck | 725,759 | Apr. 21 | 2493 | 566, 567 | 103 | 1730 |

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| Harvesting machine. Corn- | P. P. Coler | 726,508 | Apr. 28 | 3889 | 880, 881, 882 | 103 | 2030 |
| Harvesting machine. Corn- | J.W. Pridmore and B. R. Benjamin | 732,222 | June 30 | 5031 | 1120 | 104 | 2236 |
| Harvesting-machine flag or wind-break | P. Hanson | 745,831 | Dec. 1 | 956 | 215, 216 | 107 | 1302 |
| Harvesting-machine flax attachment | H. Green | 728,906 | May 26 | 3930 | 873 | 104 | 885 |
| Harvesting-machine knife-head | G. Wilson | 745,947 | Dec. 1 | 1163 | 261 | 107 | 1348 |
| Harvesting-machine. Self-binding | M. Stimpson | 725,633 | Apr. 14 | 2254 | 509 | 103 | 1664 |
| Harvesting-machine shocking device | W. Doering | 733,375 | July 14 | 1218 | 289 | 105 | 273 |
| Harvesting-machine. Sidehill | D. Best | 741,876 | Oct. 20 | 2849 | 635, 636 | 106 | 1888 |
| Harvesting-machine twine-can | P. Hanson | 745,832 | Dec. 1 | 958 | 216 | 107 | 1303 |
| Harvesting-machine twine-can | P. Hanson | 745,833 | Dec. 1 | 961 | 216 | 107 | 1303 |
| Harvesting machine. Vine- | J. Brakeley | 747,314 | Dec. 15 | 3704 | 835 | 107 | 1949 |
| Harvesting or husking machines. Snapping-rolls for corn | B. R. Benjamin | 736,478 | Aug. 18 | 2691 | 590, 591 | 105 | 1592 |
| Harvesting potatoes or similar root crops. Machine for | R. Richter | 747,771 | Dec. 22 | 4529 | 1020 | 107 | 2152 |
| Hasp | R. D. Wirt | 732,344 | Mar. 10 | 1285 | 285 | 103 | 289 |
| Hasp-fastener | A. Keller | 721,045 | Feb. 17 | 3036 | 696 | 102 | 1494 |
| Hasp-fastener | D. D. Nolley | 730,684 | June 9 | 2116 | 470 | 104 | 1583 |
| Hassock and sleeping-support. Combined | C. C. Taylor | 733,768 | July 14 | 1904 | 449 | 105 | 418 |
| Hat | L. M. Stirewalt | 740,330 | Sept. 29 | 5351 | 1205, 1206 | 106 | 1208 |
| Hat | R. Plato | 740,913 | Oct. 6 | 971 | 218 | 106 | 1454 |
| Hat and cloak rack | C. A. Gerstbacher | 739,852 | Sept. 29 | 4451 | 1090 | 106 | 1020 |
| Hat and coat hanger | H. A. Krezdorn | 722,856 | Mar. 17 | 2258 | 505 | 103 | 510 |
| Hat and coat rack | E. Pratt | 736,442 | Aug. 18 | 2613 | 574 | 105 | 1575 |
| Hat and coat rack. Bedstead | W. J. Dick | 746,301 | Dec. 8 | 1822 | 413 | 107 | 1508 |
| Hat-binding | C. E. Clark | 730,851 | June 9 | 2386 | 527 | 104 | 1640 |
| Hat-blocking machine | A. B. Waring | 724,404 | Mar. 31 | 5205 | 1167, 1168 | 103 | 1146 |
| Hat-bodies. Machine for forming napped bats for | A. B. Waring | 732,475 | June 30 | 5516 | 1223 | 104 | 2335 |
| Hat-bodies. Uniting bats to | R. L. Gordon | 741,327 | Oct. 13 | 1783 | 397 | 106 | 1644 |
| Hat-body-drying apparatus | E. Hill | 719,667 | Feb. 3 | 450 | 103 | 102 | 916 |
| Hat-body-felting machine | J. Leonard | 732,421 | June 30 | 5412 | 1200, 1201 | 104 | 2316 |
| Hat-body-forming machine | A. B. Waring | 723,954 | Mar. 31 | 4293 | 964 | 103 | 962 |
| Hat-box | H. Miller | 734,235 | July 21 | 2838 | 665 | 105 | 635 |
| Hat-box | W. M. Manning | 736,987 | Aug. 25 | 3671 | 814 | 105 | 1815 |
| Hat-box. Collapsible | J. Frye | 739,849 | Sept. 29 | 4446 | 999 | 106 | 1019 |
| Hat-brim-curling machine | D. Clerico | 746,293 | Dec. 8 | 1798 | 408 | 107 | 1502 |
| Hat-brim-shaping pan | W. Glazier | 717,839 | Jan. 6 | 624 | 137 | 102 | 134 |
| Hat-brim-stretching machine | J. H. Tarbell | 747,503 | Dec. 22 | 4045 | 909 | 107 | 2042 |
| Hat-brims. Machine for paring curls of | G. E. Hunter | 737,933 | Sept. 1 | 751 | 164, 165 | 106 | 165 |
| Hat, coat, and umbrella holder | P. Hufeland | 736,731 | Aug. 18 | 3181 | 702 | 105 | 1692 |
| Hat-die | M. Quinn | 744,402 | Nov. 17 | 3153 | 677 | 107 | 704 |
| Hat-fastener | E. D. Shultz | 717,629 | Jan. 6 | 194 | 48 | 102 | 42 |
| Hat-fastener | W. F. Murphy | 718,014 | Jan. 6 | 940 | 208 | 102 | 202 |
| Hat-fastener | J. Uhry | 719,064 | Jan. 27 | 2936 | 656 | 102 | 668 |
| Hat-fastener | A. Fleeger | 723,853 | Mar. 31 | 4086 | 922 | 103 | 917 |
| Hat-fastener | T. Fries | 726,154 | Apr. 21 | 3168 | 717 | 103 | 1870 |
| Hat-fastener | W. A. Callanan | 726,633 | Apr. 28 | 4129 | 931 | 103 | 2077 |
| Hat-fastener | J. W. Edgerton | 726,887 | May 5 | 106 | 25 | 104 | 25 |
| Hat-fastener | J. G. Closson | 730,436 | June 9 | 1669 | 374 | 104 | 1485 |
| Hat-fastener | A. F. Malmstead | 732,362 | June 30 | 5297 | 1164 | 104 | 2290 |
| Hat-fastener | F. P. McGinn and C. H. Lee | 735,286 | Aug. 4 | 485 | 97 | 105 | 1084 |
| Hat-fastener | J. C. and E. D. Shultz | 738,949 | Sept. 15 | 2785 | 617 | 106 | 630 |
| Hat-fastener | B. von Frantzius | 741,024 | Oct. 13 | 1179 | 266 | 106 | 1517 |
| Hat-fastener. Lady's | J. T. Bluff | 740,797 | Oct. 6 | 778 | 175 | 106 | 1411 |
| Hat-fastener. Lady's | E. Weissmann | 742,537 | Oct. 27 | 4167 | 936 | 106 | 2171 |
| Hat. Folding | R. Plato | 742,731 | Oct. 27 | 4495 | 1017 | 106 | 2242 |
| Hat-forming block | J. W. Brown | 732,163 | June 30 | 4911 | 1092 | 104 | 2211 |
| Hat-forming machine | G. W. Chamberlain | 733,812 | July 14 | 1993 | 469 | 105 | 437 |
| Hat-forming machine | J. Marshall | 739,787 | Sept. 22 | 4320 | 967 | 106 | 976 |
| Hat-guard | A. K. Wilson and W. M. Shaver | 721,848 | Mar. 3 | 348 | 77 | 103 | 76 |
| Hat-guard | A. Ribaud | 730,969 | June 16 | 2631 | 586 | 104 | 1711 |
| Hat-holder | S. Hecht | 731,567 | June 23 | 3781 | 841 | 104 | 1962 |
| Hat-holder | A. B. Carlisle | 735,208 | Aug. 4 | 339 | 65 | 105 | 1054 |
| Hat-holder | M. F. Bishop | 740,734 | Oct. 6 | 649 | 146 | 106 | 1386 |
| Hat-holder. Lady's | M. C. Wintter | 740,965 | Oct. 6 | 1065 | 242 | 106 | 1474 |
| Hat-holder. Milliner's | S. S. Torrance | 729,451 | May 26 | 4876 | 1080 | 104 | 1081 |
| Hat-hook | H. R. Bernard | 723,193 | Mar. 17 | 2868 | 643 | 103 | 638 |
| Hat. Husk | S. C. Heard | 717,571 | Jan. 6 | 89 | 22 | 102 | 21 |
| Hat-machine | A. A. Whitney | 734,642 | July 28 | 3585 | 839 | 105 | 807 |
| Hat-marker | E. A. Burt and H. Harris | 734,043 | July 21 | 2473 | 578 | 105 | 555 |
| Hat or bonnet frames. Clasp for shaping | A. Brodin | 747,682 | Dec. 22 | 4366 | 986 | 107 | 2114 |
| Hat or cap shaping block | H. H. Wolf | 724,227 | Mar. 31 | 4837 | 1085 | 103 | 1071 |
| Hat or the like | S. H. Meerza | 735,790 | Aug. 11 | 1434 | 309 | 105 | 1304 |
| Hat-pin | J. A. Hamelback | 720,423 | Feb. 10 | 1861 | 424 | 102 | 1233 |
| Hat-pin | H. J. Nickett | 723,781 | Mar. 24 | 3940 | 889 | 103 | 870 |
| Hat-pin | C. L. Munson and B. Cain | 730,552 | June 9 | 1874 | 419 | 104 | 1531 |
| Hat-pin | R. Mergler | 740,368 | Sept. 29 | 5423 | 1221 | 106 | 1223 |
| Hat-pin | S. Wilkins | 746,621 | Dec. 8 | 2369 | 543 | 107 | 1629 |
| Hat pin and fastener | C. B. Garrison | 721,512 | Feb. 24 | 3935 | 896 | 102 | 1700 |
| Hat-pin and locking attachment. Permanent | C. C. G. Wolpers | 735,046 | July 28 | 4353 | 1012 | 105 | 962 |
| Hat pin. Lady's | W. H. Lyon and D. V. Fisher | 725,732 | Apr. 21 | 2443 | 554 | 103 | 1717 |
| Hat-pin. Locking | H. E. Stevick | 730,310 | June 9 | 1431 | 316 | 104 | 1436 |
| Hat-polishing machine | D. Rosenberg and R. Chartier | 718,280 | Jan. 13 | 1419 | 315 | 102 | 321 |
| Hat pressing and blocking machine | A. E. Cooper | 720,565 | Feb. 17 | 2147 | 497 | 102 | 1307 |
| Hat-rack | G. C. Hager | 726,527 | Apr. 28 | 3923 | 887 | 103 | 2037 |
| Hat rack or hanger | J. G. White | 736,866 | Aug. 18 | 3321 | 736 | 105 | 1721 |
| Hat-shape retainer | C. T. Naftel | 731,703 | June 23 | 4022 | 898 | 104 | 2009 |
| Hat-shaping die | M. A. Cuming | 740,815 | Oct. 6 | 815 | 183 | 106 | 1419 |
| Hat-smoothing apparatus. Silk- | O. Hammerstein | 719,001 | Jan. 27 | 2816 | 631 | 102 | 642 |

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| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Hats, coats, &c. Hanger for | A. L. Fields | 747,398 | Dec. 22 | 3859 | 868 | 107 | 2000 |
| Hats. Crown-die for forming | H. O. Stearns | 743,045 | Nov. 3 | 435 | 95 | 107 | 92 |
| Hatch | H. Brousseau | 736,357 | Aug. 18 | 2463 | 538<br>539 | 105 | 1544 |
| Hatch-fastener | T. B. Armstrong | 736,053 | Aug. 11 | 1938 | 413 | 105 | 1414 |
| Hatchway-door | M. Hegbom | 724,472 | Apr. 7 | 99 | 24 | 103 | 1190 |
| Hatchway-doors. Means for operating | W. R. Wilcox | 723,793 | Mar. 24 | 3954 | 892 | 103 | 873 |
| Hatchway-gate | J. Bayer and H. W. Wigan | 720,216 | Feb. 10 | 1492 | 342 | 102 | 1154 |
| Hatchet, hammer, and nail-extractor. Combined | C. R. Saunders | 744,804 | Nov. 24 | 3876 | 834 | 107 | 875 |
| Hatching and brooding body | A. O. Sossna | 743,581 | Nov. 10 | 1574 | 330 | 107 | 353 |
| Haulage-clip | J. W. Smallman | 728,421 | May 19 | 3019 | 663 | 104 | 681 |
| Hay and shocked-grain loader. Combined side-delivery | F. M. Conroy, A. Burson, and F. W. Fitch. | 730,879 | June 16 | 2449 | 542<br>543 | 104 | 1673 |
| Hay and stock rack. Combined | S. J. West | 721,115 | Feb. 17 | 3166 | 728 | 102 | 1524 |
| Hay and stock rack. Combined | J. G. Sutton | 722,054 | Mar. 3 | 739 | 164 | 103 | 159 |
| Hay and stock rack. Combined | B. Tanner | 743,112 | Nov. 3 | 562 | 120<br>121 | 107 | 117 |
| Hay and stock rack. Convertible | J. L. Staley | 742,364 | Oct. 27 | 3842 | 863 | 106 | 2106 |
| Hay-carrier | W. Louden | 726,552 | Apr. 28 | 3967 | 897 | 103 | 2045 |
| Hay-carrier | P. A. Myers | 727,823 | May 12 | 1894 | 422<br>423 | 104 | 421 |
| Hay-carrier | P. A. Myers | 727,824 | May 12 | 1896 | 423<br>424 | 104 | 421 |
| Hay-carrier | H. L. Ferris | 731,558 | June 23 | 3755 | 837 | 104 | 1957 |
| Hay-carrier | W. Louden | 738,338 | Sept. 8 | 1611 | 350 | 106 | 363 |
| Hay-carrier. Elevated | S. Jacobs. (Reissue) | 12,135 | July 28 | 4355 | 1012 | 105 | 963 |
| Hay-derrick | T. De La Mare | 727,104 | May 5 | 544 | 117 | 104 | 118 |
| Hay-elevator | D. E. Rowland | 744,409 | Nov. 17 | 3168 | 679<br>680 | 107 | 707 |
| Hay-fork | W. Louden | 733,230 | July 7 | 942 | 227 | 105 | 197 |
| Hay-loader | J. Gross | 730,453 | June 9 | 1701 | 381 | 104 | 1491 |
| Hay-loader | C. J. Romwall and W. C. Pitt | 740,316 | Sept. 29 | 5320 | 1198<br>1199 | 106 | 1201 |
| Hay-loader | C. E. Colbert | 741,111 | Oct. 13 | 1339 | 307<br>308 | 106 | 1552 |
| Hay-loader | R. E. Alger | 748,032 | Dec. 29 | 5065 | 1145<br>1146 | 107 | 2292 |
| Hay loader and stacker | F. L. Doty | 748,171 | Dec. 29 | 5337 | 1214 | 107 | 2351 |
| Hay loader or stacker | H. Sorensen | 738,080 | Sept. 1 | 1018 | 228 | 106 | 221 |
| Hay-loader wind-shield | G. A. Peterson | 726,746 | Apr. 28 | 4341 | 977 | 103 | 2122 |
| Hay, &c. Machine for loading and stacking | S. Mitsch | 735,555 | Aug. 4 | 1011 | 213 | 105 | 1194 |
| Hay or cotton press | R. Hamilton | 730,642 | June 9 | 2030 | 451 | 104 | 1565 |
| Hay or stock rack | F. Goodsell | 744,748 | Nov. 24 | 3782 | 815 | 107 | 854 |
| Hay or straw cutter | T. Frtschek | 744,323 | Nov. 17 | 3017 | 647 | 107 | 674 |
| Hay-press | W. N. Newton | 719,495 | Feb. 3 | 153 | 35 | 102 | 856 |
| Hay-press | J. W. McNair | 720,055 | Feb. 10 | 1184 | 271 | 102 | 1091 |
| Hay-press | J. T. Wright | 728,066 | May 12 | 2342 | 522 | 104 | 516 |
| Hay-press | A. S. Dixon | 730,437 | June 9 | 1670 | 374 | 104 | 1485 |
| Hay-press | A. Ziller and H. Bouchard | 731,010 | June 16 | 2713 | 605 | 104 | 1728 |
| Hay-press | J. E. France and W. Tatum | 731,353 | June 16 | 3339 | 745<br>746 | 104 | 1853 |
| Hay-press | J. Eutsler | 731,556 | June 23 | 3751 | 836 | 104 | 1956 |
| Hay-press | J. L. Orr | 742,056 | Oct. 20 | 3222 | 721<br>722 | 106 | 1964 |
| Hay-press | J. B. Hall | 746,073 | Dec. 8 | 1398 | 313 | 107 | 1416 |
| Hay-press | W. F. Nanney | 746,132 | Dec. 8 | 1506 | 336 | 107 | 1442 |
| Hay-press | F. R. Greene | 746,825 | Dec. 15 | 2762 | 637 | 107 | 1737 |
| Hay-press | J. Ross | 747,230 | Dec. 15 | 3533 | 802 | 107 | 1910 |
| Hay-press door-closer | J. M. Dolan | 744,508 | Nov. 17 | 3341 | 719 | 107 | 744 |
| Hay-press. Hand | J. M. Hall | 723,461 | Mar. 24 | 3366 | 754 | 103 | 751 |
| Hay-press. Hand-power | J. E. France | 737,729 | Sept. 1 | 319 | 67 | 106 | 72 |
| Hay-rack | E. Troy | 722,775 | Mar. 17 | 2108 | 471 | 103 | 481 |
| Hay-rack | J. J. Guidinger | 737,097 | Aug. 25 | 3852 | 856 | 105 | 1853 |
| Hay-rack | N. H. Emery | 737,722 | Sept. 1 | 303 | 63 | 106 | 69 |
| Hay-rack and wagon-box. Combined | I. Williams | 748,246 | Dec. 29 | 5403 | 1245 | 107 | 2378 |
| Hay-rack construction | H. L. Ferris | 731,351 | June 16 | 3337 | 745 | 104 | 1853 |
| Hay-rack. Convertible | C. C. Runyon | 738,071 | Sept. 1 | 1006 | 224 | 106 | 218 |
| Hay-rake | W. A. Dodd | 737,717 | Sept. 1 | 289 | 60, 61 | 106 | 66 |
| Hay-rake | L. S. Bortree | 738,285 | Sept. 8 | 1486 | 321 | 106 | 335 |
| Hay-rake | L. O. Knapp, T. S. Stephenson, and O. P. Vroom. | 738,819 | Sept. 15 | 2562 | 563<br>564 | 106 | 581 |
| Hay-rake | W. Lincoln | 740,769 | Oct. 6 | 729 | 165 | 106 | 1401 |
| Hay-rake | E. Henning | 743,720 | Nov. 10 | 1817 | 383 | 107 | 405 |
| Hay-rake | T. K. Barley | 746,658 | Dec. 15 | 2460 | 562 | 107 | 1670 |
| Hay-rake attachment | J. P. Whitlock | 725,187 | Apr. 14 | 1432 | 324 | 103 | 1487 |
| Hay-rake cleaner. Wheeled | J. Macphail | 732,094 | June 30 | 4764 | 1063 | 104 | 2179 |
| Hay-rake. Horse | G. Wilson | 726,606 | Apr. 28 | 4081 | 921 | 103 | 2068 |
| Hay-rake. Horse | L. O. Knapp, O. P. Vroom, T. S Stephenson, and C. H. Arbuckle. | 727,154 | May 5 | 638 | 137 | 104 | 138 |
| Hay-rake. Horse | A. F. Brown and H. B. Holtvoigt | 728,852 | May 26 | 3841 | 855 | 104 | 869 |
| Hay-rake. Horse | L. Brown | 741,452 | Oct. 13 | 2021 | 449 | 106 | 1697 |
| Hay-rake. Horse | H. Lingelbach | 745,207 | Nov. 24 | 4673 | 1018 | 107 | 1039 |
| Hay-rake. Horse | G. Wilson | 745,946 | Dec. 1 | 1162 | 261 | 107 | 1348 |
| Hay-rake. Horse | W. E. Burrows | 747,535 | Dec. 22 | 4099 | 920 | 107 | 2054 |
| Hay rake. Side-delivery | H. A. Adams | 722,931 | Mar. 17 | 2385 | 533<br>534 | 103 | 537 |
| Hay rake, stacker, and loader | J. A. and O. J. Smith | 736,558 | Aug. 18 | 2832 | 620<br>621 | 105 | 1623 |
| Hay-rakes. Automatic pawl-trip for horse | E. A. Johnston | 732,861 | July 7 | 293 | 73, 74 | 105 | 65 |
| Hay-rakes. Automatic trip for horse | E. A. Johnston | 737,245 | Aug. 25 | 4135 | 919<br>920 | 105 | 1913 |
| Hay-rakes. Foot-trip for horse | E. A. Johnston | 738,912 | Sept. 15 | 2729 | 602<br>603 | 106 | 618 |
| Hay-rakes or other implements. Self-fastening spring-tooth for | J. Macphail | 728,592 | May 19 | 3361 | 745 | 104 | 753 |
| Hay-ricker | J. E. Enyart | 735,229 | Aug. 4 | 380 | 73 | 105 | 1062 |

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| Invention. | Name. | No. | Date. | Monthly volume | | Official Gazette. | |
|---|---|---|---|---|---|---|---|
| | | | | Spec. | Dr'g. | Vol. | Page. |
| Hay-shock ventilator and safety stack-bottom | S. P. White and J. C. Miller | 724,356 | Mar. 31 | 5102 | 1142 | 103 | 1123 |
| Hay-sling | W. A. Law | 745,360 | Dec. 1 | 83 | 20 | 107 | 1119 |
| Hay-sling lock | F. B. Strickler | 746,197 | Dec. 8 | 1623 | 362 | 107 | 1467 |
| Hay-tedder | S. B. Bamford | 720,098 | Feb. 10 | 1277 | 291, 292, 293 | 102 | 1110 |
| Hay-tedder | L. S. Bortree | 738,284 | Sept. 8 | 1484 | 321 | 106 | 335 |
| Hay-tedder attachment | P. V. Blue | 727,577 | May 12 | 1413 | 318 | 104 | 322 |
| Hay-tool | P. A. Myers | 739,901 | Sept. 29 | 4562 | 1026, 1027 | 106 | 1041 |
| Head-gate | J. H. Buttorff | 726,401 | Apr. 28 | 3663 | 830 | 103 | 1987 |
| Head-gear and ear-trumpet. Combined | T. W. Messenger | 739,098 | Sept. 15 | 3051 | 675, 676 | 106 | 684 |
| Head-gear or hat. Protecting | A. Mieroslawski | 746,976 | Dec. 15 | 3059 | 701 | 107 | 1804 |
| Head or search light reflector | H. H. Taylor | 742,135 | Oct. 20 | 3409 | 760 | 106 | 1999 |
| Head-protector | I. Seitzman | 745,530 | Dec. 1 | 404 | 93 | 107 | 1185 |
| Head-rest | J. D. Smock | 723,323 | Mar. 24 | 3098 | 698 | 103 | 699 |
| Head-rest | M. F. Stadtmuller and C. V. Mitchell | 730,488 | June 9 | 1763 | 394 | 104 | 1505 |
| Head-rest | G. L. Grimme | 730,531 | June 9 | 1840 | 411 | 104 | 1523 |
| Head-rest | H. C. Bliven | 735,453 | Aug. 4 | 808 | 172 | 105 | 1152 |
| Head-rest | W. N. Greer | 736,844 | Aug. 18 | 3400 | 751 | 105 | 1739 |
| Head-rest. Adjustable | C. F. Deardurff | 722,950 | Mar. 17 | 2415 | 540 | 103 | 543 |
| Head-rest bar | W. J. Koehn | 722,855 | Mar. 17 | 2257 | 505 | 103 | 510 |
| Headache or insomnia. Mechanism for relief of | J. R. Porter | 737,473 | Aug. 25 | 4561 | 1022 | 105 | 2006 |
| Header | C. W. Harvey | 721,183 | Feb. 24 | 3328 | 761 | 102 | 1575 |
| Header | E. A. Johnston | 735,983 | Aug. 11 | 1810 | 387, 388, 389 | 105 | 1387 |
| Header | C. W. Harvey | 740,427 | Oct. 6 | 87 | 18 | 106 | 1265 |
| Header-platform | R. L. Campbell, Sr., G. W. and C. H. Schwartz | 722,488 | Mar. 10 | 1562 | 344 | 103 | 350 |
| Heading-tool | M. Trauthen | 743,669 | Nov. 10 | 1733 | 365 | 107 | 386 |
| Headlight | F. Kapprel | 718,208 | Jan. 13 | 1282 | 281 | 102 | 291 |
| Headlight | J. Kirby, Jr | 721,647 | Feb. 24 | 4213 | 958, 959 | 102 | 1763 |
| Headlight blind. Locomotive | A. Mentzer | 743,181 | Nov. 3 | 693 | 152, 153 | 107 | 145 |
| Headlight-dimmer | H. S. Teal | 741,187 | Oct. 13 | 1491 | 339 | 106 | 1584 |
| Headlight. Electric | J. Kirby, Jr | 721,646 | Feb. 24 | 4206 | 956, 957, 958 | 102 | 1761 |
| Headlight. Electric | J. A. Mosher | 725,754 | Apr. 21 | 2485 | 564 | 103 | 1728 |
| Headlight for street-cars, &c. Adjustable | G. F. Chapman | 717,811 | Jan. 6 | 556 | 124 | 102 | 120 |
| Headlight. Locomotive | J. S. Lester | 720,823 | Feb. 17 | 2605 | 602 | 102 | 1401 |
| Headlight. Locomotive | H. Reich and O. M. Coate | 721,235 | Feb. 24 | 3449 | 784 | 102 | 1598 |
| Headlight. Locomotive | E. D. Bangs | 739,051 | Sept. 15 | 2958 | 655 | 106 | 666 |
| Headlight-operating mechanism | G. F. Chapman | 743,449 | Nov. 10 | 1301 | 267, 268 | 107 | 293 |
| Headlight-reflector | F. Buchanan | 733,136 | July 7 | 778 | 188 | 105 | 164 |
| Headlight-signal | T. C. Lauer | 721,452 | Feb. 24 | 3829 | 871 | 102 | 1678 |
| Headlight signaling apparatus. Locomotive | W. S. Blackburn | 741,760 | Oct. 20 | 2646 | 592 | 106 | 1844 |
| Headlight-support and adjusting mechanism therefor. | S. McConnell | 731,938 | June 23 | 4438 | 989, 990 | 104 | 2100 |
| Headlights. Gas-jet-holder attachment for lamps of locomotive | E. B. Stoner | 741,736 | Oct. 20 | 2596 | 577 | 106 | 1834 |
| Hearing. Apparatus for the treatment of defective | G. C. Powell and A. D. Smith | 741,371 | Oct. 13 | 1885 | 415, 416 | 106 | 1669 |
| Heat-alarm | H. F. Jones | 742,195 | Oct. 27 | 3522 | 786 | 106 | 2038 |
| Heat and heat-light bath. Radiant | H. J. Dowsing | 730,750 | June 9 | 2218 | 493, 494 | 104 | 1605 |
| Heat bath. Radiant | M. Joachimson | 720,357 | Feb. 10 | 1755 | 398, 399 | 102 | 1211 |
| Heat. Device for effecting the radiation of | F. T. Clark | 735,945 | Aug. 11 | 1737 | 371 | 105 | 1371 |
| Heat-distributer | A. Herig | 720,346 | Feb. 10 | 1728 | 392 | 102 | 1205 |
| Heat-engine | A. W. Case | 719,084 | Jan. 27 | 2981 | 665 | 102 | 676 |
| Heat-indicator | J. T. Smith | 745,740 | Dec. 1 | 760 | 174 | 107 | 1260 |
| Heat-interchanger | G. R. Jarman | 745,499 | Dec. 1 | 355 | 82 | 107 | 1175 |
| Heat-regulating apparatus | H. Winkenwerder and B. Swartz | 719,548 | Feb. 3 | 242 | 56, 57 | 102 | 874 |
| Heat-regulator | A. J. Hopkins | 725,341 | Apr. 14 | 1708 | 385 | 103 | 1547 |
| Heat-regulator | W. Parker | 730,043 | June 2 | 955 | 214 | 104 | 1322 |
| Heat-regulator | L. Aldrich and W. Grange | 741,610 | Oct. 20 | 2353 | 527 | 106 | 1783 |
| Heat-regulator. Thermostatic | A. M. Butz | 739,055 | Sept. 15 | 2965 | 657 | 106 | 668 |
| Heat-retaining pad | J. Rich | 738,573 | Sept. 8 | 2055 | 448 | 106 | 457 |
| Heater: | | | | | | | |
| *See* Air-heater. | Incubator-heater. | | | | | | |
| Air-draft heater. | Kiln-heater. | | | | | | |
| Alcohol-heater. | Lamp-heater. | | | | | | |
| Barrel-heater. | Liquid-heater. | | | | | | |
| Bath-cabinet heater. | Locomotive-engine-cab heater. | | | | | | |
| Car-heater. | | | | | | | |
| Combination-heater. | Milk-heater. | | | | | | |
| Curling-iron heater. | Oil-heater. | | | | | | |
| Electric heater. | Oil-burning heater. | | | | | | |
| Feed-water heater. | Railway-switch heater. | | | | | | |
| Fireplace-heater. | Sad-iron heater. | | | | | | |
| Fluid-fuel heater. | Steam-heater. | | | | | | |
| Furnace air-heater. | Steam or hot-water heater. | | | | | | |
| Gas-heater. | | | | | | | |
| Gas-burning heater. | Tank-heater. | | | | | | |
| Gas-light heater. | Tire-heater. | | | | | | |
| Hand or foot heater. | Tool-heater. | | | | | | |
| Hot-air heater. | Water-heater. | | | | | | |
| Hot-water heater. | | | | | | | |
| Heater | J. G. Hastings | 718,931 | Jan. 20 | 2687 | 601 | 102 | 601 |
| Heater | A. Schütt | 724,511 | Apr. 7 | 166 | 40 | 103 | 1205 |
| Heater | M. Barman | 724,777 | Apr. 7 | 677 | 158 | 103 | 1313 |

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| Heater | O. Jahelka | 724,873 | Apr. 7 | 850 | 195 | 103 | 1351 |
| Heater | T. E. Grover and A. A. Bowe | 726,158 | Apr. 21 | 3176 | 718 | 103 | 1871 |
| Heater | E. P. Clapp | 727,091 | May 5 | 520 | 112 | 104 | 113 |
| Heater | O. F. Roggenkamp | 728,618 | May 19 | 3404 | 753 | 104 | 762 |
| Heater | H. M. Sturgis | 733,437 | July 14 | 1332 | 315 | 105 | 299 |
| Heater | G. W. Brunner | 736,203 | Aug. 11 | 2195 | 472 | 105 | 1468 |
| Heater | S. G. Scanlan | 743,571 | Nov. 10 | 1555 | 324 | 107 | 349 |
| Heater | H. C. Tabrett and W. Lewin | 743,769 | Nov. 10 | 1900 | 402 | 107 | 422 |
| Heater | S. T. Axtell | 747,312 | Dec. 15 | 3701 | 834 | 107 | 1949 |
| Heater and steam-generator | O. R. Rand, Jr. | 733,747 | July 14 | 1862 | 440 | 105 | 410 |
| Heater and steam-generator. Combined | D. Cline | 723,991 | Mar. 31 | 4372 | 982 | 103 | 977 |
| Heater and stock-feed cooker. Combined | R. Braun | 747,584 | Dec. 22 | 4177 | 939, 940 | 107 | 2072 |
| Heater attachment | G. Lund | 730,672 | June 9 | 2095 | 466 | 104 | 1578 |
| Heater attachment | E. Burger | 739,384 | Sept. 22 | 3571 | 797 | 106 | 811 |
| Heater-deflector | C. Kobmann | 734,071 | July 21 | 2532 | 591 | 105 | 570 |
| Heater, radiator, or stove | T. P. Keenan | 740,140 | Sept. 29 | 4999 | 1123 | 106 | 1135 |
| Heating and cooking device | L. L. Smith | 747,011 | Dec. 15 | 3127 | 715 | 107 | 1819 |
| Heating and evaporating apparatus. Continuous-motion | H. D. Perky | 746,145 | Dec. 8 | 1531 | 342, 343 | 107 | 1447 |
| Heating and lighting apparatus. Combined | C. B. Clark | 740,530 | Oct. 6 | 286 | 56 | 106 | 1306 |
| Heating and ventilating apparatus. Combined | G. Beddow | 732,698 | July 7 | 12 | 3 | 105 | 5 |
| Heating apparatus | I. D. Smead | 717,634 | Jan. 6 | 201 | 49, 50 | 102 | 43 |
| Heating apparatus | R. G. McAuley | 724,918 | Apr. 7 | 920 | 211 | 103 | 1366 |
| Heating apparatus | F. Meinzer | 727,172 | May 5 | 666 | 143 | 104 | 144 |
| Heating apparatus | J. Sosenheimer | 730,578 | June 9 | 1929 | 428, 429 | 104 | 1542 |
| Heating apparatus | A. Kehm | 732,749 | July 7 | 94 | 26 | 105 | 23 |
| Heating apparatus | T. J. March | 732,951 | July 7 | 449 | 111 | 105 | 97 |
| Heating apparatus | T. J. March | 734,728 | July 28 | 3766 | 878 | 105 | 842 |
| Heating apparatus | E. Riedel and J. Fulhaber | 735,412 | Aug. 4 | 761 | 152 | 105 | 1132 |
| Heating apparatus | D. M. Horton | 736,099 | Aug. 11 | 2023 | 431 | 105 | 1432 |
| Heating apparatus | J. N. Murphy | 739,503 | Sept. 22 | 3798 | 850, 851 | 106 | 862 |
| Heating apparatus. Electric | D. M. Watson | 735,182 | Aug. 4 | 295 | 58 | 105 | 1043 |
| Heating apparatus. Electrical | J. S. Peck and K. C. Randall | 722,747 | Mar. 17 | 2059 | 461 | 103 | 471 |
| Heating apparatus for closed receptacles | J. A. Waters | 734,023 | July 21 | 2430 | 568, 569 | 105 | 546 |
| Heating apparatus. Hot-water | I. D. Smead | 725,160 | Apr. 14 | 1383 | 312, 313 | 103 | 1478 |
| Heating-boiler | A. Scholl | 742,359 | Oct. 27 | 3833 | 860 | 106 | 2104 |
| Heating-can for fruit or vegetables, &c | G. S. Jewett | 720,435 | Feb. 10 | 1878 | 428 | 102 | 1237 |
| Heating device | A. and H. Leibold | 731,580 | June 23 | 3805 | 847 | 104 | 1966 |
| Heating device | W. H. Henderson | 733,840 | July 14 | 2056 | 486 | 105 | 449 |
| Heating element. Electric | J. F. McElroy | 746,128 | Dec. 8 | 1498 | 335 | 107 | 1440 |
| Heating fabric. Electric | J. M. C. Herrgott | 729,171 | May 26 | 4398 | 970 | 104 | 981 |
| Heating-furnace | F. H. Daniels | 718,433 | Jan. 13 | 1689 | 373 | 102 | 377 |
| Heating-furnace | R. T. Dressler | 718,989 | Jan. 27 | 2796 | 626, 627 | 102 | 638 |
| Heating-furnace | H. C. Ryding | 719,613 | Feb. 3 | 358 | 83 | 102 | 896 |
| Heating-furnace | J. F. Barker | 731,333 | June 16 | 3312 | 739 | 104 | 1848 |
| Heating-furnace | J. A. Herrick | 732,938 | July 7 | 427 | 105, 106 | 105 | 92 |
| Heating furnace and boiler. Steam- | G. A. Copp | 722,493 | Mar. 10 | 1572 | 346 | 103 | 353 |
| Heating furnace. Coil- | R. G. Beker | 734,114 | July 21 | 2616 | 615, 616 | 105 | 586 |
| Heating-furnace. Continuous | A. Laughlin and J. Reuleaux | 726,173 | Apr. 21 | 3203 | 725, 726 | 103 | 1877 |
| Heating-furnace. Continuous | H. V. Loss | 729,370 | May 26 | 4745 | 1049 | 104 | 1054 |
| Heating-furnace. Continuous | R. B. Kernohan | 732,866 | July 7 | 300 | 75 | 105 | 66 |
| Heating-furnace. Double-hearth | P. Patterson | 729,092 | May 26 | 4259 | 940 | 104 | 952 |
| Heating-furnace. Reverberatory | S. Uren | 740,786 | Oct. 6 | 763 | 172 | 106 | 1408 |
| Heating material | E. G. Acheson | 723,631 | Mar. 24 | 3684 | 826 | 103 | 815 |
| Heating or cooling apparatus | A. Hammond and E. R. Waddell | 718,928 | Jan. 20 | 2669 | 598 | 102 | 596 |
| Heating-pad. Electric | W. Rickards | 729,222 | May 26 | 4489 | 989 | 104 | 1001 |
| Heating-pad. Electric | W. Rickards | 748,309 | Dec. 29 | 5574 | 1271 | 107 | 2402 |
| Heating plant. Steam | D. F. Morgan | 722,127 | Mar. 3 | 858 | 192 | 103 | 184 |
| Heating system | A. Glaser and W. H. McIntyre | 725,554 | Apr. 14 | 2103 | 476 | 103 | 1630 |
| Heating system | G. H. Jennings | 725,717 | Apr. 21 | 2418 | 549 | 103 | 1712 |
| Heating system | O. W. Mapes | 738,340 | Sept. 8 | 1615 | 351 | 106 | 364 |
| Heating system | A. D. Hill | 744,915 | Nov. 24 | 4069 | 877 | 107 | 915 |
| Heating system. Electric | E. E. Gold | 718,619 | Jan. 20 | 2097 | 456 | 102 | 480 |
| Heating system. Hot-water | C. O. Myers | 735,563 | Aug. 4 | 1025 | 217 | 105 | 1198 |
| Heating system. Hot-water | A. B. Reck | 741,070 | Oct. 13 | 1262 | 286 | 106 | 1537 |
| Heating system. Steam- | A. McGonagle | 729,390 | May 26 | 4775 | 1057 | 104 | 1060 |
| Heating system. Steam- | T. S. Hamilton | 731,776 | June 23 | 4154 | 926, 927 | 104 | 2037 |
| Heating system. Vacuum | G. H. Reynolds | 741,548 | Oct. 13 | 2228 | 496 | 106 | 1741 |
| Heating systems. Automatic controlling device for steam- | J. H. Davis | 726,264 | Apr. 28 | 3391 | 770 | 103 | 1931 |
| Heating systems. Means for regulating the temperature in | W. P. Powers | 722,251 | Mar. 10 | 1115 | 245, 246 | 103 | 252 |
| Heating systems. Return water-feed for steam- | G. F. Brown | 725,314 | Apr. 14 | 1655 | 373 | 103 | 1535 |
| Heddle and leno-cord-stripe motion. Needle- | H. H. Sutcliffe | 729,106 | May 26 | 4284 | 946, 947 | 104 | 957 |
| Heddle bar or support clamping device | W. F. Draper | 729,047 | May 26 | 4189 | 926 | 104 | 939 |
| Heddle bar or support clamping device | E. S. Stimpson and C. Short | 746,401 | Dec. 8 | 1989 | 454 | 107 | 1544 |
| Heddle-bar wear-protecting means | W. Barber | 732,033 | June 30 | 4648 | 1038 | 104 | 2158 |
| Heddle bars or supports. Clamping device for | H. W. Jordan | 742,120 | Oct. 20 | 3385 | 755 | 106 | 1995 |
| Heddle-machine | W. H. Gibbs | 746,951 | Dec. 15 | 3022 | 693 | 107 | 1796 |
| Heddle-making machine | J. Gohy | 729,572 | June 2 | 91 | 23, 24, 25 | 104 | 1146 |
| Hedge-trimmer | F. S. Voorhees | 718,404 | Jan. 13 | 1634 | 359 | 102 | 366 |
| Hedge-trimmer | W. Linhoff | 722,371 | Mar. 10 | 1335 | 295 | 103 | 300 |
| Heel | G. B. Grover | 724,095 | Mar. 31 | 4566 | 1027 | 103 | 1015 |

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| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Heel and sole protector. Shoe | R. A. Regester | 738,484 | Sept. 8 | 1899 | 415 | 106 | 422 |
| Heel-attaching device | C. W. Woods | 748,452 | Dec. 29 | 5838 | 1329 | 107 | 2460 |
| Heel-attaching machine | W. E. Searles | 731,511 | June 23 | 3636 | 817<br>818 | 104 | 1940 |
| Heel-attaching machine | E. Woodward | 743,369 | Nov. 3 | 1094 | 233 | 107 | 232 |
| Heel-attaching machine | F. F. Raymond, 2d | 745,971 | Dec. 1 | 1209 | 271<br>272 | 107 | 1358 |
| Heel-beading machine | H. W. Gould | 739,857 | Sept. 29 | 4459 | 1001 | 106 | 1021 |
| Heel. Boot or shoe | J. L. Izan | 722,307 | Mar. 10 | 1220 | 271 | 103 | 276 |
| Heel. Boot or shoe | C. Campbell | 727,898 | May 12 | 2037 | 453 | 104 | 452 |
| Heel. Boot or shoe | J. C. Hale | 740,124 | Sept. 29 | 4970 | 1115 | 106 | 1129 |
| Heel. Boot or shoe cushion | J. Coffman and G. Dorn | 726,405 | Apr. 28 | 3668 | 832 | 103 | 1988 |
| Heel-breasting machine | W. J. Mitchell | 717,892 | Jan. 6 | 714 | 160 | 102 | 152 |
| Heel-breasting machine | W. J. Mitchell | 717,893 | Jan. 6 | 715 | 160 | 102 | 153 |
| Heel-breasting machine | B. B. Waterman | 738,502 | Sept. 8 | 1933 | 422<br>423 | 106 | 430 |
| Heel-building machine | F. E. Morris, C. Ruemmler, and C. J. Kennedy. | 723,177 | Mar. 17 | 2819 | 635 | 103 | 626 |
| Heel-building machine | F. H. White | 744,270 | Nov. 17 | 2910 | 623 | 107 | 651 |
| Heel. Cushion | H. F. Rooney | 726,464 | Apr. 28 | 3775 | 855 | 103 | 2010 |
| Heel-cushion and ventilator. Shoe | J. H. Denton | 733,167 | July 7 | 828 | 201 | 105 | 174 |
| Heel. Detachable | M. H. Sullivan, G. J. Dixon, and J. W. White. | 723,754 | Mar. 24 | 3885 | 875 | 103 | 858 |
| Heel-finishing machine | R. W. Thomson | 743,956 | Nov. 10 | 2244 | 484 | 107 | 495 |
| Heel-finishing machine | R. W. Thomson | 743,993 | Nov. 10 | 2330 | 498 | 107 | 517 |
| Heel-finishing machine | R. W. Thomson | 743,994 | Nov. 10 | 2333 | 499 | 107 | 518 |
| Heel for boots or shoes. Compensating | R. Wynell | 724,150 | Mar. 31 | 4693 | 1054 | 103 | 1041 |
| Heel for footwear. Safety | H. C. Karpenstein | 720,440 | Feb. 10 | 1889 | 430 | 102 | 1239 |
| Heel-lift-cutting machine | N. M. Friis | 741,960 | Oct. 20 | 3033 | 675 | 106 | 1926 |
| Heel-making machine | T. H. Mayo | 734,584 | July 28 | 3479 | 813<br>814 | 105 | 784 |
| Heel-nail | H. Briggs | 723,819 | Mar. 31 | 4013 | 904 | 103 | 903 |
| Heel or sole protectors. Machine for inserting | B. F. Mayo | 741,522 | Oct. 13 | 2171 | 483<br>484 | 106 | 1729 |
| Heel-pad. Elastic | W. C. Corman | 745,793 | Dec. 1 | 862 | 194 | 107 | 1284 |
| Heel-plate | C. E. McKenna | 728,751 | May 19 | 3638 | 808 | 104 | 811 |
| Heel protector. Shoe | L. F. Riemer | 730,971 | June 16 | 2633 | 587 | 104 | 1711 |
| Heel-rand cutting and counting machine | C. O. Ryberg | 726,467 | Apr. 28 | 3779 | 855<br>856 | 103 | 2011 |
| Heel-rand-making machine | A. C. Heath | 724,700 | Apr. 7 | 525 | 125<br>126 | 103 | 1231 |
| Heel-scouring machine | W. B. Arnold | 732,814 | July 7 | 221 | 55 | 105 | 49 |
| Heel-seat and counter beating machine | C. L. Eaton | 731,168 | June 16 | 3013 | 669 | 104 | 1787 |
| Heel-seating machine. Spring | B. E. Morrison | 720,171 | Feb. 10 | 1394 | 319 | 102 | 1136 |
| Heel. Shoe | G. F. Fischer | 737,915 | Sept. 1 | 719 | 155 | 106 | 157 |
| Heel. Shoe | L. F. Small | 745,393 | Dec. 1 | 153 | 35 | 107 | 1133 |
| Heel-trimming machine. Boot or shoe | B. F. Mayo | 735,546 | Aug. 4 | 986 | 209 | 105 | 1190 |
| Heel-trimming-machine upper-guard | E. Villeneuve | 728,786 | May 19 | 3705 | 827 | 104 | 823 |
| Heels, &c. Cushion-tread for | H. F. Rooney | 718,526 | Jan. 13 | 1910 | 419 | 102 | 427 |
| Heels or other parts of boots or shoes. Machine for finishing | C. Pease | 743,988 | Nov. 10 | 2319 | 495<br>496 | 107 | 514 |
| Heeling jack. Shoe | J. H. Mullen, Jr | 733,250 | July 7 | 983 | 237 | 105 | 205 |
| Heeling-machines. Cementing attachment for | J. M. Irving | 737,243 | Aug. 25 | 4131 | 918<br>919 | 105 | 1912 |
| Helix. Electrical | R. Varley | 734,778 | July 28 | 3864 | 901 | 105 | 861 |
| Hemoglobin preparations. Making | F. Hanssen | 736,250 | Aug. 11 | 2275 | ------ | 105 | 1485 |
| Hens from setting. Means for preventing | J. B. Copeland | 736,821 | Aug. 18 | 3360 | 742 | 105 | 1730 |
| Hermetically-sealed jar | W. A. Lorenz | 747,450 | Dec. 22 | 3942 | 887 | 107 | 2018 |
| Hertzian waves. Apparatus for polarization of | F. J. Green | 739,271 | Sept. 15 | 3366 | 747<br>748 | 106 | 752 |
| Hertzian waves. Transmitting and receiving apparatus for | E. Ducretet | 726,413 | Apr. 28 | 3681 | 834 | 103 | 1991 |
| Hide-fleshing machine | O. F. Feix | 719,773 | Feb. 3 | 668 | 154 | 102 | 963 |
| Hide-fleshing machine | W. E. Lombard and E. T. Luce | 736,278 | Aug. 11 | 2328 | 505<br>506 | 105 | 1498 |
| Hide or skin treating machine | R. W. Strout | 747,500 | Dec. 22 | 4036 | 907 | 107 | 2041 |
| Hide-stretching implement | R. J. Barton | 738,276 | Sept. 8 | 1468 | 316 | 106 | 332 |
| Hide-working machine | A. A. Hutchinson | 745,353 | Dec. 1 | 65 | 15<br>16<br>17 | 107 | 1114 |
| Hides for robes. Machine for cleaning, softening, and drying tanned | S. D. Castle | 730,815 | June 9 | 2325 | 516 | 104 | 1627 |
| Hides or skins. Machine for softening | H. Foisy | 719,100 | Jan. 27 | 3025 | 673<br>674 | 102 | 685 |
| Hides or skins. Machine for treating | F. J. Perkins | 722,888 | Mar. 17 | 2323 | 519<br>520 | 103 | 524 |
| Hides or skins. Machine for treating | A. F. Jones | 726,306 | Apr. 28 | 3489 | 789<br>790 | 103 | 1951 |
| Hides or skins. Machine for treating | F. J. Perkins | 746,144 | Dec. 8 | 1527 | 341<br>342 | 107 | 1446 |
| Hides or skins. Treating | S. K. Felton, Jr. | 721,553 | Feb. 24 | 4007 | ------ | 102 | 1716 |
| Hides or skins. Treating | A. H. Peter | 727,832 | May 12 | 1909 | ------ | 104 | 424 |
| Hides or skins. Treating animal | G. D. Burton | 739,825 | Sept. 29 | 4398 | 987 | 106 | 1009 |
| High or low water alarm | R. C. Blake | 745,317 | Dec. 1 | 9 | 2 | 107 | 1103 |
| High-temperature furnace | J. T. Shadforth | 741,727 | Oct. 20 | 2584 | 575 | 106 | 1831 |
| Hinge | A. E. Preston | 719,137 | Jan. 27 | 3090 | 687 | 102 | 698 |
| Hinge | R. S. Bowen | 719,640 | Feb. 3 | 409 | 94 | 102 | 907 |
| Hinge | J. Whitehead | 721,641 | Feb. 24 | 4200 | 955 | 102 | 1760 |
| Hinge | E. A. Moore | 721,721 | Mar. 3 | 122 | 27 | 103 | 27 |
| Hinge | W. A. Peay | 721,738 | Mar. 3 | 149 | 34 | 103 | 33 |
| Hinge | J. Soss | 724,962 | Apr. 7 | 1000 | 230 | 103 | 1383 |
| Hinge | J. T. Flippen | 725,433 | Apr. 14 | 1875 | 419 | 103 | 1582 |
| Hinge | J. Gamache | 725,435 | Apr. 14 | 1878 | 420 | 103 | 1583 |
| Hinge | R. W. Hubbard | 725,712 | Apr. 21 | 2408 | 546 | 103 | 1710 |
| Hinge | G. A. Long | 727,653 | May 12 | 1557 | 351 | 104 | 353 |
| Hinge | B. Peterson | 729,406 | May 26 | 4806 | 1066 | 104 | 1066 |

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| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Hinge | G. R. Hill | 730,365 | June 9 | 1356 | 298 | 104 | 1419 |
| Hinge | E. W. Christ | 730,876 | June 16 | 2445 | 541 | 104 | 1672 |
| Hinge | J. St. Amand | 731,389 | June 16 | 3424 | 764 | 104 | 1872 |
| Hinge | H. H. Pattee | 731,811 | June 23 | 4220 | 941 | 104 | 2052 |
| Hinge | A. Ek | 735,481 | Aug. 4 | 855 | 182 | 105 | 1162 |
| Hinge | J. H. Fry | 736,953 | Aug. 25 | 3608 | 800 | 105 | 1803 |
| Hinge | E. C. Hoffman | 738,039 | Sept. 1 | 955 | 212 | 106 | 208 |
| Hinge | L. P. Krisner | 739,088 | Sept. 15 | 3028 | 671 | 106 | 680 |
| Hinge | A. C. Haycock | 743,279 | Nov. 3 | 896 | 195 | 107 | 190 |
| Hinge | G. S. Bronson | 744,030 | Nov. 17 | 2440 | 524 | 107 | 551 |
| Hinge | T. B. McCready | 745,887 | Dec. 1 | 1063 | 239 | 107 | 1325 |
| Hinge | J. Soss | 746,398 | Dec. 8 | 1985 | 453 | 107 | 1543 |
| Hinge | S. J. Hogan | 746,509 | Dec. 8 | 2171 | 499 | 107 | 1583 |
| Hinge | H. Hotz | 748,377 | Dec. 29 | 5687 | 1297, 1298 | 107 | 2427 |
| Hinge. Adjustable door | A. Christersson | 719,747 | Feb. 3 | 614 | 137 | 102 | 951 |
| Hinge and check. Combined door | J. W. Morris | 725,752 | Apr. 21 | 2482 | 563 | 103 | 1727 |
| Hinge. Awning | H. W. Hale | 734,702 | July 28 | 3708 | 867, 868 | 105 | 831 |
| Hinge. Barrel-cover | R. H. Fesperman | 744,737 | Nov. 24 | 3766 | 811 | 107 | 851 |
| Hinge. Blind or shutter | C. Purrington | 744,23[illegible] | Nov. 17 | 2845 | 608 | 107 | 637 |
| Hinge. Box | A. B. Miller | 719,832 | Feb. 3 | 765 | 179 | 102 | 985 |
| Hinge. Box | D. L. Hill | 747,175 | Dec. 15 | 3431 | 777, 778 | 107 | 1890 |
| Hinge. Coach | F. P. Pfleghar | 729,407 | May 26 | 4806 | 1066 | 104 | 1066 |
| Hinge. Convertible | A. F. Enquist | 746,054 | Dec. 8 | 1368 | 305 | 107 | 1446 |
| Hinge. Detachable | G. B. Pickop | 722,624 | Mar. 10 | 1791 | 398 | 103 | 400 |
| Hinge. Door | J. M. Cannon | 718,423 | Jan. 13 | 1670 | 369 | 102 | 372 |
| Hinge for metal windows. Pivot | J. A. Knisely | 747,189 | Dec. 15 | 3451 | 782 | 107 | 1895 |
| Hinge for railway-coach vestibules. Trap-door | G. H. Giffin | 727,933 | May 12 | 2112 | 470 | 104 | 468 |
| Hinge. Friction | F. E. Sloan. (Reissue) | 12,139 | Aug. 4 | 1256 | 266 | 105 | 1248 |
| Hinge. Gate | G. E. Rickel and J. W. Potter | 721,327 | Feb. 24 | 3604 | 819 | 102 | 1632 |
| Hinge. Gate | L. F. Volberding | 742,261 | Oct. 27 | 3661 | 818 | 106 | 2068 |
| Hinge. Gate | J. D. Parkinson | 746,142 | Dec. 8 | 1525 | 341 | 107 | 1446 |
| Hinge-joint | R. A. Moore, Jr | 729,083 | May 26 | 4243 | 938 | 104 | 949 |
| Hinge. Leaf | W. M. Gamble | 721,177 | Feb. 24 | 3319 | 759 | 102 | 1573 |
| Hinge. Leaf | W. M. Gamble | 747,962 | Dec. 29 | 4928 | 1114 | 107 | 2261 |
| Hinge. Lock | E. Cornberg | 726,870 | May 5 | 68 | 18 | 104 | 18 |
| Hinge. Lock | J. Schick | 744,626 | Nov. 17 | 3524 | 760 | 107 | 780 |
| Hinge-making machine | L. T. Weiss | 738,266 | Sept. 8 | 1442 | 311, 312, 313 | 106 | 326 |
| Hinge or hay-rack attachment | H. S. Cunningham | 743,461 | Nov. 10 | 1340 | 274 | 107 | 302 |
| Hinge-pin | J. C. Griffin | 739,306 | Sept. 22 | 3432 | 765 | 106 | 782 |
| Hinge. Seat | L. D. Petre | 723,544 | Mar. 24 | 3527 | 789 | 103 | 782 |
| Hinge. Seat | L. D. Petre | 741,000 | Oct. 6 | 1134 | 255 | 106 | 1487 |
| Hinge. Separable | R. G. Winter | 720,304 | Feb. 10 | 1656 | 377 | 102 | 1189 |
| Hinge. Separable | G. H. Schiek | 726,577 | Apr. 28 | 4028 | 910 | 103 | 2056 |
| Hinge-shoe | T. Tribe | 734,635 | July 28 | 3574 | 837 | 105 | 804 |
| Hinge. Sofa-bed | T. G. Weyer | 744,839 | Nov. 24 | 3943 | 850 | 107 | 888 |
| Hinge. Spring | W. J. Cowan | 720,116 | Feb. 10 | 1308 | 298 | 102 | 1118 |
| Hinge. Spring | W. J. Keene | 720,254 | Feb. 10 | 1558 | 357 | 102 | 1169 |
| Hinge. Spring | T. Roche | 723,186 | Mar. 17 | 2853 | 641 | 103 | 636 |
| Hinge. Spring | W. G. Peterkin | 724,039 | Mar. 31 | 4465 | 1006 | 103 | 994 |
| Hinge. Spring | H. B. Sargent | 727,697 | May 12 | 1639 | 371 | 104 | 371 |
| Hinge. Spring | W. L. Evans, Jr | 732,063 | June 30 | 4702 | 1050 | 104 | 2167 |
| Hinge. Spring | K. V. Clark | 733,153 | July 7 | 802 | 194 | 105 | 169 |
| Hinge. Spring | H. J. Valentine | 734,446 | July 21 | 3226 | 759, 760 | 105 | 715 |
| Hinge. Spring | H. J. Valentine | 734,447 | July 21 | 3227 | 760 | 105 | 716 |
| Hinge. Spring | O. M. Chesney | 741,626 | Oct. 20 | 2380 | 533 | 106 | 1789 |
| Hinge. Spring | A. F. Enquist | 745,428 | Dec. 1 | 218 | 49 | 107 | 1146 |
| Hinge. Spring | C. H. Ocumpaugh | 745,891 | Dec. 1 | 1068 | 241 | 107 | 1326 |
| Hinge. Spring | E. Bommer | 746,272 | Dec. 8 | 1764 | 400 | 107 | 1496 |
| Hinge. Spring | H. Tscherning | 747,274 | Dec. 15 | 3625 | 817 | 107 | 1930 |
| Hinge. Spring | H. Tscherning | 747,275 | Dec. 15 | 3626 | 817 | 107 | 1931 |
| Hinge. Spring | H. Tscherning | 747,276 | Dec. 15 | 3627 | 817 | 107 | 1931 |
| Hinge. Spring | E. Bommer | 747,680 | Dec. 22 | 4362 | 985 | 107 | 2113 |
| Hinge stop. Detachable spring | G. B. Pickop | 747,570 | Dec. 22 | 4155 | 933 | 107 | 2068 |
| Hinge-washer. Antifriction | E. A. Moore | 724,117 | Mar. 31 | 4622 | 1041 | 103 | 1027 |
| Hinge. Water-closet seat and cover | A. F. Blesch | 720,657 | Feb. 17 | 2337 | 535 | 102 | 1343 |
| Hinge. Window-blind | W. C. Landt | 721,204 | Feb. 24 | 3398 | 772 | 102 | 1580 |
| Hinged or other movable members. Support for | L. I. Berkowitz | 729,530 | June 2 | 20 | 6 | 104 | 1130 |
| Hip-reducer and hose-supporter. Combined | M. E. G. Darrah | 746,037 | Dec. 8 | 1337 | 300 | 107 | 1401 |
| Hitching attachment. Vehicle | C. Boulard | 719,731 | Feb. 3 | 578 | 130 | 102 | 944 |
| Hitching device | G. W. Cummings | 726,874 | May 5 | 74 | 19 | 104 | 19 |
| Hitching device | J. M. Fair, Jr., O. E. Taylor, T. Mills, and R. E. L. Snodgrass. | 745,808 | Dec. 1 | 894 | 202 | 107 | 1290 |
| Hitching device | F. Obiols | 746,135 | Dec. 8 | 1512 | 338 | 107 | 1443 |
| Hitching device. Horse | G. W. Sheehan | 724,340 | Mar. 31 | 5071 | 1134 | 103 | 1116 |
| Hitching device. Horse | H. Dalwigk | 731,757 | June 23 | 4123 | 919 | 104 | 2030 |
| Hitching or releasing device. Horse | H. C. Graybill | 731,770 | June 23 | 4146 | 925 | 104 | 2035 |
| Hitching-rack. Folding | C. W. Justus | 727,376 | May 5 | 1030 | 223 | 104 | 222 |
| Hive-frames. Foundation-fastener for | O. O. Bordson | 736,679 | Aug. 18 | 3082 | 679 | 105 | 1672 |
| Hobby-horse and merry-go-round | T. Sulikx | 724,218 | Mar. 31 | 4821 | 1081 | 103 | 1067 |
| Hod-elevator | A. Gartner | 717,672 | Jan. 6 | 270 | 67 | 102 | 58 |
| Hoe | J. F. Green | 730,636 | June 9 | 2023 | 449 | 104 | 1563 |
| Hoe. Garden | F. Vaydl | 723,950 | Mar. 31 | 4289 | 963 | 103 | 961 |
| Hoe. Weeding | E. B. Morgan | 747,206 | Dec. 15 | 3496 | 793 | 107 | 1903 |
| Hoeing-machine | J. E. Hickey | 745,610 | Dec. 1 | 544 | 127 | 107 | 1213 |
| Hog-catcher | H. O. Carns | 745,323 | Dec. 1 | 18 | 4 | 107 | 1105 |
| Hog-catcher | L. D. Howell | 747,717 | Dec. 22 | 4434 | 999 | 107 | 2130 |
| Hog-holding device | J. S. Alexander | 732,029 | June 30 | 4637 | 1037 | 104 | 2155 |
| Hog-nose cutter | C. F. Roux | 723,033 | Mar. 17 | 2555 | 574 | 103 | 572 |
| Hog-snout holder | G. F. Snider | 722,434 | Mar. 10 | 1441 | 319 | 103 | 323 |
| Hog-tongs | J. L. Vanderburg | 740,715 | Oct. 6 | 605 | 135 | 106 | 1377 |

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| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Hog-trap | M. Sage | 730,049 | June 2 | 961 | 216 | 104 | 1323 |
| Hogshead-cover | G. A. Krieger | 719,945 | Feb. 3 | 946 | 220 | 102 | 1024 |
| Hoist | W. L. McCabe | 721,067 | Feb. 17 | 3065 | 704 | 102 | 1500 |
| Hoist | L. D. Round | 721,968 | Mar. 3 | 591 | 132 | 103 | 129 |
| Hoist | G. C. Hunter | 723,277 | Mar. 24 | 3019 | 680 | 103 | 683 |
| Hoist | O. C. Duryea and M. C. White | 737,830 | Sept. 1 | 519 | 114 | 106 | 116 |
| Hoist | E. Y. Moore | 747,463 | Dec. 22 | 3966 | 891, 892 | 107 | 2023 |
| Hoist-apparatus scraper attachment | S. E. Leonard | 732,571 | June 30 | 5705 | 1267, 1268 | 104 | 2377 |
| Hoist-block for cranes or derricks | C. L. Taylor | 733,605 | July 14 | 1620 | 384 | 105 | 360 |
| Hoist. Chain | J. Johnson | 740,660 | Oct. 6 | 516 | 113 | 106 | 1357 |
| Hoist. Chain | T. A. Weston | 742,539 | Oct. 27 | 4169 | 937 | 106 | 2172 |
| Hoist circuit-breaker | S. S. Wales | 728,523 | May 19 | 3200 | 709 | 104 | 718 |
| Hoist controller. Electric | P. J. Darlington | 732,619 | June 30 | 5787 | 1283 | 104 | 2397 |
| Hoist. Electric | F. Nather | 730,955 | June 16 | 2607 | 580 | 104 | 1706 |
| Hoist. Electric | M. B. McLauthlin | 740,166 | Sept. 29 | 5046 | 1135 | 106 | 1146 |
| Hoist. Electrically-driven suspensible | F. A. Waldron | 741,390 | Oct. 13 | 1919 | 424 | 106 | 1676 |
| Hoist. Pneumatic | C. H. Reeder | 744,611 | Nov. 17 | 3499 | 755, 756 | 107 | 775 |
| Hoist, raised track, and dumping device | W. R. Strickler | 735,617 | Aug. 4 | 1116 | 237 | 105 | 1219 |
| Hoist safety device | S. S. Wales | 721,481 | Feb. 24 | 3890 | 885 | 102 | 1690 |
| Hoisting and conveying apparatus | J. H. Dickinson | 729,292 | May 26 | 4624 | 1022 | 104 | 1029 |
| Hoisting and conveying apparatus | L. S. Austin | 732,499 | June 30 | 5567 | 1234 | 104 | 2345 |
| Hoisting and conveying apparatus | C. J. Allen | 747,113 | Dec. 15 | 3317 | 755 | 107 | 1866 |
| Hoisting and conveying cableway | B. H. Hardaway | 728,574 | May 19 | 3323 | 735 | 104 | 743 |
| Hoisting and dumping apparatus | C. Lamar | 737,426 | Aug. 25 | 4481 | 1005 | 105 | 1988 |
| Hoisting and dumping apparatus. Combined | W. F. Weber | 748,447 | Dec. 29 | 5821 | 1326 | 107 | 2457 |
| Hoisting apparatus | A. E. Norris | 719,033 | Jan. 27 | 2874 | 645 | 102 | 654 |
| Hoisting apparatus | G. Blaauw | 719,177 | Jan. 27 | 3154 | 702 | 102 | 711 |
| Hoisting apparatus | E. H. and V. R. Browning | 719,182 | Jan. 27 | 3161 | 703, 704 | 102 | 712 |
| Hoisting apparatus | A. E. Norris | 721,599 | Feb. 24 | 4118 | 937 | 102 | 1741 |
| Hoisting apparatus | A. E. Norris | 722,613 | Mar. 10 | 1773 | 395 | 103 | 396 |
| Hoisting apparatus | A. V. Hysore | 724,579 | Apr. 7 | 301 | 74 | 103 | 1233 |
| Hoisting apparatus | C. W. Hunt | 729,867 | June 2 | 642 | 141 | 104 | 1260 |
| Hoisting apparatus | C. W. Hunt | 729,868 | June 2 | 644 | 141, 142 | 104 | 1260 |
| Hoisting apparatus | C. W. Hunt | 729,869 | June 2 | 646 | 142 | 104 | 1260 |
| Hoisting apparatus | F. Dunbrook and W. W. Mead | 733,469 | July 14 | 1389 | 327 | 105 | 311 |
| Hoisting apparatus | G. Blaauw | 733,615 | July 14 | 1639 | 388 | 105 | 364 |
| Hoisting apparatus | C. E. Stevenson and R. Watson | 738,705 | Sept. 8 | 2321 | 510 | 106 | 512 |
| Hoisting apparatus | H. Dyer | 739,843 | Sept. 29 | 4429 | 994 | 106 | 1016 |
| Hoisting apparatus | A. Jackson | 742,994 | Nov. 3 | 308 | 69 | 107 | 67 |
| Hoisting apparatus | S. L. G. Knox and W. Ferris | 743,889 | Nov. 10 | 2126 | 455, 456, 457 | 107 | 469 |
| Hoisting apparatus | O. F. Lidke | 747,737 | Dec. 22 | 4464 | 1006 | 107 | 2136 |
| Hoisting-apparatus safety device | M. H. Read | 744,233 | Nov. 17 | 2847 | 608, 609 | 107 | 637 |
| Hoisting-bucket | C. L. Saunders | 734,433 | July 21 | 3203 | 754, 755 | 105 | 711 |
| Hoisting-bucket | A. C. S. Rue | 739,561 | Sept. 22 | 3887 | 871, 872 | 106 | 880 |
| Hoisting-bucket | A. E. Norris | 745,653 | Dec. 1 | 615 | 143 | 107 | 1229 |
| Hoisting-bucket. Two-part | A. E. Howes | 737,408 | Aug. 25 | 4442 | 996 | 105 | 1980 |
| Hoisting, conveying, or excavating machine | F. E. Potter | 727,836 | May 12 | 1919 | 428 | 104 | 426 |
| Hoisting device | M. Rath | 727,442 | May 5 | 1156 | 254, 255 | 104 | 250 |
| Hoisting device | E. Stowell | 729,443 | May 26 | 4864 | 1077 | 104 | 1079 |
| Hoisting device | J. Hayward | 744,071 | Nov. 17 | 2526 | 541 | 107 | 567 |
| Hoisting device for sacks, boxes, &c | C. Serley | 740,475 | Oct. 6 | 174 | 34 | 106 | 1282 |
| Hoisting, &c. Drum for | C. W. Hunt | 742,193 | Oct. 27 | 3519 | 785 | 106 | 2037 |
| Hoisting-gear. Equalizing-draft | J. G. Delaney | 734,309 | July 21 | 2998 | 705, 706 | 105 | 667 |
| Hoisting, holding, and lowering device | H. F. James | 739,261 | Sept. 15 | 3346 | 742, 743 | 106 | 748 |
| Hoisting-hook. Safety | J. M. Waid | 742,761 | Oct. 27 | 4541 | 1029 | 106 | 2253 |
| Hoisting-jack | S. Popky | 729,410 | May 26 | 4810 | 1067 | 104 | 1067 |
| Hoisting-machine | J. S. Sheets | 721,396 | Feb. 24 | 3732 | 850 | 102 | 1658 |
| Hoisting-machine | L. W. Delp | 736,234 | Aug. 11 | 2240 | 483 | 105 | 1478 |
| Hoisting-machine | W. A. Barker | 736,572 | Aug. 18 | 2856 | 625, 626 | 105 | 1627 |
| Hoisting-machine | S. M. Foltz | 747,401 | Dec. 22 | 3862 | 869 | 107 | 2000 |
| Hoisting-machine brake. Automatic | R. L. Lovell and F. P. Palen | 738,556 | Sept. 8 | 2032 | 442 | 106 | 452 |
| Hoisting machinery. Automatic tripping device for | T. E. Mahoney | 729,077 | May 26 | 4236 | 936 | 104 | 948 |
| Hoisting mechanism | T. H. Butler | 737,998 | Sept. 1 | 895 | 196 | 106 | 196 |
| Hoisting-motor | A. A. Ball, Jr | 733,614 | July 14 | 1637 | 387, 388 | 105 | 364 |
| Hoisting or hauling drum | A. McNamara | 742,721 | Oct. 27 | 4479 | 1013 | 106 | 2239 |
| Hoisting or lowering material. Apparatus for | J. F. Cook | 720,329 | Feb. 10 | 1699 | 385, 386 | 102 | 1198 |
| Holdback-anchor | J. W. Elstun | 720,574 | Feb. 17 | 2173 | 504 | 102 | 1311 |
| Holdback-hook. Vehicle-shaft | J. A. Donaldson | 730,618 | June 9 | 1996 | 443 | 104 | 1558 |
| Holdback. Vehicle- | H. Breiding | 738,286 | Sept. 8 | 1488 | 322 | 106 | 335 |
| Holdback. Vehicle- | J. C. Joyce | 742,668 | Oct. 27 | 4394 | 991 | 106 | 2221 |
| Holder | F. W. Matson | 736,531 | Aug. 18 | 2787 | 610, 611 | 105 | 1613 |
| Hollow bodies. Apparatus for forming serpentine | K. Park | 727,830 | May 12 | 1905 | 425 | 104 | 423 |
| Hollow bodies. Apparatus for forming serpentine | K. Park | 731,124 | June 16 | 2930 | 651 | 104 | 1771 |
| Hollow forms from pliable compounds. Machine for making | C. W. Jefferson | 743,513 | Nov. 10 | 1441 | 301 | 107 | 324 |
| Hollow mill | W. B. Pearson | 733,870 | July 14 | 2114 | 498 | 105 | 460 |
| Hollow-ware-pressing apparatus | W. E. Maddock and W. Orme | 720,718 | Feb. 17 | 2445 | 559 | 102 | 1367 |
| Honeycomb-stripper | A. C. Miller | 731,701 | June 23 | 4019 | 897 | 104 | 2009 |
| Hood. Protective | E. Langer | 728,476 | May 19 | 3128 | 692 | 104 | 704 |

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| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Hoof boot or pad | G. W. Nickerson | 719,687 | Feb. 3 | 487 | 110 | 102 | 925 |
| Hoof-pad | A. C. Tappe | 719,162 | Jan. 27 | 3130 | 697 | 102 | 706 |
| Hoof-pad | W. J. Kent | 729,941 | June 2 | 762 | 169 | 104 | 1284 |
| Hoof-pad | W. J. Kent | 733,656 | July 14 | 1706 | 404 | 105 | 377 |
| Hoof-pad | J. Campbell | 734,301 | July 21 | 2987 | 703 | 105 | 665 |
| Hoof-pad. Yielding | T. Ryan | 718,386 | Jan. 13 | 1604 | 353 | 102 | 358 |
| Hoof-protector | O. J. Ohlson | 745,232 | Nov. 24 | 4710 | 1028 | 107 | 1047 |
| Hoof-shears | O. C. Coulom | 721,672 | Mar. 3 | 42 | 10 | 103 | 11 |
| Hoof-trimmer | S. I. Rose | 718,796 | Jan. 20 | 2428 | 538 | 102 | 546 |
| Hoof-trimmer | C. E. Shaffer and G. B. Johnson | 729,226 | May 26 | 4500 | 992 | 104 | 1003 |
| Hoof-trimming nippers | J. M. Bryant | 728,856 | May 26 | 3847 | 855 / 856 | 104 | 869 |
| Hook: *See* Anode-hook. Attaching or detaching hook. Awning-hook. Back-band hook. Band-hook. Cant-hook. Chain-hook. Check-hook. Checkrein-hook. Clothes-hook. Clothes-line hook. Door-hook. Draft-hook. Fish-hook. Fish trap-hook. Garment-hook. Hame and trace hook. Hat-hook. Hoisting-hook. Holdback-hook. Lace-hook. Lacing-hook. Ladder-hook. Lasting-hook. Leather-stretching hook. Painter's hook. Safety-hook. Singletree-hook. Skirt-hook. Snap-hook. Trolling-hook. Tug-hook. Wardrobe-hook. Whiffletree-hook. | | | | | | | |
| Hook | C. S. Purdy | 718,216 | Jan. 13 | 1297 | 286 | 102 | 293 |
| Hook | L. A. Walker | 719,627 | Feb. 3 | 384 | 88 | 102 | 902 |
| Hook | D. T. Goodman | 723,524 | Mar. 24 | 3494 | 781 | 103 | 775 |
| Hook | L. H. Bowman | 724,428 | Apr. 7 | 18 | 6 | 103 | 1174 |
| Hook | M. S. Farmer | 725,235 | Apr. 14 | 1525 | 346 | 103 | 1508 |
| Hook | J. Wahlberg | 725,518 | Apr. 14 | 2039 | 462 | 103 | 1617 |
| Hook | F. M. Chandler | 731,019 | June 16 | 2733 | 609 | 104 | 1732 |
| Hook | A. R. Otterman | 731,809 | June 23 | 4216 | 940 | 104 | 2052 |
| Hook | D. T. Goodman | 735,245 | Aug. 4 | 404 | 79 | 105 | 1067 |
| Hook | G. Banks | 735,445 | Aug. 4 | 794 | 169 | 105 | 1150 |
| Hook | A. Carpenter | 738,000 | Sept. 1 | 898 | 197 | 106 | 196 |
| Hook | T. C. Richards | 740,044 | Sept. 29 | 4839 | 1086 | 106 | 1102 |
| Hook and buckle. Combined | B. S. Kearney | 732,865 | July 7 | 295 | 75 | 105 | 66 |
| Hook and eye | G. W. Washburn | 719,918 | Feb. 3 | 905 | 212 | 102 | 1015 |
| Hook and eye | L. N. Bedford | 725,922 | Apr. 21 | 2788 | 633 | 103 | 1792 |
| Hook and eye | J. W. Edgerton | 726,888 | May 5 | 108 | 25 | 104 | 26 |
| Hook and eye | N. R. and J. M. Persinger | 727,831 | May 12 | 1908 | 426 | 104 | 424 |
| Hook and eye | M. H. Eiseman | 728,557 | May 19 | 3283 | 728 | 104 | 734 |
| Hook and eye | J. F. Schoeppl | 728,770 | May 19 | 3669 | 816 | 104 | 817 |
| Hook and eye | W. C. Utley and W. C. Newman | 734,777 | July 28 | 3862 | 901 | 105 | 861 |
| Hook and eye | A. W. Herbert and W. F. Washburn | 737,927 | Sept. 1 | 735 | 159 | 106 | 161 |
| Hook and eye | S. A. Bromberg | 738,655 | Sept. 8 | 2220 | 486 | 106 | 492 |
| Hook and eye | W. H. Scott | 739,727 | Sept. 22 | 4215 | 942 | 106 | 952 |
| Hook and eye | C. C. Mund | 742,474 | Oct. 27 | 4030 | 904 | 106 | 2144 |
| Hook and eye | P. M. Kling | 742,677 | Oct. 27 | 4408 | 995 | 106 | 2225 |
| Hook and eye | C. E. Penman | 746,372 | Dec. 8 | 1941 | 443 | 107 | 1532 |
| Hook or attachment device | W. C. Peters | 720,843 | Feb. 17 | 2636 | 608 | 102 | 1408 |
| Hook provided with counting mechanism | C. A. G. Bremer | 748,473 | Dec. 29 | 5881 | 1337 | 107 | 2470 |
| Hooks and eyes. Carrier for machines for carding | J. W. Granger | 736,717 | Aug. 18 | 3158 | 697 | 105 | 1688 |
| Hoop: *See* Embroidery-hoop. Mast-hoop. Toy hoop. | | | | | | | |
| Hoop | N. K. Bowman | 732,270 | June 30 | 5124 | 1139 | 104 | 2256 |
| Hoop-coiling machine | S. J. Caroland | 741,109 | Oct. 13 | 1336 | 307 | 106 | 1551 |
| Hoop-fastening | R. R. Stannard | 739,512 | Sept. 22 | 3811 | 854 | 106 | 865 |
| Hoop-finishing machine. Wire- | G. V. Willson | 717,648 | Jan. 6 | 218 | 55, 56 | 102 | 48 |
| Hoop or band for cylindrical casings | I. B. Hammond | 743,075 | Nov. 3 | 496 | 108 | 107 | 103 |
| Hop-separating-machine screen | J. Müller | 733,732 | July 14 | 1831 | 433 | 105 | 403 |
| Hopper | N. F. Palmer | 734,740 | July 28 | 3787 | 884 | 105 | 846 |
| Hopper | H. D. Conway | 741,112 | Oct. 13 | 1341 | 308 | 106 | 1552 |
| Hopper | J. D. Swindell | 747,018 | Dec. 15 | 3138 | 718 | 107 | 1821 |
| Hopper feed-regulator | A. T. Ferrell | 748,059 | Dec. 29 | 5132 | 1161 | 107 | 2306 |
| Hopper. Loading and discharging | T. Nicholson | 718,862 | Jan. 20 | 2545 | 566 | 102 | 571 |
| Hoppers. Gate-operating mechanism for | F. Bowers and T. Reese, Jr | 737,200 | Aug. 25 | 4036 | 894 / 895 | 105 | 1893 |
| Hopple | C. M. Wales | 723,562 | Mar. 24 | 3555 | 795 | 103 | 788 |
| Hopple | J. Fenstermaker | 735,866 | Aug. 11 | 1600 | 341 | 105 | 1341 |
| Hopple | H. C. Williams | 737,186 | Aug. 25 | 4010 | 889 | 105 | 1887 |
| Hopple | F. Filbey | 741,023 | Oct. 13 | 1178 | 266 | 106 | 1517 |
| Hopple. Cow- | J. H. Miller | 741,921 | Oct. 20 | 2945 | 657 | 106 | 1907 |
| Horizon. Artificial | J. T. Edwards | 718,330 | Jan. 13 | 1510 | 335 | 102 | 329 |
| Horn and rattler. Campaign | C. T. Childers | 728,083 | May 12 | 2374 | 528 | 104 | 523 |
| Horn. Collapsible | L. de Vineau | 745,029 | Nov. 24 | 4299 | 929 | 107 | 961 |
| Horn for campaign marching clubs | J. Leipold | 747,078 | Dec. 15 | 3260 | 742 | 107 | 1852 |
| Horn, &c. Manufacture of meal from raw | J. G. Bierich | 718,597 | Jan. 20 | 2064 | ------ | 102 | 474 |
| Horn. Reed- | S. Goldberg | 738,181 | Sept. 8 | 1276 | 277 | 106 | 292 |
| Horn stand or support | A. S. Marten | 740,886 | Oct. 6 | 924 | 207 | 106 | 1443 |
| Horn support. Amplifying- | A. S. Marten | 726,320 | Apr. 28 | 3517 | 796 | 103 | 1957 |
| Horse-bit | D. W. Donnelly | 722,683 | Mar. 17 | 1942 | 432 | 103 | 447 |
| Horse-blanket | M. Cleaver | 725,931 | Apr. 21 | 2808 | 637 | 103 | 1796 |
| Horse-blanket | G. A. Bulles | 726,857 | May 5 | 38 | 9 | 104 | 11 |
| Horse-blanket | G. A. Bulles | 742,285 | Oct. 27 | 3707 | 828 | 106 | 2079 |
| Horse-blanket attachment | E. C. O'Neil | 720,839 | Feb. 17 | 2631 | 607 | 102 | 1407 |
| Horse-blankets. Tail wrapper and crupper for | G. A. Bulles | 742,286 | Oct. 27 | 3709 | 828 | 106 | 2079 |
| Horse-blinder | O. Vikören | 721,760 | Mar. 3 | 180 | 42 | 103 | 40 |

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| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Horse-boot | G. H. Weeks | 719,922 | Feb. 3 | 909 | 213 | 102 | 1016 |
| Horse-check | G. M. McLean | 741,361 | Oct. 13 | 1862 | 411 | 106 | 1664 |
| Horse-checking device | S. W. M. and G. L. Kollock | 731,189 | June 16 | 3051 | 678 | 104 | 1793 |
| Horse-controlling device | C. B. Corl | 721,022 | Feb. 17 | 2985 | 687 | 102 | 1482 |
| Horse-controlling device | J. V. Higgins | 746,080 | Dec. 8 | 1410 | 316 | 107 | 1419 |
| Horse-detacher | M. L. Robinson | 725,367 | Apr. 14 | 1752 | 394 | 103 | 1555 |
| Horse-detacher | J. A. Donaldson | 726,881 | May 5 | 92 | 23 | 104 | 22 |
| Horse-detacher | S. Riegel | 737,146 | Aug. 25 | 3925 | 872 | 105 | 1869 |
| Horse-detacher | H. F. Spiegel | 740,198 | Sept. 29 | 5108 | 1147 | 106 | 1157 |
| Horse-detacher. Safety | F. H. Ellis | 740,111 | Sept. 29 | 4949 | 1111 | 106 | 1125 |
| Horse-detacher. Vehicle | J. Fischer | 727,334 | May 5 | 962 | 209 | 104 | 208 |
| Horse grooming and shampooing machine | A. and P. Bolund | 734,805 | July 28 | 3937 | 918, 919 | 105 | 877 |
| Horse head-stall | J. D. Flynn | 743,704 | Nov. 10 | 1790 | 378 | 107 | 398 |
| Horse-holder | J. Stanicek | 737,036 | Aug. 25 | 3750 | 832, 833 | 105 | 1833 |
| Horse-holding device | R. Winchel and J. E. Putman | 738,141 | Sept. 1 | 1173 | 258, 259 | 106 | 253 |
| Horse kicking-block | G. Lewis | 721,959 | Mar. 3 | 575 | 127 | 103 | 126 |
| Horse nose-band | M. Purcell | 742,736 | Oct. 27 | 4505 | 1020 | 106 | 2245 |
| Horse-overshoe | J. E. Hoffman | 744,549 | Nov. 17 | 3411 | 735 | 107 | 758 |
| Horse-overshoe | G. Batty | 746,268 | Dec. 8 | 1758 | 399 | 107 | 1494 |
| Horse-power | J. and C. Vavra | 748,443 | Dec. 29 | 5815 | 1325 | 107 | 2455 |
| Horse-power and pressure indicator and recorder. Automatic | E. Fortier | 717,982 | Jan. 6 | 875 | 195 | 102 | 188 |
| Horse-receptacle | G. W. Cooper | 718,915 | Jan. 20 | 2650 | 594 | 102 | 592 |
| Horse-releaser | W. H. Mack | 739,330 | Sept. 22 | 3473 | 775 | 106 | 790 |
| Horse-releasing device. Vehicle | J. F. Hinrichs and T. R. Tammen | 724,476 | Apr. 7 | 104 | 25,26 | 103 | 1191 |
| Horse-stock | M. T. Bransfield | 742,575 | Oct. 27 | 4225 | 952 | 106 | 2184 |
| Horse-tail fastener | E. Felsberg | 737,601 | Sept. 1 | 85 | 18 | 106 | 21 |
| Horse taming or training device | G. Forsyth | 730,360 | June 9 | 1522 | 337 | 104 | 1455 |
| Horse-weight suspension device | J. Diehl | 739,483 | Sept. 22 | 3769 | 842, 843 | 106 | 856 |
| Horses. Apparatus for stopping runaway | H. G. Minck | 727,550 | May 5 | 1347 | 303 | 104 | 290 |
| Horses. Device for administering medicine to | J. L. Reid | 726,460 | Apr. 28 | 3769 | 854 | 103 | 2009 |
| Horses' eyes. Apparatus for covering | C. A. P. von Winkler | 735,924 | Aug. 11 | 1701 | 362 | 105 | 1362 |
| Horses kicking the stalls of stables. Device for preventing | T. Laney | 720,937 | Feb. 17 | 2820 | 647 | 102 | 1447 |
| Horses or other animals on shipboard or other places. Apparatus for exercising | N. Burgess | 736,360 | Aug. 18 | 2466 | 540 | 105 | 1545 |
| Horseshoe | C. Glaum | 720,130 | Feb. 10 | 1334 | 305 | 102 | 1124 |
| Horseshoe | W. M. Dickey | 720,409 | Feb. 10 | 1834 | 418 | 102 | 1228 |
| Horseshoe | J. Griffin | 721,514 | Feb. 24 | 3939 | 896, 897 | 102 | 1701 |
| Horseshoe | S. V. N. Hamilton | 721,888 | Mar. 3 | 426 | 93 | 103 | 94 |
| Horseshoe | T. A. McKay | 722,610 | Mar. 10 | 1769 | 394 | 103 | 395 |
| Horseshoe | T. C. Octigan and W. Peacock | 724,122 | Mar. 31 | 4632 | 1043 | 103 | 1029 |
| Horseshoe | H. Burrus | 725,036 | Apr. 14 | 1153 | 260 | 103 | 1431 |
| Horseshoe | J. Marion | 725,736 | Apr. 21 | 2455 | 556 | 103 | 1721 |
| Horseshoe | G. H. Stone | 725,792 | Apr. 21 | 2558 | 580 | 103 | 1744 |
| Horseshoe | F. Herzog | 726,060 | Apr. 21 | 3006 | 684 | 103 | 1837 |
| Horseshoe | O. W. Siebenhaar | 726,196 | Apr. 21 | 3262 | 740 | 103 | 1889 |
| Horseshoe | F. T. Giles | 726,904 | May 5 | 137 | 32 | 104 | 32 |
| Horseshoe | J. C. and J. I. Piper | 727,835 | May 12 | 1918 | 427 | 104 | 426 |
| Horseshoe | P. Wilburg | 728,815 | May 19 | 3760 | 840 | 104 | 836 |
| Horseshoe | A. F. Mohn and P. M. Feltwell | 729,381 | May 26 | 4762 | 1053 | 104 | 1057 |
| Horseshoe | M. Schwartz | 730,483 | June 9 | 1753 | 392 | 104 | 1503 |
| Horseshoe | J. Dillon | 730,885 | June 16 | 2472 | 549 | 104 | 1678 |
| Horseshoe | A. Clawson | 731,431 | June 23 | 3505 | 783 | 104 | 1906 |
| Horseshoe | J. Regan | 731,616 | June 23 | 3864 | 861 | 104 | 1978 |
| Horseshoe | J. E. Watts | 734,024 | July 21 | 2433 | 569 | 105 | 547 |
| Horseshoe | T. Lanston | 734,269 | July 21 | 2908 | 680 | 105 | 650 |
| Horseshoe | J. H. Stair | 734,374 | July 21 | 3102 | 730 | 105 | 690 |
| Horseshoe | H. and P. S. Walker and J. Hamer | 735,322 | Aug. 4 | 546 | 111 | 105 | 1097 |
| Horseshoe | E. H. Jackson | 737,845 | Sept. 1 | 559 | 121, 122 | 106 | 124 |
| Horseshoe | T. F. Judge | 737,849 | Sept. 1 | 566 | 124 | 106 | 126 |
| Horseshoe | J. W. Collins | 737,908 | Sept. 1 | 702 | 151 | 106 | 154 |
| Horseshoe | T. Agnew and F. Denman | 738,144 | Sept. 8 | 1181 | 260 | 106 | 271 |
| Horseshoe | G. E. Watson | 739,763 | Sept. 22 | 4265 | 956 | 106 | 963 |
| Horseshoe | M. C. Flynn | 740,116 | Sept. 29 | 4956 | 1112 | 106 | 1126 |
| Horseshoe | A. G. Jennings | 740,281 | Sept. 29 | 5268 | 1187 | 106 | 1190 |
| Horseshoe | G. W. and W. H. Bradley | 740,623 | Oct. 6 | 465 | 102 | 106 | 1346 |
| Horseshoe | F. N. Cline | 741,110 | Oct. 13 | 1338 | 307 | 106 | 1552 |
| Horseshoe | F. D. Goodlake | 741,326 | Oct. 13 | 1782 | 396 | 106 | 1644 |
| Horseshoe | J. MacLean | 742,464 | Oct. 27 | 4016 | 901 | 106 | 2141 |
| Horseshoe | F. J. Bacon | 744,277 | Nov. 17 | 2934 | 627 | 107 | 656 |
| Horseshoe | A. Carr | 744,482 | Nov. 17 | 3301 | 710 | 107 | 735 |
| Horseshoe | J. R. Holland | 745,844 | Dec. 1 | 981 | 220 | 107 | 1308 |
| Horseshoe. Adjustable-clamp | D. W. Barr | 722,935 | Mar. 17 | 2395 | 535 | 103 | 538 |
| Horseshoe attachment | E. L. Abbott | 730,855 | June 16 | 2405 | 531 | 104 | 1663 |
| Horseshoe-blank-bending machine | C. Arbuthnot | 733,117 | July 7 | 745 | 180 | 105 | 157 |
| Horseshoe-calk | B. McKenzie | 724,489 | Apr. 7 | 134 | 32 | 103 | 1198 |
| Horseshoe-calk | M. R. Jackson | 738,451 | Sept. 8 | 1824 | 396 | 106 | 407 |
| Horseshoe-calk | M. R. Murray | 740,164 | Sept. 29 | 5041 | 1134 | 106 | 1145 |
| Horseshoe-calk | S. Malmquist | 741,153 | Oct. 13 | 1416 | 324 | 106 | 1567 |
| Horseshoe-calk | H. R. Fox | 741,783 | Oct. 20 | 2690 | 599 | 106 | 1854 |
| Horseshoe-calk. Detachable | A. Corcoran | 720,115 | Feb. 10 | 1306 | 298 | 102 | 1118 |
| Horseshoe. Composition | G. J. Peacock | 717,614 | Jan. 6 | 166 | 41 | 102 | 37 |
| Horseshoe. Convertible | F. M. Marney | 721,456 | Feb. 24 | 3835 | 873 | 102 | 1680 |
| Horseshoe. Cushion-tread | A. J. Puhl | 719,693 | Feb. 3 | 500 | 113 | 102 | 928 |
| Horseshoe. Cushion-tread | A. A. Spadone | 738,639 | Sept. 8 | 2189 | 478 | 106 | 486 |
| Horseshoe. Cushioned | C. T. Adams | 734,111 | July 21 | 2611 | 614 | 105 | 585 |
| Horseshoe. Elastic | E. J. Sinnott | 742,362 | Oct. 27 | 3839 | 862 | 106 | 2106 |
| Horseshoe. Elastic-tread | H. D. Traveller | 722,337 | Mar. 10 | 1275 | 283 | 103 | 287 |
| Horseshoe-finishing die | A. Nisbett, W. G. Ives, and J. S. Nicoll | 726,186 | Apr. 21 | 3246 | 736 | 103 | 1885 |

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| Invention. | Name. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|---|
| | | | | Spec. | Drg. | Vol. | Page. |
| Horseshoe-making machine | W. Stellner | 744,640 | Nov. 17 | 3547 | 765 | 107 | 785 |
| Horseshoe-nail-finishing machine. Automatic | L. Weaver | 746,766 | Dec. 15 | 2645 | 609<br>610<br>611 | 107 | 1710 |
| Horseshoe-nails. Combination nippers and clencher for | P. J. Flagstad | 747,159 | Dec. 15 | 3406 | 772 | 107 | 1885 |
| Horseshoe. Nailless | J. Surfass | 728,773 | May 19 | 3674 | 817 | 104 | 818 |
| Horseshoe. Nailless | C. W. Smith | 742,509 | Oct. 27 | 4101 | 924 | 106 | 2158 |
| Horseshoe-pad | J. M. Lord | 723,889 | Mar. 31 | 4156 | 936 | 103 | 931 |
| Horseshoe-pad | R. P. McDougall | 731,414 | June 16 | 3468 | 775 | 104 | 1879 |
| Horseshoe-pad | A. Larsen | 740,148 | Sept. 29 | 5014 | 1127 | 106 | 1139 |
| Horseshoe-pad | A. Larsen | 740,665 | Oct. 6 | 524 | 115 | 106 | 1359 |
| Horseshoe. Rubber | J. J. Colleran | 726,643 | Apr. 28 | 4146 | 935 | 103 | 2080 |
| Horseshoe sharpening and calking device | H. A. Hess | 742,190 | Oct. 27 | 3514 | 784 | 106 | 2036 |
| Horseshoe. Soft-tread | C. H. Beardsley | 737,695 | Sept. 1 | 248 | 53 | 106 | 57 |
| Horseshoes. Making composition | G. J. Peacock | 746,143 | Dec. 8 | 1526 | 341 | 107 | 1446 |
| Horseshoes. Overshoe for | C. Scudder | 718,392 | Jan. 13 | 1612 | 354<br>355 | 102 | 361 |
| Horseshoer's horse-holding machine | C. S. McGowan | 735,567 | Aug. 4 | 1032 | 219 | 105 | 1199 |
| Horseshoer's tool-box | J. Begg | 743,807 | Nov. 10 | 1978 | 421 | 107 | 438 |
| Horseshoeing apparatus | D. E. Kepford | 719,473 | Feb. 3 | 111 | 26 | 102 | 849 |
| Horseshoeing device | L. J. Northern | 735,288 | Aug. 4 | 490 | 98 | 105 | 1085 |
| Horseshoeing-stand | J. C. Hutton, Jr | 740,019 | Sept. 29 | 4787 | 1076 | 106 | 1089 |
| Horseshoeing-stock | M. M. May | 746,974 | Dec. 15 | 3054 | 700<br>701 | 107 | 1803 |
| Hose and garment supporter | M. Rubin | 720,742 | Feb. 17 | 2484 | 571 | 102 | 1376 |
| Hose and making same. Armored | E. T. Greenfield | 746,630 | Dec. 8 | 2391 | 548 | 107 | 1633 |
| Hose and pipe coupling | A. Beatty | 736,057 | Aug. 11 | 1959 | 417 | 105 | 1419 |
| Hose attachment | W. G. McKay | 732,582 | June 30 | 5726 | 1271 | 104 | 2382 |
| Hose-clamp | F. Straub | 720,296 | Feb. 10 | 1638 | 374 | 102 | 1185 |
| Hose-clamp | W. Gmeiner | 725,837 | Apr. 21 | 2637 | 600 | 103 | 1760 |
| Hose-clamp | F. T. Lippincott | 735,989 | Aug. 11 | 1823 | 391 | 105 | 1390 |
| Hose-clamp | W. C. Walker | 747,811 | Dec. 22 | 4610 | 1040 | 107 | 2170 |
| Hose-coupling | A. B. Wells | 721,985 | Mar. 3 | 623 | 139 | 103 | 135 |
| Hose-coupling | P. Whiting | 723,767 | Mar. 24 | 3909 | 879<br>880 | 103 | 864 |
| Hose-coupling | E. T. Parsons | 724,324 | Mar. 31 | 5038 | 1128 | 103 | 1110 |
| Hose-coupling | G. Hirschell | 724,390 | Mar. 31 | 5184 | 1162 | 103 | 1141 |
| Hose-coupling | L. Lehotzky | 726,077 | Apr. 21 | 3033 | 689 | 103 | 1842 |
| Hose-coupling | T. and S. Strba | 727,482 | May 5 | 1226 | 271<br>272 | 104 | 264 |
| Hose-coupling | F. G. Frankenberg and A. P. Miller | 728,696 | May 19 | 3540 | 787 | 104 | 791 |
| Hose-coupling | J. Wittman | 729,479 | May 26 | 4922 | 1090 | 104 | 1092 |
| Hose-coupling | E. J. Pace | 731,312 | June 16 | 3089 | 685 | 104 | 1801 |
| Hose-coupling | J. P. Muehlebach | 732,209 | June 30 | 4998 | 1111 | 104 | 2229 |
| Hose-coupling | H. Wischermann and J. Kolsch | 732,487 | June 30 | 5544 | 1230 | 104 | 2340 |
| Hose-coupling | W. R. Amos | 732,497 | June 30 | 5562 | 1233 | 104 | 2344 |
| Hose-coupling | F. Toerge | 734,377 | July 21 | 3105 | 731 | 105 | 690 |
| Hose-coupling | A. Freeman | 734,414 | July 21 | 3170 | 744 | 105 | 703 |
| Hose-coupling | J. R. McFall | 735,401 | Aug. 4 | 687 | 147 | 105 | 1127 |
| Hose-coupling | G. P. Jones | 736,108 | Aug. 11 | 2037 | 433 | 105 | 1435 |
| Hose-coupling | J. Whiteford | 736,184 | Aug. 11 | 2164 | 465 | 105 | 1462 |
| Hose-coupling | C. Wright | 736,908 | Aug. 18 | 3509 | 780 | 105 | 1762 |
| Hose-coupling | H. Crump and L. Metz | 737,357 | Aug. 25 | 4341 | 967 | 105 | 1957 |
| Hose-coupling | C. W. F. Kroll | 740,664 | Oct. 6 | 522 | 115 | 106 | 1359 |
| Hose-coupling | J. Homola | 742,655 | Oct. 27 | 4369 | 984 | 106 | 2216 |
| Hose-coupling | M. E. Henderson | 744,073 | Nov. 17 | 2528 | 541 | 107 | 568 |
| Hose-coupling | F. A. Moore | 744,589 | Nov. 17 | 3465 | 747 | 107 | 769 |
| Hose-coupling | F. A. Silvis | 744,634 | Nov. 17 | 3539 | 763 | 107 | 783 |
| Hose-coupling | W. W. Gibson | 745,815 | Dec. 1 | 917 | 206 | 107 | 1295 |
| Hose-coupling | H. E. Smith | 747,008 | Dec. 15 | 3120 | 714 | 107 | 1818 |
| Hose-coupling | F. Schuette, G. Fleischer, and W. S. Theliman. | 747,242 | Dec. 15 | 3561 | 806 | 107 | 1916 |
| Hose-coupling | H. G. Barry | 747,360 | Dec. 22 | 3799 | 854 | 107 | 1986 |
| Hose-coupling | A. H Getz | 747,412 | Dec. 22 | 3877 | 873 | 107 | 2004 |
| Hose-coupling | W. Koller | 748,382 | Dec. 29 | 5694 | 1299 | 107 | 2429 |
| Hose coupling. Armored | E. T. Greenfield | 746,497 | Dec. 8 | 2151 | 495 | 107 | 1579 |
| Hose cut-off compressor | E. Horsey | 742,656 | Oct. 27 | 4370 | 984 | 106 | 2216 |
| Hose. Device for winding metallic spiral | E. Witzenmann and W. Schwarz | 726,488 | Apr. 28 | 3841 | 867 | 103 | 2021 |
| Hose handler and clamp | T. McGill | 735,799 | Aug. 11 | 1454 | 313 | 105 | 1308 |
| Hose-holder | J. C. Garvey | 731,172 | June 16 | 3021 | 671 | 104 | 1788 |
| Hose-nozzle | J. Busha | 721,665 | Mar. 3 | 26 | 5 | 103 | 8 |
| Hose-nozzle | C. R. Robinson | 721,746 | Mar. 3 | 163 | 38 | 103 | 36 |
| Hose-nozzle | E. H. White | 731,529 | June 23 | 3705 | 825 | 104 | 1948 |
| Hose-nozzle supporting and guiding device | W. R. Joyner | 748,507 | Dec. 29 | 5947 | 1349<br>1350 | 107 | 2484 |
| Hose or pipe coupling | H. A. Stier | 727,858 | May 12 | 1965 | 438 | 104 | 436 |
| Hose or pipe mender | R. F. Kunze | 719,817 | Feb. 3 | 741 | 174 | 102 | 980 |
| Hose or tubing | F. M. Marcy | 739,097 | Sept. 15 | 3049 | 675 | 106 | 684 |
| Hose-patch | E. F. Peak | 730,693 | June 9 | 2134 | 473 | 104 | 1587 |
| Hose-pipe coupling | W. Noble and B. L. Wigton | 744,788 | Nov. 24 | 3850 | 829 | 107 | 869 |
| Hose-rack | J. F. Muidoon | 741,922 | Oct. 20 | 2946 | 657 | 106 | 1908 |
| Hose-reel attachment. Automatic | J. H. Couch | 720,228 | Feb. 10 | 1514 | 347 | 102 | 1159 |
| Hose-reel for cranes | H. H. Sullings | 718,672 | Jan. 20 | 2196 | 480 | 102 | 498 |
| Hose-spanner | C. Hanson and J. H. Adams | 730,119 | June 2 | 1077 | 242 | 104 | 1346 |
| Hose-support | J. C. Garrett | 742,855 | Nov. 3 | 66 | 16 | 107 | 16 |
| Hose-supporter | M. Scheuer | 719,884 | Feb. 3 | 855 | 200 | 102 | 1004 |
| Hose-supporter | T. P. Taylor | 720,193 | Feb. 10 | 1440 | 329 | 102 | 1144 |
| Hose-supporter | T. P. Taylor | 720,194 | Feb. 10 | 1441 | 329 | 102 | 1144 |
| Hose-supporter | D. Basch | 721,414 | Feb. 24 | 3764 | 856 | 102 | 1665 |
| Hose-supporter | L. B. Jones | 721,645 | Feb. 24 | 4205 | 956 | 102 | 1761 |
| Hose-supporter | J. H. Pilkington | 725,360 | Apr. 14 | 1738 | 391 | 103 | 1552 |
| Hose-supporter | H. C. Hine | 725,563 | Apr. 14 | 2115 | 479 | 103 | 1633 |
| Hose-supporter | E. N. Humphrey | 725,565 | Apr. 14 | 2119 | 480 | 103 | 1634 |
| Hose-supporter | P. S. Bauer | 726,842 | May 5 | 15 | 4 | 104 | 6 |
| Hose-supporter | D. Basch | 730,863 | June 16 | 2417 | 534 | 104 | 1665 |

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| Hose-supporter | C. E. Schaffner | 736,788 | Aug. 18 | 3283 | 726 | 105 | 1713 |
| Hose-supporter | R. Gorton | 738,185 | Sept. 8 | 1285 | 278 | 106 | 294 |
| Hose-supporter | H. E. Crandall | 738,713 | Sept. 8 | 2335 | 513 | 106 | 514 |
| Hose-supporter | V. Guinzburg | 739,411 | Sept. 22 | 3647 | 810 | 106 | 828 |
| Hose-supporter | F. C. McDonald | 739,698 | Sept. 22 | 4157 | 929 | 106 | 939 |
| Hose-supporter | M. Marks | 740,580 | Oct. 6 | 388 | 81 | 106 | 1329 |
| Hose-supporter | W. C. Michael | 741,973 | Oct. 20 | 3061 | 684 | 106 | 1931 |
| Hose-supporter | W. L. Myers | 742,476 | Oct. 27 | 4032 | 905 | 106 | 2144 |
| Hose-supporter | C. L. Wells | 743,670 | Nov. 10 | 1734 | 366 | 107 | 386 |
| Hose-supporter | A. H. Cohn | 746,030 | Dec. 8 | 1327 | 297, 298 | 107 | 1399 |
| Hose-supporter | A. H. Cohn | 746,677 | Dec. 15 | 2493 | 570 | 107 | 1677 |
| Hose-supporter button | V. Guinzburg | 734,170 | July 21 | 2715 | 639 | 105 | 608 |
| Hose-supporter clamp | M. B. Hammond | 720,244 | Feb. 10 | 1538 | 352 | 102 | 1164 |
| Hose-supporter clasp | B. Pike | 729,659 | June 2 | 245 | 57 | 104 | 1179 |
| Hose-supporter. Lady's and child's | L. A. Yost | 733,927 | July 14 | 2224 | 521 | 105 | 482 |
| Hose to couplings. Means for attaching | H. B. Sherman | 743,401 | Nov. 3 | 1154 | 245 | 107 | 244 |
| Hose. Wire-covered | J. F. McGuire | 726,730 | Apr. 28 | 4304 | 972 | 103 | 2115 |
| Hosiery | N. F. Hurdel | 726,200 | Apr. 28 | 3468 | 787 | 103 | 1947 |
| Hosiery from shrinking. Device for preventing | L. E. Roach | 743,034 | Nov. 3 | 416 | 90 | 107 | 88 |
| Hosiery. Manufacture of split-foot | E. A. Hirner | 721,190 | Feb. 24 | 3342 | 764 | 102 | 1578 |
| Hosiery. Seamless | G. Blood, Jr | 743,231 | Nov. 3 | 803 | 175 | 107 | 167 |
| Hot-air currents and liquid spray. Machine for producing | J. C. Sherburne | 742,244 | Oct. 27 | 3628 | 811 | 106 | 2062 |
| Hot-air engine | W. R. Kennedy | 739,187 | Sept. 15 | 3202 | 709 | 106 | 716 |
| Hot-air engine or power-generator | F. Burger | 747,316 | Dec. 15 | 3707 | 835 | 107 | 1950 |
| Hot-air furnace | W. H. Chappell | 718,980 | Jan. 27 | 2773 | 621 | 102 | 633 |
| Hot-air furnace | R. Schlumberger | 721,471 | Feb. 24 | 3870 | 880 | 102 | 1686 |
| Hot-air furnace | W. C. Reynolds | 723,308 | Mar. 24 | 3073 | 692 | 103 | 694 |
| Hot-air furnace | J. M. Beech | 730,202 | June 2 | 1209 | 271 | 104 | 1374 |
| Hot-air furnace | J. W. Hornsey | 730,653 | June 9 | 2055 | 457 | 104 | 1569 |
| Hot-air furnace | J. W. Hornsey | 730,654 | June 9 | 2058 | 457, 458 | 104 | 1570 |
| Hot-air furnace | J. W. Hornsey | 730,655 | June 9 | 2060 | 458 | 104 | 1570 |
| Hot-air furnace | J. W. Hornsey | 735,515 | Aug. 4 | 926 | 196 | 105 | 1178 |
| Hot-air furnace | R. J. Crozier and A. Feilbach | 738,777 | Sept. 15 | 2469 | 542, 543 | 106 | 561 |
| Hot-air furnace | J. H. Tuttle, Jr | 739,036 | Sept. 15 | 2925 | 649 | 106 | 659 |
| Hot-air furnace | T. F. Meinhardt | 742,046 | Oct. 20 | 3206 | 716, 717 | 106 | 1960 |
| Hot-air furnace | F. J. Pioch | 742,062 | Oct. 20 | 3240 | 726 | 106 | 1967 |
| Hot-air furnace | P. M. Bruner | 746,008 | Dec. 8 | 1285 | 289 | 107 | 1390 |
| Hot-air heater | T. B. Jackson | 744,760 | Nov. 24 | 3800 | 819 | 107 | 858 |
| Hot-air heater | C. F. Brand | 746,002 | Dec. 8 | 1277 | 287 | 107 | 1389 |
| Hot-air heater | R. H. Bradley | 747,904 | Dec. 22 | 4791 | 1083 | 107 | 2210 |
| Hot-air pipe | A. G. Scherer | 724,210 | Mar. 31 | 4810 | 1078 | 103 | 1064 |
| Hot-air pipe | S. E. Ellis | 741,318 | Oct. 13 | 1757 | 391, 392 | 106 | 1638 |
| Hot-air pipes. Moistening device for | J. S. Rogers | 724,045 | Mar. 31 | 4477 | 1008 | 103 | 996 |
| Hot-air register | C. H. Foster | 718,446 | Jan. 13 | 1724 | 383 | 102 | 383 |
| Hot-air register | S. Tuttle | 737,976 | Sept. 1 | 841 | 185 | 106 | 184 |
| Hot-air registers. Vaporizing device for | L. C. Wilcox | 736,659 | Aug. 18 | 3031 | 670 | 105 | 1662 |
| Hot-bearing indicator | J. R. Markle | 731,801 | June 23 | 4204 | 937 | 104 | 2049 |
| Hot-water and hot-air furnace. Combined | J. Ziegler | 745,130 | Nov. 24 | 4504 | 975 | 107 | 1004 |
| Hot-water apparatus | W. Voelpel, E. Suchert, and A. Oekel. | 747,281 | Dec. 15 | 3644 | 823 | 107 | 1936 |
| Hot-water bag | J. H. Holt | 724,289 | Mar. 31 | 4977 | 1114 | 103 | 1098 |
| Hot-water bag | J. Barnes | 734,213 | July 21 | 2791 | 654 | 105 | 624 |
| Hot-water boiler. Air-tight | L. and S. Mayhew | 731,380 | June 16 | 3404 | 760, 761 | 104 | 1867 |
| Hot-water bottle | F. H. Jones | 738,544 | Sept. 8 | 2013 | 438 | 106 | 448 |
| Hot-water furnace | W. R. Thomas | 733,923 | July 14 | 2218 | 520 | 105 | 481 |
| Hot-water heater | T. B. Lanier | 743,649 | Nov. 10 | 1697 | 357, 358 | 107 | 378 |
| Hotbed | W. S. Bodley | 720,318 | Feb. 10 | 1681 | 382 | 102 | 1194 |
| Hotbeds, forcing-frames, &c. Light or glazed frame for | G. Knochenhauer | 723,163 | Mar. 17 | 2793 | 629 | 103 | 621 |
| Hotel-register | C. H. Harger | 735,972 | Aug. 11 | 1784 | 382 | 105 | 1381 |
| House: *See* Knockdown house. Poultry-house. Portable house. | | | | | | | |
| House and running trap | H. Sieben | 747,005 | Dec. 15 | 3113 | 713 | 107 | 1816 |
| House-ventilator | G. B. Swope | 727,860 | May 12 | 1968 | 438 | 104 | 436 |
| Hub | Z. T. Kale | 722,023 | Mar. 3 | 687 | 152 | 103 | 148 |
| Hub and axle-bearing | A. J. Theiring | 726,373 | Apr. 28 | 3617 | 820 | 103 | 1978 |
| Hub and roll-back | C. J. Caley | 733,368 | July 14 | 1205 | 286 | 105 | 270 |
| Hub-attaching device | S. S. Thomas | 725,298 | Apr. 14 | 1620 | 366 | 103 | 1528 |
| Hub-attaching device | W. D. Walker | 726,383 | Apr. 28 | 3635 | 824 | 103 | 1982 |
| Hub-attaching device | G. H. Marker | 729,622 | June 2 | 174 | 42 | 104 | 1163 |
| Hub attachment | L. Neal | 747,082 | Dec. 15 | 3264 | 743 | 107 | 1853 |
| Hub-band cap | W. A. Schleicher | 728,988 | May 26 | 4072 | 904 | 104 | 915 |
| Hub-band cap | C. A. Tower | 729,518 | May 26 | 4989 | 1107 | 104 | 1107 |
| Hub guard. Wagon- | W. Vredenburg | 730,180 | June 2 | 1173 | 263 | 104 | 1366 |
| Hub. Interchangeable | E. C. Davis | 728,376 | May 19 | 2038 | 648 | 104 | 663 |
| Hub lubricating device. Vehicle- | A. F. Rockwell | 745,525 | Dec. 1 | 397 | 91 | 107 | 1184 |
| Hub. Metal wheel- | E. R. Wagner | 719,281 | Jan. 27 | 3342 | 746 | 102 | 752 |
| Hub. Metal wheel- | E. R. Wagner | 719,282 | Jan. 27 | 3343 | 746 | 102 | 752 |
| Hub. Metal wheel- | E. R. Wagner | 731,637 | June 23 | 3907 | 870 | 104 | 1987 |
| Hub. Sheet-metal | J. Macphail | 725,976 | Apr. 21 | 2875 | 652 | 103 | 1810 |
| Hub spoke-brace. Vehicle | B. A. Shepley | 730,745 | Feb. 17 | 2487 | 572 | 102 | 1376 |
| Hub. Spring- | H. A. Krezdorn | 732,751 | July 7 | 97 | 27 | 105 | 24 |
| Hub. Vehicle- | W. E., E. A., and A. R. Pound | 735,145 | Aug. 4 | 199 | 40 | 105 | 1025 |
| Hub. Vehicle- | I. Metzger | 735,552 | Aug. 4 | 1007 | 212 | 105 | 1194 |
| Hub. Vehicle-wheel | G. H. Smith | 721,612 | Feb. 24 | 4152 | 944 | 102 | 1799 |
| Hub. Vehicle-wheel | G. A. Schacht | 726,103 | Apr. 21 | 3072 | 698 | 103 | 1850 |
| Hub. Vehicle-wheel | E. H. Whiting | 748,327 | Dec. 29 | 5597 | 1276 | 107 | 2407 |

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| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Hub. Wheel- | C. F. Nissen | 717,709 | Jan. 6 | 337 | 82 | 102 | 73 |
| Hub. Wheel- | A. Schoth | 720,185 | Feb. 10 | 1430 | 327 | 102 | 1142 |
| Hub. Wheel- | J. Krauss | 740,287 | Sept. 29 | 5275 | 1188 | 106 | 1192 |
| Hub. Wheel- | G. M. Elliott | 743,843 | Nov. 10 | 2045 | 434 | 107 | 452 |
| Huller: *See* Clover-huller. Pea-huller. Cotton-huller. Seed-huller. | | | | | | | |
| Hulling-machine | F. N. Root | 746,881 | Dec. 15 | 2873 | 661 | 107 | 1762 |
| Human body. Device for cooling or warming the | B. Röber | 743,562 | Nov. 10 | 1529 | 320 | 107 | 344 |
| Human-treatment apparatus | I. J Hartford | 726,054 | Apr. 21 | 3000 | 682 | 103 | 1835 |
| Human-treatment apparatus | I. J. Hartford | 726,055 | Apr. 21 | 3000 | 682 | 103 | 1836 |
| Humidifying the atmosphere. Apparatus for | L. C. Bulkley | 719,430 | Feb. 3 | 37 | 8 | 102 | 833 |
| Hummer. Aeolian- | A. G. Pierce | 729,891 | June 2 | 682 | 150 | 104 | 1267 |
| Hunting-knife | M. H. Rowland | 728,416 | May 19 | 3007 | 661 | 104 | 678 |
| Hurl-cutting machine | J. Peery | 746,877 | Dec. 15 | 2867 | 660 | 107 | 1760 |
| Husking-machine | G. R. Sherwood | 738,248 | Sept. 8 | 1389 | 301 | 106 | 316 |
| Husking-machine | G. R. Sherwood | 740,596 | Oct. 6 | 417 | 89, 90 | 106 | 1335 |
| Husking-machine feeding mechanism | I. D. Bate | 721,137 | Feb. 24 | 3247 | 743 | 102 | 1560 |
| Husking-pin | P. A. Waller | 721,762 | Mar. 3 | 183 | 42 | 103 | 40 |
| Husking-rollers | T. Guest | 719,658 | Feb. 3 | 436 | 100 | 102 | 913 |
| Hydrant | C. E. Loetzer | 720,716 | Feb. 17 | 2441 | 558 | 102 | 1365 |
| Hydrant | A. I. Sandbo | 724,741 | Apr. 7 | 609 | 143 | 103 | 1298 |
| Hydrant | A. I. Sandbo | 724,742 | Apr. 7 | 610 | 143 | 103 | 1299 |
| Hydrant | C. L. Howes | 733,483 | July 14 | 1408 | 332 | 105 | 315 |
| Hydrant | A. O. Babendrier | 734,251 | July 21 | 2867 | 671, 672 | 105 | 640 |
| Hydrant. Automatic | T. F. Murphy | 746,125 | Dec. 8 | 1494 | 333, 334 | 107 | 1439 |
| Hydrate of calcium peroxid. Manufacturing | G. F. Jaubert | 733,047 | July 7 | 613 | ------ | 105 | 131 |
| Hydrated silicates. Reviving | C. A. McKerrow | 726,091 | Apr. 21 | 3055 | 693 | 103 | 1847 |
| Hydraulic apparatus | A. S. Cardella | 718,424 | Jan. 13 | 1671 | 369 | 102 | 373 |
| Hydraulic apparatus. Automatic | A. B. Lawther | 720,162 | Feb. 10 | 1378 | 316 | 102 | 1133 |
| Hydraulic brake | J. Bardsley and A. J. Rosentreter | 740,513 | Oct. 6 | 247 | 49, 50 | 106 | 1299 |
| Hydraulic controlling apparatus for hydraulic machinery. | F. L. Lane and W. Rainforth | 730,373 | June 9 | 1368 | 301 | 104 | 1421 |
| Hydraulic cylinders. Controlling device for | S., W., O. E., C., and H. Hibbard | 721,562 | Feb. 24 | 4025 | 915 | 102 | 1719 |
| Hydraulic drill | P. Higgins | 735,768 | Aug. 11 | 1401 | 301 | 105 | 1297 |
| Hydraulic drill | P. Higgins | 735,769 | Aug. 11 | 1402 | 301 | 105 | 1297 |
| Hydraulic elevator | J. H. Adams | 741,291 | Oct. 13 | 1709 | 382 | 106 | 1628 |
| Hydraulic indicator | F. W. Jones | 741,248 | Oct. 13 | 1608 | 361 | 106 | 1610 |
| Hydraulic machinery. Apparatus for automatically regulating the supply of water under pressure to | L. Lacoin | 720,261 | Feb. 10 | 1572 | 359 | 102 | 1172 |
| Hydraulic motor | H. F. Sawtelle | 728,987 | May 26 | 4069 | 903, 904 | 104 | 915 |
| Hydraulic-power machine | G. W. Shem | 720,494 | Feb. 10 | 1979 | 452, 453 | 102 | 1257 |
| Hydraulic press | C. Seymour | 728,628 | May 19 | 3420 | 758, 759 | 104 | 766 |
| Hydraulic press | J. H. Ferguson | 748,358 | Dec. 29 | 5650 | 1288 | 107 | 2418 |
| Hydraulic-press speed-governor | H. Harmet | 726,425 | Apr. 28 | 3700 | 839 | 103 | 1995 |
| Hydrocarbon-burner | W. J. and G. Lane | 717,753 | Jan. 6 | 433 | 101 | 102 | 94 |
| Hydrocarbon-burner | F. M. Baker | 717,795 | Jan. 6 | 524 | 117, 118 | 102 | 113 |
| Hydrocarbon-burner | W. R. Jeavons | 719,469 | Feb. 3 | 103 | 24 | 102 | 847 |
| Hydrocarbon-burner | G. T. Wadkins | 721,761 | Mar. 3 | 181 | 42 | 103 | 40 |
| Hydrocarbon-burner | H. L. Sherwood | 722,155 | Mar. 3 | 912 | 203 | 103 | 195 |
| Hydrocarbon-burner | W. J. Stoermer | 722,163 | Mar. 3 | 929 | 206 | 103 | 198 |
| Hydrocarbon-burner | J. G. Branch | 722,202 | Mar. 10 | 1021 | 225 | 103 | 232 |
| Hydrocarbon-burner | A. D. McLean and C. H. Picard | 723,010 | Mar. 17 | 2517 | 565 | 103 | 564 |
| Hydrocarbon-burner | J. F. Higgins | 724,008 | Mar. 31 | 4422 | 993 | 103 | 985 |
| Hydrocarbon-burner | C. K. Bergé | 724,248 | Mar. 31 | 4901 | 1097 | 103 | 1081 |
| Hydrocarbon-burner | R. J. Miner | 724,911 | Apr. 7 | 910 | 208 | 103 | 1364 |
| Hydrocarbon-burner | T. O. Bateman | 726,212 | Apr. 21 | 3282 | 745 | 103 | 1893 |
| Hydrocarbon-burner | W. De Latimer | 728,683 | May 19 | 3520 | 782 | 104 | 786 |
| Hydrocarbon-burner | B. N. Hawes. (Reissue) | 12,114 | May 19 | 3782 | 843 | 104 | 842 |
| Hydrocarbon-burner | C. Ball | 729,115 | May 26 | 4297 | 950 | 104 | 959 |
| Hydrocarbon-burner | J. H. Morrissey | 729,205 | May 26 | 4457 | 982, 983 | 104 | 994 |
| Hydrocarbon-burner | J. Fitton | 733,579 | July 14 | 1582 | 377 | 105 | 352 |
| Hydrocarbon-burner | H. H. Ashlock | 734,152 | July 21 | 2687 | 632 | 105 | 602 |
| Hydrocarbon-burner | G. L. Badger | 735,442 | Aug. 4 | 788 | 167, 168 | 105 | 1149 |
| Hydrocarbon-burner | J. J. Jordan and J. M. Waller | 735,880 | Aug. 11 | 1621 | 346 | 105 | 1346 |
| Hydrocarbon-burner | F. A. Reynolds | 737,020 | Aug. 25 | 3728 | 827 | 105 | 1829 |
| Hydrocarbon-burner | C. Cannom | 737,999 | Sept. 1 | 896 | 197 | 106 | 196 |
| Hydrocarbon-burner | C. H. George | 738,178 | Sept. 8 | 1272 | 275 | 106 | 292 |
| Hydrocarbon-burner | I. P. Wilson | 738,509 | Sept. 8 | 1950 | 426 | 106 | 433 |
| Hydrocarbon burner | J. E. Bancroft | 738,755 | Sept. 15 | 2432 | 533 | 106 | 552 |
| Hydrocarbon-burner | G. W. Boyd | 740,082 | Sept. 29 | 4899 | 1098, 1099 | 106 | 1114 |
| Hydrocarbon-burner | S. Denison | 741,233 | Oct. 13 | 1586 | 356, 357 | 106 | 1605 |
| Hydrocarbon-burner | H. P. Roberts | 741,834 | Oct. 20 | 2769 | 618 | 106 | 1872 |
| Hydrocarbon-burner | R. M. Jackson | 742,119 | Oct. 20 | 3383 | 755 | 106 | 1994 |
| Hydrocarbon-burner | H. J. Myers | 742,344 | Oct. 27 | 3809 | 853 | 106 | 2099 |
| Hydrocarbon-burner | J. B. and H. V. Gorrell | 742,629 | Oct. 27 | 4323 | 973 | 106 | 2206 |
| Hydrocarbon-burner | O. Falkenwalde | 742,777 | Oct. 27 | 4566 | 1034 | 106 | 2259 |
| Hydrocarbon-burner | H. E. Brunner and E. J. Patterson | 742,965 | Nov. 3 | 251 | 56 | 107 | 55 |
| Hydrocarbon-burner | J. S. Sherman and G. H. Harms | 743,764 | Nov. 10 | 1891 | 400 | 107 | 421 |
| Hydrocarbon-burner | L. E. Coleman | 743,976 | Nov. 10 | 2304 | 492 | 107 | 512 |
| Hydrocarbon-burner | A. G. Porter | 745,025 | Nov. 24 | 4293 | 928 | 107 | 959 |
| Hydrocarbon-burner | A. L. Merrill | 745,880 | Dec. 1 | 1051 | 236 | 107 | 1322 |
| Hydrocarbon burner | C. H. Knobbs | 746,525 | Dec. 8 | 2198 | 504 | 107 | 1589 |
| Hydrocarbon burner | W. R. Smith | 746,890 | Dec. 15 | 2896 | 668 | 107 | 1768 |
| Hydrocarbon-burner | L. Stockstrom | 747,799 | Dec. 22 | 4582 | 1034 | 107 | 2164 |

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| Invention. | Name. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | | Spec. | Dr'g. | Vol. | Page. |
| Hydrocarbon-burner | L. A. Eggert | 748,269 | Dec. 29 | 5513 | 1256 | 107 | 2389 |
| Hydrocarbon-burner and attachment | W. J. and G. Lane | 717,754 | Jan. 6 | 435 | 101 | 102 | 95 |
| Hydrocarbon burner and furnace | D. C. Wilgus | 739,043 | Sept. 15 | 2943 | 652 | 106 | 662 |
| Hydrocarbon-burner attachment | F. A. Reynolds | 736,153 | Aug. 11 | 2114 | 454 | 105 | 1450 |
| Hydrocarbon-burner. Incandescent | E. Lehmann | 731,060 | June 16 | 2804 | 624 | 104 | 1746 |
| Hydrocarbon-burner initial heating device | W. R. Jeavons | 722,987 | Mar. 17 | 2475 | 557 | 103 | 556 |
| Hydrocarbon-burner lighting device | W. R. Jeavons | 722,988 | Mar. 17 | 2477 | 557 | 103 | 556 |
| Hydrocarbon-burner lighting device | L. Stockstrom | 744,427 | Nov. 17 | 3197 | 686 | 107 | 713 |
| Hydrocarbon burner. Liquid- | D. J. Canchester | 746,283 | Dec. 8 | 1783 | 405 | 107 | 1499 |
| Hydrocarbon-engine | J. C. Meredith | 744,380 | Nov. 17 | 3113 | 669<br>670 | 107 | 695 |
| Hydrocarbon-furnace | J. Greer | 728,098 | May 12 | 2401 | 534 | 104 | 529 |
| Hydrocarbon-injector | W. W. Tuck and A. A. Low | 737,299 | Aug. 25 | 4237 | 943 | 105 | 1935 |
| Hydrocarbon lighting system | R. D. Cody | 737,708 | Sept. 1 | 266 | 57 | 106 | 60 |
| Hydrocarbon-motor | J. W. Packard | 732,431 | Mar. 10 | 1435 | 318 | 103 | 321 |
| Hydrocarbon-supply tank | G. B. Landers | 731,918 | June 23 | 4410 | 983 | 104 | 2094 |
| Hydrocarbon-vapor burner | L. Tapin | 718,675 | Jan. 20 | 2201 | 482 | 102 | 499 |
| Hydrocarbon-vapor burner | W. H. Tarmon and F. M. Thompson | 725,796 | Apr. 21 | 2566 | 581 | 103 | 1745 |
| Hydrocarbon-vapor burner | A. B. Macklin | 731,800 | June 23 | 4200 | 937 | 104 | 2048 |
| Hydrocarbon-vapor generator | J. F. Shelton | 735,831 | Aug. 11 | 1526 | 327 | 105 | 1325 |
| Hydrocarbons and alcohol and products thereof. Solidifying volatile | A. H. Cronemeyer | 718,318 | Jan. 13 | 1488 | ..... | 102 | 335 |
| Hydrocarbons. Treating mineral liquid | C. Hornbostel | 734,710 | July 28 | 3724 | 871 | 105 | 835 |
| Hydrogen sulfid from furnace-gases. Making pure. | W. G. Waring | 718,556 | Jan. 13 | 1978 | 432 | 102 | 440 |
| Hydrometer | P. G. Richter | 721,744 | Mar. 3 | 160 | 37 | 103 | 36 |
| Hydropneumatic engine | L. Kessler | 746,100 | Dec. 8 | 1446 | 324<br>325 | 107 | 1427 |
| Hydrosulfite paste. Discharging with | L. H. Dehoff | 744,501 | Nov. 17 | 3331 | ..... | 107 | 742 |
| Hydroxylamin. Producing | J. Tafel | 727,025 | May 5 | 407 | ..... | 104 | 89 |
| Hygrometer | J. H. Gerrer | 730,633 | June 9 | 2018 | 448 | 104 | 1562 |
| Hypodermic needle | C. D. Brooke | 722,203 | Mar. 10 | 1023 | 225 | 103 | 232 |
| Ice and refrigerating cars. Automatic apparatus for making | N. W. Gregg | 729,759 | June 2 | 438 | 99 | 104 | 1217 |
| Ice and snow melter | E. L. Tschantre | 721,479 | Feb. 24 | 3887 | 884 | 102 | 1690 |
| Ice. Apparatus for the manufacture of | L. Block | 726,852 | May 5 | 28 | 7 | 104 | 9 |
| Ice-box or refrigerator | F. C. Pershing | 732,440 | June 30 | 5453 | 1210 | 104 | 2324 |
| Ice-breaker | R. W. Reynolds | 721,326 | Feb. 24 | 3604 | 819 | 102 | 1632 |
| Ice-cake anchor-bar | T. H. Butler | 730,001 | June 2 | 887 | 198 | 104 | 1309 |
| Ice-conserver | H. S. Van Fleet | 746,414 | Dec. 8 | 2011 | 458 | 107 | 1548 |
| Ice-cream-brick mold | J. J. Snigo | 731,519 | June 23 | 3681 | 821 | 104 | 1943 |
| Ice-cream cabinet | H. A. Hopkins | 736,522 | Aug. 18 | 2776 | 607 | 105 | 1611 |
| Ice-cream dipper | J. F. Craven | 741,015 | Oct. 13 | 1165 | 263 | 106 | 1515 |
| Ice-cream freezer | B. B. Messer | 717,887 | Jan. 6 | 707 | 158 | 102 | 151 |
| Ice-cream freezer | S. Sweeney | 720,856 | Feb. 17 | 2663 | 614<br>615 | 102 | 1414 |
| Ice-cream freezer | E. Walker | 727,504 | May 5 | 1259 | 281<br>282 | 104 | 271 |
| Ice-cream freezer | W. C. Fawkes | 729,310 | May 26 | 4649 | 1027<br>1028 | 104 | 1035 |
| Ice-cream freezer | C. R. Hamilton | 736,723 | Aug. 18 | 3167 | 699 | 105 | 1690 |
| Ice-cream freezer | C. E. Taylor | 737,973 | Sept. 1 | 832 | 182<br>183 | 106 | 182 |
| Ice-cream freezer | D. Rugg | 747,490 | Dec. 22 | 4021 | 904 | 107 | 2038 |
| Ice-cream-freezer operating mechanism | W. T. Mosher | 742,473 | Oct. 27 | 4028 | 904 | 106 | 2143 |
| Ice-cream. Making block | H. Yeager and J. W. Rigney | 729,248 | May 26 | 4538 | 999 | 104 | 1010 |
| Ice-cream mold | H. Yeager and J. W. Rigney | 729,249 | May 26 | 4539 | 999 | 104 | 1011 |
| Ice-cream-packing can | J. J. Snigo | 731,518 | June 23 | 3680 | 820 | 104 | 1943 |
| Ice-cream-storage tank | E. Walker | 740,718 | Oct. 6 | 611 | 137 | 106 | 1379 |
| Ice-creeper | J. H. Wagner, C. J. Hofstetter, and H. Ostendorf. | 739,103 | Sept. 15 | 3063 | 679 | 106 | 686 |
| Ice-creeper | H. S. Kelley | 740,021 | Sept. 29 | 4792 | 1077 | 106 | 1091 |
| Ice-creeper | C. E. La Parr | 743,736 | Nov. 10 | 1844 | 389 | 107 | 410 |
| Ice-creeper | J. L. Thomson | 743,773 | Nov. 10 | 1918 | 406 | 107 | 426 |
| Ice-cutter | J. Ducharme | 728,555 | May 19 | 3275 | 725 | 104 | 732 |
| Ice-cutter | H. Bodenstein | 729,122 | May 26 | 4309 | 952 | 104 | 962 |
| Ice-cutting machine | W. H. De Baun | 722,681 | Mar. 17 | 1938 | 431<br>432 | 103 | 447 |
| Ice-cutting machine | F. J. and A. H. Reinhold | 739,718 | Sept. 22 | 4193 | 938 | 106 | 947 |
| Ice-cutting-machine table | T. H. Butler | 737,904 | Sept. 1 | 694 | 149 | 106 | 152 |
| Ice-elevator | N. H. Trask | 718,175 | Jan. 13 | 1216 | 269 | 102 | 277 |
| Ice-freezing can | E. E. Hanmer | 739,173 | Sept. 15 | 3182 | 704 | 106 | 712 |
| Ice-harvesting machine | J. B. Hause | 723,774 | Mar. 24 | 3923 | 885<br>886 | 103 | 867 |
| Ice in streets, &c. Machine for cutting up | C. A. Green and H. E. Larsson | 721,364 | Feb. 24 | 3671 | 836 | 102 | 1645 |
| Ice into cubes or blocks. Machine for sawing | J. S. Duncan | 721,789 | Mar. 3 | 240 | 53, 54 | 103 | 53 |
| Ice-machine | A. Peter | 727,432 | May 5 | 1133 | 249 | 104 | 244 |
| Ice-machine | C. C. Palmer | 742,482 | Oct. 27 | 4044 | 907 | 106 | 2147 |
| Ice-machine | T. H. Butler | 742,584 | Oct. 27 | 4240 | 955 | 106 | 2187 |
| Ice-machine freezing-cylinder | D. L. Holden | 730,018 | June 2 | 912 | 204 | 104 | 1313 |
| Ice-machine freezing-tank | T. H. Butler | 742,582 | Oct. 27 | 4238 | 955 | 106 | 2186 |
| Ice machine. Regealed- | C. P. Minning | 723,702 | Mar. 24 | 3791 | 851<br>852<br>853 | 103 | 839 |
| Ice-machine skimming-regulator | C. S. Clark | 729,278 | May 26 | 4588 | 1013<br>1014 | 104 | 1022 |
| Ice-machine skimming-regulator | A. H. Hutchinson | 729,348 | May 26 | 4715 | 1042 | 104 | 1048 |
| Ice-machine skimming-regulator | A. H. Hutchinson | 729,349 | May 26 | 4717 | 1043 | 104 | 1049 |
| Ice-making machine | H. G. Randall | 734,748 | July 28 | 3808 | 888 | 105 | 849 |
| Ice-making machine | R. F. Learned | 735,673 | Aug. 4 | 1222 | 259 | 105 | 1240 |
| Ice-making machine or apparatus | J. H. J. Haines | 729,929 | June 2 | 736 | 164 | 104 | 1278 |
| Ice-making machinery | W. J. Woodcock | 745,548 | Dec. 1 | 439 | 103 | 107 | 1191 |
| Ice pad or support | E. G. Johnson | 729,929 | Feb. 17 | 2809 | 644 | 102 | 1444 |
| Ice-pick | H. Huebner | 717,998 | Jan. 6 | 905 | 203 | 102 | 194 |
| Ice. Producing plate- | W. J. Woodcock | 745,549 | Dec. 1 | 440 | 103 | 107 | 1191 |
| Ice-reducer | C. H. Moore | 740,162 | Sept. 29 | 5039 | 1133 | 106 | 1144 |
| Ice-saw | E. G. Howard and F. M. Williams | 743,509 | Nov. 10 | 1433 | 300 | 107 | 322 |

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| Ice-scraper | F. B. Corey | 727,593 | May 12 | 1438 | 323 | 104 | 328 |
| Ice-shaver | J. F. Williams | 719,966 | Feb. 3 | 989 | 229 | 102 | 1033 |
| Ice-shaver | J. F. Williams | 719,967 | Feb. 3 | 989 | 230 | 102 | 1033 |
| Ice-spud and shovel. Combination | W. J. Ester | 722,825 | Mar. 17 | 2204 | 491 | 103 | 500 |
| Ice-spur | L Winterhalder | 736,468 | Aug. 18 | 2658 | 584 | 105 | 1585 |
| Ice spur or creeper | M. P. Link | 741,349 | Oct. 13 | 1846 | 407 | 106 | 1661 |
| Ice-table | T. H. Butler | 742,585 | Oct. 27 | 4242 | 955 | 106 | 2187 |
| Ice-tongs | G. L. Pervier | 718,790 | Jan. 20 | 2419 | 536 | 102 | 544 |
| Ice-tool | H. J. Kingsley | 747,981 | Dec. 29 | 4972 | 1123 | 107 | 2271 |
| Iceman's apron | E. W. Fletcher | 729,565 | June 2 | 82 | 20 | 104 | 1144 |
| Igniter | G. H. Lotspike | 723,472 | Mar. 24 | 3412 | 762 | 103 | 759 |
| Igniter. Electric | A. F. Ganz | 732,346 | June 30 | 5269 | 1168 | 104 | 2285 |
| Igniter. Electric | H. G. Mears and H. W. Aylward | 732,364 | June 30 | 5300 | 1175 | 104 | 2291 |
| Igniter. Electric | H. G. Mears and H. W. Aylward | 732,366 | June 30 | 5304 | 1175 | 104 | 2292 |
| Igniter. Electric | E. J. Stoddard | 739,943 | Sept 29 | 4644 | 1042 | 106 | 1060 |
| Igniter. Electrical sparking | C. W. Miller | 739,199 | Sept. 15 | 3225 | 714<br>715 | 106 | 721 |
| Igniter for explosive-motors. Catalytic | T. B. Jeffery | 747,182 | Dec. 15 | 3439 | 780 | 107 | 1891 |
| Igniter-generator | L. J. Le Pontois | 732,372 | June 30 | 5316 | 1178 | 104 | 2295 |
| Igniter generator. Electric | L. J. Le Pontois | 732,371 | June 30 | 5312 | 1177 | 104 | 2294 |
| Igniter sparking mechanism. Electric | C. B. King | 739,882 | Sept. 29 | 4530 | 1018 | 106 | 1035 |
| Igniters. Manufacture of electric | A. de Dion and G. Bouton | 735,015 | July 28 | 4302 | 1000 | 105 | 953 |
| Igniting apparatus. Electrical | W. H. Cotton | 735,213 | Aug. 4 | 348 | 67 | 105 | 1055 |
| Igniting composition and making same | O. Dieffenbach and A. Schäfer | 727,758 | May 12 | 1768 | ------ | 104 | 397 |
| Igniting device | W. Gardner | 748,360 | Dec. 29 | 5654 | 1289 | 107 | 2419 |
| Igniting device. Electric | F. Sturm | 722,333 | Mar. 10 | 1263 | 281<br>282 | 103 | 284 |
| Igniting device. Electric | H. B. McNulty | 738,624 | Sept. 8 | 2156 | 472<br>473 | 106 | 479 |
| Igniting system | V. G. Apple | 727,566 | May 12 | 1392 | 314 | 104 | 319 |
| Ignition device. Electric | N. Schmitt and J. Krannichfeldt | 722,913 | Mar. 17 | 2359 | 527 | 103 | 532 |
| Ignition device. Electric | A. R. Mosler | 738,831 | Sept. 15 | 2587 | 572 | 106 | 587 |
| Ignition device. Electrical | E. W. Brooks | 737,202 | Aug. 25 | 4041 | 896 | 105 | 1894 |
| Ignition-generator. Electric | B. P. Remy | 734,955 | July 28 | 4188 | 974<br>975 | 105 | 929 |
| Ignition-plug. Jump-spark | J. H. Lehman | 741,684 | Oct. 20 | 2488 | 556 | 106 | 1811 |
| Illuminating-canopy | F. L. O. Wadsworth | 717,784 | Jan. 6 | 511 | 114 | 102 | 110 |
| Illuminating-canopy | F. L. O. Wadsworth | 732,474 | June 30 | 5515 | 1223 | 104 | 2335 |
| Illuminating device | W. S. Traill | 725,514 | Apr. 14 | 2035 | 461 | 103 | 1616 |
| Illuminating device | R. Mancha | 726,081 | Apr. 21 | 3038 | 690 | 103 | 1843 |
| Illuminating device and reflector for show-cases | W. A. Merritt | 733,670 | July 14 | 1732 | 409 | 105 | 382 |
| Illuminating device. Threshold | G. Hail | 737,608 | Sept. 1 | 92 | 20 | 106 | 22 |
| Illuminating glass structure | F. L. O. Wadsworth | 720,987 | Feb. 17 | 2921 | 669 | 102 | 1468 |
| Illuminating prism structure | F. L. O. Wadsworth | 720,386 | Feb. 10 | 1798 | 409 | 102 | 1220 |
| Illuminating rooms opening on light-wells. Device for | N. Poulson | 729,660 | June 2 | 246 | 57 | 104 | 1179 |
| Illuminating structure | F. L. O. Wadsworth | 717,782 | Jan. 6 | 509 | 114 | 102 | 110 |
| Illuminating structure | F. L. O. Wadsworth | 717,783 | Jan. 6 | 510 | 114 | 102 | 110 |
| Illuminating structure | F. L. O. Wadsworth | 719,065 | Jan. 27 | 2937 | 656 | 102 | 668 |
| Illuminating structure | F. L. O. Wadsworth | 719,066 | Jan. 27 | 2939 | 656<br>657 | 102 | 668 |
| Illuminating structure | F. L. O. Wadsworth | 721,256 | Feb. 24 | 3492 | 793 | 102 | 1608 |
| Illuminating structure | F. L. O. Wadsworth | 721,258 | Feb. 24 | 3493 | 794 | 102 | 1608 |
| Illuminating structure | F. L. O. Wadsworth | 721,259 | Feb. 24 | 3495 | 794 | 102 | 1608 |
| Illuminating structure | F. L. O. Wadsworth | 734,020 | July 21 | 2426 | 567 | 105 | 516 |
| Illusion device | A. A. Welsh | 733,359 | July 7 | 1185 | 280<br>281 | 105 | 249 |
| Image-projecting device | E. M. Barnes | 728,655 | May 19 | 3470 | 770 | 104 | 776 |
| Impact of bodies at a distance. Means for indicating the | J. Urrutia y Motta | 729,703 | June 2 | 315 | 73 | 104 | 1193 |
| Implement-handle | J. Schwartz | 733,919 | July 14 | 2211 | 519 | 105 | 480 |
| Implement-holder. Adjustable | R. Baker | 730,509 | June 9 | 1807 | 403 | 104 | 1515 |
| Implement. Pocket | G. P. Coates | 719,088 | Jan. 27 | 2989 | 666 | 102 | 678 |
| Impulse-wheel | L. W. Noyes | 743,023 | Nov. 3 | 393 | 85 | 107 | 82 |
| Incandescent burner | A. Rector | 730,618 | Feb. 17 | 2268 | 520 | 102 | 530 |
| Incandescent burner | W. Parfrey | 738,746 | Sept. 8 | 2401 | 527 | 106 | 813 |
| Incandescent-burner cap and mantle-support | T. R. Barnes | 734,656 | July 28 | 3614 | 846 | 105 | 1339 |
| Incandescent-light bulbs. Means for locking | C. W. Dabb and C. E. Macduffee | 740,248 | Sept. 29 | 5204 | 1170 | 106 | 1177 |
| Incandescent-light holder | R. E. Hess | 733,356 | July 7 | 1177 | 279 | 105 | 248 |
| Incandescent-lighting burner | R. Danvin | 734,308 | July 21 | 2997 | 705 | 105 | 667 |
| Incandescent-mantle frame | E. Lippitt | 746,639 | Dec. 8 | 2411 | 551 | 107 | 1638 |
| Incandescent-mantle-lighting apparatus | J. Tolson | 747,805 | Dec. 22 | 4600 | 1037<br>1038 | 107 | 2168 |
| Incandescent-mantle package | J. I. Robin | 746,645 | Dec. 8 | 2420 | 553 | 107 | 1640 |
| Incandescent-mantle-supporting device | F. A. Ward and A. R. Selden | 733,522 | July 14 | 1479 | 351 | 105 | 330 |
| Incandescent mantles. Machine for manufacturing | J. L. Muller and J. Bonnet | 739,099 | Sept. 15 | 3053 | 676<br>677<br>678 | 106 | 685 |
| Incrustation preventive | R. L. Gamlen | 724,094 | Mar. 31 | 4565 | ------ | 103 | 1015 |
| Incrustation preventive | T. G. Lockwood | 728,258 | May 19 | 2712 | ------ | 104 | 615 |
| Incrustation preventive and method of manufacture | A. Raymond, T. Lowther, and D. Perry. | 724,331 | Mar. 31 | 5052 | ------ | 103 | 1113 |
| Incubator | F. C. Keck | 718,479 | Jan. 13 | 1789 | 397 | 102 | 396 |
| Incubator | J. W. Sauer | 719,614 | Feb. 3 | 359 | 83, 84 | 102 | 897 |
| Incubator | F. H. Stoneburn | 729,695 | June 2 | 301 | 70 | 104 | 1191 |
| Incubator | O. H. Grosland | 730,639 | June 9 | 2025 | 450 | 104 | 1564 |
| Incubator | W. N. Yeager | 731,649 | June 23 | 3930 | 875 | 104 | 1991 |
| Incubator | J. W. Porter | 733,270 | July 7 | 1030 | 247 | 105 | 215 |
| Incubator | W. P. Sheets | 735,305 | Aug. 4 | 515 | 104 | 105 | 1091 |
| Incubator | P. Pedersen | 735,409 | Aug. 4 | 706 | 150<br>151 | 105 | 1131 |
| Incubator | C. B. Kenyon | 735,885 | Aug. 11 | 1629 | 348 | 105 | 1347 |
| Incubator | O. W. Randolph | 736,015 | Aug. 11 | 1871 | 400 | 105 | 1400 |
| Incubator | F. C. Keck | 738,201 | Sept. 8 | 1312 | 284<br>285 | 106 | 299 |
| Incubator | H. C. Donohoe | 746,799 | Dec. 15 | 2703 | 623 | 107 | 1723 |

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| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drgs. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Incubator. Electrical | F. C. Perkins | 745,458 | Dec. 1 | 280 | 68, 69 | 107 | 1159 |
| Incubator-heater | O. P. Scott | 726,999 | May 5 | 351 | 76 | 104 | 76 |
| Incubator heater and ventilator | O. P. Shoemaker | 748,538 | Dec. 29 | 6011 | 1362 | 107 | 2499 |
| Incubator hot-water heating system | M. M. Johnson | 742,033 | Oct. 20 | 3182 | 710 | 106 | 1955 |
| Incubator-thermostat | F. W. Burd | 741,303 | Oct. 13 | 1734 | 387 | 106 | 1633 |
| Index | R. C. Russell | 719,143 | Jan. 27 | 3099 | 689 | 102 | 700 |
| Index | W. H. Gilman | 732,679 | June 30 | 5902 | 1309 | 104 | 2419 |
| Index | H. P. Jones | 740,869 | Oct. 6 | 899 | 201 | 106 | 1438 |
| Index | L. Klopsch | 746,847 | Dec. 15 | 2806 | 646 | 107 | 1747 |
| Index and balancing attachment for ledgers | H. E. Jones | 741,140 | Oct. 13 | 1394 | 319, 320 | 106 | 1563 |
| Index and indicator for account-books. Combined | W. C. Hunter | 733,844 | July 14 | 2060 | 487 | 105 | 450 |
| Index. Card- | R. L. Hunter | 718,630 | Jan. 20 | 2113 | 460 | 102 | 483 |
| Index. Card- | D. F. Taber | 727,490 | May 5 | 1237 | 275 | 104 | 267 |
| Index. Card- | J. H. Rand | 730,399 | June 9 | 1591 | 355 | 104 | 1468 |
| Index. Card- | C. McPike | 748,519 | Dec. 29 | 5969 | 1354, 1355 | 107 | 2482 |
| Index-card | G. P. Knapp | 726,439 | Apr. 28 | 3726 | 845 | 103 | 2000 |
| Index. Land- | W. A. Ragland | 733,677 | July 14 | 1742 | 412 | 105 | 384 |
| Index locking device. Card- | C. McPike | 727,186 | May 5 | 688 | 147 | 104 | 149 |
| Index-tag. Movable | F. G. Eichorn | 742,617 | Oct. 27 | 4303 | 969 | 106 | 2201 |
| Index tray or cabinet. Card- | W. H. Tucker | 729,242 | May 26 | 4530 | 998 | 104 | 1009 |
| Indexing apparatus | B. M. W. Hanson | 728,457 | May 19 | 3086 | 682, 683 | 104 | 694 |
| Indexing apparatus. Fluid-pressure-operated | B. M. W. Hanson | 728,573 | May 19 | 3315 | 733, 734, 735 | 104 | 741 |
| Indexing device | G. H. Pollard | 747,761 | Dec. 22 | 4511 | 1016, 1017 | 107 | 2148 |
| Indexing mechanism | F. G. Echols | 731,870 | June 23 | 4309 | 961, 962, 963 | 104 | 2072 |
| Indexing mechanism. Friction | F. G. Echols | 731,871 | June 23 | 4317 | 963, 964 | 104 | 2074 |
| Indian club. Illuminated | M. M. Hurst | 744,348 | Nov. 17 | 3057 | 656 | 107 | 683 |
| Indicating and controlling apparatus | C. O. Mailloux | 725,001 | Apr. 7 | 1079 | 246, 247 | 103 | 1398 |
| Indicating device | W. R. Thompson | 742,099 | Oct. 20 | 3347 | 747 | 106 | 1987 |
| Indicating instrument | C. D. Haskins | 729,164 | May 26 | 4388 | 968 | 104 | 979 |
| Indicating mechanism | W. T. Treadway | 733,350 | Nov. 3 | 1036 | 223 | 107 | 220 |
| Indicating system and time-beater | W. Stanley | 741,735 | Oct. 20 | 2594 | 577 | 106 | 1834 |
| Indicating the relative positions of moving parts | H. W. Buck | 731,992 | June 23 | 4540 | 1013 | 104 | 2122 |
| Indicating the relative positions of moving parts. Means for | H. W. Buck | 731,750 | June 23 | 4106 | 917 | 104 | 2027 |
| Indicator: | | | | | | | |
| *See* Automatic indicator. | | | | | | | |
| Automobile speed-indicator. | | | | | | | |
| Baling-press indicator. | | | | | | | |
| Battery charge-indicator. | | | | | | | |
| Boring-machine indicator. | | | | | | | |
| Bottle dose-indicator. | | | | | | | |
| Car and line indicator. | | | | | | | |
| Coffee-pot indicator. | | | | | | | |
| Current-indicator. | | | | | | | |
| Dilator-indicator. | | | | | | | |
| Electric-motor speed-indicator. | | | | | | | |
| Engine-indicator. | | | | | | | |
| Fare-indicator. | | | | | | | |
| Heat-indicator. | | | | | | | |
| Hot-bearing indicator. | | | | | | | |
| Hydraulic indicator. | | | | | | | |
| Lamp-filling indicator. | | | | | | | |
| Laundry-indicator. | | | | | | | |
| Library or like indicator. | | | | | | | |
| Liquid-containing-vessel indicator. | | | | | | | |
| Liquid-level indicator. | | | | | | | |
| Mail-box indicator. | | | | | | | |
| Marksman's indicator. | | | | | | | |
| Maximum-demand indicator. | | | | | | | |
| Office-door indicator. | | | | | | | |
| Order-indicator. | | | | | | | |
| Phase-indicator. | | | | | | | |
| Polarity-indicator. | | | | | | | |
| Power-factor indicator. | | | | | | | |
| Railway street-indicator. | | | | | | | |
| Shoal-water indicator. | | | | | | | |
| Shop-indicator. | | | | | | | |
| Signal-indicator. | | | | | | | |
| Speed-indicator. | | | | | | | |
| Speed and direction indicator. | | | | | | | |
| Station-indicator. | | | | | | | |
| Street or station indicator. | | | | | | | |
| Switch-indicator. | | | | | | | |
| Synchronism-indicator. | | | | | | | |
| Telephone toll-indicator. | | | | | | | |
| Toilet-room indicator. | | | | | | | |
| Track-laying indicator. | | | | | | | |
| Valve-indicator. | | | | | | | |
| Watch winding-indicator. | | | | | | | |
| Water-level indicator. | | | | | | | |
| Winding indicator. | | | | | | | |
| Indicator | G. C. Bailey | 721,772 | Mar. 3 | 197 | 46 | 103 | 43 |
| Indicator | T. J. McGrath | 732,580 | June 30 | 5724 | 1271 | 104 | 2381 |
| Indicator | T. J. McGrath | 732,581 | June 30 | 5725 | 1271 | 104 | 2382 |
| Indicator | E. L. Walker | 737,980 | Sept. 1 | 847 | 186 | 106 | 185 |
| Indicator | J. J. Slavin | 741,176 | Oct. 13 | 1465 | 333 | 106 | 1577 |
| Indicator | W. E. Adams | 746,433 | Dec. 8 | 2043 | 469 | 107 | 1554 |
| Indicator | C. F. Pidgin | 746,570 | Dec. 8 | 2278 | 522 | 107 | 1608 |
| Indicator for furnaces, &c | A. E. Powell | 723,303 | Mar. 24 | 3067 | 690 | 103 | 692 |
| Indicator-lock | P. Yoe | 723,350 | Mar. 24 | 3152 | 708, 709 | 103 | 708 |
| Indicator-lock | P. Yoe | 736,189 | Aug. 11 | 2175 | 467 | 105 | 1464 |
| Indicator-wheel | W. G. Kirchhoff | 724,115 | Mar. 31 | 4620 | 1041 | 103 | 1027 |
| Indigo. Hydrosulfite for reducing | M. Bazlen | 719,720 | Feb. 3 | 560 | ..... | 102 | 941 |
| Indigo. Making brom | A. Rahtjen | 729,217 | May 26 | 4484 | ..... | 104 | 1000 |
| Indigo mixture and making same | B. Homolka | 726,688 | Apr. 28 | 4227 | ..... | 103 | 2098 |
| Indigo powder. Light | P. Seidel | 744,417 | Nov. 17 | 3181 | 682 | 107 | 709 |
| Indigo. Reducing | R. Müller and O. Schwab | 723,007 | Mar. 17 | 2510 | ..... | 103 | 562 |
| Indoxyl and derivatives thereof. Making | R. Knietsch and H. S. A. Holt | 746,965 | Dec. 15 | 3042 | ..... | 107 | 1801 |
| Indoxyl and indigo preparations. Making | W. Hentschel | 737,836 | Sept. 1 | 539 | ..... | 106 | 120 |
| Indoxyl. Making | A. Bischler | 727,270 | May 5 | 840 | ..... | 104 | 180 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Indoxyl. Making | P. E. Oberreit | 731,385 | June 16 | 3412 | ..... | 104 | 1809 |
| Induction apparatus | P. F. Cowing | 723,836 | Mar. 31 | 4046 | 913 | 103 | 908 |
| Induction-coil | A. L. Parcelle | 723,016 | Mar. 17 | 2525 | 566 | 103 | 565 |
| Induction-coil | J. Splitdorf | 732,014 | June 23 | 4605 | 1027 | 104 | 2134 |
| Induction-coil | C. F. Splitdorf | 734,197 | July 21 | 2767 | 649 | 105 | 218 |
| Induction coil. Self- | G. A. Campbell | 737,703 | Sept. 1 | 261 | 55 | 106 | 59 |
| Induction coil. Self- | G. A. Campbell and W. L. Richards | 737,704 | Sept. 1 | 262 | 56 | 106 | 60 |
| Induction-coil vibrator | R. Varley | 748,442 | Dec. 29 | 5814 | 1324 | 107 | 2455 |
| Induction-motor | C. C. Chesney | 718,697 | Jan. 20 | 2244 | 491, 492 | 102 | 508 |
| Induction-motor | A. L. Cushman | 725,224 | Apr. 14 | 1505 | 343 | 103 | 1504 |
| Induction-motor | A. L. Cushman | 725,225 | Apr. 14 | 1506 | 343 | 103 | 1504 |
| Induction-motor | H. S. Meyer | 729,199 | May 26 | 4448 | 981 | 104 | 992 |
| Induction-motor | A. E. Averrett | 732,153 | June 30 | 4894 | 1088 | 104 | 2207 |
| Induction-motor | R. B. Williamson | 740,963 | Oct. 6 | 1061 | 241, 242 | 106 | 1473 |
| Induction-motor | D. M. Bliss | 745,772 | Dec. 1 | 818 | 186 | 107 | 1273 |
| Induction-motor. Alternating-current | C. S. Bradley | 732,822 | July 7 | 231 | 58 | 105 | 56 |
| Induction-motor for variable speeds | A. Meuschel | 727,662 | May 12 | 1573 | 355 | 104 | 355 |
| Induction-motor. Variable-speed | C. P. Steinmetz | 733,341 | July 7 | 1154 | 274 | 105 | 243 |
| Inflammable liquids. Safety device for vessels containing | V. Posno | 728,610 | May 19 | 3390 | 751 | 104 | 759 |
| Ingot-heating furnace | F. H. Daniels, S. T. and C. H. Wellman. | 724,549 | Apr. 7 | 237 | 57, 58 | 103 | 1220 |
| Ingot-heating furnace | F. H. Daniels, S. T. and C. H. Wellman. | 724,550 | Apr. 7 | 239 | 58 | 103 | 1221 |
| Ingot-heating furnace | F. H. Daniels, S. T. and C. H. Wellman. | 724,551 | Apr. 7 | 241 | 58, 59 | 103 | 1221 |
| Ingot-heating furnace | F. H. Daniels, S. T. and C. H. Wellman. | 724,552 | Apr. 7 | 242 | 59, 60 | 103 | 1221 |
| Ingot-mold | T. Dixon | 728,552 | May 19 | 3270 | 724 | 104 | 731 |
| Ingot-mold | T. E. Rees | 745,117 | Nov. 24 | 4484 | 970 | 107 | 1000 |
| Ingot-mold dog or grapple | L. G. Stitt | 735,616 | Aug. 4 | 1114 | 236 | 105 | 1218 |
| Ingot or casting. Metallic | G. Thomson | 734,286 | July 21 | 2949 | ..... | 105 | 658 |
| Ingot-stripper | L. G. Stitt | 735,615 | Aug. 4 | 1111 | 236 | 105 | 1217 |
| Ingots from molds. Mechanism for stripping | W. H. Morse | 735,795 | Aug. 11 | 1445 | 311, 312 | 105 | 1307 |
| Inhaler | C. W. Taylor | 718,400 | Jan. 13 | 1627 | 358 | 102 | 364 |
| Inhaler | C. W. Taylor | 723,070 | Mar. 17 | 2625 | 591 | 103 | 588 |
| Inhaler | K. Greimer | 723,268 | Mar. 24 | 3003 | 675 | 103 | 679 |
| Inhaler | A. K. Schulte | 723,738 | Mar. 24 | 3863 | 869 | 103 | 853 |
| Inhaler | A. Dow | 724,680 | Apr. 7 | 491 | 117 | 103 | 1274 |
| Inhaler | A. Bulling | 725,928 | Apr. 21 | 2797 | 635 | 103 | 1794 |
| Inhaler | S. O. Goldan | 733,026 | July 7 | 575 | 140 | 105 | 123 |
| Inhaler | S. O. Goldan | 733,027 | July 7 | 577 | 140, 141 | 105 | 123 |
| Inhaler | J. N. McKim | 743,018 | Nov. 3 | 385 | 83 | 107 | 81 |
| Inhaler. Anesthetic- | E. Marshall | 747,742 | Dec. 22 | 4469 | 1008 | 107 | 2138 |
| Inhaler. Nasal | C. K. Teter | 731,973 | June 23 | 4502 | 1005 | 104 | 2115 |
| Inhaler. Tubular | H. Ferré | 726,037 | Apr. 21 | 2976 | 676 | 103 | 1830 |
| Inhaling apparatus | T. Kautz | 736,111 | Aug. 11 | 2043 | 435 | 105 | 1436 |
| Initiating apparatus | E. and U. S. De Moulin | 736,704 | Aug. 18 | 3129 | 689 | 105 | 1682 |
| Injector | S. F. Siple | 736,770 | Apr. 28 | 4390 | 987 | 103 | 2132 |
| Injector | C. Linstrom | 738,822 | Sept. 15 | 2574 | 567 | 106 | 583 |
| Injector | A. Simpson and M. Speicher | 747,006 | Dec. 15 | 3114 | 713 | 107 | 1816 |
| Injector-burner | E. B. Shaw and M. T. Carroll | 719,382 | Jan. 27 | 3543 | 790 | 102 | 796 |
| Injector or ejector | W. D. Labadie | 744,365 | Nov. 17 | 3086 | 662 | 107 | 689 |
| Injector-pipes, &c. Straining attachment for | C. H. Gary | 723,858 | Mar. 31 | 4094 | 924 | 103 | 918 |
| Injector. Steam- | F. Sticker | 723,752 | Mar. 24 | 3882 | 873 | 103 | 857 |
| Injector. Steam- | J. Desmond | 733,168 | July 7 | 829 | 201 | 105 | 174 |
| Ink | H. H. Spohn | 719,623 | Feb. 3 | 376 | ..... | 102 | 900 |
| Ink | H. H. Spohn | 741,734 | Oct. 20 | 2593 | ..... | 106 | 1833 |
| Ink-filler | J. B. Barns | 748,040 | Dec. 29 | 5088 | 1149 | 107 | 2297 |
| Ink-fountain | W. Spalckhaver | 729,002 | May 26 | 4096 | 909 | 104 | 921 |
| Ink-fountain | G. L. Richardson and H. S. Wilcox | 745,668 | Dec. 1 | 641 | 148 | 107 | 1234 |
| Ink-reducer and making same | F. Fisher | 730,897 | June 16 | 2503 | ..... | 104 | 1683 |
| Ink-roller truck. Adjustable | M. Gally and J. Hren | 733,955 | July 21 | 2287 | 538 | 105 | 516 |
| Inkstand | C. L. Smith | 719,384 | Jan. 27 | 3545 | 791 | 102 | 796 |
| Inkstand | G. J. Sengbusch | 726,194 | Apr. 21 | 3259 | 740 | 103 | 1888 |
| Inkstand | C. Colombani | 728,545 | May 19 | 3254 | 721 | 104 | 728 |
| Inkstand | J. M. Keep | 733,050 | July 7 | 617 | 151 | 105 | 131 |
| Inkstand | J. W. Jacobus | 736,105 | Aug. 11 | 2034 | 433 | 105 | 1435 |
| Inkstand | R. H. Young | 740,508 | Oct. 6 | 240 | 48 | 106 | 1297 |
| Inkstand | J. C. B. Taber | 742,929 | Nov. 3 | 186 | 43 | 107 | 41 |
| Inkstand. Fountain- | J. D. Barry | 725,920 | Apr. 21 | 2785 | 633 | 103 | 1792 |
| Inkstand. Fountain- | F. N. Dorland | 730,006 | June 2 | 894 | 199 | 104 | 1310 |
| Ink-well | C. E. Stanley | 719,525 | Feb. 3 | 201 | 47 | 102 | 866 |
| Ink-well | A. L. Carter | 721,542 | Feb. 24 | 3987 | 908 | 102 | 1712 |
| Ink-well | H. Snell and C. Hatfield | 725,165 | Apr. 14 | 1394 | 314 | 103 | 1480 |
| Ink-well | G. J. Sengbusch | 726,195 | Apr. 21 | 3261 | 740 | 103 | 1889 |
| Ink-well | H. G. Squires | 731,240 | June 16 | 3137 | 696 | 104 | 1811 |
| Ink-well | S. D. O'Donnell | 748,002 | Dec. 29 | 5010 | 1132 | 107 | 2280 |
| Ink-well holder | J. C. Killey | 728,115 | May 12 | 2423 | 540 | 104 | 534 |
| Ink-well. School-desk | M. D. Gaines | 744,522 | Nov. 17 | 3361 | 724 | 107 | 749 |
| Ink-well. Self-closing | J. B. Calvert | 739,289 | Sept. 22 | 3403 | 757 | 106 | 776 |
| Inking appliance | J. I. Litchfield | 733,491 | July 14 | 1420 | 334 | 105 | 317 |
| Inking-pad | R. H. Smith | 721,474 | Feb. 24 | 3878 | 881 | 102 | 1688 |
| Inking-pad | J. B. Laughton | 738,550 | Sept. 8 | 2024 | 440 | 106 | 450 |
| Inking-plate for job-presses | F. W. Weber | 742,765 | Oct. 27 | 4548 | 1030 | 106 | 2255 |
| Inking-roller | H. M. Parham | 734,741 | July 28 | 3788 | 884 | 105 | 846 |
| Inking-roller | J. J. Rafter | 741,275 | Oct. 13 | 1658 | 374 | 106 | 1619 |
| Innersole-cement machine | G. F. Dunn | 728,793 | May 19 | 3716 | 820 | 104 | 825 |
| Inscriber | R. H. Smith | 726,002 | Apr. 21 | 2923 | 664, 665 | 103 | 1819 |
| Insect-catcher | G. I. Silvera | 732,595 | June 30 | 5743 | 1275 | 104 | 2386 |
| Insect-collecting machine | C. L. Ferriott | 733,020 | July 7 | 562 | 137 | 105 | 120 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|---|
| | | | | Spec. | Dr'g. | Vol. | Page. |
| Insect-destroyer | J. F. Butz | 744,902 | Nov. 24 | 4045 | 872, 873 | 107 | 910 |
| Insect-destroyer | J. H. Sewell | 748,110 | Dec. 29 | 5227 | 1185 | 107 | 2327 |
| Insect-destroying device | F. Huncker | 745,016 | Nov. 24 | 4245 | 920 | 107 | 950 |
| Insect-destroying machine | C. V. Dyer and W. S. Willette | 738,667 | Sept. 8 | 2246 | 492 | 106 | 497 |
| Insect-destroying machine | M. C. Kelley and W. P. Terrell | 746,523 | Dec. 8 | 2196 | 504 | 107 | 1588 |
| Insect-exterminator | H. H. Boring | 723,641 | Mar. 24 | 3700 | 829 | 103 | 818 |
| Insect-trap | J. G. Williams | 720,990 | Feb. 17 | 2923 | 670 | 102 | 1468 |
| Insect-trap | A. C. Davis | 721,866 | Mar. 3 | 390 | 86 | 103 | 85 |
| Insect-trap | H. S. Raymond | 722,143 | Mar. 3 | 884 | 197, 198 | 103 | 189 |
| Insect-trap | S. R. Estep | 723,996 | Mar. 31 | 4391 | 987 | 103 | 980 |
| Insect-trap | H. L. Goodwin | 738,184 | Sept. 8 | 1283 | 278 | 106 | 293 |
| Insect-trap | M. Leveson | 739,689 | Sept. 22 | 4144 | 925 | 106 | 936 |
| Insect-trap | G. A. Martin | 745,364 | Dec. 1 | 91 | 21 | 107 | 1120 |
| Insect-trap | H. Andrews | 746,435 | Dec. 8 | 2048 | 471 | 107 | 1556 |
| Insecticide | E. A. Bourlon | 729,264 | May 26 | 4562 | ..... | 104 | 1016 |
| Insecticide | J. H. and J. E. Yelvington | 745,950 | Dec. 1 | 1166 | ..... | 107 | 1349 |
| Insole | R. W. Evans | 724,174 | Mar. 31 | 4735 | 1061 | 103 | 1050 |
| Insole and arch-support. Combined | B. Nathan | 738,228 | Sept. 8 | 1352 | 293 | 106 | 308 |
| Instep-support or arch-prop | J. W. Arrowsmith | 717,523 | Jan. 6 | 3 | 1 | 102 | 3 |
| Instep-support or arch-prop | J. W. Arrowsmith | 748,553 | Dec. 29 | 6044 | 1368 | 107 | 2507 |
| Instep-supporter | L. Dulligan | 745,166 | Nov. 24 | 4603 | 998 | 107 | 1024 |
| Instep-supporting and insulating pad | E. Mayer and P. Wenger | 747,994 | Dec. 29 | 4994 | 1128 | 107 | 2276 |
| Instrument-case | C. A. Schmitz | 746,999 | Dec. 15 | 3106 | 711 | 107 | 1815 |
| Insufflator | S. Hasbrouck | 719,586 | Feb. 3 | 320 | 74 | 102 | 889 |
| Insufflator | A. Mueller | 743,741 | Nov. 10 | 1856 | 392 | 107 | 413 |
| Insulated electric conductors. Producing | J. A. Heany | 740,131 | Sept. 29 | 4979 | 1117 | 106 | 1131 |
| Insulated electrical conductors. Flexible metallic tubing for armoring | W. H. K. Bowley | 747,367 | Dec. 22 | 3806 | 856 | 107 | 1988 |
| Insulated ferrule | H. E. Kern | 721,049 | Feb. 17 | 3041 | 698 | 102 | 1495 |
| Insulated joint | J. D. Keiley | 734,419 | July 21 | 3179 | 746 | 105 | 705 |
| Insulated joint | G. A. Weber | 735,631 | Aug. 4 | 1144 | 242 | 105 | 1224 |
| Insulated joint | G. A. Weber | 744,834 | Nov. 24 | 3935 | 848 | 107 | 887 |
| Insulated joint for railway-rail joints | B. G. Braine | 731,016 | June 16 | 2730 | 608 | 104 | 1731 |
| Insulated joint for railway-rail sections | G. A. Weber | 734,479 | July 21 | 3289 | 772 | 105 | 727 |
| Insulated joint for railway-rail sections | G. A. Weber | 738,862 | Sept. 15 | 2641 | 582 | 106 | 599 |
| Insulated rail connection | W. E. Clark | 737,350 | Aug. 25 | 4329 | 965 | 105 | 1955 |
| Insulated rail-joint | J. J. Gunn | 739,077 | Sept. 15 | 3006 | 666 | 106 | 676 |
| Insulated rail-joint | G. A. Weber | 744,832 | Nov. 24 | 3932 | 846 | 107 | 886 |
| Insulated strain | L. Steinberger | 724,351 | Mar. 31 | 5093 | 1140 | 103 | 1121 |
| Insulated twin joint | G. A. Weber | 739,469 | Sept. 22 | 3741 | 834 | 106 | 849 |
| Insulating and waterproofing various articles. Composition for | E. A. G. Street | 739,514 | Sept. 22 | 3815 | 854 | 106 | 865 |
| Insulating bodies. Producing electric | H. Biehn | 724,079 | Mar. 31 | 4542 | ..... | 103 | 1010 |
| Insulating draw-bar or draft-link for railway-trains. | H. E. Procunier | 743,925 | Nov. 10 | 2188 | 472 | 107 | 482 |
| Insulating fixture-stud | A. C. Proudfit | 742,098 | Oct. 20 | 3346 | 747 | 106 | 1987 |
| Insulating handle connection | D. Heer | 740,649 | Oct. 6 | 498 | 109 | 106 | 1353 |
| Insulating handle connection | J. H. Gault | 744,743 | Nov. 24 | 3775 | 813 | 107 | 853 |
| Insulating high-potential apparatus | W. S. Moody | 719,600 | Feb. 3 | 337 | 78 | 102 | 893 |
| Insulating-joint | J. T. Robb | 728,015 | May 12 | 2252 | 501 | 104 | 496 |
| Insulating-lining and making same | G. B. Painter | 718,378 | Jan. 13 | 1590 | 351 | 102 | 355 |
| Insulating material | W. R. Whitney | 726,485 | Apr. 28 | 3830 | ..... | 103 | 2020 |
| Insulating material | G. T. Pratt | 743,031 | Nov. 3 | 409 | 88 | 107 | 86 |
| Insulating material. Manufacture of electrical | C. Jung and A. Kittel | 742,997 | Nov. 3 | 314 | ..... | 107 | 68 |
| Insulating material. Manufacturing | V. de Karavodine | 724,882 | Apr. 7 | 864 | ..... | 103 | 1354 |
| Insulating means for electrical apparatus | A. F. Batchelder | 728,152 | May 12 | 2499 | 555 | 104 | 549 |
| Insulating mediums. Producing | F. Basenau and A. Cohen | 733,797 | July 14 | 1957 | ..... | 105 | 430 |
| Insulating substances. Manufacturing plates of | J. Justus | 743,882 | Nov. 10 | 2116 | 452 | 107 | 467 |
| Insulating system for electric-transmission circuits | A. W. Underwood | 732,665 | June 30 | 5874 | 1303 | 104 | 2413 |
| Insulating wire | H. W. Fisher | 747,876 | Dec. 22 | 4745 | 1072 | 107 | 2200 |
| Insulator | H. R. Sargent | 720,184 | Feb. 10 | 1428 | 326 | 102 | 1142 |
| Insulator | R. H. Polk | 724,329 | Mar. 31 | 5050 | 1130 | 103 | 1112 |
| Insulator | F. W. Gregory | 724,848 | Apr. 7 | 805 | 185 | 103 | 1341 |
| Insulator | C. Claydon | 725,044 | Apr. 14 | 1162 | 263 | 103 | 1433 |
| Insulator | F. M. Locke | 728,805 | May 19 | 3744 | 835 | 104 | 832 |
| Insulator | W. G. Stroh | 730,805 | June 9 | 2308 | 513 | 104 | 1624 |
| Insulator | V. G. Converse | 735,212 | Aug. 4 | 347 | 67 | 105 | 1055 |
| Insulator | W. G. Rutledge | 737,027 | Aug. 25 | 3737 | 829 | 105 | 1831 |
| Insulator | C. B. and J. J. Robertson | 740,314 | Sept. 29 | 5319 | 1198 | 106 | 1200 |
| Insulator | E. F. Schoenthaler | 744,631 | Nov. 17 | 3532 | 762 | 107 | 782 |
| Insulator | F. M. Locke | 745,284 | Nov. 24 | 4810 | 1049 | 107 | 1066 |
| Insulator | S. Bower | 745,999 | Dec. 8 | 1267 | 285 | 107 | 1387 |
| Insulator | T. Carter | 746,671 | Dec. 15 | 2483 | 568 | 107 | 1674 |
| Insulator-bracket | J. F. Gilliland | 740,005 | Sept. 29 | 4758 | 1070 | 106 | 1084 |
| Insulator. Electric-wire | J. R. Bell | 726,846 | May 5 | 19 | 5 | 104 | 7 |
| Insulator. Electrical | E. J. Burke | 728,442 | May 19 | 3049 | 671 | 104 | 688 |
| Insulator for electric wires | H. Bottjer | 739,147 | Sept. 15 | 3141 | 694 | 106 | 702 |
| Insulator for handled vessels. Heat- | C. E. Allen | 738,391 | Sept. 8 | 1713 | 372 | 106 | 383 |
| Insulator for handled vessels. Heat- | C. E. Allen | 743,797 | Nov 10 | 1960 | 415 | 107 | 435 |
| Insulator for handled vessels. Heat- | C. K. Decherd | 745,331 | Dec. 1 | 30 | 6 | 107 | 1107 |
| Insulator hanger or bracket | G. H. McFeaters | 746,362 | Dec. 8 | 1928 | 440 | 107 | 1530 |
| Insulator. High-tension-current | K. S. Lemström | 732,088 | June 30 | 4755 | 1062 | 104 | 2178 |
| Insulator-machine | J. Waters | 735,429 | Aug. 4 | 757 | 161 | 105 | 1141 |
| Insulator. Rail- | L. M. Randolph | 747,477 | Dec. 22 | 3988 | 898 | 107 | 2028 |
| Insulator. Third-rail | S. B. Stewart, Jr | 723,062 | Mar. 17 | 2608 | 588 | 103 | 583 |
| Insulators. Machine for producing glass | T. C. Duffield | 723,589 | Mar. 24 | 3606 | 805, 806 | 103 | 798 |
| Insulators to their supports. Device for attaching | N. F. Anderson and E. Bebler | 741,994 | Oct. 20 | 3107 | 693 | 106 | 1940 |
| Interchangeable wrench | O. E. Covar | 740,812 | Oct. 6 | 810 | 182 | 106 | 1418 |
| Interlocking mechanism | F. Bement | 748,156 | Dec. 29 | 5309 | 1206 | 107 | 2345 |
| Interlocking switch and signal | G. W. Speckman and W. J. Powers | 725,601 | Apr. 14 | 2186 | 495 | 103 | 1650 |
| Interlooped fabric | F. Maussner | 742,700 | Oct. 27 | 4445 | 1003 | 106 | 2232 |
| Intermediates. Means for adjusting | O. Junggren and D. C. Garroway | 735,108 | Aug. 4 | 114 | 26 | 105 | 1007 |
| Internal-combustion engine | W. Langdon-Davies and A. Soames | 718,481 | Jan. 13 | 1793 | 399 | 102 | 397 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Internal-combustion engine | C. E. Dawson | 719,199 | Jan. 27 | 3190 | 711, 712 | 102 | 719 |
| Internal-combustion engine | C. L. Straub | 720,752 | Feb. 17 | 2498 | 576 | 102 | 1379 |
| Internal-combustion engine | C. C. Riotte and C. R. Radcliffe | 722,629 | Mar. 10 | 1797 | 401 | 103 | 402 |
| Internal-combustion engine | A. L. Riker | 725,990 | Apr. 21 | 2903 | 658, 659 | 103 | 1815 |
| Internal-combustion engine | R. D. Chandler | 728,543 | May 19 | 3248 | *720 | 104 | 727 |
| Internal-combustion engine | J. H. Jones | 728,724 | May 19 | 3595 | 798 | 104 | 802 |
| Internal-combustion engine | H. F. Wallmann | 729,983 | June 2 | 851 | 190 | 104 | 1301 |
| Internal-combustion engine | F. G. Ericson | 730,626 | June 9 | 2007 | 446 | 104 | 1560 |
| Internal-combustion engine | A. T. Collier | 731,995 | June 23 | 4545 | 1014, 1015 | 104 | 2122 |
| Internal-combustion engine | A. F. Evans | 732,343 | June 30 | 5260 | 1167 | 104 | 2283 |
| Internal-combustion engine | H. F. Wallmann | 733,350 | July 7 | 1165 | 276 | 105 | 245 |
| Internal-combustion engine | V. R. Nicholson | 733,417 | July 14 | 1293 | 305, 306 | 105 | 290 |
| Internal-combustion engine | F. H. Gile | 735,964 | Aug. 11 | 1767 | 379 | 105 | 1377 |
| Internal-combustion engine | C. A. Wilkinson | 736,807 | Aug. 18 | 3323 | 736, 737 | 105 | 1722 |
| Internal-combustion engine | R. Diesel and H. Güldner | 736,944 | Aug. 25 | 3593 | 796, 797 | 105 | 1800 |
| Internal-combustion engine | R. Jensen | 741,138 | Oct. 13 | 1390 | 318, 319 | 106 | 1562 |
| Internal-combustion engine | L. Roedel | 742,493 | Oct. 27 | 4068 | 914, 915 | 106 | 2152 |
| Internal-combustion engine | O. P. Ostergren | 742,799 | Oct. 27 | 4605 | 1044 | 106 | 2267 |
| Internal-combustion engine | G. Erikson | 745,098 | Nov. 24 | 4455 | 963 | 107 | 993 |
| Internal-combustion engine | E. Körting | 746,342 | Dec. 8 | 1892 | 431, 432 | 107 | 1522 |
| Internal-combustion engine | N. Crane | 746,925 | Dec. 15 | 2971 | 683 | 107 | 1785 |
| Internal-combustion engine | W. M. Britton | 748,045 | Dec. 29 | 5095 | 1151, 1152 | 107 | 2298 |
| Internal-combustion engine. Compound | H. F. Wallmann | 729,984 | June 2 | 855 | 191 | 104 | 1302 |
| Internally-fired engine | E. Thomson | 723,502 | Mar. 24 | 3459 | 774 | 103 | 768 |
| Internally-fired engine | E. Thomson | 723,503 | Mar. 24 | 3461 | 775 | 103 | 769 |
| Intestinal skins. Apparatus for dressing | C. F. A. Bitterling | 744,712 | Nov. 24 | 3724 | 804 | 107 | 843 |
| Intestine-cleaner | F. Matheyer | 722,525 | Mar. 10 | 1626 | 359 | 103 | 365 |
| Intestine-cleaning apparatus | H. Naegele | 719,031 | Jan. 27 | 2871 | 644 | 102 | 654 |
| Invalid lifter and conveyer | P. W. Dohoney | 723,847 | Mar. 31 | 4068 | 918 | 103 | 912 |
| Invalid-supporting rest | J. A. Blanchard | 719,078 | Jan. 27 | 2966 | 662 | 102 | 673 |
| Invalid's table | G. E. Dewey | 737,365 | Aug. 25 | 4353 | 970 | 105 | 1960 |
| Invalids. Warming device for use by | E. H. Coates | 745,785 | Dec. 1 | 844 | 191 | 107 | 1278 |
| Iridescent scales. Producing | A. Zand | 746,909 | Dec. 15 | 2924 | ..... | 107 | 1773 |
| Iron: *See* Andiron. Baking-iron. Branding-iron. Chafe-iron. Curling-iron. Flat-iron. Sad-iron. Soldering-iron. Vehicle rub-iron. Waffle-iron. | | | | | | | |
| Iron and cement constructions. Trussing arrangement for | M. Dumas | 737,594 | Sept. 1 | 70 | 14 | 106 | 18 |
| Iron and steel. Cleansing and improving the quality of | F. C. Weber | 722,270 | Mar. 10 | 1157 | ..... | 103 | 261 |
| Iron and steel. Electrometallurgy of | H. Harmet | 742,316 | Oct. 27 | 3765 | 843 | 106 | 2089 |
| Iron bars. Cross-jointed | K. Zucker | 746,230 | Dec. 8 | 1686 | 375 | 107 | 1480 |
| Iron bars or tubes. Machine for cutting | W. Höpflinger | 722,843 | Mar. 17 | 2239 | 502 | 103 | 506 |
| Iron. Carburizing | W. A. Köneman | 740,025 | Sept. 29 | 4808 | 1079 | 106 | 1096 |
| Iron from its ore. Reducing | M. Ruthenburg | 722,253 | Mar. 10 | 1119 | 246 | 103 | 253 |
| Iron from its ore. Reducing | M. Ruthenburg | 722,254 | Mar. 10 | 1120 | 247 | 103 | 253 |
| Iron into steel or malleable iron and the product so obtained. Converting cast- | J. A. Hunter | 719,117 | Jan. 27 | 3061 | ..... | 102 | 692 |
| Iron. Manufacturing electrolytically-active finely-divided | T. A. Edison | 727,118 | May 5 | 572 | ..... | 104 | 124 |
| Iron. Means for handling puddled | M. McDowell | 727,669 | May 12 | 1586 | 358, 359 | 104 | 358 |
| Iron or steel alloys. Forming diamond draw-plates in | F. Krause | 740,874 | Oct. 6 | 907 | *203 | 106 | 1440 |
| Iron. Purifying | S. L. Mershon | 730,142 | June 2 | 1114 | 250 | 104 | 1354 |
| Iron rods for making ladders, &c. Machine for bending and twisting | W. A. Ehrmanntraut | 731,294 | June 16 | 3242 | 721, 722, 723 | 104 | 1834 |
| Iron-sawing machine. Cold- | J. E. Carter and S. A. Wright | 722,810 | Mar. 17 | 2175 | 485 | 103 | 494 |
| Iron. Structural | J. Ellmore | 720,792 | Feb. 17 | 2562 | 590 | 102 | 1392 |
| Iron. Treating molten | H. Buderus | 721,282 | Feb. 24 | 3525 | 802 | 102 | 1615 |
| Ironwork and preparing same. Material for protecting | W. O. Emery | 748,270 | Dec. 29 | 5515 | ..... | 107 | 2390 |
| Ironing-board | W. Savidge | 722,758 | Mar. 17 | 2080 | 466 | 103 | 475 |
| Ironing-board | H. J. Hinderliter | 723,527 | Mar. 24 | 3499 | 782 | 103 | 777 |
| Ironing-board | H. H. Lang | 727,810 | May 12 | 1876 | 418 | 104 | 417 |
| Ironing-board | A. C. Schatz | 728,306 | May 19 | 2813 | 623 | 104 | 638 |
| Ironing-board | L. B. Cake | 731,278 | June 16 | 3203 | 713 | 104 | 1825 |
| Ironing-board | L. W. Cyphers | 732,525 | June 30 | 5614 | 1244 | 104 | 2356 |
| Ironing-board | J. A. Pierce | 734,941 | July 28 | 4161 | 968 | 105 | 924 |
| Ironing-board | I. M. Dillman | 740,104 | Sept. 29 | 4939 | 1109 | 106 | 1123 |
| Ironing-board | J. H. Knowles | 741,144 | Oct. 13 | 1399 | 321 | 106 | 1564 |
| Ironing-board | P. A. Rasmussen | 745,907 | Dec. 1 | 1095 | 245 | 107 | 1332 |
| Ironing-board | S. J. Brown | 745,955 | Dec. 1 | 1180 | 264 | 107 | 1351 |
| Ironing-board | J. T. Jennings | 746,518 | Dec. 8 | 2184 | 501 | 107 | 1585 |
| Ironing-board | H. C. Dillon | 747,952 | Dec. 29 | 4906 | 1110 | 107 | 2256 |
| Ironing-board. Auxiliary | R. H. Jackson | 720,926 | Feb. 17 | 2804 | 643 | 102 | 1443 |
| Ironing-board fastening device | E. R. Robinson | 718,026 | Jan. 6 | 957 | 212 | 102 | 206 |
| Ironing-board. Folding | H. Majors | 732,764 | July 7 | 117 | 32 | 105 | 29 |
| Ironing-board. Inclosed cabinet | J. Joyal | 743,517 | Nov. 10 | 1449 | 302 | 107 | 326 |
| Ironing-machine | H. H. Graack | 717,568 | Jan. 6 | 83 | 21 | 102 | 20 |
| Ironing-machine | E. G. Smith | 719,385 | Jan. 27 | 3547 | 791 | 102 | 796 |
| Ironing-machine | E. J. Lane | 722,858 | Mar. 17 | 2260 | 506 | 103 | 510 |

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| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Ironing-machine | W. M. Barnes | 731,267 | June 16 | 3175 | 707 | 104 | 1819 |
| Ironing-machine | D. H. Benjamin | 731,269 | June 16 | 3180 | 708 | 104 | 1820 |
| Ironing-machine | G. E. Norris | 741,065 | Oct. 13 | 1252 | 283, 284 | 106 | 1535 |
| Ironing-machine | J. J. O'Shea | 741,269 | Oct. 13 | 1645 | 371 | 106 | 1616 |
| Ironing-machine gearing | C. W. Stancliffe | 748,540 | Dec. 29 | 6024 | 1363, 1364 | 107 | 2503 |
| Ironing shirt-bosoms | D. H. Benjamin | 734,503 | July 28 | 3338 | 781, 782 | 105 | 754 |
| Ironing-table | L. O. Kelly | 720,033 | Feb. 10 | 1150 | 263 | 102 | 1084 |
| Ironing-table | J. Gray | 727,351 | May 5 | 986 | 215 | 104 | 213 |
| Ironing-table | G. W. Clapp | 732,394 | June 30 | 5365 | 1188 | 104 | 2306 |
| Ironing-table | F. X. Krabach | 747,615 | Dec. 22 | 4244 | 955 | 107 | 2087 |
| Ironing-table and clothes-rack. Combined | J. Carroll | 719,433 | Feb. 3 | 42 | 9 | 102 | 834 |
| Irrigating apparatus | D. Astle | 738,271 | Sept. 8 | 1459 | 315 | 106 | 330 |
| Irrigating device | C. I. Wilson | 738,508 | Sept. 8 | 1949 | 425 | 106 | 433 |
| Irrigation-ditch-damming machine | H. H. Urquhart | 739,124 | Sept. 15 | 3100 | 686 | 106 | 694 |
| Irrigation. Water-lift for | G. A. Crofutt | 741,632 | Oct. 20 | 2391 | 536 | 106 | 1791 |
| Irrigator | E. E. Steude | 718,739 | Jan. 20 | 2324 | 513 | 102 | 524 |
| Isodiametric bodies. Holder for use in making | S. S. Eveland | 747,541 | Dec. 22 | 4108 | 922 | 107 | 2056 |
| Isodiametric bodies. Machine for making | S. S. Eveland | 747,542 | Dec. 22 | 4109 | 922, 923 | 107 | 2056 |
| Jack: *See* Automobile-jack. Barrack-jack. Bootjack. Boot or shoe jack. Carpenter's and joiner's jack. Cornice-jack. Floor-jack. Heeling-jack. Hoisting-jack. Lever-jack. Lifting-jack. Lifting or screw jack. Logging-jack. Pipe-jack. Screw-jack. Shoe-jack. Smoke-jack. Telephone-jack. Tie-spacing jack. Truck-jack. Vehicle-jack. Wagon-jack. Well-jack. | | | | | | | |
| Jack | A. Stromdahl | 726,477 | Apr. 28 | 3813 | 862 | 103 | 2016 |
| Jack | S. R. Tuggle and C. W. Doering | 732,142 | June 30 | 4875 | 1084 | 104 | 2204 |
| Jack | W. R. Lewis | 740,878 | Oct. 6 | 911 | 204 | 106 | 1440 |
| Jack | L. A. Conner, Jr. | 742,595 | Oct. 27 | 4259 | 959, 960 | 106 | 2191 |
| Jack | W. W. Dwigans | 743,839 | Nov. 10 | 2040 | 433 | 107 | 451 |
| Jack-lock | J. J. Heys | 725,961 | Apr. 21 | 2852 | 647 | 103 | 1806 |
| Jack-o'-lantern | M. I. Barnes | 741,293 | Oct. 13 | 1713 | 382 | 106 | 1628 |
| Jack-o'-lantern. Folding | J. J. Du Ket | 736,506 | Aug. 18 | 2745 | 601 | 105 | 1604 |
| Jack-o'-lantern helmet | J. J. Du Ket | 737,371 | Aug. 25 | 4363 | 973 | 105 | 1962 |
| Jacquard-machine | W. W. Hodgson | 744,685 | Nov. 17 | 3628 | 782 | 107 | 804 |
| Jacquard-machines. Apparatus for setting the hook-needles in | J. Szczepanik | 748,028 | Dec. 29 | 5060 | 1143, 1144 | 107 | 2291 |
| Jail | O. W. Becker and W. G. Stuelpnagel. | 727,063 | May 5 | 470 | 99 | 104 | 103 |
| Jail-alarm. Electric | R. F. Adams | 741,992 | Oct. 20 | 3103 | 692 | 106 | 1939 |
| Jail or prison | F. O. Weary | 722,780 | Mar. 17 | 2120 | 474 | 103 | 483 |
| Jail or prison | F. O. Weary | 722,781 | Mar. 17 | 2123 | 475 | 103 | 484 |
| Japanning small articles. Machine for | T. A. Perrins | 728,606 | May 19 | 3383 | 749, 750 | 104 | 757 |
| Jar: *See* Battery-jar. Drilling-jar. Fruit-jar. Hermetically-sealed jar. Mucilage-jar. Paste-jar. Preserving-jar. Sealing-jar. | | | | | | | |
| Jar | S. J. Dunkley | 721,166 | Feb. 24 | 3305 | 756 | 102 | 1570 |
| Jar | J. A. Maxson | 727,988 | May 12 | 2204 | 491 | 104 | 488 |
| Jar | W. S. Weir | 730,500 | June 9 | 1786 | 400 | 104 | 1510 |
| Jar | F. H. Gibson | 730,903 | June 16 | 2512 | 558 | 104 | 1685 |
| Jar-cap tool | J. G. Rosenberg | 724,399 | Mar. 31 | 5197 | 1165 | 103 | 1144 |
| Jar-caps. Means for fastening | R. Murr | 745,647 | Dec. 1 | 605 | 140 | 107 | 1227 |
| Jar-clamp | E. J. Kraetzer | 731,690 | June 23 | 3995 | 892 | 104 | 2004 |
| Jar-closure | J. W. Davis | 723,142 | Mar. 17 | 2753 | 619 | 103 | 613 |
| Jar-closure | W. E. Brown | 723,645 | Mar. 24 | 3706 | 831 | 103 | 820 |
| Jar-closure | W. E. Brown | 724,256 | Mar. 31 | 4916 | 1100 | 103 | 1085 |
| Jar-closure | W. E. Brown | 726,629 | Apr. 28 | 4123 | 930 | 103 | 2075 |
| Jar-closure | D. Knowlton | 727,808 | May 12 | 1873 | 417 | 104 | 417 |
| Jar-closure | P. Astryke | 728,830 | May 26 | 3799 | 847 | 104 | 860 |
| Jar-closure | A. E. Bray | 729,726 | June 2 | 377 | 85 | 104 | 1206 |
| Jar-closure | E. Goltstein | 730,760 | June 9 | 2237 | 497 | 104 | 1610 |
| Jar-closure | J. Kunkel | 731,792 | June 23 | 4184 | 933 | 104 | 2043 |
| Jar-closure | J. H. Saunders | 732,655 | June 30 | 5856 | 1297 | 104 | 2411 |
| Jar-closure | D. B. Shinnick | 733,880 | July 14 | 2129 | 502 | 105 | 464 |
| Jar-closure | S. T. Crissy | 734,047 | July 21 | 2488 | 580 | 105 | 559 |
| Jar-closure | W. D. Keefer | 741,969 | Oct. 20 | 3055 | 681 | 106 | 1930 |
| Jar-closure | E. O. Hain | 743,494 | Nov. 10 | 1405 | 291 | 107 | 316 |
| Jar-closure-tightening attachment | G. M. Hughes | 742,435 | Oct. 27 | 3969 | 890 | 106 | 2130 |
| Jar-cover | T. A. Schmidt | 741,595 | Oct. 13 | 2321 | 519 | 106 | 1761 |
| Jar-covers, &c. Securing device for | C. A. Tatum | 729,908 | June 2 | 706 | 157 | 104 | 1272 |
| Jar-holder | A. Roesch | 742,238 | Oct. 27 | 3618 | 809 | 106 | 2059 |
| Jar holder. Fruit- | E. P. McGuire | 719,128 | Jan. 27 | 3080 | 685 | 102 | 696 |
| Jar holder. Fruit- | H. W. Bogart | 723,980 | Mar. 31 | 4349 | 976 | 103 | 972 |
| Jar neck and closure | A. Smelker | 727,470 | May 5 | 1207 | 266 | 104 | 260 |
| Jar opening or closing grip | J. Koehler | 745,200 | Nov. 24 | 4664 | 1016 | 107 | 1037 |
| Jar opening or closing tool | J. H. Stull | 733,298 | July 7 | 1076 | 256 | 105 | 227 |
| Jar or analogous vessel cover | A. L. Schram | 734,140 | July 21 | 2669 | 628 | 105 | 598 |
| Jar or bottle closure | F. C. Riely | 725,590 | Apr 14 | 2164 | 490 | 103 | 1645 |
| Jar or bottle closure | J. Hirst | 742,652 | Oct. 27 | 4362 | 981 | 106 | 2214 |
| Jar or tank stopper | W. H North | 735,402 | Aug. 4 | 689 | 147 | 105 | 1127 |
| Jar-top wrench | O. Teegarden | 720,753 | Feb. 17 | 2500 | 576 | 102 | 1379 |

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| Invention. | Name. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|---|
| | | | | Spec. | Dr'g. | Vol. | Page. |
| Jar-wrench | E. F. Tiemann | 718,174 | Jan. 13 | 1215 | 269 | 102 | 277 |
| Jars, bottles, jelly-glasses, &c. Closure for | J. W. Kunkel and C. Robinson | 721,897 | Mar. 3 | 442 | 98 | 103 | 98 |
| Jars, bottles, &c. Stopper for | C. Jovignot | 723,467 | Mar. 24 | 3376 | 756 | 103 | 753 |
| Jars, &c. Device for lifting fruit | J. K. Rettig | 719,956 | Feb. 3 | 974 | 225 | 102 | 1030 |
| Jars. Means for closing air-tight | A. F. Wilson | 723,508 | Mar. 24 | 3468 | 776 | 103 | 770 |
| Jars. Tool for removing screw-caps from | F. L. Stork | 736,455 | Aug. 18 | 2634 | 579 | 105 | 1580 |
| Jewel-gaging machine | D. H. Church | 745,417 | Dec. 1 | 194 | 44, 45 | 107 | 1141 |
| Jewel-setter | W. F. Boast | 746,444 | Dec. 8 | 2062 | 475 | 107 | 1559 |
| Jeweler's tray | D. Goldsmith | 743,859 | Nov. 10 | 2071 | 441 | 107 | 457 |
| Jewelry | O. L. Heintz | 734,066 | July 21 | 2520 | 588 | 105 | 567 |
| Jewelry and producing same | W. A. Malliet | 735,891 | Aug. 11 | 1640 | 351 | 105 | 1349 |
| Jewelry cluster-setting | H. Levin | 736,273 | Aug. 11 | 2312 | 501 | 105 | 1494 |
| Jewelry-fastener | J. Pejchar | 726,983 | May 5 | 309 | 69 | 104 | 67 |
| Jewelry. Initial attachment for | N. Roitman and S. Ruby | 738,700 | Sept. 8 | 2316 | 509 | 106 | 511 |
| Jewelry-setting | C. T. Wittstein | 743,367 | Nov. 3 | 1090 | 232 | 107 | 231 |
| Jewelry stand or easel | W. B. Christopher | 732,828 | July 7 | 244 | 61 | 105 | 54 |
| Jockey's grip or handhold | G. W. Covington | 747,145 | Dec. 15 | 3378 | 767 | 107 | 1879 |
| Joiner | G. A. Caton | 738,883 | Sept. 15 | 2681 | 591 | 106 | 608 |
| Joiner's clamp | W. R. Tucker | 718,547 | Jan. 13 | 1958 | 428 | 102 | 436 |
| Joint: | | | | | | | |
| *See* Ball-and-socket joint. | | | | | | | |
| *See* Bedstead corner-joint. | | | | | | | |
| *See* Bedstead rail-joint. | | | | | | | |
| *See* Bevel-joint. | | | | | | | |
| *See* Carpentry-joint. | | | | | | | |
| *See* Column lock-joint. | | | | | | | |
| *See* Container-joint. | | | | | | | |
| *See* Engine expansion-joint. | | | | | | | |
| *See* Expansion-joint. | | | | | | | |
| *See* Floor-joint. | | | | | | | |
| *See* Hinge-joint. | | | | | | | |
| *See* Insulated joint. | | | | | | | |
| *See* Insulated rail-joint. | | | | | | | |
| *See* Insulated twin joint. | | | | | | | |
| *See* Knuckle-joint. | | | | | | | |
| *See* Leather joint. | | | | | | | |
| *See* Limb-joint. | | | | | | | |
| *See* Packing-joint. | | | | | | | |
| *See* Pin-joint. | | | | | | | |
| *See* Pin-tongue joint. | | | | | | | |
| *See* Pipe-coupling joint. | | | | | | | |
| *See* Pipe roof-joint. | | | | | | | |
| *See* Piston-rod joint. | | | | | | | |
| *See* Rail-joint. | | | | | | | |
| *See* Rail-locking joint. | | | | | | | |
| *See* Railway-joint. | | | | | | | |
| *See* Railway pivot-blade joint. | | | | | | | |
| *See* Railway-rail joint. | | | | | | | |
| *See* Railway-track joint. | | | | | | | |
| *See* Rocker-joint. | | | | | | | |
| *See* Sash-joint. | | | | | | | |
| *See* Saw-joint. | | | | | | | |
| *See* Step-joint. | | | | | | | |
| *See* Stovepipe-joint. | | | | | | | |
| *See* Sucker-rod joint. | | | | | | | |
| *See* Switch-joint. | | | | | | | |
| *See* Universal joint. | | | | | | | |
| Joint and pipe support | J. N. Brennan | 746,277 | Dec. 8 | 1772 | 403 | 107 | 1497 |
| Joint casing. Universal- | C. W. Spicer | 728,779 | May 19 | 3693 | 824 | 104 | 821 |
| Joint-cover or kick-plate | C. C. Bohn | 739,282 | Sept. 22 | 3389 | 755 | 106 | 773 |
| Joint-making machine | H. C. Schneider | 722,197 | Mar. 3 | 996 | 221 | 103 | 210 |
| Joint-support | R. Stanton | 724,349 | Mar. 31 | 5090 | 1130 | 103 | 1120 |
| Joint-support | R. Stanton. (Reissue) | 12,161 | Oct. 13 | 2345 | 525 | 106 | 1766 |
| Jointing and blank-forming machine | N. E. Brown | 721,010 | Feb. 17 | 2961 | {681 / 682 | {102 | 1475 |
| Jointing. Cast | E. A. Pettit | 717,917 | Jan. 6 | 756 | 169 | 102 | 162 |
| Joist anchor-box | R. W. Whitehurst | 725,526 | Apr. 14 | 2053 | 464 | 103 | 1620 |
| Journal automatic alarm. Heated- | J. S. Crawford and G. W. Kinder | 730,097 | June 2 | 1040 | 233 | 104 | 1339 |
| Journal-bearing | P. T. J. Monson and O. H. Smith | 718,141 | Jan. 13 | 1157 | 257 | 102 | 264 |
| Journal-bearing | A. M. Kerr | 722,427 | Mar. 10 | 1428 | 315 | 103 | 320 |
| Journal-bearing | E. J. Decker | 722,495 | Mar. 10 | 1576 | 347 | 103 | 354 |
| Journal-bearing | E. J. Decker | 723,839 | Mar. 31 | 4049 | 914 | 103 | 909 |
| Journal-bearing | J. F. Harrigan | 727,941 | May 12 | 2125 | {473 / 474 | {104 | 471 |
| Journal-bearing | A. R. Penprase | 729,656 | June 2 | 239 | 56 | 104 | 1177 |
| Journal-bearing | G. A. Woodman | 730,327 | June 9 | 1459 | 332 | 104 | 1441 |
| Journal-bearing | G. A. Woodman | 730,328 | June 9 | 1460 | {322 / 323 | {104 | 1441 |
| Journal-bearing | M. L. Hoyt | 731,054 | June 16 | 2794 | 622 | 104 | 1744 |
| Journal-bearing | J. Tobin | 731,978 | June 23 | 4509 | 1007 | 104 | 2116 |
| Journal-bearing | I. Metzger | 734,923 | July 28 | 4129 | 962 | 105 | 918 |
| Journal-bearing | I. Metzger | 736,532 | Aug. 18 | 2789 | 611 | 105 | 1614 |
| Journal-bearing | A. Raymond | 737,962 | Sept. 1 | 812 | {178 / 179 | {106 | 178 |
| Journal-bearing | C. Erickson | 741,021 | Oct. 13 | 1175 | 265 | 106 | 1517 |
| Journal-bearing | W. P. Arntz | 741,756 | Oct. 20 | 2638 | 589 | 106 | 1842 |
| Journal-bearing | J. Buker | 748,258 | Dec. 29 | 5479 | {1248 / 1249 | {107 | 2381 |
| Journal bearing. Car- | J. M. Hopkins | 730,769 | June 9 | 2251 | 500 | 104 | 1613 |
| Journal-bearing oil-carrying ring | H. Geisenhöner | 734,317 | July 21 | 3012 | 709 | 105 | 670 |
| Journal-bearing. Self-oiling | G. A. Ensign | 727,319 | May 5 | 923 | 201 | 104 | 199 |
| Journal-bearing shell | M. J. Rogers | 732,327 | Mar. 10 | 1246 | 277 | 103 | 281 |
| Journal-bearing washer | A. K. Hamilton | 734,171 | July 21 | 2716 | 630 | 105 | 608 |
| Journal-bearings. Mold for brass | F. J. Friese and J. E. Gilbert | 726,523 | Apr. 28 | 3919 | 886 | 103 | 2036 |
| Journal-box | J. W. Stephenson | 718,584 | Jan. 13 | 2042 | {443 / 444 | {102 | 455 |
| Journal-box | J. W. Stephenson | 718,585 | Jan. 13 | 2043 | 444 | 102 | 455 |
| Journal-box | M. H. De Vore | 719,445 | Feb. 3 | 61 | 14 | 102 | 838 |
| Journal-box | F. H. Crafts | 728,547 | May 19 | 3258 | 722 | 104 | 729 |
| Journal-box | D. Yondorf | 734,250 | July 21 | 2864 | 671 | 105 | 639 |
| Journal-box | J. M. Wann | 739,366 | Sept. 22 | 3528 | 789 | 106 | 803 |
| Journal-box | H. C. McCarty | 743,653 | Nov. 10 | 1704 | 360 | 107 | 380 |
| Journal-box | A. B. Gardella | 743,709 | Nov. 10 | 1802 | 380 | 107 | 401 |
| Journal-box. Car | J. Pearson | 724,494 | Apr. 7 | 139 | 33 | 103 | 1199 |
| Journal-box dust-guard | J. W. Stephenson | 742,750 | Oct. 27 | 4525 | 1025 | 106 | 2250 |
| Journal-box dust-guard. Railway- | A. J. McCauley | 724,919 | Apr. 7 | 922 | 211 | 103 | 1367 |
| Journal-box guard | W. F. Bossert | 744,896 | Nov. 24 | 4037 | 870 | 107 | 908 |
| Journal-box lid | T. H. Symington | 739,515 | Sept. 22 | 3816 | 855 | 106 | 865 |
| Journal-box lid | T. H. Symington | 739,516 | Sept. 22 | 3817 | {855 / 856 | {106 | 866 |
| Journal-box lid | T. H. Symington | 739,517 | Sept. 22 | 3819 | 856 | 106 | 866 |

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| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Journal-box lubricators. Holder for | J. R. Harrison | 738,796 | Sept. 15 | 2517 | 553 | 106 | 571 |
| Journal-box packing-holder. Railway- | E. J. Trudeau | 732,800 | July 7 | 192 | 49 | 105 | 44 |
| Journal-box. Self-lubricating | J. F. Smith, Jr | 725,888 | Apr. 21 | 2727 | 621 | 103 | 1780 |
| Journal-boxes. Lid construction for railway | T. H. Symington | 723,069 | Mar. 17 | 2623 | 591 | 103 | 588 |
| Journal-boxes. Lock for bearing-pieces of | G. W. Lewis | 731,694 | June 23 | 4002 | 893 | 104 | 2005 |
| Journal brass and saddle | J. C. Wands | 731,724 | June 23 | 4054 | 905 | 104 | 2016 |
| Journal-cooler | J. W. Marthis | 723,173 | Mar. 17 | 2809 | 633 | 103 | 625 |
| Journal cooling and lubricating means | P. Naef | 722,875 | Mar. 17 | 2290 | 513 | 103 | 516 |
| Journal-lubricating device | R. Baggaley | 746,243 | Dec. 8 | 1707 | 381 | 107 | 1484 |
| Journal-lubricator | J. G. Smith | 728,777 | May 19 | 3690 | 824 | 104 | 820 |
| Journal-lubricator | W. F. Poyser and C. B. Bowen | 732,318 | June 30 | 5201 | 1155 | 104 | 2271 |
| Journal-lubricator | B. R. Stare | 740,482 | Oct. 6 | 188 | 37 | 106 | 1285 |
| Journal-lubricator | J. J. Busenbenz and E. Lange | 740,525 | Oct. 6 | 277 | 54 | 106 | 1305 |
| Journaling and sustaining device for rotating parts | O. Ohlsson | 719,850 | Feb. 3 | 789 | 185 | 102 | 990 |
| Jug. Dripless | F. J. Gallagher | 725,238 | Apr. 14 | 1530 | 347 | 103 | 1508 |
| Julep-tubes. Machine for making | S. K. Green | 733,714 | July 14 | 1800 | 426, 427 | 105 | 396 |
| Junction-box | R. S. Donaldson | 724,383 | Mar. 31 | 5168 | 1158 | 103 | 1138 |
| Junction-box, conduit, and electric-wiring mechanism. | F. J. Ravlin | 737,661 | Sept. 1 | 186 | 39, 40 | 106 | 43 |
| Justifying mechanism | F. B. Converse, Jr | 738,741 | Sept. 8 | 2371 | 521, 522, 523, 524, 525 | 106 | 523 |
| Justifying mechanism | F. B. Converse, Jr | 746,295 | Dec. 8 | 1800 | 409, 410, 411 | 107 | 1502 |
| Kaleidoscope | U. Diem | 718,326 | Jan. 13 | 1502 | 333 | 102 | 338 |
| Kaleidoscope. Coin-controlled | W. H. Dalton | 747,383 | Dec. 22 | 3829 | 861 | 107 | 1993 |
| Keel-block | G. Anderson | 747,349 | Dec. 22 | 3775 | 849 | 107 | 1981 |
| Keg or cask cooler | S. M. J. House | 722,509 | Mar. 10 | 1599 | 352 | 103 | 359 |
| Kerite compound. Vulcanized | W. R. Brixey | 728,851 | May 26 | 3838 | ..... | 104 | 869 |
| Kerosene-engine | G. A. Phail | 743,097 | Nov. 3 | 536 | 116 | 107 | 112 |
| Kettle or like utensil | J. E. Tonks and W. G. S. Symmons | 727,228 | May 5 | 764 | 163 | 104 | 165 |
| Kettles from stoves, &c. Device for lifting | J. T. Fitzpatrick | 746,809 | Dec. 15 | 2726 | 628 | 107 | 1729 |
| Key: *See* Brake-shoe key. Clock-key. Shafting-key. Telegraph-key. | | | | | | | |
| Key | A. E. Katz and W. S. Romme | 729,773 | June 2 | 458 | 103 | 104 | 1221 |
| Key-fastener | R. L. Lumry | 736,985 | Aug. 25 | 3669 | 814 | 105 | 1815 |
| Key-fastener | W. M. Thomson | 741,190 | Oct. 13 | 1506 | 340 | 106 | 1588 |
| Key mechanism | C. A. Lord | 719,239 | Jan. 27 | 3270 | 730 | 102 | 736 |
| Key mechanism. Silent- | M. Kellogg | 745,356 | Dec. 1 | 76 | 18 | 107 | 1117 |
| Key-opening can | W. H. Wells | 725,384 | Apr. 14 | 1780 | 399 | 103 | 1561 |
| Key-operated-machine casing | D. E. Felt | 733,379 | July 14 | 1229 | 290, 291 | 105 | 276 |
| Key-ring | S. Mountford | 723,208 | Mar. 17 | 2891 | 648 | 103 | 643 |
| Key-ring | N. B. Stone | 726,781 | Apr. 28 | 4408 | 993 | 103 | 2135 |
| Key-ring | J. S. Lewis | 739,094 | Sept. 15 | 3042 | 673 | 106 | 683 |
| Keyboard and attachment therefor | G. L. Noe | 733,261 | July 7 | 1010 | 242 | 105 | 211 |
| Keyboard attachment for stringed instruments | F. G. Baker | 745,557 | Dec. 1 | 449 | 106 | 107 | 1193 |
| Keyboard instruments. Means for modifying the action of strikers in mechanism for playing | R. W. Pain | 728,965 | May 26 | 4031 | 896 | 104 | 906 |
| Keyboard instruments. Means for modifying the action of strikers in mechanism for playing | R. W. Pain | 730,958 | June 16 | 2611 | 581 | 104 | 1706 |
| Keyboard-operator | O. A. Wolters | 730,504 | June 9 | 1795 | 401, 402 | 104 | 1512 |
| Keyhole-guard and door-lifter | M. S. Weller | 724,635 | Apr. 7 | 404 | 96 | 103 | 1256 |
| Keyless lock | L. P. Keller | 718,002 | Jan. 6 | 916 | 204 | 102 | 197 |
| Kiln: *See* Brick-kiln. Brick, tile, or pottery kiln. Cement-kiln. Coking-kiln. Continuous kiln. Downdraft-kiln. Drying-kiln. Limekiln. Lime or cement kiln. Lumber dry-kiln. Rotary kiln. Shingle-kiln. | | | | | | | |
| Kiln | H. Stehmann | 724,965 | Apr. 7 | 1005 | 231 | 103 | 1382 |
| Kiln | C. E. Watts | 725,519 | Apr. 14 | 2040 | 462 | 103 | 1617 |
| Kiln | J. Brownlow | 737,573 | Sept. 1 | 29 | 6 | 106 | 9 |
| Kiln | R. W. Stewart | 746,757 | Dec. 15 | 2627 | 603, 604 | 107 | 1707 |
| Kiln for firing china, glass, or other ware | H. Thuemler | 717,725 | Jan. 6 | 362 | 89 | 102 | 78 |
| Kiln, furnace, &c | J. Roberts | 723,310 | Mar. 24 | 3077 | 692 | 103 | 695 |
| Kiln-heater | W. C. Mitchell | 735,282 | Aug. 4 | 478 | 95 | 105 | 1083 |
| Kilns for burning. Apparatus for setting unburned ware in | J. E. Minter | 726,822 | Apr. 28 | 4484 | 1012 | 103 | 2151 |
| Kindling-block | E. Pollard | 733,675 | July 14 | 1739 | 411 | 105 | 383 |
| Kinematographic pictures. Means for exhibiting | J. A. Prestwich | 730,964 | June 16 | 2619 | 584 | 104 | 1708 |
| Kinetoscope | W. R. Meikle | 721,718 | Mar. 3 | 119 | 26 | 103 | 26 |
| Kinetoscope | E. J. Rector | 734,136 | July 21 | 2656 | 626, 627 | 105 | 594 |
| Kinetoscope | A. E. Smith | 744,251 | Nov. 17 | 2878 | 617 | 107 | 643 |
| King-post. Spring | J. N. Kailor | 739,320 | Sept. 22 | 3453 | 770 | 106 | 786 |
| Kitchen-table | M. B. Thomas | 743,772 | Nov. 10 | 1917 | 405 | 107 | 426 |
| Kitchen utensil | R. B. Ligon | 744,576 | Nov. 17 | 3450 | 743 | 107 | 766 |
| Kitchen utensil | W. E. Berry | 748,255 | Dec. 29 | 5475 | 1248 | 107 | 2380 |
| Kite | F. Lischtiak | 743,301 | Nov. 3 | 944 | 205 | 107 | 203 |
| Kite-frame. Metal | J. H. Stein | 724,402 | Mar. 31 | 5203 | 1166 | 103 | 1146 |
| Knapsack | W. H. Bradbury | 747,681 | Dec. 22 | 4363 | 985, 986 | 107 | 2113 |
| Knapsack, hammock, and sleeping-bag. Convertible | G. Klein | 748,288 | Dec. 29 | 5541 | 1263 | 107 | 2395 |
| Kneading and forming machine. Dough | W. Steinbrecher | 739,513 | Sept. 22 | 3813 | 854 | 106 | 865 |

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| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Kneading and mixing machine | E. F. W. Wieda | 723,568 | Mar. 24 | 3568 | 797 | 103 | 790 |
| Kneading and mixing machine | E. W. Osburn | 728,128 | May 12 | 2454 | 547 | 104 | 540 |
| Kneading and mixing machine | C. Cristadoro | 738,663 | Sept. 8 | 2232 | 489 | 106 | 494 |
| Kneading apparatus. Dough- | J. Koelner | 722,113 | Mar. 3 | 840 | 187 | 103 | 181 |
| Kneading-machine | M. E. Beasley | 739,142 | Sept. 15 | 3132 | 693 | 106 | 701 |
| Kneading machinery. Dough- | L. Durand | 747,154 | Dec. 15 | 3396 | 770 | 107 | 1883 |
| Kneading-roller and retiring handles therefor | R. B. and M. L. Hugunin and W. A. Lane. | 730,124 | June 2 | 1084 | 243 | 104 | 1348 |
| Knee-pad. Scrub-woman's | W. Steers, Sr | 736,648 | Aug. 18 | 3011 | 665 | 105 | 1657 |
| Knee-protector | M. M. White | 727,243 | May 5 | 790 | 169 | 104 | 170 |
| Knee-rest | I. Pettersen | 718,875 | Jan. 20 | 2577 | 574 | 102 | 577 |
| Knife: *See* Cane-cutting knife. Chopping-knife. Cigar-maker's knife. Cleaning-knife. Corn-knife. Dehorning-knife. Farrier's knife. Harvesting-knife. Hunting-knife. Leather-cutting knife. Paring-knife. Pocket-knife. Root-knife. Skinning-knife. Slicing-knife. Stack-knife. Table-knife. Tobacco-knife. Welt-knife. | | | | | | | |
| Knife | F. White | 720,202 | Feb. 10 | 1456 | 332 | 102 | 1147 |
| Knife | A. S. Allen | 739,371 | Sept. 22 | 3538 | 790 | 106 | 804 |
| Knife | T. Wenger | 748,547 | Dec. 29 | 6035 | 1366 | 107 | 2505 |
| Knife and fork | G. Garda | 719,208 | Jan. 27 | 3204 | 715 | 102 | 722 |
| Knife and fork cleaner | T. Davidson, Jr | 722,174 | Mar. 3 | 949 | 211 | 103 | 201 |
| Knife attachment | G. E. Crosley | 745,795 | Dec. 1 | 864 | 195 | 107 | 1284 |
| Knife-blade casings. Means for attaching face-plates to | E. H. J. Huebner | 724,702 | Apr. 7 | 530 | 126 | 103 | 1282 |
| Knife-cleaner | D. Appleton | 739,807 | Sept. 29 | 4371 | 980 | 106 | 1004 |
| Knife-cleaning means | C. Heywood | 723,463 | Mar. 24 | 3368 | 754, 755 | 103 | 751 |
| Knife construction | W. Carman | 728,861 | May 26 | 3856 | 858 | 104 | 871 |
| Knife-handle | J. La Croix | 743,647 | Nov. 10 | 1693 | 357 | 107 | 377 |
| Knives, forks, or similar articles. Manufacture of table | H. Joest | 730,921 | June 16 | 2542 | 565 | 104 | 1692 |
| Knitted pants and their manufacture | H. H. Middleditch and C. A. Gregory. | 731,381 | June 16 | 3406 | 761 | 104 | 1868 |
| Knitted underwear. Union | J. Pennington | 723,912 | Mar. 31 | 4201 | 946 | 103 | 942 |
| Knitting-frame | T. Lieberknecht | 735,988 | Aug. 11 | 1822 | 390, 391 | 105 | 1390 |
| Knitting-machine | F. M. Nichols | 718,951 | Jan. 20 | 2723 | 608, 609 | 102 | 609 |
| Knitting-machine | B. Salzer and G. Walther | 719,376 | Jan. 27 | 3535 | 788 | 102 | 794 |
| Knitting-machine | H. Clarke | 720,405 | Feb. 10 | 1827 | 416, 417 | 102 | 1226 |
| Knitting-machine | A. B. Dodge and J. H. Rice | 720,514 | Feb. 10 | 2018 | 465, 466 | 102 | 1265 |
| Knitting-machine | B. Salzer and G. Walther | 723,037 | Mar. 17 | 2559 | 575, 576 | 103 | 573 |
| Knitting-machine | A. N. Ames | 725,311 | Apr. 14 | 1641 | 371 | 103 | 1533 |
| Knitting-machine | G. D. Mayo | 726,178 | Apr. 21 | 3211 | 728, 729, 730, 731, 732 | 103 | 1879 |
| Knitting-machine | L. N. D. Williams | 727,522 | May 5 | 1297 | 289 | 104 | 279 |
| Knitting-machine | L. C. Huse | 728,465 | May 19 | 3110 | 688 | 104 | 700 |
| Knitting-machine | B. T. Steber | 729,005 | May 26 | 4101 | 910 | 104 | 922 |
| Knitting-machine | E. Parkinson | 739,708 | Sept. 22 | 4172 | 933, 934 | 106 | 942 |
| Knitting-machine | R. I. Creelman | 741,113 | Oct. 13 | 1343 | 308, 309 | 106 | 1553 |
| Knitting-machine | W. C. Whitcomb | 742,941 | Nov. 3 | 210 | 48 | 107 | 46 |
| Knitting-machine | J. C. Duemler | 744,311 | Nov. 17 | 2994 | 642 | 107 | 669 |
| Knitting-machine | G. D. Mayo | 745,449 | Dec. 1 | 257 | 60, 61 | 107 | 1154 |
| Knitting-machine | G. A. Leighton | 747,988 | Dec. 29 | 4982 | 1125 | 107 | 2274 |
| Knitting-machine | C. A. Santmyers | 748,219 | Dec. 29 | 5423 | 1234 | 107 | 2369 |
| Knitting-machine attachment | E. A. and A. M. Pigeon | 731,494 | June 23 | 3630 | 810, 811 | 104 | 1933 |
| Knitting-machine attachment | J. B. Hipwell | 733,964 | July 21 | 2309 | 542, 543 | 105 | 520 |
| Knitting machine. Automatic circular- | J F. Bard | 739,975 | Sept. 29 | 4699 | 1056, 1057, 1058 | 106 | 1071 |
| Knitting machine. Automatic rib- | G. W. Ruth | 735,910 | Aug. 11 | 1670 | 356, 357 | 105 | 1355 |
| Knitting machine. Circular-rib- | F. Lasher | 729,074 | May 26 | 4228 | 934, 935 | 104 | 946 |
| Knitting-machine electric stop-motion | A. L. Patterson | 727,429 | May 5 | 1125 | 248 | 104 | 243 |
| Knitting machine. Fancy- | G. A. Sanders | 742,358 | Oct. 27 | 3830 | 858, 859, 860 | 106 | 2104 |
| Knitting-machine needle | E. A. Hirner | 726,163 | Apr. 21 | 3184 | 720 | 103 | 1873 |
| Knitting-machine needle | A. Currier | 743,152 | Nov. 3 | 643 | 139 | 107 | 135 |
| Knitting-machine needle-actuating device | F. Lasher | 729,075 | May 26 | 4232 | 935 | 104 | 947 |
| Knitting-machine needle-bars. Machine for making straight- | W. D. Richter | 733,425 | July 14 | 1306 | 309, 310 | 105 | 293 |
| Knitting-machine stop-motion | H. F. and C. C. Bockmeyer and J. Palmer. | 719,728 | Feb. 3 | 574 | 129 | 102 | 943 |
| Knitting-machine. Straight-fashioning | C. H. Aldridge | 725,647 | Apr. 21 | 2297 | 519, 520, 521 | 103 | 1687 |
| Knitting-machine take-up mechanism | R. W. Scott and L. N. D. Williams. | 727,465 | May 5 | 1192 | 263, 264 | 104 | 257 |

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| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page |
|---|---|---|---|---|---|---|---|
| Knitting-machine thread-feeding mechanism | G. D. Mayo | 726,229 | Apr. 21 | 3312 | 751, 752, 753 | 103 | 1900 |
| Knitting machine. Warp and weft | G. T. Nicholls | 732,433 | June 30 | 5431 | 1205, 1206 | 104 | 2320 |
| Knitting machine Warp and weft | G. T. Nicholls | 732,434 | June 30 | 5484 | 1206, 1207, 1208 | 104 | 2320 |
| Knitting machines. Feed-circle for circular- | R. W. Gormly | 742,628 | Oct. 27 | 4321 | 973 | 106 | 2205 |
| Knitting-machines. Mechanical movement for use in | R. W. Scott, L. N. D. Williams, and H. Swinglehurst. | 743,398 | Nov. 3 | 1149 | 243, 244 | 107 | 243 |
| Knob | C. O. Noack | 736,290 | Aug. 11 | 2350 | 510 | 105 | 1504 |
| Knob alarm. Door- | C. H. Ahlum | 732,491 | June 30 | 5554 | 1231 | 104 | 2342 |
| Knob and bell. Combined door | W. R. Farrell, Jr | 721,945 | Mar. 3 | 550 | 121 | 103 | 121 |
| Knob-attaching mechanism | C. J. Ericson | 724,454 | Apr. 7 | 62 | 16 | 103 | 1183 |
| Knob attachment | B. W. Norton | 720,056 | Feb. 10 | 1185 | 271 | 102 | 1091 |
| Knob. Door- | W. Munro | 748,404 | Dec. 29 | 5731 | 1309 | 107 | 2437 |
| Knob-fastening | G. W. Roberts | 719,261 | Jan. 27 | 3305 | 740 | 102 | 743 |
| Knob-fastening | G. W. Roberts | 730,705 | June 9 | 2152 | 477 | 104 | 1590 |
| Knob lock. Door- | E. E. Flora and J. L. Clough | 729,151 | May 26 | 4361 | 963, 964 | 104 | 974 |
| Knob-rose | H. G. Voight | 723,951 | Mar. 31 | 4290 | 963 | 103 | 962 |
| Knob-shank. Ball-bearing | C. J. Caley | 733,943 | July 21 | 2260 | 531 | 105 | 510 |
| Knob-shank. Ball-bearing | C. J. Caley | 738,096 | Sept. 1 | 1066 | 236 | 106 | 230 |
| Knob. Sheet-metal | W. A. Turner | 732,973 | July 7 | 482 | 120 | 105 | 104 |
| Knob-spindle | C. J. Caley | 734,117 | July 21 | 2620 | 617 | 105 | 587 |
| Knobs, &c. Means for securing door- | E. Pearson | 722,887 | Mar. 17 | 2323 | 519 | 103 | 524 |
| Knockdown adjustable chair | D. M. Stewart, S. B. Saffell, and E. J. Andrews. | 728,141 | May 12 | 2477 | 551 | 104 | 544 |
| Knockdown bracket | H. G. Voight | 728,339 | May 19 | 2883 | 636 | 104 | 652 |
| Knockdown bracket | H. G. Voight | 744,265 | Nov. 17 | 2900 | 621 | 107 | 648 |
| Knockdown chair. Double-seat | H. Morton | 719,837 | Feb. 3 | 771 | 180 | 102 | 986 |
| Knockdown house. Canvas-covered | J. H. Hagedorn | 720,344 | Feb. 10 | 1724 | 392 | 102 | 1204 |
| Knotter | O. W. Orell | 727,424 | May 5 | 1109 | 243 | 104 | 240 |
| Knotter | J. E. Freidinger | 743,853 | Nov. 10 | 2062 | 438 | 107 | 455 |
| Knotter | R. W. Hunton | 745,623 | Dec. 1 | 565 | 131, 132 | 107 | 1218 |
| Knotting mechanism | L. B. Wygant | 743,998 | Nov. 10 | 2341 | 501, 502, 503, 504 | 107 | 519 |
| Knuckle-joint | F. M. Daly | 737,360 | Aug. 25 | 4345 | 968 | 105 | 1958 |
| Label-holder | L. Weigel | 723,093 | Mar. 17 | 2664 | 600 | 103 | 596 |
| Label-holder | W. M. Kreidler | 739,190 | Sept. 15 | 3211 | 710 | 106 | 718 |
| Label-holding pull | C. F. Kade | 729,351 | May 26 | 4720 | 1043 | 104 | 1049 |
| Label making and printing machine | F. Waite | 746,209 | Dec. 8 | 1648 | 366, 367 | 107 | 1472 |
| Label. Metallic | A. Chandler | 733,148 | July 7 | 797 | 193 | 105 | 168 |
| Label-moistener | D. D. Jones and A. Francis | 747,723 | Dec. 22 | 4442 | 1002 | 107 | 2132 |
| Label-moistening machine | C. Freihofer and F. Hanson | 727,341 | May 5 | 972 | 211 | 104 | 210 |
| Label-retainer for salve-boxes, ointment-boxes, &c | C. A. Myers | 745,227 | Nov 24 | 4703 | 1026 | 107 | 1046 |
| Labeling-machine | F. C. H. Strasburger | 720,295 | Feb. 10 | 1636 | 374 | 102 | 1185 |
| Labeling-machine | E. T. McKaig | 722,035 | Mar. 3 | 706 | 157, 158 | 103 | 152 |
| Labeling-machine | F. H. Knapp and C. W. Blackstone | 724,715 | Apr. 7 | 560 | 134 | 103 | 1289 |
| Labeling-machine | F. E. Wenzel | 730,424 | June 9 | 1634 | 366, 367 | 104 | 1477 |
| Labeling-machine | J. G. Hendrickson | 733,038 | July 7 | 592 | 145, 146 | 105 | 126 |
| Labeling-machine | J. G. Hendrickson | 733,039 | July 7 | 600 | 146, 147 | 105 | 128 |
| Labeling-machine | J. T. Reames | 736,546 | Aug. 18 | 2812 | 615 | 105 | 1619 |
| Labeling round pasteboard or paper boxes or casings. Machine for | F. E. Jagenberg | 743,083 | Nov. 3 | 511 | 110 | 107 | 107 |
| Laboratory. Pocket- | F. Flavitsky | 719,776 | Feb. 3 | 676 | 155 | 102 | 965 |
| Lace | M. A. Cox | 730,614 | June 9 | 1991 | 442 | 104 | 1556 |
| Lace and cord fastener | A. H. Smith | 723,055 | Mar 17 | 2594 | 585 | 103 | 581 |
| Lace, &c. Apparatus for cutting appliqué | P. P. Craven | 725,543 | Apr. 14 | 2088 | 473 | 103 | 1627 |
| Lace clasp. Shoe- | A. B. Rhinow | 724,502 | Apr. 7 | 150 | 36 | 103 | 1202 |
| Lace-edging | G. W. Merrow and J. T. Collins | 718,139 | Jan. 13 | 1155 | 256 | 102 | 264 |
| Lace-fastener | F. W. Leopold | 730,031 | June 2 | 936 | 209 | 104 | 1318 |
| Lace-fastener | J. H. O'Brien | 736,142 | Aug. 11 | 2098 | 450 | 105 | 1447 |
| Lace-fastener | L. H. Hyer | 742,992 | Nov. 3 | 306 | 69 | 107 | 66 |
| Lace-fastener | M. P. O'Connor | 745,890 | Dec. 1 | 1066 | 240 | 107 | 1325 |
| Lace fastener. Shoe- | J. Hennessey | 724,389 | Mar. 31 | 5183 | 1162 | 103 | 1141 |
| Lace fastener. Shoe- | M. A. Clarkson | 724,809 | Apr. 7 | 732 | 172 | 103 | 1327 |
| Lace fastener. Shoe- | J. Hennessey | 726,289 | Apr. 28 | 3444 | 783 | 103 | 1942 |
| Lace fastener. Shoe- | J. Hennessey | 726,820 | Apr. 28 | 4478 | 1011 | 103 | 2150 |
| Lace fastener. Shoe- | L. Van Orsdale | 727,500 | May 5 | 1258 | 279 | 104 | 270 |
| Lace fastener. Shoe- | E. D. Smith | 736,306 | Aug. 11 | 2375 | 516 | 105 | 1509 |
| Lace fastener. Shoe- | W. H. Rotz | 743,106 | Nov. 3 | 550 | 118 | 107 | 115 |
| Lace-fastening | H. C. Evans | 729,305 | May 26 | 4643 | 1026 | 104 | 1033 |
| Lace-holder | F. D. Davies | 745,577 | Dec. 1 | 483 | 114 | 107 | 1200 |
| Lace holder. Shoe- | C. E. Wettlaufer | 719,540 | Feb. 3 | 226 | 52 | 102 | 871 |
| Lace hook. Shoe- | M. V. Kelly | 727,805 | May 12 | 1868 | 416 | 104 | 416 |
| Lace-machine | S. G. Lewis | 745,206 | Nov. 24 | 4671 | 1017 | 107 | 1039 |
| Lace-tip | G. A. Getty and L. H. Lemley | 718,052 | Jan. 6 | 992 | 222 | 102 | 214 |
| Lace-tipping machine | J. R. Dennis | 741,315 | Oct. 13 | 1754 | 390 | 106 | 1637 |
| Lace-tipping machine. Shoe- | S. C. Shepard | 735,040 | July 28 | 4341 | 1009, 1010 | 105 | 960 |
| Lacework-holder | A. Proctor | 744,610 | Nov. 17 | 3498 | 755 | 107 | 775 |
| Lacing | E. A. Young | 727,530 | May 5 | 1311 | 292 | 104 | 282 |
| Lacing | E. C. Chapman | 742,164 | Oct. 27 | 3465 | 774 | 106 | 2028 |
| Lacing attachment. Shoe- | A. A. De Loach | 746,042 | Dec. 8 | 1348 | 301 | 107 | 1405 |
| Lacing device for boots or shoes, &c | G. W. Johnston | 736,106 | Aug. 11 | 2036 | 433 | 105 | 1435 |
| Lacing for garments | C. E. Fosburgh | 743,069 | Nov. 3 | 487 | 106 | 107 | 102 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|---|
| | | | | Spec. | Drg. | Vol. | Page. |
| Lacing for shoes, &c | W. F. Hall | 733,837 | July 14 | 2050 | 484 | 105 | 448 |
| Lacing-hook | D. Noble and H. Walden | 724,731 | Apr. 7 | 592 | 140 | 103 | 1294 |
| Lacing hook or stud setting machine | W. J. Coombs | 734,823 | July 28 | 3965 | 926 | 105 | 882 |
| Lacing-hook-setting machine | W. P. Bartel | 729,524 | June 2 | 5 | 1, 2, 3 | 104 | 1127 |
| Lacing-hook-setting machine | W. P. Bartel | 729,525 | June 2 | 10 | 3, 4 | 104 | 1128 |
| Lacing-hook-setting machines. Stop for | J. Pierce | 739,106 | Sept. 15 | 3070 | 680 | 106 | 687 |
| Lacing hook. Shoe- | J. W. Edgerton | 743,627 | Nov. 10 | 1669 | 350 | 107 | 372 |
| Lacing-hooks in shoes. Machine for fastening | H. H. Eaton | 719,314 | Jan. 27 | 3406 | 760<br>761 | 102 | 766 |
| Lacing-hooks, &c. Machine for making | G. Tucker and J. F. Jones | 746,901 | Dec. 15 | 2910 | 672 | 107 | 1771 |
| Lacing-hooks or the like to raceways. Mechanism for separating and feeding | W. P. Bartel | 729,526 | June 2 | 14 | 4, 5 | 104 | 1129 |
| Lacing. Shoe- | J. McMahon | 746,563 | Dec. 8 | 2264 | 519 | 107 | 1604 |
| Lacing-stud-setting machine | I. F. Peck | 739,105 | Sept. 15 | 3067 | 680 | 106 | 687 |
| Lacing. Temporary shoe- | L. J. Driscoll and J. W. Washburn | 744,729 | Nov. 24 | 3752 | 810 | 107 | 848 |
| Lacing-tip | F. Richardson | 732,902 | Mar. 17 | 2344 | 524 | 103 | 529 |
| Lactometer | E. C. Redfearn | 745,521 | Dec. 1 | 387 | 89 | 107 | 1182 |
| Lactose from whey. Producing | A. S. Ramage | 730,703 | June 9 | 2149 | | 104 | 1589 |
| Ladder | W. C. Buell | 719,183 | Jan. 27 | 3165 | 704 | 102 | 713 |
| Ladder | L. O. Lorenz and F. B. Jones | 722,865 | Mar. 17 | 2269 | 508 | 103 | 512 |
| Ladder | S. B. Benigar | 724,423 | Apr. 7 | 11 | 3 | 103 | 1172 |
| Ladder | W. Williamson | 725,188 | Apr. 14 | 1434 | 324 | 103 | 1487 |
| Ladder | L. B. Baker | 727,259 | May 5 | 810 | 175 | 104 | 175 |
| Ladder | W. W. Pope | 733,269 | July 7 | 1029 | 247 | 105 | 215 |
| Ladder | P. F. Wagner | 734,147 | July 21 | 2680 | 630 | 105 | 600 |
| Ladder | C. D. Phipps and H. F. Chatfield | 741,541 | Oct. 13 | 2219 | 494 | 106 | 1739 |
| Ladder | F. M. Garrison and D. W. Brackett | 745,343 | Dec. 1 | 50 | 11 | 107 | 1111 |
| Ladder. Adjustable step- | J. D. Lynch | 743,899 | Nov. 10 | 2147 | 462 | 107 | 473 |
| Ladder. Aerial | F. S. Seagrave | 724,513 | Apr. 7 | 169 | 41 | 103 | 1206 |
| Ladder and bench. Combined step- | C. P. Mohr | 746,978 | Dec. 15 | 3066 | 702 | 107 | 1806 |
| Ladder and ironing-board. Combination step- | J. W. Treen | 744,821 | Nov. 24 | 3910 | 840 | 107 | 881 |
| Ladder and trestle. Extension step- | C. Latta | 737,636 | Sept. 1 | 142 | 31 | 106 | 34 |
| Ladder and window-jack. Combined extension step- | A. W. Young | 728,650 | May 19 | 3463 | 768 | 104 | 775 |
| Ladder attachment | L. O. Lorenz and F. B. Jones | 722,864 | Mar. 17 | 2268 | 507<br>508 | 103 | 512 |
| Ladder-brace | M. P. Hayward | 735,371 | Aug. 4 | 629 | 130 | 105 | 1115 |
| Ladder brace, step-fastener, and support combined. Step- | H. A. Williamson | 727,047 | May 5 | 442 | 93 | 104 | 97 |
| Ladder, clothes-rack, and table-frame. Combined step- | J. Gray | 727,352 | May 5 | 988 | 215<br>216 | 104 | 213 |
| Ladder. Collapsible | G. W. Naylor | 740,460 | Oct. 6 | 149 | 30 | 106 | 1278 |
| Ladder. Combination step- | B. F. Sturgeon | 725,377 | Apr. 14 | 1767 | 397 | 103 | 1558 |
| Ladder. Combined step and extension | E. L. Harmon | 739,309 | Sept. 22 | 3435 | 766 | 106 | 782 |
| Ladder. Extension- | W. P. Hartigan | 726,682 | Apr. 28 | 4214 | 952<br>953 | 103 | 2096 |
| Ladder. Extension- | B. H. Ziegler and D. Betzner | 745,750 | Dec. 1 | 775 | 177 | 107 | 1264 |
| Ladder. Extension step- | L. Ferguson | 719,450 | Feb. 3 | 68 | 15 | 102 | 840 |
| Ladder. Extension step- | H. E. Bruno | 745,320 | Dec. 1 | 14 | 3 | 107 | 1104 |
| Ladder. Fire- | J. C. Schaller | 724,953 | Apr. 7 | 985 | 227 | 103 | 1379 |
| Ladder. Flexible | W. A. Ehrmanntraut | 731,293 | June 16 | 3241 | 721 | 104 | 1833 |
| Ladder. Foldable fruit- | S. S. Ward | 736,804 | Aug. 18 | 3316 | 735 | 105 | 1720 |
| Ladder. Folding | A. N. Chamberlain and W. L. Hall | 720,891 | Feb. 17 | 2728 | 628 | 103 | 1427 |
| Ladder. Folding | G. L. Gustafson | 732,295 | June 30 | 5167 | 1148 | 104 | 2264 |
| Ladder. Folding | J. McMillan and H. H. Styll | 737,954 | Sept. 1 | 794 | 174 | 106 | 174 |
| Ladder for buildings. Movable platform- | G. J. Oestreicher | 740,382 | Sept. 29 | 5448 | 1225 | 106 | 1228 |
| Ladder. Hinged | A. F. Conner | 737,080 | Aug. 25 | 3824 | 850 | 105 | 1848 |
| Ladder hook. Automatic extension- | L. Ferguson | 719,449 | Feb. 3 | 67 | 15 | 102 | 839 |
| Ladder hook. Extension- | W. A. Burbridge and E. Chesebrough. | 719,081 | Jan. 27 | 2970 | 663 | 102 | 674 |
| Ladder. Knockdown | E. L. Harmon | 743,640 | Nov. 10 | 1683 | 354 | 107 | 375 |
| Ladder. Life-saving | F. Scherrer | 743,199 | Nov. 3 | 730 | 160 | 107 | 153 |
| Ladder. Metallic step- | W. H. Cloud | 736,495 | Aug. 18 | 2724 | 597 | 105 | 1599 |
| Ladder. Step- | A. E. Paskell | 722,409 | Mar. 10 | 1398 | 309 | 103 | 314 |
| Ladder. Step- | M. Falk | 729,561 | June 2 | 74 | 19 | 104 | 1143 |
| Ladder. Step- | J. A. Ashley | 741,872 | Oct. 20 | 2843 | 634 | 106 | 1887 |
| Ladder. Store-service | W. T. Heuning and C. S. Burton | 725,705 | Apr. 21 | 2400 | 544 | 103 | 1708 |
| Ladder. Store-service | P. J. Daemicke | 743,692 | Nov. 10 | 1765 | 373 | 107 | 392 |
| Ladder. Swinging | E. L. Harmon | 721,298 | Feb. 24 | 3545 | 806 | 102 | 1620 |
| Ladder-truck side frame | F. S. Seagrave | 743,936 | Nov. 10 | 2208 | 477 | 107 | 486 |
| Ladders, &c. Extension-foot for | T. L. Charles | 742,288 | Oct. 27 | 3712 | 829 | 106 | 2079 |
| Ladle | P. J. McGuire | 721,729 | Mar. 3 | 135 | 31 | 103 | 30 |
| Ladle-car | R. H. Stevens | 719,389 | Jan. 27 | 3553 | 793 | 102 | 798 |
| Ladle-crane | F. A. Rundle | 718,160 | Jan. 13 | 1189 | 264 | 102 | 271 |
| Ladle for carrying and tipping blast-furnace slag | J. H. Dewhurst | 740,404 | Oct. 6 | 32 | 7 | 106 | 1251 |
| Ladle. Molder's | W. S. Anderson | 730,218 | June 9 | 1260 | 280 | 104 | 1399 |
| Ladle-truck | M. McDowell | 733,253 | July 7 | 990 | | 105 | 207 |
| Ladles for carrying and tipping blast-furnace slag. Carriage for | J. H. Dewhurst | 740,405 | Oct. 6 | 33 | 8 | 106 | 1251 |
| Ladles. Stopper-valve for casting- | C. O'Connor | 743,549 | Nov. 10 | 1505 | 315 | 107 | 338 |
| Laminated lever-switch | E. M. Hewlett and C. C. Badeau | 728,231 | May 19 | 2659 | 594 | 104 | 604 |
| Lamp | B. Nadeau | 728,599 | May 19 | 3370 | 747 | 104 | 755 |
| Lamp | E. P. Brown | 731,275 | June 16 | 3198 | 712 | 104 | 1824 |
| Lamp | C. Johnson | 731,909 | June 23 | 4388 | 978 | 104 | 2089 |
| Lamp | R. M. Dixon | 737,214 | Aug. 25 | 4065 | 902 | 105 | 1898 |
| Lamp | W. F. Loudon | 738,689 | Sept. 8 | 2300 | 505 | 106 | 507 |
| Lamp | R. M. Dixon | 745,583 | Dec. 1 | 500 | 117 | 107 | 1204 |
| Lamp | G. Washington | 745,698 | Dec. 1 | 692 | 159 | 107 | 1246 |
| Lamp | T. S. Leese | 746,637 | Dec. 8 | 2406 | 551 | 107 | 1637 |
| Lamp. Acetylene- | H. Lucas | 725,106 | Apr. 14 | 1283 | 290 | 103 | 1457 |
| Lamp. Acetylene- | E. Moreau | 737,125 | Aug. 25 | 3893 | 865 | 105 | 1862 |
| Lamp. Acetylene- | J. A. Kruseman | 738,549 | Sept. 8 | 2023 | 439<br>440 | 106 | 450 |
| Lamp. Acetylene-gas street- | H. M. Hastings | 728,912 | May 26 | 3940 | 876 | 104 | 888 |
| Lamp. Acetylene search- | A. J. Murdock and C. M. Stroud | 731,596 | June 23 | 3830 | 853<br>854 | 104 | 1972 |

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| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Lamp. Alcohol- | J. W. Chapman and M. Seips | 724,543 | Apr. 7 | 228 | 55, 56 | 103 | 1218 |
| Lamp. Alcohol- | J. P. Steppe | 736,454 | Aug. 18 | 2633 | 578 | 105 | 1580 |
| Lamp. Alternating-current arc- | T. E. Adams | 724,072 | Mar. 31 | 4526 | 1019 | 103 | 1001 |
| Lamp. Alternating-current arc- | M. H. Baker | 729,114 | May 26 | 4295 | 950 | 104 | 959 |
| Lamp and battery. Combined portable electric | M. Sutherland and E. Marcuson | 733,766 | July 14 | 1900 | 448 | 105 | 418 |
| Lamp and circuits and conductors therefor. Electric incandescent | G. Weissmann | 726,124 | Apr. 21 | 3124 | 707 | 103 | 1862 |
| Lamp. Arc- | W. C. Fish | 738,896 | Sept. 15 | 2701 | 597 | 106 | 612 |
| Lamp attachment | E. J. Gilmore | 726,525 | Apr. 28 | 3921 | 886 | 103 | 2036 |
| Lamp attachment | L. H. Griffith | 747,063 | Dec. 15 | 3229 | 736 | 107 | 1845 |
| Lamp attachment. Arc- | S. Lawrence and R. O. Nichols | 733,664 | July 14 | 1721 | 407 | 105 | 380 |
| Lamp attachment. Combination | J. and G. C. W. Magruder | 745,111 | Nov. 24 | 4474 | 968 | 107 | 998 |
| Lamp base. Incandescent-electric- | J. E. Casey | 744,957 | Nov. 24 | 4157 | 898 | 107 | 932 |
| Lamp-bracket | G. W. Weidner | 725,808 | Apr. 21 | 2599 | 590 | 103 | 1751 |
| Lamp bracket or holder for miners' lamps | W. Israel | 740,862 | Oct. 6 | 891 | 199 | 106 | 1436 |
| Lamp-bulb blowing-off machine | A. Swan | 729,237 | May 26 | 4519 | 996 | 104 | 1007 |
| Lamp bulb. Incandescent-electric- | E. L. Elliott | 730,852 | June 9 | 2387 | 527 | 104 | 1640 |
| Lamp bulbs. Blow-off for incandescent- | W. N. Packer | 741,822 | Oct. 20 | 2755 | 613 | 106 | 1868 |
| Lamp bulbs, &c. Packing for incandescent- | R. Gair | 723,522 | Mar. 24 | 3492 | 781 | 103 | 775 |
| Lamp-burner | L. R. Oakes | 720,954 | Feb. 17 | 2860 | 654 | 102 | 1455 |
| Lamp-burner | A. C. Denniston | 721,358 | Feb. 24 | 3657 | 832 | 102 | 1643 |
| Lamp-burner | W. L. Bogle | 726,247 | Apr. 28 | 3357 | 762 | 103 | 1924 |
| Lamp-burner | G. A. Hall | 728,166 | May 12 | 2525 | 561 | 104 | 554 |
| Lamp-burner | T. A. Matthews | 729,780 | June 2 | 474 | 105 | 104 | 1225 |
| Lamp-burner | C. H. Compton | 733,012 | July 7 | 552 | 135 | 105 | 118 |
| Lamp-burner | B. F. Fowler | 735,236 | Aug. 4 | 391 | 76 | 105 | 1064 |
| Lamp-burner | C. E. J. Grube | 740,425 | Oct. 6 | 77 | 16 | 106 | 1263 |
| Lamp-burner | C. Etches | 742,175 | Oct. 27 | 3487 | 779 | 106 | 2032 |
| Lamp-burner | W. S. Hamm | 742,637 | Oct. 27 | 4338 | 976 | 106 | 2209 |
| Lamp burner and font | G. T. Brown | 728,080 | May 12 | 2367 | 527 | 104 | 521 |
| Lamp-burner. Flat-wick | W. C. Quigley | 736,545 | Aug. 18 | 2811 | 615 | 105 | 1619 |
| Lamp burner. Incandescent- | C. Hubert | 726,297 | Apr. 28 | 3460 | 785, 786 | 103 | 1946 |
| Lamp burner. Incandescent-gas- | M. Graetz | 744,191 | Nov. 17 | 2772 | 591 | 107 | 619 |
| Lamp burner. Vapor incandescent- | S. M. Meyer | 725,740 | Apr. 21 | 2463 | 557 | 103 | 1723 |
| Lamp. Candle- | T. C. Richards | 737,141 | Aug. 25 | 3920 | 871 | 105 | 1868 |
| Lamp carbon-holder. Electric-arc- | H. P. Bayley | 726,497 | Apr. 28 | 3872 | 876 | 103 | 2026 |
| Lamp. Carbureting- | W. S. Strowger | 734,772 | July 28 | 3853 | 898, 899 | 105 | 859 |
| Lamp. Carriage- | E. M. Rosenbluth | 723,488 | Mar. 24 | 3440 | 770 | 103 | 765 |
| Lamp-chimney | J. J. Perkins | 726,743 | Apr. 28 | 4332 | 976 | 103 | 2120 |
| Lamp-chimney | O. Schott | 735,598 | Aug. 4 | 1080 | 229 | 105 | 1210 |
| Lamp-chimney cleaner | J. B. Fladby | 730,359 | June 9 | 1521 | 337 | 104 | 1454 |
| Lamp-chimney. Expansible and contractible | A. H. Stump | 729,447 | May 26 | 4869 | 1079 | 104 | 1080 |
| Lamp-chimney holder | G. W. Blair | 728,663 | May 19 | 3492 | 775 | 104 | 781 |
| Lamp-chimney holder | E. Holmes | 737,628 | Sept. 1 | 128 | 28 | 106 | 31 |
| Lamp-chimney holder | A. L. Higgins | 738,999 | Sept. 15 | 2862 | 635 | 106 | 646 |
| Lamp-chimney lantern-frame | E. F. Weidig | 719,286 | Jan. 27 | 3354 | 748 | 102 | 754 |
| Lamp-chimney. Mica | J. D. Warren | 744,828 | Nov. 24 | 3926 | 844 | 107 | 884 |
| Lamp-chimney or bottle carrier | E. P. Henigan | 746,077 | Dec. 8 | 1404 | 314 | 107 | 1418 |
| Lamp circuits. Ballast device for electric- | H. N. Potter | 743,029 | Nov. 3 | 406 | 87 | 107 | 85 |
| Lamp cluster-center. Incandescent- | H. Hubbell | 734,875 | July 28 | 4052 | 946 | 105 | 900 |
| Lamp. Colored-signal | J. J. Sill | 723,414 | Mar. 24 | 3286 | 735 | 103 | 734 |
| Lamp. Combined heating and illuminating | P. J. McLaughlin | 741,532 | Oct. 13 | 2202 | 490 | 106 | 1735 |
| Lamp. Convertible signal- | W. S. Hamm | 742,636 | Oct. 27 | 4335 | 975 | 106 | 2208 |
| Lamp cut-out. Arc- | M. H. Baker | 748,148 | Dec. 29 | 5299 | 1204 | 107 | 2343 |
| Lamp. Electric | H. N. Potter | 719,506 | Feb. 3 | 166 | 38 | 102 | 858 |
| Lamp. Electric | A. J. Wurts | 728,648 | May 19 | 3459 | 767 | 104 | 774 |
| Lamp. Electric | G. Stein | 729,906 | June 2 | 703 | 155, 156 | 104 | 1271 |
| Lamp. Electric | A. J. Wurts | 730,069 | June 2 | 998 | 223, 224 | 104 | 1331 |
| Lamp. Electric | H. N. Potter | 730,216 | June 2 | 1253 | 279 | 104 | 1380 |
| Lamp. Electric-arc | A. F. Shore | 719,149 | Jan. 27 | 3107 | 691, 692 | 102 | 701 |
| Lamp. Electric-arc | H. Baggett | 720,312 | Feb. 10 | 1670 | 380 | 102 | 1192 |
| Lamp. Electric-arc | A. Witte | 720,650 | Feb. 17 | 2323 | 532, 533 | 102 | 1341 |
| Lamp. Electric-arc | H. Baggett | 720,772 | Feb. 17 | 2529 | 583 | 102 | 1385 |
| Lamp. Electric-arc | T. E. Adams | 724,071 | Mar. 31 | 4521 | 1018, 1019 | 103 | 1006 |
| Lamp. Electric-arc | J. J. Wood | 724,229 | Mar. 31 | 4848 | 1087 | 103 | 1072 |
| Lamp. Electric-arc | J. J. Wood | 724,366 | Mar. 31 | 5117 | 1146, 1147 | 103 | 1127 |
| Lamp. Electric-arc | H. P. Wellman | 725,523 | Apr. 14 | 2046 | 463, 464 | 103 | 1618 |
| Lamp. Electric-arc | A. G. Davis | 727,596 | May 12 | 1443 | 324 | 104 | 329 |
| Lamp. Electric-arc | E. W. Rice, Jr. | 727,690 | May 12 | 1628 | 370 | 104 | 369 |
| Lamp. Electric-arc | E. Thomson | 727,714 | May 12 | 1698 | 379 | 104 | 383 |
| Lamp. Electric-arc | J. O. Girdlestone and C. F. G. Thorkelin. | 728,902 | May 26 | 3923 | 871, 872 | 104 | 884 |
| Lamp. Electric-arc | C. E. Harthan | 730,369 | June 9 | 1536 | 340, 341 | 104 | 1457 |
| Lamp. Electric-arc | R. Fleming | 730,898 | June 16 | 2504 | 555 | 104 | 1684 |
| Lamp. Electric-arc | J. L. Davies | 731,025 | June 16 | 2741 | 611 | 104 | 1733 |
| Lamp. Electric-arc | J. A. Rignon | 731,711 | June 23 | 4032 | 900 | 104 | 2012 |
| Lamp. Electric-arc | C. J. Toerring | 732,141 | June 30 | 4872 | 1084 | 104 | 2203 |
| Lamp. Electric-arc | R. Fleming | 732,182 | June 30 | 4945 | 1099, 1100 | 104 | 2218 |
| Lamp. Electric-arc | R. Broderick and F. W. Gordon | 732,701 | July 7 | 20 | 5 | 105 | 7 |
| Lamp. Electric-arc | F. W. Gore | 734,699 | July 28 | 3700 | 866, 867 | 105 | 829 |
| Lamp. Electric-arc | C. Senez | 735,161 | Aug. 4 | 220 | 45 | 105 | 1030 |
| Lamp. Electric-arc | T. L. Carbone | 735,708 | Aug. 11 | 1296 | 277, 278 | 105 | 1274 |
| Lamp. Electric-arc | H. T. Harrison | 736,966 | Aug. 25 | 3631 | 804 | 105 | 1807 |

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| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Lamp. Electric-arc | M. H. Baker | 737,315 | Aug. 25 | 4272 | 949 | 105 | 1942 |
| Lamp. Electric-arc | T. L. Carbone | 737,342 | Aug. 25 | 4318 | 962 | 105 | 1953 |
| Lamp. Electric-arc | T. L. Carbone | 737,343 | Aug. 25 | 4319 | 962 | 105 | 1953 |
| Lamp. Electric-arc | A. Schweitzer | 737,668 | Sept. 1 | 199 | 43 | 106 | 46 |
| Lamp. Electric-arc | T. L. Carbone | 737,823 | Sept. 1 | 508 | 111<br>112 | 106 | 114 |
| Lamp. Electric-arc | T. L. Carbone | 737,824 | Sept. 1 | 509 | 112 | 106 | 114 |
| Lamp. Electric-arc | T. L. Carbone | 737,825 | Sept. 1 | 511 | 112 | 106 | 115 |
| Lamp. Electric-arc | C. E. Foster | 738,426 | Sept. 8 | 1773 | 386 | 106 | 396 |
| Lamp. Electric-arc | A. Blondel | 739,977 | Sept. 29 | 4707 | 1059 | 106 | 1073 |
| Lamp. Electric-arc | J. A. Heany | 740,132 | Sept. 29 | 4980 | 1117<br>1118 | 106 | 1132 |
| Lamp. Electric-arc | G. M. Lane | 741,255 | Oct. 13 | 1620 | 366 | 106 | 1612 |
| Lamp. Electric-arc | G. R. Davison | 742,604 | Oct. 27 | 4278 | 964 | 106 | 2196 |
| Lamp. Electric-arc | J. Melzer | 742,705 | Oct. 27 | 4452 | 1006 | 106 | 2233 |
| Lamp. Electric-arc | J. Melzer | 742,706 | Oct. 27 | 4454 | 1007 | 106 | 2234 |
| Lamp. Electric-arc | H. Bremer | 743,237 | Nov. 3 | 810 | 177 | 107 | 169 |
| Lamp. Electric-arc | H. Bremer | 743,238 | Nov. 3 | 813 | 177 | 107 | 169 |
| Lamp. Electric-arc | H. Bremer | 743,239 | Nov. 3 | 815 | 178 | 107 | 170 |
| Lamp. Electric-arc | H. Bremer | 743,240 | Nov. 3 | 816 | 178 | 107 | 170 |
| Lamp. Electric-arc | H. Bremer | 743,241 | Nov. 3 | 818 | 178 | 107 | 170 |
| Lamp. Electric-arc | J. McLaughlin | 744,093 | Nov. 17 | 2562 | 548<br>549 | 107 | 575 |
| Lamp. Electric-arc | E. Thomson | 744,130 | Nov. 17 | 2634 | 562 | 107 | 590 |
| Lamp. Electric-arc | H. Emonds | 745,427 | Dec. 1 | 216 | 48 | 107 | 1146 |
| Lamp. Electric-arc | R. Hulsart | 745,622 | Dec. 1 | 563 | 131 | 107 | 1218 |
| Lamp. Electric-arc | M. A. Stogsdill and E. J. Schatz | 746,601 | Dec. 8 | 2336 | 535 | 107 | 1621 |
| Lamp. Electric-arc | T. Hamilton-Adams | 746,830 | Dec. 15 | 2778 | 640 | 107 | 1740 |
| Lamp. Electric-arc | K. Tornberg | 748,121 | Dec. 29 | 5245 | 1194 | 107 | 2331 |
| Lamp. Electric headlight | H. P. Wellman | 723,766 | Mar. 24 | 3905 | 878<br>879 | 103 | 863 |
| Lamp. Electric headlight | H. P. Wellman | 728,789 | May 19 | 3708 | 827<br>828 | 104 | 824 |
| Lamp. Electric incandescent | C. H. Carter | 736,069 | Aug. 11 | 1978 | 421 | 105 | 1422 |
| Lamp. Electric incandescent | W. B. Burrow | 737,575 | Sept. 1 | 32 | 7 | 106 | 10 |
| Lamp. Electric-street-car | C. C. Benson | 726,848 | May 5 | 22 | 6 | 104 | 8 |
| Lamp-extinguisher | A. Nieto y Abeillé and A. Gual y S. Juan. | 734,931 | July 28 | 4141 | 964 | 105 | 920 |
| Lamp-filling indicator | E. A. Burlingame | 725,670 | Apr. 21 | 2339 | 528 | 103 | 1695 |
| Lamp fixture. Incandescent-gas | J. L. Black | 742,568 | Oct. 27 | 4212 | 948<br>949 | 106 | 2181 |
| Lamp for constant-potential circuits. Electric-arc | J. J. Wood | 732,488 | June 30 | 5545 | 1230 | 104 | 2340 |
| Lamp for liquid fuel. Incandescent | A. Poeffel | 726,747 | Apr. 28 | 4343 | 977<br>978 | 103 | 2122 |
| Lamp for liquid hydrocarbons. Incandescent | R. E. Walther | 745,697 | Dec. 1 | 691 | 158 | 107 | 1245 |
| Lamp for multiple or parallel circuits. Electric-arc | R. H. Henderson | 748,185 | Dec. 29 | 5363 | 1218 | 107 | 2356 |
| Lamp for railway-cars. Signal | R. Black | 724,156 | Mar. 31 | 4700 | 1055 | 103 | 1042 |
| Lamp for railway-cars. Signal | F. W. Dressel | 724,169 | Mar. 31 | 4726 | 1060 | 103 | 1048 |
| Lamp. Formaldehyde | R. P. Kuhn. (Reissue) | 12,150 | Aug. 25 | 4740 | 1062 | 105 | 2046 |
| Lamp. Gas | A. H. Humphrey | 722,306 | Mar. 10 | 1219 | 271 | 103 | 276 |
| Lamp. Gas | R. M. Dixon | 732,928 | July 7 | 413 | 99 | 105 | 89 |
| Lamp. Gas | W. G. Midgley | 736,287 | Aug. 11 | 2345 | 509<br>510 | 105 | 1503 |
| Lamp. Gas | T. Brabson | 736,681 | Aug. 18 | 3086 | 680<br>681 | 105 | 1673 |
| Lamp. Gas | A. H. Humphrey | 740,018 | Sept. 29 | 4785 | 1076 | 106 | 1089 |
| Lamp. Gas | C. W. Currier | 740,401 | Oct. 6 | 26 | 7 | 106 | 1250 |
| Lamp. Gas | H. H. Rountree and A. W. Straight | 742,803 | Oct. 27 | 4611 | 1045 | 106 | 2269 |
| Lamp. Gas | T. Gordon | 748,363 | Dec. 29 | 5660 | 1291 | 107 | 2420 |
| Lamp. Gas arc | C. A. Haas | 729,158 | May 26 | 4378 | 966 | 104 | 977 |
| Lamp. Gas or vapor | A. Mende | 728,265 | May 19 | 2724 | 607 | 104 | 618 |
| Lamp. Gasolene | J. J. Flint | 732,686 | June 30 | 5917 | 1312 | 104 | 2422 |
| Lamp globe and chimney. Combined | J. M. Stokoe | 727,709 | May 12 | 1689 | 377 | 104 | 381 |
| Lamp globe-holder. Arc | C. E. Harthan | 725,442 | Apr. 14 | 1902 | 425 | 103 | 1587 |
| Lamp globe-holder. Arc | J. C. Tournier | 730,721 | June 9 | 2176 | 483 | 104 | 1595 |
| Lamp globe-holder. Arc | G. E. Stevens | 733,342 | July 7 | 1156 | 274 | 105 | 243 |
| Lamp globe-holder. Arc | R. H. Read | 733,596 | July 14 | 1607 | 381 | 105 | 357 |
| Lamp-globes, &c. Support for | G. J. Crist | 719,754 | Feb. 3 | 626 | 141 | 102 | 954 |
| Lamp glower and attaching terminal wires thereto. Electric- | M. W. Hanks | 725,703 | Apr. 21 | 2395 | 542 | 103 | 1707 |
| Lamp glowers. Apparatus for applying terminal wires to electric- | J. M. Gulentz | 728,567 | May 19 | 3298 | 730 | 104 | 737 |
| Lamp glowers. Apparatus for treating electric- | M. W. Hanks | 735,761 | Aug. 11 | 1386 | 298 | 105 | 1293 |
| Lamp glowers. Applying terminal wires to electric- | J. M. Gulentz | 728,568 | May 19 | 3299 | 730 | 104 | 738 |
| Lamp glowers. Making electric- | M. W. Hanks | 722,702 | Mar. 17 | 1977 | 441 | 103 | 455 |
| Lamp glowers. Making electric- | M. W. Hanks | 735,760 | Aug. 11 | 1384 | 298 | 105 | 1292 |
| Lamp glowers. Sorting device for electric- | A. J. Wurts | 722,790 | Mar. 17 | 2140 | 479 | 103 | 487 |
| Lamp glowers. Terminal for electric- | H. N. Potter | 743,030 | Nov. 3 | 408 | 88 | 107 | 85 |
| Lamp glowers. Treating electric- | M. W. Hanks | 722,701 | Mar. 17 | 1975 | 441 | 103 | 454 |
| Lamp guard and shade. Combined | W. J. Hartwig | 718,624 | Jan. 20 | 2106 | 458 | 102 | 481 |
| Lamp. Hand signal | J. Hopson and H. H. Priest | 732,941 | July 7 | 432 | 107 | 105 | 93 |
| Lamp-hanger | D. McEachern | 737,951 | Sept. 1 | 790 | 172 | 106 | 173 |
| Lamp-hanger | T. Lindsay and L. L. White | 745,633 | Dec. 1 | 582 | 135 | 107 | 1222 |
| Lamp hanger. Adjustable incandescent | P. P. Keller | 727,150 | May 5 | 633 | 136 | 104 | 137 |
| Lamp hanger. Arc | C. H. Shultz | 730,844 | June 9 | 2375 | 525 | 104 | 1637 |
| Lamp. Hanging | C. M. Pitel | 723,405 | Mar. 24 | 3269 | 732 | 103 | 730 |
| Lamp. Hanging | C. M. Pitel | 729,093 | May 26 | 4260 | 941 | 104 | 953 |
| Lamp heater cut-out. Electric | H. N. Potter | 721,387 | Feb. 24 | 3714 | 844<br>845 | 102 | 1655 |
| Lamp heater cut-out. Electric | H. N. Potter | 721,602 | Feb. 24 | 4124 | 938 | 102 | 1743 |
| Lamp heater cut-out. Electric | A. J. Wurts | 728,647 | May 19 | 3456 | 767 | 104 | 773 |
| Lamp heater cut-out. Electric | A. J. Wurts | 728,821 | May 19 | 3770 | 841 | 104 | 839 |
| Lamp-holder | T. Sharp | 731,233 | June 16 | 3119 | 692 | 104 | 1808 |
| Lamp-holder | J. T. Golcher | 743,270 | Nov. 3 | 882 | 191 | 107 | 186 |
| Lamp-holder for miners' caps | C. R. Anderson | 730,076 | June 2 | 1007 | 225 | 104 | 1333 |
| Lamp holder. Incandescent-electric | S. S. Garvin | 729,857 | June 2 | 619 | 136 | 104 | 1254 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|---|
| | | | | Spec. | Drg. | Vol. | Page. |
| Lamp holder. Miner's | J. A. Brown | 748,475 | Dec. 29 | 5883 | 1337 | 107 | 2470 |
| Lamp. Horizontal gas or vapor electric | P. C. Hewitt | 738,323 | Sept. 8 | 1586 | 313 | 106 | 357 |
| Lamp. Hydrocarbon | R. Thayer | 735,082 | Aug. 4 | 1238 | 263 | 105 | 1244 |
| Lamp. Hydrocarbon | J. Bystrom | 740,392 | Oct. 6 | 14 | 4 | 106 | 1247 |
| Lamp. Hydrocarbon incandescent | G. Washington | 739,498 | June 9 | 1783 | 399 | 104 | 1510 |
| Lamp. Hydrocarbon incandescent | P. B. Curran | 739,664 | Sept. 15 | 2980 | 662 | 106 | 673 |
| Lamp. Hydrocarbon street | C. Perillat | 739,711 | Sept. 22 | 4182 | 935 | 106 | 944 |
| Lamp. Hydrocarbon-vapor | W. S. Proskey | 734,470 | July 21 | 3273 | 769 | 105 | 724 |
| Lamp-igniter. Electric | A. L. Lind and C. H. Carlsson | 745,447 | Dec. 1 | 253 | 58, 59 | 107 | 1154 |
| Lamp. Incandescent | J. W. Howell | 726,929 | May 5 | 184 | 43 | 104 | 41 |
| Lamp. Incandescent | W. R. Burrows | 729,730 | June 2 | 383 | 87 | 104 | 1206 |
| Lamp. Incandescent | C. Hoelscher | 730,768 | June 9 | 2250 | 500 | 104 | 1612 |
| Lamp. Incandescent | L. Denayrouze | 736,943 | Aug. 25 | 3591 | 796 | 105 | 1799 |
| Lamp. Incandescent | L. Denayrouze | 740,253 | Sept. 29 | 5211 | {1171 {1172 | {106 | 1179 |
| Lamp. Incandescent electric | C. Pauthonier | 720,962 | Feb. 17 | 2874 | 658 | 102 | 1458 |
| Lamp. Incandescent electric | H. J. Jaeger | 729,182 | May 26 | 4418 | 974 | 104 | 986 |
| Lamp. Incandescent electric | J. W. Forster | 736,950 | Aug. 25 | 3604 | 799 | 105 | 1802 |
| Lamp. Incandescent electric | C. A. Crane | 744,496 | Nov. 17 | 3323 | 715 | 107 | 740 |
| Lamp. Incandescent gas | W. S. Proskey | 721,650 | Feb. 24 | 4221 | 960 | 102 | 1765 |
| Lamp. Incandescent gas | W. Schaefer | 726,765 | Apr. 28 | 4380 | 985 | 103 | 2130 |
| Lamp. Incandescent gas | C. A. Haas | 733,192 | July 7 | 867 | 211 | 105 | 182 |
| Lamp. Incandescent gas | R. W. Huss | 739,314 | Sept. 22 | 3445 | 769 | 106 | 785 |
| Lamp. Incandescent gas | W. H. Payne | 743,553 | Nov. 10 | 1509 | 316 | 107 | 340 |
| Lamp. Incandescent hydrocarbon | C. Perillat | 739,710 | Sept. 22 | 4179 | 935 | 106 | 943 |
| Lamp. Incandescent-mantle | E. A. Schoettel | 722,915 | Mar. 17 | 2363 | 528 | 103 | 532 |
| Lamp. Incandescent vapor | J. B. Christian | 728,672 | May 19 | 3504 | 779 | 104 | 783 |
| Lamp. Incandescent vapor | G. Bohner | 732,334 | June 30 | 5230 | 1161 | 104 | 2277 |
| Lamp. Incandescent vapor | L. Denayrouze | 741,772 | Oct. 20 | 2666 | 595 | 106 | 1848 |
| Lamp. Inverted incandescent | T. B. and T. E. Smith | 743,342 | Nov. 3 | 1019 | 220 | 107 | 218 |
| Lamp-jack circuit arrangement | H. P. Clausen | 726,215 | Apr. 21 | 3287 | 746 | 103 | 1894 |
| Lamp kerosene-oil burner | E. Humphrey | 726,481 | Apr. 28 | 3713 | 842 | 103 | 1997 |
| Lamp-mantles. Loop for incandescent | C. Simon and I. Eisler | 718,223 | Jan. 13 | 1306 | 289 | 102 | 295 |
| Lamp. Miner's | J. Jacobsen | 718,128 | Jan. 13 | 1135 | 251 | 102 | 259 |
| Lamp. Miner's | T. Gossack | 730,907 | June 16 | 2516 | 559 | 104 | 1686 |
| Lamp. Miner's | L. J. Husson | 744,686 | Nov. 17 | 3629 | 783 | 107 | 804 |
| Lamp. Multiphase arc | R. Fleming | 730,899 | June 16 | 2506 | 556 | 104 | 1684 |
| Lamp. Night | H. Möller. (Reissue) | 12,166 | Nov. 3 | 1205 | 249 | 107 | 257 |
| Lamp. Non-refillable | F. W. Bartlett | 740,077 | Sept. 29 | 4891 | 1096 | 106 | 1112 |
| Lamp. Oil | M. and H. Romans | 728,765 | May 19 | 3659 | 814 | 104 | 816 |
| Lamp. Oil | J. F. C. Farquhar | 730,447 | June 9 | 1686 | 378 | 104 | 1488 |
| Lamp. Oil | A. V. Campbell | 733,004 | July 7 | 536 | 132 | 105 | 115 |
| Lamp or burner. Argand | H. C. Dünnemann | 732,930 | July 7 | 415 | {100 {101 | {105 | 90 |
| Lamp or candle. Electric | C. Hubert | 741,245 | Oct. 13 | 1604 | 360 | 106 | 1609 |
| Lamp or chandelier counterbalance | H. F. Nehr | 729,886 | June 2 | 673 | 148 | 104 | 1265 |
| Lamp or heater. Safety kerosene-oil | P. Fraser | 724,840 | Apr. 7 | 792 | 183 | 103 | 1339 |
| Lamp. Petroleum | S. Carlson | 741,223 | Oct. 13 | 1573 | 354 | 106 | 1602 |
| Lamp-post and connections. Street | J. A. Bower | 734,158 | July 21 | 2697 | 634 | 105 | 604 |
| Lamp-protector | W. H. Greenwood | 741,129 | Oct. 13 | 1375 | 315 | 106 | 1560 |
| Lamp-receptacle | H. C. Wirt | 729,828 | June 2 | 576 | 127 | 104 | 1245 |
| Lamp receptacle. Incandescent | H. T. Paiste | 730,293 | June 9 | 1407 | 309 | 104 | 1431 |
| Lamp regulating device. Electric-arc | A. N. Thorin | 747,508 | Dec. 22 | 4053 | {911 {912 | {107 | 2044 |
| Lamp rheostat. Arc | J. J. Wood | 732,489 | June 30 | 5550 | 1231 | 104 | 2341 |
| Lamp. Safety | C. P. A. Kjaersgaard | 734,233 | July 21 | 2834 | 665 | 105 | 634 |
| Lamp. Safety | G. W. Reilly and C. A. Phillip | 744,612 | Nov. 17 | 3503 | 756 | 107 | 776 |
| Lamp. Safety household | A. Carson | 729,542 | June 2 | 41 | 10 | 104 | 1135 |
| Lamp shade-holder. Electric table | R. Walker | 723,087 | Mar. 17 | 2658 | 599 | 103 | 595 |
| Lamp. Shunt-wound series arc | M. H. Baker | 727,569 | May 12 | 1402 | 316 | 104 | 320 |
| Lamp. Signal | F. W. Dressel | 723,145 | Mar. 17 | 2758 | 620 | 103 | 614 |
| Lamp. Signal | F. K. Wright | 743,097 | Nov. 10 | 2339 | 500 | 107 | 519 |
| Lamp-socket | D. A. Schutt. (Reissue) | 12,099 | Mar. 10 | 1866 | 415 | 103 | 418 |
| Lamp-socket | W. H. Cole | 727,590 | May 12 | 1434 | 322 | 104 | 327 |
| Lamp-socket | H. C. Wirt | 735,188 | Aug. 4 | 305 | *60 | 105 | 1046 |
| Lamp-socket | W. A. Church | 736,577 | Aug. 18 | 2864 | 627 | 105 | 1629 |
| Lamp-socket | W. A. Church | 738,294 | Sept. 8 | 1501 | 325 | 106 | 338 |
| Lamp-socket | L. Erikson | 738,717 | Sept. 8 | 2339 | 514 | 106 | 515 |
| Lamp socket and fixtures. Incandescent | P. H. Fielding | 721,435 | Feb. 24 | 3804 | 866 | 102 | 1672 |
| Lamp socket. Electric | M. Norden | 720,953 | Feb. 17 | 2857 | 653 | 102 | 1455 |
| Lamp socket. Electric | M. Norden | 741,924 | Oct. 20 | 2949 | 657 | 106 | 1908 |
| Lamp socket. Electric | M. Norden | 742,725 | Oct. 27 | 4487 | 1015 | 106 | 2240 |
| Lamp socket. Electric | J. H. Goehst | 744,330 | Nov. 17 | 3020 | 648 | 107 | 675 |
| Lamp socket. Electric-incandescent | G. H. Proctor | 725,133 | Apr. 14 | 1334 | 301 | 103 | 1467 |
| Lamp socket. Incandescent | H. Hubbell | 720,808 | Feb. 17 | 2586 | 596 | 102 | 1397 |
| Lamp socket. Incandescent | O. E. Kenney | 737,114 | Aug. 25 | 3878 | 861 | 105 | 1859 |
| Lamp socket. Incandescent | J. L. Yost and O. E. Kenney | 737,310 | Aug. 25 | 4257 | 947 | 105 | 1938 |
| Lamp socket. Incandescent | J. L. Yost and O. E. Kenney | 737,890 | Sept. 1 | 671 | 142 | 106 | 147 |
| Lamp socket. Incandescent | W. A. Church | 738,099 | Sept. 1 | 1070 | 237 | 106 | 231 |
| Lamp socket. Incandescent | J. L. Yost and O. E. Kenney | 738,648 | Sept. 8 | 2207 | 482 | 106 | 489 |
| Lamp socket. Incandescent | H. E. Meyers | 743,906 | Nov. 10 | 2158 | 465 | 107 | 475 |
| Lamp socket. Incandescent | G. H. Proctor | 745,294 | Nov. 24 | 4829 | 1053 | 107 | 1070 |
| Lamp socket. Incandescent | C. Wagner | 748,445 | Dec. 29 | 5819 | 1326 | 107 | 2456 |
| Lamp socket. Incandescent-electric | A. Weber, Sr | 743,206 | Nov. 3 | 745 | 163 | 107 | 156 |
| Lamp socket. Incandescent-electric | A., Sr. and Jr., and J. Weber | 743,207 | Nov. 3 | 747 | 164 | 107 | 156 |
| Lamp socket. Incandescent-electric | A. Weber, Jr | 743,358 | Nov. 3 | 1061 | 227 | 107 | 226 |
| Lamp socket. Incandescent-electric | C. Bakeley | 748,337 | Dec. 29 | 5615 | 1280 | 107 | 2410 |
| Lamp socket. Incandescent-electric | C. Bakeley | 748,338 | Dec. 29 | 5617 | 1280 | 107 | 2411 |
| Lamp socket. Plural | R. B. Benjamin | 721,774 | Mar. 3 | 202 | 46 | 103 | 44 |
| Lamp socket. Plural | R. B. Benjamin | 721,775 | Mar. 3 | 206 | 47 | 103 | 46 |
| Lamp socket. Plural | R. B. Benjamin | 721,776 | Mar. 3 | 209 | 47 | 103 | 47 |
| Lamp socket. Plural | R. B. Benjamin | 721,777 | Mar. 3 | 211 | 47 | 103 | 47 |
| Lamp socket. Plural | R. B. Benjamin | 721,778 | Mar. 3 | 213 | 48 | 103 | 48 |
| Lamp socket. Plural | R. B. Benjamin | 721,779 | Mar. 3 | 215 | 48 | 103 | 48 |
| Lamp socket. Switch | F. D. Spear | 718,583 | Jan. 13 | 2041 | 443 | 102 | 455 |
| Lamp sockets. Cluster of plural | R. B. Benjamin | 721,780 | Mar. 3 | 217 | 48 | 103 | 49 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|---|
| | | | | Spec. | Dr'g. | Vol. | Page. |
| Lamp sockets. Making fiber insulating-linings for incandescent- | O. E. Kenney | 735,778 | Aug. 11 | 1414 | 303 | 105 | 1300 |
| Lamp-support | S. Camins | 736,685 | Aug. 18 | 3096 | 683 | 105 | 1674 |
| Lamp support. Incandescent-electric- | F. W. Winbolt | 731,829 | June 23 | 4254 | 947 | 104 | 2061 |
| Lamp support. Street- | P. W. Shute | 726,773 | Apr. 28 | 4393 | 988 | 103 | 2133 |
| Lamp. Switch- | C. F. Annett | 743,418 | Nov. 10 | 1222 | 253 | 107 | 276 |
| Lamp. Switchboard incandescent | A. D. Whipple | 738,060 | May 12 | 2332 | 519 | 104 | 514 |
| Lamp. Table- | A. Kitson | 738,204 | Sept. 8 | 1317 | 286 | 106 | 301 |
| Lamp. Vapor- | A. J. Simpson, Jr | 728,509 | May 19 | 3173 | 702 | 104 | 712 |
| Lamp. Vapor- | A. Mende | 735,548 | Aug. 4 | 998 | 211 | 105 | 1192 |
| Lamp. Vapor-burning | W. Mitchell | 722,601 | Mar. 10 | 1755 | 392 | 103 | 392 |
| Lamp. Vapor-burning | W. Tures | 724,973 | Apr. 7 | 1026 | 235 | 103 | 1387 |
| Lamp. Vehicle- | C. L. Betts | 744,952 | Nov. 24 | 4146 | 896 | 107 | 930 |
| Lamp-wick adjuster | B. F. Cheshire | 738,984 | Sept. 15 | 2844 | 631 | 106 | 642 |
| Lamp wick attachment | J. H. Stone | 725,376 | Apr. 14 | 1766 | 397 | 103 | 1558 |
| Lamps. Automatic apparatus for extinguishing | P. E. Newsom | 736,538 | Aug. 18 | 2799 | 613 | 105 | 1616 |
| Lamps. Automatic lighter or extinguisher for gas- | N. H. Shaw | 737,030 | Aug. 25 | 3739 | 830 | 105 | 1831 |
| Lamps. Ceiling-board hanger for arc- | H. C. Wirt | 735,189 | Aug. 4 | 306 | 60 | 105 | 1046 |
| Lamps. Edison-screw switch-holder for incandescent | O. Zielinski | 723,510 | Mar. 24 | 3472 | 777 | 103 | 771 |
| Lamps. Exhausting | J. W. Howell | 726,293 | Apr. 28 | 3453 | 784 | 103 | 1944 |
| Lamps. Gas-detecting attachment for miners' safety- | J. T. Beard and M. D. Mackie | 722,555 | Mar. 10 | 1673 | 370 | 103 | 375 |
| Lamps, &c. Globe-holder for arc- | J. J. Wood | 720,306 | Feb. 10 | 1661 | 378 | 102 | 1190 |
| Lamps, &c. Hanger for electric | M. C. Donahue | 742,398 | Oct. 27 | 3901 | 877 | 106 | 2117 |
| Lamps, &c. Heating attachment for | G. Watson | 745,699 | Dec. 1 | 694 | 159 | 107 | 1246 |
| Lamps. Lead-in wire for electric | J. C. Entriken and W. S. Everett | 740,260 | Sept. 29 | 5220 | 1174 | 106 | 1181 |
| Lamps. Machine for sealing incandescent | F. R. McBerty and F. H. Loveridge | 734,734 | July 28 | 3775 | 881<br>882 | 105 | 844 |
| Lamps. Means for protecting gas or vapor electric | S. E. Flichtner | 721,689 | Mar. 3 | 75 | 16 | 103 | 17 |
| Lamps. Means for starting electrolytic or Nernst | E. Oxley | 737,460 | Aug. 25 | 4542 | 1018 | 105 | 2002 |
| Lamps. Means for the attachment of incandescent | W. C. Tregoning | 741,741 | Oct. 20 | 2601 | 579 | 106 | 1835 |
| Lamps. Operating electric | H. N. Potter | 743,396 | Nov. 3 | 1146 | 242 | 107 | 243 |
| Lamps. Protecting device for gas or vapor electric | M. von Recklinghausen | 721,741 | Mar. 3 | 155 | 36 | 103 | 35 |
| Lamps. Revolving canopy attachment for | M. J. Murdoch | 746,559 | Dec. 8 | 2259 | 518 | 107 | 1603 |
| Lamps. Series resistance for gas or vapor electric | S. E. Flichtner | 733,381 | July 14 | 1233 | 291 | 105 | 277 |
| Lamps. Starting device for gas or vapor electric | S. E. Flichtner | 733,380 | July 14 | 1232 | 291 | 105 | 276 |
| Lamps. Starting means for vapor electric | S. E. Flichtner and C. W. Denny | 728,891 | May 26 | 3903 | 867 | 104 | 880 |
| Lamps. Steadying resistance for electric | H. N. Potter | 743,028 | Nov. 3 | 403 | 87 | 107 | 84 |
| Lamps. Switch for double-filament electric | L. Lobenthal and J. McCullough | 732,644 | June 30 | 5831 | 1292 | 104 | 2405 |
| Lamps. Switching mechanism for double-filament electric | J. McCullough | 740,369 | Sept. 29 | 5424 | 1221 | 106 | 1223 |
| Lamps. Treating glowers for direct-current electric | M. W. Hanks | 718,455 | Jan. 13 | 1742 | 387 | 102 | 387 |
| Lamps with fuel. Caloric-engine for supplying gas- | C. Scott-Snell | 725,372 | Apr. 14 | 1758 | 395<br>396 | 103 | 1557 |
| Lampblack. Making | R. A. Sembdner | 741,726 | Oct. 20 | 2583 | 575 | 106 | 1831 |
| Land-roller | O. A. Packer | 718,870 | Jan. 20 | 2569 | 572 | 102 | 576 |
| Land-roller | F. Horne | 725,445 | Apr. 14 | 1906 | 426<br>427 | 103 | 1588 |
| Land-roller | J. W. Morgenthaler | 730,469 | June 9 | 1734 | 388 | 104 | 1499 |
| Land-roller | E. O. Lean | 734,900 | July 28 | 4093 | 954 | 105 | 909 |
| Land-roller | G. W. Lilley | 735,120 | Aug. 4 | 144 | 32 | 105 | 1013 |
| Land-roller | J. M. Ebersole | 735,479 | Aug. 4 | 853 | 181 | 105 | 1161 |
| Land-roller | R. S. Buch | 746,453 | Dec. 8 | 2075 | 478 | 107 | 1561 |
| Land-roller | M. M. Lovberg | 747,453 | Dec. 22 | 3947 | 887 | 107 | 2019 |
| Land roller and corrugator. Combined | E. H. Grubb | 739,307 | Sept. 22 | 3433 | 765 | 106 | 782 |
| Land-scorer, ballast-dresser, and weed-cutter | H. Jordan | 728,932 | May 26 | 3975 | 885 | 104 | 898 |
| Lands. Mechanism for treating arable | L. Kavanaugh | 729,185 | May 26 | 4424 | 975 | 104 | 985 |
| Lantern | J. H. Hill | 717,680 | Jan. 6 | 284 | 70, 71 | 102 | 62 |
| Lantern | B. J. Downing | 718,105 | Jan. 13 | 1098 | 243 | 102 | 252 |
| Lantern | R. Walsh | 719,916 | Feb. 3 | 901 | 211 | 102 | 1014 |
| Lantern | G. T. Brown | 727,891 | May 12 | 2022 | 450 | 104 | 447 |
| Lantern | G. W. Manley | 728,738 | May 19 | 3618 | 803<br>804 | 104 | 807 |
| Lantern | E. F. Weidig | 729,463 | May 26 | 4902 | 1086 | 104 | 1088 |
| Lantern | J. T. Casey | 729,844 | June 2 | 596 | 131 | 104 | 1250 |
| Lantern | F. W. Dressel and R. Black | 740,974 | Oct. 6 | 1084 | 245 | 106 | 1477 |
| Lantern | R. Black | 745,770 | Dec. 1 | 815 | 185 | 107 | 1272 |
| Lantern and foot-warmer. Safety- | J. M. Darrah | 731,024 | June 16 | 2739 | 611 | 104 | 1733 |
| Lantern-bottom | T. J. Litle, Jr | 740,667 | Oct. 6 | 528 | 116 | 106 | 1360 |
| Lantern-casing. Collapsible | C. H. Stonebridge | 735,681 | Aug. 4 | 1237 | 262 | 105 | 1243 |
| Lantern. Collapsible | C. H. Stonebridge | 740,377 | Sept. 29 | 5439 | 1223 | 106 | 1226 |
| Lantern dissolver. Single- | F. C. Edmonds | 724,452 | Apr. 7 | 58 | 15 | 103 | 1182 |
| Lantern-frame and blank for making same | A. L. Edwards | 732,529 | June 30 | 5622 | 1246<br>1247 | 104 | 2358 |
| Lantern-globes. Manufacture of | A. B. Houghton | 738,449 | Sept. 8 | 1821 | 395<br>396 | 106 | 407 |
| Lantern. Hand- | F. V. Benson | 717,801 | Jan. 6 | 538 | 120 | 102 | 116 |
| Lantern-holder | W. L. Ferguson | 740,113 | Sept. 29 | 4952 | 1111 | 106 | 1126 |
| Lantern-holder | G. H. Shrodes | 743,578 | Nov. 10 | 1567 | 329 | 107 | 351 |
| Lantern holder and protector | G. F. Kibling | 736,405 | Aug. 18 | 2545 | 558 | 105 | 1561 |
| Lantern-holding device | J. B. Allen | 727,253 | May 5 | 803 | 172 | 104 | 173 |
| Lantern. Magic | S. Hamburger | 736,092 | Aug. 11 | 2012 | 429 | 105 | 1430 |
| Lantern. Magic | S. Hamburger | 736,093 | Aug. 11 | 2013 | 429 | 105 | 1430 |
| Lantern-rest. Wagon-pole | I. P. Grantham | 746,956 | Dec. 15 | 3028 | 695 | 107 | 1797 |
| Lantern. Signal- | H. L. Moore and J. E Lewis | 720,271 | Feb. 10 | 1592 | 364 | 102 | 1176 |
| Lantern. Signal- | F. V. Benson | 721,657 | Mar. 3 | 7 | 2 | 103 | 4 |
| Lantern. Signal- | R. Black | 723,127 | Mar. 17 | 2728 | 612<br>613 | 103 | 608 |
| Lantern. Signal- | F. W. Dressel | 723,146 | Mar. 17 | 2760 | 620 | 103 | 615 |
| Lantern. Signal- | E. H. Wade | 725,302 | Apr. 14 | 1629 | 368 | 103 | 1530 |
| Lantern. Signal- | M. Mercer and C. Phillips | 733,243 | July 7 | 971 | 234 | 105 | 203 |
| Lantern. Signal- | P. Abraham | 733,892 | July 14 | 2149 | 507 | 105 | 468 |
| Lantern. Signal- | W. S. Hamm | 735,500 | Aug. 4 | 895 | 190<br>191 | 105 | 1172 |

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| Invention. | Name. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | | Spec. | Dr'g. | Vol. | Page. |
| Lantern. Signal- | S. and J. Weber. (Reissue) | 12,142 | Aug. 4 | 1261 | 267<br>268 | 105 | 1249 |
| Lantern. Signal- | F. W. Dressel | 745,164 | Nov. 24 | 4599 | 997<br>998 | 107 | 1023 |
| Lantern. Signal- | F. W. Dressel | 745,165 | Nov. 24 | 4601 | 998 | 107 | 1023 |
| Lantern slide-shifter. Magic- | T. S. Barbour | 720,099 | Feb. 10 | 1279 | 293 | 102 | 1111 |
| Lantern. Tubular | G. T. Brown | 727,892 | May 12 | 2025 | 450 | 104 | 449 |
| Lantern. Tubular | F. M. Stevens | 730,981 | June 16 | 2654 | 591 | 104 | 1715 |
| Lap-robe and storm-apron. Combined | S. D. and E. M. Reid | 746,743 | Dec. 15 | 2602 | 598 | 107 | 1701 |
| Lap-robe or storm-apron. Roll | A. O. Kutscher and J. G. Auradou | 720,260 | Feb. 10 | 1570 | 359 | 102 | 1172 |
| Lapping-machine | R. J. Hill | 723,272 | Mar. 24 | 3008 | 676<br>677 | 103 | 680 |
| Lard compound | J. G. Scheinert | 738,702 | Sept. 8 | 2318 | ..... | 106 | 511 |
| Lard, &c. Device for handling and measuring | J. F. Needles | 737,452 | Aug. 25 | 4527 | 1015 | 105 | 1998 |
| Larynx. Instrument for intubation of the | F. E. Sampson | 724,046 | Mar. 31 | 4478 | 1009 | 103 | 996 |
| Last | E. Bostock, Jr | 718,946 | Jan. 20 | 2713 | 607 | 102 | 607 |
| Last | A. G. Fitz | 719,318 | Jan. 27 | 3420 | 763 | 102 | 769 |
| Last | J. T. Brown | 725,404 | Apr. 14 | 1820 | 408 | 103 | 1570 |
| Last | C. F. Pym | 726,755 | Apr. 28 | 4366 | 982 | 103 | 2127 |
| Last | J. St. Amand | 731,390 | June 16 | 3425 | 764 | 104 | 1872 |
| Last | C. N. Pye | 737,770 | Sept. 1 | 398 | 84 | 106 | 88 |
| Last | J. F. Plummer | 742,902 | Nov. 3 | 146 | 34 | 107 | 32 |
| Last | J. D. Winchester and C. W. Greenlaw. | 745,407 | Dec. 1 | 174 | 39 | 107 | 1136 |
| Last | A. Norman | 745,652 | Dec. 1 | 613 | 142<br>143 | 107 | 1229 |
| Last and hinge | S. Mawhinney | 721,717 | Mar. 3 | 118 | 25,26 | 103 | 26 |
| Last. Boot or shoe | A. Lewis | 729,192 | May 26 | 4436 | 978 | 104 | 990 |
| Last. Boot or shoe | H. W. Mobbs | 729,379 | May 26 | 4760 | 1053 | 104 | 1057 |
| Last. Darning- | D. H. Cox, Jr | 740,400 | Oct. 6 | 26 | 6 | 106 | 1250 |
| Last-distributer | J. J. Hopkins | 742,433 | Oct. 27 | 3966 | 890 | 106 | 2130 |
| Last. Hinged | M. F. Gleeson | 747,162 | Dec. 15 | 3410 | 773 | 107 | 1886 |
| Last. Shoe- | F. Kellner | 733,846 | July 14 | 2065 | 487 | 105 | 450 |
| Lasting-hook | W. L. Da Rozir | 730,238 | June 9 | 1299 | 287 | 104 | 1407 |
| Lasting-machine | C. Eisenberg | 725,233 | Apr. 14 | 1523 | 346 | 103 | 1507 |
| Lasting-machine | T. H. McAuliffe and J. W. Hogan | 726,087 | Apr. 21 | 3046 | 692 | 103 | 1845 |
| Lasting-machine | H. H. Cummings | 737,586 | Sept. 1 | 49 | 11 | 106 | 13 |
| Lasting machine. Boot or shoe | R. W. Peer | 718,873 | Jan. 20 | 2572 | 573<br>574 | 102 | 576 |
| Lasting machine. Boot or shoe | R. W. Peer | 737,766 | Sept. 1 | 389 | 83 | 106 | 86 |
| Lasting. Means for securing shoe-uppers preparatory to | W. A. Smith | 740,938 | Oct. 6 | 1010 | 229 | 106 | 1461 |
| Lasting-tool. Hand | S. Beauregard | 740,794 | Oct. 6 | 775 | 174<br>175 | 106 | 1410 |
| Latch | W. H. H. Decker | 718,101 | Jan. 13 | 1092 | 241 | 102 | 250 |
| Latch | A. Williams | 718,684 | Jan. 20 | 2217 | 486 | 102 | 503 |
| Latch | R. A. Stearman | 721,921 | Mar. 3 | 509 | 112 | 103 | 113 |
| Latch | M. W. Dodge | 723,846 | Mar. 31 | 4067 | 918 | 103 | 912 |
| Latch | F. I. Ackerman | 725,017 | Apr. 14 | 1115 | 253 | 103 | 1425 |
| Latch | H. W. Schiermeyer | 732,450 | June 30 | 5466 | 1213 | 104 | 2326 |
| Latch | H. W. Bowman | 737,995 | Sept. 1 | 884 | 193 | 106 | 192 |
| Latch | M. Cossey | 742,092 | Oct. 20 | 3338 | 745 | 106 | 1986 |
| Latch | J. C. Foster | 742,782 | Oct. 27 | 4572 | 1036 | 106 | 2261 |
| Latch | O. C. Little | 742,881 | Nov. 3 | 107 | 25 | 107 | 24 |
| Latch | S. S. Niles | 743,545 | Nov. 10 | 1499 | 313 | 107 | 337 |
| Latch | J. Hadka | 743,716 | Nov. 10 | 1810 | 382 | 107 | 403 |
| Latch | M. S. Thorud | 744,820 | Nov. 24 | 3908 | 840 | 107 | 881 |
| Latch | W. W. Daves | 745,042 | Nov. 24 | 4329 | 935 | 107 | 968 |
| Latch | O. F. Immell | 745,189 | Nov. 24 | 4646 | 1011 | 107 | 1033 |
| Latch | N. Erickson | 745,720 | Dec. 1 | 729 | 167 | 107 | 1254 |
| Latch | R. C. Spencer, Jr | 747,657 | Dec. 22 | 4328 | 978 | 107 | 2106 |
| Latch and door. Electrically-operated | J. Chambers, Jr | 728,367 | May 19 | 2922 | 645 | 104 | 660 |
| Latch and lock | G. S. and F. O. Parsons | 728,969 | May 26 | 4037 | 897 | 104 | 907 |
| Latch and lock. Combined | J. E. Keverline | 729,603 | June 2 | 145 | 35 | 104 | 1156 |
| Latch. Automatic | M. N. Drucker and W. Haensler | 736,707 | Aug. 18 | 3140 | 691 | 105 | 1684 |
| Latch. Door- | C. P. and F. E. Howard | 720,349 | Feb. 10 | 1733 | 394 | 102 | 1206 |
| Latch for swinging shutters and blinds | W. R. Briggs | 747,532 | Dec. 22 | 4095 | 919 | 107 | 2053 |
| Latch. Gate- | J. B. Sams | 724,952 | Apr. 7 | 984 | 227 | 103 | 1379 |
| Latch. Gate- | D. C. Heston | 727,139 | May 5 | 615 | 132 | 104 | 133 |
| Latch. Gate- | G. F. Thompson | 727,494 | May 5 | 1245 | 277 | 104 | 268 |
| Latch. Gate- | J. F. Bittle | 727,738 | May 12 | 1736 | 390 | 104 | 391 |
| Latch. Gate- | P. Deardorff | 728,087 | May 12 | 2385 | 531 | 104 | 525 |
| Latch. Gate- | C. E. McEwen | 730,954 | June 16 | 2605 | 580 | 104 | 1705 |
| Latch. Gate- | G. W. Merker | 731,199 | June 16 | 3068 | 681 | 104 | 1797 |
| Latch. Gate- | J. J. Hynding | 733,208 | July 7 | 907 | 219 | 105 | 190 |
| Latch. Gate- | H. C. Carter | 735,857 | Aug. 11 | 1582 | 337 | 105 | 1337 |
| Latch. Gate- | D. M. McRae | 745,970 | Dec. 1 | 1208 | 271 | 107 | 1357 |
| Latch. Gate- | J. R. Abernathy | 748,031 | Dec. 29 | 5064 | 1145 | 107 | 2292 |
| Latch. Lock- | M. Vallée | 719,705 | Feb. 3 | 524 | 118 | 102 | 933 |
| Latch. Locking- | L. W. Hall | 731,775 | June 23 | 4153 | 926 | 104 | 2036 |
| Latch. Night- | H. G. Voight | 720,986 | Feb. 17 | 2919 | 669 | 102 | 1468 |
| Latch. Shutter- | C. H. Haggerty | 745,492 | Dec. 1 | 344 | 80 | 107 | 1173 |
| Latch-spindle bearing | F. W. Schneider | 746,176 | Dec. 8 | 1588 | 355 | 107 | 1460 |
| Lath. Metallic | V. Moeslein | 725,115 | Apr. 14 | 1299 | 293 | 103 | 1460 |
| Lath-spacing table and tie | A. H. Bowlzer | 738,979 | Sept. 15 | 2838 | 629 | 106 | 641 |
| Lathing for plastering | J. D. O'Brien | 721,074 | Feb. 17 | 3075 | 706 | 102 | 1502 |
| Lathe | C. Seymour | 717,933 | Jan. 6 | 781 | 175<br>176 | 102 | 167 |
| Lathe | B. M. W. Hanson | 726,678 | Apr. 28 | 4205 | 950<br>951 | 103 | 2093 |
| Lathe | L. J. and F. J. Shead | 730,053 | June 2 | 967 | 217 | 104 | 1325 |
| Lathe | T. Craig | 732,050 | June 30 | 4675 | 1044 | 104 | 2163 |
| Lathe | S. C. Hills | 732,558 | June 30 | 5682 | 1261<br>1262 | 104 | 2372 |
| Lathe | J. C. Potter and J. Johnston | 735,583 | Aug. 4 | 1056 | 224 | 105 | 1205 |

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|---|---|---|---|---|---|---|---|
| Lathe | C. E. Search and E. Cheshire | 736,791 | Aug. 18 | 3288 | 727, 728 | 105 | 1714 |
| Lathe | D. B. Bullard | 737,996 | Sept. 1 | 885 | 193, 194, 195, 196 | 106 | 193 |
| Lathe | C. Glover | 740,641 | Oct. 6 | 486 | 107 | 106 | 1351 |
| Lathe accessory | J. Wright | 741,209 | Oct. 13 | 1546 | 348 | 106 | 1597 |
| Lathe attachment | C. E. Brown | 734,808 | July 28 | 3943 | 919 | 105 | 878 |
| Lathe attachment | O. A. Gooch | 738,182 | Sept. 8 | 1277 | 277 | 106 | 292 |
| Lathe attachment | J. W. Bronaugh, Jr | 742,576 | Oct. 27 | 4226 | 952, 953 | 106 | 2184 |
| Lathe. Automatic | A. L. Brown | 747,043 | Dec. 15 | 3171 | 727, 728 | 107 | 1829 |
| Lathe back-rest. Turret- | C. G. Richardson | 725,775 | Apr. 21 | 2528 | 573, 574 | 103 | 1737 |
| Lathe belt-tightener | W. C. Kirk | 743,730 | Nov. 10 | 1837 | 387 | 107 | 409 |
| Lathe-center. Ball-bearing | I. H. Gilman | 725,697 | Apr. 21 | 2380 | 540 | 103 | 1703 |
| Lathe center-grinder | T. H. Coulter | 742,599 | Oct. 27 | 4268 | 961 | 106 | 2193 |
| Lathe change-gearing | A. E. Newton | 728,279 | May 19 | 2756 | 612, 613 | 104 | 627 |
| Lathe. Column- | W. C. Kirk | 743,728 | Nov. 10 | 1833 | 386 | 107 | 408 |
| Lathe. Copying- | C. Seymour | 723,044 | Mar. 17 | 2569 | 578 | 103 | 576 |
| Lathe cutting-tool | E. H. and R. G. Rabiger | 727,440 | May 5 | 1151 | 252 | 104 | 249 |
| Lathe die-head | R. M. Nuttall | 731,121 | June 16 | 2924 | 650 | 104 | 1770 |
| Lathe-dog | A. Tindel | 745,977 | Dec. 1 | 1219 | 274 | 107 | 1360 |
| Lathe dog. Clamp- | H. H. V. Lilley | 728,946 | May 26 | 4000 | 890 | 104 | 900 |
| Lathe. Double-turret | J. C. Potter and J. Johnston | 748,097 | Dec. 29 | 5199 | 1176, 1177 | 107 | 2322 |
| Lathe. Engine- | J. H. Montstream, W. L. Schellenbach, and W. Lodge. | 723,704 | Mar. 24 | 3798 | 854 | 103 | 840 |
| Lathe for cutting and turning corncob pipe-sections. | J. Yerkes | 741,429 | Oct. 13 | 1976 | 437, 438 | 106 | 1687 |
| Lathe for turning irregular forms | H. Derrer | 724,676 | Apr. 7 | 482 | 116 | 103 | 1272 |
| Lathe gearing. Turret- | C. E. Search and E. Cheshire | 728,179 | May 12 | 2547 | 567 | 104 | 560 |
| Lathe grinding attachment | A. R. Grever and C. Stone | 727,129 | May 5 | 597 | 128 | 104 | 129 |
| Lathe grinding attachment | J. N. Heald | 744,340 | Nov. 17 | 3038 | 652 | 107 | 679 |
| Lathe. Last-turning | J. T. Brown | 726,253 | Apr. 28 | 3366 | 764, 765 | 103 | 1926 |
| Lathe or planer tool-holder | J. Brandstetter | 741,449 | Oct. 13 | 2014 | 447 | 106 | 1695 |
| Lathe. Roll-turning | J. Thomas | 734,997 | July 28 | 4274 | 994 | 105 | 947 |
| Lathe speed-changing mechanism. Automatic- | J. P. Brophy | 735,701 | Aug. 11 | 1284 | 275 | 105 | 1271 |
| Lathe. Spool-cutting | G. A. Ensign | 735,482 | Aug. 4 | 856 | 182, 183 | 105 | 1162 |
| Lathe stock-feed mechanism. Turret- | Z. B. Coes | 721,862 | Mar. 3 | 384 | 84 | 103 | 84 |
| Lathe taper attachment | F. R. Lee | 724,592 | Apr. 7 | 326 | 80 | 103 | 1238 |
| Lathe taper attachment | J. M. Kington and M. Ellis | 728,398 | May 19 | 2980 | 655, 656 | 104 | 672 |
| Lathe tool-holder | T. B. Tiefenbacher | 721,979 | Mar. 3 | 610 | 135 | 103 | 132 |
| Lathe tool-rest | H. M. Darling | 745,576 | Dec. 1 | 481 | 114 | 107 | 1199 |
| Lathe tool-turret | O. L. Brainard | 738,653 | Sept. 8 | 2215 | 484 | 106 | 491 |
| Lathe. Turret- | C. E. Search and E. Cheshire | 736,792 | Aug. 18 | 3290 | 728, 729, 730 | 105 | 1715 |
| Lathe. Turret- | J. Hartness | 739,866 | Sept. 29 | 4475 | 1005, 1006, 1007, 1008, 1009, 1010, 1011, 1012 | 106 | 1025 |
| Lathe. Wood-turning | B. S. Loveland | 719,349 | Jan. 27 | 3487 | 776 | 102 | 783 |
| Lathe work-support | W. C. Kirk | 743,729 | Nov. 10 | 1835 | 387 | 107 | 408 |
| Lathes. Feed-indicator for screw-cutting on | F. A. Japs | 728,928 | May 26 | 3963 | 881, 882 | 104 | 892 |
| Lattice or truss girder, &c | F. Visintini | 735,920 | Aug. 11 | 1691 | 360 | 105 | 1360 |
| Launch-cover | J. C. Collamore and G. W. Kerst | 734,516 | July 28 | 3357 | 786 | 105 | 758 |
| Launch spray-hood | C. H. Paine | 745,656 | Dec. 1 | 621 | 144 | 107 | 1231 |
| Launch storm hood and cover | A. H. Castle | 739,389 | Sept. 22 | 3580 | 800 | 106 | 812 |
| Laundry apparatus | H. Budd | 727,078 | May 5 | 493 | 105, 106 | 104 | 108 |
| Laundry-bag | E. Bourne, Jr | 722,801 | Mar. 17 | 2160 | 483 | 103 | 491 |
| Laundry device | J. A. Treat | 724,221 | Mar. 31 | 4828 | 1082, 1083 | 103 | 1068 |
| Laundry-fork | F. X. Krabach | 728,938 | May 26 | 3985 | 887 | 104 | 896 |
| Laundry-indicator | L. Childress | 728,866 | May 26 | 3864 | 860 | 104 | 872 |
| Laundry-marking machine | T. L. Taylor | 745,302 | Nov. 24 | 4858 | 1059, 1060 | 107 | 1077 |
| Lavatory apparatus | T. O. Potter | 745,661 | Dec. 1 | 629 | 146 | 107 | 1232 |
| Lawn-rake | G. W. Anderson | 731,421 | June 23 | 3491 | 779, 780 | 104 | 1903 |
| Lawn-shears | J. G. Thrasher | 740,489 | Oct. 6 | 205 | 40 | 106 | 1289 |
| Lawn-stand | C. T. Campbell | 743,827 | Nov. 10 | 2015 | 427 | 107 | 446 |
| Lawn-sweeper | J. F. Battle | 744,460 | Nov. 17 | 3265 | 700 | 107 | 728 |
| Lawns, &c. Machine for tending | M. E. Blackwood | 743,229 | Nov. 3 | 796 | 172, 173, 174 | 107 | 166 |
| Lay rocker-shaft box or bearing | S. H. Bevill | 725,659 | Apr. 21 | 2323 | 524 | 103 | 1691 |
| Lazy-tongs construction | F. King | 732,418 | June 30 | 5404 | 1198 | 104 | 2314 |
| Leach-pitcher | J. R. Morrison | 728,125 | May 12 | 2450 | 546 | 104 | 539 |
| Leaching-tank | W. E. Holderman | 741,402 | Oct. 13 | 1939 | 429 | 106 | 1680 |
| Leaching-tank filter | F. G. Underwood | 727,230 | May 5 | 768 | 164 | 104 | 166 |
| Lead. Electrodeposited | A. G. Betts. (Reissue) | 12,117 | June 9 | 2396 | 529 | 104 | 1642 |
| Lead or other metals from ores or mattes. Obtaining | C. Hoepfner | 735,098 | Aug 4 | 92 | | 105 | 1003 |
| Lead peroxid. Manufacture of | E. Quedenfeldt | 734,950 | July 28 | 4180 | 973 | 105 | 928 |

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| Invention. | Name. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | | Spec. | Dr'g. | Vol. | Page. |
| Lead pigments. Manufacturing | A. C. J. Charlier | 720,670 | Feb. 17 | 2359 | 540 | 102 | 1348 |
| Lead, silver, or zinc ores. Treating | S. Ganelin | 741,653 | Oct. 20 | 2424 | ..... | 106 | 1798 |
| Lead sucrate. Making | A. Wohl | 726,130 | Apr. 21 | 3136 | ..... | 103 | 1863 |
| Leaf-holder for directories, &c | C. E. Napp | 732,429 | June 30 | 5425 | 1204 | 104 | 2318 |
| Leaf-holding device | F. C. Klee | 747,188 | Dec. 15 | 3449 | 782 | 107 | 1894 |
| Leaf or sheet turner | W. A. Moulton | 744,384 | Nov. 17 | 3122 | 671 | 107 | 697 |
| Leaf-spring | T. A. Shea | 718,733 | Jan. 20 | 2311 | 511 | 102 | 522 |
| Leaf support. Automatic hinged | F. A. Schuehle and H. K. Horn | 734,757 | July 28 | 3827 | 892 | 105 | 853 |
| Leaf-turner | C. A. Evans | 746,803 | Dec. 15 | 2709 | 624 | 107 | 1724 |
| Leak-stopper | J. Philp | 746,990 | Dec. 15 | 3087 | 707 | 107 | 1811 |
| Leather-board-making machine | E. D. Alvord | 727,872 | May 12 | 1987 | 442<br>443 | 104 | 440 |
| Leather-board or similar material. Machine for manufacturing | A. H. Thompson | 746,404 | Dec. 8 | 1993 | 455 | 107 | 1545 |
| Leather burnishing or finishing machine | W. O. Penniman | 739,922 | Sept. 29 | 4605 | 1034 | 106 | 1051 |
| Leather-creasing machine | H. L. Plummer, Jr., and C. D. Witherspoon. | 746,150 | Dec. 8 | 1541 | 345 | 107 | 1449 |
| Leather-cutting knife | J. W. Wineman and A. D. Maddox | 742,946 | Nov. 3 | 218 | 49 | 107 | 48 |
| Leather-cutting machine. Sole | G. D. Clapp | 734,819 | July 28 | 3956 | 923<br>924 | 105 | 881 |
| Leather-dressing machine | H. C. Lavington | 730,931 | June 16 | 2555 | 569 | 104 | 1695 |
| Leather-finishing machine | C. Shepard | 736,160 | Aug. 11 | 2125 | 456 | 105 | 1453 |
| Leather joint. Peg-strip | B. O. Béland | 738,150 | Sept. 8 | 1192 | 263 | 106 | 273 |
| Leather. Machine for treating shin or shank | A. F. Stowe | 740,709 | Oct. 6 | 595 | 133 | 106 | 1375 |
| Leather. Making patent | W. R. Smith | 732,129 | June 30 | 4833 | 1078 | 104 | 2195 |
| Leather. Manufacture of artificial | G. Gautier | 736,957 | Aug. 25 | 3615 | ..... | 105 | 1804 |
| Leather. Manufacturing artificial | L. G. Naert | 719,787 | Feb. 3 | 689 | ..... | 102 | 969 |
| Leather. Ornamenting | S. Slade and R. Goldstein | 735,836 | Aug. 11 | 1533 | 329 | 105 | 1327 |
| Leather. Producing grain | M. Pianko | 743,099 | Nov. 3 | 538 | ..... | 107 | 113 |
| Leather skiving and folding machine | F. L. Harmon | 731,566 | June 23 | 3769 | 840<br>841 | 104 | 1960 |
| Leather-snipping machine | N. Hayward | 732,185 | June 30 | 4955 | 1101<br>1102 | 104 | 2220 |
| Leather-splitting machine | W. D. Quigley and J. H. Gay | 718,655 | Jan. 20 | 2157 | 471<br>472<br>473 | 102 | 491 |
| Leather-splitting-machine spring-roll | W. D. Quigley and J. H. Gay | 727,838 | May 12 | 1926 | 429 | 104 | 428 |
| Leather-splitting-machine stripping-plate | J. H. Gay and W. D. Quigley | 747,411 | Dec. 22 | 3877 | 873 | 107 | 2004 |
| Leather-staking machine | H. Roeske | 719,878 | Feb. 3 | 847 | 198 | 102 | 1002 |
| Leather-staking machine | F. F. Slocomb and J. Craig | 722,461 | Mar. 10 | 1504 | 332 | 103 | 337 |
| Leather-staking machine | E. Printz | 729,412 | May 26 | 4815 | 1068 | 104 | 1068 |
| Leather. Stirrup | J. P. Wroe | 728,819 | May 19 | 3766 | 841 | 104 | 838 |
| Leather-stock. Machine for making pasted | P. Belle | 743,972 | Nov. 10 | 2274 | 489<br>490<br>491 | 107 | 502 |
| Leather-stock-moistening apparatus | R. W. Blaisdell | 740,388 | Oct. 6 | 8 | 2, 3 | 106 | 1246 |
| Leather-stretching hook | J. Hurley | 747,430 | Dec. 22 | 3909 | 880 | 107 | 2011 |
| Leather-stretching machine | F. F. Williams | 742,140 | Oct. 20 | 3417 | 762 | 106 | 2001 |
| Leather. Tumbling-drum for | W. A. McManus | 739,613 | Sept. 22 | 3997 | 891<br>892 | 106 | 903 |
| Leather-working machine | H. F. Dougherty | 726,267 | Apr. 28 | 3395 | 771<br>772 | 103 | 1932 |
| Leaves from their stems. Apparatus for separating the lateral portions of | L. P. Whitaker | 741,863 | Oct. 20 | 2817 | 626<br>627 | 106 | 1882 |
| Ledger | F. Peters | 724,496 | Apr. 7 | 141 | 34 | 103 | 1200 |
| Ledger and compressor. Loose-leaf | E. T. A. Akass | 736,341 | Aug. 18 | 2441 | 533 | 105 | 1539 |
| Ledger. Bank | E. Ford | 720,414 | Feb. 10 | 1840 | 419<br>420 | 102 | 1229 |
| Ledger-footings. Device for guiding | C. A. Shea | 743,762 | Nov. 10 | 1887 | 399 | 107 | 420 |
| Ledger. General | C. A. Schofield | 721,969 | Mar. 3 | 592 | 132 | 103 | 129 |
| Ledger. Loose-leaf | F. B. Towne | 721,623 | Feb. 24 | 4168 | 947 | 102 | 1753 |
| Ledger or binder leaf | J. Baker and W. N. Winfield | 745,475 | Dec. 1 | 317 | 74 | 107 | 1167 |
| Ledger or similar book. Bank | J. H. Rand | 746,157 | Dec. 8 | 1555 | 348 | 107 | 1452 |
| Leg. Adjustable metal | J. Caesar | 734,509 | July 28 | 3346 | 783 | 105 | 755 |
| Leg. Artificial | O. P. R. Pold | 741,411 | Oct. 13 | 1950 | 432 | 106 | 1683 |
| Leg. Artificial | C. E. Stone | 741,849 | Oct. 20 | 2797 | 622 | 106 | 1878 |
| Leg. Artificial | C. A. Frees | 742,853 | Nov. 3 | 62 | 15 | 107 | 16 |
| Leg. Artificial | J. Johnston | 746,336 | Dec. 8 | 1881 | 429 | 107 | 1520 |
| Leg. Extensible telescopic | W. A. and L. D. Schofield | 719,146 | Jan. 27 | 3104 | 690 | 102 | 701 |
| Legging-fastening | L. H. Morgan | 736,764 | Aug. 18 | 3236 | 714 | 105 | 1704 |
| Lemon-squeezer | M. Redlinger, Jr. | 722,898 | Mar. 17 | 2338 | 523 | 103 | 527 |
| Lemon-squeezer | J. Kress | 726,075 | Apr. 21 | 3029 | 688 | 103 | 1842 |
| Lemon-squeezer | R. L. Dorsey | 735,728 | Aug. 11 | 1322 | 285 | 105 | 1280 |
| Lemon-squeezer | W. H. Ostrander | 747,567 | Dec. 22 | 4149 | 932 | 107 | 2066 |
| Lens-carriage. Laterally-adjustable | F. B. Case | 736,214 | Aug. 11 | 2213 | 476 | 105 | 1472 |
| Lens for spectacles or the like | C. O. Schneider | 744,982 | Nov. 24 | 4195 | 907 | 107 | 940 |
| Lens-grinding machine | G. A. Bader | 737,313 | Aug. 25 | 4264 | 948<br>949 | 105 | 1940 |
| Lens-grinding machine | E. M. Long and C. W. Howland | 739,264 | Sept. 15 | 3352 | 745 | 106 | 749 |
| Lens-wrapper | E. Riggs | 718,523 | Jan. 13 | 1906 | 418 | 102 | 426 |
| Lenses. Means for making bifocal optical | T. Mundorff | 729,781 | June 2 | 475 | 106 | 104 | 1225 |
| Lenses or the like. Temple and spring-clamp for | E. L. Lembke | 718,363 | Jan. 13 | 1563 | 345 | 102 | 350 |
| Letter-box | B. W. Parker | 722,323 | Mar. 10 | 1241 | 276 | 103 | 280 |
| Letter-box | H. B. Lambert | 726,821 | Apr. 28 | 4479 | 1011 | 103 | 2150 |
| Letter-box | M. Keller | 735,389 | Aug. 4 | 664 | 141 | 105 | 1122 |
| Letter-box | E. F. Wallace | 745,938 | Dec. 1 | 1146 | 257 | 107 | 1344 |
| Letter-box lid-operating device | G. E. Benton | 728,839 | May 26 | 3821 | 851 | 104 | 865 |
| Letter-box. Rural-delivery | C. P. Young | 729,110 | May 26 | 4290 | 948 | 104 | 958 |
| Letter-boxes. Adjustable indicating-dial for | G. H. Huntington | 740,861 | Oct. 6 | 889 | 198<br>199 | 106 | 1435 |
| Letter-carrier's routing-table and filing-case | C. C. Fields | 731,559 | June 23 | 3757 | 837 | 104 | 1958 |
| Letter-embossing machine | W. G. Reynolds and T. D. McCluskey. | 725,139 | Apr. 14 | 1344 | 303<br>304 | 103 | 1469 |
| Letter-opener | I. Minnich | 734,590 | July 28 | 3500 | 817 | 105 | 789 |
| Letter-opener | H. C. Zenke | 745,090 | Nov. 24 | 4436 | 960 | 107 | 988 |
| Letter-sheet and return-sheet. Combined | R. R. Lawson | 730,933 | June 16 | 2560 | 570 | 104 | 1696 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | | Spec. | Dr'g. | Vol. | Page. |
| Letter. Sign- | B. V. Kostka | 722,592 | Mar. 10 | 1739 | 387 | 103 | 389 |
| Letter system. Return- | F. H. Mann and J. J. Collister | 734,077 | July 21 | 2541 | 592<br>593 | 105 | 572 |
| Letters, &c. Device for forming | W. F. Blount | 725,205 | Apr. 14 | 1470 | 334 | 103 | 1496 |
| Letters for advertising-boards. Movable | T. Knoblich | 726,702 | Apr. 28 | 4257 | 962 | 103 | 2105 |
| Level | R. W. Hodgins | 720,145 | Feb. 10 | 1353 | 309 | 102 | 1127 |
| Level | J. A. Traut | 726,377 | Apr. 28 | 3626 | 822 | 103 | 1980 |
| Level | H. T. Dillon | 740,255 | Sept. 29 | 5216 | 1172 | 106 | 1180 |
| Level and attachment. Combined | H. J. Wolfe | 729,480 | May 26 | 4923 | 1091 | 104 | 1093 |
| Level and grade-finder. Combined | C. J. Weber | 739,242 | Sept. 15 | 3313 | 734 | 100 | 740 |
| Level and inclinometer. Combined | T. S. Tilley | 740,491 | Oct. 6 | 208 | 41 | 106 | 1290 |
| Level and plumb | D. F. Collicutt | 736,073 | Aug. 11 | 1985 | 422 | 105 | 1424 |
| Level and plumb. Combination | H. V. Green | 721,694 | Mar. 3 | 82 | 17 | 103 | 18 |
| Level and quadrant. Carpenter's | W. Potter | 743,100 | Nov. 3 | 540 | 117 | 107 | 113 |
| Level. Plumb- | D. N. Allard | 729,521 | June 2 | 1 | 1 | 104 | 1127 |
| Level. Plumb- | W. B. Bradshaw | 745,146 | Nov. 24 | 4557 | 988 | 107 | 1013 |
| Level. Spirit- | E. Stowe | 720,855 | Feb. 17 | 2661 | 614 | 102 | 1413 |
| Level. Spirit- | P. D. Smith | 730,487 | June 9 | 1761 | 394 | 104 | 1505 |
| Level. Spirit- | A. J. Mercer | 741,406 | Oct. 13 | 1944 | 431 | 106 | 1681 |
| Level. Spirit- | J. Lemle | 741,801 | Oct. 20 | 2717 | 605 | 106 | 1859 |
| Level. Spirit- | G. L. Davis | 742,010 | Oct. 20 | 3136 | 700 | 106 | 1946 |
| Level. Spirit- | A. Bihlman | 747,850 | Dec. 22 | 4682 | 1058 | 107 | 2188 |
| Leveling instrument | J. A. Traut | 719,061 | Jan. 27 | 2930 | 655 | 102 | 666 |
| Leveling instrument. Automatic | J. W. Belyeu | 732,258 | June 30 | 5097 | 1134 | 104 | 2250 |
| Leveling-staff | K. Hein | 723,526 | Mar. 24 | 3498 | 782 | 103 | 777 |
| Lever connection | J. J. Green | 735,092 | Aug. 4 | 84 | 20 | 105 | 1000 |
| Lever-controller | G. Baehr | 745,760 | Dec. 1 | 789 | 181 | 107 | 1266 |
| Lever-controlling mechanism | W. R. McKeen, Jr | 743,913 | Nov. 10 | 2166 | 467 | 107 | 477 |
| Lever. Gripping- | W. H. Carter | 723,827 | Mar. 31 | 4031 | 909 | 103 | 905 |
| Lever-handle lock | E. Andrews | 724,419 | Apr. 7 | 6 | 1,2 | 103 | 1171 |
| Lever-jack | W. Trewhella | 723,558 | Mar. 24 | 3550 | 794 | 103 | 787 |
| Lever. Lock- | M. N. Kirkhuff | 734,420 | July 21 | 3180 | 747 | 105 | 705 |
| Lever-locking device. Hand- | W. W. Tuck and A. Wassmann | 720,758 | Feb. 17 | 2507 | 578 | 102 | 1381 |
| Lever. Ratchet- | L. P. Jacobs | 740,863 | Oct. 6 | 891 | 199 | 106 | 1436 |
| Lever. Shifting- | M. C. Johnson | 717,861 | Jan. 6 | 665 | 147 | 102 | 142 |
| Levers. Supporting-bracket for unlocking- | J. Timms | 717,947 | Jan. 6 | 803 | 181 | 102 | 172 |
| Lewis-bolt | N. W. Rancourt | 718,582 | Jan. 13 | 2041 | 443 | 102 | 454 |
| Library or like indicator | R. Maconochie | 730,034 | June 2 | 939 | 210 | 104 | 1319 |
| Lid-fastener | J. F. Fields | 741,645 | Oct. 20 | 2413 | 540 | 106 | 1796 |
| Life-belt | F. W. Kern | 731,058 | June 16 | 2800 | 623 | 104 | 1745 |
| Life-belt-inflating device | J. Ewing, Jr | 719,316 | Jan. 27 | 3416 | 762 | 102 | 768 |
| Life-belt. Pneumatic | J. A. Malmqvist | 731,314 | June 16 | 3284 | 731 | 104 | 1843 |
| Life-pail. Marine | H. H. Herrendeen | 743,721 | Nov. 10 | 1818 | 383 | 107 | 405 |
| Life-preserver | I. W. Maccolini | 721,813 | Mar. 3 | 282 | 62 | 103 | 62 |
| Life-preserver | B. Goldstein | 724,279 | Mar. 31 | 4959 | 1110 | 103 | 1093 |
| Life-preserver | J. A. Elenius | 727,318 | May 5 | 922 | 201 | 104 | 199 |
| Life-preserver | E. Recordon | 727,444 | May 5 | 1159 | 255 | 104 | 251 |
| Life-preserver | W. N. Morrison | 728,745 | May 19 | 3630 | 806 | 104 | 810 |
| Life-preserver | G. W. Mitchell | 741,526 | Oct. 13 | 2184 | 485 | 106 | 1732 |
| Life-preserver and swimming apparatus | W. P. Tibbits | 726,784 | Apr. 28 | 4412 | 994 | 103 | 2136 |
| Life-preserver. Marine | J. Ewing, Jr | 719,654 | Feb. 3 | 431 | 99 | 102 | 912 |
| Life-preserving garments. Inflatable air-bag for | H. Kuhlmann | 723,883 | Mar. 31 | 4139 | 932 | 103 | 927 |
| Life-raft | H. S. Carley | 734,118 | July 21 | 2621 | 617 | 105 | 587 |
| Life-raft for ships. Detachable | B. W. Booker | 738,400 | Sept. 8 | 1731 | 376 | 106 | 388 |
| Life-saving appliance | C. J. Dampf | 728,208 | May 19 | 2597 | 580<br>581 | 104 | 593 |
| Life-saving device | J. Moore | 744,590 | Nov. 17 | 3466 | 747 | 107 | 769 |
| Lift | H. D. Barlow | 737,316 | Aug. 25 | 4274 | 950 | 105 | 1942 |
| Lift | R. F. Carey | 747,317 | Dec. 15 | 3710 | 836 | 107 | 1950 |
| Lift-cutting and heel-building apparatus | D. M. Beck | 728,658 | May 19 | 3479 | 772<br>773 | 104 | 779 |
| Lift. Tradesman's | C. A. Bouck | 722,444 | Mar. 10 | 1467 | 324<br>325 | 103 | 329 |
| Lifter:<br>*See* Barrel-lifter. Building-block lifter. Invalid-lifter. Pan-lifter. Plate-lifter. Pump-lifter. Sash-lifter. Store-goods lifter. Thread-board lifter. Transom-lifter. Trap-door lifter. Wagon-body lifter. | | | | | | | |
| Lifter | W. H. Hendrix | 730,370 | June 9 | 1538 | 342 | 104 | 1458 |
| Lifting and dropping gate | A. Clawson | 725,043 | Apr. 14 | 1161 | 262 | 103 | 1433 |
| Lifting device | H. F. Beeman | 725,923 | Apr. 21 | 2789 | 633 | 103 | 1792 |
| Lifting device | B. F. Lanham | 728,941 | May 26 | 3989 | 888 | 104 | 897 |
| Lifting device. Article- | F. G. Neumann | 723,296 | Mar. 24 | 3057 | 687 | 103 | 690 |
| Lifting-jack | H. Dearborn | 718,947 | Jan. 20 | 2715 | 607 | 102 | 607 |
| Lifting-jack | J. W. Garland and A. P. Aiken | 719,457 | Feb. 3 | 79 | 19, 20 | 102 | 842 |
| Lifting-jack | J. T. Haskin | 721,439 | Feb. 24 | 3810 | 867 | 102 | 1674 |
| Lifting-jack | L. O. Henggi and E. Woodings | 721,518 | Feb. 24 | 3949 | 899 | 102 | 1703 |
| Lifting-jack | W. J. Lockhart | 727,395 | May 5 | 1061 | 230 | 104 | 229 |
| Lifting-jack | T. Wright | 730,329 | June 9 | 1461 | 323 | 104 | 1442 |
| Lifting-jack | E. T. Ogle | 731,704 | June 23 | 4023 | 898 | 104 | 2010 |
| Lifting-jack | W. H. Cox | 732,523 | June 30 | 5611 | 1243 | 104 | 2355 |
| Lifting-jack | R. B. Murphy | 733,414 | July 14 | 1291 | 304 | 105 | 289 |
| Lifting-jack | W. H. Oliver | 737,655 | Sept. 1 | 179 | 38 | 106 | 42 |
| Lifting-jack | B. L. Adair | 737,891 | Sept. 1 | 673 | 143 | 106 | 147 |
| Lifting-jack | E. M. Robinson | 739,619 | Sept. 22 | 4008 | 894<br>895 | 106 | 905 |
| Lifting-jack | G. B. Davison | 739,654 | Sept. 22 | 4084 | 910 | 106 | 923 |
| Lifting-jack | W. W. Simonton | 740,597 | Oct. 6 | 418 | 90 | 106 | 1335 |
| Lifting-jack | G. Stockamp | 742,083 | Oct. 20 | 3326 | 742 | 106 | 1983 |
| Lifting-jack | J. J. McFerrin | 742,126 | Oct. 20 | 3392 | 757 | 106 | 1996 |
| Lifting-jack | F. Durgin | 743,260 | Nov. 3 | 863 | 188 | 107 | 181 |
| Lifting-jack | A. R. Bolin and J. B. Goff | 745,142 | Nov. 24 | 4527 | 980 | 107 | 1010 |
| Lifting-jack | T. Hampton | 745,180 | Nov. 24 | 4628 | 1003 | 107 | 1030 |

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| Invention. | Name. | No | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Lifting-jack | F. M. Williams | 748,127 | Dec. 29 | 5259 | 1194 | 107 | 2334 |
| Lifting-jack and propelling means therefor. Combined | C. E. Roth | 748,311 | Dec. 29 | 5577 | 1272 | 107 | 2402 |
| Lifting-jack and stump-puller. Combined | C. G. Hoffmann | 723,155 | Mar. 17 | 2781 | 627 | 103 | 618 |
| Lifting-jack for vehicles. Spring | O. E. Payne | 727,192 | May 5 | 697 | 149 | 104 | 151 |
| Lifting-jack. Screw | J. C. Covert | 718,431 | Jan. 13 | 1685 | 372 | 102 | 375 |
| Lifting or screw jack | J. M. Marzolf | 733,240 | July 7 | 964 | 232 | 105 | 202 |
| Ligature-receptacle. Aseptic | H. L. Cox | 728,444 | May 19 | 3053 | 672 | 104 | 688 |
| Light: *See* Arc-light. Gas-light. Display-light. Night-light. Drop-light. Port-light. Electric light. Signal-light. Electric-arc light. Skylight. | | | | | | | |
| Light and rein holder. Combined | E. Browning | 730,203 | June 2 | 1212 | 271 | 104 | 1374 |
| Light-controller. Time | E. Newman | 731,208 | June 16 | 3080 | 684 | 104 | 1800 |
| Light-controller. Time | E. Newman | 742,054 | Oct. 20 | 3219 | 721 | 106 | 1963 |
| Light effects. Apparatus for producing colored | A. B. Porter | 734,133 | July 21 | 2650 | 625 | 105 | 593 |
| Light effects. System for operating | R. F. Spangenberg | 726,199 | Apr. 21 | 3266 | 741 | 103 | 1889 |
| Light projector. Colored | S. P. Van Nort | 738,707 | Sept. 8 | 2325 | 511 | 106 | 512 |
| Light rays. Coloring-screen for white | C. F. Schroeder and F. E. Lauffer | 720,491 | Feb. 10 | 1973 | 451 | 102 | 1256 |
| Light-shield | W. A. Burnham | 743,687 | Nov. 10 | 1759 | 371 | 107 | 391 |
| Light-transmitter | F. W. Porsch | 726,340 | Apr. 28 | 3552 | 805 | 103 | 1965 |
| Lighter | R. Thayer | 742,258 | Oct. 27 | 3656 | 817 | 106 | 2067 |
| Lighthouse or similar apparatus | J. A. and W. T. Purves | 718,217 | Jan. 13 | 1299 | 286 | 102 | 294 |
| Lighting apparatus | A. T. Kliegl | 720,935 | Feb. 17 | 2817 | 646 | 102 | 1446 |
| Lighting device | L. Erikson | 729,303 | May 26 | 4641 | 1025 | 104 | 1033 |
| Lighting. Fixture for vacuum-tube | D. M. Moore | 726,328 | Apr. 28 | 3533 | 800 | 103 | 1961 |
| Lighting, heating, and cooking apparatus. Combined | L. L. Smith | 747,010 | Dec. 15 | 3125 | 715 | 107 | 1818 |
| Lightning-arrester | J. P. Coleman | 720,226 | Feb. 10 | 1511 | 346 | 102 | 1158 |
| Lightning-arrester | W. J. Chapman | 721,939 | Mar. 3 | 539 | 118, 119 | 103 | 119 |
| Lightning-arrester | H. M. Shaw | 724,339 | Mar. 31 | 5070 | 1134 | 103 | 1116 |
| Lightning-arrester | H. E. Raymond | 727,687 | May 12 | 1624 | 369 | 104 | 367 |
| Lightning-arrester | H. E. Raymond | 727,688 | May 12 | 1625 | 369 | 104 | 368 |
| Lightning-arrester | A. J. Wilson | 729,472 | May 26 | 4912 | 1088 | 104 | 1090 |
| Lightning-arrester | L. Bell | 730,601 | June 9 | 1970 | 438 | 104 | 1551 |
| Lightning-arrester | H. E. Raymond | 744,106 | Nov. 17 | 2588 | 553 | 107 | 581 |
| Lightning-arrester | C. E. Nicholas | 745,114 | Nov. 24 | 4479 | 969 | 107 | 999 |
| Lightning arrester and protector | J. Davis | 738,988 | Sept. 15 | 2848 | 632 | 106 | 643 |
| Lightning-arrester for electrical plants | G. Honsberg | 730,211 | June 2 | 1227 | 274 | 104 | 1377 |
| Lightning-protector | J. D. Timmerman | 737,173 | Aug. 25 | 3993 | 885 | 105 | 1883 |
| Limb. Artificial | E. H. Erickson | 733,472 | July 14 | 1393 | 328 | 105 | 312 |
| Limb. Artificial | J. K. Shanaman | 740,476 | Oct. 6 | 177 | 34, 35 | 106 | 1283 |
| Limb. Artificial | J. F. Rowley | 744,801 | Nov. 24 | 3872 | 883 | 107 | 873 |
| Limb joint. Artificial | E. Koeber | 727,383 | May 5 | 1041 | 226 | 104 | 224 |
| Limb-support | G. E. Brown | 740,740 | Oct. 6 | 658 | 149 | 106 | 1388 |
| Limb-support | G. E. Brown | 740,741 | Oct. 6 | 660 | 149 | 106 | 1388 |
| Lime and gas. Manufacture of | J. J. McTighe | 736,869 | Aug. 18 | 3444 | 763 | 105 | 1748 |
| Lime or cement kiln | C. S. Batchelder | 718,075 | Jan. 13 | 1042 | 232 | 102 | 239 |
| Lime-squeezer and ice-tongs. Combined | C. A. Eberth | 724,829 | Apr. 7 | 775 | 180 | 103 | 1336 |
| Lime-sucrate-making apparatus | G. Dinkel | 734,164 | July 21 | 2704 | 637 | 105 | 605 |
| Lime sucrate. Obtaining | G. Dinkel | 734,223 | July 21 | 2811 | 659 | 105 | 628 |
| Lime. Treating | B. E. Eldred | 721,871 | Mar. 3 | 398 | ------ | 103 | 87 |
| Lime. Treating | J. J. Feely | 747,689 | Dec. 22 | 4380 | ------ | 107 | 2117 |
| Limekiln | H. Ragot | 724,936 | Apr. 7 | 949 | 218 | 103 | 1372 |
| Limekiln | P. Martin | 730,467 | June 9 | 1730 | 386 | 104 | 1498 |
| Limekiln | S. W. Shoop | 745,248 | Nov. 24 | 4740 | 1035 | 107 | 1053 |
| Limekiln-door | S. W. Shoop | 745,249 | Nov. 24 | 4741 | 1035 | 107 | 1053 |
| Limekiln-economizer | T. Ryan | 727,845 | May 12 | 1938 | 431, 432 | 104 | 430 |
| Limit-gage | J. W. Newall | 720,730 | Feb. 17 | 2465 | 565 | 102 | 1372 |
| Line-casting machine | W. S. Scudder | 733,559 | July 14 | 1539 | 366 | 105 | 343 |
| Line-casting machine | W. S. Scudder | 734,437 | July 21 | 3211 | 756 | 105 | 712 |
| Line-holder | W. J. Doty | 741,468 | Oct. 13 | 2078 | 461 | 106 | 1710 |
| Line-holder | H. L. Marks | 744,217 | Nov. 17 | 2819 | 602 | 107 | 631 |
| Line-holder | J. H. Lee | 744,772 | Nov. 24 | 3820 | 823 | 107 | 862 |
| Line-lock | J. Simmons | 731,327 | June 16 | 3304 | 737 | 104 | 1847 |
| Line-switch. High-potential | E. M. Hewlett | 729,172 | May 26 | 4400 | 971 | 104 | 981 |
| Lineman's implement | S. Kirlin | 728,728 | May 19 | 3601 | 799 | 104 | 804 |
| Link-block | J. E. Arthur and A. D. Karr | 727,732 | May 12 | 1724 | 387 | 104 | 388 |
| Link for shirt-cuffs or the like | J. Tritsch | 739,362 | Sept. 22 | 3518 | 787 | 106 | 800 |
| Link-forming machine | A. S. Standish | 728,320 | May 19 | 2846 | 629 | 104 | 645 |
| Link. Fusible | C. B. Shaw and W. B. Knight | 725,495 | Apr. 14 | 2005 | 453 | 103 | 1610 |
| Link. Lap | R. M. Wakefield | 747,103 | Dec. 15 | 3299 | 751 | 107 | 1862 |
| Link. Weldless | H. L. Ferris | 717,562 | Jan. 6 | 75 | 19 | 102 | 18 |
| Linoleum having patterns resembling wood or fabric. Producing | L. W. Seeser | 720,627 | Feb. 17 | 2281 | ------ | 102 | 1332 |
| Linoleum. Machinery for manufacturing patterned | P. Blaubach | 736,676 | Aug. 18 | 3078 | 678 | 105 | 1671 |
| Linoleum. Manufacture of patterned | K. Klic and O. Poppe | 718,477 | Jan. 13 | 1786 | ------ | 102 | 395 |
| Linoleum or like coated fabrics. Composition for use in manufacture of | J. A. Shepherd | 728,507 | May 19 | 3171 | ------ | 104 | 712 |
| Linoleum products. Making | L. W. Seeser | 728,997 | May 26 | 4087 | 907 | 104 | 918 |
| Linoleum products. Making double-layered | L. W. Seeser | 737,214 | May 5 | 743 | 159 | 104 | 160 |
| Linotype-galley | F. E. Milholland | 726,725 | Apr. 28 | 4292 | 969 | 103 | 2112 |
| Linotype-leader | J. A. Proulx | 744,102 | Nov. 17 | 2582 | 551, 552 | 107 | 580 |
| Linotype-machine | C. Muehleisen | 718,781 | Jan. 20 | 2401 | 533 | 102 | 541 |
| Linotype-machine | H. B. Bartlett | 719,296 | Jan. 27 | 3372 | 753 | 102 | 758 |
| Linotype-machine | G. A. Bates | 719,422 | Feb. 3 | 18 | 4,5 | 102 | 830 |
| Linotype-machine | J. W. Champion | 719,436 | Feb. 3 | 46 | 10 | 102 | 835 |
| Linotype-machine | F. X. Fleck | 720,795 | Feb. 17 | 2568 | 591 | 102 | 1393 |
| Linotype-machine | L. L. Kennedy | 720,817 | Feb. 17 | 2596 | 599 | 102 | 1399 |
| Linotype-machine | L. Cesana | 722,284 | Mar. 10 | 1176 | 260 | 103 | 266 |

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| Invention. | Name. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | | Spec. | Dr'g. | Vol. | Page. |
| Linotype-machine | G. A. Bates | 722,353 | Mar. 10 | 1297 | 287 | 103 | 291 |
| Linotype-machine | G. A. Bates | 722,354 | Mar. 10 | 1298 | 288 | 103 | 292 |
| Linotype-machine | J. S. Thompson | 723,073 | Mar. 17 | 2633 | 593 | 103 | 589 |
| Linotype-machine | C. Muehleisen | 725,861 | Apr. 21 | 2680 | 610 | 103 | 1770 |
| Linotype-machine | S. J. Briden | 726,019 | Apr. 21 | 2948 | 670 | 103 | 1824 |
| Linotype-machine | P. T. Dodge | 726,412 | Apr. 28 | 3680 | 834 | 103 | 1991 |
| Linotype-machine | P. T. Dodge | 727,914 | May 12 | 2066 | 460 | 104 | 458 |
| Linotype-machine | G. A. Bates | 730,734 | June 9 | 2192 | 488 | 104 | 1598 |
| Linotype-machine | J. S. Thompson | 732,383 | June 30 | 5341 | 1183, 1184 | 104 | 2300 |
| Linotype-machine | J. R. Rogers | 734,096 | July 21 | 2570 | 601, 602, 603, 604, 605 | 105 | 578 |
| Linotype-machine | J. S. Thompson | 734,106 | July 21 | 2601 | 610, 611, 612, 613 | 105 | 583 |
| Linotype-machine | P. T. Dodge | 734,121 | July 21 | 2627 | 618, 619, 620, 621 | 105 | 589 |
| Linotype-machine | D. A. Poe and W. H. Scharf | 734,746 | July 28 | 3794 | 885, 886, 887 | 105 | 847 |
| Linotype-machine | J. L. Ebaugh | 735,226 | Aug. 4 | 376 | 72 | 105 | 1061 |
| Linotype-machine | J. L. Ebaugh | 739,591 | Sept. 22 | 3962 | 884 | 106 | 896 |
| Linotype-machine | P. T. Dodge | 739,996 | Sept. 29 | 4741 | 1066 | 106 | 1080 |
| Linotype-machine | J. R. Rogers | 740,470 | Oct. 6 | 167 | 33 | 106 | 1281 |
| Linotype-machine | H. B. Bartlett | 741,294 | Oct. 13 | 1715 | 383, 384 | 106 | 1629 |
| Linotype-machine | P. T. Dodge | 741,957 | Oct. 20 | 3023 | 670, 671, 672, 673, 674 | 106 | 1925 |
| Linotype-machine | J. G. Holbourns and H. A. Longhurst. | 743,284 | Nov. 3 | 904 | 197 | 107 | 192 |
| Linotype-machine | O. Mergenthaler and E. Lawrenz | 744,087 | Nov. 17 | 2550 | 546, 547 | 107 | 572 |
| Linotype-machine | J. K. Van Valkenburg | 746,415 | Dec. 8 | 2012 | 458, 459 | 107 | 1548 |
| Linotype-machine and matrix therefor | S. Smith | 719,270 | Jan. 27 | 3318 | 743 | 102 | 746 |
| Linotype-machine matrix and justifying device | F. C. L. D'Aix | 747,832 | Dec. 22 | 4644 | 1049 | 107 | 2178 |
| Linotype-machine nipple | J. B. Allen | 733,571 | July 14 | 1571 | 374 | 105 | 350 |
| Linotype-machines. Automatic signaling device for | J. Burger | 747,534 | Dec. 22 | 4098 | 920 | 107 | 2054 |
| Linotype-machines. Means for setting tabular matter in | T. Martin | 720,270 | Feb. 10 | 1590 | 363, 364 | 102 | 1176 |
| Linotype-matrix cleaner | C. P. Rubly | 740,471 | Oct. 6 | 168 | 33 | 106 | 1281 |
| Linotype or other type-casting machines. Space-bar for | P. F. Jones | 734,879 | July 28 | 4060 | 947 | 105 | 902 |
| Liquid and gaseous fuel burner | J. W. Bain and C. C. Durborow | 728,832 | May 26 | 3802 | 847, 848 | 104 | 861 |
| Liquid and pulverized fuel burner | W. W. Weaver | 738,131 | Sept. 1 | 1139 | 254 | 106 | 246 |
| Liquid-containing-vessel indicator | M. M. Wood | 739,629 | Sept. 22 | 4033 | 809 | 106 | 912 |
| Liquid-cooler | M. A. Connor | 736,221 | Aug. 11 | 2222 | 478 | 105 | 1474 |
| Liquid-cooler | O. Roderwald | 744,111 | Nov. 17 | 2604 | 556 | 107 | 584 |
| Liquid-cooler | O. Roderwald | 747,641 | Dec. 22 | 4298 | 966 | 107 | 2099 |
| Liquid-cooling apparatus | H. Flügge | 739,595 | Sept. 22 | 3967 | 885 | 106 | 897 |
| Liquid-delivery apparatus. Check-controlled | H. Feldmeier | 737,091 | Aug. 25 | 3838 | 853, 854 | 105 | 1851 |
| Liquid-delivery case and cooler | C. E. Flinder | 736,916 | Aug. 18 | 3526 | 783, 784 | 105 | 1765 |
| Liquid-depth gage | E. Wright | 735,330 | Aug. 4 | 559 | 114 | 105 | 1101 |
| Liquid-discharging device | W. C. Morrill | 743,093 | Nov. 3 | 531 | 115 | 107 | 111 |
| Liquid-dispensing apparatus | M. Masterson | 744,085 | Nov. 17 | 2548 | 546 | 107 | 572 |
| Liquid-dispensing vessel | L. G. Langstaff | 726,545 | Apr. 28 | 3953 | 893 | 103 | 2042 |
| Liquid-dispensing vessel | J. F. Medley | 745,876 | Dec. 1 | 1045 | 235 | 107 | 1321 |
| Liquid-distributing system | F. C. Birch | 731,661 | June 23 | 3948 | 878 | 104 | 1995 |
| Liquid-drawing-off apparatus | A. Brake | 725,211 | Apr. 14 | 1480 | 336 | 103 | 1498 |
| Liquid-elevating apparatus | F. J. Longdon | 740,151 | Sept. 29 | 5018 | 1128 | 106 | 1140 |
| Liquid-filling apparatus | R. C. White | 738,138 | Sept. 1 | 1159 | 257 | 106 | 250 |
| Liquid from liquid containing same. Apparatus for separating volatile | W. Erben and J. A. M. Wass | 736,240 | Aug. 11 | 2257 | 488 | 105 | 1482 |
| Liquid-fuel and air burner | P. Blodget | 738,978 | Sept. 15 | 2836 | 629 | 106 | 640 |
| Liquid-fuel burner | D. H. Mosteller | 718,859 | Jan. 20 | 2535 | 564 | 102 | 568 |
| Liquid-fuel burner | J. G. Branch | 724,253 | Mar. 31 | 4910 | 1099 | 103 | 1083 |
| Liquid-fuel burner | E. G. Ofeldt | 724,491 | Apr. 7 | 136 | 32 | 103 | 1199 |
| Liquid-fuel burner | R. G. Kirkwood | 727,380 | May 5 | 1037 | 225 | 104 | 223 |
| Liquid-fuel burner | C. W. Spicer | 728,140 | May 12 | 2474 | 550, 551 | 104 | 544 |
| Liquid-fuel burner | N. Beck and R. Dior | 728,356 | May 19 | 2909 | 642 | 104 | 657 |
| Liquid-fuel burner | J. B. Bladon | 733,693 | July 14 | 1761 | 418 | 105 | 388 |
| Liquid-fuel burner | J. W. Neumann | 734,930 | July 28 | 4140 | 964 | 105 | 920 |
| Liquid-fuel burner | H. A. Frantz | 737,602 | Sept. 1 | 86 | 18 | 106 | 21 |
| Liquid-fuel-burner automatic regulator | A. C. Stewart | 736,563 | Aug. 18 | 2839 | 622 | 105 | 1624 |
| Liquid-fuel furnace | A. Wengenroth | 723,564 | Mar. 24 | 3557 | 795 | 103 | 789 |
| Liquid-fuel-heater burner | M. G. Lewis | 742,460 | Oct. 27 | 4011 | 900 | 106 | 2140 |
| Liquid-fuel-heater burner | J. T. Pedersen | 744,098 | Nov. 17 | 2572 | 550 | 107 | 578 |
| Liquid-heater. Electric | F. O. Conill | 740,240 | Sept. 29 | 5193 | 1166 | 106 | 1175 |
| Liquid-heater. Electric | F. Briggs | 742,963 | Nov. 3 | 250 | 56 | 107 | 54 |
| Liquid-holder | E. G. Nelson | 729,788 | June 2 | 487 | 108 | 104 | 1227 |
| Liquid-level indicator | C. A. Tripp and G. R. Wadleigh | 722,645 | Mar. 10 | 1830 | 407 | 103 | 409 |

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| Invention. | Name. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|---|
| | | | | Spec. | Dr'g. | Vol. | Page. |
| Liquid-level indicator | L. Murphy | 732,578 | June 30 | 5720 | 1270 | 104 | 2381 |
| Liquid-meter | O. R. Pfau | 745,236 | Nov. 24 | 4716 | 1030, 1031 | 107 | 1048 |
| Liquid-meter. Self-acting | E. Gallo fu Giuseppe | 730,250 | June 9 | 1328 | 291, 292 | 104 | 1413 |
| Liquid-mixing apparatus | S. A. Smith | 721,974 | Mar. 3 | 603 | 134 | 103 | 131 |
| Liquid-purifying apparatus | G. D. Mitchell | 732,208 | June 30 | 4996 | 1111 | 104 | 2229 |
| Liquid-purifying system | J. J. Deery | 719,201 | Jan. 27 | 3193 | 712, 713 | 102 | 719 |
| Liquid-raising apparatus | A. Scholl | 724,051 | Mar. 31 | 4486 | 1011 | 103 | 998 |
| Liquid-raising apparatus | V. Schwaninger | 726,359 | Apr. 28 | 3592 | 815 | 103 | 1973 |
| Liquid-raising apparatus | V. Schwaninger | 745,529 | Dec. 1 | 403 | 92 | 107 | 1185 |
| Liquid-separator | P. L. Kimball | 726,438 | Apr. 28 | 3725 | 844, 845 | 103 | 1999 |
| Liquid-separator. Centrifugal | C. A. and O. W. Hult | 718,461 | Jan. 13 | 1755 | 390 | 102 | 389 |
| Liquid-separator. Centrifugal | O. Ohlsson | 718,724 | Jan. 20 | 2297 | 506, 507 | 102 | 519 |
| Liquid-separator. Centrifugal | J. J. Berrigan | 729,531 | June 2 | 22 | 6, 7 | 104 | 1131 |
| Liquid-separator. Centrifugal | T. Collins and E. L. Hartmann | 732,520 | June 30 | 5604 | 1242 | 104 | 2354 |
| Liquid-separator. Centrifugal | C. A. and O. W. Hult | 733,585 | July 14 | 1589 | 378 | 105 | 354 |
| Liquid-separator. Centrifugal | J. Mélotte | 734,585 | July 28 | 3490 | 815 | 105 | 787 |
| Liquid-separator. Centrifugal | G. Rennerfelt | 739,927 | Sept. 29 | 4615 | 1036 | 106 | 1054 |
| Liquid-separator. Centrifugal | M. L. Hoyt | 741,342 | Oct. 13 | 1835 | 405 | 106 | 1659 |
| Liquid-separator. Centrifugal | G. Rennerfelt | 744,938 | Nov. 24 | 4107 | 885 | 107 | 923 |
| Liquid-separator. Centrifugal | O. J. R. Ström | 747,499 | Dec. 22 | 4035 | 906 | 107 | 2040 |
| Liquid-separator. Centrifugal | J. H. Ayers | 748,038 | Dec. 29 | 5074 | 1148 | 107 | 2294 |
| Liquid-separator liner. Centrifugal | W. W. Marsh and C. H. Hackett | 724,195 | Mar. 31 | 4780 | 1071, 1072 | 103 | 1057 |
| Liquid-supply rolls. Controlling device for | J. White | 721,765 | Mar. 3 | 186 | 43, 44 | 103 | 41 |
| Liquid-supply rolls. Controlling device for | W. Spalckhaver | 742,249 | Oct. 27 | 3640 | 813, 814 | 106 | 2064 |
| Liquid-tank. Annular | O. Intze | 720,924 | Feb. 17 | 2801 | 642 | 102 | 1442 |
| Liquid-temperature regulator | H. A. R. Dietrich | 732,054 | June 30 | 4681 | 1045, 1046 | 104 | 2164 |
| Liquid-testing device | V. Spietschka | 744,123 | Nov. 17 | 2623 | 560 | 107 | 588 |
| Liquid-transfer apparatus | B. Ready | 731,071 | June 16 | 2827 | 628 | 104 | 1751 |
| Liquids, &c. Apparatus for controlling the delivery of viscous | C. F. Mendham | 732,738 | Mar. 17 | 2041 | 456 | 103 | 468 |
| Liquids. Apparatus for drawing gaseous | A. C. J. Charlier | 729,277 | May 26 | 4587 | 1013 | 104 | 1021 |
| Liquids. Apparatus for drawing off or dispensing aerated or other | J. Fletcher | 735,867 | Aug. 11 | 1602 | 342 | 105 | 1341 |
| Liquids. Apparatus for pouring out | W. Schmitt | 733,083 | July 7 | 683 | 166 | 105 | 145 |
| Liquids. Apparatus for purifying, sterilizing, or aging | R. C. Turner | 725,803 | Apr. 21 | 2592 | 588 | 103 | 1749 |
| Liquids by solvents. Extracting matter from | L. C. Reese | 744,795 | Nov. 24 | 3860 | 831 | 107 | 871 |
| Liquids. Fixing compound | D. D. Franklin | 747,600 | Dec. 22 | 4209 | 947 | 107 | 2079 |
| Liquids from or to chambers, pipes, &c. Means for controlling the flow of | C. Tönjes | 734,378 | July 21 | 3106 | 731 | 105 | 690 |
| Liquids from solids. Apparatus for separating | H. Duncan and R. R. Sherriff | 732,720 | July 7 | 46 | 11 | 105 | 13 |
| Liquids from solids. Apparatus for separating or draining | C. S. Wheelwright | 719,541 | Feb. 3 | 226 | 53 | 102 | 871 |
| Liquids. Heating, straining or filtering, and circulating | W. Hupchen | 747,429 | Dec. 22 | 3906 | 879, 880 | 107 | 2011 |
| Liquids. Means for mixing and delivering | L. J. Moser | 730,286 | June 9 | 1394 | 306 | 104 | 1428 |
| Liquor-heating apparatus | J. P. Roche | 748,531 | Dec. 29 | 5992 | 1358 | 107 | 2494 |
| Liquors. Manufacture of fermented | J. Schneible | 734,756 | July 28 | 3825 | 891 | 105 | 853 |
| Liquors. Purifying alcoholic | J. Howden | 736,098 | Aug. 11 | 2020 | ------ | 105 | 1432 |
| Lister | S. H. Tinsman | 732,140 | June 30 | 4865 | 1082, 1083 | 104 | 2201 |
| Lister attachment | A. J. Wilson | 734,150 | July 21 | 2683 | 631 | 105 | 600 |
| Lister attachment | F. M. Simonds and A. L. Butler | 738,364 | Sept. 8 | 1665 | 361 | 106 | 374 |
| Litharge. Making | J. W. Bailey | 733,896 | July 14 | 2158 | 509 | 105 | 470 |
| Lithographic or other purposes. Manufacturing artificial stones for | F. Heuber | 720,142 | Feb. 10 | 1349 | ------ | 102 | 1127 |
| Lithographic plates. Electrolytically preparing | O. C. Strecker | 737,882 | Sept. 1 | 660 | 140 | 106 | 145 |
| Lithographic press | R. D. Buncke | 721,420 | Feb. 24 | 3774 | 857, 858 | 102 | 1667 |
| Lithographic-printing rollers. Machine for covering | C. Wagner | 734,381 | July 21 | 3110 | 732 | 105 | 691 |
| Lithographic transferring | G. E. Pancoast | 748,003 | Dec. 29 | 5011 | 1132 | 107 | 2280 |
| Lithographic transferring device | G. E. Pancoast | 748,093 | Dec. 29 | 5191 | 1174 | 107 | 2320 |
| Lithographing and printing roller | A. W. Kling | 725,971 | Apr. 21 | 2867 | 650 | 103 | 1809 |
| Lithophone and Glauber salt. Making | W. D. Gilman | 732,732 | July 7 | 63 | ------ | 105 | 17 |
| Litter | J. A. Tabor | 719,059 | Jan. 27 | 2927 | 654, 655 | 102 | 665 |
| Lixiviating-machine. Centrifugal | H. R. Ellis | 725,549 | Apr. 14 | 2095 | 475 | 103 | 1629 |
| Load-binding chains or cables. Retaining or releasing means for | D. McLaughlin | 730,836 | June 9 | 2363 | 522 | 104 | 1635 |
| Load on wagons. Means for ascertaining the | L. M. F. Hacker | 748,067 | Dec. 29 | 5147 | 1163, 1164 | 107 | 3310 |
| Load retaining and releasing means for vehicles | W. M. Cain | 741,455 | Oct. 13 | 2025 | 450 | 106 | 1697 |
| Load retaining or releasing means for vehicles | D. McLaughlin | 736,138 | Aug. 11 | 2092 | 449 | 105 | 1445 |
| Load retaining or releasing means for vehicles | E. H. B. Knowlton | 736,269 | Aug. 11 | 2306 | 499 | 105 | 1492 |
| Load retaining or releasing means for vehicles | D. McLaughlin | 745,289 | Nov. 24 | 4819 | 1051 | 107 | 1069 |
| Load retaining or releasing means. Vehicle | D. McLaughlin | 744,016 | Nov. 10 | 2406 | 517 | 107 | 529 |
| Load-retaining stakes. Position-governing means for | D. Donaghy | 737,718 | Sept. 1 | 291 | 61 | 106 | 66 |
| Load-retaining stakes. Securing means for | W. M. Cain | 739,829 | Sept. 29 | 4404 | 989 | 106 | 1010 |
| Load-transporting apparatus | R. A. Needham | 733,257 | July 7 | 997 | 240, 241 | 105 | 208 |
| Loading apparatus | F. B. Metosh | 731,316 | June 16 | 3286 | 731, 732 | 104 | 1843 |
| Loading apparatus | R. Baggaley | 746,253 | Dec. 8 | 1728 | 389, 390 | 107 | 1488 |
| Loading apparatus, Wagon- | G. A. Babbitt | 717,962 | Jan. 6 | 827 | 187 | 102 | 177 |

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| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Loading attachment. Wagon- | J. Murphy | 717,701 | Jan. 6 | 324 | 78 | 102 | 70 |
| Loading device | W. E. Hamilton | 736,385 | Aug. 18 | 2506 | 551, 552 | 105 | 1553 |
| Loading device. Automatic | T. M. Park | 720,840 | Feb. 17 | 2632 | 607 | 102 | 1407 |
| Loading device. Automatic | T. M. Park | 733,418 | July 14 | 1294 | 306 | 105 | 290 |
| Loading device. Vehicle- | R. C. Miner and H. L. Fitch | 734,589 | July 28 | 3497 | 816, 817 | 105 | 788 |
| Loading-machine | J. E. Jones | 731,371 | June 16 | 3368 | 753, 754, 755 | 104 | 1859 |
| Loading-machine | T. J. Phillips, W. G. Hodge, and W. White. | 734,088 | July 21 | 2560 | 598 | 105 | 576 |
| Loading-machine | W. E. Hamilton | 736,846 | Aug. 18 | 3402 | 752, 753 | 105 | 1739 |
| Loading-machine attachment. Automatic- | T. M. Park | 737,269 | Aug. 25 | 4178 | 930 | 105 | 1922 |
| Loading machine. Sand- | C. Bosselman | 719,427 | Feb. 3 | 31 | 7 | 102 | 832 |
| Loading manure, &c. Apparatus for | W. Fischer | 744,320 | Nov. 17 | 3008 | 645 | 107 | 672 |
| Loading or unloading apparatus | A. G. Flesher | 729,150 | May 26 | 4358 | 962, 963 | 104 | 973 |
| Loading or unloading apparatus | W. T. Smith | 740,940 | Oct. 6 | 1013 | 229, 230 | 106 | 1462 |
| Loading or unloading apparatus | J. A. Pastureau | 741,538 | Oct. 13 | 2215 | 492, 493 | 106 | 1738 |
| Loading or unloading apparatus | C. A. Long | 745,362 | Dec. 1 | 86 | 20 | 107 | 1120 |
| Loading or unloading device | J. L. C. Quella | 717,617 | Jan. 6 | 170 | 42, 43 | 102 | 38 |
| Loading or unloading device | E. C. Starks | 719,526 | Feb. 3 | 202 | 47 | 102 | 866 |
| Loading or unloading device | J. J. Henzie | 735,509 | Aug. 4 | 914 | 194, 195 | 105 | 1176 |
| Loaf-forming device | J. B. Heydt | 718,124 | Jan. 13 | 1128 | 249 | 102 | 258 |
| Lock: | | | | | | | |
| *See* Air-lock. | | | | | | | |
| Alarm-lock. | | | | | | | |
| Automobile-lock. | | | | | | | |
| Bicycle-lock. | | | | | | | |
| Blind-slat lock. | | | | | | | |
| Bolt-lock. | | | | | | | |
| Car-door lock. | | | | | | | |
| Car-window lock. | | | | | | | |
| Check-controlled lock. | | | | | | | |
| Cock-lock. | | | | | | | |
| Coin-operated lock. | | | | | | | |
| Combination-lock. | | | | | | | |
| Controller-handle lock. | | | | | | | |
| Cover-lock. | | | | | | | |
| Curtain-stretcher lock. | | | | | | | |
| Cylinder-lock. | | | | | | | |
| Desk-lock. | | | | | | | |
| Door-lock. | | | | | | | |
| Drawer-lock. | | | | | | | |
| Electric lock. | | | | | | | |
| Electric alarm-lock. | | | | | | | |
| Electrically-controlled lock. | | | | | | | |
| Elevator-hatchway door-lock. | | | | | | | |
| Elevator-shaft door-lock. | | | | | | | |
| End-gate lock. | | | | | | | |
| Gravity-lock. | | | | | | | |
| Hay-sling lock. | | | | | | | |
| Indicator-lock. | | | | | | | |
| Jack-lock. | | | | | | | |
| Keyless lock. | | | | | | | |
| Knob-lock. | | | | | | | |
| Lever-handle lock. | | | | | | | |
| Line-lock. | | | | | | | |
| Loom shuttle-lock. | | | | | | | |
| Milk-jar lock. | | | | | | | |
| Milk-receptacle lock. | | | | | | | |
| Nut-lock. | | | | | | | |
| Nut and bolt lock. | | | | | | | |
| Nut or bolt lock. | | | | | | | |
| Oar-lock. | | | | | | | |
| Padlock. | | | | | | | |
| Permutation-lock. | | | | | | | |
| Pick-lock. | | | | | | | |
| Pneumatic lock. | | | | | | | |
| Post-office lock-box lock. | | | | | | | |
| Recording-lock. | | | | | | | |
| Rope-lock. | | | | | | | |
| Safe-door lock. | | | | | | | |
| Sash-lock. | | | | | | | |
| Seal-lock. | | | | | | | |
| Soap-lock. | | | | | | | |
| Stop-box lock. | | | | | | | |
| Stopper-lock. | | | | | | | |
| Strap-lock. | | | | | | | |
| Switch-lock. | | | | | | | |
| Table-lock. | | | | | | | |
| Telephone-lock. | | | | | | | |
| Telephone-hook lock. | | | | | | | |
| Time-lock. | | | | | | | |
| Time-recording lock. | | | | | | | |
| Transom-lock. | | | | | | | |
| Trunk-lock. | | | | | | | |
| Umbrella-stand lock. | | | | | | | |
| Valve-lock. | | | | | | | |
| Window-lock. | | | | | | | |
| Window-bead lock. | | | | | | | |
| Wrist-plate lock. | | | | | | | |
| Lock | S. C. Houghton | 717,855 | Jan. 6 | 652 | 144 | 102 | 139 |
| Lock | J. C. Christensen | 719,087 | Jan. 27 | 2988 | 666 | 102 | 677 |
| Lock | J. Schell | 719,883 | Feb. 3 | 854 | 200 | 102 | 1004 |
| Lock | W. S. Oberholtzer | 721,322 | Feb. 24 | 3586 | 816 | 102 | 1628 |
| Lock | H. P. Townsend | 721,399 | Feb. 24 | 3736 | 850 | 102 | 1659 |
| Lock | W. Schlueter | 721,470 | Feb. 24 | 3869 | 880 | 102 | 1686 |
| Lock | I. Wide | 722,194 | Mar. 3 | 992 | 220 | 103 | 210 |
| Lock | A. D. Plowden | 722,325 | Mar. 10 | 1243 | 277 | 103 | 281 |
| Lock | E. Heidman | 722,406 | Mar. 10 | 1392 | 307 | 103 | 313 |
| Lock | B. Phelps | 722,619 | Mar. 10 | 1784 | 397 | 103 | 398 |
| Lock | B. Phelps | 722,620 | Mar. 10 | 1786 | 397 | 103 | 399 |
| Lock | B. Phelps | 722,621 | Mar. 10 | 1787 | 398 | 103 | 399 |
| Lock | B. Phelps | 722,622 | Mar. 10 | 1789 | 398 | 103 | 400 |
| Lock | B. Phelps | 722,623 | Mar. 10 | 1790 | 398 | 103 | 400 |
| Lock | C. W. Marr | 723,539 | Mar. 24 | 3518 | 787 | 103 | 780 |
| Lock | W. C. Dickerson | 724,677 | Apr. 7 | 485 | 116, 117 | 103 | 1272 |
| Lock | P. Seisler | 724,746 | Apr. 7 | 616 | 144 | 103 | 1300 |
| Lock | C. F. Thyberg and J. C. Moses | 725,013 | Apr. 7 | 1104 | 251 | 103 | 1405 |
| Lock | J. Speer | 725,290 | Apr. 14 | 1606 | 363 | 103 | 1525 |
| Lock | H. P. Townsend | 725,381 | Apr. 14 | 1773 | 398 | 103 | 1560 |
| Lock | H. G. Carleton | 726,254 | Apr. 28 | 3368 | 765, 766 | 103 | 1926 |
| Lock | J. M. Owen | 726,741 | Apr. 28 | 4327 | 975 | 103 | 2120 |
| Lock | C. J. Roach | 728,134 | May 12 | 2462 | 548 | 104 | 542 |
| Lock | B. Revoir | 729,098 | May 26 | 4267 | 943 | 104 | 954 |
| Lock | J. Loch | 730,831 | June 9 | 2354 | 521 | 104 | 1634 |
| Lock | J. Pellington | 731,217 | June 16 | 3097 | 687 | 104 | 1803 |
| Lock | J. Krajicek | 731,691 | June 23 | 3998 | 892 | 104 | 2004 |

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| Invention. | Name. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | | Spec. | Drg. | Vol. | Page. |
| Lock | L. Neischl | 732,431 | June 30 | 5427 | 1205 | 104 | 2319 |
| Lock | N. W. Crandall | 733,163 | July 7 | 818 | 198 | 105 | 172 |
| Lock | O. H. P. Green and D. Carpenter | 734,541 | July 28 | 3412 | 797 | 105 | 770 |
| Lock | A. Hazy | 735,095 | Aug. 4 | 88 | 21 | 105 | 1001 |
| Lock | G. Lenhard | 736,528 | Aug. 18 | 2784 | 610 | 105 | 1613 |
| Lock | T. H. Rea | 737,479 | Aug. 25 | 4570 | 1024 | 105 | 2008 |
| Lock | W. E. Bell and F. W. Brown | 738,280 | Sept. 8 | 1474 | 318 319 | 106 | 333 |
| Lock | H. P. Townsend | 738,739 | Sept. 8 | 2368 | 520 | 106 | 522 |
| Lock | G. T. Oplinger | 739,556 | Sept. 22 | 3880 | 870 | 106 | 879 |
| Lock | E. J. Hatt | 739,867 | Sept. 29 | 4503 | 1012 | 106 | 1029 |
| Lock | G. H. Stout | 740,060 | Sept. 29 | 4864 | 1090 | 106 | 1107 |
| Lock | F. W. Lindgren | 741,685 | Oct. 20 | 2490 | 556 | 106 | 1812 |
| Lock | C. E. Duggan | 741,778 | Oct. 20 | 2680 | 597 | 106 | 1851 |
| Lock | S. Nelson and E. Wood | 742,052 | Oct. 20 | 3215 | 719 | 106 | 1962 |
| Lock | H. B. Walbridge | 743,355 | Nov. 3 | 1053 | 225 | 107 | 225 |
| Lock | L. Faust | 743,475 | Nov. 10 | 1367 | 280 | 107 | 307 |
| Lock | E. H. Dimock | 743,695 | Nov. 10 | 1771 | 375 | 107 | 394 |
| Lock | O. Katzenberger | 745,064 | Nov. 24 | 4377 | 945 | 107 | 978 |
| Lock | C. Reiger | 745,664 | Dec. 1 | 632 | 147 | 107 | 1233 |
| Lock | J. Schell | 746,174 | Dec. 8 | 1585 | 354 | 107 | 1459 |
| Lock | H. R. Antcliff | 746,774 | Dec. 15 | 2664 | 614 | 107 | 1714 |
| Lock | C. B. S. Möller | 747,627 | Dec. 22 | 4268 | 959 | 107 | 2093 |
| Lock | J. Mills | 748,202 | Dec. 29 | 5395 | 1226 | 107 | 2362 |
| Lock | W. K. Kaye | 748,285 | Dec. 29 | 5538 | 1262 | 107 | 2394 |
| Lock and escutchec | W. Chalmers | 733,828 | Mar. 31 | 4032 | 910 | 103 | 905 |
| Lock and latch | R. W. H. Rodney and J. H. Parkes | 720,284 | Feb. 10 | 1622 | 371 | 102 | 1182 |
| Lock and latch | C. J. Caley | 733,142 | July 7 | 788 | 191 | 105 | 167 |
| Lock and latch | E. H. Dimock | 733,171 | July 7 | 838 | 203 | 105 | 176 |
| Lock and latch | H. G. Voight | 744,134 | Nov. 17 | 2640 | 563 | 107 | 591 |
| Lock and latch. Combined | L. H. Mullikin | 717,757 | Jan. 6 | 444 | 103 104 | 102 | 96 |
| Lock and latch. Combined | E. Peterson | 719,691 | Feb. 3 | 498 | 112 | 102 | 928 |
| Lock and latch. Combined | E. More | 720,455 | Feb. 10 | 1917 | 437 | 102 | 1244 |
| Lock and latch. Combined | J. Fish | 723,376 | Mar. 24 | 3225 | 723 | 103 | 720 |
| Lock and latch. Combined | M. C. Patrick | 728,755 | May 19 | 3645 | 810 811 | 104 | 813 |
| Lock and latch. Combined | A. M. Doyle | 740,826 | Oct. 6 | 833 | 187 | 106 | 1424 |
| Lock and latch. Combined | J. E. Keverline | 742,875 | Nov. 3 | 97 | 23 | 107 | 22 |
| Lock and latch hub | N. W. Crandall | 734,824 | July 28 | 3968 | 927 | 105 | 883 |
| Lock attachment | A. W. Livingston | 724,899 | Apr. 7 | 892 | 204 | 103 | 1360 |
| Lock attachment. Cylinder- | W. B. Moore | 719,684 | Feb. 3 | 482 | 109 | 102 | 924 |
| Lock-box | E. L. Krag | 746,106 | Dec. 8 | 1454 | 326 | 107 | 1429 |
| Lock-box front | G. L. Lavery | 729,945 | June 2 | 771 | 170 | 104 | 1285 |
| Lock-case | W. H. Taylor | 742,751 | Oct. 27 | 4526 | 1025 | 106 | 2250 |
| Lock for angle-cocks, &c | F. H. Mobley | 724,912 | Apr. 7 | 912 | 209 | 103 | 1365 |
| Lock safety attachment | E. L. Ruggles | 721,468 | Feb. 24 | 3865 | 878 | 102 | 1685 |
| Lock-shoe | W. L. Denson | 733,543 | July 14 | 1511 | 360 | 105 | 336 |
| Lock-telltale | J. Koerber | 718,359 | Jan. 13 | 1556 | 343 | 102 | 348 |
| Lock tumbler. Combination- | W. H. Taylor | 730,719 | June 9 | 2173 | 483 | 104 | 1594 |
| Lock-washer | J. McGraw, Jr | 731,599 | June 23 | 3836 | 855 | 104 | 1973 |
| Lock-washer | W. C. Matteson | 741,806 | Oct. 20 | 2725 | 607 | 106 | 1861 |
| Locks having rocking chambers. Construction of | L. C. de Preville | 722,537 | Mar. 10 | 1645 | 363 | 103 | 369 |
| Locker | D. Mayer, (now D. Churchill) | 726,555 | Apr. 28 | 3975 | 900 | 103 | 2047 |
| Locket | L. A. Blackinton | 718,562 | Jan. 13 | 1988 | 433 | 102 | 442 |
| Locket | W. H. Blaney | 720,317 | Feb. 10 | 1679 | 382 | 102 | 1194 |
| Locket | J. E. Potter | 727,555 | May 5 | 1366 | 307 | 104 | 294 |
| Locket | H. E. Clap | 741,308 | Oct. 13 | 1741 | 388 | 106 | 1634 |
| Locket or similar article | T. Giguere | 720,798 | Feb. 17 | 2573 | 592 | 102 | 1394 |
| Locking attachment | S. Storm | 722,926 | Mar. 17 | 2377 | 532 | 103 | 535 |
| Locking-bar | J. P. Maginnis | 719,351 | Jan. 27 | 3490 | 776 | 102 | 783 |
| Locking-bolt | J. G. Bowles | 735,336 | Aug. 4 | 569 | 116 | 105 | 1102 |
| Locking device | G. S. Nichols | 724,729 | Apr. 7 | 587 | 140 | 103 | 1294 |
| Locking device | C. F. Ritchel | 726,832 | Apr. 28 | 4499 | 1015 | 103 | 2154 |
| Locking device for connecting tubular or other parts | F. E. Stuart | 744,985 | Nov. 24 | 4198 | 908 | 107 | 941 |
| Locking device for wrenches, clamps, &c | J. P. Ray | 741,716 | Oct. 20 | 2568 | 572 | 106 | 1828 |
| Locking device. Keyless | H. W. Standidge | 717,941 | Jan. 6 | 795 | 179 | 102 | 170 |
| Locking-hanger | L. Steinberger | 729,440 | May 26 | 4858 | 1076 | 104 | 1077 |
| Locking mechanism | R. W. Goeb | 739,075 | Sept. 15 | 3002 | 666 | 106 | 675 |
| Locking mechanism. Coin-controlled | W. H. Scott | 728,995 | May 26 | 4083 | 906 | 104 | 917 |
| Locking mechanism. Coin-controlled | G. P. Moore | 732,772 | July 7 | 134 | 37 | 105 | 33 |
| Locking system for jail-doors | D. F. Youngblood | 719,169 | Jan. 27 | 3143 | 699 700 | 102 | 708 |
| Locking-washer | W. J. Cook | 730,880 | June 16 | 2454 | 544 | 104 | 1673 |
| Locomotive | B. R. Van Kirk | 730,722 | June 9 | 2177 | 483 484 | 104 | 1595 |
| Locomotive | S. N. Mighell | 732,768 | July 7 | 125 | 35 | 105 | 30 |
| Locomotive | H. E. Parson | 741,707 | Oct. 20 | 2547 | 568 | 106 | 1824 |
| Locomotive | J. Player | 744,398 | Nov. 17 | 3146 | 675 | 107 | 702 |
| Locomotive | J. Player | 744,399 | Nov. 17 | 3148 | 676 | 107 | 703 |
| Locomotive air-feeding apparatus | F. P. Busiel | 736,066 | Aug. 11 | 1974 | 420 | 105 | 1421 |
| Locomotive and car for use on single-rail elevated railways. | E. S. G. Rees | 723,024 | Mar. 17 | 2540 | 570 571 | 103 | 569 |
| Locomotive blast-pipe | H. S. Wainwright | 737,798 | Sept. 1 | 452 | 98 | 106 | 100 |
| Locomotive-boiler | S. Stoianoff | 727,481 | May 5 | 1223 | 270 271 | 104 | 264 |
| Locomotive-cab ventilator | K. Rushton | 732,539 | Mar. 10 | 1648 | 363 | 103 | 370 |
| Locomotive. Combined steam and compressed-air | E. Hill | 724,183 | Mar. 31 | 4755 | 1067 | 103 | 1053 |
| Locomotive. Condensing- | D. R. Ivett | 730,020 | June 2 | 914 | 204 205 | 104 | 1314 |
| Locomotive-controlling device. Automatic | C. Hansel | 738,538 | Sept. 8 | 2002 | 436 | 106 | 445 |
| Locomotive. Electric | W. Dalton and F. J. Cole | 744,301 | Nov. 17 | 2978 | 638 | 107 | 665 |
| Locomotive. Electric | W. Dalton and F. J. Cole | 744,302 | Nov. 17 | 2979 | 638 | 107 | 665 |
| Locomotive. Electric | W. Dalton and F. J. Cole | 744,303 | Nov. 17 | 2981 | 638 639 | 107 | 666 |
| Locomotive. Electric | W. Dalton and F. J. Cole | 744,304 | Nov. 17 | 2984 | 639 | 107 | 667 |

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| | | | | Spec. | Dr'g. | Vol. | Page. |
| Locomotive-engine | F. J. Cole | 722,356 | Mar. 10 | 1300 | 288, 289 | 103 | 292 |
| Locomotive-engine | J. Holden and F. V. Russsll | 742,653 | Oct. 27 | 4363 | 981, 982 | 106 | 2214 |
| Locomotive-engine-cab heater | G. C. Bailey | 742,559 | Oct. 27 | 4199 | 945 | 106 | 2178 |
| Locomotive-engines, &c. Sand-distributing apparatus for | J. Holden and F. V. Russell | 742,654 | Oct. 27 | 4364 | 982, 983, 984 | 106 | 2215 |
| Locomotive-engineer's alarm | E. McClintock | 738,468 | Sept. 8 | 1861 | 405, 406 | 106 | 414 |
| Locomotive exhaust mechanism | I. F. Wallace and W. L. Kellogg | 718,681 | Jan. 20 | 2212 | 485 | 102 | 502 |
| Locomotive exhaust mechanism | F. O. Whealon | 741,859 | Oct. 20 | 2810 | 625 | 106 | 1881 |
| Locomotive-frame | J. Player | 744,400 | Nov. 17 | 3151 | 676 | 107 | 704 |
| Locomotive heater. Compressed-air- | W. R. Pratt | 732,892 | July 7 | 347 | 85 | 105 | 76 |
| Locomotive-lubricator | E. Sarver | 744,625 | Nov. 17 | 3521 | 760 | 107 | 780 |
| Locomotive nozzle-tip | D. Grattan | 717,986 | Jan. 6 | 883 | 197 | 102 | 189 |
| Locomotive oil-burner heaters. Connection for | C. Petrini | 739,923 | Sept. 29 | 4606 | 1034 | 106 | 1051 |
| Locomotive parallel rod | C. Houston | 744,551 | Nov. 17 | 3414 | 735 | 107 | 758 |
| Locomotive-pilot and draw-bar. Adjustable | E. R. Halesworth | 743,864 | Nov. 10 | 2081 | 443 | 107 | 459 |
| Locomotive. Road- | R. H. Fowler and G. S. Tuer | 743,851 | Nov. 10 | 2057 | 437 | 107 | 454 |
| Locomotive sanding device | J. C. Hooper | 732,076 | June 30 | 4725 | 1055 | 104 | 2172 |
| Locomotive smoke-box | J. E. Cooke | 738,742 | Sept. 8 | 2393 | 526 | 106 | 528 |
| Locomotive-tank coal-conveyer | L. H. Lewis | 726,711 | Apr. 28 | 4274 | 965 | 103 | 2108 |
| Locomotive-tender | L. Atwood | 729,991 | June 2 | 871 | 194 | 104 | 1304 |
| Locomotive-tender | H. J. Small | 745,392 | Dec. 1 | 152 | 35 | 107 | 1132 |
| Locomotive-tender gate | H. O. McClain | 742,718 | Oct. 27 | 4473 | 1012 | 106 | 2237 |
| Locomotive-tires, &c. Boring-mill for | I. E. McCracken | 727,413 | May 5 | 1091 | 239, 240 | 104 | 236 |
| Locomotive track-sanding apparatus. Alarm-valve for | C. Longstreth | 746,537 | Dec. 8 | 2223 | 509 | 107 | 1595 |
| Locomotives. Reel attachment for mine- | K. Rushton | 737,491 | Aug. 25 | 4602 | 1031 | 105 | 2016 |
| Locomotives, &c. Tender for | C. Vanderbilt | 747,280 | Dec. 15 | 3641 | 821, 822 | 107 | 1935 |
| Log-capper | J. H. Dickinson | 719,094 | Jan. 27 | 3016 | 671 | 102 | 683 |
| Log-car | W. S. Kennedy | 731,576 | June 23 | 3797 | 846 | 104 | 1965 |
| Log-car or road-wagon attachment | T. D. Toy | 747,022 | Dec. 15 | 3144 | 720 | 107 | 1823 |
| Log-car toggle-chain release | W. Ashcraft and J. C. Lubbers | 746,438 | Dec. 8 | 2051 | 471, 472 | 107 | 1556 |
| Log-carriage cushion | H. G. Dittbenner | 745,582 | Dec. 1 | 498 | 117 | 107 | 1203 |
| Log-conveyer | S. F. Claypool | 732,519 | June 30 | 5601 | 1241, 1242 | 104 | 2353 |
| Log hauling and loading machine | T. S. Miller and J. H. Dickinson | 726,325 | Apr. 28 | 3525 | 798 | 103 | 1959 |
| Log-loader | W. S. Kennedy | 719,012 | Jan. 27 | 2831 | 634, 635 | 102 | 645 |
| Log-loader | C. E. Evans | 724,831 | Apr. 7 | 781 | 181 | 103 | 1336 |
| Log-loading machine | M. Schmaltz | 727,849 | May 12 | 1946 | 434 | 104 | 432 |
| Log or lumber hauling attachment | S. H. Chase | 733,007 | July 7 | 542 | 133 | 105 | 116 |
| Log overhead turner | P. Wineman | 748,130 | Dec. 29 | 5263 | 1195 | 107 | 2335 |
| Log-turner | J. Scherer | 730,574 | June 9 | 1922 | 427 | 104 | 1540 |
| Log-turner | C. E. Cleveland | 743,247 | Nov. 3 | 827 | 180 | 107 | 173 |
| Log-turner. Sawmill | F. T. Wilkes | 738,385 | Sept. 8 | 1702 | 370 | 106 | 382 |
| Log-turning mechanism | W. M. Wilkin | 721,409 | Feb. 24 | 3756 | 854 | 102 | 1663 |
| Logs. Means for raising sunken | B. H. Harris | 720,137 | Feb. 10 | 1342 | 307 | 102 | 1125 |
| Logging-car stake-holder | E. Ludford, Jr | 740,885 | Oct. 6 | 922 | 206 | 106 | 1443 |
| Logging-car stanchion | J. A. Blanchard | 724,537 | Apr. 7 | 215 | 53 | 103 | 1215 |
| Logging dog or hook | C. J. Young | 727,529 | May 5 | 1310 | 291 | 104 | 282 |
| Logging-grab | J. J. Morris | 733,989 | July 21 | 2358 | 553 | 105 | 529 |
| Logging-jack | J. G. Owen | 735,897 | Aug. 11 | 1650 | 352, 353 | 105 | 1351 |
| Logging or tie-handling tongs | E. E. Brindos | 727,279 | May 5 | 853 | 183 | 104 | 183 |
| Logging-spool | R. Barr | 733 795 | July 14 | 1953 | 461 | 105 | 429 |
| Loom | F. Barlet. (Reissue) | 12,082 | Feb. 17 | 3232 | 739, 740 | 102 | 1542 |
| Loom | H. Lindsay | 731,112 | June 16 | 2904 | 645, 646 | 104 | 1766 |
| Loom | J. C. Brooks | 731,274 | June 16 | 3195 | 711 | 104 | 1823 |
| Loom | J. C. Brooks | 732,043 | June 30 | 4663 | 1042 | 104 | 2161 |
| Loom | E. Powell | 733,333 | July 7 | 1134 | 268, 269, 270, 271 | 105 | 239 |
| Loom | N. M. Shinn | 733,434 | July 14 | 1328 | 313, 314 | 105 | 298 |
| Loom | B. F. McGuiness | 737,002 | Aug. 25 | 3694 | 820 | 105 | 1821 |
| Loom | C. A. Herald | 737,837 | Sept. 1 | 540 | 117 | 106 | 120 |
| Loom | R. Crompton | 739,651 | Sept. 22 | 4073 | 907, 908, 909 | 106 | 920 |
| Loom | W. Holcroft | 743,723 | Nov. 10 | 1820 | 384 | 107 | 405 |
| Loom | E. Vahle | 744,442 | Nov. 17 | 3225 | 691, 692, 693 | 107 | 719 |
| Loom. Automatic filling-replenishing | J. Northrop | 718,576 | Jan. 13 | 2023 | 440, 441 | 102 | 450 |
| Loom. Automatic filling-replenishing | E. S. Wood | 720,209 | Feb. 10 | 1468 | 334 | 102 | 1150 |
| Loom. Automatic filling-replenishing | L. A. Aumann | 725,194 | Apr. 14 | 1443 | 327 | 103 | 1489 |
| Loom. Automatic filling-replenishing | W. F. and C. H. Draper | 725,229 | Apr. 14 | 1514 | 344, 345 | 103 | 1505 |
| Loom batten-operating mechanism | C. W. Widerstrom | 744,843 | Nov. 24 | 3950 | 852 | 107 | 889 |
| Loom. Beadwork- | E. J. Bush | 737,073 | Aug. 25 | 3810 | 844 | 105 | 1844 |
| Loom bobbin take-up | N. H. Merriam and E. H. Sawyer | 747,307 | Dec. 15 | 3690 | 831, 832 | 107 | 1947 |
| Loom box-motion | G. Goodline | 744,682 | Nov. 17 | 3621 | 781 | 107 | 802 |
| Loom box-pattern mechanism | F. A. and H. A. Guillette | 742,817 | Oct. 27 | 4645 | 1052 | 106 | 2276 |
| Loom cam. Bag | H. Bardsley | 731,655 | June 23 | 3939 | 876 | 104 | 1993 |
| Loom cloth-roll shaft | R. R. Kelly | 718,949 | Jan. 20 | 2720 | 608 | 102 | 608 |

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| Invention. | Name. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| Loom-dobby | J. A. Clark | 741,225 | Oct. 13 | 1575 | 354 | 106 | 1603 |
| Loom-dobby leno-motion | H. Bardsley | 743,675 | Nov. 10 | 1740 | 367 | 107 | 387 |
| Loom dobby mechanism | H. Wyman | 720,869 | Feb. 17 | 2686 | 621 | 102 | 1419 |
| Loom dobby mechanism | J. T. Meats and J. E. Greensmith | 729,627 | June 2 | 183 | 43 | 104 | 1165 |
| Loom filling-box stand | J. Trahan | 748,438 | Dec. 29 | 5810 | 1323 | 107 | 2454 |
| Loom filling-detecting mechanism | A. E. Benson | 742,564 | Oct. 27 | 4205 | 947 | 106 | 2180 |
| Loom filling-feeder. Automatic | E. and J. V. Cunniff | 721,784 | Mar. 3 | 223 | 49 | 103 | 50 |
| Loom. Filling-replenishing | J. Northrop | 718,575 | Jan. 13 | 2015 | 439, 440 | 102 | 448 |
| Loom. Filling-replenishing | E. S. Stimpson | 718,587 | Jan. 13 | 2045 | 445 | 102 | 455 |
| Loom. Filling-replenishing | J. Northrop | 724,120 | Mar. 31 | 4629 | 1043 | 103 | 1028 |
| Loom. Filling-replenishing | J. Northrop | 724,121 | Mar. 31 | 4630 | 1043 | 103 | 1029 |
| Loom. Filling-replenishing | H. T. Hunnewell | 724,292 | Mar. 31 | 4983 | 1115, 1116 | 103 | 1099 |
| Loom. Filling-replenishing | W. F. Draper | 726,518 | Apr. 28 | 3910 | 885 | 103 | 2034 |
| Loom. Filling-replenishing | C. F. Roper | 726,574 | Apr. 28 | 4021 | 909 | 103 | 2055 |
| Loom. Filling-replenishing | O. A. Sawyer | 726,576 | Apr. 28 | 4026 | 910 | 103 | 2056 |
| Loom. Filling-replenishing | J. Northrop | 726,978 | May 5 | 298 | 66, 67 | 104 | 64 |
| Loom. Filling-replenishing | A. E. Stafford | 727,014 | May 5 | 389 | 82 | 104 | 85 |
| Loom. Filling-replenishing | E. S. Stimpson | 729,006 | May 26 | 4104 | 910 | 104 | 922 |
| Loom. Filling-replenishing | O. A. Sawyer | 739,113 | Sept. 15 | 3080 | 683 | 106 | 690 |
| Loom. Filling-replenishing | J. Northrop | 741,700 | Oct. 20 | 2525 | 564, 565 | 106 | 1821 |
| Loom. Filling-replenishing | A. E. Rhoades | 741,717 | Oct. 20 | 2569 | 572 | 106 | 1828 |
| Loom. Filling-replenishing | A. M. Marcoux | 745,363 | Dec. 1 | 88 | 21 | 107 | 1120 |
| Loom. Filling-replenishing | E. S. Wood | 745,408 | Dec. 1 | 176 | 39, 40 | 107 | 1137 |
| Loom filling-replenishing mechanism | E. S. Stimpson | 725,790 | Apr. 21 | 2554 | 579 | 103 | 1743 |
| Loom filling-replenishing mechanism | B. F. S. Austin | 726,493 | Apr. 28 | 3866 | 875 | 103 | 2025 |
| Loom filling stop-motion | W. A. Fowler | 746,058 | Dec. 8 | 1375 | 307 | 107 | 1410 |
| Loom filling tension device | B. F. Lee | 721,206 | Feb. 24 | 3400 | 772 | 102 | 1589 |
| Loom finger mechanism | Z. L. Chadbourne | 724,260 | Mar. 31 | 4921 | 1101 | 103 | 1086 |
| Loom for cross-weaving | I. E. Palmer | 737,865 | Sept. 1 | 601 | 131, 132 | 106 | 132 |
| Loom for making laces | A. Ronsdorf | 733,426 | July 14 | 1310 | 310 | 105 | 294 |
| Loom for the manufacture of coir mats | O. Bullock and W. H. Forty | 730,339 | June 9 | 1475 | 326, 327 | 104 | 1444 |
| Loom for weaving figured double-pile fabrics | J. W. Smith | 743,943 | Nov. 10 | 2217 | 479, 480 | 107 | 489 |
| Loom for weaving narrow-ware fabrics. Needle- | E. H. Ryon | 741,279 | Oct. 13 | 1665 | 376 | 106 | 1620 |
| Loom for weaving pattern fabrics | H. Panitschek and J. Ahorn | 741,366 | Oct. 13 | 1868 | 413, 414 | 106 | 1666 |
| Loom for weaving pile fabrics | M. J. Whittall | 727,521 | May 5 | 1294 | 289 | 104 | 278 |
| Loom for weaving pile fabrics | J. Buckler | 747,587 | Dec. 22 | 4187 | 941, 942 | 107 | 2074 |
| Loom for weaving short wefts | W. Wattie | 741,749 | Oct. 20 | 2620 | 585, 586 | 106 | 1839 |
| Loom for weaving tufted fabrics | J. A. Clark | 732,518 | June 30 | 5599 | 1241 | 104 | 2353 |
| Loom fork-grid clearer | B. F. S. Austin | 745,473 | Dec. 1 | 311 | 74 | 107 | 1166 |
| Loom friction let-off | H. Taylor | 745,121 | Nov. 24 | 4489 | 972 | 107 | 1001 |
| Loom-harness | C. Knibbs and R. H. Sterrett | 733,660 | July 14 | 1716 | 406 | 105 | 379 |
| Loom harness-frame | H. W. Bracken | 719,080 | Jan. 27 | 2969 | 663 | 102 | 674 |
| Loom harness-frame | W. Fehr | 726,417 | Apr. 28 | 3687 | 835 | 103 | 1992 |
| Loom harness mechanism | E. S. Stimpson | 729,102 | May 26 | 4273 | 944, 945 | 104 | 956 |
| Loom harness mechanism | E. S. Stimpson | 733,089 | July 7 | 696 | 170 | 105 | 148 |
| Loom harness-retractor | C. I. Knox | 729,190 | May 26 | 4434 | 977, 978 | 104 | 989 |
| Loom-heddle | J. Walker | 728,055 | May 12 | 2327 | 518 | 104 | 513 |
| Loom heddle-frame | R. G. Wirtalla | 729,477 | May 26 | 4918 | 1090 | 104 | 1092 |
| Loom jacquard-machine | J. E. and W. J. Garlick | 721,885 | Mar. 3 | 420 | 92 | 103 | 92 |
| Loom jacquard mechanism | H. Hardwick | 723,153 | Mar. 17 | 2775 | 623, 624, 625, 626, 627 | 103 | 617 |
| Loom jacquard mechanism | J. Verdol | 729,706 | June 2 | 318 | 73 | 104 | 1194 |
| Loom. Kindergarten- | L. A. Truesdell | 735,177 | Aug. 4 | 259 | 51 | 105 | 1038 |
| Loom. Kindergarten- | M. P. and D. Todd | 748,120 | Dec. 29 | 5244 | 1190 | 107 | 2331 |
| Loom. Lappet- | C. A. Littlefield | 731,377 | June 16 | 3396 | 759, 760 | 104 | 1866 |
| Loom. Lappet- | H. Ledoux | 733,490 | July 14 | 1418 | 333, 334 | 105 | 317 |
| Loom. Lappet- | F. J. Dearden and G. S. Sharp | 744,307 | Nov. 17 | 2989 | 641 | 107 | 668 |
| Loom. Leno-weaving | W. Tallant | 729,012 | May 26 | 4124 | 913, 414 | 104 | 926 |
| Loom let-off and take-up mechanism | H. A. Bond | 727,533 | May 5 | 1315 | 293, 294 | 104 | 283 |
| Loom let-off and take-up mechanism | W. T. Kintzing | 737,938 | Sept. 1 | 760 | 166 | 106 | 167 |
| Loom let-off mechanism | J. J. Muldowney and H. Tomlinson | 728,961 | May 26 | 4024 | 894 | 104 | 905 |
| Loom let-off mechanism | W. Haynes | 741,661 | Oct. 20 | 2436 | 547 | 106 | 1801 |
| Loom let-off mechanism | C. F. Roper | 744,941 | Nov. 24 | 4113 | 886 | 107 | 924 |
| Loom let-off mechanism | H. Tomlinson and J. J. Muldowney. | 747,273 | Dec. 15 | 3623 | 817 | 107 | 1930 |
| Loom let-off mechanism | J. V. Cunniff | 747,302 | Dec. 15 | 3679 | 830 | 107 | 1944 |
| Loom let-off mechanism | F. Benz, Jr | 748,253 | Dec. 29 | 5473 | 1247 | 107 | 2380 |
| Loom let-off motion | H. Widmer | 741,602 | Oct. 13 | 2331 | 522 | 106 | 1764 |
| Loom let-off motion | C. Huber, J. Müller, and M. Weidmann. | 747,179 | Dec. 15 | 3436 | 779 | 107 | 1891 |
| Loom. Multiple-harness | D. Robinson | 743,333 | Nov. 3 | 1004 | 217 | 107 | 215 |
| Loom. Multiple-shuttle | L. E. Salisbury | 720,181 | Feb. 10 | 1412 | 322, 323, 324, 325 | 102 | 1139 |
| Loom multiplier mechanism | W. G. Eaton | 742,404 | Oct. 27 | 3908 | 879 | 106 | 2119 |
| Loom. Narrow-ware | F. E. Zenzerl | 734,390 | July 21 | 3133 | 736, 737 | 105 | 696 |

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| Loom. Needle- | E. Herzig | 719,666 | Feb. 3 | 447 | 102, 103 | 102 | 916 |
| Loom. Needle- | E. H. Ryon | 743,107 | Nov. 3 | 551 | 118, 119 | 107 | 115 |
| Loom. Needle- | B. Saner | 746,581 | Dec. 8 | 2298 | 527 | 107 | 1612 |
| Loom needle-motion | G. F. Hutchins | 733,586 | July 14 | 1591 | 379 | 105 | 354 |
| Loom needle-motion. Pile-fabric- | A. J. O'Reilly | 740,903 | Oct. 6 | 953 | 214 | 106 | 1450 |
| Loom needle-motions. Stop mechanism for | G. F. Hutchins | 733,207 | July 7 | 906 | 219 | 105 | 190 |
| Loom or frame for beadwork | T. F. Damm | 736,701 | Aug. 18 | 3122 | 688 | 105 | 1680 |
| Loom pattern-chain | W. J. Lutton | 735,037 | July 28 | 4334 | 1007, 1008 | 105 | 959 |
| Loom pattern-chain | J. T. Cyr | 736,700 | Aug. 18 | 3121 | 687 | 105 | 1680 |
| Loom pattern-chain | J. T. Cyr | 741,230 | Oct. 13 | 1582 | 356 | 106 | 1604 |
| Loom pattern mechanism | W. J. Lutton | 729,880 | June 2 | 664 | 146 | 104 | 1264 |
| Loom pick-ball holder or guard | J. Blanchette | 730,316 | Feb. 10 | 1679 | 381 | 102 | 1193 |
| Loom-picker | D. G. Rodgers | 730,476 | June 9 | 1744 | 390 | 104 | 1501 |
| Loom picker-checking means | A. Eaves | 729,048 | May 26 | 4190 | 926 | 104 | 939 |
| Loom picker-motion | E. E. Sullivan | 724,143 | Mar. 31 | 4680 | 1051 | 103 | 1039 |
| Loom picker-motion | A. H. Whatley | 739,526 | Sept. 22 | 3833 | 858 | 106 | 869 |
| Loom picker-motion | H. L. Goodwin | 744,862 | Nov. 24 | 3984 | 859 | 107 | 897 |
| Loom picker-stick buffer | M. Dumont | 725,327 | Apr. 14 | 1685 | 380 | 103 | 1542 |
| Loom picker-stick check | G. M. Smith | 729,229 | May 26 | 4507 | 993 | 104 | 1005 |
| Loom picker-stick check | T. E. Norman | 731,120 | June 16 | 2923 | 649 | 104 | 1769 |
| Loom picker-stick check | E. H. Gleason | 737,219 | Aug. 25 | 4077 | 905 | 105 | 1901 |
| Loom picker-stick connection | E. Rivet | 729,797 | June 2 | 504 | 111 | 104 | 1231 |
| Loom picker-stick connection | J. A. Bottomley | 745,143 | Nov. 24 | 4527 | 980 | 107 | 1010 |
| Loom picker-stick lug-strap | R. G. Campbell | 730,743 | June 9 | 2208 | 491 | 104 | 1602 |
| Loom picker-stick mechanism | W. H. Kelley | 733,655 | July 14 | 1705 | 404 | 105 | 377 |
| Loom picker-stick motion | O. A. Sawyer | 741,170 | Oct. 13 | 1453 | 330 | 106 | 1575 |
| Loom picker-stick safety-fastener | H. W. Marcy | 742,695 | Oct. 27 | 4440 | 1002 | 106 | 2231 |
| Loom picking mechanism | J. T. Meats | 729,626 | June 2 | 182 | 43 | 104 | 1164 |
| Loom. Pile-carpet-weaving | H. Panitschek and J. Ahorn | 733,216 | June 30 | 5010 | 1114, 1115, 1116, 1117, 1118 | 104 | 2232 |
| Loom. Pile-fabric | A. Turkington | 723,342 | Mar. 24 | 3129 | 704, 705 | 103 | 704 |
| Loom. Pile-fabric | T. B. Dornan | 730,438 | June 9 | 1671 | 374, 375 | 104 | 1485 |
| Loom. Pile-fabric | P. and E. Leroux | 748,084 | Dec. 29 | 5174 | 1171 | 107 | 2316 |
| Loom pile-wire retainer | H. Hardwick | 738,031 | Sept. 1 | 942 | 209 | 106 | 205 |
| Loom pile-wires. Means for lubricating | C. Baulk | 730,201 | June 2 | 1206 | 270 | 104 | 1373 |
| Loom. Power- | S. F. Patterson | 722,248 | Mar. 10 | 1108 | 244, 245 | 103 | 252 |
| Loom. Power- | S. F. Patterson. (Reissue) | 12,159 | Sept. 29 | 5450 | 1226, 1227 | 106 | 1229 |
| Loom protective mechanism | W. A. Fowler | 744,324 | Nov. 17 | 3012 | 646 | 107 | 673 |
| Loom protector mechanism | H. W. Bracken | 729,039 | May 26 | 4166 | 923 | 104 | 934 |
| Loom protector mechanism | E. S. Stimpson | 731,391 | June 16 | 3427 | 764 | 104 | 1872 |
| Loom reed | F. Ott | 717,905 | Jan. 6 | 733 | 164 | 102 | 156 |
| Loom-reed | K. F. Weissbach | 725,809 | Apr. 21 | 2600 | 591 | 103 | 1751 |
| Loom-reed | G. de Zórawski | 736,670 | Aug. 18 | 3053 | 674 | 105 | 1666 |
| Loom-rod guide | D. C. Norcross | 723,903 | Mar. 31 | 4176 | 941 | 103 | 936 |
| Loom selvage-motion | C. H. Draper | 729,046 | May 26 | 4185 | 926 | 104 | 938 |
| Loom selvage-motion | J. T. Meats | 747,201 | Dec. 15 | 3484 | 791 | 107 | 1900 |
| Loom shed-forming mechanism | C. F. Roper | 737,148 | Aug. 25 | 3930 | 873 | 105 | 1870 |
| Loom shed-forming mechanism | C. F. Roper | 737,149 | Aug. 25 | 3932 | 873, 874 | 105 | 1870 |
| Loom shedding mechanism | H. Wyman | 719,289 | Jan. 27 | 3357 | 749, 750 | 102 | 755 |
| Loom shedding mechanism | A. D. Emery | 729,146 | May 26 | 4351 | 960 | 104 | 971 |
| Loom shedding mechanism | G. B. Ambler | 732,992 | July 7 | 516 | 128 | 105 | 110 |
| Loom shedding mechanism | G. W. Stafford | 734,767 | July 28 | 3845 | 897 | 105 | 857 |
| Loom shedding mechanism | C. H. Draper | 734,834 | July 28 | 3983 | 931 | 105 | 886 |
| Loom-shuttle | H. Côté | 728,371 | May 19 | 2929 | 646 | 104 | 662 |
| Loom-shuttle | J. E. Lemyre | 729,615 | June 2 | 166 | 40 | 104 | 1161 |
| Loom-shuttle | P. Moresi | 734,189 | July 21 | 2755 | 646 | 105 | 615 |
| Loom-shuttle | J. Coldwell and C. G. Gildard | 736,580 | Aug. 18 | 2874 | 628 | 105 | 1630 |
| Loom-shuttle | B. Crossley | 738,987 | Sept. 15 | 2846 | 631 | 106 | 642 |
| Loom-shuttle | H. Côté | 747,300 | Dec. 15 | 3676 | 830 | 107 | 1943 |
| Loom-shuttle | J. Marugg and J. Ruppert | 747,993 | Dec. 29 | 4993 | 1128 | 107 | 2276 |
| Loom-shuttle automatic threading device | R. L. Cumnock | 736,500 | Aug. 18 | 2733 | 598 | 105 | 1601 |
| Loom shuttle-binder | F. A. Mills | 742,707 | Oct. 27 | 4456 | 1007 | 106 | 2234 |
| Loom shuttle-box motion | F. Hofmann | 746,333 | Dec. 8 | 1877 | 428 | 107 | 1519 |
| Loom shuttle-box-operating mechanism | C. Schoen | 721,130 | Feb. 17 | 3223 | 738 | 102 | 1539 |
| Loom shuttle-box-operating mechanism | A. Barbier | 731,532 | June 23 | 3710 | 826 | 104 | 1949 |
| Loom shuttle-box-operating mechanism | G. Goodline | 744,333 | Nov. 17 | 3027 | 649 | 107 | 676 |
| Loom shuttle-box-operating mechanism | G. Goodline | 744,683 | Nov. 17 | 3623 | 781, 782 | 107 | 803 |
| Loom shuttle-changing mechanism | A. E., A., and G. Walker | 737,536 | Aug. 25 | 4688 | 1051 | 105 | 2036 |
| Loom shuttle-checking mechanism | G. H. Parker | 732,437 | June 30 | 5444 | 1209 | 104 | 2321 |
| Loom shuttle-checking mechanism | J. E. Tichon | 738,255 | Sept. 8 | 1407 | 305 | 106 | 319 |
| Loom shuttle-checking mechanism | J. P. Johnson | 743,880 | Nov. 10 | 2108 | 450 | 107 | 465 |
| Loom shuttle controlling mechanism | C. F. Roper | 726,573 | Apr. 28 | 4018 | 909 | 103 | 2055 |
| Loom-shuttle cop carrier or spindle | M. Goodwin, Jr | 733,386 | July 14 | 1243 | 295 | 105 | 279 |
| Loom shuttle-detecting means | I. Snow | 738,249 | Sept. 8 | 1391 | 302 | 106 | 317 |
| Loom-shuttle filling-carrier | W. Welch | 721,346 | Feb. 24 | 3638 | 827 | 102 | 1639 |
| Loom shuttle-lock | F. A. Mills | 739,018 | Sept. 15 | 2894 | 642 | 106 | 653 |
| Loom shuttle-lubricating device | D. McTaggart | 746,131 | Dec. 8 | 1504 | 336 | 107 | 1442 |
| Loom shuttle-motion | O. Bullock and W. H. Forty | 728,158 | May 12 | 2506 | 557 | 104 | 551 |
| Loom shuttle-motion | W. F. Kintzing | 737,939 | Sept. 1 | 762 | 167 | 106 | 167 |
| Loom shuttle-motion | W. H. White | 743,123 | Nov. 3 | 584 | 126 | 107 | 122 |
| Loom shuttle-motion | J. Frank and F. Benz, Jr | 748,273 | Dec. 29 | 5523 | 1258 | 107 | 2391 |
| Loom shuttle-operating mechanism | A. C. Hough | 740,362 | Sept. 29 | 5406 | 1218 | 106 | 1220 |
| Loom-shuttle. Self-threading | J. Northrop | 726,977 | May 5 | 295 | 66 | 104 | 64 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | | Spec. | Dr'g. | Vol. | Page. |
| Loom-shuttle. Self-threading | G. Fair | 728,383 | May 19 | 2949 | 651 | 104 | 666 |
| Loom-shuttle. Self-threading | G. Fair | 728,384 | May 19 | 2950 | 651 | 104 | 666 |
| Loom-shuttle. Self-threading | J. Northrop | 729,086 | May 26 | 4246 | 938 | 104 | 950 |
| Loom-shuttle tension device | J. E. Tichon | 721,978 | Mar. 3 | 608 | 135 | 103 | 132 |
| Loom-shuttle tension device | A. Baldwin | 725,652 | Apr. 21 | 2314 | 522 | 103 | 1689 |
| Loom-shuttle. Weaver's | E. G. Ferreira | 728,694 | May 19 | 3537 | 786 | 104 | 790 |
| Loom-shuttle. Weaver's | E. G. Ferreira | 736,079 | Aug. 11 | 1993 | 423 | 105 | 1426 |
| Loom-shuttle weft-case | W. H. Baker and F. E. Kip | 724,075 | Mar. 31 | 4536 | 1020 | 103 | 1009 |
| Loom-shuttle. Weft-detecting | R. Slack | 733,601 | July 14 | 1614 | 383 | 105 | 359 |
| Loom-shuttles. Automatic tension device for | A. Baldwin | 717,796 | Jan. 6 | 527 | 118 | 102 | 114 |
| Loom-shuttles. Pneumatic driver and cushion for | J. C. Blundell | 717,965 | Jan. 6 | 831 | 188 | 102 | 178 |
| Loom steel-harness motion | C. H. Draper | 744,910 | Nov. 24 | 4057 | 875 | 107 | 913 |
| Loom stop-motion | J. Coldwell and C. G. Gildard | 747,856 | Dec. 22 | 4694 | 1061 | 107 | 2190 |
| Loom stopping device | R. Howarth and J. Haden. (Reissue.) | 12,071 | Jan. 6 | 1018 | 227 | 102 | 220 |
| Loom stopping mechanism | J. V. and E. Cunniff | 720,117 | Feb. 10 | 1309 | 299 | 102 | 1118 |
| Loom stopping mechanism | E. S. Stimpson | 726,589 | Apr. 28 | 4051 | 914<br>915 | 103 | 2061 |
| Loom sweep-strap | C. P. Nichols | 737,266 | Aug. 25 | 4173 | 929 | 105 | 1921 |
| Loom. Swivel- | J. Wadsworth | 728,052 | May 12 | 2322 | 516<br>517 | 104 | 512 |
| Loom. Swivel- | J. Wadsworth | 740,717 | Oct. 6 | 607 | 136 | 106 | 1378 |
| Loom. Swivel- | J. Wadsworth | 745,538 | Dec. 1 | 415 | 95, 96 | 107 | 1187 |
| Loom take-up | A. F. Caswell | 748,262 | Dec. 29 | 5496 | 1253 | 107 | 2386 |
| Loom take-up-arresting mechanism | R. Jamieson | 729,593 | June 2 | 127 | 32 | 104 | 1153 |
| Loom take-up-arresting mechanism | J. Northrop | 729,644 | June 2 | 214 | 49 | 104 | 1172 |
| Loom take-up control | C. F. Roper | 729,668 | June 2 | 259 | 60 | 104 | 1182 |
| Loom take-up mechanism | J. Northrop | 729,645 | June 2 | 216 | 49, 50 | 104 | 1172 |
| Loom take-up mechanism | C. F. Roper | 729,669 | June 2 | 261 | 60 | 104 | 1182 |
| Loom take-up mechanism | C. W. Russell | 730,404 | June 9 | 1599 | 357 | 104 | 1470 |
| Loom take-up mechanism | O. A. Sawyer | 738,245 | Sept. 8 | 1385 | 300 | 106 | 315 |
| Loom take-up mechanism | W. I. Stimpson | 743,584 | Nov. 10 | 1579 | 331 | 107 | 354 |
| Loom take-up motion | O. L. Owen | 732,436 | June 30 | 5442 | 1209 | 104 | 2321 |
| Loom take-up roller | F. Ott | 743,657 | Nov. 10 | 1713 | 362 | 107 | 381 |
| Loom-temple | E. S. Fling | 747,879 | Dec. 22 | 4749 | 1073 | 107 | 2201 |
| Loom thin-place-detector mechanism | E. E. Shelters and H. T. Hunnewell | 723,049 | Mar. 17 | 2585 | 582<br>583 | 103 | 579 |
| Loom thin-place-detector mechanism | D. W. Denny | 724,267 | Mar. 31 | 4937 | 1105 | 103 | 1088 |
| Loom thread-parting mechanism | E. S. Stimpson | 718,957 | Jan. 20 | 2732 | 611<br>612 | 102 | 610 |
| Loom thread-parting mechanism | E. S. Stimpson | 732,460 | June 30 | 5490 | 1217 | 104 | 2331 |
| Loom. Thread-winding | F. H. Frissell | 721,792 | Mar. 3 | 247 | 55 | 103 | 55 |
| Loom-undermotion | G. J. Tharan | 727,027 | May 5 | 409 | 85 | 104 | 89 |
| Loom warp and weft stopping mechanism | W. H. Baker and F. E. Kip | 727,733 | May 12 | 1724 | 387<br>388 | 104 | 388 |
| Loom warp-beam | A. Jobert | 729,496 | May 26 | 4950 | 1097 | 104 | 1098 |
| Loom warp-beam | N. J. Martin | 745,211 | Nov. 24 | 4677 | 1019 | 107 | 1040 |
| Loom warp-beams. Journal-bearing for | O. L. Owen | 731,123 | June 16 | 2929 | 651 | 104 | 1771 |
| Loom warp-evening mechanism | E. S. Wood | 747,310 | Dec. 15 | 3697 | 833<br>834 | 107 | 1948 |
| Loom warp-let-off mechanism | J. M. Peckham | 728,001 | May 12 | 2230 | 496 | 104 | 493 |
| Loom warp stop-motion | C. F. Roper | 719,879 | Feb. 3 | 849 | 198 | 102 | 1003 |
| Loom warp stop-motion | J. T. Cyr | 722,818 | Mar. 17 | 2193 | 489 | 103 | 498 |
| Loom warp stop-motion | H. Wyman | 724,769 | Apr. 7 | 653 | 152 | 103 | 1308 |
| Loom warp stop-motion | H. A. Owen | 729,960 | June 2 | 809 | 180 | 104 | 1291 |
| Loom warp stop-motion | J. Northrop | 732,885 | July 7 | 336 | 83 | 105 | 74 |
| Loom warp stop-motion | H. A. Owen | 733,077 | July 7 | 671 | 161 | 105 | 142 |
| Loom warp stop-motion | A. K. Pratt | 733,079 | July 7 | 677 | 165 | 105 | 144 |
| Loom warp stop-motion | A. Wenning and J. Bicking | 735,184 | Aug. 4 | 299 | 59 | 105 | 1044 |
| Loom warp stop-motion | J. E. Lemyre | 735,785 | Aug. 11 | 1424 | 305<br>306 | 105 | 1302 |
| Loom warp stop-motion | J. H. Wolger | 737,544 | Aug. 25 | 4698 | 1053<br>1054 | 105 | 2038 |
| Loom warp stop-motion | J. F. Dustin | 741,577 | Oct. 13 | 2286 | 510<br>511 | 106 | 1753 |
| Loom warp stop-motion | W. H. Baker and F. E. Kip | 741,951 | Oct. 20 | 3007 | 668 | 106 | 1921 |
| Loom warp stop-motion | C. F. Roper | 744,940 | Nov. 24 | 4110 | 886 | 107 | 923 |
| Loom warp stop-motion | G. B. Ambler | 747,311 | Dec. 15 | 3699 | 834 | 107 | 1949 |
| Loom warp-tension mechanism | H. Hautmann | 724,471 | Apr. 7 | 98 | 24 | 103 | 1190 |
| Loom weft-controlling mechanism | F. E. Kip | 724,113 | Mar. 31 | 4611 | 1038<br>1039 | 103 | 1025 |
| Loom weft-controlling mechanism | F. E. Kip | 724,114 | Mar. 31 | 4616 | 1040 | 103 | 1026 |
| Loom weft-controlling mechanism | F. E. Kip | 743,292 | Nov. 3 | 926 | 201 | 107 | 199 |
| Loom weft-detecting mechanism | G. F. Hutchins | 743,166 | Nov. 3 | 668 | 145 | 107 | 140 |
| Loom weft-feeler | T. McAuliffe and J. T. Bolton | 719,491 | Feb. 3 | 146 | 33 | 102 | 855 |
| Loom weft-handling mechanism | A. C. Hough | 740,276 | Sept. 29 | 5256 | 1185<br>1186 | 106 | 1188 |
| Loom weft-operated controlling device | F. Sameck | 718,529 | Jan. 13 | 1915 | 420 | 102 | 428 |
| Loom. Weft-replenishing | I. F. Peck | 729,401 | May 26 | 4796 | 1062<br>1063<br>1064 | 104 | 1064 |
| Loom. Weft-replenishing | W. Rossetter and R. Talbot | 744,240 | Nov. 17 | 2857 | 612<br>613 | 107 | 639 |
| Loom weft replenishing and controlling mechanism | W. H. Baker and F. E. Kip | 739,573 | Sept. 22 | 3922 | 877<br>878 | 106 | 888 |
| Loom weft-replenishing mechanism | E. A. Thissell | 733,884 | July 14 | 2136 | 504<br>505 | 105 | 466 |
| Loom weft-replenishing mechanism | E. A. Thissell | 734,007 | July 21 | 2389 | 560<br>561 | 105 | 536 |
| Loom weft-replenishing mechanism | A. E., A., and G. Walker | 738,644 | Sept. 8 | 2198 | 480<br>481 | 106 | 487 |
| Loom weft-replenishing mechanism | A. Smith, S. Jackson, and C. Hudson. | 745,078 | Nov. 24 | 4406 | 952<br>953 | 107 | 983 |
| Loom weft-replenishing mechanism | H. R. Ross, A. McKee, A. Laird, and R. McKeown. | 748,105 | Dec. 29 | 5215 | 1180<br>1181 | 107 | 2325 |
| Loom weft stop-motion | J. A. Clark | 719,647 | Feb. 3 | 421 | 96 | 102 | 910 |

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| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Loom whip-roll motion | W. Holcroft | 743,722 | Nov. 10 | 1819 | 383 | 107 | 405 |
| Loom wiring-motion | E. Hollingworth | 731,903 | June 23 | 4379 | 976 | 104 | 2088 |
| Looms, &c. Beam latch or dog for | J. T. Meats | 718,268 | Jan. 13 | 1394 | 311 | 102 | 315 |
| Looms by the quantity of weft in the shuttles Means for controlling | J. H. Klerx | 723,879 | Mar. 31 | 4132 | 931 | 103 | 926 |
| Looms. Electric feeler for weft-replenishing | R. Cowell and A. White | 747,146 | Dec. 15 | 3379 | 767 | 107 | 1879 |
| Looms. Electrical jacquard mechanism for | J. Szczepanik | 727,023 | May 5 | 404 | 85 | 104 | 88 |
| Looms. Knife-sled motion for pile-fabric | E. H. Ryon | 720,285 | Feb. 10 | 1623 | 371 | 102 | 1182 |
| Looms. Machine for soldering healds for weaving- | J. Gohy | 736,593 | Aug. 18 | 2917 | 637 / 638 | 105 | 1639 |
| Looms. Means for preventing banging off in | E. S. Wood | 742,813 | Oct. 27 | 4632 | 1050 | 106 | 2273 |
| Looms. Means for preventing warp breakage in | C. F. Roper | 731,622 | June 23 | 3875 | 863 | 104 | 1980 |
| Looms. Thread-parting mechanism for weft-replenishing | C. and G. Brun and J. Bicking | 722,081 | Mar. 3 | 777 | 174 | 103 | 168 |
| Looms. Tip-support for automatic filling-replenishing | E. S. Stimpson | 720,189 | Feb. 10 | 1435 | 328 | 102 | 1143 |
| Looms. Web supporting or guiding means for narrow-ware | J. Frank and F. Benz, Jr. | 748,274 | Dec. 29 | 5524 | 1259 | 107 | 2392 |
| Looms. Weft-feeler for replenishing | T. McAuliffe | 720,457 | Feb. 10 | 1920 | 437 | 102 | 1244 |
| Loop-banding machine | F. S. Culver | 730,516 | June 9 | 1818 | 405 | 104 | 1517 |
| Lorgnette and opera-glass. Combined | W. E. Stevens | 731,820 | June 23 | 4236 | 943 / 944 | 104 | 2056 |
| Low-joint-indicating mechanism | C. M. Bennett | 721,933 | Mar. 3 | 528 | 116 / 117 | 103 | 117 |
| Low-water alarm | J. Arrance | 745,987 | Dec. 8 | 1241 | 280 | 107 | 1382 |
| Low-water alarm. Steam-boiler | F. O. Stanley | 722,330 | Mar. 10 | 1255 | 280 | 103 | 283 |
| Low-water alarm. Steam-boiler | S. H. Ralph | 724,613 | Apr. 7 | 368 | 88, 89 | 103 | 1248 |
| Lowering persons or dead-weights. Apparatus for | A. Wyss-Baumgartner | 720,310 | Feb. 10 | 1668 | 379 | 102 | 1191 |
| Lubricant and making same | S. A. Smith | 736,162 | Aug. 11 | 2129 | ------ | 105 | 1453 |
| Lubricant and making same | S. A. Smith | 748,317 | Dec. 29 | 5584 | ------ | 107 | 2404 |
| Lubricating | W. Michalk | 744,088 | Nov. 17 | 2552 | 547 | 107 | 573 |
| Lubricating apparatus | M. B. Hansen | 719,941 | Feb. 3 | 939 | 219 | 102 | 1023 |
| Lubricating apparatus | L. Friedmann | 741,478 | Oct. 13 | 2092 | 464 / 465 | 106 | 1713 |
| Lubricating-box | T. A. Matthews | 719,021 | Jan. 27 | 2847 | 639 | 102 | 649 |
| Lubricating-box for axles of overhead traveling cranes. | C. L. Taylor | 721,252 | Feb. 24 | 3485 | 792 | 102 | 1606 |
| Lubricating-cup | J. M. Stapp | 734,443 | July 21 | 3222 | 758 | 105 | 714 |
| Lubricating device | F. L. Hawkins | 718,456 | Jan. 13 | 1743 | 388 | 102 | 387 |
| Lubricating device | G. Macloski | 730,676 | June 9 | 2102 | 467 | 104 | 1579 |
| Lubricating device | B. F. Campbell and J. Berg | 730,813 | June 9 | 2321 | 516 | 104 | 1626 |
| Lubricating device | B. F. Campbell and J. Berg | 730,814 | June 9 | 2323 | 516 | 104 | 1626 |
| Lubricating device | A. G. Elvin. (Reissue) | 12,134 | July 21 | 3322 | 778 | 105 | 734 |
| Lubricating device | J. Oldendorph | 746,874 | Dec. 15 | 2863 | 659 | 107 | 1759 |
| Lubricating device | J. A. Gibbons | 748,362 | Dec. 29 | 5659 | 1290 | 107 | 2420 |
| Lubricating device. Bearing- | J. D. Forrer | 736,376 | Aug. 18 | 2493 | 548 | 105 | 1550 |
| Lubricating device for car-axle journals | F. B. Harrison and L. Y. Williams | 720,026 | Feb. 10 | 1133 | 259 | 102 | 1080 |
| Lubricating device for high-speed and explosion motors. | L. Renault | 747,767 | Dec. 22 | 4522 | 1019 | 107 | 2151 |
| Lubricating explosive-hydrocarbon engines | A. F. Lucas | 721,057 | Feb. 17 | 3049 | 700 | 102 | 1497 |
| Lubricating mechanism | N. A. Christensen | 722,209 | Mar. 10 | 1031 | 228 / 229 | 103 | 234 |
| Lubricating metallic ball and making same. Self- | A. Johnston | 748,191 | Dec. 29 | 5372 | 1221 | 107 | 2358 |
| Lubricating-press | W. Michalk | 720,047 | Feb. 10 | 1171 | 268 | 102 | 1088 |
| Lubricating-trolley for wire-rope railways | R. Pfaffenbach | 724,203 | Mar. 31 | 4799 | 1075 | 103 | 1062 |
| Lubrication system. Splash- | A. P. Brush | 730,738 | June 9 | 2199 | 490 | 104 | 1600 |
| Lubricator: *See* Automatic lubricator. Axle-lubricator. Cable-lubricator. Engine-lubricator. Engine-cylinder lubricator. Force-feed lubricator. Graphite lubricator. Journal-lubricator. Locomotive-lubricator. Pump-lubricator. | | | | | | | |
| Lubricator | G. Wieseckel | 720,767 | Feb. 17 | 2523 | 581 | 102 | 1384 |
| Lubricator | L. P. Caloin | 721,284 | Feb. 24 | 3528 | 803 | 102 | 1616 |
| Lubricator | E. E. Davis | 725,545 | Apr. 14 | 2090 | 473 | 103 | 1627 |
| Lubricator | L. Waters | 728,146 | May 12 | 2483 | 552 | 104 | 546 |
| Lubricator | G. Schneider | 730,482 | June 9 | 1751 | 392 | 104 | 1502 |
| Lubricator | E. J. Mougette | 730,784 | June 9 | 2275 | 505 / 506 | 104 | 1617 |
| Lubricator | E. Allen and G. W. Carver | 731,731 | June 23 | 4074 | 908 / 909 | 104 | 2020 |
| Lubricator | E. Allen and G. W. Carver | 731,833 | June 23 | 4260 | 948 | 104 | 2062 |
| Lubricator | J. H. Walker | 732,146 | June 30 | 4883 | 1086 | 104 | 2206 |
| Lubricator | G. Fisher and V. Krosli | 733,179 | July 7 | 850 | 206 | 105 | 178 |
| Lubricator | H. James | 736,263 | Aug. 11 | 2297 | 496 | 105 | 1490 |
| Lubricator | J. F. Lewis | 738,046 | Sept. 1 | 962 | 214 | 106 | 209 |
| Lubricator | W. C. Meelings and E. J. Gay | 738,835 | Sept. 15 | 2594 | 573 | 106 | 588 |
| Lubricator | J. A. Erickson and F. W. Young | 740,409 | Oct. 6 | 39 | 9 | 106 | 1252 |
| Lubricator | C. L. Hofmann | 740,856 | Oct. 6 | 880 | 196 | 106 | 1433 |
| Lubricator | W. S. Peavey | 742,484 | Oct. 27 | 4048 | 908 | 106 | 2148 |
| Lubricator | H. W. Fisher | 743,849 | Nov. 10 | 2053 | 436 | 107 | 453 |
| Lubricator | F. X. May | 744,927 | Nov. 24 | 4091 | 881 | 107 | 919 |
| Lubricator | B. M. W. Hanson | 745,435 | Dec. 1 | 232 | 54 | 107 | 1149 |
| Lubricator | H. S. Burrell | 745,567 | Dec. 1 | 464 | 109 | 107 | 1196 |
| Lubricator | N. Schurman and E. F. Whited | 746,883 | Dec. 15 | 2877 | 665 | 107 | 1763 |
| Lubricator | H. E. Fishbough | 747,875 | Dec. 22 | 4744 | 1072 | 107 | 2200 |
| Lubricator | A. E. Clifton | 748,480 | Dec. 29 | 5894 | 1339 | 107 | 2472 |
| Lubricator or lubrication system | P. J. Lockwood | 743,392 | Nov. 3 | 1137 | 241 | 107 | 240 |
| Lug. Loose | M. Dean | 734,677 | July 28 | 3657 | 857 | 105 | 821 |
| Lug-strap holder | D. T. Shea | 743,575 | Nov. 10 | 1562 | 327 | 107 | 350 |
| Luggage-carrier | S. Jacobson | 725,715 | Apr. 21 | 2414 | 548 | 103 | 1711 |
| Luggage-carrier | J. O. Bibler | 741,098 | Oct. 13 | 1311 | 301 | 106 | 1546 |
| Lumber and preserving same. Undressed | G. C. Cowles | 746,678 | Dec. 15 | 2494 | ------ | 107 | 1677 |

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| Invention. | Name. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | | Spec. | Dr'g. | Vol. | Page. |
| Lumber-conveyer for double-cutting band-mills. Disk | E. E. Thomas | 730,317 | June 9 | 1443 | 318 | 104 | 1438 |
| Lumber dry-kiln | W. P. Hussey | 747,722 | Dec. 22 | 4440 | 1001, 1002 | 107 | 2131 |
| Lumber-drying clamp | G. X. Wendling | 734,110 | July 21 | 2609 | 614 | 105 | 585 |
| Lumber-registering attachment | W. G. Boswell | 721,857 | Mar. 3 | 368 | 81, 82 | 103 | 80 |
| Lumber-seasoning apparatus | B. B. Gray | 733,835 | July 14 | 2046 | 482, 483 | 105 | 447 |
| Lumber. Stacking | F. M. Hazleton | 719,663 | Feb. 3 | 444 | 101 | 102 | 915 |
| Lumber-surface meter | J. D. Bates | 732,697 | July 7 | 10 | 3 | 105 | 5 |
| Lumber-trimmer. Automatic | C. W. Willett and G. F. Steedman | 733,103 | July 7 | 719 | 175, 176 | 105 | 152 |
| Lunch-box | L. Louis | 732,423 | June 30 | 5418 | 1202 | 104 | 2317 |
| Lunch box | L. E. Broyles | 735,656 | Aug. 4 | 1186 | 251 | 105 | 1233 |
| Lung and voice developer | P. E. Nichol | 737,008 | Aug. 25 | 3705 | 822 | 105 | 1823 |
| Machine-clamp | D. T. Kendrick | 744,559 | Nov. 17 | 3425 | 738 | 107 | 761 |
| Machine-tools. Device for intermittently rotating tables of | F. Komnick | 746,849 | Dec. 15 | 2808 | 647 | 107 | 1747 |
| Machinery timing apparatus and alarm | D. Anderson | 728,826 | May 26 | 3792 | 845 | 104 | 860 |
| Magnesium and calcium carbonates. Producing | F. S. Young | 734,030 | July 21 | 2446 | 572 | 105 | 550 |
| Magnet | H. F. Campbell | 744,481 | Nov. 17 | 3300 | 709 | 107 | 735 |
| Magnet coil. Field- | C. R. and T. M. Meston | 724,484 | Apr. 7 | 117 | 29 | 103 | 1194 |
| Magnet coil for electrical machines. Field- | L. A. Osborne | 747,631 | Dec. 22 | 4276 | 961 | 107 | 2094 |
| Magnet for alternating-current generators. Rotating field- | H. G. Reist | 725,773 | Apr. 21 | 2525 | 573 | 103 | 1736 |
| Magnet for dynamo-electric machines or motors. Field- | R. Lundell | 729,879 | June 2 | 662 | 145 | 104 | 1263 |
| Magnet frames of dynamo-electric machines. Device for shifting the field- | W. F. Dawson | 725,416 | Apr. 14 | 1838 | 412 | 103 | 1574 |
| Magnet. Solenoid- | G. T. Hanchett | 732,851 | July 7 | 279 | 69, 70 | 105 | 62 |
| Magnet structure. Field- | H. G. Reist | 729,414 | May 26 | 4820 | 1069 | 104 | 1069 |
| Magnets to spiders. Fastening field- | H. G. Reist | 726,347 | Apr. 28 | 3566 | 808 | 103 | 1968 |
| Magnets. Winding of revolving | C. A. Parsons | 729,655 | June 2 | 237 | 53, 54, 55, 56 | 104 | 1177 |
| Magnetic composition and making same | R. A. Hadfield | 745,829 | Dec. 1 | 948 | ..... | 107 | 1301 |
| Magnetic-power mechanism | F. Hachmann | 748,182 | Dec. 29 | 5359 | 1217 | 107 | 2355 |
| Magnetic-separation apparatus | B. H. Sweet | 739,741 | Sept. 22 | 4236 | 948, 949 | 106 | 956 |
| Magnetic separator | J. Kirschweng | 720,156 | Feb. 10 | 1370 | 315 | 102 | 1131 |
| Magnetic separator | A. E. Forsgren | 731,446 | June 23 | 3538 | 788, 789 | 104 | 1914 |
| Magnetic separator. Subaqueous | E. Gates | 729,753 | June 2 | 421 | 95, 96 | 104 | 1214 |
| Magnetic suspension device | W. H. Pratt | 730,840 | June 9 | 2370 | 523 | 104 | 1637 |
| Magneto | C. W. Holtzer | 726,687 | Apr. 28 | 4226 | 955 | 103 | 2098 |
| Magneto-electric generator | L. J. Le Pontois and A. Clément | 744,573 | Nov. 17 | 3447 | 743 | 107 | 766 |
| Magneto-electric generator mechanism | L. G. Woolley | 719,971 | Feb. 3 | 996 | 232 | 102 | 1035 |
| Magneto-electric machine | J. M. Wilson | 719,167 | Jan. 27 | 3138 | 699 | 102 | 707 |
| Magneto-electric machine | D. Drawbaugh | 733,948 | July 21 | 2273 | 535 | 105 | 513 |
| Magneto-generator | G. E. Wheeler | 728,343 | May 19 | 2888 | 637 | 104 | 655 |
| Magneto-generator | G. E. Wheeler | 746,904 | Dec. 15 | 2916 | 673 | 107 | 1772 |
| Mail-bag | W. and W. M. Rohde | 733,081 | July 7 | 681 | 166 | 105 | 145 |
| Mail-bag | C. H. Burton | 746,013 | Dec. 8 | 1294 | 291 | 107 | 1392 |
| Mail-bag | D. G. McClay | 748,209 | Dec. 29 | 5405 | 1229 | 107 | 2365 |
| Mail-bag catcher and deliverer | C. R. Hawkins | 731,180 | June 16 | 3033 | 674 | 104 | 1790 |
| Mail-bag catcher and deliverer | J. N. Thomas | 747,663 | Dec. 22 | 4337 | 979 | 107 | 2108 |
| Mail-bag catcher. Automatic | G. A. Hughes | 717,999 | Jan. 6 | 906 | 203, 204 | 102 | 194 |
| Mail-bag catching and delivering mechanism | R. J. Meyer | 731,592 | June 23 | 3821 | 851 | 104 | 1970 |
| Mail-bag catching and delivery device | M. D. Cummings | 724,673 | Apr. 7 | 475 | 115 | 103 | 1271 |
| Mail-bag closure | C. A. McKinney | 733,914 | July 14 | 2205 | 517 | 105 | 479 |
| Mail-bag closure | H. J. Heilig | 738,439 | Sept. 8 | 1807 | 392 | 106 | 404 |
| Mail-bag crane | J. M. C. Howell | 739,876 | Sept. 29 | 4522 | 1016 | 106 | 1033 |
| Mail-bag fastener | J. W. Shallenberger | 735,914 | Aug. 11 | 1682 | 359 | 105 | 1358 |
| Mail-bag fastener | H. J. Heilig | 738,440 | Sept. 8 | 1808 | 392 | 106 | 404 |
| Mail-bag fastener | S. J. Brown | 738,522 | Sept. 8 | 1975 | 430 | 106 | 440 |
| Mail-bag holder | D. S. Baldwin | 720,097 | Feb. 10 | 1275 | 291 | 102 | 1110 |
| Mail-bags, &c. Buckle for sealing | J. Anschau | 733,116 | July 7 | 744 | 180 | 105 | 157 |
| Mail-box | A. M. Burnham | 718,190 | Jan. 13 | 1246 | 279 | 102 | 284 |
| Mail-box | O. M. Aarseth | 720,651 | Feb. 17 | 2329 | 533 | 102 | 1342 |
| Mail-box | A. G. Stinson | 723,939 | Mar. 31 | 4268 | 959 | 103 | 957 |
| Mail-box | J. H. Forney | 724,092 | Mar. 31 | 4562 | 1027 | 103 | 1014 |
| Mail-box | A. L. Henry | 725,080 | Apr. 14 | 1235 | 278 | 103 | 1447 |
| Mail-box | J. Lieber | 725,101 | Apr. 14 | 1275 | 288 | 103 | 1455 |
| Mail-box | J. B. Reintges | 727,445 | May 5 | 1159 | 256 | 104 | 251 |
| Mail-box | W. B. Barnes | 728,353 | May 19 | 2904 | 641 | 104 | 656 |
| Mail-box | S. S. Langford | 728,401 | May 19 | 2984 | 657 | 104 | 673 |
| Mail-box | G. Graven | 730,762 | June 9 | 2239 | 498 | 104 | 1610 |
| Mail-box | S. A. Jones | 731,372 | June 16 | 3377 | 755 | 104 | 1862 |
| Mail-box | A. R. McClelland | 731,804 | June 23 | 4210 | 938 | 104 | 2050 |
| Mail-box | J. W. Snedeker | 732,904 | July 7 | 366 | 90 | 105 | 80 |
| Mail-box | F. F. Hunter | 733,651 | July 14 | 1700 | 403 | 105 | 376 |
| Mail-box | W. G. Dougall | 733,704 | July 14 | 1780 | 243 | 105 | 393 |
| Mail-box | I. F. Collins | 740,237 | Sept. 29 | 5185 | 1165 | 106 | 1174 |
| Mail-box | M. S. Exe | 742,850 | Nov. 3 | 57 | 14 | 107 | 14 |
| Mail-box | G. E. Roesch | 743,104 | Nov. 3 | 548 | 118 | 107 | 114 |
| Mail box | M. J. Lawrence | 743,297 | Nov. 3 | 936 | 204 | 107 | 201 |
| Mail box | E. E. Reese | 743,660 | Nov. 10 | 1719 | 363 | 107 | 383 |
| Mail-box | W. A. Wheeler | 745,749 | Dec. 1 | 774 | 177 | 107 | 1263 |
| Mail box | D. J. Wilson | 747,820 | Dec. 22 | 4626 | 1045 | 107 | 2174 |
| Mail-box | J. J. Sullivan | 748,541 | Dec. 29 | 6026 | 1364 | 107 | 2503 |
| Mail-box and support | E. N. Sword | 730,806 | June 9 | 2309 | 513 | 104 | 1624 |
| Mail-box attachment | J. R. Clark | 744,904 | Nov. 24 | 4048 | 873 | 107 | 910 |
| Mail-box attachment. Rural- | J. Muskopf | 735,284 | Aug 4 | 481 | 96 | 105 | 1083 |
| Mail-box carrier | I. Unger | 722,929 | Mar. 17 | 2380 | 533 | 103 | 536 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Mail-box indicator | H. Schmid | 738,849 | Sept. 15 | 2624 | 578, 579 | 106 | 595 |
| Mail-box locking system | J. E. Walsh | 718,553 | Jan. 13 | 1969 | 431 | 102 | 438 |
| Mail-box. Rural | C. F. Mackenzie and R. J. Pense | 731,061 | June 16 | 2805 | 624 | 104 | 1746 |
| Mail-box. Rural | T. Hamilton and C. Van Riper | 741,489 | Oct. 13 | 2111 | 470 | 106 | 1717 |
| Mail-box. Rural | B. B. Williams | 741,865 | Oct. 20 | 2826 | 629 | 106 | 1883 |
| Mail-box. Rural-delivery | M. S. Norton | 720,279 | Feb. 10 | 1613 | 369 | 102 | 1179 |
| Mail-box. Rural free-delivery | H. N. King | 719,474 | Feb. 3 | 113 | 27 | 102 | 849 |
| Mail-bundling device | G. W. Hagan | 723,381 | Mar. 24 | 3233 | 725 | 103 | 722 |
| Mail-carrier | E. Horst | 724,290 | Mar. 31 | 4078 | 1114 | 103 | 1098 |
| Mail-carrier. Rural | C. C. Lester | 743,298 | Nov. 3 | 937 | 204 | 107 | 201 |
| Mail-case for rural delivery | J. A. Utterback | 739,625 | Sept. 22 | 4024 | 898 | 106 | 910 |
| Mail catcher and deliverer | J. W. Gilbert | 733,025 | July 7 | 573 | 139 | 105 | 122 |
| Mail-catcher arm | F. M. Edwards | 721,551 | Feb. 24 | 4004 | 911 | 102 | 1715 |
| Mail-chute | J. G. Cutler | 726,261 | Apr. 28 | 3385 | 769 | 103 | 1930 |
| Mail-chute | F. E. Anderson | 746,233 | Dec. 8 | 1689 | 376 | 107 | 1481 |
| Mail-chute closure | J. W. Cutler | 744,724 | Nov. 24 | 3742 | 807 | 107 | 847 |
| Mail collection and delivery apparatus | C. C. Kitterman | 744,005 | Nov. 10 | 2370 | 509 | 107 | 524 |
| Mail-collection device. Railway | C. A. Pfanstiehl, L. A. Pease, and J. A. Brady. | 727,893 | May 12 | 1911 | 426, 427 | 104 | 425 |
| Mail conveyance. Rural-route | J. H. Gross | 730,909 | June 16 | 2520 | 560 | 104 | 1687 |
| Mail-conveyer | E. Beghtel | 737,320 | Aug. 25 | 4279 | 951 | 105 | 1943 |
| Mail-crane | R. Minges | 724,313 | Mar. 31 | 5018 | 1124 | 103 | 1105 |
| Mail-crane | L. H. Rickles | 724,943 | Apr. 7 | 960 | 221, 222 | 103 | 1874 |
| Mail-crane | A. P. Bower | 725,209 | Apr. 14 | 1476 | 335 | 103 | 1497 |
| Mail-crane | T. J. Conway | 727,909 | May 12 | 2057 | 458 | 104 | 456 |
| Mail-crane | J. M. Hough | 747,714 | Dec. 22 | 4428 | 997 | 107 | 2129 |
| Mail-deliverer | F. M. Edwards | 721,550 | Feb. 24 | 4000 | 910, 911 | 102 | 1714 |
| Mail delivering and receiving apparatus for railway-cars. | R. Shedenhelm | 721,332 | Feb. 24 | 3611 | 821 | 102 | 1634 |
| Mail-delivering apparatus | G. Condory | 718,698 | Jan. 20 | 2245 | 492, 493 | 102 | 509 |
| Mail-delivery apparatus. Rural | O. S. Mallow | 726,958 | May 5 | 241 | 56 | 104 | 52 |
| Mail-delivery apparatus. Suburban | N. S. Howell | 745,498 | Dec. 1 | 352 | 81, 82 | 107 | 1174 |
| Mail-delivery bag | J. F. Stroh | 733,765 | July 14 | 1898 | 447, 448 | 105 | 417 |
| Mail-delivery box | W. S. Isham | 734,266 | July 21 | 2902 | 679 | 105 | 649 |
| Mail-distributing system | P. Reich | 737,963 | Sept. 1 | 815 | 179 | 106 | 179 |
| Mail from cars. Apparatus for delivering | E. F. Pywell | 721,234 | Feb. 24 | 3447 | 783, 784 | 102 | 1598 |
| Mail or letter drop | E. G. Gordon | 719,581 | Feb. 3 | 310 | 72 | 102 | 887 |
| Mail-pouch-transfer system. Railway | W. W. Taylor and W. F. Bossert | 734,006 | July 21 | 2384 | 560 | 105 | 535 |
| Mail-pouches from moving trains. Device for receiving | J. Kaiser | 742,670 | Oct. 27 | 4396 | 992 | 106 | 2222 |
| Mail receiving and collecting apparatus | F. Marx and E. Mérei | 718,717 | Jan. 20 | 2283 | 503 | 102 | 516 |
| Mail-receptacle | J. P. Brown | 736,815 | Aug. 18 | 3334 | 738 | 105 | 1724 |
| Mail-transportation system | T. W. Russell | 742,068 | Oct. 20 | 3298 | 734 | 106 | 1978 |
| Mail-tube fastening | H. Del Mar | 744,176 | Nov. 17 | 2738 | 583 | 107 | 612 |
| Mailing-tube | T. H. Grace | 727,786 | May 12 | 1833 | 409 | 104 | 409 |
| Mailing-tube | L. Patterson | 728,407 | May 19 | 2992 | 658 | 104 | 675 |
| Mailing-tube | J. C. Kimsey | 736,407 | Aug. 18 | 2549 | 559 | 105 | 1562 |
| Mailing-tube | H. L. Stafford | 739,232 | Sept. 15 | 3291 | 729 | 106 | 735 |
| Mailing-tube clip | F. J. Ganaway | 738,898 | Sept. 15 | 2704 | 597 | 106 | 613 |
| Mailing-tube. Paper | A. W. Ferres | 726,894 | May 5 | 117 | 27 | 104 | 28 |
| Mailing-wrapper | L. E. Barnes | 728,435 | May 19 | 3038 | 668 | 104 | 684 |
| Mailing-wrapper | E. H. Callahan | 746,014 | Dec. 8 | 1295 | 291 | 107 | 1393 |
| Mallet. Automatic | A. W. Browne | 723,134 | Mar. 17 | 2740 | 616 | 103 | 611 |
| Malt-breaking mill | H. Krusemark | 744,567 | Nov. 17 | 3437 | 740 | 107 | 764 |
| Malt for mashing. Apparatus for preparing bruised or ground | V. Lapp | 722,310 | Mar. 10 | 1223 | 372 | 103 | 277 |
| Malt for mashing. Preparing | V. Lapp | 719,479 | Feb. 3 | 121 | 28 | 102 | 851 |
| Malt, grain, seeds, &c. Apparatus for cleaning | O. G. C. L. J. Overbeck | 728,604 | May 19 | 3380 | 748, 749 | 104 | 757 |
| Malt-kiln dumping-floor | H. W. Colby | 747,143 | Dec. 15 | 3374 | 766 | 107 | 1878 |
| Malt. Means for mixing cereal with | A. C. Bourdeau | 746,664 | Dec. 15 | 2474 | 565 | 107 | 1672 |
| Malt-turner | J. Mueller | 740,770 | Oct. 6 | 732 | 165 | 106 | 1402 |
| Malt-turner. Machine | B. W. Ellison | 726,890 | May 5 | 110 | 26 | 104 | 26 |
| Malt-turning machine | D. D. Weschler | 722,785 | Mar. 17 | 2130 | 476, 477 | 103 | 486 |
| Malted flakes. Making | A. C. Bourdeau | 746,663 | Dec. 15 | 2472 | ..... | 107 | 1672 |
| Malting | B. Berg | 743,810 | Nov. 10 | 1982 | 422 | 107 | 438 |
| Malting and drying apparatus | F. H. C. Mey | 745,366 | Dec. 1 | 93 | 21, 22 | 107 | 1121 |
| Malting apparatus | F. B. Giesler | 723,266 | Mar. 24 | 3000 | 674, 675 | 103 | 678 |
| Maltose. Producing | C. B. Duryea | 746,933 | Dec. 15 | 2984 | ..... | 107 | 1788 |
| Manager's reference system | H. H. Mayberry | 728,593 | May 19 | 3362 | 745 | 104 | 753 |
| Mandolin or similar instrument attachment | J. M. Timmons | 725,177 | Apr. 14 | 1415 | 320 | 103 | 1484 |
| Mandrel | E. I. Braddock | 718,082 | Jan. 13 | 1057 | 235 | 102 | 242 |
| Mandrel | H. Prentice | 726,456 | Apr. 28 | 3759 | 852 | 103 | 2007 |
| Mandrel. Expansible | G. H. Shattuck and H. R. Farnsworth. | 727,000 | May 5 | 352 | 76 | 104 | 76 |
| Mandrel for conduit-sections | R. W. Lyle | 720,369 | Feb. 10 | 1774 | 402 | 102 | 1215 |
| Mandrel for conduit-sections | R. W. Lyle | 722,729 | Mar. 17 | 2021 | 451 | 103 | 463 |
| Mandrel-press | J. A. Hess | 747,174 | Dec. 15 | 3428 | 777 | 107 | 1889 |
| Mandrels for conduit-sections. Grappling device for | R. W. Lyle | 721,713 | Mar. 3 | 114 | 24 | 103 | 25 |
| Mangle | A. T. Hagen, D. M. Cooper, and J. Kane. | 729,928 | June 2 | 733 | 164 | 104 | 1277 |
| Mangle | K. Henrikson | 733,645 | July 14 | 1688 | 400 | 105 | 373 |
| Mangle | G. Hörig | 738,448 | Sept. 8 | 1820 | 395 | 106 | 406 |
| Mangle | C. F. Klein and H. A. Hecker | 739,322 | Sept. 22 | 3459 | 771, 772 | 106 | 788 |
| Mangle | C. T. Gilmore | 744,063 | Nov. 17 | 2508 | 587 | 107 | 564 |
| Manhole | F. T. Moore | 726,823 | Apr. 28 | 4487 | 1012 | 103 | 2152 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|---|
| | | | | Spec. | Drg. | Vol. | Page. |
| Manhole-closure | T. F. Morrin | 748,514 | Dec. 29 | 5961 | 1352 | 107 | 2487 |
| Manhole-cover | C. E. Burney | 729,272 | May 26 | 4578 | 1011 | 104 | 1019 |
| Manhole-cover | J. J. Irvine | 737,934 | Sept. 1 | 754 | 165 | 106 | 166 |
| Manhole or other cover | J. L. M. A. Reis | 724,939 | Apr. 7 | 954 | 219 | 103 | 1373 |
| Manhole-terminal for conduit-sections | G. M. Gest | 738,792 | Sept. 15 | 2507 | 551 | 106 | 569 |
| Manholes for conduits. Construction of | H. C. Baker, Jr. | 734,153 | July 21 | 2688 | 632 | 105 | 602 |
| Manifold device | D. W. McGregor | 724,320 | Mar. 31 | 5029 | 1127 | 103 | 1108 |
| Manifold-sheet | R. J. Copeland | 723,835 | Mar. 31 | 4042 | 912<br>913 | 103 | 907 |
| Manifold-sheet | H. M. Hay | 728,461 | May 19 | 3102 | 686 | 104 | 698 |
| Manifolding device | E. Leeser | 717,691 | Jan. 6 | 300 | 74, 75 | 102 | 65 |
| Manifolding device | J. O. Deckert, C. H. Mann, and H. A. Prizer. | 728,681 | May 19 | 3516 | 782 | 104 | 786 |
| Manifolding device | H. H. Norrington | 733,736 | July 14 | 1835 | 434 | 105 | 404 |
| Manifolding-pad | C. H. E. Boughton | 745,713 | Dec. 1 | 719 | 164 | 107 | 1251 |
| Manifolding-register | T. C. Sheehan | 721,097 | Feb. 17 | 3136 | 720<br>721 | 102 | 1517 |
| Manifolding-register | R. C. Williams | 721,116 | Feb. 17 | 3167 | 729 | 102 | 1524 |
| Manometric gage | C. Schmitz | 723,040 | Mar. 17 | 2563 | 577 | 103 | 574 |
| Mantel | J. E. Holbein | 728,169 | May 12 | 2530 | 562 | 104 | 555 |
| Mantle and smoke-bell support | H. J. Siegel | 731,962 | June 23 | 4486 | 1001 | 104 | 2111 |
| Mantle. Self-igniting | R. E. Berthold | 719,174 | Jan. 27 | 3151 | 701 | 102 | 710 |
| Mantle-support | J. T. Lister | 738,215 | Sept. 8 | 1334 | 289 | 106 | 305 |
| Mantles. Loop for incandescent | H. Anhaltzer | 737,549 | Aug. 25 | 4707 | 1056 | 105 | 2040 |
| Manual motor | A. Brunelle | 724,429 | Apr. 7 | 19 | 6 | 103 | 1174 |
| Manure-carrier | W. P. West and A. J. Glor | 721,485 | Feb. 24 | 3896 | 886 | 102 | 1692 |
| Manure-conveyer. Stable | L. R. Tompkins and C. E. Mead | 743,957 | Nov. 10 | 2247 | 484 | 107 | 496 |
| Manure from apatite. Manufacturing | W. Palmaer | 748,523 | Dec. 29 | 5977 | ..... | 107 | 2491 |
| Manure gatherer and loader | J. Peterson | 735,807 | Aug. 11 | 1472 | 316<br>317 | 105 | 1312 |
| Manure-spreader | N. P. Hill | 721,189 | Feb. 24 | 3340 | 763 | 102 | 1577 |
| Manure-spreader | O. L. Stadig | 727,475 | May 5 | 1214 | 268 | 104 | 262 |
| Manure-spreader | L. Kniffen | 729,189 | May 26 | 4428 | 976<br>977 | 104 | 988 |
| Manure-spreader | T. Brown | 731,539 | June 23 | 3724 | 829<br>830 | 104 | 1951 |
| Manure-spreader | F. F. Freed | 744,184 | Nov. 17 | 2761 | 588 | 107 | 617 |
| Manuscript-holder and line-indicator | A. Morison | 729,636 | June 2 | 205 | 47 | 104 | 1170 |
| Map | A. von Babo | 720,994 | Feb. 17 | 2933 | 672 | 102 | 1471 |
| Map | J. F. Mayes | 730,942 | June 16 | 2574 | 573 | 104 | 1700 |
| Map-carrying-device support | P. R. Bullard | 741,009 | Oct. 13 | 1156 | 261 | 106 | 1513 |
| Map-hanging device | F. Zimmerman | 747,829 | Dec. 22 | 4639 | 1048 | 107 | 2177 |
| Map. Illuminated | T. Ikemori | 740,280 | Sept. 29 | 5267 | 1187 | 106 | 1190 |
| Maps, &c. Device for carrying and supporting | P. R. Bullard | 733,137 | July 7 | 779 | 189 | 105 | 165 |
| Mapping instrument | J. F. D. Schrader | 735,829 | Aug. 11 | 1519 | 325<br>326 | 105 | 1323 |
| Marble-making tool | E. P. Converse and J. J. Leiter | 733,013 | July 7 | 553 | 135 | 105 | 119 |
| Marble. Manufacture of compositions forming imitations of statuary- | L. Beaumel | 730,600 | June 9 | 1970 | ..... | 104 | 1551 |
| Marble or ball projector | G. H. Hagan | 730,258 | June 9 | 1345 | 295 | 104 | 1416 |
| Marble or granite polishing machine head | H. J. Higgins | 741,664 | Oct. 20 | 2440 | 547 | 106 | 1802 |
| Marble-shooter | F. Bucher and R. B. Stephenson | 720,558 | Feb. 17 | 2134 | 494 | 102 | 1304 |
| Margin-gage | C. H. Lieber | 720,824 | Feb. 17 | 2606 | 602 | 102 | 1401 |
| Marine boiler | P. Grünewald | 740,270 | Sept. 29 | 5238 | 1178<br>1179 | 106 | 1184 |
| Marine boiler. Combination Scotch and water-tube | A. E. Roberts | 718,525 | Jan. 13 | 1908 | 419 | 102 | 426 |
| Marine conveyer | T. S. Miller | 718,368 | Jan. 13 | 1571 | 347 | 102 | 352 |
| Marine structure | E. Becker | 720,998 | Feb. 17 | 2941 | 674<br>675<br>676 | 102 | 1472 |
| Mark and display-stand. Universal | H. Frankel | 721,791 | Mar. 3 | 246 | 54 | 103 | 55 |
| Marker | J. B. Kocks | 745,629 | Dec. 1 | 577 | 134 | 107 | 1220 |
| Marker. Adjustable land- | J. E. Hagen | 743,981 | Nov. 10 | 2311 | 493 | 107 | 513 |
| Marker. Disk | C. H. Myers | 747,754 | Dec. 22 | 4493 | 1013 | 107 | 2144 |
| Marker. Land- | A. A. Elder | 717,825 | Jan. 6 | 589 | 131 | 102 | 127 |
| Marker. Land- | T. M. Hendrickson | 738,036 | Sept. 1 | 951 | 211 | 106 | 207 |
| Marking-board | F. Moehle | 744,587 | Nov. 17 | 3461 | 746 | 107 | 768 |
| Marking device | J. E. Langill | 748,383 | Dec. 29 | 5695 | 1300 | 107 | 2429 |
| Marking implement | G. A. McAlpine | 726,086 | Apr. 21 | 3045 | 692 | 103 | 1844 |
| Marking instrument | F. Moehle | 742,047 | Oct. 20 | 3208 | 717 | 106 | 1961 |
| Marking-machine | C. S. McGirr | 721,522 | Feb. 24 | 3958 | 902 | 102 | 1705 |
| Marking-machine | W. P. Dun Lany and J. A. Lannert | 725,328 | Apr. 14 | 1686 | 380 | 103 | 1542 |
| Marking-machine | E. M. Schantz | 734,755 | July 28 | 3821 | 891 | 105 | 852 |
| Marking-machine | S. I. Prescott | 746,376 | Dec. 8 | 1946 | 444<br>445 | 107 | 1533 |
| Marking-machine | G. L. Richardson and H. S. Wilcox | 748,529 | Dec. 29 | 5986 | 1357 | 107 | 2492 |
| Marking or erasive material. Holder for | R. P. Hafner | 745,053 | Nov. 24 | 4350 | 940 | 107 | 972 |
| Marksman's indicator and recorder combined | E. G. Wallace | 727,235 | May 5 | 777 | 166 | 104 | 168 |
| Mash. Apparatus for decomposing brewers' | V. Lapp | 732,195 | June 30 | 4967 | 1105<br>1106 | 104 | 2223 |
| Mash in mash-tubs. Arrangement for heating, cooling, and mixing the | G. Ullrich | 725,894 | Apr. 21 | 2738 | 623<br>624 | 103 | 1782 |
| Mash-tun and wort-separator. Convertible | M. Henius | 721,890 | Mar. 3 | 429 | 94 | 103 | 94 |
| Mashing apparatus | O. Selg | 719,052 | Jan. 27 | 2906 | 651 | 102 | 661 |
| Mask | G. L. Merrell | 727,173 | May 5 | 669 | 144 | 104 | 145 |
| Mask. Fan- | P. Eschenbach | 730,357 | June 9 | 1519 | 337 | 104 | 1454 |
| Massage apparatus | C. J. Bailey | 718,594 | Jan. 20 | 2061 | 448 | 102 | 473 |
| Massage apparatus | F. G. Lagerstrom and A. G. Anderson. | 733,977 | July 21 | 2333 | 548 | 105 | 524 |
| Massage apparatus | J. A. Reade, Jr. | 734,952 | July 28 | 4182 | 973<br>974 | 105 | 928 |
| Massage apparatus | J. A. Reade, Jr., and C. F. Birtman. | 738,357 | Sept. 8 | 1653 | 358 | 106 | 372 |
| Massage apparatus. Electrical | W. F. Hedstrom | 722,841 | Mar. 17 | 2237 | 501 | 103 | 506 |
| Massage apparatus. Pneumatic | R. Watson | 720,865 | Feb. 17 | 2677 | 619 | 102 | 1417 |
| Massage apparatus. Pneumatic | R. Watson | 738,583 | Sept. 8 | 2070 | 452<br>453 | 106 | 460 |

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| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'gs. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Massage appliance | T. Schillberg | 723,735 | Mar. 24 | 3858 | 868 | 103 | 852 |
| Massage appliance | J. H. Powers | 730,569 | June 9 | 1913 | 425 | 104 | 1539 |
| Massage appliance | I. Cassidy | 744,718 | Nov. 24 | 3732 | 806 | 107 | 845 |
| Massage-cup | C. Pfanschmidt and J. Siefert | 728,003 | May 12 | 2233 | 497 | 104 | 493 |
| Massage implement | M. A. Sullivan | 718,170 | Jan. 13 | 1207 | 267 | 102 | 275 |
| Massage implement | J. J. Grobe | 735,968 | Aug. 11 | 1776 | 381 | 105 | 1379 |
| Massage instrument | C. Owens | 725,987 | Apr. 21 | 2897 | 657 | 103 | 1814 |
| Massage instrument | J. H. and C. Carpenter | 731,543 | June 23 | 3733 | 831 | 104 | 1953 |
| Massage instrument | J. W. Hyatt | 739,083 | Sept. 15 | 3019 | 669 | 106 | 678 |
| Massage instrument | L. Casper | 742,287 | Oct. 27 | 3710 | 828, 829 | 106 | 2079 |
| Massage instrument | H. A. Church | 743,147 | Nov. 3 | 634 | 137 | 107 | 132 |
| Massage-machine | T. D. Ingram | 718,766 | Jan. 20 | 2380 | 527, 528 | 102 | 536 |
| Massage-machine | T. D. Ingram | 732,414 | June 30 | 5395 | 1195, 1196 | 104 | 2312 |
| Massage-machine | A. D. Jones | 733,049 | July 7 | 615 | 151 | 105 | 131 |
| Massage-machine | C. Pfanschmidt and J. Siefert. (Reissue.) | 12,133 | July 21 | 3320 | 778 | 105 | 733 |
| Massage-machine | C. Pfanschmidt and J. Siefert | 737,465 | Aug. 25 | 4550 | 1020 | 105 | 2004 |
| Massage-machine support | F. King | 719,675 | Feb. 3 | 465 | 106 | 102 | 920 |
| Massage-roller | T. Lennox | 731,693 | June 23 | 4001 | 893 | 104 | 2005 |
| Massaging apparatus | F. B. Turck | 718,958 | Jan. 20 | 2737 | 612 | 102 | 611 |
| Massaging apparatus | G. Sartori | 732,897 | July 7 | 353 | 86, 87 | 105 | 77 |
| Massaging implement | C. S. Whitney | 733,784 | July 14 | 1935 | 456 | 105 | 425 |
| Massaging implement | J. B. Wantz | 742,534 | Oct. 27 | 4161 | 935 | 106 | 2170 |
| Massaging instrument | B. E. Joseph | 732,356 | June 30 | 5289 | 1172 | 104 | 2288 |
| Massaging instrument | B. E. Joseph | 733,398 | July 14 | 1263 | 299 | 105 | 283 |
| Mast. Automatically-lowering | C. Schwanebeck | 720,074 | Feb. 10 | 1218 | 279, 280 | 102 | 1098 |
| Mast-hoop | R. W. Vail | 727,717 | May 12 | 1703 | 380 | 104 | 383 |
| Mast-hoop | R. W. Vail | 727,718 | May 12 | 1704 | 380 | 104 | 384 |
| Mast-hoop | R. W. Vail | 727,719 | May 12 | 1705 | 380 | 104 | 384 |
| Mat: *See* Bath-mat. Door-mat. Floor-mat. Metallic mat. Rubber mat. Stove-mat. | | | | | | | |
| Mat | G. S. Gethen | 741,656 | Oct. 20 | 2427 | 544 | 106 | 1799 |
| Mat | P. J. Shrum | 742,918 | Nov. 3 | 169 | 39, 40 | 107 | 37 |
| Mat | J. E. MacMurray | 743,303 | Nov. 3 | 947 | 206 | 107 | 203 |
| Mat-casing | E. L. Perry | 718,517 | Jan. 13 | 1894 | 416 | 102 | 423 |
| Mat holder. Door- | S. F. Oliver | 726,453 | Apr. 28 | 3755 | 851 | 103 | 2006 |
| Match | H. Gair | 746,321 | Dec. 8 | 1854 | 422 | 107 | 1515 |
| Match-box | J. H. Fulton | 717,983 | Jan. 6 | 877 | 196 | 102 | 189 |
| Match-box | G. R. Bilz | 719,726 | Feb. 3 | 571 | 129 | 102 | 943 |
| Match-box | W. T. Wilson | 723,798 | Mar. 24 | 3965 | 894 | 103 | 875 |
| Match-box | R. I. Deihl | 724,823 | Apr. 7 | 762 | 177 | 103 | 1233 |
| Match-box | J. W. Bunch | 725,822 | Apr. 21 | 2615 | 595 | 103 | 1755 |
| Match-box | C. R. Reeve | 728,131 | May 12 | 2459 | 547 | 104 | 541 |
| Match-box | C. J. Ulbricht | 728,522 | May 19 | 3199 | 709 | 104 | 718 |
| Match-box | F. A. Wattenberg | 729,817 | June 2 | 547 | 120 | 104 | 1240 |
| Match-box | F. A. Wattenberg | 729,818 | June 2 | 548 | 120 | 104 | 1240 |
| Match-box | F. K. Kennedy | 731,785 | June 23 | 4170 | 929, 930 | 104 | 2040 |
| Match-box | I. M. Manich | 737,754 | Sept. 1 | 367 | 78 | 106 | 82 |
| Match-box | C. Mitschening | 738,343 | Sept. 8 | 1620 | 352 | 106 | 365 |
| Match-box | B. F. Daniels | 740,541 | Oct. 6 | 306 | 62 | 106 | 1310 |
| Match-box | C. Hiering | 744,074 | Nov. 17 | 2529 | 541, 542 | 107 | 568 |
| Match-box | M. V. Kerley | 744,561 | Nov. 17 | 3428 | 739 | 107 | 762 |
| Match-box | P. Schick | 744,627 | Nov. 17 | 3525 | 760, 761 | 107 | 780 |
| Match-box and cigar-cutter. Combined | G. Prioletta | 730,841 | June 9 | 2371 | 523, 524 | 104 | 1637 |
| Match-box-filling machine | A. Schuster | 747,781 | Dec. 22 | 4548 | 1025, 1026, 1027 | 107 | 2157 |
| Match-box for mine-lamps | I. A. Sharp | 719,622 | Feb. 3 | 375 | 86 | 102 | 900 |
| Match-box holder | W. Bernard | 719,173 | Jan. 27 | 3150 | 701 | 102 | 710 |
| Match-box holder | W. A. V. Porter | 726,569 | Apr. 28 | 4010 | 908 | 103 | 2053 |
| Match-box holder | J. J. De Long | 727,306 | May 5 | 904 | 196 | 104 | 195 |
| Match-box holder | E. A. Parker | 747,569 | Dec. 22 | 4153 | 933 | 107 | 2067 |
| Match box holder and safe. Combined | C. F. Paige and S. H. Ullrich | 739,273 | Sept. 15 | 3370 | 748 | 106 | 753 |
| Match-box-making machine | H. C. La Flamboy | 718,480 | Jan. 13 | 1790 | 397, 398 | 102 | 396 |
| Match-box. Single-delivery | E. C. Davey | 740,542 | Oct. 6 | 307 | 63 | 106 | 1310 |
| Match-boxing apparatus | J. C. Donnelly | 741,466 | Oct. 13 | 2048 | 455 | 106 | 1702 |
| Match-boxing apparatus | J. C. Donnelly | 741,467 | Oct. 13 | 2057 | 455, 456, 457, 458, 459, 460 | 106 | 1705 |
| Match case or holder | F. J. Stone | 725,791 | Apr. 21 | 2557 | 579 | 103 | 1744 |
| Match holder and igniter. Self-feeding | C. H. Scales | 728,019 | May 12 | 3258 | 502 | 104 | 498 |
| Match holder. Safety- | E. A. Parker | 747,568 | Dec. 22 | 4152 | 933 | 107 | 2067 |
| Match-igniting material | W. Muir and C. R. E. Bell | 724,411 | Mar. 31 | 5228 | ------ | 103 | 1151 |
| Match-lighter | J. E. Sharpe | 719,889 | Feb. 3 | 863 | 202 | 102 | 1006 |
| Match lighter and box | P. C. Schmidt | 728,989 | May 26 | 4073 | 904 | 104 | 915 |
| Match-machine | W. E. Cook | 718,048 | Jan. 6 | 985 | 220 | 102 | 212 |
| Match-machine | M. A. Sheldon | 718,393 | Jan. 13 | 1615 | 355, 356 | 102 | 361 |
| Match-machine | E. B. Stocking | 722,331 | Mar. 10 | 1256 | 280, 281 | 103 | 284 |

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| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Match-machine | H. C. La Flamboy | 727,547 | May 5 | 1341 | 301, 302 | 104 | 288 |
| Match-machine | W. F. Hutchinson | 736,970 | Aug. 25 | 3637 | 805, 806 | 105 | 1809 |
| Match-making machine | J. C. Donnelly | 727,308 | May 5 | 906 | 197 | 104 | 195 |
| Match-making machine | W. H. Parker | 747,473 | Dec. 22 | 3980 | 895 | 107 | 2026 |
| Match protector. Lighted | H. C. Bowman | 738,652 | Sept. 8 | 2214 | 484 | 106 | 491 |
| Match-safe | W. A. Patten | 720,060 | Feb. 10 | 1192 | ------ | 102 | 1093 |
| Match-safe | J. W. Selander | 728,027 | May 12 | 2269 | 504 | 104 | 500 |
| Match-safe | J. De Bruin | 732,177 | June 30 | 4937 | 1097 | 104 | 2216 |
| Match-safe | J. J. Sullivan | 740,710 | Oct. 6 | 598 | 133 | 106 | 1376 |
| Match-safe | F. King | 744,357 | Nov. 17 | 3071 | 659 | 107 | 686 |
| Match-safe, paper-holder, and cigarette-machine. Combined | W. R. Hamper | 723,863 | Mar. 31 | 4105 | 926 | 103 | 921 |
| Match-safe. Pocket | E. J. Moore | 742,711 | Oct. 27 | 4461 | 1009 | 106 | 2235 |
| Match-safe. Single-delivery | W. A. Harmon | 737,736 | Sept. 1 | 337 | 71 | 106 | 77 |
| Match. Safety | J. E. State | 737,672 | Sept. 1 | 208 | 45 | 106 | 48 |
| Match-stick making and racking machine. Combined | W. Scharnweber | 744,693 | Nov. 17 | 3639 | 785 | 107 | 806 |
| Match-striker | E. C. H. Behrens | 726,845 | May 5 | 19 | 5 | 104 | 7 |
| Match. Wax | A. J. Fredrikson | 741,025 | Oct. 13 | 1180 | 267 | 106 | 1518 |
| Matches. Device for the ignition of slow | J. von der Bosch | 720,104 | Feb. 10 | 1286 | 295 | 102 | 1113 |
| Matches from plates. Machine for punching | W. E. Williams | 741,866 | Oct. 20 | 2827 | 629, 630 | 106 | 1884 |
| Matches, tickets, or the like. Receptacle for | S. M. Shattuc | 729,429 | May 26 | 4841 | 1073 | 104 | 1074 |
| Material-elevator | H. Cull | 739,296 | Sept. 22 | 3416 | 761 | 106 | 778 |
| Mathematical device | S. N. Betts | 736,481 | Aug. 18 | 2699 | 592 | 105 | 1593 |
| Matrix material | G. J. Wildridge | 744,889 | Nov. 24 | 4023 | ------ | 107 | 905 |
| Matrix-truing apparatus | H. C. Hansen | 727,355 | May 5 | 994 | 216 | 104 | 214 |
| Matte. Converting | R. Baggaley | 746,241 | Dec. 8 | 1705 | ------ | 107 | 1484 |
| Mattes and raw metals. Treatment of | H. G. C. Thofehrn | 725,297 | Apr. 14 | 1619 | ------ | 103 | 1528 |
| Mattes. Converting | R. Baggaley | 722,198 | Mar. 3 | 997 | ------ | 103 | 211 |
| Matting | E. P. Mahler | 746,722 | Dec. 15 | 2564 | 589 | 107 | 1693 |
| Mattress | J. McCarty | 717,703 | Jan. 6 | 326 | 78 | 102 | 71 |
| Mattress | C. B. Meeker | 728,594 | May 19 | 3365 | 746 | 104 | 754 |
| Mattress. Bed or couch | J. Hoey | 731,777 | June 23 | 4156 | 927 | 104 | 2037 |
| Mattress, cushion, &c | C. A. Fisher | 737,916 | Sept. 1 | 721 | 156 | 106 | 158 |
| Mattress-filler | G. W. Wareham | 717,955 | Jan. 6 | 815 | 185 | 102 | 175 |
| Mattress-filling | S. J. Stevenson | 720,292 | Feb. 10 | 1633 | ------ | 102 | 1184 |
| Mattress-filling machine | H. Eckerson | 727,115 | May 5 | 562 | 121, 122 | 104 | 122 |
| Mattress-frame | J. P. Lein | 724,192 | Mar. 31 | 4775 | 1070 | 103 | 1056 |
| Mattress-machine | E. G. Wheeler | 724,978 | Apr. 7 | 1034 | 237 | 103 | 1389 |
| Mattress. Rubber | J. Holland | 721,192 | Feb. 24 | 3347 | 765 | 102 | 1579 |
| Mattress-section. Adjustable | P. G. Souder, J. Bittner, and O. Berger. | 743,344 | Nov. 3 | 1022 | 220 | 107 | 218 |
| Mattress stretcher. Wire | J. B. Wilson | 739,568 | Sept. 22 | 3908 | 876 | 106 | 885 |
| Mattress-stuffing machine | A. R. Kezer | 733,324 | July 7 | 1113 | 264 | 105 | 234 |
| Mattress-tufting machine | F. Benoit | 718,901 | Jan. 20 | 2621 | 587, 588, 589 | 102 | 586 |
| Mattress. Wire | J. D. Haggard | 739,171 | Sept. 15 | 3178 | 703 | 106 | 711 |
| Mattress. Wire | C. S. Lloyd | 741,514 | Oct. 13 | 2153 | 479, 480 | 106 | 1726 |
| Mattress. Wire | M. R. Mangan | 746,857 | Dec. 15 | 2826 | 652 | 107 | 1750 |
| Mattress. Woven-wire | G. H. Buck | 731,662 | June 23 | 3949 | 878, 879 | 104 | 1996 |
| Mattresses and making same. Pine-needle stuffing for | M. R. Cords | 738,002 | Sept. 1 | 900 | ------ | 106 | 197 |
| Mausoleums, vaults, &c. Roof for | C. E. Tayntor | 722,392 | Mar. 10 | 1305 | 302 | 103 | 306 |
| Maximum-demand indicator | F. P. Cox | 728,546 | May 19 | 3256 | 721 | 104 | 728 |
| Maximum or indicating meter | J. Wohl and E. U. Giovannoni | 739,967 | Sept. 29 | 4685 | 1053, 1054 | 106 | 1068 |
| Measure | J. W. Pope | 735,582 | Aug. 4 | 1055 | 224 | 105 | 1205 |
| Measure case. Tape | L. S. Starrett | 739,738 | Sept. 22 | 4232 | 947 | 106 | 956 |
| Measure. Combination | E. H. Darsie | 735,951 | Aug. 11 | 1745 | 373 | 105 | 1372 |
| Measure. Computing | F. C. Ream | 722,045 | Mar. 3 | 726 | 161 | 103 | 157 |
| Measure for gloves. Hand | J. J. Summesby and J. Grieve | 740,943 | Oct. 6 | 1021 | 231 | 106 | 1464 |
| Measure. Liquid | H. J. and J. C. Brantley | 727,278 | May 5 | 851 | 183 | 104 | 183 |
| Measure. Liquid | J. T. Flaherty | 739,536 | Sept. 22 | 3850 | 862 | 106 | 872 |
| Measure. Optician's | S. B. Millard | 734,730 | July 28 | 3769 | 879 | 105 | 843 |
| Measure. Tailor's | M. E. Fairbanks and J. S. Hilley | 730,894 | June 16 | 2493 | 553 | 104 | 1681 |
| Measure. Tailor's attitude | E. Wakefield | 744,826 | Nov. 24 | 3923 | 844 | 107 | 884 |
| Measure. Tailor's tape | J. M. Adamson | 736,052 | Aug. 11 | 1937 | 413 | 105 | 1413 |
| Measure. Tape | G. Dunlea | 748,174 | Dec. 29 | 5340 | 1215 | 107 | 2351 |
| Measurements for garments. Appliance for taking | H. W. Hilder | 745,841 | Dec. 1 | 978 | 220 | 107 | 1308 |
| Measuring and bag-filling apparatus | A. J. Johnston | 739,602 | Sept. 22 | 3980 | 888 | 106 | 899 |
| Measuring and conveying coal, &c. Apparatus for | B. Leslie | 723,688 | Mar. 24 | 3772 | 847 | 103 | 834 |
| Measuring and drawing off liquids. Apparatus for | C. Prangemeier | 739,925 | Sept. 29 | 4612 | 1035 | 106 | 1053 |
| Measuring and filling apparatus | A. C. Wright | 721,850 | Mar. 3 | 351 | 77 | 103 | 76 |
| Measuring and filling apparatus | A. C. Wright | 724,768 | Apr. 7 | 649 | 152 | 103 | 1307 |
| Measuring and filling machine | T. Smith | 733,682 | July 14 | 1747 | 413 | 105 | 385 |
| Measuring and indicating electricity-supply. Apparatus for | C. H. Merz | 722,030 | Mar. 3 | 698 | 155 | 103 | 151 |
| Measuring and marking fabrics, &c. Machine for | A. Monfort | 731,702 | June 23 | 4020 | 897, 898 | 104 | 2009 |
| Measuring and registering device for liquid-supply tanks | J. G. Williams | 731,644 | June 23 | 3920 | 873 | 104 | 1990 |
| Measuring and sampling machine. Combined | H. S. Badger | 725,915 | Apr. 21 | 2771 | 631 | 103 | 1788 |
| Measuring apparatus. Illumination | D. Burnett | 733,538 | July 14 | 1503 | 359 | 105 | 334 |
| Measuring apparatus. Leather | J. Thomson | 730,491 | June 9 | 1770 | 396, 397 | 104 | 1507 |
| Measuring-cabinet. Computing | E. J. Austin | 735,852 | Aug. 11 | 1570 | 335 | 105 | 1335 |

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| Invention. | Name. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|---|
| | | | | Spec. | Dr'g. | Vol. | Page. |
| Measuring coal, &c. Apparatus for | B. Leslie | 734,901 | July 28 | 4094 | 954 | 105 | 909 |
| Measuring device | H. Smith | 718,396 | Jan. 13 | 1622 | 357 | 102 | 363 |
| Measuring device | R. Parkinson and J. Scholes | 724,036 | Mar. 31 | 4461 | 1005 | 103 | 993 |
| Measuring device | E. Smith | 726,198 | Apr. 21 | 3265 | 741 | 103 | 1889 |
| Measuring device | A. M. Bates | 737,058 | Aug. 25 | 3782 | 839 | 105 | 1839 |
| Measuring device | F. M. Steadman | 745,257 | Nov. 24 | 4756 | 1040 | 107 | 1056 |
| Measuring device | J. Fritsche | 745,811 | Dec. 1 | 905 | 204 | 107 | 1292 |
| Measuring device | C. Hald | 747,701 | Dec. 22 | 4403 | 992, 993 | 107 | 2123 |
| Measuring device. Board- | J. Mahon | 743,531 | Nov. 10 | 1475 | 309 | 107 | 332 |
| Measuring device. Cloth- | M. McKellar | 746,984 | Dec. 15 | 3076 | 704 | 107 | 1808 |
| Measuring device. Fluid- | A. W. Southey | 741,732 | Oct. 20 | 2590 | 576 | 106 | 1833 |
| Measuring device. Foot- | D. E. Hertzler and C. F. Smith | 745,184 | Nov. 24 | 4637 | 1006, 1007 | 107 | 1032 |
| Measuring device for looms. Cloth- | L. M. Phelps | 743,989 | Nov. 10 | 2323 | 496 | 107 | 516 |
| Measuring device. Height- | J. A. Heatly | 721,800 | Mar. 3 | 258 | 58 | 103 | 57 |
| Measuring device. Liquid- | C. Simon | 733,290 | July 7 | 1064 | 254 | 105 | 224 |
| Measuring device. Opening- | H. C. Parker | 748,094 | Dec. 29 | 5194 | 1174 | 107 | 2320 |
| Measuring device. Shoemaker's | J. T. Bradley | 723,236 | Mar. 24 | 2947 | 661 | 103 | 668 |
| Measuring distances of distant objects. Apparatus for | T. D. Brown, G. W. and J. H. Hause | 738,155 | Sept. 8 | 1198 | 264 | 106 | 274 |
| Measuring electric currents. Means for | G. N. Eastman | 720,335 | Feb. 10 | 1708 | 388 | 102 | 1201 |
| Measuring electrical resistance. Apparatus for | R. W. Conant | 723,369 | Mar. 24 | 3206 | 719 | 103 | 717 |
| Measuring-gage | R. C. Wright | 733,690 | July 14 | 1757 | 417 | 105 | 387 |
| Measuring illumination | D. Burnett | 736,064 | Aug. 11 | 1971 | 419 | 105 | 1421 |
| Measuring instrument | B. F. Westcott | 719,924 | Feb. 3 | 911 | 214 | 102 | 1017 |
| Measuring instrument | C. M. Towne | 721,622 | Feb. 24 | 4167 | 947 | 102 | 1752 |
| Measuring instrument | I. B. Hagan | 726,677 | Apr. 28 | 4204 | 950 | 103 | 2093 |
| Measuring instrument | W. L. West | 728,790 | May 19 | 3711 | 828 | 104 | 824 |
| Measuring instrument | J. J. Byrne | 730,742 | June 9 | 2204 | 491 | 104 | 1601 |
| Measuring instrument. Angle- | F. E. Hutchins | 746,513 | Dec. 8 | 2176 | 500 | 107 | 1584 |
| Measuring instrument. Electrical | W. H. Pratt | 730,698 | June 9 | 2140 | 475 | 104 | 1588 |
| Measuring instrument. Electrical | J. F. Stevens | 735,168 | Aug. 4 | 238 | 47, 48 | 105 | 1033 |
| Measuring instrument. Electrical | W. J. Lloyd | 737,255 | Aug. 25 | 4156 | 924 | 105 | 1918 |
| Measuring instrument. Electrical | T. W. Varley | 737,303 | Aug. 25 | 4242 | 944 | 105 | 1936 |
| Measuring instrument. Electrical | E. C. Eldredge | 747,871 | Dec. 22 | 4738 | 1071 | 107 | 2199 |
| Measuring instrument. Last or foot | C. B. Hatfield | 746,958 | Dec. 15 | 3031 | 695 | 107 | 1798 |
| Measuring instruments. Index needle or pointer for electrical | E. Weston | 727,041 | May 5 | 435 | 91 | 104 | 96 |
| Measuring instruments. Means for compensating temperature changes in electrical | W. H. Pratt | 728,612 | May 19 | 3393 | 751 | 104 | 760 |
| Measuring irregular objects. Device for | G. E. Bright | 741,881 | Oct. 20 | 2856 | 638 | 106 | 1890 |
| Measuring machine. Self-registering cloth- | W. M. Thompson | 728,333 | May 19 | 2874 | 634 | 104 | 650 |
| Measuring mechanism for warpers | H. Hebert | 737,405 | Aug. 25 | 4437 | 995 | 105 | 1979 |
| Measuring or other devices. Producing appropriate phase relationship in alternating-current | R. Arno | 746,775 | Dec. 15 | 2665 | 614 | 107 | 1714 |
| Measuring ribbon, &c. Machine for | B. Kohn | 725,972 | Apr. 21 | 2869 | 650, 651 | 103 | 1809 |
| Measuring-tape | F. Buck | 736,359 | Aug. 18 | 2465 | 539 | 105 | 1544 |
| Measuring-tapes. Device for repairing metallic | C. B. Alexander | 721,411 | Feb. 24 | 3761 | 855 | 102 | 1664 |
| Measuring the area of surfaces. Machine for | R. W. Strout | 738,580 | Sept. 8 | 2063 | 450, 451 | 106 | 459 |
| Measuring the energy of electric currents. Apparatus for | W. Stanley | 720,981 | Feb. 17 | 2909 | 667 | 102 | 1466 |
| Measuring-tool. Combination | C. E. Billings | 735,935 | Aug. 11 | 1720 | 367 | 105 | 1367 |
| Measuring-vest | R. W. Grendon | 720,019 | Feb. 10 | 1116 | 255 | 102 | 1076 |
| Measuring-wheel or traveler | A. S. Nunamaker | 737,420 | May 5 | 1103 | 242 | 104 | 238 |
| Meat case. Dried- | G. W. Holman | 745,845 | Dec. 1 | 983 | 220 | 107 | 1308 |
| Meat-chopper | R. Dettmer | 724,824 | Apr. 7 | 763 | 177, 178 | 103 | 1333 |
| Meat-chopper geared driving attachment | E. C. Pollard | 728,409 | May 19 | 2994 | 659 | 104 | 675 |
| Meat-chopping machine | W. Richter | 743,753 | Nov. 10 | 1874 | 396 | 107 | 417 |
| Meat. Curing-tube for pickling | J. J. Bailey | 725,916 | Apr. 21 | 2772 | 631 | 103 | 1788 |
| Meat-cutter | H. G. Voight | 723,952 | Mar. 31 | 4291 | 963 | 103 | 962 |
| Meat-cutter | A. W. Johnson | 734,335 | July 21 | 3037 | 715 | 105 | 676 |
| Meat-cutter | O. C. Berchtold | 739,817 | Sept. 29 | 4388 | 984 | 106 | 1007 |
| Meat-cutter | C. F. Smith | 745,079 | Nov. 24 | 4409 | 953 | 107 | 984 |
| Meat-hanger | J. C. Garratt and T. Brown | 741,397 | Oct. 13 | 1933 | 427 | 106 | 1679 |
| Meat-holder | J. C. Shearer and L. Frank | 723,412 | Mar. 24 | 3281 | 734 | 103 | 733 |
| Meat-press | J. Carey | 729,733 | June 2 | 387 | 87 | 104 | 1207 |
| Meat-roast support | J. V. Young | 728,067 | May 12 | 2343 | 522 | 104 | 516 |
| Meat-shaving machine | J. W. Brown, Jr | 742,577 | Oct. 27 | 4232 | 953 | 106 | 2185 |
| Meat-slicer | F. Beecher | 729,915 | June 2 | 715 | 159 | 104 | 1274 |
| Meat-slicer sharpening attachment | W. A. Van Berkel | 744,649 | Nov. 17 | 3562 | 768 | 107 | 788 |
| Meat-tenderer | G. Holmgren | 718,127 | Jan. 13 | 1134 | 251 | 102 | 259 |
| Meat-tenderer | O. Pike, Sr | 719,858 | Feb. 3 | 805 | 180 | 102 | 993 |
| Meat-tenderer | F. Steltz | 747,260 | Dec. 15 | 3594 | 812 | 107 | 1923 |
| Meat-tenderer | D. N. Weathers | 747,519 | Dec. 22 | 4072 | 915 | 107 | 2048 |
| Meats, &c. Basting apparatus for | L. H. Edgar | 730,525 | June 9 | 1834 | 409 | 104 | 1521 |
| Meats for boiling. Apparatus for inclosing | C. F. Weber | 735,629 | Aug. 4 | 1141 | 241 | 105 | 1224 |
| Mechanical drill | G. B. Pickop | 744,396 | Nov. 17 | 3143 | 675 | 107 | 702 |
| Mechanical furnace | J. Armstrong | 745,757 | Dec. 1 | 784 | 180 | 107 | 1265 |
| Mechanical instrument | L. Frechette | 734,694 | July 28 | 3686 | 864 | 105 | 827 |
| Mechanical members. Means for joining | A. Newell | 720,392 | May 26 | 4779 | 1058 | 104 | 1061 |
| Mechanical movement | J. D. McFarland, Jr | 717,901 | Jan. 6 | 727 | 163 | 102 | 155 |
| Mechanical movement | F. Streich and C. L. Ruehs | 717,942 | Jan. 6 | 796 | 179, 180 | 102 | 170 |
| Mechanical movement | H. Theissen | 718,033 | Jan. 6 | 968 | 214 | 102 | 208 |
| Mechanical movement | J. E. Hausfeld | 720,140 | Feb. 10 | 1346 | 308 | 102 | 1126 |
| Mechanical movement | J. R. Carter | 720,561 | Feb. 17 | 2140 | 495 | 102 | 1306 |
| Mechanical movement | C. H. Fuller | 721,294 | Feb. 24 | 3540 | 805 | 102 | 1619 |
| Mechanical movement | C. E. White | 721,847 | Mar. 3 | 345 | 76 | 103 | 75 |
| Mechanical movement | G. Geer | 722,095 | Mar. 3 | 808 | 180 | 103 | 175 |
| Mechanical movement | J. R. Carter | 722,674 | Mar. 17 | 1927 | 428 | 103 | 444 |
| Mechanical movement | F. L. and H. J. Eberhardt | 723,255 | Mar. 24 | 2979 | 669 | 103 | 674 |

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| Invention. | Name. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | | Spec. | Dr'g. | Vol. | Page. |
| Mechanical movement | J. Hofmann | 724,101 | Mar. 31 | 4575 | 1030 | 103 | 1017 |
| Mechanical movement | J. A. Schnell | 724,355 | Apr. 7 | 988 | 227 | 103 | 1380 |
| Mechanical movement | P. Christian | 725,041 | Apr. 14 | 1159 | 262 | 103 | 1432 |
| Mechanical movement | E. A. Mainguet | 725,977 | Apr. 21 | 2877 | 652 | 103 | 1810 |
| Mechanical movement | C. J. Wennas | 726,008 | Apr. 21 | 2932 | 667 | 103 | 1821 |
| Mechanical movement | J. Hellwig | 727,137 | May 5 | 612 | 131 | 104 | 132 |
| Mechanical movement | T. B. Dooley | 727,310 | May 5 | 909 | 197, 198 | 104 | 196 |
| Mechanical movement | R. F. Hargraves | 728,226 | May 19 | 2649 | 592 | 104 | 602 |
| Mechanical movement | F. H. Lindner | 729,949 | June 2 | 776 | 172, 173, 174 | 104 | 1286 |
| Mechanical movement | A. J. Kappele | 730,375 | June 9 | 1546 | 344 | 104 | 1459 |
| Mechanical movement | J. Hofmann | 730,537 | June 9 | 1849 | 412 | 104 | 1524 |
| Mechanical movement | G. Holliday | 730,915 | June 16 | 2531 | 563 | 104 | 1689 |
| Mechanical movement | A. Plagman | 730,961 | June 16 | 2614 | 582 | 104 | 1707 |
| Mechanical movement | M. Burton | 731,277 | June 16 | 3201 | 712 | 104 | 1824 |
| Mechanical movement | J. F. Cooley | 731,283 | June 16 | 3224 | 717, 718 | 104 | 1830 |
| Mechanical movement | J. and F. Klobouenik | 731,915 | June 23 | 4407 | 982 | 104 | 2093 |
| Mechanical movement | E. D. Gleason | 732,845 | July 7 | 267 | 66 | 105 | 59 |
| Mechanical movement | G. H. Burpee | 733,141 | July 7 | 785 | 190 | 105 | 166 |
| Mechanical movement | D. Felgar | 733,177 | July 7 | 847 | 205, 206 | 105 | 178 |
| Mechanical movement | M. Holman | 733,482 | July 14 | 1406 | 331 | 105 | 315 |
| Mechanical movement | J. W. Ennis | 735,075 | Aug. 4 | 46 | 13, 14 | 105 | 991 |
| Mechanical movement | J. H. Hussey | 735,518 | Aug. 4 | 931 | 197 | 105 | 1179 |
| Mechanical movement | G. H. Burpee | 736,208 | Aug. 11 | 2205 | 474 | 105 | 1470 |
| Mechanical movement | J. W. Martin | 736,285 | Aug. 11 | 2342 | 509 | 105 | 1502 |
| Mechanical movement | E. G. Johanson | 736,972 | Aug. 25 | 3641 | 806 | 105 | 1810 |
| Mechanical movement | P. Bendixen | 738,282 | Sept. 8 | 1482 | 321 | 106 | 334 |
| Mechanical movement | M. Burton | 738,770 | Sept. 15 | 2456 | 539 | 106 | 558 |
| Mechanical movement | J. M. E. Pfrom | 739,213 | Sept. 15 | 3251 | 720 | 106 | 726 |
| Mechanical movement | C. A. Carlson | 739,533 | Sept. 22 | 3845 | 861 | 106 | 871 |
| Mechanical movement | W. H. Hoyle and T. Barker | 739,877 | Sept. 29 | 4525 | 1016 | 106 | 1033 |
| Mechanical movement | J. D. A. Johnson | 740,868 | Oct. 6 | 898 | 201 | 106 | 1438 |
| Mechanical movement | J. T. Hogan | 741,341 | Oct. 13 | 1830 | 404, 405 | 106 | 1658 |
| Mechanical movement | F. M. Dillon and W. G. Wilson | 743,379 | Nov. 3 | 1112 | 237 | 107 | 235 |
| Mechanical movement | L. R. Tulloch | 743,596 | Nov. 10 | 1603 | 335 | 107 | 358 |
| Mechanical movement | W. H. Voss | 744,444 | Nov. 17 | 3235 | 693 | 107 | 722 |
| Mechanical movement | E. A. Faller | 744,520 | Nov. 17 | 3355 | 723 | 107 | 747 |
| Mechanical movement | S. D. Stevens | 748,024 | Dec. 29 | 5055 | 1141 | 107 | 2290 |
| Mechanical-movement casing | A. Wahle | 732,977 | July 7 | 489 | 121 | 105 | 105 |
| Mechanical power | S. Hayes | 724,861 | Apr. 7 | 830 | 191 | 103 | 1346 |
| Medallion or button making machine | A. Phelps | 738,062 | Sept. 1 | 989 | 220 | 106 | 215 |
| Medical apparatus. Magnetic | E. Bachelet | 743,372 | Nov. 3 | 1100 | 234 | 107 | 233 |
| Medical use. Electrical generator and distributer for | E. L. Madden | 722,598 | Mar. 10 | 1747 | 389 | 103 | 390 |
| Medicament-injector | T. E. Hall | 742,634 | Oct. 27 | 4332 | 975 | 106 | 2208 |
| Medicament-injector | T. E. Hall | 742,635 | Oct. 27 | 4333 | 975 | 106 | 2208 |
| Medicated plaster | F. J. Nash | 733,504 | July 14 | 1442 | 339, 340 | 105 | 322 |
| Medicated salt brick | J. B. Eaton | 721,633 | Feb. 24 | 4186 | ------ | 102 | 1757 |
| Medicated substances. Holder for | H. Sachs | 723,552 | Mar. 24 | 3539 | 792 | 103 | 785 |
| Medication of air. Apparatus for the | J. and W. Titus | 740,714 | Oct. 6 | 603 | 134 | 106 | 1377 |
| Medicator. Nasal | G. E. Seidel | 740,749 | Dec. 15 | 2616 | 601 | 107 | 1705 |
| Medicinal battery | F. Grimshaw | 720,020 | Feb. 10 | 1118 | 256 | 102 | 1077 |
| Medicinal capsule and making same | A. M. Hance | 730,643 | June 9 | 2032 | 452 | 104 | 1565 |
| Medicine-applicator | J. N. Dews | 738,009 | Sept. 1 | 912 | 200 | 106 | 199 |
| Medicine-dropper | G. B. Hutchings | 718,764 | Jan. 20 | 2378 | 526 | 102 | 536 |
| Medicine-dropper | F. A. Liftchild | 732,689 | June 30 | 5921 | 1313 | 104 | 2424 |
| Medicine-wrapping film | M. Kobayashi | 730,926 | June 16 | 2549 | ------ | 104 | 1694 |
| Melting apparatus. Portable | N. S. Jenkins | 721,808 | Mar. 3 | 273 | 61 | 103 | 61 |
| Melting-furnace | F. H. Daniels | 723,443 | Mar. 24 | 3332 | 747 | 103 | 744 |
| Melting-furnace | J. F. Cottrell | 725,936 | Apr. 21 | 2815 | 638 | 103 | 1797 |
| Melting-furnace | W. J. Brown | 731,991 | June 23 | 4539 | 1013 | 104 | 2121 |
| Melting-furnace | J. B. Orbison | 739,340 | Sept. 22 | 3485 | 778 | 106 | 792 |
| Melting-furnace | M. J. Burns and J. J. Aull | 740,084 | Sept. 29 | 4902 | 1099, 1100 | 106 | 1114 |
| Melting-furnace | E. Kirk | 741,505 | Oct. 13 | 2136 | 476 | 106 | 1722 |
| Memorizer | M. E. Nicholl | 736,140 | Aug. 11 | 2096 | 450 | 105 | 1446 |
| Memory-jogger | A. G. Blincoe | 728,358 | May 19 | 2911 | 642 | 104 | 657 |
| Memo-card and meal and pay check. Combined | A. E. White and J. J. Evans | 739,964 | Sept. 29 | 4675 | 1052 | 106 | 1066 |
| Mercerizing apparatus | P. Jeanmaire | 734,333 | July 21 | 3034 | 715 | 105 | 676 |
| Mercerizing apparatus | J. R. Ecob | 737,374 | Aug. 25 | 4367 | 973 | 105 | 1963 |
| Mercerizing apparatus | R. Boral and A. Kymer | 739,580 | Sept. 22 | 3943 | 881 | 106 | 892 |
| Mercerizing-machine | C. L. Weichelt | 722,064 | Mar. 3 | 754 | 168 | 103 | 163 |
| Merchandise. Means for handling | H. M. Harding | 724,859 | Apr. 7 | 828 | 191 | 103 | 1346 |
| Mercurous chlorid | C. H. von Hoessle | 740,855 | Oct. 6 | 879 | ------ | 106 | 1433 |
| Mercurous iodide. Soluble | C. H. von Hoessle | 742,429 | Oct. 27 | 3963 | ------ | 106 | 2129 |
| Mercury and amalgam from ores. Machine for recovering | T. H. Hicks | 744,759 | Nov. 24 | 3799 | 818, 819 | 107 | 858 |
| Mercury salts of ethylenediamin bases and making same. | G. Wichmann and H. Kippenberg | 726,126 | Apr. 21 | 3128 | ------ | 103 | 1862 |
| Mercury test-gage | G. A. B. Spencer and H. H. Fisher | 718,167 | Jan. 13 | 1204 | 267 | 102 | 275 |
| Merry-go-round | J. L. McCrea | 719,602 | Feb. 3 | 341 | 79 | 102 | 893 |
| Merry-go-round | P. Friedman | 727,778 | May 12 | 1823 | 407 | 104 | 407 |
| Merry-go-round | J. M. Sherman | 736,643 | Aug. 18 | 3003 | 663 | 105 | 1656 |
| Merry-go-round | M. E. Logan | 741,802 | Oct. 20 | 2719 | 605 | 106 | 1860 |
| Messenger-box. District | A. V. Siler and J. H. Riley | 743,941 | Nov. 10 | 2115 | 478 | 107 | 488 |
| Metal anode | H. E. Starrett | 733,602 | July 14 | 1616 | 383 | 105 | 359 |
| Metal. Apparatus for the disintegration of | M. J. Fuchs | 721,293 | Feb. 24 | 3538 | 805 | 102 | 1618 |
| Metal articles. Finishing | C. R. Manning | 746,724 | Dec. 15 | 2567 | 590 | 107 | 1694 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Metal articles. Wrapping material for preventing tarnishing of | F. Flor and E. Murmann | 721,171 | Feb. 24 | 3310 | ..... | 102 | 1571 |
| Metal-atomizing apparatus | W. H. Rowley | 720,382 | Feb. 10 | 1793 | 407 | 102 | 1218 |
| Metal balls. Machine for making | H. A. Williams | 729,519 | May 26 | 4990 | 1107, 1108, 1109 | 104 | 1107 |
| Metal bars into sheets. Reducing hot | T. V. Allis | 733,112 | July 7 | 735 | 178, 179 | 105 | 156 |
| Metal bars into sheets. Reducing hot | T. V. Allis | 734,795 | July 28 | 3920 | ..... | 105 | 874 |
| Metal bars or rods. Cooling-bed for | M. A. Neeland | 744,874 | Nov. 24 | 4001 | 863 | 107 | 901 |
| Metal bars. Severing | W. B. Pearson and C. E. Roberts | 732,218 | June 30 | 5025 | ..... | 104 | 2235 |
| Metal-bending machine | W. Block | 732,260 | June 30 | 5102 | 1135 | 104 | 2250 |
| Metal-bending machine | H. Geisenhöner | 734,316 | July 21 | 3009 | 708 | 105 | 669 |
| Metal-bending machine | O. L. McClellan | 747,466 | Dec. 22 | 3971 | 893 | 107 | 2024 |
| Metal clip | W. J. Baker | 718,301 | Jan. 13 | 1451 | 322 | 102 | 328 |
| Metal clip for use in steel building constructions | H. A. Streeter | 718,545 | Jan. 13 | 1955 | 427 | 102 | 436 |
| Metal-coiling machine | H. J. Mitchell | 747,203 | Dec. 15 | 3489 | 792 | 107 | 1901 |
| Metal compounds. Converting | J. W. MacDonald | 746,721 | Dec. 15 | 2562 | 589 | 107 | 1693 |
| Metal cutting and stamping apparatus | J. W. Paton | 748,415 | Dec. 29 | 5766 | 1315, 1316 | 107 | 2445 |
| Metal-cutting machine | J. L. Backus | 735,332 | Aug. 4 | 562 | 115 | 105 | 1101 |
| Metal-cutting machine | J. H. Doub | 736,505 | Aug. 18 | 2742 | 600, 601 | 105 | 1603 |
| Metal-cutting tool | G. J. Capewell | 726,859 | May 5 | 45 | 11 | 104 | 12 |
| Metal-cutting tool. Rotary | A. Tindel | 729,517 | May 26 | 4987 | 1106 | 104 | 1107 |
| Metal. Expanded | E. A. Mallory | 738,825 | Sept. 15 | 2580 | 569 | 106 | 585 |
| Metal-expanding machine | H. E. White | 735,635 | Aug. 4 | 1150 | 243, 244 | 105 | 1225 |
| Metal-expanding machine | G. J. Holl | 737,930 | Sept. 1 | 742 | 162, 163 | 106 | 162 |
| Metal-expanding machine | G. J. Holl | 737,931 | Sept. 1 | 746 | 163, 164 | 106 | 163 |
| Metal-extracting and ore-lixiviating apparatus | G. S. Foster and S. A. D. Stringer | 735,960 | Aug. 11 | 1761 | 377 | 105 | 1375 |
| Metal fabric for mats, &c. | E. A. Bedient | 730,223 | June 9 | 1269 | 281 | 104 | 1401 |
| Metal-feed mechanism | F. E. Vandercook | 742,104 | Oct. 20 | 3357 | 749, 750 | 106 | 1989 |
| Metal-fibering machine | A. L. Cole | 745,786 | Dec. 1 | 845 | 191 | 107 | 1279 |
| Metal-flanging machine | T. Reis | 745,665 | Dec. 1 | 634 | 147 | 107 | 1233 |
| Metal-heating furnace | T. V. Allis | 729,712 | June 2 | 328 | 75 | 104 | 1196 |
| Metal-heating furnace | T. V. Allis | 729,713 | June 2 | 332 | 76 | 104 | 1197 |
| Metal-hoop-making machine | J. E. Wright | 725,390 | Apr. 14 | 1793 | 401, 402 | 103 | 1564 |
| Metal-injecting mechanism. Fluid- | W. L. Lightbown | 720,714 | Feb. 17 | 2438 | 558 | 102 | 1365 |
| Metal. Leaching | T. B. Joseph | 732,641 | June 30 | 5827 | ..... | 104 | 2405 |
| Metal. Machine for making expanded | J. F. Craven | 741,016 | Oct. 13 | 1167 | 263, 264 | 106 | 1515 |
| Metal-melting furnace | J. J. Anderson | 733,931 | July 21 | 2230 | 524 | 105 | 503 |
| Metal mixer. Molten- | J. Kennedy | 721,048 | Feb. 17 | 3039 | 697 | 102 | 1495 |
| Metal oxids. Making | G. F. Rendall | 721,092 | Feb. 17 | 3127 | 718, 719 | 102 | 1515 |
| Metal pieces. Joining | H. Goldschmidt | 717,840 | Jan. 6 | 626 | 138 | 102 | 134 |
| Metal-planer attachment | L. E. Ward | 725,805 | Apr. 21 | 2594 | 589 | 103 | 1750 |
| Metal-planing machine | A. W. Whitcomb | 720,647 | Feb. 17 | 2317 | 531 | 102 | 1339 |
| Metal plates or sheets. Treating | A. J. Diescher | 725,324 | Apr. 14 | 1676 | 378 | 103 | 1539 |
| Metal-polishing machine | F. A. Weisbecker | 733,099 | July 7 | 714 | 174 | 105 | 151 |
| Metal post | G. Schneider | 722,635 | Mar. 10 | 1814 | 404 | 103 | 406 |
| Metal-pouring machine | W. S. Mather | 731,062 | June 16 | 2807 | 625, 626 | 104 | 1747 |
| Metal preserving and cleansing compound | A. Beck | 719,074 | Jan. 27 | 2960 | ..... | 102 | 672 |
| Metal. Producing uniformity of quality in molten | R. G. G. Moldenke | 736,131 | Aug. 11 | 2080 | 446 | 105 | 1443 |
| Metal-refining apparatus | A. Schwarz | 746,748 | Dec. 15 | 2614 | 600, 601 | 107 | 1704 |
| Metal rods, &c. Machine for cutting off | C. H. Veeder | 740,492 | Oct. 6 | 211 | 41, 42 | 106 | 1291 |
| Metal rods, &c. Manufacture of | F. Tomlinson | 718,546 | Jan. 13 | 1956 | 427, 428 | 102 | 436 |
| Metal roll. Composite | C. J. Reed | 741,413 | Oct. 13 | 1952 | 432, 433 | 106 | 1683 |
| Metal seat. Pressed- | R. T. J. Martin | 726,176 | Apr. 21 | 3209 | 728 | 103 | 1878 |
| Metal-shearing device | W. Wiek | 742,942 | Nov. 3 | 210 | 48 | 107 | 47 |
| Metal-shearing machine | C. McDonner | 736,536 | Aug. 18 | 2795 | 612 | 105 | 1615 |
| Metal-shearing machine | C. E. Lingenfelter | 746,716 | Dec. 15 | 2552 | 586, 587 | 107 | 1690 |
| Metal-shears | T. F. Lippengood | 731,312 | June 16 | 3280 | 729 | 104 | 1842 |
| Metal-sheet drying and fluxing machine | J. C. Taliaferro | 722,643 | Mar. 10 | 1827 | 406, 407 | 103 | 409 |
| Metal sheets. Machine for piling | B. Goldsmith and C. W. Bennett | 733,385 | July 14 | 1240 | 293, 294 | 105 | 278 |
| Metal sheets. Machine for piling | C. W. Bennett and B. Goldsmith | 734,058 | July 21 | 2506 | 584 | 105 | 563 |
| Metal sheets. Manufacturing | T. V. Allis | 729,714 | June 2 | 335 | ..... | 104 | 1198 |
| Metal sheets. Manufacturing thin | T. V. Allis | 731,732 | June 23 | 4076 | 909 | 104 | 2020 |
| Metal-strip cutting and bending machine | M. F. Stadtmuller | 740,054 | Sept. 29 | 4854 | 1088 | 106 | 1105 |
| Metal structure. Expanded- | G. J. Holl | 724,866 | Apr. 7 | 837 | 193 | 103 | 1348 |
| Metal structure. Expanded- | H. E. White | 728,345 | May 19 | 2893 | 638 | 104 | 654 |
| Metal sulfates from mattes. Obtaining | O. Meurer | 733,590 | July 14 | 1597 | ..... | 105 | 356 |
| Metal-transferring apparatus | E. E. Slick | 745,252 | Nov. 24 | 4746 | 1037 | 107 | 1054 |
| Metal-treating furnace | H. D. Hibbard | 718,760 | Jan. 20 | 2366 | 523, 524 | 102 | 534 |
| Metal-treating furnace | M. J. Murdoch | 726,728 | Apr. 28 | 4300 | 971 | 103 | 2114 |
| Metal tubes or pipes. Die for manufacture of | J. Reimann | 732,960 | July 7 | 463 | 115, 116 | 105 | 100 |
| Metal unions. Manufacture of | G. Chisholm | 730,093 | June 2 | 1033 | 231, 232 | 104 | 1337 |
| Metal ware. Die for making hollow | W. Jones | 746,843 | Dec. 15 | 2798 | 645 | 107 | 1745 |
| Metal wheel | S. L. Allen | 730,591 | June 9 | 1948 | 434 | 104 | 1546 |
| Metal wheel | R. Bradley | 747,369 | Dec. 22 | 3808 | 857 | 107 | 1988 |

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| Invention. | Name. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | | Spec. | Drg. | Vol. | Page. |
| Metal wheel. Cast- | J. McCallum | 727,826 | May 12 | 1900 | 424 | 104 | 422 |
| Metal wheels. Making | G. W. Packer | 728,285 | May 19 | 2771 | 615 | 104 | 630 |
| Metal-working apparatus. Clamping device for electric | A. F. Rietzel | 735,821 | Aug. 11 | 1503 | 322 | 105 | 1320 |
| Metal-working appliance | J. P. Johnson | 731,305 | June 16 | 3271 | 726, 727 | 104 | 1840 |
| Metal-working by electricity | D. E. Johnson | 739,601 | Sept. 22 | 3979 | 887 | 106 | 899 |
| Metal-working machine | W. T. Sears | 721,841 | Mar. 3 | 333 | 74 | 103 | 73 |
| Metal-working machine | A. M. Stillman | 725,292 | Apr. 14 | 1609 | 363, 364 | 103 | 1526 |
| Metal-working machine | F. G. Johnson | 731,686 | June 23 | 3990 | 891 | 104 | 2003 |
| Metal-working machine | L. F. and R. Schulze | 732,453 | June 30 | 5469 | 1214, 1215 | 104 | 2327 |
| Metal-working machine | J. Hartness | 735,254 | Aug. 4 | 423 | 82, 83 | 105 | 1071 |
| Metal-working tool | A. B. Hill | 727,629 | May 12 | 1502 | 340 | 104 | 341 |
| Metal-working tool | A. Tindel | 736,799 | Aug. 18 | 3307 | 733 | 105 | 1718 |
| Metal-working tool | A. Tindel | 745,976 | Dec. 1 | 1218 | 273, 274 | 107 | 1360 |
| Metals and alloys. Reduction of | F. J. Tone | 745,122 | Nov. 24 | 4490 | 972, 973 | 107 | 1002 |
| Metals. Apparatus for detecting the temperature of | A. Sauveur and J. Whiting | 748,107 | Dec. 29 | 5217 | 1181, 1182 | 107 | 2326 |
| Metals by the use of chlorin. Extracting the heavy | J. Savelsberg | 741,840 | Oct. 20 | 2779 | ..... | 106 | 1874 |
| Metals, &c. Compressing | W. Holzer | 720,348 | Feb. 10 | 1733 | 393 | 102 | 1205 |
| Metals dissolved in mercury. Apparatus for oxidizing | C. E. Baker and A. W. Burwell | 739,140 | Sept. 15 | 3126 | 691 | 106 | 700 |
| Metals. Dry separator for | T. M. Moe | 736,862 | Aug. 18 | 3432 | 760 | 105 | 1746 |
| Metals. Electrodepositing | C. R. Fletcher | 740,359 | Sept. 29 | 5401 | 1216, 1217 | 106 | 1219 |
| Metals. Electrodepositing | W. M. Johnson | 742,442 | Oct. 27 | 3980 | 893 | 106 | 2133 |
| Metals. Electromagnet for separating | G. H. Young | 721,490 | Feb. 24 | 3904 | 887 | 102 | 1693 |
| Metals. Extracting noble | F. W. Martino | 727,659 | May 12 | 1569 | ..... | 104 | 355 |
| Metals from cyanid solutions. Extracting | J. A. Ogden | 743,550 | Nov. 10 | 1507 | 315 | 107 | 339 |
| Metals from matte or ore. Separating | P. Danckwardt | 746,797 | Dec. 15 | 2699 | 623 | 107 | 1722 |
| Metals from ores. Apparatus for extracting | J. and L. Stoveken | 729,805 | June 2 | 520 | 114, 115 | 104 | 1234 |
| Metals from ores. Apparatus for extracting | O. A. Ellis | 731,169 | June 16 | 3015 | 669 | 104 | 1787 |
| Metals from ores. Apparatus for use in extracting | J. F. Webb | 729,819 | June 2 | 549 | 121 | 104 | 1240 |
| Metals from ores. Extracting | Z. B. Stuart | 719,274 | Jan. 27 | 3326 | 744 | 102 | 748 |
| Metals from ores. Extracting | S. Trivick | 723,787 | Mar. 24 | 3947 | ..... | 103 | 871 |
| Metals from ores. Extracting | E. B. Hack | 745,828 | Dec. 1 | 946 | 213 | 107 | 1301 |
| Metals from solutions. Apparatus for the precipitation of | P. W. McCaffery | 730,385 | June 9 | 1568 | 349 | 104 | 1463 |
| Metals from their compounds. Electrolytic apparatus for recovering | C. E. Baker and A. W. Burwell | 734,499 | July 28 | 3333 | 780 | 105 | 753 |
| Metals from their compounds. Electrolytic process of recovering | C. E. Baker and A. W. Burwell | 739,139 | Sept. 15 | 3125 | 691 | 106 | 699 |
| Metals from their ores. Recovering and separating | H. A. Frasch | 720,235 | Feb. 10 | 1524 | 349 | 102 | 1161 |
| Metals. Indicator for locating sunken | C. F. Pike | 737,866 | Sept. 1 | 603 | 132 | 106 | 133 |
| Metals. Means for precipitating dissolved | P. W. McCaffrey | 728,746 | May 19 | 3631 | 806 | 104 | 810 |
| Metals, metalloids, and alloys. Producing and refining | E. Straub | 721,638 | Feb. 24 | 4195 | 954 | 102 | 1759 |
| Metals, minerals, &c., without digging. Apparatus for locating | F. H. Brown | 727,077 | May 5 | 491 | 105 | 104 | 108 |
| Metals. Pulverizing | C. Bertou | 719,725 | Feb. 3 | 570 | 128 | 102 | 942 |
| Metals. Uniting | J. M. Anderson | 729,113 | May 26 | 4294 | 949 | 104 | 959 |
| Metals. Uniting | H. Goldschmidt | 729,573 | June 2 | 99 | 25 | 104 | 1147 |
| Metals. Uniting | A. Dick | 731,100 | June 16 | 2880 | 639 | 104 | 1762 |
| Metallic box | J. Nutry | 733,332 | July 7 | 1134 | 268 | 105 | 239 |
| Metallic fabric | R. S. Brown | 736,485 | Aug. 18 | 2704 | 593 | 105 | 1595 |
| Metallic fabric | R. S. Brown | 736,486 | Aug. 18 | 2706 | 593, 594 | 105 | 1595 |
| Metallic mat | G. W. Walters | 728,525 | May 19 | 3205 | 711 | 104 | 719 |
| Metallic mat | P. J. Shrum | 740,478 | Oct. 6 | 180 | 35, 36 | 106 | 1283 |
| Metallic oxids. Apparatus for making | M. Jacobi | 731,055 | June 16 | 2795 | 622 | 104 | 1744 |
| Metallic oxids. Reducing | E. G. Acheson | 718,891 | Jan. 20 | 2603 | 582 | 102 | 583 |
| Metallic oxids with metallic aluminium. Reducing | F. C. Weber | 725,520 | Apr. 14 | 2042 | 462 | 103 | 1618 |
| Metallic pole | C. L. Wilson | 741,427 | Oct. 13 | 1973 | 437 | 106 | 1687 |
| Metallic post | J. W. Altmyer | 733,792 | July 14 | 1947 | 459 | 105 | 428 |
| Metallic structure | W. H. Clarke | 745,570 | Dec. 1 | 469 | 110 | 107 | 1197 |
| Metallic tie | D. P. Crowley | 734,306 | July 21 | 2994 | 705 | 105 | 666 |
| Metallic tie | F. D. Young | 743,790 | Nov. 10 | 1949 | 413 | 107 | 432 |
| Metallic tie | P. Reeser | 746,742 | Dec. 15 | 2601 | 597 | 107 | 1701 |
| Metallic tie and rail-fastener | J. A. Boughton | 725,665 | Apr. 21 | 2331 | 526 | 103 | 1693 |
| Metallic tie and rail-fastener | J. H. Gallagher | 726,818 | Apr. 28 | 4474 | 1010 | 103 | 2150 |
| Metallic tie and rail-fastener | J. Fraser | 731,766 | June 23 | 4139 | 923 | 104 | 2033 |
| Metallic tie and rail-fastener | V. C. Washabaugh | 732,476 | June 30 | 5519 | 1224 | 104 | 2336 |
| Metallic tie and rail-fastener | C. A. Wills | 733,104 | July 7 | 723 | 176 | 105 | 153 |
| Metallic tie and rail-fastener | A. J. Klinkner | 739,607 | Sept. 22 | 3988 | 889 | 106 | 901 |
| Metallic tie and rail-fastener combined | E. C. Herrold and J. L. Orr | 745,838 | Dec. 1 | 973 | 218 | 107 | 1306 |
| Metallic tie and rail-fastening | V. A. Showalter | 736,885 | Aug. 18 | 3469 | 769 | 105 | 1753 |
| Metallic wheel | J. H. Haskins | 733,717 | July 14 | 1808 | 428 | 105 | 398 |
| Metallic wheel | W. Meinrich | 743,536 | Nov. 10 | 1488 | 311 | 107 | 335 |
| Metallurgical and chemical furnace | C. A. Doremus | 723,251 | Mar. 24 | 2974 | 668 | 103 | 673 |
| Metallurgical furnace | M. P. Boss | 732,263 | June 30 | 5108 | 1136 | 104 | 2252 |
| Metallurgical furnace | M. P. Boss | 732,264 | June 30 | 5110 | 1136, 1137 | 104 | 2253 |
| Metallurgical furnace | M. P. Boss | 732,265 | June 30 | 5112 | 1137 | 104 | 2253 |
| Metallurgical furnace | M. P. Boss | 732,266 | June 30 | 5114 | 1137 | 104 | 2254 |
| Metallurgical furnace | M. P. Boss | 732,267 | June 30 | 5116 | 1137 | 104 | 2254 |
| Metallurgical furnace | M. P. Boss | 732,268 | June 30 | 5118 | 1138 | 104 | 2255 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|---|
| | | | | Spec. | Dr'g. | Vol. | Page. |
| Metallurgical furnace | M. P. Boss | 732,269 | June 30 | 5121 | 1138 | 104 | 2255 |
| Metallurgical furnace | S. Stewart and H. Hughes | 737,519 | Aug. 25 | 4653 | 1044, 1045 | 105 | 2029 |
| Metallurgical furnace | W. F. Hannes | 740,360 | Sept. 29 | 5403 | 1217 | 106 | 1219 |
| Metallurgical or chemical vessels. Appliance for use with | W. Lynes | 728,122 | May 12 | 2444 | 544, 545 | 104 | 538 |
| Metallurgical process | O. W. Brown and W. F. Oesterle | 742,830 | Nov. 3 | 26 | | 107 | 8 |
| Metallurgical processes. Apparatus for use in | J. H. and R. H. Officer, J. H. Burfeind, and J. W. Neill. | 733,739 | July 14 | 1839 | 435 | 105 | 405 |
| Metaphone | F. S. Herrmann | 726,918 | May 5 | 157 | 38 | 104 | 36 |
| Meter: *See* Commutator-meter. Current-meter. Distance-meter. Electric meter. Electricity meter. Gas-meter. Grain-meter. Liquid-meter. Lumber-surface meter. Maximum or indicating meter. Multiple-rate meter. Photographic-exposure meter. Power-factor meter. Proportional meter. Rotary meter. Steam-meter. Velocity-meter. Volt-ampere meter. Water-meter. | | | | | | | |
| Meter | W. Stanley | 720,979 | Feb. 17 | 2905 | 666 | 102 | 1465 |
| Meter | W. Stanley | 720,980 | Feb. 17 | 2907 | 666, 667 | 102 | 1465 |
| Meter | W. C. Fish | 727,606 | May 12 | 1457 | 327 | 104 | 332 |
| Meter | J. A. Tilden | 739,701 | June 2 | 311 | 72 | 104 | 1193 |
| Meter | F. P. Cox | 730,613 | June 9 | 1989 | 442 | 104 | 1556 |
| Meter | J. A. Tilden | 739,269 | Sept. 15 | 3363 | 747 | 106 | 752 |
| Meter | J. A. Tilden | 742,137 | Oct. 20 | 3413 | 761 | 106 | 2000 |
| Meter-coupling | F. Sheridan | 746,181 | Dec. 8 | 1594 | 356 | 107 | 1461 |
| Meter-glass-cleaning device | J. C. Michie | 737,439 | Aug. 25 | 4506 | 1011 | 105 | 1993 |
| Metering. Multiple-rate | E. Thomson and F. P. Cox | 726,233 | Apr. 21 | 3324 | 754, 755 | 103 | 1902 |
| Metronome | J. Brady | 738,093 | Sept. 1 | 1058 | 235 | 106 | 229 |
| Metronome. Electric | E. K. Adams | 734,032 | July 21 | 2452 | 573, 574 | 105 | 551 |
| Micrometer-gage | F. O. Wells | 734,784 | July 28 | 3874 | 903 | 105 | 863 |
| Micrometer-gage | A. Rieffel | 747,224 | Dec. 15 | 3526 | 800 | 107 | 1909 |
| Micrometer. Inside | L. S. Starrett | 726,003 | Apr. 21 | 2925 | 665 | 103 | 1819 |
| Microphone or microphone-transmitter for electrical sound transmission. | F. W. Senkbeil | 726,360 | Apr. 28 | 3593 | 816 | 103 | 1974 |
| Microscope | E. Bausch and G. Hommel | 734,501 | July 28 | 3334 | 780, 781 | 105 | 753 |
| Microscope | A. F. Edney | 745,584 | Dec. 1 | 501 | 118 | 107 | 1204 |
| Microscope. Binocular | F. E. Ives | 739,182 | Sept. 15 | 3195 | 707 | 106 | 714 |
| Microtome | E. Bausch and G. Hommel | 728,656 | May 19 | 3472 | 771, 772 | 104 | 777 |
| Middlings-purifier | H. C. Robinson | 719,877 | Feb. 3 | 843 | 197 | 102 | 1001 |
| Mile or sign post | L. Weglein, Jr | 736,181 | Aug. 11 | 2159 | 464 | 105 | 1461 |
| Mileage holding and counting device | E. R. Allen | 727,871 | May 12 | 1986 | 442 | 104 | 440 |
| Military or naval problems. Apparatus for the demonstration and study of | B. B. Hill | 742,870 | Nov. 3 | 88 | 21 | 107 | 20 |
| Milk a food product. Producing from | A. S. Ramage | 730,702 | June 9 | 2148 | | 104 | 1589 |
| Milk-aerator | A. J. Hood | 723,389 | Mar. 24 | 3248 | 728 | 103 | 726 |
| Milk-aerator | J. A. Trentlage | 728,334 | May 19 | 2875 | 634 | 104 | 650 |
| Milk and making same. Dry condensed | H. S. Hopkins | 742,322 | Oct. 27 | 3775 | 846 | 106 | 2091 |
| Milk and product thereof. Treating | J. H. Campbell | 717,968 | Jan. 6 | 836 | 189 | 102 | 180 |
| Milk, &c. Apparatus for clarifying and aerating | J. L. Bergh | 726,134 | Apr. 21 | 3142 | 710 | 103 | 1864 |
| Milk-bottles, &c. Cleaning and sterilizing | C. S. Adams and A. J. Rice | 745,752 | Dec. 1 | 778 | 178 | 107 | 1264 |
| Milk-can | L. Harvey | 746,328 | Dec. 8 | 1872 | 427 | 107 | 1518 |
| Milk compound and producing same. Synthetic | W. A. Hall | 746,502 | Dec. 8 | 2160 | | 107 | 1580 |
| Milk-cooler | R. H. Casswell | 719,935 | Feb. 3 | 929 | 217 | 102 | 1021 |
| Milk-cooler | C. R. Gibson | 736,332 | Aug. 11 | 2419 | 528 | 105 | 1519 |
| Milk cooler and aerator | L. Wells | 721,629 | Feb. 24 | 4179 | 951 | 102 | 1755 |
| Milk-cooler. Hydraulic | Z. C. Womble | 746,623 | Dec. 8 | 2372 | 544 | 107 | 1629 |
| Milk cooler or refrigerator | A. C. Suggs | 743,588 | Nov. 10 | 1588 | 333 | 107 | 355 |
| Milk-crock hoop or band | C. M. Bronson | 740,390 | Oct. 6 | 10 | 3 | 106 | 1246 |
| Milk extract similar to meat extract. Making | X. Binder | 747,678 | Dec. 22 | 4360 | | 107 | 2113 |
| Milk heater or cooler | A. Jensen | 730,662 | June 9 | 2073 | 462 | 104 | 1573 |
| Milk in testing-bottles. Means for shaking | D. Drawbaugh | 747,870 | Dec. 22 | 4735 | 1070 | 107 | 2198 |
| Milk-jar closure | J. Crane, Jr | 736,694 | Aug. 18 | 3113 | 686 | 105 | 1678 |
| Milk-jar lock | J. C. Betts | 732,613 | June 30 | 5778 | 1281 | 104 | 2395 |
| Milk-jar lock | W. Crissy | 747,592 | Dec. 22 | 4196 | 944 | 107 | 2076 |
| Milk-jar protector | R. E. Gatter | 720,341 | Feb. 10 | 1719 | 391 | 102 | 1203 |
| Milk. Making desiccated | J. H. Campbell | 718,191 | Jan. 13 | 1248 | | 102 | 285 |
| Milk or cream vat | T. L. Valerius | 745,124 | Nov. 24 | 4493 | 973 | 107 | 1002 |
| Milk-pails. Knee-rest for | N. Huckins | 737,629 | Sept. 1 | 130 | 28 | 106 | 31 |
| Milk pasteurizer and cooler | C. R. Swisher | 739,456 | Sept. 22 | 3722 | 828, 829 | 106 | 845 |
| Milk-pasteurizing apparatus | L. Sturges | 733,604 | July 14 | 1618 | 384 | 105 | 360 |
| Milk-powder. Producing | H. V. Dunham | 723,254 | Mar. 24 | 2978 | | 103 | 674 |
| Milk product and making same | J. W. Dowler | 730,888 | June 16 | 2476 | | 104 | 1679 |
| Milk product resembling cheese and making same | J. H. Campbell | 746,016 | Dec. 8 | 1298 | 292 | 107 | 1393 |
| Milk-receptacle lock | J. L. Farley | 726,271 | Apr. 28 | 3403 | 773 | 103 | 1983 |
| Milk. Regenerative apparatus for the simultaneous warming and cooling of | L. P. Larsen | 722,366 | Mar. 10 | 1322 | 293 | 103 | 297 |
| Milk-tester | G. M. Luther | 734,725 | July 28 | 3758 | 877 | 105 | 840 |
| Milk-tester. Centrifugal | W. E. Penn | 742,801 | Oct. 27 | 4608 | 1044, 1045 | 106 | 2268 |
| Milk-tester. Centrifugal | T. L. Valerius | 742,815 | Oct. 27 | 4637 | 1051 | 106 | 2274 |
| Milk-wagon cabinet attachment | W. A. F. Uhlenhaut | 727,498 | May 5 | 1251 | 278 | 104 | 269 |
| Milking apparatus | D. T. Sharples | 737,669 | Sept. 1 | 202 | 43, 44 | 106 | 47 |
| Milking apparatus. Pneumatic | A. Gillies | 744,188 | Nov. 17 | 2768 | 590 | 107 | 618 |
| Milking apparatus. Teat-cup for pneumatic | A. Gillies | 744,189 | Nov. 17 | 2769 | 590 | 107 | 618 |
| Milking cows. Device for aiding in | C. Jacobson | 747,552 | Dec. 22 | 4127 | 926 | 107 | 2061 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Milking-machine vacuum-regulating device | F. M. Devore | 719,443 | Feb. 3 | 59 | 13 | 102 | 838 |
| Mill: See Ball-mill. Coffee-mill. Crushing-mill. Crushing and pulverizing mill. Fanning-mill. Grinding-mill. Grinding and pulverizing mill. Hollow mill. Malt-breaking mill. Ore-crushing mill. Peanut-grinding mill. Piercing and expanding mill. Quartz-mill. Rolling-mill. Sand-crushing mill. Sawmill. Stamp-mill. Sweep-mill. Three-high mill. Tumbling-mill. Windmill. | | | | | | | |
| Mill | G. M. Kemp | 718,003 | Jan. 6 | 918 | 205 | 102 | 197 |
| Mill | H. C. Groves | 732,294 | June 30 | 5165 | 1147 | 104 | 2263 |
| Milling and boring machine. Combined | A. B. Sowden | 734,628 | July 28 | 3562 | 833, 834 | 105 | 802 |
| Milling and key-seat-cutting machine | T. J. Bloss | 745,414 | Dec. 1 | 188 | 42 | 107 | 1139 |
| Milling-machine | S. R. Boyer | 726,248 | Apr. 28 | 3358 | 762 | 103 | 1924 |
| Milling-machine | C. P. Higgins | 736,726 | Aug. 18 | 3172 | 700, 701 | 105 | 1691 |
| Milling-machine | J. B. Foote | 745,431 | Dec. 1 | 222 | 50, 51, 52 | 107 | 1147 |
| Milling machine and tool | W. J. Smith | 735,605 | Aug. 4 | 1089 | 231, 232 | 105 | 1212 |
| Milling-machine automatic return-feed | C. Hakes and F. P. Carter | 731,678 | June 23 | 3975 | 886 | 104 | 2000 |
| Milling-machine change-speed attachment | W. P. Norton | 718,866 | Jan. 20 | 2557 | 569, 570 | 102 | 573 |
| Milling-machine link-cutting attachment | A. E. Kastien | 741,141 | Oct. 13 | 1395 | 320 | 106 | 1563 |
| Millstone | P. Lacey | 727,156 | May 5 | 642 | 138 | 104 | 139 |
| Mine-cage | D. F. Lepley | 720,265 | Feb. 10 | 1582 | 361 | 102 | 1174 |
| Mine-cage. Self-dumping | F. A. Ray | 719,258 | Jan. 27 | 3301 | 739 | 102 | 742 |
| Mine-curtain | A. O. Slentz | 732,903 | July 7 | 365 | 89 | 105 | 80 |
| Mine-curtain raiser | J. Wack | 738,262 | Sept. 8 | 1429 | 308 | 106 | 324 |
| Mine-gate | J. M. Marty | 718,138 | Jan. 13 | 1153 | 256 | 102 | 263 |
| Mine-gate | N. K. Bowman | 739,978 | Sept. 29 | 4711 | 1059, 1060 | 106 | 1073 |
| Mine-haul. Single-cable | C. W. Damron | 722,951 | Mar. 17 | 2416 | 540 | 103 | 543 |
| Mine model or exhibit | N. P. Hill and J. R. Chamberlin | 727,140 | May 5 | 616 | 132 | 104 | 133 |
| Mine or submarine-boat destroyer | A. F. Humphrey | 743,081 | Nov. 3 | 507 | 110 | 107 | 106 |
| Mine-shaft safety device | N. W. Dickerson | 747,951 | Dec. 29 | 4904 | 1110 | 107 | 2256 |
| Mine signal system | N. K. Bowman | 742,962 | Nov. 3 | 247 | 55 | 107 | 54 |
| Mine skips, cages, &c. Safety-gear for | W. B. Stevenson | 740,942 | Oct. 6 | 1019 | 230 | 106 | 1463 |
| Mine-timber-framing machine | C. K. Barnes and A. Y. Smith | 735,933 | Aug. 11 | 1716 | 366, 367 | 105 | 1366 |
| Mine-timbering apparatus | J. R. Hunter | 742,437 | Oct. 27 | 3972 | 891 | 106 | 2131 |
| Mine-tipple | G. W. Parker | 739,341 | Sept. 22 | 3486 | 779, 780 | 106 | 793 |
| Mine-ventilator | D. F. Lepley | 720,264 | Feb. 10 | 1580 | 360, 361 | 102 | 1173 |
| Mines. Apparatus for changing winding-ropes in | A. Beien | 723,437 | Mar. 24 | 3324 | 745 | 103 | 742 |
| Mines, &c. Safety mechanism for winding apparatus for | J. Berry | 746,271 | Dec. 8 | 1762 | 400 | 107 | 1495 |
| Miner's blasting-squib | T. R. Jones | 741,968 | Oct. 20 | 3053 | 681 | 106 | 1929 |
| Miner's crate | G. R. MacDonald | 733,552 | July 14 | 1526 | 364 | 105 | 340 |
| Miner's safety-cage | F. C. Kerst | 740,872 | Oct. 6 | 903 | 202, 203 | 106 | 1439 |
| Miner's tool | A. V. Des Moineaux | 725,420 | Apr. 14 | 1845 | 413 | 103 | 1575 |
| Mining apparatus. Phosphate- | J. Beatey | 740,731 | Oct. 6 | 644 | 145 | 106 | 1385 |
| Mining-cage safety-chair | H. Hanson and F. L. Dwight | 733,907 | July 14 | 2187 | 514, 515 | 105 | 475 |
| Mining coal | W. Foglesong | 729,566 | June 2 | 83 | 21 | 104 | 1144 |
| Mining column-bar | A. Johnson | 726,066 | Apr. 21 | 3016 | 686 | 103 | 1839 |
| Mining dredge. Placer- | A. W. Robinson | 747,086 | Dec. 15 | 3269 | 745 | 107 | 1854 |
| Mining-machine | W. A. L. Roberson | 727,843 | May 12 | 1934 | 431 | 104 | 429 |
| Mining-machine | H. B. Dierdorff | 736,705 | Aug. 18 | 3133 | 690 | 105 | 1683 |
| Mining-machine | S. N. Mighell | 746,727 | Dec. 15 | 2570 | 591, 592 | 107 | 1694 |
| Mining machine. Coal- | G. Muschweck and J. Tudas | 739,335 | Sept. 22 | 3477 | 776, 777 | 106 | 791 |
| Mining machine. Coal- | R. Robinson and J. H. Ball | 748,530 | Dec. 29 | 5991 | 1357, 1358 | 107 | 2494 |
| Mining. Machine for washing and cleaning gravel in gold- | J. G. Camp | 738,408 | Sept. 8 | 1743 | 379 | 106 | 390 |
| Mining-tool | T. M. Fisher | 735,356 | Aug. 4 | 598 | 123 | 105 | 1109 |
| Mining, &c. Wedge or splitting-tool for coal- | A. Ivanoff | 735,520 | Aug. 4 | 934 | 198 | 105 | 1180 |
| Mineral-grading apparatus | H. W. Ash | 725,642 | Apr. 14 | 2280 | 515 | 103 | 1668 |
| Mineral or other dry substances. Apparatus for mixing | C. W. Speirs | 743,202 | Nov. 3 | 740 | 162 | 107 | 155 |
| Minerals. Locating | G. I. Leonard | 736,411 | Aug. 18 | 2552 | 560 | 105 | 1562 |
| Minerals. Pulverizing and cleaning | G. C. Propfe | 734,240 | July 21 | 2845 | | 105 | 636 |
| Minerals. Reducing | O. B. Dawson | 738,007 | Sept. 1 | 910 | 200 | 106 | 199 |
| Mirror | F. Jaeger | 728,926 | May 26 | 3962 | 880 | 104 | 892 |
| Mirror | F. Jaeger | 728,927 | May 26 | 3962 | 881 | 104 | 892 |
| Mirror | C. P. Buckenberger | 735,204 | Aug. 4 | 335 | 64 | 105 | 1053 |
| Mirror. Adjustable | W. L. Doughty | 735,072 | Aug. 4 | 41 | 12 | 105 | 991 |
| Mirror-bracket | W. S. Douglas | 721,944 | Mar. 3 | 549 | 120 | 103 | 121 |
| Mirror decorating and illuminating device | S. G. Doherty | 744,507 | Nov. 17 | 3339 | 719 | 107 | 743 |
| Mirror for ladies' hats | B. A. Potter and E. D. Blodgett | 738,936 | Sept. 15 | 2768 | 613 | 106 | 626 |
| Mirror frame. Hand | W. C. Howard | 735,382 | Aug. 4 | 647 | 134 | 105 | 1119 |
| Mirror-holder. Adjustable | G. Becker | 724,782 | Apr. 7 | 683 | 160 | 103 | 1315 |
| Mirror or electric-lamp bracket | B. F. Ordway | 745,374 | Dec. 1 | 111 | 26 | 107 | 1124 |
| Mirror. Rear-view hat- | L. D. Merrick | 736,418 | Aug. 18 | 2571 | 564 | 105 | 1567 |
| Mirror. Shaving- | L. E. Painter | 717,611 | Jan. 6 | 163 | 40 | 102 | 36 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Mirror-support | J. M. Conroy | 733,162 | July 7 | 817 | 198 | 105 | 172 |
| Mirror-support. Adjustable | C. N. Langdon | 736,609 | Aug. 18 | 2951 | 646 | 105 | 1645 |
| Mirror. Transparent | E. Bloch | 720,877 | Feb. 17 | 2699 | 624 | 102 | 1421 |
| Mirror. Transparent | R. Wilson | 728,063 | May 12 | 2339 | 521 | 104 | 515 |
| Miter-box | W. B. May | 727,820 | May 12 | 1890 | 421 | 104 | 420 |
| Miter-box | J. Larson | 731,794 | June 23 | 4187 | 933 934 | 104 | 2044 |
| Miter-box | J. Larson | 731,919 | June 23 | 4411 | 983 | 104 | 2094 |
| Miter-box | R. H. Dorn | 733,823 | July 14 | 2025 | 476 477 | 105 | 443 |
| Miter-box | A. P. Forsling | 736,837 | Aug. 18 | 3387 | 749 | 105 | 1735 |
| Miter-box | M. Nicholls | 738,930 | Sept. 15 | 2759 | 610 | 106 | 624 |
| Miter-box | R. B. Briggs | 744,677 | Nov. 17 | 3612 | 779 | 107 | 800 |
| Miter-box | R. Dunne | 748,175 | Dec. 29 | 5342 | 1215 | 107 | 2352 |
| Miter-box. Adjustable | A. Sherman and J. R. Moore | 722,051 | Mar. 3 | 733 | 163 | 103 | 158 |
| Miter-box. Knockdown | A. C. Birge | 737,322 | Aug. 25 | 4282 | 951 952 | 105 | 1944 |
| Miter-clamp | J. F. Jacobs | 744,555 | Nov. 17 | 3420 | 737 | 107 | 760 |
| Miter-cutting machine | S. Levan | 734,185 | July 21 | 2747 | 645 | 105 | 614 |
| Miter-finder | G. Duncan and G. W. Byars | 725,230 | Apr. 14 | 1518 | 345 | 103 | 1506 |
| Mitten | W. S. Lodge | 722,863 | Mar. 17 | 2267 | 507 | 103 | 512 |
| Mitten | J. F. Campbell | 725,217 | Apr. 14 | 1492 | 339 | 103 | 1501 |
| Mixer: *See* Air and gas mixer. Asphalt, &c., mixer. Bread-mixer. Cement-mixer. Chemical-mixer. Clay-mixer. Concrete-mixer. Dough-mixer. Engine-mixer. Fertilizer-mixer Fluid-mixer. Gas-mixer. Gas and air mixer. Plastic-material mixer. | | | | | | | |
| Mixing and bleaching engine | A. Rommeney | 725,877 | Apr. 21 | 2706 | 616 | 103 | 1776 |
| Mixing and dissolving apparatus | L. P. Burrows | 735,206 | Aug. 4 | 337 | 65 | 105 | 1053 |
| Mixing and washing machine | T. Haskins | 736,389 | Aug. 18 | 2521 | 553 | 105 | 1557 |
| Mixing apparatus | H. W. Blaisdell | 742,385 | Oct. 27 | 3877 | 871 | 106 | 2112 |
| Mixing apparatus | J. W. Tierney | 745,930 | Dec. 1 | 1131 | 253 254 | 107 | 1340 |
| Mixing device | L. E. Shinn | 732,661 | June 30 | 5869 | 1302 | 104 | 2412 |
| Mixing device | D. S. Goss | 740,752 | Oct. 6 | 681 | 154 | 106 | 1392 |
| Mixing device | W. S. Standish | 742,749 | Oct. 27 | 4524 | 1024 | 106 | 2249 |
| Mixing-machine | H. C. Chambers | 723,987 | Mar. 31 | 4365 | 981 | 103 | 976 |
| Mixing vessel | S. R. Munson | 729,884 | June 2 | 671 | 147 | 104 | 1265 |
| Moistener and sealer. Envelop | R. H. Strong | 743,667 | Nov. 10 | 1731 | 365 | 107 | 386 |
| Moistener. Envelop | A. M. Osmun | 721,911 | Mar. 3 | 468 | 102 | 103 | 103 |
| Moistener. Envelop | F. C. Ballard | 735,051 | Aug. 4 | 8 | 3 | 105 | 982 |
| Moistener. Finger | R. C. Glanville | 727,612 | May 12 | 1470 | 329 | 104 | 334 |
| Moistening adhesive surfaces. Device for | W. J. Weaver and C. F. Hoffman | 721,112 | Feb. 17 | 3161 | 727 | 102 | 1522 |
| Moistening and sealing apparatus. Envelop | W. Henderson, Jr | 733,392 | July 14 | 1252 | 296 | 105 | 281 |
| Moistening and sealing device. Envelop | A. and B. Goldstein | 734,850 | July 28 | 4012 | 937 | 105 | 892 |
| Moistening and sealing envelops. Device for | J. B. Wisner | 730,590 | June 9 | 1947 | 433 | 104 | 1546 |
| Moistening device | P. J. Alwart | 744,455 | Nov. 17 | 3255 | 698 | 107 | 726 |
| Molasses-burner | J. Anderson | 748,458 | Dec. 29 | 5852 | 1331 | 107 | 2463 |
| Mold: *See* Anode-mold. Block-mold. Brick-mold. Brick-machine mold. Briquet-mold. Building-block mold. Bullet-mold. Butter-mold. Casting-mold. Cement-post mold. Cigar-mold. Concrete-block mold. Concrete-column mold. Concrete-post mold. Cornice-mold Cuttlebone mold. Dental mold. Fence-post mold. Finger-ring mold. Fire-kindler mold. Glass-mold. Ice-cream mold. Ice-cream-brick mold. Ingot-mold. Press-mold. Sewer-mold. Soap-mold. Stone-mold. Sugar-mold. Tank-mold. Tile-mold. Trough-mold. Type-mold. Water-tank mold. | | | | | | | |
| Mold | J. B. Stein | 729,439 | May 26 | 4856 | 1076 | 104 | 1077 |
| Mold | J. Schinharl | 732,966 | July 7 | 470 | 117 | 105 | 101 |
| Mold | E. M. Campen | 733,145 | July 7 | 793 | 192 | 105 | 167 |
| Mold | H. Heincke | 746,960 | Dec. 15 | 3035 | 696 | 107 | 1799 |
| Mold | I. Marchiony | 746,971 | Dec. 15 | 3050 | 699 | 107 | 1802 |
| Mold and core drying apparatus | W. L. Mars | 722,312 | Mar. 10 | 1225 | 272 273 | 103 | 277 |
| Mold-emptying apparatus | J. C. Reed | 718,279 | Jan. 13 | 1417 | 315 | 102 | 320 |
| Mold-flask, Extensible | J. W. Hoefers | 726,290 | Apr. 28 | 3445 | 783 | 103 | 1942 |
| Mold-flask partition | G. Rader | 725,481 | Apr. 14 | 1972 | 444 | 103 | 1602 |
| Mold-forming machine | A. E. Hammer | 720,690 | Feb. 17 | 2392 | 548 | 102 | 1355 |
| Mold-making apparatus | W. S. Wood | 747,289 | Dec. 15 | 3656 | 827 | 107 | 1939 |
| Mold-making machine | F. W. Hall | 720,913 | Feb. 17 | 2780 | 638 639 | 102 | 1438 |
| Mold-sanding machine | F. J. Wiles | 743,967 | Nov. 10 | 2263 | 487 | 107 | 500 |
| Mold-washing machine | J. L. Barrick | 740,793 | Oct. 6 | 773 | 174 | 106 | 1410 |
| Molder's flask | C. Phelps | 721,831 | Mar. 3 | 316 | 69 | 103 | 70 |
| Molder's flask | M. A. Clapp and G. Sague | 746,291 | Dec. 8 | 1795 | 407 | 107 | 1501 |
| Molder's flask and gate | S. Griffith | 723,151 | Mar. 17 | 2770 | 623 | 103 | 616 |
| Molder's flask-pin | W. J. Ball | 726,242 | Apr. 28 | 3349 | 760 | 103 | 1923 |
| Molder's slick | L. A. Schulze | 745,679 | Dec. 1 | 661 | 153 | 107 | 1238 |
| Molder's sponge | A. G. Schmidt | 735,158 | Aug. 4 | 217 | 43 | 105 | 1029 |
| Molder's tool | L. A. Schulze | 745,678 | Dec. 1 | 660 | 153 | 107 | 1238 |
| Molding and biscuiting articles from porcelain, &c | G. B. Stone | 747,800 | Dec. 22 | 4583 | 1034 | 107 | 2164 |
| Molding and casting apparatus | J. R. McWane | 745,649 | Dec. 1 | 607 | 141 | 107 | 1227 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|---|
| | | | | Spec | Drg. | Vol. | Page. |
| Molding and casting flask | J. C. Reed | 728,011 | May 12 | 2245 | 499 | 104 | 495 |
| Molding and compressing various articles. Press for | O. Bergstrom and G. Bass | 748,340 | Dec. 29 | 5620 | 1281 | 107 | 2411 |
| Molding and pressing into shape moldable material. Apparatus for | A. T. Haskell | 737,620 | Sept. 1 | 114 | 25 | 106 | 27 |
| Molding and vulcanizing apparatus | R. H. Smith | 718,286 | Jan. 13 | 1429 | 318 | 102 | 323 |
| Molding apparatus | S. Shaw | 717,631 | Jan. 6 | 197 | 49 | 102 | 42 |
| Molding apparatus | G. B. Painter | 718,379 | Jan. 13 | 1593 | 351 | 102 | 356 |
| Molding apparatus | E. Cross | 720,408 | Feb. 10 | 1832 | 417, 418 | 102 | 1228 |
| Molding apparatus | P. J. McGuire | 721,727 | Mar. 3 | 131 | 30, 31 | 103 | 29 |
| Molding apparatus | C. E. Hancock | 724,283 | Mar. 31 | 4967 | 1111, 1112 | 103 | 1095 |
| Molding apparatus | C. M. Day | 726,515 | Apr. 28 | 3905 | 884 | 103 | 2033 |
| Molding apparatus | A. K. Beckwith | 738,278 | Sept. 8 | 1470 | 317, 318 | 106 | 332 |
| Molding apparatus | A. K. Beckwith | 738,279 | Sept. 8 | 1472 | 318 | 106 | 332 |
| Molding apparatus | B. C. White | 738,506 | Sept. 8 | 1941 | 424, 425 | 106 | 432 |
| Molding apparatus | W. E. Stuart | 739,235 | Sept. 15 | 3296 | 730 | 106 | 736 |
| Molding apparatus | R. M. Hale | 741,488 | Oct. 13 | 2107 | 469, 470 | 106 | 1716 |
| Molding-apparatus appliance | L. Berg | 732,918 | July 7 | 395 | 95 | 105 | 85 |
| Molding apparatus. Multiple | A. K. Beckwith | 738,277 | Sept. 8 | 1469 | 317 | 106 | 332 |
| Molding. Electric-conductor | S. M. Burk | 737,997 | Sept. 1 | 894 | 196 | 106 | 195 |
| Molding-flask | P. J. McGuire | 721,726 | Mar. 3 | 129 | 29 | 103 | 29 |
| Molding-flask | P. J. McGuire | 721,728 | Mar. 3 | 134 | 31 | 103 | 30 |
| Molding-flask | E. Harrold and C. G. Wilderson | 735,503 | Aug. 4 | 903 | 192 | 105 | 1174 |
| Molding-flasks. Pressure apparatus for | J. Mills | 732,576 | June 30 | 5713 | 1269 | 104 | 2379 |
| Molding hollow articles. Apparatus for | J. G. Morrison | 737,854 | Sept. 1 | 574 | 127 | 106 | 127 |
| Molding hollow articles. Means and apparatus for | C. Huber | 731,367 | June 16 | 3363 | 752 | 104 | 1858 |
| Molding-machine | J. A. Field | 718,442 | Jan. 13 | 1704 | 375, 376, 377, 378, 379, 380, 381, 382 | 102 | 380 |
| Molding-machine | J. F. Nolan | 719,250 | Jan. 27 | 3286 | 735 | 102 | 739 |
| Molding-machine | R. Campbell | 720,220 | Feb. 10 | 1503 | 344 | 102 | 1156 |
| Molding-machine | A. Lotz | 722,120 | Mar. 3 | 849 | 189, 190 | 103 | 183 |
| Molding-machine | F. W. Hastings | 726,426 | Apr. 28 | 3702 | 839, 840 | 103 | 1995 |
| Molding-machine | A. L. and O. Anderson | 726,492 | Apr. 28 | 3850 | 869, 870, 871, 872, 873, 874, 875 | 103 | 2023 |
| Molding-machine | B. B. Carter and F. J. Stratton | 727,900 | May 12 | 2040 | 454 | 104 | 452 |
| Molding-machine | J. W. Pridmore | 730,398 | June 9 | 1590 | 354 | 104 | 1468 |
| Molding-machine | F. W. Hastings | 731,360 | June 16 | 3351 | 749, 750 | 104 | 1856 |
| Molding-machine | W. T. Clark | 732,276 | June 30 | 5132 | 1141 | 104 | 2257 |
| Molding-machine | J. P. Appleby | 735,049 | Aug. 4 | 4 | 1, 2 | 105 | 981 |
| Molding-machine | J. W. Dearsley | 735,347 | Aug. 4 | 584 | 120, 121 | 105 | 1106 |
| Molding-machine | E. A. Goepper | 736,841 | Aug. 18 | 3393 | 750 | 105 | 1737 |
| Molding-machine | H. G. Voight | 741,569 | Oct. 13 | 2266 | 506, 507 | 106 | 1750 |
| Molding-machine | B. C. White | 743,362 | Nov. 3 | 1069 | 228, 229 | 107 | 227 |
| Molding-machine | J. Anderson | 744,152 | Nov. 17 | 2681 | 571, 572 | 107 | 600 |
| Molding-machine | W. F. Prince | 745,293 | Nov. 24 | 4827 | 1053 | 107 | 1070 |
| Molding-machine. Founder's | J. Reid, Jr | 723,548 | Mar. 24 | 3532 | 790, 791 | 103 | 783 |
| Molding-machine-operating lever | F. J. Stratton | 731,629 | June 23 | 3889 | 866 | 104 | 1983 |
| Molding-machine-operating mechanism | F. J. Stratton | 730,313 | June 9 | 1437 | 316, 317 | 104 | 1437 |
| Molding machine. Sand- | G. G. Howe | 717,577 | Jan. 6 | 96 | 24, 25 | 102 | 23 |
| Molding machine. Sand- | F. W. Hudson | 723,529 | Mar. 24 | 3503 | 783, 784 | 103 | 778 |
| Molding machinery | W. W. Doolittle | 718,829 | Jan. 20 | 2479 | 550, 551 | 102 | 555 |
| Molding material | P. Würtz | 742,109 | Oct. 20 | 3368 | ..... | 106 | 1992 |
| Molten material and distributing the same. Device for cutting | H. Brooke | 723,983 | Mar. 31 | 4355 | 978 | 103 | 974 |
| Molten material. Receptacle for containing | H. Brooke | 723,982 | Mar. 31 | 4352 | 977 | 103 | 974 |
| Molten materials. Apparatus for receiving and handling | P. Danckwardt | 721,288 | Feb. 24 | 3534 | 804 | 102 | 1617 |
| Money-box | J. A. Steinmetz | 738,736 | Sept. 8 | 2365 | 520 | 106 | 521 |
| Money-saving box or purse | G. Smith | 723,415 | Mar. 24 | 3289 | 735, 736 | 103 | 734 |
| Monkey-wrench | J. S. Miller | 730,037 | June 2 | 943 | 211 | 104 | 1320 |
| Monkey-wrench | S. P. Shiflet | 740,049 | Sept. 29 | 4846 | 1087 | 106 | 1103 |
| Monkey-wrench | T. J. Robertson | 746,382 | Dec. 8 | 1958 | 448 | 107 | 1537 |
| Monkey-wrench | S. E. Landis | 746,712 | Dec. 15 | 2546 | 585 | 107 | 1689 |
| Monocycle | H. Tolcher | 734,109 | July 21 | 2608 | 613 | 105 | 585 |
| Monoformyl derivative of 1-3 dimethyl 4-5 diamido 2-6 dioxypyrimidin. Making the | M. Engelmann | 740,636 | Oct. 6 | 481 | ..... | 106 | 1350 |
| Monolithic construction | W. C. Lyon and K. Berle | 720,165 | Feb. 10 | 1384 | 317 | 102 | 1134 |
| Monument | E. Scott | 728,993 | May 26 | 4080 | 905 | 104 | 917 |
| Monument | E. C. Hodges | 729,176 | May 26 | 4404 | 972 | 104 | 982 |

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| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Monument | S. D. McNeal | 729,391 | May 26 | 4777 | 1057 | 104 | 1061 |
| Mop | M. Miller | 730,550 | June 9 | 1872 | 418 | 104 | 1530 |
| Mop | C. Morgan | 733,554 | July 14 | 1532 | 365 | 105 | 341 |
| Mop | W. G. Browne | 737,572 | Sept. 1 | 26 | 6 | 106 | 9 |
| Mop | F. R. Lay | 739,786 | Sept. 22 | 4319 | 967 | 106 | 975 |
| Mop and scrub-brush. Combined | A. S. Held | 729,581 | June 2 | 112 | 28 | 104 | 1150 |
| Mop and scrub-brush. Combined | A. S. Held | 732,742 | July 7 | 80 | 22 | 105 | 20 |
| Mop and scrub-brush. Combined | A. S. Held | 732,743 | July 7 | 81 | 22 | 105 | 20 |
| Mop and scrub-brush. Combined | A. S. Held | 732,744 | July 7 | 82 | 22, 23 | 105 | 21 |
| Mop and wringer. Combined | C. S. Shych | 719,383 | Jan. 27 | 3544 | 790 | 102 | 796 |
| Mop and wringer therefor. Combined | E. Hilker | 744,196 | Nov. 17 | 2780 | 593 | 107 | 621 |
| Mop-cabinet | H. H. Bonney | 735,700 | Aug. 11 | 1283 | 274 | 105 | 1271 |
| Mop. Fountain- | J. Thompson | 727,863 | May 12 | 1974 | 440 | 104 | 437 |
| Mop-head | A. S. Held | 727,627 | May 12 | 1500 | 339 | 104 | 340 |
| Mop-head | H. Bitner | 733,537 | July 14 | 1502 | 358 | 105 | 334 |
| Mop-head | C. Morgan | 733,555 | July 14 | 1533 | 365 | 105 | 341 |
| Mop-wringer | O. N. Wardwell and H. C. White | 724,634 | Apr. 7 | 403 | 96 | 103 | 1256 |
| Mop-wringer | C. J. Johnson | 725,256 | Apr. 14 | 1556 | 353 | 103 | 1515 |
| Mop-wringer | A. W. Jones | 726,692 | Apr. 28 | 4234 | 959 | 103 | 2099 |
| Mop-wringer | J. M. Baker | 727,879 | May 12 | 2000 | 445 | 104 | 443 |
| Mop-wringer | T. R. Huston | 730,125 | June 2 | 1085 | 244 | 104 | 1348 |
| Mop-wringer | E. Chaquette | 731,098 | June 16 | 2879 | 639 | 104 | 1762 |
| Mop-wringer | M. A. Elliott | 733,317 | July 7 | 1103 | 262 | 105 | 232 |
| Mop-wringer | A. M. Burnham | 736,065 | Aug. 11 | 1972 | 420 | 105 | 1421 |
| Mop-wringer | R. R. Pearson | 739,504 | Sept. 22 | 3801 | 851 | 106 | 863 |
| Mop-wringer and brush | L. D. Hart | 731,680 | June 23 | 3980 | 887 | 104 | 2001 |
| Mop-wringer and scrubbing-pail. Combined | J. Rosebush | 726,352 | Apr. 28 | 3578 | 811, 812 | 103 | 1970 |
| Mordanting wool, &c | H. Schrader | 735,599 | Aug. 4 | 1080 | ------ | 105 | 1210 |
| Mortar and muller for grinding, crushing, and mixing ores, chemicals, &c. | T. Breakell | 745,416 | Dec. 1 | 192 | 43, 44 | 107 | 1140 |
| Mortise-gage | J. A. Bengtson | 724,077 | Mar. 31 | 4539 | 1021 | 103 | 1010 |
| Mortising-machine | W. Black | 718,972 | Jan. 27 | 2759 | 617 | 102 | 630 |
| Mosaic | P. Semmer | 738,704 | Sept. 8 | 2320 | 510 | 106 | 511 |
| Mosquito-canopy | B. F. Childress | 744,487 | Nov. 17 | 3308 | 711, 712 | 107 | 737 |
| Moth-bag. Self-sealing | S. L. McMillan | 720,461 | Feb. 10 | 1929 | 440 | 102 | 1246 |
| Moth-trap | R. F. Dull | 723,446 | Mar. 24 | 3339 | 749 | 103 | 746 |
| Motion-checking device | O. F. Persson | 725,477 | Apr. 14 | 1964 | 442, 443 | 103 | 1601 |
| Motion-converting mechanism | G. L., R. A., C. B., and H. E. Griffin. | 740,423 | Oct. 6 | 73 | 16 | 106 | 1262 |
| Motion driving and reversing mechanism | W. and G. F. Meischke-Smith | 740,984 | Oct. 6 | 1106 | 249 | 106 | 1482 |
| Motion. Machine for converting | G. A. Walker | 745,086 | Nov. 24 | 4430 | 958, 959 | 107 | 987 |
| Motion. Means for preventing lost | G. W. Schock | 740,594 | Oct. 6 | 415 | 89 | 106 | 1335 |
| Motion. Means for retarding or stopping | M. S. Okun | 721,826 | Mar. 3 | 304 | 67 | 103 | 67 |
| Motion. Means for retarding or stopping | M. S. Okun | 721,827 | Mar. 3 | 308 | 67, 68 | 103 | 68 |
| Motion of rotating parts. Means for transmission of. | C. F. Rodde | 734,369 | July 21 | 3094 | 728 | 105 | 688 |
| Motion-reversing device | G. E. Tregurtha | 721,624 | Feb. 24 | 4171 | 947, 948 | 102 | 1753 |
| Motion-reversing device | G. E. Tregurtha. (Reissue) | 12,144 | Aug. 11 | 2427 | 530, 531 | 105 | 1520 |
| Motion-transmitting device | G. G. Beitzel | 739,641 | Sept. 22 | 4054 | 905 | 106 | 916 |
| Motion-transmitting device | G. F. Evans | 742,977 | Nov. 3 | 275 | 62 | 107 | 60 |
| Motion-transmitting device | W. E. Gang and G. W. Hart | 745,812 | Dec. 1 | 910 | 204 | 107 | 1293 |
| Motive-power-agency support | H. Lemp | 732,872 | July 7 | 313 | 78, 79 | 105 | 69 |
| Motive-power apparatus | E. Morrison | 730,782 | June 9 | 2269 | 504 | 104 | 1616 |
| Motive-power engine | H. Paysan | 720,470 | Feb. 10 | 1942 | 443, 444 | 102 | 1249 |
| Motor: *See* Churn-motor. Current-motor. Current induction-motor. Electric motor. Electric induction-motor. Electrical motor. Electromagnetic motor. Electrostatic motor. Explosive-motor. Fan-motor. Fluid-motor. Gas-motor. Gas or oil motor. Gravity-motor. Hoisting-motor. Hydrocarbon-motor. Induction-motor. Manual motor. Musical-instrument motor. Petrol-motor. Power-motor. Pump-motor. Railway-motor. Reversible motor. Rotary motor. Rotary explosive-motor. Rotary reaction-motor. Spring-motor. Tide-motor. Tool-motor. Toy motor. Tread-power motor. Tree-climbing motor. Turbine-motor. Washing-machine motor. Water-motor. Water-current-driven motor. Wave-motor. Wave or tide motor. Wind-motor. | | | | | | | |
| Motor | A. B. Roney | 717,624 | Jan 6 | 181 | 45, 46 | 102 | 40 |
| Motor | O. H. and A. F. Pieper | 721,229 | Feb. 24 | 3441 | 782 | 102 | 1597 |
| Motor | C. J. Pollock | 721,461 | Feb. 24 | 3848 | 876 | 102 | 1682 |
| Motor | J. H. Green | 721,561 | Feb. 24 | 4023 | 914, 915 | 102 | 1719 |
| Motor | C. H. Roth | 722,328 | Mar. 10 | 1247 | 278 | 103 | 281 |
| Motor | C. B. Cox | 722,948 | Mar. 17 | 2412 | 539 | 103 | 542 |
| Motor | C. H. Peck | 725,130 | Apr. 14 | 1329 | 299 | 103 | 1466 |
| Motor | H. Gillette | 727,124 | May 5 | 581 | 125 | 104 | 126 |
| Motor | T. H. Pettengill | 727,434 | May 5 | 1135 | 250 | 104 | 245 |
| Motor | C. Campus | 728,860 | May 26 | 3853 | 857, 858 | 104 | 871 |

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| Invention. | Name. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|---|
| | | | | Spec. | Dr'g. | Vol. | Page. |
| Motor | E. Huber | 729,178 | May 26 | 4408 | 972, 973 | 104 | 983 |
| Motor | C. T. Osborne | 729,652 | June 2 | 232 | 52 | 104 | 1176 |
| Motor | W. J. Boemper | 729,995 | June 2 | 875 | 195 | 104 | 1306 |
| Motor | A. J. Burton | 732,705 | July 7 | 27 | 7 | 105 | 9 |
| Motor | U. S. King | 733,217 | July 7 | 920 | 222 | 105 | 193 |
| Motor | T. A. Crossgrove | 735,215 | Aug. 4 | 352 | 68 | 105 | 1056 |
| Motor | J. W. Garrett | 735,491 | Aug. 4 | 874 | 186, 187 | 105 | 1166 |
| Motor | J. L. Pilling and R. J. Kruse | 735,675 | Aug. 4 | 1225 | 259, 260 | 105 | 1241 |
| Motor | C. M. Kiler | 737,115 | Aug. 25 | 3879 | 861 | 105 | 1859 |
| Motor | G. B. Fraley | 740,117 | Sept. 29 | 4957 | 1112, 1113 | 106 | 1127 |
| Motor | S. A. Gibbs | 741,325 | Oct. 13 | 1777 | 395, 396 | 106 | 1643 |
| Motor | J. G. Carlinet | 743,244 | Nov. 3 | 821 | 179 | 107 | 171 |
| Motor | T. Buchanan | 744,899 | Nov. 24 | 4041 | 871 | 107 | 909 |
| Motor control | J. D. Ihlder | 734,178 | July 21 | 2735 | 643 | 105 | 611 |
| Motor control | J. D. Ihlder | 741,796 | Oct. 20 | 2709 | 604 | 106 | 1858 |
| Motor control. Device for alternating-current | J. L. Davis | 744,053 | Nov. 17 | 2488 | 534 | 107 | 560 |
| Motor-control system | F. E. Case | 728,540 | May 19 | 3240 | 719 | 104 | 726 |
| Motor-control system | W. B. Potter | 728,611 | May 19 | 3391 | 751 | 104 | 759 |
| Motor-control system | W. H. Powell | 728,975 | May 26 | 4047 | 899 | 104 | 909 |
| Motor-control system | W. H. Powell | 728,976 | May 26 | 4051 | 899 | 104 | 911 |
| Motor-control system | C. E. Barry | 729,117 | May 26 | 4299 | 950 | 104 | 960 |
| Motor-control system | F. E. Case | 730,341 | June 9 | 1479 | 328, 329 | 104 | 1445 |
| Motor-control system | F. E. Case | 730,342 | June 9 | 1488 | 329 | 104 | 1447 |
| Motor-control system | G. H. Hill | 732,351 | June 30 | 5278 | 1170 | 104 | 2287 |
| Motor-control system | W. O. Mundy | 733,252 | July 7 | 985 | 237 | 105 | 206 |
| Motor-control system | A. H. Armstrong | 739,572 | Sept. 22 | 3916 | 877 | 106 | 887 |
| Motor-control system | C. E. Barry and W. O. Mundy | 739,577 | Sept. 22 | 3936 | 880 | 106 | 891 |
| Motor-control system | T. E. Barnum | 743,423 | Nov. 10 | 1235 | 254, 255 | 107 | 279 |
| Motor-control system. Electric | G. S. Dunn and E. R. Douglas | 736,587 | Aug. 18 | 2887 | 630 | 105 | 1633 |
| Motor-controller | W. B. Potter | 726,987 | May 5 | 322 | 70 | 104 | 70 |
| Motor controller. Alternating-current | A. Kimble | 733,401 | July 14 | 1268 | 301 | 105 | 285 |
| Motor-controller and engineer's valve. Combined | F. W. Caldwell | 742,967 | Nov. 3 | 254 | 57 | 107 | 55 |
| Motor-controllers. Time-limit device for | F. B. Corey | 744,051 | Nov. 17 | 2483 | 533 | 107 | 559 |
| Motor-controlling apparatus | J. D. Ihlder | 726,303 | Apr. 28 | 3478 | 788 | 103 | 1949 |
| Motor-controlling device | C. A. Dresser | 744,178 | Nov. 17 | 2740 | 584, 585 | 107 | 612 |
| Motor controlling device. Alternating-current | D. L. Lindquist | 733,550 | July 14 | 1520 | 362, 363 | 105 | 338 |
| Motor-controlling mechanism | C. S. Cole | 724,261 | Mar. 31 | 4922 | 1101, 1102 | 103 | 1086 |
| Motor-controlling mechanism | C. E. Ennes | 738,173 | Sept. 8 | 1258 | 273 | 106 | 288 |
| Motor cooling device. Explosive | H. J. Perkins | 743,556 | Nov. 10 | 1516 | 317 | 107 | 341 |
| Motor for automobiles, &c | C. S. Cole and W. J. Baulieu | 724,379 | Mar. 31 | 5152 | 1154, 1155 | 103 | 1135 |
| Motor for automobiles, &c | C. S. Cole and W. J. Baulieu | 724,380 | Mar. 31 | 5156 | 1155, 1156, 1157, 1158 | 103 | 1135 |
| Motor for hoists, &c | C. H. Peck | 725,128 | Apr. 14 | 1324 | 298 | 103 | 1465 |
| Motor mechanism | F. G. Echols | 731,872 | June 23 | 4319 | 964 | 104 | 2075 |
| Motor, meter, or pump | W. Ballerstedt | 732,818 | July 7 | 227 | 57 | 105 | 51 |
| Motor sparking plug. Explosion | J. Geisslinger | 745,102 | Nov. 24 | 4461 | 965 | 107 | 995 |
| Motor-stopping apparatus. Electrically-controlled | B. G. Barlow | 745,763 | Dec. 1 | 793 | 182 | 107 | 1267 |
| Motor suspension | W. O. Webster | 722,063 | Mar. 3 | 752 | 168 | 103 | 162 |
| Motor-wheel | J. A. Rand and W. H. Castles | 726,344 | Apr. 28 | 3562 | 807 | 103 | 1967 |
| Motor-wheel | L. Peter | 742,486 | Oct. 27 | 4050 | 908 | 106 | 2148 |
| Motor-wheel for bicycles, &c | W. Krauss and A. Berrenberg | 747,190 | Dec. 15 | 3452 | 783 | 107 | 1895 |
| Motor with rotating piston | G. Silvestri | 728,630 | May 19 | 3424 | 759, 760 | 104 | 767 |
| Motors. Apparatus for controlling alternating-current | A. H. Armstrong | 735,651 | Aug. 4 | 1178 | 250 | 105 | 1231 |
| Motors. Centrifugal starting-switch for induction | H. G. Reist | 735,151 | Aug. 4 | 207 | 41, 42 | 105 | 1027 |
| Motors. Changing the frequency of single-phase induction | P. E. Chapman | 733,149 | July 7 | 798 | 193 | 105 | 168 |
| Motors. Collapsible vessel for atmospheric | W. M. Fulton | 732,627 | June 30 | 5805 | 1287 | 104 | 2400 |
| Motors. Controller for alternating-current | A. Sundh | 745,926 | Dec. 1 | 1125 | 252 | 107 | 1339 |
| Motors. Controller for weight-operated | R. W. Page | 740,907 | Oct. 6 | 960 | 215 | 106 | 1451 |
| Motors. Controlling alternating-current | P. J. M. Girault | 731,887 | June 23 | 4351 | 971 | 104 | 2082 |
| Motors. Controlling alternating-current | A. H. Armstrong | 735,438 | Aug. 4 | 780 | 166 | 105 | 1147 |
| Motors. Controlling induction | H. P. Davis | 725,681 | Apr. 21 | 2355 | 532, 533 | 103 | 1698 |
| Motors. Controlling induction | A. P. Zani | 735,190 | Aug. 4 | 307 | 60 | 105 | 1046 |
| Motors from a distance. Electrically controlling | W. Baxter, Jr | 736,476 | Aug. 18 | 2680 | 589, 590 | 105 | 1590 |
| Motors. Governing mechanism for fluid-actuated | H. Holzwarth | 746,836 | Dec. 15 | 2787 | 643 | 107 | 1742 |
| Motors in dust-laden atmospheres. Means for operating | T. A. Edison | 724,089 | Mar. 31 | 4558 | 1026 | 103 | 1013 |
| Motors into gear. Device for throwing | L. Maurer | 722,122 | Mar. 3 | 853 | 190 | 103 | 183 |
| Motors. Means for preventing fluctuations in rotary | J. J. Wood | 724,645 | Apr. 7 | 420 | 100 | 103 | 1259 |
| Motors. Means for preventing fluctuations in rotary | J. J. Wood | 741,290 | Oct. 13 | 1705 | 381 | 106 | 1627 |
| Motors. Means for starting and regulating induction | R. D. de Lignières | 739,096 | Sept. 15 | 3045 | 674, 675 | 106 | 683 |
| Motors. Operating alternating-current induction | A. P. Zani | 735,686 | Aug. 4 | 1250 | 265 | 105 | 1247 |
| Motors or generators. Means for preventing arcing in direct-current | H. H. Dow | 730,523 | June 9 | 1832 | 408 | 104 | 1520 |
| Motors. Starting and regulating the speed of induction | P. J. M. Girault | 730,108 | June 2 | 1057 | 237, 238 | 104 | 1343 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|---|
| | | | | Spec. | Dr'g. | Vol. | Page. |
| Mountain rope-lift | W. Feldmann | 720,909 | Feb. 17 | 2766 | 636 | 102 | 1435 |
| Mouse or rat trap | H. A. Alston | 721,531 | Feb. 24 | 3974 | 905 | 102 | 1709 |
| Mouse or rat trap | A. Schickerling | 741,935 | Oct. 20 | 2969 | 661 | 106 | 1913 |
| Mouse-trap | W. C. Hooker | 722,842 | Mar. 17 | 2238 | 501 | 103 | 506 |
| Movable furnace | F. E. Cook and W. C. Ferguson | 735,712 | Aug. 11 | 1302 | 280 | 105 | 1275 |
| Movement-cure apparatus | C. Owens | 721,737 | Mar. 3 | 147 | 34 | 103 | 33 |
| Movement-cure apparatus | J. J. Lewin | 745,021 | Nov. 24 | 4270 | 925 | 107 | 956 |
| Mower | A. Hart | 740,561 | Oct. 6 | 333 | 70, 71 | 106 | 1316 |
| Mower | A. Hart | 740,562 | Oct. 6 | 340 | 71, 72 | 106 | 1317 |
| Mower | S. W. Johnson | 742,034 | Oct. 20 | 3183 | 710, 711 | 106 | 1955 |
| Mower | W. W. Sanders | 747,492 | Dec. 22 | 4025 | 904 | 107 | 2039 |
| Mower attachment | G. F. Burtch | 722,673 | Mar. 17 | 1924 | 428 | 103 | 443 |
| Mower attachment | L. Clark | 741,888 | Oct. 20 | 2870 | 641 | 106 | 1893 |
| Mower-bar | A. C. Rioux | 738,944 | Sept. 15 | 2778 | 615 | 106 | 629 |
| Mower bunching attachment | J. W. Latimer | 723,166 | Mar. 17 | 2798 | 630, 631 | 103 | 622 |
| Mower bunching attachment | J. F. Steward | 742,255 | Oct. 27 | 3652 | 816 | 106 | 2066 |
| Mower. Cycle- | G. D. Munsing | 733,990 | July 21 | 2359 | 554 | 105 | 530 |
| Mower draft connection | E. W. Burgess | 727,085 | May 5 | 505 | 108 | 104 | 111 |
| Mower grass-receptacle. Lawn- | L. Wildermuth | 744,657 | Nov. 17 | 3574 | 770 | 107 | 791 |
| Mower knife-head | L. B. Mitchell | 736,761 | Aug. 18 | 3231 | 713 | 105 | 1703 |
| Mower. Lawn- | F. L. Adams | 717,791 | Jan. 6 | 519 | 116 | 102 | 112 |
| Mower. Lawn- | S. L. Benson | 735,397 | Apr. 14 | 1806 | 404 | 103 | 1566 |
| Mower. Lawn- | P. J. Tunny | 726,786 | Apr. 28 | 4415 | 994 | 103 | 2136 |
| Mower. Lawn- | H. F. Schroeder | 728,992 | May 26 | 4078 | 905 | 104 | 916 |
| Mower. Lawn- | A. Lake | 730,133 | June 2 | 1096 | 246 | 104 | 1350 |
| Mower. Lawn- | F. M. Wolfe | 744,661 | Nov. 17 | 3585 | 772 | 107 | 794 |
| Mower. Lawn- | W. Duckett | 746,475 | Dec. 8 | 2115 | 486 | 107 | 1571 |
| Mower. Lawn- | R. K. Ortt | 747,758 | Dec. 22 | 4503 | 1014, 1015 | 107 | 2146 |
| Mower or reaper cutting apparatus | E. A. Johnston | 734,714 | July 28 | 3731 | 873 | 105 | 836 |
| Mower or reaper pitman | F. Tuvell | 748,236 | Dec. 29 | 5450 | 1242 | 107 | 2375 |
| Mower reaping attachment | E. A. Johnston | 728,931 | May 26 | 3972 | 883, 884 | 104 | 894 |
| Mower reaping attachment | E. A. Johnston | 731,574 | June 23 | 3792 | 844, 845 | 104 | 1964 |
| Mowers, &c. Cutting apparatus for | H. L. Hopkins | 718,351 | Jan. 13 | 1543 | 341 | 102 | 346 |
| Mowers, &c. Cutting apparatus for | T. O. Bailey | 726,392 | Apr. 28 | 3647 | 827 | 103 | 1984 |
| Mowers, &c. Cutting apparatus for | B. G. Palmer | 744,393 | Nov. 17 | 3138 | 674 | 107 | 701 |
| Mowers. Grass-receptacle for lawn- | C. F. Hamlin | 737,100 | Aug. 25 | 3857 | 857 | 105 | 1854 |
| Mowers, reapers, &c. Spring-clip for the cutting apparatus of | J. W. Pridmore | 731,611 | June 23 | 3858 | 859, 860 | 104 | 1977 |
| Mowing-machine | W. N. Whitely | 719,068 | Jan. 27 | 2942 | 657, 658 | 102 | 668 |
| Mowing-machine | J. W. Latimer | 720,262 | Feb. 10 | 1576 | 359 | 102 | 1173 |
| Mowing-machine | G. K. Flower | 724,275 | Mar. 31 | 4952 | 1108 | 103 | 1092 |
| Mowing-machine | R. L. Neville | 725,582 | Apr. 14 | 2151 | 487 | 103 | 1642 |
| Mowing-machine | E. B. Fisk | 726,152 | Apr. 21 | 3166 | 716 | 103 | 1869 |
| Mowing-machine | J. W. Latimer | 727,644 | May 12 | 1539 | 347, 348 | 10[illegible] | 349 |
| Mowing-machine | E. A. Johnston | 728,580 | May 19 | 3338 | 737, 738, 739 | 104 | 747 |
| Mowing-machine | W. N. Whitely | 735,326 | Aug. 4 | 551 | 113 | 105 | 1098 |
| Mowing-machine | O. Elison | 737,913 | Sept. 1 | 712 | 154, 155 | 106 | 156 |
| Mowing-machine | A. T. Haynes | 738,033 | Sept. 1 | 944 | 209 | 106 | 206 |
| Mowing-machine | J. F. Steward | 738,371 | Sept. 8 | 1678 | 363 | 106 | 377 |
| Mowing-machine | P. Weynand | 738,505 | Sept. 8 | 1940 | 424 | 106 | 432 |
| Mowing-machine | N. Nilson | 741,159 | Oct. 13 | 1426 | 326 | 106 | 1569 |
| Mowing-machine | J. W. Barnes | 741,874 | Oct. 20 | 2845 | 634, 635 | 106 | 1888 |
| Mowing-machine | W. N. Whitely | 744,141 | Nov. 17 | 2652 | 565, 566 | 107 | 594 |
| Mowing-machine | R. Dillingham | 746,687 | Dec. 15 | 2510 | 576 | 107 | 1680 |
| Mowing-machine | J. N. D'Artois and C. Brouillette | 747,384 | Dec. 22 | 3832 | 861, 862, 863 | 107 | 1993 |
| Mowing-machine | J. H. J. Counts | 747,946 | Dec. 29 | 4894 | 1108, 1109 | 107 | 2254 |
| Mowing-machine | B. Holthaus | 748,556 | Dec. 29 | 6049 | 1369, 1370 | 107 | 2508 |
| Mowing-machine attachment | J. P. Monroe | 721,064 | Feb. 17 | 3060 | 703 | 102 | 1499 |
| Mowing-machine attachment | W. Hord | 728,233 | May 19 | 2664 | 595 | 104 | 605 |
| Mowing-machine attachment | A. Middleton and T. S. Pearson | 730,948 | June 16 | 2593 | 576, 577 | 104 | 1703 |
| Mowing-machine attachment | T. B. Fagan. (Reissue) | 12,182 | Dec. 8 | 2437 | 557 | 107 | 1645 |
| Mowing-machine cutting apparatus | L. Study | 748,118 | Dec. 29 | 5241 | 1189, 1190 | 107 | 2330 |
| Mowing-machine cutting device | J. W. Latimer | 723,397 | Mar. 24 | 3258 | 730 | 103 | 728 |
| Mowing machine. Grass- | P. Holfert | 718,458 | Jan. 13 | 1745 | 388 | 102 | 387 |
| Mowing-machine weed attachment | P. Hanson | 747,969 | Dec. 29 | 4952 | 1118 | 107 | 2267 |
| Mowing-machine windrowing attachment | J. F. Steward | 723,418 | Mar. 24 | 3294 | 737 | 103 | 735 |
| Mowing or other agricultural machine lifting-guard | F. Blocki | 727,576 | May 12 | 1412 | 318 | 104 | 322 |
| Mucilage-holder | A. J. Park | 726,982 | May 5 | 308 | 68 | 104 | 67 |
| Mucilage-jar | W. Zimmerman | 739,970 | Sept. 29 | 4690 | 1055 | 106 | 1069 |
| Mucilage-jar | S. G. Reynolds | 744,939 | Nov. 24 | 4109 | 885 | 107 | 923 |
| Mucilage or glue containing devices. Top for | A. H. Bernard | 748,254 | Dec. 29 | 5474 | 1247 | 107 | 2380 |
| Mucilage or paste pot | J. Maine | 728,260 | May 19 | 2716 | 606 | 104 | 616 |
| Mud-guard and luggage-carrier. Combined | A. T. Taylor | 746,603 | Dec. 8 | 2339 | 536 | 107 | 1622 |
| Muffle-furnace | T. Hardie | 739,174 | Sept. 15 | 3184 | 704 | 106 | 712 |
| Muffler | W. Scheuer | 718,730 | Jan. 20 | 2305 | 509, 510 | 102 | 520 |
| Muffler | F. E. Hipple and H. T. Ratcliffe | 728,105 | May 12 | 2411 | 537 | 104 | 531 |
| Muffler | A. G. New | 733,330 | July 7 | 1130 | 267 | 105 | 238 |

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| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Muffler | J. G. Heaslet | 734,864 | July 28 | 4035 | 942, 943 | 105 | 897 |
| Muffler | T. H. Jamison | 734,878 | July 28 | 4059 | 947 | 105 | 902 |
| Muffler | L. P. Mooers | 737,443 | Aug. 25 | 4514 | 1012 | 105 | 1995 |
| Muffler | W. H. Corse | 744,495 | Nov. 17 | 3322 | 715 | 107 | 739 |
| Muffler and chest-protector. Combination | L. E. Schoch and E. J. Schafer | 746,586 | Dec. 8 | 2307 | 529 | 107 | 1615 |
| Muffler. Exhaust- | A. Winton | 723,111 | Mar. 17 | 2692 | 606 | 103 | 602 |
| Muffler. Exhaust- | W. J. Perkins | 724,124 | Mar. 31 | 4636 | 1044 | 103 | 1020 |
| Muffler. Exhaust- | C. C. Hill | 734,868 | July 28 | 4042 | 944 | 105 | 898 |
| Muffler. Exhaust- | G. F. Swain | 738,858 | Sept. 15 | 2636 | 581 | 106 | 598 |
| Muffler. Noise- | P. Rauch | 734,749 | July 28 | 3809 | 888, 889 | 105 | 850 |
| Mule. Self-acting | F. Houget and A. Becker | 736,259 | Aug. 11 | 2288 | 495 | 105 | 1488 |
| Multicircuit-controller | W. M. Scott | 746,587 | Dec. 8 | 2309 | 529 | 107 | 1615 |
| Multiphase windings. Connecting | W. S. Moody | 726,831 | Apr. 28 | 4497 | 1015 | 103 | 2154 |
| Multiphase windings. Means for connecting | W. S. Moody | 726,445 | Apr. 28 | 3735 | 847 | 103 | 2002 |
| Multiple engine | T. G. E. Lindmark | 717,875 | Jan. 6 | 686 | 153 | 102 | 146 |
| Multiple-expansion engine | F. M. Prescott | 719,136 | Jan. 27 | 3089 | 687 | 102 | 698 |
| Multiple-rate meter | E. Thomson and F. P. Cox | 725,798 | Apr. 21 | 2568 | 582 | 103 | 1746 |
| Multispindle machine. Automatic | F. M. Davis | 730,882 | June 16 | 2459 | 545, 546, 547 | 104 | 1674 |
| Multivoltage system | C. E. Woods | 736,667 | Aug. 18 | 3045 | 672 | 105 | 1665 |
| Music-box | W. A. Drysdale | 728,449 | May 19 | 3061 | 674, 675, 676, 677, 678 | 104 | 690 |
| Music-box damper | A. Keller | 735,114 | Aug. 4 | 128 | 28 | 105 | 1010 |
| Music-box indicating device | G. A. Brachhausen | 725,666 | Apr. 21 | 2333 | 526, 527 | 103 | 1693 |
| Music-box phonographic attachment | H. A. Gautschi | 743,858 | Nov. 10 | 2069 | 440 | 107 | 456 |
| Music-box star-wheel | F. A. Richter | 740,925 | Oct. 6 | 989 | 224 | 106 | 1458 |
| Music-box stop mechanism | G. A. Brachhausen | 723,578 | Mar. 24 | 3588 | 801, 802 | 103 | 794 |
| Music-cabinet | C. P. Baron | 721,532 | Feb. 24 | 3975 | 905 | 102 | 1709 |
| Music cabinet. Sheet- | O. H. Stewart | 725,170 | Apr. 14 | 1403 | 317 | 103 | 1481 |
| Music-demonstrator | F. A. Humpidge | 740,137 | Sept. 29 | 4992 | 1122 | 106 | 1133 |
| Music-holder | J. N. Chadwick | 718,091 | Jan. 13 | 1069 | 237 | 102 | 245 |
| Music-holder | U. C. Terwilliger | 727,493 | May 5 | 1244 | 276 | 104 | 268 |
| Music-holder | M. K. Bear | 743,678 | Nov. 10 | 1745 | 368 | 107 | 388 |
| Music-holder | W. E. Barnard | 744,458 | Nov. 17 | 3262 | 699 | 107 | 727 |
| Music-holder and leaf-turner | A. D. Crist | 718,984 | Jan. 27 | 2784 | 623 | 102 | 636 |
| Music holder and turner | O. McNorton, Jr. | 739,904 | Sept. 29 | 4569 | 1028 | 106 | 1043 |
| Music holder. Sheet- | F. H. Duesler | 722,004 | Mar. 3 | 656 | 146 | 103 | 142 |
| Music-leaf turner | W. T. Paxson | 728,000 | May 12 | 2229 | 496 | 104 | 492 |
| Music-leaf turner | J. G. Meziere | 728,951 | May 26 | 4008 | 891 | 104 | 902 |
| Music-leaf turner | W. Balko | 729,834 | June 2 | 582 | 128 | 104 | 1246 |
| Music-leaf turner | A. H. Lamb | 729,944 | June 2 | 768 | 170 | 104 | 1285 |
| Music-leaf turner | S. T. Hutchinson and F. W. McNeir | 731,186 | June 16 | 3045 | 677 | 104 | 1792 |
| Music-leaf turner | W. A. Mercer | 731,589 | June 23 | 3817 | 850 | 104 | 1969 |
| Music-leaf turner | E. Allison | 732,496 | June 30 | 5560 | 1233 | 104 | 2344 |
| Music-leaf turner | H. H. Hill | 732,554 | June 30 | 5667 | 1258 | 104 | 2368 |
| Music-leaf turner | E. C. Graefenhan | 737,397 | Aug. 25 | 4424 | 990 | 105 | 1976 |
| Music-leaf turner | A. D. Crist | 738,298 | Sept. 8 | 1508 | 327 | 106 | 340 |
| Music-leaf turner | L. Poulin | 746,991 | Dec. 15 | 3089 | 707 | 107 | 1811 |
| Music-playing instrument. Autopneumatic | G. W. Haywood | 747,551 | Dec. 22 | 4125 | 926 | 107 | 2061 |
| Music-playing instruments. Accentuation mechanism for autopneumatic | N. D. Hosley and S. R. Harcourt | 736,600 | Aug. 18 | 2930 | 641 | 105 | 1642 |
| Music-playing mechanisms. Expression-indicator for automatic | G. H. Davis | 748,266 | Dec. 29 | 5508 | 1255 | 107 | 2388 |
| Music pocket. Portable sheet- | F. W. Parkin | 731,214 | June 16 | 3093 | 686 | 104 | 1802 |
| Music-rack | J. J. Neumann | 738,473 | Sept. 8 | 1874 | 408 | 106 | 417 |
| Music-rack | R. W. Norton | 744,386 | Nov. 17 | 3126 | 671 | 107 | 698 |
| Music record, diagram, or pattern | R. A. Gally | 732,574 | Mar. 10 | 1710 | 381 | 103 | 383 |
| Music-recording apparatus | L. O. Rissman | 732,904 | Mar. 17 | 2346 | 525 | 103 | 529 |
| Music-recording machine | G. E. Prince | 726,754 | Apr. 28 | 4359 | 980, 981, 982 | 103 | 2126 |
| Music-roll | G. B. Kelly | 718,256 | Jan. 13 | 1362 | 302 | 102 | 308 |
| Music-roll | F. R. Wyckoff | 731,008 | June 16 | 2711 | 604 | 104 | 1728 |
| Music-roll | R. W. Pain | 734,596 | July 28 | 3512 | 819 | 105 | 791 |
| Music-roll and book-carrier. Combined | W. W. Harrington | 741,400 | Oct. 13 | 1936 | 428, 429 | 106 | 1680 |
| Music-roll for mechanical musical instruments | F. L. Young | 718,410 | Jan. 13 | 1644 | 362 | 102 | 368 |
| Music-roll for mechanical players | J. Courville | 741,463 | Oct. 13 | 2041 | 453 | 106 | 1701 |
| Music roll or spool. Compensating | G. H. Davis | 747,859 | Dec. 22 | 4702 | 1062 | 107 | 2192 |
| Music-roll-perforating device | H. P. Ball | 736,571 | Aug. 18 | 2853 | 625 | 105 | 1626 |
| Music-roll-perforating device | H. P. Ball | 747,358 | Dec. 22 | 3795 | 854 | 107 | 1985 |
| Music-roll perforator | E. B. and M. F. Gregor | 726,676 | Apr. 28 | 4201 | 949 | 103 | 2092 |
| Music rolls or spools. Machine for securing end caps and journal-pins to | G. H. Davis | 739,991 | Sept. 29 | 4733 | 1065 | 106 | 1078 |
| Music-sheet feed mechanism | A. P. Roth | 741,072 | Oct. 13 | 1265 | 287 | 106 | 1537 |
| Music-sheet for mechanical musical instruments | R. W. Pain | 725,358 | Apr. 14 | 1736 | 391 | 103 | 1552 |
| Music-sheet for mechanical musical instruments | C. L. Davis | 736,228 | Aug. 11 | 2235 | 482 | 105 | 1477 |
| Music-sheet-punching apparatus | H. Meyer | 745,881 | Dec. 1 | 1053 | 237, 238 | 107 | 1323 |
| Music-sheet spool. Automatically-adjustable | P. Wuest, Jr. | 731,261 | June 16 | 3166 | 705 | 104 | 1817 |
| Music-sheets. Apparatus for duplicating indicator-lines on | G. H. Davis | 747,687 | Dec. 22 | 4374 | 988 | 107 | 2115 |
| Music-sheets. Device for trimming perforated | L. B. Doman | 733,016 | July 7 | 557 | 136 | 105 | 110 |
| Music-sheets for mechanical musical instruments. Apparatus for marking perforated | G. H. Davis | 747,858 | Dec. 22 | 4698 | 1062 | 107 | 2191 |
| Music-sheets for mechanical musical instruments. Machine for cutting | W. S. Pain | 717,759 | Jan. 6 | 448 | 104, 105 | 102 | 97 |
| Music-stand | L. P. Halladay | 730,015 | June 2 | 909 | 202 | 104 | 1313 |

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|---|---|---|---|---|---|---|---|
| | | | | Spec. | Dr'g. | Vol. | Page. |
| Musical and pneumatic devices. Bellows for | W. F. Cooper | 725,677 | Apr. 21 | 2349 | 531 | 103 | 1697 |
| Musical apparatus. Mechanism for accentuating one or more notes in mechanically-actuated | J. H. Dickinson | 743,065 | Nov. 3 | 478 | 104 | 107 | 100 |
| Musical apparatus. Mechanism for accentuating one or more notes in mechanically-actuated | F. Young | 743,130 | Nov. 3 | 597 | 129, 130 | 107 | 125 |
| Musical instrument | P. G. Archute | 718,298 | Jan. 13 | 1447 | 322 | 102 | 327 |
| Musical instrument | A. Schoenhut | 718,388 | Jan. 13 | 1607 | 354 | 102 | 359 |
| Musical instrument | J. Mohr | 721,063 | Feb. 17 | 3058 | 703 | 102 | 1499 |
| Musical instrument | L. Kelnhofer | 721,127 | Feb. 17 | 3217 | 736 | 102 | 1538 |
| Musical instrument | F. H. Watson | 727,514 | May 5 | 1278 | 284, 285 | 104 | 275 |
| Musical instrument | O. H. Moen | 727,665 | May 12 | 1579 | 356 | 104 | 357 |
| Musical instrument | H. H. Brennan | 729,041 | May 26 | 4170 | 923 | 104 | 935 |
| Musical instrument | J. Connery | 730,611 | June 9 | 1986 | 441 | 104 | 1555 |
| Musical instrument | P. Wuest, Jr | 731,262 | June 16 | 3168 | 705, 706 | 104 | 1818 |
| Musical instrument | E. P. Cowles | 731,435 | June 23 | 3510 | 784, 785 | 104 | 1908 |
| Musical instrument | J. A. Bartholomew | 733,122 | July 7 | 757 | 183 | 105 | 167 |
| Musical instrument | W. E. Haskell | 734,262 | July 21 | 2895 | 677 | 105 | 641 |
| Musical instrument | J. C. Deagan | 734,676 | July 28 | 3654 | 857 | 105 | 829 |
| Musical instrument | G. H. Blair | 734,802 | July 28 | 3933 | 918 | 105 | 876 |
| Musical instrument | F. Kindermann | 736,979 | Aug. 25 | 3659 | 810, 811 | 105 | 1813 |
| Musical instrument | L. Johnson | 738,811 | Sept. 15 | 2545 | 559 | 106 | 578 |
| Musical instrument | J. H. Tann | 740,485 | Oct. 6 | 196 | 39 | 106 | 1287 |
| Musical instrument | R. J. Bennett | 740,514 | Oct. 6 | 254 | 50, 51 | 106 | 1300 |
| Musical instrument | J. O'Connor | 743,319 | Nov. 3 | 971 | 211 | 107 | 208 |
| Musical instrument | H. E. Hibshman | 744,546 | Nov. 17 | 3406 | 733 | 107 | 757 |
| Musical instrument | G. Rossi | 745,241 | Nov. 24 | 4730 | 1032 | 107 | 1051 |
| Musical instrument | J. C. Deagan | 747,340 | Dec. 15 | 3753 | 845 | 107 | 1960 |
| Musical instrument | J. C. Deagan | 747,341 | Dec. 15 | 3755 | 846 | 107 | 1960 |
| Musical-instrument accompanist | D. Cavicchioli | 724,082 | Mar. 31 | 4547 | 1023 | 103 | 1011 |
| Musical instrument. Automatic | E. de Kleist | 726,701 | Apr. 28 | 4254 | 961, 962 | 103 | 2104 |
| Musical instrument. Automatic | C. Coleman | 727,906 | May 12 | 2050 | 456 | 104 | 454 |
| Musical instrument. Automatic mechanical | G. A. Brachhausen | 723,235 | Mar. 24 | 2944 | 660, 661 | 103 | 668 |
| Musical-instrument automatic playing attachment | T. P. Brown | 723,820 | Mar. 31 | 4014 | 904, 905 | 103 | 903 |
| Musical instrument automatic playing attachment | P. Welin | 727,725 | May 12 | 1714 | 384, 385 | 104 | 386 |
| Musical-instrument automatic playing attachment | P. Welin | 748,126 | Dec. 29 | 5257 | 1193, 1194 | 107 | 2334 |
| Musical-instrument automatic playing attachment. Mechanical- | H. M. Salyer | 734,964 | July 28 | 4207 | 978 | 105 | 933 |
| Musical-instrument bellows | M. Clark | 725,824 | Apr. 21 | 2618 | 596 | 103 | 1755 |
| Musical-instrument-controlling sheets. Adjustable spool for | E. G. Clark | 743,830 | Nov. 10 | 2019 | 429 | 107 | 447 |
| Musical instrument. Electrical self-playing | G. H. Davis | 719,093 | Jan. 27 | 3009 | 670, 671 | 102 | 681 |
| Musical instrument. Electrically-operated | G. H. Davis | 733,702 | July 14 | 1773 | 421, 422 | 105 | 391 |
| Musical instrument. Key-actuated | V. Bessier | 729,260 | May 26 | 4556 | 1005 | 104 | 1014 |
| Musical instrument. Keyboard | H. B. Tremaine | 729,978 | June 2 | 846 | 189 | 104 | 1300 |
| Musical-instrument key system | A. Tschofen | 742,102 | Oct. 20 | 3352 | 748 | 106 | 1988 |
| Musical instrument. Key wind | B. Paris | 735,803 | Aug. 11 | 1460 | 314 | 105 | 1309 |
| Musical instrument. Mechanical | A. Junod-Turin | 717,581 | Jan. 6 | 103 | 27 | 102 | 25 |
| Musical instrument. Mechanical | H. M. Smith | 721,248 | Feb. 24 | 3476 | 790, 791 | 102 | 1604 |
| Musical instrument. Mechanical | C. L. Davis | 725,941 | Apr. 21 | 2823 | 640 | 103 | 1798 |
| Musical instrument. Mechanical | C. L. Davis | 730,517 | June 9 | 1821 | 406 | 104 | 1518 |
| Musical instrument. Mechanical | C. L. Davis | 744,052 | Nov. 17 | 2485 | 533, 534 | 107 | 559 |
| Musical instrument. Mechanical | P. Wuest, Jr | 744,990 | Nov. 24 | 4207 | 910, 911 | 107 | 942 |
| Musical-instrument mechanical playing attachment. | E. D. Ackerman | 722,476 | Mar. 10 | 1597 | 337 | 103 | 344 |
| Musical-instrument mechanical playing attachment. | E. D. Ackerman | 748,142 | Dec. 29 | 5288 | 1202 | 107 | 2341 |
| Musical-instrument motor. Mechanical- | J. Courville | 722,196 | Mar. 3 | 995 | 220 | 103 | 210 |
| Musical-instrument playing attachment. Key- | H. M. Salyer | 734,963 | July 28 | 4202 | 978 | 105 | 932 |
| Musical-instrument-playing mechanism | F. R. Wyckoff | 733,528 | July 14 | 1491 | 355 | 105 | 332 |
| Musical-instrument pneumatic-action | F. W. Hedgeland | 726,913 | May 5 | 150 | 36 | 104 | 34 |
| Musical-instrument pneumatic-action | H. T. Skelton | 734,979 | July 28 | 4236 | 984, 985 | 105 | 939 |
| Musical instrument. Pneumatic self-playing | F. F. Schoenstein | 740,993 | Oct. 6 | 1120 | 253 | 106 | 1485 |
| Musical-instrument scale | D. H. Haywood | 718,346 | Jan. 13 | 1535 | 340 | 102 | 344 |
| Musical instrument. Self-playing | W. M. Stine | 733,764 | July 14 | 1896 | 447 | 105 | 417 |
| Musical instrument. Self-playing | L. B. Dorman | 746,472 | Dec. 8 | 2108 | 485 | 107 | 1570 |
| Musical instrument. Self-playing | J. Suter and W. Lenk | 747,802 | Dec. 22 | 4586 | 1035, 1036 | 107 | 2165 |
| Musical-instrument-string receptacle | H. E. Finney | 718,114 | Jan. 13 | 1110 | 245 | 102 | 254 |
| Musical instrument. Stringed | J. Lindstrom | 728,255 | May 19 | 2705 | 604 | 104 | 614 |
| Musical instrument. Stringed | H. Steenbock | 730,581 | June 9 | 1933 | 430 | 104 | 1543 |
| Musical instrument. Stringed | F. X. Audet, Jr | 737,693 | Sept. 1 | 244 | 52, 53 | 106 | 56 |
| Musical-instrument tracker-board. Automatic | T. P. Brown | 735,062 | Aug. 4 | 26 | 8 | 105 | 987 |
| Musical instrument. Wind | G. B. Mackey | 727,655 | May 12 | 1560 | 352 | 104 | 353 |
| Musical instruments. Action for stringed | D. P. and L. F. Boyd | 719,641 | Feb. 3 | 411 | 94 | 102 | 908 |
| Musical instruments. Device for playing keyboard | B. F. Stowell | 743,992 | Nov. 10 | 2327 | 498 | 107 | 516 |
| Musical instruments. Electric-circuit-closing mechanism for keyed | E. M. Skinner | 725,598 | Apr. 14 | 2180 | 494 | 103 | 1649 |
| Musical instruments. Interchangeable roll for mechanical | H. H. Juelg | 745,500 | Dec. 1 | 356 | 83 | 107 | 1175 |
| Musical instruments. Means for adjusting music-rolls in | E. S. Votey | 743,118 | Nov. 3 | 573 | 123 | 107 | 120 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Musical instruments. Means for regulating the expression of mechanical | E. S. Votey | 742,760 | Oct. 27 | 4539 | 1028 | 106 | 2253 |
| Musical instruments. Means for retaining pianolas in position before keyboard | J. B. Tracy | 729,977 | June 2 | 844 | 188 | 104 | 1300 |
| Musical instruments. Melody-stop for mechanically-played | R. W. Pain | 717,907 | Jan. 6 | 737 | 165 | 102 | 157 |
| Musical instruments. Pneumatic-action for | J. D. Philipps | 730,565 | June 9 | 1936 | 424 | 104 | 1537 |
| Musical instruments. Pneumatic-action for self-playing | T. P. Brown | 740,391 | Oct. 6 | 11 | 3 | 106 | 1247 |
| Musical instruments. Pneumatic selecting mechanism for | W. H. Rees | 734,193 | July 21 | 2762 | 648 | 105 | 617 |
| Musical instruments. Primary pneumatic-valve in mechanism for playing | R. W. Pain | 728,966 | May 26 | 4033 | 896 | 104 | 906 |
| Musical instruments. Self-playing attachment for keyboard | F. W. Draper and J. Courville | 725,424 | Apr. 14 | 1851 | 414 | 103 | 1576 |
| Musical instruments. Sound-muffler for automatic | M. Clark | 727,904 | May 12 | 2048 | 456 | 104 | 454 |
| Musical instruments. Spool for use with automatically-playing | A. W. Nunn | 733,738 | July 14 | 1838 | 434 | 105 | 405 |
| Musical instruments. Tracker-board attachment for pneumatic | A. Anderson | 739,134 | Sept. 15 | 3118 | 690 | 106 | 698 |
| Musical instruments. Transposing device for mechanical | F. L. Young | 729,988 | June 2 | 867 | 193 | 104 | 1304 |
| Musical instruments. Wrest-plate for stringed | H. Hornbeck | 745,350 | Dec. 1 | 61 | 14 | 107 | 1113 |
| Musical notation | L. H. Beswick | 733,351 | July 7 | 1168 | 277 | 105 | 246 |
| Musical-string-truing device | C. A. Graham | 729,326 | May 26 | 4676 | 1033 | 104 | 1040 |
| Musician's exercising device | A. E. Jones | 738,198 | Sept. 8 | 1308 | 284 | 105 | 299 |
| Mussel extract. Producing | A. J. Nesso | 734,352 | July 21 | 3066 | ..... | 105 | 682 |
| Mustache-curler | J. Phelan and L. Braund | 741,711 | Oct. 20 | 2556 | 569 | 106 | 1826 |
| Mustache-trainer | J. G. Stephens and G. A. Oesterreich. | 725,632 | Apr. 14 | 2253 | 509 | 103 | 1664 |
| Mutilating device | T. Wheatley | 743,785 | Nov. 10 | 1940 | 410 | 107 | 430 |
| Mutoscope | H. O. Costello | 747,684 | Dec. 22 | 4369 | 986 | 107 | 2114 |
| Muzzle. Calf- | A. J. James and C. W. Patterson | 729,592 | June 2 | 125 | 32 | 104 | 1152 |
| Muzzle. Grazing- | H. G. Banks | 732,502 | June 30 | 5574 | 1235 | 104 | 2347 |
| Nail: *See* Furniture-nail. Screw-nail. Heel-nail. Wire clenching-nail. Picture-nail. | | | | | | | |
| Nail | E. H. Imlay | 718,934 | Jan. 20 | 2692 | 602 | 102 | 602 |
| Nail | J. W. Estes | 723,452 | Mar. 24 | 3348 | 750 | 103 | 747 |
| Nail and coating therefor | R. Mattice | 731,928 | June 23 | 4423 | 986 | 104 | 2097 |
| Nail-bin | H. O. Amundson | 717,702 | Jan. 6 | 521 | 116 | 102 | 112 |
| Nail cleaning and coating machine | C. W. Ruddell | 740,183 | Sept. 29 | 5076 | 1142 | 106 | 1151 |
| Nail-feeding device | C. P. A. Jenssen | 731,685 | June 23 | 3987 | 890 | 104 | 2002 |
| Nail-holding device | G. Horton | 735,877 | Aug. 11 | 1617 | 345 | 105 | 1345 |
| Nail making and driving machine | W. H. Lang | 745,867 | Dec. 1 | 1024 | 230 231 232 233 | 107 | 1318 |
| Nail-making machine | S. Beauregard | 739,976 | Sept. 29 | 4704 | 1058 1059 | 106 | 1072 |
| Nail or tack driving implement | E. Parent | 725,125 | Apr. 14 | 1316 | 296 | 103 | 1464 |
| Nail or tack heading apparatus | A. H. Brigham | 722,669 | Mar. 17 | 1914 | 426 | 103 | 441 |
| Nail-puller | E. H. Norris | 743,318 | Nov. 3 | 970 | 210 | 107 | 208 |
| Nail-puller for tires | H. P. Wilmarth | 738,867 | Sept. 15 | 2650 | 584 | 106 | 602 |
| Nail, spike, &c | C. Hass | 731,896 | June 23 | 4367 | 974 | 104 | 2085 |
| Nail, spike, or other driven holdfast | C. Hass | 747,171 | Dec. 15 | 3423 | 776 | 107 | 1888 |
| Nail, spike, or other driven holdfast device | C. Hass | 729,336 | May 26 | 4694 | 1037 | 104 | 1044 |
| Nails. Producing roughened wire | E. S. Morton | 745,224 | Nov. 24 | 4700 | ..... | 107 | 1045 |
| Nailing-machine | H. W. Morgan | 731,488 | June 23 | 3620 | 808 | 104 | 1931 |
| Nailing-machine | V. Sandahl | 748,535 | Dec. 29 | 6003 | 1360 | 107 | 2497 |
| Nailing-machines. Reel for holding wire in | S. M. Cutter | 736,825 | Aug. 18 | 3368 | 748 | 105 | 1732 |
| Nail-cleaner. Infant's | G. J. Barnes | 732,819 | July 7 | 228 | 57 | 105 | 51 |
| Nail cutter and implement | E. Kaufmann | 730,024 | June 2 | 924 | 207 | 104 | 1316 |
| Nails. Implement for the | E. Kaufmann | 734,715 | July 28 | 3733 | 873 | 105 | 836 |
| Name-finder | S. M. Thomas | 721,342 | Feb. 24 | 3630 | 825 | 102 | 1637 |
| Name or index plate holder | F. J. Cota | 743,831 | Nov. 10 | 2021 | 429 | 107 | 447 |
| Napkin-holder | L. R. Le Lande | 734,342 | July 21 | 3046 | 717 | 105 | 678 |
| Napkin-holder | E. J. McMeeser | 747,467 | Dec. 22 | 3973 | 893 | 107 | 2025 |
| Napkin holder. Sanitary- | F. M. Baldwin | 733,120 | July 7 | 754 | 182 | 105 | 159 |
| Napping-machine | G. W. Greene | 717,841 | Jan. 6 | 628 | 138 139 | 102 | 134 |
| Napping-machine | H. S. Greene | 720,018 | Feb. 10 | 1114 | 255 | 102 | 1076 |
| Nasal dish | H. L. Harris | 722,102 | Mar. 3 | 822 | 183 | 103 | 177 |
| Nebulizer | R. L. Benson | 733,364 | July 14 | 1199 | 285 | 105 | 268 |
| Nebulizer | T. De Vilbiss | 735,723 | Aug. 11 | 1318 | 284 | 105 | 1279 |
| Nebulizer | G. W. Hopkins | 742,986 | Nov. 3 | 289 | 65, 66 | 107 | 63 |
| Nebulizer and means for attaching same to supporting-tanks. | W. and J. Boekel | 745,415 | Dec. 1 | 190 | 43 | 107 | 1140 |
| Neck and chest protector | S. A. Moulton | 743,310 | Nov. 3 | 953 | 207 | 107 | 205 |
| Neck and ear muffler. Combined | J. C. Scott | 731,135 | June 16 | 2952 | 657 | 104 | 1775 |
| Neck-dressing for women | E. B. Ashmore | 731,837 | June 23 | 4266 | 950 | 104 | 2064 |
| Neckband-fastener | M. T. White and T. E. Van Ness | 730,323 | June 9 | 1453 | 321 | 104 | 1440 |
| Neckband-shaper | J. A. Bartholme | 730,220 | June 9 | 1265 | 281 | 104 | 1400 |
| Necktie | O. W. Peterson | 733,871 | July 14 | 2116 | 499 | 105 | 461 |
| Necktie | J. Bernstein | 745,563 | Dec. 1 | 460 | 108 | 107 | 1195 |
| Necktie-band fastener | C. W. T. Davies | 728,877 | May 26 | 3880 | 863 | 104 | 875 |
| Necktie. Combination- | L. and S. L. Samter and H. Pinner | 722,633 | Mar. 10 | 1810 | 403 | 103 | 405 |
| Necktie-fastener | G. Borst | 718,307 | Jan. 13 | 1459 | 324 | 102 | 330 |
| Necktie-fastener | J. Weil | 724,529 | Apr. 7 | 205 | 50 | 103 | 1213 |
| Necktie-fastener | C. A. G. Knoll | 728,801 | May 19 | 3735 | 833 | 104 | 830 |
| Necktie-fastener | C. E. Gleason | 728,903 | May 26 | 3926 | 872 | 104 | 885 |
| Necktie-fastener | O. Kraus | 730,028 | June 2 | 928 | 208 | 104 | 1317 |
| Necktie-fastener | J. Baumgarten | 730,222 | June 9 | 1268 | 281 | 104 | 1401 |
| Necktie-fastener | C. W. and L. J. Gronde | 737,096 | Aug. 25 | 3851 | 855 | 105 | 1853 |
| Necktie-fastener | W. A. Chapple | 739,256 | Sept. 15 | 3339 | 741 | 106 | 746 |

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| Invention. | Name. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|---|
| | | | | Spec. | Dr'g. | Vol. | Page. |
| Necktie-fastener | J. E. Glahn | 745,817 | Dec. 1 | 919 | 206 | 107 | 1295 |
| Necktie-fastener | H. E. Curtis | 746,035 | Dec. 8 | 1335 | 299 | 107 | 1401 |
| Necktie-fastener | C. Wood | 747,028 | Dec. 15 | 3154 | 723 | 107 | 1826 |
| Necktie-fastening device | A. B. Merritt | 737,436 | Aug. 25 | 4500 | 1009 | 105 | 1992 |
| Necktie-form | J. S. Hull | 744,345 | Nov. 17 | 3048 | 654 | 107 | 681 |
| Necktie-holder | J. F. Page | 741,705 | Oct. 20 | 2543 | 567 | 106 | 1824 |
| Necktie-holder | L. F. L. Pynchon | 746,573 | Dec. 8 | 2284 | 524 | 107 | 1609 |
| Necktie-rack | S. W. Bonsall | 737,274 | May 5 | 845 | 181 | 104 | 181 |
| Necktie shield and fastener | F. Lambion | 739,428 | Sept. 22 | 3679 | 817 | 106 | 836 |
| Necktie-shield. Reinforced | G. Flaskamp | 732,537 | June 30 | 5635 | 1249 | 104 | 2361 |
| Neckwear supporter and fastener | O. Kraus | 719,814 | Feb. 3 | 737 | 173 | 102 | 979 |
| Needle | A. W. Stimson | 727,020 | May 5 | 400 | 84 | 104 | 87 |
| Needle. Broom- | E. D. Palmer | 739,023 | Sept. 15 | 2903 | 644 | 106 | 655 |
| Needle-case | J. H. Boye | 747,368 | Dec. 22 | 3807 | 857 | 107 | 1988 |
| Needle for knitting, &c | F. B. Reuther | 726,758 | Apr. 28 | 4372 | 983 | 103 | 2128 |
| Needle-grinding machine | E. D. Gleason | 727,613 | May 12 | 1473 | 329 | 104 | 335 |
| Needle or threader. Tape | M. A. and W. Dorling | 743,066 | Nov. 3 | 482 | 105 | 107 | 101 |
| Needle. Self-threading | L. P. Bunnell and W. Nichols | 735,458 | Aug. 4 | 819 | 175 | 105 | 1154 |
| Needle-threader | T. Holder | 734,709 | July 28 | 3724 | 871 | 105 | 835 |
| Needle-threader | T. Coffey | 735,211 | Aug. 4 | 345 | 66, 67 | 105 | 1055 |
| Needle-threader | W. A. Johnston | 746,091 | Dec. 8 | 1430 | 322 | 107 | 1424 |
| Nest. Hen's | L. J. Du Pree | 719,197 | Jan. 13 | 1257 | 276 | 102 | 287 |
| Nest. Hen's | W. J. Dillard | 724,825 | Apr. 7 | 765 | 178 | 103 | 1334 |
| Nest. Hen's | H. A. Bierley | 747,677 | Dec. 22 | 4359 | 985 | 107 | 2112 |
| Nest. Trap- | G. and W. Brand | 732,162 | June 30 | 4910 | 1092 | 104 | 2211 |
| Net. Gill- | L. Hansen | 724,467 | Apr. 7 | 88 | 22 | 103 | 1189 |
| Net. Landing- | G. Paley | 723,484 | Mar. 24 | 3435 | 768 | 103 | 760 |
| Net-lifting machine | S. A. Ross | 726,465 | Apr. 28 | 3777 | 855 | 103 | 2018 |
| Net-making machine | W. R. Pihl and A. Olsen | 738,479 | Sept. 8 | 1887 | 410, 411, 412, 413 | 106 | 420 |
| Net. Minnow- | S. W. Higgins | 725,962 | Apr. 21 | 2854 | 647 | 103 | 1809 |
| Newspaper-box | W. H Zylstra | 743,610 | Nov. 10 | 1633 | 342 | 107 | 365 |
| Newspaper-holder | F. W. Miller | 717,888 | Jan. 6 | 709 | 158 | 102 | 151 |
| Newspaper-page | E. J. Cooper | 740,242 | Sept. 29 | 5197 | 1168 | 106 | 1176 |
| Newspapers, &c. Machine for folding, wrapping, addressing, and assorting | L. A. Agnew | 720,212 | Feb. 10 | 1474 | 335, 336, 337, 338, 339 | 102 | 1151 |
| Nickel-in-the-slot machines. Counterfeit-excluder for | B. F. D. Miller | 740,158 | Sept. 29 | 5029 | 1130 | 106 | 1142 |
| Nickel ores, &c. Treating | T. Jenkins | 723,158 | Mar. 17 | 2784 | ------ | 103 | 614 |
| Nickel ores, &c. Treating | T. Jenkins | 723,159 | Mar. 17 | 2785 | ------ | 103 | 616 |
| Nicotin-absorber | W. Schwartz | 729,680 | June 2 | 278 | 64 | 104 | 1186 |
| Nicotin-catcher | H. Feix | 732,841 | July 7 | 263 | 65 | 105 | 58 |
| Nicotin or other volatile constituents from tobacco vapors. Obtaining | G. H. Lindenberger | 730,032 | June 2 | 937 | 210 | 104 | 1318 |
| Nicotin-trap and smoke-cooling appliance for tobacco-pipes. | W. A. Ede-Clendinnen | 746,308 | Dec. 8 | 1835 | 416 | 107 | 1511 |
| Nigger-bar | J. H. E. Auger | 732,815 | July 7 | 222 | 55 | 105 | 50 |
| Nigger-bar | D. R. Edwards | 747,391 | Dec. 22 | 3846 | 865 | 107 | 1996 |
| Nigger-bar cushion device | W. A. McGregor and A. C. Somers | 722,320 | Mar. 10 | 1236 | 275 | 103 | 279 |
| Night-light | F. Hirth | 740,433 | Oct. 6 | 100 | 21 | 106 | 1268 |
| Nippers | W. J. Bayrer | 723,356 | Mar. 24 | 3166 | 711 | 103 | 711 |
| Nipple-holder | W. Griffiths | 745,344 | Dec. 1 | 50 | 11 | 107 | 1111 |
| Nipple. Nursing-bottle rubber | W. F. Ware | 726,122 | Apr. 21 | 3120 | 707 | 103 | 1861 |
| Nipple. Safety- | F. A. Colwell | 733,372 | July 14 | 1214 | 288 | 105 | 272 |
| Nipple. Teething- | F. B. Anderson | 722,350 | Mar. 10 | 1293 | 287 | 103 | 291 |
| Nitro and azo compounds. Reduction of | M. Buchner | 736,204 | Aug. 11 | 2196 | 473 | 105 | 1468 |
| Nitro compounds. Reducing | M. Buchner | 738,404 | Sept. 8 | 1739 | ------ | 106 | 390 |
| Nitro compounds. Reduction of | M. Buchner | 736,205 | Aug. 11 | 2198 | 473 | 105 | 1469 |
| Nitro compounds. Reduction of aromatic | M. Buchner | 736,206 | Aug. 11 | 2200 | 473 | 105 | 1469 |
| Nitro product | L. Edeleanu and G. A. Filiti | 745,802 | Dec. 1 | 881 | ------ | 107 | 1288 |
| Nitrocellulose films or sheets. Manufacturing | F. A. Anthony | 726,614 | Apr. 28 | 4097 | 925 | 103 | 2071 |
| Nitrocellulose or similar substances. Compound of | D. Bachrach | 743,422 | Nov. 10 | 1234 | ------ | 107 | 279 |
| Nitrocellulose. Purifying | F. I. Du Pont | 724,932 | Apr. 7 | 943 | 217 | 103 | 1371 |
| Nitrogen compounds. Making | F. E. Polzeniusz | 725,361 | Apr. 14 | 1739 | 391 | 103 | 1553 |
| Nitrogen compounds. Production of | G. de Chalmot | 741,396 | Oct. 13 | 1928 | 426, 427 | 106 | 1679 |
| Noise-muffler | S. Bouton | 748,157 | Dec. 29 | 5310 | 1206 | 107 | 2345 |
| Non-arcing clamp | H. L. Fritze | 741,785 | Oct. 20 | 2693 | 600 | 106 | 1854 |
| Non-conducting covering | W. M. Zitt | 723,970 | Mar. 31 | 4322 | 970 | 103 | 968 |
| Noodle-cutter | W. S. De Woody | 735,727 | Aug. 11 | 1321 | 285 | 105 | 1279 |
| Nose-ring. Animal | E. K. Rea | 735,150 | Aug. 4 | 206 | 41 | 105 | 1026 |
| Notice-board or the like | F. T. Vine | 722,777 | Mar. 17 | 2111 | 472 | 103 | 482 |
| Novelty device | W. M. Hervey | 744,545 | Nov. 17 | 3404 | 733 | 107 | 756 |
| Nozzle | W. C. Oberwalder | 719,849 | Feb. 3 | 788 | 184 | 102 | 989 |
| Nozzle | J. Bean | 721,656 | Mar. 3 | 6 | 2 | 103 | 4 |
| Nozzle | J. M. Stouder | 739,974 | June 2 | 842 | 187 | 104 | 1299 |
| Nozzle | T. M. Murphy | 736,134 | Aug. 11 | 2087 | 447 | 105 | 1444 |
| Nozzle | W. C. Oberwalder | 740,900 | Oct. 6 | 948 | 213 | 106 | 1449 |
| Nozzle | H. B. Sherman | 742,133 | Oct. 20 | 3405 | 759 | 106 | 1999 |
| Nozzle and tap. Combined | W. J. Dalton | 733,701 | July 14 | 1772 | 421 | 105 | 391 |
| Nozzle. Dilating- | G. Otto | 728,175 | May 12 | 2543 | 565 | 104 | 559 |
| Nozzle-directing device | E. J. Lasher | 746,110 | Dec. 8 | 1461 | 328 | 107 | 1431 |
| Nozzle. Exhaust- | J. F. Hamilton | 730,533 | June 9 | 1843 | 411 | 104 | 1523 |
| Nozzle. Fluid- | W. A. Doble | 724,678 | Apr. 7 | 488 | 117 | 103 | 1273 |
| Nozzle for humidifiers, &c | Q. N. Evans | 724,685 | Apr. 7 | 499 | 119 | 103 | 1276 |
| Nozzle. Self-closing | F. Schwaab and A. MacNeill | 725,152 | Apr. 14 | 1370 | 309 | 103 | 1475 |
| Nozzle. Spray- | A. J. Koegler | 730,927 | June 16 | 2549 | 567 | 104 | 1694 |
| Nozzle. Spraying- | D. J. Seaman | 733,334 | July 7 | 1142 | 271 | 105 | 240 |
| Nozzle. Steam- | W. S. Clarkson | 733,154 | July 7 | 803 | 194 | 105 | 169 |
| Nozzle. Variable exhaust- | G. H. Gray | 736,246 | Aug. 11 | 2268 | 490 | 105 | 1484 |

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| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Numbering-machine | T. H. Boss | 728,194 | May 19 | 2575 | 574, 575 | 104 | 587 |
| Numbering-machine | F. W. Wicht and C. Spielmann | 739,369 | Sept. 22 | 3533 | 789 | 106 | 803 |
| Numbering-machine | C. R. Culley | 741,311 | Oct. 13 | 1745 | 389 | 106 | 1635 |
| Numbering-machine | A. Nordstrom | 741,819 | Oct. 20 | 2749 | 612 | 106 | 1867 |
| Numbering-machine | T. H. Boss | 743,233 | Nov. 3 | 805 | 176 | 107 | 168 |
| Numbering-machine | F. Sanders | 743,569 | Nov. 10 | 1551 | 324 | 107 | 348 |
| Numbering or similar machine | E. G. Bates | 721,276 | Feb. 24 | 3517 | 800 | 102 | 1614 |
| Nursery-chair | G. H. Smith | 730,306 | June 9 | 1427 | 314 | 104 | 1435 |
| Nut | O. C. Duryea and M. C. White | 723,373 | Mar. 24 | 3217 | 721 | 103 | 719 |
| Nut and bolt lock | J. Wheat and W. H. Black | 725,185 | Apr. 14 | 1430 | 323 | 103 | 1487 |
| Nut and bolt lock | H. E. Owen and A. J. Shaw | 742,057 | Oct. 20 | 3223 | 722 | 106 | 1964 |
| Nut and bolt lock means | W. Lay | 747,985 | Dec. 29 | 4978 | 1124 | 107 | 2273 |
| Nut and washer | H. T. Love | 738,217 | Sept. 8 | 1337 | 289 | 106 | 305 |
| Nut and washer. Lock- | G. Bryar | 743,822 | Nov. 10 | 2008 | 426 | 107 | 444 |
| Nut and washer. Vehicle-spindle cap- | G. Martien | 731,196 | June 16 | 3064 | 680 | 104 | 1796 |
| Nut attachment. Spindle- | E. Carlton | 719,745 | Feb. 3 | 609 | 136 | 102 | 950 |
| Nut. Axle- | W. C. De Mareno | 727,757 | May 12 | 1767 | 397 | 104 | 397 |
| Nut. Axle- | S. R. Bailey | 733,532 | July 14 | 1497 | 356 | 105 | 333 |
| Nut. Axle- | S. R. Bailey | 733,533 | July 14 | 1498 | 357 | 105 | 333 |
| Nut. Axle- | P. Dansereau | 738,417 | Sept. 8 | 1759 | 382 | 106 | 394 |
| Nut. Carriage-axle | N. Tebo and T. B. French | 718,171 | Jan. 13 | 1208 | 268 | 102 | 275 |
| Nut-finishing machine | G. Dunham | 728,214 | May 19 | 2610 | 583, 584 | 104 | 595 |
| Nut-lock | J. A. Mell | 717,591 | Jan. 6 | 129 | 33 | 102 | 29 |
| Nut-lock | S. Freund | 718,336 | Jan. 13 | 1521 | 337 | 102 | 342 |
| Nut-lock | M. F. Wenrich | 718,682 | Jan. 20 | 2213 | 485 | 102 | 502 |
| Nut-lock | E. Levy and L. Irens | 718,776 | Jan. 20 | 2394 | 531 | 102 | 539 |
| Nut-lock | E. S. Hawkins | 718,838 | Jan. 20 | 2492 | 555 | 102 | 557 |
| Nut-lock | E. S. Staples | 719,157 | Jan. 27 | 3122 | 695 | 102 | 704 |
| Nut-lock | W. Noble | 719,847 | Feb. 3 | 784 | 184 | 102 | 989 |
| Nut-lock | B. Tucker | 720,505 | Feb. 10 | 2001 | 459 | 102 | 1262 |
| Nut-lock | J. Spena and C. Behe | 720,632 | Feb. 17 | 2292 | 525 | 102 | 1334 |
| Nut-lock | R. A. Van Pelt | 720,641 | Feb. 17 | 2309 | 529 | 102 | 1337 |
| Nut-lock | A. B. Harris | 720 691 | Feb. 17 | 2395 | 548 | 102 | 1356 |
| Nut-lock | D. Biggs | 721,140 | Feb. 24 | 3252 | 744 | 102 | 1561 |
| Nut-lock | W. Kellam | 721,198 | Feb. 24 | 3355 | 767 | 102 | 1580 |
| Nut-lock | J. Applin | 721,352 | Feb. 24 | 3649 | 830 | 102 | 1641 |
| Nut-lock | G. H. Bigelow | 721,497 | Feb. 24 | 3914 | 890 | 102 | 1695 |
| Nut-lock | G. F. Dobbs | 721,676 | Mar. 3 | 51 | 11 | 103 | 13 |
| Nut-lock | T. B. Stevenson | 721,844 | Mar. 3 | 342 | 76 | 103 | 75 |
| Nut-lock | W. R. and G. W. Young | 721,990 | Mar. 3 | 635 | 141 | 103 | 138 |
| Nut-lock | W. C. Stickel | 722,640 | Mar. 10 | 1823 | 405 | 103 | 401 |
| Nut-lock | M. Bartley | 722,649 | Mar. 10 | 1835 | 409 | 103 | 417 |
| Nut-lock | L. V. Rathmell | 722,751 | Mar. 17 | 2066 | 462 | 103 | 473 |
| Nut-lock | W. U. Rosenthal | 723,030 | Mar. 17 | 2550 | 573 | 103 | 577 |
| Nut-lock | A. Kissinger and H. J. Coll | 723,395 | Mar. 24 | 2256 | 729 | 103 | 722 |
| Nut-lock | W. Stinson | 723,419 | Mar. 24 | 3295 | 737 | 103 | 739 |
| Nut-lock | C. L. Durboraw | 723,590 | Mar. 24 | 3608 | 806 | 103 | 795 |
| Nut-lock | H. G. Buch | 723,821 | Mar. 31 | 4016 | 905 | 103 | 901 |
| Nut-lock | J. O. E. Krohn | 723,882 | Mar. 31 | 4138 | 932 | 103 | 928 |
| Nut lock | J. T. Pearman | 723,910 | Mar. 31 | 4200 | 946 | 103 | 941 |
| Nut-lock | C. Weichold | 724,065 | Mar. 31 | 4510 | 1016 | 103 | 1003 |
| Nut-lock | J. Marshall | 724,196 | Mar. 31 | 4782 | 1072 | 103 | 1058 |
| Nut-lock | R. P. Griffith | 725,245 | Apr. 14 | 1540 | 350 | 103 | 1514 |
| Nut-lock | T. F. O'Neil | 726,740 | Apr. 28 | 4326 | 975 | 103 | 2119 |
| Nut-lock | M. Stewart | 727,019 | May 5 | 399 | 84 | 104 | 87 |
| Nut-lock | P. L. Kimball | 727,152 | May 5 | 636 | 136 | 104 | 138 |
| Nut-lock | J. A. Duffy | 727,314 | May 5 | 916 | 199, 200 | 104 | 197 |
| Nut-lock | W. A. Lewis | 727,393 | May 5 | 1059 | 229 | 104 | 228 |
| Nut-lock | F. Riffle | 727,448 | May 5 | 1164 | 257 | 104 | 252 |
| Nut-lock | J. B. Uren | 727,716 | May 12 | 1702 | 379, 380 | 104 | 383 |
| Nut-lock | F. M. Smith | 728,032 | May 12 | 2276 | 506 | 104 | 502 |
| Nut-lock | J. C. Foster | 728,560 | May 19 | 3288 | 728 | 104 | 735 |
| Nut-lock | C. C. Border | 728,665 | May 19 | 3493 | 776 | 104 | 781 |
| Nut-lock | H. E. Stevick | 729,442 | May 26 | 4863 | 1077 | 104 | 1079 |
| Nut-lock | W. A. Scott | 729,966 | June 2 | 821 | 184 | 104 | 1295 |
| Nut-lock | M. L. Thedford | 730,199 | June 2 | 1202 | 269 | 104 | 1372 |
| Nut-lock | L. D. Woods | 730,430 | June 9 | 1651 | 369 | 104 | 1480 |
| Nut-lock | M. Bartley | 730,599 | June 9 | 1968 | 437 | 104 | 1551 |
| Nut-lock | H. A. House | 731,366 | June 16 | 3361 | 751 | 104 | 1858 |
| Nut-lock | W. Brotherton | 731,427 | June 23 | 3500 | 781 | 104 | 1905 |
| Nut-lock | G. J. Callahan | 732,166 | June 30 | 4916 | 1094 | 104 | 2212 |
| Nut-lock | L. Esser | 732,178 | June 30 | 4938 | 1098 | 104 | 2217 |
| Nut-lock | N. Newman | 732,432 | June 30 | 5430 | 1205 | 104 | 2319 |
| Nut-lock | L. Savaria | 732,898 | July 7 | 355 | 87 | 105 | 78 |
| Nut-lock | J. Edwards | 733,173 | July 7 | 841 | 204 | 105 | 177 |
| Nut-lock | P. E. Miller and J. H. Stinger | 733,245 | July 7 | 975 | 235 | 105 | 204 |
| Nut-lock | O. P. Broyles | 733,457 | July 14 | 1367 | 322 | 105 | 306 |
| Nut-lock | P. C. Secor | 733,754 | July 14 | 1879 | 443 | 105 | 413 |
| Nut-lock | J. G. Brandon | 733,808 | July 14 | 1983 | 466 | 105 | 436 |
| Nut-lock | G. B. M. Pike | 733,915 | July 14 | 2207 | 517 | 105 | 479 |
| Nut-lock | T. McCabe, Jr | 734,349 | July 21 | 3061 | 721 | 105 | 681 |
| Nut-lock | G. H. Layng | 734,577 | July 28 | 3470 | 811 | 105 | 783 |
| Nut-lock | J. E. Lenholt | 734,579 | July 28 | 3473 | 811 | 105 | 783 |
| Nut-lock | R. Kleckner | 735,116 | Aug. 4 | 131 | 29 | 105 | 1011 |
| Nut-lock | C. F. Strohmenger and J. R. Clancy | 736,456 | Aug. 18 | 2635 | 579 | 105 | 1580 |
| Nut-lock | D. J. Thorne | 737,044 | Aug. 25 | 3758 | 835 | 105 | 1834 |
| Nut-lock | N. D. Asdell | 737,893 | Sept. 1 | 675 | 143 | 106 | 148 |
| Nut-lock | F. L. Decker | 738,008 | Sept. 1 | 911 | 200 | 106 | 199 |
| Nut-lock | B. B. Moss | 738,052 | Sept. 1 | 973 | 216 | 106 | 212 |
| Nut-lock | F. Parsons | 738,060 | Sept. 1 | 987 | 219 | 106 | 215 |
| Nut-lock | A. R. Mulvane | 738,118 | Sept. 1 | 1119 | 247 | 106 | 242 |
| Nut-lock | J. G. Waggoner | 738,263 | Sept. 8 | 1430 | 308 | 106 | 325 |

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| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Nut-lock | I. W. Hoffman and P. K. Ebersole | 738,539 | Sept. 8 | 2006 | 436 | 106 | 446 |
| Nut-lock | J. V. Berry | 738,598 | Sept. 8 | 2107 | 460 | 106 | 469 |
| Nut-lock | C. H. Chittum | 738,660 | Sept. 8 | 2228 | 488 | 106 | 494 |
| Nut-lock | G. P. Finnigan | 739,594 | Sept. 22 | 3966 | 885 | 106 | 897 |
| Nut-lock | M. Reid | 739,716 | Sept. 22 | 4191 | 937 | 106 | 947 |
| Nut-lock | A. W. Edmiston | 739,997 | Sept. 29 | 4742 | 1067 | 106 | 1080 |
| Nut-lock | F. G. Stark | 740,056 | Sept. 29 | 4857 | 1089 | 106 | 1106 |
| Nut-lock | F. M. Boss | 740,222 | Sept. 29 | 5159 | 1159 | 106 | 1167 |
| Nut-lock | W. A. Young | 740,510 | Oct. 6 | 242 | 48 | 106 | 1298 |
| Nut-lock | A. W. Whitfield | 741,601 | Oct. 13 | 2330 | 522 | 106 | 1763 |
| Nut-lock | J. O'Connor | 741,701 | Oct. 20 | 2533 | 565 | 106 | 1822 |
| Nut-lock | M. J. Walz | 741,747 | Oct. 20 | 2613 | 581 | 106 | 1837 |
| Nut-lock | H. B. Smith | 741,941 | Oct. 20 | 2982 | 664 | 106 | 1916 |
| Nut-lock | A. and A. R. Marshall | 742,466 | Oct. 27 | 4018 | 901 | 106 | 2141 |
| Nut-lock | F. N. Zimmerman | 742,550 | Oct. 27 | 4186 | 941 | 106 | 2175 |
| Nut-lock | C. J. Ulbricht | 742,756 | Oct. 27 | 4533 | 1027 | 106 | 2252 |
| Nut-lock | F. Robinson | 743,334 | Nov. 3 | 1008 | 217 | 107 | 216 |
| Nut-lock | P. E. Myers | 743,544 | Nov. 10 | 1498 | 313 | 107 | 337 |
| Nut-lock | R. A. Rehner | 744,108 | Nov. 17 | 2593 | 553 | 107 | 582 |
| Nut-lock | G. A. Kennedy | 744,205 | Nov. 17 | 2804 | 599 | 107 | 627 |
| Nut-lock | J. A. Schlehr | 744,242 | Nov. 17 | 2860 | 613 | 107 | 640 |
| Nut-lock | L. N. Everett | 745,429 | Dec. 1 | 219 | 49 | 107 | 1146 |
| Nut-lock | J. D. Reed | 745,522 | Dec. 1 | 388 | 90 | 107 | 1182 |
| Nut-lock | J. A. Christ | 746,026 | Dec. 8 | 1319 | 295 | 107 | 1397 |
| Nut-lock | W. Cronk | 746,296 | Dec. 8 | 1811 | 411 | 107 | 1505 |
| Nut-lock | F. L. McGahan | 746,363 | Dec. 8 | 1929 | 440 | 107 | 1530 |
| Nut-lock | A. Elsenrath | 746,937 | Dec. 15 | 2990 | 687 | 107 | 1788 |
| Nut-lock | C. Miller | 747,459 | Dec. 22 | 3958 | 889 | 107 | 2021 |
| Nut-lock | A. G. L. Wenner | 747,669 | Dec. 22 | 4347 | 982 | 107 | 2110 |
| Nut-lock | S. C. Ramsey | 748,009 | Dec. 29 | 5024 | 1134 | 107 | 2283 |
| Nut. Lock- | G. W. Brown | 719,559 | Feb. 3 | 266 | 62 | 102 | 879 |
| Nut. Lock- | W. L. Roper | 720,620 | Feb. 17 | 2273 | 522 | 102 | 1330 |
| Nut. Lock- | H. Minck | 720,724 | Feb. 17 | 2455 | 562 | 102 | 1369 |
| Nut. Lock- | A. Scholer | 732,590 | June 30 | 5736 | 1273 | 104 | 2384 |
| Nut. Lock- | J. H. Martin | 735,992 | Aug. 11 | 1827 | 392 | 105 | 1391 |
| Nut. Lock- | W. A. Whitney | 736,326 | Aug. 11 | 2409 | 526 | 105 | 1517 |
| Nut. Lock- | J. H. Rivers | 737,488 | Aug. 25 | 4595 | 1029 | 105 | 2014 |
| Nut. Lock- | W. H. Block | 742,282 | Oct. 27 | 3702 | 827 | 106 | 2078 |
| Nut. Lock- | W. C. Swift | 748,027 | Dec. 29 | 5059 | 1143 | 107 | 2291 |
| Nut lock and guard | A. E. White | 718,744 | Jan. 20 | 2333 | 515 | 102 | 526 |
| Nut lock. Axle- | F. J. Grant | 744,335 | Nov. 17 | 3031 | 650 | 107 | 677 |
| Nut-lock. Rail-joint | C. B. Rush | 747,233 | Dec. 15 | 3537 | 803 | 107 | 1911 |
| Nut-lock. Spring-plate | W. H. Woodworth | 720,769 | Feb. 17 | 2525 | 582 | 102 | 1385 |
| Nut. Locking- | A. T. Hughes | 732,411 | June 30 | 5391 | 1194 | 104 | 2312 |
| Nut. Locking- | M. E. Donally | 736,368 | Aug. 18 | 2482 | 544 | 105 | 1548 |
| Nut-locking means | W. Lay | 747,984 | Dec. 29 | 4977 | 1124 | 107 | 2272 |
| Nut-locking washer | L. T. Stephenson | 728,323 | May 19 | 2853 | 630 | 104 | 646 |
| Nut-machine | C. P. Wetmore | 729,822 | June 2 | 554 | 122, 123, 124, 125 | 104 | 1241 |
| Nut or bolt lock | W. H. Burns | 735,706 | Aug. 11 | 1294 | 277 | 105 | 1273 |
| Nut or pipe wrench | D. Stewart | 730,311 | June 9 | 1432 | 316 | 104 | 1436 |
| Nut-press | T. Ferry | 737,724 | Sept. 1 | 305 | 63, 64 | 106 | 69 |
| Nut-setting and bolt-trimming machine | J. W. Waldorf | 741,745 | Oct. 20 | 2607 | 580, 581 | 106 | 1836 |
| Nut. Spindle- | J. B. Smith | 740,052 | Sept. 29 | 4849 | 1088 | 106 | 1104 |
| Nut-wrench | H. E. Andrew | 726,012 | Apr. 21 | 2937 | 668 | 103 | 1822 |
| Nut wrench. Axle- | E. C. Wysong | 729,829 | June 2 | 577 | 137 | 104 | 1246 |
| Nut-wrench. Double-acting | H. D. Pelle | 743,096 | Nov. 3 | 534 | 116 | 107 | 112 |
| Nut wrench. Vehicle- | P. F. Rice | 737,140 | Aug. 25 | 3919 | 871 | 105 | 1868 |
| Nuts. Machine for making tracker- | D. J Frothingham | 718,117 | Jan. 13 | 1114 | 246, 247 | 102 | 255 |
| Nut-cracker | H. Budesheim | 718,977 | Jan. 27 | 2769 | 620 | 102 | 632 |
| Nuts. Bleaching | H. J. Hoffmayr | 726,927 | May 5 | 182 | ------ | 104 | 41 |
| Oar. Bow-facing | L. W. Flint | 717,980 | Jan. 6 | 872 | 194 | 102 | 187 |
| Oar. Bow-facing | E. S. Anderson | 727,731 | May 12 | 1723 | 386, 387 | 104 | 388 |
| Oar. Bow-facing | E. S. McCaulley | 738,695 | Sept. 8 | 2309 | 508 | 106 | 509 |
| Oar. Bow-facing | J. P. Fretwell and J. T. Brown | 739,302 | Sept. 22 | 3427 | 764 | 106 | 781 |
| Oar. Bow-facing | W. Lapacz | 745,504 | Dec. 1 | 363 | 84 | 107 | 1177 |
| Oar-lock | A. W. Knapp | 724,298 | Mar. 31 | 4995 | 1117 | 103 | 1101 |
| Oar-lock | C. M. Pray | 742,490 | Oct. 27 | 4061 | 912 | 106 | 2150 |
| Oar-lock | E. Montreuil | 746,642 | Dec. 8 | 2416 | 552 | 107 | 1640 |
| Oar or scull | H. B. Murdock | 738,053 | Sept. 1 | 974 | 217 | 106 | 212 |
| Oats-hulling machine | S. E. Field | 727,332 | May 5 | 959 | 208 | 104 | 207 |
| Object-projector | J. Menchen | 744,778 | Nov. 24 | 3832 | 826 | 107 | 865 |
| Observation-plate. Transparent refractory | E. Thomson | 745,465 | Dec. 1 | 293 | 71 | 107 | 1161 |
| Obstetrical forceps | H. E. Koch | 733,402 | July 14 | 1270 | 301 | 105 | 285 |
| Obstetrical instrument | H. Mendenhall | 734,586 | July 28 | 3493 | 815 | 105 | 787 |
| Obstetrical sheet | S. Faulkner | 719,206 | Jan. 27 | 3202 | 714 | 102 | 721 |
| Oculist's or optician's trial-frame | S. G. Marshutz | 724,197 | Mar. 31 | 4783 | 1072, 1073 | 103 | 1058 |
| Odometer | J. N. Leach | 726,547 | Apr. 28 | 3958 | 894 | 103 | 2044 |
| Odometer | C. H. Veeder | 741,420 | Oct. 13 | 1962 | 435 | 106 | 1685 |
| Odometer | E. H. Hathaway | 745,726 | Dec. 1 | 739 | 169 | 107 | 1256 |
| Office-door indicator | J. D. Nifong | 737,860 | Sept. 1 | 594 | 130 | 106 | 131 |
| Oil. Apparatus for separating naphtha from | E. R. Edson | 723,849 | Mar. 31 | 4070 | 919 | 103 | 913 |
| Oil-bearing materials. Treating | N. B. Powter | 725,363 | Apr. 14 | 1744 | 392 | 103 | 1553 |
| Oil-burner | G. W. Smith | 717,937 | Jan. 6 | 790 | 178 | 102 | 169 |
| Oil-burner | L. H. Lewars | 719,345 | Jan. 27 | 3475 | 774 | 102 | 780 |
| Oil-burner | J. J. McDonald and A. D. McLean | 719,686 | Feb. 3 | 485 | 110 | 102 | 924 |
| Oil-burner | C. W. Sievert | 720,495 | Feb. 10 | 1981 | 453 | 102 | 1257 |
| Oil-burner | V. F. Lässoe and L. D. Lovekin | 721,900 | Mar. 3 | 448 | 99 | 103 | 99 |
| Oil-burner | J. McDermott | 722,530 | Mar. 10 | 1635 | 361 | 103 | 367 |
| Oil-burner | H. Luckenbach | 723,206 | Mar. 17 | 2889 | 647 | 103 | 642 |

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|---|---|---|---|---|---|---|---|
| | | | | Spec. | Dr'g. | Vol. | Page. |
| Oil-burner | R. F. Schroeder | 724,053 | Mar. 31 | 4489 | 1011, 1012 | 103 | 998 |
| Oil-burner | C. K. Bergé | 724,247 | Mar. 31 | 4809 | 1097 | 103 | 1081 |
| Oil-burner | A. H. Van Pelt and W. A. Laufman | 724,761 | Apr. 7 | 637 | 149, 150 | 103 | 1304 |
| Oil-burner | J. S. Thurman | 725,176 | Apr. 14 | 1413 | 320 | 103 | 1484 |
| Oil-burner | M. C. Henley | 726,059 | Apr. 21 | 3005 | 684 | 103 | 1837 |
| Oil-burner | C. W. Sievert | 726,106 | Apr. 21 | 3078 | 698 | 103 | 1851 |
| Oil-burner | J. McDermott | 727,415 | May 5 | 1094 | 240 | 104 | 236 |
| Oil-burner | R. G. Speer | 731,078 | June 16 | 2839 | 631 | 104 | 1754 |
| Oil-burner | F. Saffell | 731,133 | June 16 | 2950 | 656 | 104 | 1775 |
| Oil-burner | W. H. Wafer | 731,397 | June 16 | 3435 | 766, 767 | 104 | 1874 |
| Oil-burner | J. F. Rumple | 731,505 | June 23 | 3655 | 815 | 104 | 1938 |
| Oil-burner | F. W. H. Jahn | 734,712 | July 28 | 3729 | 872 | 105 | 835 |
| Oil-burner | A. Davis | 735,014 | July 28 | 4301 | 1000 | 105 | 953 |
| Oil-burner | F. B. Denning | 735,219 | Aug. 4 | 363 | 69 | 105 | 1059 |
| Oil-burner | J. B. Neuendorff | 735,287 | Aug. 4 | 487 | 97 | 105 | 1085 |
| Oil-burner | E. Pollak | 735,292 | Aug. 4 | 497 | 100 | 105 | 1087 |
| Oil-burner | E. M. Arnold | 736,473 | Aug. 18 | 2676 | 588 | 105 | 1589 |
| Oil-burner | T. Williams | 736,664 | Aug. 18 | 3041 | 672 | 105 | 1664 |
| Oil-burner | A. F. Murphy | 737,649 | Sept. 1 | 172 | 36 | 106 | 40 |
| Oil-burner | G. W. Swartz | 737,676 | Sept. 1 | 215 | 46 | 106 | 50 |
| Oil-burner | C. W. Sievert | 738,635 | Sept. 8 | 2176 | 476 | 106 | 483 |
| Oil-burner | W. F. Hogan | 739,546 | Sept. 22 | 3864 | 866 | 106 | 875 |
| Oil-burner | L. H. Wattles | 740,959 | Oct. 6 | 1055 | 240 | 106 | 1472 |
| Oil-burner | A. J. O'Brien | 741,820 | Oct. 20 | 2752 | 613 | 106 | 1868 |
| Oil-burner | G. E. Witt | 741,867 | Oct. 20 | 2831 | 631 | 106 | 1885 |
| Oil-burner | E. B. Raymond | 742,064 | Oct. 20 | 3244 | 727 | 106 | 1968 |
| Oil-burner | H. L. Sherwood | 742,916 | Nov. 3 | 166 | 38, 39 | 107 | 36 |
| Oil-burner | J. Frodsham | 743,267 | Nov. 3 | 874 | 190 | 107 | 184 |
| Oil-burner | F. A. Curtis | 743,376 | Nov. 3 | 1106 | 235 | 107 | 234 |
| Oil-burner | H. L. Sherwood | 743,940 | Nov. 10 | 2213 | 478 | 107 | 488 |
| Oil-burner | J. R. Donnelly | 745,799 | Dec. 1 | 870 | 197 | 107 | 1286 |
| Oil-burner | J. McFarlane and C. P. Pushaw | 746,562 | Dec. 8 | 2263 | 519 | 107 | 1604 |
| Oil-burner | W. R. Smith | 746,596 | Dec. 8 | 2330 | 533 | 107 | 1620 |
| Oil-burner | F. W. Jaeger | 747,434 | Dec. 22 | 3916 | 882 | 107 | 2013 |
| Oil-burner | E. A. Edwards | 748,177 | Dec. 29 | 5344 | 1216 | 107 | 2352 |
| Oil-burner | E. Boekenkamp | 748,257 | Dec. 29 | 5478 | 1248 | 107 | 2381 |
| Oil-burner | J. H. Davis | 748,267 | Dec. 29 | 5511 | 1255 | 107 | 2389 |
| Oil-burner | J. McFarlane and C. P. Pushaw | 748,516 | Dec. 29 | 5963 | 1352, 1353 | 107 | 2488 |
| Oil-burner and feed mechanism therefor | J. W. Anderson | 719,716 | Feb. 3 | 553 | 126 | 102 | 939 |
| Oil burner. Crude- | J. H. Heffner and S. L. Ball | 720,584 | Feb. 17 | 2185 | 507 | 102 | 1314 |
| Oil burner. Crude- | T. A. Hartung | 727,134 | May 5 | 603 | 129 | 104 | 131 |
| Oil burner. Crude- | E. W. Tucker and C. L. Grundell | 743,777 | Nov. 10 | 1925 | 407 | 107 | 427 |
| Oil-burner feed | A. W. Hess | 742,648 | Oct. 27 | 4357 | 980 | 106 | 2213 |
| Oil-burner for heating purposes | G. S. Anderson and B. F. Jevons | 743,414 | Nov. 10 | 1216 | 251 | 107 | 274 |
| Oil burner. Fuel- | T. E. Flaherty | 732,181 | June 30 | 4943 | 1099 | 104 | 2218 |
| Oil-burner. Generating | P. S. Spiller | 721,755 | Mar. 3 | 175 | 40 | 103 | 38 |
| Oil-burner. Nebulizing | J. Proper | 725,134 | Apr. 14 | 1335 | 301 | 103 | 1468 |
| Oil-burner nozzle | H. E. Brunner and E. J. Patterson | 736,487 | Aug. 18 | 2709 | 594 | 105 | 1595 |
| Oil burner. Petroleum- | A. F. Demory | 719,762 | Feb. 3 | 643 | 145 | 102 | 958 |
| Oil-burner. Self-cleaning | P. K. Morcom and W. G. Schaffer | 739,788 | Sept. 22 | 4321 | 968 | 106 | 976 |
| Oil-burner spreader | H. P. Akers | 744,453 | Nov. 17 | 3253 | 697 | 107 | 725 |
| Oil burner with self-supplying steam device. Crude- | E. I. Nichols | 724,728 | Apr. 7 | 586 | 139 | 103 | 1293 |
| Oil-burning apparatus | J. McDermott | 727,414 | May 5 | 1093 | 240 | 104 | 236 |
| Oil-burning apparatus | G. L. Badger | 735,441 | Aug. 4 | 785 | 166, 167 | 105 | 1148 |
| Oil-burning apparatus. Heavy- | F. Cotton | 739,153 | Sept. 15 | 3149 | 696 | 106 | 704 |
| Oil-burning device | A. H. Calkins | 720,889 | Feb. 17 | 2725 | 628 | 102 | 1426 |
| Oil-burning device | B. K. Pickerill | 730,395 | June 9 | 1585 | 353 | 104 | 1467 |
| Oil-burning heater | P. Dufresne | 721,164 | Feb. 24 | 3303 | 755 | 102 | 1570 |
| Oil-cake-forming apparatus | E. C. Bisbee | 739,478 | Sept. 22 | 3757 | 838, 839, 840 | 106 | 853 |
| Oil-cake-stripping machine | E. C. Bisbee | 739,479 | Sept. 22 | 3762 | 840, 841 | 106 | 854 |
| Oil-cake trimmer | J. Dion and J. D. Belanger | 721,867 | Mar. 3 | 391 | 86, 87 | 103 | 86 |
| Oil-cake-trimming machine | A. W. French. (Reissue) | 12,118 | June 9 | 2397 | 529 | 104 | 1642 |
| Oil-cakes. Apparatus for packing | A. W. French | 723,455 | Mar. 24 | 3351 | 751 | 103 | 748 |
| Oil-can | R. P. Hardy | 720,424 | Feb. 10 | 1862 | 424 | 102 | 1233 |
| Oil-can | T. W. Alexander | 721,134 | Feb. 24 | 3243 | 742 | 102 | 1559 |
| Oil-can | W. A. Reinecke | 721,606 | Feb. 24 | 4144 | 941 | 102 | 1747 |
| Oil-can | W. J. Donnelley | 727,309 | May 5 | 908 | 197 | 104 | 196 |
| Oil-can | M. Masterson | 727,660 | May 12 | 1569 | 354 | 104 | 355 |
| Oil-can | J. A. Baeuerle | 728,433 | May 19 | 3036 | 667 | 104 | 684 |
| Oil-can | J. B. Beam | 741,096 | Oct. 13 | 1308 | 300 | 106 | 1546 |
| Oil-can | F. K. Bell | 744,025 | Nov. 17 | 2434 | 523 | 107 | 550 |
| Oil-can acoustic alarm | J. A. Pollock | 736,441 | Aug. 18 | 2612 | 573 | 105 | 1575 |
| Oil-can and lamp-filler | H. L. Hauser | 735,507 | Aug. 4 | 910 | 194 | 105 | 1175 |
| Oil-can-cleaning attachment | F. W. Skinner | 727,855 | May 12 | 1962 | 437 | 104 | 435 |
| Oil-can. Druggist's dispensing | J. A. Dinkler | 732,620 | June 30 | 5788 | 1284 | 104 | 2397 |
| Oil-can. Non-explosive | T. J. Voorhies | 726,595 | Apr. 28 | 4064 | 917 | 103 | 2064 |
| Oil-cup | R. L. White | 719,543 | Feb. 3 | 231 | 54 | 102 | 872 |
| Oil-cup | J. Chesbro | 745,152 | Nov. 24 | 4576 | 993 | 107 | 1017 |
| Oil, &c. Device for containing and ejecting | J. A. Dunn | 747,153 | Dec. 15 | 3394 | 769 | 107 | 1882 |
| Oil-distributer | J. B. Glover | 724,692 | Apr. 7 | 511 | 121 | 103 | 1278 |
| Oil-distributing apparatus | T. F. White | 741,862 | Oct. 20 | 2815 | 626 | 106 | 1882 |
| Oil-distributing ring | J. A. Baird and E. O. H. H. Sass | 740,075 | Sept. 29 | 4889 | 1095 | 106 | 1111 |
| Oil-engine | J. S., R. D., W. D., and H. C. Cundall | 728,873 | May 26 | 3874 | 862 | 104 | 874 |
| Oil-engine | H. Soeldner | 740,195 | Sept. 29 | 5099 | 1145, 1146 | 106 | 1156 |
| Oil-engine. Kerosene- | W. W. Tuck, A. A. Low, and A. Wassmann. | 744,822 | Nov. 24 | 3911 | 841 | 107 | 881 |
| Oil-engine. Kerosene- | A. A. Low and A. Wassmann | 747,620 | Dec. 22 | 4252 | 956 | 107 | 2089 |

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| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Oil-extracting device | R. D. H. Anderson | 738,750 | Sept. 15 | 2423 | 531 | 106 | 550 |
| Oil feeding and storing system | R. G. Kirkwood | 742,334 | Oct. 27 | 3791 | 849 | 106 | 2095 |
| Oil for heating purposes. System for burning | L. D. Lovekin and V. F. Lässoe | 744,373 | Nov. 17 | 3097 | 665, 666 | 107 | 691 |
| Oil from cotton-seed. Extracting | F. M. Pratt | 734,239 | July 21 | 2844 | 667 | 105 | 636 |
| Oil from seeds. Apparatus for automatically extracting | A. B. Lawther | 720,532 | Feb. 10 | 2059 | 475, 476, 477, 478, 479 | 102 | 1273 |
| Oil-fuel-burning apparatus | J. S. Chapman | 725,408 | Apr. 14 | 1827 | 409 | 103 | 1571 |
| Oil-gage | G. C. Bartow | 747,032 | Dec. 15 | 3159 | 724 | 107 | 1827 |
| Oil heater and vaporizer | J. McDermott | 725,862 | Apr. 21 | 2682 | 611 | 103 | 1770 |
| Oil-meal into soft cakes. Re-pressing | W. P. Callahan, T. De Armon, and W. K. Callahan. | 727,897 | May 12 | 2036 | 453 | 104 | 451 |
| Oil. Means for loading or discharging | J. Baker, Jr | 729,992 | June 2 | 872 | 194 | 104 | 1305 |
| Oil or gas engine. Hydrocarbon | E. W. Graef | 725,700 | Apr. 21 | 2383 | 540 | 103 | 1704 |
| Oil-press box | W. P. and W. K. Callahan and T. De Armon. | 727,896 | May 12 | 2034 | 452, 453 | 104 | 451 |
| Oil. Producing paint | E. C. Holton | 728,918 | May 26 | 3948 | ------ | 104 | 889 |
| Oil. Refining | C. B. Graham | 732,937 | July 7 | 426 | 105 | 105 | 92 |
| Oil reservoir or tank | R. H. F. Sewall | 744,694 | Nov. 17 | 3640 | 785 | 107 | 806 |
| Oil-supply-controlling mechanism | A. E. Lovett | 720,939 | Feb. 17 | 2824 | 647, 648 | 102 | 1447 |
| Oil-switch | H. P. Ball | 732,255 | June 30 | 5092 | 1132, 1133 | 104 | 2249 |
| Oil-tank | B. F. Collins | 726,142 | Apr. 21 | 3153 | 713 | 103 | 1867 |
| Oil-tank | T. W. Castleman | 734,045 | July 21 | 2483 | 579 | 105 | 558 |
| Oil-tank attachment | C. Moller and M. Salisbury | 724,314 | Mar. 31 | 5020 | 1124 | 103 | 1106 |
| Oil-tank. Hydraulic | A. C. Frieseke | 727,779 | May 12 | 1824 | 407, 408 | 104 | 407 |
| Oil. Treating creosote | C. W. Bilfinger | 729,838 | June 2 | 586 | 129 | 104 | 1247 |
| Oil-vapor burner | A. J. Lindemann | 738,463 | Sept. 8 | 1853 | 403 | 106 | 412 |
| Oil-vapor or gas engine | W. Brown | 737,069 | Aug. 25 | 3805 | 843 | 105 | 1843 |
| Oils for medicinal use. Preparing | P. Lewy | 738,461 | Sept. 8 | 1852 | ------ | 106 | 412 |
| Oils from seeds. Expressing | V. D. Anderson | 731,736 | June 23 | 4084 | 911, 912 | 104 | 2022 |
| Oils into a soluble oil. Converting solidified | A. Kronstein | 737,249 | Aug. 25 | 4146 | ------ | 105 | 1916 |
| Oils. Machine for testing the lubricating power of | H. V. Blake | 745,997 | Dec. 8 | 1264 | 284 | 107 | 1386 |
| Oils or distillates. Desulfurizing | O. P. Amend | 747,347 | Dec. 22 | 3772 | ------ | 107 | 1980 |
| Oils or distillates. Desulfurizing | O. P. Amend | 747,348 | Dec. 22 | 3774 | ------ | 107 | 1980 |
| Oils. Refining mineral | T. Macalpine | 741,517 | Oct. 13 | 2160 | 481 | 106 | 1727 |
| Oils. Solidifying and toughening | J. B. Scammell and E. A. Muskett | 724,618 | Apr. 7 | 374 | ------ | 103 | 1250 |
| Oiler | G. J. Peacock | 724,493 | Apr. 7 | 138 | 33 | 103 | 1199 |
| Oiler | G. Wilson | 730,065 | June 2 | 989 | 222 | 104 | 1329 |
| Oiler | J. H. Bennett | 734,036 | July 21 | 2462 | 576 | 105 | 553 |
| Oiler | G. T. Allen | 741,432 | Oct. 13 | 1983 | 439, 440 | 106 | 1689 |
| Oiler. Air-pump piston-rod | W. Cooper | 717,547 | Jan. 6 | 50 | 12 | 102 | 13 |
| Oiler. Automatic | B. Poulson | 740,992 | Oct. 6 | 1119 | 252 | 106 | 1484 |
| Oiler. Automatic cross-head-pin | C. A. V. Carlsson and C. E. Bohman. | 719,565 | Feb. 3 | 273 | 63 | 102 | 880 |
| Oiler. Combined automatic spindle | N. P. Agnew | 743,371 | Nov. 3 | 1099 | 234 | 107 | 233 |
| Oiler for mining-cars. Automatic | R. S. Walker | 718,039 | Jan. 6 | 975 | 216 | 102 | 210 |
| Oiler. Gun-barrel | J. C. Dalrymple | 739,653 | Sept. 22 | 4083 | 909 | 106 | 922 |
| Oiler. Piston-bearing | H. H. Buffum | 729,537 | June 2 | 33 | 8 | 104 | 1133 |
| Oiler. Shaft | R. B. Brown | 742,579 | Oct. 27 | 4234 | 954 | 106 | 2185 |
| Oiler. Vehicle-hub | P. H. Fishell | 718,443 | Jan. 13 | 1720 | 382 | 102 | 382 |
| Oiling and cooling bearings of vertical shafts. Device for | J. H. Baker, G. F. Shevlin, and F. H. Baker. | 738,513 | Sept. 8 | 1956 | 427 | 106 | 435 |
| Oiling-cup for lubricators. Auxiliary hand | F. W. Edwards | 723,149 | Mar. 17 | 2765 | 621 | 103 | 615 |
| Oiling device. Automatic | G. W. Thurston | 739,745 | Sept 22 | 4242 | 950 | 106 | 958 |
| Oiling device. Axle | T. S. Philpott | 733,420 | July 14 | 1300 | 307 | 105 | 292 |
| Oilstone-box | J. W. Currier | 728,874 | May 26 | 3876 | 862 | 104 | 875 |
| Ointment or pill slab | W. Bower | 734,663 | July 28 | 3632 | 850 | 105 | 817 |
| Oliver | J. H. Thomas | 728,143 | May 12 | 2479 | 551 | 104 | 545 |
| Onion-setter | I. McCollister | 726,972 | May 5 | 287 | 65 | 104 | 62 |
| Open-air furnace | A. Boyer | 746,276 | Dec. 8 | 1771 | 402 | 107 | 1497 |
| Opera-glass | J. W. Riglander and B. H. Blank | 730,972 | June 16 | 2634 | 587 | 104 | 1712 |
| Operating-table | C. Lyons | 721,587 | Feb. 24 | 4094 | 932 | 102 | 1737 |
| Operator's key. Self-indicating | G. L. Burlingame | 720,885 | Feb. 17 | 2715 | 627 | 102 | 1424 |
| Ophthalmometer or other tables | W. F. Reimold | 744,613 | Nov. 17 | 3504 | 756 | 107 | 776 |
| Ophthalmoscope | S. A. Rhodes | 725,483 | Apr. 14 | 1976 | 446 | 103 | 1603 |
| Ophthalmoscope | H. L. De Zeng | 738,887 | Sept. 15 | 2685 | 592 | 106 | 609 |
| Optical apparatus | E. W. Beebe | 721,773 | Mar. 3 | 199 | 46 | 103 | 43 |
| Optical illusions. Device for producing | H. A. Gage | 747,910 | Dec. 22 | 4804 | 1086 | 107 | 2213 |
| Optical instrument | E. L. Hubbard | 737,844 | Sept. 1 | 557 | 121 | 106 | 124 |
| Optical measuring instruments. Cross-wire for | K. Hein | 730,016 | June 2 | 910 | 202, 203 | 104 | 1313 |
| Optical projection apparatus | J. Szczepanik | 733,090 | July 7 | 699 | 170, 171 | 105 | 149 |
| Optometer | E. F. Waits | 718,293 | Jan. 13 | 1141 | 320 | 102 | 326 |
| Optometer | A. J. Shellman | 746,394 | Dec. 8 | 1980 | 452 | 107 | 1542 |
| Order-holder | F. M. Turck | 719,393 | Jan. 27 | 3561 | 795 | 102 | 799 |
| Order-indicator | H. S. Reynolds | 743,397 | Nov. 3 | 1148 | 243 | 107 | 243 |
| Ordnance | O. Lauber and F. Stock | 718,004 | Jan. 6 | 920 | 205 | 102 | 198 |
| Ordnance | W. H. Bevans | 742,825 | Nov. 3 | 15 | 3 | 107 | 6 |
| Ordnance | A. T. Dawson and G. T. Buckham | 743,466 | Nov. 10 | 1350 | 276 | 107 | 304 |
| Ordnance. Breech-loading | W. H. Bevans | 735,934 | Aug. 11 | 1718 | 367 | 105 | 1366 |
| Ordnance breech mechanism | C. Holmström and A. E. Mascall | 734,416 | July 21 | 3172 | 745, 746 | 105 | 704 |
| Ordnance. Constructing and assembling the parts of heavy | A. H. Emery | 727,768 | May 12 | 1801 | 403 | 104 | 404 |
| Ordnance construction | J. Schinneller | 734,965 | July 28 | 4208 | 978 | 105 | 934 |
| Ordnance. Extractor for breech-loading | J. F. Meigs and L. N. D. Mixsell | 718,719 | Jan. 20 | 2288 | 504, 505 | 102 | 517 |

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| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Ordnance firing attachment | G. Gerdom | 731,403 | June 16 | 3446 | 770 | 104 | 1876 |
| Ordnance. Gas-check pad for breech-loading | G. Gerdom | 732,541 | June 30 | 5645 | 1251 | 104 | 2363 |
| Ordnance. Semi-automatic breech-loading | W. H. Bevans | 732,259 | June 30 | 5099 | 1134, 1135 | 104 | 2250 |
| Ordnance sighting and firing apparatus | H. W. Jones | 743,881 | Nov. 10 | 2110 | 450, 451, 452 | 107 | 465 |
| Ordnance sighting apparatus | R. Barnes | 734,395 | July 21 | 3142 | 738 | 105 | 698 |
| Ordnance sighting attachment | T. Ghenea | 745,177 | Nov. 24 | 4621 | 1002 | 107 | 1028 |
| Ore, &c. Apparatus for handling | F. K. Hoover and A. J. Mason | 733,647 | July 14 | 1692 | 401, 402 | 105 | 374 |
| Ore-bins. Delivery mechanism for | J. W. Seaver | 738,076 | Sept. 1 | 1013 | 226, 227 | 106 | 220 |
| Ore-buckets. Automatic dumping device for | R. Nye | 735,571 | Aug. 4 | 1039 | 221 | 105 | 1201 |
| Ore-classifier | J. Klein | 727,974 | May 12 | 2181 | 486 | 104 | 483 |
| Ore-classifier. Rotary | J. Klein | 727,973 | May 12 | 2179 | 485 | 104 | 482 |
| Ore-concentrating-table launder | J. O. Bardill | 720,774 | Feb. 17 | 2532 | 584 | 102 | 1386 |
| Ore-concentrating tables. Head-motion for | L. Searing | 734,758 | July 28 | 3828 | 892 | 105 | 854 |
| Ore-concentrator | F. L. Bartlett | 718,970 | Jan. 27 | 2756 | 616 | 102 | 629 |
| Ore-concentrator | C. Brown | 719,181 | Jan. 27 | 3160 | 703 | 102 | 712 |
| Ore-concentrator | A. R. Wilfley | 719,401 | Jan. 27 | 3577 | 799 | 102 | 802 |
| Ore-concentrator | J. H. Michelsen and M. L. Borglum. | 721,591 | Feb. 24 | 4100 | 933 | 102 | 1738 |
| Ore-concentrator | J. B. Arthur | 722,933 | Mar. 17 | 2389 | 534, 535 | 103 | 537 |
| Ore-concentrator | F. W. Harlow | 723,865 | Mar. 31 | 4107 | 927 | 103 | 921 |
| Ore-concentrator | E. B. Rogers and F. P. Hanson | 732,319 | June 30 | 5202 | 1156 | 104 | 2271 |
| Ore-concentrator | C. A. Bonner and E. E. Euchenhofer. | 737,326 | Aug. 25 | 4290 | 953 | 105 | 1945 |
| Ore-concentrator | J. W. Pinder | 744,229 | Nov. 17 | 2839 | 607 | 107 | 635 |
| Ore-concentrator | E. W. Keeler | 745,860 | Dec. 1 | 1009 | 227, 228 | 107 | 1314 |
| Ore concentrator and amalgamator. Combined | D. W. Almond | 739,971 | Sept. 29 | 4692 | 1055 | 106 | 1070 |
| Ore-concentrator. Centrifugal | P. H. Shue | 723,932 | Mar. 31 | 4245 | 954, 955 | 103 | 951 |
| Ore-concentrator driving mechanism | M. S. Levé | 740,027 | Sept. 29 | 4813 | 1079 | 106 | 1097 |
| Ore-concentrator. Dry | H. M. Sutton, W. L. and E. G. Steele. | 747,265 | Dec. 15 | 3606 | 814, 815 | 107 | 1926 |
| Ore concentrator. Fine- | F. L. Bartlett | 744,021 | Nov. 17 | 2429 | 522 | 107 | 549 |
| Ore-conveyer | A. McCain and T. C. Grierson | 745,368 | Dec. 1 | 99 | 23 | 107 | 1122 |
| Ore-crusher | J. A. Johnson | 727,958 | May 12 | 2158 | 481 | 104 | 479 |
| Ore-crusher. Assayer's | A. C. Calkins | 735,942 | Aug. 11 | 1731 | 369 | 105 | 1369 |
| Ore-crushing machine | H. Yarnell | 745,710 | Dec. 1 | 714 | 163 | 107 | 1250 |
| Ore-crushing mill | A. B. Mouck | 743,014 | Nov. 3 | 380 | 81, 82 | 107 | 80 |
| Ore dearsenicating and amalgamating apparatus | T. H. Hicks | 741,338 | Oct. 13 | 1819 | 402, 403 | 106 | 1655 |
| Ore-discharge for jig-tanks | G. T. Cooley | 720,564 | Feb. 17 | 2145 | 496, 497 | 102 | 1307 |
| Ore-dumping apparatus | N. A. H. Salomonson | 736,882 | Aug. 18 | 3465 | 768 | 105 | 1752 |
| Ore-feeder | L. R. Tulloch | 744,264 | Nov. 17 | 2899 | 620 | 107 | 648 |
| Ore-feeder feed-regulator | C. Z. Ellis | 745,169 | Nov. 24 | 4610 | 999, 1000 | 107 | 1026 |
| Ore-handling plant | G. H. Hulett | 722,425 | Mar. 10 | 1425 | 314 | 103 | 319 |
| Ore-jigger | E. J. Muller | 737,264 | Aug. 25 | 4168 | 928, 929 | 105 | 1920 |
| Ore-loader. Automatic | T. M. Park | 720,960 | Feb. 17 | 2871 | 657 | 102 | 1457 |
| Ore-milling apparatus | G. R. Tuttle | 731,634 | June 23 | 3902 | 869 | 104 | 1986 |
| Ore or coal washer | N. A. Smith | 721,103 | Feb. 17 | 3147 | 723 | 102 | 1519 |
| Ore reducing and concentrating apparatus | O. B. Dawson | 738,006 | Sept. 1 | 908 | 199 | 106 | 198 |
| Ore-roaster | F. C. Roberts | 720,969 | Feb. 17 | 2889 | 661, 662 | 102 | 1461 |
| Ore-roaster | H. M. Sutton, W. L. and E. G. Steele. | 729,008 | May 26 | 4114 | 912 | 104 | 924 |
| Ore-roasters. Rabble-arm and connecting device for central shafts in | E. A. Sjöstedt and W. M. Goodwin. | 727,008 | May 5 | 378 | 79 | 104 | 82 |
| Ore roasting and smelting furnace | A. W. Catton | 726,861 | May 5 | 49 | 12 | 104 | 13 |
| Ore-roasting furnace | G. F. Rendall | 724,942 | Apr. 7 | 959 | 221 | 103 | 1374 |
| Ore-roasting furnace | T. Edwards | 725,056 | Apr. 14 | 1180 | 267, 268 | 103 | 1437 |
| Ore-roasting furnace | J. B. F. Herreshoff | 729,170 | May 26 | 4396 | 970 | 104 | 981 |
| Ore-roasting furnace | E. Swain and D. C. Wood | 734,104 | July 21 | 2596 | 608, 609 | 105 | 583 |
| Ore-roasting furnace | C. A. Fontaine | 739,485 | Sept. 22 | 3771 | 843, 844 | 106 | 856 |
| Ore-roasting furnace | J. Roger | 741,549 | Oct. 13 | 2229 | 496, 497 | 106 | 1741 |
| Ore-roasting furnace | A. M. Beam | 745,765 | Dec. 1 | 798 | 183, 184 | 107 | 1268 |
| Ore, rock, cement, &c. Machinery for crushing or grinding | D. Honeywood | 719,804 | Feb. 3 | 717 | 168 | 102 | 975 |
| Ore scraper supporting and conveying apparatus | G. H. Hulett | 742,436 | Oct. 27 | 3970 | 891 | 106 | 2130 |
| Ore screening, washing, and assorting apparatus | F. Hermann | 719,942 | Feb. 3 | 941 | 219, 220 | 102 | 1023 |
| Ore separating and cleaning apparatus | F. E. Parker | 747,214 | Dec. 15 | 3509 | 796 | 107 | 1906 |
| Ore separating and concentrating apparatus | F. E. Parker | 727,997 | May 12 | 2219 | 494, 495 | 104 | 491 |
| Ore, &c. Separating-machine for | D. S. Decker | 731,438 | June 23 | 3526 | 786 | 104 | 1911 |
| Ore separator | R. B. Emmons and N. Miller | 720,338 | Feb. 10 | 1715 | 389, 390 | 102 | 1202 |
| Ore-separator | H. G. Johnson and M. S. Howard | 724,705 | Apr. 7 | 537 | 127, 128 | 103 | 1283 |
| Ore-separator | J. W. Wolfe | 725,609 | Apr. 14 | 2201 | 497, 498 | 103 | 1653 |
| Ore-separator | T. J. Reid | 731,815 | June 23 | 4227 | 942 | 104 | 2054 |
| Ore-separator | C. F. Wheelock | 734,641 | July 28 | 3583 | 838 | 105 | 806 |
| Ore-separator | O. F. Pira and C. F. Salomonson | 735,813 | Aug. 11 | 1485 | 319 | 105 | 1315 |
| Ore-separator | C. F. Lancaster | 738,331 | Sept. 8 | 1598 | 347 | 106 | 360 |

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| Invention. | Name. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|---|
| | | | | Spec. | Dr'g. | Vol. | Page. |
| Ore-separator | J. W. E. Allen | 743,413 | Nov. 10 | 1214 | 251 | 107 | 274 |
| Ore-separator. Centrifugal | G. Land | 726,948 | May 5 | 219 | 51 | 104 | 48 |
| Ore separator. Dry- | R. E. and E. Waugh | 719,397 | Jan. 27 | 3566 | 796<br>797 | 102 | 800 |
| Ore-separator. Magnetic | K. V. A. Eriksson | 731,443 | June 23 | 3534 | 787<br>788 | 104 | 1913 |
| Ore sizer or classifier | W. B. Gilmore | 738,743 | Sept. 8 | 2394 | 526<br>527 | 106 | 528 |
| Ore-slime settling and classifying apparatus | F. W. Sherman | 743,201 | Nov. 3 | 737 | 161<br>162 | 107 | 154 |
| Ore-treating apparatus | Z. B. Stuart | 719,273 | Jan. 27 | 3323 | 744 | 102 | 747 |
| Ore-treating apparatus | S. C. C. Currie | 725,321 | Apr. 14 | 1670 | 377 | 103 | 1538 |
| Ore-treating apparatus | H. Hirsching | 727,362 | May 5 | 1007 | 218<br>219 | 104 | 217 |
| Ore-treating apparatus | T. L. Rankin | 727,441 | May 5 | 1152 | 252<br>253<br>254 | 104 | 249 |
| Ore-treating apparatus | W. H. Adams, Jr | 745,472 | Dec. 1 | 307 | 73 | 107 | 1165 |
| Ore-treating mechanism | G. M. Rice | 748,528 | Dec. 29 | 5984 | 1357 | 107 | 2492 |
| Ore-treating process | B. T. Nichols | 726,802 | Apr. 28 | 4442 | 1003 | 103 | 2142 |
| Ore treatment. Machine for mixing and storing liquids and gases for | S. C. C. Currie | 719,756 | Feb. 3 | 629 | 142 | 102 | 954 |
| Ore-washer | C. Carlson | 733,944 | July 21 | 2261 | 532 | 105 | 510 |
| Ore-washing pan | J. A. Creasy | 728,677 | May 19 | 3510 | 781 | 104 | 784 |
| Ores, &c. Apparatus for crushing and sorting | E. Ferraris | 726,521 | Apr. 28 | 3916 | 885 | 103 | 2035 |
| Ores. Apparatus for treatment of | O. Daube | 746,928 | Dec. 15 | 2975 | 684 | 107 | 1786 |
| Ores. Chlorinating and brominating | J. D. Hawkins and H. W. Fox | 727,626 | May 12 | 1499 | ------ | 104 | 340 |
| Ores, &c. Classifier for crushed | R. W. Watson | 743,120 | Nov. 3 | 576 | 124 | 107 | 121 |
| Ores. Concentrating | H. F. Campbell | 723,362 | Mar. 24 | 3191 | 718 | 103 | 715 |
| Ores. Concentrating | H. F. Campbell | 723,363 | Mar. 24 | 3195 | ------ | 103 | 715 |
| Ores containing gold, silver, copper, nickel, and zinc. Treatment of | H. Hirsching | 735,512 | Aug. 4 | 918 | ------ | 105 | 1177 |
| Ores. Crushing and stamping | J. C. Anderson | 743,799 | Nov. 10 | 1963 | 416<br>417 | 107 | 435 |
| Ores. Desulfurizing sulfid | A. D. Carmichael. (Reissue) | 12,105 | Apr. 21 | 3337 | ------ | 103 | 1903 |
| Ores. Disintegrating | C. T. Snedekor | 739,116 | Sept. 15 | 3088 | ------ | 106 | 691 |
| Ores. Leaching | G. E. Thede | 732,605 | June 30 | 5760 | ------ | 104 | 2390 |
| Ores. Means for treating | F. D. Gross | 728,908 | May 26 | 3933 | 873<br>874 | 104 | 886 |
| Ores of the rare metals. Treating rebellious | W. F. Downs | 726,884 | May 5 | 102 | ------ | 104 | 25 |
| Ores or for other uses. Apparatus for sizing | S. R. Swain | 731,522 | June 23 | 3683 | 821<br>822 | 104 | 1944 |
| Ores or tailings with solutions of alkaline cyanids. Leaching | C. W. Merrill | 731,590 | June 23 | 3818 | ------ | 104 | 1969 |
| Ores. Recovering values from silicious | R. Baggaley | 746,260 | Dec. 8 | 1741 | 395 | 107 | 1491 |
| Ores. Reducing | S. C. C. Currie | 718,099 | Jan. 13 | 1088 | ------ | 102 | 249 |
| Ores. Reducing | M. Ruthenburg | 720,490 | Feb. 10 | 1972 | 451 | 102 | 1255 |
| Ores. Roasting | H. M. Sutton, W. L. and E. G. Steele | 729,009 | May 26 | 4118 | 913 | 104 | 925 |
| Ores. Treating | J. T. Jones | 717,864 | Jan. 6 | 669 | 148 | 102 | 143 |
| Ores. Treating | F. R. Carpenter | 722,809 | Mar. 17 | 2172 | ------ | 103 | 494 |
| Ores. Treating | P. A. Knappe | 723,212 | Mar. 17 | 2896 | 649 | 103 | 644 |
| Ores. Treating | E. D. Kendall | 730,462 | June 9 | 1723 | ------ | 104 | 1497 |
| Ores. Treating | F. Laist | 739,011 | Sept. 15 | 2882 | 640 | 106 | 651 |
| Ores. Treating | J. Herman | 740,014 | Sept. 29 | 4774 | ------ | 106 | 1087 |
| Ores. Treating | C. E. Baker and A. W. Burwell | 741,439 | Oct. 13 | 1994 | 442 | 106 | 1691 |
| Ores. Treating argillaceous and alkaline | C. H. Gage | 719,207 | Jan. 27 | 3203 | 714 | 102 | 721 |
| Ores. Treating rebellious or refractory | A. M. Beam | 737,059 | Aug. 25 | 3785 | ------ | 105 | 1840 |
| Ores. Treating refractory | R. McKnight and M. Satarasky | 727,184 | May 5 | 685 | ------ | 104 | 148 |
| Ores. Treating refractory | E. C. Pohlé and S. Croasdale | 741,712 | Oct. 20 | 2557 | ------ | 106 | 1826 |
| Ores with solvents. Apparatus for the treatment of | H. T. Durant | 736,078 | Aug. 11 | 1993 | 423 | 105 | 1426 |
| Organ | W. E. Haskell | 734,261 | July 21 | 2893 | 676<br>677 | 105 | 647 |
| Organ | O. H. Arno and J. C. Hagey | 736,054 | Aug. 11 | 1939 | 413<br>414<br>415<br>416 | 105 | 1414 |
| Organ | J. C. Hagey and O. H. Arno | 746,829 | Dec. 15 | 2768 | 638<br>639<br>640 | 107 | 1738 |
| Organ and pneumatic-action therefor. Self-playing | J. E. Prante | 733,917 | July 14 | 2209 | 518 | 105 | 480 |
| Organ-bellows. Electrically-controlled | E. R. Whitney | 718,182 | Jan. 13 | 1226 | 271 | 102 | 279 |
| Organ motor. Self-playing | C. Warren | 737,180 | Aug. 25 | 4002 | 887<br>888 | 105 | 1885 |
| Organ octave-coupler. Reed | S. Jenkinson | 728,721 | May 19 | 3591 | 797 | 104 | 802 |
| Organ-pedal | E. M. Hughes | 748,378 | Dec. 29 | 5089 | 1298 | 107 | 2427 |
| Organ pneumatic action and coupler | F. Campkin | 741,884 | Oct. 20 | 2864 | 639 | 106 | 1891 |
| Organ. Reed | R. Essig | 731,444 | June 23 | 3536 | 788 | 104 | 1914 |
| Organ stop-actions. Adjustable thumb-board for combination | C. Stollewerk | 731,080 | June 16 | 2842 | 631 | 104 | 1755 |
| Organs. Liquid-pressure engines for blowing | H. Swanton | 729,238 | May 26 | 4521 | 996 | 104 | 1008 |
| Ornament. Pendent | H. S. Kerr | 726,698 | Apr. 28 | 4247 | 960<br>961 | 103 | 2102 |
| Ornamental ring | L. E. Sadler | 728,501 | May 19 | 3161 | 709 | 104 | 710 |
| Ornamenting articles. Device for | J. Kirschbaum | 741,915 | Oct. 20 | 2936 | 655 | 106 | 1905 |
| Oscillating engine | T. Barrow | 721,932 | Mar. 3 | 526 | 115 | 103 | 117 |
| Oscillator | H. Shoemaker | 717,774 | Jan. 6 | 497 | 111 | 102 | 107 |
| Osmose apparatus | J. L. Kubin | 736,745 | Aug. 18 | 3202 | 708 | 105 | 1697 |
| Outdoor seat | J. T. Dawson and L. Sunderland | 728,209 | May 19 | 2601 | 581 | 104 | 593 |
| Outdoor seat | R. Billington, Jr | 742,152 | Oct. 27 | 3445 | 767<br>768 | 106 | 2023 |
| Outlet-boxes. Supplemental base for | G. L. Martin | 737,946 | Sept. 1 | 777 | 170 | 106 | 170 |
| Oven | G. J. Schmid | 726,828 | Apr. 28 | 4494 | 1014 | 103 | 2153 |
| Oven | J. E. Smith | 734,245 | July 21 | 2855 | 669 | 105 | 638 |
| Oven | G. Ott | 741,704 | Oct. 20 | 2542 | 567 | 106 | 1824 |

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| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Oven and dust-collector. Combined hot-blast | H. W. Edwards | 734,523 | July 28 | 3367 | 787<br>788 | 105 | 760 |
| Oven. Bake- | C. P. Dowd and J. H. Coleman | 719,651 | Feb. 3 | 427 | 97 | 102 | 911 |
| Oven. Bake- | W. Frohne | 725,066 | Apr. 14 | 1198 | 272 | 103 | 1440 |
| Oven. Bake- | M. Hennings | 742,424 | Oct. 27 | 3954 | 887 | 106 | 2127 |
| Oven. Bake- | H. J. Wade | 746,611 | Dec. 8 | 2350 | 539<br>540 | 107 | 1625 |
| Oven. Baker's | C. F. Igelmann | 717,858 | Jan. 6 | 659 | 146 | 102 | 140 |
| Oven. Baker's | C. Bosemer | 723,233 | Mar. 24 | 2942 | 659 | 103 | 667 |
| Oven. Baker's | J. M. Fischer | 723,664 | Mar. 24 | 3734 | 837 | 103 | 826 |
| Oven. Baker's | W. Kosicky | 737,544 | May 5 | 1335 | 297 | 104 | 287 |
| Oven. Baker's | G. H. McCausland | 730,681 | June 9 | 2111 | 469 | 104 | 1582 |
| Oven. Baker's | G. S. Baker | 741,757 | Oct. 20 | 2639 | 589<br>590 | 106 | 1843 |
| Oven. Baker's | W. D. Muir | 742,048 | Oct. 20 | 3209 | 717<br>718 | 106 | 1961 |
| Oven. Baker's | C. F. Igelmann | 742,663 | Oct. 27 | 4385 | 988<br>989 | 106 | 2220 |
| Oven. Baker's | C. F. Igelmann | 747,887 | Dec. 22 | 4759 | 1075<br>1076 | 107 | 2204 |
| Oven. Baker's reel | C. F. Igelmann | 742,664 | Oct. 27 | 4388 | 989<br>990 | 106 | 2220 |
| Oven. Baking- | P. E. Laskowski | 718,260 | Jan. 13 | 1368 | 304 | 102 | 310 |
| Oven-deflector | M. Flannery | 733,474 | July 14 | 1395 | 329 | 105 | 313 |
| Oven-door | E. A. C. Petersen | 736,295 | Aug. 11 | 2360 | 512<br>513 | 105 | 1506 |
| Oven-door. Baker's | E. A. C. Petersen | 730,795 | June 9 | 2291 | 509 | 104 | 1620 |
| Oven-feeding means | A. C. Bourdeau | 746,665 | Dec. 15 | 2475 | 565 | 107 | 1673 |
| Oven. Knockdown | M. Flannery | 735,488 | Aug. 4 | 871 | 185<br>186 | 105 | 1166 |
| Oven. Mechanical | P. F. Carroll | 740,395 | Oct. 6 | 19 | 5 | 106 | 1248 |
| Oven. Oil-burner | H. G. Tucker | 744,945 | Nov. 24 | 4121 | 887 | 107 | 925 |
| Oven. Portable | F. Listerman | 737,163 | May 5 | 654 | 140 | 104 | 141 |
| Oven reflector attachment | W. C. Trowbridge | 746,203 | Dec. 8 | 1639 | 364 | 107 | 1470 |
| Oven. Roasting- | I. B. Galbreath | 730,757 | June 9 | 2232 | 496 | 104 | 1609 |
| Oven-ventilator | J. F. Ferry | 741,474 | Oct. 13 | 2088 | 463 | 106 | 1712 |
| Ovens with crude petroleum. Mechanical device for heating bakers' | C. E. Warren | 737,238 | May 5 | 782 | 167 | 104 | 169 |
| Overalls or nether garment | N. Ravich | 734,204 | Mar. 31 | 4800 | 1076 | 103 | 1062 |
| Overcheck crown-piece attachment | W. M Rheubottom | 728,979 | May 26 | 4058 | 900 | 104 | 912 |
| Overflow-alarm | G. H. Rowland | 730,572 | June 9 | 1918 | 427 | 104 | 1539 |
| Overflow-alarm | W. J. Bishop | 741,759 | Oct. 20 | 2644 | 591<br>592 | 106 | 1843 |
| Overflow-alarm. Electric automatic | R. J. Walker | 730,181 | June 2 | 1174 | 263 | 104 | 1367 |
| Overflow-alarm for fluid-receptacles | B. P. Fortin | 731,508 | Feb. 24 | 3929 | 894 | 102 | 1699 |
| Overhead switch | W. Louden | 744,372 | Nov. 17 | 3094 | 664 | 107 | 691 |
| Overseaming and blindstitching machine | I. P. Davis | 741,465 | Oct. 13 | 2044 | 454 | 106 | 1701 |
| Overseaming-machine | J. M. Merrow | 730,944 | June 16 | 2577 | 574 | 104 | 1700 |
| Overseaming-machine | W. H. Stedman | 734,987 | July 28 | 4255 | 989 | 105 | 943 |
| Overseaming-machine | C. G. Kramer | 739,550 | Sept. 22 | 3870 | 868 | 106 | 876 |
| Overshoe | A. E. Roberts | 736,156 | Aug. 11 | 2118 | 455 | 105 | 1451 |
| Overshoe | A. E. Roberts | 744,798 | Nov. 24 | 3869 | 833 | 107 | 873 |
| Overshoe-fastener | S. W. Wilt | 732,069 | Mar. 3 | 760 | 170 | 103 | 164 |
| Overshoe-fastener | T. J. Echols | 747,390 | Dec. 22 | 3845 | 865 | 107 | 1996 |
| Overshoe-fastening device | J. M. March | 742,884 | Nov. 3 | 111 | 26 | 107 | 25 |
| Overweight-register | J. Roller | 723,733 | Mar. 24 | 3856 | 867 | 103 | 852 |
| Oxidizing furnace. Metal- | J. W. H. James | 728,109 | May 12 | 2415 | 538 | 104 | 532 |
| Oxidizing organic compounds | M. Moest | 739,502 | May 26 | 4959 | ------ | 104 | 1101 |
| Oxidizing textile material. Apparatus for | C. E. Wild | 726,207 | Apr. 21 | 3275 | 744 | 103 | 1891 |
| Oxygen-generating apparatus. Portable | A. Rosenberg | 739,723 | Sept. 22 | 4204 | 940<br>941 | 106 | 949 |
| Oxygen into ozone. Apparatus for converting | F. S. Blackmarr and J. L. Willford | 743,432 | Nov. 10 | 1265 | 258<br>259<br>260 | 107 | 285 |
| Oxygen into ozone. Apparatus for converting | F. S. Blackmarr and J. L. Willford | 743,433 | Nov. 10 | 1268 | 260 | 107 | 286 |
| Oxygen into ozone. Converting | F. S. Blackmarr and J. L. Willford | 743,431 | Nov. 10 | 1264 | 258 | 107 | 285 |
| Oxyhydrocarbon-burner | C. W. Turner | 746,409 | Dec. 8 | 2004 | 457 | 107 | 1547 |
| Ozonator | J. Miller and F. M. Ashley | 742,341 | Oct. 27 | 3804 | 852 | 106 | 2098 |
| Ozone-generator | G. L. Curtis | 727,101 | May 5 | 539 | 115<br>116 | 104 | 117 |
| Ozonizer | M. Otto | 744,096 | Nov. 17 | 2569 | 549 | 107 | 577 |
| Ozonizers. Arrangement for the support and cooling of statical | M. Otto | 733,674 | July 14 | 1738 | 410<br>411 | 105 | 383 |
| Package | R. P. Beatty | 732,332 | June 30 | 5226 | 1160 | 104 | 2276 |
| Package | W. H. Bache | 742,558 | Oct. 27 | 4197 | 945 | 106 | 2178 |
| Package-carrier | E. F. Priddat | 736,631 | Aug. 18 | 2986 | 657 | 105 | 1652 |
| Package-carrier | E. F. Priddat | 736,632 | Aug. 18 | 2987 | 657 | 105 | 1653 |
| Package-carrier handle | T. J. Soden | 743,945 | Nov. 10 | 2223 | 480 | 107 | 490 |
| Package-elevator | S. B. Peck | 744,097 | Nov. 17 | 2569 | 550 | 107 | 577 |
| Package-fastener | J. E. Wright and L. J. Edwards | 745,306 | Nov. 24 | 4865 | 1062 | 107 | 1078 |
| Package fastener and carrier | E. F. Priddat | 736,630 | Aug. 18 | 2985 | 657 | 105 | 1652 |
| Package-filling means | A. C. Bourdeau | 746,666 | Dec. 15 | 2476 | 566 | 107 | 1673 |
| Package. Merchandise- | E. C. Fitch and C. J. Olney, Jr | 721,880 | Mar. 3 | 413 | 91 | 103 | 91 |
| Package. Merchandise- | F. H. Roberts | 740,927 | Oct. 6 | 991 | 224 | 106 | 1458 |
| Package. Original | H. W. Pape | 730,960 | June 16 | 2613 | 582 | 104 | 1707 |
| Package safety-holder | E. M. Reed | 736,779 | Aug. 18 | 3270 | 722 | 105 | 1711 |
| Package. Sanitary delivery and display | W. B. Page | 742,900 | Nov. 3 | 142 | 33 | 107 | 32 |
| Package. Shipping- | J. T. Ferres | 721,384 | Mar. 31 | 5170 | 1159 | 103 | 1138 |
| Package. Shipping- | W. H. H. Stineman | 734,904 | July 28 | 4270 | 993 | 105 | 946 |
| Package. Storing and shipping | J. M. Hommel | 719,803 | Feb. 3 | 716 | 168 | 102 | 975 |
| Package-support | J. J. Lepper | 730,276 | June 9 | 1372 | 302 | 104 | 1422 |
| Package-tie | H. D. Jacobson and J. F. Trede | 732,081 | June 30 | 4738 | 1058 | 104 | 2174 |
| Package-tie | S. C. Herbert | 735,874 | Aug 11 | 1614 | 344 | 105 | 1344 |
| Package-tie fastener | F. M. Crawford | 736,499 | Aug. 18 | 2732 | 598 | 105 | 1600 |
| Package-tie. Reversible | M. S. Field | 735,232 | Aug. 4 | 384 | 74 | 105 | 1062 |
| Package-tying device | D. A. Carpenter | 726,404 | Apr. 28 | 3667 | 831 | 103 | 1988 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Package wrap and receptacle | R. R. Lawson | 745,283 | Nov. 24 | 4809 | 1049 | 107 | 1066 |
| Packages. Adjustable mouth for shipping- | C. Q. C. Leigh | 719,820 | Feb. 3 | 745 | 175 | 102 | 980 |
| Packaging apparatus | A. L. Holton | 745,847 | Dec. 1 | 986 | 221, 222 | 107 | 1309 |
| Packaging device. Liquid- | G. G. Wickson | 735,638 | Aug. 4 | 1159 | 245, 246 | 105 | 1227 |
| Packaging liquids. Means for | O. H. Castle | 720,562 | Feb. 17 | 2141 | 495, 496 | 102 | 1306 |
| Packaging-machine | G. R. Ward | 741,748 | Oct. 20 | 2615 | 581, 582, 583, 584, 585 | 106 | 1838 |
| Packaging-machine | A. Day | 744,172 | Nov. 17 | 2721 | 580, 581 | 107 | 607 |
| Packaging powdered or granular materials. Machine for | J. R. Okell | 719,251 | Jan. 27 | 3288 | 735, 736 | 102 | 739 |
| Packer | C. W. Ellis | 717,826 | Jan. 6 | 590 | 131, 132 | 102 | 127 |
| Packing | G. M. Costello | 718,607 | Jan. 20 | 2080 | 452 | 102 | 477 |
| Packing | W. Reinhold | 719,042 | Jan. 27 | 2892 | 648 | 102 | 658 |
| Packing | M. B. Barkley and C. B. Jenkins | 720,656 | Feb. 17 | 2336 | 535 | 102 | 1343 |
| Packing | C. Restein | 721,391 | Feb. 24 | 3724 | 847 | 102 | 1656 |
| Packing | O. T. Raymond | 727,839 | May 12 | 1927 | 429 | 104 | 428 |
| Packing | A. R. Dodge | 730,349 | June 9 | 1504 | 334 | 104 | 1451 |
| Packing | C. B. Rush | 731,228 | June 16 | 3113 | 690 | 104 | 1806 |
| Packing | S. Hughes and W. F. Taylor | 731,458 | June 23 | 3568 | 795 | 104 | 1920 |
| Packing | E. G. Miner | 741,808 | Oct. 20 | 2731 | 608 | 106 | 1863 |
| Packing | R. M. Shaffer | 743,666 | Nov. 10 | 1730 | 365 | 107 | 385 |
| Packing | G. R. Beamer | 747,846 | Dec. 22 | 4672 | ------ | 107 | 2184 |
| Packing and packing-case for piston-rods. Metallic | J. H. Lewis and L. G. Kunzer | 721,710 | Mar. 3 | 109 | 23 | 103 | 24 |
| Packing and packing-case. Piston-rod | J. H. Lewis and L. G. Kunzer | 724,022 | Mar. 31 | 4444 | 998 | 103 | 989 |
| Packing and storing vessel | J. C. O'Shea | 739,021 | Sept. 15 | 2899 | 643, 644 | 106 | 654 |
| Packing and transportation carrier, trunk, or the like. | G. W. Peck | 723,784 | Mar. 24 | 3942 | 889 | 103 | 870 |
| Packing apparatus. Automatic | G. W. Hannan and C. A. Robinson | 723,200 | Mar. 17 | 2878 | 644 | 103 | 640 |
| Packing-box | J. H. Rose | 725,143 | Apr. 14 | 1356 | 306 | 103 | 1472 |
| Packing-box | W. Berryman | 731,156 | June 16 | 2992 | 664 | 104 | 1783 |
| Packing-case | J. N. Hahn | 734,856 | July 28 | 4025 | 940 | 105 | 895 |
| Packing-case for tumblers, bottles, &c | J. N. Hahn | 742,022 | Oct. 20 | 3161 | 706 | 106 | 1951 |
| Packing-case sides. Machine for making | F. P. Cheney | 725,930 | Apr. 21 | 2800 | 635, 636, 637 | 103 | 1795 |
| Packing. Cylinder and piston | J. E. Douglas and G. W. Hays | 727,311 | May 5 | 911 | 198 | 104 | 196 |
| Packing device for drill-rods. &c | B. Selfridge | 723,740 | Mar. 24 | 3865 | 869 | 103 | 854 |
| Packing device. Hydraulic | A. G. Cummings | 718,701 | Jan. 20 | 2253 | 495 | 102 | 510 |
| Packing. Engine- | J. Wood and J. E. Gimson | 720,868 | Feb. 17 | 2686 | 621 | 102 | 1418 |
| Packing. Engine- | L. S. and E. B. Cushman | 721,287 | Feb. 24 | 3533 | 803 | 102 | 1617 |
| Packing for piston-rods. Metallic | J. H. Lewis and L. G. Kunzer | 721,709 | Mar. 3 | 107 | 23 | 103 | 24 |
| Packing for piston-rods. Metallic | C. A. Daniel | 729,284 | May 26 | 4605 | 1018 | 104 | 1025 |
| Packing for pistons. Metallic | E. Perks and F. Birch | 745,901 | Dec. 1 | 1087 | 243 | 107 | 1330 |
| Packing for pistons, rods, &c. Metallic | W. S. Halsey | 739,859 | Sept. 29 | 4462 | 1002 | 106 | 1022 |
| Packing for spindle-bolsters. Spring- | G. M. Burgess | 744,040 | Nov. 17 | 2458 | 528 | 107 | 554 |
| Packing for stuffing-boxes. Metallic | H. J. Gold | 735,364 | Aug. 4 | 614 | 126 | 105 | 1112 |
| Packing fragile vessels. Means for | J. N. Hahn | 747,167 | Dec. 15 | 3417 | 774 | 107 | 1887 |
| Packing. Gland- | J. Dewrance | 739,995 | Sept. 29 | 4740 | 1066 | 106 | 1080 |
| Packing. Gland for piston-rod | J. H. Lewis and L. G. Kunzer | 737,639 | Sept. 1 | 147 | 32 | 106 | 35 |
| Packing implement | J. Schlosser | 737,873 | Sept. 1 | 640 | 137 | 106 | 140 |
| Packing-joint | P. C. Traver | 739,624 | Sept. 22 | 4023 | 897 | 106 | 910 |
| Packing-machine | J. C. Thom | 723,072 | Mar. 17 | 2629 | 593 | 103 | 589 |
| Packing-machine | G. R. Wyman | 724,230 | Mar. 31 | 4853 | 1088, 1089, 1090 | 103 | 1073 |
| Packing-machine | E. Dühring | 734,224 | July 21 | 2813 | 660, 661 | 105 | 629 |
| Packing-machine feed | W. Rose | 719,374 | Jan. 27 | 3530 | 787 | 102 | 792 |
| Packing material | G. R. Hayden | 721,440 | Feb. 24 | 3812 | 867 | 102 | 1674 |
| Packing material. Hot-rivet-joint | L. Lakeberg | 735,782 | Aug. 11 | 1419 | 304 | 105 | 1301 |
| Packing mechanism | J. A. Luethy | 734,344 | July 21 | 3048 | 718 | 105 | 679 |
| Packing mechanism. Metallic | O. Isherwood | 734,559 | July 28 | 3438 | 802 | 105 | 776 |
| Packing. Metallic | G. C. Walters | 722,269 | Mar. 10 | 1156 | 255 | 103 | 261 |
| Packing. Metallic | E. James | 725,253 | Apr. 14 | 1553 | 352 | 103 | 1514 |
| Packing. Metallic | G. D. Rollins | 725,368 | Apr. 14 | 1753 | 394 | 103 | 1555 |
| Packing. Metallic | W. G. Watson | 726,808 | Apr. 28 | 4457 | 1006 | 103 | 2146 |
| Packing. Metallic | R. D. Smith | 729,001 | May 26 | 4096 | 909 | 104 | 921 |
| Packing. Metallic | W. F. Somes | 729,904 | June 2 | 699 | 155 | 104 | 1271 |
| Packing. Metallic | E. M. Hedley | 735,372 | Aug. 4 | 631 | 131 | 105 | 1115 |
| Packing. Metallic | E. W. Tucker | 738,129 | Sept. 1 | 1135 | 252, 253 | 106 | 246 |
| Packing. Metallic | W. R. Edwards, E. Wisch, and H. N. Breneman. | 743,154 | Nov. 3 | 647 | 139, 140 | 107 | 135 |
| Packing. Metallic-waste | A. L. Cole | 733,156 | July 7 | 806 | 196 | 105 | 170 |
| Packing or shipping box | P. A. Reno | 744,405 | Nov. 17 | 3159 | 678 | 107 | 706 |
| Packing. Pipe-joint | E. G. Wright | 728,065 | May 12 | 2341 | 521 | 104 | 516 |
| Packing. Piston- | J. T. Wilson | 719,630 | Feb. 3 | 392 | 89 | 102 | 904 |
| Packing. Piston- | E. F. F. Roberts | 739,721 | Sept. 22 | 4201 | 939 | 106 | 948 |
| Packing. Piston- | M. Montgomery | 741,056 | Oct. 13 | 1238 | 280 | 106 | 1531 |
| Packing. Piston- | G. B. Fraley | 742,784 | Oct. 27 | 4575 | 1037 | 106 | 2261 |
| Packing. Piston-head | J. R. Seemer | 730,168 | June 2 | 1154 | 260 | 104 | 1362 |
| Packing. Piston or rod | H. Jandin | 725,254 | Apr. 14 | 1554 | 352 | 103 | 1514 |
| Packing. Piston-rod | E. W. Tucker | 723,220 | Mar. 17 | 2907 | 651, 652 | 103 | 646 |
| Packing. Piston-rod | G. P. Kline | 723,681 | Mar. 24 | 3757 | 844 | 103 | 830 |
| Packing. Piston-rod | G. F. Allen | 724,074 | Mar. 31 | 4535 | 1020 | 103 | 1009 |
| Packing. Piston-rod | G. A. Harder and J. La Riviere | 724,698 | Apr. 7 | 519 | 123 | 103 | 1280 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|---|
| | | | | Spec. | Drg. | Vol. | Page. |
| Packing. Piston-rod | S. J. Maddox | 730,381 | June 9 | 1560 | 347 | 104 | 1462 |
| Packing. Piston-rod | C. P. Fogh | 743,705 | Nov. 10 | 1791 | 378 | 107 | 399 |
| Packing. Piston-rod | M. Montgomery | 745,643 | Dec. 1 | 599 | 139 | 107 | 1226 |
| Packing. Piston-rod | G. M. Ried | 745,908 | Dec. 1 | 1096 | 245 | 107 | 1332 |
| Packing. Piston-rod and valve-stem | J. Janda | 733,588 | July 14 | 1595 | 380 | 105 | 355 |
| Packing. Piston-rod metallic | W. Foden | 746,810 | Dec. 15 | 2727 | 628 | 107 | 1729 |
| Packing-press | N. L. Elliott | 743,844 | Nov. 10 | 2045 | 434<br>435 | 107 | 452 |
| Packing-ring | T. F. Meehan | 743,179 | Nov. 3 | 691 | 152 | 107 | 145 |
| Packing-ring box | L. H. Martell | 722,428 | Mar. 10 | 1429 | 316 | 103 | 320 |
| Packing-ring for piston-rods, &c | L. H. Martell | 720,597 | Feb. 17 | 2208 | 512 | 102 | 1319 |
| Packing-ring for stuffing-boxes. Automatic lubricating | G. Huhn | 735,260 | Aug. 4 | 435 | 85, 86 | 105 | 1073 |
| Packing-ring. Piston | H. Lemp | 733,665 | July 14 | 1723 | 407 | 105 | 380 |
| Packing-ring. Piston | T. Officer | 742,097 | Oct. 20 | 3345 | 746 | 106 | 1987 |
| Packing-rings. Machine for making | A. B. Norris | 718,863 | Jan. 20 | 2548 | 567<br>568 | 102 | 572 |
| Packing. Rod- | T. W. Mitchell | 728,124 | May 12 | 2448 | 545 | 104 | 539 |
| Packing. Rod- | J. S. Klein | 730,925 | June 16 | 2547 | 567 | 104 | 1693 |
| Packing. Rod- | H. A. Howe | 731,304 | June 16 | 3269 | 726 | 104 | 1840 |
| Packing. Rod- | G. W. Schultz | 736,303 | Aug. 11 | 2371 | 515 | 105 | 1509 |
| Packing. Rod- | T. Kinkade | 738,043 | Sept. 1 | 959 | 213 | 106 | 209 |
| Packing. Rod- | C. B. Risley | 745,459 | Dec. 1 | 285 | 69 | 107 | 1160 |
| Packing rods, &c. Device for | H. Lentz | 726,953 | May 5 | 232 | 55 | 104 | 50 |
| Packing. Semimetallic | A. L. Cole | 723,831 | Mar. 31 | 4037 | 911 | 103 | 906 |
| Packing. Stuffing-box | L. Hauslehner | 718,345 | Jan. 13 | 1534 | 340 | 102 | 344 |
| Packing. Stuffing-box | K. Arnold | 727,055 | May 5 | 458 | 96 | 104 | 100 |
| Packing. Stuffing-box | J. McCallum | 732,579 | June 30 | 5723 | 1270 | 104 | 2381 |
| Packing throttle-valves. Device for | J. D. Sturtz | 727,325 | May 5 | 761 | 163 | 104 | 164 |
| Packing-tube | G. H. Brownell | 722,204 | Mar. 10 | 1024 | 226 | 103 | 232 |
| Packing-tube | E. A. McMillin | 730,387 | June 9 | 1571 | 350 | 104 | 1464 |
| Packing. Valve-stem | C. F. McComas | 737,447 | Aug. 25 | 4518 | 1[illegible] | 105 | 1996 |
| Packing. Valve-stem | J. H. Hooper | 743,507 | Nov. 10 | 1430 | [illegible] | [illegible] | 322 |
| Pad:<br>*See* Belt-pad. Blotting-pad. Button-pad. Chair-pad. Copy-pad. Finger-pad. Foot-pad. Harness-pad. Heat-retaining pad. Heating-pad. Heel-pad. Hoof-pad. Horseshoe-pad. Ice-pad. Inking-pad. Knee-pad. Manifolding-pad. Sales-pad. Sandpapering-machine pad. Shoulder-pad. Sketching-pad. Surgical pad. Sweat-pad. Telephone-pad. Truss-pad. Wax-pad. | | | | | | | |
| Pad-holder | J. Powers | 748,006 | Dec. 29 | 5020 | 1133 | 107 | 2283 |
| Pad-moistener and letter-copying press. Combined | W. N. Phillimore | 727,834 | May 12 | 1917 | 427 | 104 | 426 |
| Pad or blank holding and feeding device | R. B. Friend | 730,451 | June 9 | 1696 | 380 | 104 | 1491 |
| Pad-support | J. Powers | 748,005 | Dec. 29 | 5019 | 1133 | 107 | 2282 |
| Paddle-wheel | J. Rourke | 728,620 | May 19 | 3409 | 754 | 104 | 764 |
| Paddle-wheel | F. Exline | 735,958 | Aug. 11 | 1758 | 377 | 105 | 1375 |
| Paddle-wheel | G. L. Hamling | 744,539 | Nov. 17 | 3394 | 731 | 107 | 755 |
| Paddle-wheel | L. Vojácek | 745,745 | Dec. 1 | 768 | 176 | 107 | 1262 |
| Padlock | W. K. Palmer | 718,789 | Jan. 20 | 2417 | 536 | 102 | 544 |
| Padlock | C. R. Snyder | 719,054 | Jan. 27 | 2910 | 652 | 102 | 662 |
| Padlock | F. Soley | 723,059 | Mar. 17 | 2601 | 586 | 103 | 582 |
| Padlock | J. Roche | 723,549 | Mar. 24 | 3534 | 791 | 103 | 784 |
| Padlock | J. Roche | 723,550 | Mar. 24 | 3536 | 791 | 103 | 785 |
| Padlock | F. Soley | 727,705 | May 12 | 1683 | 376 | 104 | 380 |
| Padlock | A. A. Page | 729,792 | June 2 | 493 | 109 | 104 | 1229 |
| Padlock | N. W. Crandall | 734,119 | July 21 | 2623 | 617 | 105 | 588 |
| Padlock | E. T. Fraim | 746,945 | Dec. 15 | 3010 | 691 | 107 | 1793 |
| Padlock-case | J. Roche | 723,551 | Mar. 24 | 3538 | 792 | 103 | 785 |
| Padlock. Combination- | J. Nielander | 718,146 | Jan. 13 | 1164 | 259 | 102 | 266 |
| Padlock. Permutation- | T. King | 717,867 | Jan. 6 | 673 | 149 | 102 | 144 |
| Padlock. Permutation- | T. A. Dinsmore | 733,820 | July 14 | 2019 | 476 | 105 | 441 |
| Padlock. Permutation- | C. O. Tooker | 746,202 | Dec. 8 | 1636 | 364 | 107 | 1470 |
| Pail and shipping-can. Minnow- | E. C. Bourne | 724,539 | Apr. 7 | 220 | 54 | 103 | 1217 |
| Pail. Dinner- | E. Frank | 723,854 | Mar. 31 | 4087 | 922 | 103 | 917 |
| Pail-ear | J. Easker | 733,470 | July 14 | 1391 | 327 | 105 | 311 |
| Pail fastening and sealing device | H. G. Cordley | 745,418 | Dec. 1 | 199 | 45 | 107 | 1141 |
| Pail-forming machine | A. J. Fogg | 735,233 | Aug. 4 | 386 | 75 | 105 | 1063 |
| Pail-handle. Detachable | A. R. Ayson | 728,072 | May 12 | 2355 | 524 | 104 | 519 |
| Pail separator. Candy- | F. B. Davidson | 735,226 | Apr. 14 | 1506 | 343 | 103 | 1504 |
| Pail-spout. Removable | C. P. Capron | 744,999 | Nov. 24 | 4224 | 915 | 107 | 946 |
| Pails, &c. Attachment for | F. P. Mahon | 720,041 | Feb. 10 | 1160 | 265 | 102 | 1086 |
| Paint and making same | J. E. Kollinger | 738,456 | Sept. 8 | 1840 | ..... | 106 | 410 |
| Paint and producing same | C. Adams | 730,506 | June 9 | 1798 | ..... | 104 | 1513 |
| Paint and producing same. Water- | S. S. and B. Ruston | 732,895 | July 7 | 351 | ..... | 105 | 77 |
| Paint and producing same. Water- | S. S. and B. Ruston | 732,896 | July 7 | 352 | ..... | 105 | 77 |
| Paint and varnish. Composition for removing | G. Osborn | 744,095 | Nov. 17 | 2568 | ..... | 107 | 577 |
| Paint and varnish from woodwork. Compound for removing | O. P. Catherman | 721,150 | Feb. 24 | 3270 | ..... | 102 | 1564 |
| Paint-box | G. H. Williams | 736,185 | Aug. 11 | 2166 | 465 | 105 | 1462 |
| Paint-can and paint-mixer. Combined | J. E. Furlong | 722,833 | Mar. 17 | 2225 | 498 | 103 | 504 |
| Paint compound | E. Bennett | 731,660 | June 23 | 3947 | ..... | 104 | 1995 |
| Paint compound | J. F. Smith | 735,604 | Aug. 4 | 1087 | ..... | 105 | 1212 |
| Paint or protective composition | E. G. Bertrand | 729,258 | May 26 | 4552 | ..... | 104 | 1014 |
| Paint or varnish. Composition for removing | C. L. Beck | 743,427 | Nov. 10 | 1257 | ..... | 107 | 283 |
| Paint or water-color receptacle | J. M. Adamson | 718,296 | Jan. 13 | 1445 | 321 | 102 | 327 |
| Paint-spraying apparatus | R. W. Bird | 728,439 | May 19 | 3045 | 669<br>670 | 104 | 687 |
| Paint vehicle | C. W. Bilfinger | 729,837 | June 2 | 585 | 129 | 104 | 1247 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Paint. Water- | S. S. and B. Ruston | 732,894 | July 7 | 350 | ------ | 105 | 77 |
| Paints. Cabinet for exhibiting and advertising | H. W. Shaw | 718,953 | Jan. 20 | 2727 | 609 | 102 | 609 |
| Paints, colors, dyes, or similar goods. Device or means for exhibiting and advertising | I. W. Drummond | 731,550 | June 23 | 3744 | 834 | 104 | 1955 |
| Painted surfaces. Composition for cleansing | E. J. Watkins and W. H. Screeton | 723,089 | Mar. 17 | 2660 | ------ | 103 | 595 |
| Painter's appliance | L. W. Young | 732,349 | Mar. 10 | 1292 | 286 | 103 | 290 |
| Painter's elevator | E. H. Murphy | 727,407 | May 5 | 1082 | 237 | 104 | 233 |
| Painter's hook | B. F. Foss | 718,753 | Jan. 20 | 2353 | 520 | 102 | 530 |
| Painter's hook | J. Hammarstrom | 742,417 | Oct. 27 | 3941 | 885 | 106 | 2125 |
| Painting and cleaning apparatus | E. Vegiard dit Labonté | 745,406 | Dec. 1 | 171 | 39 | 107 | 1136 |
| Painting apparatus | S. A. Worcester | 738,270 | Sept. 8 | 1456 | 314, 315 | 106 | 329 |
| Painting apparatus. Can- | F. Sejnoha and T. Perkins | 729,512 | May 26 | 4977 | 1103, 1104 | 104 | 1105 |
| Painting apparatus. Wheel- | W. B. Long | 746,717 | Dec. 15 | 2555 | 587 | 107 | 1691 |
| Painting-machine | J. Grahn | 734,319 | July 21 | 3014 | 709 | 105 | 671 |
| Painting machine. Can- | F. Sejnoha and T. Perkins | 728,998 | May 26 | 4089 | 907 | 104 | 918 |
| Painting-machine for vehicle-wheels, &c | J. Kraft, D. Reel, and W. L. Hawes | 731,099 | June 16 | 2879 | 639 | 104 | 1762 |
| Painting machine. Shingle- | B. F. Smith | 745,919 | Dec. 1 | 1114 | 249, 250 | 107 | 1336 |
| Paintings on glass. Producing imitations of | H. Titze | 718,036 | Jan. 6 | 972 | ------ | 102 | 209 |
| Palette | W. A. Sussmilch | 748,026 | Dec. 29 | 5059 | 1143 | 107 | 2291 |
| Pamphlet-coverer | C. Owens | 722,880 | Mar. 17 | 2304 | 515 | 103 | 520 |
| Pan: *See* Baking-pan. Benzin-pan. Dish-pan. Drip-pan. Dust-pan. Evaporating-pan. Feed or water pan. Frying-pan. Ore-crushing pan. Refrigerator drip-pan. Roasting-pan. Vacuum-pan. | | | | | | | |
| Pan | F. B. Tupper and G. M. Austin | 743,205 | Nov. 3 | 744 | 163 | 107 | 156 |
| Pan-lifter. Automatic spring | T. T. Smith | 729,231 | May 26 | 4511 | 994 | 104 | 1005 |
| Pan-lifter, can-opener, and corkscrew. Combined | H. D. Gardy | 719,105 | Jan 27 | 3035 | 675 | 102 | 687 |
| Pan-ring for coppers | W. T. Row | 718,219 | Jan. 13 | 1300 | 287 | 102 | 294 |
| Panchromatic dry-plate and making same | A. Miethe and A. Traube | 724,311 | Mar. 31 | 5013 | ------ | 103 | 1105 |
| Panel-work or wainscoting | D. P. Miller | 741,524 | Oct. 13 | 2181 | 485 | 106 | 1731 |
| Panoramic cabinet | A. M. Woodward | 729,029 | May 26 | 4150 | 920 | 104 | 931 |
| Pantograph | M. Barr | 723,978 | Mar. 31 | 4342 | 974, 975 | 103 | 971 |
| Pantograph | A. Forbes | 743,980 | Nov. 10 | 2309 | 493 | 107 | 513 |
| Paper and making same | E. H. Fowler and D. N. Hoover | 748,179 | Dec. 29 | 5353 | ------ | 107 | 2354 |
| Paper bag | F. A. Read | 717,621 | Jan. 6 | 176 | 44 | 102 | 39 |
| Paper-bag holder | L. C. Bunnell | 721,996 | Mar. 3 | 646 | 143 | 103 | 140 |
| Paper-bag holder | W. M. Nix | 743,547 | Nov. 10 | 1502 | 314 | 107 | 338 |
| Paper-bag holder | W. G. Haas | 745,179 | Nov. 24 | 4626 | 1003 | 107 | 1029 |
| Paper-bag holder and printer | R. D. Simpson | 725,785 | Apr. 21 | 2546 | 578 | 103 | 1741 |
| Paper-bag machine | S. T. Murchie | 718,143 | Jan. 13 | 1160 | 257, 258 | 102 | 264 |
| Paper-bag machine | W. Brown and W. O. Collins | 721,144 | Feb. 24 | 3258 | 746, 747 | 102 | 1562 |
| Paper-bag machine | G. Mortson | 721,596 | Feb. 24 | 4108 | 935, 936 | 102 | 1740 |
| Paper-bag machine | G. Mortson | 721,597 | Feb. 24 | 4113 | 936, 937 | 102 | 1740 |
| Paper-bag machine | C. S. Jackson | 722,986 | Mar. 17 | 2473 | 556 | 103 | 555 |
| Paper-bag machine | M. Haigh | 726,528 | Apr. 28 | 3924 | 887 | 103 | 2037 |
| Paper-bag machine | E. E. Claussen | 726,866 | May 5 | 57 | 14, 15, 16 | 104 | 16 |
| Paper-bag machine | F. Tyson | 727,559 | May 5 | 1374 | 309, 310, 311 | 104 | 296 |
| Paper-bag machine | W. A. Lorenz | 733,982 | July 21 | 2341 | 549, 550 | 105 | 526 |
| Paper-bag machine | E. J. Howlett | 735,383 | Aug. 4 | 647 | 135, 136, 137, 138 | 105 | 1119 |
| Paper-bag machine | P. L. Bartholomew | 736,673 | Aug. 18 | 3060 | 675, 676, 677 | 105 | 1668 |
| Paper-bag machine | W. A. Lorenz | 742,204 | Oct. 27 | 3541 | 790 | 106 | 2041 |
| Paper-bag machine | W. A. Lorenz | 742,205 | Oct. 27 | 3545 | 790 | 106 | 2042 |
| Paper-bag machine | A. J. Wikander | 743,124 | Nov. 3 | 585 | 126, 127 | 107 | 122 |
| Paper-bag machine | G. R. Ward | 744,947 | Nov. 24 | 4130 | 888, 889, 890, 891, 892 | 107 | 927 |
| Paper-bag machine | G. R. Ward | 744,948 | Nov. 24 | 4135 | 892, 893, 894 | 107 | 928 |
| Paper-bag machine | L. P. Eisenbeis | 746,309 | Dec. 8 | 1836 | 416, 417 | 107 | 1511 |
| Paper bags. Manufacturing square-bottom | W. A. Lorenz | 720,366 | Feb. 10 | 1768 | 401 | 102 | 1214 |
| Paper, bags, or the like. Holder for piled slips or sheets of | W. Hudson | 732,352 | June 30 | 5282 | 1170, 1171 | 104 | 2287 |
| Paper-blank-cutting mechanism | J. E. Robinson and D. S. Williams | 736,783 | Aug. 18 | 3275 | 723, 724 | 105 | 1712 |
| Paper-board-creasing machine | J. King, Jr | 744,207 | Nov. 17 | 2806 | 600 | 107 | 628 |
| Paper box | B. H. Henderson | 729,167 | May 26 | 4393 | 969 | 104 | 980 |
| Paper box | L. L. Duerden | 729,850 | June 2 | 607 | 133, 134 | 104 | 1252 |
| Paper box | J. A. Scott | 738,633 | Sept. 8 | 2174 | 476 | 106 | 483 |

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| Paper box | J. A. Scott. (Reissue) | 12,153 | Sept. 8 | 2409 | 528 | 106 | 531 |
| Paper box | H. Runtz | 748,020 | Dec. 29 | 5050 | 1140 | 107 | 2289 |
| Paper-box blanks. Machine for cutting the corners of | L. A. Mayall | 738,366 | Jan. 13 | 1568 | 346 | 102 | 351 |
| Paper-box blanks. Roll for cutting | W. G. Cowell | 738,528 | Sept. 8 | 1988 | 433 | 106 | 442 |
| Paper-box-covering machine | R. A. Thompson | 731,140 | June 16 | 2961 | 658 | 104 | 1777 |
| Paper-box end-closing machine | C. Redd | 733,507 | July 14 | 1450 | 343, 344 | 105 | 324 |
| Paper box. Foldable | H. Lowy | 731,924 | June 23 | 4418 | 984 | 104 | 2096 |
| Paper box. Foldable | M. Hirsch | 748,376 | Dec. 29 | 5686 | 1297 | 107 | 2427 |
| Paper box. Folding | G. A. Hartrampf | 732,071 | June 30 | 4716 | 1053, 1054 | 104 | 2170 |
| Paper-box-gluing mechanism | W. S. Scales | 732,225 | June 30 | 5039 | 1121 | 104 | 2238 |
| Paper box. Knockdown | A. W. Beers | 738,516 | Sept. 8 | 1967 | 428 | 106 | 438 |
| Paper-box machine | C. W. Gay | 721,557 | Feb. 24 | 4014 | 912, 913, 914 | 102 | 1717 |
| Paper-box machine | C. C. Lorgion | 726,955 | May 5 | 235 | 55 | 104 | 51 |
| Paper-box machine | C. C. Davis and E. W. Webster | 728,086 | May 12 | 2380 | 529, 530 | 104 | 524 |
| Paper-box machine | W. C. Baxter | 737,819 | Sept. 1 | 494 | 109, 110 | 106 | 111 |
| Paper-box machine | L. D. Lewis | 738,047 | Sept. 1 | 964 | 214 | 106 | 210 |
| Paper-box machine | J. S. Woodbridge | 739,529 | Sept. 22 | 3836 | 859 | 106 | 870 |
| Paper-box machine | C. W. Gay | 741,324 | Oct. 13 | 1767 | 393, 394, 395 | 106 | 1640 |
| Paper box or carton | F. D. Cleveland | 720,894 | Feb. 17 | 2734 | 629, 630 | 102 | 1428 |
| Paper boxes. Making | J. Alger | 737,692 | Sept. 1 | 243 | 52 | 106 | 56 |
| Paper-calendering-machine dampening device | W. G. Andrus | 746,655 | Dec. 15 | 2452 | 560 | 107 | 1668 |
| Paper cartons. Machine for lining | L. G. Reynolds | 736,780 | Aug. 18 | 3272 | 723 | 105 | 1711 |
| Paper-clamping device | F. T. Becker | 742,824 | Nov. 3 | 14 | 3 | 107 | 6 |
| Paper-clip | P. C. Lawless | 721,313 | Feb. 24 | 3571 | 812, 813 | 102 | 1625 |
| Paper-clip | C. Glover | 727,347 | May 5 | 980 | 213 | 104 | 212 |
| Paper-clip | J. M. Keep | 729,871 | June 2 | 652 | 143 | 104 | 1262 |
| Paper-clip | D. A. Hazard and C. M. Huntington. | 743,641 | Nov. 10 | 1683 | 354 | 107 | 375 |
| Paper-clip | H. E. Gifford | 744,529 | Nov. 17 | 3372 | 726 | 107 | 751 |
| Paper-clip. Spring-wire | G. W. McGill | 721,069 | Feb. 17 | 3068 | 705 | 102 | 1501 |
| Paper-clip. Spring-wire | G. W. McGill | 721,070 | Feb. 17 | 3070 | 705 | 102 | 1501 |
| Paper-clip. Spring-wire | G. W. McGill | 721,071 | Feb. 17 | 3071 | 705 | 102 | 1502 |
| Paper-coating machine | C. F. W. Schumacher | 726,358 | Apr. 28 | 3591 | 815 | 103 | 1973 |
| Paper-cord-making machine | H. B. Morris | 736,422 | Aug. 18 | 2579 | 565, 566 | 105 | 1569 |
| Paper-corrugating machine | W. L. Allen | 739,276 | Sept. 22 | 3380 | 751, 752, 753 | 106 | 771 |
| Paper-cutter | M. Nelson | 718,722 | Jan. 20 | 2294 | 506 | 102 | 518 |
| Paper-cutter | J. L. Lee | 732,754 | July 7 | 100 | 28 | 105 | 25 |
| Paper-cutter | E. J. Smith | 735,166 | Aug. 4 | 233 | 46, 47 | 105 | 1032 |
| Paper-cutter | G. W. Perks | 745,516 | Dec. 1 | 381 | 88 | 107 | 1181 |
| Paper-cutter | G. W. Perks | 745,517 | Dec. 1 | 382 | 88 | 107 | 1181 |
| Paper-cutter attachment and book-mark. Combined | C. J. I. Devlin | 732,527 | June 30 | 5616 | 1245 | 104 | 2357 |
| Paper-cutter for roll-holders | R. T. Jones | 744,865 | Nov. 24 | 3988 | 859 | 107 | 898 |
| Paper-cutters. Clamp-coupling device for automatic | C. Seybold | 731,232 | June 16 | 3118 | 691 | 104 | 1807 |
| Paper-cutters, &c. Gage for | F. Sholes | 745,531 | Dec. 1 | 405 | 93 | 107 | 1185 |
| Paper cutting and folding machine | S. D. Ruth | 730,974 | June 16 | 2638 | 588 | 104 | 1712 |
| Paper cutting and folding machine | S. D. Ruth | 731,624 | June 23 | 3881 | 863, 864 | 104 | 1982 |
| Paper-cutting device | F. Soennecken | 744,637 | Nov. 17 | 3543 | 764 | 107 | 784 |
| Paper-cutting machine | C. Seybold | 724,130 | Mar. 31 | 4649 | 1046 | 103 | 1032 |
| Paper-cutting machine | M. G. Ferrahian | 738,534 | Sept. 8 | 1996 | 435 | 106 | 444 |
| Paper-cutting machine | A. C. Hilsinger | 741,134 | Oct. 13 | 1381 | 316 | 106 | 1561 |
| Paper-cutting machine | N. Gray, Jr | 744,534 | Nov. 17 | 3379 | 728, 729 | 107 | 752 |
| Paper-cutting machine | W. H. Hansell | 744,754 | Nov. 24 | 3791 | 817 | 107 | 856 |
| Paper-cutting-machine cutting-beds. Mounting of | B. F. De Costa | 726,266 | Apr. 28 | 3394 | 771 | 103 | 1931 |
| Paper-cutting machines. Clamping apparatus for | B. F. De Costa | 742,974 | Nov. 3 | 270 | 61 | 107 | 58 |
| Paper-damping machine | M. Johnson | 727,373 | May 5 | 1025 | 222 | 104 | 221 |
| Paper. Device for grinding broken | R. Dietrich | 730,617 | June 9 | 1994 | 443 | 104 | 1557 |
| Paper. Device for holding loose or removable sheets of | R. G. Whitlock | 720,548 | Feb. 10 | 2111 | 487 | 102 | 1282 |
| Paper doll | K. V. Betts | 723,438 | Mar. 24 | 3325 | 745 | 103 | 742 |
| Paper-drying apparatus | W. M. Barber | 737,817 | Sept. 1 | 489 | 108 | 106 | 110 |
| Paper exhibitor. Wall- | T. J. Beard | 717,731 | Jan. 6 | 371 | 91 | 102 | 79 |
| Paper exhibitor. Wall- | W. J. Tway | 745,933 | Dec. 1 | 1136 | 255 | 107 | 1341 |
| Paper fabric | J. Arkell | 728,828 | May 26 | 3795 | 846 | 104 | 860 |
| Paper-fastener | J. V. Washburne | 731,827 | June 23 | 4249 | 946 | 104 | 2059 |
| Paper-feed | H. Bilgram | 734,215 | July 21 | 2793 | 655 | 105 | 624 |
| Paper-feeder. Automatic | J. L. Sellar | 721,970 | Mar. 3 | 594 | 133 | 103 | 130 |
| Paper-feeding apparatus | E. J. Hallberg | 720,243 | Feb. 10 | 1536 | 351 | 102 | 1163 |
| Paper-feeding machine | G. R. Williams | 719,166 | Jan. 27 | 3135 | 698 | 102 | 707 |
| Paper-feeding machine | L. F. Fuchs and B. K. Fisher | 720,546 | Feb. 10 | 2094 | 483, 484 | 102 | 1279 |
| Paper-feeding machine | G. R. Williams | 726,386 | Apr. 28 | 3638 | 825 | 103 | 1982 |
| Paper-feeding machine | E. T. Cleathero | 734,670 | July 28 | 3641 | 852, 853, 854, 855 | 105 | 819 |
| Paper-feeding machine | T. C. Dexter and H. Hallstream | 747,862 | Dec. 22 | 4706 | 1063, 1064 | 107 | 2192 |

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| Paper-feeding machine | T. C. Dexter and H. Hallstream | 747,863 | Dec. 22 | 4712 | 1064, 1065 | 107 | 2194 |
| Paper-feeding machine | T. C. Dexter and H. Hallstream | 747,864 | Dec. 22 | 4719 | 1065, 1066 | 107 | 2195 |
| Paper-feeding machine | T. C. Dexter and H. Hallstream | 747,865 | Dec. 22 | 4723 | 1066, 1067 | 107 | 2195 |
| Paper-feeding-machine separating and feeding device. | E. J. Hallberg | 748,279 | Dec. 29 | 5532 | 1261 | 107 | 2393 |
| Paper-feeding mechanism | J. Burry | 734,297 | July 21 | 2977 | 699, 700, 701 | 105 | 663 |
| Paper-folding machine | W. F. Liddle | 728,733 | May 19 | 3611 | 801 | 104 | 805 |
| Paper-folding machine | G. W. Schock | 740,592 | Oct. 6 | 412 | 88 | 106 | 1334 |
| Paper-folding machine | G. W. Schock | 740,593 | Oct. 6 | 413 | 88, 89 | 106 | 1334 |
| Paper folding or plaiting machine | J. Dowling | 735,729 | Aug. 11 | 1323 | 285 | 105 | 1280 |
| Paper for toughening and rendering it impervious. Treating | C. I. Goessmann | 740,006 | Sept. 29 | 4759 | ..... | 106 | 1084 |
| Paper from cylindrical cores. Machine for removing waste | J. S. Wemyss | 744,140 | Nov. 17 | 2651 | 565 | 107 | 594 |
| Paper-glassing machine | K. E. Rogers | 735,824 | Aug. 11 | 1512 | 323, 324 | 105 | 1322 |
| Paper-hanger's size | A. H. Thieme | 737,529 | Aug. 25 | 4675 | ..... | 105 | 2033 |
| Paper-hanging machine | D. M. McCanless | 718,015 | Jan. 6 | 942 | 209 | 102 | 203 |
| Paper-holder | A. E. Sexton | 718,058 | Jan. 6 | 1003 | 224 | 102 | 216 |
| Paper-holder | O. Harriman | 733,480 | July 14 | 1403 | 331 | 105 | 314 |
| Paper-holder | C. O. Young | 743,609 | Nov. 10 | 1631 | 342 | 107 | 364 |
| Paper-holder | A. E. Sexton | 744,119 | Nov. 17 | 2614 | 559 | 107 | 586 |
| Paper holder. Roll- | L. T. Arnold | 727,874 | May 12 | 1991 | 443 | 104 | 441 |
| Paper holder. Toilet- | R. B. Friend | 730,452 | June 9 | 1698 | 380 | 104 | 1491 |
| Paper holder. Toilet- | J. J. Tierney | 741,988 | Oct. 20 | 3098 | 691 | 106 | 1938 |
| Paper holding and feeding device | F. E. Allen | 747,344 | Dec. 22 | 3766 | 848 | 107 | 1979 |
| Paper-holding clip | F. M. Crawford | 748,264 | Dec. 29 | 5502 | 1254 | 107 | 2387 |
| Paper-jogger | L. B. Taylor | 726,372 | Apr. 28 | 3615 | 820 | 103 | 1978 |
| Paper-jogger | L. B. Taylor | 739,121 | Sept. 15 | 3094 | 685 | 106 | 693 |
| Paper-machine | J. B. Hanscom | 726,909 | May 5 | 142 | 34 | 104 | 33 |
| Paper. Machine for coating sun-print | J. A. Prince | 734,949 | July 28 | 4177 | 972 | 105 | 928 |
| Paper, &c. Machine for feeding and preparing blanks of | C. W. Gay | 747,695 | Dec. 22 | 4390 | 990, 991 | 107 | 2120 |
| Paper, &c. Machine for grooving | W. P. Northcott | 734,278 | July 21 | 2927 | 684 | 105 | 654 |
| Paper. Machine for making and cutting double-faced corrugated | J. T. Ferres | 746,807 | Dec. 15 | 2714 | 626, 627 | 107 | 1725 |
| Paper, &c. Machine for perforating | J. B. Allen | 746,625 | Dec. 8 | 2376 | 545 | 107 | 1630 |
| Paper-machine suction-box | H. Fairbanks | 723,257 | Mar. 24 | 2985 | 670, 671 | 103 | 675 |
| Paper-machine vats. Valve for | J. E. Foy | 733,022 | July 7 | 566 | 138 | 105 | 121 |
| Paper, &c. Machinery for cutting and folding | E. H. Cottrell | 743,456 | Nov. 10 | 1321 | 271, 272 | 107 | 297 |
| Paper, &c. Machinery for folding | R. C. Seymour | 736,031 | Aug. 11 | 1896 | 406 | 105 | 1405 |
| Paper. Making cloth-lined | E. Y. Le Fevre | 747,445 | Dec. 22 | 3935 | 885 | 107 | 2017 |
| Paper-making machine | J. F. Obert | 724,732 | Apr. 7 | 593 | 140 | 103 | 1295 |
| Paper-making machine | I. Kitsee | 725,345 | Apr. 14 | 1715 | 386 | 103 | 1548 |
| Paper-making machine | O. M. Farwell | 733,709 | July 14 | 1788 | 424 | 105 | 394 |
| Paper-making machine | J. Gröndahl | 736,596 | Aug. 18 | 2924 | 639 | 105 | 1641 |
| Paper-making machine | T. H. Savery | 742,239 | Oct. 27 | 3619 | 809 | 106 | 2060 |
| Paper-making machine | J. D. Tompkins | 742,259 | Oct. 27 | 3657 | 817 | 106 | 2067 |
| Paper-making-machine calender-rolls. Feed mechanism for | R. Smith | 743,403 | Nov. 3 | 1158 | 245, 246 | 107 | 245 |
| Paper-making machine. Carbon- | F. B. How | 739,313 | Sept. 22 | 3441 | 767, 768 | 106 | 784 |
| Paper-making machines. Water-extractor for | R. M. Scanlan | 741,980 | Oct. 20 | 3076 | 687 | 106 | 1934 |
| Paper-making machines. Wire or felt guide for | W. M. and T. M. Gilbert and W. C. Nash. | 735,362 | Aug. 4 | 609 | 125, 126 | 105 | 1111 |
| Paper-making machinery | A. Outerson | 726,980 | May 5 | 305 | 67 | 104 | 66 |
| Paper-making machinery | C. E. Torrance | 735,175 | Aug. 4 | 251 | 50 | 105 | 1036 |
| Paper-making roll | H. Parker | 747,632 | Dec. 22 | 4278 | 961, 962 | 107 | 2095 |
| Paper manufacture | W. W. McEwan | 734,928 | July 28 | 4138 | 963 | 105 | 919 |
| Paper. Manufacture of | W. T. Armistead | 719,982 | Feb. 10 | 1028 | ..... | 102 | 1057 |
| Paper. Manufacture of | R. D. Smith, H. A. Craigie, and W. H. Holston. | 744,422 | Nov. 17 | 3188 | ..... | 107 | 711 |
| Paper. Means for dissipating electricity in sheets of | T. C. Dexter and T. E. Breen | 720,898 | Feb. 17 | 2743 | 632 | 102 | 1430 |
| Paper-mill engine | C. S. Elder | 732,530 | June 30 | 5623 | 1247 | 104 | 2359 |
| Paper or leather glassing machine | S. E. Dart | 725,680 | Apr. 21 | 2353 | 532 | 103 | 1698 |
| Paper or other fabrics. Machinery for cutting and folding | E. H. Cottrell | 732,338 | June 30 | 5242 | 1163, 1164 | 104 | 2280 |
| Paper or other fabrics. Machinery for cutting and folding | E. H. Cottrell | 732,339 | June 30 | 5249 | 1164, 1165 | 104 | 2281 |
| Paper or other materials. Machinery for cutting and folding | E. H. Cottrell | 718,316 | Jan. 13 | 1482 | 328, 329, 330 | 102 | 334 |
| Paper or other materials. Machinery for cutting and padding | C. P. Cottrell | 718,315 | Jan. 13 | 1470 | 326, 327, 328 | 102 | 332 |
| Paper package. Rolled | F. H. Hoberg | 745,612 | Dec. 1 | 547 | 127, 128 | 107 | 1214 |
| Paper pail | E. B. Weston | 723,565 | Mar. 24 | 3559 | 796 | 103 | 789 |
| Paper-paraffining machine | R. J. Carrier | 737,826 | Sept. 1 | 512 | 113 | 106 | 115 |
| Paper pasting and cutting machine. Wall- | W. E. Grubb | 740,010 | Sept. 29 | 4768 | 1073 | 106 | 1086 |
| Paper pasting and trimming machine. Wall- | O. E. Tharp | 742,807 | Oct. 27 | 4619 | 1047, 1048 | 106 | 2271 |
| Paper-perforator | W. S. Mendenhall | 736,614 | Aug. 18 | 2960 | 650 | 105 | 1647 |
| Paper-polishing machine | L. W. Case | 734,666 | July 28 | 3635 | 851 | 105 | 817 |
| Paper. Preparing paraffin or waxed | C. I. Goessmann | 721,693 | Mar. 3 | 80 | ..... | 103 | 18 |
| Paper. Producing watermarked | E. R. and O. F. Behrend | 717,799 | Jan. 6 | 535 | 120 | 102 | 115 |
| Paper-pulp | J. C. Coleman and E. Toxey | 723,137 | Mar. 17 | 2745 | ..... | 103 | 612 |

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| Paper-pulp from cotton-seed hulls. Bleached | W. C. Johnson | 733,969 | July 21 | 2322 | ..... | 105 | 522 |
| Paper-pulp. Means for separating magnetic particles from | C. J. Reed | 736,298 | Aug. 11 | 2364 | 514 | 105 | 1507 |
| Paper-pulp-refining engine | M. A. Mills | 729,953 | June 2 | 788 | 176, 177, 178 | 104 | 1288 |
| Paper-pulp screen | W. R. and H. R. Farnsworth | 721,875 | Mar. 3 | 405 | 89 | 103 | 89 |
| Paper-pulp screen | S. H. Tibbetts | 723,078 | Mar. 17 | 2642 | 595 | 103 | 591 |
| Paper-receptacle opener | W. Green | 730,821 | June 9 | 2339 | 518 | 104 | 1631 |
| Paper reed | F. J. Shaw | 731,714 | June 23 | 4038 | 901 | 104 | 2013 |
| Paper reed | F. J. Shaw | 731,715 | June 23 | 4039 | 901 | 104 | 2013 |
| Paper-reeling machine | B. F. Perkins and C. E. Pope | 739,712 | Sept. 22 | 4184 | 935 | 106 | 945 |
| Paper-roll adapted to be cut into blanks | J. E. Robinson and D. S. Williams | 736,784 | Aug. 18 | 3277 | 724 | 105 | 1712 |
| Paper-roll bushing | M. L. Hirsch | 737,407 | Aug. 25 | 4441 | 995 | 105 | 1980 |
| Paper-roll bushing or plug | C. E. Thurman | 722,928 | Mar. 17 | 2379 | 532 | 103 | 536 |
| Paper-roll holder | H. J. Stephenson | 722,159 | Mar. 3 | 923 | 205 | 103 | 197 |
| Paper-roll holder | C. E. Turner | 723,081 | Mar. 17 | 2651 | 597 | 103 | 593 |
| Paper-roll holder and cutter | W. E. Blue | 740,389 | Oct. 6 | 9 | 3 | 106 | 1246 |
| Paper-roll support | S. S. Eccleston | 725,426 | Apr. 14 | 1856 | 415 | 103 | 1578 |
| Paper-roll support | W. A. Wheeler | 741,860 | Oct. 20 | 2812 | 626 | 106 | 1881 |
| Paper seam-cutting and pasting machine. Wall- | J. Vogt | 742,808 | Oct. 27 | 4623 | 1048 | 106 | 2271 |
| Paper server and paper package therefor. Toilet- | S. Wheeler | 730,997 | June 16 | 2687 | 598, 599 | 104 | 1722 |
| Paper-serving fixture. Toilet- | A. H. Scott | 733,281 | July 7 | 1048 | 250, 251 | 105 | 220 |
| Paper sheet | W. N. Caldwell | 743,375 | Nov. 3 | 1105 | 235 | 107 | 234 |
| Paper sheets or packages. Coin-freed delivery apparatus for | E. Martini | 730,382 | June 9 | 1562 | 347, 348 | 104 | 1462 |
| Paper-slitting device | J. F. Fromm | 747,544 | Dec. 22 | 4112 | 923 | 107 | 2057 |
| Paper-slitting machine | L. F. Fales | 723,375 | Mar. 24 | 3220 | 721, 722, 723 | 103 | 720 |
| Paper-stock-engine knife-spacer | M. P. Van Ryzin and H. G. Saecker | 723,763 | Mar. 24 | 3902 | 878 | 103 | 863 |
| Paper-stock-refining engine | H. G. Saecker | 717,718 | Jan. 6 | 350 | 85 | 102 | 75 |
| Paper-stock. Treating sulfite, ground wood, or other | J. H. Baker | 735,444 | Aug. 4 | 792 | 168, 169 | 105 | 1150 |
| Paper, such as toilet-paper, &c. Device for the containing and delivery of sheets of | E. D. Casterline, A. E. Sexton, H. C. Stockwell, and W. E. Swalm. | 744,047 | Nov. 17 | 2474 | 531, 532 | 107 | 557 |
| Paper. Toilet- | A. H. Scott | 733,282 | July 7 | 1051 | 251 | 105 | 220 |
| Paper. Toilet- | A. H. Scott | 733,283 | July 7 | 1052 | 251 | 105 | 221 |
| Paper-trimmer | A. J. Perks | 745,515 | Dec. 1 | 380 | 87 | 107 | 1180 |
| Paper-trimming machine. Wall- | F. L. Fisher | 722,093 | Mar. 3 | 802 | 179 | 103 | 173 |
| Paper-tube-machine winding-arbor | C. A. Bailey | 743,217 | Nov. 3 | 767 | 167 | 107 | 161 |
| Paper tubes. Manufacturing | G. H. Sachsenröder | 747,332 | Dec. 15 | 3741 | 843 | 107 | 1957 |
| Paper turning-in and pasting machine | C. F. Root and B. O. Conn | 741,550 | Oct. 13 | 2232 | 497, 498 | 106 | 1742 |
| Paper vessel | J. Single | 717,775 | Jan. 6 | 499 | 111, 112 | 102 | 107 |
| Paper-watermarking device | J. Barnett | 722,553 | Mar. 10 | 1670 | 369 | 103 | 375 |
| Paper-weight and pen-holder. Combined | W. G. Sirrine | 735,832 | Aug. 11 | 1529 | 327 | 105 | 1326 |
| Paper-weight and pincushion. Combined | G. Alden | 732,492 | June 30 | 5555 | 1232 | 104 | 2343 |
| Paper-weight, receptacle, and pincushion. Combined | S. T. Buckham | 741,882 | Oct. 20 | 2862 | 638 | 106 | 1891 |
| Papers. Apparatus for drying coated | W. M. Barber | 719,931 | Feb. 3 | 923 | 216 | 102 | 1019 |
| Papers, plates, &c. Solution for use in the production of photographic | M. Jolles and L. Lilienfeld | 732,189 | June 30 | 4959 | ..... | 104 | 2221 |
| Papering machine. Wall- | S. R. Crockett, Sr | 739,393 | Sept. 22 | 3586 | 801 | 106 | 814 |
| Papering machine. Wall- | J. K. C. Scheer | 746,585 | Dec. 8 | 2304 | 529 | 107 | 1614 |
| Parachute | C. W. Van Vleet | 729,455 | May 26 | 4889 | 1082 | 104 | 1085 |
| Parachute. Dart- | R. W. Means | 736,759 | Aug. 18 | 3228 | 713 | 105 | 1702 |
| Paraffin direct cooling device | C. H. Hatton | 735,873 | Aug. 11 | 1612 | 344 | 105 | 1344 |
| Paraffin fabric | C. C. Hoyt | 728,234 | May 19 | 2665 | ..... | 104 | 606 |
| Paralleling device. Automatic | E. M. Hemphill and E. Beiber | 729,934 | June 2 | 745 | 166 | 104 | 1280 |
| Parcel-carrier | J. B. Phillips | 728,004 | May 12 | 2234 | 497 | 104 | 493 |
| Parcel-carrier | A. D. Swegle | 741,182 | Oct. 13 | 1482 | 336, 337 | 106 | 1582 |
| Parcel-fastener | B. Cohn | 748,482 | Dec. 29 | 5897 | 1340 | 107 | 2473 |
| Parcel-strap | E. B. Palmer | 734,934 | July 28 | 4148 | 965 | 105 | 921 |
| Parcels, &c. Device for carrying | F. Doughty | 722,956 | Mar. 17 | 2424 | 542 | 103 | 545 |
| Parer and coring machine. Fruit | L. I. Yeomans | 718,687 | Jan. 20 | 2226 | 487, 488 | 102 | 505 |
| Paring-knife | M. MacLean | 734,909 | July 28 | 4112 | 958 | 105 | 914 |
| Partition and furring | W. N. Wight | 745,547 | Dec. 1 | 436 | 103 | 107 | 1190 |
| Partition. Architectural | J. A. Wheeler and F. W. Hargrave | 724,638 | Apr. 7 | 408 | 96 | 103 | 1256 |
| Partition-blocks. Mold for making | A. C. Rader | 719,867 | Feb. 3 | 815 | 190, 191 | 102 | 995 |
| Partitions and ceilings. Metallic framing for plastic | C. E. Walker and J. Fitting | 734,781 | July 28 | 3868 | 902 | 105 | 862 |
| Partitions. Means for operating rolling | W. Lumley | 747,621 | Dec. 22 | 4252 | 957 | 107 | 2089 |
| Passe-partout frame | F. E. Maine | 723,696 | Mar. 24 | 3784 | 850 | 103 | 837 |
| Passenger-supporting strap | J. P. Swift | 729,696 | June 2 | 301 | 70 | 104 | 1191 |
| Paste | A. M. Fuller | 735,084 | Aug. 4 | 64 | ..... | 105 | 995 |
| Paste and cutting same. Apparatus for winding flat strips of | A. Currle | 733,164 | July 7 | 819 | 198, 199, 200 | 105 | 172 |
| Paste-jar | C. B. Gordon | 727,785 | May 12 | 1832 | 409 | 104 | 409 |
| Paste-pot | C. B. Gordon | 740,848 | Oct. 6 | 870 | 194 | 106 | 1432 |
| Pasting device | C. E. Dulin | 727,602 | May 12 | 1452 | 326 | 104 | 330 |
| Pasting-machine | W. J. Dix | 743,470 | Nov. 10 | 1359 | 278, 279 | 107 | 306 |
| Pasting-machine | A. Simonson | 748,428 | Dec. 29 | 5787 | 1319, 1320 | 107 | 2449 |
| Pasting mechanism | O. Tyberg and S. I. Prescott | 719,626 | Feb. 3 | 382 | 88 | 102 | 901 |
| Pasting or gluing machine | F. D. Taylor | 741,597 | Oct. 13 | 2322 | 520 | 106 | 1761 |
| Pasting up the ends of cartons, &c. Machine for | R. F. W. Beardsley | 733,453 | July 14 | 1359 | 320, 321 | 105 | 304 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|---|
| | | | | Spec. | Dr'g. | Vol. | Page. |
| Pasteboard horses or other animals. Rapid manufacture of | J. Daxbek, Fils | 730,615 | June 9 | 1991 | 442 | 104 | 1557 |
| Pasteurizer | B. F. Schirmer | 725,489 | Apr. 14 | 1990 | 449 | 103 | 1607 |
| Pasteurizer | W. J. Ruff | 731,131 | June 16 | 2947 | 655 | 104 | 1774 |
| Pasteurizer | S. M. Barré and C. Mignault | 732,035 | June 30 | 4651 | 1039 | 104 | 2158 |
| Pasteurizer | A. Jensen | 745,105 | Nov. 24 | 4464 | 965, 966 | 107 | 995 |
| Pasteurizer, cream-ripener, churn, and butter-worker. Combined | D. W. Payne | 722,886 | Mar. 17 | 2317 | 517, 518, 519 | 103 | 523 |
| Pattern-chain | H. N. Bottomley | 735,202 | Aug. 4 | 329 | 63 | 105 | 1051 |
| Pattern-drafting device for garments | E. P. Follett | 735,738 | Aug. 11 | 1346 | 289 | 105 | 1285 |
| Pattern-drawing machine | J. C. Bradley and T. H. Gilbert | 725,210 | Apr. 14 | 1478 | 336 | 103 | 1498 |
| Pattern fabric and making same | H. Panitschek and J. Ahorn | 725,627 | Apr. 14 | 2237 | 506 | 103 | 1660 |
| Pattern, Garment | R. S. O'Loughlin and J. F. Birmingham. | 726,739 | Apr. 28 | 4326 | 975 | 103 | 2119 |
| Pattern-plate for folding and marking garment-sections. | P. J. Menahan | 731,413 | June 16 | 3464 | 774 | 104 | 1879 |
| Pattern. Skirt | M. F. and E. V. O'Donnell | 734,279 | July 21 | 2931 | 685 | 105 | 655 |
| Patterns. Device for drafting skirt | E. Curran | 718,320 | Jan. 13 | 1490 | 331 | 102 | 336 |
| Pavement | F. E. Gregory | 719,790 | Feb. 3 | 692 | 160 | 102 | 969 |
| Pavement | F. J. Warren | 727,505 | May 5 | 1261 | 282 | 104 | 272 |
| Pavement | F. J. Warren | 727,508 | May 5 | 1266 | 282 | 104 | 272 |
| Pavement | C. H. Sayre | 744,878 | Nov. 24 | 4008 | 864 | 107 | 902 |
| Pavement. Asphalt | F. J. Warren | 738,965 | Sept. 15 | 2815 | ------ | 106 | 636 |
| Pavement marginal protecting-strip | D. and A. A. Mullen | 739,899 | Sept. 29 | 4558 | 1026 | 106 | 1040 |
| Pavement or roadway. Street sheet | F. J. Warren | 727,510 | May 5 | 1271 | 282 | 104 | 273 |
| Pavement or roadway. Street sheet | F. J. Warren | 727,511 | May 5 | 1273 | 283 | 104 | 274 |
| Pavement-repairing apparatus. Asphalt | B. J. Sink | 734,141 | July 21 | 2670 | 628 | 105 | 598 |
| Pavements. Apparatus for constructing asphalt | H. W. Laster | 727,160 | May 5 | 647 | 139 | 104 | 140 |
| Pavements for use. Apparatus for preparing mineral ingredients of bituminous-macadam or other | H. W. Ash | 725,641 | Apr. 14 | 2277 | 514, 515 | 103 | 1668 |
| Pavements. Forming wearing-surfaces for asphalt | D. P. Mullen | 721,906 | Mar. 3 | 460 | ------ | 103 | 101 |
| Pavements. Heating asphalt | J. W. Nesmith and F. O. Blake | 743,021 | Nov. 3 | 391 | 84 | 107 | 82 |
| Pavements or roadways. Constructing and laying street- | F. J. Warren | 727,509 | May 5 | 1267 | ------ | 104 | 273 |
| Pavements. Renewal of old street | F. J. Warren | 727,512 | May 5 | 1275 | 283 | 104 | 275 |
| Pavements. Repairing American-asphalt | A. H. Perkins. (Reissue) | 12,077 | Feb. 3 | 1020 | 237 | 102 | 1039 |
| Paving | J. Heenan | 744,541 | Nov. 17 | 3399 | 732 | 107 | 755 |
| Paving composition. Producing asphaltic | J. H. Amies | 743,051 | Nov. 3 | 444 | ------ | 107 | 93 |
| Paving-strip | L. Vogel | 743,960 | Nov. 10 | 2253 | 485 | 107 | 497 |
| Pawl | I. W. Doeg | 725,682 | Apr. 21 | 2356 | 533 | 103 | 1698 |
| Pawl-and-ratchet connection | D. K. Bryson | 739,583 | Sept. 22 | 3949 | 882 | 106 | 893 |
| Pawl-and-ratchet device | H. W. Cooley | 734,822 | July 28 | 3962 | 925, 926 | 105 | 882 |
| Pea-blanching apparatus | H. D. Hutcheson | 740,758 | Oct. 6 | 710 | 160 | 106 | 1398 |
| Pea-huller | W. S. Broyles | 733,941 | July 21 | 2256 | 530, 531 | 105 | 510 |
| Pea-huller | E. G. Albaugh | 738,145 | Sept. 8 | 1182 | 260, 261 | 106 | 271 |
| Pea-hulling machine | W. F. Pillmore and D. Anderegg | 728,759 | May 19 | 3652 | 812, 813 | 104 | 814 |
| Pea or bean shelling machine | E. J. and J. M. Foster | 727,339 | May 5 | 968 | 210 | 104 | 209 |
| Pea-pods from vines. Machine for picking | G. W. Kelley | 733,215 | July 7 | 918 | 221 | 105 | 192 |
| Pea sheller. Green | B. E. Preston | 722,895 | Mar. 17 | 2334 | 522 | 103 | 526 |
| Pea-shelling machine | J. H. Empson | 738,894 | Sept. 15 | 2697 | 595, 596 | 106 | 611 |
| Peas, beans, &c. Shelling | J. P. Scovill | 719,618 | Feb. 3 | 366 | 85 | 102 | 898 |
| Peas or the like. Apparatus for facilitating the picking or sorting of dried | J. Major | 735,788 | Aug. 11 | 1432 | 308 | 105 | 1303 |
| Peanut-grinding mill | A. W. Straub | 721,651 | Feb. 24 | 4223 | 960 | 102 | 1766 |
| Peanut or coffee roasting and warming device | C. North | 727,674 | May 12 | 1598 | 361 | 104 | 361 |
| Peanut-roaster | A. J. Daniel | 726,876 | May 5 | 78 | 20 | 104 | 20 |
| Peanut-stemmer | C. W. Lasiter | 746,714 | Dec. 15 | 2549 | 585 | 107 | 1689 |
| Pearl-threading machine. Automatic | A. R. Durante | 741,317 | Oct. 13 | 1756 | 391 | 106 | 1638 |
| Peat block. Composite | W. A. Milne | 738,561 | Sept. 8 | 2039 | 444 | 196 | 453 |
| Peat. Block of | F. White | 738,136 | Sept. 1 | 1154 | 256 | 106 | 249 |
| Peat blocks. Pressing | A. Dobson | 735,476 | Aug. 4 | 849 | 180 | 105 | 1161 |
| Peat digging and conveying machine | C. F. Schlickeysen | 736,446 | Aug. 18 | 2619 | 575 | 105 | 1576 |
| Peat digging and excavating machine | C. Schlickeysen | 744,805 | Nov. 24 | 3878 | 834 | 107 | 875 |
| Peat into blocks for fuel. Forming | F. White | 738,135 | Sept. 1 | 1149 | 256 | 106 | 248 |
| Peat into blocks of peat. Apparatus for compressing and drying | F. White | 738,090 | Sept. 1 | 1087 | 232, 233 | 106 | 225 |
| Peat. Manufacturing plastic objects from | N. Reif | 722,626 | Mar. 10 | 1793 | 399 | 103 | 401 |
| Pedal attachment | A. J. Hamme | 731,358 | June 16 | 3347 | 748 | 104 | 1855 |
| Pedal attachment | L. O. Peterman | 732,957 | July 7 | 457 | 113 | 105 | 99 |
| Pedocycle | J. D. Schmidt | 732,120 | June 30 | 4812 | 1073 | 104 | 2191 |
| Pedometer | W. E. Porter | 718,792 | Jan. 20 | 2422 | 537 | 102 | 545 |
| Pedometer | W. E. Porter | 738,482 | Sept. 8 | 1806 | 414 | 106 | 422 |
| Pedometer-pendant | W. E. Porter | 740,915 | Oct. 6 | 973 | 219 | 106 | 1454 |
| Peeling apparatus. Fruit | C. J. Vernon and W. A. Choate | 739,953 | Sept. 29 | 4662 | 1047 | 106 | 1064 |
| Peeling or otherwise preparing vegetables or fruits. Utensil for | P. W. Nelson and C. Staberg | 719,606 | Feb. 3 | 346 | 80 | 102 | 894 |
| Peeling tomatoes, &c | J. P. Scovill | 719,616 | Feb. 3 | 363 | 84 | 102 | 898 |
| Peeling tomatoes, &c. Apparatus for | J. P. Scovill | 719,617 | Feb. 3 | 364 | 84 | 102 | 898 |
| Pegging-machine | J. F. Davey | 732,052 | June 30 | 4679 | 1044 | 104 | 2164 |
| Pegging machine. Shoe | E. Hamel | 735,499 | Aug. 4 | 886 | 190 | 105 | 1170 |
| Pen | F. M. Kegrize | 744,557 | Nov. 17 | 3422 | 737 | 107 | 760 |
| Pen and pencil receptacle tablet. Combination | W. H. Wymans | 736,810 | Aug. 18 | 3328 | 737 | 105 | 1723 |
| Pen and pencil retainer. Pocket | R. Kollmar | 734,573 | July 28 | 3462 | 809 | 105 | 781 |
| Pen-cleaner | W. E. Miller | 717,595 | Jan. 6 | 135 | 34 | 102 | 30 |
| Pen-extractor | P. Grabler | 738,318 | Sept. 8 | 1579 | 341 | 106 | 356 |
| Pen feeder. Fountain | J. Weeks | 731,987 | June 23 | 4533 | 1011 | 104 | 2120 |
| Pen filler. Reservoir-fountain | M. T. Horn | 722,508 | Mar. 10 | 1598 | 351 | 103 | 359 |
| Pen-filling device. Fountain | H. Taylor | 738,859 | Sept. 15 | 2637 | 581 | 106 | 598 |
| Pen-filling device. Fountain | L. Fisk | 744,521 | Nov. 17 | 3360 | 724 | 107 | 748 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|---|
| | | | | Spec. | Drg. | Vol. | Page. |
| Pen for recording instruments | F. A. Jones | 739,319 | Sept. 22 | 3450 | 770 | 106 | 786 |
| Pen for recording-machines. Fountain- | O. C. Patton | 738,839 | Sept. 15 | 2600 | 574 | 106 | 590 |
| Pen. Fountain- | H. W. Stone | 719,529 | Feb. 3 | 206 | 48 | 102 | 867 |
| Pen. Fountain- | A. Eberstein | 721,549 | Feb. 24 | 3998 | 910 | 102 | 1714 |
| Pen. Fountain- | R. A. Hamilton | 722,013 | Mar. 3 | 668 | 148 | 103 | 144 |
| Pen. Fountain- | P. E. Wirt | 723,112 | Mar. 17 | 2695 | 607 | 103 | 602 |
| Pen. Fountain- | P. E. Wirt | 723,113 | Mar. 17 | 2700 | 608 | 103 | 603 |
| Pen. Fountain- | G. W. Perks and F. C. Thacker | 723,726 | Mar. 24 | 3844 | 864 | 103 | 849 |
| Pen. Fountain- | P. E. Wirt | 724,983 | Apr. 7 | 1045 | 239 | 103 | 1392 |
| Pen. Fountain- | P. E. Wirt | 724,984 | Apr. 7 | 1049 | 239<br>240 | 103 | 1392 |
| Pen. Fountain- | J. Barnes | 726,495 | Apr. 28 | 3869 | 875 | 103 | 2025 |
| Pen. Fountain- | C. Nichols and J. W. Spencer | 726,561 | Apr. 28 | 3988 | 903 | 103 | 2049 |
| Pen. Fountain- | J. H. Crowell | 729,139 | May 26 | 4337 | 957 | 104 | 969 |
| Pen. Fountain- | R. A. Hamilton | 730,117 | June 2 | 1074 | 241 | 104 | 1346 |
| Pen. Fountain- | O. A. Morrow | 730,783 | June 9 | 2274 | 505 | 104 | 1617 |
| Pen. Fountain- | H. F. Buttner | 731,853 | June 23 | 4289 | 955 | 104 | 2068 |
| Pen. Fountain- | A. E. Schaaf | 732,117 | June 30 | 4808 | 1073 | 104 | 2190 |
| Pen. Fountain- | J. Blair | 734,116 | July 21 | 2620 | 616 | 105 | 587 |
| Pen. Fountain- | F. M. Kegrize | 734,563 | July 28 | 3447 | 804 | 105 | 778 |
| Pen. Fountain- | D. L. Wardroper | 735,004 | July 28 | 4284 | 997 | 105 | 949 |
| Pen. Fountain- | W. I. Ferris | 735,659 | Aug. 4 | 1192 | 252 | 105 | 1234 |
| Pen. Fountain- | W. I. Ferris | 736,710 | Aug. 18 | 3146 | 693 | 105 | 1686 |
| Pen. Fountain- | J. Barnes | 738,876 | Sept. 15 | 2667 | 587 | 106 | 605 |
| Pen. Fountain- | J. G. Rider | 739,720 | Sept. 22 | 4196 | 938<br>939 | 106 | 948 |
| Pen. Fountain- | J. Blair | 740,618 | Oct. 6 | 459 | 100 | 106 | 1345 |
| Pen. Fountain- | E. J. Kastner | 742,036 | Oct. 20 | 3188 | 712 | 106 | 1956 |
| Pen. Fountain- | T. Wheatley | 742,769 | Oct. 27 | 4354 | 1031 | 106 | 2256 |
| Pen. Fountain- | H. W. Stone | 744,642 | Nov. 17 | 3550 | 765 | 107 | 786 |
| Pen. Fountain- | W. F. Cushman | 747,948 | Dec. 29 | 4897 | 1109 | 107 | 2255 |
| Pen. Fountain drawing or ruling | W. C. Pettee | 727,433 | May 5 | 1134 | 249 | 104 | 245 |
| Pen. Fountain marking- | J. Berg | 743,430 | Nov. 10 | 1262 | 258 | 107 | 284 |
| Pen. Fountain or reservoir | E. L. Blake and R. H. Platt | 718,417 | Jan. 13 | 1659 | 365 | 102 | 371 |
| Pen guide or rest | I. Bergmann | 718,595 | Jan. 20 | 2062 | 448 | 102 | 473 |
| Penholder | W. C. Modisett | 721,592 | Feb. 24 | 4101 | 934 | 102 | 1738 |
| Penholder | J. R. Grymes | 722,698 | Mar. 17 | 1972 | 440 | 103 | 453 |
| Penholder | J. Knox | 723,283 | Mar. 24 | 3029 | 681 | 103 | 685 |
| Penholder | J. H. Woolsey | 735,928 | Aug. 11 | 1708 | 363 | 105 | 1364 |
| Penholder | M. M. Woodworth | 738,587 | Sept. 8 | 2078 | 454 | 106 | 462 |
| Penholder | H. Roeder | 740,181 | Sept. 29 | 5075 | 1141 | 106 | 1151 |
| Penholder | J. W. Estes | 741,120 | Oct. 13 | 1359 | 311 | 106 | 1556 |
| Penholder | C. M. Cook | 744,494 | Nov. 17 | 3321 | 715 | 107 | 739 |
| Penholder. Ejecting- | J. E. Mote | 725,272 | Apr. 14 | 1581 | 357 | 103 | 1520 |
| Penholder-guide | S. Bacharach | 747,574 | Dec. 22 | 4159 | 935 | 107 | 2069 |
| Penholder. Pen-ejecting | B. B. Goldsmith | 720,236 | Feb. 10 | 1528 | 350 | 102 | 1162 |
| Penholders. Device for mounting | F. McIntyre | 722,609 | Mar. 10 | 1768 | 394 | 103 | 395 |
| Pen-inking device. Draftsman's | H. W. H. Powel | 733,594 | July 14 | 1601 | 381 | 105 | 356 |
| Pen. Marking- | J. La Burt | 720,705 | Feb. 17 | 2425 | 555 | 102 | 1362 |
| Pen. Marking- | J. La Burt and D. M. P. Campbell | 741,147 | Oct. 13 | 1405 | 322 | 106 | 1565 |
| Pen or pencil attachment | W. C. Murphy | 717,597 | Jan. 6 | 137 | 35 | 102 | 31 |
| Pen or pencil grip | C. W. T. Davies | 737,085 | Aug. 25 | 3830 | 852 | 105 | 1849 |
| Pen-rack | R. H. Hazeltine | 747,066 | Dec. 15 | 3234 | 737 | 107 | 1846 |
| Pen. Recording- | F. A. Jones | 743,725 | Nov. 10 | 1824 | 384 | 107 | 406 |
| Pen. Ruling- | S. A. Floren | 724,687 | Apr. 7 | 502 | 120 | 103 | 1276 |
| Pen. Ruling- | D. M. Hall | 743,865 | Nov. 10 | 2083 | 443 | 107 | 460 |
| Pen. Ruling or draftsman's | J. Fiedler | 732,534 | June 30 | 5631 | 1248 | 104 | 2361 |
| Pen. Self-filling fountain- | H. B. Levy | 717,873 | Jan. 6 | 683 | 152 | 102 | 146 |
| Pen. Self-filling fountain- | C. A. Faber | 733,827 | July 14 | 2085 | 479 | 105 | 445 |
| Pen. Self-filling fountain- | R. Conklin | 745,481 | Dec. 1 | 325 | 76 | 107 | 1168 |
| Pen. Stock- | L. Reingardt | 739,507 | Sept. 22 | 3806 | 852 | 106 | 864 |
| Pen support and cleaner and compound for same | A. Webster | 720,765 | Feb. 17 | 2519 | 581 | 102 | 1384 |
| Pen-wiper | J. J. Stanley | 734,769 | July 28 | 3850 | 898 | 105 | 858 |
| Pens. Collapsible tube for fountain- | W. Bolles | 737,697 | Sept. 1 | 251 | 54 | 106 | 58 |
| Penmanship-chart | W. Thomson | 723,388 | Mar. 24 | 3122 | 702<br>703 | 103 | 703 |
| Penmanship practice. Training device for | H. Forbush | 745,100 | Nov. 24 | 4458 | 964 | 107 | 994 |
| Pencil | A. Fornander | 717,834 | Jan. 6 | 612 | 136 | 102 | 131 |
| Pencil | F. W. Musson | 729,783 | June 2 | 478 | 106 | 104 | 1226 |
| Pencil | F. W. Musson | 732,210 | June 30 | 5001 | 1112 | 104 | 2230 |
| Pencil | A. E. Buckingham | 744,474 | Nov. 17 | 3285 | 706 | 107 | 732 |
| Pencil-case | B. F. Stuart | 746,897 | Dec. 15 | 2905 | 671 | 107 | 1770 |
| Pencil-holder | H. H. Weaver | 723,765 | Mar. 24 | 3904 | 878 | 103 | 863 |
| Pencil-holder | I. T. Alvord | 740,791 | Oct. 6 | 771 | 174 | 106 | 1409 |
| Pencil-holder | W. J. Seebold and J. M. Hurwitz | 743,399 | Nov. 3 | 1152 | 244 | 107 | 244 |
| Pencil-holder and calendar. Combined | W. D. Widders | 724,980 | Apr. 7 | 1039 | 238 | 103 | 1391 |
| Pencil holder and guard | S. J. Dohrmann | 733,172 | July 7 | 840 | 204 | 105 | 177 |
| Pencil-holder. Pocket | E. F. Rogers | 744,799 | Nov. 24 | 3869 | 833 | 107 | 873 |
| Pencil-holder. Pocket | E. C. Bates | 747,366 | Dec. 22 | 3805 | 856 | 107 | 1988 |
| Pencil-holding case | A. G. Blincoe | 734,396 | July 21 | 3143 | 738 | 105 | 698 |
| Pencil. Lead- | C. von Schemnitzky | 726,767 | Apr. 28 | 4383 | 986 | 103 | 2130 |
| Pencil rubber-tip attachment. Lead- | E. U. Mack | 727,398 | May 5 | 1068 | 231 | 104 | 230 |
| Pencil-sharpener | R. C. Uecke | 718,548 | Jan. 13 | 1959 | 428 | 102 | 436 |
| Pencil-sharpener | W. E. Krouse | 720,821 | Feb. 17 | 2602 | 601 | 102 | 1400 |
| Pencil-sharpener | J. H. Fassett and J. E. Warren | 722,826 | Mar. 17 | 2205 | 492 | 103 | 500 |
| Pencil-sharpener | F. H. Lippincott | 724,303 | Mar. 31 | 5001 | 1119 | 103 | 1102 |
| Pencil-sharpener | C. H. Williams | 726,385 | Apr. 28 | 3637 | 824 | 103 | 1982 |
| Pencil-sharpener | C. F. Littlejohn | 740,881 | Oct. 6 | 915 | 205 | 106 | 1441 |
| Pencil-sharpener | L. G. Wilcox | 740,962 | Oct. 6 | 1060 | 241 | 106 | 1473 |
| Pencil-sharpener | O. B. Welker | 741,857 | Oct. 20 | 2807 | 625 | 106 | 1880 |
| Pencil-sharpener | J. C. Hill | 748,186 | Dec. 29 | 5365 | 1218 | 107 | 2356 |
| Pencil-sharpening device | H. E. Curtis | 747,382 | Dec. 22 | 3827 | 860 | 107 | 1992 |
| Pencil-sharpening machine | D. H. Rogan | 722,631 | Mar. 10 | 1804 | 402 | 103 | 403 |
| Pencil-sheath adapted to operate as a cigarette-maker | G. C. Geisler and A. T. M. Thomson | 739,850 | Sept. 29 | 4447 | 999 | 106 | 1019 |
| Pencil tape-holding attachment. Lead- | B. B. Waring | 725,383 | Apr. 14 | 1779 | 399 | 103 | 1561 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|---|
| | | | | Spec. | Dr'g. | Vol. | Page. |
| Pencils. Eraser-tip for lead- | W. H. Brownell | 737,070 | Aug. 25 | 3807 | 843 | 105 | 1844 |
| Pencils, penholders, &c. Rack for | J. Adair | 746,231 | Dec. 8 | 1686 | 375 | 107 | 1480 |
| Perambulator | F. E. Southard | 725,167 | Apr. 14 | 1396 | 315 | 103 | 1480 |
| Perambulator | G. D. Leadbetter | 728,253 | May 19 | 2692 | 602 | 104 | 612 |
| Percolator. Coffee- | G. B. Fyfe | 746,063 | Dec. 8 | 1384 | 309 | 107 | 1413 |
| Perfecting press. Web- | J. L. Firm | 724,456 | Apr. 7 | 68 | 17 | 103 | 1184 |
| Perforated-bottom furnace | P. Patterson | 726,338 | Apr. 28 | 3550 | 804 | 103 | 1964 |
| Perforating and round-cornering machine | J. B. Allen | 744,891 | Nov. 24 | 4026 | 868 | 107 | 906 |
| Perforating-machine | J. W. Hedgepeth | 720,425 | Feb. 10 | 1863 | 424, 425 | 102 | 1234 |
| Perforating-machine | F. P. Rosback | 732,893 | July 7 | 348 | 85, 86 | 105 | 76 |
| Perforating-machine | A. M. Bovier | 746,274 | Dec. 8 | 1767 | 401 | 107 | 1496 |
| Perforating-machine. Electrically-controlled | H. L. Davis | 732,279 | June 30 | 5139 | 1141 | 104 | 2258 |
| Perforating-machine slack-provider | W. Ackerman | 734,651 | July 28 | 3606 | 844 | 105 | 811 |
| Perforation-spacing device | A. S. Seville | 738,852 | Sept. 15 | 2626 | 579, 580 | 106 | 596 |
| Perforator and scorer. Automatic | C. J. Mittler | 729,633 | June 2 | 199 | 46 | 104 | 1168 |
| Perfumes and disinfectants. Making | J. Bardin | 738,274 | Sept. 8 | 1465 | 316 | 106 | 331 |
| Permanganates. Production of | W. Hickmann | 727,792 | May 12 | 1843 | ..... | 104 | 411 |
| Permutation-lock | J. Roche | 724,207 | Mar. 31 | 4803 | 1077 | 103 | 1063 |
| Permutation-lock | B. Durlin | 735,225 | Aug. 4 | 374 | 72 | 105 | 1061 |
| Permutation-lock | R. L. and W. R. Benton | 735,447 | Aug. 4 | 798 | 169, 170 | 105 | 1151 |
| Permutation-lock | I. G. French | 743,480 | Nov. 10 | 1377 | 282, 283 | 107 | 309 |
| Permutation-lock | J. D. Foster | 743,850 | Nov. 10 | 2055 | 437 | 107 | 454 |
| Permutation-lock | O. Smith | 745,080 | Nov. 24 | 4411 | 953, 954 | 107 | 984 |
| Permutation-lock | O. Smith | 745,081 | Nov. 24 | 4415 | 955 | 107 | 985 |
| Permutation-lock | M. B. Mills | 747,625 | Dec. 22 | 4260 | 958 | 107 | 2091 |
| Permutation-lock for valises, &c | N. S. Emert | 741,639 | Oct. 20 | 2403 | 538 | 106 | 1794 |
| Pessary | L. Hering | 726,532 | Apr. 28 | 3930 | 888 | 103 | 2038 |
| Pessary | E. M. Hewish | 732,855 | July 7 | 283 | 71 | 105 | 63 |
| Pessary | W. W. Mitchell | 733,068 | July 7 | 657 | 158 | 105 | 139 |
| Pessary | L. Knopf | 741,345 | Oct. 13 | 1840 | 406 | 106 | 1660 |
| Petrol-motor | A. Clément | 742,970 | Nov. 3 | 259 | 58 | 107 | 56 |
| Petroleum and petroleum distillates. Purifying and desulfurizing crude | T. F. Colin and O. P. Amend | 723,368 | Mar. 24 | 3203 | ..... | 103 | 717 |
| Petroleum blue-burner | H. Hurwitz and A. Schapiro | 731,459 | June 23 | 3569 | 795, 796 | 104 | 1920 |
| Petroleum-burner | J. Frick | 731,170 | June 16 | 3019 | 670 | 104 | 1788 |
| Petroleum-burner | A. Moorefield | 737,760 | Sept. 1 | 378 | 81 | 106 | 84 |
| Petroleum burner. Crude- | R. B. Fageol | 719,573 | Feb. 3 | 298 | 69 | 102 | 885 |
| Petroleum. Deodorizing or purifying | F. Berg | 736,479 | Aug. 18 | 2692 | 591 | 105 | 1592 |
| Petroleum deodorizing or purifying apparatus | F. Berg | 736,480 | Aug. 18 | 2695 | 591, 592 | 105 | 1592 |
| Petroleum. Desulfurizing crude | A. W. Burwell and L. O. Sherman | 738,656 | Sept. 8 | 2221 | 486 | 106 | 492 |
| Petroleum. Desulfurizing sulfur-bearing | T. F. Colin | 744,720 | Nov. 24 | 3735 | ..... | 107 | 845 |
| Petroleum-engine | R. O. Allsop | 725,191 | Apr. 14 | 1437 | 325, 326 | 103 | 1488 |
| Petticoat | H. L. Klein | 722,854 | Mar. 17 | 2355 | 505 | 103 | 510 |
| Pew | E. T. Kervick | 724,189 | Mar. 31 | 4767 | 1069 | 103 | 1055 |
| Phase-indicator | O. Holz | 730,652 | June 9 | 2053 | 456, 457 | 104 | 1569 |
| Phase transformation | A. D. Lunt | 732,204 | June 30 | 4988 | 1110 | 104 | 2227 |
| Phase-transformation system | F. H. Jeannin | 730,828 | June 9 | 2350 | 520 | 104 | 1633 |
| Phonograph | C. C. Shigley | 727,002 | May 5 | 361 | 77, 78 | 104 | 78 |
| Phonograph attachment | E. Gilbert | 738,316 | Sept. 8 | 1575 | 340 | 106 | 355 |
| Phonograph attachment | G. E. Allen | 747,834 | Dec. 22 | 4648 | 1050 | 107 | 2179 |
| Phonograph-cylinders. Apparatus for the manufacture of | A. Haug | 744,339 | Nov. 17 | 3037 | 652 | 107 | 679 |
| Phonograph or graphophone, &c | W. E. Clifton and B. Oaksford | 741,462 | Oct. 13 | 2039 | 452, 453 | 106 | 1700 |
| Phonograph repeating-action | E. Gilman | 721,363 | Feb. 24 | 3669 | 835 | 102 | 1644 |
| Phonograph repeating attachment | D. Petri-Palmedo | 722,616 | Mar. 10 | 1779 | 396 | 103 | 397 |
| Phonograph sound-records. Apparatus for duplicating | C. Walcutt | 733,521 | July 14 | 1478 | 351 | 105 | 329 |
| Phonograph starting and stopping mechanism | E. Gilbert | 738,317 | Sept. 8 | 1578 | 341 | 106 | 355 |
| Phonograph vibratory membrane | V. L. Garcia | 720,127 | Feb. 10 | 1328 | 304 | 102 | 1122 |
| Phonographs, &c. Actuating mechanism for | C. C. Reinhardt | 742,233 | Oct. 27 | 3605 | 807 | 106 | 2056 |
| Phonographs. Automatic return-feed mechanism for | G. Wood | 735,926 | Aug. 11 | 1703 | 363 | 105 | 1363 |
| Phonographs, ear-trumpets, &c. Horn for | G. H. Villy | 739,954 | Sept. 29 | 4663 | 1047 | 106 | 1064 |
| Phonographs, graphophones, &c. Support for | E. A. Hawthorne | 719,662 | Feb. 3 | 444 | 101 | 102 | 915 |
| Phonographic apparatus | J. Castelin | 745,782 | Dec. 1 | 833 | 189 | 107 | 1276 |
| Phonographic recorder and reproducer | P. Weber | 744,266 | Nov. 17 | 2901 | 621 | 107 | 648 |
| Phonographic records. Apparatus for reproducing | T. B. Lambert | 742,455 | Oct. 27 | 4000 | 898 | 106 | 2137 |
| Phonographic records. Reproducing | T. B. Lambert | 742,454 | Oct. 27 | 3998 | 898 | 106 | 2136 |
| Phonographic repeating mechanism | P. Weber | 744,267 | Nov. 17 | 2902 | 621 | 107 | 648 |
| Phosphate-distributer | E. W. Johnson | 727,957 | May 12 | 2155 | 480, 481 | 104 | 478 |
| Phosphates. Making citrate soluble | W. Wolters | 721,489 | Feb. 24 | 3903 | ..... | 102 | 1693 |
| Phosphorus and sulfur and making same. Compound of | E. W. Wheelwright | 745,546 | Dec. 1 | 434 | 102 | 107 | 1190 |
| Phosphorus. Making | R. K. Duncan | 733,316 | July 7 | 1101 | 262 | 105 | 232 |
| Phosphorus-making apparatus | R. K. Duncan | 733,017 | July 7 | 559 | 136 | 105 | 119 |
| Photo-plates. Portable daylight developing-box for | S. J. Sloan | 732,052 | Mar. 3 | 735 | 164 | 103 | 159 |
| Photochemical and electrotherapeutical apparatus | A. E. Sterne | 719,901 | Feb. 3 | 879 | 206 | 102 | 1009 |
| Photochemical and electrotherapeutical apparatus | A. E. Sterne | 724,215 | Mar. 31 | 4817 | 1079, 1080 | 103 | 1066 |
| Photocopying-machine | P. Latta | 728,730 | May 19 | 3605 | 800 | 104 | 804 |
| Photograph developing, toning, and fixing apparatus. | A. Schwarz | 721,839 | Mar. 3 | 328 | 72, 73 | 103 | 72 |
| Photograph-exhibiting device | A. Hattrem | 745,605 | Dec. 1 | 538 | 126 | 107 | 1211 |
| Photographs, engravings, or the like. Mounting | E. H. and A. E. Derepas | 739,143 | May 26 | 4345 | 959 | 104 | 970 |

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| Invention. | Name. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | | Spec. | Dr'g. | Vol. | Page. |
| Photographs. Producing colored | A. A. Gurtner | 730,454 | June 9 | 1704 | 381 | 104 | 1492 |
| Photographic apparatus | P. F. Cowing | 719,196 | Jan. 27 | 3187 | 710 | 102 | 718 |
| Photographic apparatus | S. Wachtl | 739,239 | Sept. 15 | 3309 | 733 | 106 | 739 |
| Photographic apparatus | R. Goldstein and W. S. Benson | 742,187 | Oct. 27 | 3507 | 783 | 106 | 2035 |
| Photographic apparatus | Y. Shannon | 747,784 | Dec. 22 | 4554 | 1028 | 107 | 2158 |
| Photographic bath apparatus | C. S. L. Kennedy. (Reissue) | 12,125 | June 23 | 4633 | 1036 | 104 | 2140 |
| Photographic cartridge-film. Flexible | P. B. Cady | 733,539 | July 14 | 1505 | 359 | 105 | 335 |
| Photographic color-filters. Making | A. Bauermeister | 734,454 | July 21 | 3239 | 762 | 105 | 718 |
| Photographic copying apparatus | O. Fair | 737,600 | Sept. 1 | 83 | 17 | 106 | 20 |
| Photographic curtain-shutter | G. F. Fraley | 734,692 | July 28 | 3682 | 863 | 105 | 826 |
| Photographic decoration. Vitrifiable | L. Crabtree | 719,197 | Jan. 27 | 3188 | 710 | 102 | 718 |
| Photographic developing apparatus | F. L. Condit | 722,813 | Mar. 17 | 2184 | 487 | 103 | 496 |
| Photographic developing apparatus | J. W. Meek | 728,743 | May 19 | 3627 | 805 | 104 | 809 |
| Photographic developing apparatus | G. J. Stage | 729,003 | May 26 | 4097 | 909 | 104 | 921 |
| Photographic developing apparatus | H. F. Northrop | 729,789 | June 2 | 488 | 108 | 104 | 1228 |
| Photographic developing apparatus | R. L. Chamberlaine | 730,091 | June 2 | 1028 | 231 | 104 | 1337 |
| Photographic developing apparatus | F. S. Davenport | 738,665 | Sept. 8 | 2239 | 491 | 106 | 496 |
| Photographic developing apparatus | C. A. Barrett and R. W. Page | 741,213 | Oct. 13 | 1552 | 350 | 106 | 1598 |
| Photographic developing apparatus | E. E. Park | 744,602 | Nov. 17 | 3484 | 751 | 107 | 772 |
| Photographic developing apparatus | A. Bartol | 745,558 | Dec. 1 | 451 | 107 | 107 | 1193 |
| Photographic developing-machine | B. J. Holcombe | 746,632 | Dec. 8 | 2397 | 538 | 107 | 1635 |
| Photographic-diaphragm-adjusting mechanism | A. Brandweiner | 738,654 | Sept. 8 | 2217 | 485 | 106 | 491 |
| Photographic-dry-plate releaser | G. J. Stage | 745,922 | Dec. 1 | 1120 | 251 | 107 | 1338 |
| Photographic emulsion and making same | H. Luttke | 722,238 | Mar. 10 | 1095 | ..... | 103 | 249 |
| Photographic-exposure meter | A. Watkins | 725,807 | Apr. 21 | 2598 | 590 | 103 | 1751 |
| Photographic film | W. H. Smalley | 723,054 | Mar. 17 | 2593 | 585 | 103 | 581 |
| Photographic-film-developing apparatus | J. F. Steward | 746,756 | Dec. 15 | 2626 | 603 | 107 | 1707 |
| Photographic film. Flexible | P. B. Cady | 727,283 | May 5 | 858 | 184 | 104 | 184 |
| Photographic film. Flexible | R. A. Anthony | 735,436 | Aug. 4 | 777 | 165 | 105 | 1146 |
| Photographic-film package. Flat-form | C. E. Hutchings and J. A. Robertson | 728,718 | May 19 | 3584 | 795<br>796 | 104 | 800 |
| Photographic films. Apparatus for developing, fixing, and toning kinematographic or other | P. Latta | 720,708 | Feb. 17 | 2430 | 555<br>556 | 102 | 1363 |
| Photographic films. Manufacture of | L. M. J. Armandy | 717,793 | Jan. 6 | 521 | 117 | 102 | 112 |
| Photographic focal-plane shutter | L. Borsum | 720,659 | Feb. 17 | 2340 | 535<br>536 | 102 | 1344 |
| Photographic images. Making | P. G. Frauenfelder | 747,961 | Dec. 29 | 4924 | 1114 | 107 | 2261 |
| Photographic lens system | E. Lohmann | 730,937 | June 16 | 2567 | 572 | 104 | 1698 |
| Photographic light-screen | T. Willsie | 727,524 | May 5 | 1302 | 290 | 104 | 280 |
| Photographic mounting-roller | J. H. Hampp | 730,368 | June 9 | 1533 | 340 | 104 | 1457 |
| Photographic mounts. Manufacturing | P. J. Stuparich | 748,232 | Dec. 29 | 5445 | 1241 | 107 | 2374 |
| Photographic-negative cleaner | H. C. White | 746,618 | Dec. 8 | 2362 | 542 | 107 | 1628 |
| Photographic negative. Mechanically-printed | T. M. St. John | 729,803 | June 2 | 518 | 114 | 104 | 1234 |
| Photographic objective | P. Rudolph | 721,240 | Feb. 24 | 3460 | 786 | 102 | 1601 |
| Photographic objective | W. Zschokke and F. Urban | 745,550 | Dec. 1 | 440 | 103 | 107 | 1191 |
| Photographic objectives. Shutter for | E. Branburger | 738,402 | Sept. 8 | 1734 | 377 | 106 | 389 |
| Photographic or like frame or other support | J. Hartley | 730,261 | June 9 | 1348 | 296 | 104 | 1417 |
| Photographic or other prints. Treating | W. P. Warren | 741,198 | Oct. 13 | 1516 | 342 | 106 | 1590 |
| Photographic plate and film bath-tank | S. A. Boucher | 718,904 | Jan. 20 | 2632 | 590 | 102 | 588 |
| Photographic plate and film. Isochromatic | L. Smith | 746,594 | Dec. 8 | 2327 | 533 | 107 | 1620 |
| Photographic plate and making same | A. Eichengrün and J. Precht | 742,405 | Oct. 27 | 3912 | ..... | 106 | 2119 |
| Photographic-plate-developing apparatus | L. Brown | 728,538 | May 19 | 3238 | 718 | 104 | 725 |
| Photographic-plate-developing apparatus | G. A. Hagner | 733,034 | July 7 | 587 | 143 | 105 | 125 |
| Photographic-plate-developing apparatus | J. D. Lyon | 744,376 | Nov. 17 | 3105 | 666<br>667<br>668 | 107 | 693 |
| Photographic-plate-developing machine | G. F. Fraley | 734,693 | July 28 | 3685 | 863<br>864 | 105 | 826 |
| Photographic-plate holder | F. V. Mathews | 717,695 | Jan. 6 | 308 | 76 | 102 | 67 |
| Photographic-plate holder | G. A. Hagner | 740,850 | Oct. 6 | 872 | 195 | 106 | 1432 |
| Photographic-plate holder | A. C. La May | 745,202 | Nov. 24 | 4666 | 1016 | 107 | 1038 |
| Photographic-plate holder | J. A. Tripp | 747,665 | Dec. 22 | 4341 | 979 | 107 | 2109 |
| Photographic-plate holder. Magazine | C. A. Barrett and R. W. Page | 741,215 | Oct. 13 | 1556 | 351 | 106 | 1599 |
| Photographic-plate washer | W. G. Mette | 733,244 | July 7 | 972 | 234<br>235 | 105 | 204 |
| Photographic print | H. C. and H. C. White | 725,525 | Apr 14 | 2051 | ..... | 103 | 1619 |
| Photographic-print washer | H. C. White and A. H. Mallison | 737,983 | Sept. 1 | 852 | 187 | 106 | 186 |
| Photographic printing | E. S. Shepherd and O. M. Bartlett | 728,310 | May 19 | 2826 | ..... | 104 | 641 |
| Photographic-printing apparatus | N. H. Brown | 721,011 | Feb. 17 | 2968 | 682 | 102 | 1477 |
| Photographic-printing apparatus | H. W. Herrman and C. J. Everett | 721,369 | Feb. 24 | 3676 | 837 | 102 | 1646 |
| Photographic-printing apparatus | A. Jaray | 725,969 | Apr. 21 | 2864 | 649<br>650 | 103 | 1808 |
| Photographic-printing apparatus | H. H. McIntire | 727,670 | May 12 | 1589 | 359 | 104 | 359 |
| Photographic-printing apparatus | H. H. McIntire | 732,650 | June 30 | 5846 | 1295 | 104 | 2408 |
| Photographic-printing apparatus | H. H. McIntire. (Reissue) | 12,130 | July 7 | 1187 | 281<br>282 | 105 | 250 |
| Photographic-printing apparatus | L. Shaw | 742,243 | Oct. 27 | 3627 | 810<br>811 | 106 | 2061 |
| Photographic-printing apparatus | N. H. Brown | 744,039 | Nov. 17 | 2455 | 527 | 107 | 554 |
| Photographic-printing frame | A. Holmes | 717,853 | Jan. 6 | 649 | 144 | 102 | 138 |
| Photographic-printing frame | A. R. Selden | 719,264 | Jan. 27 | 3310 | 741 | 102 | 744 |
| Photographic-printing frame | W. H. Smith | 719,523 | Feb. 3 | 196 | 46 | 102 | 865 |
| Photographic-printing frame | H. W. Herrman and C. J. Everett | 721,370 | Feb. 24 | 3678 | 838 | 102 | 1646 |
| Photographic-printing frame | G. F. Fraley | 731,102 | June 16 | 2884 | 640 | 104 | 1763 |
| Photographic-printing frame | M. W. Armstrong | 746,234 | Dec. 8 | 1690 | 376 | 107 | 1481 |
| Photographic-printing frame | G. E. Mackey and M. J. Raub | 748,085 | Dec. 29 | 5176 | 1171 | 107 | 2317 |
| Photographic-printing machine | H. Casler | 731,282 | June 16 | 3208 | 714<br>715<br>716<br>717 | 104 | 1826 |
| Photographic-printing machine | C. Spaulding | 738,578 | Sept. 8 | 2060 | 449<br>450 | 106 | 458 |
| Photographic-printing machine | C. J. Everett | 739,535 | Sept. 22 | 3848 | 861<br>862 | 106 | 872 |
| Photographic purposes. Copying material for | R. Krayn | 728,245 | May 19 | 2680 | 599 | 104 | 609 |

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| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Photographic purposes. Machine for ruling screens or plates for | E. E. Flora | 717,669 | Jan. 6 | 251 | 63, 64, 65, 66 | 102 | 54 |
| Photographic purposes. Portable dark chamber for | J. Lambert | 732,086 | June 30 | 4752 | 1061 | 104 | 2177 |
| Photographic ray-filter | R. H. Stocoum | 740,484 | Oct. 6 | 194 | 38 | 106 | 1287 |
| Photographic reproductive process | E. Ortmann | 744,223 | Nov. 17 | 2827 | 604 | 107 | 632 |
| Photographic retouching-frame | J. F. Patton | 741,067 | Oct. 13 | 1256 | 285 | 106 | 1535 |
| Photographic roller-blind shutter | A. L. Adams | 720,991 | Feb. 17 | 2925 | 670 | 102 | 1469 |
| Photographic shutter | G. L. Coursen | 718,983 | Jan. 27 | 2778 | 622 | 102 | 634 |
| Photographic shutter | L. J. R. Holst | 722,449 | Mar. 10 | 1482 | 327 | 103 | 332 |
| Photographic shutter | J. S. Wright | 726,608 | Apr. 28 | 4084 | 922, 923 | 103 | 2068 |
| Photographic shutter | M. Klaiber | 726,700 | Apr. 28 | 4250 | 961 | 103 | 2103 |
| Photographic shutter | J. E. Thornton | 729,015 | May 26 | 4131 | 915 | 104 | 928 |
| Photographic shutter | T. Brueck | 744,998 | Nov. 24 | 4221 | 914 | 107 | 945 |
| Photographic shutter | C. Bornmann | 745,272 | Nov. 24 | 4785 | 1044, 1045 | 107 | 1062 |
| Photographic shutter. Adjustable | T. Willsie | 741,205 | Oct. 13 | 1532 | 346 | 106 | 1593 |
| Photographic-shutter air-check | G. F. Fraley | 729,056 | May 26 | 4204 | 929 | 104 | 942 |
| Photographic-shutter-operating mechanism | G. A. Sommer | 718,736 | Jan. 20 | 2319 | 512 | 102 | 524 |
| Photographic shutters. Pneumatic apparatus for controlling duration of exposure in | J. E. Thornton | 729,014 | May 26 | 4129 | 914, 915 | 104 | 927 |
| Photographic stick-stands. Handle for | G. Geiger | 744,526 | Nov. 17 | 3369 | 726 | 107 | 750 |
| Photographic tray | G. T. McKinney | 736,766 | Aug. 18 | 3238 | 715 | 105 | 1704 |
| Photographic washing-machine | E. W. Schneider | 747,241 | Dec. 15 | 3559 | 806 | 107 | 1915 |
| Photolithographic transfer-plate | A. Lehmann and E. Schönhals | 735,536 | Aug. 4 | 970 | 205 | 105 | 1187 |
| Physicians' tables. Tray-support and closet for | W. D. Allison | 739,471 | Sept. 22 | 3744 | 835 | 106 | 850 |
| Piano | L. W. Norcross | 717,600 | Jan. 6 | 142 | 36, 37 | 102 | 32 |
| Piano | A. A. Huseby | 721,706 | Mar. 3 | 100 | 21, 22 | 103 | 22 |
| Piano | B. K. Korik | 723,396 | Mar. 24 | 3257 | 730 | 103 | 728 |
| Piano | P. Duffy | 738,890 | Sept. 15 | 2689 | 593, 594 | 106 | 610 |
| Piano | R. S. Bowen | 742,573 | Oct. 27 | 4219 | 950 | 106 | 2183 |
| Piano-action | C. L. Kallstrom | 719,120 | Jan. 27 | 3067 | 682 | 102 | 693 |
| Piano-action | S. R. Perry | 719,690 | Feb. 3 | 493 | 111, 112 | 102 | 926 |
| Piano-action | R. M. Hutchinson | 732,188 | June 30 | 4958 | 1102, 1103 | 104 | 2221 |
| Piano-action | C. A. Ahlstrom | 736,920 | Aug. 25 | 3539 | 786 | 105 | 1787 |
| Piano-action | A. A. Barthelmes | 737,565 | Sept. 1 | 8 | 2 | 106 | 5 |
| Piano-action | F. J. Granzow | 746,823 | Dec. 15 | 2759 | 636 | 107 | 1736 |
| Piano-action | L. N. Soper | 747,790 | Dec. 22 | 4569 | 1031 | 107 | 2161 |
| Piano-action adjustment | H. Mallebre | 733,725 | July 14 | 1819 | 431 | 105 | 401 |
| Piano-action bracket | E. Bornhoeft | 728,192 | May 19 | 2574 | 574 | 104 | 587 |
| Piano-action flange | G. M. Guild | 736,384 | Aug. 18 | 2505 | 550, 551 | 105 | 1553 |
| Piano action. Grand- | T. T. Fischer | 738,786 | Sept. 15 | 2495 | 548 | 106 | 567 |
| Piano action. Upright- | E. Bornhoeft | 728,193 | May 19 | 2575 | 574 | 104 | 587 |
| Piano action. Upright- | E. Bornhoeft | 730,866 | June 16 | 2422 | 536 | 104 | 1667 |
| Piano-actions. Bridle for | J. F. Ramsey | 737,961 | Sept. 1 | 811 | 178 | 106 | 178 |
| Piano agraffe attachment | H. Sohmer | 729,232 | May 26 | 4512 | 994 | 104 | 1005 |
| Piano attachment | W. W. Saunders | 726,354 | Apr. 28 | 3581 | 813 | 103 | 1971 |
| Piano attachment. Electric self-playing | G. H. Davis | 730,098 | June 2 | 1041 | 233, 234 | 104 | 1339 |
| Piano. Automatic | R. W. Pain | 726,981 | May 5 | 306 | 67, 68 | 104 | 66 |
| Piano. Automatic | P. Welin | 731,089 | June 16 | 2859 | 635, 636 | 104 | 1758 |
| Piano automatic attachment | J. A. Smith | 723,056 | Mar. 17 | 2595 | 585 | 103 | 581 |
| Piano-card-punching machine | J. B. Davidson | 735,952 | Aug. 11 | 1747 | 373, 374 | 105 | 1372 |
| Piano-card-punching machine | J. B. Davidson | 742,170 | Oct. 27 | 3475 | 776, 777 | 106 | 2030 |
| Piano-damper | E. Bornhoeft | 729,533 | June 2 | 28 | 7 | 104 | 1132 |
| Piano electric attachment | G. H. Davis | 739,396 | Sept. 22 | 3591 | 802, 803 | 106 | 815 |
| Piano. Electric self-playing | G. H. Davis | 719,092 | Jan. 27 | 3001 | 669, 670 | 102 | 679 |
| Pianoforte | J. H. Butler | 721,666 | Mar. 3 | 29 | 6 | 103 | 8 |
| Pianoforte-action | W. A. Earthy | 747,318 | Dec. 15 | 3713 | 837 | 107 | 1951 |
| Pianoforte frame, bridge, and soundboard | C. R. S. J. Hallé | 725,559 | Apr. 14 | 2110 | 478 | 103 | 1631 |
| Pianoforte-keyboard | F. L. Harmon | 732,688 | June 30 | 5920 | 1313 | 104 | 2423 |
| Pianoforte-wires. Device for cleaning | J. Barnett, commonly known as J. F. Barnett. | 719,718 | Feb. 3 | 557 | 126 | 102 | 940 |
| Piano-hammer felts. Device for loosening | F. Behringer | 738,877 | Sept. 15 | 2668 | 588 | 106 | 605 |
| Piano keyboard attachment | G. G. Mahr | 722,998 | Mar. 17 | 2492 | 560 | 103 | 559 |
| Piano key-bottom | P. Duffy | 746,932 | Dec. 15 | 2982 | 686 | 107 | 1788 |
| Piano-key-frame-adjusting device | R. G. O. Müller | 745,509 | Dec. 1 | 371 | 86 | 107 | 1178 |
| Piano mandolin attachment | F. L. Barnard | 737,261 | May 5 | 815 | 175 | 104 | 175 |
| Piano music-desk | H. Mallebre | 733,724 | July 14 | 1818 | 431 | 105 | 400 |
| Piano music-desk | R. S. Bowen | 743,140 | Nov. 3 | 618 | 134 | 107 | 129 |
| Piano music-desk | R. S. Bowen | 743,682 | Nov. 10 | 1750 | 369 | 107 | 390 |
| Piano or organ bench | D. Schustek | 744,243 | Nov. 17 | 2861 | 613, 614 | 107 | 640 |
| Piano or organ keyboard | T. Wiehmayer | 717,645 | Jan. 6 | 215 | 54 | 102 | 47 |
| Piano or organ player. Mechanical | W. F. Bayer | 731,423 | June 23 | 3493 | 780 | 104 | 1904 |
| Piano or similar instrument | S. W. Clark | 723,584 | Mar. 24 | 3600 | 804 | 103 | 797 |
| Piano-pedal | H. R. Moore | 734,236 | July 21 | 2839 | 666 | 105 | 635 |
| Piano pedal-action | J. Dierdorf | 724,555 | Apr. 7 | 250 | 61 | 103 | 1223 |
| Piano pedal-action | R. M. Bent | 736,675 | Aug. 18 | 3077 | 678 | 105 | 1671 |
| Piano pedal attachment | H. Kind | 746,101 | Dec. 8 | 1448 | 325 | 107 | 1428 |
| Piano pedal extension | W. H. McDonald | 740,302 | Sept. 29 | 5300 | 1193 | 106 | 1197 |
| Piano-pedal-locking attachment | A. J. Newby | 727,673 | May 12 | 1596 | 361 | 104 | 361 |
| Piano-plate | W. Bieger | 739,380 | Sept. 22 | 3562 | 795, 796 | 106 | 809 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Piano-plate | C. A. Haddorff | 745,103 | Nov. 24 | 4462 | 965 | 107 | 995 |
| Piano-player | C. Warren | 743,781 | Nov. 10 | 1931 | 408<br>409 | 107 | 428 |
| Piano-player tune-sheets. Perforation-spacing device for automatic | A. S. Seville | 720,075 | Feb. 10 | 1219 | 280 | 102 | 1098 |
| Piano-player's key-striker | O. F. Hintz | 723,274 | Mar. 24 | 3015 | 678 | 103 | 682 |
| Piano-players. Pneumatic motor-valve mechanism for automatic | T. Danquard | 737,363 | Aug. 25 | 4349 | 970 | 105 | 1959 |
| Piano-players. Striking mechanism for automatic | W. F. Cooper | 725,676 | Apr. 21 | 2348 | 531 | 103 | 1697 |
| Piano self-playing attachment | J. Wieser | 747,816 | Dec. 22 | 4618 | 1042<br>1043 | 107 | 2172 |
| Piano self-playing attachments. Pedal mechanism for | J. Wieser | 719,926 | Feb. 3 | 914 | 214 | 102 | 1017 |
| Piano-string bridge-bearing | F. Schimmel | 725,781 | Apr. 21 | 2540 | 576 | 103 | 1740 |
| Piano-support. Elastic | J. Baeumle | 743,672 | Nov. 10 | 1736 | 366 | 107 | 387 |
| Piano touch-regulator | M. Goggan | 727 348 | May 5 | 982 | 213 | 104 | 212 |
| Piano-truck | A. Loeb | 734,076 | July 21 | 2538 | 592 | 105 | 571 |
| Piano-tuner | A. Brambach | 718.691 | Jan. 20 | 2235 | 489 | 102 | 506 |
| Piano-tuning apparatus | D. Long | 745.634 | Dec. 1 | 584 | 136 | 107 | 1222 |
| Piano-tuning key | M. Stoddard | 729,804 | June 2 | 519 | 114 | 104 | 1234 |
| Piano-tuning-pin cover | I. B. Rosencrantz | 736,552 | Aug. 18 | 2821 | 617 | 105 | 1621 |
| Piano. Upright | H. Ziegler | 719 977 | Feb. 3 | 1009 | 235 | 102 | 1037 |
| Piano. Upright | A. G. Gardner | 722,967 | Mar. 17 | 2445 | 547 | 103 | 549 |
| Piano. Violin- | L. Breitenmoser | 746,004 | Dec. 8 | 1281 | 287 | 107 | 1390 |
| Piano. Wireless | I. F. Gilmore | 747,966 | Dec. 29 | 4935 | 1116<br>1117 | 107 | 2263 |
| Piano with auxiliary harmonic sounding-board | F. W. Kringel | 732,304 | June 30 | 5180 | 1151 | 104 | 2267 |
| Pianos and automatic piano-players. Position guide and holder for | F. C. White | 718,558 | Jan. 13 | 1981 | 432 | 102 | 440 |
| Pianos. Expression device for self-playing attachments for | J. Wieser | 745,944 | Dec. 1 | 1156 | 260 | 107 | 1346 |
| Pianos or other musical instruments. Bass string for | A. D. Ramacciotti | 740,918 | Oct. 6 | 978 | 220 | 106 | 1455 |
| Pianos. Pedal for self-playing attachments for | J. Wieser | 745,943 | Dec. 1 | 1154 | 259 | 107 | 1345 |
| Pianos, pianofortes, &c. Device for closing pedal-openings in | E. Hilger | 740,853 | Oct. 6 | 876 | 196 | 106 | 1433 |
| Pianolas or other musical instruments. Expression mechanism for | R. W. Pain | 744,227 | Nov. 17 | 2836 | 606 | 107 | 635 |
| Pick | W. S. Jenkins | 718,845 | Jan. 20 | 2503 | 557 | 102 | 560 |
| Pick | S. Jones | 722,586 | Mar. 10 | 1731 | 385 | 103 | 387 |
| Pick | J. L. Griffin | 730,637 | June 9 | 2023 | 449 | 104 | 1563 |
| Pick-blades or other tools to their handles. Means for attaching | G. Tippett | 746,648 | Dec. 8 | 2425 | 554 | 107 | 1641 |
| Pick-fastening | R. Wheater | 732,389 | June 30 | 5353 | 1186 | 104 | 2303 |
| Pick-handle | E. O. Thompson | 730,418 | June 9 | 1623 | 364 | 104 | 1475 |
| Pick-lock | W. E. Simmons | 742,507 | Oct. 27 | 4099 | 923 | 106 | 2157 |
| Pick. Miner's | A. Walker | 733,349 | July 7 | 1163 | 276 | 105 | 245 |
| Pick. Mining- | G. T. White | 720,203 | Feb. 10 | 1457 | 332 | 102 | 1147 |
| Picker:<br>*See* Corn-picker. Fruit-picker.<br>Cotton-picker. Potato-picker.<br>Felt-picker. Slate-picker. | | | | | | | |
| Picker-staff and shuttle-check. Combined | J. Coldwell and C. G. Gildard | 736,581 | Aug. 18 | 2875 | 628 | 105 | 1631 |
| Picker-staff and shuttle-check. Combined | J. Coldwell and C. G. Gildard | 736,582 | Aug. 18 | 2877 | 628 | 105 | 1631 |
| Picker-stick bunter | G. Swift | 727,859 | May 12 | 1967 | 438 | 104 | 436 |
| Pickles. Making | W. A. Loder | 723,693 | Mar. 24 | 3779 | ..... | 103 | 836 |
| Pickling-vat weight | C. G. Deible | 746,041 | Dec. 8 | 1347 | 301 | 107 | 1405 |
| Picture apparatus. Animated- | J. A. Pross | 722,382 | Mar. 10 | 1348 | 298 | 103 | 303 |
| Picture apparatus. Moving- | G. M. Higgins | 727,948 | May 12 | 2139 | 477<br>478 | 104 | 474 |
| Picture apparatus. Moving- | H. N. Marvin and H. Casler | 729,375 | May 26 | 4753 | 1051<br>1052 | 104 | 1055 |
| Picture-bearing strips. Feeding mechanism for | C. H. Kayser | 720,931 | Feb. 17 | 2811 | 645 | 102 | 1445 |
| Picture. Changeable | J. Stevenson | 736,034 | Aug. 11 | 1907 | 407 | 105 | 1407 |
| Picture. Changeable | J. Stevenson | 736,035 | Aug. 11 | 1908 | 407 | 105 | 1407 |
| Picture. Embossed | A. Berninger | 731,744 | June 23 | 4099 | 915 | 104 | 2025 |
| Picture-exhibiting apparatus | T. Armat | 743,419 | Nov. 10 | 1224 | 253<br>254 | 107 | 277 |
| Picture-exhibiting apparatus. Coin-controlled | J. C. F. Atsatt | 726,240 | Apr. 28 | 3346 | 759 | 103 | 1922 |
| Picture-exhibiting device | A. Hoermle | 718,763 | Jan. 20 | 2374 | 526 | 102 | 535 |
| Picture-exhibiting machine | W. W. Rosenfield | 743,930 | Nov. 10 | 2197 | 474 | 107 | 484 |
| Picture-exhibitor | J. Q. Adams | 729,111 | May 26 | 4291 | 948 | 104 | 958 |
| Picture-exhibitor | U. L. Berger | 733,802 | July 14 | 1968 | 463 | 105 | 432 |
| Picture-exhibitor. Coin-controlled | J. C. A. Riecke | 724,126 | Mar. 31 | 4640 | 1045 | 103 | 1031 |
| Picture-frame | J. R. Rountree | 718,281 | Jan. 13 | 1420 | 316 | 102 | 321 |
| Picture-frame | R. Benziger | 723,577 | Mar. 24 | 3587 | 801 | 103 | 794 |
| Picture-frame | J. W. Myers | 729,784 | June 2 | 479 | 107 | 104 | 1226 |
| Picture-frame | J. A. Manor | 737,124 | Aug. 25 | 3892 | 865 | 105 | 1862 |
| Picture-frame | J. Santemma | 739,112 | Sept. 15 | 3079 | 683 | 106 | 689 |
| Picture-frame. Adjustable | C. H. Strauss | 723,497 | Mar. 24 | 3452 | 772<br>773 | 103 | 767 |
| Picture-frame adjustable regulator | F. C. Brown and W. E. Chenery | 733,809 | July 14 | 1984 | 466 | 105 | 436 |
| Picture-frame hanger attachment | F. A. Matthews | 730,141 | June 2 | 1114 | 250 | 104 | 1354 |
| Picture-frame or easel | G. Mendel | 733,860 | July 14 | 2097 | 494 | 105 | 457 |
| Picture-frame sections. Apparatus for assembling | C. E. Sandstrom | 739,930 | Sept. 29 | 4621 | 1037 | 106 | 1055 |
| Picture-frames, &c. Holder for | F. L. Stafford | 730,713 | June 9 | 2164 | 480 | 104 | 1592 |
| Picture-hanger | C. Jackson and W. H. Daniels | 717,859 | Jan. 6 | 661 | 146 | 102 | 141 |
| Picture-hanger | A. W. Magerhans | 722,311 | Mar. 10 | 1224 | 272 | 103 | 277 |
| Picture-hanger | O. A. Wade | 740,493 | Oct. 6 | 214 | 42 | 106 | 1291 |
| Picture-hanger and gas-cock turner | M. E. Kanaly | 734,180 | July 21 | 2739 | 643 | 105 | 612 |
| Picture-hanging device | W. F. Towne | 732,467 | Mar. 10 | 1515 | 334 | 103 | 339 |
| Picture-holder | E. C. Etherton and G. E. Powell | 728,559 | May 19 | 3287 | 728 | 104 | 735 |
| Picture machine. Moving- | W. P. Warren | 721,261 | Feb. 24 | 3498 | 795 | 102 | 1609 |
| Picture machine. Moving- | W. P. Warren | 722,393 | Mar. 10 | 1367 | 303 | 103 | 307 |

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| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Picture-mats, stencils, &c. Tool for cutting elliptical or other curved | V. G. Barr | 735,197 | Aug. 4 | 322 | 62 | 105 | 1049 |
| Picture mechanism. Moving- | F. B. Cannock | 745,956 | Dec. 1 | 1182 | 265 | 107 | 1352 |
| Picture-molding bracket | W. L. Rummel | 738,847 | Sept. 15 | 2619 | 578 | 106 | 594 |
| Picture-molding fastener | A. F. Salstrom | 740,046 | Sept. 29 | 4841 | 1086 | 106 | 1102 |
| Picture-nail | T. C. Richards | 731,464 | Feb. 24 | 3857 | 877 | 102 | 1684 |
| Picture or mirror hanging device. Framed | E. L. Smith | 730,055 | June 2 | 972 | 217 | 104 | 1326 |
| Picture post-card, &c | A. Jassé | 722,711 | Mar. 17 | 1994 | 445 | 103 | 457 |
| Picture. Shadow- | J. A. Kraus | 720,820 | Feb. 17 | 2601 | 601 | 102 | 1400 |
| Picture-support | G. C. Lore and A. J. Barr | 731,579 | Feb. 24 | 4075 | 926 | 102 | 1733 |
| Pictures and viewing or reproducing animated scenes therefrom. Apparatus for taking | H. L. Huet and A. Daubresse | 721,954 | Mar. 3 | 565 | 125, 126 | 103 | 124 |
| Pictures of moving objects. Apparatus for exhibiting | E. J. Rector | 734,242 | July 21 | 2849 | 668 | 105 | 637 |
| Pictures or designs upon enameled metal, &c. Imprinting and fixing colored | C. J. Greenley and J. Day | 726,526 | Apr. 28 | 3922 | ------ | 103 | 2036 |
| Pictures. Protecting dry-color | G. W. Brown | 741,763 | Oct. 20 | 2650 | ------ | 106 | 1845 |
| Pie and pastry rack. Collapsible | S. M. Davison | 719,441 | Feb. 3 | 57 | 13 | 102 | 837 |
| Pie crimper and trimmer | R. H. Berkstresser | 727,269 | May 5 | 839 | 180 | 104 | 180 |
| Pie filler. Soft- | J. J. Connors | 722,210 | Mar. 10 | 1036 | 229 | 103 | 236 |
| Pie-machine | H. H. Jones | 728,799 | May 19 | 3731 | 832 | 104 | 829 |
| Pie-making machine | D. S. Williams | 740,346 | Sept. 29 | 5374 | 1211, 1212 | 106 | 1213 |
| Pie-making machine | H. H. Spring | 744,638 | Nov. 17 | 3544 | 764 | 107 | 784 |
| Pie-making machine | H. L. Manning | 748,392 | Dec. 29 | 5706 | 1303, 1304, 1305 | 107 | 2431 |
| Pie-plate or bake-pan, &c | M. Thorne | 731,417 | June 16 | 3473 | 776 | 104 | 1881 |
| Pie-plate rim. Supplemental | W. A. Banfill | 748,151 | Dec. 29 | 5304 | 1205 | 107 | 2344 |
| Pie-rolling machine | H. H. Jones | 728,171 | May 12 | 2535 | 564 | 104 | 557 |
| Pie-trimmer | T. Reminger | 719,043 | Jan. 27 | 2894 | 648 | 102 | 658 |
| Pier guard. Bridge- | H. T. Swearingen | 747,660 | Dec. 22 | 4332 | 979 | 107 | 2107 |
| Piercing and expanding mill | J. H. Nicholson | 718,723 | Jan. 20 | 2295 | 506 | 102 | 518 |
| Pig-rearing device | F. Smith and E. W. Check | 729,688 | June 2 | 291 | 67 | 104 | 1189 |
| Pigeons. Timing device for homing | W. C. Geary | 730,208 | June 2 | 1220 | 272 | 104 | 1376 |
| Pigment and making same | W. J. Armbruster | 719,073 | Jan. 27 | 2958 | ------ | 102 | 672 |
| Pigment and making same | W. J. Armbruster | 719,415 | Feb. 3 | 4 | ------ | 102 | 827 |
| Pigment and making same | W. J. Armbruster | 724,234 | Mar. 31 | 4878 | ------ | 103 | 1078 |
| Pigment and making same | W. N. Blakeman, Jr | 726,623 | Apr. 28 | 4114 | ------ | 103 | 2074 |
| Pigment and making same | W. J. Armbruster | 731,153 | June 16 | 2987 | ------ | 104 | 1782 |
| Pigment and making same | W. J. Armbruster | 734,392 | July 21 | 3137 | ------ | 105 | 697 |
| Pigment and making same | W. J. Armbruster | 737,055 | Aug. 25 | 3776 | ------ | 105 | 1838 |
| Pigment and making same | W. J. Armbruster | 743,802 | Nov. 10 | 1971 | ------ | 107 | 436 |
| Pigment and producing it | A. S. Ramage | 739,444 | Sept. 22 | 3703 | ------ | 106 | 840 |
| Pigment. Apparatus for manufacturing white | J. B. Hannay | 729,492 | May 26 | 4946 | 1096 | 104 | 1098 |
| Pigment. Apparatus for manufacturing white | J. B. Hannay | 729,493 | May 26 | 4947 | 1097 | 104 | 1098 |
| Pigment. Producing pure white | W. G. Waring | 718,555 | Jan. 13 | 1976 | 431 | 102 | 439 |
| Pigment production. Manufacture of material for use in | L. Wirtz | 733,308 | July 7 | 1087 | ------ | 105 | 229 |
| Pigments. Making | W. J. Armbruster | 724,235 | Mar. 31 | 4880 | ------ | 103 | 1078 |
| Pigments. Making | W. J. Armbruster | 726,239 | Apr. 28 | 3344 | ------ | 103 | 1922 |
| Pigments. Making | W. J. Armbruster | 731,152 | June 16 | 2985 | ------ | 104 | 1782 |
| Pigments. Making | W. J. Armbruster | 733,612 | July 14 | 1633 | ------ | 105 | 363 |
| Pigments. Making | W. J. Armbruster | 734,391 | July 21 | 3136 | ------ | 105 | 697 |
| Pigments. Making | W. J. Armbruster | 737,056 | Aug. 25 | 3778 | ------ | 105 | 1838 |
| Pigments. Making | W. J. Armbruster | 740,072 | Sept. 29 | 4883 | ------ | 106 | 1110 |
| Pigments. Making | W. J. Armbruster | 740,073 | Sept. 29 | 4884 | ------ | 106 | 1110 |
| Pile | E. Villet | 722,417 | Mar. 10 | 1413 | 312 | 103 | 317 |
| Pile-driver | F. A. von Eberstein | 726,268 | Apr. 28 | 3399 | 772 | 103 | 1932 |
| Pile-driver | W. E. Sproul | 726,780 | Apr. 28 | 4402 | 990, 991, 992, 993 | 103 | 2134 |
| Pile-driver | N. Simonson | 736,452 | Aug. 18 | 2680 | 577, 578 | 105 | 1579 |
| Pile-driver buffer | L. P. Friestedt | 738,312 | Sept. 8 | 1569 | 339 | 106 | 353 |
| Pile fabric. Woven | R. S. and H. Cookson | 731,433 | June 23 | 3506 | 783 | 104 | 1906 |
| Pile fabric. Woven | J. Buckler | 747,588 | Dec. 22 | 4191 | 943 | 107 | 2075 |
| Pile fabrics. Device for cutting double- | O. Hallensleben | 732,347 | June 30 | 5271 | 1168 | 104 | 2285 |
| Pile for forming concrete piling. Removable | F. Shuman | 733,286 | July 7 | 1056 | 252 | 105 | 222 |
| Pile for forming concrete piling. Removable | F. Shuman | 733,288 | July 7 | 1060 | 253 | 105 | 223 |
| Pile-shoe | J. A. Steinmetz | 744,256 | Nov. 17 | 2887 | 618 | 107 | 645 |
| Pile-supporter | W. K. Clark | 717,659 | Jan. 6 | 235 | 60 | 102 | 52 |
| Piles. Apparatus for removing material from | J. M. Dodge | 738,013 | Sept. 1 | 917 | 202, 203 | 106 | 200 |
| Piles. Making concrete | F. Shuman | 733,287 | July 7 | 1059 | 252 | 105 | 222 |
| Piles or the like. Protective covering for | O. A. Stempel | 737,518 | Aug. 25 | 4652 | 1044 | 105 | 2028 |
| Piling | O. E. C. Hartung and J. Bauer | 724,573 | Apr. 7 | 281 | 69 | 103 | 1229 |
| Piling and means for sinking same. Sectional sheet- | H. A. Miller | 727,989 | May 12 | 2205 | 492 | 104 | 488 |
| Piling apparatus | C. Mercàder | 717,885 | Jan. 6 | 704 | 157 | 102 | 150 |
| Piling. Composite | A. E. Brown | 727,583 | May 12 | 1425 | 320 | 104 | 325 |
| Piling. Metal sheet- | H. Wittekind | 725,608 | Apr. 14 | 2199 | 497 | 103 | 1652 |
| Piling. Metal sheet- | F. N. Kneas | 744,361 | Nov. 17 | 3079 | 660 | 107 | 688 |
| Piling. Metal sheet- | H. Wittekind | 744,847 | Nov. 24 | 3956 | 853 | 107 | 890 |
| Piling. Sheet- | L. P. Friestedt | 730,755 | June 9 | 2229 | 495 | 104 | 1608 |
| Piling. Sheet- | L. P. Friestedt | 733,713 | July 14 | 1799 | 426 | 105 | 396 |
| Piling. Sheet- | L. P. Friestedt | 734,314 | July 21 | 3007 | 708 | 105 | 669 |
| Piling. Sheet- | L. P. Friestedt | 734,843 | July 28 | 4002 | 934 | 105 | 890 |
| Piling. Sheet- | L. P. Friestedt | 735,489 | Aug. 4 | 872 | 186 | 105 | 1166 |
| Piling. Sheet- | L. P. Friestedt | 739,072 | Sept. 15 | 2998 | 664 | 106 | 674 |
| Pill-coating machine | E. C. Clark | 724,436 | Apr. 7 | 29 | 8, 9 | 103 | 1176 |
| Pill-counting machine | W. Brough | 740,801 | Oct. 6 | 786 | 177 | 106 | 1412 |
| Pill-machine | E. C. Clark | 741,461 | Oct. 13 | 2036 | 452 | 106 | 1700 |
| Pillars or similar uprights. Base for porch- | J. Schug | 738,850 | Sept. 15 | 2625 | 579 | 106 | 595 |
| Pilot-light and generator | T. W. Moran | 726,558 | Apr. 28 | 3983 | 902 | 103 | 2048 |

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| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Pin: | | | | | | | |
| *See* Bowling-pin. Chatelaine-pin. Clothes-pin. Coupling-pin. Coupling pivot-pin. Dress-supporting pin. Fabric-pin. Hair-pin. Hat-pin. Hinge-pin. Husking-pin. Safety-pin. Scarf-pin. Self-locking pin. Skirt-supporting pin. Tuning-pin. | | | | | | | |
| Pin | R. Reibetanz | 718,218 | Jan. 13 | 1300 | 286 | 102 | 294 |
| Pin | G. W. Dover | 729,557 | June 2 | 65 | 17 | 104 | 1141 |
| Pin | J. Jenkins | 729,770 | June 2 | 464 | 102 | 104 | 1220 |
| Pin | M. Rhoades | 736,547 | Aug. 18 | 2814 | 616 | 105 | 1619 |
| Pin | G. W. Dover | 742,401 | Oct. 27 | 3906 | 878 | 106 | 2118 |
| Pin for badges, &c | F. H. Noble | 748,303 | Dec. 29 | 5567 | 1270 | 107 | 2460 |
| Pin-holder | G. A. Faas | 724,832 | Apr. 7 | 782 | 181 | 103 | 1337 |
| Pin-holder | C. F. and H. R. Brown | 726,252 | Apr. 28 | 3365 | 764 | 103 | 1925 |
| Pin-joint | G. W. Dover | 717,555 | Jan. 6 | 65 | 16 | 102 | 16 |
| Pin-joint | G. W. Dover | 729,556 | June 2 | 64 | 16 | 104 | 1140 |
| Pin-protector | O. Sherman | 727,220 | May 5 | 754 | 161 | 104 | 163 |
| Pin-retainer | C. F. Whitnight | 739,527 | Sept. 22 | 3834 | 858 | 106 | 869 |
| Pin-securing device | A. Rainess | 739,756 | Sept. 22 | 4255 | 953 | 106 | 961 |
| Pin-shafts with heads of glass. Machine for providing | T. W. Jungbecker | 723,392 | Mar. 24 | 3251 | 729 | 103 | 727 |
| Pin-tongue joint | T. F. Greenwood | 724,695 | Apr. 7 | 515 | 122 | 103 | 1279 |
| Pin-tongue joint | C. W. Lord | 742,463 | Oct. 27 | 4015 | 901 | 106 | 2141 |
| Pins to metal plates. Means for attaching | H. F. Nehr | 740,305 | Sept. 29 | 5304 | 1195 | 106 | 1198 |
| Pincushion | F. Stang | 735,916 | Aug. 11 | 1685 | 359 | 105 | 1359 |
| Pincushion and paper-weight. Combined | C. L. Royer | 734,962 | July 28 | 4201 | 977 | 105 | 932 |
| Pinwheel and star-wheel motion | J. T. Cyr | 719,198 | Jan. 27 | 3189 | 710 | 102 | 718 |
| Pinwheel-support | J. E. Benedict | 726,847 | May 5 | 20 | 5 | 104 | 7 |
| Pinch-bar | M. A. Sheldon | 717,632 | Jan. 6 | 198 | 49 | 102 | 43 |
| Pineapples. Machine for treating | G. W. Zastrow | 735,649 | Aug. 4 | 1175 | 249 | 105 | 1230 |
| Pinene and producing same. Derivative of | N. Thurlow | 726,783 | Apr. 28 | 4410 | ..... | 103 | 2135 |
| Pinene hydrochlorid. Purifying | W. Naschold | 747,629 | Dec. 22 | 4271 | ..... | 107 | 2094 |
| Ping-pong-table net-holder | A. Ek | 730,188 | June 2 | 1187 | 266 | 104 | 1369 |
| Pinion. Rawhide | C. S. Grannis | 737,223 | Aug. 25 | 4083 | 907 | 105 | 1902 |
| Pipe: | | | | | | | |
| *See* Blowpipe. Cement-lined pipe. Cigar-pipe. Drive-pipe. Fluid-conducting pipe. Hot-air pipe. Locomotive blast-pipe. Screw-threaded pipe. Smoking-pipe. Stand-pipe. Stave pipe. Stovepipe. Suction-pipe. Syringe-pipe. Tobacco-pipe. Tobacco-smoking pipe. Wood pipe. | | | | | | | |
| Pipe | O. Berger | 735,449 | Aug. 4 | 803 | 170 | 105 | 1151 |
| Pipe and bolt wrench and cutter. Convertible | J. J. Gunther | 722,012 | Mar. 3 | 666 | 148 | 103 | 144 |
| Pipe and nut wrench. Combined | A. W. Hjorth | 738,444 | Sept. 8 | 1813 | 394 | 106 | 405 |
| Pipe. Apparatus for making butt-weld | P. Patterson | 720,061 | Feb. 10 | 1193 | 273 | 102 | 1093 |
| Pipe. Apparatus for manufacturing composite | D. A. Ritchie | 718,158 | Jan. 13 | 1183 | 263 | 102 | 270 |
| Pipe. Apparatus for the manufacture of butt-weld | J. H. Matheson | 720,046 | Feb. 10 | 1168 | 267 | 102 | 1087 |
| Pipe. Appliance for balancing end pressure in lengths of | R. F. Sproule | 718,288 | Jan. 13 | 1435 | 318 | 102 | 324 |
| Pipe attachment. Soil- | J. A. Godin | 743,269 | Nov. 3 | 880 | 191 | 107 | 185 |
| Pipe attachment. Water- | E. W. Stebbins | 742,511 | Oct. 27 | 4104 | 924 | 106 | 2159 |
| Pipe-bending form | W. Vanderman | 748,237 | Dec. 29 | 5451 | 1242 | 107 | 2375 |
| Pipe-bending machine | W. R. Smith | 735,307 | Aug. 4 | 518 | 105 | 105 | 1091 |
| Pipe-bending tool | C. W. Miller | 740,893 | Oct. 6 | 938 | 211 | 106 | 1447 |
| Pipe bracket. Steam- | A. J. Beaton | 746,269 | Dec. 8 | 1760 | 399 | 107 | 1495 |
| Pipe-carrier | C. F. Porteous | 724,735 | Apr. 7 | 596 | 141 | 103 | 1295 |
| Pipe-clamp | W. L. Partington | 724,037 | Mar. 31 | 4463 | 1005 | 103 | 993 |
| Pipe-clamp. Inside | B. W. Masterson | 725,739 | Apr. 21 | 2462 | 557 | 103 | 1722 |
| Pipe-cleaner | J. Sincock | 723,745 | Mar. 24 | 3873 | 871 | 103 | 856 |
| Pipe-cleaner | J. C. Kuhlman | 731,190 | June 16 | 3052 | 678 | 104 | 1793 |
| Pipe-clearing apparatus | P. Schalt | 747,089 | Dec. 15 | 3273 | 746 | 107 | 1855 |
| Pipe connection | L. G. Collins | 720,407 | Feb. 10 | 1830 | 417 | 102 | 1227 |
| Pipe connection | F. G. Tallerday | 733,346 | July 7 | 1160 | 275 | 105 | 244 |
| Pipe connection | A. W. Cram | 738,662 | Sept. 8 | 2231 | 489 | 106 | 494 |
| Pipe connection. Soil- | J. McLean | 725,275 | Apr. 14 | 1584 | 358 | 103 | 1520 |
| Pipe-core-forming apparatus | H. L. Bell and C. C. Sweitzer | 746,779 | Dec. 15 | 2671 | 617 | 107 | 1715 |
| Pipe-core machine | F. Britz | 722,670 | Mar. 17 | 1917 | 426 | 103 | 441 |
| Pipe corrugator. Sheet-metal- | M. L. Hunker | 743,287 | Nov. 3 | 915 | 198, 199 | 107 | 196 |
| Pipe-coupling | J. Willmann | 717,647 | Jan. 6 | 217 | 55 | 102 | 47 |
| Pipe-coupling | E. T. Greenfield | 720,578 | Feb. 17 | 2178 | 505 | 102 | 1312 |
| Pipe-coupling | C. S. Johnson | 723,675 | Mar. 24 | 3748 | 841 | 103 | 828 |
| Pipe-coupling | W. M. Wossoff | 725,610 | Apr. 14 | 2203 | 498 | 103 | 1653 |
| Pipe-coupling | F. N. Smith | 726,777 | Apr. 28 | 4397 | 989 | 103 | 2133 |
| Pipe-coupling | H. W. Bradley and H. Peace | 731,538 | June 23 | 3723 | 829 | 104 | 1951 |
| Pipe-coupling | O. A. Thans | 733,685 | July 14 | 1751 | 414 | 105 | 386 |
| Pipe-coupling | A. Profitlich and H. Günster | 733,995 | July 21 | 2368 | 556 | 105 | 532 |
| Pipe-coupling | F. R. Waters | 738,503 | Sept. 8 | 1937 | 423 | 106 | 431 |
| Pipe-coupling | W. R. Park | 739,707 | Sept. 22 | 4171 | 932 | 106 | 942 |
| Pipe-coupling | W. W. Price | 742,352 | Oct. 27 | 3821 | 856 | 106 | 2102 |
| Pipe coupling. Air- | T. J. Thatcher | 735,316 | Aug. 4 | 538 | 110 | 105 | 1096 |
| Pipe coupling. Air- | H. C. Lafferty | 747,733 | Dec. 22 | 4460 | 1005 | 107 | 2135 |
| Pipe coupling and plug. Combined universal-joint | T. Draper | 747,152 | Dec. 15 | 3393 | 769 | 107 | 1882 |
| Pipe-coupling. Automatic | N. F. Niederlander | 741,699 | Oct. 20 | 2523 | 564 | 106 | 1820 |
| Pipe-coupling for deep-boring devices | T. Steen | 722,764 | Mar. 17 | 2090 | 467, 468 | 103 | 477 |
| Pipe-coupling joint | G. F. Bard | 720,655 | Feb. 17 | 2336 | 534 | 102 | 1343 |
| Pipe-coupling, Line- | H. B. Schrader | 743,935 | Nov. 10 | 2206 | 476 | 107 | 486 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| Pipe-coupling seal-lock | R. D. Tittle | 720,196 | Feb. 10 | 1444 | 330 | 102 | 1145 |
| Pipe coupling. Train- | J. C. Martin, Jr. | 735,991 | Aug. 11 | 1826 | 391 | 105 | 1390 |
| Pipe coupling. Train- | A. Herpolsheimer | 738,904 | Sept. 15 | 2712 | 599 | 106 | 614 |
| Pipe coupling. Train- | J. E. Forsyth | 740,749 | Oct. 6 | 672 | 153, 154 | 106 | 1391 |
| Pipe coupling. Train- | C. Mahon | 741,051 | Oct. 13 | 1223 | 277, 278 | 106 | 1528 |
| Pipe-covering | H. S. Lord | 742,689 | Oct. 27 | 4429 | 1000 | 106 | 2229 |
| Pipe covering. Steam- | S. W. Curtiss | 720,003 | Feb. 10 | 1072 | 248 | 102 | 1066 |
| Pipe-crimping machines. Shaping-wheel for sheet-metal- | A. G. Scherer | 728,020 | May 12 | 2260 | 502 | 104 | 498 |
| Pipe-cutter | A. W. Warnock | 729,816 | June 2 | 545 | 120 | 104 | 1240 |
| Pipe-cutter | B. Colom y Marca | 747,942 | Dec. 29 | 4888 | 1107 | 107 | 2253 |
| Pipe cutter and vise | W. G. Wilson | 731,257 | June 16 | 3158 | 703 | 104 | 1816 |
| Pipe cutting and threading machine | J. B. Dumais | 722,090 | Mar. 3 | 798 | 178 | 103 | 173 |
| Pipe-cutting machine | L. N. McCarter | 734,427 | July 21 | 3193 | 751, 752 | 105 | 708 |
| Pipe-cutting tool | F. A. Headson | 746,076 | Dec. 8 | 1402 | 313, 314 | 107 | 1417 |
| Pipe die and reamer. Combined | A. O'Brien | 746,136 | Dec. 8 | 1513 | 338 | 107 | 1443 |
| Pipe die. Sewer- | T. W. Jones and C. F. Kanaer | 738,913 | Sept. 15 | 2731 | 603 | 106 | 618 |
| Pipe drive-head | P. H. Mack | 722,866 | Mar. 17 | 2271 | 508 | 103 | 512 |
| Pipe-driving attachment | S. S. O'Connor | 730,838 | June 9 | 2366 | 522, 523 | 104 | 1636 |
| Pipe-driving head | O. H. Bunger | 735,205 | Aug. 4 | 336 | 64 | 105 | 1053 |
| Pipe-fastening device. Vent- | J. J. Meyer | 737,437 | Aug. 25 | 4500 | 1009 | 105 | 1992 |
| Pipe filter or screen. Service- | J. F. Bush | 734,812 | July 28 | 3947 | 920 | 105 | 879 |
| Pipe-finishing machine | C. O. Strutz | 743,345 | Nov. 3 | 1023 | 221 | 107 | 219 |
| Pipe flange or coupling | G. C. Riber | 718,157 | Jan. 13 | 1182 | 263 | 102 | 270 |
| Pipe-flanging tool | L. D. Lovekin | 734,273 | July 21 | 2915 | 682 | 105 | 651 |
| Pipe former. Sheet-metal- | S. M. Schmeltzer | 728,178 | May 12 | 2546 | 566 | 104 | 559 |
| Pipe header. Water- | J. A. Carlson | 736,934 | Aug. 25 | 3569 | 792 | 105 | 1794 |
| Pipe heating and welding apparatus | R. A., M., and A. W. Slater | 719,522 | Feb. 3 | 194 | 45, 46 | 102 | 865 |
| Pipe-holder | W. E. Loney | 740,028 | Sept. 29 | 4816 | 1080 | 106 | 1097 |
| Pipe-jack | I. C. Beard and J. H. Stephens | 742,111 | Oct. 20 | 3370 | 752 | 106 | 1992 |
| Pipe jacket. Steam or air | R. Holden | 732,299 | June 30 | 5174 | 1149 | 104 | 2265 |
| Pipe-joint | J. P. Gilbert | 747,061 | Dec. 15 | 3227 | 735 | 107 | 1844 |
| Pipe-joint and stuffing-box. Spherical | W. F. Boardman and F. H. Jackson | 731,159 | June 16 | 3000 | 666 | 104 | 1785 |
| Pipe joint and valve in connection therewith | T. W. Moran | 721,595 | Feb. 24 | 4106 | 935 | 102 | 1740 |
| Pipe-joint. Expansion | H. J. Wessinger | 723,347 | Mar. 24 | 3148 | 708 | 103 | 707 |
| Pipe-joint. Flexible | J. C. Martin, Jr. | 733,065 | July 7 | 649 | 157 | 105 | 138 |
| Pipe joint. Metal- | G. H. West | 721,114 | Feb. 17 | 3165 | 728 | 102 | 1523 |
| Pipe joint. Sheet-metal- | J. B. Wallace | 720,538 | Feb. 10 | 2083 | 480 | 102 | 1277 |
| Pipe-joint. Swivel | J. A. Connelly | 745,482 | Dec. 1 | 326 | 76 | 107 | 1168 |
| Pipe-joints. Bearing-sleeve for expansion | H. J. Wessinger | 730,425 | June 9 | 1640 | 367 | 104 | 1479 |
| Pipe. Machine for inverting sewer- | H. A. Williams and F. S. Bean | 719,708 | Feb. 3 | 535 | 120, 121 | 102 | 936 |
| Pipe. Manufacture of butt-weld | J. H. Matheson | 720,045 | Feb. 10 | 1165 | 267 | 102 | 1080 |
| Pipe. Manufacturing composite | D. A. Ritchie | 729,796 | June 2 | 500 | 110, 111 | 104 | 1230 |
| Pipe. Means for making | A. T. Symms | 734,375 | July 21 | 3103 | 730 | 105 | 690 |
| Pipe-mold-making machine | J. Ingham, J. Poulson, and J. W. Moore. | 718,254 | Jan. 13 | 1356 | 301 | 102 | 307 |
| Pipe-molding apparatus | O. Bergstrom | 722,939 | Mar. 17 | 2401 | 537 | 103 | 540 |
| Pipe-molding apparatus | T. D. Young | 733,529 | July 14 | 1492 | 355, 356 | 105 | 332 |
| Pipe or bolt threading machine | F. Muenger | 722,032 | Mar. 3 | 701 | 156 | 103 | 152 |
| Pipe or conduit coupling | W. W. Benson | 733,535 | July 14 | 1500 | 357, 358 | 105 | 334 |
| Pipe or hose coupling | C. W. Martin | 731,379 | June 16 | 3403 | 760 | 104 | 1867 |
| Pipe or rod coupling device | A. Sundh | 733,568 | July 14 | 1568 | 373 | 105 | 350 |
| Pipe-protector. Sanitary | T. Lovely | 728,734 | May 19 | 3612 | 801 | 104 | 806 |
| Pipe renovator. Water- | R. W. Hellums and L. S. Boydston | 717,572 | Jan. 6 | 91 | 22 | 102 | 22 |
| Pipe roof-joint. Vent- | J. Bropson | 730,089 | June 2 | 1026 | 230 | 104 | 1336 |
| Pipe-shellacking machine | C. O. Strutz | 740,604 | Oct. 6 | 437 | 95 | 106 | 1340 |
| Pipe-socket expander | H. W. and J. A. Hock | 734,264 | July 21 | 2900 | 678 | 105 | 648 |
| Pipe-threading machine | B. Borden | 740,799 | Oct. 6 | 780 | 176 | 106 | 1411 |
| Pipe-trimming tool | L. Emond | 746,312 | Dec. 8 | 1841 | 419 | 107 | 1512 |
| Pipe-truing mechanism | W. W. Doolittle | 718,830 | Jan. 20 | 2482 | 551, 552 | 102 | 555 |
| Pipe-turning apparatus | S. G. Elton | 738,017 | Sept. 1 | 923 | 204 | 106 | 202 |
| Pipe-union | L. H. Flory | 731,031 | June 16 | 2751 | 613 | 104 | 1735 |
| Pipe-unions. Sheet-metal clamping-band with inclined loose displaceable joint for | E. Wirtz | 735,644 | Aug. 4 | 1167 | 247 | 105 | 1229 |
| Pipe ventilator. Leader- | G. M. Vroome | 737,535 | Aug. 25 | 4686 | 1051 | 105 | 2036 |
| Pipe-wrench | J. Bartlett | 717,528 | Jan. 6 | 12 | 3 | 102 | 5 |
| Pipe-wrench | L. W. Johnson | 717,579 | Jan. 6 | 100 | 26 | 102 | 24 |
| Pipe-wrench | S. Stucky | 719,960 | Feb. 3 | 981 | 227 | 102 | 1031 |
| Pipe-wrench | O. O. Storle | 720,385 | Feb. 10 | 1798 | 408 | 102 | 1220 |
| Pipe-wrench | J. J. Rhinelander | 722,144 | Mar. 3 | 886 | 198 | 103 | 189 |
| Pipe-wrench | J. Donaldson | 728,881 | May 26 | 3888 | 864 | 104 | 876 |
| Pipe-wrench | F. D. Bullard | 729,728 | June 2 | 380 | 86 | 104 | 1206 |
| Pipe-wrench | F. D. Bullard | 733,138 | July 7 | 780 | 189 | 105 | 165 |
| Pipe-wrench | N. Boulanger | 733,617 | July 14 | 1642 | 389 | 105 | 365 |
| Pipe-wrench | J. B. Tupper | 733,770 | July 14 | 1907 | 449 | 105 | 419 |
| Pipe-wrench | K. Peterson | 735,289 | Aug. 4 | 491 | 98 | 105 | 1086 |
| Pipe-wrench | A. Fasenmeyer | 736,372 | Aug. 18 | 2488 | 546 | 105 | 1549 |
| Pipe-wrench | G. W. Johnson | 737,847 | Sept. 1 | 563 | 122 | 106 | 125 |
| Pipe-wrench | W. Littley | 738,216 | Sept. 8 | 1336 | 289 | 106 | 305 |
| Pipe-wrench | D. H. Irland | 739,316 | Sept. 22 | 3448 | 769 | 106 | 785 |
| Pipe-wrench | F. D. Bullard | 742,389 | Oct. 27 | 3884 | 872 | 106 | 2114 |
| Pipe-wrench | D. Nelson | 743,019 | Nov. 3 | 388 | 83 | 107 | 81 |
| Pipe-wrench | A. W. Snyder | 747,013 | Dec. 15 | 3130 | 716 | 107 | 1820 |
| Pipe-wrench | L. Tarbell | 747,504 | Dec. 22 | 4047 | 910 | 107 | 2043 |
| Pipe wrench and cutter | C. S. Bonney | 721,660 | Mar. 3 | 17 | 4 | 103 | 6 |
| Pipe wrench or clamp | C. N. Hutchins | 746,705 | Dec. 15 | 2535 | 583 | 107 | 1686 |

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|---|---|---|---|---|---|---|---|
| Pipe-wrench. Ratchet | J. Levy | 738,945 | May 26 | 3999 | 890 | 104 | 906 |
| Pipes against bursting by freezing. Means for protecting water- | N. M. Hopkins | 745,060 | Nov. 24 | 4365 | 943 | 107 | 976 |
| Pipes and fittings. Apparatus for stopping leaks in | D. T. Pitkethly and J. C. Hayes | 739,107 | Sept. 15 | 3072 | 681 | 106 | 688 |
| Pipes. Apparatus for removing obstructions from | J. E. S. Taylor | 739,120 | Sept. 15 | 3092 | 685 | 106 | 692 |
| Pipes. Apparatus for the manufacture of lapweld- | A. M. Saunders | 742,500 | Oct. 27 | 4086 | 919 | 106 | 2155 |
| Pipes. Clamp or device for stopping leaks in | D. T. Pitkethly and J. C. Hayes | 736,624 | Aug. 18 | 2976 | 654 | 105 | 1650 |
| Pipes. Clean-out stopper for | D. Craig | 735,470 | Aug. 4 | 839 | 179 | 105 | 1158 |
| Pipes, conduits, &c. Coupling for | W. W. Benson | 733,534 | July 14 | 1499 | 357 | 105 | 333 |
| Pipes, conduits, &c. Hanger for | A. B. Carll | 726,636 | Apr. 28 | 4132 | 932 | 103 | 2077 |
| Pipes. Floor-plate for steam and water | A. R. Wells | 722,338 | Mar. 10 | 1276 | 284 | 103 | 287 |
| Pipes, &c. Joint for water- | C. Guyer | 746,828 | Dec. 15 | 2767 | 638 | 107 | 1738 |
| Pipes. Machine for manufacturing screw-threaded | E. T. Greenfield | 727,128 | May 5 | 592 | 127, 128 | 104 | 128 |
| Pipes. Manufacture of | J. K. Smith | 729,099 | May 26 | 4268 | 943 | 104 | 954 |
| Pipes. Means for coiling | C. L. Schalitz | 746,387 | Dec. 8 | 1967 | 450 | 107 | 1539 |
| Pipes. Mechanism for running underground | O. E. Brown | 740,521 | Oct. 6 | 268 | 53 | 106 | 1303 |
| Pipes or other articles. Hanger or support for | W. F. Irish | 738,196 | Sept. 8 | 1302 | 282 | 106 | 297 |
| Pipes. Repair-sleeve for fluid-conducting | S. R. Dresser and A. B. Henry | 732,400 | June 30 | 5373 | 1190 | 104 | 2308 |
| Pipes. Wall, floor, or ceiling plate for steam or other | M. C. Rosenfeld | 734,139 | July 21 | 2668 | 627 | 105 | 598 |
| Pipes with sand. Mechanism for packing | C. R. McKibben | 720,053 | Feb. 10 | 1181 | 270 | 102 | 1090 |
| Pistol. Match-shooting | J. J. Marshall | 746,542 | Dec. 8 | 2229 | 511 | 107 | 1597 |
| Pistol. Rapid-fire | W. B. Knoble | 743,002 | Nov. 3 | 348 | 75, 76 | 107 | 73 |
| Piston | R. Morrill | 723,005 | Mar. 17 | 2506 | 563 | 103 | 562 |
| Piston | C. L. Haase, Jr | 727,937 | May 12 | 2117 | 471 | 104 | 469 |
| Piston | J. C. Junkin | 736,735 | Aug. 18 | 3188 | 704 | 105 | 1694 |
| Piston | O. Kelsey | 743,645 | Nov. 10 | 1690 | 356 | 107 | 377 |
| Piston-cylinder | L. C. Kiser | 745,729 | Dec. 1 | 743 | 170 | 107 | 1257 |
| Piston. Expansible | E. Thomas | 730,720 | June 9 | 2174 | 483 | 104 | 1594 |
| Piston-head | A. J. Robertson | 722,146 | Mar. 3 | 897 | 199 | 103 | 192 |
| Piston-ring | W. G. Wilson | 722,440 | Mar. 10 | 1449 | 321 | 103 | 325 |
| Piston-rod joint | J. D. McFarland, Jr | 736,136 | Aug. 11 | 2090 | 448 | 105 | 1445 |
| Piston-rods. Bearing for steam-feed | H. G. Dittbenner | 736,367 | Aug. 18 | 2481 | 544 | 105 | 1548 |
| Pit-scrap. Apparatus for handling | F. E. Parks | 723,723 | Mar. 24 | 3839 | 863 | 103 | 848 |
| Pitchfork | L. L. Layne | 747,986 | Dec. 29 | 4980 | 1124 | 107 | 2273 |
| Pitching apparatus | S. C. Spangler | 724,348 | Mar. 31 | 5087 | 1138, 1139 | 103 | 1119 |
| Pitman | T. Cronin | 736,223 | Aug. 11 | 2224 | 479 | 105 | 1474 |
| Pitman | T. L. and T. J. Sturtevant | 736,458 | Aug. 18 | 2639 | 580 | 105 | 1581 |
| Pitman. Binder and mower | K. Ringheim | 740,045 | Sept. 29 | 4840 | 1086 | 106 | 1102 |
| Pitman connection | J. L. Taylor | 720,192 | Feb. 10 | 1439 | 329 | 102 | 1144 |
| Pitman connection | E. W. Burgess | 720,663 | Feb. 17 | 2348 | 537 | 102 | 1346 |
| Pitman connection | J. R. Carter | 721,502 | Feb. 24 | 3919 | 892 | 102 | 1696 |
| Pitman connection | E. A. Johnston | 738,812 | Sept. 15 | 2546 | 560 | 106 | 578 |
| Pitman connection | D. W. Fagalde | 747,054 | Dec. 15 | 3217 | 733 | 107 | 1842 |
| Placket-closer | E. Falkenberg | 718,751 | Jan. 20 | 2350 | 519 | 102 | 530 |
| Placket-closer | S. W. Long and G. U. Larom | 726,715 | Apr. 28 | 4280 | 967 | 103 | 2110 |
| Placket-closure | L. W. and S. M. Luellen | 720,450 | Feb. 10 | 1909 | 435 | 102 | 1243 |
| Placket-closure | M. L. Perrottet | 727,681 | May 12 | 1612 | 367 | 104 | 365 |
| Placket-closure | H. A. Taylor | 738,373 | Sept. 8 | 1681 | 364 | 106 | 377 |
| Placket-closure | H. A. Taylor | 738,374 | Sept. 8 | 1683 | 364 | 106 | 378 |
| Placket-closure | H. A. Taylor | 738,375 | Sept. 8 | 1685 | 365 | 106 | 378 |
| Placket-fastener | L. A. Gilpatrick | 732,009 | Mar. 3 | 663 | 147 | 103 | 143 |
| Placket-fastener | A. D. Bell | 745,766 | Dec. 1 | 810 | 184 | 107 | 1271 |
| Placket-fastener and skirt-supporter | J. E. Franzen | 718,116 | Jan. 13 | 1112 | 245, 246 | 102 | 254 |
| Placket-holder | H. N. Northrop | 718,018 | Jan. 6 | 946 | 209 | 102 | 204 |
| Plaiting attachment for tufting-boards | A. Freschl | 737,918 | Sept. 1 | 724 | 157 | 106 | 158 |
| Plaiting attachment. Skirt- | M. M. Merrill | 748,396 | Dec. 29 | 5718 | 1306 | 107 | 2434 |
| Plaiting heavy webs. Machine for | D. L. Chandler | 724,084 | Mar. 31 | 4550 | 1023, 1024 | 103 | 1012 |
| Plaiting-machine | D. L. Chandler | 733,694 | July 14 | 1763 | 418 | 105 | 388 |
| Plaiting-machine | D. L. Chandler | 737,077 | Aug. 25 | 3817 | 846, 847 | 105 | 1846 |
| Plaiting-machine | M. F. Havens | 747,704 | Dec. 22 | 4409 | 994 | 107 | 2124 |
| Plaiting-machine roll | D. L. Chandler | 724,083 | Mar. 31 | 4549 | 1023 | 103 | 1011 |
| Plaiting or braiding machine | E. L. Thorp | 726,116 | Apr. 21 | 3111 | 705 | 103 | 1859 |
| Plane | J. A. Traut | 718,679 | Jan. 20 | 2207 | 484 | 102 | 500 |
| Plane | L. C. Clark | 718,981 | Jan. 27 | 2774 | 621, 622 | 102 | 633 |
| Plane | W. L. Scott | 719,051 | Jan. 27 | 2905 | 650 | 102 | 661 |
| Plane | J. A. Traut | 719,062 | Jan. 27 | 2934 | 655 | 102 | 667 |
| Plane | J. Allen | 721,771 | Mar. 3 | 196 | 45 | 103 | 43 |
| Plane | C. H. Fox | 735,744 | Aug. 11 | 1360 | 293 | 105 | 1288 |
| Plane | A. W. Stanley | 738,500 | Sept. 8 | 1931 | 421 | 106 | 430 |
| Plane | A. W. Stanley and E. A. Schade | 738,501 | Sept. 8 | 1932 | 422 | 106 | 430 |
| Plane | J. W. Carleton and G. E. Trask | 746,285 | Dec. 8 | 1787 | 405, 406 | 107 | 1500 |
| Plane. Bench- | C. E. Lincoln | 739,014 | Sept. 15 | 2887 | 641 | 106 | 652 |
| Plane-bit | S. Jones | 737,112 | Aug. 25 | 3876 | 860 | 105 | 1858 |
| Plane. Block- | J. P. Vance | 729,020 | May 26 | 4138 | 917 | 104 | 929 |
| Plane. Carpenter's | A. E. Church | 721,017 | Feb. 17 | 2978 | 684 | 102 | 1480 |
| Plane. Carpenter's | J. W. Kirby | 725,569 | Apr. 14 | 2124 | 481 | 103 | 1635 |
| Plane-guide | J. W. Brady | 729,725 | June 2 | 376 | 85 | 104 | 1205 |
| Plane-iron | J. W. Carleton | 746,286 | Dec. 8 | 1788 | 406 | 107 | 1500 |
| Plane. Matching- | A. Mason | 748,199 | Dec. 29 | 5392 | 1226 | 107 | 2362 |
| Planer. Fixed-knife smoothing- | C. C. Stuart | 745,260 | Nov. 24 | 4763 | 1041 | 107 | 1058 |
| Planer. Floor- | F. Herbeck | 744,757 | Nov. 24 | 3797 | 818 | 107 | 858 |
| Planer. Hair- | N. J. Robedeau | 737,775 | Sept. 1 | 408 | 86 | 106 | 90 |
| Planer or shaper tool | A. Ryden | 731,388 | June 16 | 3422 | 764 | 104 | 1871 |
| Planing key-grooves. Machine for | F. Regner | 718,728 | Jan. 20 | 2303 | 509 | 102 | 520 |
| Planing-machine | E. Wuhrmann | 723,967 | Mar. 31 | 4319 | 969 | 103 | 967 |
| Planing machine. Floor- | A. J. Stephens and C. A. Goodale | 721,922 | Mar. 3 | 510 | 112 | 103 | 113 |
| Planimeter | L. T. Snow | 718,166 | Jan. 13 | 1202 | 266 | 102 | 274 |
| Planimeter | F. R. Williams | 746,427 | Dec. 8 | 2035 | 467 | 107 | 1553 |

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| | | | | Spec. | Dr'g. | Vol. | Page. |
| Plant-cover | J. L. Larson | 728,250 | May 19 | 2687 | 601 | 104 | 611 |
| Plant or flower support | L. F. Lacy | 730,779 | June 9 | 2265 | 503 | 104 | 1615 |
| Plant-propagating frame | W. M. Smith | 721,104 | Feb. 17 | 3148 | 723 | 102 | 1520 |
| Plant-protector | J. R. Easterling | 718,109 | Jan. 13 | 1103 | 244 | 102 | 253 |
| Plant-protector | L. G. Hunter | 740,437 | Oct. 6 | 104 | 22 | 106 | 1269 |
| Plant-protector | W. G. Smith | 745,395 | Dec. 1 | 156 | 36 | 107 | 1133 |
| Plant-setting. Locator for use in | N. Hostettler | 736,100 | Aug. 11 | 2024 | 431 | 105 | 1432 |
| Plant-support | J. H. Broxey | 726,631 | Apr. 28 | 4125 | 931 | 103 | 2076 |
| Plant-support | E. C. Sherman | 731,960 | June 23 | 4484 | 1000 | 104 | 2111 |
| Plant-thinning machine | J. J. Barron | 717,797 | Jan. 6 | 529 | 118 | 102 | 114 |
| Plants from streams. Apparatus for removing | A. King | 727,807 | May 12 | 1870 | 416<br>417 | 104 | 416 |
| Plants. Machine for distributing poison on cotton or other | J. Anderson | 733,932 | July 21 | 2232 | 525 | 105 | 504 |
| Plants of their fleshy substances. Machine for divesting parts of | H. J. Boeken | 732,161 | June 30 | 4908 | 1091<br>1092 | 104 | 2210 |
| Planter | A. C. Dann and E. Boos | 717,548 | Jan. 6 | 51 | 12, 13 | 102 | 13 |
| Planter | J. P. Caldwell | 727,285 | May 5 | 860 | 185 | 104 | 185 |
| Planter | J. J. Kennedy | 730,377 | June 9 | 1551 | 345 | 104 | 1461 |
| Planter | S. B. Swilling | 731,243 | June 16 | 3141 | 698 | 104 | 1812 |
| Planter | T. M. Griffin | 733,033 | July 7 | 585 | 142 | 105 | 125 |
| Planter | E. M. Heylman | 736,257 | Aug. 11 | 2283 | 494 | 105 | 1487 |
| Planter | J. P. Byrne | 739,385 | Sept. 22 | 3572 | 798 | 106 | 811 |
| Planter | S. S. Pharr | 743,026 | Nov. 3 | 401 | 86, 87 | 107 | 84 |
| Planter and fertilizer-distributer. Combined seed- | J. H. Bedingfield | 737,319 | Aug. 25 | 4278 | 951 | 105 | 1943 |
| Planter and fertilizer-distributer. Combined seed- | J. H. McDaniel | 737,856 | Sept. 1 | 581 | 128 | 106 | 128 |
| Planter and fertilizer-distributer. Combined seed- | J. H. McDaniel | 737,857 | Sept. 1 | 587 | 129 | 106 | 129 |
| Planter and fertilizer-distributer. Combined seed- | J. P. Stevens | 743,949 | Nov. 10 | 2229 | 482 | 107 | 491 |
| Planter and fertilizer-distributer. Cotton- | B. L. Robbins | 737,489 | Aug. 25 | 4596 | 1029 | 105 | 2014 |
| Planter and fertilizer-distributer. Seed- | J. A. McCutchen | 736,425 | Aug. 18 | 2586 | 567 | 105 | 1570 |
| Planter and fertilizer-distributer. Seed- | W. F. Edwards | 745,335 | Dec. 1 | 35 | 7 | 107 | 1108 |
| Planter and marker | H. L. Johnson | 728,930 | May 26 | 3968 | 882<br>883 | 104 | 893 |
| Planter attachment | W. H. Sandifer and N. E. Meredith | 736,300 | Aug. 11 | 2366 | 514 | 105 | 1507 |
| Planter attachment. Corn- | E. T. Fry and S. A. Wine | 723,857 | Mar. 31 | 4093 | 923 | 103 | 918 |
| Planter attachment. Corn- | B. F. Gordon | 726,423 | Apr. 28 | 3698 | 838 | 103 | 1994 |
| Planter attachment. Corn- | W. Hensler | 726,916 | May 5 | 154 | 37 | 104 | 35 |
| Planter. Check-row | E. Shaughnessy | 734,101 | July 21 | 2589 | 607 | 105 | 581 |
| Planter. Check-row | W. Conard | 742,596 | Oct. 27 | 4264 | 960 | 106 | 2192 |
| Planter check-row attachment. Corn- | G. S. Agee | 730,217 | June 9 | 1259 | 280 | 104 | 1399 |
| Planter. Check-row corn- | J. E. Bering | 719,076 | Jan. 27 | 2962 | 661<br>662 | 102 | 672 |
| Planter. Check-row corn- | J. P. Fox | 722,966 | Mar. 17 | 2442 | 546<br>547 | 103 | 549 |
| Planter. Check-row corn- | P. E. Wistrand | 729,986 | June 2 | 860 | 192<br>193 | 104 | 1303 |
| Planter. Check-row corn- | R. L. Parsons | 737,134 | Aug. 25 | 3911 | 869 | 105 | 1866 |
| Planter. Check-row corn- | T. M. Hendrickson | 738,035 | Sept. 1 | 947 | 210<br>211 | 106 | 206 |
| Planter. Combined check-row and drill | A. Anderson | 722,442 | Mar. 10 | 1451 | 321<br>322<br>323 | 103 | 325 |
| Planter. Combined check-row and drill | W. Sobey | 736,307 | Aug. 11 | 2377 | 517<br>518 | 105 | 1510 |
| Planter. Combined corn and potato | D. J. Sigfridson | 746,592 | Dec. 8 | 2321 | 532 | 107 | 1618 |
| Planter. Combined seed- | P. Le Sueur | 728,803 | May 19 | 3738 | 834 | 104 | 831 |
| Planter. Corn- | E. M. Sell | 719,887 | Feb. 3 | 860 | 201 | 102 | 1005 |
| Planter. Corn- | H. P. Adams | 720,211 | Feb. 10 | 1472 | 335 | 102 | 1151 |
| Planter. Corn- | T. Adams | 720,391 | Feb. 10 | 1804 | 410 | 102 | 1221 |
| Planter. Corn- | W. S. Graham | 721,795 | Mar. 3 | 251 | 56 | 103 | 56 |
| Planter. Corn- | E. M. Heylman | 723,201 | Mar. 17 | 2879 | 645 | 103 | 640 |
| Planter. Corn- | J. W. White | 723,960 | Mar. 31 | 4305 | 967 | 103 | 964 |
| Planter. Corn- | A. S. Hill | 724,864 | Apr. 7 | 833 | 192 | 103 | 1347 |
| Planter. Corn- | P. Grosbetty | 725,075 | Apr. 14 | 1225 | 277 | 103 | 1445 |
| Planter. Corn- | L. P. Graham | 726,157 | Apr. 21 | 3173 | 718 | 103 | 1871 |
| Planter. Corn- | L. P. Graham | 727,539 | May 5 | 1325 | 295<br>296 | 104 | 285 |
| Planter. Corn- | H. D. Smith | 728,510 | May 19 | 3174 | 703 | 104 | 713 |
| Planter. Corn- | J. L. Cox | 729,490 | May 26 | 4939 | 1095 | 104 | 1096 |
| Planter. Corn- | J. V. Klein | 730,775 | June 9 | 2360 | 502 | 104 | 1614 |
| Planter. Corn- | P. T. J. Monson | 730,950 | June 16 | 2597 | 577<br>578 | 104 | 1704 |
| Planter. Corn- | W. S. Graham | 731,355 | June 16 | 3342 | 746<br>747 | 104 | 1854 |
| Planter. Corn- | R. O. Newell | 731,604 | June 23 | 3843 | 856<br>857 | 104 | 1974 |
| Planter. Corn- | R. V. Barry | 731,658 | June 23 | 3944 | 877<br>878 | 104 | 1994 |
| Planter. Corn- | A. B. Frenier | 732,687 | June 30 | 5919 | 1313 | 104 | 2423 |
| Planter. Corn- | W. H. Parlin | 734,359 | July 21 | 3075 | 724 | 105 | 684 |
| Planter. Corn- | O. P. Tyson | 737,678 | Sept. 1 | 219 | 46 | 106 | 50 |
| Planter. Corn- | J. W. Gentry and A. H. Stroemer | 739,851 | Sept. 29 | 4448 | 999 | 106 | 1019 |
| Planter. Corn- | C. M. Stevenson | 743,583 | Nov. 10 | 1577 | 330<br>331 | 107 | 353 |
| Planter. Corn- | K. K. Lerol, Jr | 747,194 | Dec. 15 | 3461 | 784<br>785 | 107 | 1896 |
| Planter. Corn- | J. Leyhtwine | 748,386 | Dec. 29 | 5698 | 1300<br>1301 | 107 | 2430 |
| Planter. Cotton- | I. H. Jackson | 722,233 | Mar. 10 | 1086 | 239 | 103 | 247 |
| Planter. Cotton- | F. W. Key | 738,041 | Sept. 1 | 957 | 213 | 106 | 208 |
| Planter, cotton-chopper, and cultivator. Combined | J. D. McKenzie | 731,939 | June 23 | 4440 | 990 | 104 | 2101 |
| Planter. Cotton or pea | P. J. Smith | 728,139 | May 12 | 2473 | 550 | 104 | 544 |
| Planter disk furrow opener or closer. Seed- | F. W. Wilson | 731,645 | June 23 | 3924 | 874 | 104 | 1990 |
| Planter furrow-opener attachment. Corn- | H. Rentsch | 730,797 | June 9 | 2295 | 509 | 104 | 1621 |
| Planter. Hand- | J. L. Howard | 742,659 | Oct. 27 | 4374 | 985<br>986 | 106 | 2217 |
| Planter-marker | C. A. Taylor | 747,505 | Dec. 22 | 4048 | 910 | 107 | 2043 |

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| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Planter marker. Corn- | L. J. Lindsay | 742,202 | Oct. 27 | 3537 | 789 | 106 | 2041 |
| Planter marker. Corn- | L. J. Lindsay | 742,203 | Oct. 27 | 3539 | 789 | 106 | 2041 |
| Planter or fertilizer distributer | T. H. Nance | 721,732 | Mar. 3 | 139 | 32 | 103 | 31 |
| Planter. Pindal- | A. Tyler | 744,648 | Nov. 17 | 3559 | 767, 768 | 107 | 787 |
| Planter. Potato- | J. Q. Adams | 718,067 | Jan. 13 | 1025 | 229 | 102 | 235 |
| Planter. Potato- | F. S. McWhorter | 723,480 | Mar. 24 | 3427 | 766, 767 | 103 | 762 |
| Planter. Potato- | F. Kohser | 736,981 | Aug. 25 | 3663 | 812 | 105 | 1814 |
| Planter. Potato- | A. W. Harvey | 740,011 | Sept. 29 | 4769 | 1074 | 106 | 1086 |
| Planter. Potato- | F. E. Shaw | 743,200 | Nov. 3 | 731 | 160, 161 | 107 | 153 |
| Planter. Potato- | G. H. Elmer | 744,181 | Nov. 17 | 2755 | 586 | 107 | 615 |
| Planter. Potato- | H. J. Springer | 744,984 | Nov. 24 | 4196 | 908 | 107 | 940 |
| Planter. Rotary drop corn- | R. Armstrong and F. W. Burger | 729,484 | May 26 | 4930 | 1092 | 104 | 1094 |
| Planter. Seed- | C. L. Ferriott | 719,575 | Feb. 3 | 300 | 69 | 102 | 885 |
| Planter. Seed- | C. E. Yeager | 720,770 | Feb. 17 | 2526 | 582 | 102 | 1385 |
| Planter. Seed- | L. L. Bevis | 722,799 | Mar. 17 | 2156 | 482 | 103 | 491 |
| Planter. Seed- | J. H. Bedingfield | 728,660 | May 19 | 3486 | 773, 774 | 104 | 780 |
| Planter. Seed- | A. B. Kepner | 729,354 | May 26 | 4723 | 1044 | 104 | 1050 |
| Planter. Seed- | J. L. Phelps | 732,316 | June 30 | 5197 | 1154, 1155 | 104 | 2270 |
| Planter. Seed- | W. H. Ledbetter | 733,912 | July 14 | 2197 | 516, 517 | 105 | 477 |
| Planter. Seed- | C. L. Ferriott | 735,231 | Aug. 4 | 382 | 74 | 105 | 1062 |
| Planter. Seed- | W. H. Coble | 740,536 | Oct. 6 | 297 | 61 | 106 | 1308 |
| Planter. Seed- | S. M. Merrick | 744,779 | Nov. 24 | 3833 | 826 | 107 | 866 |
| Planter. Seed or potato | C. H. Gerling | 732,731 | July 7 | 61 | 17 | 105 | 16 |
| Planter seeding device. Corn- | J. Kaylor | 734,716 | July 28 | 3734 | 873, 874 | 105 | 836 |
| Planter seeding device. Corn- | J. Kaylor | 734,717 | July 28 | 3738 | 874 | 105 | 837 |
| Planter seeding mechanism. Corn- | J. E. Bering | 726,849 | May 5 | 23 | 6,7 | 104 | 8 |
| Planter-wheel | N. Nilson | 725,762 | Apr. 21 | 2503 | 568 | 103 | 1731 |
| Planter. Wireless check-row corn- | W. W. Watson | 722,779 | Mar. 17 | 2113 | 473, 474 | 103 | 482 |
| Planters. Device for exhibiting the operation of corn- | W. S. Graham | 727,125 | May 5 | 585 | 126 | 104 | 127 |
| Planting machine. Seed- | U. A. Fitz Maurice | 740,748 | Oct. 6 | 671 | 152 | 106 | 1391 |
| Plaster for walls, ceilings, &c. Composition for | H. M. Hanmore | 720,799 | Feb. 17 | 2573 | ..... | 102 | 1394 |
| Plaster. Means for stiffening wire- | H. L. Kubbernuss | 745,446 | Dec. 1 | 252 | 58 | 107 | 1153 |
| Plaster-of-paris. Apparatus for forming cornices or ornamental moldings from | I. L. Conkling | 717,545 | Jan. 6 | 41 | 11 | 102 | 11 |
| Plaster-package | F. F. Hawkins | 730,911 | June 16 | 2523 | 561 | 104 | 1687 |
| Plaster. Wall- | W. H. Orr | 723,015 | Mar. 17 | 2524 | ..... | 103 | 565 |
| Plastering-tool | W. A. Warson | 745,126 | Nov. 24 | 4499 | 974 | 107 | 1003 |
| Plastic composition | A. Eichengrüm and T. Becker | 738,533 | Sept. 8 | 1996 | ..... | 106 | 444 |
| Plastic composition | R. H. Boyd | 744,997 | Nov. 24 | 4220 | ..... | 107 | 945 |
| Plastic compound | O. T. Hungerford | 725,968 | Apr. 21 | 2863 | ..... | 103 | 1808 |
| Plastic compound | C. E. Gale | 743,632 | Nov. 10 | 1674 | ..... | 107 | 373 |
| Plastic compounds. Producing | A. Luft | 735,278 | Aug. 4 | 473 | ..... | 105 | 1081 |
| Plastic gate or corner post | J. A. Mitchell | 722,126 | Mar. 3 | 857 | 192 | 103 | 184 |
| Plastic material. Forming articles composed of | L. Romero and E. Rodriguez-y-Arce. | 738,243 | Sept. 8 | 1383 | 299 | 106 | 314 |
| Plastic material. Machine for molding | E. W. Stevens | 726,475 | Apr. 28 | 3802 | 860, 861, 862 | 103 | 2015 |
| Plastic material. Machine for shaping and pressing | W. Owen | 747,328 | Dec. 15 | 3732 | 841, 842 | 107 | 1955 |
| Plastic material. Manufacture of ornamental articles from | J. F. Whitman | 731,254 | June 16 | 3154 | 702 | 104 | 1815 |
| Plastic-material mixer | G. A. Schillinger | 747,653 | Dec. 22 | 4322 | 976, 977 | 107 | 2105 |
| Plastic material. Pressure-plate for polishing and surfacing | V. L. Dunne | 730,102 | June 2 | 1048 | 235 | 104 | 1341 |
| Plastic-shingle mold | N. D. Ackles and E. R. Koontz | 746,771 | Dec. 15 | 2655 | 613 | 107 | 1713 |
| Plate-finishing machine | E. D. Tucker | 746,408 | Dec. 8 | 2002 | 456 | 107 | 1546 |
| Plate-lifter | J. A. Dansereau | 721,865 | Mar. 3 | 389 | 86 | 103 | 85 |
| Plate or sheet surfacing machine | F. S. Brockett | 741,001 | Oct. 6 | 1135 | 256 | 106 | 1487 |
| Plate. Pie or cake | J. A. Bennett | 725,657 | Apr. 21 | 2322 | 524 | 103 | 1691 |
| Plate-press attachment | R. Turner and B. R. Corley | 719,909 | Feb. 3 | 890 | 209 | 102 | 1012 |
| Plate-rack | F. A. Ecker | 744,315 | Nov. 17 | 3001 | 643 | 107 | 670 |
| Plate-shears | F. Fuchs | 743,855 | Nov. 10 | 2063 | 439 | 107 | 455 |
| Platen-press | O. Pilz | 727,436 | May 5 | 1139 | 251 | 104 | 246 |
| Platen-press. Four-color | J. N. Deppert and A. Seelig | 727,307 | May 5 | 905 | 196 | 104 | 195 |
| Platen to the line-spacing mechanism. Device for adjusting the | A. W. Steiger | 744,425 | Nov. 17 | 3194 | 685 | 107 | 712 |
| Plating. Nickel- | T. A. Edison | 734,522 | July 28 | 3366 | ..... | 105 | 760 |
| Platinum contact substances. Regenerating | C. Krauss and R. M. von Berneck | 720,361 | Feb. 10 | 1762 | ..... | 102 | 1212 |
| Playing-ball | F. H. Richards | 720,737 | Feb. 17 | 2477 | 570 | 102 | 1374 |
| Playing-ball | F. H. Richards | 725,011 | Apr. 7 | 1101 | 250 | 103 | 1404 |
| Playing-ball | F. H. Richards | 727,198 | May 5 | 704 | 151 | 104 | 152 |
| Playing-ball | F. H. Richards | 727,199 | May 5 | 705 | 151 | 104 | 153 |
| Playing-ball | F. H. Richards | 727,200 | May 5 | 707 | 152 | 104 | 153 |
| Playing-ball | F. H. Richards | 727,201 | May 5 | 708 | 152 | 104 | 154 |
| Playing-ball | F. H. Richards | 727,202 | May 5 | 710 | 152 | 104 | 154 |
| Playing-ball | C. B. Elliott | 731,026 | June 16 | 2742 | 611 | 104 | 1734 |
| Playing-ball | A. E. Barnhart | 731,154 | June 16 | 2989 | 663 | 104 | 1783 |
| Playing-ball | F. H. Richards | 737,773 | Sept. 1 | 404 | 86 | 106 | 89 |
| Playing-ball | F. H. Richards | 737,774 | Sept. 1 | 406 | 86 | 106 | 89 |
| Playing-ball | E. Kempshall | 739,753 | Sept. 22 | 4252 | 952 | 106 | 960 |
| Playing-boards | C. Sauer | 738,701 | Sept. 8 | 2317 | 509 | 106 | 511 |
| Pleasure-seeking or merrymaking device | J. P. Voris | 740,206 | Sept. 29 | 5126 | 1151, 1152 | 106 | 1161 |
| Pliers | Z. T. Furbish | 719,782 | Feb. 3 | 682 | 157, 158 | 102 | 967 |
| Pliers | C. M. Schooley | 720,974 | Feb. 17 | 2895 | 664 | 102 | 1463 |

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| Invention. | Name. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|---|
| | | | | Spec. | Dr'g. | Vol. | Page. |
| Pliers | C. S. Bonney | 726,794 | Apr. 28 | 4430 | 998 | 103 | 2140 |
| Pliers | E. E. Kleinschmidt | 731,688 | June 23 | 3993 | 891 | 104 | 2003 |
| Pliers | H. C. Condit | 732,715 | July 7 | 38 | 9 | 105 | 11 |
| Pliers and pipe-wrench. Combination | J. R. Collins | 744,167 | Nov. 17 | 2712 | 579 | 107 | 606 |
| Pliers. Dressmaker's marking- | L. Holt | 737,102 | Aug. 25 | 3860 | 857 | 105 | 1855 |
| Pliers for clamping clips on wires | W. J. Baker | 732,501 | June 30 | 5572 | 1235 | 104 | 2346 |
| Pliers. Self-feeding stapling- | B. Gastaldi | 728,898 | May 26 | 3914 | 870 | 104 | 883 |
| Pliers. Valve- | J. E. Barney | 717,526 | Jan. 6 | 9 | 3 | 102 | 4 |
| Plotting instrument | L. E. Wilkes | 747,522 | Dec. 22 | 4077 | 916 | 107 | 2049 |
| Plow | L. A. Willbanks and W. C. Allen | 718,041 | Jan. 6 | 976 | 217 | 102 | 210 |
| Plow | C. R. Davis | 720,118 | Feb. 10 | 1310 | 299, 300 | 102 | 1118 |
| Plow | W. T. Ellis | 720,412 | Feb. 10 | 1838 | 419 | 102 | 1229 |
| Plow | H. D. Terrell | 723,423 | Mar. 24 | 3302 | 739 | 103 | 737 |
| Plow | F. A. Mills | 724,598 | Apr. 7 | 336 | 82 | 103 | 1240 |
| Plow | E. Haas | 724,854 | Apr. 7 | 822 | 189 | 103 | 1345 |
| Plow | N. A. Freeman | 725,855 | Apr. 21 | 2635 | 600 | 103 | 1759 |
| Plow | S. V. Jeffords | 727,372 | May 5 | 1024 | 222 | 104 | 231 |
| Plow | L. A. Weyburn | 728,341 | May 19 | 2886 | 637 | 104 | 652 |
| Plow | E. P. Currey | 728,445 | May 19 | 3054 | 672 | 104 | 689 |
| Plow | P. Lassen | 729,612 | June 2 | 162 | 39 | 104 | 1160 |
| Plow | E. A. Brooks | 731,017 | June 16 | 2731 | 608 | 104 | 1731 |
| Plow | W. L. Paul | 731,067 | June 16 | 2822 | 627 | 104 | 1750 |
| Plow | T. H. Harris | 731,359 | June 16 | 3349 | 748, 749 | 104 | 1856 |
| Plow | P. J. Johansson and L. L. Jonsson | 732,302 | June 30 | 5178 | 1150 | 104 | 2266 |
| Plow | A. G. Steele | 733,761 | July 14 | 1891 | 446 | 105 | 416 |
| Plow | E. Jarrell | 734,418 | July 21 | 3177 | 746 | 105 | 705 |
| Plow | H. C. Morrison and J. T. Flippen | 734,426 | July 21 | 3190 | 751 | 105 | 707 |
| Plow | J. N. Hatcher | 735,506 | Aug. 4 | 909 | 193 | 105 | 1175 |
| Plow | C. R. Davis | 736,503 | Aug. 18 | 2739 | 600 | 105 | 1602 |
| Plow | J. B. Smith | 737,167 | Aug. 25 | 3967 | 881 | 105 | 1879 |
| Plow | J. W. Lee | 739,092 | Sept. 15 | 3039 | 673 | 106 | 682 |
| Plow | A. Beauvais | 739,814 | Sept. 29 | 4382 | 982, 983 | 106 | 1006 |
| Plow | J. R. Rossetter | 740,373 | Sept. 29 | 5429 | 1222 | 106 | 1224 |
| Plow | A. A. Pearce and C. R. Gee | 743,095 | Nov. 3 | 533 | 115 | 107 | 112 |
| Plow | J. Clayton | 744,488 | Nov. 17 | 3311 | 712 | 107 | 737 |
| Plow | T. Griffin | 744,751 | Nov. 24 | 3787 | 816 | 107 | 856 |
| Plow | J. S. Felt | 745,172 | Nov. 24 | 4614 | 1001 | 107 | 1027 |
| Plow | G. S. Latta | 745,203 | Nov. 24 | 4667 | 1016 | 107 | 1038 |
| Plow | J. W. Hoskins | 745,850 | Dec. 1 | 993 | 223 | 107 | 1311 |
| Plow | J. D. Campbell | 746,015 | Dec. 8 | 1297 | 291 | 107 | 1393 |
| Plow | N. A. Griffin | 746,826 | Dec. 15 | 2763 | 637 | 107 | 1737 |
| Plow | B. Allen, Jr. | 747,112 | Dec. 15 | 3315 | 755 | 107 | 1866 |
| Plow | J. Buchanan | 747,129 | Dec. 15 | 3347 | 760 | 107 | 1872 |
| Plow | A. E. Squyars | 748,318 | Dec. 29 | 5584 | 1273 | 107 | 2404 |
| Plow and cultivator | J. D. Kelley | 726,168 | Apr. 21 | 3192 | 722 | 103 | 1875 |
| Plow and cultivator. Combination adjustable | W. H. Fox | 732,626 | June 30 | 5803 | 1287 | 104 | 2400 |
| Plow and drill. Lister | F. Otte | 746,875 | Dec. 15 | 2865 | 659, 660 | 107 | 1760 |
| Plow and planter. Combined lister- | A. Shearer | 718,663 | Jan. 20 | 2176 | 477 | 102 | 495 |
| Plow and planter. Combined lister- | A. Shearer | 718,664 | Jan. 20 | 2179 | 477 | 102 | 495 |
| Plow and planter. Combined lister- | G. E. Evans | 718,994 | Jan. 27 | 2805 | 628, 629 | 102 | 640 |
| Plow and planter. Combined lister- | J. Siemsen | 745,250 | Nov. 24 | 4742 | 1036 | 107 | 1054 |
| Plow and seed-planter. Combined lister or breaking | C. T. Sylvester | 724,352 | Mar. 31 | 5095 | 1140 | 103 | 1121 |
| Plow attachment | E. Marsalis | 720,453 | Feb. 10 | 1913 | 436 | 102 | 1243 |
| Plow attachment | O. Meister | 729,198 | May 26 | 4448 | 981 | 104 | 992 |
| Plow attachment | F. Gale | 734,846 | July 28 | 4006 | 935, 936 | 105 | 891 |
| Plow attachment | F. Gale | 738,105 | Sept. 1 | 1084 | 240 | 106 | 234 |
| Plow attachment | J. W. Storey | 742,925 | Nov. 3 | 180 | 42 | 107 | 40 |
| Plow attachment | W. H. Betts | 745,996 | Dec. 8 | 1262 | 284 | 107 | 1385 |
| Plow attachment. Disk- | J. P. Mulrony | 720,948 | Feb. 17 | 2844 | 651 | 102 | 1452 |
| Plow-bar and regulating-lever | J. L. Horton and D. A. Bennett | 731,457 | June 23 | 3567 | 795 | 104 | 1919 |
| Plow-beam attachment | E. Hall | 724,005 | Mar. 31 | 4405 | 991 | 103 | 983 |
| Plow. Bedding- | S. D. Poole | 739,617 | Sept. 22 | 4002 | 893, 894 | 106 | 904 |
| Plow. Beet pulling and lifting | W. H. Gilbert | 718,833 | Jan. 20 | 2486 | 553 | 102 | 556 |
| Plow cover or protector | A. Luenberger | 732,873 | July 7 | 314 | 79 | 105 | 70 |
| Plow. Disk | J. Harrison and G. Hinch | 731,179 | June 16 | 3031 | 674 | 104 | 1790 |
| Plow. Disk | J. A. Creager | 731,436 | June 23 | 3523 | 785 | 104 | 1910 |
| Plow. Disk | H. M. King | 738,818 | Sept. 15 | 2560 | 563 | 106 | 580 |
| Plow. Disk | S. V. Weeks | 741,199 | Oct. 13 | 1517 | 343 | 106 | 1590 |
| Plow disk-jointer | T. L. Bolser | 728,359 | May 19 | 2912 | 643 | 104 | 658 |
| Plow. Disk or rotary | N. Sanders | 742,908 | Nov. 3 | 156 | 36 | 107 | 34 |
| Plow. Ditching- | A. Pinion | 721,230 | Feb. 24 | 3443 | 782 | 102 | 1597 |
| Plow. Ditching- | J. Z. Stafford | 721,920 | Mar. 3 | 508 | 111 | 103 | 112 |
| Plow. Ditching- | B. D. Lemert | 726,709 | Apr. 28 | 4267 | 965 | 103 | 2107 |
| Plow. Double | R. V. E. Rasmussen | 728,010 | May 12 | 2245 | 499 | 104 | 495 |
| Plow. Double-row listing- | D. A. Biebinger | 718,415 | Jan. 13 | 1651 | 364, 365 | 102 | 370 |
| Plow-fender | J. J. McManmon | 720,173 | Feb. 10 | 1400 | 320 | 102 | 1136 |
| Plow. Garden- | W. O. Davis | 720,680 | Feb. 17 | 2375 | 544 | 102 | 1352 |
| Plow. Garden- | S. Jones | 737,111 | Aug. 25 | 3874 | 860 | 105 | 1858 |
| Plow-handle | S. Bredahl | 746,003 | Dec. 8 | 1279 | 287 | 107 | 1389 |
| Plow harrow attachment | J. C. Fooshe | 731,881 | June 23 | 4337 | 968 | 104 | 2079 |
| Plow-jointer or rolling colter | W. R. Criffield | 736,695 | Aug. 18 | 3115 | 687 | 105 | 1679 |
| Plow or cultivator attachment | W. R. Usry | 736,175 | Aug. 11 | 2148 | 462 | 105 | 1458 |
| Plow plant-protector attachment | I. W. Bass | 728,074 | May 12 | 2357 | 524 | 104 | 519 |
| Plow-point | G. N. Moody | 724,315 | Mar. 31 | 5021 | 1125 | 103 | 1106 |
| Plow-point | J. Halman | 736,845 | Aug. 18 | 3401 | 752 | 105 | 1739 |
| Plow-point. Reversible | T. J. Hubbell | 741,793 | Oct. 20 | 2706 | 603 | 106 | 1857 |
| Plow. Power- | J. L. Parker | 729,654 | June 2 | 236 | 53 | 104 | 1177 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|---|
| | | | | Spec. | Dr'g. | Vol. | Page. |
| Plow rear-wheel controller. Disk- | C. J. Simeral and F. A. Wiggins | 739,731 | Sept. 22 | 4221 | 944 | 106 | 953 |
| Plow. Reversible | F. Wiegard | 724,415 | Mar. 31 | 5233 | 1172 | 103 | 1152 |
| Plow. Riding- | J. Ehler | 718,831 | Jan. 20 | 2483 | 552 | 102 | 556 |
| Plow root-cutting attachment | W. Luquire | 743,176 | Nov. 3 | 686 | 151 | 107 | 144 |
| Plow rotary tool | W. Lorenz | 736,279 | Aug. 11 | 2333 | 506, 507 | 105 | 1500 |
| Plow. Safety- | W. T. M. Brunnemer | 736,932 | Aug. 25 | 3559 | 790, 791 | 105 | 1791 |
| Plowshare-holder | O. B. Graves | 733,387 | July 14 | 1245 | 295 | 105 | 280 |
| Plowshare upsetting-machine | W. A. Clarke | 734,161 | July 21 | 2700 | 635, 636 | 105 | 604 |
| Plow. Shovel- | L. R. Randall | 735,297 | Aug. 4 | 504 | 101 | 105 | 1088 |
| Plow. Sidehill- | L. A. Davis | 721,545 | Feb. 24 | 3992 | 909 | 102 | 1713 |
| Plow. Sod-turning | W. N. Fletcher | 721,291 | Feb. 24 | 3536 | 804 | 102 | 1618 |
| Plow. Stirring- | B. H. Giger | 745,816 | Dec. 1 | 918 | 206 | 107 | 1295 |
| Plow. Sulky- | S. C. Cobb | 730,744 | June 9 | 2209 | 491 | 104 | 1602 |
| Plow. Sulky- | G. Wilkinson | 736,662 | Aug. 18 | 3037 | 671 | 105 | 1663 |
| Plow. Wheel- | C. T. Elliston | 718,705 | Jan. 20 | 2259 | 497 | 102 | 512 |
| Plow. Wheel- | N. Sanders | 719,696 | Feb. 3 | 504 | 114 | 102 | 929 |
| Plow. Wheel- | J. Buchanan and E. M. Hickman | 732,205 | Mar. 10 | 1025 | 226 | 103 | 232 |
| Plow. Wheel- | H. H. Boenker | 730,737 | June 9 | 2197 | 489 | 104 | 1599 |
| Plow. Wheel- | E. M. Hickman | 735,096 | Aug. 4 | 89 | 21 | 105 | 1062 |
| Plow. Wheel- | P. P. Townsend | 747,513 | Dec. 22 | 4061 | 913 | 107 | 2046 |
| Plow-wheel | C. H. Melvin | 719,831 | Feb. 3 | 763 | 179 | 102 | 985 |
| Plow wheel attachment. Sulky- | C. A. Glass | 735,241 | Apr. 14 | 1533 | 348 | 103 | 1509 |
| Plows, &c. Disk-bearing for disk | W. P. Hendon | 721,951 | Mar. 3 | 561 | 123 | 103 | 123 |
| Plug-machine | W. R. Montgomery | 737,666 | May 12 | 1581 | 357 | 104 | 357 |
| Plumb-bob | H. J. Wolf | 748,132 | Dec. 29 | 5265 | 1195 | 107 | 2336 |
| Plumb, level, protractor, compass, and sun-dial. Combined | P. P. Moses | 742,472 | Oct. 27 | 4027 | 903 | 106 | 2143 |
| Plumb. Mason's | M. Moran and T. W. Grant | 746,554 | Dec. 8 | 2250 | 516 | 107 | 1601 |
| Plumb or level | C. C. Hummel | 729,347 | May 26 | 4714 | 1041, 1042 | 104 | 1048 |
| Plumb, rule, and level | A. T. Binkerd | 732,614 | June 30 | 5780 | 1282 | 104 | 2395 |
| Plumb, rule, and level. Combination folding | H. F. White | 741,861 | Oct. 20 | 2814 | 626 | 106 | 1882 |
| Plumber's blast-furnace | O. Bernz | 738,518 | Sept. 8 | 1970 | 429 | 106 | 438 |
| Plumber's clamp for wiping joints | C. Riley | 725,874 | Apr. 21 | 2702 | 614 | 103 | 1775 |
| Plumber's implement | G. J. Williams | 719,707 | Feb. 3 | 534 | 119 | 102 | 936 |
| Plumber's sanitary cross | J. L. Fruin | 740,413 | Oct. 6 | 46 | 10, 11 | 106 | 1254 |
| Plumber's testing-plug | T. G. Clifford | 739,589 | Sept. 22 | 3958 | 883 | 106 | 895 |
| Plunger-elevator | S. H. McCarroll | 742,891 | Nov. 3 | 126 | 29 | 107 | 28 |
| Plunger. Self-adjusting | C. F. Marsh | 738,826 | Sept. 15 | 2581 | 569 | 106 | 585 |
| Pneumatic actuating device | G. S. Williams | 746,220 | Dec. 8 | 1667 | 371 | 107 | 1476 |
| Pneumatic brake. Double-acting | A. A. Fickenscher | 727,773 | May 12 | 1815 | 405 | 104 | 406 |
| Pneumatic carrier | C. H. Burton | 726,022 | Apr. 21 | 2053 | 671 | 103 | 1826 |
| Pneumatic carrier | O. S. Pike | 726,097 | Apr. 21 | 3063 | 696 | 103 | 1848 |
| Pneumatic carrier | C. H. Burton | 742,390 | Oct. 27 | 3885 | 873 | 106 | 2114 |
| Pneumatic-carrier system | W. G. Davis | 738,102 | Sept. 1 | 1079 | 238, 239 | 106 | 233 |
| Pneumatic-despatch apparatus | F. R. Taisey | 729,448 | May 26 | 4870 | 1079 | 104 | 1080 |
| Pneumatic-despatch apparatus | C. F. Stoddard | 742,513 | Oct. 27 | 4106 | 925 | 106 | 2159 |
| Pneumatic-despatch apparatus | C. F. Stoddard | 742,514 | Oct. 27 | 4108 | 925 | 106 | 2159 |
| Pneumatic-despatch apparatus | C. F. Stoddard | 742,515 | Oct. 27 | 4110 | 925, 926 | 106 | 2160 |
| Pneumatic-despatch apparatus | C. F. Stoddard | 742,516 | Oct. 27 | 4113 | 926 | 106 | 2161 |
| Pneumatic-despatch apparatus | C. F. Stoddard | 742,517 | Oct. 27 | 4115 | 926, 927 | 106 | 2162 |
| Pneumatic-despatch apparatus | B. C. Batcheller | 746,267 | Dec. 8 | 1756 | 398 | 107 | 1494 |
| Pneumatic-despatch apparatus. Automatic switch for | F. C. Cutting | 726,033 | Apr. 21 | 2970 | 675 | 103 | 1829 |
| Pneumatic-despatch receptacle | E. C. Gipe | 723,457 | Mar. 24 | 3358 | 752 | 103 | 749 |
| Pneumatic-despatch system | K. E. Stuart | 744,814 | Nov. 24 | 3898 | 837 | 107 | 879 |
| Pneumatic-despatch-system terminal | H. Ash and A. Woltman | 720,395 | Feb. 10 | 1809 | 412 | 102 | 1222 |
| Pneumatic-despatch-tube apparatus | B. C. Batcheller | 719,421 | Feb. 3 | 15 | 3, 4 | 102 | 830 |
| Pneumatic-despatch-tube-apparatus carrier | C. H. Burton | 722,562 | Mar. 10 | 1691 | 377 | 103 | 379 |
| Pneumatic-despatch-tube carriers. Lock for | W. Blanchard | 726,017 | Apr. 21 | 2945 | 669, 670 | 103 | 1824 |
| Pneumatic-despatch-tube sender | K. E. Stuart | 744,815 | Nov. 24 | 3899 | 838 | 107 | 879 |
| Pneumatic-despatch-tube system | H. J. Hert | 720,804 | Feb. 17 | 2581 | 595 | 102 | 1396 |
| Pneumatic-despatch-tube system | C. A. Gray | 734,540 | July 28 | 3410 | 796 | 105 | 769 |
| Pneumatic-despatch-tube system | M. Stange | 743,109 | Nov. 3 | 554 | 119, 120 | 107 | 115 |
| Pneumatic-despatch-tube systems. Selective device for | E. A. Fordyce | 747,599 | Dec. 22 | 4205 | 946, 947 | 107 | 2079 |
| Pneumatic-despatch-tube systems. Switch-fitting for | H. J. Hert | 727,138 | May 5 | 613 | 132 | 104 | 132 |
| Pneumatic-despatch-tube terminal | E. Steinbock | 730,715 | June 9 | 2167 | 481 | 104 | 1593 |
| Pneumatic drill or like machine | G. H. Hayes | 733,960 | July 21 | 2297 | 539, 540 | 105 | 517 |
| Pneumatic elevator | C. Bradford | 747,124 | Dec. 15 | 3334 | 758 | 107 | 1869 |
| Pneumatic elevator for cotton | J. W. Hicks | 728,917 | May 26 | 3947 | 878 | 104 | 889 |
| Pneumatic engine | W. E. Peters | 743,326 | Nov. 3 | 982 | 213, 214 | 107 | 210 |
| Pneumatic lock | J. Sines | 722,258 | Mar. 10 | 1126 | 249 | 103 | 255 |
| Pneumatic passage-way | J. G. and M. O. Rehfuss | 735,909 | Aug. 11 | 1669 | 356 | 105 | 1355 |
| Pneumatic-service system | E. L. Giles | 742,410 | Oct. 27 | 3925 | 882 | 106 | 2122 |
| Pneumatic signal | J. H. Brady | 725,402 | Apr. 14 | 1815 | 406, 407 | 103 | 1569 |
| Pneumatic spring | B. L. Sanders | 727,696 | May 12 | 1637 | 371 | 104 | 371 |
| Pneumatic tools. Stroke-changing mechanism for | J. Keller | 738,546 | Sept. 8 | 2015 | 438 | 106 | 448 |
| Pneumatic transmission system | B. C. Batcheller | 722,667 | Mar. 17 | 1890 | 421, 422, 423, 424, 425 | 103 | 436 |
| Pneumatic tube | L. G. Bostedo | 736,680 | Aug. 18 | 3084 | 680 | 105 | 1672 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Pneumatic-tube-apparatus terminal | J. T. Cowley | 726,030 | Apr. 21 | 2964 | 674 | 103 | 1828 |
| Pneumatic-tube carrier | M. Anderson | 742,819 | Nov. 3 | 3 | 1 | 107 | 3 |
| Pneumatic-tube safety-valve | A. Koenig | 726,072 | Apr. 21 | 3024 | 687<br>688 | 103 | 1840 |
| Pneumatic-tube system | K. E. Stuart | 718,740 | Jan. 20 | 2325 | 513 | 102 | 524 |
| Pneumatic-tube system | W. G. Davis | 735,861 | Aug. 11 | 1587 | 338<br>339<br>340 | 105 | 1338 |
| Pneumatic-tube terminal | E. A. Fordyce | 724,688 | Apr. 7 | 503 | 120 | 103 | 1277 |
| Pneumatic tubes. Sending device for | B. C. Batcheller | 746,266 | Dec. 8 | 1750 | 397<br>398 | 107 | 1493 |
| Pneumatic underblast and stacker | A. H. Van Houwelingen | 738,959 | Sept. 15 | 2806 | 622<br>623 | 106 | 634 |
| Pocket | W. Delavoye | 738,168 | Sept. 8 | 1250 | 271 | 106 | 287 |
| Pocket-battery | W. Heym | 744,758 | Nov. 24 | 3798 | 818 | 107 | 858 |
| Pocket-book | H. J. Gaisman | 722,293 | Mar. 10 | 1194 | 263<br>264 | 103 | 270 |
| Pocket-book | H. J. Gaisman | 722,294 | Mar. 10 | 1196 | 264 | 103 | 271 |
| Pocket-book | H. J. Gaisman | 722,295 | Mar. 10 | 1198 | 264 | 103 | 271 |
| Pocket-book | M. Lovece | 739,754 | Sept. 22 | 4253 | 953 | 106 | 961 |
| Pocket-book | C. L. Hille | 741,339 | Oct. 13 | 1823 | 403 | 106 | 1656 |
| Pocket book or file | F. Mann | 745,210 | Nov. 24 | 4676 | 1019 | 107 | 1040 |
| Pocket-case | R. Oertel | 720,467 | Feb. 10 | 1937 | 443 | 102 | 1248 |
| Pocket. Garment- | J. D. Wentworth | 731,640 | June 23 | 3913 | 871 | 104 | 1988 |
| Pocket. Garment safety- | J. A. Barling | 732,996 | July 7 | 525 | 130 | 105 | 112 |
| Pocket-knife | J. Weil | 727,724 | May 12 | 1713 | 384 | 104 | 386 |
| Pocket-knife | E. Kaufmann | 730,025 | June 2 | 925 | 207 | 104 | 1316 |
| Pocket-knife | E. Kaufmann | 736,524 | Aug. 18 | 2779 | 608 | 105 | 1612 |
| Pocket-knife | E. Kaufmann | 736,525 | Aug. 18 | 2780 | 608 | 105 | 1612 |
| Pocket-knife | H. Goldin | 744,064 | Nov. 17 | 2511 | 538 | 107 | 564 |
| Pocket-knife | M. J. O'Connor | 748,521 | Dec. 29 | 5974 | 1355 | 107 | 2490 |
| Pocket or pouch. Safety | H. M. Eldred | 744,517 | Nov. 17 | 3352 | 722 | 107 | 746 |
| Pocket-protector | H. C. Dexter | 721,359 | Feb. 24 | 3660 | 833 | 102 | 1643 |
| Pocket. Safety- | B. A. James | 722,584 | Mar. 10 | 1728 | 384 | 103 | 386 |
| Pocket. Safety- | T. C. Louden | 733,666 | July 14 | 1725 | 407 | 105 | 381 |
| Pocket. Safety- | G. L. Estes | 748,271 | Dec. 29 | 5516 | 1256 | 107 | 2390 |
| Pocket-shield | A. Bernstein | 726,850 | May 5 | 26 | 7 | 104 | 9 |
| Pocket. Supplemental coat- | J. A. Sweeney | 745,927 | Dec. 1 | 1127 | 253 | 107 | 1339 |
| Poison-distributer | H. Clayton and H. Brower | 719,748 | Feb. 3 | 615 | 138 | 102 | 951 |
| Poison-holder | W. J. Shelton | 738,363 | Sept. 8 | 1664 | 361 | 106 | 374 |
| Poke. Animal- | W. R. Evans | 721,552 | Feb. 24 | 4006 | 911 | 102 | 1715 |
| Poke. Animal- | G. Gramkow | 724,003 | Mar. 31 | 4402 | 989 | 103 | 983 |
| Poke. Animal- | R. G. Morris | 725,579 | Apr. 14 | 2148 | 486 | 103 | 1641 |
| Poke. Animal- | W. S. Brown | 728,853 | May 26 | 3842 | 855 | 104 | 869 |
| Poke. Animal- | A. Krantz | 728,939 | May 26 | 3986 | 887 | 104 | 897 |
| Poke. Animal- | J. E. McClanahan | 731,937 | June 23 | 4437 | 989 | 104 | 2100 |
| Poke. Animal- | J. S. Weathers | 732,328 | June 30 | 5219 | 1159 | 104 | 2275 |
| Poke. Animal- | G. Gramkow | 740,007 | Sept. 29 | 4760 | 1070 | 106 | 1084 |
| Poke. Animal- | W. S. Brown | 744,164 | Nov. 17 | 2703 | 576 | 107 | 604 |
| Polarity-indicator | F. P. Cox | 733,627 | July 14 | 1659 | 393 | 105 | 368 |
| Pole and shaft | G. A. Schenck | 723,492 | Mar. 24 | 3447 | 771 | 103 | 766 |
| Pole and thill coupling | J. E. Ackerman | 718,893 | Jan. 20 | 2606 | 583 | 102 | 583 |
| Pole-changer | J. Crawford | 728,372 | May 19 | 2930 | 647 | 104 | 662 |
| Pole-changer | T. W. Warner | 739,128 | Sept. 15 | 3108 | 687<br>688 | 106 | 696 |
| Pole-changer | W. F. Warner. (Reissue) | 12,162 | Oct. 13 | 2347 | 525<br>526 | 106 | 1766 |
| Pole-changer and Crookes-tube controller | F. Cedergren | 734,511 | July 28 | 3349 | 784 | 105 | 756 |
| Pole coupling. Reach- | C. Trim | 743,776 | Nov. 10 | 1922 | 407 | 107 | 427 |
| Pole. Metallic | W. Maxwell | 724,909 | Apr. 7 | 908 | 207<br>208 | 103 | 1364 |
| Pole. Metallic | W. Maxwell | 726,801 | Apr. 28 | 4441 | 1002 | 103 | 3142 |
| Pole. Metallic | W. S. Gray | 731,177 | June 16 | 3028 | 673 | 104 | 1789 |
| Pole or post | C. B. Voynow | 723,085 | Mar. 17 | 2655 | 598 | 103 | 594 |
| Pole or post anchor | I. E. Clum | 720,225 | Feb. 10 | 1510 | 346 | 102 | 1158 |
| Pole or post anchor | I. E. Clum | 740,399 | Oct. 6 | 24 | 6 | 106 | 1249 |
| Pole or post anchor. Metallic | W. W. Hill | 718,841 | Jan. 20 | 2496 | 556 | 102 | 558 |
| Pole or shaft | J. G. Lovejoy | 723,695 | Mar. 24 | 3783 | 849 | 103 | 837 |
| Pole protector. Carriage- | M. A. Mack | 747,739 | Dec. 22 | 4466 | 1007 | 107 | 2137 |
| Pole-socket | B. D. Druen | 725,685 | Apr. 21 | 2360 | 534 | 103 | 1699 |
| Pole socket. Vehicle- | H. E. Martin | 736,858 | Aug. 18 | 3429 | 759 | 105 | 1745 |
| Pole-tip | J. Waddell | 724,632 | Apr. 7 | 400 | 95 | 103 | 1255 |
| Pole tip. Vehicle- | E. L. Lewis and F. Luckey | 725,729 | Apr. 21 | 2437 | 553 | 103 | 1716 |
| Pole tip. Vehicle- | D. K. Stone | 735,172 | Aug. 4 | 248 | 49 | 105 | 1035 |
| Pole tip. Vehicle- | M. A. Foley | 747,881 | Dec. 22 | 4751 | 1074 | 107 | 2201 |
| Pole tip. Wagon- | P. McBennett | 719,840 | Feb. 3 | 774 | 181 | 102 | 987 |
| Polish | J. F. Myers | 733,591 | July 14 | 1598 | ------ | 105 | 356 |
| Polish, &c. Holder for | H. Altshul | 718,969 | Jan. 27 | 2755 | 616 | 102 | 629 |
| Polisher | E. T. Gilbert | 730,012 | June 2 | 903 | 201 | 104 | 1312 |
| Polishing apparatus. Fire- | D. W. Gundlach | 737,400 | Aug. 25 | 4430 | 991 | 105 | 1977 |
| Polishing compound | G. Shambeck | 747,003 | Dec. 15 | 3111 | ------ | 107 | 1816 |
| Polishing cone and wheel | L. G. Koenig | 732,949 | July 7 | 447 | 110 | 105 | 97 |
| Polishing implement | E. E. Broadhurst | 743,685 | Nov. 10 | 1756 | 370 | 107 | 391 |
| Polishing-machine | H. Schuessler | 732,657 | June 30 | 5865 | 1300<br>1301 | 104 | 2412 |
| Polishing-machine | H. L. Haskell | 737,621 | Sept. 1 | 117 | 25, 26 | 106 | 28 |
| Polishing-machine | E. J. Murphy | 745,646 | Dec. 1 | 602 | 139<br>140 | 107 | 1226 |
| Polishing-truck. Tilting-table | L. Gassard | 732,296 | Mar. 10 | 1200 | 264<br>265 | 103 | 272 |
| Polishing-wheel | C. G. Lockwood | 734,581 | July 28 | 3475 | 812 | 105 | 784 |
| Pool-ball frame | R. D'Abramo | 743,464 | Nov. 10 | 1347 | 276 | 107 | 303 |
| Pool-ball rack and register | E. R. Marshall | 742,467 | Oct. 27 | 4018 | 902 | 106 | 2141 |
| Pool-ball rack and register | E. R. Marshall | 747,458 | Dec. 22 | 3954 | 889 | 107 | 2021 |
| Pool-ball-registering triangle | E. J. Wells | 736,805 | Aug. 18 | 3318 | 736 | 105 | 1721 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Pool-balls. Device for striping and spotting | J. P. O'Mara and J. S. Boa | 734,085 | July 21 | 2555 | 596, 597 | 105 | 575 |
| Pool or other like ball | H. L. Haskell | 724,470 | Apr. 7 | 97 | 23 | 103 | 1190 |
| Pool-table rack and tally | G. F. Goss | 728,706 | May 19 | 3555 | 790, 791 | 104 | 794 |
| Pool-table register | G. C. Beck | 732,503 | June 30 | 5575 | 1235 | 104 | 2347 |
| Pool-table register | G. C. Beck | 738,515 | Sept. 8 | 1964 | 428 | 106 | 437 |
| Pool-table return-ball attachment | P. Lapp | 720,446 | Feb. 10 | 1902 | 434 | 102 | 1242 |
| Popcorn-popper | H. R. Estes | 741,897 | Oct. 20 | 2886 | 644 | 106 | 1896 |
| Port-light | C. F. Petersen | 736,772 | Aug. 18 | 3252 | 719 | 105 | 1708 |
| Portable bath | C. H. York | 720,089 | Feb. 10 | 1258 | 288 | 102 | 1107 |
| Portable boiler or heater | R. Meldrum | 741,266 | Oct. 13 | 1640 | 370 | 106 | 1616 |
| Portable bracket | A. R. Fergusson | 719,574 | Feb. 3 | 299 | 69 | 102 | 885 |
| Portable elevator | J. E. Camp | 741,108 | Oct. 13 | 1334 | 306 | 106 | 1551 |
| Portable elevator | J. G. Brown | 747,044 | Dec. 15 | 3174 | 728 | 107 | 1829 |
| Portable elevator and dump | J. and D. Fisher | 736,833 | Aug. 18 | 3380 | 747 | 105 | 1734 |
| Portable engine for removing bark from standing trees, &c. | W. P. Kidder | 39,785 | Sept. 22 | 4318 | 967 | 106 | 975 |
| Portable house | J. D. Horton | 724,408 | Mar. 31 | 5214 | 1169 | 103 | 1148 |
| Portable press for hay, &c | F. McKean | 741,060 | Oct. 13 | 1243 | 281, 282 | 106 | 1533 |
| Portable seat | J. W. Czermak and J. Tischler | 73 ,437 | June 23 | 3525 | 785 | 104 | 1911 |
| Position finder. Depression- | W. C. Rafferty | 720,844 | Feb. 17 | 2637 | 609, 610 | 102 | 1408 |
| Post: *See* Anchor-post. Cement post. Composite post. Fence-post. King-post. Lamp-post. Metal post. Metallic post. Mile or sign post. Seat-post. Stone post. | | | | | | | |
| Post | W. A. Noble | 723,013 | Mar. 17 | 2522 | 566 | 103 | 565 |
| Post | L. C. Fisher | 727,335 | May 5 | 963 | 209 | 104 | 208 |
| Post-anchor | J. Blackburn | 725,398 | Apr. 14 | 1807 | 405 | 103 | 1567 |
| Post-base | G. C. Winslow | 724,644 | Apr. 7 | 418 | 99 | 103 | 1259 |
| Post brace and anchor | J. H. Harbold | 720,025 | Feb. 10 | 1131 | 258, 259 | 102 | 1079 |
| Post-cap | R. W. Whitehurst | 725,527 | Apr. 14 | 2054 | 465 | 103 | 1620 |
| Post-cap | A. Randolph | 734,192 | July 21 | 2761 | 648 | 105 | 616 |
| Post-driver | J. K. North and J. H Hopkins | 737,456 | Aug. 25 | 4536 | 1017 | 105 | 2000 |
| Post-hole digger | M. Hogle | 719,800 | Feb. 3 | 710 | 166 | 102 | 973 |
| Post-hole-forming implement | H. D. Sorg | 736,645 | Aug. 18 | 3005 | 663 | 105 | 1656 |
| Post-protector | J. Beazley | 725,820 | Apr. 21 | 2613 | 594 | 103 | 1755 |
| Post-canceling machine | J. K. Toles | 738,085 | Sept. 1 | 1025 | 229, 230 | 106 | 222 |
| Postmarking and canceling machine | J. French | 741,902 | Oct. 20 | 2895 | 646, 647, 648, 649, 650 | 106 | 1898 |
| Post-office assorting case and table | M. S. Field | 732,345 | June 30 | 5267 | 1168 | 104 | 2285 |
| Post-office cabinet | H. G. Wagner | 738,053 | May 12 | 2324 | 517 | 104 | 512 |
| Post-office lock-box lock | J. A. Durnbaugh | 744,858 | Nov. 24 | 3977 | 857 | 107 | 896 |
| Postal boxes. Self-closing and changeable case for | P. Schulze | 741,724 | Oct. 20 | 2580 | 574 | 106 | 1831 |
| Postal card | A. Hoffmann | 725,963 | Apr. 21 | 2856 | 648 | 103 | 1806 |
| Poster | L. Coulet, P., J., and A. Poméon | 746,794 | Dec. 15 | 2697 | 622 | 107 | 1722 |
| Pot: *See* Coffee-pot. Coffee or tea pot. Flower-pot. Mucilage or paste pot. Tea or coffee pot. | | | | | | | |
| Potassium chlorid from fuci and algæ. Extracting | D. M. Balch | 747,291 | Dec. 15 | 3660 | ..... | 107 | 1940 |
| Potato-bug catcher | W. E. Southwood | 740,481 | Oct. 6 | 187 | 37 | 106 | 1285 |
| Potato-digger | R. J. Thompson | 720,503 | Feb. 10 | 1996 | 458, 459 | 102 | 1260 |
| Potato-digger | P. Brown | 721,354 | Feb. 24 | 3652 | 831 | 102 | 1642 |
| Potato-digger | F. Heinrich | 726,428 | Apr. 28 | 3707 | 841 | 103 | 1996 |
| Potato-digger | F. G. Lilly | 726,549 | Apr. 28 | 3964 | 896 | 103 | 2045 |
| Potato-digger | C. J. Cummings | 735,216 | Aug. 4 | 353 | 68 | 105 | 1067 |
| Potato-digger | A. W. Harvey | 735,255 | Aug. 4 | 426 | 83, 84 | 105 | 1071 |
| Potato-digger | H. R. Muenster | 735,283 | Aug. 4 | 479 | 96 | 105 | 1083 |
| Potato-digger | W. I. Skinner | 738,951 | Sept. 15 | 2790 | 618 | 106 | 630 |
| Potato-digger | J. E. Egan | 739,299 | Sept. 22 | 3421 | 762, 763 | 106 | 780 |
| Potato-digger | J. E. Baird | 748,464 | Dec. 29 | 5864 | 1334 | 107 | 2466 |
| Potato-digger and listing-plow. Combined | J. T. Clark | 736,218 | Aug. 11 | 2219 | 478 | 105 | 1473 |
| Potato-digger. Rotary | W. Waters and W. K. Elder | 737,538 | Aug. 25 | 4690 | 1052 | 105 | 2037 |
| Potato-digger shaker | L. J. Stark | 741,286 | Oct. 13 | 1701 | 380 | 106 | 1626 |
| Potato-dropper | C. R. Foard | 718,707 | Jan. 20 | 2264 | 498 | 102 | 513 |
| Potato grading or assorting machine | J. Thompson | 719,532 | Feb. 3 | 212 | 49, 50 | 102 | 868 |
| Potato-masher | F. B. Holder | 719,467 | Feb. 3 | 100 | 24 | 102 | 846 |
| Potato-picker | C. W. Bly | 732,039 | June 30 | 4658 | 1040 | 104 | 2159 |
| Potato sorter and grader | E. Taylor | 725,172 | Apr. 14 | 1406 | 318 | 103 | 1482 |
| Potatoes. Composition for bleaching | A. Danmar | 728,374 | May 19 | 2935 | ..... | 104 | 662 |
| Potatoes, fruits, &c. Apparatus for assorting | E. Buysse | 723,826 | Mar. 31 | 4029 | 909 | 103 | 905 |
| Potter's wheel | J. S. Fisher | 735,355 | Aug. 4 | 598 | 123 | 105 | 1109 |
| Pottery-tissue and producing same | E. Seidel | 745,390 | Dec. 1 | 147 | ..... | 107 | 1131 |
| Pouch | J. A. Smithline | 725,889 | Apr. 21 | 2728 | 621, 622 | 103 | 1780 |
| Pouch | J. A. Smithline | 730,171 | June 2 | 1157 | 260 | 104 | 1363 |
| Pouch or bag holder | W. C. Harder | 739,783 | Sept. 22 | 4315 | 966 | 106 | 974 |
| Poultry-fountain | S. E. Cogswell | 723,651 | Mar. 24 | 3714 | 832 | 103 | 821 |
| Poultry, game, or bird rearing apparatus, partly applicable to hatching apparatus. | R., S. H., M. L. G. E., M. H., S. H., and J. Youde. | 740,728 | Oct. 6 | 631 | 142, 143 | 106 | 1383 |
| Poultry-hanger | A. Hildebrandt | 747,606 | Dec. 22 | 4223 | 949 | 107 | 2083 |
| Poultry-house | G. C. Scott | 747,243 | Dec. 15 | 3563 | 806 | 107 | 1916 |
| Poultry-house construction | G. C. Scott | 734,619 | July 28 | 3544 | 830 | 105 | 799 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Poultry of vermin. Apparatus for ridding | F. Leveck | 738,460 | Sept. 8 | 1850 | 403 | 106 | 412 |
| Poultry or birds. Self-locking leg-band for | C. C. Schild | 720,286 | Feb. 10 | 1624 | 371 | 102 | 1182 |
| Poultry-perch, feed-trough, and vermin-exterminator. Reversible combined | J. L. Ressler | 734,956 | July 28 | 4189 | 975 | 105 | 930 |
| Poultry-picking machine | F. and B. E. Terwilleger | 743,592 | Nov. 10 | 1593 | 334 | 107 | 356 |
| Poultry-receptacle | T. J. Smith | 747,494 | Dec. 22 | 4029 | 905 | 107 | 2039 |
| Poultry-trough | B. F. Williams | 733,448 | July 14 | 1350 | 318 | 105 | 302 |
| Powder: *See* Chlorate powder. Indigo powder. | | | | | | | |
| Powder. Apparatus for evaporating solvents from smokeless | P. F. A. Liedbeck | 718,484 | Jan. 13 | 1796 | 399 | 102 | 398 |
| Powder. Apparatus for inflaming rock | J. Reinelt and J. Nowarra | 731,499 | June 23 | 3641 | 813 | 104 | 1935 |
| Powder. Apparatus for molding smokeless | F. I. Du Pont | 746,375 | Dec. 8 | 1944 | 444 | 107 | 1533 |
| Powder composition. Smokeless | H. Maxim | 748,200 | Dec. 29 | 5393 | ..... | 107 | 2362 |
| Powder-dispensing device | G. L. Wernet | 722,784 | Mar. 17 | 2129 | 476 | 103 | 485 |
| Powder. Glazing | A. I. Du Pont | 733,741 | July 14 | 1845 | 435, 436 | 105 | 406 |
| Powder-glazing apparatus | A. I. Du Pont | 733,742 | July 14 | 1847 | 436, 437 | 105 | 406 |
| Powder-rods. Machine for making incisions in | E. Gathmann | 728,899 | May 26 | 3917 | 870 | 104 | 883 |
| Powder. Face | R. Belfert | 745,139 | Nov. 24 | 4521 | ..... | 107 | 1008 |
| Powder-puff | J. F. Rowland and G. D. Hull | 736,786 | Aug. 18 | 3281 | 725 | 105 | 1713 |
| Powder-puff | E. M. Huot | 745,624 | Dec. 1 | 566 | 132 | 107 | 1218 |
| Powder upon vines, plants, or the like. Apparatus for distributing | G. Lagomarsino | 735,887 | Aug. 11 | 1632 | 349 | 105 | 1348 |
| Powdered-material dispenser | W. Q. Gansen | 748,494 | Dec. 29 | 5920 | 1344 | 107 | 2478 |
| Power: *See* Churn-power. Tide and wave power. Foot-power. Tread-power. Horse-power. Treadle-power. Mechanical power. | | | | | | | |
| Power and brake system. Combined | W. B. Potter and C. D. Clark | 731,814 | June 23 | 4224 | 942 | 104 | 2053 |
| Power. Apparatus for regulating fluid-pressure for the application of | J. F. Ellis | 723,995 | Mar. 31 | 4383 | 984, 985, 986, 987 | 103 | 980 |
| Power appliance | L. B. Holliday | 729,341 | May 26 | 4701 | 1039 | 104 | 1045 |
| Power device | D. Lubin | 737,944 | Sept. 1 | 771 | 169 | 106 | 169 |
| Power-driven machinery | D. C. Jackson | 739,005 | Sept. 15 | 2874 | 637, 638 | 106 | 649 |
| Power-factor indicator | W. H. Pratt | 719,609 | Feb. 3 | 349 | 81 | 102 | 895 |
| Power-factor indicator | W. H. Pratt | 730,397 | June 9 | 1588 | 354 | 104 | 1467 |
| Power-factor meter | O. Holz | 729,343 | May 26 | 4706 | 1040 | 104 | 1046 |
| Power-feeder | J. M. Schutz | 739,228 | Sept. 15 | 3284 | 727, 728 | 106 | 734 |
| Power from car-axles. Device for transmitting | D. E. Johnson | 721,309 | Feb. 24 | 3564 | 811 | 102 | 1624 |
| Power. Means for transmitting and equalizing variable | L. E. Gaylord | 746,323 | Dec. 8 | 1857 | 422, 423 | 107 | 1515 |
| Power mechanism | B. J. Arnold | 739,773 | Sept. 22 | 4282 | 960 | 106 | 967 |
| Power-motor | C. C. Robertson | 721,834 | Mar. 3 | 320 | 70 | 103 | 71 |
| Power-producer | O. E. Waxel | 738,264 | Sept. 8 | 1431 | 309, 310 | 106 | 325 |
| Power-shears | C. and A. McVicar | 724,924 | Apr. 7 | 932 | 213 | 103 | 1369 |
| Power-shears. Combined split and bar-cutting | I. Grimm | 723,599 | Mar. 24 | 3624 | 810 | 103 | 802 |
| Power-translating device | G. W. Marble | 717,881 | Jan. 6 | 695 | 155, 156 | 102 | 148 |
| Power-translating device | G. W. Marble | 725,978 | Apr. 21 | 2879 | 653 | 103 | 1810 |
| Power-translating device | W. O. Worth | 731,007 | June 16 | 2708 | 603, 604 | 104 | 1727 |
| Power-translating device | G. W. Marble | 732,647 | June 30 | 5836 | 1293 | 104 | 2407 |
| Power-translating device | G. W. Marble | 744,776 | Nov. 24 | 3827 | 825, 826 | 107 | 864 |
| Power-translating system | A. C. Eastwood | 741,471 | Oct. 13 | 2083 | 462 | 106 | 1711 |
| Power transmission | H. W. Buck | 729,269 | May 26 | 4573 | 1009 | 104 | 1018 |
| Power transmission | J. L. Follett | 732,933 | July 7 | 420 | 102, 103 | 105 | 90 |
| Power transmission and control | J. B. Entz | 732,062 | June 30 | 4695 | 1049, 1050 | 104 | 2166 |
| Power-transmission device | W. A. Harvey | 740,128 | Sept. 29 | 4975 | 1116 | 106 | 1130 |
| Power-transmission device | H. Gerdes | 743,484 | Nov. 10 | 1386 | 284 | 107 | 311 |
| Power-transmission mechanism | J. Dring | 731,671 | June 23 | 3962 | 881, 882 | 104 | 1998 |
| Power-transmission mechanism | J. Dring | 732,057 | June 30 | 4686 | 1047 | 104 | 2165 |
| Power-transmission mechanism | J. A. Schaefer | 747,236 | Dec. 15 | 3542 | 804 | 107 | 1912 |
| Power-transmitter | W. McHaffie | 719,030 | Jan. 27 | 2868 | 644 | 102 | 653 |
| Power-transmitter | E. T. McKaig | 723,295 | Mar. 24 | 3055 | 687 | 103 | 690 |
| Power-transmitter | E. B. Allen | 732,391 | June 30 | 5360 | 1187 | 104 | 2305 |
| Power-transmitter | E. T. McKaig | 737,652 | Sept. 1 | 176 | 37 | 106 | 41 |
| Power-transmitter | E. T. McKaig | 737,653 | Sept. 1 | 177 | 38 | 106 | 42 |
| Power-transmitting apparatus | J. H. Barnard | 745,952 | Dec. 1 | 1169 | 263 | 107 | 1349 |
| Power-transmitting apparatus | J. H. Barnard | 745,953 | Dec. 1 | 1173 | 263, 264 | 107 | 1350 |
| Power-transmitting apparatus. Liquid | C. C. Palmer | 738,887 | Sept. 15 | 2597 | 573 | 106 | 589 |
| Power-transmitting device | T. B. Jeffery and R. Symmonds, Jr. | 721,807 | Mar. 3 | 269 | 60 | 103 | 60 |
| Power-transmitting device | F. Claus | 722,491 | Mar. 10 | 1569 | 345 | 103 | 352 |
| Power-transmitting device | A. W. Wigglesworth and C. H. Norstrom. | 725,387 | Apr. 14 | 1784 | 400 | 103 | 1562 |
| Power-transmitting device | I. Deutsch | 726,517 | Apr. 28 | 3907 | 884 | 103 | 2033 |
| Power-transmitting device | O. F. Persson | 729,405 | May 26 | 4804 | 1065, 1066 | 104 | 1065 |
| Power-transmitting device | E. D. Weyburn | 729,824 | June 2 | 570 | 126 | 104 | 1244 |
| Power-transmitting device | T. Scheffler | 730,481 | June 9 | 1749 | 391, 392 | 104 | 1502 |
| Power-transmitting device | C. W. Hunt | 732,079 | June 30 | 4730 | 1056 | 104 | 2173 |
| Power-transmitting device | J. Schneible | 733,600 | July 14 | 1611 | 382 | 105 | 358 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|---|
| | | | | Spec. | Dr'g. | Vol. | Page. |
| Power-transmitting mechanism | F. Sedivy | 724,338 | Mar. 31 | 5067 | 1133<br>1134 | 103 | 1115 |
| Power-transmitting mechanism | I. Lehman | 730,935 | June 16 | 2564 | 571 | 104 | 1697 |
| Power-transmitting mechanism | I. Lehman | 730,936 | June 16 | 2566 | 571 | 104 | 1698 |
| Power-transmitting mechanism | W. Cooper | 735,859 | Aug. 11 | 1585 | 337 | 105 | 1337 |
| Power-transmitting mechanism | P. W. Bettinger | 737,696 | Sept. 1 | 249 | 53, 54 | 106 | 57 |
| Power-transmitting mechanism | L. H. Redetzke | 742,738 | Oct. 27 | 4508 | 1020<br>1021 | 106 | 2246 |
| Power-transmitting mechanism. Means for supporting | L. J. Le Pontois | 731,473 | June 23 | 3595 | 801<br>802 | 104 | 1925 |
| Power-wheels. Bucket or vane for impact | F. M. F. Cazin | 738,292 | Sept. 8 | 1496 | 323 | 106 | 357 |
| Power-wrench | S. F. Short | 729,685 | June 2 | 288 | 66 | 104 | 1188 |
| Power-wrench | S. F. Short | 729,686 | June 2 | 289 | 66 | 104 | 1188 |
| Pralines. Machine for making | P. R. Franke | 725,065 | Apr. 14 | 1197 | 272 | 103 | 1440 |
| Precious metals. Apparatus for extracting | H. H. Thompson | 741,189 | Oct. 13 | 1495 | 339<br>340 | 106 | 1584 |
| Precious metals. Apparatus for extraction of | J. Baxeres de Alzugaray and W. A. Mercer. | 724,076 | Mar. 31 | 4538 | 1021 | 103 | 1009 |
| Precious metals. Apparatus for the recovery of | H. L. Sulman and H. F. Kirkpatrick-Picard. | 736,036 | Aug. 11 | 1909 | 408 | 105 | 1407 |
| Precious metals. Extracting | T. J. Grier | 745,490 | Dec. 1 | 341 | 79 | 107 | 1172 |
| Precious metals from cyanid solutions. Apparatus for extracting | J. A. Ogden | 743,551 | Nov. 10 | 1507 | 315 | 107 | 339 |
| Precious metals from matte. Separating | F. R. Carpenter | 718,601 | Jan. 20 | 2067 | 450 | 102 | 474 |
| Precious metals from mattes containing them. Recovering | F. R. Carpenter | 718,089 | Jan. 13 | 1066 | ------ | 102 | 245 |
| Precious metals from ores. Separating | F. R. Carpenter | 718,088 | Jan. 13 | 1065 | 236 | 102 | 244 |
| Precious metals from solutions. Sulfuric-acid process of extracting | G. A. Bahn | 731,839 | June 23 | 4270 | ------ | 104 | 2064 |
| Precious metals from solvent solutions. Separating | J. P. Schuch, Jr | 722,762 | Mar. 17 | 2087 | 467 | 103 | 477 |
| Precious metals from their ores. Apparatus for extraction of | J. Baxeres de Alzugaray and W. A. Mercer. | 738,148 | Sept. 8 | 1188 | 262 | 106 | 272 |
| Precious metals from their ores. Extracting | J. W. Maxwell and J. W. Sawyer | 733,859 | July 14 | 2089 | 494 | 105 | 455 |
| Precious metals from their ores. Extraction of | J. Baxeres de Alzugaray | 738,758 | Sept. 15 | 2436 | ------ | 106 | 553 |
| Precious metals from their ores. Separating | F. R. Carpenter | 718,087 | Jan. 13 | 1063 | 236 | 102 | 244 |
| Precious metals. Recovering | A. M. Beam | 737,061 | Aug. 25 | 3790 | ------ | 105 | 1840 |
| Precious metals. Separating | F. R. Carpenter | 735,032 | July 28 | 4325 | 1005 | 105 | 958 |
| Precious metals. Treating ores containing | S. C. C. Currie | 719,757 | Feb. 3 | 632 | 142 | 102 | 955 |
| Precious-stone setting | J. C. Nordt | 733,262 | July 7 | 1013 | 243 | 105 | 212 |
| Precious-stone setting | J. C. Nordt | 733,263 | July 7 | 1014 | 243 | 105 | 212 |
| Precious-stone settings. Fastening for | M. L. J. Girdany | 721,692 | Mar. 3 | 79 | 17 | 103 | 18 |
| Precious stones. Cutting | E. G. H. Schenck | 732,119 | June 30 | 4811 | 1073 | 104 | 2191 |
| Precious stones. Holder for cutting | H. W. Oostendorp | 740,902 | Oct. 6 | 951 | 214 | 106 | 1450 |
| Precious stones. Machine for cutting | E. G. H. Schenck | 732,118 | June 30 | 4809 | 1073 | 104 | 2190 |
| Precipitating apparatus | P. W. McCaffrey | 728,126 | May 12 | 2452 | 546 | 104 | 540 |
| Prescription-blank and label combined | W. B. Beach | 730,083 | June 2 | 1017 | 228 | 104 | 1334 |
| Preserving-basket | J. Dowd | 738,301 | Sept. 8 | 1518 | 329 | 106 | 342 |
| Preserving device | T. L. Martin | 720,043 | Feb. 10 | 1163 | 266 | 102 | 1086 |
| Preserving fruit | D. F. Sherman | 744,810 | Nov. 24 | 3890 | 836 | 107 | 878 |
| Preserving-jar | M. E. Perley | 720,471 | Feb. 10 | 1943 | 444 | 102 | 1249 |
| Preserving-jar | J. M. Grau | 746,496 | Dec. 8 | 2150 | 494 | 107 | 1578 |
| Preserving-jar. Vacuum | C. C. Giles and G. H. Gray | 720,129 | Feb. 10 | 1332 | 305 | 102 | 1123 |
| Preserving perishable food products | C. E. Davis | 724,553 | Apr. 7 | 245 | 60 | 103 | 1222 |
| Preserving perishable food products. Apparatus for | C. E. Davis | 724,554 | Apr. 7 | 248 | 60 | 103 | 1222 |
| Press: | | | | | | | |
| *See* Baling-press. | Hay or cotton press. | | | | | | |
| Barrel-press. | Hydraulic press. | | | | | | |
| Barrel-heading press. | Lithographic press. | | | | | | |
| | Lubricating-press. | | | | | | |
| Calender-press. | Mandrel-press. | | | | | | |
| Can-press. | Meat-press. | | | | | | |
| Cheese-press. | Nut-press. | | | | | | |
| Cider-press. | Packing-press. | | | | | | |
| Continuous press. | Perfecting-press. | | | | | | |
| Copying-press. | Platen-press. | | | | | | |
| Corrugating-press. | Portable press. | | | | | | |
| Cotton-press. | Printing-press. | | | | | | |
| Cutting-out press. | Printing, stamping, and embossing press. | | | | | | |
| Dental press. | | | | | | | |
| Dental flask-press. | Punching-press. | | | | | | |
| Drawing-press. | Revolving press. | | | | | | |
| Drill-press. | Ribbon-press. | | | | | | |
| Drying-press. | Rolling-press. | | | | | | |
| Embossing-press. | Rotary press. | | | | | | |
| Filter-press. | Seal-press. | | | | | | |
| Filtering-press. | Soap-press. | | | | | | |
| Fluid-extracting press. | Stamping-press. | | | | | | |
| | Tankage-press. | | | | | | |
| Fruit-press. | Tobacco-press. | | | | | | |
| Glass-press. | Wine-press. | | | | | | |
| Hay-press. | Wood-bending press. | | | | | | |
| Press | J. Dennis | 719,202 | Jan. 27 | 3196 | 713 | 102 | 720 |
| Press | J. C. Taft | 719,702 | Feb. 3 | 520 | 117 | 102 | 932 |
| Press | E. G. Christiansen | 720,672 | Feb. 17 | 2361 | 541 | 102 | 1348 |
| Press | K. S. Blanchard | 725,313 | Apr. 14 | 1648 | 372<br>373 | 103 | 1534 |
| Press | K. S. Blanchard | 729,723 | June 2 | 868 | 84 | 104 | 1204 |
| Press | V. D. Anderson | 731,734 | June 23 | 4078 | 909<br>910 | 104 | 2021 |
| Press | V. D. Anderson | 731,735 | June 23 | 4080 | 910<br>911 | 104 | 2021 |
| Press | V. D. Anderson | 731,737 | June 23 | 4087 | 912<br>913 | 104 | 2023 |
| Press | F. E. Warner | 747,900 | Dec. 22 | 4785 | 1081 | 107 | 2209 |

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| Invention. | Name. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|---|
| | | | | Spec. | Dr'g. | Vol. | Page. |
| Press after-pressing device | F. Wally | 723,506 | Mar. 24 | 3467 | 776 | 103 | 770 |
| Press-board | C. Koryta | 719,015 | Jan. 27 | 2835 | 636 | 102 | 646 |
| Press-board-polishing machine | S. E. Dart | 743,062 | Nov. 3 | 471 | 103 | 107 | 98 |
| Press feeder mechanism | W. M. Rheem | 734,750 | July 28 | 3811 | 889 | 105 | 850 |
| Press for oleaginous substances | G. W. Zoder and W. P. Hayne | 748,138 | Dec. 29 | 5282 | 1200<br>1201 | 107 | 2339 |
| Press for ribbons, &c | W. Y. Fuqua | 743,631 | Nov. 10 | 1673 | 351 | 107 | 373 |
| Press for squeezing mushy, zinky, or coppery lead drosses. | W. H. Howard | 739,003 | Sept. 15 | 2869 | 637 | 106 | 647 |
| Press-mold | J. J. Forster | 721,174 | Feb. 24 | 3315 | 758 | 102 | 1572 |
| Press-valve-operating mechanism | J. M. Stuart | 748,231 | Dec. 29 | 5442 | 1240<br>1241 | 107 | 2373 |
| Pressing-machine. Tailor's | J. Langton | 729,191 | May 26 | 4435 | 978 | 104 | 990 |
| Pressman's tray | C. Bradley | 738,980 | Sept. 15 | 2840 | 630 | 106 | 641 |
| Pressure-exerting machine | G. W. Greenwood | 727,353 | May 5 | 990 | 216 | 104 | 213 |
| Pressure-exerting mechanism | E. Guenther | 718,621 | Jan. 20 | 2101 | 457 | 102 | 481 |
| Pressure-gage | C. J. Manning | 723,616 | Mar. 24 | 3650 | 817 | 103 | 807 |
| Pressure-gage | C. J. Manning | 731,585 | June 23 | 3811 | 849 | 104 | 1968 |
| Pressure-gage | M. Luscomb | 745,636 | Dec. 1 | 588 | 136 | 107 | 1223 |
| Pressure-gage-testing apparatus | A. G. Wood | 719,968 | Feb. 3 | 990 | 230 | 102 | 1033 |
| Pressure-gage-testing device | C. B. Bosworth | 747,530 | Dec. 22 | 4090 | 919 | 107 | 2052 |
| Pressure-generator | G. E. Blake and C. M. Bell | 727,067 | May 5 | 475 | 101 | 104 | 104 |
| Pressure-regulated switch | A. Sundh | 733,561 | July 14 | 1544 | 368 | 105 | 344 |
| Pressure-regulating, governing, safety apparatus | F. Krüger | 722,026 | Mar. 3 | 691 | 153 | 103 | 149 |
| Pressure-regulator | J. E. Spencer | 723,060 | Mar. 17 | 2602 | 586<br>587 | 103 | 582 |
| Pressure-regulator | B. Zindel | 723,118 | Mar. 17 | 2713 | 610 | 103 | 605 |
| Pressure-regulator | N. C. Locke | 724,481 | Apr. 7 | 112 | 27 | 103 | 1193 |
| Pressure-regulator | J. C. Stewart | 734,993 | July 28 | 4268 | 992 | 105 | 946 |
| Pressure-regulator | S. L. McAdams | 746,560 | Dec. 8 | 2260 | 518 | 107 | 1603 |
| Pressure-regulator | I. H. Spencer | 746,755 | Dec. 15 | 2624 | 603 | 107 | 1706 |
| Pressure-roller | F. I. Dana | 733,630 | July 14 | 1663 | 394 | 105 | 368 |
| Primary battery | J. W. Gladstone | 730,014 | June 2 | 907 | 202 | 104 | 1312 |
| Primary battery | J. A. Pedrazzi | 742,726 | Oct. 27 | 4489 | 1015 | 106 | 2241 |
| Primer | C. A. Bailey | 745,761 | Dec. 1 | 791 | 182 | 107 | 1267 |
| Primers and cartridges. Packing-strip for | R. Gair | 739,487 | Sept. 22 | 3776 | 844 | 106 | 858 |
| Print-mounting device | F. Sauer | 736,027 | Aug. 11 | 1893 | 405 | 105 | 1404 |
| Prints. Apparatus for making blue- | J. V. McAdam | 730,553 | June 9 | 1875 | 419 | 104 | 1531 |
| Prints may be taken. Treating and producing metal surfaces from which | P. Ny | 739,339 | Sept. 22 | 3482 | 778 | 106 | 792 |
| Printer. Automatic focusing solar | H. Stender | 730,583 | June 9 | 1936 | 430 | 104 | 1544 |
| Printer. Check- | F. Mutschler | 726,446 | Apr. 28 | 3737 | 847<br>848 | 103 | 2002 |
| Printer. Roll-paper | J. M. Fox | 720,910 | Feb. 17 | 2768 | 636 | 102 | 1436 |
| Printer's base and attachments | T. Wensel | 720,387 | Feb. 10 | 1800 | 409 | 102 | 1220 |
| Printer's base-clamp | T. Wensel | 720,388 | Feb. 10 | 1801 | 409 | 102 | 1220 |
| Printer's block | W. S. Timmis | 745,467 | Dec. 1 | 295 | 71 | 107 | 1162 |
| Printer's case | H. P. Hamilton | 742,862 | Nov. 3 | 75 | 18 | 107 | 18 |
| Printer's form | F. C. Leethem | 745,869 | Dec. 1 | 1034 | 233<br>234 | 107 | 1320 |
| Printer's furniture | J. C. Bovard | 728,845 | May 26 | 3828 | 852 | 104 | 867 |
| Printer's furniture | S. Stephens | 747,794 | Dec. 22 | 4574 | 1032 | 107 | 2162 |
| Printers' furniture. Mold for casting | I. Baas | 733,531 | July 14 | 1495 | 356 | 105 | 333 |
| Printer's galley | E. Hall | 727,615 | May 12 | 1476 | 330 | 104 | 335 |
| Printer's galley | W. A. Faucett | 727,924 | May 12 | 2095 | 466 | 104 | 464 |
| Printer's galley and chase. Combined | F. P. Wilson and J. Knight | 724,530 | Apr. 7 | 206 | 50 | 103 | 1213 |
| Printer's inking-roller | J. H. Osgood | 725,356 | Apr. 14 | 1734 | ------ | 103 | 1552 |
| Printers' inking-rollers. Mold for casting | J. H. Osgood | 725,357 | Apr. 14 | 1735 | 390 | 103 | 1552 |
| Printers' metal furniture. Making | I. Baas | 733,895 | July 14 | 2157 | 509 | 105 | 470 |
| Printer's quoin | H. A. White | 723,099 | Mar. 17 | 2673 | 602 | 103 | 598 |
| Printer's quoin | W. S. Decker | 736,077 | Aug. 11 | 1992 | 423 | 105 | 1426 |
| Printer's quoin | W. H. Lynchard | 741,151 | Oct. 13 | 1412 | 323 | 106 | 1567 |
| Printer's quoin | G. B. Huffington | 743,165 | Nov. 3 | 667 | 144 | 107 | 140 |
| Printer's quoin | W. H. Scovill | 744,806 | Nov. 24 | 3880 | 835 | 107 | 876 |
| Printers' rules. Machine for mitering | H. C. Hansen | 718,837 | Jan. 20 | 2490 | 554<br>555 | 102 | 557 |
| Printing | R. J. Kittredge and J. Niemes | 722,591 | Mar. 10 | 1738 | 387 | 103 | 389 |
| Printing | C. Owens | 736,540 | Aug. 18 | 2803 | 613<br>614 | 105 | 1616 |
| Printing | A. Hoz | 746,087 | Dec. 8 | 1419 | 318 | 107 | 1421 |
| Printing and addressing circulars, &c. Machine for | J. O. Clément | 722,811 | Mar. 17 | 2178 | 486 | 103 | 495 |
| Printing and duplicating apparatus | A. D. Klaber | 747,074 | Dec. 15 | 3252 | 740 | 107 | 1851 |
| Printing and folding machinery. Sheet-delivery apparatus for | C. T. Cundall | 738,778 | Sept. 15 | 2474 | 543<br>544 | 106 | 562 |
| Printing and graining machine | A. H. Sherwood | 720,629 | Feb. 17 | 2286 | 524 | 102 | 1333 |
| Printing and issuing machine. Ticket | J. P. Eastman and T. F. Hawley | 725,054 | Apr. 14 | 1175 | 266<br>267 | 103 | 1436 |
| Printing and toning compound. Combined | P. E. Schoenfelder | 730,800 | June 9 | 2302 | ------ | 104 | 1622 |
| Printing apparatus | R. Herman | 721,041 | Feb. 17 | 3021 | 694<br>695 | 102 | 1491 |
| Printing apparatus | R. Herman | 743,160 | Nov. 3 | 659 | 142 | 107 | 138 |
| Printing apparatus | J. H. Ketcheson | 743,884 | Nov. 10 | 2118 | 453 | 107 | 467 |
| Printing apparatus. Blue- | J. H. Wagenhorst | 720,862 | Feb. 17 | 2670 | 616 | 102 | 1415 |
| Printing apparatus. Fabric- | F. A. Arbenz | 721,492 | Feb. 24 | 3906 | 888 | 102 | 1694 |
| Printing apparatus. Lamp-controller for electric blue- | S. B. Whinery | 747,338 | Dec. 15 | 3751 | 845 | 107 | 1959 |
| Printing apparatus. Stencil- | D. Gestetner | 732,542 | June 30 | 5646 | 1252 | 104 | 2363 |
| Printing apparatus. Stencil- | D. Gestetner | 746,950 | Dec. 15 | 3020 | 693 | 107 | 1796 |
| Printing apparatus. Wall-paper- | J. A. Watson | 736,044 | Aug. 11 | 1923 | 410 | 105 | 1411 |
| Printing apparatus. Yarn- | C. L. Horack | 732,001 | June 23 | 4559 | 1017 | 104 | 2125 |
| Printing, associating, and folding machine. Web- | R. C. Annand | 734,112 | July 21 | 2612 | 614<br>615 | 105 | 586 |
| Printing attachment for calculating-machines | W. H. Pike, Jr | 738,934 | Sept. 15 | 2765 | 612 | 106 | 626 |
| Printing attachment for roll-paper holders | R. E. Brunacci | 737,822 | Sept. 1 | 506 | 111 | 106 | 114 |
| Printing black | E. Ullrich and V. Fussgänger | 742,530 | Oct. 27 | 4156 | ------ | 106 | 2169 |
| Printing-block | J. H. Swain | 732,467 | June 30 | 5503 | 1220 | 104 | 2333 |

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| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Printing-clichés and high-reliefs. Producing | J. Schmidting | 725,879 | Apr. 21 | 2709 | ..... | 103 | 1776 |
| Printing collapsible tubes. Machine for | F. F. Ingram | 744,554 | Nov. 17 | 3418 | 736 | 107 | 759 |
| Printing. Color- | P. Barboutau | 738,875 | Sept. 15 | 2664 | 587 | 106 | 605 |
| Printing cotton | F. Schaab | 722,050 | Mar. 3 | 732 | 163 | 103 | 158 |
| Printing device | M. J. Bulger | 718,189 | Jan. 13 | 1244 | 273 | 102 | 284 |
| Printing device. Automatic roll-paper- | G. H. Dworzek | 723,517 | Mar. 24 | 3486 | 779, 780 | 103 | 774 |
| Printing device. Combined hand and automatic roll | C. P. King | 747,325 | Dec. 15 | 3724 | 839 | 107 | 1953 |
| Printing device for cash-registers | J. P. Cleal | 747,855 | Dec. 22 | 4690 | 1060, 1061 | 107 | 2189 |
| Printing device for paper-rolls | J. W. Bolger | 747,580 | Dec. 22 | 4168 | 937 | 107 | 2070 |
| Printing device. Rolled-wrapping-paper- | E. Wilson | 731,256 | June 16 | 3156 | 702 | 104 | 1816 |
| Printing-form | G. E. Pancoast | 748,004 | Dec. 29 | 5015 | 1133 | 107 | 2281 |
| Printing-frame | G. A. McMenimen | 725,276 | Apr. 14 | 1586 | 358 | 103 | 1521 |
| Printing-frame | E. F. Galloway | 743,708 | Nov. 10 | 1796 | 379, 380 | 107 | 400 |
| Printing-frame automatic register | O. H. Eichler | 733,706 | July 14 | 1783 | 423 | 105 | 393 |
| Printing in colors. Apparatus for | T. Regensteiner | 718,877 | Jan. 20 | 2580 | 576 | 102 | 578 |
| Printing. Invisible-impression | E. W. Hall | 730,823 | June 9 | 2342 | 519 | 104 | 1631 |
| Printing, issuing, and recording machine. Ticket | V. R. Heftler and C. B. Weeks | 740,274 | Sept. 29 | 5246 | 1182, 1183, 1184 | 106 | 1186 |
| Printing linoleum, floor-cloth, &c. Machine for | D. N. Bertram and R. Milne | 739,818 | Sept. 29 | 4389 | 984 | 106 | 1007 |
| Printing-machine | S. G. Goss | 719,324 | Jan. 27 | 3428 | 765 | 102 | 771 |
| Printing-machine | J. H. Reinhardt | 721,236 | Feb. 24 | 3451 | 784, 785 | 102 | 1599 |
| Printing-machine | M. Rosenfeld | 728,982 | May 26 | 4060 | 901 | 104 | 913 |
| Printing-machine | L. W. Southgate | 729,691 | June 2 | 294 | 68, 69 | 104 | 1189 |
| Printing-machine | H. A. W. Wood | 735,646 | Aug. 4 | 1170 | 248 | 105 | 1229 |
| Printing-machine | W. K. Hodgman | 735,977 | Aug. 11 | 1795 | 384 | 105 | 1383 |
| Printing-machine | T. Cossar | 738,527 | Sept. 8 | 1985 | 432 | 106 | 442 |
| Printing-machine | G. F. Read | 742,232 | Oct. 27 | 3599 | 805, 806 | 106 | 2054 |
| Printing-machine | W. T. Bailey | 745,134 | Nov. 24 | 4507 | 976 | 107 | 1005 |
| Printing-machine | A. R. Boynton | 745,145 | Nov. 24 | 4542 | 984, 985, 986, 987, 988 | 107 | 1011 |
| Printing-machine | J. W. Smith and G. U. Harn, Jr | 747,009 | Dec. 15 | 3122 | 714, 715 | 107 | 1818 |
| Printing-machine | C. W. Gay | 747,694 | Dec. 22 | 4386 | 989, 990 | 107 | 2119 |
| Printing-machine | H. A. W. Wood | 748,133 | Dec. 29 | 5266 | 1195, 1196 | 107 | 2336 |
| Printing machine. Automatic color- | O. Hallensleben | 747,168 | Dec. 15 | 3418 | 774, 775 | 107 | 1887 |
| Printing-machine bed-motion | E. T. Cleathero | 740,533 | Oct. 6 | 292 | 59 | 106 | 1307 |
| Printing machine. Color- | G. Schneider | 723,736 | Mar. 24 | 3859 | 868 | 103 | 853 |
| Printing-machine cylinder | O. Roesen | 733,276 | July 7 | 1042 | 249 | 105 | 219 |
| Printing-machine cylinder | O. Roesen | 733,277 | July 7 | 1044 | 250 | 105 | 219 |
| Printing-machine delivery mechanism | R. C. Annand | 730,857 | June 16 | 2408 | 531, 532 | 104 | 1663 |
| Printing-machine delivery mechanism | W. Spalckhaver | 732,322 | June 30 | 5208 | 1157 | 104 | 2272 |
| Printing-machine delivery mechanism | G. F. Read | 745,385 | Dec. 1 | 131 | 30 | 107 | 1128 |
| Printing machine. Fabric- | J. G Sanderson | 743,038 | Nov. 3 | 425 | 91, 92 | 107 | 89 |
| Printing-machine feed-guard | W. Spalckhaver | 732,792 | July 7 | 175 | 45 | 105 | 41 |
| Printing-machine. Flat-bed oscillating-cylinder | T. Cossar | 733,461 | July 14 | 1373 | 324, 325 | 105 | 307 |
| Printing machine for printing yarns, &c. Automatic color- | O. Hallensleben | 728,225 | May 19 | 2644 | 589, 590, 591 | 104 | 602 |
| Printing machine. Hosiery- | R. Baird | 747,355 | Dec. 22 | 3784 | 851, 852, 853 | 107 | 1983 |
| Printing machine. Multicolor- | F. H. Mowbray | 721,905 | Mar. 3 | 457 | 100 | 103 | 101 |
| Printing machine. Multicolor- | F. H. Mowbray and W. Black | 743,910 | Nov. 10 | 2164 | 466 | 107 | 476 |
| Printing machine. Multicolor and perfecting | W. Spalckhaver | 742,247 | Oct. 27 | 3633 | 812 | 106 | 2063 |
| Printing machine. Multiple-color and text | M. Rudometoff | 741,375 | Oct. 13 | 1890 | 417 | 106 | 1670 |
| Printing machine. Pattern- | C. L. Burdick | 746,786 | Dec. 15 | 2680 | 619 | 107 | 1717 |
| Printing-machine. Platen | F. Waite | 727,502 | May 5 | 1255 | 280 | 104 | 270 |
| Printing-machine register-gear. Web- | T. Cossar | 745,572 | Dec. 1 | 471 | 111 | 107 | 1197 |
| Printing machine. Stencil- | A. B. Dick | 729,045 | May 26 | 4184 | 925 | 104 | 938 |
| Printing machine. Stencil- | A. B. Dick | 746,930 | Dec. 15 | 2978 | 685 | 107 | 1787 |
| Printing machine. Stencil- | A. B. Dick | 746,931 | Dec. 15 | 2980 | 685, 686 | 107 | 1787 |
| Printing machine. Ticket- | E. B. Clark | 748,163 | Dec. 29 | 5321 | 1208, 1209 | 107 | 2347 |
| Printing machine. Wall-paper- | J. McCoy | 735,285 | Aug. 4 | 482 | 96, 97 | 105 | 1084 |
| Printing machine. Wall-paper- | J. A. Watson | 736,043 | Aug. 11 | 1922 | 410 | 105 | 1410 |
| Printing machine. Web- | W. Spalckhaver | 742,248 | Oct. 27 | 3636 | 812, 813 | 106 | 2063 |
| Printing-machines. Pneumatic laying-off apparatus for cylinder | W. M. Rockstroh | 746,651 | Dec. 8 | 2430 | 555, 556 | 107 | 1643 |
| Printing mechanism | H. A. W. Wood | 748,134 | Dec. 29 | 5270 | 1196, 1197, 1198 | 107 | 2337 |
| Printing-mechanism shifting device | G. W. Donning | 743,259 | Nov. 3 | 857 | 187, 188 | 107 | 180 |
| Printing merchants' advertising-cards on wrapping-paper. Device for | N. T. Pool | 723,785 | Mar. 24 | 3944 | 890 | 103 | 871 |
| Printing. Multicolor- | E. T. Neben | 718,274 | Jan. 13 | 1407 | 313 | 102 | 318 |
| Printing. Multicolor- | P. G. Frauenfelder | 745,174 | Nov. 24 | 4616 | ..... | 107 | 1027 |
| Printing on roll-paper. Apparatus for | A. E. Palmer | 741,706 | Oct. 20 | 2544 | 567, 568 | 106 | 1824 |

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| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Printing or coloring floor-coverings, &c., and articles thus produced. | A. F. Lundeberg | 737,945 | Sept. 1 | 774 | 169 | 106 | 170 |
| Printing or coloring yarn or similar material | W. J. Webb | 719,398 | Jan. 27 | 3569 | 797, 798 | 102 | 801 |
| Printing or coloring yarn or similar material. Apparatus for | W. J. Webb | 719,284 | Jan. 27 | 3348 | 747, 748 | 102 | 753 |
| Printing or embossing machine impression-latches. Apparatus for operating platen | F. W. Thomas | 725,508 | Apr. 14 | 2025 | 457 | 103 | 1614 |
| Printing or graining machine | A. H. Sherwood | 721,244 | Feb. 24 | 3472 | 789 | 102 | 1603 |
| Printing or lettering machine | H. Elmblad | 720,573 | Feb. 17 | 2169 | 503, 504 | 102 | 1311 |
| Printing or other machine blanket | R. J. C. Mitchell | 744,090 | Nov. 17 | 2558 | 547 | 107 | 574 |
| Printing or other machines. Edge-unfolder for fabric- | H. E. Green | 739,781 | Sept. 22 | 4311 | 965 | 106 | 973 |
| Printing or other machines. Sheet separating and feeding mechanism for | L. F. Fuchs and B. K. Fisher | 720,547 | Feb. 10 | 2102 | 484, 485, 486 | 102 | 1280 |
| Printing or similar machines. Sheet-delivery mechanism for | F. J. Wich and G. L. Hoyt | 740,724 | Oct. 6 | 621 | 139, 140 | 106 | 1381 |
| Printing or writing machine. Stenographic | J. Lafaurie | 734,895 | July 28 | 4085 | 952 | 105 | 907 |
| Printing paper bags and wrapping-paper. Apparatus for | M. Purdin and G. H. Haskins | 720,481 | Feb. 10 | 1958 | 447 | 102 | 1252 |
| Printing-plate casting and finishing apparatus. Automatic stereotype- | H. A. W. Wood | 721,117 | Feb. 17 | 3172 | 729, 730, 731 | 102 | 1524 |
| Printing-plate casting and finishing apparatus. Stereotype- | H. A. W. Wood | 721,120 | Feb. 17 | 3195 | 732, 733 | 102 | 1532 |
| Printing-plate-casting apparatus. Stereotype- | H. A. W. Wood | 721,118 | Feb. 17 | 3189 | 731 | 102 | 1530 |
| Printing-plate-casting apparatus. Stereotype- | H. A. W. Wood | 721,119 | Feb. 17 | 3192 | 732 | 102 | 1531 |
| Printing-plate-finishing machine | F. C. Leethen | 737,251 | Aug. 25 | 4150 | 923 | 105 | 1916 |
| Printing-plate-finishing mechanism. Stereotype- | H. A. W. Wood | 721,122 | Feb. 17 | 3203 | 734 | 102 | 1534 |
| Printing-plate-finishing mechanism. Stereotype- | H. A. W. Wood | 721,123 | Feb. 17 | 3206 | 735 | 102 | 1534 |
| Printing-plate holder | R. W. Pittman and G. C. Andrews. | 718,519 | Jan. 13 | 1899 | 417 | 102 | 425 |
| Printing-plate holder | R. W. Pittman and G. C. Andrews. | 740,310 | Sept. 29 | 5311 | 1196 | 106 | 1199 |
| Printing-plate supplemental press-base | C. E. Beach | 747,845 | Dec. 22 | 4670 | 1055, 1056 | 107 | 2184 |
| Printing-plates. Making relief-effect | W. A. Hinners | 718,842 | Jan. 20 | 2497 | 556 | 102 | 558 |
| Printing-plates. Making relief-effect | J. L. Shilling | 718,883 | Jan. 20 | 2589 | 578 | 102 | 580 |
| Printing-plates. Producing | H. P. Arms | 740,352 | Sept. 29 | 5387 | 1214 | 106 | 1216 |
| Printing-plates. Producing celluloid | B. Ludwig | 747,738 | Dec. 22 | 4465 | ..... | 107 | 2137 |
| Printing. Preparing metals or alloys for lithographic | O. C. Strecker | 731,082 | June 16 | 2846 | ..... | 104 | 1755 |
| Printing-press | G. H. Pierce | 720,064 | Feb. 10 | 1198 | 274, 275, 276 | 102 | 1094 |
| Printing-press | C. R. Culley | 720,331 | Feb. 10 | 1702 | 387 | 102 | 1199 |
| Printing-press | J. L. Firm | 724,455 | Apr. 7 | 64 | 16, 17 | 103 | 1183 |
| Printing-press | J. L. Firm | 724,457 | Apr. 7 | 71 | 18 | 103 | 1184 |
| Printing-press | J. L. Firm | 724,459 | Apr. 7 | 77 | 19 | 103 | 1185 |
| Printing-press | E. E. Flora | 724,997 | Apr. 7 | 1072 | 245 | 103 | 1397 |
| Printing-press | L. B. Martin | 728,948 | May 26 | 4002 | 890, 891 | 104 | 900 |
| Printing-press | M. L. Severy and G. S. Heath | 729,683 | June 2 | 283 | 65, 66 | 104 | 1187 |
| Printing-press | G. W. Prouty | 731,497 | June 23 | 3638 | 812 | 104 | 1934 |
| Printing-press | H. A. W. Wood | 731,530 | June 23 | 3706 | 825, 826 | 104 | 1948 |
| Printing-press | J. Krehbiel | 731,790 | June 23 | 4180 | 932 | 104 | 2042 |
| Printing-press | J. F. Ames. (Reissue) | 12,124 | June 23 | 4630 | 1035 | 104 | 2139 |
| Printing-press | S. G. Goss | 732,066 | June 30 | 4707 | 1051, 1052 | 104 | 2169 |
| Printing-press | D. I. Eckerson | 732,528 | June 30 | 5617 | 1245, 1246 | 104 | 2357 |
| Printing-press | J. Krehbiel | 733,325 | July 7 | 1114 | 264, 265 | 105 | 235 |
| Printing-press | J. Durand | 737,829 | Sept. 1 | 518 | 114 | 106 | 116 |
| Printing-press | F. H. Lindner | 738,821 | Sept. 15 | 2566 | 564, 565, 566, 567 | 106 | 582 |
| Printing-press | M. L. Severy | 743,759 | Nov. 10 | 1882 | 398 | 107 | 419 |
| Printing-press | M. L. Severy | 743,760 | Nov. 10 | 1884 | 398 | 107 | 419 |
| Printing-press | M. L. Severy | 743,761 | Nov. 10 | 1886 | 398, 399 | 107 | 420 |
| Printing-press | W. A. Logue | 744,371 | Nov. 17 | 3093 | 663 | 107 | 690 |
| Printing-press | C. H. Cochrane | 746,464 | Dec. 8 | 2092 | 481, 482 | 107 | 1565 |
| Printing press and embossing-machine. Tip- | W. H. Lum | 742,691 | Oct. 27 | 4430 | 1000 | 106 | 2229 |
| Printing-press attachment | S. G. Goss | 740,552 | Oct. 6 | 321 | 67 | 106 | 1313 |
| Printing-press bed-motion | H. Hartt | 738,797 | Sept. 15 | 2519 | 553, 554 | 106 | 571 |
| Printing-press bed-motion | R. Miehle | 738,829 | Sept. 15 | 2585 | 570, 571 | 106 | 586 |
| Printing-press bed-movement | W. S. Huson | 725,714 | Apr. 21 | 2411 | 547 | 103 | 1711 |
| Printing-press bed-plate motion | J. A. Svensson | 730,174 | June 2 | 1161 | 261, 262 | 104 | 1364 |
| Printing-press blank or stock register | C. G. Harris | 742,641 | Oct. 27 | 4342 | 977 | 106 | 2209 |
| Printing-press chase-holding device | R. E. and A. Kemper | 718,634 | Jan. 20 | 2119 | 461 | 102 | 484 |
| Printing-press cutting and punching mechanism | G. H. Pierce | 723,302 | Mar. 24 | 3065 | 689, 690 | 103 | 692 |
| Printing-press delivery apparatus | W. Evensen | 730,892 | June 16 | 2490 | 552 | 104 | 1681 |
| Printing-press delivery mechanism | W. Scott | 721,840 | Mar. 3 | 329 | 73 | 103 | 72 |
| Printing-press delivery mechanism | C. G. Harris | 726,161 | Apr. 21 | 3180 | 719 | 103 | 1872 |
| Printing-press feed-controlling attachment | S. R. Kramer | 723,683 | Mar. 24 | 3760 | 844 | 103 | 831 |
| Printing-press feeding-gage | W. H. Bradley | 745,318 | Dec. 1 | 11 | 2 | 107 | 1103 |

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| Invention. | Name. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|---|
| | | | | Spec. | Dr'g. | Vol. | Page. |
| Printing-press feeding mechanism | C. H. Palmer and J. W. Denmead | 729,214 | May 26 | 4476 | 985, 986 | 104 | 998 |
| Printing-press flies. Jogger for | J. Kaup | 726,435 | Apr. 28 | 3722 | 844 | 103 | 1999 |
| Printing-press folding and delivery device | J. L. Firm | 724,458 | Apr. 7 | 74 | 18, 19 | 103 | 1185 |
| Printing-press front-sheet-delivery apparatus | A. Stocker | 739,233 | Sept. 15 | 3292 | 729 | 106 | 735 |
| Printing-press gripper | F. I. Macauley | 721,377 | Feb. 24 | 3696 | 841 | 102 | 1651 |
| Printing-press gripping device | S. Halvorson | 744,538 | Nov. 17 | 3393 | 731 | 107 | 755 |
| Printing-press ink-distributing apparatus | G. W. Prouty | 735,818 | Aug. 11 | 1498 | 321 | 105 | 1319 |
| Printing-press ink-distributing mechanism | G. H. Pierce | 733,078 | July 7 | 672 | 162, 163, 164, 165 | 105 | 142 |
| Printing-press inking apparatus | M. Gally | 733,023 | July 7 | 567 | 138, 139 | 105 | 121 |
| Printing-press inking attachment | G. W. and W. W. Read | 729,097 | May 26 | 4266 | 942 | 104 | 954 |
| Printing-press inking mechanism | J. Thomson | 725,513 | Apr. 14 | 2031 | 460 | 103 | 1615 |
| Printing press. Job- | F. W. Pohl | 730,396 | June 9 | 1587 | 353, 354 | 104 | 1467 |
| Printing-press motor-bracket | F. E. Rich | 728,301 | May 19 | 2806 | 621 | 104 | 637 |
| Printing-press offset-preventing mechanism | H. A. W. Wood | 748,135 | Dec. 29 | 5277 | 1198, 1199 | 107 | 2338 |
| Printing-press paper cutting and feeding device | W. Scott | 730,976 | June 16 | 2645 | 589 | 104 | 1714 |
| Printing-press perforating attachment | N. A. Emrich and W. F. Krautter | 736,512 | Aug. 18 | 2758 | 603 | 105 | 1607 |
| Printing-press plate-holder | H. A. Maley | 724,116 | Mar. 31 | 4621 | 1041 | 103 | 1027 |
| Printing-press. Platen | R. E. and A. Kemper | 724,106 | Mar. 31 | 4595 | 1034, 1035 | 103 | 1022 |
| Printing-press. Platen | J. Thomson | 725,512 | Apr. 14 | 2030 | 459, 460 | 103 | 1615 |
| Printing-press. Platen | W. M. Rockstroh | 729,223 | May 26 | 4490 | 989, 990 | 104 | 1002 |
| Printing-press platen | J. Thomson | 725,637 | Apr. 14 | 2272 | 513 | 103 | 1666 |
| Printing-press platen | J. Thomson | 732,797 | July 7 | 185 | 46, 47 | 105 | 43 |
| Printing-press reel. Adjustable | J. Sr., and F. H. Hoberg | 742,788 | Oct. 27 | 4580 | 1038 | 106 | 2262 |
| Printing-press sheet-delivery mechanism | W. S. Huson | 720,355 | Feb. 10 | 1747 | 397 | 102 | 1209 |
| Printing-press sheet-jogging device | J. W. P. Taylor | 738,641 | Sept. 8 | 2193 | 479 | 106 | 486 |
| Printing-press shoo-fly | J. J. Mosher | 746,124 | Dec. 8 | 1492 | 333 | 107 | 1439 |
| Printing-press stop-motion | G. R. Williams | 723,107 | Mar. 17 | 2685 | 604, 605 | 103 | 600 |
| Printing-press stop-motion | G. R. Williams | 723,108 | Mar. 17 | 2687 | 605 | 103 | 601 |
| Printing-press tympan | A. S. Allen | 737,052 | Aug. 25 | 3770 | 837 | 105 | 1837 |
| Printing-press tympan-gage adjusting and squaring device. | P. W. Wiley | 726,128 | Apr. 21 | 3132 | 709 | 103 | 1863 |
| Printing-presses. Apparatus for cleaning, drying, and polishing inking-rollers of | V. Bauer | 728,354 | May 19 | 2906 | 641 | 104 | 657 |
| Printing-presses. Apparatus for securing ink-distributing cylinders to platen | J. Thomson | 725,511 | Apr. 14 | 2029 | 459 | 103 | 1615 |
| Printing-presses, &c. Attachment for | F. I. Clark | 740,233 | Sept. 29 | 5179 | 1164 | 106 | 1172 |
| Printing-presses. Automatic delivery device for platens of | J. R. Fox | 742,980 | Nov. 3 | 280 | 63 | 107 | 61 |
| Printing-presses. Composition for preventing adhesion of paper to rubber in | F. Pape | 743,918 | Nov. 10 | 2176 | ------ | 107 | 480 |
| Printing-presses. Doctor for regulating and controlling the feed of paper to | F. W. Rolland, Jr | 745,240 | Nov. 24 | 4728 | 1032 | 107 | 1050 |
| Printing-presses. Means for feeding bags, &c., to | C. H. Palmer and J. W. Denmead | 729,213 | May 26 | 4474 | 985 | 104 | 998 |
| Printing-presses. Registering wood-base cuts on | E. J. Jones | 728,723 | May 19 | 3594 | 798 | 104 | 802 |
| Printing-presses, &c. Slant-board for | G. R. Williams | 738,967 | Sept. 15 | 2818 | 624 | 106 | 636 |
| Printing. Producing surfaces for color- | J. Ramsdell | 742,354 | Oct. 27 | 3824 | ------ | 106 | 2102 |
| Printing purposes. Producing positive chromatized colloid designs on plates for | M. Rudometoff | 741,278 | Oct. 13 | 1663 | 376 | 106 | 1620 |
| Printing-roll | J. W. Smith and G. U. Harn, Jr | 747,096 | Dec. 15 | 3289 | 748 | 107 | 1860 |
| Printing, stamping, and embossing press | W. M. Rockstroh | 744,239 | Nov. 17 | 2855 | 611 | 107 | 639 |
| Printing, stamping, numbering, or similar machines. Inking mechanism for | J. D. Humphrey and H. G. Storz | 740,136 | Sept. 29 | 4989 | 1121 | 106 | 1133 |
| Printing, stamping, &c. Platen-press for | E. T. Cleathero | 747,939 | Dec. 29 | 4882 | 1103, 1104, 1105, 1106 | 107 | 2252 |
| Printing-surface | G. S. Christie | 736,937 | Aug. 25 | 3752 | ------ | 105 | 1794 |
| Printing-surface and making same. Polychromatic | A. von Beust | 741,297 | Oct. 13 | 1721 | ------ | 106 | 1630 |
| Printing-surfaces for color-printing. Making | C. G. Sunergren | 745,263 | Nov. 24 | 4767 | ------ | 107 | 1059 |
| Printing-surfaces. Making half-tone | G. Palmer | 735,142 | Aug. 4 | 190 | 40 | 105 | 1022 |
| Printing-surfaces. Making multicolor | A. von Beust | 735,854 | Aug. 11 | 1577 | 336 | 105 | 1336 |
| Printing-surfaces. Manufacture of metallic | W. E. W. Southwood | 747,791 | Dec. 22 | 4570 | ------ | 107 | 2162 |
| Printing-surfaces. Producing | O. Förster | 723,198 | Mar. 17 | 2874 | ------ | 103 | 639 |
| Printing, type-casting, &c. Machine for producing controllers for | W. S. Timmis | 742,523 | Oct. 27 | 4124 | 928, 929, 930, 931 | 106 | 2164 |
| Printing wall-paper. Hand-press for | E. A. Popcke | 746,152 | Dec. 8 | 1545 | 345 | 107 | 1450 |
| Printing-wheel. Adjustable | J. H. Horan and E. N. Winston | 719,592 | Feb. 3 | 329 | 76 | 102 | 891 |
| Printing yarns or threads for woven carpet fabrics | W. B. Keefer | 747,306 | Dec. 15 | 3688 | 831 | 107 | 1946 |
| Prismatic effects. Apparatus for producing | W. H. Meagher | 718,496 | Jan. 13 | 1851 | 407 | 102 | 414 |
| Projectile | C. V. Wheeler and A. G. McKenna | 721,487 | Feb. 24 | 3898 | 887 | 102 | 1692 |
| Projectile | N. Densler | 723,249 | Mar. 24 | 2968 | 666 | 103 | 672 |
| Projectile | W. Pepperling | 724,326 | Mar. 31 | 5042 | 1129 | 103 | 1110 |
| Projectile | C. V. Wheeler and A. G. McKenna | 725,385 | Apr. 14 | 1781 | 399 | 103 | 1562 |
| Projectile | L. P. Holmblad | 726,291 | Apr. 28 | 3448 | 783 | 103 | 1943 |
| Projectile | M. C. Regan | 728,012 | May 12 | 2247 | 500 | 104 | 495 |
| Projectile | E. M. Johnson | 732,638 | June 30 | 5822 | 1291 | 104 | 2404 |
| Projectile | R. W. Scott | 733,920 | July 14 | 2213 | 519 | 105 | 480 |
| Projectile | C. V. Schou | 734,966 | July 28 | 4211 | 979 | 105 | 934 |
| Projectile | G. Schrödel | 735,415 | Aug. 4 | 720 | 154 | 105 | 1134 |
| Projectile | S. A. Groff | 740,849 | Oct. 6 | 871 | 195 | 106 | 1432 |
| Projectile | I. N. Hamilton | 740,977 | Oct. 6 | 1088 | 246 | 106 | 1478 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Projectile | S. A. Groff | 741,328 | Oct. 13 | 1785 | 397 | 106 | 1645 |
| Projectile | H. E. Thomas | 741,738 | Oct. 20 | 2598 | 578 | 106 | 1834 |
| Projectile. Armor-piercing | R. A. Hadfield | 720,242 | Feb. 10 | 1535 | 351 | 102 | 1163 |
| Projectile. Enveloped | H. Platz | 740,914 | Oct. 6 | 972 | 218 | 106 | 1454 |
| Projectile. Explosive | H. S. Maxim | 738,621 | Sept. 8 | 2146 | 471 | 106 | 477 |
| Projectile for smooth and rifled bores | C. F. P. Stendebach | 730,308 | June 9 | 1429 | 315 | 104 | 1435 |
| Projectile-fuse | G. E. Fiedler | 720,339 | Feb. 10 | 1716 | 390 | 102 | 1202 |
| Projectiles. Manufacturing | G. H. Newell and J. H. Dean | 726,230 | Apr. 21 | 3318 | 753 | 103 | 1901 |
| Propeller | A. de Bausset | 719,172 | Jan. 27 | 3148 | 700 | 102 | 709 |
| Propeller | T. Edgington | 722,958 | Mar. 17 | 2427 | 542, 543 | 103 | 545 |
| Propeller | R. Murr | 724,488 | Apr. 7 | 133 | 32 | 103 | 1198 |
| Propeller | G. Quick | 724,935 | Apr. 7 | 947 | 218 | 103 | 1372 |
| Propeller | A. W. Learnard | 725,097 | Apr. 14 | 1267 | 286 | 103 | 1453 |
| Propeller | E. S. Jacobs | 728,925 | May 26 | 3960 | 880 | 104 | 892 |
| Propeller | H. H. Abell | 733,891 | July 14 | 2147 | 507 | 105 | 468 |
| Propeller | A. C. J. H. McIntosh | 736,137 | Aug. 11 | 2091 | 448, 449 | 105 | 1445 |
| Propeller | E. Claudio | 738,985 | Sept. 15 | 2845 | 631 | 106 | 642 |
| Propeller | H. C. Ingraham | 745,853 | Dec. 1 | 998 | 225 | 107 | 1312 |
| Propeller | E. Brûncker | 746,007 | Dec. 8 | 1284 | 288, 289 | 107 | 1390 |
| Propeller | R. W. Shaw | 747,654 | Dec. 22 | 4325 | 977 | 107 | 2105 |
| Propeller. Auxiliary screw- | R. P. Gibbons | 737,386 | Aug. 25 | 4384 | 978 | 105 | 1967 |
| Propeller-blades. Device for changing the angle of | G. L. McCallum | 734,468 | July 21 | 3266 | 768 | 105 | 723 |
| Propeller. Boat- | J. H. Milligan | 724,486 | Apr. 7 | 130 | 31 | 103 | 1197 |
| Propeller. Boat- | H. W. Sturges | 747,801 | Dec. 22 | 4584 | 1035 | 107 | 2164 |
| Propeller. Counter-gravity screw- | C. A. Manker | 727,169 | May 5 | 661 | 142 | 104 | 143 |
| Propeller for the propulsion and steering of ships. Screw- | J. Sinclair | 719,958 | Feb. 3 | 976 | 225, 226 | 102 | 1031 |
| Propeller gear. Reversing- | G. S. Slocum | 747,785 | Dec. 22 | 4555 | 1028, 1029 | 107 | 2158 |
| Propeller. Marine | C. A. Manker | 742,693 | Oct. 27 | 4436 | 1001 | 106 | 2230 |
| Propeller. Oscillating | W. B. Terry | 747,506 | Dec. 22 | 4050 | 910 | 107 | 2043 |
| Propeller. Reversible | J. V. Johansson | 719,225 | Jan. 27 | 3243 | 724 | 102 | 729 |
| Propeller. Screw- | J. A. Fehlman | 722,572 | Mar. 10 | 1708 | 380 | 103 | 383 |
| Propeller. Screw- | G. Pinkert | 735,905 | Aug. 11 | 1663 | 355 | 105 | 1354 |
| Propeller. Screw- | E. Fox | 736,952 | Aug. 25 | 3607 | 799 | 105 | 1803 |
| Propeller. Screw- | J. B. Macduff | 745,871 | Dec. 1 | 1038 | 234 | 107 | 1320 |
| Propeller. Screw- | T. H. Eastwood | 748,176 | Dec. 29 | 5343 | 1215 | 107 | 2352 |
| Propeller. Self-clearing | C. H. Lee | 732,568 | June 30 | 5701 | 1266 | 104 | 2376 |
| Propeller-shafts. Apparatus for regulating the speed of | T. A. Duiff | 731,869 | June 23 | 4307 | 961 | 104 | 2072 |
| Propeller-shafts by electrolysis. Means for prevention of weakening | A. A. Knudson | 727,381 | May 5 | 1038 | 226 | 104 | 224 |
| Propeller-shafts by electrolysis. Means for prevention of weakening | A. A. Knudson | 727,382 | May 5 | 1040 | 223, 224 | 104 | 224 |
| Propeller. Ship's | G. R. Noblet | 725,280 | Apr. 14 | 1591 | 360 | 103 | 1522 |
| Propeller. Vessel- | B. Charles | 731,020 | June 16 | 2734 | 609 | 104 | 1732 |
| Propeller weed-cutter. Launch- | L. M. Miller | 726,180 | Apr. 21 | 3234 | 733 | 103 | 1883 |
| Propeller-wheel | O. E. Sarr | 718,881 | Jan. 20 | 2586 | 578 | 102 | 579 |
| Propeller-wheel | C. L. Webber | 725,639 | Apr. 14 | 2274 | 514 | 103 | 1667 |
| Propeller-wheel | J. W. Nowak | 729,397 | May 26 | 4790 | 1060 | 104 | 1063 |
| Propelling and steering apparatus. Vessel | J. Dupuis | 743,700 | Nov. 10 | 1786 | 377 | 107 | 398 |
| Propelling and steering vessels. Mechanism for | S. H. Taylor | 733,882 | July 14 | 2132 | 502 | 105 | 465 |
| Propelling apparatus | R. W. Shely | 735,163 | Aug. 4 | 225 | 45, 46 | 105 | 1031 |
| Propelling apparatus. Vessel | L. Dion | 737,213 | Aug. 25 | 4064 | 902 | 105 | 1898 |
| Propelling boats. Means for | M. S. Okun | 730,042 | June 2 | 951 | 214 | 104 | 1321 |
| Propelling device. Boat | J. S. Worcester | 748,453 | Dec. 29 | 5840 | 1329 | 107 | 2460 |
| Propelling mechanism. Boat | D. C. Putnam | 718,156 | Jan. 13 | 1180 | 262 | 102 | 269 |
| Propelling mechanism. Boat | D. R. Sheen | 718,162 | Jan. 13 | 1193 | 265 | 102 | 272 |
| Propelling mechanism. Boat | D. E. Norton | 720,534 | Feb. 10 | 2078 | 479 | 102 | 1276 |
| Propelling mechanism. Boat | J. M. Story | 723,333 | Mar. 24 | 3115 | 701 | 103 | 702 |
| Propelling mechanism. Boat | G. F. Bryan | 730,090 | June 2 | 1027 | 230 | 104 | 1336 |
| Propelling mechanism. Boat | M. N. and D. R. Sheen | 731,514 | June 23 | 3671 | 819 | 104 | 1941 |
| Propelling mechanism. Vessel | T. T. Timayenis | 742,522 | Oct. 27 | 4123 | 928 | 106 | 2164 |
| Propelling vessels. Means for | A. F. Godefroy | 730,529 | June 9 | 1838 | 410 | 104 | 1522 |
| Proportional meter | H. Chrisman | 740,088 | Sept. 29 | 4907 | 1101 | 106 | 1115 |
| Propulsion apparatus. Vessel | C. M. Coen | 733,010 | July 7 | 548 | 134 | 105 | 118 |
| Propulsion. Canal-boat | J. C. Tone | 719,907 | Feb. 3 | 888 | 209 | 102 | 1011 |
| Propulsion. Marine | H. H. Fowler | 736,951 | Aug. 25 | 3605 | 799 | 105 | 1802 |
| Propulsion. Marine | A. J. Taplin | 740,946 | Oct. 6 | 1028 | 234, 235 | 106 | 1465 |
| Propulsion. Means for canal-boat | G. H. Mann | 744,378 | Nov. 17 | 3109 | 668, 669 | 107 | 694 |
| Propulsion mechanism. Vessel | H. H. Little | 745,732 | Dec. 1 | 746 | 171 | 107 | 1257 |
| Protecting device | J. Bronnenkant | 739,824 | Sept. 29 | 4397 | 986 | 106 | 1009 |
| Protective composition. Applying | O. A. Stempel | 732,663 | June 30 | 5871 | ----- | 104 | 2413 |
| Protracting device | A. S. Prall | 717,920 | Jan. 6 | 759 | 170 | 102 | 163 |
| Protractor | C. L. Kline | 724,018 | Mar. 31 | 4437 | 997 | 103 | 988 |
| Protractor. Machinist's | C. T. Frantz | 744,963 | Nov. 24 | 4164 | 900 | 107 | 933 |
| Protractor. Molding-knife | A. F. Nye | 731,066 | June 16 | 2820 | 627 | 104 | 1750 |
| Protractor, triangle, and curve. Combined | F. W. Otis | 727,680 | May 12 | 1611 | 366 | 104 | 365 |
| Protractors. Fine adjustment for | R. W. Bailey | 741,292 | Oct. 13 | 1711 | 382 | 106 | 1628 |
| Pruning apparatus | B. E. Poole | 730,295 | June 9 | 1409 | 309 | 104 | 1431 |
| Pruning implement | H. A. Hill | 719,799 | Feb. 3 | 708 | 166 | 102 | 973 |
| Pruning implement | J. Barrett | 727,263 | May 5 | 817 | 176 | 104 | 176 |
| Pruning implement | W. T. Woodyard | 731,147 | June 16 | 2978 | 661 | 104 | 1781 |
| Pruning implement | J. C. Kearns | 746,964 | Dec. 15 | 3041 | 698 | 107 | 1801 |
| Pruning-saw. Pneumatic | W. Young | 728,069 | May 12 | 2346 | 523 | 104 | 517 |
| Pruning-shears | J. H. Wiles | 723,629 | Mar. 24 | 3681 | 825 | 103 | 814 |
| Pruning-shears | J. B. Rhodes | 729,894 | June 2 | 686 | 151 | 104 | 1268 |
| Pruning-shears | C. F. Holybee | 734,557 | July 28 | 3436 | 801 | 105 | 775 |
| Pruning-shears | E. Mohr | 736,763 | Aug. 18 | 3235 | 714 | 105 | 1703 |
| Pruning-shears. Pneumatic | W. Young | 728,068 | May 12 | 2344 | 522 | 104 | 517 |
| Puff-comb. Lady's | G. L. Winn and A. L. Bates | 735,643 | Aug. 4 | 1166 | 247 | 105 | 1229 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Puller:<br>*See* Bolt or spike puller. Spike or nail puller.<br>Casing-puller. Staple-puller.<br>Cork-puller. Stump-puller.<br>Cotton-stalk puller. Tack-puller.<br>Nail-puller. Weed-puller.<br>Root-puller. Well-pipe puller.<br>Spike-puller. | | | | | | | |
| Pulley | R. W. Dull | 727,916 | May 12 | 2078 | 461 | 104 | 461 |
| Pulley | J. W. Strehli | 730,413 | June 9 | 1614 | 362 | 104 | 1473 |
| Pulley | J. T. Duff | 731,552 | June 23 | 3747 | 835 | 104 | 1955 |
| Pulley | H. T. Hallowell | 732,549 | June 30 | 5658 | 1255<br>1256 | 104 | 2366 |
| Pulley | E. Schumacher | 733,877 | July 14 | 2125 | 501 | 105 | 463 |
| Pulley | C. H. Bicalky | 736,926 | Aug. 25 | 3550 | 788 | 105 | 1790 |
| Pulley | H. H. Boyce | 738,765 | Sept. 15 | 2449 | 537 | 106 | 556 |
| Pulley | E. S. Buckley | 739,148 | Sept. 15 | 3142 | 694 | 106 | 703 |
| Pulley | C. N. Ogle and I. K. Hurt | 739,909 | Sept. 29 | 4579 | 1030 | 106 | 1045 |
| Pulley | G. F. Conner | 741,889 | Oct. 20 | 2873 | 641 | 106 | 1893 |
| Pulley | F. L. Davis | 742,171 | Oct. 27 | 3477 | 777 | 106 | 2030 |
| Pulley. Belt- | P. Medart | 722,734 | Mar. 17 | 2027 | 453 | 103 | 465 |
| Pulley. Belt- | P. Medart | 722,735 | Mar. 17 | 2028 | 453 | 103 | 465 |
| Pulley. Belt- | P. Medart | 726,961 | May 5 | 252 | 58 | 104 | 54 |
| Pulley. Belt- | P. Medart | 730,383 | June 9 | 1563 | 348 | 104 | 1462 |
| Pulley. Belt- | G. A. Ensign | 740,258 | Sept. 29 | 5218 | 1173 | 106 | 1180 |
| Pulley-block | J. Z. Benedict | 723,231 | Mar. 24 | 2937 | 658 | 103 | 666 |
| Pulley-block | J. L. de Vou | 729,024 | May 26 | 4144 | 918 | 104 | 930 |
| Pulley. Catch- | F. Wuest | 733,527 | July 14 | 1490 | 355 | 105 | 332 |
| Pulley-cover | J. D. Kreisser | 742,679 | Oct. 27 | 4412 | 995 | 106 | 2225 |
| Pulley. Expanding rope- | D. N. Bertram and S. Milne | 725,024 | Apr. 14 | 1132 | 255 | 103 | 1427 |
| Pulley. Expansible | P. H. Shue | 718,800 | Jan. 20 | 2435 | 539<br>540 | 102 | 547 |
| Pulley. Expansible | L. G. Rowand | 742,497 | Oct. 27 | 4079 | 917<br>918 | 106 | 2154 |
| Pulley. Expansible | W. A. Peters and R. May | 745,381 | Dec. 1 | 124 | 28 | 107 | 1126 |
| Pulley-fastening | A. W. Hight | 738,611 | Sept. 8 | 2126 | 466 | 106 | 473 |
| Pulley for metallic window-frames | W. D. Watson | 741,990 | Oct. 20 | 3101 | 691 | 106 | 1938 |
| Pulley. Friction-clutch | C. F. Duke and R. C. Berry | 717,557 | Jan. 6 | 66 | 16, 17 | 102 | 17 |
| Pulley. Grip- | S. R. Batson | 741,614 | Oct. 20 | 2360 | 528 | 106 | 1785 |
| Pulley-mold-making apparatus | C. M. Day and J. Anderson | 721,785 | Mar. 3 | 225 | 50 | 103 | 50 |
| Pulley or similar device. Sash- | A. Johnston | 724,878 | Apr. 7 | 858 | 197 | 103 | 1353 |
| Pulley or wheel. Friction | W. D. Huse | 728,466 | May 19 | 3114 | 683 | 104 | 700 |
| Pulley-rim-curving machine | E. G. Budd | 735,704 | Aug. 11 | 1289 | 276 | 105 | 1272 |
| Pulley-rim section | F. Philips | 721,228 | Feb. 24 | 3440 | 781 | 102 | 1597 |
| Pulley. Sash- | P. Dosch | 723,252 | Mar. 24 | 2975 | 669 | 103 | 674 |
| Pulley. Sash-cord | W. R. Madison | 725,263 | Apr. 14 | 1567 | 355 | 103 | 1516 |
| Pulley. Self-locking | F. W. Smith | 729,968 | June 2 | 824 | 184 | 104 | 1295 |
| Pulley. Split | J. E. Thron | 745,928 | Dec. 1 | 1129 | 253 | 107 | 1339 |
| Pulley structure. Cone- | H. P. White and L. E. Payne | 739,368 | Sept. 22 | 3532 | 789 | 106 | 803 |
| Pulp, &c. Apparatus for straining paper- | J. White | 728,346 | May 19 | 2894 | 638<br>639 | 104 | 654 |
| Pulp articles. Apparatus for making | M. L. Keyes | 740,023 | Sept. 29 | 4795 | 1078 | 106 | 1092 |
| Pulp articles. Machine for manufacturing | J. H. Rivers | 748,013 | Dec. 29 | 5030 | 1136<br>1137 | 107 | 2285 |
| Pulp-beating engine | F. J. Marshall | 725,349 | Apr. 14 | 1723 | 388 | 103 | 1549 |
| Pulp-digester lining | S. A. Leavitt | 720,038 | Feb. 10 | 1157 | 264 | 102 | 1085 |
| Pulp distributer and feeder | L. Cohen and J. Gross | 725,932 | Apr. 21 | 2809 | 637 | 103 | 1796 |
| Pulp-engine knife-fastening | M. A. Mills | 727,176 | May 5 | 673 | 144 | 104 | 146 |
| Pulp-grinding machine. Wood- | C. Schmitthenner | 727,458 | May 5 | 1181 | 261 | 104 | 255 |
| Pulp-guard. Beating-engine | H. A. Hall | 726,424 | Apr. 28 | 3699 | 838 | 103 | 1995 |
| Pulp-machine | E. Hazelton | 721,039 | Feb. 17 | 3019 | 693 | 102 | 1490 |
| Pulp-machine | M. W. Marsden | 721,378 | Feb. 24 | 3697 | 842 | 102 | 1651 |
| Pulp-machine suction device | J. L. Youngs | 747,029 | Dec. 15 | 3155 | 723 | 107 | 1826 |
| Pulp machine. Wood- | C. W. Roberts | 719,695 | Feb 3 | 502 | 114 | 102 | 929 |
| Pulp. Making wood- | V. Drewsen | 730,439 | June 9 | 1673 | ..... | 104 | 1485 |
| Pulp. Manufacturing perforated sheets of wood- | G. S. Lindberg | 728,804 | May 19 | 3742 | 834 | 104 | 882 |
| Pulp or paper-stock screen | O. H. Moore | 729,382 | May 26 | 4764 | 1053<br>1054 | 104 | 1058 |
| Pulp. Press for making spools from fibrous | E. Hubbard | 717,857 | Jan. 6 | 654 | 145 | 102 | 139 |
| Pulp-screen. Centrifugal | J. H. Baker, G. F. Shevlin, and F. H. Baker. | 727,878 | May 12 | 1997 | 445 | 104 | 442 |
| Pulp-screening machine | W. H. Crosby | 718,098 | Jan. 13 | 1087 | 240<br>241 | 102 | 249 |
| Pulp-separator | K. B. Fletcher | 735,080 | Aug. 4 | 56 | 15, 16 | 105 | 993 |
| Pulp sheets. Apparatus for producing perforated wood- | G. S. Lindberg | 720,593 | Feb. 17 | 2201 | 510 | 102 | 1317 |
| Pulp-strainer | P. Reinicke | 721,390 | Feb. 24 | 3722 | 846 | 102 | 1656 |
| Pulp-strainer | F. M. and C. E. Chapman and F. McNaughton. | 736,215 | Aug. 11 | 2214 | 476<br>477 | 105 | 1472 |
| Pulp. Treating | J. H. Rivers | 748,014 | Dec. 29 | 5038 | 1137 | 107 | 2286 |
| Pulp vessels. Apparatus for making | F. B. Howard | 725,966 | Apr. 21 | 2860 | 649 | 103 | 1807 |
| Pulping-machine | F. I. du Pont | 720,379 | Feb. 10 | 1789 | 405<br>406 | 102 | 1218 |
| Pulverizer | H. Ariens, J. Thompson, and J. Wolfinger. | 717,653 | Jan. 6 | 228 | 58 | 102 | 50 |
| Pulverizer | H. Ariens and J. Thompson | 727,254 | May 5 | 804 | 173 | 104 | 173 |
| Pulverizer | H. Moor | 744,381 | Nov. 17 | 3118 | 670 | 107 | 697 |
| Pulverizer | H. Moor | 744,382 | Nov. 17 | 3120 | 670 | 107 | 697 |
| Pulverizer | W. M. Wheildon | 745,705 | Dec. 1 | 707 | 161 | 107 | 1249 |
| Pulverizer | A. Schoellhorn and H. S. Albrecht | 748,536 | Dec. 29 | 6005 | 1360<br>1361 | 107 | 2498 |
| Pulverizer and harrow. Combined | O. M. Bird | 724,375 | Mar. 31 | 5144 | 1151 | 103 | 1133 |
| Pulverizer corrugated lining | J. M. Schutz | 745,075 | Nov. 24 | 4401 | 950<br>951 | 107 | 982 |
| Pulverizer. Soil- | B. L. Lambert | 732,194 | June 30 | 4966 | 1104<br>1105 | 104 | 2222 |

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| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Pulverizing apparatus | W. A. Köneman | 740,764 | Oct. 6 | 720 | 162, 163, 164 | 106 | 1399 |
| Pulverizing-machine | L. S. Pfouts | 719,503 | Feb. 3 | 162 | 37 | 102 | 858 |
| Pulverulent, granular, or like substances. Apparatus for discharging | A. Weiss and L. Giroud | 722,783 | Mar. 17 | 2127 | 475, 476 | 103 | 485 |
| Pump | T. G. E. Lindmark | 717,877 | Jan. 6 | 691 | 154 | 102 | 147 |
| Pump | H. M. Chase | 720,112 | Feb. 10 | 1301 | 297 | 102 | 1116 |
| Pump | W. H. Westerman | 721,640 | Feb. 24 | 4199 | 955 | 102 | 1760 |
| Pump | W. A. Kerfoot | 721,810 | Mar. 3 | 277 | 62 | 103 | 62 |
| Pump | A. Radovanovic | 722,142 | Mar. 3 | 882 | 197 | 103 | 189 |
| Pump | L. J. Phelps | 722,749 | Mar. 17 | 2062 | 461, 462 | 103 | 472 |
| Pump | W. A. Kerfoot | 723,394 | Mar. 24 | 3254 | 729 | 103 | 727 |
| Pump | S. B. Leidy | 723,686 | Mar. 24 | 3769 | 846 | 103 | 833 |
| Pump | H. P. Saunderson | 724,048 | Mar. 31 | 4483 | 1009 | 103 | 997 |
| Pump | J. A. Ek | 724,559 | Apr. 7 | 253 | 62 | 103 | 1224 |
| Pump | W. B. Culver | 726,259 | Apr. 28 | 3377 | 767, 768 | 103 | 1928 |
| Pump | W. A. Kerfoot | 728,933 | May 26 | 3976 | 885 | 104 | 895 |
| Pump | P. Thomas and J. S. Marsland | 729,013 | May 26 | 4128 | 914 | 104 | 927 |
| Pump | K. S. Geiger | 729,156 | May 26 | 4376 | 965 | 104 | 977 |
| Pump | A. Dellanna | 731,288 | June 16 | 3233 | 720 | 104 | 1831 |
| Pump | T. Downs | 731,549 | June 23 | 3743 | 834 | 104 | 1954 |
| Pump | L. J. Russell | 731,623 | June 23 | 3879 | 863 | 104 | 1981 |
| Pump | S. N. Hall | 731,892 | June 23 | 4357 | 972 | 104 | 2084 |
| Pump | R. Whitaker | 735,009 | July 28 | 4291 | 998 | 105 | 951 |
| Pump | J. S. C. Bonham | 736,062 | Aug. 11 | 1969 | 418, 419 | 105 | 1420 |
| Pump | E. T. Miles and Z. Storch | 736,421 | Aug. 18 | 2578 | 565 | 105 | 1568 |
| Pump | G. C. Richards | 737,274 | Aug. 25 | 4186 | 932 | 105 | 1924 |
| Pump | C. F. Scott | 737,499 | Aug. 25 | 4615 | 1034 | 105 | 2018 |
| Pump | J. G. Roth | 738,244 | Sept. 8 | 1384 | 299, 300 | 106 | 315 |
| Pump | J. B. O'Donnell | 738,931 | Sept. 15 | 2761 | 610 | 106 | 625 |
| Pump | I. W. Hills and H. B. Ross | 739,082 | Sept. 15 | 3016 | 668 | 106 | 678 |
| Pump | Z. Storch | 739,234 | Sept. 15 | 3294 | 730 | 106 | 736 |
| Pump | O. L. Clark | 739,831 | Sept. 29 | 4406 | 989 | 106 | 1011 |
| Pump | R. L. Benson | 740,386 | Oct. 6 | 3 | 1 | 106 | 1245 |
| Pump | G. W. Meyer | 740,892 | Oct. 6 | 935 | 210 | 106 | 1446 |
| Pump | G. J. Kennedy | 741,045 | Oct. 13 | 1208 | 273, 274, 275 | 106 | 1524 |
| Pump | G. F. Conner | 741,627 | Oct. 20 | 2381 | 533 | 106 | 1789 |
| Pump | S. B. Jones | 741,672 | Oct. 20 | 2458 | 550 | 106 | 1805 |
| Pump | C. R. Moore | 741,813 | Oct. 20 | 2739 | 610 | 106 | 1864 |
| Pump | C. L. Parker | 741,926 | Oct. 20 | 2952 | 658 | 106 | 1909 |
| Pump | G. Morrice and C. G. Grim | 742,471 | Oct. 27 | 4026 | 903 | 106 | 2142 |
| Pump | L. H. Williams | 742,541 | Oct. 27 | 4172 | 938 | 106 | 2172 |
| Pump | C. C. Worthington | 742,949 | Nov. 3 | 229 | 51 | 107 | 50 |
| Pump | F. C. Lewis | 743,299 | Nov. 3 | 938 | 204 | 107 | 201 |
| Pump | B. C. White | 743,361 | Nov. 3 | 1065 | 227, 228 | 107 | 227 |
| Pump | I. B. Robertson | 744,618 | Nov. 17 | 3511 | 758 | 107 | 778 |
| Pump | D. McStravick | 748,520 | Dec. 29 | 5972 | 1355 | 107 | 2490 |
| Pump-actuating device for steam-engines. Air- | G. B. Petsche | 746,373 | Dec. 8 | 1942 | 443 | 107 | 1532 |
| Pump. Air- | A. A. Phipps | 717,760 | Jan. 6 | 452 | 105 | 102 | 98 |
| Pump. Air- | C. L. Wilkins | 719,709 | Feb. 3 | 540 | 121 | 102 | 937 |
| Pump. Air- | F. Edwards | 727,316 | May 5 | 920 | 200 | 104 | 198 |
| Pump. Air- | H. Turner | 729,018 | May 26 | 4134 | 916 | 104 | 928 |
| Pump. Air- | L. E. Hoffman | 736,398 | Aug. 18 | 2537 | 557 | 105 | 1560 |
| Pump. Air- | W. M. Reason | 736,778 | Aug. 18 | 3267 | 722 | 105 | 1710 |
| Pump. Air- | H. Harris | 736,965 | Aug. 25 | 3629 | 803, 804 | 105 | 1807 |
| Pump. Air- | J. B. Lyford and C. E. Hartman | 736,986 | Aug. 25 | 3670 | 814 | 105 | 1815 |
| Pump. Air- | G. H. Mohler | 742,342 | Oct. 27 | 3806 | 852 | 106 | 2099 |
| Pump. Air- | T. N. Case | 746,019 | Dec. 8 | 1303 | 292, 293 | 107 | 1394 |
| Pump. Air- | M. E. Harmstead | 748,498 | Dec. 29 | 5927 | 1346 | 107 | 2480 |
| Pump. Air lift- | J. P. Couse | 740,999 | Oct. 6 | 1133 | 255 | 106 | 1487 |
| Pump and compressor. Centrifugal | C. W. Weiss | 730,589 | June 9 | 1945 | 433 | 104 | 1546 |
| Pump. Artesian-well | T. H. Gallagher | 735,661 | Aug. 4 | 1197 | 253 | 105 | 1235 |
| Pump attachment | F. Dobson | 739,298 | Sept. 22 | 3420 | 762 | 106 | 779 |
| Pump attachment | G. H. Davenport | 739,480 | Sept. 22 | 3765 | 841 | 106 | 855 |
| Pump attachment | J. Cherne and J. F. Sundermeyer | 747,374 | Dec. 22 | 3814 | 858 | 107 | 1989 |
| Pump attachment. Deep-well- | G. C. Richards | 747,223 | Dec. 15 | 3525 | 800 | 107 | 1908 |
| Pump attachment for drilling or boring machinery | A. Porterfield | 730,045 | June 2 | 957 | 214 | 104 | 1322 |
| Pump attachment for drilling or boring machinery | A. Porterfield | 730,154 | June 2 | 1130 | 254 | 104 | 1357 |
| Pump attachment for portable cans | P. J. Blackmon | 740,221 | Sept. 29 | 5158 | 1158 | 106 | 1167 |
| Pump. Automatic | W. F. Carlberg | 744,483 | Nov. 17 | 3302 | 710 | 107 | 735 |
| Pump. Automatic duplex steam- | A. Jack | 730,917 | June 16 | 2536 | 564 | 104 | 1690 |
| Pump bail. Sand- | R. Crytser | 736,696 | Aug. 18 | 3116 | 687 | 105 | 1679 |
| Pump. Cattle- | C. E. Griffith | 721,297 | Feb. 24 | 3544 | 806 | 102 | 1620 |
| Pump. Centrifugal | W. Wenzel | 718,557 | Jan. 13 | 1980 | 432 | 102 | 440 |
| Pump. Centrifugal | L. Leblanc | 718,642 | Jan. 20 | 2132 | 466 | 102 | 487 |
| Pump. Centrifugal | A. C. E. Rateau | 730,842 | June 9 | 2372 | 524 | 104 | 1637 |
| Pump. Centrifugal | E. W. Brooks | 731,095 | June 16 | 2873 | 638 | 104 | 1761 |
| Pump. Centrifugal | J. H. C. Petersen | 735,901 | Aug. 11 | 1658 | 354 | 105 | 1353 |
| Pump. Centrifugal | A. C. E. Rateau | 742,231 | Oct. 27 | 3596 | 804, 805 | 106 | 2054 |
| Pump. Centrifugal | E. G. Harris | 745,181 | Nov. 24 | 4629 | 1003, 1004 | 107 | 1030 |
| Pump. Centrifugal high-pressure | P. Kugel and V. Gelpke | 743,296 | Nov. 3 | 935 | 203 | 107 | 200 |
| Pump. Centrifugal suction- | J. H. C. Petersen | 735,900 | Aug. 11 | 1656 | 354 | 105 | 1352 |
| Pump. Clay-cutting sand- | A. J. Bramlette | 727,072 | May 5 | 485 | 103 | 104 | 106 |
| Pump. Combustion-engine | G. A. Gemmer | 722 008 | Mar. 3 | 662 | 147 | 103 | 143 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Pump-controller. Electric | C. F. Dew | 723,842 | Mar. 31 | 4054 | 915, 916 | 103 | 910 |
| Pump controller. Electric-motor-driven | T. Trolsen | 718,177 | Jan. 13 | 1220 | 270 | 102 | 278 |
| Pump coupling. Windmill | C. W. Decker | 744,500 | Nov. 17 | 3329 | 717 | 107 | 741 |
| Pump. Deep-well | N. A. Heyman | 737,928 | Sept. 1 | 736 | 160 | 106 | 161 |
| Pump. Deep-well | H. A. Bower | 741,880 | Oct. 20 | 2855 | 637 | 106 | 1890 |
| Pump. Deep-well | F. C. Kleinstiver | 742,676 | Oct. 27 | 4407 | 994, 995 | 106 | 2224 |
| Pump. Deep-well propeller | J. M. Tillotson | 739,746 | Sept. 22 | 4243 | 950 | 106 | 958 |
| Pump. Double-acting | S. N. Hall | 731,893 | June 23 | 4360 | 973 | 104 | 2084 |
| Pump. Double-acting force | W. W. Kuntz | 741,508 | Oct. 13 | 2142 | 476 | 106 | 1723 |
| Pump. Double-cylinder sinking | E. M. Coryell | 726,871 | May 5 | 69 | 18 | 104 | 18 |
| Pump. Double-plunger | R. Addison | 744,272 | Nov. 17 | 2913 | 623, 624 | 107 | 651 |
| Pump. Duplex force | E. B. Croy | 726,650 | Apr. 28 | 4158 | 937 | 103 | 2083 |
| Pump. Duplex or twin piston | E. Vogel | 730,179 | June 2 | 1172 | 263 | 104 | 1366 |
| Pump. Duplex steam | F. Weise | 747,024 | Dec. 15 | 3146 | 720, 721 | 107 | 1824 |
| Pump. Electric | O. G. Dobert | 743,836 | Nov. 10 | 2030 | 431 | 107 | 449 |
| Pump. Electric air | C. A. Eck | 738,532 | Sept. 8 | 1994 | 434 | 106 | 444 |
| Pump engine. Steam | J. A. Reed | 746,158 | Dec. 8 | 1557 | 348 | 107 | 1452 |
| Pump. Feed | A. B. Moore | 722,871 | Mar. 17 | 2278 | 510 | 103 | 514 |
| Pump. Feed | E. Josse | 726,069 | Apr. 21 | 3020 | 687 | 103 | 1840 |
| Pump for cylinder lubrication. Oil | J. W. McClure | 722,184 | Mar. 3 | 969 | 215 | 103 | 205 |
| Pump for high heads. Series high-pressure centrifugal | B. Jackson | 729,870 | June 2 | 648 | 143 | 104 | 1261 |
| Pump for portable engines or the like | W. W. Dingee | 736,235 | Aug. 11 | 2241 | 484 | 105 | 1478 |
| Pump for raising liquids by compressed air | C. F. Simon | 723,743 | Mar. 24 | 3871 | 871 | 103 | 855 |
| Pump for raising liquids by compressed air | C. F. Simon | 723,744 | Mar. 24 | 3872 | 871 | 103 | 855 |
| Pump for steam-generators, &c. Double-action feed | C. Caille | 739,828 | Sept. 29 | 4402 | 988 | 106 | 1010 |
| Pump. Force | W. A. Kerfoot | 718,771 | Jan. 20 | 2387 | 530 | 102 | 538 |
| Pump. Gas | R. Whitaker | 742,940 | Nov. 3 | 208 | 48 | 107 | 46 |
| Pump-governing device. Steam | R. B. McGowan | 730,682 | June 9 | 2112 | 469 | 104 | 1582 |
| Pump governor. Air | S. B. Stewart, Jr | 745,683 | Dec. 1 | 666 | 154 | 107 | 1240 |
| Pump-handle bearer | T. E. Long | 728,402 | May 19 | 2986 | 657 | 104 | 673 |
| Pump having rotary operating mechanism. Air or liquid reciprocating | G. W. Johnston | 717,750 | Jan. 6 | 429 | 100 | 102 | 93 |
| Pump-head | H. M. Etter | 721,169 | Feb. 24 | 3308 | 757 | 102 | 1571 |
| Pump. High-speed | D. Bánki | 725,814 | Apr. 21 | 2607 | 592 | 103 | 1753 |
| Pump. High-speed rotary | J. W. Alvord | 735,691 | Aug. 11 | 1265 | 269 | 105 | 1267 |
| Pump. High-speed rotary | J. W. Alvord | 735,692 | Aug. 11 | 1267 | 270, 271 | 105 | 1268 |
| Pump-housing | J. W. Webster | 737,182 | Aug. 25 | 4005 | 888 | 105 | 1886 |
| Pump. Interchangeable-cylinder | G. A. Krohn | 746,344 | Dec. 8 | 1899 | 432 | 107 | 1524 |
| Pump-lifter | T. D. Stark | 722,463 | Mar. 10 | 1510 | 333 | 103 | 338 |
| Pump-lubricator | G. B. Essex | 720,516 | Feb. 10 | 2031 | 466 | 102 | 1266 |
| Pump. Measuring | J. J. Tokheim and E. O. Mansfield | 720,638 | Feb. 17 | 2306 | 528 | 102 | 1336 |
| Pump. Measuring | R. A. Kunzmann | 734,465 | July 21 | 3257 | 766 | 105 | 721 |
| Pump mechanism | J. H. Ruch and L. A. Baker | 722,385 | Mar. 10 | 1351 | 299 | 103 | 304 |
| Pump mechanism | E. C. Brown | 742,828 | Nov. 3 | 22 | 5 | 107 | 7 |
| Pump. Mining | J. K. Hogan | 717,852 | Jan. 6 | 647 | 143 | 102 | 138 |
| Pump. Motor | D. Bánki | 725,813 | Apr. 21 | 2607 | 592 | 103 | 1753 |
| Pump-motor | J. A. Workman, Sr | 728,064 | May 12 | 2340 | 521 | 104 | 516 |
| Pump-mounting | H. C. Jones | 718,001 | Jan. 6 | 915 | 204 | 102 | 197 |
| Pump. Multiple-cylinder | W. H. Millspaugh | 722,240 | Mar. 10 | 1097 | 241 | 103 | 249 |
| Pump. Oil | C. W. Enos | 720,121 | Feb. 10 | 1317 | 301 | 102 | 1120 |
| Pump. Oil | C. Hirsch | 720,251 | Feb. 10 | 1553 | 356 | 102 | 1168 |
| Pump. Oil | J. T. Bradford and A. R. Gordon | 740,738 | Oct. 6 | 656 | 148 | 106 | 1387 |
| Pump-operating device | C. E. Burkholder | 720,322 | Feb. 10 | 1690 | 383 | 102 | 1196 |
| Pump-operating device. Air | R. D. Albright | 728,651 | May 19 | 3465 | 768, 769 | 104 | 775 |
| Pump-operating mechanism | D. J. Nysewander | 727,189 | May 5 | 691 | 148 | 104 | 149 |
| Pump-operating mechanism | G. A. Gemmer | 732,628 | June 30 | 5806 | 1287, 1288 | 104 | 2401 |
| Pump or bailer. Sand | M. C. White | 739,042 | Sept. 15 | 2940 | 651 | 106 | 662 |
| Pump or filling device | E. Quick | 718,382 | Jan. 13 | 1597 | 352 | 102 | 357 |
| Pump or motor applicable also as a fluid-meter. Rotary | E. N. Gulich | 726,907 | May 5 | 140 | 33 | 104 | 32 |
| Pump or motor. Rotary | W. S. Austin | 719,634 | Feb. 3 | 399 | 91 | 102 | 906 |
| Pump. Oscillating | H. E. Schrader | 725,595 | Apr. 14 | 2175 | 493 | 103 | 1647 |
| Pump-piston | J. Hahn | 735,248 | Aug. 4 | 409 | 80 | 105 | 1068 |
| Pump-piston. Non-corrodible | W. H. Niemeyer | 734,277 | July 21 | 2925 | 683 | 105 | 654 |
| Pump piston or plunger | O. P. Berry | 723,811 | Mar. 31 | 3999 | 902 | 103 | 899 |
| Pump-plunger | E. Scott | 724,512 | Apr. 7 | 167 | 40, 41 | 103 | 1206 |
| Pump pressure-regulating device | R. Birkholz | 722,443 | Mar. 10 | 1465 | 323 | 103 | 328 |
| Pump. Reciprocating | F. Lamplough | 718,132 | Jan. 13 | 1141 | 253, 254 | 102 | 261 |
| Pump-regulating mechanism | W. C. Bucknam | 737,332 | Aug. 25 | 4297 | 955 | 105 | 1947 |
| Pump-regulator | A. A. Ball, Jr | 726,841 | May 5 | 13 | 3, 4 | 104 | 6 |
| Pump. Relay | E. W. Gragert | 724,569 | Apr. 7 | 273 | 66 | 103 | 1227 |
| Pump-rod adjuster. Oil-well | A. C. Price | 733,505 | July 14 | 1444 | 340 | 105 | 323 |
| Pump-rod coupling | A. E. Boring | 718,306 | Jan. 13 | 1458 | 324 | 102 | 330 |
| Pump-rod coupling | C. J. Le Valley and W. T. Bird | 727,548 | May 5 | 1346 | 303 | 104 | 289 |
| Pump-rod coupling | J. L. Strawn | 730,173 | June 2 | 1160 | 261 | 104 | 1364 |
| Pump-rod coupling | S. M. Abbott | 737,191 | Aug. 25 | 4017 | 891 | 105 | 1889 |
| Pump-rod lifter | T. H. Tregellas | 741,566 | Oct. 13 | 2260 | 504 | 106 | 1749 |
| Pump-rods. Automatic coupling for sectional | T. Costello, Jr., and V. B. Post | 742,598 | Oct. 27 | 4266 | 961 | 106 | 2193 |
| Pump-rods. Gripping attachment for oil-well | J. W. Rhoades | 723,026 | Mar. 17 | 2545 | 572 | 103 | 570 |
| Pump. Rotary | J. B. C. Lockwood | 721,207 | Feb. 24 | 3402 | 772, 773 | 102 | 1589 |
| Pump. Rotary | W. E. Cook | 721,863 | Mar. 3 | 385 | 84, 85 | 103 | 84 |
| Pump. Rotary | J. Robinson | 722,185 | Mar. 3 | 973 | 215, 216 | 103 | 206 |
| Pump. Rotary | E. F. Smith | 724,132 | Mar. 31 | 4654 | 1047 | 103 | 1033 |
| Pump. Rotary | W. S. Sharpneck | 725,784 | Apr. 21 | 2544 | 577 | 103 | 1740 |

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| Invention. | Name. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|---|
| | | | | Spec. | Dr'g. | Vol. | Page. |
| Pump. Rotary | A. Mayer | 727,171 | May 5 | 664 | 143 | 104 | 144 |
| Pump. Rotary | W. E. Cook | 727,749 | May 12 | 1752 | 393 | 104 | 394 |
| Pump. Rotary | W. S. Sharpneck | 730,052 | June 2 | 965 | 217 | 104 | 1324 |
| Pump. Rotary | F. G. Bates | 730,081 | June 2 | 1014 | 227 | 104 | 1334 |
| Pump. Rotary | M. W. Peterson | 730,149 | June 2 | 1123 | 252 | 104 | 1356 |
| Pump. Rotary | E. Patterson | 732,109 | June 30 | 4792 | 1069 | 104 | 2186 |
| Pump. Rotary | C. W. Loomis | 733,229 | July 7 | 941 | 227 | 105 | 197 |
| Pump. Rotary | E. W. Brooks | 735,339 | Aug. 4 | 572 | 117 | 105 | 1103 |
| Pump. Rotary | J. Nielsen | 739,207 | Sept. 15 | 3241 | 717<br>718 | 106 | 724 |
| Pump. Rotary | T. T. Johnston | 744,352 | Nov. 17 | 3062 | 657<br>658 | 107 | 684 |
| Pump. Rotary | R. D. O. Johnson and W. H. Reeves | 745,857 | Dec. 1 | 1006 | 226 | 107 | 1314 |
| Pump. Rotary | H. O. Evans | 746,482 | Dec. 8 | 2126 | 489 | 107 | 1574 |
| Pump. Rotary eccentric-piston | M. Limnell | 726,712 | Apr. 28 | 4275 | 966 | 103 | 2109 |
| Pump. Rotary force- | H. P. Curtis | 738,101 | Sept. 1 | 1075 | 238 | 106 | 232 |
| Pump. Sand- | C. M. Heeter | 722,424 | Mar. 10 | 1424 | 314 | 103 | 319 |
| Pump-shafts in well-casings. Means for alining | J. W. Alvord | 735,690 | Aug. 11 | 1264 | 269 | 105 | 1267 |
| Pump spring attachment | J. O. Bane | 733,121 | July 7 | 756 | 183 | 105 | 160 |
| Pump. Steam- | F. D. Clinger | 732,713 | July 7 | 36 | 9 | 105 | 11 |
| Pump stroke-regulator. Windmill- | N. S. Lowrie and W. W. Votaw | 736,530 | Aug. 18 | 2786 | 610 | 105 | 1613 |
| Pump. Submerged force- | F. B. Davis and F. W. Henshaw | 746,038 | Dec. 8 | 1338 | 300 | 107 | 1402 |
| Pump suction-valve | J. Klein. (Reissue) | 12,094 | Mar. 10 | 1849 | 413 | 103 | 413 |
| Pump. Vacuum- | J. Stumpf | 722,416 | Mar. 10 | 1411 | 311<br>312 | 103 | 316 |
| Pump. Vacuum- | R. A. Steeb | 734,988 | July 28 | 4257 | 989 | 105 | 943 |
| Pump-valve | R. Whitaker | 737,809 | Sept. 1 | 474 | 105 | 106 | 107 |
| Pump-valve and valve-actuating mechanism | G. B. Petsche | 724,497 | Apr. 7 | 143 | 34 | 103 | 1200 |
| Pump-valve arrangement | P. F. Oddie | 738,122 | Sept. 1 | 1125 | 249<br>250 | 106 | 243 |
| Pump-valve. Standing | W. L. Betts | 741,217 | Oct. 13 | 1559 | 352 | 106 | 1599 |
| Pump valve. Steam- | J. H. Bullard. (Reissue) | 12,088 | Mar. 3 | 998 | 221 | 103 | 211 |
| Pump. Valveless | L. S. Chapman | 732,169 | June 30 | 4921 | 1095 | 104 | 2213 |
| Pumps, air-brakes, compressors, or the like. Diaphragm for | E. B. Rayner | 721,324 | Feb. 24 | 3598 | 817 | 102 | 1631 |
| Pumps, &c. Automatic controller for electric | C. H. Durning | 748,354 | Dec. 29 | 5645 | 1287 | 107 | 2417 |
| Pumps. Automatic steam-governor for | D. W. Porter | 735,144 | Aug. 4 | 198 | 40 | 105 | 1024 |
| Pumps. Bottom wheel for bucket or conveyer | L. A. Brigel | 728,850 | May 26 | 3837 | 855 | 104 | 869 |
| Pumps. Computing attachment for dispensing- | A. A. Bowser | 747,296 | Dec. 15 | 3666 | 828 | 107 | 1941 |
| Pumps. Pressure-regulating device for compensators of direct-acting | P. F. Oddie | 721,075 | Feb. 17 | 3076 | 706<br>707 | 102 | 1503 |
| Pumps. Relief-valve attachment for oil-well | E. R. Graham | 723,458 | Mar. 24 | 3359 | 752 | 103 | 749 |
| Pumps. Shaft-shield for centrifugal | J. Hedlund | 737,623 | Sept. 1 | 121 | 26 | 106 | 29 |
| Pumps, &c. Valve-gear for | E. Crowe | 725,047 | Apr. 14 | 1166 | 263 | 103 | 1434 |
| Pumping apparatus | F. J. Donoughe | 717,977 | Jan. 6 | 861 | 193 | 102 | 186 |
| Pumping apparatus | J. W. Simmons | 720,748 | Feb. 17 | 2490 | 573<br>574 | 102 | 1377 |
| Pumping apparatus | D. W. Jones | 723,676 | Mar. 24 | 3749 | 842 | 103 | 829 |
| Pumping apparatus | F. C. Cain | 737,336 | Aug. 25 | 4300 | 956 | 105 | 1947 |
| Pumping apparatus | C. L. Cushing | 741,634 | Oct. 20 | 2394 | 537 | 106 | 1792 |
| Pumping apparatus | J. E. Kirk | 747,728 | Dec. 22 | 4452 | 1004 | 107 | 2134 |
| Pumping apparatus. Air- | B. B. Bower | 721,662 | Mar. 3 | 20 | 4 | 103 | 6 |
| Pumping device | F. L. Robertson | 736,549 | Aug. 18 | 2816 | 616 | 105 | 1620 |
| Pumping device. Air and water | D. Vaniman and S. F. Sanger | 732,241 | June 30 | 5066 | 1127 | 104 | 2243 |
| Pumping device. Oil-well- | H. F. James and E. R. Inman | 739,262 | Sept. 15 | 3349 | 744 | 106 | 748 |
| Pumping-engine | E. Hill | 723,387 | Mar. 24 | 3243 | 727 | 103 | 724 |
| Pumping-engine | C. J. Printz | 736,443 | Aug. 18 | 2614 | 574 | 105 | 1575 |
| Pumping-engine | E. Hill | 744,547 | Nov. 17 | 3407 | 734 | 107 | 757 |
| Pumping-engine | G. A. Krohn | 746,343 | Dec. 8 | 1896 | 432 | 107 | 1523 |
| Pumping-engine. Direct-acting | W. May | 731,929 | June 23 | 4424 | 987 | 104 | 2097 |
| Pumping-engine. Duplex | E. P. Worden | 738,589 | Sept. 8 | 2081 | 454<br>455 | 106 | 463 |
| Pumping-engine. Non-rotative | L. d'Auria | 718,808 | Jan. 20 | 2450 | 542 | 102 | 550 |
| Pumping engine. Water- | A. W. Case | 742,588 | Oct. 27 | 4248 | 957 | 106 | 2188 |
| Pumping system | J. G. Steiner | 731,241 | June 16 | 3138 | 696<br>697 | 104 | 1811 |
| Pumping system | J. Bryan | 732,704 | July 7 | 25 | 6 | 105 | 8 |
| Pumpkin-dividing machine | J. Goossen, Jr | 740,119 | Sept. 29 | 4960 | 1113 | 106 | 1127 |
| Punch | O. D. Woodbury | 720,309 | Feb. 10 | 1667 | 379 | 102 | 1191 |
| Punch | T. E. Gray | 733,319 | July 7 | 1105 | 263 | 105 | 233 |
| Punch | C. S. Dundore | 733,544 | July 14 | 1512 | 360 | 105 | 337 |
| Punch | W. A. Bernard | 734,157 | July 21 | 2696 | 634 | 105 | 603 |
| Punch and feeding mechanism | F. M. Leavitt | 735,119 | Aug. 4 | 136 | 30, 31 | 105 | 1011 |
| Punch and lacing-awl | J. J. Rogers | 743,335 | Nov. 3 | 1009 | 217 | 107 | 216 |
| Punch and nail-set. Screw center- | N. Bond | 722,559 | Mar. 10 | 1685 | 374 | 103 | 378 |
| Punch and shearing machine. Combined | O. Knudson | 723,164 | Mar. 17 | 2794 | 630 | 103 | 621 |
| Punch attachment. Ticket- | H. C. Watson | 726,597 | Apr. 28 | 4067 | 918 | 103 | 2065 |
| Punch. Belt- | D. T. Allen | 732,030 | June 30 | 4639 | 1037 | 104 | 2156 |
| Punch. Check- | W. J. Kenderdine | 718,848 | Jan. 20 | 2507 | 558 | 102 | 561 |
| Punch. Check- | W. J. Kenderdine | 728,726 | May 19 | 3598 | 799 | 104 | 803 |
| Punch. Conductor's | R. J. Krautheim | 736,116 | Aug. 11 | 2050 | 437 | 105 | 1437 |
| Punch. Hand- | R. Hayden | 732,850 | July 7 | 277 | 69 | 105 | 62 |
| Punch. Hand- | C. H. Thurston | 740,333 | Sept. 29 | 5356 | 1206 | 106 | 1209 |
| Punch. Metal- | W. S. Mendenhall | 719,947 | Feb. 3 | 949 | 221 | 102 | 1025 |
| Punch. Multiple | J. H. Ames | 734,496 | July 28 | 3328 | 779 | 105 | 752 |
| Punch or blow testing machine | G. W. Powell | 737,960 | Sept. 1 | 809 | 177<br>178 | 106 | 177 |
| Punch-press safety device | J. Miotke | 733,412 | July 14 | 1285 | 303 | 105 | 288 |
| Punch. Self-centering | B. H. and G. A. Clement | 718,427 | Jan. 13 | 1675 | 370 | 102 | 374 |
| Punch. Ticket- | H. Cottrell | 744,958 | Nov. 24 | 4158 | 898 | 107 | 932 |
| Punches, &c. Appliance for operating | T. A. Weston | 747,521 | Dec. 22 | 4075 | 916 | 107 | 2049 |
| Punching and shearing machine | A. A. Koch | 745,628 | Dec. 1 | 576 | 134 | 107 | 1220 |
| Punching apparatus. Strip- | A. Pollák | 736,775 | Aug. 18 | 3258 | 720<br>721 | 105 | 1709 |
| Punching-bag and support | G. S. Maxwell | 732,096 | June 30 | 4766 | 1064 | 104 | 2180 |

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| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Punching-bag apparatus. Coin-controlled | H. S. Mills | 740,160 | Sept. 29 | 5084 | 1131, 1132 | 106 | 1143 |
| Punching-bag-supporting mechanism | E. J. and H. Goldsmith | 735,750 | Aug. 11 | 1369 | 294 | 105 | 1289 |
| Punching-machine | W. H. Parker | 723,722 | Mar. 24 | 3836 | 862, 863 | 103 | 848 |
| Punching-machine | E. B. Stimpson | 736,167 | Aug. 11 | 2137 | 459 | 105 | 1455 |
| Punching-machine gage | T. Conley | 735,469 | Aug. 4 | 838 | 178 | 105 | 1158 |
| Punching-machine. Multiple | J. S. Stevenson | 741,180 | Oct. 13 | 1477 | 335, 336 | 106 | 1580 |
| Punching-machine. Multiple | J. S. Stevenson | 741,181 | Oct. 13 | 1480 | 336 | 106 | 1581 |
| Punching-machine spacing-table | J. Christie | 732,517 | June 30 | 5597 | 1240, 1241 | 104 | 2352 |
| Punching or analogous machines. Spacing appliance for | G. M. and R. M. Hunter | 741,039 | Oct. 13 | 1199 | 271, 272 | 106 | 1522 |
| Punching-press. Multiple | W. Crossley | 743,620 | Nov. 10 | 1659 | 348 | 107 | 370 |
| Puncture-plug | E. F. Felsing and J. A. Andersen | 735,078 | Aug. 4 | 53 | 15 | 105 | 993 |
| Punka | S. R. Baildon | 741,438 | Oct. 13 | 1993 | 441, 442 | 106 | 1691 |
| Purifying apparatus | P. J. Boucher | 728,440 | May 19 | 3046 | 670 | 104 | 687 |
| Purse | R. Malzahn | 717,880 | Jan. 6 | 694 | 155 | 102 | 148 |
| Purse, &c | A. Irons | 726,166 | Apr. 21 | 3188 | 721 | 103 | 1874 |
| Purse | J. C. O'Shea | 744,392 | Nov. 17 | 3137 | 673 | 107 | 701 |
| Purse-locket | S. K. Grover | 723,600 | Mar. 24 | 3625 | 810 | 103 | 802 |
| Purse or bag frames. Holding-catch for | C. Hiering | 719,218 | Jan. 27 | 3225 | 721 | 102 | 726 |
| Purse or pouch | J. P. Luther | 731,378 | June 16 | 3401 | 760 | 104 | 1867 |
| Push-button | A. Lungen | 731,479 | June 23 | 3606 | 804 | 104 | 1928 |
| Push-button | E. W. Ham | 741,905 | Oct. 20 | 2918 | 651 | 106 | 1901 |
| Push-button. Electric | J. Y. Parke | 727,996 | May 12 | 2217 | 494 | 104 | 491 |
| Push-button. Electric | A. W. Plassmann | 730,567 | June 9 | 1908 | 425 | 104 | 1537 |
| Push-button switch | E. G. Kastenhuber | 729,772 | June 2 | 457 | 103 | 104 | 1221 |
| Push-button switch | A. B. Simpson | 742,508 | Oct. 27 | 4100 | 923 | 106 | 2158 |
| Puttying-tool | F. Egert | 721,168 | Feb. 24 | 3307 | 756 | 102 | 1570 |
| Puzzle | T. J. Deck | 718,323 | Jan. 13 | 1497 | 332 | 102 | 337 |
| Puzzle | E. Hocker | 718,843 | Jan. 20 | 2500 | 556 | 102 | 559 |
| Puzzle | G. B. M. Tweedy | 719,910 | Feb. 3 | 892 | 209 | 102 | 1012 |
| Puzzle | J. B. Olsen | 721,910 | Mar. 3 | 467 | 102 | 103 | 103 |
| Puzzle | C. A. Bennett | 722,668 | Mar. 17 | 1913 | 426 | 103 | 440 |
| Puzzle | J. L. Adams | 723,120 | Mar. 17 | 2717 | 610 | 103 | 606 |
| Puzzle | L. A. Svenson | 723,498 | Mar. 24 | 3454 | 773 | 103 | 767 |
| Puzzle | N. D. Ingram and F. H. Wyant | 727,800 | May 12 | 1862 | 414 | 104 | 415 |
| Puzzle | B. G. Lamme | 728,249 | May 19 | 2684 | 600 | 104 | 610 |
| Puzzle | C. L. Smith | 729,000 | May 26 | 4095 | 908 | 104 | 920 |
| Puzzle | R. C. Hill | 729,174 | May 26 | 4402 | 971 | 104 | 982 |
| Puzzle | W. P. Van Loan | 729,705 | June 2 | 317 | 73 | 104 | 1194 |
| Puzzle | A. Keedell | 730,026 | June 2 | 926 | 208 | 104 | 1316 |
| Puzzle | E. S. Mowry | 732,954 | July 7 | 453 | 112 | 105 | 98 |
| Puzzle | A. H. Wallace | 733,886 | July 14 | 2141 | 505 | 105 | 466 |
| Puzzle | W. A. Justice | 734,884 | July 28 | 4069 | 949 | 105 | 904 |
| Puzzle | T. K. Keith | 735,269 | Aug. 4 | 460 | 91 | 105 | 1079 |
| Puzzle | C. E. Haynes | 736,251 | Aug. 11 | 2276 | 492 | 105 | 1486 |
| Puzzle | D. McPherson | 736,767 | Aug. 18 | 3239 | 715 | 105 | 1705 |
| Puzzle | J. H. Dieringer and C. L. Du Rocher | 737,367 | Aug. 25 | 4355 | 971 | 105 | 1961 |
| Puzzle | D. C. Fulton and D. Lawson | 738,023 | Sept. 1 | 933 | 207 | 106 | 204 |
| Puzzle | I. R. Taylor | 741,287 | Oct. 13 | 1701 | 380 | 106 | 1627 |
| Puzzle | M. J. Cawley | 741,766 | Oct. 20 | 2653 | 593 | 106 | 1846 |
| Puzzle | Z. B. Webb | 742,139 | Oct. 20 | 3416 | 762 | 106 | 2001 |
| Puzzle | W. S. Day | 742,397 | Oct. 27 | 3900 | 877 | 106 | 2117 |
| Puzzle | E. S. Mowry | 743,015 | Nov. 3 | 381 | 82 | 107 | 80 |
| Puzzle | C. Denison | 743,469 | Nov. 10 | 1358 | 278 | 107 | 305 |
| Puzzle | W. D. Taylor | 744,884 | Nov. 24 | 4018 | 866 | 107 | 904 |
| Puzzle | E. B. Kirk | 746,105 | Dec. 8 | 1453 | 326 | 107 | 1429 |
| Puzzle | N. B. Stone | 746,193 | Dec. 8 | 1618 | 361 | 107 | 1466 |
| Puzzle | H. F. Willey and W. E. Barton | 748,245 | Dec. 29 | 5462 | 1245 | 107 | 2378 |
| Puzzle. Educational | E. S. Cobb | 734,821 | July 28 | 3961 | 925 | 105 | 882 |
| Puzzle or toy | F. D. Brinton | 736,930 | Aug. 25 | 3558 | 789 | 105 | 1791 |
| Puzzle. Picture | I. H. Blanchard | 718,305 | Jan. 13 | 1457 | 323 | 102 | 329 |
| Puzzle. Sliding-block | J. Bigham | 737,899 | Sept. 1 | 686 | 146 | 106 | 151 |
| Puzzle. Street-car | M. H. Anderson | 729,522 | June 2 | 2 | 1 | 104 | 1127 |
| Puzzle. Thimble | H. Schierhorst | 731,957 | June 23 | 4475 | 998 | 104 | 2108 |
| Pyrographic burner | F. A. Reichardt | 724,397 | Mar. 31 | 5194 | 1164 | 103 | 1144 |
| Pyrographic burners. Manufacture of | W. D. Donovan | 737,719 | Sept. 1 | 292 | 61 | 106 | 66 |
| Pyrographic work. Tool for | Z. N. Tyssowska | 727,034 | May 5 | 423 | 88 | 104 | 92 |
| Pyrography. Poker or branding-tool for use in | H. Freytag | 724,002 | Mar. 31 | 4401 | 989 | 103 | 982 |
| Pyrometer | F. W. Taylor and H. L. Gantt | 722,770 | Mar. 17 | 2100 | 470 | 103 | 479 |
| Pyrometer | J. Whiting | 724,066 | Mar. 31 | 4512 | 1016 | 103 | 1004 |
| Pyrometer | E. Childs | 730,513 | June 9 | 1813 | 404 | 104 | 1516 |
| Pyrometer | M. Arndt | 734,398 | July 21 | 3138 | 737 | 105 | 697 |
| Pyrometer | F. W. Taylor and H. L. Gantt | 735,423 | Aug. 4 | 741 | 158, 159 | 105 | 1138 |
| Pyrometer | F. W. Taylor and H. L. Gantt | 735,425 | Aug. 4 | 749 | 159, 160 | 105 | 1139 |
| Pyrotechnics. Preparing | N. Del Grande | 728,878 | May 26 | 3882 | ..... | 104 | 876 |
| Pyroxylin compound | J. H. Stevens | 718,670 | Jan. 20 | 2192 | ..... | 102 | 497 |
| Pyroxylin compound | R. C. Schüpphaus | 741,554 | Oct. 13 | 2242 | ..... | 106 | 1745 |
| Quarter-boot | C. A. Root | 720,970 | Feb. 17 | 2891 | 662 | 102 | 1461 |
| Quartz-mill | J. F. Forward | 735,234 | Aug. 4 | 387 | 75, 76 | 105 | 1063 |
| Quartz-mill | C. J. Hodge | 736,519 | Aug. 18 | 2772 | 606 | 105 | 1610 |
| Quartz-mill | J. Y. Byers | 742,966 | Nov. 3 | 253 | 56, 57 | 107 | 55 |
| Quick-acting clamp | A. M. Colt | 735,947 | Aug. 11 | 1739 | 372 | 105 | 1371 |
| Quick-acting wrench | H. Aue | 726,013 | Apr. 21 | 2938 | 668 | 103 | 1822 |
| Quick-action wrench | J. Talbert | 743,770 | Nov. 10 | 1901 | 403 | 107 | 423 |
| Quick-break switch | H. Krantz | 742,449 | Oct. 27 | 3991 | 896 | 106 | 2135 |
| Quick-break switch | H. R. Sargent | 744,115 | Nov. 17 | 2608 | 557 | 107 | 585 |
| Quicksilver-furnace | A. A. Tregidgo | 735,919 | Aug. 11 | 1689 | 360 | 105 | 1359 |
| Quicksilver-ore-reducing apparatus | F. C. Meyer | 742,887 | Nov. 3 | 117 | 27 | 107 | 27 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|---|
| | | | | Spec. | Drg. | Vol. | Page. |
| Quicksilver-roaster | A. Johnson and R. McKay | 724,581 | Apr. 7 | 305 | 74 | 103 | 1233 |
| Quill-tip finish | J. J. Robinson | 746,578 | Dec. 8 | 2292 | 525 | 107 | 1611 |
| Quilling-machine | R. Atherton | 746,439 | Dec. 8 | 2052 | 472, 473 | 107 | 1557 |
| Quilting-frame | R. P. McKinley | 725,353 | Apr. 14 | 1730 | 389 | 103 | 1550 |
| Quilting-frame, cot, and ironing-board holder. Combined | F. G. Dieterich | 728,684 | May 19 | 3521 | 783 | 104 | 787 |
| Rabble mechanism | W. C. Davis | 734,492 | July 21 | 3309 | 776, 777 | 105 | 731 |
| Rabbling mechanism. Material- | A. J. Diescher | 740,102 | Sept. 29 | 4936 | 1107 | 106 | 1122 |
| Rabbling mechanism. Material- | A. J. Diescher | 740,103 | Sept. 29 | 4937 | 1108 | 106 | 1122 |
| Race-horse starter | M. Cassidy | 738,524 | Sept. 8 | 1980 | 430, 431 | 106 | 441 |
| Race-starter | A. J. Escudé | 731,347 | June 16 | 3331 | 743, 744 | 104 | 1851 |
| Race-starting apparatus | C. A. Chapman | 738,293 | Sept. 8 | 1498 | 324 | 106 | 337 |
| Race-starting gate | J. Izatt | 730,373 | June 9 | 1543 | 343 | 104 | 1459 |
| Race-track amusement apparatus | W. H. Gilman | 726,282 | Apr. 28 | 3431 | 780, 781 | 103 | 1939 |
| Racer | H. A. Cook | 724,546 | Apr. 7 | 233 | 56 | 103 | 1219 |
| Racing-hurdle | R. P. Traxler | 732,680 | June 30 | 5904 | 1309 | 104 | 2419 |
| Rack; *See* Book-rack. Bread and cake rack. Broom-rack. Chip-rack. Clothes-rack. Coat-rack. Coat and hat rack. Cracker-box rack. Display-rack. Drum-rack. Drying-rack. Feed-rack. Garment-rack. Hall-rack. Hat-rack. Hat and cloak rack. Hat and coat rack. Hay-rack. Hay and stock rack. Hitching-rack. Hose-rack. Music-rack. Necktie-rack. Pen-rack. Pie and pastry rack. Plate-rack. Pool-ball rack. Railway-tariff rack. Supporting-rack. Towel-rack. Umbrella and cane rack. Vehicle-rack. Wagon-rack. Whip-rack. | | | | | | | |
| Rack | F. X. Krabach | 747,614 | Dec. 22 | 4242 | 955 | 107 | 2087 |
| Racket-and-fives apparatus. Table | J. W. Jones | 735,521 | Aug. 4 | 935 | 198 | 105 | 1180 |
| Racket for playing lawn-tennis, &c | A. Schnek | 739,450 | Sept. 22 | 3713 | 827 | 106 | 843 |
| Racking and bunging apparatus. Counter-pressure | H. Reininger | 737,480 | Aug. 25 | 4571 | 1025 | 105 | 2008 |
| Racking apparatus | D. Beebe | 737,895 | Sept. 1 | 678 | 144, 145 | 106 | 149 |
| Radial drill | O. W. Mueller | 737,948 | Sept. 1 | 780 | 170 | 106 | 171 |
| Radiator | A. G. Bayles | 718,898 | Jan. 20 | 2616 | 585 | 102 | 585 |
| Radiator | C. D. Sanborn and E. C. Fox | 737,494 | Aug. 25 | 4608 | 1032 | 105 | 2017 |
| Radiator | J. Kelly | 741,404 | Oct. 13 | 1942 | 430 | 106 | 1681 |
| Radiator | W. C. Pease | 743,749 | Nov. 10 | 1867 | 394 | 107 | 415 |
| Radiator | J. J. Spear | 747,254 | Dec. 15 | 3578 | 810 | 107 | 1920 |
| Radiator. Air-heating | J. A. McDaniel | 727,668 | May 12 | 1585 | 358 | 104 | 358 |
| Radiator air-valve | F. W. Leuthesser | 721,521 | Feb. 24 | 3955 | 901 | 102 | 1705 |
| Radiator air-vent-controlling apparatus | W. S. Johnson | 721,809 | Mar. 3 | 274 | 61 | 103 | 61 |
| Radiator for heating buildings | D. Sinclair | 741,845 | Oct. 20 | 2791 | 621 | 106 | 1877 |
| Radiator for internal-combustion motors, &c. Heat- | F. W. Darnstaedt | 737,083 | Aug. 25 | 3827 | 851 | 105 | 1848 |
| Radiator. Gas- | T. E. McNeill | 744,787 | Nov. 24 | 3848 | 829 | 107 | 869 |
| Radiator. Portable | J. M. Cripe | 722,286 | Mar. 10 | 1178 | 261 | 103 | 266 |
| Radiator seal. Steam- | J. L. Judge | 741,503 | Oct. 13 | 2132 | 475 | 106 | 1721 |
| Radiator-section connection | C. F. Gessert | 733,183 | July 7 | 855 | 207 | 105 | 179 |
| Radiator. Sheet-metal | W. R. Kinnear | 742,672 | Oct. 27 | 4401 | 992, 993 | 106 | 2223 |
| Radiator. Sheet-metal | W. R. Kinnear | 742,673 | Oct. 27 | 4403 | 993 | 106 | 2223 |
| Radiator. Sheet-metal | W. R. Kinnear | 742,794 | Oct. 27 | 4596 | 1041 | 106 | 2265 |
| Radiator. Stovepipe- | B. Edgar | 745,004 | Nov. 24 | 4232 | 916 | 107 | 948 |
| Radiator-support | H. D. Kellogg | 727,969 | May 12 | 2175 | 484 | 104 | 481 |
| Radiator. Tubular sheet-metal | W. R. Kinnear | 742,674 | Oct. 27 | 4404 | 993, 994 | 106 | 2224 |
| Radiotherapeutic-treatment apparatus | E. K. Müller | 730,785 | June 9 | 2277 | 506 | 104 | 1617 |
| Raft | J. G. Elderkin | 734,050 | July 21 | 2492 | 581 | 105 | 560 |
| Raft construction. Mooring derrick-scows in | J. Ayres | 738,595 | Sept. 8 | 2102 | 459 | 106 | 468 |
| Rafting-dog | T. H. Curtis | 733,629 | July 14 | 1661 | 394 | 105 | 368 |
| Rag-dusting machine | E. T. S. Thayer | 745,743 | Dec. 1 | 764 | 175 | 107 | 1261 |
| Rail-anchor | B. Burgess | 717,808 | Jan. 6 | 551 | 123 | 102 | 119 |
| Rail-bender | C. A. Davis | 719,760 | Feb. 3 | 639 | 143 | 102 | 957 |
| Rail bending and breaking device | J. Rodenberger | 738,946 | Sept. 15 | 2780 | 616 | 106 | 629 |
| Rail-block | W. H. Arthur | 725,914 | Apr. 21 | 2769 | 630 | 103 | 1788 |
| Rail-bond | L. Pfingst | 740,912 | Oct. 6 | 970 | 218 | 106 | 1453 |
| Rail-bonding tool | S. H. Harrington | 723,270 | Mar. 24 | 3005 | 676 | 103 | 679 |
| Rail-brace | T. A. Griffin | 721,180 | Feb. 24 | 3323 | 760 | 102 | 1574 |
| Rail-brace | D. M. Watson | 725,304 | Apr. 14 | 1631 | 368 | 103 | 1530 |
| Rail-brace | D. D. Quenell | 732,653 | June 30 | 5852 | 1296 | 104 | 2410 |
| Rail-brace and tie-plate. Combined | D. Ryan | 723,214 | Mar. 17 | 2900 | 649 | 103 | 644 |
| Rail-chair | G. E. Raitz | 739,026 | Sept. 15 | 2906 | 645 | 106 | 655 |
| Rail chair and coupling. Boltless | F. H. Holman and E. F. Shawver | 736,258 | Aug. 11 | 2287 | 494 | 105 | 1488 |
| Rail chair and joint | P. J. McCann and J. H. Brassel | 746,127 | Dec. 8 | 1497 | 334 | 107 | 1440 |
| Rail-clamp | W. S. Jones | 724,711 | Apr. 7 | 552 | 132 | 103 | 1287 |
| Rail-clamp | C. W. Hill | 734,869 | July 28 | 4044 | 944 | 105 | 899 |
| Rail-clamp | E. Gerrard | 738,179 | Sept. 8 | 1274 | 276 | 106 | 292 |
| Rail clamp. Guard- | F. M. Phillabaum | 730,151 | June 2 | 1126 | 253 | 104 | 1356 |
| Rail-clamp. Swinging | J. F. Busey | 722,420 | Mar. 10 | 1418 | 312 | 103 | 318 |
| Rail conductor. Third- | F. T. Bailey and C. S. Mickey | 741,613 | Oct. 20 | 2359 | 528 | 106 | 1785 |
| Rail contact-shoe and support therefor | L. Wheeler and J. T. Murphy | 726,600 | Apr. 28 | 4071 | 919 | 103 | 2066 |
| Rail cover. Third- | H. C. Morgan | 746,556 | Dec. 8 | 2254 | 517 | 107 | 1602 |
| Rail electric systems. Traveling connector for third- | J. W. Perkins | 736,006 | Aug. 11 | 1861 | 398 | 105 | 1397 |

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| Invention | Name. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|---|
| | | | | Spec. | Dr'g. | Vol. | Page. |
| Rail. Electrical tramway or railway | H. M. and H. M. Bigwood | 739,819 | Sept. 29 | 4391 | 985 | 106 | 1008 |
| Rail-fastener | J. Owen | 746,567 | Dec. 8 | 2271 | 521 | 107 | 1606 |
| Rail-fastening | C. E. Neubauer | 719,950 | Feb. 3 | 954 | 222 | 102 | 1025 |
| Rail-fastening | G. A. Weber | 733,445 | July 14 | 1345 | 317 | 105 | 301 |
| Rail-fastening | G. A. Weber | 735,630 | Aug. 4 | 1143 | 241 | 105 | 1224 |
| Rail-fastening | G. A. Weber | 739,465 | Sept. 22 | 3735 | 831 | 106 | 848 |
| Rail-fastening | G. A. Weber | 739,467 | Sept. 22 | 3738 | 832 | 106 | 848 |
| Rail-fastening and cross-tie | T. W. Hughes | 741,496 | Oct. 13 | 2120 | 472 | 106 | 1719 |
| Rail-fastening and tie-plate. Combined | R. G. Polster and A. Loew | 744,606 | Nov. 17 | 3489 | 752<br>753 | 107 | 773 |
| Rail-fastening apparatus | D. L. Winters | 718,042 | Jan. 6 | 978 | 217 | 102 | 211 |
| Rail-frog. Spring | W. H. Rabbe, E. W. Harden, and M. E. Dempsey. | 729,661 | June 2 | 247 | 57 | 104 | 1179 |
| Rail guard. Third- | C. W. Hornung | 725,622 | Apr. 14 | 2232 | 504 | 103 | 1659 |
| Rail-joint | C. Gommon | 717,985 | Jan. 6 | 881 | 196<br>197 | 102 | 189 |
| Rail-joint | J. E. Jones | 718,354 | Jan. 13 | 1550 | 342 | 102 | 347 |
| Rail-joint | W. E. Penn | 718,516 | Jan. 13 | 1894 | 415 | 102 | 423 |
| Rail-joint | H. B. Nichols and C. B. Voynow. (Reissue.) | 12,074 | Jan. 27 | 3605 | 807 | 102 | 808 |
| Rail-joint | J. Kelly | 720,358 | Feb. 10 | 1758 | 399 | 102 | 1211 |
| Rail-joint | C. A. Snider | 720,498 | Feb. 10 | 1985 | 454 | 102 | 1258 |
| Rail-joint | H. Hanson | 720,581 | Feb. 17 | 2182 | 506 | 102 | 1313 |
| Rail-joint | R. P. Clover and J. L. Johnston | 721,019 | Feb. 17 | 2981 | 685 | 102 | 1480 |
| Rail-joint | B. P. Taylor | 721,109 | Feb. 17 | 3157 | 726 | 102 | 1522 |
| Rail-joint | F. S. Pascoe | 721,524 | Feb. 24 | 3963 | 903 | 102 | 1706 |
| Rail-joint | E. W. Long | 721,712 | Mar. 3 | 112 | 24 | 103 | 25 |
| Rail-joint | A. Russell | 722,538 | Mar. 10 | 1647 | 363 | 103 | 369 |
| Rail-joint | A. H. Ambler | 722,660 | Mar. 17 | 1878 | 417 | 103 | 434 |
| Rail-joint | A. L. Rosemond | 722,907 | Mar. 17 | 2352 | 526 | 103 | 530 |
| Rail-joint | J. C. W. Bischoff | 723,512 | Mar. 24 | 3475 | 777<br>778 | 103 | 771 |
| Rail-joint | G. L. Matheney | 723,699 | Mar. 24 | 3788 | 850 | 103 | 838 |
| Rail-joint | G. Godsell | 723,861 | Mar. 31 | 4103 | 925 | 103 | 920 |
| Rail-joint | J. J. Manton | 724,193 | Mar. 31 | 4776 | 1071 | 103 | 1057 |
| Rail-joint | J. F. Hollis | 724,867 | Apr. 7 | 838 | 193 | 103 | 1348 |
| Rail-joint | F. P. Butts | 725,216 | Apr. 14 | 1490 | 339 | 103 | 1500 |
| Rail-joint | H. and W. A. Glinsky | 725,555 | Apr. 14 | 2104 | 476 | 103 | 1630 |
| Rail-joint | P. C. Osteen | 725,583 | Apr. 14 | 2152 | 488 | 103 | 1642 |
| Rail-joint | J. H. Fowler | 725,833 | Apr. 21 | 2632 | 599 | 103 | 1758 |
| Rail-joint | P. Holbrook | 725,965 | Apr. 21 | 2859 | 648 | 103 | 1807 |
| Rail-joint | G. H. Gray | 726,050 | Apr. 21 | 2995 | 681 | 103 | 1834 |
| Rail-joint | A. Hauptmann | 726,057 | Apr. 21 | 3002 | 683 | 103 | 1836 |
| Rail-joint | K. Kohn | 728,469 | May 19 | 3119 | 689<br>690 | 104 | 702 |
| Rail-joint | D. P. Monroe | 729,081 | May 26 | 4240 | 937 | 104 | 948 |
| Rail-joint | W. J. McCoy | 729,389 | May 26 | 4774 | 1057 | 104 | 1060 |
| Rail-joint | C. F. Hall | 729,576 | June 2 | 104 | 26, 27 | 104 | 1148 |
| Rail-joint | L. Lehotzky | 729,946 | June 2 | 772 | 171 | 104 | 1285 |
| Rail-joint | I. Kicak | 730,130 | June 2 | 1091 | 244 | 104 | 1349 |
| Rail-joint | G. Gow | 731,176 | June 16 | 3026 | 672 | 104 | 1789 |
| Rail-joint | J. P. Heuer | 731,181 | June 16 | 3037 | 675 | 104 | 1790 |
| Rail-joint | F. Melaun | 732,311 | June 30 | 5188 | 1153 | 104 | 2268 |
| Rail-joint | B. Wolhaupter | 732,390 | June 30 | 5354 | 1186<br>1187 | 104 | 2303 |
| Rail-joint | H. T. Campbell | 733,144 | July 7 | 792 | 191<br>192 | 105 | 167 |
| Rail-joint | R. L. Conner | 733,814 | July 14 | 1996 | 470 | 105 | 438 |
| Rail-joint | E. J. Gaynon | 733,833 | July 14 | 2044 | 481<br>482 | 105 | 446 |
| Rail-joint | C. T. Greenwood and A. N. Marvin. | 734,853 | July 28 | 4020 | 938 | 105 | 894 |
| Rail-joint | W. S. Dunagan | 735,223 | Aug. 4 | 369 | 71 | 105 | 1060 |
| Rail-joint | W. S. De Woody | 735,726 | Aug. 11 | 1321 | 284 | 105 | 1279 |
| Rail-joint | J. E. Dutton | 735,864 | Aug. 11 | 1598 | 341 | 105 | 1341 |
| Rail-joint | P. J. Lukes | 736,123 | Aug. 11 | 2067 | 442<br>443 | 105 | 1441 |
| Rail-joint | W. C. Scofield | 736,883 | Aug. 18 | 3466 | 769 | 105 | 1752 |
| Rail-joint | O. B. Starkey | 737,037 | Aug. 25 | 3751 | 833 | 105 | 1833 |
| Rail-joint | H. J. Bubenheim | 737,071 | Aug. 25 | 3808 | 844 | 105 | 1844 |
| Rail-joint | F. B. Byers | 737,074 | Aug. 25 | 3812 | 844 | 105 | 1845 |
| Rail-joint | F. V. Lacy | 737,422 | Aug. 25 | 4472 | 1002 | 105 | 1986 |
| Rail-joint | W. P. Bowers | 737,552 | Aug. 25 | 4710 | 1057 | 105 | 2040 |
| Rail-joint | J. Nelson | 737,654 | Sept. 1 | 178 | 38 | 106 | 42 |
| Rail-joint | B. J. Funsch | 738,024 | Sept. 1 | 934 | 207 | 106 | 204 |
| Rail-joint | G. A. Weber | 739,466 | Sept. 22 | 3736 | 831 | 106 | 848 |
| Rail-joint | J. S. and N. R. Briel | 739,823 | Sept. 29 | 4396 | 986 | 106 | 1009 |
| Rail-joint | J. B. Elker | 740,110 | Sept. 29 | 4947 | 1110 | 106 | 1125 |
| Rail-joint | V. Flannigan and J. R. Partridge | 740,411 | Oct. 6 | 42 | 10 | 106 | 1253 |
| Rail-joint | C. H. McKee | 741,061 | Oct. 13 | 1246 | 282 | 106 | 1533 |
| Rail-joint | C. H. McKee | 741,062 | Oct. 13 | 1247 | 282 | 106 | 1533 |
| Rail-joint | C. H. McKee | 741,063 | Oct. 13 | 1249 | 282<br>283 | 106 | 1534 |
| Rail-joint | G. W. Johnson | 741,139 | Oct. 13 | 1393 | 319 | 106 | 1563 |
| Rail-joint | A. M. Beason | 741,295 | Oct. 13 | 1717 | 384 | 106 | 1629 |
| Rail-joint | J. E. Davis | 741,343 | Oct. 13 | 1752 | 390 | 106 | 1636 |
| Rail-joint | W. H. Rehmert | 742,739 | Oct. 27 | 4509 | 1021 | 106 | 2246 |
| Rail-joint | W. Ross, Sr. | 743,036 | Nov. 3 | 419 | 90 | 107 | 88 |
| Rail-joint | J. Kaufman | 743,172 | Nov. 3 | 678 | 148 | 107 | 142 |
| Rail-joint | J. Booth | 743,437 | Nov. 10 | 1279 | 262 | 107 | 289 |
| Rail-joint | R. J. Weken | 743,783 | Nov. 10 | 1938 | 410 | 107 | 430 |
| Rail-joint | W. A. Aughinbaugh | 743,804 | Nov. 10 | 1974 | 419 | 107 | 437 |
| Rail-joint | A. S. Lanum | 744,242 | Nov. 17 | 2815 | 601 | 107 | 630 |
| Rail-joint | A. B. Tomlin | 744,262 | Nov. 17 | 2897 | 620 | 107 | 647 |
| Rail-joint | C. H. Little | 744,577 | Nov. 17 | 3451 | 744 | 107 | 766 |
| Rail-joint | C. H. Shobert | 744,633 | Nov. 17 | 3537 | 763 | 107 | 783 |
| Rail-joint | J. Santee and E. G. Hines | 744,803 | Nov. 24 | 3875 | 834 | 107 | 874 |

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| Invention. | Name. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | | Spec. | Drg. | Vol. | Page. |
| Rail joint | L. T. Stephenson | 744,812 | Nov. 24 | 3894 | 837 | 107 | 878 |
| Rail-joint | G. A. Weber | 744,829 | Nov. 24 | 3928 | 844, 845 | 107 | 885 |
| Rail-joint | G. A. Weber | 744,835 | Nov. 24 | 3937 | 848, 849 | 107 | 887 |
| Rail-joint | J. G. Kutzner | 744,968 | Nov. 24 | 4172 | 902 | 107 | 935 |
| Rail-joint | G. A. Weber | 745,304 | Nov. 24 | 4862 | 1060, 1061 | 107 | 1078 |
| Rail-joint | G. A. Pack | 745,894 | Dec. 1 | 1071 | 241 | 107 | 1326 |
| Rail-joint | C. G. Ford | 746,487 | Dec. 8 | 2134 | 490 | 107 | 1575 |
| Rail-joint | W. A. Moffat | 746,550 | Dec. 8 | 2244 | 515 | 107 | 1600 |
| Rail-joint | F. W. Wilharm | 746,620 | Dec. 8 | 2368 | 543 | 107 | 1629 |
| Rail-joint | G. A. Weber | 746,650 | Dec. 8 | 2428 | 555 | 107 | 1642 |
| Rail-joint | R. C. Bott | 747,037 | Dec. 15 | 3165 | 725 | 107 | 1828 |
| Rail-joint | W. Larkin | 747,076 | Dec. 15 | 3257 | 741 | 107 | 1851 |
| Rail-joint | N. A. Alm | 747,115 | Dec. 15 | 3319 | 755 | 107 | 1867 |
| Rail-joint | J. A. Bridge | 747,125 | Dec. 15 | 3336 | 758 | 107 | 1870 |
| Rail-joint | J. H. Young | 747,670 | Dec. 22 | 4349 | 982 | 107 | 2110 |
| Rail-joint | B. P. Taylor | 748,234 | Dec. 29 | 5448 | 1241 | 107 | 2374 |
| Rail-joint | J. F. Summit | 748,437 | Dec. 29 | 5809 | 1323 | 107 | 2454 |
| Rail-joint | J. F. Vilsack | 748,444 | Dec. 29 | 5818 | 1325 | 107 | 2456 |
| Rail joint and chair. Combined | H. Kunkel | 721,573 | Feb. 24 | 4068 | 923 | 102 | 1731 |
| Rail-joint and cross-tie | W. T. McBride | 721,218 | Feb. 24 | 3427 | 778 | 102 | 1594 |
| Rail joint and fastening | T. H. Davies | 722,175 | Mar. 3 | 950 | 211 | 103 | 201 |
| Rail-joint and nut-lock. Combined | L. N. Reed | 735,908 | Aug. 11 | 1668 | 356 | 105 | 1355 |
| Rail-joint bed-plate | J. R. Bitner | 728,190 | May 19 | 2572 | 573 | 104 | 586 |
| Rail-joint chair | T. Elrod | 725,057 | Apr. 14 | 1183 | 268 | 103 | 1437 |
| Rail-joint chair | T. Fitzgibbon | 740,115 | Sept. 29 | 4955 | 1112 | 106 | 1126 |
| Rail-joint chair | L. L. Savoie | 747,647 | Dec. 22 | 4306 | 968 | 107 | 2101 |
| Rail-joint connection | J. Houlehan | 738,805 | Sept. 15 | 2536 | 557 | 106 | 575 |
| Rail-joint connection | J. E. Field | 740,262 | Sept. 29 | 5225 | 1175 | 106 | 1181 |
| Rail-joint fastener | W. H. Logan | 740,883 | Oct. 6 | 920 | 206 | 106 | 1443 |
| Rail-joint for street-car tracks | J. Jones | 719,010 | Jan. 27 | 2828 | 634 | 102 | 645 |
| Rail-joint nut-lock | F. Chambordon | 723,364 | Mar. 24 | 3199 | 718 | 103 | 716 |
| Rail-joint tie | A. Kreps | 738,548 | Sept. 8 | 2021 | 439 | 106 | 449 |
| Rail-joint tie-plate | P. W. Mosher | 734,925 | July 28 | 4132 | 962 | 105 | 919 |
| Rail-loader | G. R. Huntington and T. A. Foque | 725,084 | Apr. 14 | 1241 | 279, 280 | 103 | 1448 |
| Rail-locking joint | P. F. McCool | 734,130 | July 21 | 2646 | 625 | 105 | 592 |
| Rail or bar straightening apparatus | J. Smith | 743,766 | Nov. 10 | 1894 | 401 | 107 | 421 |
| Rail repairing or splicing device | O. D. Binett | 743,811 | Nov. 10 | 1986 | 422 | 107 | 439 |
| Rail-sander | J. C. Thompson | 732,325 | June 30 | 5213 | 1157, 1158 | 104 | 2273 |
| Rail. Sectional | M. F. Bell | 733,692 | July 14 | 1760 | 417 | 105 | 388 |
| Rail shoe. Third- | J. E. Blakesley | 741,392 | Oct. 13 | 1922 | 425 | 106 | 1677 |
| Rail shoes. Circuit-breaker for third- | M. M. Wood | 723,115 | Mar. 17 | 2705 | 608 | 103 | 604 |
| Rail splice-bars. Means for securing | D. F. Vaughan | 735,320 | Aug. 4 | 543 | 111 | 105 | 1097 |
| Rail-support | W. E. Jaques | 723,280 | Mar. 24 | 3023 | 681 | 103 | 684 |
| Rail-support | G. A. Weber and F. R. Coates | 744,830 | Nov. 24 | 3930 | 845 | 107 | 885 |
| Rail support or chair. Third- | J. E. Blakesley | 741,393 | Oct. 13 | 1923 | 425 | 106 | 1677 |
| Rail switch. Traction- | H. and H. Williams | 731,643 | June 23 | 3917 | 872 | 104 | 1989 |
| Rail system. Sectional third- | W. B. Potter | 745,383 | Dec. 1 | 127 | 29 | 107 | 1127 |
| Rail system. Third- | J. H. Hughes | 738,721 | Sept. 8 | 2343 | 514 | 106 | 516 |
| Rail-tie | W. T. McBride | 721,219 | Feb. 24 | 3429 | 779 | 102 | 1594 |
| Rail-tie | J. Kelly | 733,654 | July 14 | 1704 | 404 | 105 | 376 |
| Rail-tie | W. Olsen | 740,309 | Sept. 29 | 5310 | 1196 | 106 | 1199 |
| Rail-tie | W. Gasser | 743,157 | Nov. 3 | 654 | 141 | 107 | 137 |
| Rail tie and brace | T. J. Cahill | 729,539 | June 2 | 36 | 9 | 104 | 1134 |
| Rail-tie. Metallic | H. I. Jeffers | 745,282 | Nov. 24 | 4807 | 1049 | 107 | 1066 |
| Rails, &c. Apparatus for cleansing tram- | C. H. Jerrard | 724,479 | Apr. 7 | 109 | 27 | 103 | 1192 |
| Rails. Apparatus for unloading and distributing steel | H. Ware | 735,005 | July 28 | 4285 | 997 | 105 | 949 |
| Rails. Appliance for cutting off the upper or wearing portions of compound tramway- | W. L. Le Maitre, F. G. W. Parker, and E. Rhodes. | 718,362 | Jan. 13 | 1561 | 344 | 102 | 350 |
| Rails. Connection for the meeting ends of | T. Gardin | 741,482 | Oct. 13 | 2100 | 466, 467 | 106 | 1715 |
| Rails. Foot-blocking for guard- | E. A. Bowers | 732,511 | June 30 | 5589 | 1238 | 104 | 2350 |
| Rails. Means for lubricating street-car | E. K. Green | 742,786 | Oct. 27 | 4578 | 1038 | 106 | 2262 |
| Rails. Means for preventing the spreading of | M. Sellers | 731,512 | June 23 | 3667 | 818 | 104 | 1940 |
| Rails. Means for removing sleet, snow, and ice from third | P. Lindemann | 721,960 | Mar. 3 | 576 | 128 | 103 | 126 |
| Railway | E. Stiles | 730,312 | June 9 | 1434 | 316 | 104 | 1436 |
| Railway | S. E. Jackman | 743,168 | Nov. 3 | 674 | 147 | 107 | 141 |
| Railway | S. E. Jackman | 743,170 | Nov. 3 | 676 | 147, 148 | 107 | 141 |
| Railway | J. Dew | 747,342 | Dec. 15 | 3758 | 846 | 107 | 1961 |
| Railway-alarm. Automatic | H. E. Bartlett | 743,222 | Nov. 3 | 782 | 170 | 107 | 164 |
| Railway. Amusement- | A. E. W. Frazer | 738,022 | Sept. 1 | 931 | 206 | 106 | 204 |
| Railway antispreading means | P. Gavin | 747,964 | Dec. 29 | 4932 | 1115 | 107 | 2262 |
| Railway appliance | O. Sweat | 734,246 | July 21 | 2858 | 669, 670 | 105 | 638 |
| Railway automatic safety appliance | J. Bardsley | 730,219 | June 9 | 1262 | 280 | 104 | 1399 |
| Railway automatic signaling apparatus | J. Goldsworthy | 731,108 | June 16 | 2896 | 643 | 104 | 1764 |
| Railway-ballast-tamping machine | L. R. Moseley | 748,089 | Dec. 29 | 5184 | 1173 | 107 | 2318 |
| Railway block-signal. Automatic | P. A. Sawyer | 746,582 | Dec. 8 | 2300 | 528 | 107 | 1613 |
| Railway block-signaling system | H. B. Taylor | 739,518 | Sept. 22 | 3820 | 856 | 106 | 866 |
| Railway block system | H. J. Fuller | 718,925 | Jan. 20 | 2663 | 598 | 102 | 595 |
| Railway-bond | H. M. Bellows | 737,896 | Sept. 1 | 683 | 145 | 106 | 150 |
| Railway-bond | H. E. Procunier | 743,101 | Nov. 3 | 541 | 117 | 107 | 113 |
| Railway brace and chair | W. F. Bossert | 747,930 | Dec. 29 | 4866 | 1098 | 107 | 2248 |
| Railway brace and tie-plate. Combined | W. F. Bossert | 739,822 | Sept. 29 | 4395 | 986 | 106 | 1008 |
| Railway-brake | G. Houplain | 717,996 | Jan. 6 | 900 | 202 | 102 | 193 |
| Railway-brake | L. R. Battle | 729,034 | May 26 | 4158 | 921 | 104 | 933 |
| Railway-brake | P. Hallot | 730,115 | June 2 | 1071 | 240, 241 | 104 | 1345 |
| Railway-brake | P. Hallot | 731,894 | June 23 | 4363 | 973 | 104 | 2084 |
| Railway-brake | P. Hallot | 733,195 | July 7 | 875 | 212 | 105 | 184 |

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| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Railway-brake | S. Cheney | 733,312 | July 7 | 1093 | 260, 261 | 105 | 230 |
| Railway-brake | P. Hallot | 733,838 | July 14 | 2051 | 484, 485 | 105 | 448 |
| Railway-brake | P. Hallot | 736,091 | Aug. 11 | 2010 | 429 | 105 | 1430 |
| Railway-brake | D. W. Davis | 738,005 | Sept. 1 | 905 | 199 | 106 | 198 |
| Railway-brake | F. Prochaska | 747,638 | Dec. 22 | 4293 | 965 | 107 | 2098 |
| Railway-brake. Automatic | L. Seile | 737,029 | Aug. 25 | 3739 | 829 | 105 | 1831 |
| Railway-brake. Electric | J. S. Lockwood | 745,285 | Nov. 24 | 4811 | 1050 | 107 | 1066 |
| Railway-brake. Fluid-pressure | J. F. Voorhees | 739,761 | Sept. 22 | 4262 | 955 | 106 | 962 |
| Railway-brake. High-speed | W. B. Mann | 720,827 | Feb. 17 | 2612 | 603, 604 | 102 | 1402 |
| Railway building. Tie dumping and turning mechanism for | C. Conran | 721,783 | Mar. 3 | 222 | 49 | 103 | 49 |
| Railway-bumper | S. P. McGough | 725,274 | Apr. 14 | 1583 | 358 | 103 | 1520 |
| Railway. Carriage- | H. L. Stillman | 722,641 | Mar. 10 | 1824 | 406 | 103 | 408 |
| Railway-carriage coupling. Automatic | J. Willison | 728,184 | May 12 | 2557 | 568, 569 | 104 | 562 |
| Railway carriage. Ship- | B. Kirsch, C. V. Suppan, and B. Szendi. | 728,117 | May 12 | 2425 | 540, 541 | 104 | 535 |
| Railway cattle-guard | F. W. Perkins | 730,794 | June 9 | 2290 | 509 | 104 | 1619 |
| Railway cattle-guard | W. von Daake | 739,590 | Sept. 22 | 3961 | 884 | 106 | 896 |
| Railway chair and brace | W. F. Bossert | 747,931 | Dec. 29 | 4867 | 1098, 1099 | 107 | 2249 |
| Railway chair and stand | W. P. Hussey | 748,504 | Dec. 29 | 5944 | 1348 | 107 | 2484 |
| Railway chart. Street- | M. Szekler | 742,520 | Oct. 27 | 4120 | 927 | 106 | 2163 |
| Railway clamp and gage | B. G. and J. Norris | 719,034 | Jan. 27 | 2881 | 645, 646 | 102 | 656 |
| Railway-coach | C. Ansorge | 722,795 | Mar. 17 | 2148 | 480 | 103 | 489 |
| Railway-coach chair. Convertible | L. Petterson | 735,810 | Aug. 11 | 1479 | 317, 318 | 105 | 1314 |
| Railway construction | P. Dunwald | 731,292 | June 16 | 3239 | 721 | 104 | 1835 |
| Railway construction | S. E. Duff. (Reissue) | 12,126 | June 23 | 4635 | 1036 | 104 | 2140 |
| Railway construction | W. P. Bryant | 739,981 | Sept. 29 | 4716 | 1061 | 106 | 1074 |
| Railway contact-box. Electric- | W. M. Brown | 745,778 | Dec. 1 | 827 | 187 | 107 | 1275 |
| Railway contact device. Electric- | E. M. Hewlett | 729,173 | May 26 | 4401 | 971 | 104 | 982 |
| Railway contact device. Electric- | H. F. Kellogg | 737,936 | Sept. 1 | 757 | 166 | 106 | 166 |
| Railway coupling device | C. G. Turner | 729,813 | Mar. 3 | 807 | 180 | 103 | 174 |
| Railway cross-tie | D. Ford | 722,094 | June 2 | 538 | 118 | 104 | 506 |
| Railway cross-tie | F. W. Dunnell. (Reissue) | 12,091 | Mar. 3 | 1012 | 222 | 103 | 215 |
| Railway cross-tie | F. W. Dunnell | 722,501 | Mar. 10 | 1588 | 350 | 103 | 357 |
| Railway cross-tie | O. H. Odell | 736,293 | Aug. 11 | 2355 | 511, 512 | 105 | 1505 |
| Railway cross-tie | D. S. Affleck | 742,144 | Oct. 27 | 3431 | 765 | 106 | 2021 |
| Railway-crossing | A. H. Lewis, A. G. Quimby, C. T. Harlow, and J. C. Shields. | 717,692 | Jan. 6 | 302 | 75 | 102 | 65 |
| Railway-crossing | V. Angerer | 718,297 | Jan. 13 | 1446 | 321 | 102 | 327 |
| Railway-crossing | Z. Frei | 719,412 | Jan. 27 | 3603 | 806 | 102 | 807 |
| Railway-crossing | C. A. Moreno | 721,129 | Feb. 17 | 3221 | 737 | 102 | 1539 |
| Railway-crossing | W. F. Mills | 737,759 | Sept. 1 | 376 | 80 | 106 | 84 |
| Railway-crossing | J. W. Bennett | 748,469 | Dec. 29 | 5876 | 1336 | 107 | 2469 |
| Railway-crossing gate | B. A. Karr | 726,308 | Apr. 28 | 3496 | 791, 792 | 103 | 1952 |
| Railway-crossing gate | N. Perrault | 733,419 | July 14 | 1297 | 306, 307 | 105 | 291 |
| Railway-crossing-gate mechanism. Automatic | J. N. Hyke | 722,845 | Mar. 17 | 2241 | 502 | 103 | 1142 |
| Railway-crossing signal | N. Perrault | 724,395 | Mar. 31 | 5190 | 1164 | 103 | 2459 |
| Railway-crossing signal | E. E. Wolf and J. B. Williams | 748,451 | Dec. 29 | 5832 | 1328, 1329 | 107 | 1238 |
| Railway current-collecting device. Electric- | C. A. Terry | 722,772 | Mar. 17 | 2102 | 470 | 103 | 480 |
| Railway curve. Street- | A. C. Wells | 717,728 | Jan. 6 | 367 | 90 | 102 | 79 |
| Railway danger-signal | C. P. Bass | 719,932 | Feb. 3 | 924 | 216 | 102 | 1020 |
| Railway danger-signal. Automatic | S. M. Davis | 743,063 | Nov. 3 | 473 | 103 | 107 | 98 |
| Railway. Electric | F. M. Ashley | 718,068 | Jan. 13 | 1027 | 229, 230 | 102 | 235 |
| Railway. Electric | F. M. Ashley | 718,069 | Jan. 13 | 1029 | 230 | 102 | 236 |
| Railway. Electric | M. T. A. Kubierschky | 719,016 | Jan. 27 | 2836 | 636 | 102 | 646 |
| Railway. Electric | F. M. Ashley | 719,983 | Feb. 10 | 1029 | 239, 240 | 102 | 1057 |
| Railway. Electric | F. M. Ashley | 719,984 | Feb. 10 | 1031 | 240 | 102 | 1058 |
| Railway. Electric | T. E. Murray and J. Van Vleck | 720,273 | Feb. 10 | 1597 | 365, 366, 367 | 102 | 1177 |
| Railway. Electric | G. L. Fowler | 720,684 | Feb. 17 | 2381 | 545 | 102 | 1353 |
| Railway. Electric | H. Edwards | 723,592 | Mar. 24 | 3611 | 807 | 103 | 799 |
| Railway. Electric | C. A. Thompson | 727,227 | May 5 | 763 | 163 | 104 | 165 |
| Railway. Electric | A. N. Connett | 729,136 | May 26 | 4329 | 956 | 104 | 967 |
| Railway. Electric | J. S. Pevear | 729,216 | May 26 | 4481 | 988 | 104 | 1000 |
| Railway. Electric | G. T. and L. Woods | 729,481 | May 26 | 4924 | 1091 | 104 | 1093 |
| Railway. Electric | W. M. Brown | 730,869 | June 16 | 2425 | 536 | 104 | 1668 |
| Railway. Electric | A. H. Bedworth | 732,157 | June 30 | 4900 | 1090 | 104 | 2209 |
| Railway. Electric | E. C. Boynton | 732,512 | June 30 | 5590 | 1238 | 104 | 2351 |
| Railway. Electric | W. N. Stewart | 739,032 | Sept. 15 | 2915 | 647 | 106 | 657 |
| Railway. Electric | F. W. Rochler | 741,719 | Oct. 20 | 2574 | 573 | 106 | 1830 |
| Railway. Electric | W. B. Potter | 745,382 | Dec. 1 | 125 | 29 | 107 | 1127 |
| Railway. Electric | R. Hübner | 746,512 | Dec. 8 | 2174 | 500 | 107 | 1583 |
| Railway. Electric | M. Hoopes | 747,177 | Dec. 15 | 3433 | 778 | 107 | 1890 |
| Railway electric danger and safety signal | H. F. Spurr, Jr. | 719,388 | Jan. 27 | 3551 | 792 | 102 | 797 |
| Railway electric-motor-cooling system | C. O. Mailloux and W. C. Gotshall | 719,020 | Jan. 27 | 2844 | 638, 639 | 102 | 648 |
| Railway. Elevated | C. I. White | 743,786 | Nov. 10 | 1941 | 411, 412 | 107 | 431 |
| Railway. Elevated electric | W. Varzar | 728,428 | May 19 | 3029 | 665 | 104 | 683 |
| Railway fog signal apparatus | H. F. Clayton | 726,867 | May 5 | 64 | 16, 17 | 104 | 16 |
| Railway fog signaling apparatus. Detonator holder or clip for use in | H. F. Clayton | 745,328 | Dec. 1 | 27 | 6 | 107 | 1106 |
| Railway-folders. Foldable holder for | J. L. Blair | 742,958 | Nov. 3 | 241 | 54 | 107 | 52 |

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| Invention. | Name. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | | Spec. | Dr'g. | Vol. | Page. |
| Railway-frog | E. B. Douglass | 719,571 | Feb. 3 | 296 | 68 | 102 | 884 |
| Railway-frog | R. Novinger | 734,132 | July 21 | 2649 | 625 | 105 | 593 |
| Railway-frog | W. A. Chapman | 746,022 | Dec. 8 | 1308 | 294 | 107 | 1395 |
| Railway-frog | E. B. Entwisle | 747,955 | Dec. 29 | 4911 | 1111 | 107 | 2258 |
| Railway frog and switch mechanism | L. Green, W. H. Stobbs, L. Green, and F. L. Stobbs. | 719,461 | Feb. 3 | 87 | 21 | 102 | 844 |
| Railway-frog foot-guard | C. Holtmann, W. H. Lindewirth, and J. Schunk. | 723,156 | Mar. 17 | 2782 | 628 | 103 | 618 |
| Railway-frog foot-guard | H. Hooker | 737,103 | Aug. 25 | 3860 | 857 | 105 | 1855 |
| Railway-frog-plate clamp | E. W. Stout | 748,435 | Dec. 29 | 5806 | 1322 | 107 | 2453 |
| Railway-fusee projector | W. C. Beckwith | 720,397 | Feb. 10 | 1812 | 412, 413 | 102 | 1223 |
| Railway-gate | G. E. Jackson | 740,658 | Oct. 6 | 512 | 112, 113 | 106 | 1356 |
| Railway-gate | J. H. Elward | 741,781 | Oct. 20 | 2686 | 598 | 106 | 1853 |
| Railway-gate | W. A. Aughinbaugh | 743,803 | Nov. 10 | 1973 | 419 | 107 | 437 |
| Railway gate and signal. Automatic | H. Higgin | 718,126 | Jan. 13 | 1131 | 250, 251 | 102 | 259 |
| Railway-gate. Automatic | C. E. Mickley | 718,011 | Jan. 6 | 934 | 207 | 102 | 201 |
| Railway-gate. Automatic | A. Kammerich | 718,473 | Jan. 13 | 1779 | 395 | 102 | 394 |
| Railway-gate signal | E. Stevens and C. Terborg | 726,367 | Apr. 28 | 3604 | 818 | 103 | 1976 |
| Railway guard-rail support | O. Paulhus | 727,999 | May 12 | 2228 | 496 | 104 | 492 |
| Railway. Inclined | S. E. Jackman | 737,409 | Aug. 25 | 4444 | 996, 997 | 105 | 1980 |
| Railway interchangeable turnout | D. E. Pepin | 723,300 | Mar. 24 | 3062 | 689 | 103 | 691 |
| Railway interlocking machine | B. C. Rowell | 724,947 | Apr. 7 | 966 | 223, 224 | 103 | 1376 |
| Railway-jack wheel-clamp | A. L. Casebeer | 728,365 | May 19 | 2920 | 645 | 104 | 659 |
| Railway-joint | J. L. Mayes | 740,029 | Sept. 29 | 4817 | 1080 | 106 | 1097 |
| Railway-joint | C. W. Dake | 745,330 | Dec. 1 | 29 | 6 | 107 | 1106 |
| Railway joint and chair | W. C. Bales | 741,440 | Oct. 13 | 1996 | 442 | 106 | 1692 |
| Railway level and gage | J. C. Johnson | 747,975 | Dec. 29 | 4961 | 1120 | 107 | 2269 |
| Railway-line sleeper | A. Olivier | 732,213 | June 30 | 5005 | 1112 | 104 | 2231 |
| Railway-motor | E. D. Priest | 747,765 | Dec. 22 | 4519 | 1018 | 107 | 2150 |
| Railway-motor-ventilating system | J. H. Fedeler | 721,877 | Mar. 3 | 409 | 90 | 103 | 89 |
| Railway or tramway points. Apparatus for controlling and operating electric | T. B. Stewart, W. H. Turner, and R. E. Dixon. | 747,796 | Dec. 22 | 4577 | 1033 | 107 | 2163 |
| Railway or tramway points. Automatic apparatus for controlling and operating electric | T. B. Stewart, W. H. Turner, and R. E. Dixon. | 747,795 | Dec. 22 | 4576 | 1032, 1033 | 107 | 2163 |
| Railway or tramway vehicles. Brake apparatus for electric | J. G. V. Lang | 736,608 | Aug. 18 | 2948 | 646 | 105 | 1645 |
| Railway overhead structure. Electric- | B. Willard | 729,826 | June 2 | 574 | 126 | 104 | 1245 |
| Railway pivot-blade joint | W. Watts | 733,689 | July 14 | 1756 | 417 | 105 | 387 |
| Railway. Pleasure- | J. T. Truitt | 723,559 | Mar. 24 | 3551 | 794 | 103 | 788 |
| Railway. Pleasure- | H. B. Gentry | 739,169 | Sept. 15 | 3176 | 702 | 106 | 710 |
| Railway. Pleasure- | G. F. Myers | 739,789 | Sept. 22 | 4325 | 968 | 106 | 977 |
| Railway. Pleasure- | G. S. Crane | 746,467 | Dec. 8 | 2097 | 483 | 107 | 1567 |
| Railway-rail | W. H. Haight | 717,845 | Jan. 6 | 635 | 141 | 102 | 136 |
| Railway-rail | Z. L. Pierce | 719,040 | Jan. 27 | 2890 | 647, 648 | 102 | 657 |
| Railway-rail | J. S. Fox | 719,453 | Feb. 3 | 73 | 17 | 102 | 841 |
| Railway-rail | J. P. A. Hanlon | 726,798 | Apr. 28 | 4436 | 999 | 103 | 2141 |
| Railway-rail | G. A. Case | 727,288 | May 5 | 867 | 187 | 104 | 186 |
| Railway-rail | J. G. Wentzell | 731,253 | June 16 | 3153 | 702 | 104 | 1815 |
| Railway-rail | G. R. Huff | 741,795 | Oct. 20 | 2708 | 603 | 106 | 1857 |
| Railway-rail | H. B. Yost | 746,430 | Dec. 8 | 2039 | 467 | 107 | 1553 |
| Railway-rail and rail-joint | J. Teller | 736,566 | Aug. 18 | 2846 | 623 | 105 | 1625 |
| Railway rail and tie distributer | W. P. Cunningham | 717,820 | Jan. 6 | 576 | 129 | 102 | 124 |
| Railway-rail bond | J. and M. W. Risbridger | 730,403 | June 9 | 1598 | 356 | 104 | 1469 |
| Railway rail-bond. Electric- | T. Kerr | 722,991 | Mar. 17 | 2481 | 558 | 103 | 557 |
| Railway-rail brace or tie-bar | W. E. Arthur | 738,592 | Sept. 8 | 2097 | 458 | 106 | 467 |
| Railway-rail bridle-rod | J. R. Johnson | 725,720 | Apr. 21 | 2425 | 550 | 103 | 1713 |
| Railway-rail clamp | C. A. Sanborn | 744,623 | Nov. 17 | 3518 | 759 | 107 | 779 |
| Railway-rail construction | J. F. Johnston | 720,813 | Feb. 17 | 2590 | 598 | 102 | 1398 |
| Railway rail-coupling. Electric- | T. Kerr | 722,992 | Mar. 17 | 2482 | 558 | 103 | 557 |
| Railway-rail ends. Device for increasing the vertical and lateral stiffness at the juncture of | J. M. Griswold | 746,072 | Dec. 8 | 1397 | 312 | 107 | 1416 |
| Railway-rail fastener | W. N. Haring | 726,681 | Apr. 28 | 4213 | 952 | 103 | 2095 |
| Railway-rail fastener | C. G. Chamberlain | 747,136 | Dec. 15 | 3365 | 763 | 107 | 1876 |
| Railway-rail fastening | R. G. Musgrove | 726,559 | Apr. 28 | 3984 | 902 | 103 | 2048 |
| Railway-rail-fastening device | A. Vogelsang | 724,064 | Mar. 31 | 4509 | 1015, 1016 | 103 | 1003 |
| Railway-rail fish-plate joint | W. F. Bossert | 723,439 | Mar. 24 | 3326 | 745 | 103 | 742 |
| Railway-rail holder for metal cross-ties | J. Katzenmeyer | 740,282 | Sept. 29 | 5269 | 1187 | 106 | 1191 |
| Railway-rail joint | H. C. Wortman | 722,346 | Mar. 10 | 1288 | 286 | 103 | 289 |
| Railway-rail joint | R. Runolfson and E. Johnson | 722,457 | Mar. 10 | 1495 | 330 | 103 | 335 |
| Railway-rail joint | H. Glover | 722,971 | Mar. 17 | 2451 | 549 | 103 | 550 |
| Railway-rail joint | D. R. Page | 723,543 | Mar. 24 | 3526 | 789 | 103 | 782 |
| Railway-rail joint | F. E. Waterson | 724,355 | Mar. 31 | 5100 | 1142 | 103 | 1122 |
| Railway-rail joint | J. G. McMichael | 724,922 | Apr. 7 | 926 | 212 | 103 | 1368 |
| Railway-rail joint | J. G. McMichael | 725,121 | Apr. 14 | 1311 | 295 | 103 | 1463 |
| Railway-rail joint | T. Higgins | 727,794 | May 12 | 1846 | 413 | 104 | 411 |
| Railway-rail joint | W. M. Brewer and C. A. Archer | 728,196 | May 19 | 2579 | 575 | 104 | 588 |
| Railway-rail joint | G. E. Daggett | 728,373 | May 19 | 2934 | 647 | 104 | 662 |
| Railway-rail joint | H. T. Lockwood | 731,582 | June 23 | 3807 | 848 | 104 | 1967 |
| Railway-rail joint | J. C. Wallace | 731,638 | June 23 | 3908 | 870 | 104 | 1987 |
| Railway-rail joint | C. G. Polleys | 731,706 | June 23 | 4027 | 899 | 104 | 2011 |
| Railway-rail joint | T. Powell | 732,317 | June 30 | 5199 | 1155 | 104 | 2270 |
| Railway-rail joint | J. W. Gay | 734,056 | July 21 | 2503 | 583 | 105 | 563 |
| Railway-rail joint | F. Veith and F. Renfer, Jr. | 737,177 | Aug. 25 | 4000 | 887 | 105 | 1885 |
| Railway-rail joint | S. Conkle | 737,584 | Sept. 1 | 45 | 10 | 106 | 12 |
| Railway-rail joint | G. A. Weber | 739,462 | Sept. 22 | 3732 | 830 | 106 | 847 |
| Railway-rail joint | G. A. Weber | 739,463 | Sept. 22 | 3732 | 830 | 106 | 847 |
| Railway-rail joint | G. A. Weber | 739,464 | Sept. 22 | 3734 | 831 | 106 | 848 |
| Railway-rail joint | L. Dinger, Jr | 739,656 | Sept. 22 | 4087 | 910 | 106 | 923 |

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| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Railway-rail joint | J. G. McMichael | 741,817 | Oct. 20 | 2746 | 611 | 106 | 1866 |
| Railway-rail joint | J. R. Hubbard | 744,553 | Nov. 17 | 3417 | 736 | 107 | 759 |
| Railway-rail-joint base-plate | R. B. Charlton | 727,902 | May 12 | 2044 | 455 | 104 | 453 |
| Railway-rail-joint-connecting plate | R. B. Charlton | 725,613 | Apr. 14 | 2209 | 499 | 103 | 1654 |
| Railway-rail-joint plates. Manufacturing | S. B. Sheldon | 733,085 | July 7 | 691 | 169 | 105 | 147 |
| Railway rail-joint. Suspended | G. H. J. Maas | 744,868 | Nov. 24 | 3991 | 860 | 107 | 899 |
| Railway-rail stay | E. Laas and H. Sponenburg | 720,362 | Feb. 10 | 1763 | 400 | 102 | 1213 |
| Railway-rail stay | H. H. Sponenburg | 738,499 | Sept. 8 | 1930 | 421 | 106 | 430 |
| Railway rail. Street- | W. Kuske | 720,704 | Feb. 17 | 2424 | 554 | 102 | 1362 |
| Railway-rail track-bridge | O. Haase | 732,069 | June 30 | 4713 | 1052 | 104 | 2170 |
| Railway-rails. Boltless fish and bed plate for | W. R. Crawford | 718,317 | Jan. 13 | 1487 | 330 | 102 | 335 |
| Railway-rails. Joining or connecting | J. F. Koehler and J. F. Milde | 730,928 | June 16 | 2551 | 568 | 104 | 1694 |
| Railway-rails upon wooden ties. Fastening | I. Copeland | 728,675 | May 19 | 3507 | 780 | 104 | 784 |
| Railway repair and defect card holder | A. M. Goodwin | 745,597 | Dec. 1 | 524 | 122 | 107 | 1209 |
| Railway repair and defect card holder | A. M. Goodwin | 745,598 | Dec. 1 | 525 | 123 | 107 | 1209 |
| Railway road-bed | J. W. Cooper | 718,430 | Jan. 13 | 1682 | 371, 372 | 102 | 375 |
| Railway. Rope | R. Pfaffenbach | 745,659 | Dec. 1 | 626 | 145, 146 | 107 | 1231 |
| Railway safety device | S. Rogozea | 726,351 | Apr. 28 | 3573 | 809 | 103 | 1969 |
| Railway safety device. Inclined- | S. E. Jackman | 745,962 | Dec. 1 | 1105 | 267, 268 | 107 | 1355 |
| Railway safety-gate. Automatic | H. E. Bartlett | 743,221 | Nov. 3 | 777 | 169 | 107 | 163 |
| Railway safety-gear and signal system | J. J. Moore | 725,116 | Apr. 14 | 1300 | 293 | 103 | 1461 |
| Railway screw-spike | C. L. Renn | 743,329 | Nov. 3 | 989 | 215 | 107 | 212 |
| Railway. Ship- | O. Philipp | 731,945 | June 23 | 4456 | 994 | 104 | 2104 |
| Railway-siding buffer | T. L. McKeen | 737,858 | Sept. 1 | 591 | 129 | 106 | 130 |
| Railway-signal | J. Williams | 718,063 | Jan. 6 | 1011 | 226 | 102 | 218 |
| Railway-signal | J. B. Monroe and W. E. Lee | 718,269 | Jan. 13 | 1395 | 311, 312 | 102 | 316 |
| Railway-signal | C. H. Remington | 718,385 | Jan. 13 | 1602 | 353 | 102 | 358 |
| Railway-signal | D. M. Snyder | 724,347 | Mar. 31 | 5084 | 1138 | 103 | 1119 |
| Railway-signal | A. W. Olund | 727,678 | May 12 | 1608 | 366 | 104 | 364 |
| Railway-signal | J. D. Price. (Reissue) | 12,113 | May 19 | 3777 | 843 | 104 | 840 |
| Railway-signal | M. D. Hanlon | 729,065 | May 26 | 4216 | 932 | 104 | 944 |
| Railway-signal | J. G. Schreuder | 736,554 | Aug. 18 | 2823 | 618 | 105 | 1621 |
| Railway-signal | J. B. Reagan | 737,662 | Sept. 1 | 191 | 40 | 106 | 45 |
| Railway-signal | R. F. Johnson | 739,681 | Sept. 22 | 4132 | 922 | 106 | 933 |
| Railway-signal | M. D. Hanlon | 744,069 | Nov. '17 | 2521 | 540 | 107 | 566 |
| Railway-signal | W. C. Bryant | 744,716 | Nov. 24 | 3728 | 805 | 107 | 844 |
| Railway-signal | J. P. Coleman | 745,308 | Nov. 24 | 4870 | 1064 | 107 | 1079 |
| Railway-signal | J. P. Cameron | 745,309 | Nov. 24 | 4874 | 1064, 1065 | 107 | 1080 |
| Railway-signal | H. M. Cogan | 747,142 | Dec. 15 | 3372 | 765, 766 | 107 | 1878 |
| Railway signal and alarm | A. E. Caughey | 743,245 | Nov. 3 | 824 | 179 | 107 | 172 |
| Railway-signal. Automatic | E. Renaud | 737,482 | Aug. 25 | 4579 | 1026, 1027 | 105 | 2010 |
| Railway-signal. Automatically-operated | I. Reynet | 736,445 | Aug. 18 | 2618 | 575 | 105 | 1576 |
| Railway-signal controlling system | G. Gibbs | 737,094 | Aug. 25 | 3846 | 854, 855 | 105 | 1852 |
| Railway signal-controlling system. Electric- | G. Gibbs | 728,164 | May 12 | 2515 | 559, 560 | 104 | 552 |
| Railway signal device | C. E. Baker | 721,136 | Feb. 24 | 3245 | 743 | 102 | 1559 |
| Railway-signal. Electric | E. B. Cutten and A. C. Fraser | 721,161 | Feb. 24 | 3291 | 753, 754 | 102 | 1569 |
| Railway-signal. Electric | H. A. Ammann and A. D. Campbell. | 736,345 | Aug. 18 | 2447 | 535 | 105 | 1540 |
| Railway-signal. Electric | H. A. Ammann and A. D. Campbell. | 737,053 | Aug. 25 | 3773 | 838 | 105 | 1837 |
| Railway-signal. Electric | H. Brooks | 741,955 | Oct. 20 | 3018 | 669 | 106 | 1924 |
| Railway signal selector | L. A. de Berard | 746,661 | Dec. 15 | 2465 | 563, 564 | 107 | 1670 |
| Railway signal system | J. P. Coleman | 725,674 | Apr. 21 | 2345 | 530 | 103 | 1696 |
| Railway-signals. Circuit-breaker for automatic electric | R. A. Doty | 739,066 | Sept. 15 | 2992 | 663 | 106 | 673 |
| Railway signaling apparatus | H. J. Jefcoate | 722,109 | Mar. 3 | 832 | 185 | 103 | 179 |
| Railway signaling apparatus | J. A. Norton | 744,599 | Nov. 17 | 3475 | 750 | 107 | 770 |
| Railway signaling apparatus. Pneumatic | E. C. Irving | 747,432 | Dec. 22 | 3913 | 881 | 107 | 2013 |
| Railway signaling device | E. M. Cutting | 726,512 | Apr. 28 | 3899 | 883 | 103 | 2031 |
| Railway signaling device. Electric | H. Pfirmann | 742,487 | Oct. 27 | 4051 | 908, 909, 910 | 106 | 2148 |
| Railway signaling system | A. G. Dahmke | 741,312 | Oct. 13 | 1746 | 389, 390 | 106 | 1635 |
| Railway signaling system | J. Shoecraft | 744,248 | Nov. 17 | 2869 | 615, 616 | 107 | 642 |
| Railway signaling system. Electric | C. W. Mills and W. W. Piddington. | 746,977 | Dec. 15 | 3060 | 702 | 107 | 1804 |
| Railway signaling system. Electric | C. W. Mills and W. W. Piddington. | 747,326 | Dec. 15 | 3726 | 840 | 107 | 1953 |
| Railway signaling. Track instrument for | L. R. Hummel | 738,906 | Sept. 15 | 2714 | 599 | 106 | 614 |
| Railway-spike | J. Pederson | 719,036 | Jan. 27 | 2884 | 646 | 102 | 656 |
| Railway-spike | J. H. Duffy | 727,111 | May 5 | 556 | 119 | 104 | 121 |
| Railway-spike and tie-plate therefor | J. W. Macaulay | 730,139 | June 2 | 1111 | 249 | 104 | 1353 |
| Railway-splice | J. Mabus | 724,903 | Apr. 7 | 898 | 205 | 103 | 1361 |
| Railway splice-bar | I. O. McClaskey | 729,388 | May 26 | 4774 | 1056 | 104 | 1060 |
| Railway splice-bar | W. L. Bauer | 742,956 | Nov. 3 | 239 | 53 | 107 | 51 |
| Railway-splice. Locking | J. Mabus | 724,902 | Apr. 7 | 895 | 205 | 103 | 1361 |
| Railway station-signal | J. L. Wrenn | 743,789 | Nov. 10 | 1947 | 412 | 107 | 432 |
| Railway steam and air pipe coupling or the like. Automatic | G. D. Pettingell | 733,993 | July 21 | 2364 | 555, 556 | 105 | 530 |
| Railway-stop. Automatic | Z. L. Trainham and H. E. Eastman | 739,748 | Sept. 22 | 4245 | 950, 951 | 106 | 959 |
| Railway street-indicator | I. M. Koch | 739,189 | Sept. 15 | 3208 | 709 | 106 | 717 |

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| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Railway structure | S. F. Seely | 746,179 | Dec. 8 | 1591 | 355, 356 | 107 | 1461 |
| Railway structure. Elevated- | C. Zimmerman | 718,237 | Jan. 13 | 1332 | 294, 295 | 102 | 301 |
| Railway structure. Elevated- | G. H. Thomson | 722,773 | Mar. 17 | 2103 | 470 | 103 | 480 |
| Railway substructure | S. E. Duff | 740,106 | Sept. 29 | 4941 | 1109 | 106 | 1123 |
| Railway surfacing and lining device | J. M. Bailey | 738,754 | Sept. 15 | 2430 | 533 | 106 | 552 |
| Railway-switch | J. P. Hasty | 717,991 | Jan. 6 | 889 | 198 | 102 | 191 |
| Railway-switch | P. F. King | 718,636 | Jan. 20 | 2124 | 463 | 102 | 485 |
| Railway-switch | M. S. Pittman | 719,134 | Jan. 27 | 3086 | 686 | 102 | 697 |
| Railway-switch | H. Blanchard | 719,557 | Feb. 3 | 264 | 61 | 102 | 878 |
| Railway-switch | W. Quintal | 720,067 | Feb. 10 | 1203 | 276, 277 | 102 | 1095 |
| Railway-switch | A. Youngblood | 720,090 | Feb. 10 | 1259 | 288, 289 | 102 | 1107 |
| Railway-switch | A. K. Brantner | 721,141 | Feb. 24 | 3254 | 744, 745 | 102 | 1561 |
| Railway-switch | C. E. Nowlin | 725,008 | Apr. 7 | 1094 | 248, 249 | 103 | 1402 |
| Railway-switch | C. F. Granger | 725,956 | Apr. 21 | 2846 | 645, 646 | 103 | 1803 |
| Railway-switch | S. S. Nichol | 725,986 | Apr. 21 | 2896 | 657 | 103 | 1813 |
| Railway-switch | A. H. Vandling | 728,635 | May 19 | 3431 | 761 | 104 | 768 |
| Railway-switch | W. B. Fazakerly | 734,527 | July 28 | 3387 | 790 | 105 | 765 |
| Railway-switch | G. C. Tyus | 735,318 | Aug. 4 | 542 | 110 | 105 | 1096 |
| Railway-switch | J. M. Payne | 735,576 | Aug. 4 | 1045 | 222 | 105 | 1203 |
| Railway-switch | F. W. Aley | 736,911 | Aug. 18 | 3515 | 782 | 105 | 1763 |
| Railway-switch | L. Trebert | 737,045 | Aug. 25 | 3759 | 835 | 105 | 1835 |
| Railway-switch | W. K. Smith | 738,638 | Sept. 8 | 2188 | 478 | 106 | 485 |
| Railway-switch | W. Doll and F. A. Brandstetter | 739,401 | Sept. 22 | 3621 | 807 | 106 | 823 |
| Railway-switch | T. T. Chaloner | 740,232 | Sept. 29 | 5178 | 1164 | 106 | 1172 |
| Railway-switch | A. L. Eddy | 741,896 | Oct. 20 | 2884 | 643 | 106 | 1896 |
| Railway-switch | G. C. Calentine | 744,289 | Nov. 17 | 2957 | 632, 633 | 107 | 661 |
| Railway-switch | M. S. Pittman | 745,237 | Nov. 24 | 4719 | 1031 | 107 | 1049 |
| Railway-switch | J. P. Pulsifer | 746,644 | Dec. 8 | 2419 | 553 | 107 | 1640 |
| Railway-switch | D. Miller | 747,202 | Dec. 15 | 3487 | 791 | 107 | 1901 |
| Railway-switch adjustable bridle-rod | H. A. Lawler and J. P. Kerr | 730,932 | June 16 | 2559 | 570 | 104 | 1696 |
| Railway-switch and operating means therefor | A. J. Backer | 741,571 | Oct. 13 | 2276 | 508 | 106 | 1751 |
| Railway switch and track construction | J. W. Koch | 745,199 | Nov. 24 | 4661 | 1015 | 107 | 1036 |
| Railway-switch. Automatic | W. R. and C. M. Murphy | 718,503 | Jan. 13 | 1863 | 409 | 102 | 417 |
| Railway-switch. Automatic | H. W. and C. R. Summers | 747,501 | Dec. 22 | 4039 | 908 | 107 | 2041 |
| Railway switch. Automatic street- | J. R. Klippelt, H. W. Jeffers, and W. D. Bradford. | 717,689 | Jan. 6 | 298 | 74 | 102 | 64 |
| Railway switch. Electric- | G. W. Linder | 723,690 | Mar. 24 | 3775 | 848 | 103 | 835 |
| Railway-switch. Electrically-controlled | F. T. Kitt | 748,557 | Dec. 29 | 6052 | 1370, 1371 | 107 | 2509 |
| Railway-switch. Electromagnetic | R. A. Baldwin | 736,055 | Aug. 11 | 1954 | 416 | 105 | 1417 |
| Railway-switch heater | F. S. Whipple | 748,448 | Dec. 29 | 5824 | 1327 | 107 | 2457 |
| Railway-switch opening or closing apparatus | J. S. Jones and A. W. McFarland | 742,996 | Nov. 3 | 311 | 70 | 107 | 67 |
| Railway-switch-operating device | C. A. Hendel | 732,552 | June 30 | 5664 | 1257 | 104 | 2367 |
| Railway-switch-operating means | J. O. Dimmick | 741,118 | Oct. 13 | 1354 | 310, 311 | 106 | 1555 |
| Railway-switch-operating mechanism | J. E. Ruby | 728,621 | May 19 | 3410 | 754, 755 | 104 | 764 |
| Railway-switch-operating mechanism | E. Reynolds | 734,367 | July 21 | 3092 | 728 | 105 | 687 |
| Railway-switch-operating mechanism | G. W. Fernside | 741,644 | Oct. 20 | 2410 | 540 | 106 | 1795 |
| Railway-switch-operating mechanism | H. D. Stelle | 742,080 | Oct. 20 | 3320 | 740, 741 | 106 | 1982 |
| Railway-switch protector | L. R. Rogers | 726,990 | May 5 | 330 | 72, 73 | 104 | 72 |
| Railway-switch safety device | E. Renaud | 737,481 | Aug. 25 | 4576 | 1025, 1026 | 105 | 2010 |
| Railway switch-signal | A. J. Park | 738,232 | Sept. 8 | 1361 | 294 | 106 | 309 |
| Railway-switch stand | M. Waters and B. S. Josselyn | 717,956 | Jan. 6 | 818 | 185 | 102 | 175 |
| Railway switch. Street- | G. T. Osborn | 718,510 | Jan. 13 | 1879 | 412 | 102 | 420 |
| Railway switch. Street- | W. J. Bell | 721,000 | Feb. 17 | 2949 | 677 | 102 | 1473 |
| Railway switch. Street- | W. J. Bell | 721,416 | Feb. 24 | 3767 | 856 | 102 | 1665 |
| Railway switch. Street- | J. E. Scott | 732,011 | June 23 | 4599 | 1026 | 104 | 2133 |
| Railway switch. Street- | G. W. Thompson | 739,742 | Sept. 22 | 4238 | 949 | 106 | 957 |
| Railway switch. Street- | W. J. Bell | 741,097 | Oct. 13 | 1310 | 301 | 106 | 1546 |
| Railway switches and signals. Operating and locking device for | B. Lindh | 732,198 | June 30 | 4974 | 1107 | 104 | 2224 |
| Railway switches. Automatic operating mechanism for electric- | G. W. Johnston | 727,147 | May 5 | 627 | 135 | 104 | 135 |
| Railway switches. Device for operating street- | E. Robbins | 731,952 | June 23 | 4468 | 997 | 104 | 2106 |
| Railway switching apparatus | W. F. Bossert | 725,401 | Apr. 14 | 1811 | 406 | 103 | 1568 |
| Railway switching mechanism. Street- | W. J. Bell | 747,847 | Dec. 22 | 4672 | 1056 | 107 | 2185 |
| Railway system. Aerial- | L. A. Gross | 725,838 | Apr. 21 | 2639 | 601 | 103 | 1760 |
| Railway system. Electric- | G. T. Woods | 718,183 | Jan. 13 | 1228 | 271, 272 | 102 | 279 |
| Railway system. Electric- | G. T. Hanchett | 725,250 | Aug. 4 | 414 | 81 | 105 | 1069 |
| Railway system. Electric- | T. Mahoney | 736,752 | Aug. 18 | 3214 | 710 | 105 | 1699 |
| Railway system. Electric- | W. Embley and A. A. Shobe | 744,055 | Nov. 17 | 2496 | 535 | 107 | 561 |
| Railway system. Electric- | A. A. Shobe and W. Embley | 744,246 | Nov. 17 | 2865 | 614, 615 | 107 | 641 |
| Railway system. Electric- | A. A. Shobe and W. Embley | 744,247 | Nov. 17 | 2867 | 615 | 107 | 641 |
| Railway system. Electric- | F. W. Hild | 745,436 | Dec. 1 | 234 | 54 | 107 | 1149 |
| Railway system. Electric- | S. Udstad | 747,277 | Dec. 15 | 3628 | 818 | 107 | 1931 |
| Railway system. Surface-contact | W. B. Potter | 729,411 | May 26 | 4812 | 1067 | 104 | 1067 |
| Railway system. Surface-contact | W. B. Potter | 735,584 | Aug. 4 | 1057 | 225 | 105 | 1205 |
| Railway system. Surface-contact electric- | W. M. Brown | 735,340 | Aug. 4 | 574 | 118 | 105 | 1104 |
| Railway system. Third-rail- | W. E. Wray | 745,708 | Dec. 1 | 712 | 162 | 107 | 1250 |
| Railway system. Third-rail electric- | W. G. Wagenhals | 724,762 | Apr. 7 | 638 | 150 | 103 | 1305 |
| Railway system. Third-rail electric- | G. Bertram | 729,120 | May 26 | 4305 | 951 | 104 | 961 |

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| Invention. | Name. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|---|
| | | | | Spec. | Dr'g. | Vol. | Page. |
| Railway systems. Current-collecting device for electric- | A. A. Shobe and W. Embley | 746,751 | Dec. 15 | 2619 | 601<br>602 | 107 | 1705 |
| Railway-tariff rack | C. W. Cook | 747,945 | Dec. 29 | 4892 | 1108 | 107 | 2253 |
| Railway. Third-rail electric | S. B. Stewart, Jr | 728,324 | May 19 | 2855 | 630 | 104 | 646 |
| Railway third rail. Electric- | L. G. Johnstone | 737,935 | Sept. 1 | 756 | 166 | 106 | 166 |
| Railway third-rail guard. Electric- | J. Martin | 726,721 | Apr. 28 | 4287 | 968 | 103 | 2111 |
| Railway-tie | Z. C. Robbins | 721,745 | Mar. 3 | 162 | 37 | 103 | 36 |
| Railway-tie | F. J. Sibley | 721,919 | Mar. 3 | 507 | 111 | 103 | 112 |
| Railway-tie | F. H. Alfred and P. Chipman | 722,200 | Mar. 10 | 1018 | 224 | 103 | 231 |
| Railway-tie | W. A. Wetmore | 722,473 | Mar. 10 | 1532 | 336 | 103 | 344 |
| Railway-tie | R. A. Huron | 723,674 | Mar. 24 | 3747 | 841 | 103 | 828 |
| Railway-tie | E. McConnell | 725,758 | Apr. 21 | 2492 | 565 | 103 | 1730 |
| Railway-tie | W. C. Kirkland | 726,170 | Apr. 21 | 3196 | 723 | 103 | 1876 |
| Railway-tie | J. S. Miller | 727,403 | May 5 | 1073 | 233 | 104 | 231 |
| Railway-tie | J. T. Shaw | 728,028 | May 12 | 2271 | 504 | 104 | 501 |
| Railway-tie | S. McElfatrick | 730,787 | June 9 | 2280 | 506 | 104 | 1618 |
| Railway-tie | J. Beasley | 732,256 | June 30 | 5094 | 1133 | 104 | 2249 |
| Railway-tie | B. B. Moss | 733,501 | July 14 | 1436 | 337 | 105 | 321 |
| Railway-tie | O. Hughes | 733,843 | July 14 | 2060 | 486 | 105 | 450 |
| Railway-tie | C. C. Shatto | 733,878 | July 14 | 2127 | 501 | 105 | 464 |
| Railway-tie | T. Buchanan | 734,810 | July 28 | 3945 | 920 | 105 | 878 |
| Railway-tie | R. W. Thweatt | 735,174 | Aug. 4 | 251 | 49 | 105 | 1036 |
| Railway-tie | J. Beazley | 735,198 | Aug. 4 | 324 | 62 | 105 | 1050 |
| Railway-tie | G. A. Goth and A. Williams | 738,028 | Sept. 1 | 938 | 208 | 106 | 205 |
| Railway-tie | R. E. Heller | 738,681 | Sept. 8 | 2278 | 501 | 106 | 503 |
| Railway-tie | A. A. Raymond | 738,940 | Sept. 15 | 2772 | 614 | 106 | 627 |
| Railway-tie | O. Gerlach and M. H. Hammond | 742,307 | Oct. 27 | 3749 | 839 | 106 | 2086 |
| Railway-tie | C. M. Kirk | 742,675 | Oct. 27 | 4405 | 994 | 106 | 2224 |
| Railway-tie | A. C. Waterman | 742,936 | Nov. 3 | 204 | 46 | 107 | 45 |
| Railway-tie | J. H. Jennings | 743,084 | Nov. 3 | 512 | 111 | 107 | 107 |
| Railway-tie | W. H. Stults | 745,686 | Dec. 1 | 674 | 155 | 107 | 1242 |
| Railway-tie | A. S. Dreibelbis | 746,304 | Dec. 8 | 1830 | 415 | 107 | 1510 |
| Railway-tie | I. M. Warner | 747,668 | Dec. 22 | 4346 | 981 | 107 | 2110 |
| Railway-tie | H. F. Thompson | 747,804 | Dec. 22 | 4599 | 1037 | 107 | 2168 |
| Railway-tie | J. F. Olin and M. Alexander | 748,304 | Dec. 29 | 5568 | 1270 | 107 | 2400 |
| Railway-tie | G. F. Jencks | 748,381 | Dec. 29 | 5693 | 1299 | 107 | 2428 |
| Railway-tie and antispreading device | F. D. Bline | 746,918 | Dec. 15 | 2938 | 678 | 107 | 1776 |
| Railway tie and means for connecting the rails thereto. Metal | F. H. Smith and J. H. McKee | 731,238 | June 16 | 3135 | 696 | 104 | 1811 |
| Railway-tie and rail-brace. Combined | G. M. Williams | 746,905 | Dec. 15 | 2918 | 674 | 107 | 1772 |
| Railway-tie and rail-fastening | P. H. Quinn | 739,217 | Sept. 15 | 3261 | 723 | 106 | 728 |
| Railway-tie. Cement | G. M. Burbank | 734,506 | July 28 | 3342 | 782 | 105 | 755 |
| Railway-tie. Composite | J. C. Currier | 724,165 | Mar. 31 | 4718 | 1058 | 103 | 1046 |
| Railway-tie-cutting machine | A. W. Barrs | 728,835 | May 26 | 3806 | 848 | 104 | 862 |
| Railway-tie. Metal | H. K. J. Manger | 746,858 | Dec. 15 | 2827 | 652 | 107 | 1751 |
| Railway-tie. Metal and concrete | C. H. Quimby | 748,307 | Dec. 29 | 5572 | 1271 | 107 | 2401 |
| Railway-tie. Metallic | G. F. Stansbury | 719,900 | Feb. 3 | 878 | 206 | 102 | 1009 |
| Railway-tie. Metallic | C. F. Fisher | 721,555 | Feb. 24 | 4011 | 912 | 102 | 1716 |
| Railway-tie. Metallic | G. H. Lyle | 722,373 | Mar. 10 | 1339 | 296 | 103 | 301 |
| Railway-tie. Metallic | S. S. Wood | 723,965 | Mar. 31 | 4316 | 969 | 103 | 957 |
| Railway-tie. Metallic | C. B. Ebert | 725,055 | Apr. 14 | 1179 | 267 | 103 | 1466 |
| Railway-tie. Metallic | C. S. Seitz | 725,373 | Apr. 14 | 1762 | 396 | 103 | 1536 |
| Railway-tie. Metallic | C. S. Seitz | 728,026 | May 12 | 2267 | 504 | 104 | 500 |
| Railway-tie. Metallic | J. H. Van Tassel and J. M. Thornton. | 730,059 | June 2 | 979 | 219 | 104 | 1327 |
| Railway-tie. Metallic | F. U. Haymond | 730,535 | June 9 | 1846 | 412 | 104 | 1524 |
| Railway-tie. Metallic | J. K. Thoma | 735,619 | Aug. 4 | 1121 | 237 | 105 | 1220 |
| Railway-tie. Metallic | C. A. Skibbe | 737,508 | Aug. 25 | 4635 | 1040 | 105 | 2024 |
| Railway-tie. Metallic | D. N. Avey and G. T. Hastings | 739,637 | Sept. 22 | 4050 | 904 | 106 | 915 |
| Railway-tie. Metallic | A. J. Derr | 741,773 | Oct. 20 | 2667 | 593 | 106 | 1849 |
| Railway-tie. Metallic | F. U. Haymond and S. I. Bean | 742,318 | Oct. 27 | 3768 | 844 | 106 | 2089 |
| Railway-tie. Metallic | C. L. Renn | 743,330 | Nov. 3 | 990 | 215 | 107 | 212 |
| Railway-tie. Metallic | R. Black | 744,285 | Nov. 17 | 2949 | 631 | 107 | 659 |
| Railway-tie plate | D. O. Ward | 727,037 | May 5 | 427 | 89, 90 | 104 | 93 |
| Railway-tie rail-fastening | F. Foster | 719,779 | Feb. 3 | 679 | 157 | 102 | 966 |
| Railway-tie. Steel | E. M. Denny and J. S. Maxwell | 718,568 | Jan. 13 | 2004 | 436 | 102 | 445 |
| Railway-tie. Steel | F. L. Teel | 724,412 | Mar. 31 | 5229 | 1171 | 103 | 1151 |
| Railway-tie-tamping machine | E. C. Springer | 727,013 | May 5 | 387 | 81, 82 | 104 | 84 |
| Railway-tie-trimming machine | J. Munroe | 742,715 | Oct. 27 | 4467 | 1010<br>1011 | 106 | 2236 |
| Railway-ties. Apparatus for handling | C. P. Olson, F. J. Angier, and W. C. Lambert. | 746,737 | Dec. 15 | 2589 | 595 | 107 | 1698 |
| Railway-time-table jacket. Rotary | P. S. Butterworth | 735,463 | Aug. 4 | 828 | 176 | 105 | 1156 |
| Railway-track | J. R. McFall | 721,907 | Mar. 3 | 462 | 101 | 103 | 102 |
| Railway-track | W. Goldie | 739,539 | Sept. 22 | 3853 | 863 | 106 | 873 |
| Railway-track | H. F. Miller | 747,460 | Dec. 22 | 3960 | 890 | 107 | 2021 |
| Railway-track connection | W. F. Miller | 734,345 | July 21 | 3051 | 718 | 105 | 679 |
| Railway-track gage | T. L. Howell | 742,660 | Oct. 27 | 4376 | 986 | 106 | 2217 |
| Railway-track joint | J. S. Donohue | 730,522 | June 9 | 1831 | 408 | 104 | 1520 |
| Railway-track joint | O. F. McCully | 730,556 | June 9 | 1879 | 420 | 104 | 1531 |
| Railway-track layer | W. B. Michel | 744,870 | Nov. 24 | 3995 | 861 | 107 | 899 |
| Railway-track-laying apparatus | J. M. C. Howell | 739,874 | Sept. 29 | 4517 | 1015 | 106 | 1032 |
| Railway-track-laying apparatus | J. M. C. Howell | 739,875 | Sept. 29 | 4519 | 1016 | 106 | 1032 |
| Railway-track. Mobile | P. Montsabrè | 725,351 | Apr. 14 | 1726 | 388<br>389 | 103 | 1550 |
| Railway-track rails. Device for preventing the spreading of | C. A. Alkins | 728,186 | May 19 | 2563 | 571 | 104 | 585 |
| Railway-track rails. Method of and apparatus for making continuous lengths of | C. E. Mark | 727,657 | May 12 | 1564 | 354 | 104 | 354 |
| Railway-track sand-guard | J. P. Newell | 731,320 | June 16 | 3291 | 733 | 104 | 1844 |
| Railway-track securer | J. H. Crowley | 717,818 | Jan. 6 | 574 | 129 | 102 | 124 |
| Railway track. Street- | J. Scanlan | 719,512 | Feb. 3 | 174 | 40 | 102 | 860 |
| Railway-track structure | H. B. Nichols | 721,382 | Feb. 24 | 3704 | 843 | 102 | 1653 |
| Railway-track structure | G. M. Ervin | 729,049 | May 26 | 4191 | 927 | 104 | 939 |
| Railway-track structure | G. M. Ervin | 729,050 | May 26 | 4193 | 927 | 104 | 940 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|---|
| | | | | Spec. | Dr'g. | Vol. | Page. |
| Railway-track structure | A. L. George | 729,057 | May 26 | 4205 | 930 | 104 | 942 |
| Railway-track structure | A. L. George | 729,058 | May 26 | 4206 | 930 | 104 | 942 |
| Railway-track structure | A. L. George | 729,059 | May 26 | 4208 | 930 | 104 | 943 |
| Railway-track structure | A. L. George | 729,060 | May 26 | 4209 | 930 | 104 | 943 |
| Railway-track structure | A. L. George | 729,061 | May 26 | 4211 | 931 | 104 | 943 |
| Railway-track structure | J. Hart | 729,067 | May 26 | 4219 | 932 | 104 | 944 |
| Railway-track structure | G. H. Parmelee | 729,089 | May 26 | 4252 | 939 | 104 | 951 |
| Railway-track structure | G. H. Parmelee | 729,090 | May 26 | 4255 | 940 | 104 | 952 |
| Railway-track structure | G. H. Parmelee | 729,091 | May 26 | 4257 | 940 | 104 | 952 |
| Railway-track structures. Templet for use in the manufacture of | N. W. Berkley | 745,767 | Dec. 1 | 811 | 185 | 107 | 1272 |
| Railway-tracks. Instrument for determining the gage level and elevation of | A. H. Glenn | 735,496 | Aug. 4 | 880 | 188 | 105 | 1168 |
| Railway-tracks. Machine for raising, regrading, and ballasting | E. Holbrook | 748,503 | Dec. 29 | 5940 | 1348 | 107 | 2483 |
| Railway. Traction- | W. O. Gunckel | 718,570 | Jan. 13 | 2007 | 437 | 102 | 446 |
| Railway-train arrest | C. Yingling | 740,969 | Oct. 6 | 1073 | 243 | 106 | 1475 |
| Railway-train safety appliance | R. Wittmann | 722,646 | Mar. 10 | 1832 | 408 | 103 | 410 |
| Railway-trains. Safety device for stopping | T. T. Chaloner | 724,807 | Apr. 7 | 730 | 171 | 103 | 1326 |
| Railway transfer apparatus | H. H. Porter, Jr | 734,610 | July 28 | 3531 | 826 | 105 | 796 |
| Railway transfer-table | A. Nelson and F. X. Herrmann | 731,806 | June 23 | 4212 | 939 | 104 | 2051 |
| Railway-vehicle | G. Gibbs | 739,074 | Sept. 15 | 3000 | 664, 665 | 106 | 674 |
| Railway-vehicle brake. Automatic | E. L. Cridge | 740,246 | Sept. 29 | 5201 | 1169 | 106 | 1177 |
| Railway-vehicle coupling apparatus | G. B. Orton | 721,735 | Mar. 3 | 144 | 33 | 103 | 32 |
| Railway-vehicle coupling. Automatic | B. April | 725,649 | Apr. 21 | 2308 | 521 | 103 | 1688 |
| Railway-vehicle lighting apparatus | B. G. Lamme | 731,466 | June 23 | 3585 | 798 | 104 | 1923 |
| Railway-vehicles in case of derailment. Safety device for | F. Gehricke and F. Bollmann | 735,239 | Aug. 4 | 395 | 77 | 105 | 1065 |
| Railway vehicles or trains. Controlling system for | G. Gibbs | 724,690 | Apr. 7 | 507 | 121 | 103 | 1277 |
| Railway vehicles or trains. Controlling system for | J. L. Crouse | 735,714 | Aug. 11 | 1305 | 281 | 105 | 1276 |
| Railway vehicles or trains. Multiple-control system for | L. M. Aspinwall | 740,074 | Sept. 29 | 4885 | 1095 | 106 | 1111 |
| Railway-vehicles. Reversing apparatus for use on | J. Graber | 736,382 | Aug. 18 | 2502 | 550 | 105 | 1552 |
| Railway-wagon | M. Hoogstraeten | 738,360 | Sept. 8 | 1661 | 360 | 106 | 374 |
| Railway-wagon coupling | C. Gebers | 723,265 | Mar. 24 | 2998 | 674 | 103 | 678 |
| Railway-wagon. Self-discharging | J. T. Jepson | 726,690 | Apr. 28 | 4229 | 956, 957 | 103 | 2099 |
| Railway wagon. Single-rail- | A. Lehmann | 737,748 | Sept. 1 | 355 | 75, 76 | 106 | 80 |
| Railway-wagons, &c. Construction of underframes for | P. Grant | 726,049 | Apr. 21 | 2993 | 680 | 103 | 1834 |
| Railway-wagons, &c. Coupling for | R. F. C. Rambeaud | 726,825 | Apr. 28 | 4490 | 1012, 1013 | 103 | 2152 |
| Railway water-column | A. K. Mansfield | 719,483 | Feb. 3 | 131 | 30 | 102 | 852 |
| Railways. Apparatus for removing ice from track or conductor rails of | P. B. Delany | 747,596 | Dec. 22 | 4200 | 945 | 107 | 2077 |
| Railways. Automatic signal for electric | C. B. Campbell | 739,057 | Sept. 15 | 2969 | 657, 658 | 106 | 668 |
| Railways. Combined signaling and telephonic intercommunicating system for | J. A. Whyte and G. C. Edwards | 744,655 | Nov. 17 | 3570 | 769 | 107 | 790 |
| Railways. Conductor, conduit, and collector for electricity on | R. C. Sayer | 718,220 | Jan. 13 | 1301 | 287, 288 | 102 | 294 |
| Railways. Contact-shoe for electric | W. D. Young | 738,649 | Sept. 8 | 2209 | 483 | 106 | 490 |
| Railways. Electric signal system for | J. W. Williams | 718,233 | Jan. 13 | 1325 | 293 | 102 | 300 |
| Railways. Electric signaling system for | J. N. Baskett | 741,952 | Oct. 20 | 3011 | 668, 669 | 106 | 1922 |
| Railways. Electromagnetic switch for electric | S. B. Stewart, Jr. | 735,170 | Aug. 4 | 241 | 48 | 105 | 1034 |
| Railways. Means for operating the points of overhead wires on electric | H. and C. W. Collins | 723,441 | Mar. 24 | 3329 | 746 | 103 | 743 |
| Railways. Mechanism for cutting, crushing, and dislodging ice or sleet on the third rail of electric | H. Klein | 726,225 | Apr. 21 | 3307 | 750 | 103 | 1899 |
| Railways. Mechanism for removing ice and snow from the conducting or third rail of electric | F. V. Winters | 720,208 | Feb. 10 | 1465 | 334 | 102 | 1149 |
| Railways. Nozzle appliance for cleaning | F. A. Jones | 733,653 | July 14 | 1703 | 403 | 105 | 376 |
| Railways or other rolling machinery. Device for decreasing the noise upon | G. W. Stevens | 734,200 | July 21 | 2770 | 650 | 105 | 618 |
| Railways or tramways. Permanent way of | A. Ambert | 728,652 | May 19 | 3468 | 769 | 104 | 776 |
| Railways. Plow-raising means for conduit- | A. N. Connett | 729,137 | May 26 | 4332 | 957 | 104 | 967 |
| Railways. Switch especially adapted for third rails for electric | W. A. P. Willard, Jr | 730,810 | June 9 | 2316 | 514, 515 | 104 | 1625 |
| Railways. System of electrical signaling for | C. Barber | 734,655 | July 28 | 3612 | 846 | 105 | 812 |
| Railways. Third-rail support for underrunning third-rail electric | L. Wheeler and J. T. Murphy | 726,599 | Apr. 28 | 4070 | 919 | 103 | 2066 |
| Railways. Underground-conduit system for electric | A. H. Angle | 745,033 | Nov. 24 | 4308 | 931 | 107 | 964 |
| Railing-post anchor | W. Hammann | 723,669 | Mar. 24 | 3740 | 839 | 103 | 827 |
| Raisin-seeding machine | J. B. Crosby | 729,551 | June 2 | 55 | 13, 14 | 104 | 1138 |
| Rake: *See* Hay-rake. Reaper reel-rake. Lawn-rake. Revolving rake. | | | | | | | |
| Rake | K. Reis | 736,878 | Aug. 18 | 3459 | 767 | 105 | 1751 |
| Rake-adjusting mechanism | R. B. Macphail | 741,152 | Oct. 13 | 1414 | 323, 324 | 106 | 1567 |
| Rake and hoe. Combined | A. C. Miller | 734,078 | July 21 | 2543 | 593 | 105 | 572 |
| Rake attachment | E. L. Wick | 729,468 | May 26 | 4907 | 1087 | 104 | 1089 |
| Rake-tooth-testing machine | J. W. Pridmore and G. G. Barker | 717,761 | Jan. 6 | 453 | 105, 106 | 102 | 98 |
| Rakes. Manufacturing | W. R. Jenkins | 741,671 | Oct. 20 | 2457 | 550 | 106 | 1805 |
| Ram for hydraulic jacks | H. J. Riedel | 744,616 | Nov. 17 | 3509 | 757 | 107 | 777 |
| Ram. Hydraulic | P. W. and E. H. Foster | 724,001 | Mar. 31 | 4400 | 989 | 103 | 982 |
| Ram. Hydraulic | H. Culpan | 731,285 | June 16 | 3227 | 718 | 104 | 1830 |
| Ram. Hydraulic | S. S. Smith | 748,113 | Dec. 29 | 5234 | 1188 | 107 | 2329 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Ram. Portable pneumatic | J. B. Barnes | 732,696 | July 7 | 8 | 3 | 105 | 4 |
| Range | R. L. Seeds | 737,785 | Sept. 1 | 423 | 91 | 106 | 93 |
| Range | J. F. Ruth and E. Preisler | 743,933 | Nov. 10 | 2202 | 475, 476 | 107 | 485 |
| Range. Coal and gas | H. Chevola | 721,423 | Feb. 24 | 3783 | 860, 861, 862 | 102 | 1669 |
| Range furnace, &c. Cooking- | J. J. Cartwright | 727,287 | May 5 | 866 | 186 | 104 | 186 |
| Range. Gas- | G. A. Simpson | 722,414 | Mar. 10 | 1409 | 311 | 103 | 316 |
| Ranges, stoves, or furnaces. Hot blast for | J. B. Ehrlich | 719,767 | Feb. 3 | 655 | 150, 151 | 102 | 961 |
| Range-finder | A. Kennedy | 719,011 | Jan. 27 | 2829 | 634 | 102 | 645 |
| Range-finder | G. Griffith | 735,497 | Aug. 4 | 881 | 188 | 105 | 1169 |
| Range-finder | J. W. Kern | 742,038 | Oct. 20 | 3192 | 713, 714 | 106 | 1957 |
| Range-finder attachment | R. J. Sheehy | 720,076 | Feb. 10 | 1221 | 280, 281 | 102 | 1099 |
| Range-finder. Depression | A. Swasey | 737,794 | Sept. 1 | 443 | 95 | 106 | 98 |
| Range-finder. Electrical | H. Shoemaker | 736,557 | Aug. 18 | 2829 | 619, 620 | 105 | 1622 |
| Range-finder or telemeter | A. Barr and W. Stroud | 739,475 | Sept. 22 | 3752 | 837, 838 | 106 | 852 |
| Range-finding device | F. E. Molkow | 732,878 | July 7 | 326 | 81 | 105 | 72 |
| Range and azimuth finder and predictor. Continuous-reading | J. F. Meigs and E. Gathmann | 735,547 | Aug. 4 | 992 | 210, 211 | 105 | 1191 |
| Rasp | J. H. Rohret | 735,825 | Aug. 11 | 1515 | 324 | 105 | 1322 |
| Ratan-splitting machine | C. W. Gay | 723,859 | Mar. 31 | 4096 | 924 | 103 | 919 |
| Ratchet and drill brace. Combined | F. J. Cleaver | 747,940 | Dec. 29 | 4887 | 1106 | 107 | 2253 |
| Ratchet cylinder-wrench. Roller- | W. H. George | 728,900 | May 26 | 3920 | 870 | 104 | 884 |
| Ratchet-wrench | J. W. Muskett | 720,373 | Feb. 10 | 1782 | 404 | 102 | 1216 |
| Ratchet-wrench | M. J. West | 721,265 | Feb. 24 | 3504 | 796 | 102 | 1611 |
| Ratchet-wrench | A. P. Kershner | 722,450 | Mar. 10 | 1484 | 328 | 103 | 332 |
| Ratchet-wrench | C. B. Gracey | 722,695 | Mar. 17 | 1967 | 439 | 103 | 453 |
| Ratchet-wrench | A. Donavan | 732,055 | June 30 | 4683 | 1046 | 104 | 2164 |
| Ratchet-wrench | A. R. McLean | 735,134 | Aug. 4 | 176 | 37 | 105 | 1019 |
| Ratchet-wrench | D. L. Winters | 736,047 | Aug. 11 | 1928 | 411 | 105 | 1412 |
| Ratchet-wrench | P. Harding | 742,638 | Oct. 27 | 4339 | 976 | 106 | 2209 |
| Ratchet-wrench | J. E. Sinclair | 743,942 | Nov. 10 | 2216 | 478 | 107 | 488 |
| Ratchet-wrench | J. W. Muskett and C. Flint | 745,886 | Dec. 1 | 1061 | 239 | 107 | 1325 |
| Ratchet-wrench | G. Hansen | 747,419 | Dec. 22 | 3891 | 876 | 107 | 2008 |
| Ratchet-wrench | W. W. Murch | 747,750 | Dec. 22 | 4482 | 1012 | 107 | 2141 |
| Ratchet-wrench. Reversible | L. C. Snyder | 745,397 | Dec. 1 | 158 | 36 | 107 | 1134 |
| Ratchet-wrench. Revolving | J. C. Carlhime | 719,645 | Feb. 3 | 418 | 95 | 102 | 909 |
| Rattle | L. J. Bailey | 727,258 | May 5 | 810 | 174 | 104 | 174 |
| Razor | H. Drösse | 719,313 | Jan. 27 | 3405 | 759 | 102 | 766 |
| Razor | H. H. Mintzer | 729,378 | May 26 | 4759 | 1052 | 104 | 1057 |
| Razor and guard | J. H. Hilton | 742,650 | Oct. 27 | 4360 | 980 | 106 | 2214 |
| Razor frame. Safety- | A. W. Scheuber | 739,029 | Sept. 15 | 2909 | 646 | 106 | 656 |
| Razor-guard | J. J. Meehan | 736,859 | Aug. 18 | 3430 | 759 | 105 | 1745 |
| Razor-guard. Safety | A. A. Lux | 742,692 | Oct. 27 | 4434 | 1001 | 106 | 2230 |
| Razor guard. Safety- | C. H. Hill, Jr | 747,069 | Dec. 15 | 3240 | 738 | 107 | 1848 |
| Razor-handle | E. A. Langdon | 746,348 | Dec. 8 | 1905 | 435 | 107 | 1525 |
| Razor. Safety- | G. W. Korn | 720,360 | Feb. 10 | 1761 | 399 | 102 | 1212 |
| Razor. Safety- | H. Wilcox | 731,090 | June 16 | 2862 | 636 | 104 | 1759 |
| Razor. Safety- | F., R., and O. Kampfe | 733,399 | July 14 | 1264 | 300 | 105 | 284 |
| Razor. Safety- | F., R., and O. Kampfe | 733,400 | July 14 | 1266 | 300 | 105 | 284 |
| Razor. Safety- | J. Guinan | 740,555 | Oct. 6 | 325 | 68 | 106 | 1314 |
| Razor safety attachment | J. Guinan | 740,556 | Oct. 6 | 327 | 68 | 106 | 1314 |
| Razor-sterilizing device | F. E. King | 747,554 | Dec. 22 | 4131 | 927 | 107 | 2062 |
| Razor-strop | E. Tennis | 718,172 | Jan. 13 | 1210 | 268 | 102 | 275 |
| Razor-strop | G. C. Blasdell | 731,402 | June 16 | 3444 | 769 | 104 | 1875 |
| Razor-strop | E. Straub | 734,771 | July 28 | 3852 | 898 | 105 | 859 |
| Razor-strop | G. W. Korn | 735,780 | Aug. 11 | 1416 | 304 | 105 | 1300 |
| Razor-strop | W. H. Doss | 739,534 | Sept. 22 | 3847 | 861 | 106 | 872 |
| Razor-strop | R. B. Jackson and J. Sharp, Jr | 746,334 | Dec. 8 | 1879 | 428 | 107 | 1520 |
| Razor-strop hanger | F. H. Anderson | 721,654 | Mar. 3 | 4 | 1 | 103 | 3 |
| Razor-strop holder | T. G. Riordan | 739,928 | Sept. 29 | 4618 | 1036 | 106 | 1054 |
| Razor-strop-surfacing device | H. J. J. Schanzlin | 735,156 | Aug. 4 | 215 | 43 | 105 | 1028 |
| Razor-strop swivel | J. H. Keating | 726,309 | Apr. 28 | 3500 | 792 | 103 | 1953 |
| Razor-strops. Preparing | G. W. McFarland | 722,129 | Mar. 3 | 863 | ------ | 103 | 185 |
| Razor-stropping device | F., R., and O. Kampfe | 725,449 | Apr. 14 | 1911 | 428 | 103 | 1589 |
| Razor-stropping device | J. A. Butler | 744,479 | Nov. 17 | 3297 | 708 | 107 | 734 |
| Razor-stropping machine | F., R., and O. Kampfe. (Reissue) | 12,164 | Oct. 27 | 4647 | 1052 | 106 | 2277 |
| Razor-wiper. Antiseptic | R. B. Dakin | 718,822 | Jan. 20 | 2468 | 548 | 102 | 553 |
| Reach and short-turning gear. Interchangeable | F. C. Kerby | 736,738 | Aug. 18 | 3192 | 706 | 105 | 1694 |
| Reamer | J. W. Sweeting | 719,902 | Feb. 3 | 880 | 207 | 102 | 1010 |
| Reamer | J. Shaw | 725,374 | Apr. 14 | 1764 | 396 | 103 | 1558 |
| Reamer | F. P. Souder | 745,399 | Dec. 1 | 160 | 37 | 107 | 1134 |
| Reamer | J. Ross | 747,330 | Dec. 15 | 3735 | 842 | 107 | 1956 |
| Reamer | F. G. Echols | 747,907 | Dec. 22 | 4795 | 1084 | 107 | 2211 |
| Reaper or mower attachment | J. F. Sickenberger | 728,629 | May 19 | 3422 | 759 | 104 | 767 |
| Reaper or mower rake attachment | G. Hauenstein | 731,897 | June 23 | 4368 | 974 | 104 | 2085 |
| Reaper reel-rake | C. A. A. Rand | 741,715 | Oct. 20 | 2564 | 570, 571 | 106 | 1827 |
| Reaping and mowing machine | P. W. Kenny | 723,393 | Mar. 24 | 3253 | 729 | 103 | 727 |
| Reaping, mowing, or binding machine finger | R. Cresswell | 731,344 | June 16 | 3326 | 742 | 104 | 1851 |
| Recapping device | W. T. Alsop | 735,047 | Aug. 4 | 1 | 1 | 105 | 981 |
| Receiver | F. E. Peters | 748,306 | Dec. 29 | 5570 | 1271 | 107 | 2401 |
| Receptacle | C. O. Harker | 736,387 | Aug. 18 | 3513 | 552 | 105 | 1555 |
| Receptacle and packing-ring therefor | J. L. Mason | 726,321 | Apr. 28 | 3518 | 797 | 103 | 1957 |
| Receptacle-base. Cushioned | F. and H. F. Keil | 735,883 | Aug. 11 | 1626 | 347 | 105 | 1347 |
| Receptacle-closure | J. A. Landsberger | 731,793 | June 23 | 4185 | 933 | 104 | 2044 |
| Receptacle-closure | J. H. Rivers | 734,753 | July 28 | 3819 | 890 | 105 | 852 |
| Receptacle-closure | J. H. Rivers | 737,147 | Aug. 25 | 3929 | 873 | 105 | 1869 |
| Receptacle-closure | J. E. Gavin | 746,491 | Dec. 8 | 2143 | 493 | 107 | 1577 |

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| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Receptacle. Flexible | J. C. O'Shea | 744,391 | Nov. 17 | 3135 | 673 | 107 | 700 |
| Receptacle. Folded | J. C. O'Shea | 739,022 | Sept. 15 | 2901 | 644 | 106 | 654 |
| Receptacle for apparel, &c | W. Wittigschlager | 747,287 | Dec. 15 | 3653 | 826 | 107 | 1938 |
| Receptacle for corned beef, &c | W. G. Bell | 736,349 | Aug. 18 | 2453 | 536 | 105 | 1542 |
| Receptacle for liquid or semiliquid substances | J. Hinkel | 718,625 | Jan. 20 | 2107 | 458 | 102 | 482 |
| Receptacle. Non-refillable | H. W. Avery | 721,494 | Feb. 24 | 3908 | 889 | 102 | 1694 |
| Receptacle. Non-refillable | H. W. Avery | 745,988 | Dec. 8 | 1243 | 280 | 107 | 1383 |
| Receptacle or drawer. Sliding | J. C. Gaither | 742,854 | Nov. 3 | 64 | 15,16 | 107 | 16 |
| Receptacle-stopper | C. A. Tatum | 731,523 | June 23 | 3684 | 822 | 104 | 1944 |
| Receptacle. Transportation or storage | R. C. Andersen | 731,150 | June 16 | 2981 | 662 | 104 | 1782 |
| Receptacles. Insertible closure for liquid- | G. H. Klemm | 732,565 | June 30 | 5696 | 1265 | 104 | 2375 |
| Reciprocating-piston engine | F. W. Brady | 737,201 | Aug. 25 | 4039 | 895, 896 | 105 | 1894 |
| Reclining-chair | J. H. Travis | 717,949 | Jan. 6 | 806 | 182 | 102 | 172 |
| Reclining-chair | O. J. Mattax | 728,264 | May 19 | 2763 | 607 | 104 | 618 |
| Reclining-chair | F. C. Hodges | 731,456 | June 23 | 3566 | 795 | 104 | 1919 |
| Reclining-chair | W. A. Wylie | 740,966 | Oct. 6 | 1067 | 242, 243 | 106 | 1474 |
| Reclining-chair | W. A. Wylie | 740,967 | Oct. 6 | 1069 | 243 | 106 | 1475 |
| Reclining-chair | W. A. Wylie | 740,968 | Oct. 6 | 1071 | 243 | 106 | 1475 |
| Reclining-chair | E. H. Fisher | 741,121 | Oct. 13 | 1360 | 312 | 106 | 1556 |
| Recoil-check. Fluid | A. T. Dawson and G. T. Buckham | 732,676 | June 30 | 5895 | 1308 | 104 | 2418 |
| Record card. Complete school- | F. D. Boynton | 742,827 | Nov. 3 | 20 | 4 | 107 | 7 |
| Record-indicating device | W. L. Trill | 724,525 | Apr. 7 | 197 | 48 | 103 | 1211 |
| Record keeper. Family- | R. A. Flanagan | 742,979 | Nov. 3 | 279 | 62 | 107 | 61 |
| Recorder: *See* Autographic duplicate recorder. Check-system recorder. Ship's-course recorder. Ship's distance and course recorder. Signal-recorder. Sound-recorder. Speed-recorder. Time-recorder. Time, speed, and distance recorder. | | | | | | | |
| Recording apparatus | P. V. Markell | 720,829 | Feb. 17 | 2616 | 604 | 102 | 1403 |
| Recording-board | A. E. Huguley | 735,102 | Aug. 4 | 102 | 23 | 105 | 1005 |
| Recording device | J. O. Deckert, C. H. Mann, and H. A. Prizer. | 724,167 | Mar. 31 | 4722 | 1059 | 103 | 1047 |
| Recording device | J. A. Cole | 736,583 | Aug. 18 | 2877 | 629 | 105 | 1631 |
| Recording instrument | C. C. Jones | 718,000 | Jan. 6 | 909 | 204 | 102 | 195 |
| Recording-lock | A. De Vilbiss, Jr | 735,034 | July 28 | 4328 | 1006 | 105 | 958 |
| Recording speech. Apparatus for electromagnetically | W. A. Rosenbaum | 720,621 | Feb. 17 | 2274 | 522 | 102 | 1330 |
| Recording system. Electric | J. C. Huss and G. W. Schilling | 726,301 | Apr. 28 | 3470 | 787 | 103 | 1947 |
| Recreation device | J. Wilson | 728,062 | May 12 | 2337 | 520 | 104 | 515 |
| Recreation device | J. Wilson | 743,968 | Nov. 10 | 2266 | 487, 488 | 107 | 501 |
| Rectifier | E. Thomson | 723,076 | Mar. 17 | 2637 | 594, 595 | 103 | 591 |
| Rectifier | W. Stanley | 728,812 | May 19 | 3754 | 838 | 104 | 835 |
| Red azo lake | R. Gley and O. Siebert | 741,029 | Oct. 13 | 1183 | ..... | 106 | 1519 |
| Reducing-furnace | W. W. Fyfe | 742,018 | Oct. 20 | 3153 | 704 | 106 | 1949 |
| Reel: *See* Bolting-reel. Clothes-reel. Clothes-line reel. Drying-reel. Fish-line reel. Fishing-reel. Fishing-rod reel. Harvester-reel. Silk-reel. Spring-reel. Warping-reel. Wire-pay-out reel. | | | | | | | |
| Reel | H. B. Carlton | 742,587 | Oct. 27 | 4246 | 956 | 106 | 2188 |
| Reel-holder | W. McDougall | 721,460 | Feb. 24 | 3845 | 875 | 102 | 1682 |
| Reeling-machine | G. Sipp | 723,624 | Mar. 24 | 3669 | 822, 823 | 103 | 811 |
| Refining-engine | S. R. Wagg | 718,060 | Jan. 6 | 1006 | 224 | 102 | 217 |
| Refining-engine | S. R. Wagg | 718,061 | Jan. 6 | 1007 | 225 | 102 | 217 |
| Refining-engine | S. R. Wagg | 722,060 | Mar. 3 | 746 | 167 | 103 | 161 |
| Refining-engine | S. R. Wagg | 726,790 | Apr. 28 | 4421 | 996 | 103 | 2138 |
| Refining-engine | G. A. Clark and H. R. Farnsworth | 734,669 | July 28 | 3639 | 852 | 105 | 818 |
| Reflecting-panel | F. L. O. Wadsworth | 737,178 | Aug. 25 | 4001 | 887 | 105 | 1885 |
| Reflecting structure | F. L. O. Wadsworth | 721,257 | Feb. 24 | 3493 | 794 | 102 | 1608 |
| Reflector | R. Fyfe | 730,361 | June 9 | 1523 | 338 | 104 | 1455 |
| Reflector | G. F. Spencer | 740,196 | Sept. 29 | 5103 | 1146, 1147 | 106 | 1156 |
| Reflector | D. J. O'Brien | 744,387 | Nov. 17 | 3128 | 672 | 107 | 699 |
| Reflector for head, search, or other lights | H. H. Taylor | 731,084 | June 16 | 2849 | 632, 633 | 104 | 1755 |
| Reflector. Lamp- | J. R. Flagg | 719,576 | Feb. 3 | 302 | 70 | 102 | 886 |
| Reflector. Show-case | M. Taussig and P. A. Conne | 723,943 | Mar. 31 | 4276 | 960 | 103 | 959 |
| Reflectors. Adjustable means for mounting | J. Kirby, Jr | 721,648 | Feb. 24 | 4218 | 959 | 102 | 1764 |
| Refractometer | W. L. Burnam | 735,460 | Aug. 4 | 821 | 175, 176 | 105 | 1155 |
| Refractory article of manufacture | S. L. Mershon | 730,834 | June 9 | 2360 | ..... | 104 | 1635 |
| Refractory material | E. G. Acheson | 722,793 | Mar. 17 | 2145 | ..... | 103 | 488 |
| Refractory material. Manufacture of | A. G. Salamon and P. Williams | 735,594 | Aug. 4 | 1073 | ..... | 105 | 1209 |
| Refrigerating and purifying apparatus | C. W. Vollmann | 741,855 | Oct. 20 | 2805 | 624 | 106 | 1880 |
| Refrigerating apparatus | R. Coppola | 718,606 | Jan. 20 | 2078 | 452 | 102 | 477 |
| Refrigerating apparatus | A. J. Chase | 719,086 | Jan. 27 | 2987 | 666 | 102 | 677 |
| Refrigerating apparatus | C. J. Coleman | 726,216 | Apr. 21 | 3289 | 746 | 103 | 1895 |
| Refrigerating apparatus | E. W. Millburn | 731,802 | June 23 | 4207 | 938 | 104 | 2050 |
| Refrigerating apparatus | W. W. Harris | 738,107 | Sept. 1 | 1089 | 241, 242 | 106 | 235 |
| Refrigerating apparatus | J. F. Place | 741,591 | Oct. 13 | 2311 | 517, 518 | 106 | 1758 |
| Refrigerating-apparatus generator | N. W. Condict | 747,943 | Dec. 29 | 4890 | 1107 | 107 | 2253 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Refrigerating apparatus. Means for determining the quantity of liquid in | J. Smaill | 744,121 | Nov. 17 | 2618 | 559 | 107 | 587 |
| Refrigerating apparatus. Pressure and temperature regulator for the absorbers and return-lines of | J. E. Starr | 742,253 | Oct. 27 | 3649 | 815 | 106 | 2066 |
| Refrigerating apparatus. Still for absorption | N. W. Condict. (Reissue) | 12,089 | Mar. 3 | 1001 | 221 | 103 | 211 |
| Refrigerating-machine | J. C. Goosmann | 719,460 | Feb. 3 | 85 | 21 | 102 | 843 |
| Refrigerating-machine oil-separator | G. T. Voorhees | 730,496 | June 9 | 1780 | 399 | 104 | 1509 |
| Refrigerating-machines. Air or gas pump for | F. N. Mackay | 746,856 | Dec. 15 | 2820 | 651<br>652 | 107 | 1750 |
| Refrigerating-machines. Device for preventing vapor from passing the expansion-valves of | G. T. Voorhees | 731,824 | June 23 | 4244 | 945 | 104 | 2058 |
| Refrigerating means | A. F. George and F. Rademacher | 728,702 | May 19 | 3549 | 789 | 104 | 793 |
| Refrigerating or like machines. Absorber for ammonia-absorption | A. Osenbrück | 729,398 | May 26 | 4792 | 1061 | 104 | 1063 |
| Refrigeration system | C. J. Coleman | 726,217 | Apr. 21 | 3291 | 747 | 103 | 1895 |
| Refrigeration system | C. J. Coleman | 726,218 | Apr. 21 | 3293 | 747 | 103 | 1896 |
| Refrigeration system | C. J. Coleman | 746,792 | Dec. 15 | 2693 | 621 | 107 | 1721 |
| Refrigeration system. Mechanical car- | W. H. Miller | 742,796 | Oct. 27 | 4598 | 1042<br>1043 | 106 | 2266 |
| Refrigerator | W. A. Hulin | 718,628 | Jan. 20 | 2110 | 459 | 102 | 482 |
| Refrigerator | S. Jones | 718,712 | Jan. 20 | 2274 | 499<br>500 | 102 | 514 |
| Refrigerator | H. Inman | 718,767 | Jan. 20 | 2383 | 528 | 102 | 537 |
| Refrigerator | L. R. Blackmore | 723,979 | Mar. 31 | 4344 | 975<br>976 | 103 | 972 |
| Refrigerator | J. M. McCool | 724,319 | Mar. 31 | 5027 | 1126<br>1127 | 103 | 1108 |
| Refrigerator | C. G. Schmidt and J. A. F. Heine | 726,995 | May 5 | 345 | 75 | 104 | 74 |
| Refrigerator | H. J. Shannen | 727,215 | May 5 | 745 | 159 | 104 | 160 |
| Refrigerator | J. Rossi | 728,017 | May 12 | 2255 | 502 | 104 | 497 |
| Refrigerator | M. Bensinger. (Reissue) | 12,127 | June 30 | 5924 | 1314 | 104 | 2424 |
| Refrigerator | R. R. Graf | 733,186 | July 7 | 859 | 208<br>209 | 105 | 180 |
| Refrigerator | C. L. Siebert | 737,506 | Aug. 25 | 4632 | 1039 | 105 | 2023 |
| Refrigerator | A. D. Fritts | 741,784 | Oct. 20 | 2691 | 600 | 106 | 1854 |
| Refrigerator | B. Parish | 743,323 | Nov. 3 | 976 | 212 | 107 | 209 |
| Refrigerator | M. R. Perotti | 746,739 | Dec. 15 | 2595 | 596 | 107 | 1699 |
| Refrigerator-alarm | C. Kleifgen | 736,112 | Aug. 11 | 2044 | 435 | 105 | 1436 |
| Refrigerator-alarm | T. Varin and D. M. Buyers | 745,537 | Dec. 1 | 414 | 95 | 107 | 1187 |
| Refrigerator-building | J. Wills | 742,540 | Oct. 27 | 4170 | 937<br>938 | 106 | 2172 |
| Refrigerator-car | G. C. Perkins | 718,874 | Jan. 20 | 2575 | 574 | 102 | 577 |
| Refrigerator-car | H. F. Stanley | 732,597 | June 30 | 5746 | 1275 | 104 | 2386 |
| Refrigerator-car | C. Zimmerman | 734,649 | July 28 | 3604 | 843 | 105 | 810 |
| Refrigerator-car condensing-coils. Movable casing for | J. L. Morris | 727,180 | May 5 | 679 | 146 | 104 | 147 |
| Refrigerator-car ventilator | W. E. Sharp | 725,994 | Apr. 21 | 2910 | 660<br>661 | 103 | 1817 |
| Refrigerator. Counter- | A. Jensen and W. Reissner | 732,945 | July 7 | 438 | 108<br>109 | 105 | 95 |
| Refrigerator-door | A. L. Shanklin and J. G. Hausam | 725,783 | Apr. 21 | 2543 | 577 | 103 | 1740 |
| Refrigerator-drawer | A. L. Shanklin and J. G. Hausam | 736,449 | Aug. 18 | 2626 | 576 | 105 | 1578 |
| Refrigerator drip-catching device | A. Bernier | 745,768 | Dec. 1 | 814 | 185 | 107 | 1272 |
| Refrigerator drip-pan attachment | A. Bessette | 740,516 | Oct. 6 | 261 | 52 | 106 | 1302 |
| Refrigerator drip-pan. Removable | R. and G. Frey | 719,104 | Jan. 27 | 3034 | 675 | 102 | 687 |
| Refrigerator for bottled goods | E. F. Osborne | 735,403 | Aug. 4 | 690 | 148 | 105 | 1128 |
| Refrigerator or cold-storage room | E. J. Wirfs | 734,248 | July 21 | 2860 | 670 | 105 | 639 |
| Refrigerator or cold-storage room | E. J. Wirfs | 738,510 | Sept. 8 | 1952 | 426 | 106 | 434 |
| Refrigerators, &c. Lining for | P. Schreck | 742,072 | Oct. 20 | 3306 | 736 | 106 | 1979 |
| Refuse. Apparatus for treating and utilizing town | W. P. Wrightson | 722,195 | Mar. 3 | 993 | 220 | 103 | 210 |
| Refuse-burner | D. B. Donnelly | 722,289 | Mar. 10 | 1184 | 262 | 103 | 267 |
| Refuse-destroying apparatus | G. Watson | 746,421 | Dec. 8 | 2027 | 464<br>465 | 107 | 1551 |
| Regenerative apparatus | J. A. Herrick | 732,939 | July 7 | 430 | 106<br>107 | 105 | 93 |
| Regenerative furnace | J. A. Durfee | 730,620 | June 9 | 1998 | 444 | 104 | 1558 |
| Regenerator-furnace | G. Campion and M. Wyant | 725,539 | Apr. 14 | 2083 | 471 | 103 | 1626 |
| Register:<br>*See* Account-register. Fare-register. Adding-register. Gas-meter register. Autographic register. Hot-air register. Hotel-register. Ball-register. Manifolding-register. Bookkeeping-register. Overweight-register. Pool-table register. Cash-register. Telephone-call register. Check-register. Telephone toll-register. Comparative register. Time-register. | | | | | | | |
| Register | I. S. Dement | 718,195 | Jan. 13 | 1255 | 275 | 102 | 286 |
| Register | P. S. Stauffer | 721,106 | Feb. 17 | 3151 | 724 | 102 | 1520 |
| Register | J. L. Giles | 727,782 | May 12 | 1828 | 408 | 104 | 408 |
| Register | A. R. Beal | 728,836 | May 26 | 3808 | 849 | 104 | 862 |
| Register | H. E. Goldberg | 741,126 | Oct. 13 | 1369 | 314 | 106 | 1558 |
| Register | C. Wamsley | 748,324 | Dec. 29 | 5594 | 1275 | 107 | 2406 |
| Register-fastener | E. H. Arend | 723,433 | Mar. 24 | 3316 | 743 | 103 | 740 |
| Registers. Means for holding and centering the rolls of paper contained in autographic | E. J. Barker | 733,934 | July 21 | 2236 | 526 | 105 | 504 |
| Registering apparatus | H. Bean | 719,423 | Feb. 3 | 23 | 5 | 102 | 831 |
| Registering apparatus | A. Pollak | 738,480 | Sept. 8 | 1891 | 413<br>414 | 106 | 421 |
| Registering-machine | J. Heissenberger | 738,441 | Sept. 8 | 1810 | 393 | 106 | 404 |
| Registering mechanism | W. L. Dixon | 718,104 | Jan. 13 | 1097 | 242 | 102 | 251 |
| Registering mechanism | W. H. Pratt | 747,763 | Dec. 22 | 4516 | 1018 | 107 | 2150 |

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| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Registering monetary transactions. Apparatus for. | J. Frydmane | 738,670 | Sept. 8 | 2252 | 495<br>496<br>497 | 106 | 498 |
| Regulator:<br>*See* Automatic regulator. Boiler water-regulator. Centrifugal regulator. Current-regulator. Damper-regulator. Draft-regulator. Electric regulator. Electric-current regulator. Electrical regulator. Engine-regulator. Engine speed-regulator. Feed-regulator. Feed-water regulator. Feeding-regulator. Fluid-pressure regulator. Furnace combustion-regulator. Gas-regulator. Gas-burner regulator. Governor-regulator. Heat-regulator. Hopper feed-regulator. Piano touch-regulator. Pressure-regulator. Pump-regulator. Speed-regulator. Switch-regulator. Temperature-regulator. Timepiece-regulator. Tooth-regulator. Transom-regulator. Turbine-regulator. Valve-regulator. Voltage-regulator. Voltaic regulator. Watch-regulator. Water-regulator. Water-level regulator. Windmill-regulator. | | | | | | | |
| Regulator | J. B. Foote | 725,692 | Apr. 21 | 2370 | 536 | 103 | 1701 |
| Regulator-disk | H. M. Sheer | 731,959 | June 23 | 4482 | 1000 | 104 | 2110 |
| Rein fastener and button | J. G. Smith | 742,921 | Nov. 3 | 174 | 41 | 107 | 39 |
| Rein-fender | J. H. Nienstadt | 726,094 | Apr. 21 | 3059 | 695 | 103 | 1848 |
| Rein-guide | N. Johnston | 718,467 | Jan. 13 | 1768 | 392 | 102 | 392 |
| Rein-hold | C. W. Walker | 744,445 | Nov. 17 | 3237 | 694 | 107 | 722 |
| Rein-holder | S. S. Cornelius | 719,306 | Jan. 27 | 3397 | 758 | 102 | 765 |
| Rein-holder | B. A. Smith | 721,754 | Mar. 3 | 174 | 40 | 103 | 38 |
| Rein-holder | A. Carlson | 724,430 | Apr. 7 | 21 | 6 | 103 | 1175 |
| Rein-holder | C. B. Mansell | 734,582 | July 28 | 3476 | 812 | 105 | 784 |
| Rein-holder | J. G. Bowles | 741,619 | Oct. 20 | 2367 | 530 | 106 | 1786 |
| Rein-holder | J. R. Carroll | 746,288 | Dec. 8 | 1791 | 406 | 107 | 1501 |
| Rein holder and guide. Combined | J. I. Stamper | 746,599 | Dec. 8 | 2234 | 534 | 107 | 1621 |
| Rein-holder. Harness | L. S. Newcomb | 735,137 | Aug. 4 | 181 | 38 | 105 | 1020 |
| Rein-roll | W. J. Scott | 747,000 | Dec. 15 | 3107 | 712 | 107 | 1815 |
| Rein spread-roller | W. J. Scott | 725,154 | Apr. 14 | 1373 | 309 | 103 | 1476 |
| Rein-support | J. S. Jones | 720,438 | Feb. 10 | 1886 | 429 | 102 | 1238 |
| Rein-support | I. M. Priest | 723,918 | Mar. 31 | 4210 | 948 | 103 | 944 |
| Rein-support | J. F. Penrod | 739,442 | Sept. 22 | 3701 | 824 | 106 | 840 |
| Rein-supporter | J. H. Henderson and E. D. Jerome | 732,853 | July 7 | 281 | 70 | 105 | 63 |
| Relasting-machine | G. H. Bickley | 719,077 | Jan. 27 | 2964 | 662 | 102 | 673 |
| Relay | W. W. Dean | 722,680 | Mar. 17 | 1936 | 431 | 103 | 446 |
| Relay | W. W. Dean | 741,115 | Oct. 13 | 1350 | 309 | 106 | 1554 |
| Relay. Reverse-current | E. M. Hewlett | 730,371 | June 9 | 1539 | 342 | 104 | 1458 |
| Relays. Balancing | H. M. Sutton, W. L. Steele, and M. Coerver. | 745,687 | Dec. 1 | 676 | 156 | 107 | 1242 |
| Relief-work. Apparatus for making | H. Du Brau | 720,902 | Feb. 17 | 2751 | 633 | 102 | 1431 |
| Reminder | V. Sterki | 734,991 | July 28 | 4263 | 990 | 105 | 945 |
| Rendering apparatus | F. Kleinschmidt and C. H. A. Wannenwetsch. | 735,987 | Aug. 11 | 1820 | 390 | 105 | 1389 |
| Rendering lard | W. B. Allbright | 732,151 | June 30 | 4890 | 1087 | 104 | 2207 |
| Rendering-tank | E. R. Edson | 723,850 | Mar. 31 | 4073 | 919 | 103 | 913 |
| Rendering-tank | E. R. Edson and B. F. Silliman | 747,303 | Dec. 15 | 3681 | 830 | 107 | 1944 |
| Renovating apparatus | J. S. Thurman | 741,987 | Oct. 20 | 3096 | 690 | 106 | 1937 |
| Renovator. Pneumatic | J. S. Thurman | 720,083 | Feb. 10 | 1233 | 284 | 102 | 1101 |
| Resaw and bevel-siding machine. Combined | C. Finnegan | 737,832 | Sept. 1 | 523 | 115 | 106 | 117 |
| Resawing-machine | J. C. Lawhon | 744,368 | Nov. 17 | 3089 | 662<br>663 | 107 | 690 |
| Reservoir construction | P. Evans | 728,691 | May 19 | 3532 | 785 | 104 | 789 |
| Resistance-box | S. S. Wales | 723,788 | Mar. 24 | 3949 | 890 | 103 | 871 |
| Resistance-coil | E. F. Northrup | 725,855 | Apr. 14 | 1732 | 390 | 103 | 1551 |
| Resistance-pile | E. H. Wise | 727,249 | May 5 | 796 | 171 | 104 | 171 |
| Resistance set | E. F. Northrup | 731,209 | June 16 | 3082 | 684 | 104 | 1800 |
| Resistance set | E. F. Northrup | 731,210 | June 16 | 3086 | 684 | 104 | 1801 |
| Resistance-tube | C. Bloom | 736,677 | Aug. 18 | 3079 | 679 | 105 | 1671 |
| Resisting device | G. Baehr | 745,759 | Dec. 1 | 788 | 181 | 107 | 1266 |
| Respirator | H. E. Jones | 718,470 | Jan. 13 | 1773 | 393 | 102 | 393 |
| Respirator | J. W. McNary | 718,785 | Jan. 20 | 2410 | 535 | 102 | 543 |
| Respirator | E. Folkmar | 735,959 | Aug. 11 | 1760 | 377 | 105 | 1375 |
| Rest. Folding | M. Rosenberg | 732,116 | June 30 | 4807 | 1072 | 104 | 2190 |
| Retinoscope | W. H. Reisner | 718,384 | Jan. 13 | 1600 | 352 | 102 | 358 |
| Retinoscope | H. L. De Zeng | 737,087 | Aug. 25 | 3833 | 852 | 105 | 1850 |
| Retort | F. B. and C. E. Felt | 725,060 | Apr. 14 | 1188 | 269<br>270 | 103 | 1438 |
| Retort-charging apparatus | L. Bertrand | 729,259 | May 26 | 4553 | 1004<br>1005 | 104 | 1014 |
| Retort-discharging apparatus | M. Graham | 728,389 | May 19 | 2957 | 652 | 104 | 667 |
| Retort-walls, &c. Composition of matter used for protecting | T. J. Carlton | 732,707 | July 7 | 29 | ------ | 105 | 9 |
| Retorts. Apparatus for charging inclined | W. R. Herring | 717,575 | Jan. 6 | 95 | 23, 24 | 102 | 22 |
| Return-flue boiler | D. F. Murphy | 739,900 | Sept. 29 | 4561 | 1026 | 106 | 1041 |
| Reversible motor | V. L. Ochoa | 718,508 | Jan. 13 | 1877 | 411 | 102 | 420 |
| Reversible motor | C. H. Peck | 725,129 | Apr. 14 | 1326 | 299 | 103 | 1466 |
| Reversing and speed-reducing mechanism | T. B. Jeffery | 727,143 | May 5 | 621 | 133<br>134 | 104 | 135 |
| Reversing mechanism | C. J. Cook | 724,263 | Mar. 31 | 4930 | 1103<br>1104 | 103 | 1087 |
| Reversing mechanism | A. Crawley | 725,414 | Apr. 14 | 1834 | 411 | 103 | 1573 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drgs. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Reversing mechanism | L. E. Robinson | 725,991 | Apr. 21 | 2906 | 659 | 103 | 1816 |
| Reversing mechanism | F. J. Ball | 743,053 | Nov. 3 | 455 | 99 | 107 | 95 |
| Reversing mechanism | J. A. Bjur | 743,228 | Nov. 3 | 795 | 172 | 107 | 166 |
| Reversing mechanism. Automatic | J. C. Schaeffler | 747,649 | Dec. 22 | 4310 | 969 | 107 | 2102 |
| Revolver | A. Fyrberg | 728,896 | May 26 | 3911 | 869 | 104 | 882 |
| Revolver | D. B. Wesson | 733,101 | July 7 | 717 | 175 | 105 | 152 |
| Revolver | C. J. Ehbets | 734,524 | July 28 | 3369 | 788 | 105 | 760 |
| Revolving bin | E. E. Donaldson | 727,107 | May 5 | 550 | 118 | 104 | 12 |
| Revolving bodies. Instrument for locating over-balance in | O. Snell | 728,315 | May 19 | 2832 | 626, 627 | 104 | 642 |
| Revolving-body-balancing device | J. H. Hubbell | 734,417 | July 21 | 3176 | 746 | 105 | 705 |
| Revolving case | J. Poole | 743,557 | Nov. 10 | 1518 | 317 | 107 | 341 |
| Revolving furnace | S. S. Barger | 721,275 | Feb. 24 | 3516 | 799 | 102 | 1613 |
| Revolving press | J. B. Hough and C. H. Gary | 722,582 | Mar. 10 | 1725 | 384 | 103 | 380 |
| Revolving rake | C. F. McKenzie | 718,373 | Jan. 13 | 1579 | 348 | 102 | 35 |
| Revolving screen | V. W. Mason, Jr | 731,315 | June 16 | 3284 | 731 | 104 | 184 |
| Rheostat | J. P. Ball | 725,196 | Apr. 14 | 1450 | 328 | 103 | 14 |
| Rheostat | C. J. Reed | 728,978 | May 26 | 4056 | 900 | 104 | 912 |
| Rheostat | C. E. Harthan | 730,644 | June 9 | 2035 | 452, 453 | 104 | 1567 |
| Rheostat | W. C. Yates | 733,610 | July 14 | 1629 | 385 | 105 | 362 |
| Rheostat | E. Weston | 737,982 | Sept. 1 | 850 | 186, 187 | 106 | 185 |
| Rheostat | W. V. Ash | 738,392 | Sept. 8 | 1714 | 372 | 106 | 384 |
| Rheostat | W. C. Yates | 738,970 | Sept. 15 | 2822 | 625 | 106 | 637 |
| Rheostat | T. S. Perkins | 740,175 | Sept. 29 | 5066 | 1139 | 106 | 1149 |
| Rheostat | J. C. Vetter | 740,787 | Oct. 6 | 765 | 173 | 106 | 1408 |
| Rheostat | A. Eimer | 740,831 | Oct. 6 | 843 | 189 | 106 | 1425 |
| Rheostat | W. A. Sherlock | 745,077 | Nov. 24 | 4404 | 951 | 107 | 983 |
| Rheostat and resistance element therefor | C. J. Reed | 736,297 | Aug. 11 | 2362 | 513 | 105 | 1507 |
| Rheostat. Automatic | J. W. Moore | 741,814 | Oct. 20 | 2742 | 611 | 106 | 1865 |
| Rheostat. Automatic | A. B. Saliger | 741,839 | Oct. 20 | 2777 | 620 | 106 | 1874 |
| Rheostat. Electric | L. Wilson | 741,206 | Oct. 13 | 1536 | 346 | 106 | 1594 |
| Rheostat. Electric | L. Wilson | 741,207 | Oct. 13 | 1538 | 347 | 106 | 1595 |
| Rheostat operated by compressed air. Liquid | K. de Kandó | 733,971 | July 21 | 2325 | 546 | 105 | 522 |
| Rheostat. Starting | C. E. Harthan | 729,762 | June 2 | 443 | 100 | 104 | 1218 |
| Rheostat. Starting | H. B. Wilson | 747,821 | Dec. 22 | 4628 | 1045 | 107 | 2174 |
| Rheostats and heaters. Automatic release device for | C. E. Freeman | 723,261 | Mar. 24 | 2990 | 673 | 103 | 676 |
| Ribbon-feed-regulating device | H. N. Marvin and H. Casler | 732,765 | July 7 | 118 | 32 | 105 | 29 |
| Ribbon-holder | G. P. Schmidt | 720,287 | Feb. 10 | 1625 | 372 | 102 | 1182 |
| Ribbon mechanism | J. J. Green | 735,089 | Aug. 4 | 73 | 20 | 105 | 997 |
| Ribbon or roll holder | G. C. Farrar | 741,473 | Oct. 13 | 2087 | 462 | 106 | 1712 |
| Ribbon-tie | C. E. Smith | 717,777 | Jan. 6 | 505 | 112 | 102 | 109 |
| Ribbon-winder | W. A. Hayes | 720,141 | Feb. 10 | 1347 | 308 | 102 | 1126 |
| Rice-hulling machine | R. W. Welch | 745,269 | Nov. 24 | 4777 | 1043 | 107 | 1061 |
| Rice-polishing machine | R. W. Welch | 742,939 | Nov. 3 | 207 | 47 | 107 | 46 |
| Riding-habit | J. Juran | 718,769 | Jan. 20 | 2385 | 529 | 102 | 537 |
| Riding-habit | A. Loscalzo | 742,123 | Oct. 20 | 3389 | 756 | 106 | 1995 |
| Riding-habit. Lady's | J. G. Müller | 720,602 | Feb. 17 | 2215 | 514 | 102 | 1320 |
| Riding-skirt | J. A. Ondrak | 742,349 | Oct. 27 | 3817 | 855 | 106 | 2101 |
| Rifle. Magazine | B. F. Perry | 726,744 | Apr. 28 | 4333 | 976, 977 | 103 | 2121 |
| Rifle-range | J. de St. Legier and E. Herbage | 731,967 | June 23 | 4493 | 1002 | 104 | 2113 |
| Rifle-telescope mounting | C. E. Stallcop | 740,327 | Sept. 29 | 5346 | 1204 | 106 | 1206 |
| Rifles. Practice-barrel for | P. Bergersen | 745,561 | Dec. 1 | 457 | 107 | 107 | 1195 |
| Rimming-machine | G. A. Ensign | 733,826 | July 14 | 2030 | 478, 479 | 105 | 444 |
| Rimming-machine | F. Unckrich | 742,086 | Oct. 20 | 3330 | 743 | 106 | 1984 |
| Ring: *See* Curtain-ring. Curtain-support ring. Finger-ring. Key-ring. Nose-ring. Ornamental ring. Packing-ring. Pan-ring. Piston-ring. Spinning-ring. | | | | | | | |
| Ring | M. L. Weiss | 732,245 | June 30 | 5073 | 1128 | 104 | 2246 |
| Ring-frame spindle | T. E. Leigh | 731,111 | June 16 | 2903 | 644 | 104 | 1765 |
| Ring-guard | J. Fallek | 732,532 | June 30 | 5628 | 1248 | 104 | 2366 |
| Ring-roll | D. P. O'Brien | 733,264 | July 7 | 1015 | 243 | 105 | 212 |
| Ring-stamping apparatus | W. H. Ford | 730,245 | June 9 | 1312 | 289 | 104 | 1410 |
| Ring-throwing apparatus | J. L. Donaly | 734,832 | July 28 | 3979 | 930 | 105 | 886 |
| Ring-tray | B. Lenzen | 732,089 | June 30 | 4756 | 1062 | 104 | 2170 |
| Ring-tray. Jeweler's | M. Porteck | 734,091 | July 21 | 2564 | 598 | 105 | 577 |
| Rings, brooches, &c. Cluster-setting for | F. W. Rohde | 736,022 | Aug. 11 | 1885 | 403 | 105 | 1402 |
| Rings, buttons, &c. Interchangeable top for initial or insignia | G. G. Ackerman | 723,353 | Mar. 24 | 3161 | 710 | 103 | 710 |
| Ringing-generator | J. C. F. Malthaner | 720,595 | Feb. 17 | 2205 | 511 | 102 | 1318 |
| Rivet | H. J. Maurer | 742,206 | Oct. 27 | 3550 | 792 | 106 | 2043 |
| Rivet-cutter | W. Franz | 718,996 | Jan. 27 | 2808 | 629 | 102 | 641 |
| Rivet-cutter | E. F. Galloway, Jr | 727,610 | May 12 | 1467 | 328 | 104 | 338 |
| Rivet-holder. Pneumatic | E. Gunnell | 731,772 | June 23 | 4149 | 925 | 104 | 2033 |
| Rivet or bolt heads. Machine for forming | L. Lovas | 735,539 | Aug. 4 | 973 | 206 | 105 | 1187 |
| Rivets. Device for electrically heating | H. V. Loss | 722,728 | Mar. 17 | 2019 | 451 | 103 | 463 |
| Rivets. Heating | H. V. Loss | 722,727 | Mar. 17 | 2019 | 451 | 103 | 463 |
| Rivets, &c. Portable heater for heating | J. and T. Macdonald | 740,670 | Oct. 6 | 531 | 118 | 106 | 1360 |
| Riveter or punch. Fluid-pressure | S. S. Caskey | 722,489 | Mar. 10 | 1563 | 344 | 103 | 350 |
| Riveter-supporting device. Shell- | J. W. Tierney | 747,272 | Dec. 15 | 3621 | 816 | 107 | 1929 |
| Riveting-brace | J. L. Pearson | 728,605 | May 19 | 3381 | 749 | 104 | 757 |
| Riveting-machine | G. E. Martin | 718,365 | Jan. 13 | 1566 | 345, 346 | 102 | 351 |
| Riveting-machine | G. E. Martin | 719,242 | Jan. 27 | 3273 | 731, 732 | 102 | 736 |
| Riveting-machine | P. F. King | 728,936 | May 26 | 3982 | 886 | 104 | 896 |
| Riveting-machine | M. W. Wilkins | 731,399 | June 16 | 3439 | 767, 768 | 104 | 1874 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Riveting-machine | G. E. Martin | 733,497 | July 14 | 1430 | 336 | 105 | 320 |
| Riveting mechanism | C. J. Carney and J. C. Gorton | 737,344 | Aug. 25 | 4320 | 962 | 105 | 1953 |
| Road, &c | F. J. Nash | 725,983 | Apr. 21 | 2888 | 655 | 103 | 1812 |
| Road-bed | I. Haws | 724,286 | Mar. 31 | 4972 | 1112 | 103 | 1096 |
| Road-bed. Automobile | R. T. Van Valkenburg | 743,116 | Nov. 3 | 570 | 123 | 107 | 119 |
| Road-machine | W. A. Heusner, C. H. Dudley, and D. E. Graves. | 740,430 | Oct. 6 | 94 | 19,20 | 106 | 1267 |
| Road making and repairing machine | J. B. and B. O. Rhodes | 724,042 | Mar. 31 | 4470 | {1007 {1008 | {103 | 995 |
| Road-making machine | R. T. Head | 748,372 | Dec. 29 | 5679 | {1295 {1296 | {107 | 2426 |
| Road-roller | W. M. Fawcett and C. L. Heisler | 728,451 | May 19 | 3074 | {679 {680 | {104 | 691 |
| Road-roller sprinkler attachment | R. D. Aldrich | 738,748 | Sept. 15 | 2418 | 530 | 106 | 549 |
| Road-scarifier | W. M. Fawcett | 719,099 | Jan. 27 | 3023 | {672 {673 | {102 | 685 |
| Road-scarifier | H. Morrison | 735,127 | Aug. 4 | 155 | 34,35 | 105 | 1015 |
| Road-spool | W. H. Corbett | 739,294 | Sept. 22 | 3414 | 760 | 106 | 778 |
| Road working or grading machine | A. F. Tank | 734,632 | July 28 | 3569 | {835 {836 | {105 | 803 |
| Roadway | W. Wilson | 748,248 | Dec. 29 | 5466 | 1245 | 107 | 2378 |
| Roadway and vehicle for traveling thereon | J. B. Hansler | 734,061 | July 21 | 2512 | 586 | 105 | 565 |
| Roadways. Laying asphalt or bituminous | W. Wilson | 748,247 | Dec. 29 | 5464 | ..... | 107 | 2378 |
| Roadways, sidewalks, &c. Construction of | G. D. Wansbrough | 728,056 | May 12 | 2328 | 518 | 104 | 513 |
| Roaster: *See* Coffee-roaster. Peanut-roaster. Ore-roaster. Quicksilver-roaster. | | | | | | | |
| Roasting apparatus | C. Cretors | 728,549 | May 19 | 3262 | 723 | 104 | 730 |
| Roasting-furnace | F. Klepetko | 733,658 | July 14 | 1711 | 405 | 105 | 378 |
| Roasting-furnace | E. C. Brice | 736,929 | Aug. 25 | 3556 | 789 | 105 | 1790 |
| Roasting-furnace | C. H. Repath and F. E. Marcy | 740,589 | Oct. 6 | 404 | 89 | 106 | 1332 |
| Roasting-furnace | F. Klepetko | 744,359 | Nov. 17 | 3076 | 660 | 107 | 687 |
| Roasting-furnace. Muffle | F. Meyer | 731,114 | June 16 | 2911 | {646 {647 | {104 | 1767 |
| Roasting-furnace with a swimming hearth | R. von Zelewski | 741,430 | Oct. 13 | 1977 | 439 | 106 | 1688 |
| Roasting or drying apparatus | W. Harvey | 727,540 | May 5 | 1327 | 296 | 104 | 286 |
| Roasting-pan | E. H. Moore | 736,863 | Aug. 18 | 3434 | {760 {761 | {105 | 1746 |
| Robe-holder | A. A. Jones | 733,212 | July 7 | 915 | 221 | 105 | 191 |
| Rock-crusher concave | J. D. Spargo and G. W. Rose | 720,853 | Feb. 17 | 2659 | 613 | 102 | 1413 |
| Rock-drill | V. Schneider | 722,914 | Mar. 17 | 2361 | 528 | 103 | 532 |
| Rock-drill | L. E. Decker | 725,227 | Apr. 14 | 1508 | 344 | 103 | 1504 |
| Rock-drill | P. Reinhalter | 734,264 | July 21 | 3084 | 726 | 105 | 686 |
| Rock-drill | P. Reinhalter | 734,365 | July 21 | 3086 | 726 | 105 | 686 |
| Rock-drill | O. G. Worsley | 735,028 | July 28 | 4319 | 1004 | 105 | 956 |
| Rock-drill | H. A. Dalmas | 735,717 | Aug. 11 | 1309 | 282 | 105 | 1277 |
| Rock-drill | P. Higgins | 735,767 | Aug. 11 | 1399 | 301 | 105 | 1296 |
| Rock-drill | C. Mead | 736,758 | Aug. 18 | 3223 | {712 {713 | {105 | 1701 |
| Rock-drill | W. Brady | 740,800 | Oct. 6 | 783 | {176 {177 | {106 | 1412 |
| Rock-drill attachment | D. A. Owen | 740,906 | Oct. 6 | 958 | 215 | 106 | 1451 |
| Rock-drill. Hand | V. Y. Smith | 728,314 | May 19 | 2830 | 626 | 104 | 642 |
| Rock-drill or rock-drilling machine. Electrical | A. H. Gibson | 744,912 | Nov. 24 | 4063 | 876 | 107 | 914 |
| Rock-drill shaping and sharpening apparatus | W. W. Word | 731,728 | June 23 | 4064 | 906 | 104 | 2018 |
| Rock-drill valve | H. S. Burrell | 726,632 | Apr. 28 | 4127 | 931 | 103 | 2076 |
| Rock-drills. Front cylinder-head for | J. S. Spencer | 747,015 | Dec. 15 | 3132 | 717 | 107 | 1820 |
| Rock-drilling machine | J. G. Heimrich | 731,569 | June 23 | 3783 | 842 | 104 | 1962 |
| Rock-drilling system | J. G. Leyner | 739,551 | Sept. 22 | 3871 | 868 | 106 | 877 |
| Rocker for chairs, hobby-horses, &c | B. J. Buckman | 720,882 | Feb. 17 | 2708 | 626 | 102 | 1423 |
| Rocker-joint | O. C. Moore | 733,327 | July 7 | 1118 | 265 | 105 | 236 |
| Rocker or wheel. Cushioned | J. M. Martin | 721,904 | Mar. 3 | 455 | 100 | 103 | 101 |
| Rocker. Spring | A. M. Wolf | 733,450 | July 14 | 1352 | 318 | 105 | 303 |
| Rocking-chair | C. L. Santee | 729,674 | June 2 | 269 | 62 | 104 | 1184 |
| Rocking-chair | B. Klein | 740,661 | Oct. 6 | 517 | 114 | 106 | 1358 |
| Rocking-chair. Platform | A. A. Van Slyke and E. Perry, Jr | 730,320 | June 9 | 1448 | {319 {320 | {104 | 1439 |
| Rocking-horse. Traveling | R. Barrett | 737,818 | Sept. 1 | 490 | 109 | 106 | 110 |
| Rod: *See* Connecting-rod. Stair-rod. End-gate rod. Surveyor's rod. Sash-rod. | | | | | | | |
| Rod | C. F. Axelson | 733,572 | July 14 | 1572 | 374 | 105 | 351 |
| Rod-coupling | T. W. Kenworthy | 739,548 | Sept. 22 | 3867 | 867 | 106 | 876 |
| Rod-coupling | J. G. Alexander | 743,211 | Nov. 3 | 755 | 165 | 107 | 158 |
| Rod-coupling | H. A. Dulinsky | 748,056 | Dec. 29 | 5128 | 1159 | 107 | 2305 |
| Rod-cutting device | C. L. Butler | 719,934 | Feb. 3 | 928 | 217 | 102 | 1020 |
| Rod or pipe coupling | W. H. Gilbert | 735,242 | Aug. 4 | 399 | 78 | 105 | 1066 |
| Rods or bars. Reducing | J. R. George | 729,570 | June 2 | 88 | 22 | 104 | 1145 |
| Rods, tubes, or pipes. Machine for cleaning and polishing the outer surfaces of | T. B. Van Auken | 718,549 | Jan. 13 | 1961 | 429 | 102 | 436 |
| Rodent-exterminating device | J. B. Boylan, Jr | 721,535 | Feb. 24 | 3977 | 906 | 102 | 1710 |
| Roll heating and cooling apparatus | C. W. Bray | 737,571 | Sept. 1 | 25 | 5 | 106 | 9 |
| Roll-housing support | J. Kennedy | 721,047 | Feb. 17 | 3039 | {696 {697 | {102 | 1494 |
| Rolls. Adjustable bench for | H. E. Sheldon | 725,157 | Apr. 14 | 1380 | 311 | 103 | 1477 |
| Roller: *See* Boiler-flue roller. Pressure-roller. Ground-roller. Road-roller. Inking-roller. Shade-roller. Land-roller. Skate-roller. Lithographing and printing roller. Snow or road roller. Photographic mounting-roller. | | | | | | | |
| Roller | B. E. Storr | 732,907 | July 7 | 375 | 91 | 105 | 82 |

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| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Roller and harrow. Combined | G. W. Larison | 746,528 | Dec. 8 | 2203 | 505, 506 | 107 | 1590 |
| Roller attachment. Steam- | W. Salway | 743,336 | Nov. 3 | 1010 | 218 | 107 | 216 |
| Roller, harrow, and cultivator. Combined | O. A. Gallatin | 746,066 | Dec. 8 | 1387 | 310, 311 | 107 | 1414 |
| Roller-mill exhaust apparatus | A. G. Mather | 740,155 | Sept. 29 | 5025 | 1129 | 106 | 1141 |
| Roller-mill scraper | G. F. Thompson | 743,955 | Nov. 10 | 2243 | 483 | 107 | 495 |
| Roller-rack | J. F. Johnson | 722,514 | Mar. 10 | 1606 | 354 | 103 | 316 |
| Rollers with india-rubber, &c. Machine for covering | R. Milne | 727,664 | May 12 | 1578 | 356 | 104 | 356 |
| Rolling and trimming machine | J. Ditson | 728,379 | May 19 | 2943 | 649 | 104 | 664 |
| Rolling black plates or sheets | J. R. Phillips and C. W. Bray | 740,176 | Sept. 29 | 5067 | | 106 | 1149 |
| Rolling blanks for I-beams or girders | R. D. York | 728,349 | May 19 | 2897 | 640 | 104 | 654 |
| Rolling flanged sections | T. Morrison | 722,605 | Mar. 10 | 1764 | | 103 | 394 |
| Rolling-machine | O. Windecker | 727,247 | May 5 | 794 | 170 | 104 | 171 |
| Rolling-machine for forming lips on treads, &c. | G. F. Hutchins | 730,019 | June 2 | 913 | 204 | 104 | 1313 |
| Rolling machine. Metal-ball- | O. Spahr | 719,959 | Feb. 3 | 979 | 227 | 102 | 1031 |
| Rolling machine. Tube- | J. P. Kane | 739,424 | Sept. 22 | 3667 | 815 | 106 | 833 |
| Rolling machine. Tube-end- | H. Rinne | 748,100 | Dec. 29 | 5207 | 1178 | 107 | 2323 |
| Rolling-mill | J. R. George | 717,673 | Jan. 6 | 271 | 67 | 102 | 58 |
| Rolling-mill | C. L. Huston | 722,022 | Mar. 3 | 685 | 151, 152 | 103 | 148 |
| Rolling-mill | V. E. Edwards | 729,559 | June 2 | 69 | 18 | 104 | 1142 |
| Rolling-mill | R. D. York | 732,490 | June 30 | 5552 | 1231 | 104 | 2342 |
| Rolling-mill | H. L. Thompson | 735,173 | Aug. 4 | 249 | 49 | 105 | 1036 |
| Rolling-mill | W. B. Hughes | 739,416 | Sept. 22 | 3655 | 812 | 106 | 830 |
| Rolling-mill | G. Hargreaves, Jr | 739,493 | Sept. 22 | 3783 | 846, 847 | 106 | 859 |
| Rolling-mill | J. W. Offutt | 741,702 | Oct. 20 | 2533 | 565 | 106 | 1823 |
| Rolling-mill | M. M. Suppes | 742,367 | Oct. 27 | 3848 | 864 | 106 | 2108 |
| Rolling-mill | O. Heer | 742,645 | Oct. 27 | 4352 | 978, 979 | 106 | 2212 |
| Rolling-mill | C. M. Grey | 744,535 | Nov. 17 | 3382 | 729, 730 | 107 | 753 |
| Rolling-mill adjusting-screw mechanism | J. Kennedy | 720,932 | Feb. 17 | 2813 | 645 | 102 | 1445 |
| Rolling-mill appliance | J. Kennedy | 721,046 | Feb. 17 | 3038 | 696 | 102 | 1494 |
| Rolling mill. Car-wheel and tire | H. C. Buhoup and G. P. Ritter | 717,539 | Jan. 6 | 27 | 8 | 102 | 8 |
| Rolling-mill coupling | V. E. Edwards | 724,684 | Apr. 7 | 497 | 119 | 103 | 1275 |
| Rolling-mill feed mechanism | J. J. Purcell | 719,694 | Feb. 3 | 501 | 113 | 102 | 928 |
| Rolling-mill feed mechanism | S. V. Huber | 720,353 | Feb. 10 | 1744 | 396 | 102 | 1209 |
| Rolling-mill feed-table | J. Kennedy | 721,569 | Feb. 24 | 4062 | 920, 921 | 102 | 1729 |
| Rolling-mill feed-table | J. Kennedy | 735,391 | Aug. 4 | 668 | 142 | 105 | 1123 |
| Rolling-mill feed-table | E. E. Slick | 746,886 | Dec. 15 | 2882 | 666 | 107 | 1764 |
| Rolling-mill feed-tables. Manipulator for | S. T. and C. H. Wellman | 721,626 | Feb. 24 | 4175 | 949 | 102 | 1754 |
| Rolling-mill feed-tables. Manipulator for | C. H. Wellman | 721,628 | Feb. 24 | 4178 | 950 | 102 | 1755 |
| Rolling-mill feeding mechanism | J. R. George | 740,418 | Oct. 6 | 51 | 12 | 106 | 1255 |
| Rolling-mill friction driving mechanism | C. A. Erbslöh | 722,685 | Mar. 17 | 1946 | 433 | 103 | 448 |
| Rolling-mill gearing | J. Fawell | 738,991 | Sept. 15 | 2852 | 633 | 106 | 644 |
| Rolling-mill guide | V. E. Edwards | 730,244 | June 9 | 1310 | 289 | 104 | 1409 |
| Rolling-mill ingot-manipulating mechanism | J. A. Hampton and J. Roberts | 742,314 | Oct. 27 | 3761 | 842, 843 | 106 | 2088 |
| Rolling-mill pinion-housing | O. N. Rauschenberg | 728,615 | May 19 | 3398 | 752 | 104 | 761 |
| Rolling-mill pinion-housing | V. E. Edwards | 730,205 | June 2 | 1216 | 272 | 104 | 1375 |
| Rolling-mill repeater | E. E. Slick | 726,774 | Apr. 28 | 4394 | 988 | 103 | 2133 |
| Rolling-mill roll-adjusting mechanism | M. M. Suppes | 742,368 | Oct. 27 | 3849 | 864 | 106 | 2108 |
| Rolling-mill rolls. Means for greasing the necks or journals of | R. R. and T. W. Jones | 718,471 | Jan. 13 | 1774 | 393, 394 | 102 | 393 |
| Rolling mill. Seamless-tubing- | J. H. King and E. M. Wolfe | 718,476 | Jan. 13 | 1785 | 396 | 102 | 395 |
| Rolling-mill top-roll carrier | J. R. George | 729,569 | June 2 | 86 | 22 | 104 | 1145 |
| Rolling-mill. Universal | R. D. York | 746,228 | Dec. 8 | 1679 | 373, 374 | 107 | 1478 |
| Rolling-mills. Means for the control of the electrical driving of reversible | C. Ilgner | 733,485 | July 14 | 1410 | 332 | 105 | 316 |
| Rolling-mills, shafts, &c. Automatic controller for | C. Kuhlewind | 728,802 | May 19 | 3736 | 833 | 104 | 830 |
| Rolling-pin | R. Lowe | 724,023 | Mar. 31 | 4446 | 999 | 103 | 989 |
| Rolling-pin | W. L. Stanley | 745,923 | Dec. 1 | 1121 | 251 | 107 | 1338 |
| Rolling plates or sheets. Apparatus for | C. W. Bray | 728,849 | May 26 | 3835 | 853, 854 | 104 | 868 |
| Rolling-press | W. S. Gillen and W. G. Anderson | 731,769 | June 23 | 4143 | 924, 925 | 104 | 2034 |
| Rolling sheet and tin plate. Apparatus for | C. W. Bray | 718,974 | Jan. 27 | 2764 | 618, 619 | 102 | 631 |
| Rolling sheet metal. Pack for | A. Paterson | 741,708 | Oct. 20 | 2552 | 569 | 106 | 1825 |
| Rolling sheet or other metal strips or bars of curved or other section. Machinery for | G. B. Johnson | 726,691 | Apr. 28 | 4232 | 957, 958 | 103 | 2099 |
| Rolling. Steel or other metal | W. Cooper | 723,834 | Mar. 31 | 4040 | 912 | 103 | 907 |
| Rolling tubes | M. Mannesmann | 721,209 | Feb. 24 | 3405 | 773, 774 | 102 | 1590 |
| Rolling tubes | M. Mannesmann | 721,210 | Feb. 24 | 3409 | 774 | 102 | 1590 |
| Rolling tubes | M. Mannesmann | 721,211 | Feb. 24 | 3411 | 775 | 102 | 1591 |
| Rolling tubes | M. Mannesmann | 721,213 | Feb. 24 | 3415 | 775 | 102 | 1592 |
| Rolling tubes. Machine for | M. Mannesmann | 721,212 | Feb. 24 | 3412 | 775 | 102 | 1591 |
| Roof | J. Ingram | 720,811 | Feb. 17 | 2589 | 597 | 102 | 1397 |
| Roof | T. B. Stewart | 725,291 | Apr. 14 | 1608 | 363 | 103 | 1525 |
| Roof | L. P. Normandin | 732,883 | July 7 | 334 | 82 | 105 | 73 |
| Roof-bracket | J. L. Chase | 718,602 | Jan. 20 | 2070 | 450 | 102 | 474 |
| Roof. Building- | H. F. Langewische | 730,030 | June 2 | 935 | 209 | 104 | 1318 |
| Roof-carline | G. B. Maltby | 742,465 | Oct. 27 | 4017 | 901 | 106 | 2141 |
| Roof fastener. Slate- | F. C. Sneden | 718,165 | Jan. 13 | 1200 | 266 | 102 | 274 |
| Roof. Portable | W. Morris | 738,694 | Sept. 8 | 2308 | 507 | 106 | 509 |
| Roof structure | H. Aiken | 718,044 | Jan. 6 | 981 | 218, 219 | 102 | 211 |
| Roofs and walls of buildings. Construction of | J. W. Beaumont | 747,120 | Dec. 15 | 3326 | 757 | 107 | 1868 |
| Roofing compound | G. E. Reynolds | 733,597 | July 14 | 1608 | | 105 | 357 |
| Roofing. Felt or fabric | B. G. Casler | 742,589 | Oct. 27 | 4249 | 957 | 106 | 2189 |

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| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Roofing. Metallic | G. Huth | 720,030 | Feb. 10 | 1139 | 260 | 102 | 1081 |
| Roofing. Metallic | G. W. Armstrong and H. G. Morton | 731,264 | June 16 | 3172 | 706 | 104 | 1818 |
| Roofing. Tool for removing tin | J. C. Howley and D. W. McFadyen | 742,324 | Oct. 27 | 3777 | 846 | 106 | 2092 |
| Roost | C. H. Mattox | 742,699 | Oct. 27 | 4444 | 1003 | 106 | 2232 |
| Roost. Chicken- | E. Royce | 727,454 | May 5 | 1172 | 259 | 104 | 253 |
| Root-cutter | O. Davis | 726,514 | Apr. 28 | 3904 | 883 | 103 | 2033 |
| Root-extractor | F. R. Holden | 725,083 | Apr. 14 | 1240 | 279 | 103 | 1448 |
| Root-knife and subsoiler. Combined | A. M. Jacobs | 742,872 | Nov. 3 | 92 | 22 | 107 | 21 |
| Root-puller | A. E. Bunt | 737,333 | Aug. 25 | 4298 | 955 | 105 | 1947 |
| Rope | B. Kirsch | 728,399 | May 19 | 2981 | 656 | 104 | 672 |
| Rope-clamp | F. C. Crowe | 722,949 | Mar. 17 | 2414 | 539 | 103 | 542 |
| Rope-clamp | J. L. Smith and J. McCambridge | 725,599 | Apr. 14 | 2183 | 494 | 103 | 1649 |
| Rope-clamp | J. S. Hermanson | 727,946 | May 12 | 2137 | 477 | 104 | 474 |
| Rope-clamp | A. A. Newell | 734,469 | July 21 | 3271 | 769 | 105 | 724 |
| Rope-clamp | C. H. Mohland | 738,562 | Sept. 8 | 2040 | 444 | 106 | 454 |
| Rope-clip | B. C. Riblet | 744,406 | Nov. 17 | 3161 | 678, 679 | 107 | 706 |
| Rope-cutter | T. C. Rogers | 745,526 | Dec. 1 | 399 | 92 | 107 | 1184 |
| Rope-fastener | R. W. Cox | 739,392 | Sept. 22 | 3585 | 801 | 106 | 813 |
| Rope grip and brake for ascending or descending ropes. Eccentric-lever | R. Cockerell | 733,458 | July 14 | 1368 | 323 | 105 | 306 |
| Rope-lock | L. M. Cutting | 725,048 | Apr. 14 | 1167 | 264 | 103 | 1434 |
| Rope-machine | C. J. Banks | 724,776 | Apr. 7 | 674 | 158 | 103 | 1312 |
| Rope-splice | P. Vogel | 730,060 | June 2 | 980 | 219 | 104 | 1328 |
| Rope-tension attachment. Pneumatic balancing | H. W. Rank | 719,370 | Jan. 27 | 3525 | 785 | 102 | 791 |
| Ropes. Apparatus for mechanically greasing | M. Graf, W. Dobbelstein, and F. Unterbein. | 737,221 | Aug. 25 | 4081 | 906, 907 | 105 | 1901 |
| Ropeway. Aerial | J. P. Roe | 737,871 | Sept. 1 | 636 | 136 | 106 | 139 |
| Ropeway gripping apparatus. Aerial- | W. Eichner | 740,830 | Oct. 6 | 841 | 188 | 106 | 1425 |
| Rosette | E. J. Hunt | 747,609 | Dec. 22 | 4227 | 950 | 107 | 2084 |
| Rossing-machine | J. Moreau | 737,646 | Sept. 1 | 159 | 35, 36 | 106 | 37 |
| Rotary cutter | J. Ettinger | 723,374 | Mar. 24 | 3218 | 721 | 103 | 720 |
| Rotary cutter | C. T. Headley | 746,959 | Dec. 15 | 3033 | 696 | 107 | 1798 |
| Rotary-cylinder engine | J. G. Gracey | 733,477 | July 14 | 1398 | 330 | 105 | 313 |
| Rotary drier | D. Grupe | 738,106 | Sept. 1 | 1087 | 240, 241 | 106 | 235 |
| Rotary drill | L. F. Seed and L. Harper | 717,630 | Jan. 6 | 195 | 48 | 102 | 42 |
| Rotary drill | C. H. Haeseler and A. H. Taylor | 721,037 | Feb. 17 | 3012 | 692 | 102 | 1487 |
| Rotary engine | H. W. Carpenter | 717,541 | Jan. 6 | 31 | 9, 10 | 102 | 9 |
| Rotary engine | T. W. Neely | 717,598 | Jan. 6 | 139 | 35 | 102 | 31 |
| Rotary engine | M. E. Knight | 717,869 | Jan. 6 | 676 | 150, 151 | 102 | 144 |
| Rotary engine | J. M. McCulloch | 717,897 | Jan. 6 | 732 | 162 | 102 | 154 |
| Rotary engine | M. P. Elgen | 718,198 | Jan. 13 | 1261 | 276 | 102 | 287 |
| Rotary engine | J. L. McMillan | 718,653 | Jan. 20 | 2151 | 469, 470 | 102 | 490 |
| Rotary engine | J. B. Pollard | 718,791 | Jan. 20 | 2420 | 537 | 102 | 544 |
| Rotary engine | O. G. Rieske | 719,046 | Jan. 27 | 2899 | 650 | 102 | 660 |
| Rotary engine | E. Ulland | 719,163 | Jan. 27 | 3132 | 697, 698 | 102 | 706 |
| Rotary engine | E. T. Cass | 719,302 | Jan. 27 | 3390 | 756 | 102 | 763 |
| Rotary engine | L. J. Collins | 719,305 | Jan. 27 | 3396 | 757 | 102 | 764 |
| Rotary engine | A. G. McPherson and E. M. Laing | 719,359 | Jan. 27 | 3504 | 779, 780 | 102 | 786 |
| Rotary engine | G. W. Wood | 719,969 | Feb. 3 | 992 | 231 | 102 | 1034 |
| Rotary engine | R. B. Chritton | 719,996 | Feb. 10 | 1053 | 245, 246 | 102 | 1063 |
| Rotary engine | D. J. Bliss | 720,102 | Feb. 10 | 1283 | 294 | 102 | 1112 |
| Rotary engine | J. W. and R. M. Anderson | 720,393 | Feb. 10 | 1806 | 411 | 102 | 1222 |
| Rotary engine | J. L. McMillan | 720,460 | Feb. 10 | 1925 | 438, 439, 440 | 102 | 1245 |
| Rotary engine | J. C. Wharton | 720,542 | Feb. 10 | 2088 | 482 | 102 | 1278 |
| Rotary engine | R. May | 720,598 | Feb. 17 | 2209 | 512, 513 | 102 | 1319 |
| Rotary engine | M. E. Knight | 720,818 | Feb. 17 | 2597 | 600, 601 | 102 | 1399 |
| Rotary engine | A. Michael | 720,834 | Feb. 17 | 2624 | 605 | 102 | 1405 |
| Rotary engine | H. Nielsen | 720,952 | Feb. 17 | 2854 | 653 | 102 | 1454 |
| Rotary engine | A. D. Allen | 720,993 | Feb. 17 | 2931 | 671, 672 | 102 | 1470 |
| Rotary engine | C. C. Smith | 721,611 | Feb. 24 | 4149 | 943 | 102 | 1749 |
| Rotary engine | H. Bergmann | 722,480 | Mar. 10 | 1550 | 340 | 103 | 347 |
| Rotary engine | W. Buckingham | 722,560 | Mar. 10 | 1687 | 374, 375, 376 | 103 | 378 |
| Rotary engine | H. Igel | 722,710 | Mar. 17 | 1993 | 444, 445 | 103 | 457 |
| Rotary engine | T. Oliver | 722,742 | Mar. 17 | 2049 | 457, 458 | 103 | 469 |
| Rotary engine | A. P. Anderson | 723,226 | Mar. 24 | 2929 | 656 | 103 | 665 |
| Rotary engine | E. W. Cooey | 723,242 | Mar. 24 | 2958 | 664 | 103 | 670 |
| Rotary engine | H. T. Dunn | 723,656 | Mar. 24 | 3721 | 834 | 103 | 823 |
| Rotary engine | G. J. Scott | 724,056 | Mar. 31 | 4496 | 1012, 1013 | 103 | 1000 |
| Rotary engine | A. L. Treese | 724,222 | Mar. 31 | 4829 | 1083 | 103 | 1069 |
| Rotary engine | J. Wiechmann | 724,224 | Mar. 31 | 4833 | 1084 | 103 | 1070 |
| Rotary engine | J. H. L. and J. D. A. Böttcher | 725,028 | Apr. 14 | 1138 | 257 | 103 | 1428 |
| Rotary engine | W. H. Cornell | 725,412 | Apr. 14 | 1832 | 410, 411 | 103 | 1572 |
| Rotary engine | L. M. A. Butin | 726,024 | Apr. 21 | 2956 | 672, 673 | 103 | 1826 |
| Rotary engine | H. L. Lewis | 726,228 | Apr. 21 | 3311 | 751 | 103 | 1900 |
| Rotary engine | H. M. Hjermstad and E. O. Sohn | 726,684 | Apr. 28 | 4219 | 953, 954 | 103 | 2096 |
| Rotary engine | C. D. Holt | 726,686 | Apr. 28 | 4224 | 955 | 103 | 2098 |

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| Invention. | Name. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | | Spec. | Dr'g. | Vol. | Page. |
| Rotary engine | F. A. Franzén | 726,896 | May 5 | 120 | 28, 29 | 104 | 29 |
| Rotary engine | N. H. Motsinger | 726,969 | May 5 | 283 | 63, 64 | 104 | 61 |
| Rotary engine | E. E. Fuller | 727,122 | May 5 | 576 | 124 | 104 | 125 |
| Rotary engine | H. C. Essington | 727,769 | May 12 | 1808 | 404 | 104 | 404 |
| Rotary engine | N. S. Taylor | 727,861 | May 12 | 1969 | 439 | 104 | 436 |
| Rotary engine | E. Blucker | 728,077 | May 12 | 2363 | 526 | 104 | 520 |
| Rotary engine | A. Box | 728,157 | May 12 | 2504 | 556, 557 | 104 | 550 |
| Rotary engine | M. J. Hewlett | 728,232 | May 19 | 2660 | 594, 595 | 104 | 604 |
| Rotary engine | W. H. Masterman and J. P. Magney | 728,263 | May 19 | 2721 | 606, 607 | 104 | 617 |
| Rotary engine | G. P. Breed and E. L. Hawn | 728,536 | May 19 | 3229 | 716, 717 | 104 | 724 |
| Rotary engine | M. Cameron | 729,042 | May 26 | 4172 | 923, 924 | 104 | 936 |
| Rotary engine | F. A. Pallé | 729,399 | May 26 | 4793 | 1061 | 104 | 1063 |
| Rotary engine | W. P. Digby | 729,554 | June 2 | 62 | 15, 16 | 104 | 1140 |
| Rotary engine | T. A. Diebold | 729,849 | June 2 | 605 | 133 | 104 | 1252 |
| Rotary engine | M. H. Sullivan | 730,489 | June 9 | 1764 | 395, 396 | 104 | 1505 |
| Rotary engine | M. E. Knight | 730,543 | June 9 | 1862 | 415, 416 | 104 | 1528 |
| Rotary engine | F. Jacob | 730,661 | June 9 | 2069 | 461, 462 | 104 | 1571 |
| Rotary engine | J. C. Monroe | 730,679 | June 9 | 2105 | 468 | 104 | 1580 |
| Rotary engine | J. C. Beckfield | 731,155 | June 16 | 2990 | 663, 664 | 104 | 1783 |
| Rotary engine | C. T. Benson | 731,425 | June 23 | 3497 | 781 | 104 | 1905 |
| Rotary engine | R. Foster | 732,404 | June 30 | 5379 | 1191, 1192 | 104 | 2309 |
| Rotary engine | E. J. Beakley | 732,612 | June 30 | 5776 | 1280, 1281 | 104 | 2394 |
| Rotary engine | T. M. Andrews | 732,671 | June 30 | 5885 | 1306 | 104 | 2416 |
| Rotary engine | J. S. Moseley | 732,880 | July 7 | 329 | 81 | 105 | 72 |
| Rotary engine | J. Knowles | 733,052 | July 7 | 621 | 152, 153 | 105 | 132 |
| Rotary engine | A. I. Ostrander | 733,265 | July 7 | 1016 | 243, 244 | 105 | 212 |
| Rotary engine | R. R. and J. H. Vogan | 733,773 | July 14 | 1515 | 451 | 105 | 421 |
| Rotary engine | M. Fleming | 734,226 | July 21 | 2818 | 661, 662 | 105 | 630 |
| Rotary engine | C. E. and W. E. Reynolds | 734,430 | July 21 | 3199 | 753 | 105 | 710 |
| Rotary engine | O. Jurtz | 734,882 | July 28 | 4066 | 948 | 105 | 903 |
| Rotary engine | E. B. Porter | 734,944 | July 28 | 4166 | 969, 970 | 105 | 925 |
| Rotary engine | J. H. Pitkin | 736,011 | Aug. 11 | 1866 | 398 | 105 | 1398 |
| Rotary engine | J. Graves | 736,383 | Aug. 18 | 2504 | 550 | 105 | 1552 |
| Rotary engine | R. B. Morden | 736,865 | Aug. 18 | 3439 | 762 | 105 | 1747 |
| Rotary engine | J. F. Muncey | 737,127 | Aug. 25 | 3898 | 866 | 105 | 1863 |
| Rotary engine | P. R. Mattocks and J. L. Graffiin | 737,853 | Sept. 1 | 571 | 126 | 106 | 127 |
| Rotary engine | H. E. Smallbone | 737,876 | Sept. 1 | 645 | 137, 138 | 106 | 141 |
| Rotary engine | H. L. Humphrey | 738,907 | Sept. 15 | 2715 | 600, 601 | 106 | 615 |
| Rotary engine | J. M. Farmer | 739,274 | Sept. 15 | 3372 | 748, 749 | 106 | 753 |
| Rotary engine | J. H. Cadoo and J. M. Van Why | 739,288 | Sept. 22 | 3399 | 756, 757 | 106 | 774 |
| Rotary engine | G. White | 739,567 | Sept. 22 | 3904 | 875 | 106 | 884 |
| Rotary engine | L. V. Sutton | 740,944 | Oct. 6 | 1022 | 231, 232 | 106 | 1464 |
| Rotary engine | H. M. Dailey | 741,018 | Oct. 13 | 1171 | 264, 265 | 106 | 1516 |
| Rotary engine | H. A. Mattill | 741,053 | Oct. 13 | 1230 | 279 | 106 | 1529 |
| Rotary engine | H. Mullen | 741,059 | Oct. 13 | 1242 | 281 | 106 | 1532 |
| Rotary engine | J. W. Larimore | 741,149 | Oct. 13 | 1407 | 322, 323 | 106 | 1566 |
| Rotary engine | E. A. Morphew | 741,359 | Oct. 13 | 1859 | 411 | 106 | 1654 |
| Rotary engine | L. S. Flatau | 741,476 | Oct. 13 | 2090 | 463, 464 | 106 | 1713 |
| Rotary engine | W. F. Barrett | 741,574 | Oct. 13 | 2281 | 509 | 106 | 1752 |
| Rotary engine | H. W. Bogart | 741,617 | Oct. 20 | 2364 | 529 | 106 | 1785 |
| Rotary engine | F. Fuchs | 742,181 | Oct. 27 | 3496 | 780, 781 | 106 | 2033 |
| Rotary engine | I. H. Dillon | 742,297 | Oct. 27 | 3728 | 833 | 106 | 2082 |
| Rotary engine | L. Teal | 742,369 | Oct. 27 | 3850 | 864, 865 | 106 | 2108 |
| Rotary engine | T. E. E. Bartlett | 742,561 | Oct. 27 | 4202 | 946 | 106 | 2179 |
| Rotary engine | A. H. Pierce | 742,901 | Nov. 3 | 144 | 33 | 107 | 32 |
| Rotary engine | D. Morell | 743,010 | Nov. 3 | 364 | 79 | 107 | 77 |
| Rotary engine | J. P. L. Halyburton | 743,074 | Nov. 3 | 493 | 107 | 107 | 103 |
| Rotary engine | G. W. Montgomery | 743,092 | Nov. 3 | 528 | 114, 115 | 107 | 111 |
| Rotary engine | R. L. Barnhart | 743,135 | Nov. 3 | 608 | 131, 132 | 107 | 127 |
| Rotary engine | E. W. Bull | 743,443 | Nov. 10 | 1290 | 264, 265 | 107 | 291 |
| Rotary engine | M. D. Kalbach | 743,883 | Nov. 10 | 2117 | 452, 453 | 107 | 467 |
| Rotary engine | F. M. Comstock | 744,050 | Nov. 17 | 2482 | 533 | 107 | 559 |
| Rotary engine | C. Bowers | 744,466 | Nov. 17 | 3275 | 703 | 107 | 730 |
| Rotary engine | M. A. Rice | 744,614 | Nov. 17 | 3505 | 756, 757 | 107 | 776 |
| Rotary engine | E. M. Sturgis | 744,816 | Nov. 24 | 3901 | 838 | 107 | 879 |
| Rotary engine | H. T. Allen | 745,755 | Dec. 1 | 781 | 179 | 107 | 1265 |

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|---|---|---|---|---|---|---|---|
| Rotary engine | W. H. Greene | 745,820 | Dec. 1 | 926 | 208, 209 | 107 | 1296 |
| Rotary engine | L. J. J. B. Le Rond | 746,346 | Dec. 8 | 1902 | 434, 435 | 107 | 1524 |
| Rotary engine | C. Guyer | 746,501 | Dec. 8 | 2158 | 496, 497 | 107 | 1580 |
| Rotary engine | A. Guindon. (Reissue) | 12,183 | Dec. 8 | 2438 | 557, 558 | 107 | 1645 |
| Rotary engine | A. C. Willis | 747,026 | Dec. 15 | 3150 | 721, 722 | 107 | 1825 |
| Rotary engine | H. C. Essington | 747,319 | Dec. 15 | 3714 | 837 | 107 | 1951 |
| Rotary engine | J. D'Halewyn | 747,418 | Dec. 22 | 3889 | 875, 876 | 107 | 2007 |
| Rotary engine | I. V. Ketcham | 747,727 | Dec. 22 | 4448 | 1003, 1004 | 107 | 2133 |
| Rotary engine | A. P. Schmucker | 747,894 | Dec. 22 | 4774 | 1078, 1079 | 107 | 2206 |
| Rotary engine | L. J. J. B. Le Rond | 748,196 | Dec. 29 | 5384 | 1223, 1224, 1225 | 107 | 2360 |
| Rotary engine | J. W. Weger | 748,243 | Dec. 29 | 5458 | 1244 | 107 | 2377 |
| Rotary engine | F. K. Sturdivant | 748,320 | Dec. 29 | 5587 | 1274 | 107 | 2404 |
| Rotary engine | J. Gary | 748,495 | Dec. 29 | 5921 | 1344, 1345 | 107 | 2479 |
| Rotary engine | W. Olewinski | 748,522 | Dec. 29 | 5975 | 1356 | 107 | 2490 |
| Rotary engine | W. J. Rowe and A. L. Witbeck | 748,533 | Dec. 29 | 5998 | 1359 | 107 | 2495 |
| Rotary engine. Balanced | F. P. Huyck | 719,222 | Jan. 27 | 3235 | 722, 723 | 102 | 728 |
| Rotary engine. Multicylinder | W. Scantlebury | 719,513 | Feb. 3 | 175 | 40, 41 | 102 | 860 |
| Rotary engine. Multiple-expansion | H. Pearse and E. F. Ievers | 718,725 | Jan. 20 | 2298 | 507, 508 | 102 | 519 |
| Rotary engine. Reciprocating | F. W. Reeves | 720,845 | Feb. 17 | 2643 | 610, 611 | 102 | 1410 |
| Rotary engine. Reversible | G. A. L. Lind | 723,689 | Mar. 24 | 3773 | 847 | 103 | 834 |
| Rotary engine. Reversible | E. S. Ward | 744,447 | Nov. 17 | 3239 | 694 | 107 | 723 |
| Rotary engine. Reversible | E. Hemstrom | 744,542 | Nov. 17 | 3399 | 732 | 107 | 756 |
| Rotary expansion-engine | R. S. Matteson | 724,907 | Apr. 7 | 904 | 206, 207 | 103 | 1363 |
| Rotary explosive-engine | P. C. Sainsevain | 726,353 | Apr. 28 | 3579 | 812 | 103 | 1970 |
| Rotary explosive-engine | R. Cumming | 731,286 | June 16 | 3229 | 719 | 104 | 1830 |
| Rotary explosive-engine | R. Cumming | 734,827 | July 28 | 3971 | 928 | 105 | 884 |
| Rotary explosive-engine | J. J. O. R. Ruliancih | 736,787 | Aug. 18 | 3282 | 726 | 105 | 1713 |
| Rotary explosive-engine | C. R. James | 740,138 | Sept. 29 | 4995 | 1122 | 106 | 1134 |
| Rotary explosive-engine | G. C. Blasdell | 743,230 | Nov. 3 | 799 | 174, 175 | 107 | 167 |
| Rotary explosive-engine | A. McCahon | 746,870 | Dec. 15 | 2857 | 658 | 107 | 1758 |
| Rotary explosive-motor | A. Primat | 736,151 | Aug. 11 | 2111 | 453 | 105 | 1449 |
| Rotary fluid-engine | J. F. Cooley | 724,994 | Apr. 7 | 1066 | 244 | 103 | 1396 |
| Rotary fluid-engine | J. F. Cooley | 725,615 | Apr. 14 | 2212 | 499, 500 | 103 | 1655 |
| Rotary fluid-engine | J. F. Cooley | 748,348 | Dec. 29 | 5633 | 1284 | 107 | 2414 |
| Rotary fluid-pressure engine | B. Draper and C. W. Carter | 732,280 | June 30 | 5144 | 1142, 1143 | 104 | 2260 |
| Rotary gas-engine | O. G. Rieske | 719,045 | Jan. 27 | 2897 | 649 | 102 | 659 |
| Rotary gas-engine | W. M. Everett | 719,653 | Feb. 3 | 429 | 98 | 102 | 911 |
| Rotary-grate furnace | J. MacCormack | 724,025 | Mar. 31 | 4448 | 999, 1000 | 103 | 990 |
| Rotary kiln | W. Michaëlis, Jr. | 743,538 | Nov. 10 | 1490 | 311 | 107 | 335 |
| Rotary meter | G. Fajen | 726,270 | Apr. 28 | 3402 | 773 | 103 | 1933 |
| Rotary meter | W. H. Larrabee | 746,634 | Dec. 8 | 2403 | 550 | 107 | 1037 |
| Rotary motor | F. C. Watson | 723,344 | Mar. 24 | 3139 | 705, 706 | 103 | 706 |
| Rotary motor | J. M. Crowley | 724,819 | Apr. 7 | 754 | 175 | 103 | 1331 |
| Rotary motor | E. R. Douglas | 735,956 | Aug. 11 | 1754 | 375, 376 | 105 | 1374 |
| Rotary motor | A. Patschke | 740,908 | Oct. 6 | 961 | 215, 216 | 106 | 1452 |
| Rotary motor | A. Patschke | 745,898 | Dec. 1 | 1078 | 242 | 107 | 1328 |
| Rotary motor. Reciprocating | H. de Chardonnet | 735,943 | Aug. 11 | 1733 | 370 | 105 | 1370 |
| Rotary-piston engine | C. E. Hite | 740,979 | Oct. 6 | 1091 | 247 | 106 | 1479 |
| Rotary press | J. Neuert | 740,168 | Sept. 29 | 5052 | 1136, 1137 | 106 | 1147 |
| Rotary reaction-motor | C. Mündel | 735,561 | Aug. 4 | 1022 | 216 | 105 | 1197 |
| Rotary steam-engine | J. A. Jenkins and J. F. Lord | 718,207 | Jan. 13 | 1281 | 281 | 102 | 290 |
| Rotary steam-engine | J. F. Craig and T. V. Fleming | 722,086 | Mar. 3 | 787 | 176 | 103 | 170 |
| Rotary steam-engine | T. Bayley | 723,436 | Mar. 24 | 3320 | 744 | 103 | 741 |
| Rotary steam-engine | J. McCalley and H. L. Collman | 725,580 | Apr. 14 | 2148 | 487 | 103 | 1641 |
| Rotary steam-engine | S. Olson | 727,677 | May 12 | 1606 | 365, 366 | 104 | 363 |
| Rotary steam-engine | F. J. Waters | 733,777 | July 14 | 1921 | 452, 453 | 105 | 422 |
| Rotary steam-engine | H. E. Bridge | 735,203 | Aug. 4 | 330 | 64 | 105 | 1051 |
| Rotary steam-engine | C. W. Edwards | 738,016 | Sept. 1 | 921 | 203 | 106 | 202 |
| Rotary steam-engine | T. Duysens and P. Klijnen | 740,544 | Oct. 6 | 309 | 63, 64 | 106 | 1310 |
| Rotary steam-engine | J. J. Walley | 746,420 | Dec. 8 | 2026 | 463, 464 | 107 | 1551 |
| Rotary steam-engine | D. P. Fuqua, Sr., and F. C. Bueh-ler, Jr. | 746,489 | Dec. 8 | 2137 | 491, 492 | 107 | 1575 |
| Rotary steam explosive-engine | D. P. Fuqua, Sr | 731,104 | June 16 | 2887 | 640, 641 | 104 | 1763 |
| Rotatably-mounted wheel | W. M. Scott | 737,289 | Aug. 25 | 4220 | 940 | 105 | 1931 |
| Rotating steam-engine | H. W. A. Andersen | 739,805 | Sept. 29 | 4368 | 979 | 106 | 1003 |
| Roundabout | O. Manig | 739,691 | Sept. 22 | 4147 | 926 | 106 | 936 |
| Roundabout | C. P. Beisel | 741,758 | Oct. 20 | 2641 | 591 | 106 | 1843 |
| Roundabout or pleasure-railway | J. M. Taylor | 728,514 | May 19 | 3183 | 705 | 104 | 714 |
| Roundabout sailing apparatus | A. Kitterman | 723,162 | Mar. 17 | 2792 | 629 | 103 | 621 |

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|---|---|---|---|---|---|---|---|
| Rounding-machine tool | D. F. Shea | 721,395 | Feb. 24 | 3731 | 849 | 102 | 1658 |
| Routing-cutter | J. L. Perkins | 740,690 | Oct. 6 | 563 | 126 | 106 | 1369 |
| Routing-machine cutter-head | V. Royle | 729,896 | June 2 | 688 | 152 | 104 | 1268 |
| Routing-table | D. M. Heald | 721,949 | Mar. 3 | 557 | 122 | 103 | 122 |
| Routing-table | D. M. Heald | 721,950 | Mar. 3 | 559 | 123 | 103 | 123 |
| Roving and spinning machines, &c. Gage for setting rollers of | M. H. Vaughan | 730,178 | June 2 | 1171 | 262 | 104 | 1366 |
| Roving-can | E. Andrews | 731,151 | June 16 | 2983 | 663 | 104 | 1782 |
| Roving-clamp | C. T. Hawley | 735,974 | Aug. 11 | 1786 | 383 | 105 | 1381 |
| Roving-clamp | C. T. Hawley | 735,975 | Aug. 11 | 1788 | 383 | 105 | 1382 |
| Roving-frames, &c. Stopping mechanism for | T. Bentley | 723,576 | Mar. 24 | 3581 | 800, 801 | 103 | 793 |
| Roving-guide traverse-motion | L. Owen | 727,191 | May 5 | 695 | 149 | 104 | 150 |
| Roving mechanism | N. N. S. Daudelin | 744,306 | Nov. 17 | 2988 | 640 | 107 | 667 |
| Rowing apparatus | J. L. Burton | 732,336 | June 30 | 5233 | 1161, 1162 | 104 | 2278 |
| Rowing-machine | L. W. Grayson | 731,998 | June 23 | 4554 | 1016 | 104 | 2124 |
| Rowlock | J. R. Supple | 741,850 | Oct. 20 | 2798 | 623 | 106 | 1878 |
| Rowlock for boats | A. Fenwick | 743,265 | Nov. 3 | 872 | 189 | 107 | 183 |
| Rowlock for metallic boats | J. L. Burton | 740,626 | Oct. 6 | 467 | 103 | 106 | 1347 |
| Rub-apron for rub-rolls | H. W. Tuttle | 723,505 | Mar. 24 | 3466 | 775 | 103 | 769 |
| Rubber boots, &c. Device for patching | H. H. Gove | 735,753 | Aug. 11 | 1375 | 296 | 105 | 1291 |
| Rubber boots or shoes. Foxing for | H. J. Doughty | 722,823 | Mar. 17 | 2202 | 492 | 103 | 500 |
| Rubber-dam holder | E. B. Marshall | 733,410 | July 14 | 1281 | 303 | 105 | 287 |
| Rubber fabric for heels, &c | M. A. Kennedy | 723,876 | Mar. 31 | 4124 | 930 | 103 | 925 |
| Rubber glove. Seamless | J. Pfeiffer | 723,301 | Mar. 24 | 3063 | 689 | 103 | 692 |
| Rubber glove. Seamless | C. A. Lindsay | 732,360 | June 30 | 5295 | 1174 | 104 | 2290 |
| Rubber heel | F. M., J. S., and W. W. Hilton | 736,394 | Aug. 18 | 2532 | 556 | 105 | 1559 |
| Rubber-heel holder | P. A. Jahn | 740,760 | Oct. 6 | 715 | 161 | 106 | 1399 |
| Rubber. Machine for coating fabric with | J. H. Pearce | 720,281 | Feb. 10 | 1616 | 370 | 102 | 1180 |
| Rubber. Manufacturing a substance resembling india- | D. H. Dupont-Franklin | 746,689 | Dec. 15 | 2512 | ------ | 107 | 1681 |
| Rubber mat | W. J. Ellis | 729,923 | June 2 | 726 | 162 | 104 | 1276 |
| Rubber or other sap-yielding trees. Device for grooving or tapping | F. S. Robinson | 730,299 | June 9 | 1414 | 310, 311 | 104 | 1432 |
| Rubber. Refining crude | W. A. Lawrence | 741,260 | Oct. 13 | 1630 | 367 | 106 | 1614 |
| Rubber roll | J. B. Forsyth | 732,728 | July 7 | 57 | 16 | 105 | 15 |
| Rubber shoes, &c. Attachment for | W. Foreman and G. R. Conger | 736,082 | Aug. 11 | 1996 | 424 | 105 | 1427 |
| Rubber shoes. Mechanism for manufacturing | H. J. Doughty | 722,822 | Mar. 17 | 2200 | 491 | 103 | 499 |
| Rubber. Substance resembling india- | D. H. Dupont-Franklin | 746,688 | Dec. 15 | 2511 | ------ | 107 | 1681 |
| Rubber-tired wheel | R. Mulholland | 728,490 | May 19 | 3146 | 696 | 104 | 707 |
| Rubber. Vulcanizing | A. O. Bourn | 735,059 | Aug. 4 | 21 | 6 | 105 | 986 |
| Rubber without solvents. Extracting | W. A. Lawrence | 741,258 | Oct. 13 | 1626 | 367 | 106 | 1613 |
| Rubbing and polishing machine | C. S. Yarnell | 743,608 | Nov. 10 | 1628 | 341 | 107 | 364 |
| Rubbing-machine | A. Lawson | 738,921 | Sept. 15 | 2743 | 606, 607 | 106 | 621 |
| Rubbing or polishing machine | M. S. Gooley | 724,567 | Apr. 7 | 269 | 65, 66 | 103 | 1227 |
| Rudder. Ship's | O. S. Mears | 717,590 | Jan. 6 | 127 | 33 | 102 | 29 |
| Rug attachment | M. C. Long | 718,136 | Jan. 13 | 1150 | 255 | 102 | 263 |
| Rug-fastener | J. L. Kingston | 724,884 | Apr. 7 | 866 | 199 | 103 | 1354 |
| Rug. Traveler's | G. A. and A. Ström | 721,250 | Feb. 24 | 3483 | 791 | 102 | 1606 |
| Rule | J. F. Bush | 740,742 | Oct. 6 | 661 | 150 | 106 | 1389 |
| Rule | T. G. Saxton and W. G. McDowell | 745,243 | Nov. 24 | 4733 | 1033 | 107 | 1051 |
| Rule and blotter. Combined | W. H. Ramsey | 717,618 | Jan. 6 | 171 | 43 | 102 | 38 |
| Rule and calculator. Slide- | W. Crosley | 748,050 | Dec. 29 | 5108 | 1154 | 107 | 2301 |
| Rule and try-square combined | W. T. Whiteway | 730,849 | June 9 | 2384 | 526 | 104 | 1639 |
| Rule attachment | M. G. Bailey | 718,300 | Jan. 13 | 1450 | 322 | 102 | 328 |
| Rule attachment | S. Murphy | 738,225 | Sept. 8 | 1347 | 292 | 106 | 307 |
| Rule. Carpenter's | F. E. Clark | 734,514 | July 28 | 3354 | 785 | 105 | 757 |
| Rule. Combination- | A. Gray | 734,539 | July 28 | 3408 | 795, 796 | 105 | 769 |
| Rule. Foldable | J. A. and F. L. Traut | 734,013 | July 21 | 2408 | 564 | 105 | 541 |
| Rule for checks, &c. Severing- | S. W. Finch | 741,901 | Oct. 20 | 2891 | 645, 646 | 106 | 1897 |
| Rule for measuring openings | E. Hipolito | 740,653 | Oct. 6 | 504 | 111 | 106 | 1355 |
| Rule-gage | E. A. Bircher | 727,884 | May 12 | 2005 | 447 | 104 | 444 |
| Rule. Garment-drafting | J. P. Buckley | 744,475 | Nov. 17 | 3286 | 706 | 107 | 732 |
| Rule. Lumber- | J. F. W. Ritsch | 728,763 | May 19 | 3658 | 814 | 104 | 816 |
| Rule. Measuring- | W. E. Severance | 728,137 | May 12 | 2469 | 549 | 104 | 543 |
| Rule or scale. Universal fraction | W. F. Leavell | 731,311 | June 16 | 3279 | 729 | 104 | 1842 |
| Rule-planing apparatus | H. C. Hansen | 745,725 | Dec. 1 | 737 | 168, 169 | 107 | 1255 |
| Rule. Protractor- | A. Peterson | 736,437 | Aug. 18 | 2605 | 572 | 105 | 1573 |
| Rule. Slide- | W. H. Glaser | 732,935 | July 7 | 425 | 104 | 105 | 91 |
| Ruler | T. Ramsay | 719,257 | Jan. 27 | 3299 | 739 | 102 | 741 |
| Ruler | A. Wildman | 734,149 | July 21 | 2682 | 631 | 105 | 600 |
| Ruler | J. F. Cooke and A. Keller | 747,380 | Dec. 22 | 3822 | 860 | 107 | 1991 |
| Ruler and adding device. Combined | H. L. Haskell and J. A. Mitchell | 732,072 | June 30 | 4720 | 1054 | 104 | 2171 |
| Ruler and blotter. Combined | H. C. Probst | 722,141 | Mar. 3 | 881 | 197 | 103 | 188 |
| Ruler and blotter. Combined | J. H. Watson, Jr | 743,119 | Nov. 3 | 575 | 124 | 107 | 120 |
| Ruler and line-gage | S. Adler | 721,271 | Feb. 24 | 3510 | 798 | 102 | 1612 |
| Ruler attachment | H. Diffo | 730,348 | June 9 | 1503 | 334 | 104 | 1451 |
| Ruler. Dressmaker's | S. S. Freeman | 722,221 | Mar. 10 | 1057 | 232 | 103 | 241 |
| Ruler. Flexible | E. A. A. Dunn | 742,013 | Oct. 20 | 3142 | 701 | 106 | 1947 |
| Ruler. Parallel- | J. W. Glaholm and G. T. Kent | 746,494 | Dec. 8 | 2147 | 494 | 107 | 1578 |
| Ruling and erasing implement | A. W. Steiger | 722,160 | Mar. 3 | 924 | 205 | 103 | 197 |
| Ruling-machine | A. Keach | 730,923 | June 16 | 2545 | 566 | 104 | 1693 |
| Ruling machine. Paper- | A. L. Barber | 745,136 | Nov. 24 | 4514 | 977 | 107 | 1006 |
| Ruling-machine pen-clamp | R. T. Brooks | 747,127 | Dec. 15 | 3341 | 759 | 107 | 1871 |
| Ruling parallel lines. Apparatus for | W. Schmitt | 723,039 | Mar. 17 | 2562 | 576 | 103 | 574 |
| Running-gear | C. W. Petro | 720,177 | Feb. 10 | 1404 | 321 | 102 | 1137 |
| Running-gear | J. Weber | 726,598 | Apr. 28 | 4068 | 918 | 103 | 2065 |
| Running-gear | M. G. Bunnell | 739,777 | Sept. 22 | 4294 | 962 | 106 | 969 |
| Running-gear | A. Groff | 746,694 | Dec. 15 | 2518 | 578, 579 | 107 | 1682 |
| Rust preventing and removing composition | S. T. Coffing | 719,190 | Jan. 27 | 3177 | ------ | 102 | 716 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|---|
| | | | | Spec. | Drg. | Vol. | Page. |
| Rustproof and fireproof composition | G. and G. Bevilacqua | 733,573 | July 14 | 1573 | ------ | 105 | 351 |
| Saccharimeter | A. B. Lyons | 730,674 | June 9 | 2098 | 467 | 104 | 1579 |
| Saccharine juices. Defecating | J. J. Hignette | 738,328 | Sept. 8 | 1592 | 345 | 106 | 359 |
| Saccharine juices. Defecating | W. C. Salisbury | 748,313 | Dec. 29 | 5579 | ------ | 107 | 2403 |
| Saccharine or other solutions. Clarifying | E. M. Deming | 739,400 | Sept. 22 | 3619 | 806 | 106 | 822 |
| Sack, bag, &c | A. M. Bates. (Reissue) | 12,081 | Feb. 17 | 3230 | 739 | 102 | 1541 |
| Sack-cleaner | W. B. Schuyler | 724,055 | Mar. 31 | 4494 | 1012 | 103 | 1000 |
| Sack-holder | E. Taylor | 717,779 | Jan. 6 | 506 | 113 | 102 | 109 |
| Sack-holder | P. P. Fjellman | 729,564 | June 2 | 81 | 20 | 104 | 1144 |
| Sack-holder | E. E. Elliott | 731,442 | June 23 | 3533 | 787 | 104 | 1913 |
| Sack-holder | J. Schmidt | 736,553 | Aug. 18 | 2822 | 618 | 105 | 1621 |
| Sad-iron | A. J. Campbell | 718,311 | Jan. 13 | 1465 | 325 | 102 | 331 |
| Sad-iron | E. J. Hansen | 720,518 | Feb. 10 | 2034 | 467 | 102 | 1267 |
| Sad-iron | A. J. Campbell | 728,669 | May 19 | 3499 | 777 | 104 | 782 |
| Sad-iron | D. R. Blair and C. Kirby | 733,616 | July 14 | 1640 | 389 | 105 | 364 |
| Sad-iron | L. A. Miller | 735,553 | Aug. 4 | 1009 | 213 | 105 | 1194 |
| Sad-iron | C. W. Johnston | 736,733 | Aug. 18 | 3185 | 703 | 105 | 1693 |
| Sad-iron | W. W. Lind | 737,120 | Aug. 25 | 3886 | 863 | 105 | 1861 |
| Sad-iron | W. A. Hammond | 738,678 | Sept. 8 | 2274 | 500 | 106 | 502 |
| Sad-iron | O. Tverdahl | 740,996 | Oct. 6 | 1127 | 254 | 106 | 1486 |
| Sad-iron | W. W. Lamb | 743,648 | Nov. 10 | 1694 | 357 | 107 | 378 |
| Sad-iron | F. C. Lowthorp | 743,897 | Nov. 10 | 2145 | 461 | 107 | 473 |
| Sad-iron | B. Holz, Jr | 746,510 | Dec. 8 | 2172 | 499 | 107 | 1583 |
| Sad-iron. Gas-heating | H. W. O'Dowd | 725,865 | Apr. 21 | 2688 | 612 | 103 | 1771 |
| Sad-iron handle | F. Stuart | 738,127 | Sept. 1 | 1132 | 252 | 106 | 245 |
| Sad-iron handle | W. C. Fawkes | 740,410 | Oct. 6 | 40 | 10 | 106 | 1252 |
| Sad-iron heater | H. H. Brown | 740,083 | Sept. 29 | 4900 | 1099 | 106 | 1114 |
| Sad-iron. Self-heating | J. C. Lake | 725,261 | Apr. 14 | 1563 | 354 | 103 | 1516 |
| Sad-iron. Self-heating | H. D. Raemisch | 726,343 | Apr. 28 | 3559 | 806, 807 | 103 | 1966 |
| Sad-iron. Self heating and extinguishing | T. Hawkes | 739,079 | Sept. 15 | 3010 | 667 | 106 | 676 |
| Sad-iron support | A. Lapinski | 740,876 | Oct. 6 | 909 | 204 | 106 | 1440 |
| Saddle | S. S. Moore | 744,591 | Nov. 17 | 3467 | 748 | 107 | 769 |
| Saddle and driving-box. Spring- | E. N. Slocum | 723,322 | Mar. 24 | 3097 | 697, 698 | 103 | 699 |
| Saddle attachment. Riding- | T. Sena | 734,100 | July 21 | 2587 | 606, 607 | 105 | 581 |
| Saddle. Cart and harness | P. R. Pulman | 734,471 | July 21 | 3274 | 769 | 105 | 724 |
| Saddle for harness. Auxiliary | H. Rittel | 720,178 | Feb. 10 | 1406 | 321 | 102 | 1138 |
| Saddle. Harness- | C. Hoberecht | 730,122 | June 2 | 1081 | 243 | 104 | 1347 |
| Saddle. Harness- | J. B. Tener | 734,478 | July 21 | 3288 | 771 | 105 | 727 |
| Saddle. Harness- | C. W. Miller | 736,760 | Aug. 18 | 3230 | 713 | 105 | 1702 |
| Saddle. Harness- | T. I. Morrish | 748,204 | Dec. 29 | 5398 | 1227 | 107 | 2363 |
| Saddle pad. Riding- | B. F. Amos | 721,653 | Mar. 3 | 2 | 1 | 103 | 3 |
| Saddle. Riding- | F. J. Beckerman | 726,844 | May 5 | 17 | 4,5 | 104 | 7 |
| Saddle. Spring-supported | I. A. Newey | 742,479 | Oct. 27 | 4038 | 906 | 106 | 2145 |
| Saddles, collars, &c. Reversible pad for | F. Maussner | 742,701 | Oct. 27 | 4446 | 1004 | 106 | 2232 |
| Saddletree. Harness- | J. Sanftleben | 736,026 | Aug. 11 | 1892 | 404 | 105 | 1404 |
| Saddletree. Harness- | D. C. Bowers | 741,104 | Oct. 13 | 1330 | 305 | 106 | 1550 |
| Safe | W. P. McKenna | 723,714 | Mar. 24 | 3821 | 859 | 103 | 844 |
| Safe | J. Wartenberger | 725,303 | Apr. 14 | 1630 | 368 | 103 | 1530 |
| Safe | J. H. Dodson | 727,105 | May 5 | 546 | 117 | 104 | 119 |
| Safe | H. Jaarsma | 727,371 | May 5 | 1023 | 222 | 104 | 220 |
| Safe | T. Scott | 732,660 | June 30 | 5868 | 1301, 1302 | 104 | 2412 |
| Safe | B. France | 733,712 | July 14 | 1796 | 425, 426 | 105 | 396 |
| Safe | W. H. Reynolds and C. F. Meilink | 735,588 | Aug. 4 | 1062 | 226 | 105 | 1206 |
| Safe | H. C. Lowrie | 735,787 | Aug. 11 | 1429 | 307 | 105 | 1303 |
| Safe | M. M. Long | 738,116 | Sept. 1 | 1113 | 246, 247 | 106 | 244 |
| Safe. Buoyant | F. Honeck and R. H. Hopkins | 717,683 | Jan. 6 | 290 | 72 | 102 | 63 |
| Safe day-lock. Screw-door- | C. E. Blechschmidt | 742,569 | Oct. 27 | 4213 | 949 | 106 | 2181 |
| Safe. Domestic | M. M. Enders | 731,027 | June 16 | 2743 | 612 | 104 | 1734 |
| Safe. Door-jamb | W. R. Park | 741,368 | Oct. 13 | 1880 | 415 | 106 | 1668 |
| Safe. Fire and water proof | J. Thomas-Kilham | 729,809 | June 2 | 530 | 117 | 104 | 1236 |
| Safe-protecting means | G. W. Craig | 720,330 | Feb. 10 | 1701 | 386 | 102 | 1199 |
| Safes, &c. Closing and locking device for | W. H. Reynolds and C. F. Meilink | 718,878 | Jan. 20 | 2583 | 576 | 102 | 578 |
| Safes. Electrical signal for adding security to | W. E. Arnold | 732,813 | July 7 | 218 | 54 | 105 | 49 |
| Safety apparatus | H. K. Whitner. (Reissue) | 12,145 | Aug. 11 | 2430 | 531 | 105 | 1521 |
| Safety-deposit receptacle | C. A. Lord | 730,279 | June 9 | 1376 | 303 | 104 | 1423 |
| Safety device | E. S. Smith | 734,142 | July 21 | 2671 | 628 | 105 | 598 |
| Safety-gate | C. E. Simpson | 735,306 | Aug. 4 | 516 | 104, 105 | 105 | 1091 |
| Safety-hook | F. Lynx | 732,308 | June 30 | 5186 | 1152 | 104 | 2268 |
| Safety-hook | R. B. Witte | 743,606 | Nov. 10 | 1626 | 340 | 107 | 363 |
| Safety-hook for suspending drapery or analogous purposes. | M. E. Higgins | 718,203 | Jan. 13 | 1274 | 279 | 102 | 289 |
| Safety-pin | R. P. Brown | 720,106 | Feb. 10 | 1289 | 295 | 102 | 1113 |
| Safety-pin | P. H. T. Paulinetti | 721,225 | Feb. 24 | 3437 | 781 | 102 | 1596 |
| Safety-pin | L. Greer | 737,225 | Aug. 25 | 4097 | 911 | 105 | 1905 |
| Safety-pin | J. H. Green | 740,121 | Sept. 29 | 4965 | 1114 | 106 | 1128 |
| Safety-pin | J. W. Casper and W. Gerder | 743,690 | Nov. 10 | 1763 | 372 | 107 | 392 |
| Safety-pin | B. P. Herndon | 748,071 | Dec. 29 | 5153 | 1166 | 107 | 2311 |
| Safety-pin | C. Andresen | 748,333 | Dec. 29 | 5605 | 1278 | 107 | 2408 |
| Safety-pin and hook. Combined | W. F. Peet | 722,617 | Mar. 10 | 1781 | 396 | 103 | 398 |
| Safety-pin attachments. Anchor for | W. S. Hunkins | 738,542 | Sept. 8 | 2010 | 437 | 106 | 447 |
| Safety-pin. Double | J. M. Howley | 733,204 | July 7 | 902 | 218 | 105 | 189 |
| Safety-shears | C. Grant | 738,994 | Sept. 15 | 2855 | 634 | 106 | 644 |
| Safety-stopper | I. Timar | 728,426 | May 19 | 3028 | 665 | 104 | 683 |
| Sail | J. Couch | 721,286 | Feb. 24 | 3532 | 803 | 102 | 1617 |
| Sales-pad | H. W. Mather | 718,648 | Jan. 20 | 2144 | 468 | 102 | 489 |
| Sales-recording device | W. Reardon | 744,937 | Nov. 24 | 4105 | 885 | 107 | 922 |
| Saline solutions. Electrolytic decomposition of | A. B. Larchar | 736,982 | Aug. 25 | 3664 | 812, 813 | 105 | 1814 |
| Saliva-ejector | J. B. Jordan | 730,128 | June 2 | 1088 | 244 | 104 | 1349 |

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| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Salt and pepper shaker. Combined | H. F. Thurston | 725,638 | Apr. 14 | 2273 | 513 | 103 | 1667 |
| Salt-box. Animal | U. Heater | 730,912 | June 16 | 2524 | 562 | 104 | 1688 |
| Salt-cellar | S. Stevens | 735,169 | Aug. 4 | 241 | 48 | 105 | 1034 |
| Salt-cellar | E. B. Little | 738,048 | Sept. 1 | 965 | 215 | 106 | 210 |
| Salt-cellar | W. Wood | 742,268 | Oct. 27 | 3671 | 820 | 106 | 2070 |
| Salt-grainer | H. L. Hildreth | 720,143 | Feb. 10 | 1349 | 309 | 102 | 1127 |
| Salt-graining apparatus | J. S. Clarke | 731,754 | June 23 | 4115 | 918 | 104 | 2029 |
| Salt-packing apparatus | T. Courtland | 726,143 | Apr. 21 | 3154 | 713 / 714 | 103 | 1867 |
| Salt-receptacle | M. F. Simpson | 740,324 | Sept. 29 | 5342 | 1203 | 106 | 1205 |
| Salting-machine. Automatic | J. W. Gheen | 720,128 | Feb. 10 | 1330 | 304 / 305 | 102 | 1123 |
| Sampler. Liquid- | G. S. Dyer | 732,059 | June 30 | 4689 | 1048 | 104 | 2166 |
| Sand and discharging it therefrom under pressure. Mechanical device for receiving | W. H. Stuart | 734,773 | July 28 | 3857 | 899 | 105 | 860 |
| Sand-blast | P. H. Long | 730,138 | June 2 | 1109 | 249 | 104 | 1352 |
| Sand-blast | J. Perdew | 731,812 | June 23 | 4221 | 941 | 104 | 2053 |
| Sand-blast apparatus | N. Farnham | 747,396 | Dec. 22 | 3855 | 867 | 107 | 1999 |
| Sand-blast apparatus. Washer for | A. G. Warren | 719,395 | Jan. 27 | 3563 | 796 | 102 | 800 |
| Sand-blast machinery | B. C. Tilghman, Jr | 727,030 | May 5 | 412 | 86, 87 | 104 | 90 |
| Sand-blower and brake attachment | J. D. Smith | 745,394 | Dec. 1 | 154 | 35 | 107 | 1133 |
| Sand-box and mechanism for actuating same | J. W. Endean | 728,094 | May 12 | 2394 | 533 | 104 | 527 |
| Sand-crushing mill | M. Drury | 738,889 | Sept. 15 | 2688 | 593 | 106 | 609 |
| Sand cutting, sifting, lump-crushing, and mixing machine. | N. K. Skow | 725,884 | Apr. 21 | 2717 | 618 | 103 | 1778 |
| Sand-discharging spout | A. M. Howery | 734,331 | July 21 | 3032 | 714 | 105 | 675 |
| Sand, &c. Distributer for | J. J. Mulligan | 733,733 | July 14 | 1833 | 433 | 105 | 403 |
| Sand-drier | H. W. Bohrman | 730,086 | June 2 | 1023 | 229 | 104 | 1335 |
| Sand-drying apparatus | R. Tanner and O. Tolaas | 745,689 | Dec. 1 | 680 | 156 | 107 | 1243 |
| Sand, gravel, &c. Apparatus for washing | P. Maurice | 740,887 | Oct. 6 | 925 | 207 / 208 | 106 | 1444 |
| Sand-guard | E. L. Degree | 731,345 | June 16 | 3327 | 742 | 104 | 1851 |
| Sand molds. Forming | J. B. Neesham | 733,868 | July 14 | 2110 | 498 | 105 | 460 |
| Sand trap and strainer | H. Blueher | 738,878 | Sept. 15 | 2670 | 588 | 106 | 606 |
| Sand. Treating molding- | W. J. Patterson | 722,885 | Mar. 17 | 2316 | 517 | 103 | 523 |
| Sander-drum | B. Storm | 732,796 | July 7 | 183 | 46 | 105 | 42 |
| Sander. Fluid-operated | F. H. Edwards | 738,172 | Sept. 8 | 1256 | 273 | 106 | 288 |
| Sanding device | J. J. Kennelly | 722,990 | Mar. 17 | 2479 | 557 | 103 | 556 |
| Sanding device | L. A. Gardner | 746,691 | Dec. 15 | 2513 | 577 | 107 | 1681 |
| Sanding device. Automatic | W. F. Cady | 739,386 | Sept. 22 | 3574 | 799 | 106 | 811 |
| Sanding-machine. Universal | A. C. Gough | 747,699 | Dec. 22 | 4400 | 992 | 107 | 2122 |
| Sandpaper-holder | F. Reissmann | 734,953 | July 28 | 4185 | 974 | 105 | 929 |
| Sandpaper-holder | F. Reissmann | 734,954 | July 28 | 4187 | 974 | 105 | 929 |
| Sandpapering-machine | J. A. Fisher | 740,263 | Sept. 29 | 5227 | 1175 / 1176 | 106 | 1182 |
| Sandpapering-machine | C. H. Schmidt | 740,319 | Sept. 29 | 5332 | 1201 | 106 | 1203 |
| Sandpapering-machine pad | C. C. Stuart | 738,956 | Sept. 15 | 2801 | 621 | 106 | 633 |
| Sandpapering-machine-pad mechanism. Supplemental driving means for | C. C. Stuart | 738,955 | Sept. 15 | 2799 | 620 | 106 | 633 |
| Sandpapering-machines. Automatic yielding pressure-bars for | C. C. Stuart | 732,381 | June 30 | 5337 | 1183 | 104 | 2299 |
| Sandpapering-machines. Automatic yielding sectional pressure-bar for | C. C. Stuart | 732,134 | June 30 | 4855 | 1081 | 104 | 2199 |
| Sandal | P. E. Bassett | 736,194 | Aug. 11 | 2184 | 469 | 105 | 1466 |
| Sandal-strap-turning machine | A. H. Higgins | 731,182 | June 16 | 3038 | 675 | 104 | 1790 |
| Sanitary trap | J. W. McAuliffe | 743,094 | Nov. 3 | 532 | 115 | 107 | 112 |
| Sap-spout | G. H. Grimm | 729,330 | May 26 | 4684 | 1034 | 104 | 1042 |
| Sap-spout | A. B. Kilpatrick | 729,355 | May 26 | 4724 | 1044 | 104 | 1050 |
| Sarcophagus | C. A. Landon | 740,766 | Oct. 6 | 726 | 164 | 106 | 1400 |
| Sash adjuster and locking device | F. Bower | 722,079 | Mar. 3 | 775 | 174 | 103 | 167 |
| Sash and frame. Combination top and bottom window | J. Moss | 741,058 | Oct. 13 | 1240 | 280 | 106 | 1532 |
| Sash and frame. Window | G. B. Determann | 730,005 | June 2 | 893 | 199 | 104 | 1310 |
| Sash attachment. Window- | P. Mayotte | 732,526 | Mar. 10 | 1628 | 359 | 103 | 365 |
| Sash-balance | M. Blome | 729,994 | June 2 | 874 | 195 | 104 | 1305 |
| Sash-balance | J. Foster | 733,953 | July 21 | 2284 | 537 | 105 | 516 |
| Sash-balance | H. E. Rathbun and W. H. Lonergan | 737,867 | Sept. 1 | 605 | 132 / 133 | 106 | 133 |
| Sash-balance | W. Berry | 743,224 | Nov. 3 | 789 | 170 / 171 | 107 | 165 |
| Sash-balance | W. Berry | 744,995 | Nov. 24 | 4216 | 913 | 107 | 944 |
| Sash-balance | W. Berry | 744,996 | Nov. 24 | 4219 | 913 | 107 | 945 |
| Sash balance and lock | W. Berry | 743,225 | Nov. 3 | 791 | 171 | 107 | 165 |
| Sash-bar. Greenhouse, &c. | P. M. Pierson. (Reissue) | 12,129 | June 30 | 5929 | 1315 | 104 | 2425 |
| Sash-dovetailing machine. Window- | N. Barrett | 741,093 | Oct. 13 | 1304 | 299 | 106 | 1545 |
| Sash-fastener | G. Simpson | 720,496 | Feb. 10 | 1982 | 453 | 102 | 1257 |
| Sash-fastener | C. M. Zirkle | 720,870 | Feb. 17 | 2688 | 621 | 102 | 1419 |
| Sash-fastener | F. X. St. Louis | 722,162 | Mar. 3 | 928 | 205 | 103 | 198 |
| Sash-fastener | H. R. Fay | 722,963 | Mar. 17 | 2438 | 546 | 103 | 548 |
| Sash-fastener | R. K. Brown | 724,081 | Mar. 31 | 4545 | 1022 | 103 | 1011 |
| Sash-fastener | J. Bohlen | 725,662 | Apr. 21 | 2827 | 525 | 103 | 1692 |
| Sash-fastener | H. Van Wie | 727,036 | May 5 | 426 | 89 | 104 | 93 |
| Sash-fastener | C. H. Hook | 727,950 | May 12 | 2143 | 478 | 104 | 475 |
| Sash-fastener | F. Keilwerth | 727,968 | May 12 | 2174 | 484 | 104 | 481 |
| Sash-fastener | A. Carlson | 728,670 | May 19 | 3500 | 777 | 104 | 783 |
| Sash-fastener | J. E. Gibbs | 733,640 | July 14 | 1680 | 399 | 105 | 372 |
| Sash-fastener | E. H. Baker | 736,474 | Aug. 18 | 2677 | 588 | 105 | 1589 |
| Sash-fastener | C. F. Stone | 737,039 | Aug. 25 | 3753 | 833 | 105 | 1834 |
| Sash-fastener | R. A. Broadhurst and W. Mitchell | 738,766 | Sept. 15 | 2450 | 537 | 106 | 556 |
| Sash-fastener | G. and J. Goerk | 739,410 | Sept. 22 | 3645 | 810 | 106 | 828 |
| Sash-fastener | I. A. Shaw | 740,322 | Sept. 29 | 5339 | 1203 | 106 | 1205 |
| Sash-fastener | F. G. High | 742,787 | Oct. 27 | 4579 | 1038 | 106 | 2262 |
| Sash-fastener | J. W. Buchanan | 744,473 | Nov. 17 | 3284 | 705 | 107 | 731 |
| Sash-fastener | E. W. Hasenpflug | 744,755 | Nov. 24 | 3794 | 817 | 107 | 857 |
| Sash-fastener | J. F. McElwee and C. S. Lowthorp | 745,888 | Dec. 1 | 1063 | 239 | 107 | 1325 |
| Sash-fastener | W. A. Vance and T. Knapp | 746,764 | Dec. 15 | 2637 | 607 | 107 | 1709 |

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| Invention. | Name. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|---|
| | | | | Spec. | Dr'g. | Vol. | Page. |
| Sash-fastener | A. F. W. Lorie | 747,616 | Dec. 22 | 4245 | 955 | 107 | 2088 |
| Sash-fastener | A. F. W. Lorie | 747,617 | Dec. 22 | 4247 | 956 | 107 | 2088 |
| Sash-fastener | A. F. W. Lorie | 747,618 | Dec. 22 | 4248 | 956 | 107 | 2088 |
| Sash-fastener | A. F. W. Lorie | 747,619 | Dec. 22 | 4250 | 956 | 107 | 2089 |
| Sash fastener and lock | G. B. Pickop | 721,385 | Feb. 24 | 3710 | 844 | 102 | 1654 |
| Sash fastener. Storm- | J. Diehl | 747,866 | Dec. 22 | 4727 | 1068 | 107 | 2196 |
| Sash hanger. Storm- | O. F. Abrahamson | 732,692 | July 7 | 2 | 1 | 105 | 3 |
| Sash-holder | L. T. Wever | 730,996 | June 16 | 2686 | 598 | 104 | 1722 |
| Sash-holding device | G. F. Lyman | 727,815 | May 12 | 1884 | 420 | 104 | 419 |
| Sash joint. Window- | C. Mündel | 727,406 | May 5 | 1081 | 237 | 104 | 233 |
| Sash-lift | C. P. Howard | 724,701 | Apr. 7 | 528 | 121 | 103 | 1282 |
| Sash-lifter | G. Cassady | 733,147 | July 7 | 796 | 193 | 105 | 168 |
| Sash-lifting apparatus. Greenhouse | W. O. Johnston and P. J. Foley | 724,879 | Apr. 7 | 859 | 197 | 103 | 1353 |
| Sash-light securer | G. K. F. Franke | 733,830 | July 14 | 2040 | 480 | 105 | 446 |
| Sash-lock | C. A. Goodsell | 718,118 | Jan. 13 | 1116 | 247 | 102 | 255 |
| Sash-lock | L. Patterson | 718,577 | Jan. 13 | 2029 | 441 | 102 | 451 |
| Sash-lock | O. Wall | 721,983 | Mar. 3 | 620 | 138 | 103 | 134 |
| Sash-lock | E. H. Dimock | 723,843 | Mar. 31 | 4056 | 916 | 103 | 910 |
| Sash-lock | J. D. Miller | 725,577 | Apr. 14 | 2145 | 486 | 103 | 1640 |
| Sash-lock | J. Mac Vane | 727,984 | May 12 | 2198 | 490 | 104 | 487 |
| Sash-lock | G. A. Bell | 729,916 | June 2 | 716 | 160 | 104 | 1274 |
| Sash-lock | F. J. Hoyt | 730,266 | June 9 | 1357 | 298 | 104 | 1419 |
| Sash-lock | A. E. Ayer | 731,266 | June 16 | 3174 | 707 | 104 | 1819 |
| Sash-lock | J. D. Miller | 731,317 | June 16 | 3287 | 732 | 104 | 1843 |
| Sash-lock | J. H. Clements | 737,351 | Aug. 25 | 4330 | 965 | 105 | 1956 |
| Sash-lock | B. F. Cheshire | 738,411 | Sept. 8 | 1750 | 380 | 106 | 392 |
| Sash-lock | H. H. Meyer | 738,465 | Sept. 8 | 1857 | 404 | 106 | 413 |
| Sash-lock | M. B. J. Simonds | 738,577 | Sept. 8 | 2059 | 449 | 106 | 458 |
| Sash-lock | J. Ross | 739,109 | Sept. 15 | 3076 | 682 | 106 | 689 |
| Sash-lock | G. L. Lamb | 739,883 | Sept. 29 | 4532 | 1018 | 106 | 1035 |
| Sash-lock | R. W. Hutchison | 742,030 | Oct. 20 | 3175 | 709 | 106 | 1954 |
| Sash-lock | W. B. Weaver | 744,654 | Nov. 17 | 3569 | 769 | 107 | 790 |
| Sash-lock | J. M. Teamer | 745,403 | Dec. 1 | 167 | 38 | 107 | 1135 |
| Sash-lock | A. Johanson | 748,505 | Dec. 29 | 5945 | 1349 | 107 | 2484 |
| Sash-lock and alarm | C. W. Linn | 718,007 | Jan. 6 | 928 | 206 | 102 | 200 |
| Sash lock and lift | J. E. Riley | 722,754 | Mar. 17 | 2069 | 463 | 103 | 473 |
| Sash-lock. Automatic | A. W. Adams | 719,981 | Feb. 10 | 1027 | 239 | 102 | 1057 |
| Sash-lock, lift, and sash-supporter | L. W. Hagel | 734,855 | July 28 | 4024 | 939 | 105 | 894 |
| Sash-lock, &c. Ventilating | J. C. Blair | 743,137 | Nov. 3 | 613 | 133 | 107 | 128 |
| Sash lock. Window- | E. O'Neill | 736,335 | Aug. 11 | 2423 | 529 | 105 | 1520 |
| Sash lock. Window- | C. Hoskyns | 742,658 | Oct. 27 | 4373 | 985 | 106 | 2216 |
| Sash-operating mechanism. Window- | P. A. Houghtaling | 719,221 | Jan. 27 | 3233 | 722 | 102 | 727 |
| Sash or sliding-door attachment. Window- | P. McCabe | 738,277 | May 19 | 2753 | 611 | 104 | 636 |
| Sash. Reversible window- | P. E. Loree | 720,164 | Feb. 10 | 1383 | 317 | 102 | 1134 |
| Sash. Reversible window- | J. G. Robbe | 729,665 | June 2 | 253 | 58, 59 | 104 | 1181 |
| Sash-rod | T. C. Richards | 737,142 | Aug. 25 | 3921 | 871 | 105 | 1868 |
| Sash-screen fastening | J. D. Campbell | 721,015 | Feb. 17 | 2975 | 684 | 102 | 1479 |
| Sash-securing device. Outside- | W. M. Reely | 726,192 | Apr. 21 | 3257 | 739 | 103 | 1888 |
| Sash-stile plowing and boring machine | A. A. Loetscher | 725,461 | Apr. 14 | 1937 | 434, 435 | 103 | 1595 |
| Sash. Store-front | J. B. Phelps | 736,774 | Aug. 18 | 3256 | 719, 720 | 105 | 1708 |
| Sash. Tongued | E. Hipolito | 732,298 | June 30 | 5173 | 1149 | 104 | 2265 |
| Sash-trimming machine | L. S. and J. N. Heald | 734,863 | July 28 | 4034 | 942 | 105 | 896 |
| Sash. Window- | J. Beazley | 722,797 | Mar. 17 | 2154 | 481 | 103 | 490 |
| Sash. Window- | A. L. Bolles | 731,847 | June 23 | 4280 | 953 | 104 | 2067 |
| Sash. Window- | J. E. Scott | 734,436 | July 21 | 3210 | 756 | 105 | 712 |
| Sash. Window- | G. W. Richardson | 737,144 | Aug. 25 | 3923 | 872 | 105 | 1868 |
| Sash. Window- | E. Wadey | 741,197 | Oct. 13 | 1515 | 342 | 106 | 1590 |
| Sash. Window- | S. Grady | 742,020 | Oct. 20 | 3157 | 705 | 106 | 1950 |
| Sashes, &c. Adjustable tongue-and-groove member for window or screen | E. Hipolito | 725,621 | Apr. 14 | 2229 | 504 | 103 | 1659 |
| Sashes and frames. Adjustment for metallic window | J. L. Boyd | 721,498 | Feb. 24 | 3915 | 890 | 102 | 1696 |
| Sashes. Automatic spring-catch for sliding | J. T. and C. M. Young | 733,790 | July 14 | 1945 | 458 | 105 | 427 |
| Sashes. Automatically-operating window | C. Rupp | 728,135 | May 12 | 2465 | 548 | 104 | 542 |
| Sashes. Die for making hollow sheet-metal window or other | F. Voigtmann and S. H. Pomeroy | 747,666 | Dec. 22 | 4342 | 980, 981 | 107 | 2109 |
| Sashes. Screen-strip for window- | J. D. Campbell | 719,082 | Jan. 27 | 2972 | 663 | 102 | 674 |
| Satchel. Music- | R. E. Trognitz | 726,119 | Apr. 21 | 3116 | 706 | 103 | 1860 |
| Sauer-kraut, &c. Follower for packing | W. Saenger | 725,149 | Apr. 14 | 1365 | 308 | 103 | 1474 |
| Sausage-stuffer | R. L. Eby and J. W. Weaver | 748,489 | Dec. 29 | 5913 | 1343 | 107 | 2477 |
| Sausage-stuffer and lard or jelly press. Combined | M. J. Vogler | 720,301 | Feb. 10 | 1646 | 376 | 102 | 1187 |
| Sausage-stuffing machine | G. R. Napier | 719,032 | Jan. 27 | 2873 | 644 | 102 | 654 |
| Sausage-stuffing machine | E. Hahn | 736,720 | Aug. 18 | 3162 | 698 | 105 | 1689 |
| Saw | J. Schmidt, Jr | 717,719 | Jan. 6 | 351 | 86 | 102 | 76 |
| Saw | R. H. Benner | 720,313 | Feb. 10 | 1672 | 389 | 102 | 1192 |
| Saw | J. H. Miner | 725,469 | Apr. 14 | 1952 | 437 | 103 | 1598 |
| Saw | W. O. Williams | 726,603 | Apr. 28 | 4077 | 920 | 103 | 2067 |
| Saw | Z. Rabie | 735,586 | Aug. 4 | 1061 | 225 | 105 | 1206 |
| Saw | P. M. Way | 739,241 | Sept. 15 | 3312 | 734 | 106 | 740 |
| Saw | S. Toles | 739,361 | Sept. 22 | 3517 | 787 | 106 | 799 |
| Saw | W. E. Tilden | 739,457 | Sept. 22 | 3724 | 829 | 106 | 845 |
| Saw | E. B. Dennison | 746,686 | Dec. 15 | 2509 | 576 | 107 | 1680 |
| Saw attachment. Band- | J. Catudal | 724,433 | Apr. 7 | 25 | 8 | 103 | 1175 |
| Saw attachment. Hand- | C. H. Kohler | 734,892 | July 28 | 4081 | 951 | 105 | 906 |
| Saw. Band- | W. Maddocks | 727,168 | May 5 | 660 | 142 | 104 | 143 |
| Saw. Buck- | C. T. Redfield | 731,324 | June 16 | 3330 | 736 | 104 | 1846 |
| Saw clamp or vise | C. R. Walter | 723,789 | Mar. 24 | 3950 | 891 | 103 | 872 |
| Saw-collar-truing machine | R. O. Wigley | 743,363 | Nov. 3 | 1081 | 229 | 107 | 220 |
| Saw. Coping- | P. J. Lawrence | 747,735 | Dec. 22 | 4462 | 1006 | 107 | 2136 |
| Saw. Drag- | L. Phillipps | 732,958 | July 7 | 458 | 114 | 105 | 99 |
| Saw. Drag- | S. Truitt | 738,087 | Sept. 1 | 1033 | 230, 241 | 106 | 224 |
| Saw. Drag- | W. P. Kidder | 739,496 | Sept. 22 | 3787 | 848 | 106 | 860 |
| Saw-file attachment | O. B. Blocher | 740,736 | Oct. 6 | 654 | 148 | 106 | 1387 |

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| Invention. | Name. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|---|
| | | | | Spec. | Drg. | Vol. | Page. |
| Saw-filer | D. L. Kelchner | 724,883 | Apr. 7 | 865 | 199 | 103 | 1354 |
| Saw-filing device | R. Evans and I. E. Fraser | 740,833 | Oct. 6 | 848 | 189 | 106 | 1426 |
| Saw-filing gage | S. J. Galloway | 728,562 | May 19 | 3290 | 729 | 104 | 735 |
| Saw-filing machine | J. W. Foley | 728,893 | May 26 | 3906 | 868 | 104 | 881 |
| Saw-filing machine | J. D. Smith | 737,033 | Aug. 25 | 3742 | 831 | 105 | 1832 |
| Saw for resawing box-lumber. Horizontal band- | A. Mereen | 737,434 | Aug. 25 | 4493 | 1008<br>1009 | 105 | 1991 |
| Saw frame. Drag- | E. E. Redfield | 733,749 | July 14 | 1865 | 441 | 105 | 410 |
| Saw-frame stretcher | C. J. Novak | 732,315 | June 30 | 5197 | 1154 | 104 | 2270 |
| Saw. Gang- | E. E. Thomas | 717,946 | Jan. 6 | 801 | 181 | 102 | 171 |
| Saw-guide | B. A. Brink | 737,330 | Aug. 25 | 4295 | 954<br>955 | 105 | 1946 |
| Saw guide. Band- | W. Miller | 729,200 | May 26 | 4451 | 981 | 104 | 993 |
| Saw guide. Band- | W. H. Trout and G. M. Hinkley | 732,799 | July 7 | 187 | 47, 48 | 105 | 43 |
| Saw-gummer | J. M. Birtels | 726,246 | Apr. 28 | 3355 | 761 | 103 | 1924 |
| Saw-gummer | E. Chainey | 726,637 | Apr. 28 | 4134 | 932<br>933 | 103 | 2077 |
| Saw. Hand- | R. F. E. Okrassa | 737,458 | Aug. 25 | 4540 | 1017 | 105 | 2001 |
| Saw-handle | J. A. Williams | 719,060 | Jan. 27 | 2949 | 658 | 102 | 670 |
| Saw-handle | O. B. Craft | 723,837 | Mar. 31 | 4047 | 913 | 103 | 908 |
| Saw-handle | G. W. McMillian | 746,130 | Dec. 8 | 1503 | 335 | 107 | 1441 |
| Saw-handle | T. Laughlin | 746,635 | Dec. 8 | 2404 | 550 | 107 | 1037 |
| Saw handle. Hand- | M. E. Hunter | 733,484 | July 14 | 1409 | 332 | 105 | 316 |
| Saw. Horizontal band- | C. C. Stuart | 748,025 | Dec. 29 | 5057 | 1142 | 107 | 2290 |
| Saw. Hot- | P. C. Patterson | 742,223 | Oct. 27 | 3580 | 800<br>801 | 106 | 2050 |
| Saw-jointer | E. J. Hicks | 731,901 | June 23 | 4374 | 975 | 104 | 2086 |
| Saw-jointer | W. M. Potter | 738,354 | Sept. 8 | 1648 | 357 | 106 | 371 |
| Saw jointer and gage. Combined | R. E. Poindexter | 731,947 | June 23 | 4459 | 995 | 104 | 2104 |
| Saw-level | J. Bertrand | 725,925 | Apr. 21 | 2794 | 634 | 103 | 1794 |
| Saw machine. Band- | M. Dixon | 742,607 | Oct. 27 | 4281 | 965 | 106 | 2196 |
| Saw-making machine | A. H. Cruse | 746,297 | Dec. 8 | 1812 | 411<br>412 | 107 | 1506 |
| Sawmill | W. E. Jones | 720,815 | Feb. 17 | 2593 | 598<br>599 | 102 | 1398 |
| Sawmill | H. S. Mitchell | 732,649 | June 30 | 5844 | 1294 | 104 | 2408 |
| Sawmill | T. S. Wilkin | 739,045 | Sept. 15 | 2948 | 653 | 106 | 664 |
| Sawmill | E. Dyer | 742,848 | Nov. 3 | 52 | 13 | 107 | 14 |
| Sawmill | I. Calvert | 745,780 | Dec. 1 | 830 | 188 | 107 | 1276 |
| Sawmill attachment | D. W. Bartran | 738,396 | Sept. 8 | 1725 | 375 | 106 | 387 |
| Saw mill. Band- | D. C. Prescott and I. M. Thurlow | 721,966 | Mar. 3 | 585 | 131 | 103 | 128 |
| Sawmill bridging-levers. Actuating device for | J. A. Gillard | 747,161 | Dec. 15 | 3409 | 772<br>773 | 107 | 1885 |
| Sawmill-carriage | G. F. Baxter | 742,149 | Oct. 27 | 3440 | 766 | 106 | 2022 |
| Sawmill-carriage offset mechanism | A. J. West | 732,148 | June 30 | 4885 | 1086<br>1087 | 104 | 2206 |
| Sawmill-carriage set-works | A. Cunningham | 721,160 | Feb. 24 | 3287 | 752<br>753 | 102 | 1568 |
| Sawmill-carriage stop | A. Niedermeyer | 745,512 | Dec. 1 | 375 | 87 | 107 | 1179 |
| Sawmill-carriages. Pressure-fluid feed for | G. F. Steedman | 721,842 | Mar. 3 | 336 | 74, 75 | 103 | 74 |
| Saw mill. Double-cutting band- | H. G. Dittbenner | 717,738 | Jan. 6 | 403 | 95 | 102 | 88 |
| Sawmill friction-feed | S. Smith | 733,514 | July 14 | 1465 | 348 | 105 | 327 |
| Saw mill. Gang- | W. M. Wilkin | 730,063 | June 2 | 985 | 220<br>221 | 104 | 1328 |
| Sawmill machinery | D. A. Kennedy | 747,979 | Dec. 29 | 4968 | 1122 | 107 | 2270 |
| Sawmill. Portable | E. H. Hanssler | 719,585 | Feb. 3 | 318 | 74 | 102 | 888 |
| Sawmill. Portable | W. L. Hunt | 726,165 | Apr. 21 | 3186 | 720<br>721 | 103 | 1874 |
| Sawmill set-wheels. Grip mechanism for operating | J. E. Queen | 726,571 | Apr. 28 | 4014 | 908 | 103 | 2054 |
| Sawmill set-works | L. J. Hanhart | 721,182 | Feb. 24 | 3326 | 760 | 102 | 1574 |
| Sawmill set-works | D. C. Prescott | 721,965 | Mar. 3 | 582 | 130 | 103 | 127 |
| Sawmill set-works | T. S. Wilkin | 723,794 | Mar. 24 | 3955 | 892<br>893 | 103 | 873 |
| Sawmill set-works | R. F. Barker | 737,563 | Sept. 1 | 5 | 2 | 106 | 4 |
| Sawmill set-works | J. Scherer | 740,477 | Oct. 6 | 178 | 35 | 106 | 1283 |
| Sawmill set-works | T. S. Wilkin | 744,449 | Nov. 17 | 3244 | 695<br>696 | 107 | 724 |
| Sawmill steam set-works | D. C. Prescott | 734,947 | July 28 | 4174 | 971 | 105 | 927 |
| Saw mills. Upper saw-guide for band- | H. G. Dittbenner | 745,581 | Dec. 1 | 496 | 116<br>117 | 107 | 1203 |
| Saw-operating mechanism | J. Meiklejohn | 720,944 | Feb. 17 | 2832 | 649 | 102 | 1449 |
| Saw patch. Band- | F. L. Gausden | 729,154 | May 26 | 4374 | 965 | 104 | 976 |
| Saw-repairing device | R. P. Hoadley | 720,585 | Feb. 17 | 2186 | 507 | 102 | 1314 |
| Saw-set | C. O. Andersson | 717,522 | Jan. 6 | 2 | 1 | 102 | 3 |
| Saw-set | G. Mossholder | 720,172 | Feb. 10 | 1398 | 320 | 102 | 1136 |
| Saw-set | C. Morrill | 728,958 | May 26 | 4021 | 894 | 104 | 904 |
| Saw-set | H. Cottrell | 731,864 | June 23 | 4302 | 960 | 104 | 2071 |
| Saw-set | J. D. Smith | 734,981 | July 28 | 4240 | 985<br>986 | 105 | 940 |
| Saw-set | J. Morin | 736,534 | Aug. 18 | 2792 | 612 | 105 | 1614 |
| Saw-set | P. H. L. Klette | 738,615 | Sept. 8 | 2135 | 467 | 106 | 475 |
| Saw-set | H. Caldwell | 740,393 | Oct. 6 | 15 | 4 | 106 | 1247 |
| Saw-set | W. C. Morrill | 744,383 | Nov. 17 | 3121 | 670 | 107 | 697 |
| Saw-set and gage. Combined | D. Worden | 736,470 | Aug. 18 | 2660 | 584 | 105 | 1586 |
| Saw-setting machine | B. F. Briley | 731,851 | June 23 | 4286 | 954 | 104 | 2067 |
| Saw-sharpener feed-finger | J. E. McCauley and W. C. Renie | 746,982 | Dec. 15 | 3074 | 703<br>704 | 107 | 1807 |
| Saw-sharpening apparatus | J. Hormby | 735,100 | Aug. 4 | 97 | 23 | 105 | 1003 |
| Saw-sharpening device | G. A. W. and J. H. L. Folkers | 733,636 | July 14 | 1675 | 398 | 105 | 371 |
| Saw-sharpening device | G. A. W. and J. H. L. Folkers | 735,868 | Aug. 11 | 1604 | 342 | 105 | 1342 |
| Saw-sharpening implement | G. Y. Anderson | 738,872 | Sept. 15 | 2659 | 586 | 106 | 604 |
| Saw-shifter for gang-edgers | F. W. Cook | 738,296 | Sept. 8 | 1504 | 325<br>326 | 106 | 339 |
| Saw-sidedressing device | F. A. Bell | 723,810 | Mar. 31 | 3998 | 901 | 103 | 899 |
| Saw-soldering apparatus. Band- | G. Ott | 735,574 | Aug. 4 | 1043 | 222 | 105 | 1202 |

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| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Saw. Steam-power crosscut- | J. A. Reed | 747,766 | Dec. 22 | 4521 | {1018 1019 | 107 | 2150 |
| Saw-swage | E. P. Armstrong | 724,236 | Mar. 31 | 4882 | 1092 | 103 | 1078 |
| Saw-swage | B. R. Smith | 747,094 | Dec. 15 | 3286 | 748 | 107 | 1859 |
| Saw-table | F. D. Hazelton | 741,034 | Oct. 13 | 1192 | 269 | 106 | 1520 |
| Saw-table | E. T. Gorham | 744,190 | Nov. 17 | 2770 | {590 591 | 107 | 618 |
| Saw-table gage | R. Mancha | 743,650 | Nov. 10 | 1698 | 358 | 107 | 378 |
| Saw-teeth. Device for side-filing | F. D. Foggin | 717,981 | Jan. 6 | 873 | 195 | 102 | 188 |
| Saw-teeth. Machine for gumming and straightening | J. H. Thayer | 743,771 | Nov. 10 | 1903 | {403 404 405 | 107 | 423 |
| Saw-tightener | A. H. South and J. C. Bostwick | 729,436 | May 26 | 4852 | 1075 | 104 | 1076 |
| Saw-tool | E. G. Smith | 744,811 | Nov. 24 | 3893 | 837 | 107 | 878 |
| Saw-tooth swage. Insertible | J. F. Finnegan | 740,747 | Oct. 6 | 670 | 152 | 106 | 1390 |
| Saw. Wabble | C. Seymour | 722,541 | Mar. 10 | 1650 | 364 | 103 | 370 |
| Saws in cutting down trees. Contrivance for actuating hand- | R. C. Stillfried | 746,191 | Dec. 8 | 1617 | 360 | 107 | 1466 |
| Sawing apparatus. Wood- | J. Rosenbaum | 733,278 | July 7 | 1046 | 250 | 105 | 219 |
| Sawing, beveling, and chamfering machine. Wood | A. L. Shaw | 720,628 | Feb. 17 | 2282 | {523 524 | 102 | 1332 |
| Sawing ivory nuts. Apparatus for | J. Hornby | 735,090 | Aug. 4 | 95 | 22,23 | 105 | 1003 |
| Sawing lumber | J. C. Killam | 723,469 | Mar. 24 | 3387 | 758 | 103 | 755 |
| Sawing-machine | R. C. Gossett | 718,201 | Jan. 13 | 1271 | 279 | 102 | 2881 |
| Sawing-machine | W. H. Fullerton | 719,455 | Feb. 3 | 76 | 18 | 102 | 84 |
| Sawing-machine | S. Anson | 720,873 | Feb. 17 | 2694 | 623 | 102 | 1420 |
| Sawing-machine | J. R. Thomas | 722,335 | Mar. 10 | 1272 | 283 | 103 | 286 |
| Sawing-machine | W. Goethe | 726,673 | Apr. 28 | 4195 | {947 948 | 103 | 2091 |
| Sawing-machine | O. Nordberg | 728,753 | May 19 | 3641 | 809 | 104 | 812 |
| Sawing-machine | J. T. Marsh | 729,374 | May 26 | 4750 | 1051 | 104 | 1055 |
| Sawing-machine | C. D. Marsh | 733,063 | July 7 | 646 | 156 | 105 | 137 |
| Sawing-machine | J. McCarthy and J. M. Palmer | 738,623 | Sept. 8 | 2150 | 472 | 106 | 478 |
| Sawing-machine | T. S. Wilkin and E. S. Newton | 739,044 | Sept. 15 | 2945 | {652 653 | 106 | 663 |
| Sawing-machine | W. H. Clendenon | 740,535 | Oct. 6 | 296 | 60 | 106 | 1308 |
| Sawing-machine | G. Kundmueller | 742,121 | Oct. 20 | 3386 | 756 | 106 | 1995 |
| Sawing machine. Drag- | D. J. Shea | 741,174 | Oct. 13 | 1458 | {331 332 | 106 | 1576 |
| Sawing-machine. Draw-cut | S. Field | 729,051 | May 26 | 4194 | {927 928 | 104 | 940 |
| Sawing-machine gage-board attachment | J. T. Marsh | 746,972 | Dec. 15 | 3052 | 700 | 107 | 1803 |
| Sawing machine. Head-block | G. F. Wissmann | 740,727 | Oct. 6 | 628 | 141 | 106 | 1382 |
| Sawing machine. Portable wood- | F. T. Palmer | 728,967 | May 26 | 4034 | 869 | 104 | 907 |
| Sawing machine. Portable wood- | E. E. Swarthout | 743,203 | Nov. 3 | 741 | {162 163 | 107 | 155 |
| Sawing machine. Veneer- | C. W. Talge | 720,985 | Feb. 17 | 2917 | {668 669 | 102 | 1467 |
| Sawing machine. Wood- | T. M. Dunagan, Jr | 721,680 | Mar. 3 | 61 | 13 | 103 | 14 |
| Sawing machine. Wood- | W. T. Yard | 730,330 | June 9 | 1462 | 323 | 104 | 1442 |
| Sawing machine. Wood- | A. S. Kendall | 738,453 | Sept. 8 | 1826 | 397 | 106 | 407 |
| Scaffold | W. L. Clancy | 719,188 | Jan. 27 | 3173 | {706 707 | 102 | 715 |
| Scaffold | N. Williams | 737,187 | Aug. 25 | 4011 | 890 | 105 | 1887 |
| Scaffold | M. A. Cheves | 740,398 | Oct. 6 | 23 | 5,6 | 106 | 1249 |
| Scaffold | C. Uffelman | 742,755 | Oct. 27 | 4532 | {1026 1027 | 106 | 2251 |
| Scaffold | C. B. Cummons | 745,094 | Nov. 24 | 4445 | 961 | 107 | 991 |
| Scaffold. Adjustable | O. C. Donecker and J. A. Nagle | 722,498 | Mar. 10 | 1583 | 349 | 103 | 356 |
| Scaffold. Adjustable | J. E. England | 737,377 | Aug. 25 | 4373 | {974 975 | 105 | 1964 |
| Scaffold-binder | A. T. Sears | 734,620 | July 28 | 3545 | 830 | 105 | 799 |
| Scaffold-bracket | M. S. Smith | 718,164 | Jan. 13 | 1198 | 266 | 102 | 273 |
| Scaffold-bracket | B. B. Brown | 730,606 | June 9 | 1977 | 440 | 104 | 1553 |
| Scaffold-bracket | W. Michael | 740,452 | Oct. 6 | 133 | 26 | 106 | 1274 |
| Scaffold-bracket. Folding | G. A. Pierce | 732,584 | June 30 | 5728 | 1272 | 104 | 2383 |
| Scaffold. Butchering | G. M. Landers | 737,851 | Sept. 1 | 568 | 125 | 106 | 126 |
| Scaffold. Folding | T. E. Berry | 742,565 | Oct. 27 | 4207 | 947 | 106 | 2180 |
| Scaffold for window-washing, &c | J. C. Crow | 724,406 | Mar. 31 | 5212 | 1168 | 103 | 1147 |
| Scaffold. Window- | C. A. Cable | 744,717 | Nov. 24 | 3732 | {805 806 | 107 | 845 |
| Scaffolding. Carpenter's | E. A. Kuntz | 729,608 | June 2 | 155 | 37 | 104 | 1158 |
| Scaffolding. Knockdown | W. Harrison | 744,194 | Nov. 17 | 2776 | 592 | 107 | 620 |
| Scaffolding. Portable | J. B. and R. Murray | 747,564 | Dec. 22 | 4145 | 931 | 107 | 2065 |
| Scaffolding-support | A. Menczarski | 728,595 | May 19 | 3366 | 746 | 104 | 754 |
| Scale | E. Finn | 721,879 | Mar. 3 | 412 | 91 | 103 | 90 |
| Scale | J. H. Carr | 726,027 | Apr. 21 | 2961 | 674 | 103 | 1827 |
| Scale | W. H. Sanderson | 728,418 | May 19 | 3012 | 662 | 104 | 679 |
| Scale | J. Hotsapillar | 728,577 | May 19 | 3331 | {736 737 | 104 | 745 |
| Scale | T. W. Kirkman | 730,270 | June 9 | 1363 | 299 | 104 | 1420 |
| Scale | M. Schwartz | 731,625 | June 23 | 3884 | 864 | 104 | 1982 |
| Scale | J. Lines | 733,226 | July 7 | 934 | 226 | 105 | 195 |
| Scale | D. J. Whelan | 734,383 | July 21 | 3114 | {732 733 | 105 | 692 |
| Scale | A. De Vilbiss, Jr. (Reissue) | 12,137 | July 28 | 4360 | 1013 | 105 | 964 |
| Scale | A. De Vilbiss, Jr. (Reissue) | 12,138 | July 28 | 4363 | 1013 | 105 | 965 |
| Scale | W. W. Palmer | 738,475 | Sept. 8 | 1879 | {408 409 | 106 | 418 |
| Scale | J. H. Milburn | 741,688 | Oct. 20 | 2499 | 557 | 106 | 1814 |
| Scale | T. L. Richmond | 742,742 | Oct. 27 | 4513 | 1022 | 106 | 2247 |
| Scale | C. F. Christopher | 746,461 | Dec. 8 | 2087 | 480 | 107 | 1564 |
| Scale | A. W. Stanley | 747,098 | Dec. 15 | 3293 | 749 | 107 | 1861 |
| Scale | F. Verplast | 748,238 | Dec. 29 | 5452 | 1242 | 107 | 2375 |
| Scale. Automatic computing and weighing | T. S. Mount | 726,182 | Apr. 21 | 3237 | 734 | 103 | 1884 |
| Scale-beam | C. G. Strubler | 733,297 | July 7 | 1075 | 256 | 105 | 226 |

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|---|---|---|---|---|---|---|---|
| Scale. Bracket- | G. E. Miller | 722,374 | Mar. 10 | 1340 | 296 | 103 | 301 |
| Scale. Calculating- | R. C. Smith | 746,888 | Dec. 15 | 2891 | 667, 668 | 107 | 1767 |
| Scale. Calculating- | R. C. Smith | 746,889 | Dec. 15 | 2894 | 668 | 107 | 1767 |
| Scale. Coin-controlled weighing- | A. Olson | 746,138 | Dec. 8 | 1516 | 339 | 107 | 1444 |
| Scale. Computing- | T. L. Tincher | 720,756 | Feb. 17 | 2504 | 577, 578 | 102 | 1380 |
| Scale. Computing- | F. J. Englen | 723,659 | Mar. 24 | 3726 | 835 | 103 | 824 |
| Scale. Computing- | H. F. Kinser | 734,464 | July 21 | 3254 | 765 | 105 | 720 |
| Scale. Computing- | H. F. Kinser | 735,273 | Aug. 4 | 465 | 92 | 105 | 1080 |
| Scale. Computing- | C. A. Deyerle | 737,212 | Aug. 25 | 4061 | 901, 902 | 105 | 1897 |
| Scale. Computing- | F. P. Dunn | 748,057 | Dec. 29 | 5129 | 1160 | 107 | 2306 |
| Scale. Computing platform- | J. H. Milburn | 725,468 | Apr. 14 | 1949 | 437 | 103 | 1597 |
| Scale for fish-poles | R. H. Ward | 735,003 | July 28 | 4283 | 996 | 105 | 949 |
| Scale-frames. Blank for sheet-metal | W. N. Pelouze | 722,618 | Mar. 10 | 1782 | 397 | 103 | 398 |
| Scale or weighing beam | A. B. Callin | 746,454 | Dec. 8 | 2077 | 478 | 107 | 1562 |
| Scale. Platform- | C. H. Vincent | 740,955 | Oct. 6 | 1045 | 238, 239 | 106 | 1469 |
| Scale-rack | J. N. Richey | 734,094 | July 21 | 2568 | 599, 600 | 105 | 578 |
| Scale. Railway- | M. E. Reisert | 723,184 | Mar. 17 | 2845 | 638, 639 | 103 | 634 |
| Scale. Railway-track | J. A. Barclay | 741,212 | Oct. 13 | 1550 | 349 | 106 | 1597 |
| Scale. Recording- | M. Y. Jordan | 735,523 | Aug. 4 | 940 | 200 | 105 | 1181 |
| Scale registering device. Automatic- | C. A. Carlson | 727,286 | May 5 | 864 | 185, 186 | 104 | 185 |
| Scale relieving-gear | F. W. Taylor and W. H. Sargent | 719,904 | Feb. 3 | 884 | 207, 208 | 102 | 1010 |
| Scale. Sack- | G. A. Archambault | 735,437 | Aug. 4 | 779 | 165 | 105 | 1147 |
| Scale. Spring- | M. H. Wilson | 739,047 | Sept. 15 | 2951 | 654 | 106 | 664 |
| Scale. Spring- | W. F. Stimpson | 745,684 | Dec. 1 | 668 | 155 | 107 | 1240 |
| Scale. Spring-balance | J. W. Culmer and F. C. Hoyt | 743,460 | Nov. 10 | 1338 | 274 | 107 | 301 |
| Scale. Vehicle- | H. H. Chase | 730,435 | June 9 | 1667 | 373, 374 | 104 | 1484 |
| Scale. Vertical stoker- | P. B. Clarke | 742,005 | Oct. 20 | 3122 | 696, 697, 698, 699 | 106 | 1942 |
| Scale. Wagon- | B. T., Jr., and J. M. McDonald | 720,728 | Feb. 17 | 2461 | 563, 564 | 102 | 1370 |
| Scale. Weighing- | G. W. Taylor | 718,059 | Jan. 6 | 1004 | 224 | 102 | 216 |
| Scale. Weighing- | J. W. Cartwright | 721,998 | Mar. 3 | 648 | 144 | 103 | 141 |
| Scale. Weighing- | H. B. McNulty | 724,923 | Apr. 7 | 928 | 212, 213 | 103 | 1368 |
| Scale. Weighing- | J. H. Swihart and F. C. Hoyt | 728,046 | May 12 | 2308 | 513 | 104 | 508 |
| Scale. Weighing- | N. Newman | 731,807 | June 23 | 4214 | 939 | 104 | 2051 |
| Scale. Weighing- | J. Collins | 737,907 | Sept. 1 | 699 | 151 | 106 | 153 |
| Scale. Weighing- | M. F. Knox | 743,089 | Nov. 3 | 522 | 113 | 107 | 109 |
| Scale. Weighing- | F. W. Grey | 744,192 | Nov. 17 | 2773 | 592 | 107 | 619 |
| Scale. Weighing and computing | S. A. Brown | 722,173 | Mar. 3 | 944 | 209, 210 | 103 | 200 |
| Scales. Attachment for spring-balance | J. F. Milligan | 739,266 | Sept. 15 | 3358 | 746 | 106 | 750 |
| Scales. Balancing and recording mechanism for weighing- | H. O. Hem | 741,908 | Oct. 20 | 2923 | 652, 653 | 106 | 1902 |
| Scales. Combined panel and beam for computing- | M. F. Knox | 729,607 | June 2 | 153 | 37 | 104 | 1158 |
| Scales. Mounting for spring adjusting-rods of weighing- | F. Mulligan | 729,207 | May 26 | 4462 | 983 | 104 | 995 |
| Scales. Quick-weighing attachment for | M. Maurer | 729,376 | May 26 | 4756 | 1052 | 104 | 1056 |
| Scale and chord indicator | E. L. Sanford | 727,846 | May 12 | 1939 | 432, 433 | 104 | 431 |
| Scalper, grader, and purifier | A. Craig and W. Gunnell | 736,364 | Aug. 18 | 2476 | 541, 542 | 105 | 1547 |
| Scarf and scarf-pin securing device | L. von Köppen | 745,445 | Dec. 1 | 250 | 58 | 107 | 1153 |
| Scarf-fastener | H. J. Helberg | 730,017 | June 2 | 911 | 203 | 104 | 1313 |
| Scarf-pin | G. W. Dover | 746,049 | Dec. 8 | 1361 | 303 | 107 | 1408 |
| Scarf-pins, studs, &c. Safety device for | M. Crohn | 737,356 | Aug. 25 | 4340 | 967 | 105 | 1957 |
| Scarf-retainer | R. L. Gooding | 739,668 | Sept. 22 | 4108 | 915 | 106 | 928 |
| Scavengering-machine | J. Briggs | 719,733 | Feb. 3 | 582 | 131 | 102 | 945 |
| Scene-displaying apparatus. Automatic | C. F. Mensing | 745,217 | Nov. 24 | 4688 | 1023 | 107 | 1042 |
| Scene. Transformation | W. A. Demmon | 729,553 | June 2 | 61 | 15 | 104 | 1139 |
| Scenery. Theatrical | L. J. Carter | 747,045 | Dec. 15 | 3178 | 729 | 107 | 1830 |
| Scenic apparatus | F. W. Thompson | 725,509 | Apr. 14 | 2026 | 457, 458 | 103 | 1614 |
| Scenic apparatus | F. W. Thompson | 739,236 | Sept. 15 | 3299 | 730, 731, 732 | 106 | 737 |
| Scenic apparatus | W. A. Hadden | 742,632 | Oct. 27 | 4329 | 974 | 106 | 2207 |
| Scenic or other displays. Stage or platform appliance for producing | O. Stoll | 748,116 | Dec. 29 | 5239 | 1189 | 107 | 2330 |
| Scenographic apparatus | E. J. Austen | 719,986 | Feb. 10 | 1033 | 240, 241 | 102 | 1058 |
| Schedule and train calculating machine | J. M. Wilson, Jr., and J. B. Dalton | 732,985 | July 7 | 504 | 125 | 105 | 108 |
| Schedule-holder | C. F. Pidgin | 721,386 | Feb. 24 | 3712 | 844 | 102 | 1654 |
| Scholar's companion | A. W. Trescott. (Reissue) | 12,112 | May 19 | 3776 | 843 | 104 | 840 |
| Scholar's companion | M. E. Dinsmore | 737,088 | Aug. 25 | 3834 | 852 | 105 | 1850 |
| Scissors holder | A. E. Moore | 742,710 | Oct. 27 | 4460 | 1009 | 106 | 2235 |
| Scissors or shears buttonhole-cutting attachment | M. H. Bolsinger | 739,643 | Sept. 22 | 4059 | 905 | 106 | 917 |
| Scissors, &c. Sheath for | H. C. Willmott | 723,109 | Mar. 17 | 2690 | 605 | 103 | 601 |
| Scoop | A. H. Baughman | 718,814 | Jan. 20 | 2457 | 546 | 102 | 551 |
| Scoop | G. Flitsch and D. J. Fleischmann | 722,965 | Mar. 17 | 2441 | 546 | 103 | 548 |
| Scoop | M. Voelker | 741,195 | Oct. 13 | 1512 | 342 | 106 | 1589 |
| Scoop | L. Ernst | 741,640 | Oct. 20 | 2405 | 539 | 106 | 1795 |
| Scoop-board. Vehicle-body | W. W. Patterson | 718,019 | Jan. 6 | 947 | 210 | 102 | 204 |
| Scoop. Gathering- | W. E. Hamilton | 740,560 | Oct. 6 | 332 | 69 | 106 | 1315 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Scourer: *See* Grain-scourer. | | | | | | | |
| Scow. Deck- | W. Y. Gambee and M. A. McCarthy | 744,523 | Nov. 17 | 3363 | 724 | 107 | 749 |
| Scow. Dumping- | W. Y. Gambee | 721,883 | Mar. 3 | 417 | 92 | 103 | 92 |
| Scow. Dumping- | B. Seaman | 736,640 | Aug. 18 | 3000 | 662 | 105 | 1655 |
| Scraper | F. T. Powell | 722,250 | Mar. 10 | 1114 | 245 | 103 | 252 |
| Scraper | J. P. Hodgins | 735,257 | Aug. 4 | 431 | 84 | 105 | 1072 |
| Scraper | F. K. Hoover and A. J. Mason | 735,380 | Aug. 4 | 644 | 134 | 105 | 1119 |
| Scraper | J. W. Carleton | 740,087 | Sept. 29 | 4906 | 1101 | 106 | 1115 |
| Scraper and grader | N. Dreis | 732,621 | June 30 | 5790 | 1284 | 104 | 2397 |
| Scraper and grader. Road | C. A. Slaughter | 718,029 | Jan. 6 | 961 | 213 | 102 | 207 |
| Scraper and scoop machine. Swinging | D. B. James | 735,388 | Aug. 4 | 663 | 142 | 105 | 1121 |
| Scraper, chopper, and cultivator. Combined cotton | L. D. Moore | 720,272 | Feb. 10 | 1594 | 364, 365 | 102 | 1177 |
| Scraper. Cotton- | B. F. Williams | 739,528 | Sept. 22 | 3835 | 859 | 106 | 869 |
| Scraper. Foot- | F. E. Krauth | 735,781 | Aug. 11 | 1417 | 304 | 105 | 1300 |
| Scraper or self-loading cart. Wheeled | C. H. Sawyer | 728,136 | May 12 | 2467 | 548, 549, 818 | 104 | 543 |
| Scraper. Road- | J. D. Olcott | 723,619 | Mar. 24 | 3657 | 819, 820 | 103 | 809 |
| Scraper. Road- | R. L. Templeman | 736,312 | Aug. 11 | 2390 | 520 | 105 | 1512 |
| Scraper. Road- | M. G. Bunnell | 739,383 | Sept. 22 | 3567 | 797 | 106 | 810 |
| Scraper. Road- | O. T. Patterson | 740,909 | Oct. 6 | 964 | 216, 217 | 106 | 1453 |
| Scraper. Soil- | G. N. Perry | 720,176 | Feb. 10 | 1403 | 321 | 102 | 1137 |
| Scraper. Wheel- | C. H. Sawyer | 726,993 | May 5 | 340 | 74 | 104 | 74 |
| Scraper. Wheeled | W. S. Livengood | 723,887 | Mar. 31 | 4151 | 935 | 103 | 930 |
| Scraper. Wheeled | C. H. Sawyer | 727,208 | May 5 | 722 | 155, 156 | 104 | 157 |
| Scraper. Wheeled | C. H. Sawyer | 730,301 | June 9 | 1419 | 311, 312 | 104 | 1433 |
| Scraper. Wheeled | W. S. Livengood | 742,336 | Oct. 27 | 3793 | 849 | 106 | 2095 |
| Scraper. Wheeled | J. M. Brooks | 744,856 | Nov. 24 | 3971 | 856, 857 | 107 | 894 |
| Scraper. Wheeled | J. J. Gyldenborg | 745,826 | Dec. 1 | 944 | 212 | 107 | 1300 |
| Scraping-tool | E. P. Golden | 721,178 | Feb. 24 | 3320 | 759 | 102 | 1573 |
| Scraps. Machine for compressing detinned | M. Lemberg | 737,427 | Aug. 25 | 4483 | 1005, 1006 | 105 | 1988 |
| Scraps. Machine for compressing detinned or other | M. Laernoes and J. Dunn | 737,424 | Aug. 25 | 4475 | 1003, 1004 | 105 | 1986 |
| Scraps. Machine for compressing detinned or other | M. Laernoes and J. Dunn | 737,425 | Aug. 25 | 4478 | 1004 | 105 | 1987 |
| Screen: *See* Bumping-screen. Coal-screen. Fly-screen. Fruit-washing-machine screen. Grain-screen. Grain-separating screen. Half-tone screen. Paper-pulp screen. Photographic light-screen. Pulp-screen. Revolving screen. Separating-screen. Shaking-screen. Tobacco-flue screen. Vibrating screen. Water-screen. Well-screen. Well sand-screen. Window-screen. Window fly-screen. Window or door screen. | | | | | | | |
| Screen | J. D. Campbell | 718,978 | Jan. 27 | 2770 | 621 | 102 | 633 |
| Screen | R. B. Hancock and G. Sipple | 729,577 | June 2 | 107 | 27 | 104 | 1149 |
| Screen | E. T. Burrowes | 730,230 | June 9 | 1286 | 284 | 104 | 1405 |
| Screen | H. J. Coenen | 730,745 | June 9 | 2210 | 492 | 104 | 1603 |
| Screen | E. Hipolito | 733,323 | July 7 | 1111 | 264 | 105 | 234 |
| Screen | W. Oates, Jr | 736,291 | Aug. 11 | 2352 | 511 | 105 | 1504 |
| Screen | L. E. Gaylord | 743,634 | Nov. 10 | 1676 | 352 | 107 | 374 |
| Screen-cleaner | I. Wiebe | 718,559 | Jan. 13 | 1983 | 432 | 102 | 441 |
| Screen for windows, doors, &c | F. C. Wright | 726,210 | Apr. 21 | 3280 | 745 | 103 | 1898 |
| Screen or storm-window | H. S. and A. P. Hubbell | 743,080 | Nov. 3 | 505 | 109 | 107 | 106 |
| Screen or storm-window attachment | R. Ellingson | 728,093 | May 12 | 2393 | 532 | 104 | 527 |
| Screen-plate holder | J. H. Blaisdell | 735,057 | Aug. 4 | 16 | 5 | 105 | 984 |
| Screen system | W. H. Picher and J. P. Boss | 735,904 | Aug. 11 | 1662 | 354 | 105 | 1354 |
| Screening-machine | G. W. Osburn | 741,821 | Oct. 20 | 2753 | 613 | 106 | 1868 |
| Screening-separator | A. N. Dodge | 746,302 | Dec. 8 | 1822 | 414 | 107 | 1508 |
| Screw-anchor | T. Tribe | 728,144 | May 12 | 2481 | 552 | 104 | 545 |
| Screw and driver therefor | E. L. Walter | 748,241 | Dec. 29 | 5455 | 1243 | 107 | 2376 |
| Screw. Binding- | I. S. Turner | 723,082 | Mar. 17 | 2652 | 597 | 103 | 593 |
| Screw-cap | A. R. Pritchard | 720,380 | Feb. 10 | 1791 | 406 | 102 | 1218 |
| Screw-cap closure | H. J. S. Hall | 730,367 | June 9 | 1531 | 340 | 104 | 1456 |
| Screw-clamp | M. Taylor | 747,270 | Dec. 15 | 3649 | 816 | 107 | 1929 |
| Screw-cutting device | E. W. Bullard | 737,204 | Aug. 25 | 4048 | 898 | 105 | 1895 |
| Screw-cutting die | H. J. Hjorth | 718,252 | Jan. 13 | 1353 | 300 | 102 | 306 |
| Screw-cutting die | M. R. Mobeck | 745,229 | Nov. 24 | 4697 | 1025 | 107 | 1044 |
| Screw-cutting machine. Self-adjusting | T. Murray | 723,403 | Mar. 24 | 3267 | 732 | 103 | 730 |
| Screw-cutting machine. Wood- | R. Dicke | 738,989 | Sept. 15 | 2849 | 632 | 106 | 643 |
| Screw-cutting machinery | J. Alger and J. F. Cook | 747,833 | Dec. 22 | 4647 | 1049 | 107 | 2178 |
| Screw-driver | F. C. Greene | 717,569 | Jan. 6 | 85 | 21 | 102 | 20 |
| Screw-driver | H. Berquist | 724,154 | Mar. 31 | 4698 | 1055 | 103 | 1042 |
| Screw-driver | L. S. Starrett | 729,004 | May 26 | 4100 | 910 | 104 | 921 |
| Screw-driver | L. S. Starrett | 730,804 | June 9 | 2306 | 513 | 104 | 1623 |
| Screw-driver | W. S. Ward | 737,179 | Aug. 25 | 4001 | 887 | 105 | 1885 |
| Screw-driver | W. M. Benzing and H. Gimber | 737,897 | Sept. 1 | 683 | 146 | 106 | 150 |
| Screw-driver | S. P. Kemm | 739,606 | Sept. 22 | 3987 | 889 | 106 | 901 |
| Screw-driver attachment | G. M. Gamwell | 721,884 | Mar. 3 | 418 | 92 | 103 | 92 |
| Screw-driver gage | W. H. Voss | 734,204 | July 21 | 2777 | 651 | 105 | 620 |
| Screw-driver or kindred tool | P. H. Garrity | 723,523 | Mar. 24 | 3493 | 781 | 103 | 775 |
| Screw-fastening device | E. Rieger | 722,046 | Mar. 3 | 727 | 162 | 103 | 157 |
| Screw-holding device. Automatic | J. A. Yates | 729,830 | June 2 | 578 | 127 | 104 | 1246 |
| Screw-jack | M. Ketterer | 743,200 | Nov. 3 | 922 | 200 | 107 | 198 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|---|
| | | | | Spec. | Drg. | Vol. | Page. |
| Screw-machine | F. L. Todd | 737,974 | Sept. 1 | 834 | 183, 184 | 106 | 182 |
| Screw-machine tool-holder | C. L. Goodrich | 726,674 | Apr. 28 | 4198 | 984 | 103 | 2092 |
| Screw mechanism | W. L. Schellenbach | 725,779 | Apr. 21 | 2536 | 575, 576 | 103 | 1739 |
| Screw-nail | T. B. Hitchman | 736,851 | Aug. 18 | 3416 | 756 | 105 | 1742 |
| Screw-plate | F. E. Wells | 736,045 | Aug. 11 | 1925 | 411 | 105 | 1411 |
| Screw-plate and die | F. W. Conant | 719,089 | Jan. 27 | 2990 | 667 | 102 | 678 |
| Screw-stock | E. Mengel | 721,719 | Mar. 3 | 120 | 26 | 103 | 27 |
| Screw-thread-cutting machine | C. F. Wieland | 733,446 | July 14 | 1346 | 317 | 105 | 302 |
| Screw-threaded pipe, tube, or rod | E. T. Greenfield | 720,580 | Feb. 17 | 2181 | 506 | 102 | 1313 |
| Screw-threaded pipes, tubes, or rods. Constructing | E. T. Greenfield | 720,579 | Feb. 17 | 2179 | 505 | 102 | 1313 |
| Screw-threading machine | G. M. Pfaff | 727,194 | May 5 | 699 | 150 | 104 | 151 |
| Screw-threading tool | C. R. Gabriel | 748,276 | Dec. 29 | 5529 | 1260 | 107 | 2392 |
| Scribbling and carding machine | S. Garsed and J. Carter | 725,836 | Apr. 21 | 2636 | 600 | 103 | 1760 |
| Scroll-bending machine | G. Boehm | 725,026 | Apr. 14 | 1135 | 256 | 103 | 1428 |
| Scrubbing device. Floor- | M. C. Bliss | 728,664 | May 19 | 3492 | 776 | 104 | 781 |
| Scrubbing-machine | P. Cecil | 728,542 | May 19 | 3247 | 720 | 104 | 727 |
| Scrubbing-machine | T. Gossack | 741,787 | Oct. 20 | 2697 | 601 | 106 | 1855 |
| Scrubbing-machine | D. Bowen | 742,283 | Oct. 27 | 3705 | 827 | 106 | 2078 |
| Scrubbing-machine | P. E. Timon | 746,605 | Dec. 8 | 2342 | 537 | 107 | 1623 |
| Sculptural reliefs, &c. Making | J. Walter | 718,890 | Jan. 20 | 2601 | 581 | 102 | 583 |
| Scythe | S. S. Elder | 743,842 | Nov. 10 | 2044 | 434 | 107 | 452 |
| Scythe | V. Czermak | 745,798 | Dec. 1 | 870 | 196 | 107 | 1285 |
| Scythe-snath-bending machine | G. M. Fenn | 728,890 | May 26 | 3901 | 867 | 104 | 880 |
| Seal | T. I. Porter | 719,864 | Feb. 3 | 812 | 190 | 102 | 994 |
| Seal | T. I. Porter | 719,865 | Feb. 3 | 813 | 190 | 102 | 995 |
| Seal | T. I. Porter | 719,866 | Feb. 3 | 814 | 190 | 102 | 995 |
| Seal | W. S. Davison | 734,517 | July 28 | 3359 | 786 | 105 | 758 |
| Seal | E. J. Brooks | 734,807 | July 28 | 3940 | 919 | 105 | 877 |
| Seal | L. E. Wood and C. R. Cooper | 739,248 | Sept. 15 | 3328 | 738 | 106 | 744 |
| Seal | L. A. Foote | 745,587 | Dec. 1 | 504 | 119 | 107 | 1205 |
| Seal. Bottle- | F. A. Emerick | 725,687 | Apr. 21 | 2362 | 534 | 103 | 1700 |
| Seal. Bottle- | H. S. Brewington | 730,812 | June 9 | 2320 | 515 | 104 | 1625 |
| Seal. Bottle- | E. D. Schmitt | 747,240 | Dec. 15 | 3556 | 805 | 107 | 1914 |
| Seal. Car- | T. White | 737,809 | Apr. 28 | 4459 | 1007 | 103 | 2146 |
| Seal. Car- | S. F. Estell | 733,708 | July 14 | 1786 | 424 | 105 | 394 |
| Seal. Car- | H. Thompson | 742,085 | Oct. 20 | 3329 | 742 | 106 | 1983 |
| Seal-designs. Apparatus for melting sealing-wax, &c., on paper or other surfaces for the production of ornamental | C. H. Williams | 722,341 | Mar. 10 | 1280 | 284 | 103 | 288 |
| Seal for bottles, &c | G. A. Kendall | 741,143 | Oct. 13 | 1398 | 320 | 106 | 1564 |
| Seal for envelops, packages, &c | J. O. Fleece | 724,839 | Apr. 7 | 791 | 183 | 103 | 1339 |
| Seal for pipe-couplings and nuts | W. Mooney and O. Jaeger | 733,731 | July 14 | 1830 | 432 | 105 | 403 |
| Seal-lock | J. Pellington | 724,038 | Mar. 31 | 4465 | 1005 | 103 | 994 |
| Seal-lock | G. B. Edgar | 729,922 | June 2 | 725 | 162 | 104 | 1276 |
| Seal-lock | W. L. Sebring | 732,593 | June 30 | 5740 | 1274 | 104 | 2385 |
| Seal-lock | W. L. Sebring | 732,594 | June 30 | 5741 | 1274 | 104 | 2385 |
| Seal-lock | J. J. Russell | 736,024 | Aug. 11 | 1888 | 404 | 105 | 1403 |
| Seal-lock | C. W. McShane | 739,206 | Sept. 15 | 3238 | 717 | 106 | 724 |
| Seal-lock | D. E. McLaughlin | 739,701 | Sept. 22 | 4160 | 930 | 106 | 939 |
| Seal-lock seal | C. J. Reynolds and O. E. Chapman | 744,234 | Nov. 17 | 2849 | 609 | 107 | 638 |
| Seal-lock seal | C. J. Reynolds and O. E. Chapman | 744,235 | Nov. 17 | 2850 | 610 | 107 | 638 |
| Seal-press | J. W. Holley | 732,940 | July 7 | 431 | 107 | 105 | 93 |
| Seal-press | W. S. Davison | 734,518 | July 28 | 3361 | 786 | 105 | 759 |
| Seal-press | A. B. Schofield | 740,185 | Sept. 29 | 5081 | 1142 | 106 | 1153 |
| Seal-press | F. W. Brooks | 748,474 | Dec. 29 | 5881 | 1337 | 107 | 2470 |
| Seal-press. Ratchet | E. J. Brooks | 727,890 | May 12 | 2020 | 449 | 104 | 447 |
| Seal. Pressure-resisting | D. Craig | 725,937 | Apr. 21 | 2816 | 639 | 103 | 1797 |
| Seal. Self-locking | E. Tyden | 739,037 | Sept. 15 | 2927 | 649 | 106 | 659 |
| Seal. Self-locking | E. Tyden | 739,038 | Sept. 15 | 2929 | 650 | 106 | 660 |
| Seal. Sheet-metal | F. W. Brooks | 745,036 | Nov. 24 | 4318 | 933 | 107 | 966 |
| Seal. Snap- | E. J. Brooks | 719,642 | Feb. 3 | 412 | 94, 95 | 102 | 908 |
| Seal. Snap- | E. J. Brooks | 719,643 | Feb. 3 | 415 | 95 | 102 | 908 |
| Seal. Snap- | E. J. Brooks | 736,682 | Aug. 18 | 3089 | 681 | 105 | 1673 |
| Seal. Vessel- | E. P. Cooke | 723,515 | Mar. 24 | 3481 | 778 | 103 | 773 |
| Seals. Machine for making bottle- | G. E. Painter | 719,689 | Feb. 3 | 489 | 111 | 102 | 925 |
| Sealed folding hollow body | F. A. Walter | 720,864 | Feb. 17 | 2674 | 617, 618 | 102 | 1416 |
| Sealer. Envelop- | H. I. Talley | 725,795 | Apr. 21 | 2564 | 581 | 103 | 1745 |
| Sealer. Envelop- | W. M. Henry | 738,610 | Sept. 8 | 2125 | 465, 466 | 106 | 473 |
| Sealing and applying stamps to envelops. Machine for | W. L. Rowell, Jr | 723,315 | Mar. 24 | 3084 | 694, 695 | 103 | 696 |
| Sealing and stamping machine. Envelop | J. E. Lester | 746,114 | Dec. 8 | 1467 | 329, 330 | 107 | 1433 |
| Sealing and stamping machine. Letter | J. N. Stacy | 728,036 | May 12 | 2281 | 507, 508 | 104 | 503 |
| Sealing apparatus. Jar- | W. H. Honiss | 727,631 | May 12 | 1507 | 341 | 104 | 342 |
| Sealing apparatus. Jar- | W. A. Lorenz | 739,887 | Sept. 29 | 4537 | 1019 | 106 | 1036 |
| Sealing attachment. Bag- | E. Tyden | 721,926 | Mar. 3 | 516 | 113 | 103 | 114 |
| Sealing cap. Bottle- | M. Seiffert | 739,932 | Sept. 29 | 4625 | 1038 | 106 | 1056 |
| Sealing-cap for vessels under pressure | J. M. Hicks | 746,332 | Dec. 8 | 1876 | 428 | 107 | 1519 |
| Sealing device | D. J. T. Hiett | 720,806 | Feb. 17 | 2583 | 595, 596 | 102 | 1396 |
| Sealing device | W. E. Heath | 741,607 | Oct. 13 | 2338 | 524 | 106 | 1765 |
| Sealing device. Automatic envelop- | L. Madas | 741,805 | Oct. 20 | 2722 | 606, 607 | 106 | 22, 1861 |
| Sealing device. Bottle- | W. C. Wiederseim | 732,481 | June 30 | 5529 | 1227 | 104 | 2338 |
| Sealing device. Bottle- | G. H. Gilletre | 734,459 | July 21 | 3246 | 763 | 105 | 719 |
| Sealing device. Bottle or jar | E. D. Schmitt | 741,843 | Oct. 20 | 2784 | 620 | 106 | 1875 |
| Sealing device. Bottle or jar | E. D. Schmitt | 741,844 | Oct. 20 | 2787 | 621 | 106 | 1876 |
| Sealing device. Bottle or jar | E. D. Schmitt | 747,333 | Dec. 15 | 3742 | 843 | 107 | 1957 |
| Sealing device. Envelop- | A. H. Pitney | 735,814 | Aug. 11 | 1488 | 319 | 105 | 1316 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Sealing-jar for preserving articles of food | G. Lees | 718,643 | Jan. 20 | 2136 | 466 | 102 | 488 |
| Sealing jars. Means for | W. Walter | 726,806 | Apr. 28 | 4456 | 1006 | 103 | 2145 |
| Sealing machine. Automatic vacuum can- | J. G. Hodgson | 735,978 | Aug. 11 | 1798 | 384, 385 | 105 | 1384 |
| Sealing machine. Bottle- | N. B. Abbott and C. J. Marks | 734,031 | July 21 | 2448 | 572, 573 | 105 | 550 |
| Sealing machine. Envelop- | H. J. Williams | 724,981 | Apr. 7 | 1041 | 238 | 103 | 1391 |
| Sealing machine. Envelop- | J. P. Squires | 732,905 | July 7 | 369 | 90 | 105 | 80 |
| Sealing machine. Envelop- | E. D. Votaw | 738,089 | Sept. 1 | 1036 | 231 | 106 | 225 |
| Sealing means. Bottle- | E. Goltstein | 743,636 | Nov. 10 | 1677 | 352 | 107 | 374 |
| Sealing means. Vessel- | J. M. Hicks | 727,947 | May 12 | 2138 | 477 | 104 | 474 |
| Sealing-rings. Apparatus for making | W. P. Coldren | 738,295 | Sept. 8 | 1503 | 325 | 106 | 338 |
| Sealing-rings for canning-jars. Apparatus for making | W. P. Coldren | 747,377 | Dec. 22 | 3817 | 859 | 107 | 1990 |
| Sealing-rings for canning-jars. Making lipped | W. P. Coldren | 738,885 | Sept. 15 | 2683 | 591, 592 | 106 | 609 |
| Sealing sheet-metal cans or vessels. Vacuum- | E. Norton | 717,711 | Jan. 6 | 340 | 83 | 102 | 74 |
| Sealing vessels. Means for | J. M. Hicks | 746,330 | Dec. 8 | 1874 | 427 | 107 | 1519 |
| Seam-dampener | W. H. Rickey | 734,000 | July 21 | 2375 | 558 | 105 | 533 |
| Seam. Garment- | N. E. Johnson | 725,623 | Apr. 14 | 2232 | 504 | 103 | 1659 |
| Seam. Sheet-metal | R. Hawkins | 747,970 | Dec. 29 | 4954 | 1119 | 107 | 2267 |
| Seam trimmer. Back- | C. B. Corwin | 723,585 | Mar. 24 | 3601 | 804 | 103 | 797 |
| Seams of sheet-metal cans. Machine for closing circular | B. Adriance | 747,671 | Dec. 22 | 4350 | 982 | 107 | 2110 |
| Seaming machine. Automatic double- | J. G. Hodgson | 727,630 | May 12 | 1504 | 340, 341 | 104 | 342 |
| Seaming machine. Can-double- | C. Stecher | 741,942 | Oct. 20 | 2984 | 664, 665 | 106 | 1916 |
| Seaming machine. Double- | O. S. Beyer | 737,567 | Sept. 1 | 12 | 4 | 106 | 6 |
| Seaming-machine ejector. Side- | C. W. Sleeper | 734,759 | July 28 | 3830 | 893 | 105 | 854 |
| Seaming-machine feeding mechanism. Side- | C. W. Sleeper | 734,760 | July 28 | 3832 | 893 | 105 | 854 |
| Seaming machine. Sheet-metal-box- | H. J. Reinert | 733,678 | July 14 | 1743 | 412 | 105 | 384 |
| Seaming machine. Sheet-metal-lock- | R. T. Smith and D. M. Monroe | 725,163 | Apr. 14 | 1386 | 313, 314 | 103 | 1479 |
| Search-light | J. L. Hall | 726,529 | Apr. 28 | 3926 | 888 | 103 | 2037 |
| Search-light projector | J. L. Hall | 739,599 | Sept. 22 | 3973 | 886, 887 | 106 | 898 |
| Search-light shutter | J. L. Hall | 735,498 | Aug. 4 | 884 | 189 | 105 | 1169 |
| Seat: *See* Adjustable seat. Agricultural-implement seat. Bath-tub seat. Buoyant seat. Car-seat. Carriage-seat. Closet-seat. Driver's seat. Foldable seat. Metal seat. Outdoor seat. Portable seat. Suspension-seat. Tram-seat. Vehicle-seat. | | | | | | | |
| Seat and back | C. W. Emmons | 724,453 | Apr. 7 | 60 | 16 | 103 | 1183 |
| Seat-back | R. P. Elliott | 728,215 | May 19 | 2616 | 585 | 104 | 596 |
| Seat-cushion | H. S. Hale | 734,701 | July 28 | 3706 | 867 | 105 | 831 |
| Seat-guard-locking device | S. E. Jackman | 745,854 | Dec. 1 | 1000 | 225 | 107 | 1312 |
| Seat. Omnibus, tram-car, garden, or other | E. R. Halstead | 730,189 | June 2 | 1187 | 266 | 104 | 1369 |
| Seat-post | A. Rydquist | 741,376 | Oct. 13 | 1893 | 417 | 106 | 1671 |
| Seat-spider | H. W. Bolens | 719,729 | Feb. 3 | 575 | 130 | 102 | 943 |
| Seat-spider | H. W. Bolens | 719,730 | Feb. 3 | 576 | 130 | 102 | 943 |
| Seat-support | G. Wilson | 736,665 | Aug. 18 | 3043 | 672 | 105 | 1664 |
| Secateur | A. W. A. Barnard and W. G. Reid | 747,359 | Dec. 22 | 3798 | 854 | 107 | 1986 |
| Secondary battery | J. W. Madigin | 718,489 | Jan. 13 | 1836 | 403 | 102 | 411 |
| Secondary battery | I. Kitsee | 718,637 | Jan. 20 | 2126 | 464 | 102 | 485 |
| Secondary battery | F. Buchanan | 720,321 | Feb. 10 | 1688 | 383 | 102 | 1196 |
| Secondary battery | P. Figuccia | 726,274 | Apr. 28 | 3415 | 774, 775 | 103 | 1936 |
| Secondary battery | W. Gardiner | 732,843 | July 7 | 263 | 65,66 | 105 | 59 |
| Secondary battery | G. E. Hatch | 736,390 | Aug. 18 | 2523 | 554 | 105 | 1557 |
| Secondary battery | J. Middleby, Jr | 736,420 | Aug. 18 | 2575 | 565 | 105 | 1568 |
| Secondary battery | G. E. Hatch | 738,188 | Sept. 8 | 1289 | 279 | 106 | 295 |
| Secondary battery | G. K. Hartung | 745,604 | Dec. 1 | 537 | 125 | 107 | 1211 |
| Section-liner | R. Kastmann | 740,871 | Oct. 6 | 902 | 202 | 106 | 1438 |
| Sectional boiler | J. L. Armitage and A. Pinney | 724,373 | Mar. 31 | 5140 | 1150, 1151 | 103 | 1132 |
| Sectional boiler | L. R. Libby | 727,814 | May 12 | 1882 | 419 | 104 | 418 |
| Sectional boiler | E. M. Fancher | 730,895 | June 16 | 2495 | 553, 554 | 104 | 1682 |
| Sectional boiler | J. G. Wagstaff | 733,688 | July 14 | 1754 | 415, 416 | 105 | 386 |
| Securing means. Adjustable | H. M. Pilkington | 744,604 | Nov. 17 | 3486 | 752 | 107 | 773 |
| Seed-cleaner | F. J. Prame | 732,140 | Mar. 3 | 880 | 197 | 103 | 188 |
| Seed cleaner and separator | C. N. Hatfield | 732,073 | June 30 | 4721 | 1054 | 104 | 2171 |
| Seed-cotton distributers. Automatic relief-valve for pneumatic | G. W. Wade | 717,642 | Jan. 6 | 211 | 53 | 102 | 46 |
| Seed-drill | P. W. Ekstrand | 734,049 | July 21 | 2490 | 580, 581 | 105 | 560 |
| Seed-drill scraper. Disk | W. Stephenson | 718,885 | Jan. 20 | 2593 | 579 | 102 | 581 |
| Seed dropper and fertilizer-distributer. Cotton- | J. C. Griffin | 718,620 | Jan. 20 | 2100 | 457 | 102 | 481 |
| Seed-dropping mechanism | A. C. Lindgren | 719,237 | Jan. 27 | 3264 | 729, 730 | 102 | 734 |
| Seed-dropping mechanism | A. C. Lindgren | 725,460 | Apr. 14 | 1934 | 433, 434 | 103 | 1594 |
| Seed from the hulls. Apparatus for separating the meat of cotton- | L. W. Merriam | 719,948 | Feb. 3 | 950 | 221 | 102 | 1025 |
| Seed huller. Cotton- | F. A. Wells | 731,988 | June 23 | 4534 | 1011, 1012 | 104 | 2120 |
| Seed hulling and breaking machine. Cotton- | M. F. Williams | 728,643 | May 19 | 3449 | 765 | 104 | 772 |
| Seed-hulls. Apparatus for separating kernels from | F. B. Pope | 732,779 | July 7 | 148 | 39 | 105 | 36 |
| Seed or fertilizer drill | T. H. Nance | 721,733 | Mar. 3 | 142 | 33 | 103 | 38 |
| Seed-packet holder | L. J. Ullathorne | 726,380 | Apr. 28 | 3633 | 823 | 103 | 1981 |

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| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Seed-stirring mechanism | W. Fetzer | 742,016 | Oct. 20 | 3150 | 703 | 106 | 1949 |
| Seed stripper. Grass- | H. T. and W. H. McCormick | 727,412 | May 5 | 1089 | 239 | 104 | 235 |
| Seeds. Eliminating solvents from | M. Swenson | 747,267 | Dec. 15 | 3614 | ..... | 107 | 1929 |
| Seeder | G. W. Denyes and O. Schutt | 726,880 | May 5 | 91 | 23 | 104 | 22 |
| Seeder | J. L. Jones and R. L. Rhea | 731,463 | June 23 | 3574 | 796<br>797 | 104 | 1921 |
| Seeder | E. F. Molck | 733,249 | July 7 | 979 | 236 | 105 | 205 |
| Seeder and fertilizer-distributer | W. A. Davis | 737,588 | Sept. 1 | 55 | 12 | 106 | 14 |
| Seeder and fertilizer-dropper | W. Marcum | 725,109 | Apr. 14 | 1290 | 291 | 103 | 1458 |
| Seeder bevel-gear connection | W. Fetzer | 745,721 | Dec. 1 | 730 | 167 | 107 | 1254 |
| Seeder. Broadcast | C. P. Sester and F. J. Feldt | 719,620 | Feb. 3 | 368 | 85 | 102 | 899 |
| Seeder. Broadcast | C. J. Rinderknecht | 737,484 | Aug. 25 | 1584 | 1027<br>1028 | 105 | 2011 |
| Seeder. Onion- | I. McCollister | 723,294 | Mar. 24 | 3053 | 686 | 103 | 689 |
| Seeding attachment | E. K. Rea | 729,893 | June 2 | 684 | 151 | 104 | 1268 |
| Seeding device | J. Tchooljian | 719,905 | Feb. 3 | 885 | 208 | 102 | 1010 |
| Seeding-machine | F. K. Lathrop | 718,640 | Jan. 20 | 2130 | 465 | 102 | 486 |
| Seeding-machine | S. H. Jones | 722,111 | Mar. 3 | 836 | 186 | 103 | 180 |
| Seeding-machine | S. H. Jones | 724,710 | Apr. 7 | 550 | 131<br>132 | 103 | 1287 |
| Seeding-machine | E. Baseman | 725,921 | Apr. 21 | 2786 | 633 | 103 | 1792 |
| Seeding-machine | J. R. Kralinger and A. Kleiber | 729,774 | June 2 | 459 | 103 | 104 | 1221 |
| Seeding-machine | C. N. E. Gray | 730,908 | June 16 | 2517 | 560 | 104 | 1686 |
| Seeding-machine | A. O'Connor | 740,687 | Oct. 6 | 557 | 125 | 106 | 1367 |
| Seeding-machine | A. Ploss | 745,903 | Dec. 1 | 1091 | 244 | 107 | 1331 |
| Seeding-machine. Broadcast | C. N. E. Gray | 731,404 | June 16 | 3447 | 770 | 104 | 1876 |
| Seeding-machine covering device | A. C. Lindgren | 719,823 | Feb. 3 | 749 | 176 | 102 | 981 |
| Seeding-machine. Disk-drill | J. S. Rowell | 746,383 | Dec. 8 | 1959 | 448 | 107 | 1537 |
| Seeding. Machine for preparing soil for | T. Adair | 746,653 | Dec. 15 | 2448 | 559 | 107 | 1667 |
| Seeding-machine. Sulky lister | F. E. Davis | 729,552 | June 2 | 57 | 14,15 | 104 | 1138 |
| Seine | I. E. Palmer | 725,988 | Apr. 21 | 2898 | 657 | 103 | 1814 |
| Seine. Pursing- | W. F. Harris | 721,517 | Feb. 24 | 3947 | 898<br>899 | 102 | 1703 |
| Selective system | S. A. Reed | 737,869 | Sept. 1 | 616 | 135 | 106 | 136 |
| Selective system | S. A. Reed | 737,870 | Sept. 1 | 626 | 135<br>136 | 106 | 137 |
| Self-centering spindle | S. F. Carpenter | 740,354 | Sept. 29 | 5391 | 1215 | 106 | 1216 |
| Self-closing gate | J. W. Henderson | 722,104 | Mar. 3 | 825 | 183 | 103 | 178 |
| Self-heating can for canned goods | G. S. Jewett | 720,434 | Feb. 10 | 1877 | 428 | 102 | 1236 |
| Self-locking bolt | J. P. Ruark | 725,147 | Apr. 14 | 1361 | 307 | 103 | 1473 |
| Self-locking pin | L. Pierce | 733,994 | July 21 | 2367 | 556 | 105 | 531 |
| Self-measuring can | R. Barrett | 733,937 | July 21 | 2239 | 527 | 105 | 505 |
| Self-oiling wheel | E. Ramsay | 722,044 | Mar. 3 | 724 | 161 | 103 | 156 |
| Self-opening die | L. A. Howe | 739,873 | Sept. 29 | 4514 | 1015 | 106 | 1031 |
| Self-opening die | L. A. Howe | 740,016 | Sept. 29 | 4780 | 1075 | 106 | 1088 |
| Self-waiting table | M. V. Hamnack | 723,269 | Mar. 24 | 3004 | 676 | 103 | 679 |
| Self-waiting table | J. Shafer and J. Miller | 732,227 | June 30 | 5042 | 1121 | 104 | 2239 |
| Selvage motion. Center- | H. Bardsley | 743,674 | Nov. 10 | 1738 | 367 | 107 | 387 |
| Semaphore | L. F. Loree and F. P. J. Patenall | 733,981 | July 21 | 2340 | 549 | 105 | 525 |
| Semaphore | G. H. J. Maas | 739,891 | Sept. 29 | 4545 | 1021 | 106 | 1037 |
| Semaphore-operating device | H. W. Souder | 735,420 | Aug. 4 | 736 | 157 | 105 | 1137 |
| Sensitive sheets. Device for holding flexible | R. Beckmann | 741,445 | Oct. 13 | 2006 | 445 | 106 | 1694 |
| Separating and grading machine | D. Sewell | 743,574 | Nov. 10 | 1559 | 325<br>326 | 107 | 350 |
| Separating-machine | F. H. Schule | 726,996 | May 5 | 347 | 75 | 104 | 75 |
| Separating-screen | W. C. Rowe | 748,562 | Dec. 29 | 6065 | 1373 | 107 | 2512 |
| Separator:<br>*See* Air-separator. Battery-separator. Bean-separator. Boiler-separator. Cement and gravel separator. Centrifugal separator. Cotton-separator. Cream-separator. Cream and butter separator. Diamagnetic separator. Egg-separator. Electrostatic separator. Gas and tar separator. Gold-separator. Grain-separator. Grain and seed separator. Graphite-separator. Grease-separator. Liquid-separator. Magnetic separator. Ore-separator. Pulp-separator. Screening-separator. Steam-separator Traction-separator. Wort-separator. | | | | | | | |
| Separator | E. Colvin | 717,971 | Jan. 6 | 845 | 191 | 102 | 181 |
| Separator | A. Langerfeld | 719,343 | Jan. 27 | 3465 | 772<br>773 | 102 | 778 |
| Separator | J. W. Burton | 719,741 | Feb. 3 | 602 | 135 | 102 | 949 |
| Separator | J. Slattery | 726,000 | Apr. 21 | 2920 | 663<br>664 | 103 | 1819 |
| Separator | J. Roger | 730,162 | June 2 | 1142 | 257 | 104 | 1359 |
| Separator | J. T. Burr | 730,229 | June 9 | 1284 | 284 | 104 | 1404 |
| Separator | J. Tetlow | 741,386 | Oct. 13 | 1911 | 423 | 106 | 1675 |
| Separator | J. E. Foley | 742,622 | Oct. 27 | 4310 | 971 | 106 | 2203 |
| Separator | H. H. Humphrey | 743,388 | Nov. 3 | 1130 | 240 | 107 | 239 |
| Separator | W. G. Read | 743,752 | Nov. 10 | 1872 | 396 | 107 | 417 |
| Separator | W. V. Meyer | 745,450 | Dec. 1 | 265 | 62 | 107 | 1155 |
| Separator | R. W. Jessup | 746,089 | Dec. 8 | 1425 | 320 | 107 | 1422 |
| Separator screen-shoe | J. N. Kailor and M. T. Reeves | 743,087 | Nov. 3 | 518 | 112 | 107 | 108 |
| Separator-sieve | E. E. Ditch and F. M. Hawkins | 735,016 | July 28 | 4302 | 1001 | 105 | 953 |
| Separator sieve and riddle | W. N. Rumely | 747,231 | Dec. 15 | 3535 | 802 | 107 | 1910 |
| Serre-fin | C. D. Lukens | 733,723 | July 14 | 1816 | 430 | 105 | 400 |
| Serum and preparing same | W. P. Dunbar | 745,333 | Dec. 1 | 32 | ..... | 107 | 1107 |
| Serum container and injector | T. J. Lynch | 740,152 | Sept. 29 | 5020 | 1128 | 106 | 1140 |
| Service-box cover | H. P. Martin | 748,394 | Dec. 29 | 5714 | 1305 | 107 | 2433 |
| Serving apparatus | T. H. Munroe | 731,936 | June 23 | 4434 | 989 | 104 | 2099 |
| Serving apparatus | R. Taylor | 741,186 | Oct. 13 | 1490 | 338 | 106 | 1583 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Setting | F. L. King | 729,606 | June 2 | 152 | 36 | 104 | 1158 |
| Settling device | J. F. Gent | 727,345 | May 5 | 977 | 212 | 104 | 211 |
| Sewage-ejector | J. W. Cooney | 745,791 | Dec. 1 | 859 | 193, 194 | 107 | 1283 |
| Sewage-ejector. Automatic | E. Yeomans | 735,430 | Aug. 4 | 758 | 161, 162 | 105 | 1141 |
| Sewage or like tanks. Apparatus in connection with | T. H. Ramsden | 733,746 | July 14 | 1859 | 439, 440 | 105 | 409 |
| Sewage. Plant for disposal of | J. Danner | 726,513 | Apr. 28 | 3901 | 883 | 103 | 2032 |
| Sewage-trap | D. J. Lynch | 719,680 | Feb. 3 | 475 | 108 | 102 | 922 |
| Sewage treating and utilizing apparatus | R. J. G. Wood | 739,049 | Sept. 15 | 2954 | 654, 655 | 106 | 665 |
| Sewer | C. Wentzien | 738,645 | Sept. 8 | 2202 | 481 | 106 | 488 |
| Sewer-inlet or basin cover | M. W. Peters | 718,277 | Jan. 13 | 1413 | 314 | 102 | 319 |
| Sewer-mold | J. B. Blaw | 727,272 | May 5 | 842 | 181 | 104 | 181 |
| Sewer pit and trap. Combined | J. M. Peters | 732,778 | July 7 | 147 | 39 | 105 | 35 |
| Sewer-water. Extracting the residuary matters from | E. Vial | 730,588 | June 9 | 1943 | 432, 433 | 104 | 1545 |
| Sewed articles. Seam for | C. McNeil | 718,654 | Jan. 20 | 2156 | 470 | 102 | 491 |
| Sewed articles. Seam for | E. T. Allan | 718,943 | Jan. 20 | 2709 | 606 | 102 | 606 |
| Sewed articles. Seam for | R. G. Woodward | 718,960 | Jan. 20 | 2740 | 613 | 102 | 612 |
| Sewed articles. Seam for | J. J. McLoughlin | 721,731 | Mar. 3 | 137 | 32 | 103 | 31 |
| Sewed articles. Seam for | C. McNeil | 742,346 | Oct. 27 | 3813 | 854 | 106 | 2160 |
| Sewing and trimming machine. Overseaming | F. Malsch | 721,315 | Feb. 24 | 3574 | 813 | 102 | 1626 |
| Sewing-cabinet | A. E. Thayer | 731,974 | June 23 | 4503 | 1005 | 104 | 2115 |
| Sewing device | O. Knorr | 744,080 | Nov. 17 | 2542 | 544 | 107 | 571 |
| Sewing-machine | A. E. Lindner | 719,347 | Jan. 27 | 3479 | 774, 775 | 102 | 781 |
| Sewing-machine | L. Onderdonk | 721,077 | Feb. 17 | 3080 | 707, 708 | 102 | 1504 |
| Sewing-machine | G. H. Dimond and W. F. Dial | 722,496 | Mar. 10 | 1577 | 348 | 103 | 353 |
| Sewing-machine | E. Ilg | 723,278 | Mar. 24 | 3022 | 680 | 103 | 683 |
| Sewing-machine | S. M. Jacoby | 732,353 | June 30 | 5281 | 1171 | 104 | 2288 |
| Sewing-machine | G. H. Dimond | 736,828 | Aug. 18 | 3372 | 744, 745, 746 | 105 | 1732 |
| Sewing-machine | M. Hemleb | 741,035 | Oct. 13 | 1192 | 270 | 106 | 1520 |
| Sewing-machine | J. A. Cameron | 744,045 | Nov. 17 | 2464 | 530 | 107 | 555 |
| Sewing-machine | J. T. Hogan | 745,438 | Dec. 1 | 238 | 55 | 107 | 1151 |
| Sewing-machine attachment | E. J. Fain | 730,446 | June 9 | 1685 | 377 | 104 | 1488 |
| Sewing-machine attachment for sewing on buttons | C. Schneider | 722,188 | Mar. 3 | 979 | 217 | 103 | 207 |
| Sewing-machine attachment-holder | P. Joecken and J. Kotzlovsky | 723,608 | Mar. 24 | 3640 | 815 | 103 | 806 |
| Sewing-machine attachment-holder | J. M. Greist | 740,644 | Oct. 6 | 492 | 108 | 106 | 1352 |
| Sewing-machine awl mechanism | H. A. Dodge and W. Wilson | 724,447 | Apr. 7 | 45 | 12 | 103 | 1179 |
| Sewing-machine base | G. M. Eames and A. Laubscher | 740,256 | Sept. 29 | 5217 | 1172, 1173 | 106 | 1180 |
| Sewing-machine. Blindstitch | L. Onderdonk | 720,731 | Feb. 17 | 2466 | 565, 566 | 102 | 1372 |
| Sewing-machine. Blindstitch | L. Onderdonk | 720,732 | Feb. 17 | 2467 | 566 | 102 | 1372 |
| Sewing-machine. Blindstitch | L. Onderdonk | 721,079 | Feb. 17 | 3086 | 709 | 102 | 1505 |
| Sewing-machine. Blindstitch | L. Onderdonk | 721,081 | Feb. 17 | 3091 | 710, 711 | 102 | 1507 |
| Sewing-machine. Blindstitch | L. Onderdonk | 721,082 | Feb. 17 | 3095 | 711 | 102 | 1508 |
| Sewing-machine. Blindstitch | J. G. Lewis | 731,695 | June 23 | 4003 | 893, 894 | 104 | 2005 |
| Sewing-machine. Blindstitch | J. G. Lewis | 731,696 | June 23 | 4006 | 894 | 104 | 2006 |
| Sewing-machine. Blindstitch | J. G. Lewis | 731,697 | June 23 | 4007 | 894 | 104 | 2006 |
| Sewing-machine. Blindstitch | J. G. Lewis | 746,853 | Dec. 15 | 2814 | 648, 649, 650 | 107 | 1748 |
| Sewing-machine blindstitching attachment | E. Donaldson | 746,303 | Dec. 8 | 1824 | 414, 415 | 107 | 1509 |
| Sewing-machine bobbin-controlling mechanism | A. Steward | 723,330 | Mar. 24 | 3108 | 700 | 103 | 701 |
| Sewing-machine bobbin-latch | W. A. Mack | 723,170 | Mar. 17 | 2806 | 632 | 103 | 624 |
| Sewing machine. Book- | D. M. and D. G. Smyth and H. Hastings. | 735,606 | Aug. 4 | 1092 | 232, 233 | 105 | 1213 |
| Sewing machine. Boot or shoe | F. Doucet | 731,761 | June 23 | 4128 | 920, 921 | 104 | 2032 |
| Sewing machine. Boot or shoe | W. Goddu | 745,819 | Dec. 1 | 923 | 207, 208 | 107 | 1296 |
| Sewing machine. Broom- | W. C. Lipe | 718,263 | Jan. 13 | 1373 | 306, 307, 308, 309 | 102 | 311 |
| Sewing machine. Button- | J. W. Darley, Jr. | 747,048 | Dec. 15 | 3182 | 729, 730, 731, 732 | 107 | 1831 |
| Sewing machine. Buttonhole- | J. E. Dimond | 718,103 | Jan. 13 | 1094 | 242 | 102 | 251 |
| Sewing machine. Buttonhole- | F. W. Ostrom | 726,335 | Apr. 28 | 3544 | 803 | 103 | 1963 |
| Sewing machine. Buttonhole- | R. L. Plumley | 733,267 | July 7 | 1020 | 245, 246 | 105 | 213 |
| Sewing machine. Buttonhole- | E. B. Allen | 734,794 | July 28 | 3896 | 910, 911, 912, 913, 914, 915 | 105 | 868 |
| Sewing machine. Buttonhole- | F. L. Harmon | 740,755 | Oct. 6 | 685 | 155, 156, 157, 158, 159 | 106 | 1393 |
| Sewing machine. Buttonhole- | J. T. Hogan | 741,340 | Oct. 13 | 1824 | 403, 404 | 106 | 1656 |
| Sewing-machine cabinet | W. Person | 737,658 | Sept. 1 | 183 | 39 | 106 | 43 |

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| Invention. | Name. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|---|
| | | | | Spec. | Drg. | Vol. | Page. |
| Sewing-machine cabinet | S. H. Wheeler | 739,765 | Sept. 22 | 4268 | 956 | 106 | 963 |
| Sewing-machine cabinet | E. E. Manning | 740,579 | Oct. 6 | 387 | 80 | 106 | 1329 |
| Sewing-machine carpet-carrier | J. W. Gordon | 739,856 | Sept. 29 | 4457 | 1001 | 106 | 1021 |
| Sewing-machine. Chain-stitch | C. G. Kramer | 734,574 | July 28 | 3463 | 809<br>810 | 105 | 781 |
| Sewing-machine cloth-presser. Adjustable | E. De Ville | 732,719 | July 7 | 43 | 11 | 105 | 12 |
| Sewing-machine clutch mechanism. Buttonhole- | W. W. Dixon | 718,569 | Jan. 13 | 2005 | 437 | 102 | 446 |
| Sewing-machine creasing means | G. H. Dimond, W. F. Dial, and W. R. Abercrombie. | 722,497 | Mar. 10 | 1580 | 348<br>349 | 103 | 355 |
| Sewing-machine cutter-controlling mechanism. Buttonhole- | T. O. Quist | 742,492 | Oct. 27 | 4065 | 913<br>914 | 106 | 2151 |
| Sewing-machine embroidering attachment | A. Hochstrasser | 740,654 | Oct. 6 | 506 | 111 | 106 | 1355 |
| Sewing-machine fan attachment | F. Holzmark | 737,365 | May 5 | 1014 | 220 | 104 | 219 |
| Sewing-machine fan attachment | F. Gerber | 738,429 | Sept. 8 | 1785 | 389 | 106 | 398 |
| Sewing-machine fan attachment | O. G. Ogden | 744,600 | Nov. 17 | 3480 | 750 | 107 | 772 |
| Sewing-machine feed | J. M. Merrow | 730,945 | June 16 | 2581 | 575 | 104 | 1701 |
| Sewing-machine feed-actuating mechanism | W. F. Dial, G. M. Eames, and G. H. Dimond. | 718,988 | Jan. 27 | 2793 | 625<br>626 | 102 | 638 |
| Sewing-machine feeding and edge-controlling device. | W. H. Stedman | 725,631 | Apr. 14 | 2250 | 509 | 103 | 1663 |
| Sewing-machine feeding device | O. S. Harmon | 722,014 | Mar. 3 | 670 | 149 | 103 | 145 |
| Sewing-machine feeding device | E. F. Wilson | 735,641 | Aug. 4 | 1163 | 246<br>247 | 105 | 1228 |
| Sewing-machine feeding mechanism | J. Köhler | 727,384 | May 5 | 1042 | 227 | 104 | 224 |
| Sewing-machine feeding mechanism | W. H. Stedman | 733,922 | July 14 | 2215 | 519 | 105 | 481 |
| Sewing-machine feeding mechanism | W. A. Smith | 748,431 | Dec. 29 | 5795 | 1321 | 107 | 2451 |
| Sewing-machine folding and ruffling device combined. | J. Douglas | 740,632 | Oct. 6 | 474 | 104<br>105 | 106 | 1348 |
| Sewing-machine folding-guide | W. L. Swift | 742,257 | Oct. 27 | 3656 | 817 | 106 | 2067 |
| Sewing-machine folding seat | J. Van Blarcum | 746,763 | Dec. 15 | 2636 | 606 | 107 | 1709 |
| Sewing-machine guide | M. E. Campbell | 718,818 | Jan. 20 | 2463 | 547 | 102 | 552 |
| Sewing-machine guide | A. Merkel, L. B. Sanders, and M. Hellmann. | 721,590 | Feb. 24 | 4099 | 933 | 102 | 1738 |
| Sewing-machine guide. Shoe- | J. Lapointe | 725,096 | Apr. 14 | 1265 | 286 | 103 | 1453 |
| Sewing-machine guide. Sole- | G. and W. Riel | 747,225 | Dec. 15 | 3527 | 801 | 107 | 1909 |
| Sewing machine. Hat- | E. G. O'Donnell | 728,602 | May 19 | 3376 | 748 | 104 | 756 |
| Sewing machine. Hat- | E. G. O'Donnell | 734,933 | July 28 | 4145 | 965 | 105 | 921 |
| Sewing-machine hem-folder | A. Laubscher | 723,615 | Mar. 24 | 3648 | 817 | 103 | 807 |
| Sewing-machine hemmer | O. S. Harmon | 722,015 | Mar. 3 | 673 | 149<br>150 | 103 | 145 |
| Sewing-machine hemmer | J. Douglas | 732,399 | June 30 | 5372 | 1190 | 104 | 2307 |
| Sewing-machine hemmer | A. J. A. Oesterreich | 739,210 | Sept. 15 | 3248 | 719 | 106 | 726 |
| Sewing-machine hemmer | A. Laubscher | 741,682 | Oct. 20 | 2479 | 554<br>555 | 106 | 1809 |
| Sewing-machine. Hemstitch | C. M. Abercrombie | 724,233 | Mar. 31 | 4876 | 1092 | 103 | 1077 |
| Sewing-machine. Hemstitch | A. J. A. Oesterreich | 732,435 | June 30 | 5441 | 1208 | 104 | 2321 |
| Sewing-machine horn | I. A. Cook | 740,810 | Oct. 6 | 800 | 180 | 106 | 1415 |
| Sewing-machine lap-seam-felling attachment | S. P. Brown | 729,126 | May 26 | 4316 | 953 | 104 | 964 |
| Sewing-machine loop-holder | H. A. Klumm | 722,236 | Mar. 10 | 1092 | 240 | 103 | 249 |
| Sewing-machine loop-spreader mechanism | H. A. Klemm | 726,310 | Apr. 28 | 3501 | 792 | 103 | 1953 |
| Sewing-machine loop-taker | W. F. Dial and G. H. Dimond | 723,371 | Mar. 24 | 3210 | 720 | 103 | 718 |
| Sewing machine. Looped-fabric- | F. E. Morris | 725,578 | Apr. 14 | 2146 | 486 | 103 | 1641 |
| Sewing-machine looper | D. L. Anthony | 737,053 | May 5 | 455 | 95 | 104 | 100 |
| Sewing-machine looper mechanism | L. Onderdonk | 720,733 | Feb. 17 | 2470 | 567 | 102 | 1373 |
| Sewing-machine looper mechanism | L. Onderdonk | 721,076 | Feb. 17 | 3078 | 707 | 102 | 1504 |
| Sewing-machine looper mechanism | L. Onderdonk | 721,078 | Feb. 17 | 3084 | 708 | 102 | 1505 |
| Sewing-machine looper mechanism | L. Onderdonk | 721,080 | Feb. 17 | 3090 | 710 | 102 | 1506 |
| Sewing-machine marking attachment | M. A. Bloomfield and H. E. Hawes. | 718,080 | Jan. 13 | 1054 | 234 | 102 | 242 |
| Sewing machine. Multiple buttonhole- | G. H. Arakelian | 743,971 | Nov. 10 | 2271 | 489 | 107 | 502 |
| Sewing-machine needle | G. A. Manwaring | 721,588 | Feb. 24 | 4096 | 932 | 102 | 1737 |
| Sewing-machine needle | O. L. Olsen | 738,567 | Sept. 8 | 2047 | 446 | 106 | 455 |
| Sewing-machine needle-actuating mechanism | E. P. Hatch | 717,848 | Jan. 6 | 640 | 142 | 102 | 136 |
| Sewing-machine needle-bar mechanism | E. B. Allen | 739,132 | Sept. 15 | 3114 | 689 | 106 | 697 |
| Sewing-machine needle-guide attachment | C. C. Cherry | 729,132 | May 26 | 4324 | 955 | 104 | 966 |
| Sewing-machine needle-guide mechanism | J. L. Kieffer | 737,417 | Aug. 25 | 4462 | 1001 | 105 | 1984 |
| Sewing-machine needle-threader | H. B. Maynard | 726,083 | Apr. 21 | 3039 | 690 | 103 | 1843 |
| Sewing-machine. Overedge | G. Keyser | 724,017 | Mar. 31 | 4436 | 997 | 103 | 988 |
| Sewing-machine. Overedge | G. Keyser and J. M. Weber | 724,109 | Mar. 31 | 4603 | 1036<br>1037 | 103 | 1023 |
| Sewing-machine. Overedge | G. Keyser and J. M. Weber | 724,110 | Mar. 31 | 4606 | 1037 | 103 | 1024 |
| Sewing-machine. Overedge | S. Borton | 736,199 | Aug. 11 | 2191 | 471 | 105 | 1467 |
| Sewing-machine. Overseam | W. H. Stedman | 725,168 | Apr. 14 | 1397 | 315<br>316<br>317 | 103 | 1481 |
| Sewing-machine. Overseam | R. L. Plumley | 732,959 | July 7 | 460 | 114<br>115 | 105 | 99 |
| Sewing-machine. Overseaming | S. Arnold | 719,552 | Feb. 3 | 254 | 59, 60 | 102 | 877 |
| Sewing-machine. Overseaming | W. H. Stedman | 732,457 | June 30 | 5483 | 1216 | 104 | 2330 |
| Sewing-machine. Overseaming | P. Diehl | 733,170 | July 7 | 834 | 203 | 105 | 175 |
| Sewing-machine overseaming attachment | J. C. Moore | 740,298 | Sept. 29 | 5290 | 1191 | 106 | 1195 |
| Sewing-machine plaiter attachment | M. Cummings | 740,094 | Sept. 29 | 4918 | 1103 | 106 | 1118 |
| Sewing-machine presser-foot | R. G. Woodward | 722,441 | Mar. 10 | 1450 | 321 | 103 | 325 |
| Sewing-machine presser-foot | R. G. Woodward | 722,550 | Mar. 10 | 1664 | 367 | 103 | 374 |
| Sewing-machine presser-foot | R. G. Woodward | 722,647 | Mar. 10 | 1833 | 409 | 103 | 410 |
| Sewing-machine presser-foot | D. L. Chandler | 725,929 | Apr. 21 | 2799 | 635 | 103 | 1794 |
| Sewing-machine presser-foot | A. A. Merritt | 733,499 | July 14 | 1434 | 337 | 105 | 321 |
| Sewing-machine presser-foot. Eyelet- | D. Noble | 724,322 | Mar. 31 | 5033 | 1128 | 103 | 1109 |
| Sewing-machine presser-foot holder | P. Diehl | 734,257 | July 21 | 2886 | 675 | 105 | 645 |
| Sewing-machine presser-foot holder | J. M. Greist | 747,163 | Dec. 15 | 3412 | 773 | 107 | 1886 |
| Sewing-machine presser-foot holder | J. M. Greist | 747,164 | Dec. 15 | 3413 | 773 | 107 | 1886 |
| Sewing-machine presser-foot holder | J. M. Greist | 747,165 | Dec. 15 | 3414 | 774 | 107 | 1886 |
| Sewing-machine ripping attachment | W. J. Cunningham | 737,358 | Aug. 25 | 4342 | 968 | 105 | 1958 |
| Sewing-machine rotary take-up | J. Heberling | 724,576 | Apr. 7 | 294 | 72 | 103 | 1231 |
| Sewing-machine ruffler | A. Laubscher | 724,589 | Apr. 7 | 320 | 79 | 103 | 1237 |
| Sewing-machine ruffling attachment | J. Stairs and W. H. Petrie | 747,257 | Dec. 15 | 3585 | 810 | 107 | 1920 |
| Sewing machine. Sack- | J. L. Boyle | 729,724 | June 2 | 373 | 84, 85 | 104 | 1204 |

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| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Sewing machine. Shoe- | A. B. Fowler | 718,199 | Jan. 13 | 1262 | 277, 278 | 102 | 288 |
| Sewing machine. Shoe- | J. Laurin | 733,403 | July 14 | 1271 | 301 | 105 | 285 |
| Sewing machine. Shoe- | H. K. Bridger and G. H. Scetrini | 748,044 | Dec. 29 | 5093 | 1150, 1151 | 107 | 2298 |
| Sewing machine. Shoe and leather | J. L. Kieffer | 742,998 | Nov. 3 | 315 | 70, 71, 72, 73, 74 | 107 | 68 |
| Sewing-machine shuttle | F. L. Babb | 724,652 | Apr. 7 | 431 | 104 | 103 | 1262 |
| Sewing-machine shuttle | J. O. Huffman | 743,876 | Nov. 10 | 2098 | 448 | 107 | 463 |
| Sewing-machine shuttle-driving mechanism | A. Spear | 745,256 | Nov. 24 | 4754 | 1040 | 107 | 1056 |
| Sewing-machine shuttle-operating means | M. Pietsch | 747,084 | Dec. 15 | 3266 | 744 | 107 | 1853 |
| Sewing-machine shuttle-raceway attachment | L. B. Goeres | 744,747 | Nov. 24 | 3781 | 814 | 107 | 854 |
| Sewing-machine slack-thread take-up | J. Diehl | 728,211 | May 19 | 2603 | 582 | 104 | 594 |
| Sewing-machine stitch-divider | S. J. Wentworth | 727,038 | May 5 | 429 | 90 | 104 | 94 |
| Sewing-machine stitch-forming mechanism | W. N. Parkes | 730,692 | June 9 | 2130 | 473 | 104 | 1586 |
| Sewing-machine stitch-forming mechanism. Book- | H. Hastings | 741,331 | Oct. 13 | 1788 | 398 | 106 | 1645 |
| Sewing-machine stitch-forming mechanism. Shoe- | J. L. Kieffer | 719,980 | Feb. 3 | 1015 | 236, 237 | 102 | 1039 |
| Sewing-machine stop mechanism | D. Mills | 728,269 | May 19 | 2738 | 609 | 104 | 622 |
| Sewing-machine stop mechanism | D. Mills | 729,201 | May 26 | 4451 | 981, 982 | 104 | 993 |
| Sewing-machine table. Folding | A. Morley | 730,680 | June 9 | 2107 | 469 | 104 | 1581 |
| Sewing-machine table. Folding | A. Morley | 734,190 | July 21 | 2756 | 647 | 105 | 616 |
| Sewing-machine take-up | J. Diehl | 737,366 | Aug. 25 | 4354 | 970, 971 | 105 | 1960 |
| Sewing-machine take-up device | P. Diehl and M. Hemleb | 739,158 | Sept. 15 | 3156 | 697 | 106 | 706 |
| Sewing-machine take-up mechanism | J. Diehl | 718,703 | Jan. 20 | 2256 | 496 | 102 | 511 |
| Sewing-machine take-up mechanism. Shoe- | J. L. Kieffer | 729,604 | June 2 | 146 | 35, 36 | 104 | 1157 |
| Sewing-machine tension releasing and restoring device. | J. G. Greene | 732,407 | June 30 | 5385 | 1193 | 104 | 2310 |
| Sewing-machine thread-controller | J. Diehl | 745,580 | Dec. 1 | 493 | 115, 116 | 107 | 1203 |
| Sewing-machine thread-cutter | E. H. A. Habbert and J. L. Allen | 724,282 | Mar. 31 | 4965 | 1111 | 103 | 1095 |
| Sewing-machine thread-cutter | R. L. Lyons | 726,318 | Apr. 28 | 3515 | 796 | 103 | 1956 |
| Sewing-machine thread-cutting device | E. B. Allen | 735,432 | Aug. 4 | 763 | 162, 163 | 105 | 1143 |
| Sewing-machine thread-cutting device | E. B. Allen | 739,133 | Sept. 15 | 3116 | 689 | 106 | 698 |
| Sewing-machine thread-cutting device | J. J. Sullivan and E. B. Allen | 742,366 | Oct. 27 | 3844 | 863, 864 | 106 | 2107 |
| Sewing-machine thread-cutting mechanism | R. L. Lyons | 737,122 | Aug. 25 | 3890 | 863, 864 | 105 | 1861 |
| Sewing-machine thread-guide | W. H. Stedman | 732,458 | June 30 | 5487 | 1217 | 104 | 2330 |
| Sewing-machine thread-waxing device | Z. T. French and W. C. Meyer | 732,729 | July 7 | 59 | 16 | 105 | 16 |
| Sewing-machine throat-plate | J. Douglas | 735,477 | Aug. 4 | 850 | 181 | 105 | 1161 |
| Sewing-machine transmitter. Electric motor | J. Rosenberger | 725,776 | Apr. 21 | 2530 | 574, 575 | 103 | 1738 |
| Sewing-machine trimmer | D. Noble | 724,321 | Mar. 31 | 5030 | 1127, 1128 | 103 | 1108 |
| Sewing-machine trimming attachment | A. J. A. Oesterreich | 735,572 | Aug. 4 | 1041 | 221 | 105 | 1202 |
| Sewing-machine trimming attachment | B. Bissinger | 735,699 | Aug. 11 | 1281 | 274 | 105 | 1271 |
| Sewing-machine trimming attachment. Looped-fabric- | G. Keyser | 724,016 | Mar. 31 | 4433 | 996 | 103 | 987 |
| Sewing-machine trimming device | J. M. Merrow | 730,946 | June 16 | 2585 | 575 | 104 | 1702 |
| Sewing-machine trimming mechanism | J. M. Merrow | 730,947 | June 16 | 2588 | 576 | 104 | 1702 |
| Sewing-machine trimming mechanism | W. H. Stedman | 733,760 | July 14 | 1887 | 446 | 105 | 415 |
| Sewing-machine tuck creaser and marker | A. Merkel, L. B. Sanders, and M. Hellman. | 726,322 | Apr. 28 | 3520 | 797 | 103 | 1958 |
| Sewing-machine tuck-folding guide | J. M. Greist | 740,643 | Oct. 6 | 490 | 108 | 106 | 1352 |
| Sewing-machine tucking-guide | W. M. Ammerman | 723,121 | Mar. 17 | 2718 | 611 | 103 | 606 |
| Sewing-machine. Two-needle hemstitch | A. J. A. Oesterreich | 737,012 | Aug. 25 | 3715 | 824 | 105 | 1826 |
| Sewing-machine. Two-needle hemstitch | A. J. A. Oesterreich | 737,013 | Aug. 25 | 3717 | 825 | 105 | 1826 |
| Sewing-machine. Wax-thread | W. J. Dobson | 738,011 | Sept. 1 | 914 | 201, 202 | 106 | 200 |
| Sewing-machine. Wax-thread | J. N. Whipple | 747,284 | Dec. 15 | 3648 | 824, 825 | 107 | 1937 |
| Sewing-machine welt-guide. Shoe- | C. H. Cook | 738,886 | Sept. 15 | 2684 | 592 | 106 | 609 |
| Sewing-machine work-gage. Shoe- | J. L. Kieffer | 729,605 | June 2 | 149 | 36 | 104 | 1157 |
| Sewing-machine work-guide | J. C. Harper | 742,867 | Nov. 3 | 82 | 19, 20 | 107 | 19 |
| Sewing-machine work-holder | M. B. Woodruff | 727,526 | May 5 | 1305 | 290 | 104 | 281 |
| Sewing-machine work-plate-operating mechanism | L. Onderdonk | 745,736 | Dec. 1 | 755 | 172, 173 | 107 | 1259 |
| Sewing machines. Presser-foot mechanism for shoe- | M. T. Denne | 737,716 | Sept. 1 | 288 | 60 | 106 | 65 |
| Sewing-machines. Rotary take-up for | P. Diehl and M. Hemleb | 739,157 | Sept. 15 | 3154 | 697 | 106 | 706 |
| Sewing sweat-bands into hats. Machine for | W. P. Gammons, Jr | 747,963 | Dec. 29 | 4929 | 1115 | 107 | 2262 |
| Shackle | H. G. Judd | 732,417 | June 30 | 5403 | 1197 | 104 | 2314 |
| Shackle | F. J. Briggs | 733,575 | July 14 | 1575 | 375 | 105 | 351 |
| Shade. Adjustable window- | J. T. Taylor | 726,006 | Apr. 21 | 2928 | 666 | 103 | 1820 |
| Shade-adjuster, lock, and pull. Combined | S. R. Smith and E. J. Badgley | 741,561 | Oct. 13 | 2253 | 503 | 106 | 1747 |
| Shade adjuster. Window- | C. A. Scheif | 722,912 | Mar. 17 | 2358 | 527 | 103 | 531 |
| Shade adjuster. Window- | C. A. Scheif | 735,157 | Aug. 4 | 216 | 43 | 105 | 1028 |
| Shade and curtain bracket | K. M. Dymond | 730,187 | June 2 | 1185 | 265 | 104 | 1369 |
| Shade and curtain bracket. Combination | J. E. French | 736,085 | Aug. 11 | 2002 | 426 | 105 | 1428 |
| Shade and curtain fixture | G. Retzko | 736,018 | Aug. 11 | 1879 | 401 | 105 | 1401 |
| Shade and curtain fixture. Window | S. A. Norwood | 736,334 | Aug. 11 | 2421 | 529 | 105 | 1519 |
| Shade and curtain holder | F. E. Naumann | 748,211 | Dec. 29 | 5408 | 1230 | 107 | 2365 |
| Shade and curtain holder. Window | G. Wills | 748,128 | Dec. 29 | 5260 | 1194 | 107 | 2335 |
| Shade and curtain-pole bracket | E. H. B. Lindhorst | 720,938 | Feb. 17 | 2822 | 647 | 102 | 1447 |
| Shade and curtain-pole bracket. Combined window- | C. T. Mitchell | 721,062 | Feb. 17 | 3058 | 703 | 102 | 1498 |
| Shade and curtain-pole bracket. Window- | V. Hildebrand | 740,431 | Oct. 6 | 97 | 20 | 106 | 1267 |
| Shade and curtain-pole holder | C. McDonner | 734,131 | July 21 | 2648 | 625 | 105 | 593 |
| Shade and curtain support. Combined | C. S. Snell | 736,559 | Aug. 18 | 2834 | 621 | 105 | 1623 |

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| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Shade and ventilator. Combination window | S. S. Gable | 736,242 | Aug. 11 | 2260 | 489 | 105 | 1482 |
| Shade. Artificial-light | O. A. Mygatt | 736,535. | Aug. 18 | 2794 | 612 | 105 | 1615 |
| Shade-bracket | J. B. Landry | 744,366 | Nov. 17 | 3087 | 662 | 107 | 689 |
| Shade-bracket | M. S. Weaver | 748,124 | Dec. 29 | 5254 | 1192 | 107 | 2333 |
| Shade-bracket. Adjustable | W. S. Heaton | 721,040 | Feb. 17 | 3021 | 693 | 102 | 1491 |
| Shade-bracket. Adjustable | M. H. Middlemiss | 736,533 | Aug. 18 | 2791 | 611 | 105 | 1614 |
| Shade bracket. Window- | J. A. Scott | 722,387 | Mar. 10 | 1353 | 299 | 103 | 304 |
| Shade bracket. Window- | A. Brzykcy | 731,540 | June 23 | 3728 | 830 | 104 | 1952 |
| Shade bracket. Window- | A. J. Signor | 744,419 | Nov. 17 | 3184 | 682 | 107 | 710 |
| Shade bracket. Window- | D. Harrington | 747,702 | Dec. 22 | 4406 | 993 | 107 | 2124 |
| Shade-cloth trimmer | F. McDaniels | 727,667 | May 12 | 1582 | 357, 358 | 104 | 357 |
| Shade. Collapsible sun or rain | L. Seeger | 728,505 | May 19 | 3167 | 701, 702 | 104 | 711 |
| Shade-cord holder | G. Lange | 742,682 | Oct. 27 | 4418 | 997 | 106 | 2226 |
| Shade cutter. Window- | L. C. Thompson | 723,760 | Mar. 24 | 3898 | 877 | 103 | 861 |
| Shade device. Window- | A. L. Moyer | 723,899 | Mar. 31 | 4172 | 940 | 103 | 935 |
| Shade-fixture | T. G. Wonderly | 717,789 | Jan. 6 | 516 | 116 | 102 | 111 |
| Shade-fixture | S. Stewart | 721,341 | Feb. 24 | 3629 | 825 | 102 | 1637 |
| Shade-fixture | C. A. Olcott | 740,308 | Sept. 29 | 5309 | 1196 | 106 | 1199 |
| Shade fixture. Adjustable | C. J. Wiltsie | 739,048 | Sept. 15 | 2952 | 654 | 106 | 665 |
| Shade fixture. Adjustable window- | D. S. Dow | 721,546 | Feb. 24 | 3993 | 909 | 102 | 1713 |
| Shade fixture. Adjustable window- | M. E. Rice | 741,609 | Oct. 13 | 2341 | 524 | 106 | 1765 |
| Shade fixture. Window- | T. J. Spencer | 723,748 | Mar. 24 | 3876 | 872 | 103 | 856 |
| Shade fixture. Window- | G. R. Jennings | 729,594 | June 2 | 129 | 32 | 104 | 1153 |
| Shade fixture. Window- | J. Nicholas | 742,724 | Oct. 27 | 4485 | 1014 | 106 | 2240 |
| Shade fixture. Window- | D. Hoyt | 742,989 | Nov. 3 | 301 | 68 | 107 | 65 |
| Shade fixture. Window- | J. Wheat | 744,269 | Nov. 17 | 2908 | 628 | 107 | 650 |
| Shade-hanger | W. Disney | 730,241 | June 9 | 1302 | 288 | 104 | 1407 |
| Shade-hanger | J. P. Gerth | 738,720 | Sept. 8 | 2342 | 514 | 106 | 516 |
| Shade-hanger. Adjustable | L. A. Watts | 734,025 | July 21 | 2434 | 569 | 105 | 547 |
| Shade-hanger. Adjustable | J. C. Forsberg and O. Rogan | 746,057 | Dec. 8 | 1374 | 307 | 107 | 1410 |
| Shade-holder | R. M. Hill | 721,704 | Mar. 3 | 97 | 21 | 103 | 21 |
| Shade-holder | C. J. Kusche | 725,455 | Apr. 14 | 1926 | 431 | 103 | 1592 |
| Shade-holder | H. Hubbell | 734,874 | July 28 | 4051 | 945 | 105 | 900 |
| Shade-holder | H. J. Peters | 745,737 | Dec. 1 | 757 | 173 | 107 | 1260 |
| Shade-holder. Adjustable | C. E. Houston | 740,277 | Sept. 29 | 5262 | 1186 | 106 | 1189 |
| Shade holder. Adjustable window- | J. D. Campbell | 721,014 | Feb. 17 | 2973 | 683, 684 | 102 | 1479 |
| Shade-holder. Electric | F. McIntyre | 737,651 | Sept. 1 | 174 | 37 | 106 | 41 |
| Shade-holding device | C. L. Hopkins | 721,193 | Feb. 24 | 3348 | 765 | 102 | 1579 |
| Shade-holding mechanism | H. H. Forsyth | 725,062 | Apr. 14 | 1191 | 270 | 103 | 1439 |
| Shade-holding mechanism | H. H. Forsyth | 725,063 | Apr. 14 | 1193 | 270, 271 | 103 | 1439 |
| Shade or curtain holder | D. W. Driscoll and W. Drake | 738,888 | Sept. 15 | 2686 | 592 | 106 | 609 |
| Shade or curtain-pole holder | G. Bell | 726,244 | Apr. 28 | 3352 | 761 | 103 | 1923 |
| Shade. Portable folding | W. F. Lawrenz | 720,709 | Feb. 17 | 2431 | 556 | 102 | 1364 |
| Shade-roller | W. G. Wiesener | 720,988 | Feb. 17 | 2022 | 669 | 102 | 1468 |
| Shade-roller | W. H. O'Keefe | 730,292 | June 9 | 1406 | 308 | 104 | 1430 |
| Shade-roller | W. Mumbrauer | 736,424 | Aug. 18 | 2585 | 566 | 105 | 1570 |
| Shade-roller bearing | C. Flagler | 734,530 | July 28 | 3391 | 791 | 105 | 766 |
| Shade-roller bracket | W. Fieldhouse, Jr | 727,333 | May 5 | 961 | 208 | 104 | 207 |
| Shade-roller bracket | B. F. Johnson | 727,802 | May 12 | 1865 | 415 | 104 | 415 |
| Shade-roller bracket and sash-stop | W. Crowther | 734,548 | Apr. 7 | 236 | 57 | 103 | 1220 |
| Shade-roller cap | W. Bucholt | 738,441 | May 19 | 3048 | 671 | 104 | 687 |
| Shade-roller guard-cap | G. Mathis | 729,881 | June 2 | 667 | 146 | 104 | 1264 |
| Shade-roller holder. Adjustable | E. Chabot | 723,583 | Mar. 24 | 3599 | 804 | 103 | 797 |
| Shade-roller holder. Window- | G. L. Smith | 746,396 | Dec. 8 | 1983 | 452 | 107 | 1543 |
| Shade-roller spear | W. D. Janes | 741,670 | Oct. 20 | 2455 | 549 | 106 | 1805 |
| Shade-roller. Spring | F. M. Vickery | 718,178 | Jan. 13 | 1221 | 270 | 102 | 278 |
| Shade-roller spring mechanism | W. D. Harned | 721,699 | Mar. 3 | 91 | 19 | 103 | 20 |
| Shade-roller support | J. Renner | 734,041 | Mar. 31 | 4469 | 1007 | 103 | 995 |
| Shade-rollers. Mounting for vertically-adjustable | W. Scott and J. G. Gardner | 718,283 | Jan. 13 | 1422 | 316 | 102 | 321 |
| Shade stop and release. Automatic window- | H. A. Starr | 718,738 | Jan. 20 | 2322 | 513 | 102 | 524 |
| Shade stop. Window- | G. M. Rust and E. J. Faulkner | 728,984 | May 26 | 4064 | 902 | 104 | 914 |
| Shade structure | W. J. Hayes | 727,541 | May 5 | 1329 | 296 | 104 | 286 |
| Shade-trimming apparatus. Window- | J. A. Tufts | 736,317 | Aug. 11 | 2396 | 522 | 105 | 1514 |
| Shade-trimming device. Window- | C. H. Bell | 717,800 | Jan. 6 | 537 | 120 | 102 | 116 |
| Shade-trimming machine. Window- | G. W. Steffee and M. J. Beeney | 728,424 | May 19 | 3024 | 664 | 104 | 682 |
| Shade. Window- | P. G. Emery | 718,992 | Jan. 27 | 2801 | 627, 628 | 102 | 639 |
| Shade. Window- | P. G. Emery | 727,560 | May 5 | 1378 | 311 | 104 | 297 |
| Shade. Window- | A. R. Hagner | 731,774 | June 23 | 4152 | 926 | 104 | 2036 |
| Shade. Window- | M. E. Reilly | 733,996 | July 21 | 2369 | 556 | 105 | 582 |
| Shades and rollers. Machine for reducing the width of window- | J. A. Bradford | 723,358 | Mar. 24 | 3184 | 716 | 103 | 713 |
| Shades. Friction holding device for spring-actuated | J. H. Milazs | 729,630 | June 2 | 189 | 44,45 | 104 | 1166 |
| Shades to rollers. Device for attaching window- | W. H. Lyon | 735,540 | Aug. 4 | 974 | 206 | 105 | 1188 |
| Shades to rollers. Means for fastening | H. A. Starr | 718,737 | Jan. 20 | 2321 | 512 | 102 | 524 |
| Shaft and casing therefor. Flexible | E. D. Weyburn | 729,823 | June 2 | 568 | 125 | 104 | 1244 |
| Shaft and harness support | F. D. Davies | 736,915 | Aug. 18 | 3524 | 783 | 105 | 1764 |
| Shaft attachment. Vehicle- | S. S. Langford | 738,207 | Sept. 8 | 1325 | 287 | 105 | 303 |
| Shaft-borers. Contrivance for actuating | H. Pattberg | 738,233 | Sept. 8 | 1362 | 294, 295 | 106 | 310 |
| Shaft-clamp | H. C. Swan | 731,971 | June 23 | 4500 | 1004 | 104 | 2114 |
| Shaft-collar | B. Hecht | 736,095 | Aug. 11 | 2016 | 430 | 105 | 1431 |
| Shaft-collar. Split | G. Potstada | 718,727 | Jan. 20 | 2302 | 508 | 102 | 520 |
| Shaft. Composite | O. F. Leibert and C. von Philp | 733,229 | July 7 | 929 | 224 | 105 | 194 |
| Shaft connection | H. Nyberg | 729,649 | June 2 | 225 | 51 | 104 | 1174 |
| Shaft connection. Adjustable | G. P. Clark | 727,903 | May 12 | 2047 | 456 | 104 | 454 |
| Shaft. Counterbalanced crank- | A. R. Mosler | 741,057 | Oct. 13 | 1239 | 280 | 106 | 1582 |
| Shaft-coupling | E. C. Griffin | 721,035 | Feb. 17 | 3007 | 691 | 102 | 1486 |
| Shaft-coupling | M. Halfpenny | 725,957 | Apr. 21 | 2847 | 646 | 103 | 1804 |
| Shaft-coupling | G. Graham | 726,047 | Apr. 21 | 2989 | 679 | 103 | 1833 |
| Shaft-coupling | A. J. Ott | 726,336 | Apr. 28 | 3547 | 804 | 103 | 1964 |

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| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Shaft-coupling | J. E. and R. P. Vandegrift and R. L. Morris. | 731,635 | June 23 | 3903 | 869 | 104 | 1986 |
| Shaft-coupling | A. W. Cash | 734,815 | July 28 | 3951 | 921 | 105 | 880 |
| Shaft-coupling | G. L. Estes | 743,628 | Nov. 10 | 1670 | 350 | 107 | 373 |
| Shaft-coupling | H. Breiding | 745,714 | Dec. 1 | 720 | 165 | 107 | 1251 |
| Shaft-coupling | D. H. Hendershot | 748,373 | Dec. 29 | 5681 | 1296 | 107 | 2426 |
| Shaft coupling. Angle- | S. W. Robinson and C. H. Tilton | 719,611 | Feb. 3 | 354 | 82 | 102 | 896 |
| Shaft coupling. Angle- | S. W. Robinson | 731,325 | June 16 | 3109 | 689 | 104 | 1805 |
| Shaft-coupling. Flexible | A. Peteler | 731,813 | June 23 | 4224 | 941 | 104 | 2053 |
| Shaft-driving mechanism | A. L. Cushman | 726,409 | Apr. 28 | 3675 | 833 | 103 | 1990 |
| Shaft end. Vehicle- | J. Sigrist | 731,627 | June 23 | 3887 | 866 | 104 | 1983 |
| Shaft. Extensible | I. Lehman | 729,365 | May 26 | 4737 | 1047 | 104 | 1052 |
| Shaft. Flexible | J. K. Stewart | 729,694 | June 2 | 299 | 69 | 104 | 1190 |
| Shaft. Flexible | S. M. Burdick | 741,106 | Oct. 13 | 1332 | 306 | 106 | 1551 |
| Shaft. Flexible | H. P. Brown | 746,451 | Dec. 8 | 3073 | 477 | 107 | 1561 |
| Shaft. Flexible power-transmitting | R. Shedenhelm | 735,020 | July 28 | 4307 | 1002 | 105 | 954 |
| Shaft for bolting or other machines | A. G. Mather | 721,316 | Feb. 24 | 3575 | 813, 814 | 102 | 1626 |
| Shaft-hanger | H. T. Hallowell | 719,213 | Jan. 27 | 3211 | 716, 717 | 102 | 723 |
| Shaft-hanger | H. T. Hallowell | 719,214 | Jan. 27 | 3213 | 717 | 102 | 724 |
| Shaft-hanger | C. W. Levalley | 734,902 | July 28 | 4094 | 954 | 105 | 910 |
| Shaft-hanger | E. V. Cresson | 743,619 | Nov. 10 | 1656 | 347, 348 | 107 | 370 |
| Shaft-holder | G., Jr., and M. Gerould | 725,240 | Apr. 14 | 1532 | 348 | 103 | 1509 |
| Shaft-loop and buckle. Combined | C. E. Berry | 725,658 | Apr. 21 | 2322 | 524 | 103 | 1691 |
| Shaft split collar | R. W. Scott and L. N. D. Williams. | 736,304 | Aug. 11 | 2372 | 515 | 105 | 1509 |
| Shaft stop-collar. Power- | O. Rudd | 743,932 | Nov. 10 | 2201 | 475 | 107 | 485 |
| Shaft-support | S. A. Livingstone and W. F. Bennett. | 730,278 | June 9 | 1375 | 303 | 104 | 1423 |
| Shaft-support | F. Reynolds | 734,368 | July 21 | 3093 | 728 | 105 | 688 |
| Shaft-support | E. R. Edson | 736,508 | Aug. 18 | 2751 | 602 | 105 | 1606 |
| Shaft-support and rein-holder. Combined | J. D. McCabe and W. Hancock | 737,762 | Sept. 1 | 380 | 81, 82 | 106 | 84 |
| Shaft support. Vehicle- | W. H. Burcher | 732,806 | Mar. 17 | 2168 | 484 | 103 | 493 |
| Shaft support. Vehicle- | T. H. Bennett | 729,119 | May 26 | 4305 | 951 | 104 | 961 |
| Shaft-supporting device | M. C. Johnson | 717,860 | Jan. 6 | 662 | 147 | 102 | 141 |
| Shaft. Variable-speed counter- | C. M. Conradson | 745,789 | Dec. 1 | 849 | 192, 193 | 107 | 1279 |
| Shaft. Vehicle- | F. Graef | 733,673 | Sept. 8 | 2269 | 498 | 106 | 501 |
| Shafts and arms. Connecting device for | S. Frazier | 747,405 | Dec. 22 | 3870 | 871 | 107 | 2002 |
| Shafts and bars of any section. Means for coupling together endwise | C. A. A. Chenu | 733,008 | July 7 | 545 | 134 | 105 | 117 |
| Shafts and wheels. Flexible connection for drive | W. E. Hamilton | 740,559 | Oct. 6 | 331 | 69 | 106 | 1315 |
| Shafts at variable speed by means of alternating-current motors. Mechanism for driving | O. Holz | 726,536 | Apr. 28 | 3937 | 889 | 103 | 2039 |
| Shafts. Compound sleeve for flexible | A. Janet | 732,415 | June 30 | 5401 | 1197 | 104 | 2313 |
| Shafts. Device for regulating the motion of rotary | G. S. Herrick and F. S. Rogers | 737,627 | Sept. 1 | 127 | 27, 28 | 106 | 31 |
| Shafts. Device for securing parts to | E. G. Hoffmann | 738,445 | Sept. 8 | 1814 | 394 | 106 | 406 |
| Shafts. Fastening device for connecting collars and | L. F. Fales | 728,692 | May 19 | 3533 | 786 | 104 | 789 |
| Shafts. Means for electrically operating counter- | N. C. Bassett | 729,716 | June 2 | 339 | 76, 77 | 104 | 1199 |
| Shafts of metal. Forming pawl-openings through round | A. B. Case | 721,781 | Mar. 3 | 219 | 49 | 103 | 49 |
| Shafting-coupling | E. J. Thompson | 745,690 | Dec. 1 | 681 | 156 | 107 | 1243 |
| Shafting. Flexible | W. D. Forsyth | 733,181 | July 7 | 853 | 207 | 105 | 179 |
| Shafting. Flexible | G. E. Gay | 736,378 | Aug. 18 | 2495 | 549 | 105 | 1551 |
| Shafting keys and key-seats | C. Hammen | 732,738 | July 7 | 73 | 20 | 105 | 19 |
| Shafting. Portable device for centering | F. H. Hudson | 730,123 | June 2 | 1083 | 243 | 104 | 1348 |
| Shafting sleeve. Flexible- | A. W. Browne | 723,135 | Mar. 17 | 2343 | 616 | 103 | 611 |
| Shaker or mixer | F. L. Williams | 723,796 | Mar. 24 | 3963 | 894 | 103 | 875 |
| Shaking-screen | G. S. Ingle | 719,805 | Feb. 3 | 719 | 169 | 102 | 975 |
| Shaking-tables, &c. Movement for | F. L. Bartlett | 744,022 | Nov. 17 | 2431 | 522 | 107 | 549 |
| Shampoo-bowl stand | M. and H. Romans | 746,167 | Dec. 8 | 1572 | 351 | 107 | 1456 |
| Shampooing. Bib and head-rest for | L. Larrimore | 748,081 | Dec. 29 | 5170 | 1169 | 107 | 2315 |
| Shank-stiffener-cutting machine | W. F. O'Brien and D. S. Keith | 740,169 | Sept. 29 | 5054 | 1137 | 106 | 1147 |
| Shaper table-support | S. G. Chambliss | 728,368 | May 19 | 2925 | 645 | 104 | 661 |
| Shaping-machine | A. Kimble | 731,786 | June 23 | 4172 | 930 | 104 | 2041 |
| Shaping-machine work-table | J. C. Potter and J. Johnston | 719,255 | Jan. 27 | 3296 | 738 | 102 | 741 |
| Sharpener | H. Bucking and R. Brown | 722,805 | Mar. 17 | 2167 | 484 | 103 | 493 |
| Sharpener. Blade- | S. R. Duval | 747,688 | Dec. 22 | 4378 | 988 | 107 | 2117 |
| Sharpener. Combination knife and scissors or shears | M. L. Hawks | 724,096 | Mar. 31 | 4567 | 1027 | 103 | 1015 |
| Sharpener. Disk- | P. Caffarel | 717,657 | Jan. 6 | 232 | 59 | 102 | 51 |
| Sharpener. Disk- | A. H. Grimm | 718,966 | Jan. 20 | 2748 | 615 | 102 | 614 |
| Sharpener. Disk- | T. M. Anderson | 731,263 | June 16 | 3171 | 706 | 104 | 1818 |
| Sharpener. Disk- | J. S. Donnell | 736,829 | Aug. 18 | 3374 | 746 | 105 | 1733 |
| Sharpener. Drill- | J. H. Hicks | 734,708 | July 28 | 3721 | 870, 871 | 105 | 834 |
| Sharpener. Edged-tool | T. Davis | 744,726 | Nov. 24 | 3746 | 808 | 107 | 847 |
| Sharpener for band-cutter knives | A. J. Heine | 738,192 | Sept. 8 | 1294 | 280, 281 | 106 | 295 |
| Sharpener. Knife- | F. Foster | 740,840 | Oct. 6 | 860 | 192 | 106 | 1429 |
| Sharpener. Knife- | J. R. Hare | 748,369 | Dec. 29 | 5676 | 1294 | 107 | 2425 |
| Sharpener. Lawn-mower-knife | G. Farnsworth | 732,177 | Mar. 3 | 952 | 211 | 103 | 202 |
| Sharpener. Scissors- | T. G. Goodfellow | 736,245 | Aug. 11 | 2267 | 490 | 105 | 1484 |
| Sharpening device for moving knife-blades | W. D. Quigley and J. H. Gay | 731,127 | June 16 | 2937 | 652, 653 | 104 | 1772 |
| Sharpening device for moving knife-blades | W. D. Quigley and J. H. Gay | 747,476 | Dec. 22 | 3986 | 897, 898 | 107 | 2028 |
| Sharpening device. Knife- | G. L. Plumley | 719,861 | Feb. 3 | 808 | 189 | 102 | 994 |
| Sharpening device. Knife- | T. Wilkins | 743,365 | Nov. 3 | 1084 | 230 | 107 | 220 |
| Sharpening device. Shears- | N. P. Goodfellow | 740,118 | Sept. 29 | 4959 | 1113 | 106 | 1127 |
| Sharpening-machine | A. M. McLeran | 726,974 | May 5 | 290 | 65 | 104 | 62 |
| Sharpening machine. Disk- | O. O. Goodenow | 738,901 | Sept. 15 | 2707 | 598 | 106 | 613 |
| Sharpening machine. Drill- | J. Retallack | 731,232 | June 16 | 3104 | 688 | 104 | 1805 |
| Shaving apparatus | F. J. Halbekann | 731,562 | June 23 | 3762 | 839 | 104 | 1958 |
| Shaving-glass | W. B. May | 723,700 | Mar. 24 | 3789 | 851 | 103 | 838 |
| Shaving-mug | W. G. Rivers | 729,417 | May 26 | 4825 | 1070 | 104 | 1070 |

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| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drgs. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Shaving-mug | S. H. Leavenworth | 739,057 | July 7 | 639 | 155 | 105 | 136 |
| Sheaf-carrier | H. F. Crandall | 728,676 | May 19 | 3509 | 780, 781 | 104 | 784 |
| Sheaf-carrier | J. W. Parker | 738,838 | Sept. 15 | 2598 | 574 | 106 | 589 |
| Shear-table | B. P. Swyers | 732,265 | Mar. 10 | 1146 | 252, 253 | 103 | 259 |
| Shears: *See* Animal-shears. Buttonhole-shears. Hoof-shears. Lawn-shears. Metal-shears. Plate-shears. Power-shears. Pruning-shears. Safety-shears. Sheep-shears. Tailor's shears. | | | | | | | |
| Shears | W. Welch | 726,384 | Apr. 28 | 3636 | 824 | 103 | 1982 |
| Shears attachment | W. Kanter | 731,687 | June 23 | 3992 | 891 | 104 | 2003 |
| Shears. Combined split and crosscut | F. G. Koehler | 740,763 | Oct. 6 | 719 | 162 | 106 | 1399 |
| Shears for cutting corrugated sheet metal | T. M. Robinson | 724,206 | Mar. 31 | 4802 | 1076 | 103 | 1062 |
| Shears for structural-shape bars | J. F. Doolittle | 746,800 | Dec. 15 | 2704 | 623, 624 | 107 | 1723 |
| Shears-holder | S. H. Shank | 746,392 | Dec. 8 | 1975 | 451 | 107 | 1541 |
| Shears or the like | F. D. Davies | 741,576 | Oct. 13 | 2285 | 510 | 106 | 1753 |
| Shears, scissors, &c. Joint for | A. F. Johns and H. A. Hill | 725,718 | Apr. 21 | 2420 | 549 | 103 | 1712 |
| Shearing and clipping device | J. K. Priest | 743,190 | Nov. 3 | 709 | 155 | 107 | 148 |
| Shearing-machine | C. M. Palmer | 720,469 | Feb. 10 | 1939 | 443 | 102 | 1248 |
| Shearing-machine | S. V. Huber | 724,010 | Mar. 31 | 4425 | 993, 994, 995 | 103 | 985 |
| Shearing-machine | C. M. Palmer. (Reissue) | 12,131 | July 21 | 3314 | 778 | 105 | 732 |
| Shearing-machine. Direct-acting steam | W. J. Fogarty | 738,787 | Sept. 15 | 2496 | 549, 550 | 106 | 567 |
| Shearing-machine. Hydraulic | G. W. Shem | 739,430 | May 26 | 4842 | 1073 | 104 | 1074 |
| Shearing mechanism | S. V. Huber | 726,296 | Apr. 28 | 3459 | 785 | 103 | 1945 |
| Shearing or clipping cutters | T. A. Martin | 722,313 | Mar. 10 | 1228 | 273 | 103 | 277 |
| Shed. Portable folding | T. M. Laswell | 730,275 | June 9 | 1371 | 302 | 104 | 1422 |
| Sheep-dips. Making | F. S. Clark and E. A. Harris | 721,153 | Feb. 24 | 3273 | ..... | 102 | 1565 |
| Sheep-shears | H. Burgon | 730,609 | June 9 | 1983 | 441 | 104 | 1554 |
| Sheep-shears | J. F. Burgher | 740,523 | Oct. 6 | 274 | 54 | 106 | 1304 |
| Sheep-shears | R. F. Wells | 742,766 | Oct. 27 | 4549 | 1030 | 106 | 2255 |
| Sheep-shears | O. Börs | 743,438 | Nov. 10 | 1280 | 262 | 107 | 289 |
| Sheet and envelop. Combined communication | J. W. Rice | 738,943 | Sept. 15 | 2776 | 615 | 106 | 628 |
| Sheet and envelop. Combined writing | E. Eckart | 738,891 | Sept. 15 | 2691 | 594 | 106 | 610 |
| Sheet and roller. Combined | D. H. Haywood | 718,347 | Jan. 13 | 1537 | 340 | 102 | 345 |
| Sheet-delivery | G. P. Fenner | 719,317 | Jan. 27 | 3418 | 762, 763 | 102 | 769 |
| Sheet-delivery mechanism | R. T. Johnston | 721,893 | Mar. 3 | 436 | 96, 97 | 103 | 96 |
| Sheet-delivery mechanism | R. Miehle | 743,393 | Nov. 3 | 1141 | 241, 242 | 107 | 241 |
| Sheet-drier | A. K. Taylor | 723,329 | May 19 | 2862 | 632, 633 | 104 | 648 |
| Sheet-feeder control | E. T. Cleathero | 740,532 | Oct. 6 | 289 | 57, 58 | 106 | 1307 |
| Sheet-feeding apparatus. Trifter for pneumatic | E. T. Cleathero | 740,534 | Oct. 6 | 294 | 59, 60 | 106 | 1308 |
| Sheet-feeding machine. Pneumatic | G. F. Leiger | 734,466 | July 21 | 3259 | 766, 767 | 105 | 721 |
| Sheet-folding device | J. V. Rieffel | 747,085 | Dec. 15 | 3268 | 744 | 107 | 1854 |
| Sheet-leader block | W. H. Marshall | 719,124 | Jan. 27 | 3074 | 683 | 102 | 695 |
| Sheet-metal angle-section | E. G. Charlebois | 720,892 | Feb. 17 | 2730 | 629 | 102 | 1427 |
| Sheet-metal-bending machine | C. T. Tarpenning | 724,519 | Apr. 7 | 187 | 46, 47 | 103 | 1209 |
| Sheet-metal box | L. Richard | 747,770 | Dec. 22 | 4527 | 1020 | 107 | 2152 |
| Sheet-metal box or can | B. Adriance and A. Calleson | 742,951 | Nov. 3 | 232 | 52 | 107 | 50 |
| Sheet-metal can | I. E. Sexton | 737,971 | Sept. 1 | 828 | 181 | 106 | 181 |
| Sheet-metal can | D. Ghirardelli | 746,815 | Dec. 15 | 2737 | 631 | 107 | 1732 |
| Sheet-metal can. Vacuum-sealing | E. Norton | 717,710 | Jan. 6 | 339 | 83 | 102 | 73 |
| Sheet-metal cutting and shaping machine | G. C. Mohr | 723,703 | Mar. 24 | 3797 | 853, 854 | 103 | 840 |
| Sheet-metal-cutting machine | A. G. Scherer | 729,964 | June 2 | 816 | 183 | 104 | 1293 |
| Sheet-metal-cutting machine | A. E. Chambers and L. H. Bullard | 730,874 | June 16 | 2442 | 540 | 104 | 1671 |
| Sheet-metal-cutting machine | E. Zeh | 740,730 | Oct. 6 | 639 | 144, 145 | 106 | 1384 |
| Sheet-metal elbows and pipe. Device for crimping | J. Baeumle | 744,672 | Nov. 17 | 3605 | 777 | 107 | 798 |
| Sheet-metal elbows. Making | W. C. Winfield | 743,050 | Nov. 3 | 443 | 96 | 107 | 93 |
| Sheet-metal grinding or polishing machine | J. Müller | 743,911 | Nov. 10 | 2165 | 466, 467 | 107 | 477 |
| Sheet metal of cans. Means or apparatus for reclaiming the | C. J. Carroll | 742,391 | Oct. 27 | 3888 | 873 | 106 | 2115 |
| Sheet-metal-pipe former and groover | M. L. Hunker | 732,857 | July 7 | 286 | 71, 72 | 105 | 63 |
| Sheet-metal-plate-cleaning machine | R. D. Buncke | 721,935 | Mar. 3 | 534 | 117 | 103 | 118 |
| Sheet-metal-plate-handling apparatus | O. Clark | 727,291 | May 5 | 870 | 188 | 104 | 187 |
| Sheet-metal-receptacle joint | A. C. Badger | 739,974 | Sept. 29 | 4698 | 1056 | 106 | 1071 |
| Sheet-metal siding | E. G. Charlebois | 720,893 | Feb. 17 | 2732 | 629 | 102 | 1428 |
| Sheet-metal ware. Making | J. Kirschbaum | 741,046 | Oct. 13 | 1214 | 275 | 106 | 1525 |
| Sheet or tin plate mills. Automatic catcher for | C. W. Bennett | 727,532 | May 5 | 1313 | 292, 293 | 104 | 282 |
| Sheets fed to lining or other machines. Means for turning the | F. Förste | 743,477 | Nov. 10 | 1370 | 281 | 107 | 307 |
| Sheets or plates. Machine for making laminated | E. Cooper | 718,914 | Jan. 20 | 2648 | 593, 594 | 102 | 592 |
| Sheeting | D. D. McBean | 745,452 | Dec. 1 | 269 | 62, 63 | 107 | 1156 |
| Sheeting-driver | D. D. McBean | 741,588 | Oct. 13 | 2306 | 516 | 106 | 1757 |
| Sheeting. Pilot | D. D. McBean | 745,453 | Dec. 1 | 270 | 63 | 107 | 1156 |
| Shelf-bracket | H. G. Voight | 725,382 | Apr. 14 | 1777 | 398, 399 | 103 | 1561 |
| Shelf-bracket | R. Mancha | 745,873 | Dec. 1 | 1040 | 235 | 107 | 1321 |
| Shelf-bracket. Adjustable | M. A. Heimann | 733,037 | July 7 | 591 | 145 | 105 | 126 |
| Shelf bracket. Adjustable tension window | J. Oppenheimer | 727,423 | May 5 | 1108 | 242 | 104 | 239 |
| Shelf-guard and advertising medium. Combined | E. Frank | 738,788 | Sept. 15 | 2501 | 550 | 106 | 568 |
| Shelf or case. Book | H. J. Gill | 747,062 | Dec. 15 | 3228 | 735 | 107 | 1845 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Shelf-support | P. M. Wege | 721,404 | Feb. 24 | 3748 | 852 | 102 | 1662 |
| Shelf-supporter | F. L. Collis | 742,007 | Oct. 20 | 3133 | 699 | 106 | 1945 |
| Shelf. Window- | I. D. Bennett | 747,363 | Dec. 22 | 3803 | 855 | 107 | 1987 |
| Shelves or other articles. Support for | C. E. Wilton | 744,149 | Nov. 17 | 2675 | 570 | 107 | 599 |
| Shelves, &c. Sheet-metal structure for | P. M. Wege | 721,928 | Mar. 3 | 518 | 114 | 103 | 115 |
| Shelving | F. A. Phelps, Jr | 718,152 | Jan. 13 | 1174 | 260, 261 | 102 | 268 |
| Shelving | G. W. Sues | 730,984 | June 16 | 2658 | 592, 593 | 104 | 1716 |
| Shelving. Adjustable | E. Allen | 739,804 | Sept. 29 | 4365 | 979 | 106 | 1003 |
| Shelving. Bracketed | J. R. Lake | 727,157 | May 5 | 643 | 138 | 104 | 139 |
| Shelving system | J. Harrison | 726,053 | Apr. 21 | 2999 | 682 | 103 | 1835 |
| Shell | E. von Reichenau | 735,299 | Aug. 4 | 507 | 102 | 105 | 1089 |
| Shell | L. G. Roach | 737,964 | Sept. 1 | 817 | 179 | 106 | 179 |
| Shell-collecting machine | O. F. Knapp | 734,571 | July 28 | 3457 | 807 | 105 | 780 |
| Shell. Shrapnel | A. H. Emery | 723,256 | Mar. 24 | 2981 | 670 | 103 | 674 |
| Shells. Machine for making tubular | C. E. Ingals and A. V. Jackson | 724,104 | Mar. 31 | 4585 | 1032, 1033 | 103 | 1019 |
| Sheller: *See* Corn-sheller. Pea-sheller. | | | | | | | |
| Shingle | J. L. M. Du Four | 742,614 | Oct. 27 | 4298 | 969 | 106 | 2200 |
| Shingle-bracket | N. Weber | 732,388 | June 30 | 5352 | 1186 | 104 | 2303 |
| Shingle-carrier | A. O. Bartlett | 723,299 | Mar. 24 | 2934 | 657 | 103 | 666 |
| Shingle-gage | H. M. Tinklepaugh | 738,256 | Sept. 8 | 1408 | 305 | 106 | 320 |
| Shingle-guide | A. Sivertson | 723,746 | Mar. 24 | 3874 | 871 | 103 | 856 |
| Shingle-kiln | J. M. Chapin | 720,669 | Feb. 17 | 2357 | 540 | 102 | 1347 |
| Shingle-machine | F. L. Johnson | 742,439 | Oct. 27 | 3975 | 892 | 106 | 2132 |
| Shingle. Metallic roofing- | H. E. Moomaw | 727,179 | May 5 | 678 | 146 | 104 | 147 |
| Shingle. Roofing- | W. C. and J. C. Sharp | 718,284 | Jan. 13 | 1424 | 317 | 102 | 322 |
| Shingles from roofs or clapboards from walls. Device for removing | G. W. Mitchell | 730,781 | June 9 | 2268 | 504 | 104 | 1616 |
| Shingling-bracket | J. W. Farr | 718,963 | Jan. 20 | 2744 | 614 | 102 | 613 |
| Ship-building | P. Eyermann | 747,393 | Dec. 22 | 3848 | 866 | 107 | 1997 |
| Ship-building plant | J. W. Seaver | 747,782 | Dec. 22 | 4552 | 1027 | 107 | 2158 |
| Ship-building plate | J. Chapman | 737,078 | Aug. 25 | 3820 | 847 | 105 | 1846 |
| Ship-derrick | D. F. Macdonald | 731,584 | June 23 | 3810 | 848 | 104 | 1967 |
| Ship loading or coaling device | J. Tarr | 739,033 | Sept. 15 | 2917 | 647, 648 | 106 | 658 |
| Ship-ventilator | C. A. Withers | 744,950 | Nov. 24 | 4142 | 895 | 107 | 929 |
| Shipwrecks. Device for locating | R. Sato | 735,595 | Aug. 4 | 1074 | 228 | 105 | 1209 |
| Ship's air and light port | T. Utley | 743,599 | Nov. 10 | 1609 | 336, 337 | 107 | 359 |
| Ships at sea. System of coaling | A. K. Finlay | 727,774 | May 12 | 1817 | 405, 406 | 104 | 406 |
| Ships' bottoms. Apparatus for cleaning | C. Johnson | 732,082 | June 30 | 4739 | 1058 | 104 | 2175 |
| Ship's-course recorder | W. Maxted | 738,221 | Sept. 8 | 1341 | 291 | 106 | 306 |
| Ships. Device for indicating position of sunken | A. Tomic | 726,118 | Apr. 21 | 3115 | 706 | 103 | 1860 |
| Ship's distance and course recorder | W. C. Forbes | 747,690 | Dec. 22 | 4381 | 988 | 107 | 2117 |
| Ships' hulls, &c. Apparatus for cleaning and treating | H. Binney | 741,298 | Oct. 13 | 1723 | 385 | 106 | 1630 |
| Ship's log | E. Nicholson | 742,215 | Oct. 27 | 3564 | 795, 796 | 106 | 2046 |
| Ship's log | E. Nicholson | 742,216 | Oct. 27 | 3568 | 796, 797 | 106 | 2047 |
| Ship's-log apparatus. Electrical | T. F. and T. S. Walker | 720,508 | Feb. 10 | 2004 | 460, 461, 462 | 102 | 1262 |
| Ships' running-lights. Telltale for | J. L. Hall | 729,159 | May 26 | 4381 | 966 | 104 | 978 |
| Ship's state-room | J. W. Boughton | 731,848 | June 23 | 4283 | 953, 954 | 104 | 2067 |
| Ship's table | W. J. Preater | 726,752 | Apr. 28 | 4355 | 979, 980 | 103 | 2125 |
| Ships when not under way. Means for turning or swinging | J. B. Blair | 744,160 | Nov. 17 | 2695 | 574 | 107 | 603 |
| Shipping-case | M. S. Downey | 733,632 | July 14 | 1666 | 396 | 105 | 369 |
| Shipping or traveling case | C. R. Walter | 728,534 | May 19 | 3302 | 710, 711 | 104 | 719 |
| Shirt | C. Uebel | 731,418 | June 16 | 3474 | 776 | 104 | 1881 |
| Shirt | G. D. Eighmie | 745,719 | Dec. 1 | 728 | 166 | 107 | 1253 |
| Shirt-bosom | C. L. and L. B. Kretschmar | 720,160 | Feb. 10 | 1375 | 316 | 102 | 1133 |
| Shirt-neckband | D. B. Coon | 723,141 | Mar. 17 | 2752 | 619 | 103 | 613 |
| Shirt-sleeve shortener and cuff-fastener | S. O. Gravé | 727,935 | May 12 | 2114 | 470 | 104 | 468 |
| Shirt-waist | A. Levi | 724,301 | Mar. 31 | 4999 | 1118 | 103 | 1102 |
| Shirt-waist | W. H. Hamilton | 728,571 | May 19 | 3310 | 733 | 104 | 740 |
| Shirt-waist | J. M. Ide | 731,369 | June 16 | 3365 | 752 | 104 | 1859 |
| Shirt-waist and skirt supporter | A. Wiltsey | 742,945 | Nov. 3 | 216 | 49 | 107 | 48 |
| Shirt-waist fitter | M. E. Buckley | 725,035 | Apr. 14 | 1151 | 260 | 103 | 1431 |
| Shirt-waist holder and skirt-supporter | F. E. Moody | 732,316 | Mar. 10 | 1232 | 274 | 103 | 278 |
| Shirt-waist holder and skirt-supporter | E. G. Brown | 737,821 | Sept. 1 | 504 | 111 | 106 | 113 |
| Shirt-waist retainer and conformer | F. E. Thompson | 721,253 | Feb. 24 | 3486 | 793 | 102 | 1607 |
| Shoal-water indicator | F. E. Forster | 720,015 | Feb. 10 | 1108 | 254 | 102 | 1075 |
| Shock-loader | C. J. Stovin | 719,158 | Jan. 27 | 3123 | 696 | 102 | 704 |
| Shock-loader | J. B. Schuman | 720,383 | Feb. 10 | 1795 | 407 | 102 | 1219 |
| Shock-loader | C. W. Anderson | 742,552 | Oct. 27 | 4189 | 943 | 106 | 2176 |
| Shock-loader | D. J. Green | 743,489 | Nov. 10 | 1398 | 289 | 107 | 314 |
| Shock or hay loader | J. E. Little and C. E. Rogers | 731,698 | June 23 | 4008 | 895 | 104 | 2007 |
| Shocker | H. W. Johnson | 739,084 | Sept. 15 | 3020 | 669 | 106 | 679 |
| Shocker. Bundle- | J. G. Hoffman | 728,713 | May 19 | 3573 | 793 | 104 | 798 |
| Shoe | H. F. Buttner | 719,742 | Feb. 3 | 604 | 135, 136 | 102 | 949 |
| Shoe | C. H. Goodwin | 724,846 | Apr. 7 | 803 | 185 | 103 | 1341 |
| Shoe | A. D. Puerner | 725,771 | Apr. 21 | 2523 | 572 | 103 | 1736 |
| Shoe | H.C.Kenworthy and W. H. Minckemeyer. | 726,940 | May 5 | 204 | 48 | 104 | 45 |
| Shoe | C. C. Hoyt | 728,235 | May 19 | 2666 | 595 | 104 | 606 |
| Shoe | H. Fischer | 729,314 | May 26 | 4655 | 1029 | 104 | 1036 |

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| Invention. | Name. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|---|
| | | | | Spec. | Dr'g. | Vol. | Page. |
| Shoe | C. F. Klein | 729,357 | May 26 | 4726 | 1045 | 104 | 1050 |
| Shoe | W. Lanz | 729,361 | May 26 | 4732 | 1046 | 104 | 1052 |
| Shoe | P. Yon | 731,650 | June 23 | 3932 | 875 | 104 | 1992 |
| Shoe | J. Walden | 739,956 | Sept. 29 | 4667 | 1048 | 106 | 1065 |
| Shoe | G. Strootman | 745,462 | Dec. 1 | 290 | 70 | 107 | 1161 |
| Shoe. Ankle-supporting | A. Posner | 737,959 | Sept. 1 | 808 | 177 | 106 | 177 |
| Shoe. Ankle-supporting corset- | J. J. Lattemann | 721,574 | Feb. 24 | 4069 | 923 | 102 | 1732 |
| Shoe antislipping device | C. Cook | 741,011 | Oct. 13 | 1160 | 262 | 106 | 1514 |
| Shoe attachment | J. N. Scism | 738,851 | Sept. 15 | 2626 | 579 | 106 | 595 |
| Shoe attachment. Coasting | R. W. Innes | 745,442 | Dec. 1 | 246 | 57 | 107 | 1152 |
| Shoe-bow | S. L. Pratt | 743,924 | Nov. 10 | 2187 | 472 | 107 | 482 |
| Shoe-brake | C. W. Hoch | 734,556 | July 28 | 3435 | 801 | 105 | 775 |
| Shoe-cabinet | V. P. Orrick | 736,003 | Aug. 11 | 1858 | 397 | 105 | 1397 |
| Shoe-cleaner | C. G. Strombeck | 726,201 | Apr. 21 | 3269 | 742 | 103 | 1890 |
| Shoe-cleaner | W. G. Callender | 726,634 | Apr. 28 | 4130 | 931 | 103 | 2077 |
| Shoe-creaser | P. J. Myer | 745,228 | Nov. 24 | 4704 | 1027 | 107 | 1046 |
| Shoe-creasing device | E. Roraback | 744,620 | Nov. 17 | 3515 | 759 | 107 | 779 |
| Shoe. Electric | J. W. Gibbs | 740,548 | Oct. 6 | 318 | 66 | 106 | 1312 |
| Shoe. Electric | J. S. Busky, Jr | 741,623 | Oct. 20 | 2377 | 532 | 106 | 1788 |
| Shoe. Extension- | J. F. Wireback | 736,186 | Aug. 11 | 2168 | 466 | 105 | 1463 |
| Shoe-fastener | G. Hirschell | 724,391 | Mar. 31 | 5186 | 1162 | 103 | 1141 |
| Shoe-fastener | H. W. Cushing | 746,927 | Dec. 15 | 2974 | 684 | 107 | 1786 |
| Shoe-fastening | G. Bryant | 733,001 | July 7 | 531 | 131 | 105 | 113 |
| Shoe-fastening | E. L. Knapp | 736,742 | Aug. 18 | 3199 | 707 | 105 | 1696 |
| Shoe-fastening | L. A. Boehme | 738,390 | Sept. 8 | 1730 | 376 | 106 | 388 |
| Shoe-fastening | L. A. Boehme | 743,680 | Nov. 10 | 1747 | 369 | 107 | 389 |
| Shoe-fastening | J. W. P. Bunning | 746,280 | Dec. 8 | 1779 | 404 | 107 | 1499 |
| Shoe flap-fastener. Button- | J. Frye | 739,848 | Sept. 29 | 4445 | 998 | 106 | 1018 |
| Shoe for cloven-footed animals | B. Brand | 732,998 | July 7 | 527 | 131 | 105 | 113 |
| Shoe-heater | M. C. Gerard | 728,703 | May 19 | 3551 | 789 | 104 | 793 |
| Shoe-holder | W. R. Patterson | 731,492 | June 23 | 3625 | 809 | 104 | 1932 |
| Shoe-holder | R. W. Snowdon | 746,187 | Dec. 8 | 1609 | 359 | 107 | 1464 |
| Shoe holder and stretcher | H. C. Pomeroy | 746,151 | Dec. 8 | 1542 | 345 | 107 | 1450 |
| Shoe-holding device | A. J. Skinner | 729,228 | May 26 | 4506 | 993 | 104 | 1004 |
| Shoe-holding device | A. J. Skinner | 735,833 | Aug. 11 | 1530 | 328 | 105 | 1326 |
| Shoe-horn | A. D. Washington | 728,788 | May 19 | 3707 | 827 | 104 | 824 |
| Shoe-horn and shoe-remover. Combined | A. Hepner | 732,854 | July 7 | 282 | 70 | 105 | 63 |
| Shoe-jack | R. D. Tittle | 737,174 | Aug. 25 | 3993 | 885 | 105 | 1883 |
| Shoe-jack | W. A. Blain | 740,971 | Oct. 6 | 1077 | 244 | 106 | 1476 |
| Shoe. Leather | H. C. Jenney | 730,919 | June 16 | 2538 | 565 | 104 | 1691 |
| Shoe-lining-marking machine | W. J. Dix and T. Quinn | 746,470 | Dec. 8 | 2100 | 483<br>484 | 107 | 1567 |
| Shoe-nailing machine | J. T. Crowe | 742,396 | Oct. 27 | 3898 | 876 | 106 | 2117 |
| Shoe-paste applier | W. R. Smith | 720,079 | Feb. 10 | 1227 | 282 | 102 | 1100 |
| Shoe-plug. Detachable | L. B. Cahill | 732,045 | June 30 | 4668 | 1043 | 104 | 2161 |
| Shoe-polisher | J. W. Edgerton | 718,990 | Jan. 27 | 2797 | 627 | 102 | 638 |
| Shoe-polisher | J. V. Peacock | 737,135 | Aug. 25 | 3914 | 869 | 105 | 1866 |
| Shoe polisher or inker | J. Johnson | 720,930 | Feb. 17 | 2810 | 644 | 102 | 1444 |
| Shoe-polishing-cloth grip | C. L. Durboraw | 726,886 | May 5 | 105 | 25 | 104 | 25 |
| Shoe-polishing machine | J. R. McGarrity | 721,823 | Mar. 3 | 296 | 66 | 103 | 65 |
| Shoe-polishing machine | E. Dagger | 722,679 | Mar. 17 | 1935 | 430<br>431 | 103 | 446 |
| Shoe-polishing stand | R. G. Polson | 726,748 | Apr. 28 | 4346 | 978 | 103 | 2123 |
| Shoe-protector | B. F. Bond | 719,933 | Feb. 3 | 927 | 216 | 102 | 1020 |
| Shoe-regoring device | N. S. Wakefield | 723,086 | Mar. 17 | 2657 | 599 | 103 | 595 |
| Shoe-rest | R. V. Winter | 735,925 | Aug. 11 | 1702 | 362 | 105 | 1363 |
| Shoe-shining machine | J. C. C. Scheer | 737,496 | Aug. 25 | 4609 | 1033 | 105 | 2017 |
| Shoe. Snow- | C. E. Phelps | 735,290 | Aug. 4 | 492 | 98 | 105 | 1086 |
| Shoe. Sporting- | D. J. Golden | 737,920 | Sept. 1 | 726 | 157 | 106 | 159 |
| Shoe-stamping machine | J. J. Heys | 728,464 | May 19 | 3109 | 687 | 104 | 700 |
| Shoe-stretching device | J. Karlson | 722,517 | Mar. 10 | 1613 | 356 | 103 | 362 |
| Shoe-tie fastener | W. E. Delano | 732,718 | July 7 | 42 | 10 | 105 | 12 |
| Shoe-tip | C. C. Turner | 741,567 | Oct. 13 | 2262 | 505 | 106 | 1749 |
| Shoe-tongue | J. A. Lyons | 748,197 | Dec. 29 | 5387 | 1225 | 107 | 2361 |
| Shoe-tongue fastener | M. B. Morse | 728,959 | May 26 | 4022 | 894 | 104 | 904 |
| Shoe-top fastener | J. W. Reilley | 743,194 | Nov. 3 | 722 | 158 | 107 | 151 |
| Shoe-tray | C. D. Whiting | 744,143 | Nov. 17 | 2661 | 567 | 107 | 596 |
| Shoe-tree | M. Hayes | 720,916 | Feb. 17 | 2788 | 639 | 102 | 1440 |
| Shoe-tree | M. S. Hess | 721,443 | Feb. 24 | 3815 | 868 | 102 | 1675 |
| Shoe-tree | A. P. Redifer | 730,475 | June 9 | 1742 | 390 | 104 | 1501 |
| Shoe-tree | G. E. Belcher | 744,156 | Nov. 17 | 2689 | 573 | 107 | 602 |
| Shoe-tying machine | T. F. Hart | 745,182 | Nov. 24 | 4632 | 1004<br>1005<br>1006 | 107 | 1031 |
| Shoe-upper fastener | W. E. Ellis | 729,300 | May 26 | 4637 | 1025 | 104 | 1032 |
| Shoe-uppers. Handling-horse for | M. A. Hayward | 722,018 | Mar. 3 | 680 | 150 | 103 | 146 |
| Shoe-uppers. Machine for marking | C. E. Moore | 747,205 | Dec. 15 | 3492 | 792 | 107 | 1902 |
| Shoe-uppers. System of handling and storing | M. A. Hayward | 722,103 | Mar. 3 | 822 | 183 | 103 | 178 |
| Shoe. Ventilated | J. E. Kennedy | 734,338 | July 21 | 3042 | 716 | 105 | 677 |
| Shoe. Ventilated | C. H. Matson | 746,862 | Dec. 15 | 2837 | 654 | 107 | 1753 |
| Shoe welting. Welt- | J. B. Hadaway | 744,752 | Nov. 24 | 3787 | 816 | 107 | 856 |
| Shoes. Machine for cutting articles from the inside of | W. S. Fultz | 721,509 | Feb. 24 | 3931 | 895 | 102 | 1699 |
| Shoes. Making turned welt- | M. J. Moloney | 744,588 | Nov. 17 | 3463 | 746<br>747 | 107 | 768 |
| Shoes. Welting for welt- | J. B. Hadaway | 725,077 | Apr. 14 | 1229 | 278 | 103 | 1446 |
| Shoemaker's ironing device | A. S. Hayden and W. F. Packard | 737,926 | Sept. 1 | 734 | 159 | 106 | 161 |
| Shoestring-fastener | A. P. Pitman | 722,891 | Mar. 17 | 2329 | 520 | 103 | 525 |
| Shoestring-retaining device | J. W. Force | 741,238 | Oct. 13 | 1592 | 358 | 106 | 1606 |
| Shoestring-tip | R. M. Seibel | 742,074 | Oct. 20 | 3807 | 736<br>737 | 106 | 1980 |
| Shop-indicator | G. F. Willower | 740,380 | Sept. 29 | 5444 | 1224<br>1225 | 106 | 1227 |
| Shot for shrapnel. Charging | A. Haase | 727,182 | May 5 | 601 | ..... | 104 | 130 |
| Shoulder-brace | G. E. Bates | 733,897 | July 14 | 2158 | 509 | 105 | 470 |
| Shoulder-pad | H. Lavine | 747,734 | Dec. 22 | 4461 | 1006 | 107 | 2135 |

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|---|---|---|---|---|---|---|---|
| Shovel:<br>*See* Ash-shovel. Fire-shovel.<br>Electric shovel. Steam-shovel. | | | | | | | |
| Shovel | W. N. Williams | 725,905 | Apr. 21 | 2753 | 626 | 103 | 1784 |
| Shovel attachment | W. T. Spillane | 720,500 | Feb. 10 | 1991 | 457 | 102 | 1259 |
| Shovel attachment | E. B. O'Connor | 738,057 | Sept. 1 | 983 | 218 | 106 | 214 |
| Shovel-nose | W. E. Hamilton | 740,557 | Oct. 6 | 329 | 68 | 106 | 1314 |
| Show-box lid | W. D. Harrison | 740,647 | Oct. 6 | 496 | 109 | 106 | 1353 |
| Show-card | H. H. Garrison | 731,884 | June 23 | 4347 | 970 | 104 | 2081 |
| Show-case | C. F. Kade | 720,032 | Feb. 10 | 1150 | 262, 263 | 102 | 1083 |
| Show-case | R. Mancha | 720,452 | Feb. 10 | 1912 | 436 | 102 | 1243 |
| Show-case | J. U. Lasso | 724,410 | Mar. 31 | 5227 | 1171 | 103 | 1151 |
| Show-case | W. Bower | 727,887 | May 12 | 2011 | 448 | 104 | 445 |
| Show-case | F. Pollard | 730,294 | June 9 | 1408 | 309 | 104 | 1431 |
| Show-case | W. C. Huss | 734,558 | July 28 | 3438 | 802 | 105 | 776 |
| Show-case | C. E. Wilton | 734,644 | July 28 | 3589 | 840 | 105 | 808 |
| Show-case | T. H. Betty | 738,759 | Sept. 15 | 2438 | 534 | 106 | 553 |
| Show-case | J. S. Lewis, D. F. Grow, and L. Wolf | 742,459 | Oct. 27 | 4009 | 899 | 106 | 2140 |
| Show-case | J. M. Biggerstaff | 742,957 | Nov. 3 | 239 | 53, 54 | 107 | 52 |
| Show-case | J. Clayton | 744,489 | Nov. 17 | 3312 | 713 | 107 | 737 |
| Show-case | E. C. Thurnau. (Reissue) | 12,188 | Dec. 29 | 6075 | 1377 | 107 | 2514 |
| Show-case base | L. Paulle | 717,910 | Jan. 6 | 742 | 166 | 102 | 158 |
| Show-case. Cabinet | A. Bever | 730,512 | June 9 | 1812 | 404 | 104 | 1516 |
| Show-case. Combination | S. E. Parrish | 724,323 | Mar. 31 | 5036 | 1128 | 103 | 1109 |
| Show-case corner or fastening | O. C. Kade | 722,588 | Mar. 10 | 1735 | 386 | 103 | 388 |
| Show-case for confections | K. Panay | 722,745 | Mar. 17 | 2057 | 460 | 103 | 471 |
| Show-case or show-front | J. L. Crane | 739,295 | Sept. 22 | 3414 | 761 | 106 | 778 |
| Show-case. Revoluble | C. Gantert | 726,900 | May 5 | 128 | 30 | 104 | 30 |
| Show-cases, show-windows, aquariums, &c. Construction of | E. F. Coffin | 740,235 | Sept. 29 | 5182 | 1165 | 106 | 1173 |
| Show-front or show-case | J. L. Crane | 745,158 | Nov. 24 | 4589 | 995 | 107 | 1020 |
| Show-front or show-case | J. L. Crane | 747,148 | Dec. 15 | 3383 | 768 | 107 | 1880 |
| Show-windows, show-cases, &c. Corner construction for | G. M. Chambers | 719,435 | Feb. 3 | 45 | 10 | 102 | 835 |
| Shower-bath | J. J. Butcher | 743,616 | Nov. 10 | 1651 | 346, 347 | 107 | 369 |
| Shrapnel | B. W. Dunn | 735,658 | Aug. 4 | 1191 | 252 | 105 | 1234 |
| Shrapnel, shells, &c. Smoke-generator for | C. V. Schou | 723,737 | Mar. 24 | 3862 | ..... | 103 | 853 |
| Shredder-cylinder | W. A. Bush | 740,627 | Oct. 6 | 469 | 103 | 106 | 1347 |
| Shredder-feeder | G. W. Crane | 740,245 | Sept. 29 | 5200 | 1169 | 106 | 1177 |
| Shredder-head | C. E. Curtiss | 747,905 | Dec. 22 | 4792 | 1083 | 107 | 2210 |
| Shredding-machine | M. F. Williams | 741,947 | Oct. 20 | 2999 | 666 | 106 | 1920 |
| Shredding-machine feed mechanism | F. M. and W. R. Teeguarden | 732,382 | June 30 | 5339 | 1183 | 104 | 2299 |
| Shutter | J. J. Plucker | 734,607 | July 28 | 3528 | 825 | 105 | 795 |
| Shutter. Awning- | D. W. Custer | 719,758 | Feb. 3 | 634 | 142 | 102 | 956 |
| Shutter bower and fastener | C. Zimmerman | 740,970 | Oct. 6 | 1075 | 244 | 106 | 1476 |
| Shutter-fastener | E. F. McIntire | 720,459 | Feb. 10 | 1923 | 438 | 102 | 1245 |
| Shutter-fastener | O. F. Immell | 724,013 | Mar. 31 | 4430 | 995 | 103 | 986 |
| Shutter-fastener | R. Krubetke | 734,575 | July 28 | 3465 | 810 | 105 | 782 |
| Shutter fastener and setter | H. J. Mohlenhoff | 721,318 | Feb. 24 | 3580 | 814 | 102 | 1628 |
| Shutter or blind slats. Device for fastening | W. W. Du Bois | 740,634 | Oct. 6 | 479 | 105 | 106 | 1349 |
| Shutter or door. Rolling steel | J. H. Swearinger | 731,328 | June 16 | 3305 | 737 | 104 | 1847 |
| Shutter. Rolling | P. Ebner | 746,307 | Dec. 8 | 1834 | 416 | 107 | 1511 |
| Shutter-worker | H. Osborne | 722,878 | Mar. 17 | 2295 | 513, 514 | 103 | 517 |
| Shutter-worker | J. H. Rose | 725,144 | Apr. 14 | 1357 | 306 | 103 | 1472 |
| Shutter-worker | A. M. Burnham | 732,393 | June 30 | 5364 | 1188 | 104 | 2306 |
| Shutter-worker | N. O. Bond | 732,615 | June 30 | 5781 | 1282 | 104 | 2396 |
| Shutter worker and lock | J. H. Applegate | 720,874 | Feb. 17 | 2695 | 623 | 102 | 1420 |
| Shuttle | J. H. Morin | 719,685 | Feb. 3 | 483 | 109 | 102 | 924 |
| Shuttle | E. L. Castor | 731,856 | June 23 | 4292 | 956 | 104 | 2069 |
| Shuttle | L. V. Martel | 732,310 | June 30 | 5187 | 1153 | 104 | 2268 |
| Shuttle | J. G. King | 739,008 | Sept. 15 | 2880 | 639 | 106 | 650 |
| Shuttle | J. C. Sergeson | 743,937 | Nov. 10 | 2208 | 477 | 107 | 487 |
| Shuttle-actuating mechanism | J. N. Whipple | 730,848 | June 9 | 2382 | 526 | 104 | 1639 |
| Shuttle and shuttle-eye | P. P. Daudelin | 737,714 | Sept. 1 | 282 | 59 | 106 | 63 |
| Shuttle-box motion | J. S. Ainley | 744,273 | Nov. 17 | 2915 | 624 | 10. | 651 |
| Shuttle-driving mechanism | C. E. Brouillette | 744,037 | Nov. 17 | 2450 | 526 | 107 | 553 |
| Shuttle-guard | A. Aube | 741,612 | Oct. 20 | 2358 | 528 | 106 | 1784 |
| Shuttle. Self-threading | S. B. Cutting | 727,594 | May 12 | 1439 | 323 | 104 | 328 |
| Shuttle. Self-threading | J. B. Daudelin | 729,141 | May 26 | 4340 | 958 | 104 | 969 |
| Shuttle-threader | T. Paquette | 747,472 | Dec. 22 | 3979 | 895 | 107 | 2026 |
| Shuttle. Weaver's | L. Wengefeld | 718,806 | Jan. 20 | 2446 | 541 | 102 | 549 |
| Sickle-bar | B. F. Stuart | 742,084 | Oct. 20 | 3328 | 742 | 106 | 1983 |
| Sickle-bar clip. Ball-bearing | I. Trimble | 727,864 | May 12 | 1975 | 440 | 104 | 437 |
| Side-board fastener | J. Erret | 729,851 | June 2 | 608 | 134 | 104 | 1252 |
| Side-board-rod fastening | S. S. Bolton | 723,640 | Mar. 24 | 3698 | 828, 829 | 103 | 818 |
| Sidestick and quoin. Combined | W. S. Rhodes and W. J. Trump | 722,753 | Mar. 17 | 2068 | 463 | 103 | 473 |
| Sidewalk. Concrete-steel | W. Mueser | 731,505 | June 23 | 3828 | 853 | 104 | 1971 |
| Sidewalk-elevator | J. Rieg | 724,205 | Mar. 31 | 4801 | 1076 | 103 | 1062 |
| Sidewalks, curbs, and gutters. Mechanism for making | D. B. Estell | 729,852 | June 2 | 609 | 134 | 104 | 1252 |
| Siding-gage | E. J. H. Blohm | 742,571 | Oct. 27 | 4217 | 950 | 106 | 2182 |
| Sieve | J. W. Smith | 740,194 | Sept. 29 | 5097 | 1145 | 106 | 1156 |
| Sieve. Flour- | E. M. Jones | 740,439 | Oct. 6 | 109 | 23 | 106 | 1270 |
| Sieve. Grain- | E. Huber | 736,261 | Aug. 11 | 2294 | 496 | 105 | 1489 |
| Sieve or bolting-machine. Gyrating | D. E. Burner | 720,559 | Feb. 17 | 2136 | 494 | 102 | 1305 |
| Sieve or bolting-machine. Gyrating | A. Wolf | 732,019 | June 23 | 4612 | 1029, 1030 | 104 | 2136 |
| Sieve or strainer | J. Frye | 744,060 | Nov. 17 | 2504 | 536 | 107 | 563 |
| Sifter | C. B. Comegys | 733,161 | July 7 | 816 | 198 | 105 | 172 |
| Sifter. Ash- | W. H. Boyle | 737,699 | Sept. 1 | 254 | 54 | 106 | 58 |
| Sifter. Ash- | J. Glantz | 740,268 | Sept. 29 | 5235 | 1177 | 106 | 1183 |
| Sifter. Ash- | T. McGowan | 741,696 | Oct. 20 | 2520 | 563 | 106 | 1819 |

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| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
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| Sifter. Ash- | G. N. Houghton | 747,715 | Dec. 22 | 4430 | 997 | 107 | 2129 |
| Sifter. Attached ash- | T. Edwards | 730,204 | June 2 | 1214 | 271 | 104 | 1375 |
| Sifter. Flour- | G. W. Hancock | 731,895 | June 23 | 4365 | 974 | 104 | 2085 |
| Sifter. Flour- | E. H. Senechal | 747,092 | Dec. 15 | 3284 | 747 | 107 | 1859 |
| Sifter for heaters, &c. Coal and ash | C. G. Cadwallader | 721,937 | Mar. 3 | 537 | 118 | 103 | 118 |
| Sifter. Plan | J. Konegen | 726,073 | Apr. 21 | 3025 | 688 | 103 | 1841 |
| Sifting apparatus | E. Maag | 728,482 | May 19 | 3136 | 693 | 104 | 705 |
| Sifting flour, meal, &c. Device for | W. S. Hayden | 747,605 | Dec. 22 | 4222 | 949 | 107 | 2083 |
| Sifting machine. Dustless ash- | A. Daniels | 733,314 | July 7 | 1097 | 261 | 105 | 231 |
| Sifting machine. Flour- | C. P. P. Gravé and J. Schaible | 748,366 | Dec. 29 | 5664 | 1291, 1292 | 107 | 2422 |
| Sifting machine. Sand- | J. W. Sappington, T. A. Kendrick, and C. Wright, Jr. | 723,187 | Mar. 17 | 2854 | 641 | 103 | 636 |
| Sight-testing apparatus | F. W. Reich and M. B. Clason | 726,101 | Apr. 21 | 3070 | 697 | 103 | 1850 |
| Sight-testing apparatus | G. Johnston | 742,329 | Oct. 27 | 3783 | 847 | 106 | 2093 |
| Sign | C. A. Tyndall | 725,300 | Apr. 14 | 1627 | 367 | 103 | 1529 |
| Sign | H. L. Casperson | 746,020 | Dec. 8 | 1306 | 293 | 107 | 1395 |
| Sign | E. B. Bartlett | 747,293 | Dec. 15 | 3663 | 828 | 107 | 1940 |
| Sign. Advertising- | J. S. Anderson | 739,635 | Sept. 22 | 4046 | 902, 903 | 106 | 915 |
| Sign and letter-slot. Combined door- | J. R. Wimer | 746,906 | Dec. 15 | 2919 | 674 | 107 | 1772 |
| Sign. Automatic door- | M. H. Richardson | 731,129 | June 16 | 2942 | 654 | 104 | 1773 |
| Sign-board. Reversible | O. H. Peters and D. M. Lewis | 737,136 | Aug. 25 | 3914 | 870 | 105 | 1867 |
| Sign. Cement | R. B. Emerson | 744,056 | Nov. 17 | 2497 | 535 | 107 | 562 |
| Sign. Changeable | J. W. Currier | 728,875 | May 26 | 3877 | 862 | 104 | 875 |
| Sign. Changeable | J. N. Brady | 730,603 | June 9 | 1973 | 438, 439 | 104 | 1552 |
| Sign. Changeable | T. W. Loaring | 736,122 | Aug. 11 | 2064 | 442 | 105 | 1440 |
| Sign. Changeable | M. B. Disken | 736,236 | Aug. 11 | 2244 | 484, 485 | 105 | 1479 |
| Sign clamping device. Street- | A. D. Benham | 727,065 | May 5 | 472 | 100 | 104 | 103 |
| Sign. Day or night | H. M. Beugler | 733,800 | July 14 | 1965 | 463 | 105 | 432 |
| Sign. Double-reading illuminated | M. L. Jolly | 729,599 | June 2 | 139 | 34 | 104 | 1155 |
| Sign. Electric | H. B. Wren | 730,854 | June 9 | 2389 | 528 | 104 | 1640 |
| Sign. Electric | T. E. Murray | 737,129 | Aug. 25 | 3902 | 867 | 105 | 1864 |
| Sign. Electric | B. E. Salisbury | 738,489 | Sept. 8 | 1908 | 417 | 106 | 424 |
| Sign. Electric display- | F. M. Sheridan and E. Behrendt | 723,321 | Mar. 24 | 3096 | 697 | 103 | 698 |
| Sign. Electrically-illuminated | J. H. Goehst | 742,309 | Oct. 27 | 3751 | 840 | 106 | 2087 |
| Sign. Electrically-illuminated | J. H. Goehst | 744,331 | Nov. 17 | 3022 | 648 | 107 | 675 |
| Sign. Illuminated | C. E. Lee | 728,731 | May 19 | 3608 | 800 | 104 | 805 |
| Sign. Illuminated | W. M. Hall | 736,722 | Aug. 18 | 3165 | 699 | 105 | 1690 |
| Sign. Illuminated | C. F. Lancaster | 738,332 | Sept. 8 | 1599 | 347 | 106 | 360 |
| Sign. Illuminated | S. Evans | 739,845 | Sept. 29 | 4433 | 994, 995 | 106 | 1016 |
| Sign. Illuminated | H. B. Pulsifer | 739,926 | Sept. 29 | 4613 | 1036 | 106 | 1053 |
| Sign-illuminator | J. H. McMullin | 717,758 | Jan. 6 | 447 | 104 | 102 | 97 |
| Sign. Metal | E. L. Ayers and W. F. Coffee | 734,212 | July 21 | 2790 | 654 | 105 | 623 |
| Sign. Moving advertising- | T. P. Thompson | 723,761 | Mar. 24 | 3899 | 877 | 103 | 862 |
| Sign or picture. Illuminated | M. L. Jolly | 729,598 | June 2 | 138 | 34 | 104 | 1155 |
| Sign. Revolving | G. W. De Camp | 741,635 | Oct. 20 | 2395 | 537 | 106 | 1792 |
| Signs. Circuit-controller for electric flash- | J. H. Eastman and G. L. Weaver | 740,357 | Sept. 29 | 5398 | 1216 | 106 | 1218 |
| Signs. Contact-maker for electrical | C. F. Lancaster | 738,333 | Sept. 8 | 1600 | 347 | 106 | 360 |
| Signs. Making | C. Blossom and O. W. Dysert | 731,846 | June 23 | 4280 | ..... | 104 | 2067 |
| Signs. Means for operating electric | W. Goltz | 745,488 | Dec. 1 | 337 | 79 | 107 | 1171 |
| Signal: *See* Block-signal. Car-signal. Car electric alarm-signal. Electric signal. Electric-light signal. Electric safety-signal. Elevator alarm-signal. Fire-signal. Headlight-signal. Pneumatic signal. Railway-signal. Railway block-signal. Railway crossing-signal. Railway danger-signal. Railway-gate signal. Railway station-signal. Railway switch-signal. Train-signal. Train-order signal. Trolley-signal. | | | | | | | |
| Signal and trumpet. Combined | F. L. Chamberlin | 721,151 | Feb. 24 | 3271 | 748 | 102 | 1564 |
| Signal apparatus | H. W. Souder | 735,418 | Aug. 4 | 733 | 156 | 105 | 1136 |
| Signal apparatus | C. J. Coleman | 743,975 | Nov. 10 | 2289 | 491, 492 | 107 | 505 |
| Signal-compensator | J. T. Hambay | 740,127 | Sept. 29 | 4974 | 1116 | 106 | 1130 |
| Signal-indicator. Electromagnetic | W. W. Dean | 735,953 | Aug. 11 | 1749 | 374 | 105 | 1373 |
| Signal-light | E. A. Edwards | 738,781 | Sept. 15 | 2484 | 545 | 106 | 564 |
| Signal mechanism. Framework for supporting | R. Herman | 743,159 | Nov. 3 | 657 | 141, 142 | 107 | 137 |
| Signal or calling device | R. H. Ferguson | 742,619 | Oct. 27 | 4306 | 970 | 106 | 2202 |
| Signal or other staff | H. M. Nourse | 744,977 | Nov. 24 | 4186 | 905 | 107 | 938 |
| Signal-recorder | H. W. Doughty and C. E Beach | 726,882 | May 5 | 95 | 23, 24 | 104 | 23 |
| Signal system | J. K. Reid | 728,616 | May 19 | 3400 | 752 | 104 | 761 |
| Signal system. Electrical | U. G. Merrill | 746,726 | Dec. 15 | 2568 | 591 | 107 | 1694 |
| Signal system. Pneumatic | H. T. Farnsworth | 739,660 | Sept. 22 | 4091 | 911, 912 | 106 | 924 |
| Signal transmission and receipt | R. A. Fessenden | 727,325 | May 5 | 939 | 205 | 104 | 203 |
| Signal transmitter. Multiple- | G. E. King | 726,944 | May 5 | 211 | 50 | 104 | 46 |
| Signal transmitter. Multiple- | G. E. King | 727,543 | May 5 | 1332 | 297 | 104 | 287 |
| Signal-transmitting system | E. B. Ellicott | 738,302 | Sept. 8 | 1519 | 329 | 106 | 342 |
| Signal-waves. Amplifying electromagnetic | J. S. Stone. (Reissue) | 12,152 | Sept. 8 | 2406 | 528 | 106 | 530 |
| Signal-waves. Apparatus for amplifying electromagnetic | J. S. Stone. (Reissue) | 12,151 | Sept. 8 | 2402 | 528 | 106 | 530 |
| Signals. Lubricating device for train-order | H. De Wallace | 744,309 | Nov. 17 | 2992 | 641 | 107 | 668 |
| Signals. Make-and-break switch for electric | C. B. Campbell | 739,056 | Sept. 15 | 2967 | 657 | 106 | 668 |
| Signals. Means for controlling illuminated announcement and display | R. E. Lippincott | 744,923 | Nov. 24 | 4083 | 880 | 107 | 917 |
| Signaling | N. Tesla | 723,188 | Mar. 17 | 2855 | 641 | 103 | 636 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|---|
| | | | | Spec. | Dr'g. | Vol. | Page. |
| Signaling and collision-preventing device. Electro-mechanical automatic | C. S. L. Baker | 718,071 | Jan. 13 | 1034 | 231 | 102 | 238 |
| Signaling apparatus | H. S. Hoover | 721,043 | Feb. 17 | 3031 | 695 | 102 | 1493 |
| Signaling apparatus | H. A. Fessenden | 724,274 | Mar. 31 | 4949 | 1108, 1109 | 103 | 1091 |
| Signaling apparatus | F. W. Dunbar and W. W. Dean | 724,451 | Apr. 7 | 54 | 15 | 103 | 1181 |
| Signaling apparatus | P. Jacobi | 726,933 | May 5 | 188 | 44 | 104 | 42 |
| Signaling apparatus | J. E. Allison | 747,345 | Dec. 22 | 3769 | 849 | 107 | 1979 |
| Signaling apparatus and system | E. E. Clement | 719,999 | Feb. 10 | 1061 | 246, 247 | 102 | 1065 |
| Signaling apparatus. Electric | H. W. Souder | 735,416 | Aug. 4 | 721 | 154, 155 | 105 | 1134 |
| Signaling apparatus. Electric | H. W. Souder | 735,417 | Aug. 4 | 728 | 156 | 105 | 1135 |
| Signaling apparatus. Electric | F. B. Herzog and S. S. Wheeler | 748,501 | Dec. 29 | 5932 | 1347 | 107 | 2481 |
| Signaling apparatus. Electric | F. B. Herzog and S. S. Wheeler | 748,502 | Dec. 29 | 5934 | 1348 | 107 | 2481 |
| Signaling. Apparatus for selective electric | J. S. Stone. (Reissue) | 12,141 | Aug. 4 | 1258 | 267 | 105 | 1249, |
| Signaling. Apparatus for selective electric | J. S. Stone | 737,170 | Aug. 25 | 3975 | 884 | 105 | 1880 |
| Signaling. Apparatus for selective electric | J. S. Stone. (Reissue) | 12,149 | Aug. 25 | 4727 | 1060, 1061 | 105 | 2044 |
| Signaling apparatus. Marine | W. J. Smith | 740,939 | Oct. 6 | 1011 | 229 | 106 | 1462 |
| Signaling by electromagnetic waves | R. A. Fessenden | 727,329 | May 5 | 949 | 206, 207 | 104 | 205 |
| Signaling by electromagnetic waves | R. A. Fessenden | 727,330 | May 5 | 951 | 207 | 104 | 206 |
| Signaling by electromagnetic waves | R. A. Fessenden | 742,779 | Oct. 27 | 4567 | 1035 | 106 | 2260 |
| Signaling by electromagnetic waves | R. A. Fessenden | 742,780 | Oct. 27 | 4569 | 1035 | 106 | 2260 |
| Signaling by electromagnetic waves. Selective | R. A. Fessenden | 727,326 | May 5 | 944 | 205, 206 | 104 | 204 |
| Signaling. Coherer for wireless | T. E. Clark | 741,767 | Oct. 20 | 2655 | 594 | 106 | 1846 |
| Signaling device. Automatic | J. Floss | 747,880 | Dec. 22 | 4750 | 1073 | 107 | 2201 |
| Signaling device. Electric | W. Fraser | 723,259 | Mar. 24 | 2987 | 672 | 103 | 676 |
| Signaling device. Electric | G. E. Clark | 728,544 | May 19 | 3251 | 721 | 104 | 728 |
| Signaling device. Electrical | H. C. Giles | 746,069 | Dec. 8 | 1393 | 311, 312 | 107 | 1415 |
| Signaling. Electrical | H. Shoemaker and H. C. Snook | 736,884 | Aug. 18 | 3467 | 769 | 105 | 1753 |
| Signaling. Electrical ringing of bells for submarine | E. Gray | 744,336 | Nov. 17 | 3032 | 650, 651 | 107 | 678 |
| Signaling. Electromagnetic-wave | R. A. Fessenden | 730,753 | June 9 | 2222 | 494 | 104 | 1606 |
| Signaling. Magneto-electric-semaphore | L. G. Woolley | 733,789 | July 14 | 1942 | 458 | 105 | 427 |
| Signaling mechanism | J. L. Ricketts | 740,312 | Sept. 29 | 5315 | 1197 | 106 | 1200 |
| Signaling or calling system. Electrical | C. B. Smith | 727,702 | May 12 | 1674 | 375 | 104 | 378 |
| Signaling or calling system. Electrical | C. B. Smith | 727,703 | May 12 | 1677 | 375 | 104 | 379 |
| Signaling or calling system. Electrical | C. B. Smith | 727,704 | May 12 | 1680 | 375 | 104 | 379 |
| Signaling receiver | R. A. Fessenden | 727,328 | May 5 | 948 | 206 | 104 | 205 |
| Signaling system | H. Shoemaker | 717,771 | Jan. 6 | 490 | 110 | 102 | 106 |
| Signaling system | H. Shoemaker | 717,772 | Jan. 6 | 492 | 110 | 102 | 106 |
| Signaling system | H. Shoemaker | 717,773 | Jan. 6 | 494 | 110, 111 | 102 | 107 |
| Signaling system | N. Tesla | 725,605 | Apr. 14 | 2192 | 496 | 103 | 1651 |
| Signaling system | H. G. Brown | 732,272 | June 30 | 5127 | 1139, 1140 | 104 | 2256 |
| Signaling system | W. H. Dammond | 747,949 | Dec. 29 | 4899 | 1109, 1110 | 107 | 2255 |
| Signaling system. Electrical | J. L. Wrenn | 736,050 | Aug. 11 | 1933 | 412 | 105 | 1413 |
| Signaling system. Multiplex wireless | H. Shoemaker | 717,767 | Jan. 6 | 472 | 108 | 102 | 101 |
| Signaling system. Wireless | H. Shoemaker and G. W. Pickard | 717,765 | Jan. 6 | 467 | 107 | 102 | 100 |
| Signaling system. Wireless | H. Shoemaker | 717,766 | Jan. 6 | 470 | 108 | 102 | 100 |
| Signaling system. Wireless | H. Shoemaker | 717,769 | Jan. 6 | 485 | 109 | 102 | 105 |
| Signaling system. Wireless | H. Shoemaker | 717,770 | Jan. 6 | 487 | 109, 110 | 102 | 105 |
| Signaling system. Wireless | C. D. Ehret | 734,048 | July 21 | 2489 | 580 | 105 | 560 |
| Signaling system. Wireless selective | C. D. Ehret | 717,978 | Jan. 6 | 865 | 194 | 102 | 187 |
| Signaling. Wireless | L. de Forest | 730,819 | June 9 | 2333 | 517 | 104 | 1629 |
| Signature-bundling machine | S. H. Pray | 736,027 | Aug. 18 | 2980 | 655, 656 | 105 | 1651 |
| Signature-gatherer | N. M. MacDowell and J. T. Sperling | 748,198 | Dec. 29 | 5388 | 1225, 1226 | 107 | 2361 |
| Silicon and aluminium from silicates of alumina. Manufacture of | C. H. Homan | 732,410 | June 30 | 5390 | 1194 | 104 | 2311 |
| Silicon chlorids, hydrochloric acid, and alkali hydroxids. Producing | F. J. Machalske | 745,966 | Dec. 1 | 1200 | ..... | 107 | 1356 |
| Silicon, oxygen, and carbon. Producing compounds containing | E. G. Acheson | 722,792 | Mar. 17 | 2144 | 479 | 103 | 488 |
| Silk filaments. Apparatus for producing artificial | E. H. Ryon and C. N. Waite | 732,784 | July 7 | 157 | 41 | 105 | 37 |
| Silk-floss holder | F. C. Runge, Jr | 745,296 | Nov. 24 | 4831 | 1054 | 107 | 1071 |
| Silk-holder | S. V. Luallen | 725,462 | Apr. 14 | 1940 | 435 | 103 | 1595 |
| Silk-lustering machine | C. Stuart | 724,626 | Apr. 7 | 392 | 93 | 103 | 1253 |
| Silk-reel. High-speed | E. Fougeirol | 731,765 | June 23 | 4136 | 923 | 104 | 2033 |
| Silo | E. W. Gilbert | 720,419 | Feb. 10 | 1855 | 422, 423 | 102 | 1232 |
| Silo | J. P. Christensen | 721,543 | Feb. 24 | 3990 | 909 | 102 | 1712 |
| Silo | J. C. Schreder | 725,289 | Apr. 14 | 1605 | 362, 363 | 103 | 1525 |
| Silo | J. P. Christensen | 726,639 | Apr. 28 | 4140 | 934 | 103 | 2079 |
| Silo | W. Craine | 726,649 | Apr. 28 | 4155 | 937 | 103 | 2083 |
| Silo | F. S. Lord | 734,722 | July 28 | 3750 | 876 | 105 | 839 |
| Silo | J. Farrell | 735,485 | Aug. 4 | 866 | 184, 185 | 105 | 1165 |
| Silo | R. F. Van Winkle | 740,340 | Sept. 29 | 5367 | 1209 | 106 | 1211 |
| Silo | A. O. Hubbard | 741,403 | Oct. 13 | 1940 | 429, 430 | 106 | 1681 |
| Silo | E. B. Repp | 745,666 | Dec. 1 | 637 | 148 | 107 | 1233 |
| Silo | W. B. Cannon | 746,017 | Dec. 8 | 1301 | 292 | 107 | 1394 |
| Silo | F. H. Ryder | 746,997 | Dec. 15 | 3101 | 710 | 107 | 1814 |
| Silver bromid gelatin and making same | A. Cobenzl | 718,312 | Jan. 13 | 1467 | ..... | 102 | 331 |
| Silver chromate | C. H. von Hoessle | 745,843 | Dec. 1 | 981 | ..... | 107 | 1308 |
| Silver-plating or gilding process | J. Schiele | 722,148 | Mar. 3 | 900 | ..... | 103 | 193 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|---|
| | | | | Spec. | Drg. | Vol. | Page. |
| Silver. Reducing and separating | G. V. Guzman | 720,760 | June 2 | 439 | 99 | 104 | 1217 |
| Sinew-extractor | H. H. Hollender | 732,300 | June 30 | 5175 | 1149 | 104 | 2265 |
| Single-trigger mechanism | L. Henry | 719,331 | Jan. 27 | 3443 | 767 | 102 | 774 |
| Single-trigger mechanism | J. J. Hewson | 722,706 | Mar. 17 | 1983 | 442<br>443 | 103 | 455 |
| Singletree attachment | J. A. Cake | 719,743 | Feb. 3 | 605 | 136 | 102 | 949 |
| Singletree-hook | J. W. Overholt | 720,959 | Feb. 17 | 2869 | 656 | 102 | 1457 |
| Sink and sink-strainer | J. Koslopsky | 745,963 | Dec. 1 | 1196 | 268 | 107 | 1355 |
| Sink and wash and bath tub. Combined | T. Mills | 718,856 | Jan. 20 | 2530 | 562<br>563 | 102 | 567 |
| Sink. Camp- | G. B. Donavin | 732,342 | June 30 | 5258 | 1166 | 104 | 2283 |
| Sink-cleaning composition | T. Meyeringh | 725,467 | Apr. 14 | 1949 | ------ | 103 | 1597 |
| Sink overflow attachment | J. Blum | 740,737 | Oct. 6 | 655 | 148 | 106 | 1387 |
| Sink-strainer | E. E. Weed | 728,059 | May 12 | 2331 | 519 | 104 | 514 |
| Sink-trap | C. E. Morrison | 741,815 | Oct. 20 | 2744 | 611 | 106 | 1866 |
| Siphon | J. Fogg | 725,949 | Apr. 21 | 2836 | 643 | 103 | 1801 |
| Siphon | S. W. Miller | 727,990 | May 12 | 2207 | 492 | 104 | 489 |
| Siphon | S. W. Miller | 727,991 | May 12 | 2210 | 493 | 104 | 489 |
| Siphon | C. H. Gilby | 739,489 | Sept. 22 | 3778 | 845 | 106 | 858 |
| Siphon | C. H. Linn | 741,513 | Oct. 13 | 2551 | 479 | 106 | 1725 |
| Siphon and bottle-stopper. Combined | J. E. Keller, Jr | 730,267 | June 9 | 1358 | 298 | 104 | 1419 |
| Siphon-filler | C. M. Earl | 721,547 | Feb. 24 | 3995 | 910 | 102 | 1713 |
| Siphon-filler | C. M. Earl | 721,548 | Feb. 24 | 3997 | 910 | 102 | 1714 |
| Siphon-filler | H. Carmichael | 734,302 | July 21 | 2988 | 703 | 105 | 665 |
| Siphon-filler | J. K. Turajski | 737,300 | Aug. 25 | 4238 | 943 | 105 | 1935 |
| Siphon-filler | W. H. McKenna | 742,894 | Nov. 3 | 132 | 30 | 107 | 29 |
| Siphon-filler | H. A. Allwardt | 743,798 | Nov. 10 | 1961 | 416 | 107 | 435 |
| Siphon-filling apparatus | L. P. Setzler | 725,494 | Apr. 14 | 2003 | 453 | 103 | 1610 |
| Siphon-trap | J. E. Keyt | 730,463 | June 9 | 1724 | 385 | 104 | 1497 |
| Sizing | G. A. Fredenburgh | 728,697 | May 19 | 3542 | ------ | 104 | 791 |
| Sizing and producing same | A. A. Dunham | 739,657 | Sept. 22 | 4088 | ------ | 106 | 924 |
| Sizing compound | J. C. Evans | 744,734 | Nov. 24 | 3761 | ------ | 107 | 850 |
| Sizing-machine | E. Rettich and M. E. Pugh | 740,180 | Sept. 20 | 5073 | 1140<br>1141 | 106 | 1150 |
| Sizing. Preparing | T. Aspinall | 724,238 | Mar. 31 | 4885 | ------ | 103 | 1078 |
| Skate | J. Thomsen and A. Peterson | 741,083 | Oct. 13 | 1287 | 294 | 106 | 1542 |
| Skate | A. P. Draper | 748,172 | Dec. 29 | 5338 | 1214 | 107 | 2351 |
| Skate ankle-support | I. B. Macomber | 718,265 | Jan. 13 | 1388 | 310 | 102 | 315 |
| Skate-roller | L. M. Richardson | 726,463 | Apr. 28 | 3774 | 468 | 103 | 2010 |
| Skate-sharpener | A. A. Stepzinski | 721,843 | Mar. 3 | 341 | 75 | 103 | 75 |
| Skate. Tubular | W. G. Nott | 729,648 | June 2 | 222 | 50 | 104 | 1174 |
| Skein-holder | T. King | 721,375 | Feb. 24 | 3693 | 841 | 102 | 1651 |
| Skein-holding device | F. Benzinger and L. Freund | 740,616 | Oct. 6 | 457 | 99<br>100 | 106 | 1344 |
| Skein scouring and dyeing machine | J. W. Finegan | 724,562 | Apr. 7 | 261 | 64 | 103 | 1225 |
| Skeining-machine | J. H. Shearn | 728,775 | May 19 | 3682 | 821<br>822<br>823 | 104 | 819 |
| Sketching-pad | E. A. Chester | 726,141 | Apr. 21 | 3151 | 713 | 103 | 1866 |
| Skewer-machine | O. P. Beck | 719,639 | Feb. 3 | 407 | 93, 94 | 102 | 907 |
| Skewer-machine feed mechanism | O. P. Beck | 733,362 | July 14 | 1195 | 284 | 105 | 268 |
| Skewer-machine feed mechanism | O. P. Beck | 733,363 | July 14 | 1197 | 284 | 105 | 268 |
| Skid. Portable | J. Williams and J. Butler | 718,295 | Jan. 13 | 1444 | 321 | 102 | 326 |
| Skin diseases, &c. Apparatus for treating | J. Kjeldsen | 740,873 | Oct. 6 | 906 | 203 | 106 | 1439 |
| Skins and furs. Apparatus for depilating | A. Billaud | 724,249 | Mar. 31 | 4903 | 1097<br>1098 | 103 | 1082 |
| Skins and hides. Apparatus for treating | R. D. Scott | 741,381 | Oct. 13 | 1900 | 420 | 106 | 1673 |
| Skinning-knife | G. N. Abbey | 732,911 | July 7 | 386 | 93 | 105 | 83 |
| Skirt | C. V. and M. R. Frankenberg | 734,842 | July 28 | 4001 | 934 | 105 | 890 |
| Skirt | E. A. C. White | 735,023 | July 28 | 4311 | 1002 | 105 | 955 |
| Skirt | S. H. Camp | 736,576 | Aug. 18 | 2863 | 627 | 105 | 1628 |
| Skirt. Adjustable | B. Stillson | 723,063 | Mar. 17 | 2611 | 588 | 103 | 584 |
| Skirt and dress-waist retaining device | A. J. Macqueene | 727,167 | May 5 | 659 | 142 | 104 | 142 |
| Skirt and shirt-waist holder | C. L. Stephenson | 727,479 | May 5 | 1220 | 269 | 104 | 264 |
| Skirt and waist adjuster | R. E. Saffold | 730,478 | June 9 | 1746 | 391 | 104 | 1501 |
| Skirt and waist holder | M. Distelman | 718,327 | Jan. 13 | 1503 | 334 | 102 | 338 |
| Skirt-edging | G. Koss | 722,115 | Mar. 3 | 842 | 187 | 103 | 181 |
| Skirt-elevator | J. P. Sutton | 724,518 | Apr. 7 | 187 | 46 | 103 | 1209 |
| Skirt-fastener | D. J. Hauptman | 720,250 | Feb. 10 | 1551 | 356 | 102 | 1168 |
| Skirt-fastener and waist-holder. Combined | J. Hauptman | 746,700 | Dec. 15 | 2527 | 581 | 107 | 1684 |
| Skirt-fastening. Adjustable | C. H. G. B. McWilliams | 737,004 | Aug. 25 | 3699 | 821 | 105 | 1822 |
| Skirt-former | S. Stratton | 744,882 | Nov. 24 | 4015 | 866 | 107 | 904 |
| Skirt-gage | J. B. McFatrich | 728,598 | May 19 | 3369 | 747 | 104 | 754 |
| Skirt-holder | A. and E. C. Serfoss | 721,096 | Feb. 17 | 3135 | 720 | 102 | 1517 |
| Skirt-holder | S. D. Engle | 730,625 | June 9 | 2006 | 446 | 104 | 1569 |
| Skirt-holder. Adjustable | J. L. Nicholson | 729,208 | May 26 | 4463 | 983 | 104 | 90[illegible] |
| Skirt-holding device | E. W. Wheelock | 726,830 | Apr. 28 | 4496 | 1014 | 103 | 213[illegible] |
| Skirt-hook | J. A. Savage | 728,769 | May 19 | 3668 | 816 | 104 | 817 |
| Skirt-lifter | E. Lautenbach | 726,951 | May 5 | 223 | 52 | 104 | 48 |
| Skirt or train lifter | H. M. Todd | 724,758 | Apr. 7 | 632 | 149 | 103 | 1304 |
| Skirt-protector. Woven | G. S. Hensel | 744,544 | Nov. 17 | 3403 | 733 | 107 | 756 |
| Skirt. Riding- | M. Weingarten | 731,250 | June 16 | 3150 | 700 | 104 | 1814 |
| Skirt. Riding- | M. Tauber | 734,775 | July 28 | 3859 | 900 | 105 | 861 |
| Skirt-supporter | K. M. Dickerson and M. T. Dunbar | 718,325 | Jan. 13 | 1501 | 333 | 102 | 338 |
| Skirt-supporter | J. H. Griswold | 719,656 | Feb. 3 | 434 | 99 | 102 | 912 |
| Skirt-supporter | R. B. Melanson | 720,832 | Feb. 17 | 2621 | 605 | 102 | 1405 |
| Skirt-supporter | V. J. King | 723,533 | Mar. 24 | 3509 | 785 | 103 | 779 |
| Skirt-supporter | H. M. Fox | 725,434 | Apr. 14 | 1876 | 419 | 103 | 1582 |
| Skirt-supporter | N. C. Edwards | 730,751 | June 9 | 2220 | 494 | 104 | 1605 |
| Skirt-supporter | L. H. Flory | 738,021 | Sept. 1 | 930 | 206 | 106 | 203 |
| Skirt-supporter | E. Jennings | 745,354 | Dec. 1 | 71 | 17 | 107 | 1116 |
| Skirt-supporter and shirt-waist holder | F. J. Smith | 722,921 | Mar. 17 | 2372 | 530 | 103 | 534 |
| Skirt-supporter and shirt-waist holder. Combination | A. M. Brown | 721,280 | Feb. 24 | 3523 | 801 | 102 | 1615 |
| Skirt-supporting pin | H. Miller | 739,896 | Sept. 29 | 4554 | 1023 | 106 | 1040 |
| Skirt-waistband | M. A. Ormsbee | 720,468 | Feb. 10 | 1938 | 443 | 102 | 1248 |

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| Skirt. Woman's | A. Adler | 723,191 | Mar. 17 | 2865 | 642 | 102 | 637 |
| Skirt-yoke | A. Sullivan | 719,160 | Jan. 27 | 3127 | 696 | 102 | 705 |
| Skirts. Woven interlining for | W. S. Cox | 726,648 | Apr. 28 | 4154 | 937 | 103 | 2081 |
| Skiving-machine | F. L. Harmon | 726,285 | Apr. 28 | 3436 | 781<br>782 | 103 | 1940 |
| Skylight | R. Lieber and C. Lambert | 739,013 | Sept. 15 | 2886 | 641 | 106 | 652 |
| Skylight | J. Degenhardt | 745,310 | Nov. 24 | 4880 | 1065 | 107 | 1081 |
| Skylight-operating device | F. Reichard | 725,871 | Apr. 21 | 2697 | 613 | 103 | 1773 |
| Slab for building construction | M. Watson and W. H. Ham | 719,396 | Jan. 27 | 3565 | 796 | 102 | 800 |
| Slab or block for building purposes | A. Mack | 719,123 | Jan. 27 | 3072 | 683 | 102 | 694 |
| Slab or plate | W. L. Kann | 741,043 | Oct. 13 | 1205 | 272<br>273 | 106 | 1523 |
| Slack-adjuster | W. H. Sauvage | 718,799 | Jan. 20 | 2433 | 539 | 102 | 547 |
| Slack-adjuster | F. K. Howard | 720,147 | Feb. 10 | 1355 | 310 | 102 | 1128 |
| Slack-adjuster | E. G. and H. G. Shortt | 725,496 | Apr. 14 | 2007 | 453 | 103 | 1611 |
| Slack-adjuster. Automatic | F. L. Clark | 728,443 | May 19 | 3050 | 671<br>672 | 104 | 688 |
| Slack take-up and adjuster. Cord- | F. W. A. Meyer | 741,154 | Oct. 13 | 1417 | 324 | 106 | 1567 |
| Slack-take-up mechanism | E. G. Shortt | 748,112 | Dec. 29 | 5231 | 1186<br>1187 | 107 | 2328 |
| Slag-boiler | R. Baggaley | 746,235 | Dec. 8 | 1694 | 376<br>377 | 107 | 1481 |
| Slag-furnace | R. Baggaley and O. S. Garretson | 727,057 | May 5 | 460 | 96, 97 | 104 | 101 |
| Slag-furnace | O. S. Garretson | 728,794 | May 19 | 3719 | 829<br>830 | 104 | 826 |
| Slag-furnace | O. S. Garretson | 728,795 | May 19 | 3721 | 830<br>831 | 104 | 827 |
| Slag-handling apparatus | H. J. Glaubitz | 735,086 | Aug. 4 | 68 | 18, 19 | 105 | 996 |
| Slag-heated boiler | R. Baggaley | 746,239 | Dec. 8 | 1702 | 380 | 107 | 1483 |
| Slag-heated boiler | R. Baggaley | 746,240 | Dec. 8 | 1704 | 380 | 107 | 1484 |
| Slate | C. B. Tompkins | 723,340 | Mar. 24 | 3127 | 703 | 103 | 703 |
| Slate or similar device for educational purposes | H. King | 722,994 | Mar. 17 | 2485 | 559 | 103 | 557 |
| Slate-picker | G. W. Cross | 739,837 | Sept. 29 | 4417 | 991 | 106 | 1013 |
| Slate-ruling device. School- | J. E. Dundore | 746,053 | Dec. 8 | 1367 | 305 | 107 | 1409 |
| Slate. Treating and cleaving | W. A. McLaughlin | 748,518 | Dec. 29 | 5968 | 1354 | 107 | 2489 |
| Slaughtering apparatus | J. H. Cook | 727,591 | May 12 | 1435 | 322 | 104 | 327 |
| Sled | H. G. M. Howard | 728,922 | May 26 | 3954 | 879 | 104 | 891 |
| Sled | J. W. Perkins | 729,961 | June 2 | 810 | 180 | 104 | 1292 |
| Sled | W. A. Marqua | 731,925 | June 23 | 4419 | 985 | 104 | 2096 |
| Sled attachment | E. C. Whitney | 719,287 | Jan. 27 | 3355 | 749 | 102 | 754 |
| Sled. Bob- | G. Koch | 748,194 | Dec. 29 | 5379 | 1222 | 107 | 2359 |
| Sled. Hand bob- | H. G. M. Howard | 738,450 | Sept. 8 | 1822 | 396 | 106 | 407 |
| Sled-knee | F. O. Stark | 725,502 | Apr. 14 | 2017 | 455 | 103 | 1612 |
| Sled. Knockdown | B. F. Rix | 734,431 | July 21 | 3201 | 753 | 105 | 710 |
| Sled-runner | J. Mann | 743,902 | Nov. 10 | 2152 | 463 | 107 | 474 |
| Sled-runner. Detachable spring | A. White | 727,044 | May 5 | 438 | 92 | 104 | 96 |
| Sled-runner nose-piece | A. J. Petertyl | 736,148 | Aug. 11 | 2106 | 452 | 105 | 1448 |
| Sleeve-head | L. N. Stein | 734,198 | July 21 | 2769 | 649 | 105 | 618 |
| Sleeve-holder | C. D. Jackson | 732,942 | July 7 | 433 | 108 | 105 | 94 |
| Sleeve-link | F. W. Phillips | 733,266 | July 7 | 1019 | 244 | 105 | 213 |
| Sleeve-protector | A. G. Haynes | 741,133 | Oct. 13 | 1380 | 316 | 106 | 1560 |
| Sleeve-protector holder | G. W. Davis | 719,650 | Feb. 3 | 426 | 97 | 102 | 911 |
| Sleigh | A. C. Merrill and A. J. Belton | 724,910 | Apr. 7 | 909 | 208 | 103 | 1364 |
| Sleigh | G. Snell | 727,472 | May 5 | 1211 | 267 | 104 | 261 |
| Sleigh | W. C. Pierce | 736,543 | Aug. 18 | 2808 | 615 | 105 | 1618 |
| Sleigh | J. R. Kyle | 738,617 | Sept. 8 | 2137 | 468 | 106 | 475 |
| Sleigh attachment. Vehicle | W. L. Williams | 721,408 | Feb. 24 | 3755 | 853<br>854 | 102 | 1663 |
| Sleigh. Automobile- | E. S. Weaver | 747,815 | Dec. 22 | 4616 | 1041 | 107 | 2171 |
| Sleigh. Bob- | I. K. Storms | 740,603 | Oct. 6 | 436 | 95 | 106 | 1339 |
| Sleigh-knee | F. Kamke, H. A. Schmidt, and C. H. Schabacker. | 728,725 | May 19 | 3597 | 799 | 104 | 803 |
| Sleigh-runner | S. R. Ford | 717,564 | Jan. 6 | 77 | 20 | 102 | 19 |
| Sleigh-runner | D. D. Grant | 719,211 | Jan. 27 | 3208 | 716 | 102 | 722 |
| Sleigh-runner | E. Perry | 742,485 | Oct. 27 | 4049 | 908 | 106 | 2148 |
| Sleigh-runner attachment. Vehicle | E. Kaiser | 727,637 | May 12 | 1523 | 343 | 104 | 346 |
| Sleigh-runner knee | H. Blow | 720,878 | Feb. 17 | 2700 | 624 | 102 | 1421 |
| Slicer | E. S. Regnier | 744,107 | Nov. 17 | 2589 | 553 | 107 | 582 |
| Slicer. Beet- | W. Köllmann | 738,616 | Sept. 8 | 2136 | 467<br>468 | 106 | 475 |
| Slicer. Bread- | A. Bolduc | 725,537 | Apr. 14 | 2078 | 470 | 103 | 1625 |
| Slicer. Bread, meat, or vegetable | M. C. Ratcliff | 720,617 | Feb. 17 | 2267 | 520 | 102 | 1329 |
| Slicer. Fruit or vegetable | J. A. Lallement | 725,262 | Apr. 14 | 1565 | 354 | 103 | 1516 |
| Slicers. Self-feeder for fruit or vegetable | S. J. Evans | 731,349 | June 16 | 3334 | 744 | 104 | 1852 |
| Slicing-knife | W. Kelley | 726,697 | Apr. 28 | 4246 | 960 | 103 | 2102 |
| Slicing-machine | W. Horrocks | 730,656 | June 9 | 2062 | 459 | 104 | 1570 |
| Slicing-machine | E. F. Smith | 731,516 | June 23 | 3676 | 819<br>820 | 104 | 1942 |
| Slicing-machine | P. Sommer | 745,398 | Dec. 1 | 159 | 37 | 107 | 1134 |
| Sliding gate | A. Mason | 727,818 | May 12 | 1887 | 421 | 104 | 419 |
| Sliding-jaw wrench | O. Gebauer | 729,155 | May 26 | 4375 | 965 | 104 | 976 |
| Sliding-jaw wrench | G. R. Cheesman | 746,673 | Dec. 15 | 2486 | 568 | 107 | 1675 |
| Slimes. Device for treating | W. E. Holderman | 738,329 | Sept. 8 | 1594 | 345 | 106 | 359 |
| Slip and shrinkage gage | A. J. Wold | 746,622 | Dec. 8 | 2370 | 544 | 107 | 1629 |
| Slitting-machine | H. L. Staley | 741,418 | Oct. 13 | 1958 | 434 | 106 | 1684 |
| Slitting-machine. Gang | G. Magnien | 745,967 | Dec. 1 | 1202 | 269 | 107 | 1356 |
| Slitting-machine or the like | E. B. Stimpson | 740,201 | Sept. 29 | 5115 | 1149 | 106 | 1159 |
| Slotting-machine | P. B. Harrison | 718,930 | Jan. 20 | 2684 | 600 | 102 | 600 |
| Slotting-machine tool-holder | J. Armstrong and S. Welter | 745,758 | Dec. 1 | 786 | 181 | 107 | 1266 |
| Slug and foot-stick. Combined | A. D. Hostetter | 742,323 | Oct. 27 | 3776 | 846 | 106 | 2091 |
| Slug-strip | N. P. Coburn | 721,357 | Feb. 24 | 3656 | 832 | 102 | 1642 |
| Sluice-box. Movable | F. François | 747,692 | Dec. 22 | 4384 | 989 | 107 | 2118 |
| Smearing-preventing device | O. Roesen | 746,746 | Dec. 15 | 2610 | 600 | 107 | 1703 |
| Smelter. Prospector's | B. F. Daniels and V. W. Clark | 744,305 | Nov. 17 | 2987 | 640 | 107 | 667 |
| Smelting | E. Knudsen | 721,311 | Feb. 24 | 3568 | 812 | 102 | 1624 |
| Smelting apparatus | P. Naef | 734,594 | July 28 | 3505 | 819 | 105 | 790 |

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| Smelting apparatus. Electrical | R. L. Barnhart | 724,778 | Apr. 7 | 677 | 159 | 103 | 1313 |
| Smelting copper ores | R. H. Aiken | 746,773 | Dec. 15 | 2660 | | 107 | 1714 |
| Smelting-furnace | F. B. Pettengill and E. Nicholson | 718,726 | Jan. 20 | 2301 | 508 | 102 | 519 |
| Smelting-furnace | E. F. Blessing | 725,661 | Apr. 21 | 2326 | 525 | 103 | 1692 |
| Smelting-furnace | E. Campbell | 730,610 | June 9 | 1984 | 441 | 104 | 1555 |
| Smelting-furnace | E. Riveroll | 737,487 | Aug. 25 | 4590 | 1028, 1029 | 105 | 2012 |
| Smelting-furnace | O. H. Eliel | 742,406 | Oct. 27 | 3913 | 879, 880 | 106 | 2120 |
| Smelting-furnace | E. Riveroll | 748,561 | Dec. 29 | 6061 | 1373 | 107 | 2511 |
| Smelting furnace. Copper- | R. Baggaley | 746,258 | Dec. 8 | 1739 | 394, 395 | 107 | 1490 |
| Smelting-furnace. Crucible | O. Forsbach and E. Clerc | 722,831 | Mar. 17 | 2222 | 498 | 103 | 503 |
| Smelting-furnace for the continuous production of steel. | S. Surzycki | 742,519 | Oct. 27 | 4119 | 927 | 106 | 2163 |
| Smelting furnace. Zinc- | J. P. Cappeau | 720,664 | Feb. 17 | 2349 | 538 | 102 | 1346 |
| Smelting. Matte or pyritic | O. S. Garretson | 728,701 | May 19 | 3548 | 788 | 104 | 793 |
| Smelting metals and metal compounds | G. Egly | 733,578 | July 14 | 1581 | 377 | 105 | 352 |
| Smelting ores | J. W. MacDonald | 746,970 | Dec. 15 | 3048 | 699 | 107 | 1802 |
| Smelting plant | W. E. Koch | 732,084 | June 30 | 4748 | 1059, 1060 | 104 | 2176 |
| Smoke and fume condenser | F. A. Pascoe | 746,989 | Dec. 15 | 3084 | 706 | 107 | 1810 |
| Smoke-bell | C. Haynes | 724,006 | Mar. 31 | 4406 | 991 | 103 | 983 |
| Smoke-bell | H. E. Butler | 741,883 | Oct. 20 | 2863 | 639 | 106 | 1891 |
| Smoke-consumer | J. and W. Wildman | 723,104 | Mar. 17 | 2681 | 604 | 103 | 600 |
| Smoke-consumer | J. T. Coyne | 725,045 | Apr. 14 | 1163 | 263 | 103 | 1433 |
| Smoke-consumer | J. M. Kersey | 731,373 | June 16 | 3379 | 755 | 104 | 1862 |
| Smoke-consumer | H. R. Ellsworth | 739,659 | Sept. 22 | 4090 | 911 | 106 | 924 |
| Smoke-consumer | L. H. Snoor | 742,363 | Oct. 27 | 3841 | 862 | 106 | 2106 |
| Smoke-consumer | J. Toohey | 744,131 | Nov. 17 | 2636 | 562 | 107 | 591 |
| Smoke-consumer | H. Wilkins | 746,426 | Dec. 8 | 2033 | 466 | 107 | 1552 |
| Smoke-consuming apparatus | J. A. Holthaus | 726,535 | Apr. 28 | 3934 | 889 | 103 | 2039 |
| Smoke-consuming apparatus | G. A. Doebbel | 727,106 | May 5 | 548 | 118 | 104 | 120 |
| Smoke-consuming apparatus | W. C. Courts | 744,905 | Nov. 24 | 4049 | 873 | 107 | 911 |
| Smoke-consuming apparatus for furnaces | J. Alves | 721,652 | Mar. 3 | 1 | 1 | 103 | 3 |
| Smoke-consuming apparatus for furnaces or boilers. | C. G. Bracklow, H. G. E. Timm, and H. Bünz. | 731,015 | June 16 | 2729 | 608 | 104 | 1730 |
| Smoke-consuming apparatus. Furnace | W. C. Courts | 720,229 | Feb. 10 | 1515 | 347, 348 | 102 | 1159 |
| Smoke-consuming apparatus. Furnace | J. F. Zaruba | 724,647 | Apr. 7 | 425 | 102 | 103 | 1260 |
| Smoke-consuming boiler-furnace | W. H. Daniels | 718,608 | Jan. 20 | 2081 | 453 | 102 | 477 |
| Smoke-consuming furnace | C. J. Shoemaker | 717,934 | Jan. 6 | 783 | 176 | 102 | 167 |
| Smoke-consuming furnace | H. E. Parson. (Reissue) | 12,072 | Jan. 6 | 1020 | 227, 228 | 102 | 220 |
| Smoke-consuming furnace | C. H. Eddins and C. Buddie | 720,571 | Feb. 17 | 2165 | 502 | 102 | 1310 |
| Smoke-consuming furnace | J. B. Harris | 721,698 | Mar. 3 | 89 | 18, 19 | 103 | 20 |
| Smoke-consuming furnace | E. W. Berry | 723,511 | Mar. 24 | 3473 | 777 | 103 | 771 |
| Smoke-consuming furnace | J. C. Smith | 724,058 | Mar. 31 | 4499 | 1013 | 103 | 1001 |
| Smoke-consuming furnace | W. Jourdan | 725,090 | Apr. 14 | 1252 | 282 | 103 | 1451 |
| Smoke-consuming furnace | J. A. McAllister | 727,410 | May 5 | 1086 | 238 | 104 | 234 |
| Smoke-consuming furnace | W. K. Clark and J. S. Du Quesne | 731,546 | June 23 | 3738 | 832, 833 | 104 | 1954 |
| Smoke-consuming furnace | R. Simms | 740,323 | Sept. 29 | 5341 | 1203 | 106 | 1205 |
| Smoke-consuming furnace | L. C. Mooney | 742,208 | Oct. 27 | 3551 | 792 | 106 | 2043 |
| Smoke-consuming furnace | C. W. Stanton | 748,432 | Dec. 29 | 5802 | 1322 | 107 | 2452 |
| Smoke-consuming furnace and damper-regulator therefor. | F. A. Kirby | 729,188 | May 26 | 4427 | 976 | 104 | 988 |
| Smoke-consuming means | G. Boullet | 722,940 | Mar. 17 | 2402 | 537 | 103 | 540 |
| Smoke consumption or prevention | H. L. Fulenwider and A. C. Wood | 745,006 | Nov. 24 | 4234 | 917, 918 | 107 | 948 |
| Smoke, fume, and gas condensing apparatus | R. Ogle | 736,294 | Aug. 11 | 2358 | 512 | 105 | 1505 |
| Smoke, fumes, or gases. Apparatus for condensing | W. B. Jackson | 723,531 | Mar. 24 | 3506 | 784, 785 | 103 | 778 |
| Smoke-guard support | W. C. Rood | 740,182 | Sept. 29 | 5075 | 1141 | 106 | 1151 |
| Smoke in furnaces. Preventing | J. Wilson and J. S. Kemp-Welch | 718,234 | Jan. 13 | 1329 | 294 | 102 | 300 |
| Smoke in furnaces. Preventing | J. Wilson and J. S. Kemp-Welch | 727,729 | May 12 | 1720 | 386 | 104 | 387 |
| Smoke-jack | A. D. Colton | 724,161 | Mar. 31 | 4710 | 1057 | 103 | 1044 |
| Smoke-machine | G. W. Heiland | 740,650 | Oct. 6 | 499 | 110 | 106 | 1353 |
| Smoke-preventer furnace | R. W. Cavenaugh | 740,743 | Oct. 6 | 662 | 150 | 106 | 1389 |
| Smoke-preventing furnace | A. W. Puddington | 741,069 | Oct. 13 | 1259 | 285, 286 | 106 | 1536 |
| Smoke-preventing furnace | W. A. Köneman | 741,346 | Oct. 13 | 1841 | 407 | 106 | 1660 |
| Smoke-preventing furnace | C. W. Smith | 747,007 | Dec. 15 | 3117 | 713, 714 | 107 | 1817 |
| Smoke-stack | P. Dickinson | 722,288 | Mar. 10 | 1182 | 261 | 103 | 267 |
| Smoke-stack attachment | G. C. Rand | 744,403 | Nov. 17 | 3155 | 677 | 107 | 705 |
| Smoke-stack. Reversible | S. T. Walton | 731,248 | June 16 | 3146 | 639 | 104 | 1813 |
| Smoke-stacks. Derrick for raising | J. G. Steiner | 731,079 | June 16 | 2840 | 631 | 104 | 1754 |
| Smoker's article | A. C. Cornell | 724,667 | Apr. 7 | 463 | 112 | 103 | 1268 |
| Smoking-device mouthpiece | J. E. Blake | 720,555 | Feb. 17 | 2131 | 493 | 102 | 1304 |
| Smoking-pipe | B. Ganim | 722,405 | Mar. 10 | 1391 | 307 | 103 | 312 |
| Smoking-pipe | I. and G. A. Pfortner | 738,235 | Sept. 8 | 1365 | 295 | 106 | 310 |
| Smokeless and coal-saving furnace | R. L. Walker | 732,909 | July 7 | 380 | 92 | 105 | 82 |
| Smoothing-irons. Heat-controller stand for electric | J. I. Ayer | 723,632 | Mar. 24 | 3686 | 826 | 103 | 815 |
| Smoothing-irons. Heat-controller stand for electric | J. I. Ayer | 723,633 | Mar. 24 | 3689 | 826 | 103 | 815 |
| Snap | F. L. Loree | 742,690 | Oct. 27 | 4429 | 1000 | 106 | 2229 |
| Snap-fastening | H. Booth | 740,518 | Oct. 6 | 264 | 52 | 106 | 1302 |
| Snap. Harness- | E. L. Maranville | 721,815 | Mar. 3 | 283 | 63 | 103 | 63 |
| Snap. Harness- | W. P. Morrow | 731,489 | June 23 | 3621 | 808 | 104 | 1931 |
| Snap-hook | A. L. Hines | 720,429 | Feb. 10 | 1872 | 426 | 102 | 1235 |
| Snap-hook | J. W. Collins | 720,673 | Feb. 17 | 2362 | 541 | 102 | 1348 |
| Snap-hook | R. W. Hubbard | 723,875 | Mar. 31 | 4123 | 930 | 103 | 925 |
| Snap-hook | F. J. Shephard | 725,158 | Apr. 14 | 1381 | 312 | 103 | 1478 |
| Snap-hook | C. E. Smith and G. H. Nearing | 729,802 | June 2 | 517 | 113 | 104 | 1233 |
| Snap-hook | W. Cooper | 731,023 | June 16 | 2738 | 610 | 104 | 1733 |
| Snap-hook | C. W. Carter | 731,162 | June 16 | 3004 | 667 | 104 | 1786 |

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| Snap-hook | V. D. Sibley | 733,921 | July 14 | 2214 | 519 | 105 | 481 |
| Snap-hook | R. R. Waddell | 734,380 | July 21 | 3109 | 731 | 105 | 691 |
| Snap-hook | J. A. Gavitt | 737,384 | Aug. 25 | 4382 | 977 | 105 | 1966 |
| Snap-hook | G. H. Steele | 737,790 | Sept. 1 | 437 | 93 | 106 | 96 |
| Snap-hook | T. Forstner | 739,661 | Sept. 22 | 4097 | 913 | 106 | 925 |
| Snap-hook | R. F. Covert | 741,014 | Oct. 13 | 1164 | 263 | 106 | 1514 |
| Snap-hook | W. A. Schleicher | 744,628 | Nov. 17 | 3527 | 761 | 107 | 781 |
| Snap-hook | J. F. Ellsworth | 744,860 | Nov. 24 | 3981 | 858 | 107 | 896 |
| Snap-hook | H. R. Meilicke | 747,745 | Dec. 22 | 4474 | 1009 | 107 | 2139 |
| Snap-hook. Double safety | J. S. Mugg | 720,050 | Feb. 10 | 1177 | 268 | 102 | 1089 |
| Snap-hook. Safety | O. W. Sanborn | 739,226 | Sept. 15 | 3280 | 727 | 106 | 733 |
| Snap-hook. Swivel | S. Phillips | 720,378 | Feb. 10 | 1789 | 405 | 102 | 1218 |
| Snap. Safety- | C. P. Allison | 730,075 | June 2 | 1007 | 225 | 104 | 1332 |
| Snap-switch | G. A. Mead | 718,495 | Jan. 13 | 1849 | 406 | 102 | 414 |
| Snap-switch | W. C. Tregoning | 720,858 | Feb. 17 | 2666 | 615 | 102 | 1414 |
| Snap-switch | F. L. Fenn | 729,744 | June 2 | 404 | 91 | 104 | 1211 |
| Snap-switch | R. H. Read | 738,941 | Sept. 15 | 2774 | 614 | 106 | 628 |
| Snapping-rolls | H. L. Ferris | 740,637 | Oct. 6 | 482 | 106 | 106 | 1350 |
| Snatch-block | E. S. Grammer | 737,222 | Aug. 25 | 4082 | 907 | 105 | 1902 |
| Snatch-block | F. M. Eby | 743,840 | Nov. 10 | 2041 | 433 | 107 | 451 |
| Snatch-block | D. E. Welsh | 743,965 | Nov. 10 | 2259 | 486 | 107 | 499 |
| Snoring-preventing device | S. A. Moulton | 746,869 | Dec. 15 | 2855 | 658 | 107 | 1758 |
| Snow-boat | S. S. Hansen | 736,386 | Aug. 18 | 2512 | 552 | 105 | 1554 |
| Snow-clearing machine | F. C. Harris | 724,469 | Apr. 7 | 94 | 23 | 103 | 1189 |
| Snow-excavator for railways, &c | O. B. H. Hanneborg | 721,697 | Mar. 3 | 87 | 18 | 103 | 19 |
| Snow-excluder | L. L. Leathers | 719,344 | Jan. 27 | 3473 | 773 | 102 | 780 |
| Snow-melting apparatus | A. E. Riedel | 734,195 | July 21 | 2765 | 648<br>649 | 105 | 617 |
| Snow-melting machine. Automatic | A. Bass | 738,146 | Sept. 8 | 1186 | 261 | 106 | 271 |
| Snow or road roller | C. W. Carter | 732,826 | July 7 | 242 | 60 | 105 | 57 |
| Snow-plow | J. W. Russell | 721,241 | Feb. 24 | 3461 | 787<br>788 | 102 | 1601 |
| Snow-plow | F. A. Brigham | 728,197 | May 19 | 2580 | 576 | 104 | 588 |
| Snow-plow | P. B. Brazel | 729,265 | May 26 | 4563 | 1007<br>1008 | 104 | 1016 |
| Snow-plow | C. L. Wykoff | 731,419 | June 16 | 3476 | 777 | 104 | 1881 |
| Snow-plow | P. J. Lunden | 732,646 | June 30 | 5835 | 1292 | 104 | 2407 |
| Snow-plow | W. F. Wheeler | 734,026 | July 21 | 2438 | 570 | 105 | 544 |
| Snow-plow | J. E. Cailyer | 739,387 | Sept. 22 | 3576 | 799 | 106 | 812 |
| Snow-plow | F. Kiefer and C. Freeman | 740,572 | Oct. 6 | 376 | 77, 78 | 106 | 1327 |
| Snow-plow | W. S. H. Heermans | 745,608 | Dec. 1 | 542 | 136 | 107 | 1212 |
| Snow-plow and road-icer | M. Ferguson | 717,561 | Jan. 6 | 74 | 19 | 102 | 18 |
| Snow-plow coupling device | J. W. Russell | 739,348 | Sept. 22 | 3497 | 782 | 106 | 795 |
| Snow-removing device | J. A. Manion | 720,942 | Feb. 17 | 2829 | 648 | 102 | 1449 |
| Snow-removing flanger | J. W. Russell | 722,187 | Mar. 3 | 975 | 216<br>217 | 103 | 206 |
| Snuff or tobacco box | F. M. Rowe | 717,717 | Jan. 6 | 349 | 85 | 102 | 75 |
| Soap cake | R. A. Jones | 740,440 | Oct. 6 | 109 | 23 | 106 | 1270 |
| Soap cakes provided with inserts. Making | W. Berry | 740,387 | Oct. 6 | 5 | 2 | 106 | 1246 |
| Soap cutter and spreader | J. J. Gaynor. (Reissue) | 12,100 | Mar. 17 | 2917 | 654 | 103 | 648 |
| Soap-dispensing apparatus | N. J. Crowell, L. R. Wanger, and S. Wright. | 717,817 | Jan. 6 | 567 | 126<br>127<br>128 | 102 | 122 |
| Soap-feeding receptacle. Liquid- | G. A. Schmidt, Jr | 741,981 | Oct. 20 | 3078 | 688 | 106 | 1934 |
| Soap-flaker | W. G. Hawley | 739,175 | Sept. 15 | 3185 | 704 | 106 | 712 |
| Soap-frame | E. A. Houchin and A. Huber | 740,438 | Oct. 6 | 106 | 22 | 106 | 1269 |
| Soap-frame | H. D. Winton | 744,150 | Nov. 17 | 2678 | 570<br>571 | 107 | 599 |
| Soap-granulator | C. A. Samuelson and J. A. Lynn | 719,881 | Feb. 3 | 852 | 199 | 102 | 1004 |
| Soap-handle | E. J. Howard | 727,368 | May 5 | 1018 | 221 | 104 | 219 |
| Soap-holder | H. Fitzgerald | 740,264 | Sept. 29 | 5230 | 1176 | 106 | 1182 |
| Soap-holder | J. S. Roake | 740,469 | Oct. 6 | 166 | 32 | 106 | 1281 |
| Soap-lock | J. C. Corey | 721,021 | Feb. 17 | 2984 | 686 | 102 | 1481 |
| Soap-manufacturing apparatus | J. Schwechler | 720,535 | Feb. 10 | 2078 | 480 | 102 | 1276 |
| Soap-manufacturing apparatus | A. Flagendorf | 746,484 | Dec. 8 | 2128 | 489 | 107 | 1574 |
| Soap-mold | V. Alexa | 724,771 | Apr. 7 | 659 | 153 | 103 | 1309 |
| Soap-molding machine | K. Schnetzer | 735,304 | Aug. 4 | 514 | 104 | 105 | 1090 |
| Soap-press | C. Drolet | 736,706 | Aug. 18 | 3135 | 690<br>691 | 105 | 1683 |
| Soap-supplier | J. Schwechler | 742,912 | Nov. 3 | 160 | 37 | 107 | 35 |
| Soap-wrapping machine | J. E. Robinson | 736,634 | Aug. 18 | 2990 | 658<br>659 | 105 | 1653 |
| Soapsuds. Treating hot refuse | S. Turner and F. W. Akeroyd | 743,959 | Nov. 10 | 2251 | ------ | 107 | 497 |
| Sock | W. C. Hall | 719,108 | Jan. 27 | 3039 | 676 | 102 | 688 |
| Socket-cover and shade-holder. Combined | E. Gothberg | 727,934 | May 12 | 2113 | 470 | 104 | 468 |
| Socket extension-tap | H. F. Holland | 721,042 | Feb. 17 | 3030 | 695 | 102 | 1492 |
| Socket member | J. V. Washburne | 746,616 | Dec. 8 | 2360 | 542 | 107 | 1627 |
| Socket-wrench | C. E. Brattlof | 737,902 | Sept. 1 | 692 | 148 | 106 | 152 |
| Sod-cutter | J. M. Harlan | 743,277 | Nov. 3 | 893 | 194 | 107 | 189 |
| Soda acetate. Making | W. M. Grosvenor | 741,243 | Oct. 13 | 1601 | ------ | 106 | 1608 |
| Soda and barium sulfate. Producing caustic | C. B. Jacobs | 737,740 | Sept. 1 | 344 | ------ | 106 | 78 |
| Soda-ash dust. Apparatus for retaining | C. P. Carlson | 727,088 | May 5 | 510 | 109 | 104 | 112 |
| Soda. Cleaning | D. W. Gill | 725,553 | Apr. 14 | 2102 | ------ | 103 | 1630 |
| Soda-fountain | J. B. Herron | 719,334 | Jan. 27 | 3451 | 768 | 102 | 775 |
| Soda-water fountains. Sanitary syrup-receptacle for | F. H. Hecker | 746,832 | Dec. 15 | 2781 | 641 | 107 | 1741 |
| Sodium. Acetylsalicylate of | B. R. Seifert and F. R. Engelhardt | 740,702 | Oct. 6 | 583 | ------ | 106 | 1373 |
| Sodium bicarbonate. Making | F. M. and D. D. Spence, T. J. I. Craig, and J. J. Hood. | 725,501 | Apr. 14 | 2015 | ------ | 103 | 1612 |
| Sodium. Manufacture of | T. Ewan | 745,958 | Dec. 1 | 1188 | 266 | 107 | 1353 |
| Sodium oxid. Making | A. Bischler | 731,746 | June 23 | 4100 | ------ | 104 | 2026 |
| Sodium peroxid. Producing | C. E. Baker and A. W. Burwell | 739,375 | Sept. 22 | 3546 | ------ | 106 | 806 |
| Sodium sulfite. Obtaining | H. H. Wing | 743,209 | Nov. 3 | 752 | ------ | 107 | 157 |
| Solder | H. W. Neild and F. Campbell | 722,273 | Mar. 10 | 1161 | ------ | 103 | 262 |
| Solder | E. C. Rice and H. F. Monk | 724,503 | Apr. 7 | 151 | ------ | 103 | 1202 |
| Solder | R. Bormann | 736,812 | Aug. 18 | 3331 | ------ | 105 | 1724 |
| Solder for aluminium | R. Fortun and E. Semprun | 736,712 | Aug. 18 | 3150 | ------ | 105 | 1687 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Solder from sheet-metal cans. Means for removing superfluous | O. S. Fellows | 725,429 | Apr. 14 | 1861 | 416, 417 | 103 | 1578 |
| Solder from sheet-metal cans. Means for removing superfluous | O. S. Fellows | 725,430 | Apr. 14 | 1866 | 417, 418 | 103 | 1580 |
| Solder from sheet-metal cans. Means for removing superfluous | O. S. Fellows | 727,824 | May 5 | 933 | 203 | 104 | 201 |
| Solder-saving machine | J. D. Kyser and J. C. Morgan | 746,108 | Dec. 8 | 1456 | 327 | 107 | 1429 |
| Solder to vessels. Mechanism for preparing and applying | W. Rubin | 743,568 | Nov. 10 | 1547 | 323, 324 | 107 | 347 |
| Soldering apparatus. Can- | F. P. McColl | 717,896 | Jan. 6 | 721 | 161 | 102 | 154 |
| Soldering-block. Adjustable | A. R. Webster | 746,422 | Dec. 8 | 2028 | 465 | 107 | 1551 |
| Soldering caps on cans. Machine for | W. W. Lawder | 718,210 | Jan. 13 | 1287 | 283 | 102 | 292 |
| Soldering flux for aluminium | C. Ellis and O. J. Flanigan | 746,802 | Dec. 15 | 2708 | ------ | 107 | 1724 |
| Soldering-iron | C. R. Gutner | 724,853 | Apr. 7 | 820 | 188 | 103 | 1344 |
| Soldering-iron | R. E. Manley | 736,283 | Aug. 11 | 2341 | 508 | 105 | 1502 |
| Soldering-iron. Electric | J. I. Ayer | 731,838 | June 23 | 4268 | 950 | 104 | 2064 |
| Soldering-iron. Gasolene | F. G. and H. R. Emmelmann | 740,112 | Sept. 29 | 4950 | 1111 | 106 | 1125 |
| Soldering-iron handle. Detachable | J. J. Vigo | 739,125 | Sept. 15 | 3104 | 687 | 106 | 695 |
| Soldering-iron. Self-heating | F. E. Renick | 739,719 | Sept. 22 | 4195 | 938 | 106 | 947 |
| Soldering-iron stand. Electric | J. I. Ayer | 723,634 | Mar. 24 | 3689 | 827 | 103 | 816 |
| Soldering-machine | J. Black and F. J. Smith | 729,261 | May 26 | 4558 | 1005, 1006 | 104 | 1015 |
| Soldering-machine attachment. Can- | F. N. Prince | 732,780 | July 7 | 149 | 40 | 105 | 36 |
| Soldering-machine bucket. Can- | W. R. Gorrell | 719,938 | Feb. 3 | 933 | 218 | 102 | 1022 |
| Soldering machine. Can- | J. G. Hodgson | 723,388 | Mar. 24 | 3245 | 727, 728 | 103 | 725 |
| Soldering machine. Can- | G. F. Leiger | 732,003 | June 23 | 4570 | 1019, 1020 | 104 | 2128 |
| Soldering machine. Can- | C. H. Ayars | 732,611 | June 30 | 5772 | 1279, 1280 | 104 | 2393 |
| Soldering machine. Can- | J. A. Steward | 732,970 | July 7 | 476 | 118, 119 | 105 | 102 |
| Soldering machine. Can- | S. A. Baker | 738,972 | Sept. 15 | 2825 | 626, 627 | 106 | 638 |
| Soldering machine. Can- | W. Cameron | 741,222 | Oct. 13 | 1569 | 353 | 106 | 1601 |
| Soldering machine. Can-body- | G. F. Leiger | 732,005 | June 23 | 4589 | 1024, 1025 | 104 | 2131 |
| Soldering machine. Side-seam can- | E. J. Moore | 733,413 | July 14 | 1288 | 304 | 105 | 289 |
| Soldering of aluminium | H. Lange | 733,662 | July 14 | 1719 | ------ | 105 | 379 |
| Soldering or joining can-body seams. Apparatus for | G. W. Berry | 724,785 | Apr. 7 | 689 | 161, 162 | 103 | 1316 |
| Soldering-sticks. Composition for making | O. J. Flanigan | 717,833 | Jan. 6 | 611 | ------ | 102 | 131 |
| Soldering the covers or bottoms of tin boxes. Machine for | H. Finne, Jr | 744,738 | Nov. 24 | 3767 | 812 | 107 | 851 |
| Soldering the side seams of sheet-metal bodies. Horn for | R. T. Smith and D. M. Monroe | 725,164 | Apr. 14 | 1392 | 314 | 103 | 1480 |
| Soldering-tool. Self-heating | C. J. Thorngren | 718,034 | Jan. 6 | 969 | 214 | 102 | 208 |
| Sole and heel edge trimming machine | F. L. Champine | 743,448 | Nov. 10 | 1300 | 267 | 107 | 293 |
| Sole and heel protecting device for boots, shoes, &c. | J. T. Sutcliffe | 731,970 | June 23 | 4498 | 1004 | 104 | 2114 |
| Sole and heel. Shoe | F. A. Salaman | 738,735 | Sept. 8 | 2364 | 519 | 106 | 521 |
| Sole-blocking machine | F. O. Schryburt | 726,768 | Apr. 28 | 4384 | 986, 987 | 103 | 2130 |
| Sole. Boot or shoe | E. Dimant | 726,652 | Apr. 28 | 4160 | 938 | 103 | 2084 |
| Sole-edge-burnishing machine | C. F. Stackpole | 740,601 | Oct. 6 | 428 | 93, 94 | 106 | 1338 |
| Sole-edge-burnishing machine | C. F. Stackpole | 740,602 | Oct. 6 | 432 | 94 | 106 | 1339 |
| Sole for shoes. Detachable | J. P. Steele | 737,880 | Sept. 1 | 658 | 140 | 106 | 145 |
| Sole-leveling machine | B. Phillips | 722,889 | Mar. 17 | 2326 | 520 | 103 | 524 |
| Sole-leveling machine | H. A. Webster | 727,516 | May 5 | 1283 | 286, 287 | 104 | 276 |
| Sole-leveling machine | H. A. Webster | 729,820 | June 2 | 550 | 121 | 104 | 1241 |
| Sole. Metal shoe | E. G. Lutz | 729,371 | May 26 | 4746 | 1049 | 104 | 1054 |
| Sole-pressing machines. Adjusting device for forms of | E. E. Winkley | 746,224 | Dec. 8 | 1674 | 372 | 107 | 1477 |
| Sole rough-rounding and channeling machine | J. L. Kieffer | 723,468 | Mar. 24 | 3378 | 756, 757, 758 | 103 | 753 |
| Sole. Shoe | T. Fadden | 748,490 | Dec. 29 | 5914 | 1343 | 107 | 2477 |
| Sole-splitting machine | F. M. Furber | 745,591 | Dec. 1 | 513 | 120 | 107 | 1206 |
| Sole stretching machine. Boot or shoe | C. R. Johnston | 744,078 | Nov. 17 | 2538 | 543 | 107 | 570 |
| Soles and heels of boots or shoes. Wheel for smoothing the edges of | P. Duplessis | 720,009 | Feb. 10 | 1096 | 252 | 102 | 1072 |
| Soles. Apparatus for applying cement to | G. L. Rollins | 743,929 | Nov. 10 | 2196 | 474 | 107 | 484 |
| Soles. Elastic tap for boot or shoe | W. C. Corman | 745,792 | Dec. 1 | 861 | 194 | 107 | 1284 |
| Soles. Machine for preparing boot or shoe | J. Keats | 742,444 | Oct. 27 | 3984 | 894 | 106 | 2134 |
| Soles of boots or shoes or securing together layers of material. Attaching | L. A. Casgrain | 721,016 | Feb. 17 | 2977 | 684 | 102 | 1480 |
| Soles of boots or shoes to their inner soles. Attaching the outer | L. A. Casgrain | 724,432 | Apr. 7 | 23 | 7 | 103 | 1175 |
| Solidifying and excavating the soil and constructing tunnels. | C. Sooysmith | 720,384 | Feb. 10 | 1795 | 408 | 102 | 1219 |
| Solutions. Concentrating | A. Gürber | 723,152 | Mar. 17 | 2773 | 623 | 103 | 617 |
| Soot-cleaner | E. Green | 735,967 | Aug. 11 | 1775 | 380 | 105 | 1379 |
| Sorting-machine | H. Speiser | 739,736 | Sept. 22 | 4220 | 947 | 106 | 955 |
| Sound-box | W. B. Outten | 719,361 | Jan. 27 | 3508 | 780 | 102 | 788 |
| Sound-box for sound recording and reproducing machines | E. H. Mobley | 744,586 | Nov. 17 | 3460 | 786 | 107 | 768 |
| Sound. Means for diminishing, deadening, and preventing | H. W. Blair | 740,081 | Sept. 29 | 4898 | 1098 | 106 | 1113 |
| Sound or speech. Diaphragm for machines for recording or reproducing | J. C. English | 728,382 | May 19 | 2948 | 650 | 104 | 666 |
| Sound-producing device suitable for sirens or like instruments. | J. P. Northey | 736,428 | Aug. 18 | 2592 | 568 | 105 | 1571 |
| Sound-producing records. Return mechanism for | C. C. and A. C. Clifford | 747,299 | Dec. 15 | 3672 | 829 | 107 | 1942 |
| Sound receivers or transmitters. Sanitary attachment for | A. Levi | 743,896 | Nov. 10 | 2144 | 461 | 107 | 472 |
| Sound-record | T. H. Macdonald. (Reissue) | 12,096 | Mar. 10 | 1853 | 413 | 103 | 414 |
| Sound-record | E. R. Johnson | 739,318 | Sept. 22 | 3449 | 770 | 106 | 785 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Sound-record cylinders. Apparatus for forming duplicate | A. N. Petit | 728,607 | May 19 | 3385 | 750 | 104 | 758 |
| Sound-record cylinders. Forming duplicate | A. N. Petit | 735,579 | Aug. 4 | 1050 | 223 | 105 | 1204 |
| Sound-record cylinders. Forming metal matrices for duplicating | A. N. Petit | 736,773 | Aug. 18 | 3254 | 719 | 105 | 1708 |
| Sound-record cylinders. Metal matrix for forming duplicate | A. N. Petit | 739,713 | Sept. 22 | 4186 | 936 | 106 | 945 |
| Sound record or blank | W. H. Miller and A. N. Pierman | 726,966 | May 5 | 268 | 60 | 104 | 58 |
| Sound-records. Making | T. H. Macdonald. (Reissue) | 12,095 | Mar. 10 | 1852 | 413 | 103 | 414 |
| Sound records or blanks. Making | W. H. Miller and A. N. Pierman | 726,965 | May 5 | 266 | 60 | 104 | 58 |
| Sound-records. Removing | B. Klepper | 741,047 | Oct. 13 | 1216 | ..... | 106 | 1526 |
| Sound-recorder. Automatic | V. H. Emerson and F. L. Capps | 727,921 | May 12 | 2089 | 464 | 104 | 463 |
| Sound recording and reproducing machine | G. H. Hall | 722,977 | Mar. 17 | 2460 | 551 | 103 | 552 |
| Sound recording and reproducing machine sound-box. | G. K. Cheney | 724,435 | Apr. 7 | 28 | 8 | 103 | 1176 |
| Sound-recording machine | E. R. Johnson | 741,500 | Oct. 13 | 2126 | 474 | 106 | 1720 |
| Sound-recording tablet | J. W. Jones | 727,960 | May 12 | 2165 | 483 | 104 | 480 |
| Sound-reproducer | W. Tures | 722,776 | Mar. 17 | 2110 | 471 | 103 | 482 |
| Sound-reproducer | T. H. Macdonald | 747,991 | Dec. 29 | 4989 | 1127 | 107 | 2275 |
| Sound-reproducers. Stylus or needle for | V. H. Emerson | 736,948 | Aug. 25 | 3600 | 798 | 105 | 1801 |
| Sound-reproducing and scene-displaying apparatus | C. F. Mensing | 745,216 | Nov. 24 | 4686 | 1023 | 107 | 1042 |
| Sound-reproducing and stereopticon apparatus. Combined | C. F. Mensing | 745,218 | Nov. 24 | 4691 | 1024 | 107 | 1043 |
| Sound-reproducing machine | E. D. Gleason | 732,292 | June 30 | 5163 | 1147 | 104 | 2263 |
| Sound-reproducing machine | J. Wellner | 734,206 | July 21 | 2780 | 652 | 105 | 621 |
| Sound-reproducing records. Making | F. W. H. Clay | 728,867 | May 26 | 3865 | 860 | 104 | 873 |
| Sound-transmitter appliance | S. J. Ballard | 740,512 | Oct. 6 | 245 | 49 | 106 | 1298 |
| Sound-vibrations in water. Automatic means for producing | A. J. Mundy | 725,755 | Apr. 21 | 2487 | 564, 565 | 103 | 1729 |
| Sound-vibrations. Instrument for recording and reproducing | E. J. Romano | 729,798 | June 2 | 505 | 111, 112 | 104 | 1231 |
| Sounds. Flexible tube for conveying and receiving articulate | F. W. Wood | 735,645 | Aug. 4 | 1168 | 248 | 105 | 1229 |
| Sounding apparatus | J. F. Lewis | 718,006 | Jan. 6 | 926 | 206 | 102 | 199 |
| Sounding apparatus. Navigational | J. C. Dobbie | 728,553 | May 19 | 3271 | 724 | 104 | 731 |
| Souvenir | G. Fantoni | 740,834 | Oct. 6 | 849 | 190 | 106 | 1426 |
| Sower. Broadcast hand seed- | E. C. Smith | 721,473 | Feb. 24 | 3876 | 881 | 102 | 1687 |
| Sower. Broadcast seed- | T. V. Page, J. T. Huntington, and M. C. Walls. | 725,474 | Apr. 14 | 1958 | 441 | 103 | 1600 |
| Sower. Seed- | W. H. Bohr | 739,752 | Sept. 22 | 4251 | 952 | 106 | 960 |
| Sowing machine. Seed- | T. Adair | 746,654 | Dec. 15 | 2450 | 560 | 107 | 1667 |
| Spacer and matrix | M. Reid | 724,332 | Mar. 31 | 5054 | 1131 | 103 | 1113 |
| Spacing instrument | D. W. Stinson | 736,168 | Aug. 11 | 2139 | 460 | 105 | 1456 |
| Spacing-machine | W. A. Gray | 745,723 | Dec. 1 | 733 | 167, 168 | 107 | 1254 |
| Spacing mechanism | W. C. Bray | 743,684 | Nov. 10 | 1753 | 370 | 107 | 390 |
| Spacing-table | A. Clarke | 739,060 | Sept. 15 | 2973 | 659, 660 | 106 | 669 |
| Spade-handle | O. S. Haukvik | 744,756 | Nov. 24 | 3796 | 817 | 107 | 857 |
| Spanner or wrench | J. Chandler | 736,687 | Aug. 18 | 3099 | 683 | 105 | 1675 |
| Spanner-wrench. Adjustable | J. C. Dufresne | 738,015 | Sept. 1 | 920 | 203 | 106 | 201 |
| Spark-arrester | T. J. Hawkins | 731,898 | June 23 | 4369 | 974 | 104 | 2085 |
| Spark-arrester | H. S. Wainwright | 737,797 | Sept. 1 | 450 | 96, 97 | 106 | 99 |
| Spark-arrester | H. S. Wainwright | 737,799 | Sept. 1 | 455 | 98 | 106 | 101 |
| Spark-arrester | H. S. Wainwright | 737,800 | Sept. 1 | 456 | 99 | 106 | 101 |
| Spark-arrester | H. S. Wainwright | 737,801 | Sept. 1 | 459 | 99, 100 | 106 | 102 |
| Spark-arrester | H. S. Wainwright | 737,802 | Sept. 1 | 461 | 101, 102 | 106 | 103 |
| Spark-arrester | H. S. Wainwright | 737,803 | Sept. 1 | 464 | 102, 103 | 106 | 104 |
| Spark-arrester | F. E. Rogers and E. Hosking | 739,225 | Sept. 15 | 3279 | 726 | 106 | 733 |
| Spark-arrester | F. J. Wilke | 740,503 | Oct. 6 | 233 | 46 | 106 | 1296 |
| Spark-arrester | J. W. Lyons | 742,339 | Oct. 27 | 3799 | 851 | 106 | 2097 |
| Spark-arrester | I. N. Kalbaugh | 746,522 | Dec. 8 | 2194 | 503 | 107 | 1588 |
| Spark-arrester | J. Whitehouse | 748,550 | Dec. 29 | 6039 | 1367 | 107 | 2506 |
| Spark arrester and extinguisher | A. P. Zink | 747,830 | Dec. 22 | 4641 | 1048 | 107 | 2177 |
| Spark-catcher. Locomotive | O. H. Heydemann | 724,863 | Apr. 7 | 832 | 192 | 103 | 1347 |
| Spark-extinguisher | J. W. Bryant | 740,227 | Sept. 29 | 5166 | 1160, 1161 | 106 | 1169 |
| Spark-gap | J. O. Heinze, Jr | 740,428 | Oct. 6 | 88 | 18 | 106 | 1266 |
| Sparking device | C. L. Barker | 745,474 | Dec. 1 | 313 | 74 | 107 | 1166 |
| Sparking device | J. S. Thurman | 746,406 | Dec. 8 | 1996 | 455 | 107 | 1545 |
| Sparking mechanism | J. S. Dikeman | 730,519 | June 9 | 1825 | 406 | 104 | 1519 |
| Sparking plug | W. Barber | 732,032 | June 30 | 4646 | 1038 | 104 | 2157 |
| Sparking plug | J. C. Anderson | 732,812 | July 7 | 216 | 54 | 105 | 49 |
| Sparking plug | H. C. Folger | 738,992 | Sept. 15 | 2853 | 633 | 106 | 644 |
| Sparking plug | C. E. L. Lipman | 746,968 | Dec. 15 | 3046 | 699 | 107 | 1801 |
| Speaking apparatus | P. Vogel | 746,609 | Dec. 8 | 2347 | 538 | 107 | 1624 |
| Speaking-tube mouthpiece | J. C. Bahr | 718,809 | Jan. 20 | 2451 | 542 | 102 | 550 |
| Speaking-tube mouthpiece | W. Cartwright | 720,110 | Feb. 10 | 1296 | 296 | 102 | 1115 |
| Speaking-tube mouthpiece | J. Finck and H. Herbstritt | 729,853 | June 2 | 611 | 134, 135 | 104 | 1253 |
| Spectacle bridge. Rimless- | F. A. Stevens | 724,755 | Apr. 7 | 628 | 147 | 103 | 1303 |
| Spectacle eye-shield | G. Moritz | 730,192 | June 2 | 1190 | 268 | 104 | 1370 |
| Spectacle-fitting | E. B. Temple | 735,917 | Aug. 11 | 1686 | 359 | 105 | 1359 |
| Spectacle-frames, &c. Connection for | S. C. Laflin | 746,966 | Dec. 15 | 3043 | 698 | 107 | 1801 |
| Spectacle-holder | E. H. Ford | 721,881 | Mar. 3 | 414 | 91 | 103 | 91 |
| Spectacle-holder | A. W. Rogers | 727,204 | May 5 | 714 | 153 | 104 | 155 |
| Spectacle-holder | R. M. Grooms | 732,547 | June 30 | 5655 | 1254 | 104 | 2366 |
| Spectacle or eyeglass mounting | I. Fox | 729,152 | May 26 | 4367 | 964 | 104 | 975 |
| Spectacles | J. C. Anderson | 724,151 | Mar. 31 | 4694 | 1054 | 103 | 1040 |
| Spectacles | J. C. Wells | 729,247 | May 26 | 4536 | 999 | 104 | 1010 |
| Spectacles | J. S. Baker | 732,500 | June 30 | 5571 | 1234 | 104 | 2346 |
| Spectacles | J. C. Anderson | 748,459 | Dec. 29 | 5854 | 1331 | 107 | 2463 |
| Spectacles or eyeglasses | B. T. Trueblood | 720,859 | Feb. 17 | 2667 | 615 | 102 | 1415 |

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| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drgs. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Spectacles or eyeglasses | C. B. Bishop | 746,448 | Dec. 8 | 2061 | 475 | 107 | 1559 |
| Spectacles. Shooting | J. Ender | 737,376 | Aug. 25 | 4372 | 974 | 105 | 1964 |
| Spectacles. Temple for | C. A. Zeiser | 731,830 | June 23 | 4255 | 947 | 104 | 2061 |
| Speculum. Nasal | O. B. Monosmith | 730,284 | June 9 | 1391 | 306 | 104 | 1427 |
| Speculum. Rectal or vaginal | O. H. Kohlhaas | 726,704 | Apr. 28 | 4259 | 963 | 103 | 2105 |
| Speech receiver or transmitter guard | S. J. Ballard | 719,987 | Feb. 10 | 1036 | 242 | 102 | 1059 |
| Speech receivers and transmitters. Guard for | S. J. Ballard | 732,915 | July 7 | 390 | 95 | 105 | 84 |
| Speed and direction indicator | B. A. Fiske | 740,547 | Oct. 6 | 315 | 65 | 106 | 1312 |
| Speed and reversing mechanism. Variable | R. B. Hain | 733,193 | July 7 | 871 | 211 | 105 | 183 |
| Speed and reversing mechanism. Variable | F. O. Farwell | 743,156 | Nov. 3 | 652 | 141 | 107 | 136 |
| Speed and reversing mechanism. Variable | W. Decker | 743,467 | Nov. 10 | 1352 | 277 | 107 | 304 |
| Speed-changer | W. L. Schellenbach | 723,926 | Mar. 31 | 4232 | 952, 953 | 103 | 948 |
| Speed-changer | C. F. Roper | 731,503 | June 23 | 3650 | 814 | 104 | 1937 |
| Speed-changing and reversing mechanism | C. C. Riotte | 721,093 | Feb. 17 | 3129 | 719 | 102 | 1515 |
| Speed-changing and reversing mechanism | A. C. Sargent | 722,458 | Mar. 10 | 1496 | 330 | 103 | 335 |
| Speed-changing apparatus. Electrically-controlled | L. J. Le Pontois | 731,470 | June 23 | 3591 | 800, 801 | 104 | 1924 |
| Speed-changing apparatus. Electrically-controlled | L. J. Le Pontois | 731,474 | June 23 | 3597 | 802, 803 | 104 | 1926 |
| Speed-changing box | R. K. Le Blond and W. F. Groene | 727,977 | May 12 | 2185 | 487 | 104 | 483 |
| Speed-changing device | J. H. and H. H. Dow | 718,922 | Jan. 20 | 2660 | 597 | 102 | 594 |
| Speed-changing device | N. Lombard | 741,686 | Oct. 20 | 2491 | 556, 557 | 106 | 1812 |
| Speed-changing mechanism | R. K. Le Blond and W. F. Groene | 725,100 | Apr. 14 | 1273 | 287 | 103 | 1455 |
| Speed-changing mechanism | A. E. Robinson and C. F. Laur | 725,141 | Apr. 14 | 1349 | 304, 305 | 103 | 1470 |
| Speed-changing mechanism | W. F. Barnes | 735,012 | July 28 | 4298 | 999 | 105 | 952 |
| Speed-changing mechanism | J. D. Curtis | 735,068 | Aug. 4 | 36 | 11 | 105 | 989 |
| Speed-changing mechanism. Electrically-controlled | L. J. Le Pontois | 731,472 | June 23 | 3594 | 801 | 104 | 1925 |
| Speed-changing mechanism for machine-tools | J. Mills | 727,404 | May 5 | 1073 | 234 | 104 | 232 |
| Speed device. Variable | H. E. Kellogg | 738,814 | Sept. 15 | 2550 | 560, 561 | 106 | 579 |
| Speed driving mechanism. Variable | A. Herbert and P. V. Vernon | 742,025 | Oct. 20 | 3167 | 707 | 106 | 1952 |
| Speed-indicating and distance-measuring mechanism | J. W. Darley, Jr | 733,816 | July 14 | 2000 | 471, 472 | 105 | 438 |
| Speed indicating and regulating apparatus | A. Wetzel | 726,125 | Apr. 21 | 3127 | 705 | 103 | 1862 |
| Speed-indicating apparatus. Vessel | S. J. Lawrence | 738,458 | Sept. 8 | 1842 | 400 | 106 | 411 |
| Speed-indicating device | T. D. and J. D. Millea, M. J. and E. J. Carroll. | 732,953 | July 7 | 451 | 112 | 105 | 98 |
| Speed-indicating mechanism | J. W. Darley, Jr | 733,817 | July 14 | 2008 | 472, 473, 474 | 105 | 440 |
| Speed-indicator | C. E. Kelly | 721,199 | Feb. 24 | 3356 | 767 | 102 | 1580 |
| Speed-indicator | C. E. Kelly | 721,200 | Feb. 24 | 3358 | 767, 768 | 102 | 1581 |
| Speed-indicator | J. Richi | 730,298 | June 9 | 1412 | 310 | 104 | 1432 |
| Speed-indicator | M. R. Hutchison | 731,368 | June 16 | 3364 | 752 | 104 | 1858 |
| Speed-indicator | E. J. Hodgson | 738,683 | Sept. 8 | 2282 | 502 | 106 | 504 |
| Speed-indicator | H. P. Churchill | 742,968 | Nov. 3 | 256 | 57 | 107 | 56 |
| Speed-indicator | F. L. Ebelhare | 744,960 | Nov. 24 | 4159 | 899 | 107 | 932 |
| Speed-indicator. Magnetic | S. B. Storer | 743,585 | Nov. 10 | 1580 | 331 | 107 | 354 |
| Speed-indicator. Magnetic | S. B. Storer | 743,586 | Nov. 10 | 1582 | 331 | 107 | 354 |
| Speed-indicator. Rotary | H. W. Schlotfeldt | 740,698 | Oct. 6 | 578 | 130 | 106 | 1372 |
| Speed-indicator. Vehicle | A. L. McMurtry | 722,532 | Mar. 10 | 1638 | 361 | 103 | 368 |
| Speed-limiting means. Safety | G. W. Henricks. (Reissue) | 12,165 | Nov. 3 | 1201 | 248, 249 | 107 | 257 |
| Speed mechanism | J. S. Heath and E. Baseman | 725,959 | Apr. 21 | 2849 | 647 | 103 | 1805 |
| Speed mechanism | E. Baseman | 735,446 | Aug. 4 | 795 | 169 | 105 | 1150 |
| Speed mechanism. Reversible and variable | J. Banwell | 723,228 | Mar. 24 | 2933 | 657 | 103 | 665 |
| Speed mechanism. Variable | G. H. Follows | 719,102 | Jan. 27 | 3028 | 674 | 102 | 686 |
| Speed mechanism. Variable | G. H. Follows | 719,103 | Jan. 27 | 3032 | 675 | 102 | 687 |
| Speed mechanism. Variable | F. J. Watt | 725,899 | Apr. 21 | 2744 | 624 | 103 | 1783 |
| Speed mechanism. Variable | H. M. Norris | 726,976 | May 5 | 293 | 66 | 104 | 63 |
| Speed mechanism. Variable | A. Mill | 728,266 | May 19 | 2727 | 608 | 104 | 619 |
| Speed mechanism. Variable | F. C. Miller | 728,268 | May 19 | 2734 | 608 | 104 | 621 |
| Speed mechanism. Variable | A. A. De Loach | 729,289 | May 26 | 4616 | 1021 | 104 | 1027 |
| Speed mechanism. Variable | G. C. Nelson | 730,146 | June 2 | 1120 | 251, 252 | 104 | 1355 |
| Speed mechanism. Variable | H. A. Knox | 734,891 | July 28 | 4079 | 950, 951 | 105 | 906 |
| Speed mechanism. Variable | H. B. Brazier | 735,456 | Aug. 4 | 813 | 173, 174 | 105 | 1153 |
| Speed mechanism. Variable | R. Lang | 741,510 | Oct. 13 | 2145 | 477 | 106 | 1724 |
| Speed mechanism. Variable | E. R. Seward | 742,361 | Oct. 27 | 3886 | 861, 862 | 106 | 2105 |
| Speed mechanism. Variable | N. D. Chard | 744,678 | Nov. 17 | 3613 | 779 | 107 | 800 |
| Speed-recorder | T. A. Meyers | 746,865 | Dec. 15 | 2844 | 656 | 107 | 1753 |
| Speed-regulating device | M. W. Alexander | 738,871 | Sept. 15 | 2657 | 586 | 106 | 603 |
| Speed-regulator | V. G. Apple | 720,652 | Feb. 17 | 2331 | 533 | 102 | 1342 |
| Speed-regulator | H. P. White | 721,406 | Feb. 24 | 3751 | 853 | 102 | 1662 |
| Speed-regulator | W. C. Runge | 738,125 | Sept. 1 | 1129 | 251 | 106 | 244 |
| Speed-regulator | T. and C. T. Nesom | 741,158 | Oct. 13 | 1424 | 326 | 106 | 1569 |
| Speed-regulator | H. E. Warren | 742,106 | Oct. 20 | 3363 | 751 | 106 | 1991 |
| Speed-regulator and stop mechanism | T. H. Macdonald | 725,857 | Apr. 21 | 2672 | 609 | 103 | 1768 |
| Speed-regulator. Generator | G. J. and H. G. Pelstring | 719,037 | Jan. 27 | 2885 | 646 | 102 | 656 |
| Speed-regulator. Spring-motor | G. W. Merrill, Jr | 728,488 | May 19 | 3143 | 695 | 104 | 707 |
| Speed-transmission mechanism. Variable | F. J. Nutting | 722,245 | Mar. 10 | 1105 | 243 | 103 | 251 |
| Speed-varying machine | J. H. Cleveland | 742,837 | Nov. 3 | 33 | 7, 8 | 107 | 10 |
| Speed-varying mechanism | W. D. Hoffman | 744,550 | Nov. 17 | 3411 | 735 | 107 | 758 |
| Speeds. Driving mechanism for transmitting variable | W. and G. F. Meischke-Smith | 734,921 | July 28 | 4126 | 961 | 105 | 917 |
| Sphygmograph | W. H. Fahrney | 747,157 | Dec. 15 | 3400 | 770, 771 | 107 | 1884 |
| Spice-box top | E. B. Millar | 735,280 | Aug. 4 | 476 | 95 | 105 | 1082 |

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| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Spice-feeding receptacle | R. W. Cramer | 733,628 | July 14 | 1660 | 394 | 105 | 368 |
| Spigot | G. Underwood | 744,441 | Nov. 17 | 3224 | 691 | 107 | 719 |
| Spike | D. Servis | 723,554 | Mar. 24 | 3542 | 792 | 103 | 786 |
| Spike-extractor | E. E. Welsh | 725,902 | Apr. 21 | 2748 | 625 | 103 | 1784 |
| Spike or nail puller | J. H. Duncan | 728,884 | May 26 | 3892 | 865 | 104 | 877 |
| Spike-puller | T. G. Brown | 719,735 | Feb. 3 | 585 | 132 | 102 | 945 |
| Spike-puller | W. Scott | 731,074 | June 16 | 2833 | 629 | 104 | 1753 |
| Spike-puller | C. F. Tillberg | 737,530 | Aug. 25 | 4675 | 1049 | 105 | 2034 |
| Spike-puller | A. Gartshore and W. Maxwell | 740,415 | Oct. 6 | 49 | 11 | 106 | 1255 |
| Spike-puller | G. Bryar | 743,823 | Nov. 10 | 2009 | 426 | 107 | 444 |
| Spinal curvature. Device for correcting | C. G. P. Blomqvist | 744,713 | Nov. 24 | 3726 | 804 | 107 | 843 |
| Spindle: *See* Knob-spindle. Self-centering spindle. Ring-frame spindle. Spinning-spindle. | | | | | | | |
| Spindle and bearing | G. Hill | 718,349 | Jan. 13 | 1540 | 341 | 102 | 345 |
| Spindle bobbin-retaining means. Rotatable- | C. E. Metcalf | 734,922 | July 28 | 4127 | 961 | 105 | 918 |
| Spindle-catch | M. Seveney | 724,747 | Apr. 7 | 618 | 144 | 103 | 1300 |
| Spindle-driving mechanism | E. E. Bradley | 724,080 | Mar. 31 | 4543 | 1022 | 103 | 1010 |
| Spindle foot-step | T. Ashworth | 727,255 | May 5 | 805 | 173 | 104 | 173 |
| Spindle-head and bearings therefor | Z. R. Tucker | 726,378 | Apr. 28 | 3628 | 822 | 103 | 1980 |
| Spindle-shaping device | A. C. Moffitt | 740,296 | Sept. 29 | 5288 | 1191 | 106 | 1195 |
| Spindles. Means for connecting spools or bobbins to | F. J. Rabbeth | 729,095 | May 26 | 4263 | 942 | 104 | 953 |
| Spine-stretching device | C. G. P. Blomqvist | 738,283 | Sept. 8 | 1483 | 321 | 106 | 334 |
| Spinning and doubling apparatus | T. Ashworth | 742,554 | Oct. 27 | 4192 | 944 | 106 | 2177 |
| Spinning and doubling apparatus | T. Ashworth | 742,555 | Oct. 27 | 4193 | 944 | 106 | 2177 |
| Spinning and doubling apparatus | T. Ashworth | 742,822 | Nov. 3 | 10 | 2 | 107 | 5 |
| Spinning and twisting machine. Combined | E. E. Bradley | 731,272 | June 16 | 3186 | 709, 710 | 104 | 1821 |
| Spinning apparatus. Ring- | G. O. Draper | 741,777 | Oct. 20 | 2678 | 597 | 106 | 1851 |
| Spinning apparatus with rotating head | J. E. Schmidt | 724,954 | Apr. 7 | 987 | 227 | 103 | 1380 |
| Spinning apparatus. Yarn- | J. Booth | 741,101 | Oct. 13 | 1323 | 304 | 106 | 1549 |
| Spinning, doubling, and twisting machine brake-shoe. | J. Duffy | 725,053 | Apr. 14 | 1174 | 265 | 103 | 1425 |
| Spinning-frame | A. E. Rhoades | 722,145 | Mar. 3 | 887 | 198, 199 | 103 | 190 |
| Spinning-frame | W. P. Wingate | 745,030 | Nov. 24 | 4300 | 930 | 107 | 961 |
| Spinning-frame | A. Parker | 745,897 | Dec. 1 | 1077 | 242 | 107 | 1328 |
| Spinning-frame bolster-rail | D. A. Tompkins | 727,715 | May 12 | 1700 | 379 | 104 | 383 |
| Spinning-frame guide-eye | W. O. Aldrich | 740,611 | Oct. 6 | 451 | 98 | 106 | 1343 |
| Spinning frame. Ring- | C. E. Lovejoy | 720,268 | Feb. 10 | 1587 | 362 | 102 | 1175 |
| Spinning-frame ring and traveler | Z. E. Booth | 743,138 | Nov. 3 | 615 | 133 | 107 | 128 |
| Spinning-frame ring and traveler | Z. E. Booth | 743,139 | Nov. 3 | 616 | 133, 134 | 107 | 129 |
| Spinning-frame top roll | J. J. Weiss | 739,041 | Sept. 15 | 2938 | 651 | 106 | 661 |
| Spinning-frame traveler | A. Ivon | 717,748 | Jan. 6 | 426 | 99, 100 | 102 | 93 |
| Spinning-frame yarn controller and separator. Ring- | J. E. Tichon and and H. S. Foster | 745,466 | Dec. 1 | 294 | 71 | 107 | 1162 |
| Spinning-frames. Automatic thread-board lifter for | N. N. S. Daudelin | 737,084 | Aug. 25 | 3829 | 851 | 105 | 1849 |
| Spinning-frames. Shipper-lock for | H. A. and O. L. Owen | 737,864 | Sept. 1 | 599 | 131 | 106 | 132 |
| Spinning-machine | G. H. Ellis | 721,684 | Mar. 3 | 67 | 14 | 103 | 15 |
| Spinning-machine | Ding Cie Sui | 733,299 | July 7 | 1077 | 256, 257 | 105 | 227 |
| Spinning-machine | M. Campbell | 739,983 | Sept. 29 | 4719 | 1061 | 106 | 1075 |
| Spinning-machine | L. F. Weiss | 742,370 | Oct. 27 | 3853 | 866 | 106 | 2108 |
| Spinning-machine drawing apparatus | F. ter Weele | 727,518 | May 5 | 1289 | 288 | 104 | 277 |
| Spinning-machine flier | F. Spence | 745,400 | Dec. 1 | 162 | 37 | 107 | 1134 |
| Spinning-machine guide-board | H. R. Mitchell | 736,130 | Aug. 11 | 2079 | 445 | 105 | 1443 |
| Spinning-machine needle-frame | G. Van Meurs | 733,608 | July 14 | 1625 | 385 | 105 | 361 |
| Spinning machine. Ring- | N. N. S. Daudelin | 732,526 | June 30 | 5615 | 1245 | 104 | 2357 |
| Spinning-machine roll-cleaner | T. O. Cunningham | 727,099 | May 5 | 532 | 114 | 104 | 116 |
| Spinning-machine roll-cleaning device | V. Maheu | 723,172 | Mar. 17 | 2808 | 633 | 103 | 624 |
| Spinning-machine separator | A. D. Chandler | 719,085 | Jan. 27 | 2984 | 665, 666 | 102 | 677 |
| Spinning-machine yarn-controller and clearer | G. Schmidt, Sr | 729,901 | June 2 | 695 | 154 | 104 | 1270 |
| Spinning-machine yarn-guide holder | C. G. Tideman | 730,492 | June 9 | 1772 | 397 | 104 | 1507 |
| Spinning machines. Apparatus for doffing in cap- | A. H. Illingworth | 745,188 | Nov. 24 | 4642 | 1008, 1009, 1010, 1011 | 107 | 1033 |
| Spinning machinery. Mule- | I. Briggs, Jr | 718,419 | Jan. 13 | 1662 | 366, 367, 368 | 102 | 371 |
| Spinning-machinery yarn-controller | S. Shackleton | 731,409 | June 16 | 3458 | 772, 773 | 104 | 1878 |
| Spinning material. Preparing | E. Mundorf | 743,912 | Nov. 10 | 2166 | 467 | 107 | 477 |
| Spinning-mule | H. S. Golland and J. D. Whyte | 722,973 | Mar. 17 | 2454 | 549 | 103 | 551 |
| Spinning-mule | H. S. Golland and J. D. Whyte | 727,349 | May 5 | 983 | 213, 214 | 104 | 212 |
| Spinning-mule antisnarling-motion | T. McAuliffe | 735,996 | Aug. 11 | 1836 | 394 | 105 | 1392 |
| Spinning or twisting machine | T. Sampson | 747,893 | Dec. 22 | 4772 | 1078 | 107 | 2206 |
| Spinning-ring | G. M. Warren | 729,708 | June 2 | 321 | 74 | 104 | 1195 |
| Spinning-ring | A. A. Lovejoy | 733,495 | July 14 | 1427 | 335 | 105 | 319 |
| Spinning-ring | M. E. Sullivan | 739,739 | Sept. 22 | 4234 | 948 | 106 | 956 |
| Spinning-ring | D. Harrington | 743,503 | Nov. 10 | 1422 | 297 | 107 | 320 |
| Spinning-spindle | M. E. Sullivan | 728,042 | May 12 | 2296 | 510 | 104 | 506 |
| Spinning-spindle | A. E. Rhoades | 729,221 | May 26 | 4488 | 989 | 104 | 1001 |
| Spinning-spindle | R. Fair | 732,179 | June 30 | 4939 | 1098 | 104 | 2217 |
| Spinning-spindle | W. Gihon | 733,641 | July 14 | 1682 | 379 | 105 | 372 |
| Spinning-spindle | F. J. Rabbeth | 734,747 | July 28 | 3806 | 888 | 105 | 849 |
| Spinning-spindle | J. C. Potter | 736,544 | Aug. 18 | 2809 | 615 | 105 | 1618 |
| Spinning-spindle | J. C. Edwards | 741,638 | Oct. 20 | 2401 | 538 | 106 | 1794 |
| Spinning-spindle bolster and step combined | J. Caldwell | 736,491 | Aug. 18 | 2717 | 595 | 105 | 1597 |
| Spinning-spindle-plumbing device | A. E. Rhoades | 732,223 | June 30 | 5034 | 1120 | 104 | 2237 |

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|---|---|---|---|---|---|---|---|
| Spinning-spindles. Automatic filtering-lubricator for the bushings of | J. L. Geis | 728,563 | May 19 | 3291 | 729 | 104 | 736 |
| Spinning stop-motion | W. G. Morrison | 729,384 | May 26 | 4767 | 1055 | 104 | 1058 |
| Spinning, twisting, winding, balling, or like machinery. Flier for | C. S. McConnan | 721,457 | Feb. 24 | 3837 | 873 | 102 | 1680 |
| Spiral elevator | D. E. Condon | 719,751 | Feb. 3 | 620 | 139, 140, 141 | 102 | 952 |
| Spirometer | H. T. Lyttleton | 735,542 | Aug. 4 | 980 | 208 | 105 | 1189 |
| Spittoon | B. G. Mészáros | 740,891 | Oct. 6 | 934 | 210 | 106 | 1446 |
| Spittoon | F. K. Beyer and C. W. W. T. List | 743,226 | Nov. 3 | 793 | 171 | 107 | 165 |
| Spittoon carrier and cleaner | H. Wenneborg, Jr | 742,538 | Oct. 27 | 4168 | 936 | 106 | 2171 |
| Spittoon. Flushing- | M. A. Coykendall | 740,538 | Oct. 6 | 301 | 61 | 106 | 1308 |
| Splicing-tool | D. E. Wiseman | 732,150 | June 30 | 4889 | 1087 | 104 | 2207 |
| Splint | J. R. Moore | 739,200 | Sept. 15 | 3227 | 715 | 106 | 721 |
| Spoke-fastening device | J. Gaworzewski | 718,964 | Jan. 20 | 2746 | 614 | 102 | 614 |
| Spoke-finishing machine | G. A. Ensign | 719,769 | Feb. 3 | 659 | 151, 152 | 102 | 961 |
| Spoke. Vehicle-wheel | C. L. Schwarz | 743,665 | Nov. 10 | 1728 | 364 | 107 | 385 |
| Spoke. Vehicle-wheel metallic | T. Midgley | 743,539 | Nov. 10 | 1491 | 311 | 107 | 336 |
| Spoke. Wheel spring- | A. Prouvost | 722,432 | Mar. 10 | 1437 | 318 | 103 | 322 |
| Spokeshave | H. Sarasin | 744,411 | Nov. 17 | 3174 | 680 | 107 | 708 |
| Sponge | J. R. and H. Campbell | 720,890 | Feb. 17 | 2727 | 628 | 102 | 1427 |
| Spool | F. A. Brownell | 742,964 | Nov. 3 | 250 | 56 | 107 | 54 |
| Spool-holder | C. T. Starr | 736,562 | Aug. 18 | 2838 | 622 | 105 | 1624 |
| Spool-holder and cushion. Combined | J. Woelfel and J. C. W. Schultz | 746,907 | Dec. 15 | 2920 | 674 | 107 | 1773 |
| Spool-making machinery | J. S. Goldberg | 740,422 | Oct. 6 | 61 | 14, 15, 16 | 106 | 1258 |
| Spool or bobbin shield or hoop | W. B. Wilson | 745,948 | Dec. 1 | 1164 | 262 | 107 | 1348 |
| Spool stop-motion device | J. B. Underwood | 723,626 | Mar. 24 | 3673 | 823 | 103 | 812 |
| Spool, thimble, and cushion rack | Z. G. Shelton | 723,930 | Mar. 31 | 4242 | 954 | 103 | 951 |
| Spooler | A. E. Rhoades | 744,797 | Nov. 24 | 3865 | 832 | 107 | 872 |
| Spooling-machine | C. Seidel and C. W. Dahlhaus | 721,472 | Feb. 24 | 3873 | 880, 881 | 102 | 1687 |
| Spooling-machine thread-guide | L. T. Houghton | 741,666 | Oct. 20 | 2446 | 548 | 106 | 1803 |
| Spoon-holder | H. Powles, Sr | 723,729 | Mar. 24 | 3852 | 866 | 103 | 851 |
| Spoon. Olive or pickle | A. H. Leach | 742,685 | Oct. 27 | 4422 | 998 | 106 | 2227 |
| Spout. Sectional and adjustable discharge- | A. Rosenthal | 744,408 | Nov. 17 | 3164 | 679 | 107 | 706 |
| Spout. Vessel ventilating- | A. A. Low and J. M. Hicks | 718,487 | Jan. 13 | 1832 | 402 | 102 | 410 |
| Sprayer. Hand- | A. O. Freeman | 731,033 | June 16 | 2755 | 614 | 104 | 1736 |
| Sprayer. Hand- | G. W. Lisk | 732,092 | June 30 | 4759 | 1063 | 104 | 2179 |
| Sprayer. Liquid- | L. A. Aspinwall | 726,616 | Apr. 28 | 4101 | 926 | 103 | 2072 |
| Spraying apparatus | F. Rippley | 737,485 | Aug. 25 | 4586 | 1028 | 105 | 2012 |
| Spraying-apparatus strainer attachment | A. I. Loop | 743,091 | Nov. 3 | 527 | 114 | 107 | 111 |
| Spraying coating or coloring fluids. Apparatus for | C. J. Wittig | 723,770 | Mar. 24 | 3914 | 881 | 103 | 865 |
| Spraying device | S. Hasbrouck | 719,588 | Feb. 3 | 323 | 75 | 102 | 889 |
| Spraying device | J. W. Flow | 728,892 | May 26 | 3904 | 867 | 104 | 880 |
| Spraying device | J. C. Tennent | 730,316 | June 9 | 1442 | 318 | 104 | 1438 |
| Spraying device. Liquid- | G. Gordejeff | 745,178 | Nov. 24 | 4624 | 1002 | 107 | 1029 |
| Spraying mechanism. Tree- | J. C. Gill | 746,953 | Dec. 15 | 3025 | 694 | 107 | 1797 |
| Spraying or ejecting apparatus. Oil or liquid | E. Castle | 742,113 | Oct. 20 | 3373 | 753 | 106 | 1992 |
| Spreading-roll | D. H. Lentz | 732,006 | June 23 | 4593 | 1025 | 104 | 2132 |
| Spring: *See* Bed-spring. Bolster-spring. Carriage-spring. Checkrein-spring. Coil-spring. Cushion-spring. Door-spring. Elliptic spring. Elliptical spring. Eyeglass-spring. Eyeglass bow-spring. Leaf-spring. Pneumatic spring. Upholstery-spring. Vehicle-spring. Watchcase-spring. | | | | | | | |
| Spring | G. H. Howell | 723,874 | Mar. 31 | 4122 | 930 | 103 | 925 |
| Spring | F. P. D'Arcy | 726,817 | Apr. 28 | 4473 | 1010 | 103 | 2149 |
| Spring | F. P. D'Arcy | 746,299 | Dec. 8 | 1818 | 413 | 107 | 1507 |
| Spring bearing-plate | C. A. Lindström | 748,512 | Dec. 29 | 5956 | 1351 | 107 | 2486 |
| Spring-bottom | W. D. Hunt | 733,649 | July 14 | 1696 | 402 | 105 | 375 |
| Spring-brake | J. A. Field | 723,852 | Mar. 31 | 4077 | 920, 921, 922 | 103 | 914 |
| Spring-buffer | F. F. Keeler | 734,337 | July 21 | 3040 | 716 | 105 | 677 |
| Spring-clamp | N. A. Westbrook | 717,729 | Jan. 6 | 368 | 90 | 102 | 79 |
| Spring-clip | G. W. McGill | 731,598 | June 23 | 3834 | 854 | 104 | 1972 |
| Spring-clip | G. W. McGill | 741,408 | Oct. 13 | 1947 | 431 | 106 | 1682 |
| Spring-clip | G. W. McGill | 742,892 | Nov. 3 | 128 | 29 | 107 | 28 |
| Spring-clip | G. W. McGill | 742,893 | Nov. 3 | 130 | 30 | 107 | 29 |
| Spring-clip | G. W. McGill | 743,017 | Nov. 3 | 384 | 83 | 107 | 80 |
| Spring-clip | G. W. McGill. (Reissue) | 12,171 | Nov. 17 | 3702 | 798, 799 | 107 | 822 |
| Spring-clip for holding papers, &c | G. W. McGill | 731,597 | June 23 | 3832 | 854 | 104 | 1972 |
| Spring-coiling machine | F. Kirk | 725,723 | Apr. 21 | 2430 | 551 | 103 | 1714 |
| Spring-cushioning device | C. P. Byrnes | 743,089 | Nov. 10 | 1761 | 371, 372 | 107 | 391 |
| Spring end plate | J. Carroll | 718,090 | Jan. 13 | 1067 | 237 | 102 | 245 |
| Spring for beds, couches, &c | J. Watkins | 735,006 | July 28 | 4288 | 998 | 105 | 950 |
| Spring for furniture, &c | W. Bursch | 720,108 | Feb. 10 | 1292 | 296 | 102 | 1114 |
| Spring-frame | F. A. Hall, Jr | 729,334 | May 26 | 4692 | 1036 | 104 | 1044 |
| Spring frame | H. D. Shaiffer | 747,002 | Dec. 15 | 3109 | 712 | 107 | 1815 |
| Spring-leaves. Forming gib-seats on | C. A. Contant | 725,220 | Apr. 14 | 1497 | 341 | 103 | 1502 |
| Spring-locking device | G. C. Locklin | 720,715 | Feb. 17 | 2440 | 558 | 102 | 1365 |
| Spring motor | C. H. Hoyt | 724,009 | Mar. 31 | 4424 | 993 | 103 | 985 |
| Spring-motor | J. R. Oliver | 732,777 | July 7 | 145 | 38, 39 | 105 | 35 |
| Spring-motor | H. P. Fiske | 740,114 | Sept. 29 | 4953 | 1111, 1112 | 106 | 1126 |
| Spring-motor | E. L. Garvey | 741,483 | Oct. 13 | 2101 | 467 | 106 | 1715 |

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| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Spring-motor | W. U. Colthar | 744,295 | Nov. 17 | 2969 | 635, 636 | 107 | 663 |
| Spring-motor | J. E. Jordan | 748,506 | Dec. 29 | 5946 | 1349 | 107 | 2484 |
| Spring-point switch | E. J. King | 743,885 | Nov. 10 | 2121 | 454 | 107 | 468 |
| Spring-reel | I. V. Edgerton and R. V. Hursen | 727,370 | May 5 | 1022 | 221 | 104 | 220 |
| Spring structure | E. A. Hoefer | 742,117 | Oct. 20 | 3379 | 754 | 106 | 1994 |
| Spring structure for seat or bed bottoms | L. H. Lawhon | 740,983 | Oct. 6 | 1105 | 248 | 106 | 1482 |
| Spring-switch | E. B. Entwisle and F. G. Wertz | 747,956 | Dec. 29 | 4912 | 1112 | 107 | 2258 |
| Spring-wheel | C. C. Kelley | 732,303 | June 30 | 5179 | 1150, 1151 | 104 | 2266 |
| Spring-wheel | C. J. Zillgitt | 732,684 | June 30 | 5913 | 1311, 1312 | 104 | 2421 |
| Spring-wheel | E. D. Johnson | 741,797 | Oct. 20 | 2710 | 604 | 106 | 1858 |
| Springs. End clip or bearing-plate for semi-elliptic | J. H. Evans | 737,599 | Sept. 1 | 82 | 17 | 106 | 20 |
| Springs in jointed members. Device for assembling | J. A. Smithline | 725,788 | Apr. 21 | 2550 | 578 | 103 | 1742 |
| Springs. Separable band for leaf- | W. M. Harty | 720,914 | Feb. 17 | 2785 | 639 | 102 | 1439 |
| Springwork | J. A. Staples | 742,251 | Oct. 27 | 3643 | 814, 815 | 106 | 2065 |
| Springwork | J. A. Staples | 748,433 | Dec. 29 | 5803 | 1322 | 107 | 2453 |
| Sprinkler: *See* Automatic sprinkler. Traveling sprinkler. Fire-extinguishing sprinkler. | | | | | | | |
| Sprinkler apparatus | A. A. Cowles | 725,827 | Apr. 21 | 2622 | 597 | 103 | 1756 |
| Sprinkler-head | C. W. Kersteter | 723,161 | Mar. 17 | 2789 | 629 | 103 | 620 |
| Sprinkler-head | P. Evans | 729,306 | May 26 | 4644 | 1026 | 104 | 1034 |
| Sprinkler-head | V. Lapham | 734,184 | July 21 | 2745 | 644 | 105 | 613 |
| Sprinkler system. Automatic | J. F. Brass | 721,858 | Mar. 3 | 376 | 82 | 103 | 82 |
| Sprinkling-cart | C. F. O'Neil | 727,422 | May 5 | 1107 | 242 | 104 | 239 |
| Sprocket-band | A. S. Reed | 747,478 | Dec. 22 | 3989 | 898 | 107 | 2028 |
| Sprocket-tooth | R. O. Wigley | 735,640 | Aug. 4 | 1162 | 246 | 105 | 1228 |
| Sprocket-wheel | C. C. Keyser | 720,442 | Feb. 10 | 1891 | 430 | 102 | 1239 |
| Sprocket-wheel | F. R. Willson, Jr | 736,906 | Aug. 18 | 3505 | 780 | 105 | 1761 |
| Sprocket-wheel | A. Langerfeld | 740,445 | Oct. 6 | 118 | 24 | 106 | 1271 |
| Sprocket-wheel for drive-chains | J. M. Dodge | 717,976 | Jan. 6 | 860 | 192, 193 | 102 | 186 |
| Spud or vertical anchor | C. E. Fowler | 724,386 | Mar. 31 | 5175 | 1160 | 103 | 1139 |
| Spudding and pipe-driving machine | B. Higgins | 747,322 | Dec. 15 | 3719 | 838, 839 | 107 | 1952 |
| Spur | W. Olmstead | 729,791 | June 2 | 492 | 109 | 104 | 1228 |
| Spur attachment for leggings | W. C. Brown | 740,226 | Sept. 29 | 5165 | 1160 | 106 | 1169 |
| Spur rowel-frames. Spur-leather for securing in position | J. D. and D. J. Straus | 725,604 | Apr. 14 | 2190 | 496 | 103 | 1651 |
| Square | J. D. Witcher | 734,290 | July 21 | 2957 | 689 | 105 | 660 |
| Square | T. Esbiornson | 745,171 | Nov. 24 | 4613 | 1000 | 107 | 1026 |
| Square and adjustable bevel. Combined try- | J. J. Crozier | 746,468 | Dec. 8 | 2098 | 483 | 107 | 1567 |
| Square and bevel. Combination | F. L. Ress | 729,663 | June 2 | 250 | 58 | 104 | 1180 |
| Square and bevel. Combined try- | C. R. Bannihr | 725,021 | Apr. 14 | 1127 | 254 | 103 | 1426 |
| Square and level. Combination right-angle | A. E. Victor | 733,570 | July 14 | 1571 | 372 | 105 | 350 |
| Square and miter. Try- | T. Gerber | 718,618 | Jan. 20 | 2095 | 456 | 102 | 480 |
| Square and protractor. Combination | E. Oehrle. (Reissue) | 12,119 | June 9 | 2401 | 530 | 104 | 1643 |
| Square. Carpenter's framing- | W. B. Mahan | 743,900 | Nov. 10 | 2149 | 462 | 107 | 473 |
| Square. Center | J. C. Gillner and J. L. White | 746,070 | Dec. 8 | 1395 | 312 | 107 | 1415 |
| Square clamp. T- | A. Sang | 733,279 | July 7 | 1047 | 250 | 105 | 220 |
| Square-clamping device. T- | G. H. H. Emett | 737,090 | Aug. 25 | 3838 | 853 | 105 | 1850 |
| Square. Draftsman's T- | E. C. Amidon | 725,532 | Apr. 14 | 2068 | 468 | 103 | 1623 |
| Square. Folding | J. Nelson | 735,136 | Aug. 4 | 179 | 38 | 105 | 1020 |
| Square for die-makers' use. Try- | O. W. Cook | 718,913 | Jan. 20 | 2647 | 593 | 102 | 592 |
| Square. Framing- | H. A. Bankston | 721,274 | Feb. 24 | 3515 | 799 | 102 | 1613 |
| Square. Gage- | J. Campbell | 735,207 | Aug. 4 | 339 | 65 | 105 | 1053 |
| Square head. T- | H. A. Rounds | 720,179 | Feb. 10 | 1407 | 322 | 102 | 1138 |
| Square. Jointed | H. G. Bogert | 739,054 | Sept. 15 | 2963 | 656 | 106 | 667 |
| Square, level, and tape-measure. Combined | R. E. Van Court | 733,302 | July 7 | 1081 | 257 | 105 | 228 |
| Square. Machinist's try- | A. Duffy | 738,422 | Sept. 8 | 1767 | 384 | 106 | 395 |
| Square. Protracting- | S. A. Caldwell and S. B. Terry | 718,817 | Jan. 20 | 2461 | 547 | 102 | 552 |
| Square. T and angle | J. Brauchli | 717,534 | Jan. 6 | 22 | 6, 7 | 102 | 7 |
| Square. Tailor's measuring- | T. R. Boone | 743,436 | Nov. 10 | 1278 | 262 | 107 | 288 |
| Square. Try- | W. G. Clements | 725,614 | Apr. 14 | 2210 | 499 | 103 | 1655 |
| Square. Universal | T. P. Roy | 746,384 | Dec. 8 | 1961 | 449 | 107 | 1538 |
| Squaring device. Foundation- | J. C. Paul | 735,899 | Aug. 11 | 1654 | 353 | 105 | 1352 |
| Squeegee | J. C. W. Rofe | 734,370 | July 21 | 3096 | 728 | 105 | 689 |
| Stable-floor | R. S. Judson | 746,094 | Dec. 8 | 1434 | 323 | 107 | 1424 |
| Stack-anchor | J. Monahan | 740,894 | Oct. 6 | 939 | 211 | 106 | 1447 |
| Stack former. Straw- | D. Cook | 731,862 | June 23 | 4300 | 959 | 104 | 2070 |
| Stack-knife | J. O. Byro | 719,992 | Feb. 10 | 1047 | 243 | 102 | 1061 |
| Stacker | F. Wyatt | 738,390 | Sept. 8 | 1711 | 371, 372 | 106 | 383 |
| Stacker | J. W. Heaton | 743,868 | Nov. 10 | 2087 | 444, 445 | 107 | 460 |
| Stacker-deflector | G. F. Conner | 727,093 | May 5 | 524 | 113 | 104 | 114 |
| Stacker drum. Hay- | P. E. Sneer | 721,616 | Feb. 24 | 4159 | 945 | 102 | 1751 |
| Stacker. Hay- | W. Saighman | 717,625 | Jan. 6 | 183 | 46, 47 | 102 | 40 |
| Stacker. Hay- | J. M. Copenhaver | 718,605 | Jan. 20 | 2076 | 451, 452 | 102 | 476 |
| Stacker. Hay- | C. B. Rhoads and C. Deckert | 718,879 | Jan. 20 | 2584 | 577 | 102 | 578 |
| Stacker. Hay- | J. H. Cope | 723,992 | Mar. 31 | 4376 | 982, 983 | 103 | 978 |
| Stacker. Hay- | J. Law | 735,784 | Aug. 11 | 1420 | 305 | 105 | 1301 |
| Stacker. Hay- | W. H. Robbins | 737,663 | Sept. 1 | 193 | 41 | 106 | 45 |
| Stacker. Hay- | J. C. McCorkle | 744,932 | Nov. 24 | 4098 | 883 | 107 | 921 |
| Stacker hood. Pneumatic- | J. N. Kailor | 742,669 | Oct. 27 | 4395 | 991 | 106 | 2222 |
| Stacker. Pneumatic | T. W. Slutz | 718,395 | Jan. 13 | 1621 | 356 | 102 | 363 |
| Stacker. Pneumatic | C. P. Jensen | 720,697 | Feb. 17 | 2409 | 551 | 102 | 1359 |
| Stacker. Pneumatic | J. K. Sharpe, Jr | 721,243 | Feb. 24 | 3470 | 789 | 102 | 1603 |
| Stacker. Pneumatic | C. N. Leonard | 722,369 | Mar. 10 | 1330 | 293, 294 | 103 | 299 |

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| Invention. | Name. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | | Spec. | Dr'g. | Vol. | Page. |
| Stacker. Pneumatic | C. N. Leonard | 723,204 | Mar. 17 | 2884 | 646 | 103 | 641 |
| Stacker. Pneumatic | J. Henry | 723,870 | Mar. 31 | 4117 | 929 | 103 | 924 |
| Stacker. Pneumatic | C. N. Leonard | 725,624 | Apr. 14 | 2233 | 504<br>505 | 103 | 1659 |
| Stacker. Pneumatic | F. L. Stallard | 728,511 | May 19 | 3177 | 703<br>704 | 104 | 713 |
| Stacker. Pneumatic | C. N. Leonard | 729,947 | June 2 | 773 | 171<br>172 | 104 | 1286 |
| Stacker. Pneumatic | L. Holland-Letz | 734,067 | July 21 | 2521 | 589 | 105 | 567 |
| Stacker. Pneumatic | J. Henry | 739,869 | Sept. 29 | 4505 | 1013 | 106 | 1029 |
| Stacker. Pneumatic | J. Henry | 748,070 | Dec. 29 | 5151 | 1165 | 107 | 2311 |
| Stacker. Pneumatic straw- | C. F. Dammeier | 719,308 | Jan. 27 | 3400 | 758 | 102 | 764 |
| Stacker. Pneumatic straw- | W. C. Robby and W. N. Rumely | 720,486 | Feb. 10 | 1965 | 449 | 102 | 1255 |
| Stacker. Pneumatic straw- | H. W. and M. F. Smith | 747,251 | Dec. 15 | 3572 | 809 | 107 | 1918 |
| Stacker. Pneumatic straw- | S. D. Felsing | 747,397 | Dec. 22 | 3857 | 868 | 107 | 1999 |
| Stacker. Pneumatic straw- | J. K. Sharpe, Jr | 747,896 | Dec. 22 | 4779 | 1079 | 107 | 2207 |
| Stacker. Straw- | F. Torbeck | 719,534 | Feb. 3 | 216 | 50 | 102 | 869 |
| Stacker. Straw- | J. Heineke | 724,097 | Mar. 31 | 4568 | 1028 | 103 | 1015 |
| Stacker. Straw- | A. M. Hood and C. Bradford | 730,825 | June 9 | 2345 | 519 | 104 | 1632 |
| Stacker. Straw- | J. K. White | 734,027 | July 21 | 2440 | 570<br>571 | 105 | 548 |
| Stacker. Straw- | A. M. Hood | 736,599 | Aug. 18 | 2928 | 640<br>641 | 105 | 1641 |
| Stacker. Straw- | W. N. Rumely | 740,695 | Oct. 6 | 575 | 129 | 106 | 1371 |
| Stacker. Straw- | F. L. Sattley | 741,378 | Oct. 13 | 1897 | 418<br>419 | 106 | 1672 |
| Stacker. Straw- | M. Heineke | 742,116 | Oct. 20 | 3377 | 754 | 106 | 1993 |
| Stacker. Straw- | E. T. Dunn | 744,514 | Nov. 17 | 3348 | 721 | 107 | 745 |
| Stacker. Straw- | M. Heineke. (Reissue) | 12,177 | Nov. 24 | 4898 | 1069 | 107 | 1084 |
| Stackers. Means for operating the adjustable hoods of pneumatic straw- | J. A. Moser | 722,451 | Mar. 10 | 1486 | 328<br>329 | 103 | 333 |
| Stacking apparatus. Straw- | A. A. Minkler | 725,114 | Apr. 14 | 1297 | 292 | 103 | 1460 |
| Staff and lever lock | T. H. Patenall | 743,325 | Nov. 3 | 979 | 212<br>213 | 107 | 209 |
| Staging. Adjustable | J. A. Hagan | 734,321 | July 21 | 3017 | 710 | 105 | 671 |
| Stair. Counterbalancing | P. L. Larson | 722,859 | Mar. 17 | 2262 | 507 | 103 | 511 |
| Stair cover and nosing | W. H. Cooper | 718,821 | Jan. 20 | 2466 | 548 | 102 | 553 |
| Stair-rod and fastening therefor | I. V. Mead and J. W. Gibson | 726,723 | Apr. 28 | 4289 | 969 | 103 | 2111 |
| Stair-rod and securer | S. A. Brown | 744,472 | Nov. 17 | 3282 | 705 | 107 | 731 |
| Stair-rod fastener | T. C. Richards | 737,143 | Aug. 25 | 3922 | 871 | 105 | 1868 |
| Stair-rod fastening | J. P. Stahl | 744,639 | Nov. 17 | 3545 | 764 | 107 | 785 |
| Stair-rod-securing device | R. H. Warren | 744,949 | Nov. 24 | 4140 | 894<br>895 | 107 | 929 |
| Stair structure | N. Bois | 724,790 | Apr. 7 | 697 | 163 | 103 | 1318 |
| Stairway | O. C. Uehling | 725,179 | Apr. 14 | 1419 | 321 | 103 | 1485 |
| Stairway or elevator. Moving spiral | L. G. Souder | 723,325 | Mar. 24 | 3102 | 698<br>699 | 103 | 700 |
| Stairway. Traveling | I. H. Venn | 727,720 | May 12 | 1707 | 381 | 104 | 384 |
| Stairway. Traveling | E. Baltzley | 739,141 | Sept. 15 | 3127 | 691<br>692 | 106 | 700 |
| Stairway. Traveling | E. M. Fraser | 746,059 | Dec. 8 | 1377 | 307<br>308 | 107 | 1411 |
| Stake. False-top | J. R. Bowling | 721,004 | Feb. 17 | 2954 | 678 | 102 | 1474 |
| Stake-holder. Folding | G. W. Lutz | 725,464 | Apr. 14 | 1944 | 436 | 103 | 1596 |
| Stake-holder release | J. Skelton | 727,009 | May 5 | 379 | 80 | 104 | 82 |
| Staking-machine | F. C. Kimball | 719,340 | Jan. 27 | 3460 | 771 | 102 | 777 |
| Staking-machine | C. F. Stackpole | 734,143 | July 21 | 2672 | 628<br>629 | 105 | 598 |
| Stalk-breaking and fiber-cleaning machine | S. B. Allison | 737,311 | Aug. 25 | 4258 | 947 | 105 | 1939 |
| Stalk-cutter | J. W. Nutsch | 719,497 | Feb. 3 | 156 | 35 | 102 | 857 |
| Stalk cutter and crusher | R. B. Elison | 732,623 | June 30 | 5792 | 1285 | 104 | 2398 |
| Stalk-cutting machine | P. J. Boggess | 745,564 | Dec. 1 | 461 | 109 | 107 | 1195 |
| Stall | H. Locke | 721,578 | Feb. 24 | 4074 | 925 | 102 | 1733 |
| Stall. Cattle- | M. J. Drown | 737,370 | Aug. 25 | 4361 | 972 | 105 | 1962 |
| Stall. Collapsible horse- | A. Herschmann | 718,840 | Jan. 20 | 2495 | 555<br>556 | 102 | 558 |
| Stall-floor | W. C. Schmidt | 747,239 | Dec. 15 | 3553 | 805 | 107 | 1914 |
| Stall for horses, &c. Portable shipping- | A. Moffitt | 720,725 | Feb. 17 | 2456 | 562<br>563 | 102 | 1370 |
| Stall. Horse- | G. B. Eppley | 745,170 | Nov. 24 | 4611 | 1000 | 107 | 1026 |
| Stall. Portable | G. B. Buckingham | 721,540 | Feb. 24 | 3983 | 908 | 102 | 1711 |
| Stall. Portable | D. Stitzer | 732,232 | June 30 | 5050 | 1123 | 104 | 2240 |
| Stamp-affixer | J. Olsen | 740,901 | Oct. 6 | 949 | 213 | 106 | 1449 |
| Stamp-affixer | F. E. Beck | 744,894 | Nov. 24 | 4033 | 869<br>870 | 107 | 908 |
| Stamp-affixing apparatus. Postage- | C. Welter and T. Grenzstein | 746,423 | Dec. 8 | 2030 | 465 | 107 | 1552 |
| Stamp-affixing device | J. J. Fargue and R. W. Smith | 743,263 | Nov. 3 | 867 | 189 | 107 | 182 |
| Stamp-affixing machine | W. E. Newton | 733,074 | July 7 | 666 | 160 | 105 | 141 |
| Stamp-affixing machine | S. Farmer | 746,627 | Dec. 8 | 2383 | 546<br>547 | 107 | 1632 |
| Stamp. Chronometric | F. A. E. Burda | 727,745 | May 12 | 1745 | 392 | 104 | 393 |
| Stamp. Drop- | B. Löhr | 740,884 | Oct. 6 | 921 | 206 | 106 | 1443 |
| Stamp feeding and cutting machanism | M. E. Woodford | 736,329 | Aug. 11 | 2412 | 527 | 105 | 1517 |
| Stamp for indorsing, &c. Hand- | E. J. Mankiewicz | 741,520 | Oct. 13 | 2167 | 482<br>483 | 106 | 1728 |
| Stamp for receipting bills | L. Greiner-Voigt | 745,822 | Dec. 1 | 936 | 210 | 107 | 1298 |
| Stamp. Hand | B. B. Hill | 718,251 | Jan. 13 | 1352 | 300 | 102 | 306 |
| Stamp. Hand- | B. B. Hill | 722,707 | Mar. 17 | 1987 | 443 | 103 | 456 |
| Stamp. Hand- | G. Lobitz | 726,954 | May 5 | 233 | 55 | 104 | 50 |
| Stamp. Hand- | E. M. Tilden | 732,236 | June 30 | 5056 | 1124 | 104 | 2241 |
| Stamp. Hand- | C. Hansen | 732,551 | June 30 | 5663 | 1256<br>1257 | 104 | 2367 |
| Stamp. Hand- | B. B. Hill | 742,649 | Oct. 27 | 4359 | 980 | 106 | 2213 |
| Stamp. Hand- | A. M. Comstock | 743,455 | Nov. 10 | 1319 | 271 | 107 | 296 |
| Stamp holder. Postage- | J. H. Binney | 738,600 | Sept. 8 | 2110 | 461 | 106 | 470 |
| Stamp-machine discharge | J. L. Harris and J. W. Shields | 747,703 | Dec. 22 | 4406 | 993 | 107 | 2124 |

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| Stamp. Marking- | F. Test | 729,699 | June 2 | 305 | 71 | 104 | 1191 |
| Stamp. Marking- | G. D. Strayer | 732,601 | June 30 | 5756 | 1277 | 104 | 2389 |
| Stamp-mill | W. S. McKinney | 720,054 | Feb. 10 | 1182 | 270, 271 | 102 | 1091 |
| Stamp-mill | C. C. Lane | 727,809 | May 12 | 1875 | 417 | 104 | 417 |
| Stamp-mill | J. A. and J. W. Shields | 728,999 | May 26 | 4093 | 908 | 104 | 927 |
| Stamp-mill | R. J. Baker | 733,933 | July 21 | 2234 | 525, 526 | 105 | 504 |
| Stamp-mill | W. A. Dalton | 734,828 | July 28 | 3973 | 928, 929 | 105 | 884 |
| Stamp-mill | G. C. Richards | 735,590 | Aug. 4 | 1066 | 226 | 105 | 1207 |
| Stamp-mill | G. Thomson | 741,852 | Oct. 20 | 2799 | 623 | 106 | 1879 |
| Stamp-mill machinery | J. C. Anderson | 743,800 | Nov. 10 | 1965 | 417, 418 | 107 | 435 |
| Stamp-mill mortar | J. H. Hendy | 735,374 | Aug. 4 | 634 | 131 | 105 | 1116 |
| Stamp-mill stamps. Hanging up or throwing out of operation | J. J. R. Smythe | 728,631 | May 19 | 3425 | 760 | 104 | 760 |
| Stamp. Portable hand- | H. E. and H. S. Reynolds | 730,968 | June 16 | 2628 | 586 | 104 | 1711 |
| Stamp. Postage or other | C. O. Snavely | 746,397 | Dec. 8 | 1984 | 453 | 107 | 1543 |
| Stamp recording attachment. Time- | C. W. Graham | 748,365 | Dec. 29 | 5662 | 1291 | 107 | 2421 |
| Stamp sectional cam. Ore- | A. P. J. Bossell | 743,681 | Nov. 10 | 1748 | 369 | 107 | 389 |
| Stamp shoes or dies. Making | W. Brinton | 731,748 | June 23 | 4102 | 916 | 104 | 2026 |
| Stamp, stationery, and cash box. Combined | G. W. Schweer | 727,211 | May 5 | 734 | 157 | 104 | 159 |
| Stamp-stem guide. Battery- | J. H. Hendy | 729,169 | May 26 | 4395 | 970 | 104 | 981 |
| Stamp. Time- | W. D. Chandler | 736,070 | Aug. 11 | 1980 | 421 | 105 | 1423 |
| Stamp. Time- | J. C. Wilson | 743,408 | Nov. 3 | 1195 | 248 | 107 | 255 |
| Stamp. Time- | F. L. Schulz | 745,244 | Nov. 24 | 4734 | 1033 | 107 | 1052 |
| Stamping and vending machine. Ticket | E. E. Flora | 748,272 | Dec. 29 | 5518 | 1256, 1257, 1258 | 107 | 2390 |
| Stamping-machine | F. H. Rickards | 730,970 | June 16 | 2632 | 587 | 104 | 1711 |
| Stamping nuts or other small articles. Machine for | T. H. Ford and R. Walmsley | 743,266 | Nov. 3 | 872 | 190 | 107 | 184 |
| Stamping-press | J. J. Heys | 728,463 | May 19 | 3105 | 686, 687 | 104 | 699 |
| Stamping presses, &c. Table for relief- | E. W. Savory | 730,300 | June 9 | 1417 | 311 | 104 | 1433 |
| Stanchion | L. H. Andersson | 722,271 | Mar. 10 | 1159 | 255 | 103 | 262 |
| Stanchion | W. Kueter | 739,610 | Sept. 22 | 3993 | 890 | 106 | 902 |
| Stanchion. Cattle- | L. Garrett | 722,360 | Mar. 10 | 1307 | 290 | 103 | 294 |
| Stanchion. Cattle- | H. Taylor | 728,784 | May 19 | 3700 | 826 | 104 | 822 |
| Stanchion. Cattle- | E. and J. P. Reck | 733,874 | July 14 | 2122 | 500 | 105 | 463 |
| Stanchion. Cattle- | J. Foster | 734,532 | July 28 | 3396 | 793 | 105 | 767 |
| Stanchion. Cattle- | J. H. M. Thompson | 737,884 | Sept. 1 | 663 | 141 | 106 | 146 |
| Stanchion. Cattle- | S. M. Barnard | 746,913 | Dec. 15 | 2928 | 676 | 107 | 1774 |
| Stanchion. Cattle- | W. T. Edwards | 747,954 | Dec. 29 | 4909 | 1111 | 107 | 2257 |
| Stand: *See* Album-stand. Bottle-stand. Box-stand. Camera-stand. Display-stand. Flat-iron stand. Flower-stand. Flower-pot stand. Folding stand. Horn-stand. Jewelry-stand. Lawn-stand. Music-stand. Shampoo-bowl stand. Shoe-polishing stand. Supporting-stand. Trolley-stand. Umbrella-stand. Washstand. Wheel-stand. Whip-stand. | | | | | | | |
| Stand | D. K. Wade and R. C. Wright | 733,441 | July 14 | 1339 | 316 | 105 | 300 |
| Stand and easel. Combined | E. Werner | 733,100 | July 7 | 716 | 174 | 105 | 152 |
| Stand for umbrellas, canes, &c | H. Werle | 722,546 | Mar. 10 | 1658 | 366 | 103 | 372 |
| Stand-pipe | M. M. Moore | 718,720 | Jan. 20 | 2291 | 505 | 102 | 518 |
| Staple | W. H. Morehouse | 718,649 | Jan. 20 | 2145 | 468 | 102 | 489 |
| Staple | J. Rupert | 733,679 | July 14 | 1744 | 412 | 105 | 384 |
| Staple-driver | T. B. Modlin and W. H. Buhl | 746,549 | Dec. 8 | 2243 | 514 | 107 | 1599 |
| Staple feeding and inserting device | R. W. Levitt and J. L. Shough | 746,967 | Dec. 15 | 3044 | 698 | 107 | 1801 |
| Staple-machine | R. K. Marple | 731,587 | June 23 | 3813 | 849 | 104 | 1968 |
| Staple-machine | E. A. Suverkrop and R. Coates | 731,630 | June 23 | 3892 | 867 | 104 | 1984 |
| Staple-puller | G. P. Haley | 722,975 | Mar. 17 | 2457 | 550 | 103 | 551 |
| Stapling-machine | V. Zwissler | 730,070 | June 2 | 1000 | 224 | 104 | 1331 |
| Star-wheel | F. A. Richter | 740,926 | Oct. 6 | 990 | 224 | 106 | 1458 |
| Starch. Apparatus for manufacturing | A. P. Murdoch | 717,699 | Jan. 6 | 316 | 77 | 102 | 69 |
| Starch-making apparatus | W. H. Uhland | 725,180 | Apr. 14 | 1421 | 322 | 103 | 1486 |
| Starch. Making lump- | J. M. Lyman | 721,314 | Feb. 24 | 3573 | ------ | 102 | 1626 |
| Starch. Making soluble | C. H. Meyer | 742,469 | Oct. 27 | 4023 | 903 | 106 | 2142 |
| Starch. Manufacture of | A. A. Osborn | 746,369 | Dec. 8 | 1937 | 441, 442 | 107 | 1531 |
| Starch. Manufacturing | A. P. Murdoch | 717,700 | Jan. 6 | 321 | 77 | 102 | 70 |
| Starching-machine | L. Hoffmann | 720,146 | Feb. 10 | 1354 | 310 | 102 | 1128 |
| Starching-machine | W. M. Barnes | 728,436 | May 19 | 3039 | 668 | 104 | 685 |
| Starching-machine | W. M. Barnes | 728,437 | May 19 | 3042 | 679 | 104 | 686 |
| Starching-machine | W. Hess, Jr. | 731,050 | June 16 | 2782 | 620 | 104 | 1741 |
| Starching-machine | G. H. Bishop | 734,038 | July 21 | 2465 | 576 | 105 | 553 |
| Starching-machine | H. Grunhagen | 735,758 | Aug. 11 | 1382 | 297 | 105 | 1292 |
| Starching-machine | J. Huebsch | 736,601 | Aug. 18 | 2934 | 642 | 105 | 1643 |
| Starching-machine | G. C. Roberts and H. S. Wilcox | 739,722 | Sept. 22 | 4202 | 940 | 106 | 949 |
| Starching-machine | W. J. Asher. (Reissue) | 12,172 | Nov. 24 | 4881 | 1065, 1066 | 107 | 1081 |
| Starching or dampening machine | A. P. Vreeland and J. R. McDonald | 719,912 | Feb. 3 | 895 | 210 | 102 | 1013 |
| Starting-gate | D. J. Pine | 723,915 | Mar. 31 | 4206 | 947 | 103 | 943 |
| Starting-gate | F. A. Vianest | 745,936 | Dec. 1 | 1142 | 256 | 107 | 1342 |
| Starting-machine | J. F. Carr | 728,539 | May 19 | 3239 | 719 | 104 | 726 |
| Starting-machine | W. R. Barling | 745,411 | Dec. 1 | 183 | 41 | 107 | 1138 |
| Static machine | H. E. and H. F. Waite | 734,450 | July 21 | 3232 | 761 | 105 | 717 |
| Station-indicator | P. J. Wilson | 722,068 | Mar. 3 | 759 | 170 | 103 | 164 |
| Station-indicator | C. D. Osborn | 722,743 | Mar. 17 | 2052 | 458 | 103 | 470 |
| Station-indicator | E. G. Schwarz | 723,739 | Mar. 24 | 3864 | 869 | 103 | 853 |

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| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
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| Station-indicator | J. J. Heberle | 730,648 | June 9 | 2040 | 454, 455 | 104 | 1567 |
| Station-indicator | J. Jackson | 739,878 | Sept. 29 | 4526 | 1017 | 106 | 1034 |
| Station-indicator | P. P. I. Fyfe | 741,651 | Oct. 20 | 2419 | 542 | 106 | 1797 |
| Station-indicator | P. P. I. Fyfe | 741,652 | Oct. 20 | 2422 | 543 | 106 | 1798 |
| Station-indicator | F. Clark | 747,938 | Dec. 29 | 4879 | 1101, 1102, 1103 | 107 | 2251 |
| Statistics. Compiling | C. F. Pidgin | 719,365 | Jan. 27 | 3518 | 782, 783 | 102 | 789 |
| Stave. Bung-hole | F. X. Schleich | 744,879 | Nov. 24 | 4009 | 864 | 107 | 902 |
| Stave-cutting machine | F. T. Brown | 720,400 | Feb. 10 | 1817 | 414, 415 | 102 | 1224 |
| Stave pipe. Wooden- | A. Bannister | 738,394 | Sept. 8 | 1720 | 373 | 106 | 386 |
| Stave-press | A. Hoffmann | 733,357 | July 7 | 1178 | 279 | 105 | 248 |
| Stave-sawing machine | P. Wineman | 725,908 | Apr. 21 | 2756 | 627, 628 | 103 | 1785 |
| Stave-sawing machine. Barrel- | B. S. Loveland | 746,719 | Dec. 15 | 2557 | 588 | 107 | 1691 |
| Stave-setter | J. W. Jones | 718,355 | Jan. 13 | 1551 | 343 | 102 | 346 |
| Stave sizing and crozing machine | D. C. Putnam | 743,032 | Nov. 3 | 410 | 88, 89 | 107 | 88 |
| Stave slicer. Barrel- | B. G. Jayne | 735,669 | Aug. 4 | 1213 | 257 | 105 | 1238 |
| Stay blank. Dress- | H. Feder | 727,323 | May 5 | 932 | 203 | 104 | 201 |
| Stay-bolt | S. H. Dunning | 721,869 | Mar. 3 | 395 | 87 | 103 | 87 |
| Stay-bolt | S. M. Vauclain | 731,983 | June 23 | 4528 | 1010 | 104 | 2119 |
| Stay-bolt. Flexible | F. Burger | 746,010 | Dec. 8 | 1290 | 290 | 107 | 1391 |
| Stay. Dress-waist | A. Nickerson | 724,602 | Apr. 7 | 346 | 84 | 103 | 1243 |
| Stay. Metallic | G. S. Herrick and W. H. Landers | 743,161 | Nov. 3 | 663 | 143 | 107 | 138 |
| Steam. Apparatus for measuring the flow of | J. Seidener | 720,188 | Feb. 10 | 1434 | 327, 328 | 102 | 1143 |
| Steam-boiler | C. R. Sayre | 717,931 | Jan. 6 | 778 | 174, 175 | 102 | 166 |
| Steam-boiler | E. T. Hannam | 718,836 | Jan. 20 | 2489 | 554 | 102 | 557 |
| Steam-boiler | F. M. Ramsdell | 719,140 | Jan. 27 | 3094 | 688 | 102 | 699 |
| Steam-boiler | R. W. Barton | 719,420 | Feb. 3 | 13 | 3 | 102 | 829 |
| Steam-boiler | H. A. House, Jr | 719,670 | Feb. 3 | 457 | 104 | 102 | 918 |
| Steam-boiler | G. A. Kennedy | 720,153 | Feb. 10 | 1365 | 313 | 102 | 1130 |
| Steam-boiler | J. B. and E. C. Doolittle | 720,899 | Feb. 17 | 2746 | 632 | 102 | 1430 |
| Steam-boiler | E. Ward | 721,482 | Feb. 24 | 3891 | 885 | 102 | 1691 |
| Steam-boiler | P. Ssiway | 722,415 | Mar. 10 | 1411 | 311 | 103 | 316 |
| Steam-boiler | G. Cawley | 725,540 | Apr. 14 | 2084 | 471 | 103 | 1626 |
| Steam-boiler | C. M. Raymond and L. E. Hoffman | 725,772 | Apr. 21 | 2524 | 572 | 103 | 1736 |
| Steam-boiler | M. K. Van der Velde | 727,499 | May 5 | 1252 | 279 | 104 | 269 |
| Steam-boiler | C. Olson | 728,284 | May 19 | 2770 | 615 | 104 | 630 |
| Steam-boiler | C. Cretors | 728,548 | May 19 | 3260 | 722 | 104 | 729 |
| Steam-boiler | W. C. Lockwood | 728,591 | May 19 | 3360 | 744 | 104 | 752 |
| Steam-boiler | J. M. Bradley and J. F. Senter | 728,847 | May 26 | 3830 | 853 | 104 | 867 |
| Steam-boiler | T. A. Gillespie | 729,757 | June 2 | 431 | 97, 98 | 104 | 1216 |
| Steam-boiler | R. W. Barton | 731,657 | June 23 | 3943 | 877 | 104 | 1994 |
| Steam-boiler | E. F. Edgar | 732,725 | July 7 | 52 | 14, 15 | 105 | 14 |
| Steam-boiler | D. M. Webster | 733,781 | July 14 | 1932 | 454, 455 | 105 | 424 |
| Steam-boiler | J. I. Thornycroft | 735,427 | Aug. 4 | 754 | 161 | 105 | 1140 |
| Steam-boiler | C. Campus | 736,068 | Aug. 11 | 1976 | 421 | 105 | 1422 |
| Steam-boiler | M. O'Connor | 736,621 | Aug. 18 | 2971 | 653 | 105 | 1649 |
| Steam-boiler | H. L. Fulenwider | 736,713 | Aug. 18 | 3151 | 694 | 105 | 1687 |
| Steam-boiler | A. W. La France | 737,250 | Aug. 25 | 4148 | 922 | 105 | 1916 |
| Steam-boiler | A. W. La France | 737,558 | Aug. 25 | 4718 | 1059 | 105 | 2042 |
| Steam-boiler | L. C. Auldjo | 739,774 | Sept. 22 | 4284 | 960, 961 | 106 | 967 |
| Steam-boiler | G. H. Rheutan | 740,922 | Oct. 6 | 985 | 222, 223 | 106 | 1457 |
| Steam-boiler | R. W. Barton | 741,094 | Oct. 13 | 1305 | 299, 300 | 106 | 1545 |
| Steam-boiler | B. H. Green | 741,485 | Oct. 13 | 2104 | 468 | 106 | 1715 |
| Steam boiler | J. M. McClellon | 741,529 | Oct. 13 | 2191 | 487 | 106 | 1734 |
| Steam-boiler | J. B. Beam | 741,575 | Oct. 13 | 2283 | 510 | 106 | 1752 |
| Steam-boiler | J. W. East | 741,779 | Oct. 20 | 2682 | 597 | 106 | 1852 |
| Steam-boiler | F. X. Komarek | 742,335 | Oct. 27 | 3792 | 849 | 106 | 2095 |
| Steam-boiler | W. C. Temple | 742,931 | Nov. 3 | 189 | 44 | 107 | 42 |
| Steam-boiler | D. M. Webster | 742,938 | Nov. 3 | 206 | 47 | 107 | 46 |
| Steam-boiler | L. L. Griffiths | 743,271 | Nov. 3 | 883 | 192 | 107 | 186 |
| Steam-boiler | W. B. Gregg | 743,488 | Nov. 10 | 1396 | 289 | 107 | 313 |
| Steam-boiler | W. Dobler | 745,043 | Nov. 24 | 4331 | 936 | 107 | 969 |
| Steam-boiler | J. P. Sneddon | 746,186 | Dec. 8 | 1604 | 358, 359 | 107 | 1463 |
| Steam-boiler | G. F. Spencer | 746,646 | Dec. 8 | 2421 | 553, 554 | 107 | 1641 |
| Steam-boiler | R. Schulz | 746,882 | Dec. 15 | 2874 | 662, 663, 664, 665 | 107 | 1762 |
| Steam-boiler | T. F. Morrin | 748,400 | Dec. 29 | 5726 | 1308 | 107 | 2436 |
| Steam-boiler and furnace | F. J. Doyle | 742,613 | Oct. 27 | 4294 | 967, 968 | 106 | 2199 |
| Steam-boiler and its setting | H. M. Ashley | 723,805 | Mar. 31 | 3979 | 897, 898 | 103 | 895 |
| Steam-boiler for locomobiles or other machines | W. N. Best | 728,840 | May 26 | 3823 | 851 | 104 | 866 |
| Steam-boiler for motor-vehicles | A. D. Smith | 718,954 | Jan. 20 | 2729 | 610, 611 | 102 | 609 |
| Steam-boiler. Locomotive | P. Burk | 744,042 | Nov. 17 | 2461 | 528, 529 | 107 | 555 |
| Steam-boiler. Sectional | P. Wiedenfeld | 720,205 | Feb. 10 | 1462 | 333 | 102 | 1149 |
| Steam-boiler. Stationary | P. Burk | 744,043 | Nov. 17 | 2462 | 529 | 107 | 555 |
| Steam-boiler. Water-tube | H. See | 728,996 | May 26 | 4085 | 906 | 104 | 918 |
| Steam-box | H. Cramer and F. Schraudner | 727,096 | May 5 | 527 | 113 | 104 | 114 |
| Steam-coils, &c. Detachable leg for | G. W. De Staebler | 723,655 | Mar. 24 | 3721 | 834 | 103 | 823 |

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| Steam-condensating apparatus | W. J. Nuss | 745,513 | Dec. 1 | 376 | 87 | 107 | 1180 |
| Steam-drier | C. H. Noyes | 736,429 | Aug. 18 | 2593 | 568 | 105 | 1571 |
| Steam-drying apparatus | T. J. Nelson | 724,925 | Apr. 7 | 933 | 213 | 103 | 1369 |
| Steam-engine | C. Lean | 718,715 | Jan. 20 | 2278 | 500, 501, 502 | 102 | 515 |
| Steam-engine | J. W. McQuay | 719,493 | Feb. 3 | 151 | 34 | 102 | 855 |
| Steam-engine | W. Sutcliffe | 719,530 | Feb. 3 | 208 | 48, 49 | 102 | 867 |
| Steam-engine | D. F. Lepley | 720,263 | Feb. 10 | 1577 | 360 | 102 | 1173 |
| Steam-engine | J. W. Lyons | 720,826 | Feb. 17 | 2609 | 603 | 102 | 1402 |
| Steam-engine | J. W. Lyons | 720,940 | Feb. 17 | 2826 | 648 | 102 | 1448 |
| Steam-engine | C. W. A. Taylor | 722,055 | Mar. 3 | 740 | 165 | 103 | 160 |
| Steam-engine | J. J. Burke | 722,083 | Mar. 3 | 779 | 175 | 103 | 168 |
| Steam-engine | B. J. Carter | 722,206 | Mar. 10 | 1027 | 226, 227 | 103 | 233 |
| Steam-engine | P. Gindt | 722,225 | Mar. 10 | 1063 | 233 | 103 | 242 |
| Steam-engine | J. W. Nowak | 724,201 | Mar. 31 | 4794 | 1074 | 103 | 1061 |
| Steam-engine | H. G. Coustillac, Jr | 724,816 | Apr. 7 | 750 | 174 | 103 | 1331 |
| Steam-engine | C. and C. Volz | 725,517 | Apr. 14 | 2038 | 461 | 103 | 1617 |
| Steam-engine | E. C. Doolittle | 725,945 | Apr. 21 | 2831 | 642 | 103 | 1800 |
| Steam-engine | S. Hicks | 726,429 | Apr. 28 | 3708 | 842 | 103 | 1996 |
| Steam-engine | A. C. Schuman | 727,558 | May 5 | 1370 | 308, 309 | 104 | 295 |
| Steam-engine | C. Crompton | 727,752 | May 12 | 1757 | 395 | 104 | 395 |
| Steam-engine | W. Sutcliffe | 729,107 | May 26 | 4285 | 947 | 104 | 957 |
| Steam-engine | N. François | 729,567 | June 2 | 84 | 21 | 104 | 1145 |
| Steam-engine | O. W. Kelly | 729,602 | June 2 | 142 | 35 | 104 | 1156 |
| Steam-engine | E. F. Steele | 729,972 | June 2 | 839 | 187 | 104 | 1298 |
| Steam-engine | P. S. Bostwick | 729,997 | June 2 | 878 | 196 | 104 | 1306 |
| Steam-engine | H. Steven, Jr | 730,309 | June 9 | 1430 | 315 | 104 | 1436 |
| Steam-engine | S. Sheriff | 734,475 | July 21 | 3281 | 770 | 105 | 726 |
| Steam-engine | C. L. Fouts | 734,533 | July 28 | 3397 | 793 | 105 | 767 |
| Steam-engine | H. K. Lee | 734,720 | July 28 | 3746 | 875, 876 | 105 | 838 |
| Steam-engine | M. Castelnau | 734,816 | July 28 | 3952 | 922 | 105 | 880 |
| Steam-engine | H. L. Dickson | 735,220 | Aug. 4 | 363 | 70 | 105 | 1059 |
| Steam-engine | W. M. Smith | 736,888 | Aug. 18 | 3473 | 770, 771, 772 | 105 | 1754 |
| Steam-engine | J. Stumpf | 737,043 | Aug. 25 | 3757 | 834 | 105 | 1834 |
| Steam-engine | S. B. House | 737,239 | Aug. 25 | 4122 | 915, 916 | 105 | 1910 |
| Steam-engine | W. Sutcliffe | 737,294 | Aug. 25 | 4228 | 941 | 105 | 1933 |
| Steam-engine | L. Hicks | 739,311 | Sept. 22 | 3438 | 767 | 106 | 783 |
| Steam-engine | G. P. Clark | 740,089 | Sept. 29 | 4910 | 1101, 1102 | 106 | 1116 |
| Steam-engine | C. E. Van Norman | 741,743 | Oct. 20 | 2603 | 579, 580 | 106 | 1835 |
| Steam-engine | J. Missong | 742,888 | Nov. 3 | 119 | 27, 28 | 107 | 27 |
| Steam-engine | C. C. Worthington | 742,948 | Nov. 3 | 221 | 50, 51 | 107 | 48 |
| Steam-engine | L. Hicks | 743,282 | Nov. 3 | 898 | 196 | 107 | 191 |
| Steam-engine | J. J. Reilly | 743,927 | Nov. 10 | 2191 | 473 | 107 | 483 |
| Steam-engine | W. Dieter | 746,626 | Dec. 8 | 2377 | 545 | 107 | 1630 |
| Steam-engine | S. C. Carter | 747,135 | Dec. 15 | 3359 | 762, 763 | 107 | 1875 |
| Steam-engine and pressure-accumulator therefor. Compensating | W. C. Brown | 729,268 | May 26 | 4569 | 1008, 1009 | 104 | 1017 |
| Steam-engine. Compound | J. Hardill | 728,709 | May 19 | 3562 | 792 | 104 | 795 |
| Steam-engine. Compound | F. Caha | 733,811 | July 14 | 1987 | 467, 468, 469 | 105 | 436 |
| Steam-engine. Compound | W. T. Bennett | 734,037 | July 21 | 2464 | 576 | 105 | 553 |
| Steam-engine. Compound | J. E. Sague | 741,838 | Oct. 20 | 2775 | 619 | 106 | 1874 |
| Steam-engine. Compound reciprocating | W. L. Casaday | 730,873 | June 16 | 2439 | 539 | 104 | 1670 |
| Steam-engine. Double-acting | J. Deneal | 717,822 | Jan. 6 | 580 | 130 | 102 | 125 |
| Steam-engine for pumps, &c | W. Viggers | 716,206 | Dec. 8 | 1642 | 365 | 107 | 1471 |
| Steam-engine. Low-speed | G. P. Clark | 731,664 | June 23 | 3952 | 880 | 104 | 1996 |
| Steam-engine. Multiple-cylinder | H. S. Baldwin | 747,926 | Dec. 29 | 4857 | 1097 | 107 | 2246 |
| Steam-engine. Multiple-cylinder | H. Lemp and O. F. Persson | 748,083 | Dec. 29 | 5172 | 1169, 1170 | 107 | 2315 |
| Steam-engine. Oscillating | E. L. Street | 726,110 | Apr. 21 | 3088 | 700, 701 | 103 | 1853 |
| Steam from hot slag. Apparatus for generating | H. A. Seymour | 719,520 | Feb. 3 | 191 | 44, 45 | 102 | 864 |
| Steam-generating apparatus | I. V. Holmes | 743,386 | Nov. 3 | 1123 | 239 | 107 | 238 |
| Steam-generating furnace | J. L. Giroux | 718,756 | Jan. 20 | 2357 | 532 | 102 | 532 |
| Steam-generating furnace | J. L. Giroux | 727,346 | May 5 | 979 | 212 | 104 | 211 |
| Steam-generator | J. Deneal | 717,823 | Jan. 6 | 585 | 130, 131 | 102 | 126 |
| Steam-generator | H. E. Penney | 717,914 | Jan. 6 | 748 | 168 | 102 | 160 |
| Steam-generator | H. E. Penney | 717,915 | Jan. 6 | 749 | 168 | 102 | 160 |
| Steam-generator | E. A. Briner | 718,815 | Jan. 20 | 2458 | 546 | 102 | 551 |
| Steam-generator | H. E. Penney | 719,501 | Feb. 3 | 160 | 36, 37 | 102 | 857 |
| Steam-generator | E. E. Taylor | 719,624 | Feb. 3 | 377 | 87 | 102 | 900 |
| Steam-generator | F. O. Wellington and C. B. Edwards | 720,645 | Feb. 17 | 2313 | 530 | 102 | 1338 |
| Steam-generator | J. W. Sutton | 722,466 | Mar. 10 | 1514 | 334 | 103 | 339 |
| Steam-generator | A. S. Kiefer | 722,717 | Mar. 17 | 2000 | 446, 447 | 103 | 458 |
| Steam-generator | E. Thomine | 723,337 | Mar. 24 | 3121 | 702 | 103 | 703 |
| Steam-generator | C. H. Fox | 724,564 | Apr. 7 | 265 | 64 | 103 | 1226 |
| Steam-generator | H. Sinclair | 724,960 | Apr. 7 | 995 | 229 | 103 | 1382 |
| Steam-generator | C. A. Marrder | 725,737 | Apr. 21 | 2456 | 556, 557 | 103 | 1721 |
| Steam-generator | J. H. Peelen | 729,402 | May 26 | 4801 | 1064 | 104 | 1065 |
| Steam-generator | H. Friedenthal | 730,248 | June 9 | 1326 | 291 | 104 | 1412 |
| Steam-generator | W. Henry | 730,766 | June 9 | 2247 | 499 | 104 | 1612 |

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| Steam-generator | F. M. Faber | 732,344 | June 30 | 5261 | 1167<br>1168 | 104 | 2283 |
| Steam-generator | A. B. Neiman | 733,259 | July 7 | 1008 | 242 | 105 | 210 |
| Steam-generator | J. A. Miller | 733,862 | July 14 | 2099 | 495 | 105 | 457 |
| Steam-generator | G. R. Hingelberg | 734,328 | July 21 | 3028 | 713 | 105 | 674 |
| Steam-generator | C. M. Hopwood and J. G. Murdock, Jr | 734,871 | July 28 | 4046 | 945 | 105 | 899 |
| Steam-generator | F. E. and F. O. Stanley | 735,021 | July 28 | 4308 | 1002 | 105 | 954 |
| Steam-generator | G. E. Whitney | 735,045 | July 28 | 4351 | 1012 | 105 | 962 |
| Steam-generator | F. Lamplough | 735,275 | Aug. 4 | 468 | 93, 94 | 105 | 1081 |
| Steam-generator | F. W. Schirmer | 735,597 | Aug. 4 | 1079 | 229 | 105 | 1210 |
| Steam-generator | L. E. Wright | 736,187 | Aug. 11 | 2170 | 466 | 105 | 1463 |
| Steam-generator | V. Taboulevitsch | 736,652 | Aug. 18 | 3016 | 666 | 105 | 1659 |
| Steam-generator | F. M. Ashley | 736,922 | Aug. 25 | 3543 | 786<br>787 | 105 | 1788 |
| Steam-generator | C. F. Ruby | 737,279 | Aug. 25 | 4199 | 936<br>937 | 105 | 1926 |
| Steam-generator | J. Schütte | 737,288 | Aug. 25 | 4219 | 939 | 105 | 1931 |
| Steam-generator | J. S. Chenhalls | 737,346 | Aug. 25 | 4323 | 963 | 105 | 1954 |
| Steam-generator | H. J. Fisher | 737,727 | Sept. 1 | 312 | 65 | 106 | 71 |
| Steam-generator | R. Schulz | 737,782 | Sept. 1 | 418 | 89<br>90<br>91 | 106 | 92 |
| Steam-generator | E. J. Wood | 738,143 | Sept. 1 | 1176 | 259 | 106 | 253 |
| Steam-generator | G. D. Cooper | 738,526 | Sept. 8 | 1984 | 431 | 106 | 442 |
| Steam-generator | C. Crompton | 738,664 | Sept. 8 | 2234 | 490 | 106 | 495 |
| Steam-generator | D. A. Walton | 738,964 | Sept. 15 | 2814 | 624 | 106 | 636 |
| Steam-generator | L. Rauhauser | 739,445 | Sept. 22 | 3704 | 824<br>825 | 106 | 841 |
| Steam-generator | E. Makin, Jr | 741,353 | Oct. 13 | 1851 | 409 | 106 | 1662 |
| Steam-generator | E. I. Nichols | 742,480 | Oct. 27 | 4039 | 906 | 106 | 2145 |
| Steam-generator | D. Fitzgibbons | 742,620 | Oct. 27 | 4308 | 970 | 106 | 2202 |
| Steam-generator | F. Grünewald | 743,491 | Nov. 10 | 1401 | 290 | 107 | 315 |
| Steam-generator | J. J. Bush | 744,900 | Nov. 24 | 4042 | 872 | 107 | 909 |
| Steam-generator | F. S. Smith | 746,593 | Dec. 8 | 2324 | 532 | 107 | 1619 |
| Steam-generator | M. W. Sewall | 747,093 | Dec. 15 | 3285 | 747 | 107 | 1859 |
| Steam-generator air-heater | G. H. Lyon and G. H. Karicofe | 747,198 | Dec. 15 | 3479 | 789 | 107 | 1899 |
| Steam-generator furnace | M. Deprez and J. Verney | 725,228 | Apr. 14 | 1511 | 344 | 103 | 1505 |
| Steam-generator. Smokeless | O. D. Orvis | 722,321 | Mar. 10 | 1237 | 275 | 103 | 279 |
| Steam-generator. Tubulous | J. McKechnie | 740,032 | Sept. 29 | 4821 | 1081<br>1082 | 106 | 1099 |
| Steam-generator. Tubulous | J. McKechnie | 743,316 | Nov. 3 | 968 | 210 | 107 | 207 |
| Steam-generator. Vertical | E. Establie | 727,770 | May 12 | 1812 | 404 | 104 | 405 |
| Steam-generator water-gage | A. Wood | 736,666 | Aug. 18 | 3043 | 672 | 105 | 1664 |
| Steam-generator water-level indicator | H. Thiemann | 726,203 | Apr. 21 | 3271 | 742 | 103 | 1890 |
| Steam-generator. Water-tube | H. W. Kolle | 736,743 | Aug. 18 | 3200 | 707<br>708 | 105 | 1697 |
| Steam-generators, &c. Apparatus for purifying water for | E. Delmouly | 719,761 | Feb. 3 | 640 | 144 | 102 | 957 |
| Steam-heater | W. P. Hussey | 748,379 | Dec. 29 | 5690 | 1298 | 107 | 2428 |
| Steam into centrifugal machines. Apparatus for introducing | G. Dentsch | 744,503 | Nov. 17 | 3333 | 718 | 107 | 742 |
| Steam-meter | C. E. Sargent | 729,511 | May 26 | 4974 | 1102<br>1103 | 104 | 1104 |
| Steam or hot-water heater | J. C. Barrett | 717,527 | Jan. 6 | 10 | 3 | 102 | 4 |
| Steam or hot-water trap | M. Conley | 719,568 | Feb. 3 | 281 | 65 | 102 | 882 |
| Steam or other fluid pressure motor | F. Lamplough | 722,722 | Mar. 17 | 2010 | 448 | 103 | 461 |
| Steam or other pressure chambers. Means for closing | P. Kirgeis | 720,155 | Feb. 10 | 1369 | 314 | 102 | 1131 |
| Steam or similar engine | E. Thomson | 741,388 | Oct. 13 | 1915 | 423 | 106 | 1675 |
| Steam or water. Apparatus for controlling the passage of | E. M. Eden | 718,329 | Jan. 13 | 1506 | 334<br>335 | 102 | 339 |
| Steam-power apparatus | P. L. Clark | 736,579 | Aug. 18 | 2869 | 628 | 105 | 1630 |
| Steam-power plants. Operating | P. L. Clark | 736,578 | Aug. 18 | 2865 | 627 | 105 | 1629 |
| Steam-pressure engine | W. E. J. Vavasour | 723,628 | Mar. 24 | 3677 | 824<br>825 | 103 | 813 |
| Steam-purifying device | A. L. Covill | 726,872 | May 5 | 71 | 19 | 104 | 18 |
| Steam-separator | I. Watts | 718,805 | Jan. 20 | 2443 | 541 | 102 | 549 |
| Steam-separator | W. J. Baker | 722,272 | Mar. 10 | 1160 | 255<br>256 | 103 | 262 |
| Steam-separator | M. W. Cottle | 725,413 | Apr. 14 | 1833 | 411 | 103 | 1572 |
| Steam-separator | G. I. Roberts | 731,953 | June 23 | 4469 | 997 | 104 | 2106 |
| Steam-separator | C. M. Friesland | 739,596 | Sept. 22 | 3968 | 886 | 106 | 897 |
| Steam-separator | H. Stormer | 745,924 | Dec. 1 | 1122 | 251 | 107 | 1338 |
| Steam-shovel | W. S. Russell | 745,676 | Dec. 1 | 652 | 151<br>152 | 107 | 1237 |
| Steam-superheater | H. Webster | 719,921 | Feb. 3 | 908 | 213 | 102 | 1016 |
| Steam-superheater | M. Marquardt and E. Höffner | 727,400 | May 5 | 1069 | 232 | 104 | 231 |
| Steam-superheater | F. E. and F. O. Stanley | 733,088 | July 7 | 695 | 169<br>170 | 105 | 148 |
| Steam-superheating apparatus | A. Bolton | 730,087 | June 2 | 1024 | 229 | 104 | 1335 |
| Steam-trap | I. S. McDougall | 719,028 | Jan. 27 | 2864 | 642 | 102 | 652 |
| Steam-trap | J. J. Burke | 719,740 | Feb. 3 | 599 | 134 | 102 | 948 |
| Steam-trap | E. A. Adams | 720,091 | Feb. 10 | 1261 | 289 | 102 | 1108 |
| Steam-trap | R. H. Thorpe | 720,195 | Feb. 10 | 1442 | 329 | 102 | 1144 |
| Steam-trap | F. D. Koehler and T. W. Monahan | 720,701 | Feb. 17 | 2421 | 554 | 102 | 1361 |
| Steam-trap | F. D. Koehler and T. W. Monahan | 721,312 | Feb. 24 | 3569 | 812 | 102 | 1625 |
| Steam-trap | J. Westley | 722,193 | Mar. 3 | 991 | 219 | 103 | 209 |
| Steam-trap | J. L. Chapman | 722,400 | Mar. 10 | 1376 | 305 | 103 | 309 |
| Steam-trap | G. S. Brainerd | 722,650 | Mar. 10 | 1836 | 410 | 103 | 411 |
| Steam-trap | J. T. Lindstrom | 723,691 | Mar. 24 | 3777 | 848 | 103 | 835 |
| Steam-trap | W. Khlebnikon | 723,877 | Mar. 31 | 4126 | 931 | 103 | 925 |
| Steam-trap | J. G. Branch | 724,254 | Mar. 31 | 4913 | 1099 | 103 | 1084 |
| Steam-trap | L. B. Fulton | 726,155 | Apr. 21 | 3170 | 717 | 103 | 1870 |
| Steam-trap | R. G. Brooke | 727,075 | May 5 | 487 | 104 | 104 | 107 |
| Steam-trap | F. D. Koehler and T. W. Monahan | 729,359 | May 26 | 4729 | 1045 | 104 | 1051 |
| Steam-trap | W. H. Powell | 729,509 | May 26 | 4971 | 1101 | 104 | 1103 |

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|---|---|---|---|---|---|---|---|
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| Steam-trap | V. Schwaninger | 729,679 | June 2 | 277 | 63 | 104 | 1186 |
| Steam-trap | C. F. Murray | 729,956 | June 2 | 802 | 178 | 104 | 1290 |
| Steam-trap | F. D. Koehler and T. W. Monahan | 730,213 | June 2 | 1230 | 275 | 104 | 1378 |
| Steam-trap | M. W. Cottle | 731,756 | June 23 | 4121 | 919 | 104 | 2030 |
| Steam-trap | W. J. Poole | 735,294 | Aug. 4 | 500 | 100 | 105 | 1087 |
| Steam-trap | F. W Leuthesser | 736,750 | Aug. 18 | 3211 | 709 | 105 | 1699 |
| Steam-trap | T. J. Grace | 736,842 | Aug. 18 | 3396 | 751 | 105 | 1738 |
| Steam-trap | F. H. N. Gerwig | 738,672 | Sept. 8 | 2264 | 498 | 106 | 500 |
| Steam-trap | J. G. Morgan and W. Bletso | 739,696 | Sept. 22 | 4154 | 928 | 106 | 938 |
| Steam-trap | H. H. Humphrey | 740,435 | Oct. 6 | 102 | 21 | 106 | 1268 |
| Steam-trap | G. M. Hilger | 740,854 | Oct. 6 | 877 | 196 | 106 | 1433 |
| Steam-trap | J. H. Blessing | 741,448 | Oct. 13 | 2012 | 446<br>447 | 106 | 1695 |
| Steam-trap | E. Gerrard | 742,308 | Oct. 27 | 3750 | 840 | 106 | 2086 |
| Steam-trap | R. D. Tackaberry | 743,952 | Nov. 10 | 2235 | 483 | 107 | 492 |
| Steam-trap | E. Hippard | 743,983 | Nov. 10 | 2313 | 494 | 107 | 513 |
| Steam-trap. Thermostatic | C. H. Atkins | 739,279 | Sept. 22 | 3385 | 784 | 106 | 772 |
| Steam-utilizing apparatus | L. P. Burrows | 740,085 | Sept. 29 | 4904 | 1100 | 106 | 1115 |
| Steamer | C. A. Butler | 735,461 | Aug. 4 | 825 | 176 | 105 | 1155 |
| Steamer and heater. Wheat | R. E. Hutton | 735,878 | Aug. 11 | 1619 | 345 | 105 | 1345 |
| Steamer. Domestic | W. Ashert | 748,037 | Dec. 29 | 5073 | 1147 | 107 | 2294 |
| Steamer for culinary purposes | M. A. Shauman | 722,153 | Mar. 3 | 910 | 262 | 103 | 194 |
| Steaming-board | J. Bieberneit | 748,470 | Dec. 29 | 5877 | 1336 | 107 | 2469 |
| Steaming-machine | A. T. Sarfert | 730,164 | June 2 | 1146 | 258 | 104 | 1360 |
| Steaming-tray | F. Sochurek, Sr | 746,597 | Dec. 8 | 2332 | 533 | 107 | 1620 |
| Steel | C. H. Halcomb | 722,504 | Mar. 10 | 1593 | ------ | 103 | 358 |
| Steel | R. A. Hadfield | 735,365 | Aug. 4 | 615 | ------ | 105 | 1113 |
| Steel, &c. Apparatus for making | E. C. Wills | 736,900 | Aug. 18 | 3491 | 775<br>776 | 105 | 1758 |
| Steel. Apparatus for the manufacture of | H. Johnson | 742,441 | Oct. 27 | 3978 | 893 | 106 | 2132 |
| Steel. Apparatus for use in the production of | E. C. Wills | 719,404 | Jan. 27 | 3582 | 800 | 102 | 803 |
| Steel articles. Device for case-hardening | J. P. S. Lawrance | 723,167 | Mar. 17 | 2800 | 631 | 103 | 623 |
| Steel. Chromium-nickel | R. A. Hadfield | 735,666 | Aug. 4 | 1208 | ------ | 105 | 1237 |
| Steel dies. Manufacture of | C. Ball and H. E. Nock | 722,351 | Mar. 10 | 1294 | 287 | 103 | 291 |
| Steel direct from iron ore. Making | M. R. Conley | 730,746 | June 9 | 2211 | 492 | 104 | 1603 |
| Steel-hardening composition | G. Kolb | 744,208 | Nov. 17 | 2811 | ------ | 107 | 629 |
| Steel. Making | F. E. Young | 724,770 | Apr. 7 | 655 | 153 | 103 | 1309 |
| Steel-making. Compound for use in | W. A. Givens | 735,748 | Aug. 11 | 1367 | ------ | 105 | 1289 |
| Steel. Manufacture of | H. G. C. Thofehrn | 723,501 | Mar. 24 | 3458 | 774 | 103 | 768 |
| Steel. Manufacture of | R. A. Hadfield | 743,715 | Nov. 10 | 1809 | ------ | 107 | 403 |
| Steel. Manufacture of | B. Talbot | 747,662 | Dec. 22 | 4335 | ------ | 107 | 2107 |
| Steel. Manufacture of open-hearth | B. Talbot | 747,661 | Dec. 22 | 4333 | ------ | 107 | 2107 |
| Steel. Manufacturing | A. F. Mitchell | 721,061 | Feb. 17 | 3057 | ------ | 102 | 1498 |
| Steel. Manufacturing | W. B. Brookfield | 744,031 | Nov. 17 | 2442 | 524 | 107 | 551 |
| Steel. Manufacturing | W. B. Brookfield | 744,032 | Nov. 17 | 2443 | 525 | 107 | 551 |
| Steel. Manufacturing | W. B. Brookfield | 744,033 | Nov. 17 | 2444 | 525 | 107 | 552 |
| Steel. Manufacturing | W. B. Brookfield | 744,034 | Nov. 17 | 2445 | 525 | 107 | 552 |
| Steel. Manufacturing | W. B. Brookfield | 744,035 | Nov. 17 | 2447 | 525 | 107 | 552 |
| Steel. Manufacturing | W. B. Brookfield | 744,036 | Nov. 17 | 2449 | 526 | 107 | 553 |
| Steel. Manufacturing | C. V. Burton | 746,281 | Dec. 8 | 1781 | ------ | 107 | 1499 |
| Steel marker. Pressed- | N. P. Cowell | 724,163 | Mar. 31 | 4714 | 1058 | 103 | 1045 |
| Steel plates. Cutting | E. W. Lewis and J. S. Unger | 744,014 | Nov. 10 | 2404 | 516 | 107 | 528 |
| Steel. Producing | P. Eyermann | 723,594 | Mar. 24 | 3616 | 808<br>809 | 103 | 800 |
| Steel. Rephosphorizing | J. Stevenson, Jr | 724,140 | Mar. 31 | 4676 | ------ | 103 | 1039 |
| Steel. Toughening manganese | R. A. Hadfield | 731,450 | June 23 | 3560 | ------ | 104 | 1918 |
| Steering and retarding mechanism. Barge | I. H. Larr | 731,110 | June 16 | 2900 | 644 | 104 | 1765 |
| Steering apparatus | D. W. Rantine | 719,869 | Feb. 3 | 820 | 192 | 102 | 997 |
| Steering apparatus | F. R. White | 721,986 | Mar. 3 | 625 | 139 | 103 | 135 |
| Steering-check. Electromagnetically-operated | H. Lemp | 725,456 | Apr. 14 | 1928 | 432 | 103 | 1593 |
| Steering device | M. W. Patrick | 734,742 | July 28 | 3789 | 884<br>885 | 105 | 846 |
| Steering device | C. Ewing | 742,978 | Nov. 3 | 278 | 62 | 107 | 60 |
| Steering-gear. Boat | E. C. Akers | 733,893 | July 14 | 2151 | 508 | 105 | 469 |
| Steering-gear. Electric | W. L. Merrill | 735,550 | Aug. 4 | 1003 | 212 | 105 | 1193 |
| Steering-gear. Hand and power | C. Green | 738,793 | Sept. 15 | 2509 | 552 | 106 | 569 |
| Steering mechanism | F. T. Cable | 741,395 | Oct. 13 | 1927 | 425<br>426 | 106 | 1678 |
| Stencil | E. A. Wilcox | 740,961 | Oct. 6 | 1059 | 241 | 106 | 1472 |
| Stencil and making same | H. C. J. Deeks | 734,120 | July 21 | 2625 | 618 | 105 | 588 |
| Stencil duplicating apparatus | A. D. Klaber | 739,497 | Sept. 22 | 3788 | 848 | 106 | 860 |
| Stencil-sheet | A. D. Klaber | 732,564 | June 30 | 5692 | 1264<br>1265 | 104 | 2374 |
| Stencil-sheets to duplicating-machines. Means for attaching | A. D. Klaber | 739,498 | Sept. 22 | 3790 | 849 | 106 | 860 |
| Stenciling or printing machine | C. M. Hamilton | 734,172 | July 21 | 2719 | 640 | 105 | 608 |
| Step-joint | G. A. Weber | 730,990 | June 16 | 2674 | 595<br>596 | 104 | 1719 |
| Step-joint | G. A. Weber | 739,468 | Sept. 22 | 3739 | 832<br>833 | 106 | 849 |
| Step-joint | G. A. Weber | 744,831 | Nov. 24 | 3931 | 845<br>846 | 107 | 885 |
| Step-joint | G. A. Weber | 745,303 | Nov. 24 | 4861 | 1060 | 107 | 1077 |
| Step. Sectional plastic | J. Walsh | 744,887 | Nov. 24 | 4021 | 867 | 107 | 905 |
| Stereogram and making same. Parallax | F. E. Ives | 725,567 | Apr. 14 | 2121 | 481 | 103 | 1634 |
| Stereopticon | J. A. Seaverns | 729,225 | May 26 | 4492 | 990<br>991<br>992 | 104 | 1002 |
| Stereoscope | A. Schwarz | 720,849 | Feb. 17 | 2654 | 613 | 102 | 1412 |
| Stereoscope | D. E. Kirkpatrick and I. A. Dryden | 722,851 | Mar. 17 | 2252 | 504 | 103 | 509 |
| Stereoscope | H. E. Richmond | 724,044 | Mar. 31 | 4476 | 1008 | 103 | 996 |
| Stereoscope | H. C. White | 735,024 | July 28 | 4312 | 1003 | 105 | 955 |
| Stereoscope. Automatic | T. B. Eastman | 739,402 | Sept. 22 | 3623 | 807 | 106 | 823 |
| Stereoscopic apparatus | W. K. Dickson | 731,405 | June 16 | 3449 | 771 | 104 | 1876 |
| Stereoscopic apparatus | H. C. Snook | 733,756 | July 14 | 1882 | 444 | 105 | 413 |
| Stereoscopic print and making same | H. C. and H. C. White | 725,607 | Apr. 14 | 2197 | ------ | 103 | 1652 |

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| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Stereotype | A. L. Anderson | 724,418 | Apr. 7 | 5 | 1 | 103 | 1171 |
| Stereotype-casting box | C. S. Partridge | 735,804 | Aug. 11 | 1462 | 314 | 105 | 1310 |
| Stereotype-casting box | C. S. Partridge | 738,476 | Sept. 8 | 1881 | 409 | 106 | 418 |
| Stereotype-matrix frame | J. C. Bonneau | 743,812 | Nov. 10 | 1988 | 423 | 107 | 439 |
| Stereotype or electrotype matrices and printing-blocks. Machine for producing | A. Kraus and N. Collins | 743,890 | Nov. 10 | 2132 | 457<br>458<br>459 | 107 | 470 |
| Stereotype-plate-casting apparatus | H. A. W. Wood | 721,121 | Feb. 17 | 3199 | 733<br>734 | 102 | 1532 |
| Stereotype-plates. Machine for casting and trimming | C. E. Hopkins | 733,202 | July 7 | 887 | 214<br>215<br>216<br>217 | 105 | 486 |
| Stereotyping | W. Nicholas | 732,026 | June 23 | 4626 | 1034 | 104 | 2139 |
| Sterilized substances. Closure for vessels for | J. K. Van der Heide | 741,989 | Oct. 20 | 3100 | 691 | 106 | 1938 |
| Sterilizer | J. P. Lord | 717,587 | Jan. 6 | 114 | 30 | 102 | 27 |
| Sterilizer | R. Kny | 720,159 | Feb. 10 | 1373 | 315 | 102 | 1132 |
| Sterilizer | R. H. Speare | 724,964 | Apr. 7 | 1002 | 231 | 103 | 1383 |
| Sterilizer | R. P. Barnstead | 742,560 | Oct. 27 | 4200 | 945<br>946 | 106 | 2178 |
| Sterilizer | S. E. Morse | 744,782 | Nov. 24 | 3838 | 827 | 107 | 866 |
| Sterilizer-door | J. Brucker | 720,107 | Feb. 10 | 1290 | 295<br>296 | 102 | 1113 |
| Sterilizing and drying apparatus | L. L. Gross | 745,601 | Dec. 1 | 529 | 123 | 107 | 1210 |
| Sterilizing apparatus | O. H. Hoffman | 726,926 | May 5 | 179 | 42 | 104 | 40 |
| Sterilizing apparatus | G. Van Eÿck | 741,742 | Oct. 20 | 2602 | 579 | 106 | 1835 |
| Sterilizing appliance | E. Nichols | 725,123 | Apr. 14 | 1313 | 296 | 103 | 1463 |
| Sterilizing-case for pocket-thermometers | O. H. Elbrecht | 720,234 | Feb. 10 | 1523 | 349 | 102 | 1161 |
| Sterilizing water or other liquids. Apparatus for | C. Caille | 729,732 | June 2 | 385 | 87 | 104 | 1207 |
| Stethoscope | W. Jones | 742,790 | Oct. 27 | 4584 | 1039 | 106 | 2263 |
| Stethoscope. Binaural | W. J. Penfold | 738,352 | Sept. 8 | 1646 | 356 | 106 | 370 |
| Stethoscope-holder | W. Jones | 735,670 | Aug. 4 | 1215 | 257 | 105 | 1238 |
| Stethoscope instrument | R. C. M. Bowles | 734,159 | July 21 | 2698 | 635 | 105 | 604 |
| Stethoscope or the like | R. P. McCully | 717,898 | Jan. 6 | 724 | 162 | 102 | 154 |
| Stick adapted for self-defense | W. Freh | 723,260 | Mar. 24 | 2988 | 672 | 103 | 676 |
| Stiffening cord or tape | E. K. Warren | 739,460 | Sept. 22 | 3727 | 830 | 106 | 846 |
| Stiffening material. Machine for manufacturing | E. K. Warren | 739,461 | Sept. 22 | 3729 | 830 | 106 | 846 |
| Still | G. F. Ahlers | 722,071 | Mar. 3 | 763 | 170 | 103 | 164 |
| Still | C. H. McCormick | 723,709 | Mar. 24 | 3813 | 858 | 103 | 843 |
| Still | E. Huber | 729,179 | May 26 | 4413 | 973 | 104 | 985 |
| Still | W. Maybury | 737,756 | Sept. 1 | 369 | 79, 80 | 106 | 82 |
| Still | S. B. Martin | 742,697 | Oct. 27 | 4442 | 1003 | 106 | 2232 |
| Still | A. L. de Lautreppe | 744,367 | Nov. 17 | 3088 | 662 | 107 | 689 |
| Still. Ammonia- | E. A. Moore | 740,678 | Oct. 6 | 545 | 121<br>122 | 106 | 1364 |
| Still. Ammonia- | N. W. Condict | 747,944 | Dec. 29 | 4891 | 1107 | 107 | 2253 |
| Still column. Column- | E. Guillaume | 732,548 | June 30 | 5657 | 1255 | 104 | 2366 |
| Still for petroleum-oil or hydrocarbon fluids | W. Ryder and J. A. Qualey | 739,757 | Sept. 22 | 4256 | 954 | 106 | 961 |
| Still. Turpentine- | F. M. Gideon | 718,246 | Jan. 13 | 1343 | 298 | 102 | 304 |
| Still. Turpentine- | W. H. Krug | 746,850 | Dec. 15 | 2809 | 647 | 107 | 1747 |
| Still. Water- | T. P. Wilson | 734,486 | July 21 | 3298 | 774 | 105 | 729 |
| Stilt | L. L. Roberts | 738,240 | Sept. 8 | 1377 | 297<br>298 | 106 | 313 |
| Stirrer for cooking-receptacles | S. J. Ellis and C. Neilsen | 733,471 | July 14 | 1391 | 328 | 105 | 312 |
| Stirrup | H. E. Hey and H. B. Crozier | 717,850 | Jan. 6 | 645 | 143 | 102 | 137 |
| Stirrup | H. Nikolaisen | 722,877 | Mar. 17 | 2294 | 513 | 103 | 517 |
| Stirrup | J. M. Birtels | 725,204 | Apr. 14 | 1469 | 334 | 103 | 1496 |
| Stirrup | J. Hollicott | 726,534 | Apr. 28 | 3932 | 889 | 103 | 2038 |
| Stirrup | H. Treas and H. L. Kinzy | 731,396 | June 16 | 3433 | 766 | 104 | 1874 |
| Stirrup | M. H. Green | 739,170 | Sept. 15 | 3177 | 702 | 106 | 711 |
| Stirrup | J. Wright | 740,789 | Oct. 6 | 767 | 173 | 106 | 1409 |
| Stirrup | A. F. Wood | 743,969 | Nov. 10 | 2269 | 488 | 107 | 501 |
| Stirrup | A. Klietsch | 744,360 | Nov. 17 | 3078 | 660 | 107 | 687 |
| Stirrup | W. L. Ward | 744,653 | Nov. 17 | 3568 | 769 | 107 | 789 |
| Stirrup | J. B. Dowell | 745,332 | Dec. 1 | 31 | 7 | 107 | 1107 |
| Stirrup | J. Heaton | 745,607 | Dec. 1 | 541 | 126 | 107 | 1212 |
| Stirrup | W. L. Myers | 746,126 | Dec. 8 | 1496 | 334 | 107 | 1440 |
| Stirrup and connections therefor | W. J. May | 740,888 | Oct. 6 | 927 | 208 | 106 | 1444 |
| Stirrup-detacher. Automatic | H. B. K. Rosenfeld | 734,960 | July 28 | 4197 | 977 | 105 | 931 |
| Stirrup. Riding- | W. G. Murphy | 719,246 | Jan. 27 | 3278 | 733 | 102 | 737 |
| Stirrup. Safety- | J. A. Whelan | 721,486 | Feb. 24 | 3897 | 886 | 102 | 1692 |
| Stirrup spur attachment | C. L. Poorter | 744,607 | Nov. 17 | 3490 | 753 | 107 | 773 |
| Stitch-separating machine | J. B. Hadaway | 719,584 | Feb. 3 | 316 | 73 | 102 | 888 |
| Stitching and trimming machine. Blind- | C. McNeil and C. L. Sturtevant | 738,054 | Sept. 1 | 976 | 217 | 106 | 213 |
| Stitching machine. Buttonhole- | E. B. Allen | 738,591 | Sept. 8 | 2085 | 455<br>456<br>457 | 106 | 464 |
| Stitching-machines. Machine for feeding pamphlets, &c., to | J. C. Rodgers | 727,692 | May 12 | 1632 | 370 | 104 | 369 |
| Stock | R. V. D. Stoutenburgh | 719,392 | Jan. 27 | 3559 | 795 | 102 | 798 |
| Stock. Device for loading or unloading live | T. H. Edgar | 740,109 | Sept. 29 | 4946 | 1110 | 106 | 1124 |
| Stocking | L. C. Calkins | 723,361 | Mar. 24 | 3191 | 717 | 103 | 715 |
| Stocking | L. N. D. Williams | 733,926 | July 14 | 2222 | 521 | 105 | 482 |
| Stocking. Seamless-fashioned | J. F. Bard | 732,034 | June 30 | 4650 | 1039 | 104 | 2158 |
| Stocking-stretching device | M. Thus | 736,314 | Aug. 11 | 2393 | 521 | 105 | 1513 |
| Stoker. Automatic | J. P. Luckett | 721,586 | Feb. 24 | 4090 | 931 | 102 | 1736 |
| Stoker. Automatic | H. L. Wilson | 737,306 | Aug. 25 | 4249 | 945<br>946 | 105 | 1937 |
| Stoker. Automatic | N. E. Shontz | 745,247 | Nov. 24 | 4739 | 1035 | 107 | 1053 |
| Stoker driving mechanism. Mechanical- | H. Snyder | 748,539 | Dec. 29 | 6012 | 1362<br>1363 | 107 | 2499 |
| Stoking-chambers of furnaces, &c. Under-feed mechanical | E. W. Jones | 733,397 | July 14 | 1260 | 299 | 105 | 283 |
| Stoker for threshing or other engines | D. Farquhar and A. W. Aitken | 741,472 | Oct. 13 | 2085 | 462 | 106 | 1711 |
| Stoker. Mechanical | D. Hurst | 724,872 | Apr. 7 | 848 | 195 | 103 | 1350 |
| Stoker. Mechanical | H. G. Cox | 726,258 | Apr. 28 | 3375 | 763 | 103 | 1928 |

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| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Stoker. Mechanical | P. J. Harleman | 727,940 | May 12 | 2122 | 472, 473 | 104 | 470 |
| Stoker. Mechanical | T. R. Butman | 728,362 | May 19 | 2916 | 643, 644 | 104 | 658 |
| Stoker. Mechanical | E. F. Edgar | 732,726 | July 7 | 54 | 15 | 105 | 15 |
| Stoker. Mechanical | J. W. Kincaid | 733,657 | July 14 | 1709 | 405 | 105 | 377 |
| Stoker. Mechanical | W. T. Bonner | 742,826 | Nov. 3 | 16 | 3, 4 | 107 | 6 |
| Stoker. Mechanical | E. F. Edgar | 742,975 | Nov. 3 | 272 | 61 | 107 | 59 |
| Stoker. Mechanical furnace | F. Burger | 736,207 | Aug. 11 | 2204 | 473, 474 | 105 | 1470 |
| Stoker or feeder. Automatic coal | P. W. Lichtenberger and W. M. Zimmermann. | 728,732 | May 19 | 3609 | 801 | 104 | 805 |
| Stoker. Self-acting mechanical | H. Untiedt | 744,133 | Nov. 17 | 2639 | 563 | 107 | 591 |
| Stoker. Steam | E. B. Valentine | 722,471 | Mar. 10 | 1528 | 336 | 103 | 343 |
| Stoker. Underfeed | J. M. Searle | 747,091 | Dec. 15 | 3282 | 747 | 107 | 1858 |
| Stoking mechanism | F. A. Daley | 733,374 | July 14 | 1216 | 288 | 105 | 272 |
| Stone, &c. Apparatus for lifting | J. Jones | 729,939 | June 2 | 758 | 168 | 104 | 1283 |
| Stone. Artificial | W. G. and A. C. Roach | 720,739 | Feb. 17 | 2481 | ..... | 102 | 1375 |
| Stone. Artificial | T. K. Gaines | 726,278 | Apr. 28 | 3425 | ..... | 103 | 1938 |
| Stone. Artificial | J. A. Bell and L. T. Leet | 732,674 | June 30 | 5892 | ..... | 104 | 2417 |
| Stone blocks. Apparatus for making hollow artificial | S. Giletti | 719,655 | Feb. 3 | 433 | 99 | 102 | 912 |
| Stone blocks. Device for making artificial | H. G. Goodwin | 742,019 | Oct. 20 | 3155 | 704 | 106 | 1949 |
| Stone blocks. Mold for the manufacture of artificial | L. P. Ford | 726,665 | Apr. 28 | 4184 | 994, 995 | 103 | 2089 |
| Stone-boring machine | J. P. Murphy | 717,702 | Jan. 6 | 325 | 78 | 102 | 71 |
| Stone-breaker | E. Deane | 731,866 | June 23 | 4304 | 960 | 104 | 2071 |
| Stone, bricks, &c. Apparatus for preparing composition for artificial | L. P. Ford | 725,693 | Apr. 21 | 2373 | 536, 537 | 103 | 1702 |
| Stone building-blocks. Machine for making artificial | O. A. Hoyt | 742,192 | Oct. 27 | 3518 | 785 | 106 | 2037 |
| Stone-column-cutting machine | G. Bleh | 742,570 | Oct. 27 | 4215 | 949, 950 | 106 | 2182 |
| Stone. Composition for artificial | L. Roehm and P. Walther | 737,024 | Aug. 25 | 3733 | ..... | 105 | 1830 |
| Stone compound. Artificial | J. S. Burns | 737,334 | Aug. 25 | 4298 | ..... | 105 | 1947 |
| Stone conveyer. Artificial | N. F. Palmer | 731,941 | June 23 | 4446 | 992 | 104 | 2102 |
| Stone-cutter's gage | H. Baumann | 740,079 | Sept. 29 | 4895 | 1098 | 106 | 1113 |
| Stone-cutting machine | C. L. Payne | 717,911 | Jan. 6 | 743 | 166, 167 | 102 | 159 |
| Stone. Decorating | E. E. Hippe | 722,708 | Mar. 17 | 1989 | 443 | 103 | 456 |
| Stone. Device for fastening metal, &c., to | T. P. Hicks | 734,326 | July 21 | 3024 | 712 | 105 | 674 |
| Stone-dressing lathe | E. R. Cheney | 746,024 | Dec. 8 | 1313 | 294, 295 | 107 | 1396 |
| Stone-dressing machine | A. F. Jones | 724,706 | Apr. 7 | 539 | 128, 129 | 103 | 1284 |
| Stone-dressing machine | A. F. Jones | 724,707 | Apr. 7 | 544 | 130 | 103 | 1285 |
| Stone-dressing machine | T. Gallagher | 731,297 | June 16 | 3255 | 723 | 104 | 1837 |
| Stone-dressing machine | A. F. Jones | 741,582 | Oct. 13 | 2292 | 512, 513 | 106 | 1754 |
| Stone for building piers, dry-docks, breakwaters, &c. Apparatus for making artificial | F. B. and C. H. Umstead | 732,607 | June 30 | 5763 | 1278 | 104 | 2391 |
| Stone for imitating embroidery | G. Keller | 741,142 | Oct. 13 | 1397 | 320 | 106 | 1563 |
| Stone, granite, or marble cutting machinery | S. W. Vint | 725,301 | Apr. 14 | 1628 | 367 | 103 | 1530 |
| Stone. Indurated | C. A. O. Rosell | 747,229 | Dec. 15 | 3532 | ..... | 107 | 1910 |
| Stone. Indurating | L. T. Leet and C. A. O. Rosell | 747,193 | Dec. 15 | 3460 | ..... | 107 | 1896 |
| Stone, &c. Making artificial | J. T. Saltiel | 730,480 | June 9 | 1748 | ..... | 104 | 1502 |
| Stone. Making artificial | M. Cordes, geboren Müller | 739,835 | Sept. 29 | 4413 | ..... | 106 | 1012 |
| Stone, &c. Making artificial | E. R. Sutcliffe | 744,432 | Nov. 17 | 3207 | ..... | 107 | 715 |
| Stone. Making composite | C. A. O. Rosell | 747,228 | Dec. 15 | 3531 | ..... | 107 | 1910 |
| Stone. Manufacture of artificial | C. W. Stevens | 722,464 | Mar. 10 | 1512 | 333 | 103 | 338 |
| Stone. Manufacture of artificial | J. T. Saltiel | 730,479 | June 9 | 1747 | ..... | 104 | 1502 |
| Stone. Manufacture of artificial | C. W. Stevens | 742,924 | Nov. 3 | 179 | 41 | 107 | 40 |
| Stone. Manufacturing artificial | W. Owen | 731,608 | June 23 | 3853 | ..... | 104 | 1976 |
| Stone mold. Artificial | E. B. Jarvis | 733,396 | July 14 | 1258 | 299 | 105 | 283 |
| Stone. Mold for making artificial | F. L. Dykema | 746,476 | Dec. 8 | 2117 | 487 | 107 | 1572 |
| Stone. Molding | A. Lake | 743,525 | Nov. 10 | 1466 | ..... | 107 | 330 |
| Stone-molding machine. Artificial | N. F. Palmer | 724,608 | Apr. 7 | 355 | 86 | 103 | 1245 |
| Stone-molding machine. Artificial | E. W. Stevens | 737,169 | Aug. 25 | 3969 | 882, 883 | 105 | 1879 |
| Stone post. Artificial | E. H. Dresser | 741,469 | Oct. 13 | 2079 | 461 | 106 | 1710 |
| Stone-removing apparatus | J. P. Moran | 731,933 | June 23 | 4430 | 988 | 104 | 2098 |
| Stone-saw | C. K. George and J. Burnett | 726,902 | May 5 | 135 | 31 | 104 | 31 |
| Stone-sawing machine | C. A. Thomson | 729,975 | June 2 | 842 | 188 | 104 | 1299 |
| Stone-sawing machine | J. P. Winter | 732,986 | July 7 | 506 | 126 | 105 | 109 |
| Stone-sawing machine. High-speed gang | R. F. McKinley | 744,092 | Nov. 17 | 2560 | 548 | 107 | 574 |
| Stone. Steam-indurated | J. A. Bell and L. T. Leet | 745,476 | Dec. 1 | 319 | ..... | 107 | 1167 |
| Stone tub | W. Greer | 724,464 | Apr. 7 | 85 | 21 | 103 | 1187 |
| Stone tub. Artificial | F. Jager | 741,137 | Oct. 13 | 1389 | 318 | 106 | 1562 |
| Stones. Making artificial | F. Jürschina | 738,200 | Sept. 8 | 1311 | ..... | 106 | 299 |
| Stones. Producing artificial | E. Schwanenberg | 720,848 | Feb. 17 | 2654 | ..... | 102 | 1412 |
| Stool | F. D. Foote | 738,993 | Sept. 15 | 2854 | 633 | 106 | 644 |
| Stool and quilting-frame. Combined | J. Fitzgerald | 728,695 | May 19 | 3538 | 786, 787 | 104 | 790 |
| Stool. Bookkeeper's | R. W. Jennison | 722,585 | Mar. 10 | 1729 | 385 | 103 | 386 |
| Stool. Folding | C. H. Mock | 747,204 | Dec. 15 | 3491 | 792 | 107 | 1902 |
| Stool. Foot | R. M. Nidever | 736,427 | Aug. 18 | 2591 | 568 | 105 | 1571 |
| Stool. Music | F. R. Bennett | 720,776 | Feb. 17 | 2536 | 584 | 102 | 1387 |
| Stool or chair truck | F. A. Mast | 734,919 | July 28 | 4123 | 961 | 105 | 917 |
| Stools, chairs, or the like. Brace for | L. N. Prentice | 737,660 | Sept. 1 | 185 | 39 | 106 | 43 |
| Stop-box lock | L. R. Schunck | 737,667 | Sept. 1 | 198 | 42 | 106 | 46 |
| Stop device. Adjustable marginal | G. W. Donning | 742,611 | Oct. 27 | 4287 | 966 | 106 | 2198 |
| Stop mechanism | W. A. Walker | 743,961 | Nov. 10 | 2254 | 485 | 107 | 483 |
| Stop mechanism | C. Wais | 745,125 | Nov. 24 | 4496 | 973, 974 | 107 | 1090 |
| Stop mechanism | T. F. Robinson, C. E. Smethurst, and W. M. Gilbert. | 748,103 | Dec. 29 | 5212 | 1179, 1180 | 107 | 2324 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Stop mechanism. Machinery | T. J. Landrum, L. J. Bamberger, and D. C. Wright. | 725,571 | Apr. 14 | 2131 | 482 | 103 | 1637 |
| Stop-motion | G. A. Martin | 732,573 | June 30 | 5708 | 1268, 1269 | 104 | 2378 |
| Stop-motion for preparing, spinning, and doubling machines. | W. Hilton | 719,668 | Feb. 3 | 452 | 103 | 102 | 917 |
| Stop-motion mechanism | L. D. Wade | 727,501 | May 5 | 1254 | 279, 280 | 104 | 270 |
| Stopper: *See* Boiler-tube stopper. Bottle-stopper. Bottle-destroying stopper. Bottle or jar stopper. Bung-stopper. Flue-stopper. Gas-main stopper. Jar or tank stopper. Leak-stopper. Receptacle-stopper. Safety-stopper. Wood stopper. | | | | | | | |
| Stopper | J. H. Rivers | 726,761 | Apr. 28 | 4375 | 984 | 103 | 2129 |
| Stopper | J. H. Rivers | 726,762 | Apr. 28 | 4376 | 984 | 103 | 2129 |
| Stopper | H. Campbell | 735,031 | July 28 | 4324 | 1005 | 105 | 957 |
| Stopper-attaching device | A. H. Tatum | 733,438 | July 14 | 1335 | 315 | 105 | 299 |
| Stopper-extractor | S. Clubb | 730,878 | June 16 | 2448 | 541 | 104 | 1673 |
| Stopper-fastener | E. W. Klingensmith | 739,323 | Sept. 22 | 3462 | 772 | 106 | 788 |
| Stopper-lock | H. L. Leilich | 742,686 | Oct. 27 | 4423 | 999 | 106 | 2227 |
| Stopper-retainer | C. A. Tatum | 721,477 | Feb. 24 | 3884 | 883 | 102 | 1689 |
| Stopping and reversing mechanism | B. M. W. Hanson | 726,679 | Apr. 28 | 4208 | 951, 952 | 103 | 2094 |
| Stopping mechanism | J. T. Meats | 726,960 | May 5 | 250 | 58 | 104 | 54 |
| Storage and reloading apparatus | W. J. Selleck | 719,518 | Feb. 3 | 184 | 42, 43 | 102 | 862 |
| Storage apparatus | A. C. Johnston | 722,515 | Mar. 10 | 1609 | 354, 355 | 103 | 361 |
| Storage apparatus | J. M. Dodge | 733,355 | July 7 | 1175 | 278 | 105 | 247 |
| Storage battery | C. H. Everett | 719,315 | Jan. 27 | 3415 | 761, 762 | 102 | 768 |
| Storage battery | B. Ford | 719,937 | Feb. 3 | 932 | 217 | 102 | 1021 |
| Storage battery | E. A. Sperry | 723,327 | Mar. 24 | 3106 | ------ | 103 | 700 |
| Storage battery | E. A. Sperry | 723,328 | Mar. 24 | 3106 | ------ | 103 | 701 |
| Storage battery | J. B. Entz | 723,451 | Mar. 24 | 3347 | 750 | 103 | 747 |
| Storage battery | J. M. Allen | 723,804 | Mar. 31 | 3978 | 897 | 103 | 895 |
| Storage battery | W. Gardiner and J. R. Macmillan | 725,067 | Apr. 14 | 1199 | 273 | 103 | 1440 |
| Storage battery | R. N. Chamberlain | 725,218 | Apr. 14 | 1493 | 339, 340 | 103 | 1501 |
| Storage battery | F. A. Feldkamp | 726,272 | Apr. 28 | 3404 | 773, 774 | 103 | 1933 |
| Storage battery | A. W. Charlton | 728,202 | May 19 | 2587 | 578 | 104 | 590 |
| Storage battery | M. Emmé | 728,381 | May 19 | 2947 | 650 | 104 | 665 |
| Storage battery | J. C. Brocksmith | 728,667 | May 19 | 3496 | 777 | 104 | 782 |
| Storage battery | R. Darling | 729,140 | May 26 | 4338 | 958 | 104 | 969 |
| Storage battery | C. Bruno | 731,429 | June 23 | 3502 | 782 | 104 | 1906 |
| Storage battery | R. N. Chamberlain | 733,813 | July 14 | 1994 | 470 | 105 | 437 |
| Storage battery | A. V. Meserole | 736,125 | Aug. 11 | 2071 | 444 | 105 | 1441 |
| Storage battery | F. A. Redmon | 738,942 | Sept. 15 | 2775 | 615 | 106 | 628 |
| Storage battery | J. T. Niblett | 740,034 | Sept. 29 | 4823 | ------ | 106 | 1099 |
| Storage battery | C. W. Kennedy | 741,044 | Oct. 13 | 1206 | 273 | 106 | 1523 |
| Storage battery | R. N. Chamberlain | 746,289 | Dec. 8 | 1792 | 407 | 107 | 1501 |
| Storage battery and preparing electrodes therefor. | L. Paget | 717,610 | Jan. 6 | 161 | 40 | 102 | 35 |
| Storage battery. Electrical | H. K. P. Barham | 718,045 | Jan. 6 | 982 | 219 | 102 | 211 |
| Storage-bin | J. A. Jamieson | 742,873 | Nov. 3 | 93 | 22 | 107 | 21 |
| Storage-pocket | L. J. Anderson and C. Palmer | 747,837 | Dec. 22 | 4652 | 1052 | 107 | 2180 |
| Storage structure | C. Piez | 719,366 | Jan. 27 | 3520 | 783, 784 | 102 | 790 |
| Storage structure | A. H. Woodward | 732,020 | June 23 | 4614 | 1030, 1031 | 104 | 2136 |
| Storage structure | A. H. Woodward | 732,021 | June 23 | 4618 | 1031, 1032 | 104 | 2137 |
| Store-bin | C. H. Mather | 718,647 | Jan. 20 | 2143 | 467 | 102 | 489 |
| Store-bin | C. R. Reid and C. F. Heidelberg | 738,572 | Sept. 8 | 2054 | 448 | 106 | 457 |
| Store-goods lifter | J. S. Nicholson | 733,260 | July 7 | 1009 | 242 | 105 | 211 |
| Store-goods lifter | P. Christman | 747,376 | Dec. 22 | 3816 | 859 | 107 | 1990 |
| Store goods. Tool for reaching | F. H. Bertschy | 744,157 | Nov. 17 | 2690 | 574 | 107 | 602 |
| Store, library, office, or warehouse apparatus | N. O. Starks | 718,543 | Jan. 13 | 1938 | 424, 425, 426 | 102 | 432 |
| Store-service apparatus | C. W. McCormick | 721,320 | Feb. 24 | 3583 | 815 | 102 | 1628 |
| Store-service apparatus | A. L. W. Begg | 722,937 | Mar. 17 | 2398 | 536 | 103 | 539 |
| Store-service apparatus | W. L. Churchill | 723,829 | Mar. 31 | 4033 | 910, 911 | 103 | 906 |
| Store-service apparatus | C. W. McCormick | 726,089 | Apr. 21 | 3052 | 693 | 103 | 1846 |
| Store-service apparatus | C. W. McCormick | 726,090 | Apr. 21 | 3053 | 693 | 103 | 1846 |
| Store-service apparatus | M. C. Swezey | 736,651 | Aug. 18 | 3015 | 665 | 105 | 1658 |
| Store-service-apparatus station | W. L. Churchill | 726,815 | Apr. 28 | 4466 | 1008, 1009 | 103 | 2148 |
| Store-service-apparatus station | W. L. Churchill | 726,816 | Apr. 28 | 4469 | 1009, 1010 | 103 | 2148 |
| Store-service apparatus. Take-up device for | W. L. Churchill | 739,059 | Sept. 15 | 2972 | 659 | 106 | 669 |
| Storing and unloading materials. Apparatus for | C. C. Vermeer | 739,760 | Sept. 22 | 4260 | 955 | 106 | 962 |
| Stove | E. A. Quisenberry | 719,139 | Jan. 27 | 2093 | 687 | 102 | 699 |
| Stove | J. A. Schulte | 720,626 | Feb. 17 | 2280 | 523 | 102 | 1332 |
| Stove | J. J. Konigs | 721,376 | Feb. 24 | 3694 | 841 | 102 | 1651 |
| Stove | J. Wilson | 722,067 | Mar. 3 | 758 | 169 | 103 | 163 |
| Stove | J. M. and S. R. Crowner | 724,820 | Apr. 7 | 755 | 176 | 103 | 1332 |
| Stove | F. Krux | 730,464 | June 9 | 1726 | 385, 386 | 104 | 1498 |
| Stove | C. E. Hill | 732,186 | June 30 | 4956 | 1102 | 104 | 2220 |
| Stove | G. J. Day | 736,585 | Aug. 18 | 2883 | 630 | 105 | 1633 |
| Stove | W. Bell | 738,974 | Sept. 15 | 2832 | 627 | 106 | 639 |

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| Invention. | Name. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|---|
| | | | | Spec. | Dr'g. | Vol. | Page. |
| Stove | W. Heuermann | 739,177 | Sept. 15 | 3188 | 705 | 106 | 713 |
| Stove | P. Hamer | 739,543 | Sept. 22 | 3861 | 865 | 106 | 874 |
| Stove | T. J. March | 740,674 | Oct. 6 | 539 | 120 | 106 | 1363 |
| Stove | S. Bredahl | 741,220 | Oct. 13 | 1564 | 353 | 106 | 1600 |
| Stove | M. Hertenstein | 741,790 | Oct. 20 | 2702 | 602 | 106 | 1856 |
| Stove | J. Wood | 742,108 | Oct. 20 | 3367 | 752 | 106 | 1991 |
| Stove | H. B. Robischung | 745,909 | Dec. 1 | 1097 | 245 | 107 | 1332 |
| Stove | W. D. Gold | 746,817 | Dec. 15 | 2740 | 631<br>632 | 107 | 1732 |
| Stove | H. D. Perky | 747,475 | Dec. 22 | 3984 | 896<br>897 | 107 | 2027 |
| Stove air-feeding apparatus | L., Jr., and A. F. Brandt | 748,472 | Dec. 29 | 5880 | 1336 | 107 | 2470 |
| Stove air-heating attachment | D. H. Rickerd | 731,224 | June 16 | 3108 | 689 | 104 | 1805 |
| Stove and grate therefor | J. Gregory | 743,861 | Nov. 10 | 2075 | 442 | 107 | 458 |
| Stove and heater. Combined gas | J. R. Allan | 743,412 | Nov. 10 | 1213 | 250 | 107 | 274 |
| Stove and hot-water heater. Combined cooking- | R. Purdy | 726,189 | Apr. 21 | 3250 | 738 | 103 | 1886 |
| Stove and lamp. Combined oil | J. Wister | 738,968 | Sept. 15 | 2820 | 625 | 106 | 637 |
| Stove and steam-generator. Combined cooking- | D. Cline | 733,371 | July 14 | 1208 | 287 | 105 | 271 |
| Stove attachment | E. Jennings | 720,589 | Feb. 17 | 2194 | 509 | 102 | 1315 |
| Stove attachment | M. J. Stevens | 736,649 | Aug. 18 | 3012 | 665 | 105 | 1658 |
| Stove attachment | J. H. Clark | 746,923 | Dec. 15 | 2948 | 680 | 107 | 1779 |
| Stove attachment. Blue-flame oil- | C. F. McKay | 742,214 | Oct. 27 | 3563 | 794 | 106 | 2046 |
| Stove attachment. Gas- | D. W. Ross | 729,670 | June 2 | 264 | 61 | 104 | 1183 |
| Stove automatic cut-off. Gas- | F. C. Miller | 728,267 | May 19 | 2733 | 608 | 104 | 621 |
| Stove-band. Detachable | C. H. Bailey | 720,551 | Feb. 17 | 2117 | 488 | 102 | 1301 |
| Stove. Blue-flame oil- | G. W. Ferdon | 720,123 | Feb. 10 | 1320 | 302 | 102 | 1121 |
| Stove burner-cup. Oil- | J. S. Frey | 739,486 | Sept. 22 | 3775 | 844 | 106 | 857 |
| Stove. Car-heating | B. D. Grant and W. C. Middlebrook | 741,658 | Oct. 20 | 2429 | 545 | 106 | 1800 |
| Stove. Charcoal- | M. Stockon | 747,100 | Dec. 15 | 3295 | 750 | 107 | 1861 |
| Stove charcoal cooking attachment | R. Fletcher | 736,241 | Aug. 11 | 2259 | 489 | 105 | 1482 |
| Stove. Combined heating and cooking | F. J. Smith | 740,705 | Oct. 6 | 587 | 131 | 106 | 1374 |
| Stove. Condensing gas- | T. Bamforth and F. R. E. Branston | 721,495 | Feb. 24 | 3910 | 889 | 102 | 1695 |
| Stove-controller | G. L. Grondahl | 739,076 | Sept. 15 | 3005 | 666 | 106 | 675 |
| Stove. Convertible | C. R. Morgan | 747,998 | Dec. 29 | 4999 | 1129<br>1130 | 107 | 2278 |
| Stove. Cooking- | J. T. Clancy | 719,187 | Jan. 27 | 3171 | 706 | 102 | 714 |
| Stove. Cooking- | H. Hernfeld | 729,861 | June 2 | 632 | 138 | 104 | 1258 |
| Stove cover and lifter | L. T. Lenderking | 736,749 | Aug. 18 | 3210 | 709 | 105 | 1699 |
| Stove cut-off. Vapor- | L. Stockstrom | 747,798 | Dec. 22 | 4580 | 1034 | 107 | 2163 |
| Stove detachable fire-box. Cook- | I. G. Chatfield | 727,090 | May 5 | 519 | 112 | 104 | 113 |
| Stove-door | F. Kumber, H. and E. Haenze | 747,731 | Dec. 22 | 4458 | 1005 | 107 | 2135 |
| Stove. Downdraft- | W. F. Wolfe | 729,028 | May 26 | 4149 | 919 | 104 | 931 |
| Stove. Downdraft- | E. R. Cahoone | 742,161 | Oct. 27 | 3454 | 771 | 106 | 2026 |
| Stove-flue. Safety | F. C. Melsha | 717,592 | Jan. 6 | 130 | 33 | 102 | 29 |
| Stove. Gas- | J. F. and F. O. Adams and E. E. Frederick. | 720,771 | Feb. 17 | 2528 | 583 | 102 | 1385 |
| Stove. Gas- | E. E. Frederick | 725,834 | Apr. 21 | 2633 | 600 | 103 | 1759 |
| Stove. Gas- | A. C. Witman | 726,010 | Apr. 21 | 2934 | 667 | 103 | 1821 |
| Stove. Gas- | M. B. McCleery | 731,203 | June 16 | 3072 | 682 | 104 | 1798 |
| Stove. Gas- | W. B. Cassidy | 733,005 | July 7 | 538 | 132 | 105 | 115 |
| Stove. Gas- | D. J. Clark | 733,699 | July 14 | 1769 | 420<br>421 | 105 | 390 |
| Stove. Gas- | H. Eldridge | 733,767 | July 14 | 1784 | 423<br>424 | 105 | 393 |
| Stove. Gas- | A. L. Gibson | 735,963 | Aug. 11 | 1766 | 378 | 105 | 1376 |
| Stove. Gas- | O. H. Ernst | 739,780 | Sept. 22 | 4309 | 965 | 106 | 973 |
| Stove. Gas- | F. J. Doyle | 742,844 | Nov. 3 | 45 | 11, 12 | 107 | 12 |
| Stove. Gas- | J. F. and F. O. Adams | 745,711 | Dec. 1 | 715 | 163<br>164 | 107 | 1250 |
| Stove. Gas- | L. Silverman | 746,752 | Dec. 15 | 2620 | 602 | 107 | 1705 |
| Stove. Gas- | W. M. Partridge | 747,474 | Dec. 22 | 3983 | 896 | 107 | 2027 |
| Stove gas-burner | C. F. Wilson | 720,303 | Feb. 10 | 1654 | 377 | 102 | 1188 |
| Stove. Gas heating- | E. Meininghaus | 736,860 | Aug. 18 | 3430 | 759 | 105 | 1745 |
| Stove. Gas or vapor | H. B. Tatham, Jr | 732,470 | June 30 | 5506 | 1221 | 104 | 2334 |
| Stove gas-saving attachment | S. W. Shoupe | 725,882 | Apr. 21 | 2715 | 617 | 103 | 1777 |
| Stove-grate | A. B. Clunies | 718,604 | Jan. 20 | 2073 | 451 | 102 | 475 |
| Stove-grate | J. V. Frederick | 737,382 | Aug. 25 | 4380 | 977 | 105 | 1966 |
| Stove-grate | R. J. Lore | 744,082 | Nov. 17 | 2544 | 544 | 107 | 571 |
| Stove. Grilling or toasting | C. Adams | 735,331 | Aug. 4 | 561 | 115 | 105 | 1101 |
| Stove. Heating- | C. Matthews | 719,827 | Feb. 3 | 758 | 178 | 102 | 984 |
| Stove. Heating- | C. A. Richardson | 726,462 | Apr. 28 | 3772 | 462 | 103 | 2009 |
| Stove. Heating- | J. H. Waters | 728,527 | May 19 | 3208 | 712 | 104 | 720 |
| Stove. Heating- | D. Lippy | 731,476 | June 23 | 3602 | 803 | 104 | 1927 |
| Stove. Heating- | S. F. Shafer | 733,432 | July 14 | 1325 | 312<br>313 | 105 | 297 |
| Stove. Heating- | L. O. Gilliland | 734,460 | July 21 | 3247 | 764 | 105 | 719 |
| Stove. Heating- | C. J. Kirch | 736,740 | Aug. 18 | 3196 | 707 | 105 | 1696 |
| Stove. Heating- | W. L. Rose | 738,069 | Sept. 1 | 1002 | 223 | 106 | 218 |
| Stove. Heating- | C. Faust | 738,304 | Sept. 8 | 1528 | 330 | 106 | 344 |
| Stove. Heating- | C. Matthews | 738,619 | Sept. 8 | 2140 | 469 | 106 | 476 |
| Stove. Heating- | J. L. F. Bauer, Jr | 743,223 | Nov. 3 | 788 | 170 | 107 | 165 |
| Stove. Heating- | T. Young | 743,370 | Nov. 3 | 1097 | 234 | 107 | 232 |
| Stove. Heating- | C. E. Hill | 744,075 | Nov. 17 | 2533 | 542 | 107 | 569 |
| Stove. Heating- | H. Beach and J. B. Coe | 747,674 | Dec. 22 | 4354 | 983 | 107 | 2111 |
| Stove. Heating and cooking | J. Harris | 742,643 | Oct. 27 | 4347 | 977 | 106 | 2211 |
| Stove. Heating or cooking | P. S. Spiller | 721,756 | Mar. 3 | 176 | 41 | 103 | 39 |
| Stove-hood | A. Anderson | 717,961 | Jan. 6 | 826 | 187 | 102 | 177 |
| Stove-hood | M. Warren | 731,985 | June 23 | 4531 | 1010<br>1011 | 104 | 2120 |
| Stove hot-air feeder | A. E. Whitney | 740,501 | Oct. 6 | 231 | 45 | 106 | 1296 |
| Stove. Hot-blast | J. Kennedy | 728,185 | May 12 | 2559 | 569 | 104 | 562 |
| Stove. Hot-blast | A. C. Kloman | 732,867 | July 7 | 302 | 76 | 105 | 66 |
| Stove. Hot-blast | H. Lang | 741,680 | Oct. 20 | 2474 | 553 | 106 | 1808 |
| Stove. Lamp- | C. R. Sandvig | 720,182 | Feb. 10 | 1424 | 325 | 102 | 1141 |
| Stove. Lamp- | A. F. Glaessner | 725,335 | Apr. 14 | 1695 | 382 | 103 | 1544 |
| Stove. Lamp- | A. S. Martin | 731,926 | June 23 | 4420 | 986 | 104 | 2096 |

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| Invention. | Name. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|---|
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| Stove. Lamp- | R. M. Bracklow | 741,105 | Oct. 13 | 1332 | 305 | 106 | 1551 |
| Stove-lid lifter | J. F. Rose | 741,835 | Oct. 20 | 2771 | 618 | 106 | 1873 |
| Stove lighting attachment. Gas- | L. E. Adams | 741,991 | Oct. 20 | 3102 | 691 | 106 | 1939 |
| Stove magazine. Heating- | E. Schoup | 727,459 | May 5 | 1182 | 261 | 104 | 255 |
| Stove-mat | E. L. Allen | 727,251 | May 5 | 800 | 172 | 104 | 172 |
| Stove. Oil- | A. B. Hutchins | 721,707 | Mar. 3 | 105 | 22 | 103 | 23 |
| Stove. Oil- | O. Thacher | 723,499 | Mar. 24 | 3455 | 773 | 103 | 767 |
| Stove. Oil- | W. H. Wilder | 733,307 | July 7 | 1085 | 257 | 105 | 229 |
| Stove. Oil- | E. A. Anderson | 737,993 | Sept. 1 | 880 | 192 | 106 | 192 |
| Stove. Oil- | J. L. Berge | 739,143 | Sept. 15 | 3134 | 693 | 106 | 701 |
| Stove oil-burner | C. H. Higgins | 721,371 | Feb. 24 | 3679 | 838 | 102 | 1647 |
| Stove or apparatus for heating air | S. C. Davidson | 746,682 | Dec. 15 | 2500 | 572, 573, 574 | 107 | 1678 |
| Stove or furnace | W. S. Beale | 724,781 | Apr. 7 | 682 | 160 | 103 | 1314 |
| Stove or furnace chimney-valve | P. Meehan | 738,828 | Sept. 15 | 2584 | 570 | 106 | 586 |
| Stove or furnace. Gas heating- | W. S. Bechtold and A. Faber du Faur, Jr. | 747,928 | Dec. 29 | 4862 | 1097, 1098 | 107 | 2247 |
| Stove or furnace grate | J. H. Goodfellow and J. W. Piper | 718,998 | Jan. 27 | 2812 | 630 | 102 | 641 |
| Stove or furnace. Heating | T. D. Evans | 746,939 | Dec. 15 | 2997 | 689 | 107 | 1791 |
| Stove or heater. Gas | E. D. Morss | 734,732 | July 28 | 3773 | 880 | 105 | 843 |
| Stove or heater. Gas | J. R. Allan | 747,529 | Dec. 22 | 4088 | 918 | 107 | 2051 |
| Stove or range | B. F. Allen | 727,561 | May 12 | 1383 | 312 | 104 | 317 |
| Stove or range | D. D. Berry | 733,129 | July 7 | 766 | 185, 186 | 105 | 162 |
| Stove or range | J. N. Young | 737,546 | Aug. 25 | 4702 | 1055 | 105 | 2039 |
| Stove or range. Cooking | G. E. Wilbur | 719,629 | Feb. 3 | 391 | 88, 89 | 102 | 904 |
| Stove or range. Cooking | R. H. Babbitt, Jr | 737,813 | Sept. 1 | 485 | 107 | 106 | 109 |
| Stove or range gas heating apparatus. Cooking | T. I. Rankin | 718,793 | Jan. 20 | 2423 | 537 | 102 | 545 |
| Stove-oven revolving grate | I. Sanford | 736,301 | Aug. 11 | 2368 | 515 | 105 | 1508 |
| Stove-oven revolving stand | A. S. Bliss | 747,929 | Dec. 29 | 4865 | 1098 | 107 | 2248 |
| Stovepipe | O. M. Bubb | 718,599 | Jan. 20 | 2066 | 449 | 102 | 474 |
| Stovepipe | D. N. Thomason | 731,975 | June 23 | 4504 | 1006 | 104 | 2115 |
| Stovepipe | H. Ditchburn | 735,955 | Aug. 11 | 1753 | 375 | 105 | 1374 |
| Stovepipe | F. E. Heinig | 739,600 | Sept. 22 | 3977 | 887 | 106 | 898 |
| Stovepipe. Adjustable | R. I. Connelly and I. W. Read | 747,379 | Dec. 22 | 3820 | 859 | 107 | 1991 |
| Stovepipe and collar fastener | B. A. Stocking | 740,376 | Sept. 29 | 5438 | 1223 | 106 | 1226 |
| Stovepipe-boiler | M. G. Strickland | 717,943 | Jan. 6 | 799 | 180 | 102 | 171 |
| Stovepipe-clamp | J. M. Whitney | 733,785 | July 14 | 1936 | 456 | 105 | 425 |
| Stovepipe-collar | E. J. Campbell | 718,047 | Jan. 6 | 984 | 219 | 102 | 212 |
| Stovepipe-elbow connection | A. Neilson | 719,494 | Feb. 3 | 153 | 34 | 102 | 856 |
| Stovepipe-fastener | M. H. Goodwin | 718,119 | Jan. 13 | 1118 | 247 | 102 | 256 |
| Stovepipe-fastener | F. H. Busby | 723,984 | Mar. 31 | 4357 | 978 | 103 | 975 |
| Stovepipe-fastener | R. H. Hodge | 738,038 | Sept. 1 | 954 | 212 | 106 | 208 |
| Stovepipe-fastener | A. J. Forsythe | 741,648 | Oct. 20 | 2416 | 541 | 106 | 1797 |
| Stovepipe-fastener | W. G. Drake | 745,003 | Nov. 24 | 4229 | 916 | 107 | 947 |
| Stovepipe-fastener | F. E. Mason | 746,122 | Dec. 8 | 1489 | 333 | 107 | 1438 |
| Stovepipe for flue-cleaning | H. M. Shields | 728,508 | May 19 | 3172 | 702 | 104 | 712 |
| Stovepipe-holder | P. E. Getz | 721,691 | Mar. 3 | 78 | 17 | 103 | 18 |
| Stovepipe-holder | W. H. Medina | 736,416 | Aug. 18 | 2567 | 563 | 105 | 1566 |
| Stovepipe-holder | C. F. Goodman | 748,063 | Dec. 29 | 5139 | 1162 | 107 | 2308 |
| Stovepipe-hole cover | W. A. Kuhlman and G. W. Carpenter | 719,816 | Feb. 3 | 741 | 173 | 102 | 980 |
| Stovepipe-joint | C. A. Overton | 743,321 | Nov. 3 | 974 | 211 | 107 | 209 |
| Stovepipe-joint | H. E. Moomaw | 744,972 | Nov. 24 | 4178 | 903 | 107 | 937 |
| Stovepipe or chimney thimble | C. E. Hubbs | 745,618 | Dec. 1 | 556 | 130 | 107 | 1216 |
| Stovepipe-polishing machine | I. Gottfield | 722,297 | Mar. 10 | 1201 | 265 | 103 | 272 |
| Stovepipe-thimble | R. E. Mann | 722,029 | Mar. 3 | 697 | 154 | 103 | 150 |
| Stovepipe-thimble | A. Muellerwiess | 722,607 | Mar. 10 | 1766 | 393 | 103 | 894 |
| Stovepipe-thimble | J. S. Brown | 731,336 | June 16 | 3317 | 740 | 104 | 1849 |
| Stovepipe thimble and collar. Combination | D. N. Shoemaker | 747,334 | Dec. 15 | 3744 | 843, 844 | 107 | 1958 |
| Stovepipes. Clamping-collar for use in cutting holes in Stove-plate | G. W. H. Hughes | 724,185 | Mar. 31 | 4760 | 1068 | 103 | 1054 |
| Stove. Portable | L. W. Brown | 720,401 | Feb. 10 | 1819 | 415 | 102 | 1224 |
| Stove. Portable | J. Watson | 747,814 | Dec. 22 | 4613 | 1041 | 107 | 2171 |
| Stove. Portable knockdown or folding camp- | F. Bach, Jr., and E. Crotteau | 718,412 | Jan. 13 | 1648 | 363 | 102 | 369 |
| Stove. Radiant | E. Scott | 739,726 | Sept. 22 | 4212 | 942 | 106 | 951 |
| Stove-radiator | J. C. Meister | 738,222 | Sept. 8 | 1342 | 291 | 106 | 306 |
| Stove self-feeding attachment. Cooking- | N. Joergensen | 740,866 | Oct. 6 | 895 | 200 | 106 | 1437 |
| Stove-support | D. C. McFarland | 745,648 | Dec. 1 | 606 | 140 | 107 | 1227 |
| Stove tilting frame. Cooking- | F. L. Holmes | 739,872 | Sept. 29 | 4513 | 1014, 1015 | 106 | 1031 |
| Stove valve. Vapor- | W. E. Guese | 743,714 | Nov. 10 | 1807 | 381 | 107 | 403 |
| Stove. Vapor- | L. Dahl | 727,301 | May 5 | 890 | 193, 194 | 104 | 190 |
| Stove. Vapor- | I. Kinsey | 741,913 | Oct. 20 | 2932 | 654 | 106 | 1905 |
| Stoves, &c. Air-heating device for | C. E. Whitaker | 748,326 | Dec. 29 | 5597 | 1276 | 107 | 2407 |
| Stoves. Air-valve for hot-blast | G. K. Hamfeldt | 731,452 | June 23 | 3562 | 794 | 104 | 1918 |
| Stoves and chimneys. Hot-air box for brick or tile | H. Niemeczek | 725,007 | Apr. 7 | 1093 | 248 | 103 | 1402 |
| Stoves. Apparatus for feeding liquid fuel to | S. Trivett and E. Cummings | 738,257 | Sept. 8 | 1409 | 306 | 106 | 320 |
| Stoves. Construction of heating- | C. W. Stauss | 738,640 | Sept. 8 | 2191 | 478 | 106 | 486 |
| Stoves. Electric lighting attachment for gas- | S. Lewellen | 747,446 | Dec. 22 | 3936 | 885 | 107 | 2017 |
| Stoves. Gas-burning attachment for coal cooking | H. C. Steinhoff | 729,233 | May 26 | 4512 | 995 | 104 | 1006 |
| Stoves or heaters. Flue construction of gas-burning | S. B. Harvey | 717,847 | Jan. 6 | 638 | 841 | 102 | 136 |
| Stoves or ranges. Tea-shelf for cooking | W. A. Spicer | 737,671 | Sept. 1 | 207 | 44 | 106 | 48 |
| Stoves, ranges, &c. Composition for destroying and removing carbon or soot from | A. R. Radtke | 728,176 | May 12 | 2544 | ..... | 104 | 559 |
| Straightening and tempering device | M. J. Ryan | 747,779 | Dec. 22 | 4545 | 1024 | 107 | 2157 |
| Strain. Single-link | L. Steinberger | 735,612 | Aug. 4 | 1105 | 235 | 105 | 1215 |
| Strain. Spheroidal | L. Steinberger | 735,611 | Aug. 4 | 1103 | 235 | 105 | 1215 |
| Strainer | G. L. Wackerow | 719,913 | Feb. 3 | 898 | 211 | 102 | 1014 |
| Strainer | W. Lewinski | 720,365 | Feb. 10 | 1767 | 400 | 102 | 1214 |
| Strainer | M. E. Gallaher | 725,952 | Apr. 21 | 2839 | 644 | 103 | 1802 |
| Strainer | I. Ersha | 727,321 | May 5 | 929 | 202 | 104 | 200 |

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| Invention. | Name. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|---|
| | | | | Spec. | Dr'g. | Vol. | Page. |
| Strainer | F. G. Brown | 740,225 | Sept. 29 | 5164 | 1160 | 106 | 1169 |
| Strainer | G. Lafrentz | 745,109 | Nov. 24 | 4469 | 967 | 107 | 996 |
| Strainer | A. E. Saxton | 747,088 | Dec. 15 | 3272 | 745 | 107 | 1855 |
| Strainer and mixer. Liquid | W. F. O'Neill | 737,014 | Aug. 25 | 3717 | 825 | 105 | 1826 |
| Strainer axle-bearing | P. Reinicke | 735,411 | Aug. 4 | 710 | 151 | 105 | 1132 |
| Strainer-bag support | J. A. Mayhew | 745,875 | Dec. 1 | 1043 | 235 | 107 | 1321 |
| Strainer-belt | C. Edgerton | 729,296 | May 26 | 4629 | {1023 1024 | {104 | 1030 |
| Strainer. Culinary | M. B. Goodrich | 718,247 | Jan. 13 | 1344 | 298 | 102 | 304 |
| Strainer. Down-spout adjustable | R. F. Coleman | 725,933 | Apr. 21 | 2811 | 637 | 103 | 1796 |
| Strainer. Feed-pipe | S. M. Vauclain and G. Greenough | 738,088 | Sept. 1 | 1034 | 231 | 106 | 224 |
| Strainer. Milk | J. W. Barth | 724,153 | Mar. 31 | 4697 | 1054 | 103 | 1041 |
| Strainer. Milk | C. A. Dunn | 731,553 | June 23 | 3747 | 835 | 104 | 1955 |
| Strainer. Rotary | C. Edgerton | 726,658 | Apr. 28 | 4169 | 940 | 103 | 2086 |
| Strainer. Tea or coffee | A. H. Leach | 731,920 | June 23 | 4413 | 983 | 104 | 2094 |
| Strainer. Waste-pipe | A. E. Lytle | 738,726 | Sept. 8 | 2354 | 516 | 106 | 519 |
| Straining device. Automatic | M. I. Lowry | 737,752 | Sept. 1 | 361 | 77 | 106 | 81 |
| Straining food products or the like. Machine for | M. Schlüssel | 732,900 | July 7 | 357 | 87 | 105 | 78 |
| Strap: *See* Belt-strap. Blanket-roll strap. Breast-strap. Crate corner-strap. Hame-strap. Hand-strap. Parcel-strap. Passenger-supporting strap. | | | | | | | |
| Strap-covering machine | H. R. Chadbourne, Jr., I. S. Craig, and C. W. B. Fuller. | 742,163 | Oct. 27 | 3458 | {772 773 774 | {106 | 2027 |
| Strap-folding device | B. Cohen | 733,700 | July 14 | 1771 | 421 | 105 | 391 |
| Strap grip or buckle | J. H. Wallace | 734,382 | July 21 | 3112 | 732 | 105 | 692 |
| Strap-holder | J. H. Lee | 747,077 | Dec. 15 | 3258 | 741 | 107 | 1852 |
| Strap-lock | W. P. C. Adams | 735,689 | Aug. 11 | 1263 | 269 | 105 | 1267 |
| Strap spring attachment | W. J. Davidson | 741,232 | Oct. 13 | 1585 | 356 | 106 | 1604 |
| Straw-conveyer | H. J. Talmage | 723,335 | Mar. 24 | 3118 | 702 | 103 | 702 |
| Street-box for underground mains for water, gas, meter, and valve boxes. | S. Shanahan | 734,621 | July 28 | 3546 | 830 | 105 | 799 |
| Street-cleaning apparatus. Hydraulic | P. Shannon | 726,580 | Apr. 28 | 4031 | {911 912 | {103 | 2057 |
| Street-cleaning machine | S. Hosfeld | 742,657 | Oct. 27 | 4371 | 985 | 106 | 2216 |
| Street-cleaning-machine attachment | O. Brothers | 748,160 | Dec. 29 | 5316 | {1207 1208 | {107 | 2347 |
| Street cleansing or scavengering apparatus | F. J. Scott | 748,109 | Dec. 29 | 5224 | {1183 1184 | {107 | 2327 |
| Street-indicating device | T. W. Small | 738,366 | Sept. 8 | 1670 | {361 362 | {106 | 375 |
| Street-indicator and advertiser. Automatic | T. A. Reader | 723,182 | Mar. 17 | 2839 | 638 | 103 | 633 |
| Street or station indicator | A. T. Chester | 735,944 | Aug. 11 | 1735 | 371 | 105 | 1370 |
| Street or station indicator | E. Lundin | 738,464 | Sept. 8 | 1854 | {403 404 | {106 | 413 |
| Street or station indicator | H. L. Towler | 739,949 | Sept. 29 | 4655 | {1044 1045 | {106 | 1062 |
| Street refuse. Apparatus for collecting mud, dust, or other | W. H. Melvin and A. Mann | 730,190 | June 2 | 1188 | {266 267 | {104 | 1369 |
| Street-sweeper | D. Pike | 720,474 | Feb. 10 | 1947 | 445 | 102 | 1250 |
| Street-sweeper | E. Curtiss | 725,939 | Apr. 21 | 2820 | 639 | 103 | 1798 |
| Street-sweeper | A. Flechtheim | 726,040 | Apr. 21 | 2981 | 677 | 103 | 1831 |
| Street-sweeper | Z. Whittemore | 730,502 | June 9 | 1790 | 401 | 104 | 1511 |
| Street-sweeper | H. Thompson | 740,063 | Sept. 29 | 4871 | {1091 1092 | {106 | 1108 |
| Street-sweeper | D. B. and W. R. Cliffe | 746,029 | Dec. 8 | 1326 | 297 | 107 | 1399 |
| Street-sweeper | A. S. Young | 746,229 | Dec. 8 | 1683 | {374 375 | {107 | 1479 |
| Street-sweeper brush | J. T. Collins | 742,839 | Nov. 3 | 38 | 9 | 107 | 11 |
| Street-sweeping device | I. A. McCormack | 719,492 | Feb. 3 | 148 | 33, 34 | 102 | 855 |
| Street-sweeping machine | R. S. Beatty | 740,218 | Sept. 29 | 5152 | {1156 1157 | {106 | 1166 |
| Street-sweeping-machine brooms. Machine for making | A. Schaefer | 729,676 | June 2 | 272 | 62 | 104 | 1185 |
| Street-washer | T. M. Murphy | 736,135 | Aug. 11 | 2088 | 448 | 105 | 1445 |
| Streets, roads, or footpaths. Implement for clearing | F. Draeger | 731,762 | June 23 | 4130 | 922 | 104 | 2032 |
| Strength-testing device | J. Maitland | 723,291 | Mar. 24 | 3042 | {684 685 | {103 | 687 |
| Strength-testing device | R. Stock and F. F. Boegner | 740,708 | Oct. 6 | 594 | 132 | 106 | 1375 |
| Strength-testing machine. Bicyclist's | R. W. Blaisdell | 747,294 | Dec. 15 | 3603 | 828 | 107 | 1940 |
| Strength-testing or punching machine | R. J. Carson | 741,625 | Oct. 20 | 2379 | 533 | 106 | 1788 |
| Stretcher | J. E. Reeves | 732,456 | Mar. 10 | 1493 | 329 | 103 | 334 |
| Stretcher. Collapsible | K. Freuler | 740,002 | Sept. 29 | 4754 | 1069 | 106 | 1083 |
| Stretcher. Collapsible | E. Kottusch | 748,289 | Dec. 29 | 5542 | {1263 1264 | {107 | 2395 |
| Striking-bag | R. Reach | 728,177 | May 12 | 2545 | 566 | 104 | 559 |
| Striking-bag | J. Gamble | 733,024 | July 7 | 572 | 139 | 105 | 122 |
| Striking-bag-disk support | W. J. Cunningham | 732,396 | June 30 | 5368 | 1189 | 104 | 2306 |
| Striking-bag support | J. F. Maynard | 730,943 | June 16 | 2575 | 574 | 104 | 1700 |
| String-cutter | G. R. Butler | 740,526 | Oct. 6 | 278 | 55 | 106 | 1305 |
| String-cutting device | B. J. Tumelty | 740,339 | Sept. 29 | 5366 | 1209 | 106 | 1211 |
| Stringed-instrument bridge | S. C. Roberts and F. C. Potter | 727,203 | May 5 | 711 | {152 153 | {104 | 154 |
| Stringed-instrument keyboard | G. P. Buchanan | 730,000 | June 2 | 885 | 197 | 104 | 1308 |
| Stropper. Automatic | A. C. Gaynor | 720,417 | Feb. 10 | 1851 | 422 | 102 | 1231 |
| Stropping-machine | A. W. Scheuber | 734,337 | Mar. 31 | 5065 | 1133 | 103 | 1115 |
| Structural element and producing same | O. A. Turner | 746,411 | Dec. 8 | 2008 | 457 | 107 | 1548 |
| Structural member. Composite | J. Kahn | 743,086 | Nov. 3 | 516 | {111 112 | {107 | 108 |
| Structural metal support | T. Collins | 719,191 | Jan. 27 | 3178 | 708 | 102 | 716 |
| Structure. Composite | G. A. Weber | 742,809 | Oct. 27 | 4626 | 1048 | 106 | 2272 |
| Stub-runner and subsoil attachment therefor | W. Fetzer | 724,835 | Apr. 7 | 785 | 182 | 103 | 1238 |

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| Invention. | Name. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|---|
| | | | | Spec. | Drg. | Vol. | Page. |
| Stubble-shaver | T. X. Landry | 719,236 | Jan. 27 | 3262 | 729 | 102 | 734 |
| Stud | E. Pringle | 720,616 | Feb. 17 | 2265 | 520 | 102 | 1329 |
| Stud | A. C. Schlieper and H. G. Steinbock | 722,540 | Mar. 10 | 1649 | 363 | 103 | 370 |
| Stud | T. R. Hyde, Jr | 739,677 | Sept. 22 | 4124 | 920 | 106 | 931 |
| Stud member | J. V. Washburne | 742,089 | Oct. 20 | 3335 | 744 | 106 | 1985 |
| Stud member | J. V. Washburne | 745,747 | Dec. 1 | 771 | 176 | 107 | 1263 |
| Stud. Shirt-bosom | J. W. Lawson | 724,591 | Apr. 7 | 324 | 80 | 103 | 1238 |
| Studding | J. W. Rapp | 717,923 | Jan. 6 | 765 | 171 | 102 | 164 |
| Stuffing-box | B. P. Fielden | 722,219 | Mar. 10 | 1052 | 231 | 103 | 240 |
| Stuffing-box | F. E. Fredericks | 732,291 | June 30 | 5162 | 1146 | 104 | 2263 |
| Stuffing-box | R. Titus | 734,633 | July 28 | 3572 | 836 | 105 | 801 |
| Stuffing-box for flexible steam or gas turbine shafts | A. Schütt | 724,510 | Apr. 7 | 165 | 40 | 103 | 1205 |
| Stump-extractor | O. J. Dahl | 728,551 | May 19 | 3266 | 723, 724 | 104 | 731 |
| Stump-extractor | J. C. Fullington | 741,026 | Oct. 13 | 1181 | 267 | 106 | 1518 |
| Stump-extractor and grubber | W. S. Chilton | 733,151 | July 7 | 800 | 194 | 105 | 169 |
| Stump-protector | J. F. Rowley | 721,239 | Feb. 24 | 3459 | 786 | 102 | 1601 |
| Stump-puller | I. H. Garrett | 726,421 | Apr. 28 | 3695 | 838 | 103 | 1994 |
| Stump-puller | F. M. Hawkins | 737,925 | Sept. 1 | 733 | 159 | 106 | 160 |
| Stump-puller-anchoring device | W. Smith | 746,505 | Dec. 8 | 2328 | 533 | 107 | 1620 |
| Stump-puller or lifting-machine | C. Shoettle | 726,581 | Apr. 28 | 4034 | 912 | 103 | 2058 |
| Stump-puller. Portable | T. A. Kundson | 728,248 | May 19 | 2683 | 600 | 104 | 610 |
| Subaqueous working-chamber | D. D. McBean | 745,454 | Dec. 1 | 272 | 64, 65 | 107 | 1157 |
| Subirrigating device | C. M. Patterson | 718,380 | Jan. 13 | 1596 | 351 | 102 | 357 |
| Submarine building | B. H. Weisker | 739,961 | Sept. 29 | 4671 | 1050 | 106 | 1066 |
| Submarine communication. System of | S. Lake | 738,725 | Sept. 8 | 2350 | 515, 516 | 106 | 518 |
| Submarine construction | L. L. Rinaldi | 728,014 | May 12 | 2250 | 500, 501 | 104 | 496 |
| Submarine work. Apparatus for | C. Williamson | 745,469 | Dec. 1 | 299 | 72 | 107 | 1163 |
| Submerged devices. Means for protecting | O. A. Stempel | 736,891 | Aug. 18 | 3477 | 773 | 105 | 1755 |
| Subtarget | H. H. Cummings | 739,779 | Sept. 22 | 4307 | 964, 965 | 106 | 972 |
| Subway construction | J. and D. W. Ohaver | 722,247 | Mar. 10 | 1107 | 243 | 103 | 251 |
| Sucker-rod antifriction device | W. L. Black | 735,200 | Aug. 4 | 326 | 63 | 105 | 1050 |
| Sucker-rod connector | F. M. Egbert | 736,371 | Aug. 18 | 2487 | 546 | 105 | 1549 |
| Sucker-rod joint | E. B. Campbell | 735,030 | July 28 | 4323 | 1005 | 105 | 957 |
| Suction-pipe | J. Jorgensen | 735,106 | Aug. 4 | 108 | 25 | 105 | 1006 |
| Suction-ventilator. Rotary | J. Dickie and A. F. Williams | 730,099 | June 2 | 1044 | 234 | 104 | 1340 |
| Sugar and solutions thereof. Purifying | C. A. Spreckels and C. A. Kern | 722,157 | Mar. 3 | 919 | ------ | 103 | 196 |
| Sugar and solutions thereof. Purifying | C. A. Spreckels and C. A. Kern | 722,158 | Mar. 3 | 921 | ------ | 103 | 196 |
| Sugar-boiler | J. Czapikowski | 735,345 | Aug. 4 | 582 | 119, 120 | 105 | 1105 |
| Sugar-boiler | T. W. Lanier | 741,148 | Oct. 13 | 1406 | 322 | 106 | 1566 |
| Sugar-cane syrup. Making | J. Tillman | 729,976 | June 2 | 844 | ------ | 104 | 1300 |
| Sugar constituents. Extracting | L. Naudet | 728,600 | May 19 | 3372 | 747 | 104 | 755 |
| Sugar. Converting wood into | A. Classen. (Reissue) | 12,108 | May 5 | 1381 | ------ | 104 | 298 |
| Sugar-crystals and recovery of cleansing compositions employed. Cleansing | C. A. Spreckels and C. A. Kern | 747,256 | Dec. 15 | 3582 | ------ | 107 | 1920 |
| Sugar. Electro-endosmotic process of extracting | B. Schwerin | 723,928 | Mar. 31 | 4239 | 953 | 103 | 950 |
| Sugar. Extracting | L. Naudet | 746,734 | Dec. 15 | 2580 | 594 | 107 | 1697 |
| Sugar-extracting apparatus | L. Naudet | 746,736 | Dec. 15 | 2586 | 594, 595 | 107 | 1698 |
| Sugar from beets. Making | F. Breyer | 718,692 | Jan. 20 | 2237 | ------ | 102 | 507 |
| Sugar from beets. Making white | L. Hirt | 719,113 | Jan. 27 | 3051 | 678 | 102 | 690 |
| Sugar-juice. Apparatus for the continuous carbonation of alkaline | L. Naudet | 739,702 | Sept. 22 | 4162 | 930, 931 | 106 | 940 |
| Sugar-juice. Continuous carbonation of | L. Naudet | 746,735 | Dec. 15 | 2584 | 594 | 107 | 1697 |
| Sugar-juice-treating apparatus | J. A. Besson | 738,397 | Sept. 8 | 1728 | 376 | 106 | 388 |
| Sugar-juices. Purifying and concentrating | J. A. Besson | 738,398 | Sept. 8 | 1729 | ------ | 106 | 388 |
| Sugar. Making | J. W. De Castro | 729,920 | June 2 | 722 | 161 | 104 | 1275 |
| Sugar. Making | J. O. Schweitzer | 746,177 | Dec. 8 | 1589 | 355 | 107 | 1460 |
| Sugar. Making | W. C. Salisbury | 748,314 | Dec. 29 | 5580 | ------ | 107 | 2403 |
| Sugar-making | M. H. Miller | 741,689 | Oct. 20 | 2502 | 558 | 106 | 1815 |
| Sugar-making | M. H. Miller | 742,127 | Oct. 20 | 3393 | 757, 758 | 106 | 1996 |
| Sugar-mixing apparatus | J. Ragot and H. Tourneur | 736,875 | Aug. 18 | 3453 | 765, 766 | 105 | 1750 |
| Sugar-mixing apparatus | J. Czapikowski | 742,603 | Oct. 27 | 4277 | 964 | 106 | 2196 |
| Sugar-mold | H. Passburg | 722,137 | Mar. 3 | 876 | 195, 196 | 103 | 188 |
| Sugar-molding apparatus | H. Passburg | 724,930 | Apr. 7 | 939 | 216 | 103 | 1371 |
| Sugar. Press for pressing the parings of diffusion-chambers in the manufacture of | W. Bock | 736,484 | Aug. 18 | 2704 | 593 | 105 | 1594 |
| Sugar. Purifying | C. A. Spreckels and C. A. Kern | 746,891 | Dec. 15 | 2898 | ------ | 107 | 1768 |
| Sugar-refining apparatus. Loaf- | M. Gevers | 717,838 | Jan. 6 | 622 | 137 | 102 | 133 |
| Sugar solutions. Boiling | H. Claassen | 723,990 | Mar. 31 | 4370 | ------ | 103 | 977 |
| Sugar solutions. Boiling | A. Grántzdörffer | 730,111 | June 2 | 1063 | ------ | 104 | 1344 |
| Suit. Combination- | M. E. Cavanaugh | 722,490 | Mar. 10 | 1567 | 345 | 103 | 352 |
| Sulfid ores. Treatment of | A. M. G. Sébillot | 740,701 | Oct. 6 | 582 | ------ | 106 | 1373 |
| Sulfite lyes. Utilizing | V. Drewsen and L. J. Dorenfeldt | 726,036 | Apr. 21 | 2975 | ------ | 103 | 1830 |
| Sulfite-works. Acid-chamber for | W. A. McKee | 719,844 | Feb. 3 | 779 | 182, 183 | 102 | 988 |
| Sulfur-burner | H. Blumenberg, Jr | 734,397 | July 21 | 3144 | 739 | 105 | 698 |
| Sulfur. Mining | P. Higgins | 738,326 | Sept. 8 | 1589 | 344 | 106 | 358 |
| Sulfuric anhydrid and sulfuric acid by the contact process. Making | M. Schroeder | 742,502 | Oct. 27 | 4089 | 920 | 106 | 2156 |
| Sulfuric anhydrid. Apparatus for making | W. C. Ferguson | 723,595 | Mar. 24 | 3618 | 809 | 103 | 801 |
| Sulfuric anhydrid. Apparatus for making | C. Daub | 731,758 | June 23 | 4124 | 919 | 104 | 2031 |
| Sulfuric anhydrid. Apparatus for the manufacture of | J. B. F. Herreshoff | 719,333 | Jan. 27 | 3448 | 768 | 102 | 775 |
| Sulfuric anhydrid. Making | J. B. F. Herreshoff | 719,332 | Jan. 27 | 3446 | 768 | 102 | 774 |
| Sulfuric anhydrid. Making | W. C. Ferguson | 723,596 | Mar. 24 | 3620 | 809 | 103 | 801 |
| Sulfuric anhydrid. Making | M. Le Blanc and C. Krauss | 726,076 | Apr. 21 | 3031 | 689 | 103 | 1842 |
| Sulfuric anhydrid. Making | E. Raynaud and L. Pierron | 736,876 | Aug. 18 | 3454 | 766 | 105 | 1750 |
| Sulfuric anhydrid. Manufacturing | A. Clemm and W. Hasenbach | 729,735 | June 2 | 391 | ------ | 104 | 1208 |

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|---|---|---|---|---|---|---|---|
| Sulky | F. Rudolph | 742,067 | Oct. 20 | 3297 | 734 | 106 | 1978 |
| Sun-dial | E. G. Hewitt | 740,978 | Oct. 6 | 1090 | 246 | 106 | 1478 |
| Sun-dial | H. E. Cowdrey | 747,046 | Dec. 15 | 3179 | 729 | 107 | 1831 |
| Sunshade | E. Reger | 739,446 | Sept. 22 | 3706 | 825 | 106 | 841 |
| Sunshade attachment. Vehicle | G. S. Bozarth | 722,803 | Mar. 17 | 2164 | 483 | 103 | 492 |
| Sunshade. Body-attachable | C. E. Gill | 725,069 | Apr. 14 | 1203 | 273 | 103 | 1441 |
| Sun-shield | R. L. Morgan | 736,765 | Aug. 18 | 3237 | 715 | 105 | 1704 |
| Superheater | E. F. Edgar | 732,724 | July 7 | 50 | 13, 14 | 105 | 14 |
| Superheater | H. Michauck | 735,791 | Aug. 11 | 1435 | 309 | 105 | 1304 |
| Superheater | W. J. M. Dobson | 738,530 | Sept. 8 | 1991 | 434 | 106 | 443 |
| Superheater | E. F. Edgar. (Reissue) | 12,155 | Sept. 8 | 2411 | 529 | 106 | 531 |
| Superheater | J. R. Brown | 744,470 | Nov. 17 | 3280 | 704, 705 | 107 | 730 |
| Superheater | J. R. Brown | 744,471 | Nov. 17 | 3281 | 705 | 107 | 731 |
| Superheater. Steam-engine | R. E. Law | 738,618 | Sept. 8 | 2138 | 468, 469 | 106 | 476 |
| Superheater-tube | E. H. Foster | 744,323 | Nov. 17 | 3011 | 646 | 107 | 673 |
| Superheaters. Protective means for | F. D. Potter and R. D. Jeffreys | 743,027 | Nov. 3 | 402 | 87 | 107 | 84 |
| Superheating apparatus | M. W. Sewall | 736,793 | Aug. 18 | 3297 | 730 | 105 | 1716 |
| Supervisor's assistant | S. N. Betts | 724,424 | Apr. 7 | 12 | 4 | 103 | 1173 |
| Support. Foldable | F. R. Goode | 747,881 | Dec. 22 | 4754 | 1074 | 107 | 2202 |
| Support or leg. Sheet-metal | C. F. Kade | 745,107 | Nov. 24 | 4466 | 966 | 107 | 996 |
| Support or trestle. Folding | A. Burri and L. Helferich | 718,600 | Jan. 20 | 2067 | 449 | 102 | 474 |
| Support. Slidable | J. C. Dahlquist | 735,716 | Aug. 11 | 1308 | 281 | 105 | 1277 |
| Supporter | M. Van Duyn | 723,560 | Mar. 24 | 3553 | 795 | 103 | 788 |
| Supporter | F. E. Griffith | 743,862 | Nov. 10 | 2078 | 442 | 107 | 459 |
| Supporting and attaching device. Combined | C. Johnson | 731,908 | June 23 | 4386 | 978 | 104 | 2089 |
| Supporting and locking device | J. B. Johnson | 723,466 | Mar. 24 | 3375 | 755 | 103 | 752 |
| Supporting apparatus. Safety | J. K. Green | 718,948 | Jan. 20 | 2717 | 607, 608 | 102 | 607 |
| Supporting device. Elastic | A. Klumpp | 746,848 | Dec. 15 | 2807 | 647 | 107 | 1747 |
| Supporting-rack | J. A. Donnelly | 717,739 | Jan. 6 | 405 | 95 | 102 | 89 |
| Supporting-stand | A. G. Park | 746,141 | Dec. 8 | 1523 | 340 | 107 | 1445 |
| Suppository | F. F. Feidler | 725,831 | Apr. 21 | 2630 | 598 | 103 | 1758 |
| Suppository | A. H. Peloubet | 740,910 | Oct. 6 | 967 | 217 | 106 | 1453 |
| Suppository and making same. Covered | D. Genese | 727,344 | May 5 | 976 | 212 | 104 | 211 |
| Suppository-molding machine | F. S. Chester | 726,507 | Apr. 28 | 3886 | 879, 880, 881, 882, 883, 884, 885, 886 | 103 | 2029 |
| Suprarenal glands. Isolating the active principle of the | J. Takamine | 730,196 | June 2 | 1198 | ------ | 104 | 1371 |
| Suprarenal glands. Isolating the active principle of the | J. Takamine | 730,197 | June 2 | 1200 | ------ | 104 | 1372 |
| Suprarenal glands. Obtaining products from | J. Takamine | 730,175 | June 2 | 1163 | ------ | 104 | 1365 |
| Suprarenal glands. Preparing extracts of the | J. Takamine | 730,198 | June 2 | 1202 | ------ | 104 | 1372 |
| Surface cooler connected with a sediment-removing device. Closed | V. Lapp | 738,820 | Sept. 15 | 2565 | 564 | 106 | 581 |
| Surfaces. Protecting | W. H. Grow | 722,836 | Mar. 17 | 2228 | 499 | 103 | 504 |
| Surgical absorbent dressing. Sterilizing and packaging | R. W. Johnson | 727,145 | May 5 | 625 | 134 | 104 | 135 |
| Surgical apparatus | G. A. Ogle | 735,141 | Aug. 4 | 188 | 39 | 105 | 1022 |
| Surgical apparatus | B. R. Willis | 747,525 | Dec. 22 | 4083 | 917 | 107 | 2050 |
| Surgical appliance | L. G. Tandy | 731,083 | June 16 | 2847 | 632 | 104 | 1755 |
| Surgical appliance | A. V. Todd | 742,814 | Oct. 27 | 4635 | 1050 | 106 | 2274 |
| Surgical appliance | A. V. Todd | 745,264 | Nov. 24 | 4768 | 1042 | 107 | 1059 |
| Surgical applicator | E. L. Ridgway and D. H. Bailey | 728,980 | May 26 | 4058 | 900 | 104 | 912 |
| Surgical bandage | G. F. Sumner | 737,526 | Aug. 25 | 4672 | 1048 | 105 | 2033 |
| Surgical bandage | J. K. Toles | 745,028 | Nov. 24 | 4298 | 929 | 107 | 961 |
| Surgical chair | C. H. Patrick | 717,612 | Jan. 6 | 164 | 41 | 102 | 36 |
| Surgical chair | W. I. St. John | 744,126 | Nov. 17 | 2630 | 561 | 107 | 589 |
| Surgical device for setting fractured legs | J. Scheidl | 743,663 | Nov. 10 | 1726 | 364 | 107 | 384 |
| Surgical écraseur | L. R. Kratzmueller | 736,744 | Aug. 18 | 3201 | 708 | 105 | 1697 |
| Surgical fracture apparatus | G. E. Gorham | 730,253 | June 9 | 1336 | 293 | 104 | 1414 |
| Surgical instrument | N. J. Smedley | 722,542 | Mar. 10 | 1651 | 364 | 103 | 370 |
| Surgical instrument | L. Levi | 728,589 | May 19 | 3357 | 744 | 104 | 752 |
| Surgical instrument | R. P. McCully | 735,400 | Aug. 4 | 685 | 147 | 105 | 1126 |
| Surgical-instrument case. Sterilizable | H. P. Wilson | 736,328 | Aug. 11 | 2411 | 526 | 105 | 1517 |
| Surgical instruments. Making india-rubber | B. G. Work | 721,768 | Mar. 3 | 192 | 45 | 103 | 42 |
| Surgical needle | J. A. Nelson | 722,133 | Mar. 3 | 868 | 194 | 103 | 186 |
| Surgical operating-frame | R. C. Hoyer | 747,972 | Dec. 29 | 4956 | 1119 | 107 | 2268 |
| Surgical or similar purposes. Electrical instrument for | M. D. Law | 722,594 | Mar. 10 | 1741 | 388 | 103 | 389 |
| Surgical pad | G. H. Gilmore | 743,486 | Nov. 10 | 1389 | 285 | 107 | 312 |
| Surgical sling | J. F. Janisch | 745,856 | Dec. 1 | 1003 | 226 | 107 | 1313 |
| Surgical splint | A. W. Graham | 718,339 | Jan. 13 | 1527 | 339 | 102 | 343 |
| Surgical truss | B. Chamberlain | 724,808 | Apr. 7 | 731 | 172 | 103 | 1327 |
| Surveying instrument | G. M. Gouyard | 725,073 | Apr. 14 | 1218 | 276 | 103 | 1443 |
| Surveying instrument | J. Harman | 735,763 | Aug. 11 | 1389 | 299 | 105 | 1294 |
| Surveying-instrument illuminator | C. M. Bernegan | 728,357 | May 19 | 2910 | 642 | 104 | 657 |
| Surveyor's rod | W. L. E. Keuffel | 727,151 | May 5 | 634 | 136 | 104 | 137 |
| Surveyor's slate and book holder | E. McConnell | 733,415 | July 14 | 1291 | 305 | 105 | 290 |
| Suspender attachment | J. P. Muth | 744,594 | Nov. 17 | 3471 | 749 | 107 | 770 |
| Suspender-belt | A. J. Koch | 735,274 | Aug. 4 | 467 | 93 | 105 | 1080 |
| Suspender-belt coupling | M. Goldin and P. Glickman | 727,784 | May 12 | 1830 | 409 | 104 | 409 |
| Suspender-end | A. M. Ziegler | 738,740 | Sept. 8 | 2370 | 521 | 106 | 522 |
| Suspender-end clasp | E. E. Stuver | 736,170 | Aug. 11 | 2141 | 460 | 105 | 1456 |
| Suspender-fastener | H. Joslin | 718,768 | Jan. 20 | 2384 | 529 | 102 | 537 |
| Suspender spring attachment | W. H. Edwards and J. B. Bryan | 726,416 | Apr. 28 | 3686 | 835 | 103 | 1992 |
| Suspender-trimming | E. R. Spencer | 738,081 | Sept. 1 | 1019 | 228 | 106 | 221 |
| Suspenders | C. R. Harris | 717,989 | Jan. 6 | 886 | 198 | 102 | 190 |
| Suspenders | W. H. Johnson and C. Gordon | 718,129 | Jan. 13 | 1136 | 252 | 102 | 260 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Suspenders | I. Wechsler | 719,285 | Jan. 27 | 3354 | 748 | 102 | 754 |
| Suspenders | F. W. Potter | 719,505 | Feb. 3 | 195 | 38 | 102 | 858 |
| Suspenders | H. C. Hine | 720,521 | Feb. 10 | 2038 | 468 | 102 | 1269 |
| Suspenders | H. C. Hine | 720,522 | Feb. 10 | 2039 | 468 | 102 | 1269 |
| Suspenders | H. C. Hine | 721,563 | Feb. 24 | 4028 | 915 | 102 | 1720 |
| Suspenders | H. C. Hine | 721,634 | Feb. 24 | 4187 | 953 | 102 | 1757 |
| Suspenders | C. L. Buschmann | 722,942 | Mar. 17 | 2405 | 538 | 103 | 541 |
| Suspenders | H. C. Hine | 723,202 | Mar. 17 | 2881 | 645 | 103 | 641 |
| Suspenders | A. M. Ziegler | 725,190 | Apr. 14 | 1436 | 325 | 103 | 1488 |
| Suspenders | H. C. Hine | 725,249 | Apr. 14 | 1547 | 351 | 103 | 1512 |
| Suspenders | M. Gluckauf | 725,437 | Apr. 14 | 1881 | 420 | 103 | 1583 |
| Suspenders | H. C. Hine | 725,562 | Apr. 14 | 2173 | 479 | 103 | 1632 |
| Suspenders | R. T. Clarke | 726,865 | May 5 | 56 | 13 | 104 | 15 |
| Suspenders | H. C. Hine | 727,796 | May 12 | 1849 | 413 | 104 | 412 |
| Suspenders | H. L. A. Seidel | 728,025 | May 12 | 2266 | 503 | 104 | 499 |
| Suspenders | H. C. Hine | 728,712 | May 19 | 3570 | 793 | 104 | 797 |
| Suspenders | I. Fuhrman | 730,249 | June 9 | 1327 | 291 | 104 | 1412 |
| Suspenders | G. M. Edgarton | 732,060 | June 30 | 4690 | 1048 | 104 | 2166 |
| Suspenders | L. E. Schoch | 737,497 | Aug. 25 | 4612 | 1033 | 105 | 2018 |
| Suspenders | E. McGuire | 740,584 | Oct. 6 | 395 | 83 | 106 | 1331 |
| Suspenders | M. Murry | 747,753 | Dec. 22 | 4492 | 1013 | 107 | 2143 |
| Suspenders and belt. Combined | I. Beaver | 721,415 | Feb. 24 | 3766 | 856 | 102 | 1665 |
| Suspenders and belt. Combined | A. Landau | 726,441 | Apr. 28 | 3727 | 845 | 103 | 2000 |
| Suspenders and belt. Combined | W. Freeman | 740,265 | Sept. 29 | 5231 | 1176 | 106 | 1182 |
| Suspenders and belt. Convertible | D. Lauferty and B. Stein | 718,360 | Jan. 13 | 1557 | 344 | 102 | 349 |
| Suspenders. Boy's | M. Goodman | 726,045 | Apr. 21 | 2987 | 679 | 103 | 1832 |
| Suspenders. Boy's | C. I. Mandel | 741,405 | Oct. 13 | 1943 | 430 | 106 | 1681 |
| Suspenders. Stocking- | J. F. Storey | 746,194 | Dec. 8 | 1620 | 361 | 107 | 1467 |
| Suspending device | C. A. Benke | 729,836 | June 2 | 585 | 129 | 104 | 1247 |
| Suspending device | C. M. Pitel | 737,659 | Sept. 1 | 184 | 39 | 106 | 43 |
| Suspension-fixture | L. Steinberger | 735,613 | Aug. 4 | 1107 | 235 | 105 | 1216 |
| Suspension-seat | H. G. Grote | 737,398 | Aug. 25 | 4426 | 990 | 105 | 1976 |
| Swage-block | H. B. Blood | 727,885 | May 12 | 2008 | 447 | 104 | 445 |
| Swager | G. B. Stone | 748,565 | Dec. 29 | 6069 | 1374 | 107 | 2513 |
| Swath-turning implement | S. A. Peto | 740,911 | Oct. 6 | 967 | 217, 218 | 106 | 1453 |
| Sweat-pad. Thin-rim | M. H. Fetzer | 725,643 | Apr. 14 | 2282 | 516 | 103 | 1669 |
| Sweep-mill | C. W. Baird | 739,373 | Sept. 22 | 3542 | 791 | 106 | 805 |
| Sweeper. Rotary | S. B. Hoadley | 734,555 | July 28 | 3434 | 801 | 105 | 775 |
| Sweetmeats. Making | E. Shaw | 739,229 | Sept. 15 | 3286 | ..... | 106 | 734 |
| Swift-bracket | W. G. Morrison | 729,084 | May 26 | 4244 | 938 | 104 | 949 |
| Swimming apparatus | J. J. Gallagher | 732,405 | June 30 | 5380 | 1192 | 104 | 2309 |
| Swimming. Foot-gear for | P. J. Griffin | 719,583 | Feb. 3 | 314 | 72, 73 | 102 | 888 |
| Swimming-glove | E. G. Vans Agnew | 733,303 | July 7 | 1082 | 258 | 105 | 228 |
| Swimming-mitt | H. W. Johnson | 742,440 | Oct. 27 | 3977 | 893 | 106 | 2132 |
| Swing | C. B. McKay | 718,784 | Jan. 20 | 2408 | 534 | 102 | 542 |
| Swing | G. S. Kerr | 719,013 | Jan. 27 | 2833 | 636 | 102 | 646 |
| Swing | C. T. Campbell | 719,301 | Jan. 27 | 3389 | 755 | 102 | 762 |
| Swing | D. B. Speer | 721,339 | Feb. 24 | 3626 | 825 | 102 | 1637 |
| Swing | C. O. Lyman | 732,307 | June 30 | 5184 | 1152 | 104 | 2268 |
| Swing | E. F. Miller | 733,913 | July 14 | 2204 | 517 | 105 | 478 |
| Swing | G. E. Knowlton | 743,524 | Nov. 10 | 1465 | 306 | 107 | 329 |
| Swing and chair. Combined | C. W. Rote | 737,276 | Aug. 25 | 4191 | 933, 934 | 105 | 1925 |
| Swing attachment | G. S. Kerr | 720,034 | Feb. 10 | 1152 | 263 | 102 | 1084 |
| Swing. Lawn- | J. Plattenburg | 719,135 | Jan. 27 | 3088 | 686 | 102 | 697 |
| Swing. Lawn- | D. H. Bausman | 725,396 | Apr. 14 | 1802 | 404 | 103 | 1566 |
| Swing. Lawn or house | J. S. Tuttle | 742,932 | Nov. 3 | 190 | 44 | 107 | 42 |
| Swing. Porch- | A. A. Hoffman | 735,378 | Aug. 4 | 642 | 133 | 105 | 1118 |
| Swinging gate | F. L. Price | 724,933 | Apr. 7 | 944 | 217 | 103 | 1372 |
| Swingletree | P. Krall | 737,420 | Aug. 25 | 4470 | 1002 | 105 | 1985 |
| Swingletree-clasp | O. Lorenz | 728,947 | May 26 | 4001 | 890 | 104 | 900 |
| Switch: | | | | | | | |
| *See* Automatic switch. | Laminated lever-switch. | | | | | | |
| Battery-switch. | Line-switch. | | | | | | |
| Bell-switch. | Oil-switch. | | | | | | |
| Car-switch. | Overhead switch. | | | | | | |
| Ceiling-switch. | Pressure-regulated switch. | | | | | | |
| Charging-switch. | Push-button switch. | | | | | | |
| Door-switch. | Quick-break switch. | | | | | | |
| Electric switch. | Rail-switch. | | | | | | |
| Electric-circuit switch. | Railway-switch. | | | | | | |
| Electric-light switch. | Snap-switch. | | | | | | |
| Electric time-switch. | Spring-switch. | | | | | | |
| Electrical switch. | Spring-point switch. | | | | | | |
| Electrical-apparatus switch. | Telephone drop-switch. | | | | | | |
| Interlocking switch. | Telephone-hook switch. | | | | | | |
| | Track-switch. | | | | | | |
| | Trolley-switch. | | | | | | |
| | Trolley-track switch. | | | | | | |
| Switch | A. F. Sweigart | 718,229 | Jan. 13 | 1317 | 291 | 102 | 298 |
| Switch | J. N. Kelman | 722,024 | Mar. 3 | 689 | 152 | 103 | 148 |
| Switch | A. Bouvier | 726,501 | Apr. 28 | 3878 | 878 | 103 | 2028 |
| Switch | J. L. Albiez, Jr | 726,612 | Apr. 28 | 4094 | 924 | 103 | 2070 |
| Switch | J. Smith | 727,223 | May 5 | 759 | 162 | 104 | 164 |
| Switch | M. Obney | 730,041 | June 2 | 950 | 213 | 104 | 1321 |
| Switch | A. M. Beall | 741,444 | Oct. 13 | 2004 | 445 | 106 | 1693 |
| Switch | M. E. Hepburn | 743,281 | Nov. 3 | 898 | 196 | 107 | 191 |
| Switch | I. B. Ritter | 747,774 | Dec. 22 | 4536 | 1021, 1022 | 107 | 2154 |
| Switch-actuating mechanism | J. H. Fitch | 721,688 | Mar. 3 | 73 | 15 | 103 | 17 |
| Switch-actuating mechanism | J. H. Fitch | 734,259 | July 21 | 2890 | 675 | 105 | 646 |
| Switch and fuse. Combined | G. E. Clark | 745,155 | Nov. 24 | 4580 | 994 | 107 | 1018 |
| Switch and protecting device. Combined | H. H. Hornsby and E. W. Anger, Jr. | 718,460 | Jan. 13 | 1751 | 390 | 102 | 388 |
| Switch and signal operating mechanism | C. E. Brown | 727,281 | May 5 | 855 | 184 | 104 | 184 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|---|
| | | | | Spec. | Dr'g. | Vol. | Page. |
| Switch apparatus and valve therefor. Pneumatic | L. Griffith | 724,180 | Mar. 31 | 4743 | 1063, 1064, 1065, 1066 | 103 | 1051 |
| Switch attachment. Automatic | C. B. Blank | 745,413 | Dec. 1 | 186 | 42 | 107 | 1139 |
| Switch-bar attachment | C. Partington | 739,441 | Sept. 22 | 3700 | 824 | 106 | 840 |
| Switch binding-post and contact. Electric- | W. C. Tregoning | 733,569 | July 14 | 1570 | 373 | 105 | 350 |
| Switchboard | J. F. Skirrow | 732,012 | June 23 | 4601 | 1027 | 104 | 2133 |
| Switchboard | B. Beerwald | 739,052 | Sept. 15 | 2960 | 656 | 106 | 667 |
| Switchboard | J. B. Wood | 746,624 | Dec. 8 | 2374 | 545 | 107 | 1630 |
| Switchboard and circuits. Electric | V. G. Apple | 727,563 | May 12 | 1386 | 312 | 104 | 318 |
| Switchboard. Electric | W. F. Bossert | 738,519 | Sept. 8 | 1971 | 429 | 106 | 438 |
| Switchboard. Electrical | E. B. Ellicott | 727,763 | May 12 | 1788 | 401 | 104 | 401 |
| Switchboard. Multiple | C. M. Hedman | 747,421 | Dec. 22 | 3894 | 877 | 107 | 2008 |
| Switchboard. Sectional electrical | T. W. Jardine | 723,607 | Mar. 24 | 3638 | 814 | 103 | 805 |
| Switch-box apparatus. Electrical | G. L. Addenbrooke | 746,772 | Dec. 15 | 2656 | 613, 614 | 107 | 1713 |
| Switch-box. Protective electric | A. Sundh | 733,560 | July 14 | 1541 | 366, 367 | 105 | 343 |
| Switch-casing. Moisture-proof | E. L. Etheridge | 729,304 | May 26 | 4642 | 1026 | 104 | 1033 |
| Switch-closing mechanism. Safety | D. J. Sullivan | 719,057 | Jan. 27 | 2922 | 653, 654 | 102 | 665 |
| Switch connection. Adjustable | F. C. Anderson | 726,613 | Apr. 28 | 4096 | 925 | 103 | 2071 |
| Switch-control mechanism | P. L. Clark | 729,134 | May 26 | 4326 | 956 | 104 | 966 |
| Switch-controlling apparatus | C. W. and J. B. Squires | 719,055 | Jan. 27 | 2913 | 652, 653 | 102 | 663 |
| Switch device | L. Horinko | 720,523 | Feb. 10 | 2041 | 469 | 102 | 1269 |
| Switch for systems of remote control | O. M. Lacey | 735,531 | Aug. 4 | 961 | 203 | 105 | 1185 |
| Switch handle. Electric- | C. G. Perkins | 735,577 | Aug. 4 | 1047 | 222 | 105 | 1203 |
| Switch handle. Electric-snap- | M. Guett | 745,011 | Nov. 24 | 4240 | 919 | 107 | 949 |
| Switch indicating mechanism. Snap- | C. G. Perkins | 741,825 | Oct. 20 | 2758 | 614 | 106 | 1869 |
| Switch indicator. Rotary-snap- | M. Guett | 745,010 | Nov. 24 | 4239 | 919 | 107 | 949 |
| Switch-joint. Hinged | W. A. Fort | 740,839 | Oct. 6 | 858 | 191 | 106 | 1429 |
| Switch-lever staff-lock | T. H. Patenall | 720,961 | Feb. 17 | 2872 | 657, 658 | 102 | 1458 |
| Switch-light | A. Frantzen and W. H. Rattenbury | 736,856 | Mar. 31 | 4091 | 923 | 103 | 918 |
| Switch-lock | H. H. Louis | 734,723 | July 28 | 3752 | 876 | 105 | 839 |
| Switch-lock | R. S. Bush | 745,275 | Nov. 24 | 4789 | 1046 | 107 | 1063 |
| Switch-lock. Electrical | C. A. Shea | 726,361 | Apr. 28 | 3595 | 816 | 103 | 1974 |
| Switch mechanism. Protected | A. Sundh | 744,817 | Nov. 24 | 3902 | 839 | 107 | 879 |
| Switch operating and locking mechanism | E. W. Coughlin | 737,354 | Aug. 25 | 4334 | 966 | 105 | 1956 |
| Switch-operating device | J. P. Lowe | 718,364 | Jan. 13 | 1564 | 345 | 102 | 351 |
| Switch-operating device | A. Hepola | 722,980 | Mar. 17 | 2464 | 551, 552 | 103 | 553 |
| Switch-operating device | J. M. Wilbur | 724,358 | Mar. 31 | 5105 | 1143 | 103 | 1124 |
| Switch-operating device | G. E. Fry | 735,083 | Aug. 4 | 61 | 17 | 105 | 995 |
| Switch-operating device | W. K. Smith | 738,637 | Sept. 8 | 2187 | 478 | 106 | 485 |
| Switch-operating device | E. L. Pence | 739,709 | Sept. 22 | 4177 | 934, 935 | 106 | 943 |
| Switch-operating device | J. E. Campbell | 748,345 | Dec. 29 | 5628 | 1283 | 107 | 2413 |
| Switch-operating mechanism | J. M. Wilbur | 724,359 | Mar. 31 | 5107 | 1143 | 103 | 1124 |
| Switch-operating mechanism | C. E. Badger | 725,650 | Apr. 21 | 2309 | 521 | 103 | 1688 |
| Switch-operating mechanism | T. Rundorff | 735,826 | Aug. 11 | 1515 | 324 | 105 | 1322 |
| Switch-operating mechanism | T. Fleming | 737,380 | Aug. 25 | 4377 | 975 | 105 | 1965 |
| Switch-operating mechanism | A. A. Tripold | 737,885 | Sept. 1 | 664 | 141 | 106 | 146 |
| Switch-operating mechanism | W. J. Hynes | 738,195 | Sept. 8 | 1301 | 282 | 106 | 297 |
| Switch-operating mechanism | B. J. Delzeit and W. J. Saker | 738,606 | Sept. 8 | 2119 | 464 | 106 | 472 |
| Switch-operating mechanism | Z. L. Trainham and H. E. Eastman | 739,749 | Sept. 22 | 4247 | 951 | 106 | 959 |
| Switch-operating mechanism | O. D. Hunt | 740,379 | Sept. 29 | 5264 | 1186 | 106 | 1189 |
| Switch-operating mechanism | T. Rundorff | 746,170 | Dec. 8 | 1578 | 353 | 107 | 1457 |
| Switch-operating mechanism | O. D. Hunt | 747,885 | Dec. 22 | 4755 | 1075 | 107 | 2202 |
| Switch-operating mechanism | O. D. Hunt | 747,886 | Dec. 22 | 4757 | 1075 | 107 | 2203 |
| Switch-operating mechanism. Automatic | H. T. Dumas | 744,513 | Nov. 17 | 3346 | 721 | 107 | 745 |
| Switch-operating mechanism. Automatic | H. T. Dumas | 745,096 | Nov. 24 | 4452 | 963 | 107 | 993 |
| Switch-operating mechanism. Electrical | C. B. Russell. (Reissue) | 12,079 | Feb. 3 | 1023 | 238 | 102 | 1040 |
| Switch-operating mechanism. Snap- | W. C. Tregoning | 735,317 | Aug. 4 | 541 | 110 | 105 | 1096 |
| Switch-operating mechanism. Snap- | C. A. Clark | 737,349 | Aug. 25 | 4328 | 964 | 105 | 1955 |
| Switch-operating mechanism. Snap- | C. G. Perkins | 743,555 | Nov. 10 | 1515 | 316 | 107 | 341 |
| Switch. Quick-action make-and-break | W. C. O'Brien | 741,268 | Oct. 13 | 1643 | 370 | 106 | 1616 |
| Switch-regulator | W. S. Moody | 726,327 | Apr. 28 | 3530 | 800 | 103 | 1960 |
| Switch-stand | M. W. Hibbard | 718,348 | Jan. 13 | 1538 | 340, 341 | 102 | 345 |
| Switch-stand | G. L. Mansfield | 719,826 | Feb. 3 | 754 | 177 | 102 | 982 |
| Switch-stand | A. B. Bellows | 724,656 | Apr. 7 | 440 | 106 | 103 | 1263 |
| Switch-stand | A. B. Bellows | 724,657 | Apr. 7 | 441 | 107 | 103 | 1264 |
| Switch-stand | A. B. Bellows | 724,658 | Apr. 7 | 443 | 107 | 103 | 1264 |
| Switch-stand | A. B. Bellows | 724,659 | Apr. 7 | 445 | 108 | 103 | 1265 |
| Switch-stand | A. B. Bulloch | 734,042 | July 21 | 2471 | 577 | 105 | 555 |
| Switch-stand | J. P. Franks | 745,590 | Dec. 1 | 512 | 120 | 107 | 1206 |
| Switch-stand | W. W. Allen | 746,434 | Dec. 8 | 2044 | 469, 470 | 107 | 1555 |
| Switch-stand | F. C. Anderson | 746,911 | Dec. 15 | 2925 | 675 | 107 | 1773 |
| Switch stand and lock | H. H. Warner | 740,788 | Oct. 6 | 766 | 173 | 106 | 1409 |
| Switch-stand. Automatic | F. C. Anderson | 742,818 | Nov. 3 | 1 | 1 | 107 | 3 |
| Switch-stand. Automatic | G. L. Mansfield | 747,200 | Dec. 15 | 3482 | 790 | 107 | 1900 |
| Switch-stand. Semaphore | A. K. and G. L. Mansfield | 717,694 | Jan. 6 | 306 | 76 | 102 | 66 |
| Switch system. Controlling- | A. L. De Leeuw | 723,840 | Mar. 31 | 4050 | 914, 915 | 103 | 909 |
| Switch-terminal | G. W. Hart | 717,675 | Jan. 6 | 274 | 68 | 102 | 59 |
| Switch-throw | C. C. Korns | 738,205 | Sept. 8 | 1320 | 286 | 106 | 301 |
| Switch-throwing device | F. A. Graham and J. R. Neely | 734,260 | July 21 | 2891 | 676 | 105 | 646 |
| Switch-throwing mechanism | N. J. Anderson | 741,433 | Oct. 13 | 1984 | 440 | 106 | 1689 |
| Switch-tongue-operating mechanism | H. A. Earl | 740,356 | Sept. 29 | 5394 | 1215 | 106 | 1217 |
| Switch-turning device | L. L. Bigelow | 744,159 | Nov. 17 | 2692 | 574 | 107 | 602 |
| Switches. Automatic lock for facing-point | S. M. Braden | 740,223 | Sept. 29 | 5160 | 1159 | 106 | 1168 |
| Switches. Mechanism for operating snap or rotary | W. A. Harvey | 729,335 | May 26 | 4693 | 1037 | 104 | 1044 |

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| Invention. | Name. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|---|
| | | | | Spec. | Drg. | Vol. | Page. |
| Switching apparatus | W. Kaisling | 746,095 | Dec. 8 | 1435 | 323 | 107 | 1424 |
| Switching system. Electrical | G. Wright and F. V. Nicholls | 742,547 | Oct. 27 | 4181 | 940 | 106 | 2174 |
| Swivel | S. M. Wells, Jr | 721,483 | Feb. 24 | 3893 | 886 | 102 | 1691 |
| Swivel-coupling | R. C. Scruggs | 747,493 | Dec. 22 | 4027 | 905 | 107 | 2039 |
| Swivel. Hydraulic | H. G. Johnston | 742,667 | Oct. 27 | 4392 | 991 | 106 | 2221 |
| Swivel. Ratchet- | H. H. Krohn | 740,026 | Sept. 29 | 4810 | 1079 | 106 | 1096 |
| Swivel. Rope-socket | H. M. Brittan | 734,664 | July 28 | 3633 | 850 | 105 | 817 |
| Synchronism-indicator | J. E. Woodbridge | 722,345 | Mar. 10 | 1286 | 285 | 103 | 289 |
| Synchronizer | H. Shoemaker | 717,768 | Jan. 6 | 474 | 108<br>109 | 102 | 101 |
| Synchronizer | D. J. Richards | 735,676 | Aug. 4 | 1228 | 260 | 105 | 1241 |
| Synchronizing alternator | C. P. Steinmetz | 733,515 | July 14 | 1468 | 349 | 105 | 328 |
| Synchronizing apparatus for alternators | F. T. Dow | 727,601 | May 12 | 1450 | 325 | 104 | 330 |
| Synchronous motion. Means for producing | L. M. Potts | 726,750 | Apr. 28 | 4349 | 979 | 103 | 2124 |
| Syringe | E. B. Wilder | 720,648 | Feb. 17 | 2320 | 532 | 102 | 1340 |
| Syringe | W. M. Decker | 722,819 | Mar. 17 | 2.95 | 489 | 103 | 498 |
| Syringe | J. H. Sheets | 730,054 | June 2 | 970 | 217 | 104 | 1325 |
| Syringe | F. M. Baker | 730,596 | June 9 | 1962 | 436 | 104 | 1550 |
| Syringe | E. Hriss | 742,434 | Oct. 27 | 3968 | 890 | 106 | 2130 |
| Syringe | C. S. Ruckstuhl | 743,662 | Nov. 10 | 1725 | 364 | 107 | 384 |
| Syringe and applicator. Combined | E. N. La Veine | 747,444 | Dec. 22 | 3933 | 885 | 107 | 2017 |
| Syringe case. Hypodermic- | T. A. Chappell | 722,943 | Mar. 17 | 2406 | 538 | 103 | 541 |
| Syringe case. Hypodermic- | B. T. Winchester | 724,643 | Apr. 7 | 417 | 99 | 103 | 1259 |
| Syringe for dental or other uses | A. E. Buchanan | 723,822 | Mar. 31 | 4017 | 905 | 103 | 903 |
| Syringe. Fountain- | J. Hardman, Jr | 718,202 | Jan. 13 | 1272 | 279 | 102 | 289 |
| Syringe. Fountain- | O. Wider | 744,656 | Nov. 17 | 3572 | 770 | 107 | 790 |
| Syringe. Hot-air | J. I. Richards | 720,071 | Feb. 10 | 1209 | 278 | 102 | 1096 |
| Syringe. Hypodermic | M. Campbell | 718,979 | Jan. 27 | 2772 | 621 | 102 | 633 |
| Syringe. Hypodermic | J. N. Ranger | 720,381 | Feb. 10 | 1792 | 406 | 102 | 1218 |
| Syringe. Hypodermic | F. S. Dickinson | 723,588 | Mar. 24 | 3605 | 805 | 103 | 798 |
| Syringe. Hypodermic | T. A. Chappell | 728,160 | May 12 | 2508 | 558 | 104 | 551 |
| Syringe. Hypodermic | C. J. Tagliabue and F. W. Steuer | 729,011 | May 26 | 4122 | 913 | 104 | 926 |
| Syringe. Hypodermic | P. J. McElroy | 730,557 | June 9 | 1880 | 420 | 104 | 1532 |
| Syringe. Hypodermic | R. Walsh | 742,762 | Oct. 27 | 4542 | 1029 | 106 | 2254 |
| Syringe. Hypodermic | J. H. McCulloch | 745,743 | Nov. 10 | 1859 | 392 | 107 | 413 |
| Syringe. Hypodermic | A. Schmidt | 748,424 | Dec. 29 | 5782 | 1318 | 107 | 2448 |
| Syringe-nozzle | J. T. Montgomery | 724,913 | Apr. 7 | 914 | 209 | 103 | 1365 |
| Syringe-nozzle | H. Brown | 738,603 | Sept. 8 | 2115 | 462 | 106 | 471 |
| Syringe-pipe | V. C. Van't Woud | 737,795 | Sept. 1 | 446 | 96 | 106 | 98 |
| Syringe. Rectal | H. M. Guild | 730,822 | June 9 | 2341 | 519 | 104 | 1631 |
| Syringe rectal nozzle | W. M. Decker | 722,953 | Mar. 17 | 2420 | 541 | 103 | 544 |
| Syringe. Vaginal | D. McPherson | 722,130 | Mar. 3 | 864 | 193 | 103 | 185 |
| Syringe. Vaginal | O. P. Moon | 725,270 | Apr. 14 | 1579 | 357 | 103 | 1519 |
| Syringe. Vaginal | J. R. Lane | 735,276 | Aug. 4 | 470 | 94 | 105 | 1081 |
| Syringe vaginal nozzle | W. M. Decker | 722,954 | Mar. 17 | 2421 | 541 | 103 | 544 |
| T-bars, angle-bars, &c. Machine for straightening | G. H. Geyer | 731,675 | June 23 | 3970 | 884 | 104 | 1999 |
| Table: | | | | | | | |
| *See* Adjustable table. | Feed-table. | | | | | | |
| Billiard and pool table. | Folding table. | | | | | | |
| | Game-table. | | | | | | |
| Brick-cut-off table. | Ice-table. | | | | | | |
| Chart-table. | Ice-cutting-machine table. | | | | | | |
| Collapsible table. | Invalid's table. | | | | | | |
| Concentrating-table. | Ironing-table. | | | | | | |
| Concentrator-table. | Kitchen-table. | | | | | | |
| Confectioner's table. | Lath-spacing table. | | | | | | |
| Dining or other table. | Operating-table. | | | | | | |
| | Routing-table. | | | | | | |
| Display-table. | Saw-table. | | | | | | |
| Embalmer's table. | Self-waiting table. | | | | | | |
| Extensible round-top table. | Shear-table. | | | | | | |
| | Ship's table. | | | | | | |
| Extension-table. | Spacing-table. | | | | | | |
| Fabric-picking table. | Traveling table. | | | | | | |
| Table | J. G. Peace | 720,842 | Feb. 17 | 2635 | 608 | 102 | 1408 |
| Table | M. Manfred | 724,905 | Apr. 7 | 902 | 206 | 103 | 1362 |
| Table | L. Welker, Sr | 733,925 | July 14 | 2221 | 521 | 105 | 482 |
| Table | E. E. Quaas | 739,618 | Sept. 22 | 4006 | 894 | 106 | 905 |
| Table | M. Engle | 739,999 | Sept. 29 | 4747 | 1067 | 106 | 1081 |
| Table | T. C. Beach | 748,041 | Dec. 29 | 5089 | 1150 | 107 | 2297 |
| Table adjustable angularly and vertically | O. C. Dorney | 722,003 | Mar. 3 | 654 | 145<br>146 | 103 | 142 |
| Table and desk. Combination | P. Douglas | 742,843 | Nov. 3 | 44 | 11 | 107 | 12 |
| Table and desk. Combined | F. H. Dukesmith | 723,148 | Mar. 17 | 2763 | 621 | 103 | 615 |
| Table, book-rest, &c. Portable | A. M. Brown | 729,919 | June 2 | 721 | 161 | 104 | 1275 |
| Table device for sick-beds, &c | W. Schleuning | 735,593 | Apr. 14 | 2172 | 492 | 103 | 1646 |
| Table-fork | M. V. B. Stimson | 721,249 | Feb. 24 | 3482 | 791 | 102 | 1606 |
| Table-frame | S. P. Giddings | 740,846 | Oct. 6 | 867 | 194 | 106 | 1431 |
| Table-knife | G. Garda | 719,785 | Feb. 3 | 686 | 158 | 102 | 968 |
| Table leaf. Extension- | W. A. Finkbeiner | 739,109 | Sept. 22 | 3644 | 810 | 106 | 828 |
| Table-leg fastening | J. H. Robbins | 738,124 | Sept. 1 | 1128 | 250<br>251 | 106 | 244 |
| Table lock. Pedestal- | C. S. Burton | 733,367 | July 14 | 1203 | 286 | 105 | 269 |
| Table lock. Pedestal-extension- | E. Tyden. (Reissue) | 12,083 | Feb. 17 | 3236 | 740<br>741 | 102 | 1542 |
| Table lock. Pedestal-extension- | E. Tyden | 722,469 | Mar. 10 | 1522 | 335 | 103 | 341 |
| Table lock. Pedestal-extension- | E. Tyden | 722,470 | Mar. 10 | 1525 | 335 | 103 | 342 |
| Table lock. Pedestal-extension- | E. Tyden | 734,203 | July 21 | 2773 | 651 | 105 | 619 |
| Table lock. Pedestal-extension- | C. S. Burton | 747,131 | Dec. 15 | 3350 | 761 | 107 | 1872 |
| Table lock. Pedestal-extension- | C. S. Burton | 747,132 | Dec. 15 | 3352 | 761 | 107 | 1873 |
| Table locking device. Pedestal- | E. Tyden | 733,607 | July 14 | 1623 | 384 | 105 | 360 |
| Table locking device. Pedestal- | C. Wilhelm | 736,327 | Aug. 11 | 2410 | 526 | 105 | 1517 |
| Table locking device. Pedestal-extension- | E. Tyden | 722,468 | Mar. 10 | 1516 | 335 | 103 | 339 |
| Table-stand | L. B. and H. T. Sidway | 729,432 | May 26 | 4845 | 1074 | 104 | 1075 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|---|
| | | | | Spec. | Drg. | Vol. | Page. |
| Table or type-writer desk | M. A. Deimel | 722,000 | Mar. 3 | 650 | 144 | 103 | 141 |
| Table-receptacle for sandwiches, &c | W. Weise | 745,087 | Nov. 24 | 4432 | 959 | 107 | 988 |
| Tablet. Adhesive | G. Schmalfuss | 738,703 | Sept. 8 | 2320 | ..... | 106 | 511 |
| Tablet and copy-holder. Combined writing- | J. E. Loveless and J. W. Mulligan | 738,049 | Sept. 1 | 966 | 215 | 106 | 210 |
| Tablet-dispensing machine | W. G. Buehne | 743,686 | Nov. 10 | 1758 | 370 | 107 | 391 |
| Tablet-feeding machine | J. W. and A. M. Ayers | 742,377 | Oct. 27 | 3864 | 868<br>869 | 106 | 2110 |
| Tablet for roll-paper. Writing- | J. P. Dorr | 727,109 | May 5 | 553 | 119 | 104 | 120 |
| Tablet-grading machine | J. M. MacDonald | 735,396 | Aug. 4 | 677 | 145 | 105 | 1125 |
| Tablet. Memorandum- | G. A. A. Weber | 738,504 | Sept. 8 | 1938 | 423 | 106 | 431 |
| Tablet or book. Manifolding | F. J. Cota | 738,413 | Sept. 8 | 1753 | 381 | 106 | 393 |
| Tablet. Writing- | P. B. Bogart | 741,878 | Oct. 20 | 2853 | 637 | 106 | 1889 |
| Tablet. Writing- | H. V. Lough | 744,578 | Nov. 17 | 3452 | 744 | 107 | 766 |
| Tablets, &c. Apparatus for forming | E. Dühring | 728,091 | May 12 | 2391 | 532 | 104 | 526 |
| Tabulating-machine keyboard | C. F. Pidgin | 740,042 | Sept. 29 | 4836 | 1085 | 106 | 1102 |
| Tachometer | W. P. Wiemann | 728,529 | May 19 | 3212 | 713 | 104 | 721 |
| Tachometer | C. H. Veeder | 732,975 | July 7 | 485 | 120<br>121 | 105 | 105 |
| Tachometer | C. H. Veeder | 733,358 | July 7 | 1180 | 279<br>280 | 105 | 248 |
| Tachometer. Magnetic | A. P. and C. H. Warner | 745,468 | Dec. 1 | 297 | 71 | 107 | 1162 |
| Tack-claw | W. G. Browne | 742,284 | Oct. 27 | 3706 | 827 | 106 | 2078 |
| Tack-driver | G. W. Wells | 730,995 | June 16 | 2683 | 597<br>598 | 104 | 1731 |
| Tack-driver | S. Beauregard | 744,282 | Nov. 17 | 2943 | 629<br>630 | 107 | 658 |
| Tack-driving machine | W. E. Trufant | 735,178 | Aug. 4 | 260 | 52 | 105 | 1038 |
| Tack-extractor | W. H. Brown | 728,668 | May 19 | 3498 | 777 | 104 | 782 |
| Tack-puller | W. C. Miller | 743,183 | Nov. 3 | 699 | 153 | 107 | 146 |
| Tack-pulling machine | C. L. Eaton | 746,306 | Dec. 8 | 1832 | 415<br>416 | 107 | 1510 |
| Tacks. Forming | G. J. Capewell | 737,206 | Aug. 25 | 4052 | 898 | 105 | 1895 |
| Tacks or nails. Knife for machines for making | J. N. Gifford | 725,068 | Apr. 14 | 1200 | 273 | 103 | 1441 |
| Tackle | L. Chevenier | 739,986 | Sept. 29 | 4723 | 1062<br>1063 | 106 | 1076 |
| Tackle-block | A. H. F. Straub | 720,984 | Feb. 17 | 2915 | 668 | 102 | 1467 |
| Tackle-block | T. E. Maddux | 733,239 | July 7 | 962 | 232 | 105 | 202 |
| Tackle-block | H. W. Stocking | 739,119 | Sept. 15 | 3091 | 684 | 106 | 692 |
| Tag | R. G. Crosby | 724,264 | Mar. 31 | 4932 | 1104 | 103 | 1088 |
| Tag | C. D. Meneely and H. A. Crowe | 735,397 | Aug. 4 | 678 | 145 | 105 | 1125 |
| Tag | S. Dancyger | 747,593 | Dec. 22 | 4197 | 944 | 107 | 2077 |
| Tag and check. Marking- | S. Dancyger | 747,594 | Dec. 22 | 4198 | 944 | 107 | 2077 |
| Tag-clasp | S. Dancyger | 720,787 | Feb. 17 | 2550 | 588 | 102 | 1390 |
| Tag-clip | F. E. Ladd | 741,509 | Oct. 13 | 2144 | 477 | 106 | 1724 |
| Tag-holder | J. B. Rose | 736,299 | Aug. 11 | 2365 | 514 | 105 | 1507 |
| Tag holder and lock. Shipping- | C. M. Alger | 741,091 | Oct. 13 | 1300 | 298 | 106 | 1544 |
| Tag. Laundry- | C. E. Smith | 724,624 | Apr. 7 | 390 | 93 | 103 | 1252 |
| Tag. Shipping- | J. C. Kimsey | 738,042 | Sept. 1 | 958 | 213 | 106 | 208 |
| Tag-stringing machine | J. C. Kimsey | 736,406 | Aug. 18 | 2546 | 558<br>559 | 105 | 1561 |
| Tag-stringing machine | F. A. Suck | 738,253 | Sept. 8 | 1397 | 303<br>304<br>305 | 106 | 317 |
| Tags, &c. Machine for stringing | J. C. Kimsey | 724,714 | Apr. 7 | 558 | 133 | 103 | 1288 |
| Tailor's cloth-cutter. Custom- | P. E. Salin | 741,930 | Oct. 20 | 2961 | 659 | 106 | 1911 |
| Tailor's shears | J. Polkowski | 743,658 | Nov. 10 | 1714 | 362 | 107 | 382 |
| Take-up and catch block | W. C. F. Zimmerman | 740,070 | Sept. 29 | 4880 | 1094 | 106 | 1110 |
| Take-up mechanism | E. H. Ryon | 745,026 | Nov. 24 | 4295 | 928<br>929 | 107 | 960 |
| Take-up. Spring-actuated | G. H. Forsyth | 742,781 | Oct. 27 | 4570 | 1035<br>1036 | 106 | 2260 |
| Talking-machine | L. P. Valiquet | 717,953 | Jan. 6 | 812 | 184 | 102 | 174 |
| Talking-machine | H. E. Booth | 738,764 | Sept. 15 | 2446 | 536<br>537 | 106 | 555 |
| Talking-machine | M. A. Possons | 741,543 | Oct. 13 | 2221 | 494 | 106 | 1740 |
| Talking-machine case | W. Barnes | 725,815 | Apr. 21 | 2609 | 592 | 103 | 1753 |
| Talking-machine-horn elbow | W. Barnes | 718,074 | Jan. 13 | 1041 | 232 | 102 | 239 |
| Talking-machine-horn support | W. Barnes | 718,073 | Jan. 13 | 1039 | 232 | 102 | 239 |
| Talking-machine horns. Elbow-fastening for | H. C. Kestel | 745,444 | Dec. 1 | 249 | 57 | 107 | 1153 |
| Talking-machine-motor brake | E. R. Johnson | 741,501 | Oct. 13 | 2129 | 474 | 106 | 1721 |
| Talking-machine needle-feeding device | E. D. Gleason | 739,303 | Sept. 22 | 3428 | 764 | 106 | 781 |
| Talking-machine record | J. H. Fedeler | 746,806 | Dec. 15 | 2713 | 626 | 107 | 1725 |
| Talking-machine sound-box | E. D. Gleason | 728,704 | May 19 | 3552 | 789 | 104 | 794 |
| Talking-machine sound-box | E. D. Gleason | 730,109 | June 2 | 1061 | 238 | 104 | 1343 |
| Talking-machine sound-box | E. D. Gleason | 730,110 | June 2 | 1062 | 239 | 104 | 1343 |
| Talking-machine sound-box | E. D. Gleason | 737,733 | Sept. 1 | 325 | 68 | 105 | 74 |
| Talking-machine sound-record | E. R. Johnson | 739,421 | Sept. 22 | 3664 | 815 | 106 | 832 |
| Talking-machine turn-table | E. R. Johnson | 741,247 | Oct. 13 | 1608 | 361 | 106 | 1609 |
| Talking or sound-reproducing machines. Interchangeable sound-amplifying means for | A. S. Marten | 738,342 | Sept. 8 | 1618 | 351 | 106 | 364 |
| Tallow, &c. Decomposing | F. Perrelet and K. Becker | 736,007 | Aug. 11 | 1862 | 398 | 105 | 1398 |
| Tally-board | F. A. Glidden | 733,834 | July 14 | 2045 | 482 | 105 | 446 |
| Tally device | L. L. Frost | 718,449 | Jan. 13 | 1729 | 384<br>385 | 102 | 384 |
| Tally device | L. L. Frost | 744,058 | Nov. 17 | 2500 | 536 | 107 | 562 |
| Tanbark. Apparatus for the removal and dumping of spent | H. Braniff | 741,300 | Oct. 13 | 1727 | 386 | 106 | 1631 |
| Tannin extract and making same | G. Klenk | 734,889 | July 28 | 4076 | ..... | 105 | 905 |
| Tannin extracts. Making | G. Klenk | 740,283 | Sept. 29 | 5271 | ..... | 106 | 1191 |
| Tannin extracts. Making decolorized | G. Klenk | 730,157 | Feb. 10 | 1371 | ..... | 102 | 1132 |
| Tannin. Extracting | M. Hönig | 738,905 | Sept. 15 | 2713 | ..... | 106 | 614 |
| Tanning | M. C. Lamb | 722,857 | Mar. 17 | 2259 | ..... | 103 | 510 |
| Tanning and tawing compound | G. Smith | 744,252 | Nov. 17 | 3880 | ..... | 107 | 643 |
| Tanning apparatus | C. P. Kerans | 732,562 | June 30 | 5690 | 1264 | 104 | 2374 |
| Tanning apparatus | C. J. Glasel | 742,186 | Oct. 27 | 3505 | 782<br>783 | 106 | 2035 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Tanning, bleaching, scouring, and oiling leather. Apparatus for continuously | W. T. Forbes | 742,115 | Oct. 20 | 3375 | 753, 754 | 106 | 1993 |
| Tanning extracts. Making | M. Hönig | 727,798 | May 12 | 1860 | | 104 | 414 |
| Tanning hides, skins, &c | O. P. Amend | 725,648 | Apr. 21 | 2305 | | 103 | 1688 |
| Tanning-wheel | B., Jr., and W. C. Allen | 719,713 | Feb. 3 | 549 | 125 | 102 | 938 |
| Tandem compound engine | S. M. Vauclain | 726,788 | Apr. 28 | 4418 | 995 | 103 | 2137 |
| Tandem compound engine | S. M. Vauclain | 729,456 | May 26 | 4890 | 1083 | 104 | 1085 |
| Tandem engine. Compound | J. Hardill | 728,708 | May 19 | 3561 | 791 | 104 | 795 |
| Tank: *See* Agitation-tank. Barrel-washing tank. Flour-tank. Flush-tank. Flushing-tank. Grain-storage tank. Hydrocarbon-supply tank. Leaching-tank. Liquid-tank. Oil-tank. Rendering-tank. Treating-tank. Watering-tank. | | | | | | | |
| Tank | G. H. Lloyd | 726,550 | Apr. 28 | 3965 | 896 | 103 | 2045 |
| Tank | G. H. Lloyd | 726,551 | Apr. 28 | 3966 | 897 | 103 | 2045 |
| Tank | R. G. Stone | 728,037 | May 12 | 2285 | 508 | 104 | 504 |
| Tank | N. J. Clayton, Sr | 730,344 | June 9 | 1494 | 330 | 104 | 1449 |
| Tank | A. Holtgen | 736,520 | Aug. 18 | 2773 | 607 | 105 | 1610 |
| Tank | T. H. Butler | 742,583 | Oct. 27 | 4239 | 955 | 106 | 2187 |
| Tank and heater. Combined | G. Thompson | 744,943 | Nov. 24 | 4117 | 887 | 107 | 925 |
| Tank band-fastener | P. H. Bruinekool | 721,539 | Feb. 24 | 3982 | 907 | 102 | 1711 |
| Tank-cleaning mechanism | W. B. Hogg | 728,714 | May 19 | 3574 | 794 | 104 | 798 |
| Tank discharge means | L. H. Mitchell | 722,314 | Mar. 10 | 1230 | 273 | 103 | 278 |
| Tank-filling apparatus. Combined automatic signal and cut-off for | W. Renner | 736,152 | Aug. 11 | 2112 | 453, 454 | 105 | 1450 |
| Tank-heater | A. Hamilton | 721,368 | Feb. 24 | 3675 | 837 | 102 | 1646 |
| Tank heating apparatus | E. O. Whittington | 736,898 | Aug. 18 | 3488 | 775 | 105 | 1757 |
| Tank-lug | G. P. Rasck | 744,794 | Nov. 24 | 3859 | 831 | 107 | 871 |
| Tank-mold | J. C. Dougherty | 736,586 | Aug. 18 | 2885 | 630 | 105 | 1633 |
| Tank-mold | W. Bryan and W. A. Palfreyman | 738,769 | Sept. 15 | 2454 | 539 | 106 | 557 |
| Tanks, storage-bins, or warehouses. Wall for | F. Kees | 726,071 | Apr. 21 | 3022 | 687 | 103 | 1840 |
| Tankage-press | J. Morrissey and C. P. O'Brien | 734,591 | July 28 | 3501 | 818 | 105 | 789 |
| Tap | F. J. Nutting | 729,647 | June 2 | 221 | 50 | 104 | 1173 |
| Tap | P. J. Kelly | 731,784 | June 23 | 4168 | 929 | 104 | 2040 |
| Tap. Barrel- | A. Schneider | 732,122 | June 30 | 4816 | 1075 | 104 | 2192 |
| Tap. Beer-barrel | M. J. Chaplin | 729,545 | June 2 | 46 | 12 | 104 | 1136 |
| Tap. Beer-keg | G. M. Eckenwiler | 729,145 | May 26 | 4349 | 960 | 104 | 971 |
| Tap-blanks. Making | F. N. Gardner | 737,833 | Sept. 1 | 524 | 115 | 106 | 117 |
| Tap-borer | E. G. Hayne | 737,231 | Aug. 25 | 4106 | 912 | 105 | 1907 |
| Tap. Bottle- | J. A. Sherrard | 718,163 | Jan. 13 | 1197 | 265 | 102 | 273 |
| Tap for barrels. Measuring and registering | C. Eichellspiker | 732,839 | July 7 | 258 | 64 | 105 | 58 |
| Tap-hole closer | J. Hlavacek | 733,908 | July 14 | 2190 | 515 | 105 | 476 |
| Tap-hole plugs. Making | A. Dickey | 718,828 | Jan. 20 | 2476 | 550 | 102 | 555 |
| Taps. Construction of high-pressure water- | W. Bradley | 728,848 | May 26 | 3833 | 853 | 104 | 868 |
| Tapping and boring machine. Upright | L. H. Colburn | 742,291 | Oct. 27 | 3715 | 829, 830, 831 | 106 | 2080 |
| Tapping apparatus. Keg- | J. E. Easter and E. L. Robinson | 742,403 | Oct. 27 | 3907 | 878 | 106 | 2119 |
| Tapping device. Liquid- | T. Tietz | 744,646 | Nov. 17 | 3557 | 767 | 107 | 787 |
| Tapping-machine | R. C. Lewis | 743,737 | Nov. 10 | 1845 | 389, 390 | 107 | 410 |
| Tape-fastener | W. C. Martineau | 735,892 | Aug. 11 | 1641 | 351 | 105 | 1350 |
| Tape guide and fastener | R. A. Moore, Jr | 727,551 | May 5 | 1349 | 303 | 104 | 290 |
| Tape into edging. Machine for threading | D. Grotta | 730,255 | June 9 | 1339 | 294 | 104 | 1414 |
| Taper-making apparatus | J. L. Harvey | 725,704 | Apr. 21 | 2396 | 543, 544 | 103 | 1707 |
| Tappet for stamp-batteries, &c | M. Bodley | 726,624 | Apr. 28 | 4115 | 929 | 103 | 2070 |
| Tar extract. Obtaining | M. C. M. Tixier | 722,336 | Mar. 10 | 1274 | | 103 | 284 |
| Target | C. L. Finney | 722,220 | Mar. 10 | 1055 | 232 | 103 | 247 |
| Target | O. Hanson | 741,131 | Oct. 13 | 1377 | 315 | 106 | 1560 |
| Target | H. B. Hollifield | 747,710 | Dec. 22 | 4422 | 996 | 107 | 2127 |
| Target. Electric | W. F. Mangles | 734,911 | July 28 | 4113 | 958 | 105 | 914 |
| Target. Flying | C. Nelson | 727,419 | May 5 | 1101 | 241 | 104 | 238 |
| Target for miniature ranges | F. M. Gaudet | 738,790 | Sept. 15 | 2504 | 551 | 106 | 568 |
| Target-practice apparatus | H. H. Cummings | 739,778 | Sept. 22 | 4296 | 962, 963, 964 | 106 | 970 |
| Target. Shooting-gallery | A. J. Northcraft | 718,864 | Jan. 20 | 2555 | 569 | 102 | 573 |
| Target. Shooting-gallery | A. J. Northcraft | 718,865 | Jan. 20 | 2556 | 569 | 102 | 573 |
| Target-trap | W. W. McQueen | 722,132 | Mar. 3 | 866 | 193, 194 | 103 | 185 |
| Target-trap | W. A. Holland | 738,804 | Sept. 15 | 2534 | 557 | 106 | 575 |
| Targets. Apparatus for operating moving | J. W. Porter | 724,330 | Mar. 31 | 5051 | 1130 | 103 | 1112 |
| Tea-kettle cover | W. N. Ickes | 717,685 | Jan. 6 | 293 | 73 | 102 | 63 |
| Tea-leaf holder | R. C. Lawson and M. McLaren | 723,287 | Mar. 24 | 3033 | 682 | 103 | 686 |
| Tea. Obtaining extract of | J. Roger and M. K. Bamber | 726,102 | Apr. 21 | 3071 | | 103 | 1850 |
| Tea or coffee pot | H. W. Gander | 744,524 | Nov. 17 | 3364 | 724 | 107 | 749 |
| Teaching and practice of telegraphy. Instrument for | C. E. Chinnock | 736,936 | Aug. 25 | 3571 | 792 | 105 | 1794 |
| Teaching apparatus. Gun-practice- | C. A. Sporrong | 732,596 | June 30 | 5744 | 1275 | 104 | 2386 |
| Teaching device. Penmanship- | W. W. Fry | 726,898 | May 5 | 124 | 30 | 104 | 29 |
| Teaching music and singing. Device for | A. Gusinde | 736,960 | Aug. 25 | 3622 | 802 | 105 | 1806 |
| Teaching reading of the facial expressions which occur in speaking. Means for | L. E. Warren | 726,484 | Apr. 28 | 3827 | 866 | 103 | 2019 |
| Teaching telegraphy. Educational device for | G. W. Newman and W. H. Young | 723,716 | Mar. 24 | 3827 | 860 | 103 | 846 |
| Teaching the golf-swing. Device for | S. Clifford | 720,406 | Feb. 10 | 1829 | 417 | 102 | 1227 |
| Teeth | E. C. Rosenaw | 748,532 | Dec. 29 | 5996 | 1358 | 107 | 2495 |
| Teeth. Instrument for holding artificial | W. F. McKibben | 745,070 | Nov. 24 | 4388 | 947 | 107 | 580 |
| Teeth. Instrument for holding artificial | W. F. McKibben | 745,071 | Nov. 24 | 4390 | 947 | 107 | 980 |
| Teeth. Porcelain crown for | W. H. Mosley | 731,594 | June 23 | 3827 | 852 | 104 | 1971 |
| Teeth. Rack for holding false | O. E. Wall | 721,528 | Feb. 24 | 3970 | 904 | 102 | 1708 |
| Teeth with porcelain. Filling | R. K. Belden | 738,517 | Sept. 8 | 1969 | 428 | 106 | 438 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Telautograph | G. S. Tiffany | 745,692 | Dec. 1 | 683 | 157 | 107 | 1243 |
| Telegraph and telephone system. Combined | C. H. Gaunt | 719,458 | Feb. 3 | 80 | 20 | 102 | 842 |
| Telegraph apparatus | J. C. Barclay | 727,060 | May 5 | 465 | 98 | 104 | 102 |
| Telegraph apparatus. Electric printing- | H. Casevitz | 744,046 | Nov. 17 | 2469 | 530, 531 | 107 | 556 |
| Telegraph. Automatic printing- | C. L. Buckingham and E. Germann | 736,933 | Aug. 25 | 3566 | 791 | 105 | 1793 |
| Telegraph. Automatic printing- | C. L. Buckingham | 737,203 | Aug. 25 | 4043 | 896, 897, 898 | 105 | 1894 |
| Telegraph. Electric | I. Kitsee | 722,852 | Mar. 17 | 2253 | 504 | 103 | 509 |
| Telegraph. Facsimile- | E. E. Kleinschmidt | 721,202 | Feb. 24 | 3363 | 768, 769, 770, 771 | 102 | 1582 |
| Telegraph. Facsimile- | H. Liebreich and J. C. Francis | 728,254 | May 19 | 2705 | 602, 603, 604 | 104 | 612 |
| Telegraph. Geometric | G. B. Rossman | 742,066 | Oct. 20 | 3265 | 730, 731, 732, 733, 734 | 106 | 1970 |
| Telegraph instrument | E. Bing and H. Nevill | 719,556 | Feb. 3 | 263 | 61 | 102 | 878 |
| Telegraph instrument | C. E. Bunker | 725,214 | Apr. 14 | 1487 | 338 | 103 | 1500 |
| Telegraph instrument | M. Armstrong | 730,858 | June 16 | 2410 | 532 | 104 | 1664 |
| Telegraph-key | W. E. Duncan | 723,253 | Mar. 24 | 2977 | 669 | 103 | 674 |
| Telegraph-key | E. T. Thorpe | 724,628 | Apr. 7 | 395 | 94 | 103 | 1254 |
| Telegraph-key | C. E. Bunker | 725,215 | Apr. 14 | 1489 | 339 | 103 | 1500 |
| Telegraph or telephone circuits. Line-tapping device for | C. Dietz | 719,095 | Jan. 27 | 3017 | 671 | 102 | 683 |
| Telegraph or telephone receiver. Wireless | A. Plecher | 744,936 | Nov. 24 | 4103 | 884, 885 | 107 | 922 |
| Telegraph-pole | W. J. McCarthy | 719,841 | Feb. 3 | 775 | 181 | 102 | 987 |
| Telegraph-pole socket | C. H. Baker | 722,663 | Mar. 17 | 1884 | 418 | 103 | 435 |
| Telegraph-poles or the like. Step for | S. S. Leonard | 739,326 | Sept. 22 | 3465 | 773 | 106 | 789 |
| Telegraph. Printing- | L. Cerebotani | 720,668 | Feb. 17 | 2354 | 539, 540 | 102 | 1347 |
| Telegraph. Printing- | H. Casevitz | 727,089 | May 5 | 512 | 110, 111, 112 | 104 | 113 |
| Telegraph. Printing- | W. S. Steljes | 743,948 | Nov. 10 | 2227 | 481 | 107 | 490 |
| Telegraph receiver. Printing- | J. D. White | 743,122 | Nov. 3 | 580 | 125, 126 | 107 | 121 |
| Telegraph receiver. Wireless- | G. T. Swenson | 745,463 | Dec. 1 | 291 | 70 | 107 | 1161 |
| Telegraph receiving-tape. Chemical- | P. B. Delany | 720,233 | Feb. 10 | 1522 | 349 | 102 | 1161 |
| Telegraph-relay | J. C. Barclay | 734,452 | July 21 | 3235 | 762 | 105 | 717 |
| Telegraph-repeater | F. W. Jones | 733,909 | July 14 | 2191 | 515 | 105 | 476 |
| Telegraph-repeater | J. C. Barclay | 734,451 | July 21 | 3233 | 762 | 105 | 717 |
| Telegraph repeater. Wireless- | H. Shoemaker | 718,535 | Jan. 13 | 1927 | 422 | 102 | 430 |
| Telegraph signals. Determining the direction of space- | J. S. Stone. (Reissue) | 12,148 | Aug. 18 | 3531 | 784 | 105 | 1766 |
| Telegraph-sounder | J. C. Barclay | 734,453 | July 21 | 3237 | 762 | 105 | 717 |
| Telegraph system | E. R. Storm | 718,544 | Jan. 13 | 1951 | 426, 427 | 102 | 435 |
| Telegraph system | W. E. Athearn | 720,875 | Feb. 17 | 2696 | 623, 624 | 102 | 1421 |
| Telegraph system | C. K. Jones | 726,693 | Apr. 28 | 4235 | 959 | 103 | 2100 |
| Telegraph system. Alarm | A. Goldstein | 723,199 | Mar. 17 | 2875 | 644 | 103 | 639 |
| Telegraph system. Automatic printing- | L. Casper | 744,165 | Nov. 17 | 2704 | 577, 578 | 107 | 605 |
| Telegraph system. Printing- | W. P. Phelps | 726,566 | Apr. 28 | 4000 | 905, 906, 907 | 103 | 2051 |
| Telegraph system. Quadruplex | J. F. Skirrow | 717,776 | Jan. 6 | 500 | 112 | 102 | 108 |
| Telegraph-transmitter | C. T. Bourk | 717,966 | Jan. 6 | 833 | 188, 189 | 102 | 179 |
| Telegraph. Type-writing | F. H. W. Higgins | 745,279 | Nov. 24 | 4799 | 1048 | 107 | 1064 |
| Telegraph. Visible-signal | W. A. Farrell | 718,332 | Jan. 13 | 1512 | 335, 336 | 102 | 340 |
| Telegraphs or other strip-delivering apparatus. Attachment for printing- | C. M. Stiner | 735,311 | Aug. 4 | 529 | 108 | 105 | 1094 |
| Telegraphic code | C. G. Burke | 744,041 | Nov. 17 | 2459 | 528 | 107 | 555 |
| Telegraphic instrument. Miniature | B. I. Levi | 744,575 | Nov. 17 | 3449 | 743 | 107 | 766 |
| Telegraphic system | J. Doyle | 720,901 | Feb. 17 | 2749 | 633 | 102 | 1431 |
| Telegraphic systems. Coherer for wireless | L. Dorman | 742,298 | Oct. 27 | 3730 | 833 | 106 | 2083 |
| Telegraphic transmitter | H. G. Martin | 732,648 | June 30 | 5839 | (1293, 1294) | 104 | 2407 |
| Telegraphic transmitter | J. P. Conway | 738,525 | Sept. 8 | 1982 | 431 | 106 | 441 |
| Telegraphic transmitter | A. E. Morelock | 743,012 | Nov. 3 | 372 | 80, 81 | 107 | 78 |
| Telegraphic transmitting and receiving apparatus | G. F. R. Blochmann | 736,483 | Aug. 18 | 2702 | 592 | 105 | 1594 |
| Telegraphing or telephoning to or from railway-vehicles. System of | J. Edgar | 746,690 | Dec. 15 | 3512 | 577 | 107 | 1681 |
| Telegraphy | P. B. Delany | 720,004 | Feb. 10 | 1073 | 248 | 102 | 1066 |
| Telegraphy | H. A. Rowland | 725,593 | Apr. 14 | 2169 | 491, 492 | 103 | 1646 |
| Telegraphy | H. A. Rowland | 729,420 | May 26 | 4828 | 1071 | 104 | 1070 |
| Telegraphy and transmission of power. Wireless | J. T. Armstrong and A. Orling | 748,143 | Dec. 29 | 5290 | 1202 | 107 | 2341 |
| Telegraphy. Audible electrical | R. Oxlade | 721,084 | Feb. 17 | 3099 | 712 | 102 | 1509 |
| Telegraphy. Electric | A. Muirhead | 719,355 | Jan. 27 | 3496 | 778 | 102 | 785 |
| Telegraphy. Means for directing electric waves for use in wireless | F. Braun | 744,897 | Nov. 24 | 4038 | 870 | 107 | 908 |
| Telegraphy. Multiplex | P. E. Heina | 735,508 | Aug. 4 | 911 | 194 | 105 | 1176 |
| Telegraphy. Space | L. De Forest | 720,568 | Feb. 17 | 2151 | 500 | 102 | 1308 |
| Telegraphy. Space | J. S. Stone | 723,635 | Apr. 14 | 2260 | 511 | 103 | 1665 |
| Telegraphy. Space | J. S. Stone | 725,636 | Apr. 14 | 2265 | 511, 512 | 103 | 1666 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Telegraphy. Space | L. de Forest | 730,246 | June 9 | 1313 | 289, 290 | 104 | 1410 |
| Telegraphy. Submarine | A. Muirhead | 733,556 | July 14 | 1535 | 365 | 105 | 342 |
| Telegraphy. Synchronous code | E. F. Northrup | 726,735 | Apr. 28 | 4313 | 973, 974 | 103 | 2116 |
| Telegraphy. Synchronous code | E. F. Northrup | 726,736 | Apr. 28 | 4318 | 974 | 103 | 2118 |
| Telegraphy. System of wireless | S. G. Brown | 741,622 | Oct. 20 | 2375 | 532 | 106 | 1788 |
| Telegraphy. Tuning device for wireless | W. S. Hogg | 719,005 | Jan. 27 | 2820 | 632 | 102 | 643 |
| Telegraphy. Vibratory | S. D. Field | 734,689 | July 28 | 3678 | 862 | 105 | 825 |
| Telegraphy. Wireless | H. Shoemaker. (Reissue) | 12,073 | Jan. 13 | 2057 | 447 | 102 | 458 |
| Telegraphy. Wireless | J. F. King | 728,243 | May 19 | 2677 | 599 | 104 | 608 |
| Telegraphy. Wireless | J. F. King | 729,497 | May 26 | 4951 | 1098 | 104 | 1099 |
| Telegraphy. Wireless | L. de Forest | 730,247 | June 9 | 1323 | 291 | 104 | 1412 |
| Telegraphy. Wireless | C. G. Burke | 737,072 | Aug. 25 | 3809 | 844 | 105 | 1844 |
| Telegraphy. Wireless | E. E. Butcher | 739,287 | Sept. 22 | 3398 | 756 | 106 | 774 |
| Telegraphy. Wireless | F. Braun | 743,056 | Nov. 3 | 460 | 100 | 107 | 95 |
| Telegraphy. Wireless | R. A. Fessenden. (Reissue) | 12,168 | Nov. 10 | 2408 | 517 | 107 | 529 |
| Telegraphy. Wireless | R. A. Fessenden. (Reissue) | 12,169 | Nov. 10 | 2414 | 517 | 107 | 530 |
| Telegraphy. Wireless or space | J. S. Stone | 725,634 | Apr. 14 | 2255 | 510 | 103 | 1664 |
| Telemotor apparatus for ships, &c | A. B. Brown | 738,767 | Sept. 15 | 2452 | 538 | 106 | 557 |
| Telephone | M. R. Hutchison | 718,204 | Jan. 13 | 1275 | 280 | 102 | 289 |
| Telephone | M. R. Hutchison | 727,634 | May 12 | 1518 | 342 | 104 | 345 |
| Telephone | W. L. Denio | 728,162 | May 12 | 2512 | 558, 559 | 104 | 552 |
| Telephone | F. C. Redfield | 732,443 | June 30 | 5456 | 1211 | 104 | 2324 |
| Telephone | B. O. Fox | 733,021 | July 7 | 565 | 137 | 105 | 121 |
| Telephone | E. H. Strauss | 733,296 | July 7 | 1073 | 255, 256 | 105 | 226 |
| Telephone | J. A. Barrett, L. A. Falk, and H. E. Shreeve. | 736,672 | Aug. 18 | 3056 | 675 | 105 | 1667 |
| Telephone | M. I. Vought | 738,861 | Sept. 15 | 2639 | 582 | 106 | 599 |
| Telephone | C. B. Smith | 741,283 | Oct. 13 | 1686 | 378 | 106 | 1624 |
| Telephone alarm system | J. D. Peachey | 738,351 | Sept. 8 | 1644 | 356 | 106 | 370 |
| Telephone alarm system | J. D. Peachey | 745,235 | Nov. 24 | 4715 | 1030 | 107 | 1048 |
| Telephone. Alternating-current | A. Plecher | 745,292 | Nov. 24 | 4826 | 1053 | 107 | 1070 |
| Telephone and fire-alarm system. Combined | W. L. Denio | 728,161 | May 12 | 2509 | 558 | 104 | 551 |
| Telephone. Answering and recording | T. D. and C. J. Freese | 745,342 | Dec. 1 | 45 | 10 | 107 | 1110 |
| Telephone apparatus | C. G. Burke | 736,489 | Aug. 18 | 2711 | 593 | 105 | 1596 |
| Telephone apparatus | W. Kaisling | 738,813 | Sept. 15 | 2548 | 560 | 106 | 578 |
| Telephone apparatus. Automatic | J. J. Brownrigg and J. K. Norstrom. | 738,156 | Sept. 8 | 1202 | 265 | 106 | 275 |
| Telephone attachment | J. P. Riedinger | 723,309 | Mar. 24 | 3074 | 692 | 103 | 694 |
| Telephone attachment for telegraph-lines | E. Russel | 724,336 | Mar. 31 | 5064 | 1133 | 103 | 1115 |
| Telephone-bracket | H. S. Waite | 746,210 | Dec. 8 | 1650 | 367 | 107 | 1472 |
| Telephone-bracket. Adjustable | E. J. Murphy | 739,202 | Sept. 15 | 3231 | 716 | 106 | 722 |
| Telephone call-annunciator | G. K. Jackson | 727,801 | May 12 | 1863 | 415 | 104 | 415 |
| Telephone call-register | W. Gray | 725,244 | Apr. 14 | 1539 | 349 | 103 | 1510 |
| Telephone call system | E. A. Terpening | 724,219 | Mar. 31 | 4824 | 1082 | 103 | 1067 |
| Telephone-circuit | F. W. Sorg | 731,239 | June 16 | 3136 | 696 | 104 | 1811 |
| Telephone-circuit. Subscriber's | W. W. Dean | 722,212 | Mar. 10 | 1039 | 229 | 103 | 236 |
| Telephone-circuit. Subscriber's | W. W. Dean | 747,331 | Dec. 15 | 3737 | 842 | 107 | 1956 |
| Telephone-circuit. Substation | A. B. Stetson | 732,795 | July 7 | 180 | 46 | 105 | 42 |
| Telephone circuits and apparatus | G. K. Thompson | 743,594 | Nov. 10 | 1598 | 335, 336 | 107 | 357 |
| Telephone circuits and apparatus. Means for protecting | A. B. Stetson | 736,033 | Aug. 11 | 1901 | 407 | 105 | 1406 |
| Telephone-circuits. Means for preventing the disturbance of | C. J. A. Michalke | 726,963 | May 5 | 259 | 59 | 104 | 56 |
| Telephone coil-box | W. E. McCormick | 718,371 | Jan. 13 | 1576 | 348 | 102 | 353 |
| Telephone cut-out | W. L. Ralston | 744,103 | Nov. 17 | 2584 | 552 | 107 | 580 |
| Telephone-directory | F. H. Chamberlin | 746,021 | Dec. 8 | 1307 | 293 | 107 | 1395 |
| Telephone drop-switch | G. L. Gulliford | 737,922 | Sept. 1 | 729 | 158 | 106 | 159 |
| Telephone-exchange | W. W. Woodruff | 734,386 | July 21 | 3122 | 735 | 105 | 694 |
| Telephone-exchange | C. S. Exley | 744,735 | Nov. 24 | 3761 | 811 | 107 | 850 |
| Telephone-exchange | F. A. Lundquist | 747,197 | Dec. 15 | 3474 | 788, 789 | 107 | 1898 |
| Telephone-exchange. Automatic | M. C. Rorty and A. M. Bullard | 743,564 | Nov. 10 | 1531 | 320, 321 | 107 | 345 |
| Telephone-exchange. Automatic | W. B. Vansize | 744,946 | Nov. 24 | 4122 | 888 | 107 | 925 |
| Telephone-exchange signaling-jack. Multiple- | L. M. Ericsson | 729,560 | June 2 | 72 | 18, 19 | 104 | 1142 |
| Telephone-exchange system | C. B. Smith | 729,801 | June 2 | 515 | 113 | 104 | 1233 |
| Telephone-exchange system | J. J. O'Connell | 730,291 | June 9 | 1402 | 308 | 104 | 1430 |
| Telephone-exchange system | W. M. Davis | 737,590 | Sept. 1 | 59 | 13 | 106 | 14 |
| Telephone-exchange system | W. M. Davis | 737,715 | Sept. 1 | 283 | 59, 60 | 106 | 64 |
| Telephone-exchange system | G. L. Cragg | 743,457 | Nov. 10 | 1326 | 272, 273 | 107 | 298 |
| Telephone-exchange system | J. C. F. Malthauer | 743,532 | Nov. 10 | 1478 | 309 | 107 | 332 |
| Telephone-exchange system | W. W. Dean | 745,579 | Dec. 1 | 488 | 115 | 107 | 1201 |
| Telephone-exchange systems. Automatic conversation-counter for | J. H. Meyer | 717,755 | Jan. 6 | 438 | 102, 103 | 102 | 95 |
| Telephone-exchanges. Service-meter system and apparatus for | A. M. Bullard and L. A. Falk | 719,736 | Feb. 3 | 587 | 133 | 102 | 946 |
| Telephone-hook lock. Coin-actuated | J. E. Head | 725,338 | Apr. 14 | 1698 | 383 | 103 | 1545 |
| Telephone-hook switch | E. B. Fahnestock | 732,287 | June 30 | 5158 | 1145 | 104 | 2262 |
| Telephone hygienic appliance | H. L. Cutter | 744,497 | Nov. 17 | 3324 | 716 | 107 | 740 |
| Telephone-jack | H. P. Clausen | 718,093 | Jan. 13 | 1074 | 238 | 102 | 246 |
| Telephone-line contact apparatus | J. P. Werner and W. H. Silvey | 733,782 | July 14 | 1933 | 455 | 105 | 424 |
| Telephone-line signaling apparatus | F. E. Green | 728,165 | May 12 | 2520 | 560, 561 | 104 | 553 |
| Telephone-line testing system | W. W. Dean | 717,973 | Jan. 6 | 849 | 191, 192 | 102 | 182 |
| Telephone-line testing system | W. W. Dean. (Reissue) | 12,090 | Mar. 3 | 1002 | 222 | 103 | 212 |
| Telephone-lines. Connection-counter for | F. R. McBerty. (Reissue) | 12,185 | Dec. 22 | 4838 | 1092 | 107 | 2220 |
| Telephone-lock | E. G. Lewis | 728,478 | May 19 | 3130 | 692 | 104 | 704 |
| Telephone-lock | W. H. Scott | 728,994 | May 26 | 4082 | 906 | 104 | 917 |
| Telephone-lock | W. H. Scott | 732,788 | July 7 | 167 | 43 | 105 | 39 |
| Telephone-lock | W. H. Scott | 739,114 | Sept. 15 | 3083 | 684 | 106 | 690 |

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| Invention. | Name. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|---|
| | | | | Spec. | Dr'g. | Vol. | Page. |
| Telephone-mouthpiece antiseptic attachment | C. W. Clough | 720,783 | Feb. 17 | 2546 | 587 | 102 | 1389 |
| Telephone-mouthpiece attachment | J. F. Logue | 718,264 | Jan. 13 | 1387 | 310 | 102 | 314 |
| Telephone-notation register | J. P. McKee | 731,805 | June 23 | 4211 | 938 | 104 | 2051 |
| Telephone or like cable | F. Tremain | 747,515 | Dec. 22 | 4067 | 914 | 107 | 2047 |
| Telephone or other cables. Device for reinsulating electric and aerial | J. Daggett | 727,756 | May 12 | 1766 | 397 | 104 | 397 |
| Telephone-pad | C. Van Riper | 726,483 | Apr. 28 | 3826 | 864, 865 | 103 | 2019 |
| Telephone paper-holding device | W. H. Sherman | 736,556 | Aug. 18 | 2828 | 619 | 105 | 1622 |
| Telephone-party-line signaling device | E. O. Hood | 747,070 | Dec. 15 | 3242 | 738, 739 | 107 | 1848 |
| Telephone-pay-station coin-collector | C. E. Scribner | 728,309 | May 19 | 2822 | 624 | 104 | 640 |
| Telephone-protecting device | G. R. Bonham | 720,103 | Feb. 10 | 1285 | 294 | 102 | 1113 |
| Telephone-receiver | G. E. Wheeler | 728,342 | May 19 | 2887 | 637 | 104 | 653 |
| Telephone-receiver | J. S. Goldberg | 732,734 | July 7 | 66 | 19 | 105 | 17 |
| Telephone-receiver | W. W. Dean | 736,076 | Aug. 11 | 1989 | 423 | 105 | 1425 |
| Telephone-receiver adjustable support | F. J. Becker | 723,635 | Mar. 24 | 3691 | 827 | 103 | 816 |
| Telephone-receiver holder | J. B. McClain | 717,895 | Jan. 6 | 719 | 161 | 102 | 153 |
| Telephone-receiver holder | A. J. Briggs | 720,880 | Feb. 17 | 2703 | 625 | 102 | 1422 |
| Telephone-receiver holder | S. Konigstein | 723,471 | Mar. 24 | 3411 | 762 | 103 | 759 |
| Telephone-receiver holder | G. Königstein | 725,850 | Apr. 21 | 2661 | 606 | 103 | 1765 |
| Telephone-receiver holder | A. J. Briggs | 729,267 | May 26 | 4567 | 1008 | 104 | 1017 |
| Telephone-receiver support | D. W. Shiek | 723,742 | Mar. 24 | 3868 | 870 | 103 | 854 |
| Telephone-receiver support | E. Bass | 737,894 | Sept. 1 | 676 | 143 | 106 | 148 |
| Telephone-receiver support | G. W. Ganoe | 742,182 | Oct. 27 | 3498 | 781 | 106 | 2033 |
| Telephone registration system | A. J. Springborn | 740,053 | Sept. 29 | 4850 | 1088 | 106 | 1104 |
| Telephone relay or step-up | G. E. Sundquist | 743,589 | Nov. 10 | 1590 | 333 | 107 | 356 |
| Telephone-ringing device | J. I. Gemmill | 732,730 | July 7 | 60 | 16 | 105 | 16 |
| Telephone selecting device | W. D. Watkins | 728,147 | May 12 | 2484 | 552, 553 | 104 | 546 |
| Telephone selecting device | B. Hamilton | 736,249 | Aug. 11 | 2272 | 491 | 105 | 1485 |
| Telephone set | K. B. Miller | 718,855 | Jan. 20 | 2525 | 562 | 102 | 565 |
| Telephone signal-bell. Polarized | E. E. Yaxley | 718,235 | Jan. 13 | 1330 | 294 | 102 | 301 |
| Telephone, signal, burglar, and fire alarm. Combined | B. O. Fox | 724,093 | Mar. 31 | 4563 | 1027 | 103 | 1015 |
| Telephone special directory | L. M. Bannan | 727,880 | May 12 | 2001 | 446 | 104 | 443 |
| Telephone-substation apparatus | H. F. Farwell | 741,899 | Oct. 20 | 2888 | 644 | 106 | 1896 |
| Telephone-support | J. S. Young | 722,348 | Mar. 10 | 1291 | 286 | 103 | 290 |
| Telephone-support | C. H. Pelton and W. Ramsey | 748,524 | Dec. 29 | 5978 | 1356 | 107 | 2491 |
| Telephone-switchboard | W. E. McCormick | 730,287 | June 9 | 1395 | 307 | 104 | 1428 |
| Telephone-switchboard | C. E. Egan | 732,931 | July 7 | 417 | 101, 102 | 105 | 90 |
| Telephone-switchboard | C. E. Scribner | 734,099 | July 21 | 2584 | 606 | 105 | 580 |
| Telephone-switchboard | G. F. Archer | 739,636 | Sept. 22 | 4047 | 903 | 106 | 915 |
| Telephone-switchboard circuits and apparatus | S. B. Prentiss | 741,713 | Oct. 20 | 2559 | 570 | 106 | 1826 |
| Telephone-switchboard spring-jack | C. E. Scribner | 726,105 | Apr. 21 | 3076 | 698 | 103 | 1851 |
| Telephone-switchboard timing device | B. F. Merritt | 740,889 | Oct. 6 | 929 | 208, 209 | 106 | 1445 |
| Telephone-switchboards. Busy-test apparatus for | J. J. O'Connell | 736,002 | Aug. 11 | 1853 | 397 | 105 | 1395 |
| Telephone switching apparatus | N. A. Engstrom | 746,314 | Dec. 8 | 1844 | 420 | 107 | 1512 |
| Telephone system | I. H. Parsons and T. Sloper | 718,315 | Jan. 13 | 1294 | 285 | 102 | 293 |
| Telephone system | F. B. Wood | 718,686 | Jan. 20 | 2222 | 487 | 102 | 504 |
| Telephone system | W. Höhne | 719,219 | Jan. 27 | 3227 | 721 | 102 | 726 |
| Telephone system | E. E. Clement | 719,998 | Feb. 10 | 1055 | 246 | 102 | 1063 |
| Telephone system | S. B. Fowler | 721,882 | Mar. 3 | 415 | 91 | 103 | 91 |
| Telephone system | J. W. Lattig and C. L. Goodrum | 722,367 | Mar. 10 | 1323 | 293 | 103 | 298 |
| Telephone system | J. H. Mason | 724,594 | Apr. 7 | 329 | 80, 81 | 103 | 1239 |
| Telephone system | T. Paul | 725,476 | Apr. 14 | 1961 | 442 | 103 | 1600 |
| Telephone system | C. B. Smith | 727,701 | May 12 | 1648 | 373, 374, 375 | 104 | 373 |
| Telephone system | E. Umdenstock | 728,785 | May 19 | 3702 | 826 | 104 | 823 |
| Telephone system | J. J. Brownrigg and J. K. Norstrom | 738,158 | Sept. 8 | 1220 | 266, 267 | 106 | 280 |
| Telephone system | J. W. Lattig and C. L. Goodrum. (Reissue.) | 12,156 | Sept. 8 | 2413 | 529 | 106 | 531 |
| Telephone system | S. A. Duvall | 738,780 | Sept. 15 | 2482 | 544 | 106 | 564 |
| Telephone system | C. B. Smith | 741,282 | Oct. 13 | 1669 | 377, 378 | 106 | 1621 |
| Telephone system | C. B. Smith | 741,284 | Oct. 13 | 1693 | 379 | 106 | 1625 |
| Telephone system | C. B. Smith | 741,285 | Oct. 13 | 1697 | 379 | 106 | 1626 |
| Telephone system | D. F. Stakes | 741,847 | Oct. 20 | 2793 | 622 | 106 | 1877 |
| Telephone system | G. Babcock | 743,421 | Nov. 10 | 1230 | 254 | 107 | 278 |
| Telephone system | G. Ritter | 745,388 | Dec. 1 | 137 | 31, 32 | 107 | 1130 |
| Telephone system | G. Ritter | 745,523 | Dec. 1 | 389 | 90, 91 | 107 | 1182 |
| Telephone system | W. W. Dean | 746,040 | Dec. 8 | 1341 | 300 | 107 | 1402 |
| Telephone system. Anti-induction | W. Condon and A. Barrett | 737,711 | Sept. 1 | 273 | 58 | 106 | 61 |
| Telephone system. Automatic central-station | F. Merk | 732,874 | July 7 | 315 | 79 | 105 | 70 |
| Telephone system. Central-energy | F. W. Dunbar | 721,124 | Feb. 17 | 3208 | 735 | 102 | 1535 |
| Telephone system. Central-energy | K. B. Miller | 726,964 | May 5 | 261 | 60 | 104 | 56 |
| Telephone system. Central-energy | K. B. Miller | 732,098 | June 30 | 4769 | 1065 | 104 | 2181 |
| Telephone system. Central-energy | K. B. Miller | 741,807 | Oct. 20 | 2726 | 608 | 106 | 1861 |
| Telephone system. Central-energy | W. A. Taylor | 743,953 | Nov. 10 | 2237 | 483 | 107 | 493 |
| Telephone system. Electric | H. D. Currier | 731,166 | June 16 | 3010 | 668 | 104 | 1786 |
| Telephone system. Intercommunication | T. Sloper and I. H. Parsons | 718,224 | Jan. 13 | 1307 | 289 | 102 | 296 |
| Telephone system. Lock-out party-line | C. L. Goodrum and J. W. Lattig | 722,362 | Mar. 10 | 1311 | 291 | 103 | 295 |
| Telephone system. Private | T. J. Seely and C. Hemsing | 744,117 | Nov. 17 | 2610 | 558 | 107 | 586 |
| Telephone system. Selective | A. Gagnon | 746,065 | Dec. 8 | 1336 | 310 | 107 | 1414 |
| Telephone system. Selective party-line | A. J. Springborn | 732,131 | June 30 | 4843 | 1079, 1080 | 104 | 2197 |
| Telephone-system signal device | E. P. Baird | 728,833 | May 26 | 3804 | 848 | 104 | 862 |
| Telephone systems. Anti-induction method for | W. Condon and A. Barrett | 737,710 | Sept. 1 | 269 | 57 | 106 | 61 |
| Telephone systems. Calling mechanism for automatic | J. J. Brownrigg and J. K. Norstrom | 738,157 | Sept. 8 | 1211 | 265, 266 | 106 | 277 |
| Telephone systems. Calling mechanism for automatic | J. J. Brownrigg and J. K. Norstrom | 738,159 | Sept. 8 | 1232 | 268 | 106 | 282 |
| Telephone systems. Trouble-test for automatic | F. N. Reeves | 721,742 | Mar. 3 | 156 | 36 | 103 | 35 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Telephone tablet attachment | G. M. Urie and A. A. Markam | 743,996 | Nov. 10 | 2336 | 499<br>500 | 107 | 519 |
| Telephone tablet attachment | G. M. Urie and A. A. Markam | 745,978 | Dec. 1 | 1220 | 275 | 107 | 1360 |
| Telephone test instrument | H. G. Chalkley | 737,345 | Aug. 25 | 4321 | 963 | 105 | 1953 |
| Telephone tie-wire | G. F. Moore, Jr | 742,890 | Nov. 3 | 125 | 29 | 107 | 28 |
| Telephone toll-indicator | G. A. Long | 733,494 | July 14 | 1425 | 335 | 105 | 319 |
| Telephone toll-register | G. A. Long | 723,694 | Mar. 24 | 3780 | 849 | 103 | 836 |
| Telephone-toll slot-machine | W. S. Paca | 728,964 | May 26 | 4029 | 895 | 104 | 906 |
| Telephone-transmitter | C. C. Cadden | 718,310 | Jan. 13 | 1463 | 325 | 102 | 330 |
| Telephone-transmitter | J. A. Wotton | 719,972 | Feb. 3 | 999 | 232 | 102 | 1035 |
| Telephone-transmitter | F. S. Tucker | 720,085 | Feb. 10 | 1237 | 285 | 102 | 1101 |
| Telephone-transmitter | A. F. Lawson | 721,708 | Mar. 3 | 106 | 23 | 103 | 23 |
| Telephone-transmitter | L. Mellett | 721,817 | Mar. 3 | 288 | 64 | 103 | 64 |
| Telephone-transmitter | C. Holmok | 722,021 | Mar. 3 | 684 | 151 | 103 | 147 |
| Telephone-transmitter | G. E. Wheeler | 728,344 | May 19 | 2889 | 637<br>638 | 104 | 653 |
| Telephone-transmitter | M. Weisser | 732,147 | June 30 | 4884 | 1086 | 104 | 2206 |
| Telephone-transmitter | E. B. Fahnestock | 732,284 | June 30 | 5154 | 1145 | 104 | 2261 |
| Telephone-transmitter | E. B. Fahnestock | 732,285 | June 30 | 5156 | 1145 | 104 | 2261 |
| Telephone-transmitter | H. D. Stroud | 738,857 | Sept. 15 | 2635 | 581 | 106 | 598 |
| Telephone-transmitter | D. O'Brien | 739,208 | Sept. 15 | 3245 | 718 | 106 | 725 |
| Telephone-transmitter | A. Stromberg | 743,951 | Nov. 10 | 2233 | 482 | 107 | 492 |
| Telephone transmitter and receiver | O. P. Sammons | 732,449 | June 30 | 5464 | 1213 | 104 | 2326 |
| Telephone transmitter and receiver. Combined | C. Yeack | 741,604 | Oct. 13 | 2335 | 523 | 106 | 1764 |
| Telephone-transmitter base | E. B. Fahnestock | 732,286 | June 30 | 5158 | 1145 | 104 | 2262 |
| Telephone-transmitter support | A. Gamache | 745,049 | Nov. 24 | 4344 | 938 | 107 | 971 |
| Telephone-transmitter switch mechanism | C. Holmok | 724,478 | Apr. 7 | 108 | 27 | 103 | 1192 |
| Telephone trunk-line apparatus | W. W. Dean | 741,114 | Oct. 13 | 1345 | 309 | 106 | 1553 |
| Telephone vocal guard | W. J. Dunihue | 730,101 | June 2 | 1046 | 234 | 104 | 1341 |
| Telephone wall set | E. B. Fahnestock | 747,394 | Dec. 22 | 3849 | 866 | 107 | 1997 |
| Telephone-wire hanger | H. F. Neslage and H. H. Watson | 728,278 | May 19 | 2755 | 612 | 104 | 626 |
| Telephone-wire noise and lightning arrester | A. Stiles | 735,839 | Aug. 11 | 1537 | 330 | 105 | 1328 |
| Telephones, &c. Folding bracket for | S. J. Seifried | 741,382 | Oct. 13 | 1904 | 421 | 106 | 1673 |
| Telephonic apparatus | C. G. Burke | 719,432 | Feb. 3 | 40 | 8 | 102 | 834 |
| Telephonic apparatus | C. G. Burke. (Reissue) | 12,103 | Mar. 24 | 3974 | 896 | 103 | 877 |
| Telephonic apparatus | F. W. Wood | 726,835 | Apr. 28 | 4503 | 1016 | 103 | 2155 |
| Telephonic apparatus | F. W. Wood | 726,836 | Apr. 28 | 4511 | 1017 | 103 | 2158 |
| Telephonic apparatus | M. R. Hutchison | 737,242 | Aug. 25 | 4130 | 918 | 105 | 1912 |
| Telephonic-communication system | J. T. Armstrong and A. Orling | 744,001 | Nov. 10 | 2354 | 505 | 107 | 522 |
| Telephonic or other switchboards. Switching apparatus for | F. W. Francis | 745,341 | Dec. 1 | 43 | 10 | 107 | 1109 |
| Telephonic toll-collecting devices. Electrical indicator for | R. B. Hazlett | 731,899 | June 23 | 4370 | 975 | 104 | 2086 |
| Telephoning apparatus | J. R. Troland | 731,822 | June 23 | 4240 | 944 | 104 | 2057 |
| Telephony | W. E. Pembleton | 726,984 | May 5 | 310 | 69 | 104 | 67 |
| Telephony | R. H. Yurgae | 728,350 | May 19 | 2898 | 640 | 104 | 655 |
| Telephony | I. Kitsee | 745,019 | Nov. 24 | 4264 | 923<br>924 | 107 | 954 |
| Telephony | H. O. Rugh | 747,491 | Dec. 22 | 4023 | 904 | 107 | 2038 |
| Telephony. Multiplex | W. M. Miner | 745,734 | Dec. 1 | 750 | 172 | 107 | 1258 |
| Telescope | G. Forbes | 727,776 | May 12 | 1821 | 406 | 104 | 406 |
| Telescope | G. Fecker | 731,101 | June 16 | 2883 | 640 | 104 | 1762 |
| Telescope | G. N. Saegmuller | 737,872 | Sept. 1 | 637 | 136 | 106 | 140 |
| Telescope | G. M. Searle and G. N. Saegmuller | 742,241 | Oct. 27 | 3623 | 810 | 106 | 2060 |
| Telescope. Galilean | A. A. Common | 729,848 | June 2 | 604 | 132 | 104 | 1251 |
| Telescopic sights. Means for adjusting cross-hairs of | A. W. Peterson | 736,541 | Aug. 18 | 2805 | 614 | 105 | 1617 |
| Tellurian | E. P. Gram | 720,017 | Feb. 10 | 1112 | 254<br>255 | 102 | 1076 |
| Tellurian | G. V. Clark | 734,513 | July 28 | 3352 | 785 | 105 | 757 |
| Tellurian | C. T. Sibold | 735,165 | Aug. 4 | 231 | 46 | 105 | 1032 |
| Tellurian | J. L. Van Nort | 739,238 | Sept. 15 | 3307 | 732<br>733 | 106 | 739 |
| Tellurian | W. Gentry | 743,483 | Nov. 10 | 1383 | 284 | 107 | 310 |
| Telpher | H. M. Harding | 729,578 | June 2 | 108 | 27 | 104 | 1149 |
| Telpher | H. M. Harding | 734,126 | July 21 | 2639 | 623 | 105 | 591 |
| Telpherage system | H. Bentz | 736,197 | Aug. 11 | 2187 | 470<br>471 | 105 | 1466 |
| Temperature-chart | O. Wider | 740,502 | Oct. 6 | 232 | 45, 46 | 106 | 1296 |
| Temperature of heated articles or receptacles. Determining and regulating the | H. L. Gantt and F. W. Taylor | 735,361 | Aug. 4 | 606 | 125 | 105 | 1111 |
| Temperature of heated articles or receptacles. Determining and regulating the | F. W. Taylor and H. L. Gantt | 735,424 | Aug. 4 | 746 | 159 | 105 | 1139 |
| Temperature of substances to be heated. Apparatus for controlling | C. F. Ruby | 740,472 | Oct. 6 | 169 | 33 | 106 | 1281 |
| Temperature-regulating apparatus | W. P. Powers | 723,728 | Mar. 24 | 3848 | 865 | 103 | 850 |
| Temperature-regulating appliance | N. E. Nash | 732,775 | July 7 | 140 | 38 | 105 | 34 |
| Temperature-regulator | N. E. Nash | 733,329 | July 7 | 1127 | 267 | 105 | 237 |
| Temperature-regulator. Thermostatic | W. S. Johnson | 733,210 | July 7 | 910 | 220 | 105 | 191 |
| Temperature-retaining device | J. Hommel | 719,220 | Jan. 27 | 3229 | 721 | 102 | 726 |
| Temperatures, the liquefaction of gases, and the separation of the constituents of gaseous mixtures. Apparatus for producing low | C. Linde | 728,173 | May 12 | 2538 | 565 | 104 | 557 |
| Temperatures, the liquefaction of gases, and the separation of the constituents of gaseous mixtures. Producing low | C. Linde | 727,650 | May 12 | 1552 | 350 | 104 | 351 |
| Tempering apparatus | A. M. Chase | 737,079 | Aug. 25 | 3821 | 848<br>849 | 105 | 1847 |
| Tempering furnace. Section- | G. W. Packer | 717,906 | Jan. 6 | 734 | 164 | 102 | 156 |
| Templet for ships' carpenters. Adjustable | T. B. Way | 742,937 | Nov. 3 | 206 | 47 | 107 | 45 |
| Tender and tank-locomotive | K. Gölsdorf | 723,666 | Mar. 24 | 3736 | 898 | 103 | 826 |
| Tennis-court marker | J. H. Bullard | 735,705 | Aug. 11 | 1293 | 277 | 105 | 1273 |
| Tenoning-machine | E. B. Hayes and J. M. Kuebler | 722,230 | Mar. 10 | 1071 | 236<br>237<br>238 | 103 | 243 |
| Tenoning-machine | W. J. McNaul | 737,450 | Aug. 25 | 4521 | 1014 | 105 | 1997 |
| Tenpin centering and leveling device | C. H. Gunn | 732,024 | June 23 | 4624 | 1033 | 104 | 2138 |

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| Invention. | Name. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|---|
| | | | | Spec. | Drg. | Vol. | Page. |
| Tension | W. H. Hasemeyer | 724,285 | Mar. 31 | 4970 | 1112 | 103 | 1096 |
| Tension device | T. C. Orndorff | 718,509 | Jan. 13 | 1878 | 412 | 102 | 420 |
| Tension device | J. Barrett | 733,936 | July 21 | 2239 | 527 | 105 | 505 |
| Tension device | W. S. Wells | 739,523 | Sept. 22 | 3829 | 857 | 106 | 868 |
| Tent, canopy, or awning | E. Arnett | 721,993 | Mar. 3 | 639 | 142 | 103 | 139 |
| Tent. Portable pleasure | C. U. Krieg, Sr | 720,445 | Feb. 10 | 1901 | 433, 434 | 102 | 1241 |
| Tent. Sanitary | S. A. McIntyre | 731,319 | June 16 | 3289 | 732, 733 | 104 | 1844 |
| Tent-slide | D. T. Abercrombie | 745,551 | Dec. 1 | 441 | 104 | 107 | 1191 |
| Tent-wall clasp | E. Covert | 724,817 | Apr. 7 | 751 | 175 | 103 | 1331 |
| Tentering-machine | A. A. Whitley | 742,107 | Oct. 20 | 3364 | 751, 752 | 106 | 1991 |
| Tentering-machine | J. H. Lownsbury | 745,023 | Nov. 24 | 4273 | 925, 926 | 107 | 956 |
| Tentering-machine | A. H. Smith | 746,887 | Dec. 15 | 2883 | 666, 667 | 107 | 1764 |
| Terminal-box fixture | H. A. Hoagland | 745,494 | Dec. 1 | 347 | 80 | 107 | 1173 |
| Terminal socket | C. Leichtenschlag | 732,196 | June 30 | 4972 | 1106 | 104 | 2224 |
| Terry fabric | J. H. Margerison | 745,112 | Nov. 24 | 4476 | 968 | 107 | 998 |
| Test trap or seal | C. M. Breen | 745,319 | Dec. 1 | 12 | 3 | 107 | 1103 |
| Testing and fumigating apparatus | M. Schnaier | 745,913 | Dec. 1 | 1103 | 247 | 107 | 1334 |
| Testing and measuring the strength or resistance of materials. Apparatus for | C. Fremont | 720,575 | Feb. 17 | 2174 | 504 | 102 | 1312 |
| Testing apparatus | G. J. Henry, Jr | 731,571 | June 23 | 3786 | 843 | 104 | 1963 |
| Testing-machine | S. M. Taylor | 737,296 | Aug. 25 | 4230 | 942 | 105 | 1933 |
| Testing-machine | T. Olsen | 741,703 | Oct. 20 | 2535 | 566, 567 | 106 | 1823 |
| Testing-machine. Coin-controlled | S. M. Taylor | 741,080 | Oct. 13 | 1281 | 293 | 106 | 1541 |
| Testing-plug | A. T. Pflugh | 724,396 | Mar. 31 | 5193 | 1164 | 103 | 1144 |
| Tether | G. K. Andrews | 729,912 | June 2 | 711 | 158 | 104 | 1273 |
| Textile material non-inflammable. Rendering | W. Warr | 723,088 | Mar. 17 | 2659 | ..... | 103 | 595 |
| Theater-chair. Folding | O. Markiewicz | 738,341 | Sept. 8 | 1617 | 351 | 106 | 364 |
| Theater-scenery. Apparatus for raising or lowering | E. Lytton | 732,597 | Mar. 10 | 1745 | 389 | 103 | 390 |
| Theater-seat attachment | S. W. Van Nostran | 741,004 | Oct. 6 | 1145 | 259 | 106 | 1488 |
| Theatrical apparatus | L. J. Couch | 732,049 | June 30 | 4674 | 1043 | 104 | 2162 |
| Theatrical appliance | D. J. Canary | 722,808 | Mar. 17 | 2171 | 484 | 103 | 494 |
| Theatrical stage | H. W. Bishop | 731,094 | June 16 | 2870 | 637, 638 | 104 | 1760 |
| Therapeutic apparatus. Electromagnetic | E. Bachelet | 743,373 | Nov. 3 | 1102 | 234 | 107 | 233 |
| Therapeutic appliance | G. M. D. Merwin | 743,306 | Nov. 3 | 949 | 206 | 107 | 204 |
| Therapeutic blanket. Electric thermal | W. E. Williams | 723,797 | Mar. 24 | 3964 | 894 | 103 | 875 |
| Therapeutical apparatus | A. Pollacsek and B. Beer | 735,581 | Aug. 4 | 1054 | 223 | 105 | 1204 |
| Therapeutical apparatus | G. L. Abell | 735,851 | Aug. 11 | 1567 | 334 | 105 | 1334 |
| Therapeutical purposes. Electrovibratory apparatus for | F. H. Brown | 738,403 | Sept. 8 | 1737 | 378 | 106 | 389 |
| Therapeutical work. Electrical apparatus for | H. Jackson | 724,186 | Mar. 31 | 4761 | 1068 | 103 | 1054 |
| Thermo-electric battery | B. J. Hall | 724,572 | Apr. 7 | 280 | 69 | 103 | 1228 |
| Thermo-electric generator | A. Tissier | 729,108 | May 26 | 4287 | 947 | 104 | 958 |
| Thermocauter | L. Wirsching | 731,004 | June 16 | 2702 | 602 | 104 | 1726 |
| Thermometer | H. Frankenberg | 744,325 | Nov. 17 | 3013 | 646 | 107 | 673 |
| Thermometer and making same. Shielded clinical | S. C. Hirschberg | 737,838 | Sept. 1 | 541 | 117 | 106 | 120 |
| Thermometer-case | T. Sandhop and E. Diemar | 717,764 | Jan. 6 | 467 | 107 | 102 | 100 |
| Thermometer-case | A. Ashenberger | 723,355 | Mar. 24 | 3164 | 711 | 103 | 710 |
| Thermometer case. Clinical or other | F. J. Berberich, Jr | 733,536 | July 14 | 1501 | 358 | 105 | 334 |
| Thermometer. Clinical | C. J. Fritsch | 719,781 | Feb. 3 | 681 | 157 | 102 | 967 |
| Thermometer. Clinical | O. G. Bell | 726,619 | Apr. 28 | 4108 | 927 | 103 | 2073 |
| Thermometer. Electric | A. Zeleny | 721,770 | Mar. 3 | 194 | 45 | 103 | 42 |
| Thermometer shield. Clinical | H. Vaughan and J. W. Arrowsmith | 738,960 | Sept. 15 | 2809 | 623 | 106 | 635 |
| Thermophoric mixture | I. Timar | 726,204 | Apr. 21 | 3272 | ..... | 103 | 1891 |
| Thermostat | J. M. Latimer | 721,451 | Feb. 24 | 3828 | 870 | 102 | 1678 |
| Thermostat | H. W. Germiner | 725,334 | Apr. 14 | 1694 | 382 | 103 | 1544 |
| Thermostat | T. O. Perry | 726,985 | May 5 | 313 | 69 | 104 | 68 |
| Thermostat | E. W. Comfort | 730,816 | June 9 | 2327 | 517 | 104 | 1627 |
| Thermostat | A. Roesch | 731,620 | June 23 | 3871 | 862 | 104 | 1980 |
| Thermostat | J. D. Gould | 733,184 | July 7 | 857 | 208 | 105 | 180 |
| Thermostat | L. H. Des Isles | 740,254 | Sept. 29 | 5212 | 1172 | 106 | 1179 |
| Thermostat | A. Roesch | 742,494 | Oct. 27 | 4072 | 916 | 106 | 2152 |
| Thermostat | G. A. Wall | 748,323 | Dec. 29 | 5593 | 1275 | 107 | 2406 |
| Thermostat. Incubator | L. P. Meister | 720,722 | Feb. 17 | 2453 | 562 | 102 | 1369 |
| Thermostatic alarm | J. E. Fortin | 734,053 | July 21 | 2496 | 582 | 105 | 561 |
| Thermostatic apparatus | M. S. Bell | 732,699 | July 7 | 13 | 4 | 105 | 6 |
| Thermostatic apparatus | W. H. and E. H. Bristol | 747,297 | Dec. 15 | 3668 | 828, 829 | 107 | 1941 |
| Thermostatic pole-changer | J. P. Jensen | 743,879 | Nov. 10 | 2107 | 450 | 107 | 464 |
| Thill-bow or thill-tug and holdback. Safety | L. W. Benner | 729,529 | June 2 | 19 | 5 | 104 | 1130 |
| Thill-coupling | E. Atterby | 719,985 | Feb. 10 | 1032 | 240 | 102 | 1058 |
| Thill-coupling | A. Paul | 720,280 | Feb. 10 | 1615 | 369 | 102 | 1180 |
| Thill-coupling | J. Cummings | 722,401 | Mar. 10 | 1378 | 305 | 103 | 309 |
| Thill-coupling | A. H. Worrest | 723,509 | Mar. 24 | 3469 | 776 | 103 | 770 |
| Thill-coupling | N. Svenson | 726,202 | Apr. 21 | 3269 | 742 | 103 | 1890 |
| Thill-coupling | G. S. Engler | 727,604 | May 12 | 1454 | 326 | 104 | 331 |
| Thill-coupling | E. Trainer | 731,721 | June 23 | 4050 | 904 | 104 | 2015 |
| Thill-coupling | G. W. Smith | 733,291 | July 7 | 1067 | 254 | 105 | 225 |
| Thill-coupling | I. Osgood | 733,869 | July 14 | 2111 | 498 | 105 | 460 |
| Thill-coupling | W. E. Sherwood | 738,494 | Sept. 8 | 1924 | 420 | 106 | 428 |
| Thill-coupling | W. E. Sherwood | 738,495 | Sept. 8 | 1925 | 420 | 106 | 429 |
| Thill-coupling | J. M. Bryant | 738,881 | Sept. 15 | 2679 | 590 | 106 | 608 |
| Thill-coupling | W. S. Marshall | 739,500 | Sept. 22 | 3792 | 849 | 106 | 861 |
| Thill-coupling | J. N. Keach | 739,683 | Sept. 22 | 4136 | 922, 923 | 106 | 934 |
| Thill-coupling | S. P. Rodabaugh and J. Carr | 742,237 | Oct. 27 | 3617 | 808 | 106 | 2059 |
| Thill-coupling | R. Eccles | 744,314 | Nov. 17 | 2999 | 643 | 107 | 670 |
| Thill-coupling | C. F. Goforth | 745,596 | Dec. 1 | 522 | 122 | 107 | 1208 |
| Thill-coupling | C. C. Bradley | 747,038 | Dec. 15 | 3166 | 725 | 107 | 1828 |

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| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Thill-coupling | C. C. Bradley | 747,039 | Dec. 15 | 3167 | 726 | 107 | 1828 |
| Thill-coupling | C. C. Bradley | 747,040 | Dec. 15 | 3168 | 726 | 107 | 1828 |
| Thill-coupling | C. C. Bradley | 747,041 | Dec. 15 | 3169 | 726 | 107 | 1828 |
| Thill-coupling | C. C. Bradley | 747,042 | Dec. 15 | 3170 | 726 | 107 | 1829 |
| Thill-coupling | S. W. Baldwin | 747,292 | Dec. 15 | 3661 | 827 | 107 | 1940 |
| Thill-coupling | G. H. Fernald | 747,874 | Dec. 22 | 4743 | 1072 | 107 | 2200 |
| Thill or pole clip | W. A. and D. P. Gillett and F. B. Wood. | 732,629 | June 30 | 5808 | 1288 | 104 | 2401 |
| Thill or pole coupling | W. H. Thompson | 734,998 | July 28 | 4275 | 994 | 105 | 947 |
| Thill-support | U. C. Oblosser | 738,121 | Sept. 1 | 1124 | 249 | 106 | 243 |
| Thill-support. Antirattler | J. B. Cooke | 718,820 | Jan. 20 | 2465 | 548 | 102 | 553 |
| Thimble | C. Hemenway | 743,280 | Nov. 3 | 897 | 195 | 107 | 190 |
| Thread-board lifter | N. N. S. Daudelin | 739,840 | Sept. 29 | 4423 | 992, 993 | 106 | 1014 |
| Thread-board lifter | N. N. S. Daudelin | 740,250 | Sept. 29 | 5207 | 1170, 1171 | 106 | 1178 |
| Thread-board lifter. Automatic | W. E. Sharples | 737,161 | Aug. 25 | 3955 | 879 | 105 | 1876 |
| Thread-cutter | H. A. Wehner and J. J. Keunst | 727,867 | May 12 | 1979 | 441 | 104 | 438 |
| Thread-cutter | D. Flagg | 733,318 | July 7 | 1103 | 262 | 105 | 233 |
| Thread cutter and holder | J. S. Mason | 746,973 | Dec. 15 | 3053 | 700 | 107 | 1803 |
| Thread cutter and tier | J. B. Underwood | 733,627 | Mar. 24 | 3675 | 824 | 103 | 813 |
| Thread-dressing machine | G. A. Fredenburgh | 735,745 | Aug. 11 | 1361 | 293 | 105 | 1288 |
| Thread-dressing-machine spindle-driving device | G. A. Fredenburgh | 741,323 | Oct. 13 | 1765 | 393 | 106 | 1640 |
| Thread-dressing-machine twisting-head | G. A. Fredenburgh | 743,707 | Nov. 10 | 1794 | 379 | 107 | 399 |
| Thread-dressing machines. Brush-cylinder for | G. A. Fredenburgh | 746,946 | Dec. 15 | 3012 | 692 | 107 | 1794 |
| Thread-dressing machines. Tension-regulating device for | G. A. Fredenburgh | 739,663 | Sept. 22 | 4099 | 913 | 106 | 926 |
| Thread-dressing machines. Twisting-head for | G. A. Fredenburgh | 731,883 | June 23 | 4344 | 969 | 104 | 2081 |
| Thread guide and cleaner | F. E. Garner | 718,617 | Jan. 20 | 2094 | 456 | 102 | 479 |
| Thread-guide collar | W. E. Sullivan | 733,345 | July 7 | 1160 | 275 | 105 | 244 |
| Thread-holder support. Cone- | H. A. Bates and L. J. Labrum | 734,293 | July 21 | 2972 | 698 | 105 | 662 |
| Thread holding and cutting device | E. Flower | 726,797 | Apr. 28 | 4435 | 999 | 103 | 2141 |
| Thread-protector | G. W. La Voo | 744,213 | Nov. 17 | 2815 | 601 | 107 | 630 |
| Thread-unroller | S. W. Wardwell | 724,975 | Apr. 7 | 1029 | 236 | 103 | 1388 |
| Threading-machine | H. Koester | 734,572 | July 28 | 3460 | 808, 809 | 105 | 781 |
| Three-high mill | J. Kennedy | 734,070 | July 21 | 2531 | 590 | 105 | 569 |
| Thresher | J. J. Skinner | 722,919 | Mar. 17 | 2368 | 529, 530 | 103 | 533 |
| Thresher | T. Powell | 735,146 | Aug. 4 | 201 | 41 | 105 | 1025 |
| Thresher. Grain- | W. Maloney | 719,482 | Feb. 3 | 125 | 29, 30 | 102 | 851 |
| Thresher. Pea- | R. W. J. Stewart | 747,099 | Dec. 15 | 3294 | 749, 750 | 107 | 1861 |
| Thresher. Traveling | M. Ereckson | 737,598 | Sept. 1 | 80 | 16, 17 | 106 | 20 |
| Threshing-machine | W. H. King | 720,699 | Feb. 17 | 2416 | 552, 553 | 102 | 1360 |
| Threshing-machine | H. L. Hunt | 723,157 | Mar. 17 | 2783 | 628 | 103 | 619 |
| Threshing-machine | J. B. McCutcheon | 723,711 | Mar. 24 | 3815 | 858 | 103 | 843 |
| Threshing-machine | J. B. McCutcheon | 723,712 | Mar. 24 | 3817 | 859 | 103 | 843 |
| Threshing-machine | J. B. McCutcheon | 723,713 | Mar. 24 | 3819 | 859 | 103 | 844 |
| Threshing-machine | N. E. Heieren | 727,358 | May 5 | 999 | 217 | 104 | 215 |
| Threshing-machine | E. W. Flagg | 730,754 | June 9 | 2227 | 495 | 104 | 1608 |
| Threshing-machine | A. A. Lowry | 733,231 | July 7 | 944 | 227, 228 | 105 | 198 |
| Threshing-machine | C. H. Bidwell | 734,214 | July 21 | 2792 | 655 | 105 | 624 |
| Threshing-machine | H. Bethuy | 737,898 | Sept. 1 | 684 | 146 | 106 | 150 |
| Threshing-machine | E. D. Hurst | 741,136 | Oct. 13 | 1388 | 317 | 106 | 1562 |
| Threshing-machine | F. T. Parkhurst | 742,058 | Oct. 20 | 3225 | 722, 723 | 106 | 1964 |
| Threshing-machine | J. H. Gardner | 742,183 | Oct. 27 | 3500 | 781 | 106 | 2034 |
| Threshing-machine | E. W. Flagg | 743,703 | Nov. 10 | 1788 | 378 | 107 | 398 |
| Threshing-machine | G. M. Absalom | 746,431 | Dec. 8 | 2040 | 468 | 107 | 1554 |
| Threshing-machine | W. W. Dingee | 747,906 | Dec. 22 | 4794 | 1084 | 107 | 2210 |
| Threshing-machine and grain-separator | C. Ramsdell | 734,241 | July 21 | 2846 | 667 | 105 | 636 |
| Threshing-machine attachment | C. L. Richards | 734,751 | July 28 | 3817 | 889, 890 | 105 | 851 |
| Threshing-machine band-cutter and feeder | W. T. Wright | 719,168 | Jan. 27 | 3139 | 699 | 102 | 707 |
| Threshing-machine band-cutter and feeder | A. A. Thomas | 720,637 | Feb. 17 | 2304 | 527, 528 | 102 | 1336 |
| Threshing-machine band-cutter and feeder | H. W. Eisenhart | 725,617 | Apr. 14 | 2219 | 501, 502 | 103 | 1657 |
| Threshing-machine band-cutter and feeder | F. A. Colwell | 739,833 | Sept. 29 | 4410 | 990 | 106 | 1012 |
| Threshing-machine bodies. Device for shifting | G. Graham | 744,334 | Nov. 17 | 3030 | 650 | 107 | 677 |
| Threshing-machine conveyer | J. R. Harrison | 720,249 | Feb. 10 | 1550 | 355, 356 | 102 | 1167 |
| Threshing-machine conveyer attachment | J. H. Hissong | 735,875 | Aug. 11 | 1615 | 344, 345 | 105 | 1344 |
| Threshing-machine cylinder-tooth | J. Dahl | 740,540 | Oct. 6 | 305 | 62 | 106 | 1309 |
| Threshing-machine-cylinder wrench | J. T. Hume | 745,281 | Nov. 24 | 4804 | 1048, 1049 | 107 | 1065 |
| Threshing-machine feeder | J. D. Barton | 744,994 | Nov. 24 | 4215 | 912 | 107 | 944 |
| Threshing-machine feeder | I. S. Wood, Jr | 746,429 | Dec. 8 | 2038 | 467 | 107 | 1553 |
| Threshing-machine feeder | J. F. Henner | 746,507 | Dec. 8 | 2168 | 498 | 107 | 1582 |
| Threshing-machine feeder attachment | E. U. Down | 744,054 | Nov. 17 | 2489 | 534, 535 | 107 | 560 |
| Threshing machine. Flax or hemp | J. T. Smith | 737,512 | Aug. 25 | 4642 | 1041, 1042 | 105 | 2026 |
| Threshing machine. Grain- | W. Maloney, E. and J. Doré | 717,588 | Jan. 6 | 115 | 30, 31, 32 | 102 | 27 |
| Threshing machine. Grain- | W. Maloney | 719,825 | Feb. 3 | 752 | 176, 177 | 102 | 982 |
| Threshing-machine grain-separating device | H. H. Nightingale | 739,908 | Sept. 29 | 4577 | 1029 | 106 | 1045 |
| Threshing-machine grain-separator | I. M. Cooper | 722,815 | Mar. 17 | 2189 | 488 | 103 | 497 |
| Threshing-machine grain-separator | F. M. Carter | 742,392 | Oct. 27 | 3891 | 874 | 106 | 2115 |
| Threshing-machine grain-separator | D. D. Nofziger | 745,371 | Dec. 1 | 104 | 24 | 107 | 1123 |

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| | | | | Spec | Dr'g. | Vol. | Page. |
| Threshing machine. Pea- | J. M. Brasington | 724,793 | Apr. 7 | 699 | 164 | 103 | 1318 |
| Threshing-machine riddle | E. Huber and J. W. Miller | 738,541 | Sept. 8 | 2008 | 437 | 106 | 447 |
| Threshing-machine rope or cable drive | G. E. Wilson | 732,690 | June 30 | 5923 | 1314 | 104 | 2424 |
| Threshing-machine self-feeder | D. A. Simpson | 724,748 | Apr. 7 | 619 | 145 | 103 | 1301 |
| Threshing-machine straw-baler attachment | A. J. Spencer | 721,105 | Feb. 17 | 3149 | 724 | 102 | 1520 |
| Threshing-machine straw-stacker | J. Heineke | 724,098 | Mar. 31 | 4570 | 1028 | 103 | 1016 |
| Threshing-machine tooth | R. L. Nellis | 721,220 | Feb. 24 | 3430 | 779 | 102 | 1595 |
| Threshing-machines. Automatic belt-guide for | G. S. Thompson | 745,691 | Dec. 1 | 682 | 157 | 107 | 1243 |
| Threshing-machines. Means for propelling and guiding | P. S. Houghton | 739,675 | Sept. 22 | 4121 | 919 | 106 | 931 |
| Threshold or door-sill and storm-protector. Removable | S. W. Funk | 721,510 | Feb. 24 | 3932 | 895 | 102 | 1699 |
| Throw device. Variable- | M. S. Gooley | 724,566 | Apr. 7 | 268 | 65 | 103 | 1226 |
| Thrust-fork | S. B. Fleming | 745,339 | Dec. 1 | 41 | 8,9 | 107 | 1109 |
| Ticker attachment | R. D. Westcote | 735,922 | Aug. 11 | 1698 | 362 | 105 | 1362 |
| Ticket-case | M. Macdonald | 731,480 | June 23 | 3607 | 805 | 104 | 1928 |
| Ticket-case | R. A. Edgar and W. W. Tobey | 733,825 | July 14 | 2029 | 478 | 105 | 443 |
| Ticket. Combined railway fare and transfer | F. W. Gillard | 717,984 | Jan. 6 | 878 | 196 | 102 | 189 |
| Ticket-control apparatus | A. Alling | 734,654 | July 28 | 3611 | 845 | 105 | 812 |
| Ticket-holder | C. F. Howes | 725,711 | Apr. 21 | 2408 | 546 | 103 | 1710 |
| Ticket holder. Duplex- | H. Tyler | 718,590 | Jan. 13 | 2051 | 446 | 102 | 457 |
| Ticket-marking device. Pin- | A. W. A. Finch | 739,408 | Sept. 22 | 3643 | 810 | 106 | 827 |
| Ticket of varied value | G. T. Murray | 741,693 | Oct. 20 | 2514 | 561, 562 | 106 | 1818 |
| Ticket or card holder | A. L. Johnson | 735,773 | Aug. 11 | 1408 | 302 | 105 | 1298 |
| Ticket. Railway- | J. E. Mohan | 725,744 | Apr. 21 | 2470 | 558 | 103 | 1724 |
| Ticket. Railway transfer- | W. F. Ham | 730,764 | June 9 | 2243 | 498 | 104 | 1611 |
| Ticket-spindle | H. M. Barnet | 738,275 | Sept. 8 | 1467 | 316 | 106 | 331 |
| Ticket system. Transportation- | P. C. Dockstader | 746,046 | Dec. 8 | 1352 | 302 | 107 | 1406 |
| Ticket. Time-limit | R. W. Wood | 742,546 | Oct. 27 | 4179 | 940 | 106 | 2174 |
| Ticket. Transportation- | A. A. Anderson | 741,871 | Oct. 20 | 2841 | 633, 634 | 106 | 1886 |
| Tickets, labels, or the like. Holder for rolls of | C. Grundig | 736,247 | Aug. 11 | 2270 | 491 | 105 | 1484 |
| Tickets. Machine for dating and numbering mileage- | W. H. Ogan | 731,490 | June 23 | 3623 | 808 | 104 | 1932 |
| Tickler. Office- | F. E. Smith | 737,166 | Aug. 25 | 3966 | 881 | 105 | 1879 |
| Tidal elevator | C. D. O'Leary | 731,491 | June 23 | 3624 | 809 | 104 | 1932 |
| Tide and wave power | F. Merziger | 729,629 | June 2 | 188 | 44 | 104 | 1166 |
| Tide-motor | P. J. Nevins | 726,733 | Apr. 28 | 4309 | 972, 973 | 103 | 2116 |
| Tide-motor | A. W. Fredson | 739,538 | Sept. 22 | 3852 | 863 | 106 | 873 |
| Tide-water apparatus | H. Smetana | 725,887 | Apr. 21 | 2726 | 620, 621 | 103 | 1780 |
| Tie:<br>*See* Bale-tie. Rail-joint tie.<br>Cross-tie. Railway-tie.<br>Eyelet safety-tie. Railway cross-tie.<br>Fence-tie. Ribbon-tie.<br>Metallic tie. Wall-tie.<br>Necktie. Wire-tie.<br>Rail-tie. | | | | | | | |
| Tie | E. F. Priddat | 736,628 | Aug. 18 | 2982 | 656 | 105 | 1651 |
| Tie and rail-clasp | F. W. Topliff | 747,806 | Dec. 22 | 4602 | 1038 | 107 | 2168 |
| Tie and rail-joint. Combined | A. B. Snyder | 734,102 | July 21 | 2593 | 607 | 105 | 582 |
| Tie-fastener | E. F. Priddat | 736,629 | Aug. 18 | 2983 | 656 | 105 | 1652 |
| Tie-fastener | E. F. Priddat. (Reissue) | 12,147 | Aug. 18 | 3530 | 784 | 105 | 1766 |
| Tie-plate | J. H. Crowley | 717,819 | Jan. 6 | 576 | 129 | 102 | 124 |
| Tie-plate | B. Wolhaupter | 721,644 | Feb. 24 | 4203 | 956 | 102 | 1761 |
| Tie-plate | B. Wolhaupter | 730,067 | June 2 | 993 | 223 | 104 | 1330 |
| Tie-plate | B. B. Moss | 732,424 | June 30 | 5419 | 1202 | 104 | 2317 |
| Tie-plate | A. F. Wood | 739,768 | Sept. 22 | 4271 | 957 | 106 | 964 |
| Tie-plate | L. A. Hoerr | 746,082 | Dec. 8 | 1414 | 317 | 107 | 1420 |
| Tie-plate and rail-brace | J. A. Bystrom | 737,701 | Sept. 1 | 258 | 55 | 106 | 59 |
| Tie-plates. Making | J. M. Sellers | 722,152 | Mar. 3 | 908 | 202 | 103 | 194 |
| Tie-spacing jack | J. Murray and W. W. Havre | 720,603 | Feb. 17 | 2217 | 514 | 102 | 1320 |
| Tile | A. B. Klay | 730,131 | June 2 | 1093 | 245 | 104 | 1349 |
| Tile | S. T. Playford | 738,627 | Sept. 8 | 2162 | 474 | 106 | 480 |
| Tile | J. M. Coffield | 745,000 | Nov. 24 | 4225 | 915 | 107 | 946 |
| Tile | G. B. Staples | 746,399 | Dec. 8 | 1987 | 453 | 107 | 1543 |
| Tile and roof. Roofing- | J. Veen | 736,801 | Aug. 18 | 3310 | 734 | 105 | 1719 |
| Tile. Building- | H. Ohaus | 739,211 | Sept. 15 | 3249 | 719 | 106 | 726 |
| Tile curb | F. Hill | 722,580 | Mar. 10 | 1720 | 383 | 103 | 385 |
| Tile-fastener | H. B. Skeele | 721,246 | Feb. 24 | 3475 | 790 | 102 | 1604 |
| Tile. Floor- | A. Plant | 728,290 | May 19 | 2781 | 617 | 104 | 632 |
| Tile. Floor or wall | L. R. Blackmore | 731,158 | June 16 | 2998 | 665, 666 | 104 | 1784 |
| Tile flooring | C. P. Lawshe | 722,520 | Mar. 10 | 1618 | 357 | 103 | 363 |
| Tile flooring | C. P. Capen | 726,506 | Apr. 28 | 3885 | 879 | 103 | 2029 |
| Tile flooring | C. P. Capen | 729,128 | May 26 | 4319 | 954 | 104 | 965 |
| Tile. Flooring or paving | C. H. Puls | 725,364 | Apr. 14 | 1745 | 393 | 103 | 1554 |
| Tile for lining silos | E. E. Blaschke, Jr | 717,532 | Jan. 6 | 19 | 5 | 102 | 7 |
| Tile-forming apparatus | J. Sherry | 729,431 | May 26 | 4843 | 1073 | 104 | 1074 |
| Tile-forming machines. Cutting and delivery table for | O. C. Pixley | 734,942 | July 28 | 4162 | 968, 969 | 105 | 924 |
| Tile, &c. Glass facing- | E. F. Chance | 737,707 | Sept. 1 | 265 | 56 | 106 | 60 |
| Tile. Illuminating- | J. Jacobs | 725,342 | Apr. 14 | 1712 | 385 | 103 | 1547 |
| Tile. Illuminating- | P. H. Jackson | 726,537 | Apr. 28 | 3939 | 890 | 103 | 2040 |
| Tile. Imitation | W. N. Cornell | 735,344 | Aug. 4 | 581 | 119 | 105 | 1105 |
| Tile-machine | W. A. Strouss and S. S. Lawson | 741,078 | Oct. 13 | 1275 | 292 | 106 | 1539 |
| Tile. Machine for removing glaze from the edges of | M. A. Metzner | 732,767 | July 7 | 123 | 33, 34, 35 | 105 | 30 |
| Tile, &c., made of vitrified clay | F. W. Braunstein | 746,448 | Dec. 8 | 2068 | ------ | 107 | 1560 |
| Tile-making machine | W. A. Houts | 737,841 | Sept. 1 | 551 | 119, 120 | 106 | 122 |
| Tile-making machine | W. A. Houts | 737,843 | Sept. 1 | 555 | 121 | 106 | 123 |

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| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Tile. Making mosaic | T. H. Mooney | 719,244 | Jan. 27 | 3276 | 732 | 102 | 737 |
| Tile. Metal roofing | A. H. Memmler | 743,905 | Nov. 10 | 2157 | 465 | 107 | 475 |
| Tile-mold | R. C. Tucker | 736,337 | Aug. 11 | 2425 | 529 | 105 | 1520 |
| Tile-molding machine | E. S. Lafferty | 735,117 | Aug. 4 | 131 | 29 | 105 | 1011 |
| Tile or brick cutting machine | J. Bensing | 718,077 | Jan. 13 | 1044 | 233 | 102 | 240 |
| Tile or brick. Hollow | O. C. Pixley | 722,249 | Mar. 10 | 1112 | 245 | 103 | 252 |
| Tile or other decorative device | H. C. Mercer | 733,668 | July 14 | 1729 | 408 | 105 | 381 |
| Tile or shingle. Metal roofing | A. Friedley | 740,842 | Oct. 6 | 862 | 192 | 106 | 1430 |
| Tile. Roof | J. N. Mauntin | 720,831 | Feb. 17 | 2620 | 605 | 102 | 1405 |
| Tile. Roofing | F. E. Coombs | 719,193 | Jan. 27 | 3181 | 708, 709 | 102 | 717 |
| Tile. Roofing | J. Schall | 719,514 | Feb. 3 | 176 | 41 | 102 | 861 |
| Tile. Roofing | H. B. Skeele | 722,918 | Mar. 17 | 2367 | 529 | 103 | 533 |
| Tile. Roofing | C. Schlachter | 746,747 | Dec. 15 | 2612 | 600 | 107 | 1704 |
| Tile-setting | J. H. Munro | 720,836 | Feb. 17 | 2627 | 606 | 102 | 1406 |
| Tile-strip-breaking apparatus | P. Semmer | 744,244 | Nov. 17 | 2863 | 614 | 107 | 640 |
| Tile strips. Breaking | P. Semmer | 744,245 | Nov. 17 | 2864 | 614 | 107 | 640 |
| Tiles | P. W. Litchfield | 725,102 | Apr. 14 | 1277 | 288 | 103 | 1456 |
| Tiles. Appliance for forming designs with | W. P. Meeker | 738,051 | Sept. 1 | 972 | 216 | 106 | 211 |
| Tiles. Box for making angular | M. Kondolf | 744,363 | Nov. 17 | 3083 | 661 | 107 | 688 |
| Tiles, bricks, panels, &c. Manufacture of | T. Pfister | 718,381 | Jan. 13 | 1597 | ------ | 102 | 357 |
| Tiles. Ceiling | W. Bremer | 733,134 | July 7 | 775 | 187, 188 | 105 | 164 |
| Tiles. Die for making roofing | J. Daniel | 726,144 | Apr. 21 | 3157 | 714 | 103 | 1867 |
| Tiles for floors, walls, &c. Combination | R. L. Moyle | 734,394 | Mar. 31 | 5189 | 1163 | 103 | 1142 |
| Tiles. Joining metallic roofing | E. L. Quinn | 721,967 | Mar. 3 | 590 | 132 | 103 | 129 |
| Tiles. Paving | A. Picha | 739,345 | Sept. 22 | 3492 | 781 | 106 | 794 |
| Tiles, &c. Press for the manufacture of stove | G. Bähr | 722,661 | Mar. 17 | 1881 | 417, 418 | 103 | 434 |
| Tiles, slabs, &c. Manufacture of | G. Kunick | 730,778 | June 9 | 2265 | ------ | 104 | 1615 |
| Tiling | G. P. Chappell | 746,290 | Dec. 8 | 1794 | 407 | 107 | 1501 |
| Tiling-block for buildings | V. L. McCuskey | 720,727 | Feb. 17 | 2460 | 563 | 102 | 1370 |
| Tiling-block. Hollow | K. M. Mitchell and J. Dell | 742,709 | Oct. 27 | 4459 | 1009 | 106 | 2235 |
| Timber at the surface of the ground. Machine for cutting | J. H. Young | 723,968 | Mar. 31 | 4320 | 970 | 103 | 967 |
| Timber clamp. Cross | W. Louden | 741,803 | Oct. 20 | 2720 | 606 | 106 | 1860 |
| Timber. Preservation of | R. Kroll | 727,975 | May 12 | 2182 | 486 | 104 | 483 |
| Time-check receiver. Workman's | C. E. Beckwith and R. M. Clark | 746,778 | Dec. 15 | 2670 | 616 | 107 | 1715 |
| Time-controlling mechanism | F. Clarke | 740,234 | Sept. 29 | 5180 | 1164 | 106 | 1172 |
| Time-detector contact device | H. W. Durkee and W. L. Cosgrove | 717,558 | Jan. 6 | 68 | 17 | 102 | 17 |
| Time-lock | C. W. Spicer | 718,668 | Jan. 20 | 2189 | 479 | 102 | 497 |
| Time-recorder | A. N. Palmer and W. W. Kimball | 738,350 | Sept. 8 | 1642 | 355, 356 | 106 | 369 |
| Time-recorder | W. W. Kimball and A. N. Palmer | 738,454 | Sept. 8 | 1827 | 397, 398, 399 | 106 | 408 |
| Time-recorder | S. A. Dean | 744,173 | Nov. 17 | 2731 | 581, 582 | 107 | 611 |
| Time-recorder. Workman's | C. E. Ongley | 720,957 | Feb. 17 | 2863 | 655 | 102 | 1456 |
| Time-recorder. Workman's | C. E. Ongley | 720,958 | Feb. 17 | 2866 | 655, 656 | 102 | 1457 |
| Time-recorder. Workman's | D. Hepp | 721,187 | Feb. 24 | 3337 | 762, 763 | 102 | 1577 |
| Time-recorder. Workman's | A. L. Jaynes | 721,374 | Feb. 24 | 3685 | 839, 840, 841 | 102 | 1648 |
| Time-recorder. Workman's | C. E. Larrabee | 726,546 | Apr. 28 | 3954 | 893, 894 | 103 | 2043 |
| Time-recorder. Workman's | D. Hepp | 745,058 | Nov. 24 | 4360 | 941, 942 | 107 | 974 |
| Time-recording device | J. K. Barber | 722,934 | Mar. 17 | 2393 | 535 | 103 | 538 |
| Time-recording lock | A. B. Hayden | 734,174 | July 21 | 2725 | 641 | 105 | 609 |
| Time-recording lock | A. B. Hayden | 734,175 | July 21 | 2727 | 641 | 105 | 610 |
| Time-register | J. L. Roberts | 739,224 | Sept. 15 | 3275 | 725, 726 | 106 | 732 |
| Time-reminder | F. W. Baynes | 720,527 | June 2 | 17 | 5 | 104 | 1130 |
| Time, speed, and distance recorder | R. F. G. Baxandall | 734,156 | July 21 | 2693 | 633, 634 | 105 | 603 |
| Timepiece-gearing | E. Kuhn | 719,342 | Jan. 27 | 3464 | 772 | 102 | 778 |
| Timepiece-regulator | C. C. Sibley | 731,819 | June 23 | 4235 | 943 | 104 | 2056 |
| Timepiece winding-indicator | W. A. Aumen | 744,456 | Nov. 17 | 3256 | 698 | 107 | 726 |
| Tin from scraps of tinned iron. Recovering | B. A. Bergman | 736,924 | Aug. 25 | 3548 | 787 | 105 | 1789 |
| Tin from the surface of other metals. Removing | A. K. Eaton | 723,197 | Mar. 17 | 2873 | ------ | 103 | 639 |
| Tin from tin-scrap. Recovering | R. H. Gould | 718,927 | Jan. 20 | 2667 | 598 | 102 | 596 |
| Tin-plate cleaning and polishing machine | W. McCord and T. Gill | 721,458 | Feb. 24 | 3839 | 873 | 102 | 1680 |
| Tin scraps. Machine for cutting up | M. Lemberg | 744,572 | Nov. 17 | 3445 | 742 | 107 | 765 |
| Tinning-baths. Compound for use in | A. W. Burwell | 735,941 | Aug. 11 | 1731 | ------ | 105 | 1369 |
| Tinning-machine | H. L. Bradley and T. W. Otis | 746,000 | Dec. 8 | 1268 | 285 | 107 | 1387 |
| Tincture-extractor | H. Redlich | 731,615 | June 23 | 3863 | 861 | 104 | 1978 |
| Tine and cranberry-scoop | W. T. Makepeace | 722,732 | Mar. 17 | 2024 | 452 | 103 | 464 |
| Tire | E. A. Arcouet | 719,293 | Jan. 27 | 3364 | 751 | 102 | 756 |
| Tire | C. H. Wilkinson | 719,927 | Feb. 3 | 916 | 215 | 102 | 1018 |
| Tire | G. H. Raflovich | 728,009 | May 12 | 2243 | 499 | 104 | 495 |
| Tire | C. Bürger | 734,296 | July 21 | 2976 | 699 | 105 | 662 |
| Tire | W. P. Scofield | 736,638 | Aug. 18 | 2998 | 661 | 105 | 1655 |
| Tire | E. B. Cadwell | 737,205 | Aug. 25 | 4050 | 898 | 105 | 1895 |
| Tire | C. Miller | 737,559 | Aug. 25 | 4721 | 1059 | 105 | 2043 |
| Tire | E. B. Cadwell | 737,702 | Sept. 1 | 259 | 55 | 106 | 59 |
| Tire and fastening therefor. Vehicle | R. M. Connable | 727,296 | May 5 | 878 | 190 | 104 | 188 |
| Tire and manufacturing same. Vehicle | C. D. Nirdlinger | 738,566 | Sept. 8 | 2046 | 446 | 106 | 455 |
| Tire and rim. Pneumatic | A. H. Marks | 734,916 | July 28 | 4119 | 959 | 105 | 916 |
| Tire armor. Pneumatic | H. Parsons | 723,299 | Mar. 24 | 3061 | 688 | 103 | 691 |
| Tire armor. Pneumatic | E. C. Radick | 741,714 | Oct. 20 | 2562 | 570 | 106 | 1827 |
| Tire-bolt wrench | J. D. Smith | 722,637 | Mar. 10 | 1878 | 405 | 103 | 407 |
| Tire-casing openings. Device for closing | O. T. Semler | 719,147 | Jan. 27 | 3105 | 690 | 102 | 701 |
| Tire cleaner. Bicycle | F. J. Smith | 737,509 | Aug. 25 | 4636 | 1040 | 105 | 2024 |

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| Tire. Composite wheel- | E. I. Braddock | 722,804 | Mar. 17 | 2165 | 483 | 103 | 492 |
| Tire. Compressible vehicle- | H. P. Feister | 729,311 | May 26 | 4651 | 1028 | 104 | 1035 |
| Tire construction | C. E. W. Woodward | 744,663 | Nov. 17 | 3588 | 773 | 107 | 795 |
| Tire cover. Pneumatic- | L. Johnstone | 724,295 | Mar. 31 | 4989 | {1116 {1117 | 103 | 1100 |
| Tire. Cushion- | J. H. Toole | 735,622 | Aug. 4 | 1127 | 238 | 105 | 1221 |
| Tire. Detachable | H. E. Irwin | 735,265 | Aug. 4 | 450 | 89 | 105 | 1077 |
| Tire. Detachable | H. E. Irwin | 745,443 | Dec. 1 | 247 | 57 | 107 | 1152 |
| Tire-detacher | A. W. Blanchard | 724,157 | Mar. 31 | 4702 | 1055 | 103 | 1043 |
| Tire. Elastic | W. W. E. Scheck | 747,237 | Dec. 15 | 3545 | 804 | 107 | 1913 |
| Tire. Elastic vehicle- | H. G. Fiske | 734,529 | July 28 | 3389 | 791 | 105 | 765 |
| Tire. Elastic vehicle- | E. M. Birdsall | 748,256 | Dec. 29 | 5476 | 1248 | 107 | 2381 |
| Tire. Elastic wheel- | W. C. Lilly | 718,645 | Jan. 20 | 2140 | 467 | 102 | 488 |
| Tire-fastener | H. G. Wilson | 721,266 | Feb. 24 | 3505 | 797 | 102 | 1611 |
| Tire-fastener | G. E. Rumrill | 723,316 | Mar. 24 | 3089 | 696 | 103 | 697 |
| Tire-fastener | R. M. Connable | 727,295 | May 5 | 877 | 190 | 104 | 188 |
| Tire fastener. Vehicle- | J. C. Haines | 719,329 | Jan. 27 | 3438 | 767 | 102 | 773 |
| Tire-fastening | J. F. Byers | 727,746 | May 12 | 1748 | 393 | 104 | 391 |
| Tire-fastening device. Vehicle- | F. P. Stone | 722,164 | Mar. 3 | 930 | 206 | 103 | 193 |
| Tire for vehicle-wheels. Clencher- | A. de Laski and P. D. Thropp | 740,877 | Oct. 6 | 910 | 204 | 106 | 1448 |
| Tire for vehicle-wheels. Cushion- | J. N. Dages | 738,415 | Sept. 8 | 1755 | 382 | 106 | 390 |
| Tire for vehicle-wheels. Spring- | W. T. G. Ellis | 717,827 | Jan. 6 | 593 | 132 | 102 | 123 |
| Tire for vehicles. Elastic | W. Balassa | 737,816 | Sept. 1 | 489 | 108 | 106 | 118 |
| Tire for vehicles. Rubber cushion- | A. H. Brintnell | 727,582 | May 12 | 1423 | 320 | 104 | 320 |
| Tire-heater. Hydrocarbon | W. W. Davis | 718,567 | Jan. 13 | 2002 | 436 | 102 | 445 |
| Tire-heating apparatus | F. Thomson | 740,064 | Sept. 29 | 4873 | 1092 | 106 | 1105 |
| Tire-heating device | C. Solberg | 737,034 | Aug. 25 | 3748 | 832 | 105 | 1838 |
| Tire hose-coupling. Pneumatic- | C. G. Eshelman | 731,348 | June 16 | 3333 | 744 | 104 | 1853 |
| Tire-inflating device. Pneumatic- | A. de Gingins | 724,845 | Apr. 7 | 801 | 185 | 103 | 1342 |
| Tire-joint-closing machine. Rubber- | F. H. Guber | 741,788 | Oct. 20 | 2699 | 601 | 106 | 1855 |
| Tire-joint-fastening device. Pneumatic- | E. Perceval | 728,002 | May 12 | 2232 | 496 | 104 | 493 |
| Tire-making machine. Pneumatic- | U. P. Smith | 745,300 | Nov. 24 | 4846 | {1057 {1058 {1059 | 107 | 1075 |
| Tire plug. Pneumatic- | C. O. Tingley | 734,108 | July 21 | 2607 | 613 | 105 | 585 |
| Tire. Pneumatic | F. Toni | 720,639 | Feb. 17 | 2307 | 528 | 102 | 1337 |
| Tire. Pneumatic | J. G. Moomy | 732,376 | Mar. 10 | 1343 | 297 | 103 | 302 |
| Tire. Pneumatic | J. G. Moomy | 732,377 | Mar. 10 | 1343 | 297 | 103 | 302 |
| Tire. Pneumatic | E. Midgley | 732,600 | Mar. 10 | 1754 | 391 | 103 | 392 |
| Tire. Pneumatic | P. W. Tulinghast | 723,945 | Mar. 31 | 4279 | 962 | 103 | 960 |
| Tire. Pneumatic | W. Edmunds | 724,830 | Apr. 7 | 776 | 180 | 103 | 1336 |
| Tire. Pneumatic | E. B. Rayner | 730,474 | June 9 | 1741 | 390 | 104 | 1500 |
| Tire. Pneumatic | R. A. Harris | 733,198 | July 7 | 881 | 213 | 105 | 185 |
| Tire. Pneumatic | A. Vreeland | 733,440 | July 14 | 1338 | 315 | 105 | 300 |
| Tire. Pneumatic | W. F. Schacht | 734,434 | July 21 | 3206 | 755 | 105 | 711 |
| Tire. Pneumatic | A. H. Marks | 734,912 | July 28 | 4115 | 959 | 105 | 915 |
| Tire. Pneumatic | A. H. Marks | 734,913 | July 28 | 4115 | 959 | 105 | 915 |
| Tire. Pneumatic | A. H. Marks | 734,914 | July 28 | 4116 | 959 | 105 | 915 |
| Tire. Pneumatic | A. H. Marks | 734,915 | July 28 | 4118 | 959 | 105 | 915 |
| Tire. Pneumatic | P. W. Litchfield | 736,414 | Aug. 18 | 2564 | 563 | 105 | 1565 |
| Tire. Pneumatic | W. Corliss | 736,584 | Aug. 18 | 2880 | 629 | 105 | 1632 |
| Tire. Pneumatic | P. Magnus | 740,578 | Oct. 6 | 386 | 80 | 106 | 1329 |
| Tire. Pneumatic | J. R. Brunt and R. C. Pitt | 742,831 | Nov. 3 | 27 | 5 | 107 | 8 |
| Tire. Pneumatic | I. Tennant | 744,435 | Nov. 17 | 3213 | 689 | 107 | 717 |
| Tire. Pneumatic | I. Tennant | 744,436 | Nov. 17 | 3215 | 689 | 107 | 717 |
| Tire. Pneumatic | T. J. Cooper | 745,040 | Nov. 24 | 4325 | 934 | 107 | 967 |
| Tire. Pneumatic | E. H. Seddon | 747,001 | Dec. 15 | 3108 | 712 | 107 | 1815 |
| Tire-protecting band. Pneumatic- | J. Wheeldon | 732,339 | Mar. 10 | 1277 | 284 | 103 | 287 |
| Tire-protector. Noiseless | L. C. Cummings | 732,278 | June 30 | 5136 | 1141 | 104 | 2258 |
| Tire protector. Pneumatic- | G. E. and S. N. Mentel | 745,878 | Dec. 1 | 1049 | 236 | 107 | 1322 |
| Tire-remover | H. L. Doane | 741,891 | Oct. 20 | 2874 | 642 | 106 | 1893 |
| Tire-removing device. Vehicle- | H. Atwater | 743,131 | Nov. 3 | 601 | 130 | 107 | 125 |
| Tire-repair device. Pneumatic- | J. R. Vosburgh | 746,207 | Dec. 8 | 1644 | 366 | 107 | 1471 |
| Tire-repair tool | T. Weigele | 743,963 | Nov. 10 | 2257 | 486 | 107 | 498 |
| Tire. Resilient | H. Carmont | 724,259 | Mar. 31 | 4920 | 1101 | 103 | 1085 |
| Tire. Resilient | A. W. Hockman | 728,106 | May 12 | 2412 | 537 | 104 | 532 |
| Tire. Resilient | L. C. Cummings | 728,678 | May 19 | 3511 | 781 | 104 | 785 |
| Tire. Road-vehicle | B. Nadall | 732,612 | Mar. 10 | 1772 | 395 | 103 | 396 |
| Tire. Rubber | R. Austin | 727,877 | May 12 | 1996 | 445 | 104 | 442 |
| Tire. Rubber | C. Grotz | 731,677 | June 23 | 3974 | 886 | 104 | 2000 |
| Tire. Rubber | E. B. Tragler | 732,237 | June 30 | 5057 | 1125 | 104 | 2242 |
| Tire. Rubber vehicle- | G. B. Dryden | 724,681 | Apr. 7 | 492 | 118 | 103 | 1274 |
| Tire. Sectional cushion- | C. Miller | 735,993 | Aug. 11 | 1829 | 392 | 105 | 1391 |
| Tire-set | J. B. Kimbell | 722,993 | Mar. 17 | 2484 | 558 | 103 | 557 |
| Tire setter and cooler | S. Smith | 734,003 | July 21 | 2378 | 558 | 105 | 533 |
| Tire-setting apparatus. Rubber- | F. A. Orcutt | 718,148 | Jan. 13 | 1168 | 260 | 102 | 266 |
| Tire-setting machine | G. Lattin | 748,292 | Dec. 29 | 5549 | 1266 | 107 | 2396 |
| Tire-setting machine. Rubber- | E. R. Lanpher | 745,358 | Dec. 1 | 78 | 19 | 107 | 1118 |
| Tire-setting machine. Vehicle- | H. R. Auld | 742,556 | Oct. 27 | 4194 | 944 | 106 | 2177 |
| Tire-smoothing device. Rubber- | A. E. Ellinwood | 736,239 | Aug. 11 | 2255 | 488 | 105 | 1481 |
| Tire-tightener | A. McMaster and H. Kean | 720,174 | Feb. 10 | 1401 | 320 | 102 | 1137 |
| Tire-tightener | O. R. Gould | 721,033 | Feb. 17 | 3005 | 690 | 102 | 1486 |
| Tire-tightener | J. B. Smith | 728,776 | May 19 | 3689 | 823 | 104 | 820 |
| Tire-tightener | R. M. Payne | 733,592 | July 14 | 1599 | 380 | 105 | 356 |
| Tire-tightener | R. H. Lewis | 747,736 | Dec. 22 | 4462 | 1006 | 107 | 2136 |
| Tire-valve and cap | G. H. F. Schrader | 724,128 | Mar. 31 | 4643 | 1046 | 103 | 1031 |
| Tire valve-coupling. Pneumatic- | A. B. Catterall | 729,129 | May 26 | 4319 | 954 | 104 | 965 |
| Tire. Vehicle- | J. S. Chenhalls | 718,696 | Jan. 20 | 2243 | 491 | 102 | 508 |
| Tire. Vehicle- | F. P. Brining | 719,179 | Jan. 27 | 3156 | 703 | 102 | 711 |
| Tire. Vehicle- | O. Schaefer | 722,459 | Mar. 10 | 1498 | 330 | 103 | 335 |
| Tire. Vehicle- | W. Clapp | 723,366 | Mar. 24 | 3201 | 718 | 103 | 716 |
| Tire. Vehicle- | R. W. Brooks | 727,076 | May 5 | 490 | 105 | 104 | 108 |
| Tire. Vehicle- | W. Esty | 730,628 | June 9 | 2009 | 447 | 104 | 1561 |
| Tire. Vehicle- | J. A. Collet | 733,158 | July 7 | 809 | 196 | 105 | 171 |
| Tire. Vehicle- | J. W. Carter | 733,540 | July 14 | 1507 | 359 | 105 | 335 |
| Tire. Vehicle- | C. L. Henderson | 735,373 | Aug. 4 | 633 | 131 | 105 | 1116 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Tire. Vehicle- | A. Prinzhorn | 738,064 | Sept. 1 | 992 | 221 | 106 | 216 |
| Tire. Vehicle- | W. O. Worth | 740,069 | Sept. 29 | 4879 | 1094 | 106 | 1110 |
| Tire. Vehicle- | G. W. Southwick | 743,043 | Nov. 3 | 432 | 94 | 107 | 91 |
| Tire. Vehicle- | C. A. Pettie | 744,099 | Nov. 17 | 2574 | 551 | 107 | 578 |
| Tire. Vehicle- | C. A. Pettie | 744,100 | Nov. 17 | 2577 | 551 | 107 | 578 |
| Tire. Vehicle- | R. M. Connable | 744,493 | Nov. 17 | 3319 | 715 | 107 | 739 |
| Tire. Vehicle cellular rubber | A. Ducasble | 718,439 | Jan. 13 | 1697 | 374 | 102 | 378 |
| Tire. Vehicle-wheel | S. C. Lines | 732,199 | June 30 | 4977 | 1108 | 104 | 2225 |
| Tire. Vehicle-wheel | G. Lagaehe | 744,210 | Nov. 17 | 2813 | 600 | 107 | 630 |
| Tire. Wheel- | R. S. Graham | 724,693 | Apr. 7 | 512 | 122 | 103 | 1278 |
| Tire. Wheel- | R. S. Graham | 724,694 | Apr. 7 | 514 | 122 | 103 | 1279 |
| Tire. Wheel- | F. H. Chase | 729,131 | May 26 | 4322 | 955 | 104 | 965 |
| Tire. Wheel- | J. P. Donovan | 729,144 | May 26 | 4346 | 959, 960 | 104 | 970 |
| Tire. Wheel- | A. D. Van Ausdall | 729,704 | June 2 | 317 | 73 | 104 | 1194 |
| Tire. Wheel- | D. E. Griffiths | 730,638 | June 9 | 2024 | 450 | 104 | 1564 |
| Tires. Apparatus for manufacturing and vulcanizing rubber | F. A. Seiberling | 725,155 | Apr. 14 | 1373 | 309, 310, 311 | 103 | 1476 |
| Tires. Inner tube for pneumatic | T. R. Palmer | 739,025 | Sept. 15 | 2905 | 645 | 106 | 655 |
| Tires. Making self-mending | J. W. Blodgett | 719,425 | Feb. 3 | 27 | 6 | 102 | 832 |
| Tires. Making single-tube pneumatic | T. R. Palmer | 744,394 | Nov. 17 | 3140 | 674 | 107 | 701 |
| Tires. Manufacturing pneumatic | U. P. Smith | 723,057 | Mar. 17 | 2597 | 585 | 103 | 581 |
| Tires. Means for repairing punctured pneumatic | C. R. Sutton | 725,171 | Apr. 14 | 1405 | 318 | 103 | 1482 |
| Tires. Outer cover for pneumatic | J. Butler | 721,146 | Feb. 24 | 3264 | 747 | 102 | 1563 |
| Tires to vehicles. Apparatus for applying rubber | E. R. Lanpher | 745,631 | Dec. 1 | 579 | 135 | 107 | 1221 |
| Titanous chlorid. Manufacture of | H. Spence | 723,217 | Mar. 17 | 2903 | 650 | 103 | 645 |
| Toaster | C. J. Parker | 719,253 | Jan. 27 | 3291 | 737 | 102 | 740 |
| Toaster | J. L. Clark | 729,547 | June 2 | 48 | 12 | 104 | 1137 |
| Toaster | J. E. Harkins and J. B. Willis | 735,369 | Aug. 4 | 627 | 129 | 105 | 1114 |
| Toaster | C. A. Roseland | 741,720 | Oct. 20 | 2575 | 573 | 106 | 1830 |
| Toaster. Bread- | L. F. Butler | 743,688 | Nov. 10 | 1760 | 371 | 107 | 391 |
| Tobacco and cigars are stored. Maintaining an even temperature and humidity in places where | E. C. Berriman | 747,121 | Dec. 15 | 3328 | 757 | 107 | 1868 |
| Tobacco. Apparatus for disentangling cut | O. W. Allison | 726,607 | Apr. 28 | 4082 | 931, 932 | 103 | 2068 |
| Tobacco-barn ventilating-doors. Device for operating | W. D. Case | 739,985 | Sept. 29 | 4722 | 1062 | 106 | 1075 |
| Tobacco box or caddy | A. J. Feild | 734,839 | July 28 | 3996 | 933 | 105 | 889 |
| Tobacco cartridge | E. G. Dexter | 720,007 | Feb. 10 | 1080 | 249 | 102 | 1068 |
| Tobacco-clamp | G. L. Pool | 725,586 | Apr. 14 | 2155 | 488 | 103 | 1642 |
| Tobacco-curing furnace | N. A. Carter | 740,230 | Sept. 29 | 5172 | 1162 | 106 | 1171 |
| Tobacco-cutting device. Plug- | M. Kayser | 745,355 | Dec. 1 | 72 | 17, 18 | 107 | 1117 |
| Tobacco-cutting machine | M. Himoff | 731,183 | June 16 | 3039 | 675, 676 | 104 | 1791 |
| Tobacco-flue screen | A. G. Floyd | 738,425 | Sept. 8 | 1772 | 386 | 106 | 396 |
| Tobacco for manufacture into cigars, &c. Machine for preparing leaf- | P. H. Ertheiler | 725,058 | Apr. 14 | 1184 | 268 | 103 | 1437 |
| Tobacco-hanger | J. B. Cuzner | 732,924 | July 7 | 403 | 98 | 105 | 87 |
| Tobacco. Harvesting and curing | J. B. Underwood | 748,440 | Dec. 29 | 5811 | 1324 | 107 | 2455 |
| Tobacco-hoist | J. Sullivan | 739,358 | Sept. 22 | 3511 | 785 | 106 | 798 |
| Tobacco. Improving | C. Reimann | 729,218 | May 26 | 4484 | ------ | 104 | 1000 |
| Tobacco-knife | G. H. Kelley | 718,847 | Jan. 20 | 2506 | 558 | 102 | 561 |
| Tobacco-lath | I. C. Putnam | 741,163 | Oct. 13 | 1433 | 328 | 106 | 1571 |
| Tobacco-leaf hanger | W. W. Smith | 721,615 | Feb. 24 | 4158 | 944 | 102 | 1750 |
| Tobacco-leaf-stripping machine | G. A. Marier | 740,675 | Oct. 6 | 540 | 120 | 106 | 1363 |
| Tobacco-leaves for manufacture into cigars, &c. Machine for preparing | P. H. Ertheiler | 725,059 | Apr. 14 | 1186 | 269 | 103 | 1438 |
| Tobacco-leaves. Machine for sizing or assorting | W. Hunt | 718,352 | Jan. 13 | 1546 | 342 | 102 | 346 |
| Tobacco-picker's frame | J. J. Kelly | 743,518 | Nov. 10 | 1450 | 303 | 107 | 327 |
| Tobacco-pipe | F. H. A. Moehlenbrock | 719,683 | Feb. 3 | 481 | 109 | 102 | 924 |
| Tobacco-pipe | E. B. Watson | 719,920 | Feb. 3 | 907 | 213 | 102 | 1016 |
| Tobacco-pipe | H. M. Willis | 722,343 | Mar. 10 | 1283 | 285 | 103 | 288 |
| Tobacco-pipe | A. W. Thornton | 722,543 | Mar. 10 | 1654 | 364 | 103 | 371 |
| Tobacco-pipe | A. Andrén | 724,651 | Apr. 7 | 430 | 104 | 103 | 1262 |
| Tobacco-pipe | W. G. Hastings | 726,162 | Apr. 21 | 3183 | 720 | 103 | 1873 |
| Tobacco-pipe | M. F. Hahn | 727,789 | May 12 | 1837 | 410 | 104 | 410 |
| Tobacco-pipe | H. M. Willis. (Reissue) | 12,132 | July 21 | 3318 | 778 | 105 | 732 |
| Tobacco-pipe | P. H. Barz | 737,550 | Aug. 25 | 4707 | 1056 | 105 | 2040 |
| Tobacco-pipe | D. B. McAllister | 739,101 | Sept. 15 | 3061 | 679 | 106 | 686 |
| Tobacco-pipe | S. Wenzel | 740,722 | Oct. 6 | 620 | 138 | 106 | 1380 |
| Tobacco-pipe attachment | T. C. Martin | 736,757 | Aug. 18 | 3221 | 712 | 105 | 1701 |
| Tobacco-pipe-mouthpiece attachment | W. A. England | 746,480 | Dec. 8 | 2124 | 488 | 107 | 1573 |
| Tobacco-pouch | E. Hafer | 717,674 | Jan. 6 | 273 | 68 | 102 | 58 |
| Tobacco-press | H. Nestestu | 720,463 | Feb. 10 | 1931 | 441 | 102 | 1247 |
| Tobacco-prizing machine. Plug- | R. M. Vaughan | 731,144 | June 16 | 2970 | 659 | 104 | 1780 |
| Tobacco-smoking pipe | F. Holland | 723,672 | Mar. 24 | 3745 | 840 | 103 | 828 |
| Tobacco-stemming machine | J. G. Havens | 720,802 | Feb. 17 | 2577 | 594 | 102 | 1395 |
| Tobacco-stick | W. U. Chapin | 746,922 | Dec. 15 | 2946 | 680 | 107 | 1779 |
| Tobacco. Treating | J. H. Fendrich | 729,312 | May 26 | 4652 | ------ | 104 | 1035 |
| Tobacco. Treating | A. Nauwelaers | 747,081 | Dec. 15 | 3263 | 743 | 107 | 1853 |
| Tobacco-truck | A. G. Cox | 721,864 | Mar. 3 | 387 | 85 | 103 | 85 |
| Tobacco-wrapper and making same | M. W. Marsden | 720,830 | Feb. 17 | 2617 | ------ | 102 | 1404 |
| Toe-clip | H. Stevens | 726,804 | Apr. 28 | 4453 | 1005 | 103 | 2145 |
| Toe-weight | W. E. Sell | 728,506 | May 19 | 3170 | 702 | 104 | 712 |
| Toilet and advertising device. Combined | A. A. Root | 742,496 | Oct. 27 | 4078 | 917 | 106 | 2154 |
| Toilet article | H. F. Harlan | 742,639 | Oct. 27 | 4340 | 976 | 106 | 2209 |
| Toilet-article handle | L. B. Prahar | 734,946 | July 28 | 4173 | 970 | 105 | 926 |
| Toilet-cabinet | W. A. J. Newell | 738,626 | Sept. 8 | 2161 | 474 | 106 | 480 |
| Toilet-case. Combination | J. Q. A. Cate | 744,485 | Nov. 17 | 3304 | 711 | 107 | 736 |
| Toilet-package cabinet | F. H. Dawes | 735,474 | Aug. 4 | 846 | 180 | 105 | 1160 |
| Toilet-room indicator | E. D. Allen and W. A. McElney | 720,871 | Feb. 17 | 2690 | 622 | 102 | 1419 |
| Toilet-tablets. Apparatus for making | W. Kropff | 718,713 | Jan. 20 | 2275 | 500 | 102 | 515 |
| Tombstone | D. Stewart | 734,770 | July 28 | 3851 | 898 | 105 | 859 |
| Tone-modifier | L. C. Smith | 729,230 | May 26 | 4508 | 994 | 104 | 1005 |
| Tongs | J. Morgan | 732,100 | June 30 | 4777 | 1066 | 104 | 2183 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|---|
| | | | | Spec. | Dr'g. | Vol. | Page. |
| Tongs | M. Quinn | 736,874 | Aug. 18 | 3451 | 765 | 105 | 1749 |
| Tongs | A. Brinkmann | 738,154 | Sept. 8 | 1197 | 264 | 106 | 274 |
| Tongs. Chain | C. F. Hultgren | 733,648 | July 14 | 1695 | 402 | 105 | 375 |
| Tongs. Fire- | L. McKinniss | 741,816 | Oct. 20 | 2745 | 611 | 106 | 1866 |
| Tongs. Fire- | J. L. Miller | 745,882 | Dec. 1 | 1057 | 238 | 107 | 1324 |
| Tongs. Grappling- | R. E. Lackner | 731,917 | June 23 | 4409 | 983 | 104 | 2094 |
| Tongs. Ingot- | E. S. Sites | 748,222 | Dec. 29 | 5429 | 1237 | 107 | 2370 |
| Tongs-operating mechanism | H. Aiken | 729,251 | May 26 | 4541 | 1000<br>1001 | 104 | 1011 |
| Tongs. Pipe- | J. P. and H. M. Thomann | 743,593 | Nov. 10 | 1597 | 335 | 107 | 357 |
| Tongs. Pipe- | A. H. Harmon | 747,170 | Dec. 15 | 3422 | 775 | 107 | 1887 |
| Tongs. Pipe and tubing | R. C. Jones | 747,612 | Dec. 22 | 4238 | 953 | 107 | 2086 |
| Tongs. Scorifier- | J. M. Hyde | 739,419 | Sept. 22 | 3662 | 814 | 106 | 831 |
| Tongs. Tubing- | W. H. Downing | 729,294 | May 26 | 4627 | 1023 | 104 | 1030 |
| Tongue attachment. Vehicle | D. A. Gillespie | 747,601 | Dec. 22 | 4211 | 948 | 107 | 2080 |
| Tongue-plate. Vehicle | G. C. Thompson | 729,810 | June 2 | 533 | 117 | 104 | 1237 |
| Tongue-protector | J. S. C. Nicholls | 725,354 | Apr. 14 | 1731 | 390 | 103 | 1551 |
| Tongue-support | G. Wenzelmann and E. H. Overholt | 748,548 | Dec. 29 | 6036 | 1366 | 107 | 2505 |
| Tongue-support. Spring | J. P. Barnes | 730,598 | June 9 | 1967 | 437 | 104 | 1551 |
| Tongue support. Vehicle- | B. C. Cowden | 728,870 | May 26 | 3870 | 861 | 104 | 874 |
| Tongue support. Vehicle- | B. H. Oldfield | 746,367 | Dec. 8 | 1934 | 441 | 107 | 1531 |
| Tongue support. Wagon- | H. B. Edgar | 734,836 | July 28 | 3987 | 931 | 105 | 887 |
| Tongue support. Wagon- | W. L. Park | 743,185 | Nov. 3 | 702 | 154 | 107 | 147 |
| Tongue supporter. Vehicle- | W. J. Calkins | 728,363 | May 19 | 2918 | 644 | 104 | 659 |
| Tongue. Vehicle- | H. H. Dreyer | 732,622 | June 30 | 5791 | 1284 | 104 | 2397 |
| Tool | W. H. Soley | 718,542 | Jan. 13 | 1935 | 423 | 102 | 431 |
| Tool | N. Crane | 724,818 | Apr. 7 | 752 | 175 | 103 | 1331 |
| Tool | J. Arrington | 742,771 | Oct. 27 | 4557 | 1032 | 106 | 2257 |
| Tool | J. Peelle | 744,228 | Nov. 17 | 2838 | 607 | 107 | 635 |
| Tool | C. A. Ergo | 744,681 | Nov. 17 | 3619 | 780<br>781 | 107 | 802 |
| Tool and tool-holder | S. S. Swan | 719,275 | Jan. 27 | 3327 | 744 | 102 | 749 |
| Tool-carriage mechanism | B. M. W. Hanson | 719,110 | Jan. 27 | 3046 | 677 | 102 | 689 |
| Tool-chest | F. J. Schwartz | 739,451 | Sept. 22 | 3715 | 827 | 106 | 843 |
| Tool. Combination- | F. A. Robbins | 717,716 | Jan. 6 | 347 | 85 | 102 | 75 |
| Tool. Combination- | T. D. Millea | 720,168 | Feb. 10 | 1389 | 318 | 102 | 1135 |
| Tool. Combination- | G. L. Baker | 725,651 | Apr. 21 | 2311 | 522 | 103 | 1688 |
| Tool. Combination- | L. Smith | 726,365 | Apr. 28 | 3602 | 817 | 103 | 1975 |
| Tool. Combination- | J. D. McKinnon | 726,973 | May 5 | 288 | 65 | 104 | 62 |
| Tool. Combination- | H. K. Harbaugh | 727,356 | May 5 | 996 | 217 | 104 | 215 |
| Tool. Combination- | W. E. Haight | 727,421 | May 5 | 1105 | 242 | 104 | 239 |
| Tool. Combination- | N. Newman | 730,790 | June 9 | 2285 | 507 | 104 | 1618 |
| Tool. Combination- | W. R. Clark | 731,859 | June 23 | 4296 | 957 | 104 | 2070 |
| Tool. Combination- | J. Koegel | 731,916 | June 23 | 4408 | 982 | 104 | 2093 |
| Tool. Combination- | S. Chambers | 732,827 | July 7 | 243 | 60 | 105 | 54 |
| Tool. Combination- | L. Bruni | 733,366 | July 14 | 1202 | 285 | 105 | 269 |
| Tool. Combination- | C. E. Waters | 736,042 | Aug. 11 | 1921 | 410 | 105 | 1410 |
| Tool. Combination- | J. Parbel | 736,435 | Aug. 18 | 2603 | 572 | 105 | 1573 |
| Tool. Combination- | A. A. Waymire | 738,130 | Sept. 1 | 1138 | 254 | 106 | 246 |
| Tool. Combination- | R. A. Baggett | 738,753 | Sept. 15 | 2429 | 533 | 106 | 551 |
| Tool. Combination- | C. R. Jeffords | 742,665 | Oct. 27 | 4390 | 990 | 106 | 2220 |
| Tool. Combination- | W. G. Harris | 743,076 | Nov. 3 | 497 | 108 | 107 | 104 |
| Tool. Combination- | D. N. Tarbox | 743,590 | Nov. 10 | 1591 | 333 | 107 | 356 |
| Tool. Combination- | G. W. Daniels | 743,622 | Nov. 10 | 1662 | 349 | 107 | 371 |
| Tool. Combination- | G. G. Gearhart | 745,008 | Nov. 24 | 4237 | 918 | 107 | 949 |
| Tool. Compound | L. Vick | 723,764 | Mar. 24 | 3903 | 878 | 103 | 863 |
| Tool. Compound | C. H. Dreher | 724,268 | Mar. 31 | 4938 | 1105 | 103 | 1089 |
| Tool. Compound | J. F. Watermolen | 742,764 | Oct. 27 | 4546 | 1030 | 106 | 2255 |
| Tool. Electromagnetic reciprocating | C. Marshall | 720,596 | Feb. 17 | 2206 | 512 | 102 | 1318 |
| Tool. Fluid-pressure-operated | C. H. Johnson | 726,305 | Apr. 28 | 3486 | 789 | 103 | 1950 |
| Tool. Fluid-pressure-operated | H. H. Vaughan and C. H. Johnson | 742,934 | Nov. 3 | 199 | 46 | 107 | 44 |
| Tool. Fluid-pressure-operated | C. H. Johnson | 743,389 | Nov. 3 | 1132 | 240 | 107 | 249 |
| Tool. Hand- | A. Vanderbeek | 735,845 | Aug. 11 | 1552 | 332 | 105 | 1331 |
| Tool. Hand-operated | R. P. Charles and C. C. Detherage | 717,543 | Jan. 6 | 35 | 10 | 102 | 10 |
| Tool-handle | F. E. Davis | 719,440 | Feb. 3 | 56 | 12 | 102 | 837 |
| Tool-handle | C. V. B. Reeder | 722,899 | Mar. 17 | 2340 | 523 | 103 | 528 |
| Tool-handle | A. Hilmo | 724,475 | Apr. 7 | 103 | 25 | 103 | 1191 |
| Tool-handle | E. E. Hendrick | 726,288 | Apr. 28 | 3443 | 782 | 103 | 1942 |
| Tool-handle | J. A. Harold | 742,640 | Oct. 27 | 4341 | 976 | 106 | 2209 |
| Tool-handle fastener | J. F. McCullum | 742,213 | Oct. 27 | 3561 | 794 | 106 | 2046 |
| Tool-handle fastening | R. E. Appleton | 739,136 | Sept. 15 | 3122 | 690 | 106 | 699 |
| Tool-handle wedge | O. Weston | 727,042 | May 5 | 436 | 92 | 104 | 95 |
| Tool-heads to handles. Means for adjustably securing | J. F. Kemp | 730,542 | June 9 | 1860 | 415 | 104 | 1527 |
| Tool-heater | H. Walther | 736,321 | Aug. 11 | 2401 | 524 | 105 | 1515 |
| Tool-heating handle | M. Kalaba and F. Gailer | 747,725 | Dec. 22 | 4445 | 1003 | 107 | 2133 |
| Tool-holder | D. E. Norris | 723,718 | Mar. 24 | 3830 | 861 | 103 | 846 |
| Tool-holder | H. Driehaus | 723,848 | Mar. 31 | 4069 | 918 | 103 | 912 |
| Tool-holder | J. Armstrong | 725,019 | Apr. 14 | 1117 | 253 | 103 | 1425 |
| Tool-holder | C. F. Bellows | 733,126 | July 7 | 763 | 184 | 105 | 161 |
| Tool-holder | J. M. Normand | 735,138 | Aug. 4 | 182 | 38 | 105 | 1021 |
| Tool-holder | E. A. Warburton | 739,750 | Sept. 22 | 4248 | 951 | 106 | 960 |
| Tool-holder | J. Dangerfield | 744,725 | Nov. 24 | 3744 | 808 | 107 | 847 |
| Tool-holder and cutter | J. M. Normand | 717,601 | Jan. 6 | 145 | 37 | 102 | 33 |
| Tool holder. Electric- | M. Loewenthal | 724,721 | Apr. 7 | 571 | 136<br>137 | 103 | 1291 |
| Tool-holder for planers, &c. Adjustable | G. H. Kleinert | 721,201 | Feb. 24 | 3361 | 768 | 102 | 1582 |
| Tool-holder. Instrument-maker's | G. H. Dworzek | 740,107 | Sept. 29 | 4943 | 1110 | 106 | 1124 |
| Tool-holding device | W. B. Fowler | 729,319 | May 26 | 4664 | 1031 | 104 | 1038 |
| Tool. Impact- | J. F. Clement | 724,811 | Apr. 7 | 734 | 172 | 103 | 1327 |
| Tool. Impact- | C. B. Richards | 735,589 | Aug. 4 | 1064 | 226 | 105 | 1207 |
| Tool. Impact- | S. Oldham | 739,440 | Sept. 22 | 3698 | 823 | 106 | 839 |
| Tool. Impact- | T. H. Phillips | 743,920 | Nov. 10 | 2178 | 470<br>471 | 107 | 480 |
| Tool. Machine- | W. Sellers | 724,514 | Apr. 7 | 171 | 41, 42 | 103 | 1206 |
| Tool. Machine- | D. Roberts | 742,356 | Oct. 27 | 3826 | 857 | 106 | 2103 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|---|
| | | | | Spec. | Drg. | Vol. | Page. |
| Tool. Magazine | J. M. Barstad | 728,188 | May 19 | 2566 | 571, 572 | 104 | 585 |
| Tool motor. Portable | C. H. Peck | 725,127 | Apr. 14 | 1320 | 297, 298 | 103 | 1464 |
| Tool or implement | C. W. Shedd | 718,534 | Jan. 13 | 1924 | 422 | 102 | 429 |
| Tool. Pneumatic | H. A. R. Prindle and J. U. Adolph | 724,736 | Apr. 7 | 598 | 141 | 103 | 1296 |
| Tool. Pneumatic | C. H. Haeseler | 725,337 | Apr. 14 | 1997 | 383 | 103 | 1544 |
| Tool. Pneumatic | H. G. Kotten | 726,074 | Apr. 21 | 3026 | 688 | 103 | 1841 |
| Tool. Pneumatic | C. H. Haeseler | 726,221 | Apr. 21 | 3297 | 748, 749 | 103 | 1897 |
| Tool. Pneumatic | C. W. Peck | 727,431 | May 5 | 1129 | 249 | 104 | 244 |
| Tool. Pneumatic | D. G. Foley | 730,207 | June 2 | 1218 | 272 | 104 | 1375 |
| Tool. Pneumatic | F. M. Metcalf and M. C. Abbey | 734,276 | July 21 | 2924 | 683 | 105 | 654 |
| Tool. Pneumatic | W. H. Soley | 734,765 | July 28 | 3839 | 895, 896 | 105 | 856 |
| Tool. Pneumatic | C. H. Shaw | 736,555 | Aug. 18 | 2825 | 618, 619 | 105 | 1621 |
| Tool. Pneumatic | H. G. Kotten | 739,608 | Sept. 22 | 3988 | 890 | 106 | 901 |
| Tool. Pneumatic | H. G. Kotten | 739,609 | Sept. 22 | 3990 | 890 | 106 | 901 |
| Tool. Pneumatic | N. W. Fletcher | 741,320 | Oct. 13 | 1760 | 392 | 106 | 1638 |
| Tool. Pneumatic | C. B. Richards | 745,239 | Nov. 24 | 4724 | 1032 | 107 | 1049 |
| Tool. Pneumatic | W. H. Soley | 747,336 | Dec. 15 | 3747 | 844 | 107 | 1958 |
| Tool. Pneumatically-operated percussive | W. Payton | 745,900 | Dec. 1 | 1085 | 243 | 107 | 1330 |
| Tool-post. Adjustable | B. M. W. Hanson | 733,391 | July 14 | 1251 | 296 | 105 | 281 |
| Tool-relieving machine | F. G. Echols | 730,445 | June 9 | 1678 | 376, 377 | 104 | 1486 |
| Tool-shanks. Means for holding cylindrical | J. A. Coburn | 732,048 | June 30 | 4672 | 1043 | 104 | 2162 |
| Tool-stock | J. G. Jernberg | 728,929 | May 26 | 3966 | 882 | 104 | 893 |
| Tools. Holder-on for pneumatic | H. S. Covey | 720,786 | Feb. 17 | 2549 | 587 | 102 | 1390 |
| Tools. Machine for relieving fluted | B. M. W. Hanson | 721,516 | Feb. 24 | 3941 | 897, 898 | 102 | 1702 |
| Tools. Machine for relieving fluted | F. G. Echols | 731,873 | June 23 | 4321 | 965, 966 | 104 | 2075 |
| Tools to handles. Means for securing | A. P. Smythe and T. P. Bryant | 729,690 | June 2 | 293 | 67 | 104 | 1189 |
| Tools to sockets. Means for connecting | A. F. Pitkin | 722,324 | Mar. 10 | 1242 | 276 | 103 | 280 |
| Tools. Variable-speed drive for machine or other | W. Donaldson | 736,238 | Aug. 11 | 2253 | 487 | 105 | 1481 |
| Tooth. Artificial | W. F. Wheeler | 719,964 | Feb. 3 | 986 | 229 | 102 | 1032 |
| Tooth. Artificial | T. H. Whiteside | 723,102 | Mar. 17 | 2677 | 603 | 103 | 599 |
| Tooth. Artificial | G. A. Louque | 726,956 | May 5 | 237 | 55 | 104 | 51 |
| Tooth. Artificial | D. N. Booth | 742,572 | Oct. 27 | 4218 | 950 | 106 | 2182 |
| Tooth-bar guide and arrester | T. S. Wilkin | 739,046 | Sept. 15 | 2950 | 653 | 106 | 664 |
| Tooth-caps. Core for casting molds for | W. M. Sharp | 726,771 | Apr. 28 | 4391 | 987 | 103 | 2132 |
| Tooth-caps. Device for drawing metal | W. M. Sharp | 726,772 | Apr. 28 | 4392 | 988 | 103 | 2132 |
| Tooth-cleaning appliance | J. E. Storms, Jr | 736,650 | Aug. 18 | 3013 | 665 | 105 | 1658 |
| Tooth-crown. Artificial | H. Friedland | 718,614 | Jan. 20 | 2090 | 455 | 102 | 479 |
| Tooth-crown. Seamless gold | J. R. Comins | 726,644 | Apr. 28 | 4147 | 935 | 103 | 2081 |
| Tooth-fastening device. Artificial | C. A. Davis | 740,096 | Sept. 29 | 4925 | 1104 | 106 | 1120 |
| Tooth pivot-pin | E. A. Clark | 732,922 | July 7 | 400 | 97 | 105 | 86 |
| Tooth-powder box | W. H. Hall | 722,699 | Mar. 17 | 1973 | 440 | 103 | 454 |
| Tooth-regulating apparatus | J. N. MacDowell | 741,687 | Oct. 20 | 2496 | 557 | 106 | 1814 |
| Tooth-regulator | E. H. Angle | 721,655 | Mar. 3 | 5 | 2 | 103 | 3 |
| Toothpick | A. Lenhardtson | 719,017 | Jan. 27 | 2838 | 637 | 102 | 647 |
| Toothpick | J. E. Hills | 725,081 | Apr. 14 | 1237 | 279 | 103 | 1448 |
| Toothpick | J. A. Ohlsson | 740,586 | Oct. 6 | 399 | 84 | 106 | 1331 |
| Toothpick-machine | H. P. Churchill and I. J. Keene | 746,462 | Dec. 8 | 2090 | 481 | 107 | 1565 |
| Toothpicks, matches, or like articles. Stand for | R. Dickson | 729,740 | June 2 | 398 | 90 | 104 | 1210 |
| Top | G. Wilken | 744,146 | Nov. 17 | 2668 | 569 | 107 | 597 |
| Top | J. R. Barry | 748,154 | Dec. 29 | 5307 | 1205 | 107 | 2344 |
| Top. Bounding | W. Griffin | 742,858 | Nov. 3 | 69 | 17 | 107 | 17 |
| Top. Musical | P. V. Mighels and C. Z. Ellis | 748,087 | Dec. 29 | 5180 | 1172 | 107 | 2317 |
| Top-spinner. Self-winding | R. J. Wilson | 744,148 | Nov. 17 | 2674 | 570 | 107 | 598 |
| Top. Spinning | A. H. Munsell | 717,596 | Jan. 6 | 136 | 34 | 102 | 31 |
| Top. Spinning | F. L. Cook | 724,664 | Apr. 7 | 456 | 111 | 103 | 1267 |
| Top. Spinning | I. E. Stump and E. E. Crook | 732,233 | June 30 | 5052 | 1123 | 104 | 2241 |
| Top. Spinning | C. Marx | 737,431 | Aug. 25 | 4491 | 1007 | 105 | 1990 |
| Top-roll saddle and stirrup | E. Dixon | 733,703 | July 14 | 1780 | 422 | 105 | 392 |
| Top-roller spring-holder | A. A. Sack | 744,114 | Nov. 17 | 2607 | 557 | 107 | 585 |
| Torch | C. H. Brown | 718,598 | Jan. 20 | 2065 | 449 | 102 | 474 |
| Torch | W. J. Hackett | 731,891 | June 23 | 4356 | 972 | 104 | 2083 |
| Torch | R. Thayer | 741,737 | Oct. 20 | 2597 | 578 | 106 | 1834 |
| Torch. Engineer's | A. K. Young | 729,250 | May 26 | 4540 | 1000 | 104 | 1011 |
| Torch for destroying insects | S. M. Hess | 727,628 | May 12 | 1501 | 339 | 104 | 341 |
| Torch. Gasolene | F. Reinlein | 739,221 | Sept. 15 | 3272 | 725 | 106 | 731 |
| Torch. Hydrocarbon | C. Filzer | 717,831 | Jan. 6 | 608 | 135 | 102 | 130 |
| Torch. Marine | W. H. Rose and J. A. Watson | 740,317 | Sept. 29 | 5323 | 1199 | 106 | 1201 |
| Torch. Signal | F. and W. Dutcher | 725,231 | Apr. 14 | 1519 | 345 | 103 | 1506 |
| Torpedo | M. Fischhaber | 726,796 | Apr. 28 | 4433 | 998, 999 | 103 | 2140 |
| Torpedo | A. F. Humphrey | 747,323 | Dec. 15 | 3721 | 839 | 107 | 1952 |
| Torpedo. Dirigible | D. W. McCaughey | 743,315 | Nov. 3 | 959 | 209 | 107 | 206 |
| Torpedo for submarine mines | F. Bauduin | 720,101 | Feb. 10 | 1282 | 293 | 102 | 1112 |
| Torpedo-placing machine. Danger-signal | H. Simcoe | 733,086 | July 7 | 693 | 169 | 105 | 147 |
| Torpedo. Railway | M. M. Carr | 720,666 | Feb. 17 | 2352 | 539 | 102 | 1347 |
| Torpedo. Railway | E. S. Lafferty | 738,112 | Sept. 1 | 1102 | 244 | 106 | 238 |
| Torpedo-receptacle | J. B. Barnett | 747,313 | Dec. 15 | 3703 | 834 | 107 | 1949 |
| Torpedoes. Apparatus for handling automobile | B. A. Fiske | 717,563 | Jan. 6 | 76 | 20 | 102 | 18 |
| Torpedoes. Gyroscopic apparatus for steering | F. M. Leavitt | 741,683 | Oct. 20 | 2480 | 555, 556 | 106 | 1810 |
| Towage. Electrical traction | S. W. Wood | 724,367 | Mar. 31 | 5128 | 1147, 1148 | 103 | 1129 |
| Towage. Electrical traction-way for canal | S. W. Wood | 724,370 | Mar. 31 | 5134 | 1149 | 103 | 1130 |
| Towage on canals. Electrical | S. W. Wood | 724,368 | Mar. 31 | 5130 | 1148 | 103 | 1129 |
| Towage traction-way. Electrical | S. W. Wood | 724,369 | Mar. 31 | 5132 | 1149 | 103 | 1120 |
| Towel-holder | J. Blum | 742,153 | Oct. 27 | 3446 | 768 | 106 | 2024 |
| Towel-rack | H. E. Conant | 731,343 | June 16 | 3325 | 741 | 104 | 1850 |
| Tower | G. G. Guy | 722,839 | Mar. 17 | 2233 | 500 | 103 | 505 |

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| Tower | G. P. Youmans | 748,136 | Dec. 29 | 5279 | 1199 | 107 | 2338 |
| Tower. Pleasure | M. J. Doner | 730,521 | June 9 | 1828 | 407<br>408 | 104 | 1520 |
| Tower. Tilting | T. O. Perry | 717,916 | Jan. 6 | 750 | 169 | 102 | 161 |
| Toy | J. H. Nelson | 718,721 | Jan. 20 | 2293 | 505 | 102 | 518 |
| Toy | F. Dean | 719,200 | Jan. 27 | 3192 | 712 | 102 | 719 |
| Toy | J. W. Macdonald | 719,681 | Feb. 3 | 477 | 108 | 102 | 923 |
| Toy | J. D. Atherton | 720,876 | Feb. 17 | 2698 | 624 | 102 | 1421 |
| Toy | T. G. Davis | 721,674 | Mar. 3 | 44 | 10 | 103 | 11 |
| Toy | H. S. MacKaye | 722,731 | Mar. 17 | 2023 | 452 | 103 | 464 |
| Toy | H. K. Reed | 723,023 | Mar. 17 | 2539 | 570 | 103 | 569 |
| Toy | H. Metzger | 723,292 | Mar. 24 | 3048 | 685 | 103 | 688 |
| Toy | A. Strenitz | 723,421 | Mar. 24 | 3297 | 738 | 103 | 736 |
| Toy | A. L. Stone | 723,557 | Mar. 24 | 3549 | 794 | 103 | 787 |
| Toy | H. Wittmann | 724,226 | Mar. 31 | 4837 | 1085 | 103 | 1071 |
| Toy | H. G. Sammons | 724,617 | Apr. 7 | 373 | 90 | 103 | 1249 |
| Toy | E. Sollmann | 725,012 | Apr. 7 | 1103 | 250 | 103 | 1404 |
| Toy | A. A. Fennessy | 726,151 | Apr. 21 | 3165 | 716 | 103 | 1869 |
| Toy | F. Carter | 728,864 | May 26 | 3862 | 859 | 104 | 872 |
| Toy | B. B. Whaley | 729,466 | May 26 | 4905 | 1086 | 104 | 1089 |
| Toy | D. J. Wilson | 729,473 | May 26 | 4914 | 1088 | 104 | 1091 |
| Toy | E. V. Clark | 729,546 | June 2 | 47 | 12 | 104 | 1136 |
| Toy | F. Strauss | 730,584 | June 9 | 1938 | 431 | 104 | 1544 |
| Toy | O. C. Hills | 731,051 | June 16 | 2785 | 620 | 104 | 1742 |
| Toy | O. F. Hale | 731,299 | June 16 | 3259 | 724 | 104 | 1838 |
| Toy | L. M. Craun and C. M. Harris | 732,051 | June 30 | 4678 | 1044 | 104 | 2163 |
| Toy | J. A. Doyle | 732,056 | June 30 | 4685 | 1046 | 104 | 2165 |
| Toy | I. D. Worcester | 733,108 | July 7 | 731 | 178 | 105 | 155 |
| Toy | E. Bull | 733,353 | July 7 | 1172 | 277 | 105 | 246 |
| Toy | S. E. Miller | 737,757 | Sept. 1 | 373 | 80 | 106 | 83 |
| Toy | L. A. Allard | 737,992 | Sept. 1 | 879 | 192 | 106 | 191 |
| Toy | A. J. Keck | 738,916 | Sept. 15 | 2735 | 604 | 106 | 619 |
| Toy | F. Garrecht | 739,168 | Sept. 15 | 3172 | 701<br>702 | 106 | 709 |
| Toy | J. V. Keane | 739,184 | Sept. 15 | 3199 | 707 | 106 | 715 |
| Toy | D. Gibbs | 740,419 | Oct. 6 | 53 | 12 | 106 | 1256 |
| Toy | F. R. Davis | 740,817 | Oct. 6 | 817 | 184 | 106 | 1419 |
| Toy | W. M. Moseley | 741,360 | Oct. 13 | 1860 | 411 | 106 | 1664 |
| Toy | E. A. Sanguinet | 741,932 | Oct. 20 | 2963 | 660 | 106 | 1912 |
| Toy | E. S. Hale | 741,963 | Oct. 20 | 3047 | 679 | 106 | 1928 |
| Toy | H. Johnson | 742,032 | Oct. 20 | 3181 | 710 | 106 | 1955 |
| Toy | G. A. Johnson | 742,194 | Oct. 27 | 3521 | 785 | 106 | 2038 |
| Toy | L. C. Spencer | 742,250 | Oct. 27 | 3642 | 814 | 106 | 2065 |
| Toy | E. S. Savage | 743,570 | Nov. 10 | 1554 | 324 | 107 | 348 |
| Toy | E. R. George | 743,635 | Nov. 10 | 1647 | 352 | 107 | 374 |
| Toy | G. E. McVey | 748,410 | Dec. 29 | 5756 | 1313 | 107 | 2443 |
| Toy. Apple-shooting | J. F. Blaisdell | 734,661 | July 28 | 3630 | 850 | 105 | 816 |
| Toy. Automatic | R. H. and R. D. Adams | 719,711 | Feb. 3 | 546 | 124 | 102 | 938 |
| Toy. Bag-punching | F. L. Shaffer | 742,504 | Oct. 27 | 4092 | 921 | 106 | 2157 |
| Toy balloon | A. J. Whisler | 726,009 | Apr. 21 | 2933 | 667 | 103 | 1821 |
| Toy bank | C. H. Schambers | 729,899 | June 2 | 691 | 153 | 104 | 1269 |
| Toy bank | M. J. Wade | 744,886 | Nov. 24 | 4020 | 867 | 107 | 905 |
| Toy bank | G. H. Spafford | 746,598 | Dec. 8 | 2332 | 534 | 107 | 1620 |
| Toy bank | M. J. Wade | 746,612 | Dec. 8 | 2351 | 540 | 107 | 1625 |
| Toy boat | A. M. Royse | 731,227 | June 16 | 3111 | 690 | 104 | 1806 |
| Toy box of bricks | M. E. Brandt | 725,032 | Apr. 14 | 1144 | 258 | 103 | 1429 |
| Toy building-blocks | F. Thomsen | 732,384 | June 30 | 5343 | 1184 | 104 | 2300 |
| Toy cannon | W. Frowe | 725,332 | Apr. 14 | 1692 | 381 | 103 | 1543 |
| Toy cannon | E. N. Tuttle | 729,453 | May 26 | 4881 | 1081 | 104 | 1082 |
| Toy cap-pistol | W. J. Turnbull | 725,802 | Apr. 21 | 2589 | 588 | 103 | 1749 |
| Toy car | E. Sollmann and J. A. Issmayer | 737,514 | Aug. 25 | 4647 | 1042 | 105 | 2027 |
| Toy. Chance | C. J. Dorsey | 731,760 | June 23 | 4127 | 920 | 104 | 2031 |
| Toy cradle and savings-bank. Combined | C. Clegg | 747,941 | Dec. 29 | 4888 | 1107 | 107 | 2253 |
| Toy. Detonating | R. S. Wiesenfeld | 720,768 | Feb. 17 | 2524 | 582 | 102 | 1385 |
| Toy. Detonating | C. E. Wenzel | 729,985 | June 2 | 859 | 192 | 104 | 1302 |
| Toy. Detonating | C. E. Wenzel | 738,584 | Sept. 8 | 2073 | 453 | 106 | 461 |
| Toy. Detonating | C. E. Wenzel | 738,585 | Sept. 8 | 2076 | 453 | 106 | 462 |
| Toy. Detonating | C. E. Wenzel | 739,525 | Sept. 22 | 3832 | 858 | 106 | 868 |
| Toy. Detonating | C. E. Wenzel | 742,767 | Oct. 27 | 4550 | 1030 | 106 | 2256 |
| Toy figure | C. E. Shaffer | 718,662 | Jan. 20 | 2175 | 476 | 102 | 495 |
| Toy. Figure | C. J. Dorsey | 729,555 | June 2 | 63 | 16 | 104 | 1140 |
| Toy figure or doll | C. A. French | 729,750 | June 2 | 413 | 93 | 104 | 1213 |
| Toy folding bed | A. C. Healy | 738,189 | Sept. 8 | 1291 | 279 | 106 | 295 |
| Toy for expanding the lungs | O. Henrichsen | 741,492 | Oct. 13 | 2115 | 471 | 106 | 1717 |
| Toy gas-balloon | A. J. King | 721,051 | Feb. 17 | 3043 | 698 | 102 | 1495 |
| Toy gramophone hand-motor | E. R. Johnson | 725,343 | Apr. 14 | 1713 | 386 | 103 | 1547 |
| Toy gun | J. B. Popenhagen | 720,478 | Feb. 10 | 1953 | 446 | 102 | 1251 |
| Toy gun | M. Anthony | 723,227 | Mar. 24 | 2932 | 656 | 103 | 665 |
| Toy gun | E. Hazlehurst | 723,603 | Mar. 24 | 3632 | 813 | 103 | 804 |
| Toy gun | A. Delgrande | 733,946 | July 21 | 2263 | 532 | 105 | 511 |
| Toy gunboat. Detonating | C. E. Wenzel | 730,182 | June 2 | 1177 | 264 | 104 | 1367 |
| Toy hoop | W. E. Veideman | 726,789 | Apr. 28 | 4420 | 996 | 103 | 2137 |
| Toy house. Knockdown | G. E. Grimm | 739,669 | Sept. 22 | 4109 | 916<br>917 | 106 | 928 |
| Toy lantern | C. H. Wolfert | 732,806 | July 7 | 207 | 52 | 105 | 47 |
| Toy locomotive | H. C. Ives | 729,765 | June 2 | 447 | 101 | 104 | 1219 |
| Toy. Locomotive | D. B. Clark | 738,412 | Sept. 8 | 1751 | 381 | 106 | 392 |
| Toy. Mechanical | J. Flaherty | 725,432 | Apr. 14 | 1874 | 419 | 103 | 1582 |
| Toy. Mechanical | C. J. Rehlin | 732,374 | June 30 | 5321 | 1178 | 104 | 2296 |
| Toy. Mechanical | G. W. Macko | 733,409 | July 14 | 1281 | 303 | 105 | 287 |
| Toy. Mechanical | R. Cairns | 737,337 | Aug. 25 | 4304 | 956 | 105 | 1949 |
| Toy money-bank | R. E. Lintner | 720,825 | Feb. 17 | 2607 | 602 | 102 | 1401 |
| Toy motor. Electric | W. Broad | 746,278 | Dec. 8 | 1775 | 403 | 107 | 1498 |
| Toy. Optical | P. D. Smith | 741,730 | Oct. 20 | 2588 | 576 | 106 | 1832 |
| Toy or game apparatus. Educational | E. Gates | 741,903 | Oct. 20 | 2913 | 650 | 106 | 1900 |
| Toy or trick device | T. H. Murray | 719,126 | Jan. 27 | 3076 | 684 | 102 | 695 |

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| Toy. Parachute | S. S. Lawrence | 728,251 | May 19 | 2688 | 601 | 104 | 611 |
| Toy pistol | C. A. Bailey | 725,534 | Apr. 14 | 2074 | 469 | 103 | 1624 |
| Toy. Pneumatic | G. Schneider | 744,630 | Nov. 17 | 3531 | 762 | 107 | 782 |
| Toy-railway rolling-stock | A. Schütze | 741,982 | Oct. 20 | 3079 | 688 | 106 | 1934 |
| Toy. Roundabout | C. J. Dorsey | 734,681 | July 28 | 3666 | 858 | 105 | 822 |
| Toy savings-bank | F. A. Lane | 734,268 | July 21 | 2905 | 680 | 105 | 650 |
| Toy. Scientific | W. H. Zimmerman | 722,070 | Mar. 3 | 761 | 170 | 103 | 164 |
| Toy shooting apparatus | H. Künzel | 739,010 | Sept. 15 | 2882 | 640 | 106 | 651 |
| Toy shooting-gallery | C. C. Reinhardt | 719,141 | Jan. 27 | 3095 | 688 | 102 | 699 |
| Toy. Sounding | J. S. Patten | 723,909 | Mar. 31 | 4198 | 945 | 103 | 942 |
| Toy. Sounding | H. F. Weber | 733,779 | July 14 | 1930 | 453 | 105 | 423 |
| Toy. Spinning and dancing | J. S. Thornburg | 719,276 | Jan. 27 | 3329 | 744 | 102 | 749 |
| Toy spring-gun. Top-spinning | S. E. Purdum | 739,506 | Sept. 22 | 3804 | 852 | 106 | 864 |
| Toy. Trick | J. R. Armstrong | 726,615 | Apr. 28 | 4100 | 925 | 103 | 2071 |
| Toy vehicle | H. N. Parker | 725,126 | Apr. 14 | 1318 | 297 | 103 | 1464 |
| Toy vehicle | H. N. Parker | 728,286 | May 19 | 2772 | 615 | 104 | 630 |
| Toy wagon | W. Christensen | 718,192 | Jan. 13 | 1251 | 274 | 102 | 285 |
| Toy wagon | E. F. Kapus | 734,296 | Mar. 31 | 4992 | 1117 | 103 | 1100 |
| Toy wheel | J. C. Wells | 729,246 | May 26 | 4535 | 999 | 104 | 1010 |
| Toy. Wheeled | E. Belenger | 721,855 | Mar. 3 | 364 | 80 | 103 | 79 |
| Toy. Wheeled | L. I. Dickinson | 746,045 | Dec. 8 | 1352 | 302 | 107 | 1406 |
| Toy. Whistling | C. D. Robb | 736,782 | Aug. 18 | 3274 | 723 | 105 | 1712 |
| Toy wind-wheel | B. Sutton | 726,371 | Apr. 28 | 3613 | 819 | 103 | 1977 |
| Trace | F. D. Thoman | 740,948 | Oct. 6 | 1032 | 235 | 106 | 1466 |
| Trace-carrier | F. L. Beymer | 722,277 | Mar. 10 | 1164 | 257 | 103 | 263 |
| Trace-carrier | W. O. Barnett | 735,652 | Aug. 4 | 1181 | 250 | 105 | 1232 |
| Trace-carrier | A. B. Meinhardt | 739,694 | Sept. 22 | 4150 | 927 | 106 | 937 |
| Trace-carrier | A. A. Breast | 744,161 | Nov. 17 | 2696 | 575 | 107 | 603 |
| Trace-carrier | H. C. Hurd | 746,839 | Dec. 15 | 2793 | 644 | 107 | 1744 |
| Trace-detacher | J. B. Blakeman | 724,787 | Apr. 7 | 693 | 163 | 103 | 1317 |
| Trace-end-supporting device | J. P. Phillips | 745,738 | Dec. 1 | 758 | 173 | 107 | 1260 |
| Trace-fastener | H. L. Hall | 726,159 | Apr. 21 | 3177 | 719 | 103 | 1872 |
| Trace-fastener | J. E. Henderson | 728,229 | May 19 | 2656 | 593 | 104 | 604 |
| Trace-fastener | J. Morrison | 728,744 | May 19 | 3629 | 806 | 104 | 809 |
| Trace-fastener | A. Wagner | 739,039 | Sept. 15 | 2931 | 650 | 106 | 660 |
| Trace-fastener | J. M. McCormick | 739,203 | Sept. 15 | 3232 | 716 | 106 | 722 |
| Trace. Harness | J. Ziegler | 727,730 | May 12 | 1721 | 386 | 104 | 388 |
| Trace. Harness | D. K. Bellis | 738,596 | Sept. 8 | 2103 | 459 | 106 | 468 |
| Trace-hitch | J. S. and N. R. Briel | 737,068 | Aug. 25 | 3804 | 843 | 105 | 1843 |
| Trace-holder | W. F. Simon | 719,521 | Feb. 3 | 193 | 45 | 102 | 864 |
| Trace-holder | R. E. Barnes | 727,061 | May 5 | 468 | 98 | 104 | 102 |
| Trace-holder | J. N. Metzger | 728,489 | May 19 | 3145 | 695 | 104 | 707 |
| Trace-holder | J. M. Bryant | 738,882 | Sept. 15 | 2680 | 590 | 106 | 608 |
| Trace-loop. Lap-ring | T. Beecher | 747,034 | Dec. 15 | 3162 | 724 | 107 | 1827 |
| Trace-support | H. Brooks | 727,280 | May 5 | 854 | 183 | 104 | 183 |
| Tracing-machine | G. H. Davis | 745,424 | Dec. 1 | 211 | 47 | 107 | 1145 |
| Track and car | S. E. Jackman | 745,855 | Dec. 1 | 1001 | 225, 226 | 107 | 1312 |
| Track attachment | W. H. Crossley | 721,504 | Feb. 24 | 3921 | 892 | 102 | 1697 |
| Track-brake | H. D. Deshler | 720,005 | Feb. 10 | 1076 | 248, 249 | 102 | 1068 |
| Track-cable roller-bearing support | C. A. Case | 739,984 | Sept. 29 | 4721 | 1062 | 106 | 1075 |
| Track. Curved momentum gravity | C. M. Smith | 727,221 | May 5 | 754 | 161 | 104 | 163 |
| Track device for inclined ways | A. H. McClure | 745,069 | Nov. 24 | 4386 | 947 | 107 | 980 |
| Track-fastening | L. Sweeney | 741,943 | Oct. 20 | 2992 | 665 | 106 | 1918 |
| Track-gage | A. M. Carlsen | 731,097 | June 16 | 2876 | 638 | 104 | 1761 |
| Track gage and bridle. Combined | G. F. H. Hicks | 736,097 | Aug. 11 | 2018 | 430 | 105 | 1432 |
| Track-gage. Automatic | T. Ellis and G. H. Purvis | 747,872 | Dec. 22 | 4739 | 1071 | 107 | 2199 |
| Track-gage. Automatic inspection | H. B. Merriam | 732,739 | Mar. 17 | 2044 | 456 | 103 | 468 |
| Track instrument. Electrical | T. T. Fogel | 741,123 | Oct. 13 | 1363 | 312, 313 | 106 | 1557 |
| Track-laying and spike-driving machine | F. B. Hewitt | 719,217 | Jan. 27 | 3218 | 720 | 102 | 724 |
| Track-laying apparatus | R. E. Hurley | 732,080 | June 30 | 4731 | 1056, 1057 | 104 | 2173 |
| Track-laying indicator | L. Dunn | 740,408 | Oct. 6 | 37 | 9 | 106 | 1252 |
| Track-laying machine | M. B. Holman and W. L. Cowles | 734,577 | Apr. 7 | 297 | 72,73 | 103 | 1232 |
| Track-laying machine | E. J. Brennan | 735,457 | Aug. 4 | 818 | 174 | 105 | 1154 |
| Track or rail | F. and H. F. Keil | 735,882 | Aug. 11 | 1625 | 347 | 105 | 1347 |
| Track-raising implement | J. J. Buckley | 735,703 | Aug. 11 | 1288 | 275 | 105 | 1272 |
| Track. Revolving circular | W. P. Dameron | 736,225 | Aug. 11 | 2229 | 480, 481 | 105 | 1475 |
| Track-sander | C. E. M. Knight | 745,065 | Nov. 24 | 4383 | 945 | 107 | 979 |
| Track-sander. Pneumatic | J. W. Thomas | 747,308 | Dec. 15 | 3693 | 832, 833 | 107 | 1947 |
| Track-sanding apparatus | J. C. Hooper | 732,636 | June 30 | 5818 | 1290 | 104 | 2403 |
| Track-sanding apparatus | J. J. Dolan, Jr | 747,539 | Dec. 22 | 4105 | 921 | 107 | 2055 |
| Track-sanding apparatus. Combined emergency and service valve for | W. A. Ashton and J. C. Hooper | 747,889 | Dec. 22 | 4655 | 1052 | 107 | 2180 |
| Track-sanding device | T. E. Townsend | 725,801 | Apr. 21 | 2587 | 587, 588 | 103 | 1748 |
| Track-sanding device | J. H. Watters | 736,895 | Aug. 18 | 3481 | 774 | 105 | 1755 |
| Track-sanding device | J. H. Hanlon | 737,228 | Aug. 25 | 4101 | 911, 912 | 105 | 1906 |
| Track-sanding device | M. A. De France | 741,116 | Oct. 13 | 1351 | 310 | 106 | 1554 |
| Track-sanding mechanism | E. M. Hedley | 730,536 | June 9 | 1847 | 412 | 104 | 1524 |
| Track-sweeper | B. Hemann | 740,851 | Oct. 6 | 873 | 195 | 106 | 1432 |
| Track-switch and block-signal. Combined | H. Hollis | 731,301 | June 16 | 3261 | 725 | 104 | 1838 |
| Track switch. Elevated | H. H. Drew | 731,440 | June 23 | 3531 | 786 | 104 | 1912 |
| Tracks. Means for operating the points on tramway or like | S. Zylberlast | 728,822 | May 19 | 3772 | 842 | 104 | 839 |
| Traction apparatus | N. Hiss | 718,762 | Jan. 20 | 2371 | 524, 525 | 102 | 535 |
| Traction apparatus | N. Hiss | 719,466 | Feb. 3 | 98 | 23,24 | 102 | 846 |
| Traction. Contact-stud and fixing for use with surface-contact systems of electric | B. H. Bedell | 739,816 | Sept. 29 | 4386 | 983, 984 | 106 | 1007 |
| Traction device | S. M. Wilson | 747,823 | Dec. 22 | 4631 | 1046 | 107 | 2175 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|---|
| | | | | Spec. | Dr'g. | Vol. | Page. |
| Traction device. Electrical | W. W. O'Malley | 722,255 | Mar. 10 | 1121 | 247 | 103 | 245 |
| Traction-engine | B. T. Gibbons | 722,096 | Mar. 3 | 810 | 180 | 103 | 175 |
| Traction-engine | S. S. Morton | 725,860 | Apr. 21 | 2677 | 609<br>610 | 103 | 1769 |
| Traction-engine | J. K. Kendrick | 726,939 | May 5 | 203 | 48 | 104 | 45 |
| Traction-engine | F. S. Brown | 736,931 | Aug. 25 | 3559 | 789 | 105 | 1791 |
| Traction-engine | J. B. Bartholomew | 743,424 | Nov. 10 | 1239 | 255 | 107 | 280 |
| Traction-engine | C. S. Doney and O. A. Gordon | 744,728 | Nov. 24 | 3750 | 809 | 107 | 848 |
| Traction-engine | B. J. Diplock | 747,387 | Dec. 22 | 3839 | 864 | 107 | 1995 |
| Traction-increasing apparatus. Electromagnetic- | A. A. Honey | 731,364 | June 16 | 3359 | 751 | 104 | 1857 |
| Traction-increasing apparatus. Electromagnetic- | A. A. Honey | 731,365 | June 16 | 3360 | 751 | 104 | 1857 |
| Traction on the conduit system. Apparatus for use in electric | E. Vedovelli | 746,417 | Dec. 8 | 2015 | 460<br>461<br>462 | 107 | 1549 |
| Traction-separator | V. W. Clough | 743,453 | Nov. 10 | 1311 | 270 | 107 | 295 |
| Traction system | E. L. K. F. Kahlenberg | 728,581 | May 19 | 3342 | 739 | 104 | 748 |
| Traction system. Alternate-current | W. M. Mordey and A. G. Hansard | 746,353 | Dec. 8 | 1912 | 437 | 107 | 1526 |
| Traction-wheel | G. P. Breed and E. L. Hawn | 723,132 | Mar. 17 | 2735 | 614 | 103 | 609 |
| Traction-wheel | A. Wenberg | 734,481 | July 21 | 3291 | 773 | 105 | 728 |
| Traction-wheel | H. H. Porter, Jr | 734,608 | July 28 | 3529 | 826 | 105 | 795 |
| Traction-wheel | H. Spurrier, Jr | 738,369 | Sept. 8 | 1675 | 363 | 106 | 376 |
| Traction-wheel | C. C. and C. S. Nichols | 740,035 | Sept. 29 | 4825 | 1082 | 106 | 1099 |
| Traction-wheel | J. W. Livermore | 742,462 | Oct. 27 | 4014 | 900 | 106 | 2140 |
| Traction-wheel | D. B. Speck | 743,768 | Nov. 10 | 1898 | 402 | 107 | 422 |
| Traction-wheel | D. W. McLaughlin | 745,510 | Dec. 1 | 372 | 86 | 107 | 1178 |
| Traction-wheel | W. A. Price | 747,764 | Dec. 22 | 4518 | 1018 | 107 | 2150 |
| Traction wheel or runner | A. Sell | 741,938 | Oct. 20 | 2972 | 662 | 106 | 1913 |
| Tractor and coke-loader | E. A. Moore | 722,031 | Mar. 3 | 700 | 155<br>156 | 103 | 151 |
| Train-control system | F. E. Case | 736,816 | Aug. 18 | 3335 | 739 | 105 | 1724 |
| Train controlling and signaling system | F. P. Green | 747,967 | Dec. 29 | 4940 | 1117<br>1118 | 107 | 2265 |
| Train-controlling apparatus. Automatic | C. Bergmann | 731,013 | June 16 | 2718 | 606<br>607 | 104 | 1729 |
| Train-controlling mechanism. Automatic | A. E. Osborn | 738,349 | Sept. 8 | 1637 | 354<br>355 | 106 | 368 |
| Train-operating device | S. Kashichi | 735,111 | Aug. 4 | 122 | 27 | 105 | 1009 |
| Train-order catcher | J. W. Woodard | 744,890 | Nov. 24 | 4025 | 868 | 107 | 905 |
| Train-order holder | C. A. Luckfield | 724,024 | Mar. 31 | 4447 | 999 | 103 | 990 |
| Train-order holder and deliverer | J. J. Metz | 730,143 | June 2 | 1117 | 250 | 104 | 1354 |
| Train-order-holding device | C. J. Quay | 742,353 | Oct. 27 | 3823 | 856 | 106 | 2102 |
| Train-order signal | H. De Wallace | 720,569 | Feb. 17 | 2155 | 500<br>501 | 102 | 1308 |
| Train-robberies. Device for preventing | G. A. Copp | 722,494 | Mar. 10 | 1575 | 347 | 103 | 354 |
| Train safety device | J. Augros | 739,808 | Sept. 29 | 4371 | 980 | 106 | 1004 |
| Train-signal. Electric | W. J. and J. P. Hare | 745,277 | Nov. 24 | 4794 | 1046<br>1047 | 107 | 1064 |
| Train signaling and controlling system | H. O. Westmark | 741,858 | Oct. 20 | 2807 | 625 | 106 | 1880 |
| Train staff systems. Ring and pouch for high-speed- | T. H. Patenall | 720,057 | Feb. 10 | 1187 | 272 | 102 | 1092 |
| Train-stop. Automatic | C. F. Miller | 735,792 | Aug. 11 | 1437 | 309 | 105 | 1305 |
| Train-stop. Automatic safety | H. G. Sedgwick | 738,947 | Sept. 15 | 2781 | 616 | 106 | 629 |
| Train-stop. Emergency automatic air | J. R. Van Daniker | 738,378 | Sept. 8 | 1689 | 366 | 106 | 380 |
| Train-stopper | J. B. Sheppard and J. J. Rose | 729,227 | May 26 | 4501 | 993 | 104 | 1003 |
| Trains. Automatic system for stopping and slowing down | J. A. Guerin | 746,499 | Dec. 8 | 2155 | 496 | 107 | 1579 |
| Trains. Device for delivering articles to moving | A. L. Irvin | 746,515 | Dec. 8 | 2181 | 500 | 107 | 1584 |
| Trains. Device for delivering messages to moving | A. U. Campbell | 736,361 | Aug. 18 | 2468 | 540 | 105 | 1545 |
| Trains running at full speed. Device for delivering and receiving news from the guards of | S. Schur | 748,425 | Dec. 29 | 5783 | 1318<br>1319 | 107 | 2449 |
| Trains. System of control for electrically-propelled | E. A. Sperry | 732,130 | June 30 | 4834 | 1078<br>1079 | 104 | 2195 |
| Tram life-guard | W. Hirt | 740,134 | Sept. 29 | 4984 | 1119<br>1120 | 106 | 1133 |
| Tram-seat | H. S. Haigh and T. Taylor | 719,940 | Feb. 3 | 938 | 219 | 102 | 1022 |
| Tramway. Aerial | J. N. Bellwald | 722,557 | Mar. 10 | 1681 | 372 | 103 | 377 |
| Tramway. Aerial wire-rope | C. T. Finlayson | 738,306 | Sept. 8 | 1533 | 332<br>333 | 106 | 345 |
| Tramway bucket-clip | E. A. Brown | 745,148 | Nov. 24 | 4558 | 988<br>989 | 107 | 1014 |
| Tramway. Cable- | W. Dusedau | 729,558 | June 2 | 66 | 17 | 104 | 1141 |
| Tramway for conveying crops or merchandise. Aerial | L. Ferreira | 745,486 | Dec 1 | 335 | 78 | 107 | 1170 |
| Tramway or railway collector. Electric | A. Bolzano | 727,068 | May 5 | 476 | 101<br>102 | 104 | 104 |
| Tramway towers. Rope-sheave support and adjustment for rope- | B. C. Riblet | 730,402 | June 9 | 1596 | 356 | 104 | 1469 |
| Tramway. Vehicle- | W. J. Newman | 731,119 | June 16 | 2922 | 649 | 104 | 1769 |
| Tramways. Automatic bucket-loader for aerial wire-rope | C. T. Finlayson | 738,309 | Sept. 8 | 1553 | 336<br>337 | 106 | 350 |
| Tramways. Bucket-grip for rope | R. N. Riblet | 744,109 | Nov. 17 | 2593 | 554 | 107 | 582 |
| Tramways. Discharge-terminal for wire-rope | B. C. Riblet | 742,235 | Oct. 27 | 3608 | 807<br>808 | 106 | 2057 |
| Tramways. Dumping device for aerial | C. T. Finlayson | 738,308 | Sept. 8 | 1547 | 335<br>336 | 106 | 349 |
| Tramways. Friction-grip for wire-rope | C. T. Finlayson | 738,307 | Sept. 8 | 1540 | 333<br>334<br>335 | 106 | 347 |
| Tramways. Grip for aerial wire-rope | B. C. Riblet | 742,236 | Oct. 27 | 3613 | 808 | 106 | 2058 |
| Tramways. Lock-clip for connecting buckets to traction-ropes of aerial wire-rope | C. T. Finlayson | 738,310 | Sept. 8 | 1560 | 338 | 106 | 351 |
| Tramways. Magnetic contact-box for electric | A. Diatto | 748,268 | Dec. 29 | 5512 | 1256 | 107 | 2389 |
| Trammel | C. M. Van Horn | 720,507 | Feb. 10 | 2003 | 460 | 102 | 1262 |
| Transfer | H. Sicard | 748,427 | Dec. 29 | 5786 | 1319 | 107 | 2449 |
| Transformer | O. J. Depp and J. P. Hunter | 721,289 | Feb. 24 | 3535 | 804 | 102 | 1617 |
| Transformer | T. J. Johnston | 726,936 | May 5 | 194 | 45, 46 | 104 | 43 |
| Transformer | G. H. Hill and S. G. Brown | 728,575 | May 19 | 3327 | 736 | 104 | 744 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|---|
| | | | | Spec. | Dr'g. | Vol. | Page. |
| Transformer | M. Leblanc | 730,214 | June 2 | 1232 | 276, 277 | 104 | 1378 |
| Transformer | J. L. Adams, Jr | 734,791 | July 28 | 3883 | 906 | 105 | 865 |
| Transformer | R. R. Wiley | 738,864 | Sept. 15 | 2645 | 583 | 106 | 601 |
| Transformer | G. Wright | 742,548 | Oct. 27 | 4183 | 940, 941 | 106 | 2175 |
| Transformers. Means for varying the voltage ratio of | J. S. Peck | 740,174 | Sept. 29 | 5063 | 1139 | 106 | 1149 |
| Transformers. Varying the output of | J. S. Peck | 728,970 | May 26 | 4039 | 897 | 104 | 907 |
| Transforming system | N. Thomas, Jr | 724,060 | Mar. 31 | 4502 | 1014 | 103 | 1002 |
| Transit | G. L. Buff | 719,429 | Feb. 3 | 35 | 8 | 102 | 833 |
| Transit | L. H. Abbee | 723,351 | Mar. 24 | 3155 | 709 | 103 | 708 |
| Transits. Solar and vertical sighting attachment for | J. S. J. Lallie | 745,110 | Nov. 24 | 4470 | 967, 968 | 107 | 997 |
| Transmission mechanism | A. E. Osborn | 721,736 | Mar. 3 | 145 | 33, 34 | 103 | 32 |
| Transmitter-arm | W. Kaisling | 729,184 | May 26 | 4421 | 975 | 104 | 987 |
| Transmitter-arm | W. Kaisling | 733,970 | July 21 | 2323 | 545 | 105 | 522 |
| Transmitting intelligence | H. Shoemaker | 734,476 | July 21 | 3283 | 771 | 105 | 726 |
| Transom-lifter | O. N. Eaton | 723,447 | Mar. 24 | 3340 | 749 | 103 | 746 |
| Transom-lifter | H. Osborne | 723,482 | Mar. 24 | 3432 | 768 | 103 | 763 |
| Transom-lifter | T. A. Reidy | 738,123 | Sept. 1 | 1127 | 250 | 106 | 244 |
| Transom-lock | O. A. Essig | 739,300 | Sept. 22 | 3425 | 763 | 106 | 780 |
| Transom-operating apparatus | E. Wait | 721,927 | Mar. 3 | 517 | 113 | 103 | 115 |
| Transom-regulator | J. H. Glassburn | 746,495 | Dec. 8 | 2149 | 494 | 107 | 1578 |
| Transparency | J. Lobmiller | 736,751 | Aug. 18 | 3213 | 710 | 105 | 1699 |
| Transparency. Trichromatic | F. E. Ives | 725,566 | Apr. 14 | 2120 | 480 | 103 | 1634 |
| Transparent-slide folding box | S. Prager | 734,945 | July 28 | 4[illegible]1 | 970 | 105 | 926 |
| Transplanter | C. Hering | 736,252 | Aug. 11 | 2277 | 492 | 105 | 1486 |
| Transplanter | L. W. Snowden | 742,922 | Nov. 3 | 176 | 41 | 107 | 39 |
| Transplanting machine. Vegetable | J. H. Carroll | 719,995 | Feb. 10 | 1052 | 244, 245 | 102 | 1062 |
| Transport of materials. Apparatus for the | H. Marcus | 736,753 | Aug. 18 | 3216 | 710, 711 | 105 | 1700 |
| Trap: | | | | | | | |
| *See* Animal-trap. | Insect-trap. | | | | | | |
| Ant-trap. | Moth-trap. | | | | | | |
| Bath-tub trap. | Mouse-trap. | | | | | | |
| Beer-trap. | Mouse or rat trap. | | | | | | |
| Bird-trap. | Sand-trap. | | | | | | |
| Burglar-trap. | Sanitary trap. | | | | | | |
| Centripetal trap. | Sewage-trap. | | | | | | |
| Fish-trap. | Sink-trap. | | | | | | |
| Fish or minnow trap. | Siphon-trap. | | | | | | |
| Flea-trap. | Steam-trap. | | | | | | |
| Fly-trap. | Steam or hot-water trap. | | | | | | |
| Fly or insect trap. | Target-trap. | | | | | | |
| Gopher-trap. | Test-trap. | | | | | | |
| Grease-trap. | Urinal-trap. | | | | | | |
| Hog-trap. | Vault-trap. | | | | | | |
| House and running trap. | Water-trap. | | | | | | |
| Trap | J. P. White | 723,100 | Mar. 17 | 2675 | 602 | 103 | 598 |
| Trap | T. F. Foley | 733,475 | July 14 | 1396 | 329 | 105 | 313 |
| Trap | M. Hartmann | 741,330 | Oct. 13 | 1787 | 397 | 106 | 1645 |
| Trap | C. W. Stanton | 746,893 | Dec. 15 | 2901 | 669 | 107 | 1768 |
| Trap and thimble. Combined | J. Crawford | 739,154 | Sept. 15 | 3150 | 696 | 106 | 704 |
| Trap clean-out | J. and J. W. Buckley | 738,289 | Sept. 8 | 1491 | 323 | 106 | 336 |
| Trap-door lifter | F. Fountain | 739,301 | Sept. 22 | 3426 | 763 | 106 | 780 |
| Trap trigger-tongue | H. H. Dreyer | 718,750 | Jan. 20 | 2349 | 519 | 102 | 530 |
| Traveling-bag umbrella-retainer | S. S. Wenzell | 746,617 | Dec. 8 | 2360 | 542 | 107 | 1627 |
| Traveling-case | W. A. Moody | 722,317 | Mar. 10 | 1233 | 274 | 103 | 278 |
| Traveling-case | C. S. Morris | 722,604 | Mar. 10 | 1763 | 393 | 103 | 394 |
| Traveling-case | F. H. White | 739,627 | Sept. 22 | 4030 | 898 | 106 | 912 |
| Traveling sprinkler | J. P. Olofsson | 729,650 | June 2 | 226 | 51 | 104 | 1175 |
| Traveling table. Continuous | J. Ingleby | 720,149 | Feb. 10 | 1358 | 310, 311 | 102 | 1128 |
| Tray | A. H. Garde | 729,568 | June 2 | 85 | 22 | 104 | 1145 |
| Tray-carrier | C. L. Poillon | 733,268 | July 7 | 1028 | 247 | 105 | 215 |
| Tray. Collapsible | H. R. and R. S. Tuttle | 726,205 | Apr. 21 | 3272 | 742 | 103 | 1891 |
| Tray. Extension- | W. Maxwell | 729,078 | May 26 | 4238 | 936 | 104 | 948 |
| Tray. Serving- | H. L. Palmer | 724,492 | Apr. 7 | 137 | 33 | 103 | 1199 |
| Tread-piece or sole | A. H. Pratt | 740,311 | Sept. 29 | 5314 | 1197 | 106 | 1200 |
| Tread-power | W. De Graw | 722,820 | Mar. 17 | 2197 | 490 | 103 | 499 |
| Tread-power motor | E. Parker | 726,454 | Apr. 28 | 3756 | 851, 852 | 103 | 2006 |
| Tread. Safety stair- | J. A. McNamee | 730,145 | June 2 | 1119 | 251 | 104 | 1355 |
| Tread, &c. Stair- | F. W. Huestis | 743,164 | Nov. 3 | 666 | 144 | 107 | 139 |
| Treadle mechanism | R. S. Fleming | 744,321 | Nov. 17 | 3009 | 645 | 107 | 672 |
| Treadle-power | J. J. Cooke | 731,863 | June 23 | 4301 | 960 | 104 | 2071 |
| Treating-tank | C. I. Goessmann | 748,181 | Dec. 29 | 5357 | 1217 | 107 | 2355 |
| Tree. Artificial | A. Hummel | 742,871 | Nov. 3 | 91 | 21 | 107 | 21 |
| Tree-climbing motor | W. P. Kidder | 742,447 | Oct. 27 | 3989 | 895 | 106 | 2135 |
| Tree-holder | T. J. Briner | 727,074 | May 5 | 486 | 104 | 104 | 107 |
| [illegible]g stretcher or holder attachment | P. J. McGrath | 728,750 | May 19 | 3637 | 808 | 104 | 811 |
| [illegible] protector | J. Schirra | 730,575 | June 9 | 1924 | 427 | 104 | 1541 |
| [illegible] protector | D. H. B. Hooper | 742,431 | Oct. 27 | 3964 | 889 | 106 | 2129 |
| [illegible] support | A. A. Hoyt | 739,676 | Sept. 22 | 4124 | 919 | 106 | 931 |
| [illegible] support. Expansion-standard | W. Cartwright | 720,667 | Feb. 17 | 2353 | 539 | 102 | 1347 |
| [illegible] support | A. M. Lamb | 720,706 | Feb. 17 | 2426 | 555 | 102 | 1362 |
| [illegible] for bending and shaping growing | L. Ecker | 728,886 | May 26 | 3894 | 865 | 104 | 878 |
| [illegible] metal guard for protecting | A. F. R. Arndt | 727,054 | May 5 | 457 | 95 | 104 | 100 |
| [illegible] treating | R. R. Hite | 735,018 | July 28 | 4305 | | 105 | 954 |
| [illegible] | C. Eilrich and D. Breckenridge | 720,906 | Feb. 17 | 2762 | 635 | 102 | 1434 |
| Tri[illegible] apparatus for forming circular | E. Quilling | 730,156 | June 2 | 1132 | 254, 255 | 104 | 1358 |
| Trimming-machine | H. J. Bentson | 717,530 | Jan. 6 | 15 | 4, 5 | 102 | 6 |
| Trestle | S. S. Mortimer | 737,000 | Aug. 25 | 3691 | 819 | 105 | 1821 |
| Trestle. Adjustable | L. G. Cantrell | 731,994 | June 23 | 4544 | 1014 | 104 | 2122 |

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| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Tricycle | W. A. Marqua | 722,524 | Mar. 10 | 1625 | 359 | 103 | 365 |
| Trigger mechanism. Single- | J. P. White | 746,619 | Dec. 8 | 2364 | 543 | 107 | 1628 |
| Trimmer: | | | | | | | |
| *See* Broom-trimmer. Lumber-trimmer. | | | | | | | |
| Cigar-trimmer. Oil-cake trimmer. | | | | | | | |
| Edge-trimmer. Paper-trimmer. | | | | | | | |
| Finger-nail trimmer. Pie-trimmer. | | | | | | | |
| Seam-trimmer. | | | | | | | |
| Hedge-trimmer. Shade-cloth trimmer. | | | | | | | |
| Hoof-trimmer. Tree-trimmer. | | | | | | | |
| Trimmer | W. N. Gartside | 724,176 | Mar. 31 | 4737 | 1062 | 103 | 1050 |
| Trimming | H. T. Loomis | 722,996 | Mar. 17 | 2489 | 559 | 103 | 558 |
| Trimming | G. W. Merrow | 725,112 | Apr. 14 | 1295 | 292 | 103 | 1459 |
| Trimming-machine | J. M. Stetter | 734,992 | July 28 | 4264 | 990, 991, 992 | 105 | 945 |
| Trimming-making machine | J. A. Groebli | 736,595 | Aug. 18 | 2921 | 638, 639 | 105 | 1640 |
| Trimming or braid. Reeded | J. Heimann | 725,561 | Apr. 14 | 2113 | 479 | 103 | 1633 |
| Trip-coupling | D. M. Motherwell | 745,225 | Nov. 24 | 4701 | 1026 | 107 | 1045 |
| Triple-expansion engine | F. M. Prescott | 719,367 | Jan. 27 | 3522 | 785 | 102 | 790 |
| Tripod | W. C. Dickerson | 729,291 | May 26 | 4622 | 1022 | 104 | 1028 |
| Tripod | G. W. Lingle | 730,830 | June 9 | 2352 | 521 | 104 | 1633 |
| Tripod | W. F. Folmer | 731,879 | June 23 | 4334 | 968 | 104 | 2078 |
| Tripod | H. H. McNaughton | 740,459 | Oct. 6 | 147 | 30 | 106 | 1277 |
| Tripod | L. C. Otto | 743,320 | Nov. 3 | 974 | 211 | 107 | 208 |
| Tripod adjusting-head | W. H. Fliehmann | 718,445 | Jan. 13 | 1723 | 383 | 102 | 383 |
| Tripod-head | A. Marceau | 737,755 | Sept. 1 | 367 | 79 | 106 | 82 |
| Tripod-head. Photographic-instrument | F. A. Robbins | 729,520 | May 26 | 4993 | 1109 | 104 | 1108 |
| Tripods. Sliding joint for camera- | F. B. Case | 736,210 | Aug. 11 | 2208 | 475 | 105 | 1471 |
| Trisodium phosphate. Manufacturing | E. H. Strickler | 744,128 | Nov. 17 | 2632 | ..... | 107 | 590 |
| Trolley | J. T. Rice | 718,024 | Jan. 6 | 952 | 212 | 102 | 205 |
| Trolley | G. R. Tomb | 718,678 | Jan. 20 | 2205 | 484 | 102 | 500 |
| Trolley | A. J. Johnson | 719,006 | Jan. 27 | 2821 | 632 | 102 | 643 |
| Trolley | J. Spena | 720,633 | Feb. 17 | 2293 | 526 | 102 | 1334 |
| Trolley | W. H. Goodyear | 721,794 | Mar. 3 | 250 | 55 | 103 | 52 |
| Trolley | S. H. Limbert | 722,862 | Mar. 17 | 2265 | 507 | 103 | 515 |
| Trolley | H. H. Bryant and J. B. McGaw | 723,646 | Mar. 24 | 3707 | 831 | 103 | 821 |
| Trolley | C. A. Olsen | 724,927 | Apr. 7 | 935 | 214 | 103 | 1370 |
| Trolley | W. H. Bachtel | 726,211 | Apr. 21 | 3281 | 745 | 103 | 1890 |
| Trolley | W. S. Stockton | 727,021 | May 5 | 401 | 84 | 104 | 87 |
| Trolley | G. E. Smith | 728,313 | May 19 | 2829 | 625 | 104 | 641 |
| Trolley | F. Lehrmann | 729,366 | May 26 | 4738 | 1047 | 104 | 1053 |
| Trolley | M. McBride | 729,957 | June 2 | 803 | 179 | 104 | 1290 |
| Trolley | J. H. Walker | 732,144 | June 30 | 4879 | 1085 | 104 | 2204 |
| Trolley | J. H. Walker | 732,145 | June 30 | 4880 | 1085 | 104 | 2205 |
| Trolley | G. E. Allen and G. Zimmer | 732,495 | June 30 | 5559 | 1232 | 104 | 2344 |
| Trolley | A. S. Deem | 733,015 | July 7 | 556 | 136 | 105 | 119 |
| Trolley | H. Spurrier | 734,442 | July 21 | 3221 | 758 | 105 | 714 |
| Trolley | L. Lavagne and L. Bertrand | 736,610 | Aug. 18 | 2953 | 647 | 105 | 1646 |
| Trolley | T. P. Seastrunk and J. P. Archer | 736,641 | Aug. 18 | 3000 | 662 | 105 | 1655 |
| Trolley | E. Hall | 736,721 | Aug. 18 | 3164 | 698 | 105 | 1689 |
| Trolley | A. P. Lord | 736,855 | Aug. 18 | 3421 | 756 | 105 | 1743 |
| Trolley | M. Nicholls and C. J. Smith | 738,056 | Sept. 1 | 982 | 218 | 106 | 214 |
| Trolley | H. E. Myers | 738,926 | Sept. 15 | 2755 | 609 | 106 | 623 |
| Trolley | E. E. Frederick | 739,164 | Sept. 15 | 3168 | 700 | 106 | 709 |
| Trolley | J. M. Olinger | 740,037 | Sept. 29 | 4827 | 1083 | 106 | 1100 |
| Trolley | S. Stitts | 740,331 | Sept. 29 | 5353 | 1206 | 106 | 1208 |
| Trolley | B. Stenvall | 740,707 | Oct. 6 | 592 | 132 | 106 | 1375 |
| Trolley | A. B. Upham | 741,599 | Oct. 13 | 2326 | 521 | 106 | 1762 |
| Trolley | L. L. Leathers | 744,770 | Nov. 24 | 3816 | 823 | 107 | 861 |
| Trolley | H. M. Williams and J. W. Woomer | 745,127 | Nov. 24 | 4501 | 974 | 107 | 1004 |
| Trolley | H. Holland | 745,614 | Dec. 1 | 549 | 128 | 107 | 1214 |
| Trolley | F. A. Merrick | 746,351 | Dec. 8 | 1909 | 436 | 107 | 1526 |
| Trolley | M. J. Wilson | 747,106 | Dec. 15 | 3306 | 752 | 107 | 1864 |
| Trolley | W. J. Rowley | 748,422 | Dec. 29 | 5780 | 1318 | 107 | 2448 |
| Trolley | T. F. Varley | 748,441 | Dec. 29 | 5813 | 1324 | 107 | 2455 |
| Trolley alarm and indicator | W. H. Hillyer | 739,179 | Sept. 15 | 3192 | 706 | 106 | 714 |
| Trolley-alarm. Safety | W. M. Gruner and W. C. Fink | 743,272 | Nov. 3 | 885 | 193 | 107 | 187 |
| Trolley and air-brake controller. Combined | J. Kynoch | 745,502 | Dec. 1 | 359 | 83, 84 | 107 | 1176 |
| Trolley and brake for aerial railways | M. J. Doner | 720,333 | Feb. 10 | 1706 | 388 | 102 | 1200 |
| Trolley-arm | J. T. Cousins | 731,284 | June 16 | 3227 | 718 | 104 | 1830 |
| Trolley-catch | G. W. Maxwell | 734,920 | July 28 | 4124 | 961 | 105 | 917 |
| Trolley-catch | M. C. White and O. C. Duryea | 736,897 | Aug. 18 | 3486 | 774 | 105 | 1756 |
| Trolley-catcher | E. Limauge | 737,649 | May 12 | 1550 | 349, 350 | 104 | 351 |
| Trolley-catcher | W. E. Pettee | 729,657 | June 2 | 241 | 56 | 104 | 1178 |
| Trolley-catcher | C. B. Robertson | 740,313 | Sept. 29 | 5317 | 1198 | 106 | 1200 |
| Trolley-catcher | H. R. Martin | 746,860 | Dec. 15 | 2830 | 653 | 107 | 1751 |
| Trolley catcher and replacer | J. V. Ainsworth | 739,632 | Sept. 22 | 4041 | 901, 902 | 106 | 914 |
| Trolley circuit-breaker | C. P. Breese | 733,619 | July 14 | 1645 | 389 | 105 | 365 |
| Trolley-contact | H. W. Souder | 735,419 | Aug. 4 | 735 | 157 | 105 | 1136 |
| Trolley contact device | C. L. Fitch | 727,608 | May 12 | 1464 | 328 | 104 | 333 |
| Trolley contact device | W. L. Baker | 742,378 | Oct. 27 | 3867 | 869 | 106 | 2110 |
| Trolley-controller | W. B. Leecraft | 745,020 | Nov. 24 | 4268 | 925 | 107 | 955 |
| Trolley device | R. P. Tisch and R. Kissinger | 748,322 | Dec. 29 | 5592 | 1275 | 107 | 2405 |
| Trolley. Electric-car | W. A. Daggett | 717,821 | Jan. 6 | 578 | 130 | 102 | 125 |
| Trolley. Electric-line | K. Lyons | 733,496 | July 14 | 1429 | 335 | 105 | 319 |
| Trolley. Electric-railway | R. L. McCartney | 732,608 | Mar. 10 | 1767 | 394 | 103 | 393 |
| Trolley-finder | G. T. Roberts | 731,954 | June 23 | 4470 | 997 | 104 | 2107 |
| Trolley-finder | F. A. Graham, F. F. Carmiencke, and J. R. Neely. | 742,311 | Oct. 27 | 3755 | 841 | 106 | 2087 |
| Trolley for electric railways having overhead wires for supply of current. | A. Fayol | 738,305 | Sept. 8 | 1531 | 331 | 106 | 345 |
| Trolley for electric railways. Underrunning | C. A. Singer | 746,395 | Dec. 8 | 1981 | 452 | 107 | 1542 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Trolley guard and finder | W. F. Reichenbach | 746,160 | Dec. 8 | 1559 | 349 | 107 | 1453 |
| Trolley-guide | M. Walker | 744,446 | Nov. 17 | 3238 | 694 | 107 | 722 |
| Trolley-harp | F. J. Caswell and C. C. Wood | 717,542 | Jan. 6 | 34 | 10 | 102 | 10 |
| Trolley-harp | H. A. Ripley | 739,223 | Sept. 15 | 3274 | 725 | 106 | 732 |
| Trolley-harp axle-locking device | A. J. Wiggin | 735,639 | Aug. 4 | 1161 | 246 | 105 | 1228 |
| Trolley-head | S. Fierbaugh | 725,618 | Apr. 14 | 2222 | 502 | 103 | 1655 |
| Trolley-head | F. V. Marsh | 733,727 | July 14 | 1821 | 432 | 105 | 401 |
| Trolley-head | J. Bishop | 744,463 | Nov. 17 | 3269 | 701 | 107 | 728 |
| Trolley mechanism | C. I. Earll | 743,153 | Nov. 3 | 645 | 139 | 107 | 135 |
| Trolley. Overhead | J. J. Bouchard | 720,879 | Feb. 17 | 2701 | 625 | 102 | 1422 |
| Trolley. Overhead | J. E. Byers | 721,147 | Feb. 24 | 3266 | 748 | 102 | 1563 |
| Trolley-pole | H. P. Oler | 722,379 | Mar. 10 | 1345 | 297 | 103 | 307 |
| Trolley-pole | C. A. Bray and F. C. Fry | 725,667 | Apr. 21 | 2334 | 527 | 103 | 1692 |
| Trolley-pole | G. W. Hamilton | 730,116 | June 2 | 1073 | 241 | 104 | 1346 |
| Trolley-pole | E. Schlicker | 732,967 | July 7 | 472 | 118 | 105 | 102 |
| Trolley-pole | P. F. King | 740,144 | Sept. 29 | 5007 | 1125 | 106 | 1137 |
| Trolley-pole | J. F. Mackin | 740,577 | Oct. 6 | 384 | 80 | 106 | 1328 |
| Trolley-pole | T. F. Wetton | 746,424 | Dec. 8 | 2031 | 466 | 107 | 1552 |
| Trolley-pole | E. A. Wakefield and G. W. Morse | 746,614 | Dec. 8 | 2354 | 541 | 107 | 1626 |
| Trolley-pole | J. R. Hollis | 747,607 | Dec. 22 | 4224 | 950 | 107 | 2083 |
| Trolley-pole and stand therefor | W. H. Kilbourn | 717,583 | Jan. 6 | 105 | 28 | 102 | 25 |
| Trolley-pole. Automatic self-dropping | J. Delane | 743,378 | Nov. 3 | 1110 | 236 | 107 | 235 |
| Trolley-pole base | A. D. Crossley | 736,942 | Aug. 25 | 3589 | 795 | 105 | 1799 |
| Trolley-pole controller | J. J. O'Donnell | 731,606 | June 23 | 3847 | 858 | 104 | 1927 |
| Trolley-pole controller | C. Harter | 740,272 | Sept. 29 | 5242 | 1179, 1180 | 106 | 1185 |
| Trolley-pole-controlling apparatus | J. L. Bogue and D. M. Jennings | 743,435 | Nov. 10 | 1272 | 261 | 107 | 287 |
| Trolley-pole guide | H. O. Woodbury | 733,524 | July 14 | 1485 | 353, 354 | 105 | 331 |
| Trolley-pole of electric tram-cars or the like | C. R. F. and R. J. Hommel | 738,193 | Sept. 8 | 1297 | 281 | 106 | 296 |
| Trolley-pole reverser for electric tramways | F. E. Ward | 721,529 | Feb. 24 | 3971 | 904 | 102 | 1709 |
| Trolley-restoring device | C. W. Dowling | 740,105 | Sept. 29 | 4940 | 1109 | 106 | 1123 |
| Trolley-retractor | R. H. Ham | 738,676 | Sept. 8 | 2271 | 500 | 106 | 501 |
| Trolley-retriever | A. W. Knutson | 735,672 | Aug. 4 | 1218 | 258 | 105 | 1239 |
| Trolley-reverser | F. H. Burnham | 723,360 | Mar. 24 | 3189 | 717 | 103 | 713 |
| Trolley-signal | C. H. Morse | 743,542 | Nov. 10 | 1495 | 313 | 107 | 336 |
| Trolley-stand | W. B. Norton | 722,036 | Mar. 3 | 711 | 158 | 103 | 154 |
| Trolley-stand | G. F. Johnson | 725,719 | Apr. 21 | 2421 | 549, 550 | 103 | 1713 |
| Trolley-stand | W. Magner | 729,620 | June 2 | 171 | 41 | 104 | 1162 |
| Trolley-stand | J. J. Bouchard and W. F. Ensor | 738,602 | Sept. 8 | 2113 | 462 | 106 | 471 |
| Trolley-stand | J. J. Goodrich and J. H. McPherson | 741,786 | Oct. 20 | 2694 | 600 | 106 | 1854 |
| Trolley-stand | F. Kennington and D. L. Fawcett | 743,521 | Nov. 10 | 1460 | 305 | 107 | 328 |
| Trolley-switch | L. E. Elwell | 747,155 | Dec. 15 | 3398 | 770 | 107 | 1883 |
| Trolley system. Electric-railway | J. S. Fox | 719,452 | Feb. 3 | 71 | 16, 17 | 102 | 840 |
| Trolley-track switch. Overhead | P. F. Werner | 721,484 | Feb. 24 | 3894 | 886 | 102 | 1691 |
| Trolley-track switch. Overhead | C. G. Schmidt and P. F. Werner | 744,629 | Nov. 17 | 3527 | 761 | 107 | 781 |
| Trolley. Trackless | A. B. Upham | 722,654 | Mar. 10 | 1844 | 411, 412 | 103 | 412 |
| Trolley. Traversing-crane | O. Briede and H. W. Friderichsen | 719,558 | Feb. 3 | 265 | 61 | 102 | 879 |
| Trolley-wagon | G. H. Hulett | 722,426 | Mar. 10 | 1427 | 315 | 103 | 320 |
| Trolley-wheel | T. McWilliams | 720,612 | Feb. 17 | 2259 | 518, 519 | 102 | 1328 |
| Trolley-wheel | N. T. Hazen | 723,385 | Mar. 24 | 3239 | 727 | 103 | 723 |
| Trolley-wheel | J. Hengen | 724,099 | Mar. 31 | 4571 | 1028, 1029 | 103 | 1016 |
| Trolley-wheel | E. C. Rolfe | 725,485 | Apr. 14 | 1983 | 447 | 103 | 1605 |
| Trolley-wheel | F. P. Crockett and O. P. Johnson | 725,938 | Apr. 21 | 2819 | 639 | 103 | 1798 |
| Trolley-wheel | C. S. Stanton | 726,587 | Apr. 28 | 4049 | 914 | 103 | 2061 |
| Trolley-wheel | F. B. Corey | 726,868 | May 5 | 65 | 17 | 104 | 17 |
| Trolley-wheel | F. B. Corey | 726,869 | May 5 | 67 | 18 | 104 | 17 |
| Trolley-wheel | W. E. Ryer | 729,421 | May 26 | 4831 | 1071 | 104 | 1071 |
| Trolley-wheel | R. and R. W. Fox | 735,237 | Aug. 4 | 393 | 76 | 105 | 1064 |
| Trolley-wheel | H. W. Brockett | 747,371 | Dec. 22 | 3811 | 858 | 107 | 1989 |
| Trolley-wheel and holder | F. D. Moon | 729,082 | May 26 | 4241 | 937 | 104 | 949 |
| Trolley-wheel bearing | G. E. Chapman | 729,130 | May 26 | 4321 | 955 | 104 | 965 |
| Trolley-wheel bearing. Self-lubricating | C. E. Stanley | 727,015 | May 5 | 393 | 82 | 104 | 85 |
| Trolley-wheel casing | T. Kelch | 742,331 | Oct. 27 | 3786 | 848 | 106 | 2094 |
| Trolley-wheel for electric tram-cars | A. Selz | 722,189 | Mar. 3 | 982 | 217 | 103 | 207 |
| Trolley-wheel. Resilient multiple-contact | E. S. Cobb | 737,582 | Sept. 1 | 42 | 9 | 106 | 12 |
| Trolley-wire clamp | H. Geissenhöner | 725,436 | Apr. 14 | 1880 | 420 | 103 | 1583 |
| Trolley-wire crossing | O. Vanorman | 740,205 | Sept. 29 | 5125 | 1151 | 106 | 1161 |
| Trolley-wire finder | T. S. Herrick, J. H. Bissett, and F. M. Merrick. | 726,917 | May 5 | 156 | 37 | 104 | 36 |
| Trolley-wire hanger | J. Antiga | 746,436 | Dec. 8 | 2049 | 471 | 107 | 1556 |
| Trolley-wire hanger | J. Antiga | 746,437 | Dec. 8 | 2050 | 471 | 107 | 1556 |
| Trolley-wire support | E. Hill | 719,112 | Jan. 27 | 3049 | 678 | 102 | 690 |
| Trolley-wires at railway-crossings. Safety-guard for | C. D. Austin | 729,523 | June 2 | 4 | 1 | 104 | 1127 |
| Trolley-wires of electric railways. Wire-holder for | L. von Orth | 721,734 | Mar. 3 | 143 | 33 | 103 | 32 |
| Trolley-wires. Safety device for automatically preventing accidents from | W. A. and L. O. Heyes | 726,061 | Apr. 21 | 3007 | 684 | 103 | 1837 |
| Trolley-wires. Suspension of | M. T. A. Kubierschky and P. Herkner. | 738,919 | Sept. 15 | 2740 | 605 | 106 | 620 |
| Trolling-hook | A. H. Smith | 729,435 | May 26 | 4850 | 1074 | 104 | 1076 |
| Trolling-spoon | A. W. Wilson | 730,064 | June 2 | 988 | 221 | 104 | 1329 |
| Trolling-spoon or spinner | P. Junod | 747,976 | Dec. 29 | 4963 | 1120 | 107 | 2269 |
| Trombone. Slide- | F. P. Shepard and D. K. Stauffer | 739,353 | Sept. 22 | 3504 | 783 | 106 | 796 |
| Trough: *See* Drainage conveyer-trough. Drinking-trough. Eaves-trough. Feed-trough. Poultry-trough. Water-trough. | | | | | | | |
| Trough carriers. Dump-gate for endless | J. Petersen | 720,963 | Feb. 17 | 2876 | 659 | 102 | 1458 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|---|
| | | | | Spec. | Dr'g. | Vol. | Page. |
| Trough-mold | H. A. Huttinger | 735,385 | Aug. 4 | 653 | 138 | 105 | 1120 |
| Trousers | S. A. Myers | 718,144 | Jan. 13 | 1162 | 258 | 102 | 265 |
| Trousers | L. A. Peak | 722,138 | Mar. 3 | 877 | 196 | 103 | 188 |
| Trousers | A. G. Larkin | 723,614 | Mar. 24 | 3648 | 816 | 103 | 807 |
| Trousers | A. T. Buswell | 730,741 | June 9 | 2203 | 491 | 104 | 1601 |
| Trousers | L. W. Hammond | 738,677 | Sept. 8 | 2273 | 500 | 106 | 502 |
| Trousers and hose supporter. Combined | R. T. Clarke | 745,156 | Nov. 24 | 4582 | 994 | 107 | 1018 |
| Trousers attachment | J. F. Williams and C. Mustin | 719,965 | Feb. 3 | 987 | 229 | 102 | 1032 |
| Trousers fly-fronts. Fastening device for | F. M. Schmidt | 741,280 | Oct. 13 | 1567 | 376 | 106 | 1621 |
| Trousers-former and coat-hanger | A. Jacobs | 734,232 | July 21 | 2832 | 664 | 105 | 634 |
| Trousers-hanger | W. Walker | 725,804 | Apr. 21 | 2593 | 588 | 103 | 1750 |
| Trousers-hanger | J. Nagely | 736,426 | Aug. 18 | 2589 | 537 | 105 | 1570 |
| Trousers-hanger | S. W. Bonsall | 737,569 | Sept. 1 | 22 | 5 | 106 | 8 |
| Trousers-hanger | E. C. Hyland | 739,260 | Sept. 15 | 3345 | 742 | 106 | 747 |
| Trousers hanger and stretcher | E. A. Burrell | 737,335 | Aug. 25 | 4299 | 956 | 105 | 1947 |
| Trousers. Means for creasing | A. S. Pike | 718,939 | Jan. 20 | 2700 | 604 | 102 | 604 |
| Trousers or skirt hanger | F. H. Cowles | 723,587 | Mar. 24 | 3604 | 805 | 103 | 798 |
| Trousers presser and creaser | E. M. Martin | 724,198 | Mar. 31 | 4789 | 1073 | 103 | 1059 |
| Trousers pressing and holding device | J. T. Donaldson | 743,837 | Nov. 10 | 2031 | 432 | 107 | 449 |
| Trousers-stretcher | S. Gasser | 741,654 | Oct. 20 | 2425 | 543 | 106 | 1799 |
| Trousers-stretcher | F. H. Wood | 743,788 | Nov. 10 | 1946 | 412 | 107 | 431 |
| Trousers-stretching device | E. J. Sander | 721,749 | Mar. 3 | 166 | 38 | 103 | 37 |
| Trousers-support | M. M. Bowman | 718,690 | Jan. 20 | 2233 | 489 | 102 | 506 |
| Trowel | W. S. Ward | 745,544 | Dec. 1 | 433 | 102 | 107 | 1190 |
| Trowel-handle | G. H. Bishop | 747,036 | Dec. 15 | 3163 | 725 | 107 | 1828 |
| Trowel-handle. Detachable | F. H. Feraud | 737,831 | Sept. 1 | 522 | 115 | 106 | 117 |
| Truck | S. M. Vauclain | 721,625 | Feb. 24 | 4174 | 948<br>949 | 102 | 1754 |
| Truck | J. J. Moule | 721,820 | Mar. 3 | 291 | 65 | 103 | 64 |
| Truck | C. E. Taft | 722,166 | Mar. 3 | 934 | 207 | 103 | 198 |
| Truck | G. W. Davis | 722,952 | Mar. 17 | 2419 | 540<br>541 | 103 | 544 |
| Truck | F. E. Caton | 724,991 | Apr. 7 | 1059 | 242 | 103 | 1394 |
| Truck | G. W. King, H. J. Barnhart, and C. B. King. | 725,344 | Apr. 14 | 1714 | 386 | 103 | 1548 |
| Truck | T. W. Davis, Jr | 725,828 | Apr. 21 | 2626 | 597 | 103 | 1757 |
| Truck | R. L. Dorsey | 726,035 | Apr. 21 | 2974 | 676 | 103 | 1830 |
| Truck | H. H. Colestock | 726,406 | Apr. 28 | 3670 | 832 | 103 | 1989 |
| Truck | W. A. Frazier | 726,420 | Apr. 28 | 3692 | 837 | 103 | 1993 |
| Truck | J. M. Hansen | 727,618 | May 12 | 1484 | 333 | 104 | 337 |
| Truck | J. C. Moore | 728,957 | May 26 | 4020 | 893 | 104 | 904 |
| Truck | T. G. Selleck | 729,682 | June 2 | 282 | 65 | 104 | 1187 |
| Truck | H. E. Melville | 732,367 | June 30 | 5306 | 1176 | 104 | 2292 |
| Truck | E. J. Bryan | 732,825 | July 7 | 235 | 59, 60 | 105 | 52 |
| Truck | J. P. Lind | 736,613 | Aug. 18 | 2959 | 650 | 105 | 1647 |
| Truck | E. Peckham | 738,841 | Sept. 15 | 2606 | 575 | 106 | 591 |
| Truck | T. H. Brown | 740,802 | Oct. 6 | 789 | 177<br>178 | 106 | 1413 |
| Truck | E. Peckham | 746,370 | Dec. 8 | 1938 | 442 | 107 | 1531 |
| Truck and body bolster | A. Lipschutz | 738,211 | Sept. 8 | 1330 | 288 | 106 | 303 |
| Truck and body bolster | A. Lipschutz | 738,212 | Sept. 8 | 1331 | 288 | 106 | 304 |
| Truck and body bolster | A. Lipschutz | 738,213 | Sept. 8 | 1332 | 288 | 106 | 304 |
| Truck and body bolster | A. Lipschutz | 738,214 | Sept. 8 | 1334 | 288 | 106 | 304 |
| Truck and body bolster | A. Lipschutz | 738,337 | Sept. 8 | 1609 | 349<br>350 | 106 | 362 |
| Truck and bolster. Car | A. B. Bellows | 726,500 | Apr. 28 | 3877 | 877 | 103 | 2027 |
| Truck and bolster. Car | R. E. Powers | 748,007 | Dec. 29 | 5021 | 1133<br>1134 | 107 | 2283 |
| Truck and hoist. Combined | S. E. Mitchell | 735,399 | Aug. 4 | 683 | 146<br>147 | 105 | 1126 |
| Truck and skid. Combined | J. E. Dilger | 722,570 | Mar. 10 | 1705 | 379<br>380 | 103 | 382 |
| Truck. Automatic swing-wheel car | J. C. Hoshor | 731,053 | June 16 | 2790 | 621<br>622 | 104 | 1743 |
| Truck. Bag conveying and supporting | A. J. Houle | 729,866 | June 2 | 641 | 141 | 104 | 1259 |
| Truck-bolster | G. H. Goodell | 720,239 | Feb. 10 | 1531 | 350 | 102 | 1163 |
| Truck-bolster | L. A. Shepard | 728,030 | May 12 | 2274 | 505 | 104 | 501 |
| Truck-bolster | C. Vanderbilt | 734,637 | July 28 | 3577 | 837 | 105 | 805 |
| Truck-bolster | C. Vanderbilt | 734,638 | July 28 | 3578 | 838 | 105 | 805 |
| Truck-bolster | C. Vanderbilt | 735,044 | July 28 | 4350 | 1011 | 105 | 962 |
| Truck-bolster | H. T. Anderson | 743,415 | Nov. 10 | 1217 | 251<br>252 | 107 | 275 |
| Truck-bolster | D. C. Courtney | 748,167 | Dec. 29 | 5330 | 1211<br>1212 | 107 | 2349 |
| Truck bolster and bolster-frame. Car | G. G. Floyd | 723,521 | Mar. 24 | 3491 | 781 | 103 | 775 |
| Truck bolster. Car | E. Cliff | 728,868 | May 26 | 3868 | 860 | 104 | 873 |
| Truck-bolster. Railway-car | H. R. Keithley | 727,149 | May 5 | 632 | 136 | 104 | 187 |
| Truck-bolster. Railway-car | J. M. Hansen | 736,094 | Aug. 11 | 2014 | 430 | 105 | 1431 |
| Truck-bolster. Railway-car | S. Otis | 739,911 | Sept. 29 | 4582 | 1030 | 106 | 1046 |
| Truck-bolster. Railway-car | S. Otis | 744,225 | Nov. 17 | 2832 | 606 | 107 | 633 |
| Truck. Car | J. Timms | 717,780 | Jan. 6 | 507 | 113 | 102 | 109 |
| Truck. Car | J. Timms | 717,781 | Jan. 6 | 508 | 113 | 102 | 109 |
| Truck. Car | J. Player and G. G. Floyd | 718,580 | Jan. 13 | 2037 | 442 | 102 | 453 |
| Truck. Car | S. F. Klohs | 718,773 | Jan. 20 | 2389 | 530<br>531 | 102 | 538 |
| Truck. Car | G. B. Maltby | 721,715 | Mar. 3 | 116 | 25 | 103 | 26 |
| Truck. Car | E. W. Summers | 723,755 | Mar. 24 | 3887 | 875 | 103 | 859 |
| Truck. Car | G. G. Floyd | 725,329 | Apr. 14 | 1688 | 380 | 103 | 1542 |
| Truck. Car | E. W. Summers | 728,043 | May 12 | 2296 | 510<br>511 | 104 | 506 |
| Truck. Car | J. A. Brill | 728,792 | May 19 | 3713 | 828<br>829 | 104 | 825 |
| Truck. Car | E. Cliff | 738,773 | Sept. 15 | 2459 | 540<br>541 | 106 | 558 |
| Truck. Car | E. Cliff | 738,774 | Sept. 15 | 2463 | 541 | 106 | 559 |

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| Invention. | Name. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | | Spec. | Drg. | Vol. | Page. |
| Truck. Car- | E. Peckham | 738,840 | Sept. 15 | 2601 | 574, 575 | 106 | 590 |
| Truck. Car- | W. S. Adams | 739,771 | Sept. 22 | 4277 | 958, 959 | 106 | 966 |
| Truck. Car- | W. S. Adams | 739,772 | Sept. 22 | 4280 | 959, 960 | 106 | 967 |
| Truck. Car- | W. S. Adams | 739,800 | Sept. 22 | 4346 | 974, 975 | 106 | 981 |
| Truck. Car- | W. S. Adams | 739,801 | Sept. 22 | 4348 | 975, 976 | 106 | 982 |
| Truck. Car- | J. A. Brill and W. S. Adams | 739,802 | Sept. 22 | 4349 | 976, 977 | 106 | 982 |
| Truck. Car- | S. Otis | 739,910 | Sept. 29 | 4580 | 1030 | 106 | 1045 |
| Truck. Car- | E. W. Summers | 740,605 | Oct. 6 | 439 | 95, 96 | 106 | 1340 |
| Truck. Car- | W. P. Bettendorf | 740,617 | Oct. 6 | 458 | 100 | 106 | 1345 |
| Truck. Car- | W. J. Knox | 741,145 | Oct. 13 | 1400 | 321 | 106 | 1564 |
| Truck. Car- | F. W. Luedke | 741,917 | Oct. 20 | 2938 | 655 | 106 | 1906 |
| Truck. Car- | E. W. Samen | 743,756 | Nov. 10 | 1878 | 397 | 107 | 418 |
| Truck. Car- | G. J. Smith | 744,983 | Nov. 24 | 4196 | 907 | 107 | 940 |
| Truck. Car- | W. B. Scaife | 745,119 | Nov. 24 | 4486 | 971 | 107 | 1001 |
| Truck. Car- | B. W. Tucker | 745,536 | Dec. 1 | 413 | 95 | 107 | 1187 |
| Truck. Car or other vehicle | S. Otis | 730,687 | June 9 | 2120 | 471 | 104 | 1584 |
| Truck. Elevating- | H. F. Broyles | 721,281 | Feb. 24 | 3524 | 801, 802 | 102 | 1615 |
| Truck. Elevating- | G. J. Holl | 740,275 | Sept. 29 | 5255 | 1185 | 106 | 1187 |
| Truck. Elevating baggage- | W. H. Cadwell | 747,133 | Dec. 15 | 3354 | 761 | 107 | 1873 |
| Truck for moving buildings | J. T. Marsh | 724,309 | Mar. 31 | 5010 | 1122 | 103 | 1104 |
| Truck for tram-cars or other rolling-stock | J. W. Wainwright | 718,551 | Jan. 13 | 1964 | 429 | 102 | 437 |
| Truck for tramway-cars, railway-carriages, &c. Four-wheeled | A. S. Nelson, A. Stewart, and T. J. Foster. | 737,132 | Aug. 25 | 3908 | 868 | 105 | 1865 |
| Truck for transport of ships, &c | C. V. Suppan and B. Szendi | 722,436 | Mar. 10 | 1443 | 320 | 103 | 323 |
| Truck. Four-wheel swing-fulcrum | B. R. Van Kirk | 736,318 | Aug. 11 | 2398 | 522, 523 | 105 | 1514 |
| Truck-frame for railway-cars. Swing-motion | J. M. Hansen | 729,160 | May 26 | 4382 | 967 | 104 | 978 |
| Truck-frame. Railway-car | J. M. Hansen | 722,298 | Mar. 10 | 1203 | 265 | 103 | 273 |
| Truck. Freight-car | J. H. Graham | 735,754 | Aug. 11 | 1376 | 296 | 105 | 1291 |
| Truck. Hand- | W. H. Hart and S. N. Olsen | 729,931 | June 2 | 741 | 165 | 104 | 1279 |
| Truck. House-moving | P. Dahle | 744,907 | Nov. 24 | 4055 | 874 | 107 | 912 |
| Truck jack. Car- | C. Kofske | 724,587 | Apr. 7 | 312 | 76 | 103 | 1235 |
| Truck. Lateral-motion arch-bar | C. H. Read | 743,558 | Nov. 10 | 1519 | 317, 318 | 107 | 341 |
| Truck. Lateral-motion arch-bar | C. H. Read | 743,559 | Nov. 10 | 1520 | 318 | 107 | 342 |
| Truck. Lumber- | J. Barker | 740,613 | Oct. 6 | 453 | 98 | 106 | 1344 |
| Truck. Maximum-traction | C. F. Uebelacker | 739,364 | Sept. 22 | 3519 | 787, 788 | 106 | 800 |
| Truck. Mill- | C. Koegel | 717,752 | Jan. 6 | 432 | 101 | 102 | 94 |
| Truck. Mill- | E. Whalley | 724,149 | Mar. 31 | 4692 | 1053 | 103 | 1041 |
| Truck or car. Dumping | S. E. Gladding | 732,544 | June 30 | 5649 | 1253 | 104 | 2364 |
| Truck. Piano- | F. W. Shoecraft and H. L. Allard | 737,165 | Aug. 25 | 3965 | 881 | 105 | 1879 |
| Truck. Portable | J. E. Dilger | 722,569 | Mar. 10 | 1704 | 379 | 103 | 382 |
| Truck. Radial car- | R. L. Ellery | 724,271 | Mar. 31 | 4943 | 1106, 1107 | 103 | 1090 |
| Truck. Radial car- | R. L. Ellery | 727,918 | May 12 | 2081 | 462 | 104 | 462 |
| Truck. Radial car- | R. L. Ellery | 727,919 | May 12 | 2085 | 463 | 104 | 463 |
| Truck. Radial-swing | B. R. Van Kirk | 735,626 | Aug. 4 | 1132 | 239 | 105 | 1222 |
| Truck. Railway- | H. W. Wolff and A. Lipschutz | 723,430 | Mar. 24 | 3312 | 742 | 103 | 739 |
| Truck. Railway-car | J. F. O'Connor | 717,603 | Jan. 6 | 147 | 38 | 102 | 33 |
| Truck. Railway-car | H. R. Keithley | 728,582 | May 19 | 3343 | 739, 740 | 104 | 748 |
| Truck. Railway-car | H. R. Keithley | 728,583 | May 19 | 3345 | 740 | 104 | 749 |
| Truck. Railway-car | H. R. Keithley | 731,057 | June 16 | 2798 | 623 | 104 | 1745 |
| Truck. Railway-car | S. Otis | 744,226 | Nov. 17 | 2834 | 606 | 107 | 634 |
| Truck. Rigid arch-bar | A. Lipschutz | 730,668 | June 9 | 2089 | 465 | 104 | 1576 |
| Truck side bearing. Railway-car- | H. W. Fowler | 735,743 | Aug. 11 | 1358 | 292, 293 | 105 | 1288 |
| Truck. Traction- | H. H. Schenk | 737,779 | Sept. 1 | 414 | 88 | 106 | 91 |
| Truck. Weighing- | T. G. Stevens | 746,895 | Dec. 15 | 2903 | 669 | 107 | 1769 |
| Truck-wheel | J. T. Towsley | 746,900 | Dec. 15 | 2909 | 671 | 107 | 1771 |
| Truck-wheel. Adjustable | W. E. Hamilton | 740,558 | Oct. 6 | 330 | 69 | 106 | 1315 |
| Trucks. Appliance for use in coupling railway- | J. T. Woods | 730,728 | June 9 | 2185 | 486 | 104 | 1597 |
| Trucks. Brake-rigging for six-wheeled | F. P. Livingston | 731,477 | June 23 | 3603 | 804 | 104 | 1927 |
| Trucks. Brake-rigging for six-wheeled | F. P. Livingston | 731,478 | June 23 | 3604 | 804 | 104 | 1927 |
| Trucks. Brake-rigging for six-wheeled | F. P. Livingston | 731,797 | June 23 | 4193 | 935 | 104 | 2046 |
| Trucks. Constructing or forming car- | R. C. Wright and F. E. Stebbins | 737,810 | Sept. 1 | 475 | 106 | 106 | 107 |
| Trucks, &c. Roller for | S. B. Peck | 747,215 | Dec. 15 | 3512 | 796 | 107 | 1906 |
| Trucks. Roller side bearing for car- | E. S. Woods | 725,388 | Apr. 14 | 1788 | 400, 401 | 103 | 1563 |
| Trucks. Roller side bearing for car- | E. S. Woods | 725,389 | Apr. 14 | 1791 | 401 | 103 | 1563 |
| Truing up work. Indicator for | E. W. Kelley | 734,182 | July 21 | 2742 | 644 | 105 | 613 |
| Trunk | W. Wohlrabe | 724,985 | Apr. 7 | 1053 | 240 | 103 | 1393 |
| Trunk | M. N. Drucker | 732,058 | June 30 | 4688 | 1047 | 104 | 2165 |
| Trunk | M. V. Burnside | 732,165 | June 30 | 4915 | 1093 | 104 | 2211 |
| Trunk | H. Davis | 739,397 | Sept. 22 | 3599 | 804 | 106 | 817 |
| Trunk | W. R. Worth | 744,664 | Nov. 17 | 3590 | 773 | 107 | 795 |
| Trunk | J. M. Martin | 746,121 | Dec. 8 | 1488 | 332 | 107 | 1438 |
| Trunk | J. Wolf | 747,107 | Dec. 15 | 3307 | 753 | 107 | 1864 |
| Trunk and dressing-table. Combination | M. Berry | 719,298 | Jan. 27 | 3376 | 754 | 102 | 759 |
| Trunk and fittings. Wardrobe- | I. Mendel and S. Newman | 743,537 | Nov. 10 | 1489 | 311 | 107 | 335 |
| Trunk attachment | G. Alden | 732,493 | June 30 | 5556 | 1232 | 104 | 2343 |
| Trunk attachment | R. Weir, Jr | 744,988 | Nov. 24 | 4205 | 909 | 107 | 942 |
| Trunk-binder | J. P. Wales | 726,806 | Apr. 28 | 4456 | 1006 | 103 | 2145 |
| Trunk. Bureau- | N. Baruch | 729,993 | June 2 | 873 | 194 | 104 | 1305 |
| Trunk. Bureau or dresser | A. W. Moede | 729,380 | May 26 | 4761 | 1053 | 104 | 1057 |
| Trunk. [illegible] | R. T. Watkins and W. B. Overton | 732,670 | June 30 | 5884 | 1305 | 104 | 2415 |
| Trunk-fastener | J. S. Isidor | 745,061 | Nov. 24 | 4366 | 943 | 107 | 976 |

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| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Trunk-fastener | J. D. Bishop | 746,782 | Dec. 15 | 2676 | 618 | 107 | 1716 |
| Trunk-lock | C. Salviolo | 721,838 | Mar. 3 | 327 | 72 | 103 | 72 |
| Trunk-lock | G. Goerk | 744,532 | Nov. 17 | 3376 | 727 | 107 | 752 |
| Trunk-rest | J. Willy | 738,139 | Sept. 1 | 1169 | 258 | 106 | 252 |
| Trunk. Salesman's sample- | J. O. Horsey | 730,657 | June 9 | 2063 | 459 | 104 | 1570 |
| Trunk-strap keeper | L. Westlen | 739,963 | Sept. 29 | 4674 | 1051 | 106 | 1066 |
| Trunk-tray lift | O. Rangnow | 725,870 | Apr. 21 | 2696 | 613 | 103 | 1773 |
| Trunk. Wardrobe- | N. Baruch | 726,618 | Apr. 28 | 4107 | 927 | 103 | 2073 |
| Trunks, &c. Shield or protector for | C. E. Duggan | 721,165 | Feb. 24 | 3304 | 755 | 102 | 1570 |
| Truss | H. T. Prange | 721,603 | Feb. 24 | 4126 | 938 | 102 | 1743 |
| Truss | M. E. Jasper | 724,014 | Mar. 31 | 4431 | 996 | 103 | 987 |
| Truss | A. A. Raymond | 724,500 | Apr. 7 | 147 | 35 | 103 | 1201 |
| Truss | T. W. Booth | 730,226 | June 9 | 1278 | 283 | 104 | 1403 |
| Truss | O. Tirrill and A. De Bevoise | 731,141 | June 16 | 2966 | 658 | 104 | 1778 |
| Truss | J. Railton | 731,709 | June 23 | 4031 | 900 | 104 | 2011 |
| Truss | M. B. Brooks | 736,356 | Aug. 18 | 2461 | 538 | 105 | 1543 |
| Truss | S. H. Phillis | 738,842 | Sept. 15 | 2608 | 575 | 106 | 592 |
| Truss | R. Doane | 742,608 | Oct. 27 | 4283 | 965 | 106 | 2197 |
| Truss | J. U. Adams | 745,311 | Dec. 1 | 1 | 1 | 107 | 1101 |
| Truss. Abdominal | H. W. Pell | 718,149 | Jan. 13 | 1169 | 260 | 102 | 266 |
| Truss. Hernia- | H. Loewy | 732,361 | June 30 | 5296 | 1174 | 104 | 2290 |
| Truss. Hernia- | C. and F. Weck | 735,325 | Aug. 4 | 550 | 112 | 105 | 1098 |
| Truss. Hernial | C. R. Turner | 729,017 | May 26 | 4133 | 916 | 104 | 928 |
| Truss. Hernial | T. Beckwith | 733,124 | July 7 | 759 | 184 | 105 | 160 |
| Truss. Hernial | J. B. Sheehan | 733,879 | July 14 | 2128 | 502 | 105 | 464 |
| Truss. Hernial | J. U. Adams | 737,051 | Aug. 25 | 3769 | 837 | 105 | 1837 |
| Truss. Hernial | J. N. Schiffer | 737,155 | Aug. 25 | 3945 | 877 | 105 | 1873 |
| Truss. Hernial | W. S. Rice | 741,929 | Oct. 20 | 2959 | 659 | 106 | 1911 |
| Truss. Hernial | S. H. Phillis | 743,187 | Nov. 3 | 705 | 155 | 107 | 147 |
| Truss. Hernial | F. P. McElfresh | 746,872 | Dec. 15 | 2860 | 659 | 107 | 1759 |
| Truss-pad | W. C. Wetmore | 718,408 | Jan. 13 | 1640 | 360 | 102 | 367 |
| Truss-pad | I. B. Seeley | 747,247 | Dec. 15 | 3568 | 808 | 107 | 1917 |
| Truss-pad. Hernial | D. Brisky | 718,421 | Jan. 13 | 1668 | 368 | 102 | 372 |
| Truss-pad. Hernial | P. A. Lorenz | 721,812 | Mar. 3 | 281 | 62 | 103 | 62 |
| Tub: *See* Bath-tub. Washtub. Stone tub. | | | | | | | |
| Tubs or sinks. Adjustable support for | J. Crawford | 737,082 | Aug. 25 | 3826 | 850 | 105 | 1848 |
| Tube: *See* Bunsen tube. Mailing-tube. Composite tube. Packing-tube. Evaporator-tube. Pneumatic tube. Glass-blower's tube. Resistance-tube. Grain-drill discharge-tube. Well-tube. X-ray tube. | | | | | | | |
| Tube-bending machine | J. E. O'Donnell | 727,676 | May 12 | 1604 | 365 | 104 | 363 |
| Tube-bending machine | C. A. Briigel | 740,803 | Oct. 6 | 790 | 178 | 106 | 1413 |
| Tube-cleaner | G. O. Rawson and G. W. Atterbury | 717,619 | Jan. 6 | 172 | 43, 44 | 102 | 38 |
| Tube-cleaner | C. A. Pratt | 722,750 | Mar. 17 | 2065 | 462 | 103 | 472 |
| Tube-cleaner | T. J. Hart | 742,644 | Oct. 27 | 4350 | 978 | 106 | 2211 |
| Tube-cleaner | H. F. Weinland | 743,782 | Nov. 10 | 1935 | 410 | 107 | 429 |
| Tube-cleaner | W. Müller | 748,206 | Dec. 29 | 5401 | 1228 | 107 | 2364 |
| Tube-cleaner | E. John | 748,283 | Dec. 29 | 5536 | 1262 | 107 | 2394 |
| Tube-closure | A. L. Lambert | 730,378 | June 9 | 1553 | 346 | 104 | 1461 |
| Tube-compressing machine | R. Kuhn | 727,642 | May 12 | 1532 | 345, 346 | 104 | 348 |
| Tube connection | J. H. Rosenthal | 720,622 | Feb. 17 | 2275 | 522 | 102 | 1331 |
| Tube-coupling | R. A. Gillespie | 740,003 | Sept. 29 | 4755 | 1069 | 106 | 1083 |
| Tube-coupling | R. A. Gillespie | 740,004 | Sept. 29 | 4756 | 1070 | 106 | 1083 |
| Tube-cutting machine. Metal- | T. L. Carbone | 738,409 | Sept. 8 | 1744 | 379, 380 | 106 | 391 |
| Tube-drawing device | R. C. Stiefel and R. T. Brown | 718,671 | Jan. 20 | 2194 | 480 | 102 | 498 |
| Tube-drawing mechanism. Seamless- | P. Patterson | 741,369 | Oct. 13 | 1881 | 415 | 106 | 1669 |
| Tube-expander | J. S. Stevens | 721,340 | Feb. 24 | 3627 | 825 | 102 | 1637 |
| Tube-expander | F. Lamplough | 723,685 | Mar. 24 | 3768 | 846 | 103 | 833 |
| Tube-expander | C. F. Carty | 743,146 | Nov. 3 | 633 | 137 | 107 | 132 |
| Tube-expanding tool | C. Roedmann | 746,579 | Dec. 8 | 2292 | 526 | 107 | 1611 |
| Tube-extractor | F. McWilliams | 718,066 | Jan. 6 | 1016 | 227 | 102 | 219 |
| Tube-forming apparatus | W. Cairns | 734,299 | July 21 | 2984 | 702 | 105 | 664 |
| Tube-forming apparatus | W. Cairns | 734,300 | July 21 | 2986 | 702, 703 | 105 | 664 |
| Tube-handling apparatus | T. J. Bray, Jr. | 721,006 | Feb. 17 | 2956 | 679 | 102 | 1475 |
| Tube-handling apparatus | T. J. Bray, Jr. | 728,666 | May 19 | 3494 | 776 | 104 | 781 |
| Tube-making fagot | W. Allderdice | 736,344 | Aug. 18 | 2446 | 534 | 105 | 1540 |
| Tube-making machines. Adjustable skid for | G. H. Page and J. S. Button | 734,357 | July 21 | 3072 | 723 | 105 | 683 |
| Tube or rod clamp and coupling | B. Draper | 733,376 | July 14 | 1223 | 289 | 105 | 274 |
| Tube shaping and setting device | S. E. Condon | 740,239 | Sept. 29 | 5188 | 1166 | 106 | 1174 |
| Tube-sheet protector | C. H. Boone | 732,508 | June 30 | 5584 | 1237 | 104 | 2349 |
| Tube-splicing | J. Humphreys | 717,684 | Jan. 6 | 292 | 72 | 102 | 63 |
| Tube-welding apparatus. Electric | G. Baehr | 747,841 | Dec. 22 | 4657 | 1053 | 107 | 2181 |
| Tube-welding apparatus. Electric | G. Baehr | 747,842 | Dec. 22 | 4662 | 1054 | 107 | 2182 |
| Tube-welding machine | H. A. Fergusson | 724,561 | Apr. 7 | 258 | 63 | 103 | 1225 |
| Tubes. Elongating | M. Mannesmann | 721,214 | Feb. 24 | 3418 | 776 | 102 | 1592 |
| Tubes. Machine for forming tapered | W. C. Sargent and J. J. Barker | 733,428 | July 14 | 1314 | 311 | 105 | 294 |
| Tubes, &c. Machine for glazing | J. Conde | 727,294 | May 5 | 874 | 189, 190 | 104 | 187 |
| Tubes. Manufacturing conical | E. Bock | 722,398 | Mar. 10 | 1374 | 304 | 103 | 308 |
| Tubes. Means or apparatus for molding metal | M. Sensenschmidt | 745,246 | Nov. 24 | 4737 | 1034 | 107 | 1052 |
| Tubes of soft metal. Machine for forming | W. S. Clark | 732,829 | July 7 | 245 | 61 | 105 | 55 |
| Tubes or hollow articles. Making seamless | C. Mercäder and C. P. Byrnes | 717,886 | Jan. 6 | 705 | 157, 158 | 102 | 150 |
| Tubes or rods. Machine for profiling non-circular | J. Reimann | 738,067 | Sept. 1 | 968 | 222 | 106 | 217 |
| Tubes. Verifying apparatus for dressing | F. Stordeur | 725,293 | Apr. 14 | 1612 | 364 | 103 | 1527 |
| Tubing | C. D. Frees | 746,319 | Dec. 8 | 1853 | 421 | 107 | 1514 |
| Tubing. Apparatus for making lapweld- | P. Patterson | 742,483 | Oct. 27 | 4045 | 907 | 106 | 2147 |
| Tubing. Apparatus for manufacturing seamless | J. H. King and E. M. Wolfe | 719,231 | Jan. 27 | 3252 | 721 | 102 | 732 |

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| | | | | Spec. | Dr'g. | Vol. | Page. |
| Tubing. Apparatus for manufacturing seamless | J. H. King and E. M. Wolfe | 742,200 | Oct. 27 | 3532 | 788 | 106 | 2040 |
| Tubing. Apparatus for the manufacture of seamless | J. H. King and E. M. Wolfe | 740,442 | Oct. 6 | 112 | 23 | 106 | 1270 |
| Tubing. Clamp for removing | J. H. Smith | 730,486 | June 9 | 1757 | 394 | 104 | 1504 |
| Tubing employed in metal beds. Closure for the ends of | C. P. Walter | 732,804 | July 7 | 203 | 52 | 105 | 46 |
| Tubing locking mechanism. Telescoping | P. A. Bowen | 737,570 | Sept. 1 | 24 | 5 | 106 | 8 |
| Tubing. Making | F. F. Bischoff | 724,426 | Apr. 7 | 13 | 4,5 | 103 | 1173 |
| Tubing-top | M. J. Kirschner | 730,664 | June 9 | 2076 | 462 | 104 | 1573 |
| Tubular articles. Manufacture of | G. G. and R. O. Blakey | 735,936 | Aug. 11 | 1723 | 368 | 105 | 1368 |
| Tubular articles provided with diaphragms. Making | J. P. Sneddon | 745,254 | Nov. 24 | 4749 | 1038 | 107 | 1055 |
| Tubular articles. Testing for or detecting and correcting faults or errors in | A. H. M. Driver and G. Norman | 740,727 | Oct. 6 | 836 | 187 | 106 | 1424 |
| Tubular bodies. Apparatus for producing | H. Ehrhardt | 724,270 | Mar. 31 | 4941 | 1106 | 103 | 1090 |
| Tubular boiler | J. S. Stevens | 727,480 | May 5 | 1221 | 270 | 104 | 264 |
| Tubular boiler | W. T. Fox | 738,311 | Sept. 8 | 1568 | 339 | 106 | 353 |
| Tubular covering. Flexible | J. Stanley | 738,250 | Sept. 8 | 1393 | 302 | 106 | 317 |
| Tuft-fastener | D. P. Page | 730,689 | June 9 | 2126 | 472 | 104 | 1585 |
| Tuft-making machine | W. M. Pettit | 723,914 | Mar. 31 | 4204 | 947 | 103 | 943 |
| Tufting-frame | J. H. Horstman | 729,588 | June 2 | 120 | 30, 31 | 104 | 1151 |
| Tufting-machine | W. E. Buser | 726,400 | Apr. 28 | 3661 | 830 | 103 | 1987 |
| Tufting-machine | A. G. Eyles | 744,961 | Nov. 24 | 4161 | 899 | 107 | 933 |
| Tufting machine Fabric | J. T. Roberts | 739,447 | Sept. 22 | 3709 | 825 | 106 | 842 |
| Tug attachment | B. I. H. Mitchell | 739,502 | Sept. 22 | 3796 | 850 | 106 | 862 |
| Tug. Hame | E. V. S. Guichard | 743,492 | Nov. 10 | 1402 | 290 | 107 | 315 |
| Tug-hook | A. Anderson | 741,755 | Oct. 20 | 2637 | 588 | 106 | 1842 |
| Tug. Jointed hame | C. C. Schwaner | 734,001 | July 21 | 2376 | 558 | 105 | 533 |
| Tug metal casing | W. A. Lane | 729,611 | June 2 | 161 | 38 | 104 | 1160 |
| Tug reinforcement. Harness | D. W. Hawkins | 728,913 | May 26 | 3942 | 876 | 104 | 888 |
| Tug. Shaft | Z. Wiggs | 723,222 | Mar. 17 | 2911 | 652 | 103 | 647 |
| Tug. Shaft | A. J. Dewald | 741,235 | Oct. 13 | 1589 | 357 | 106 | 1605 |
| Tug. Thill | W. A. Crist | 723,246 | Mar. 24 | 2964 | 666 | 103 | 671 |
| Tumbler-grinding machine | W. F. Altenbaugh | 737,811 | Sept. 1 | 478 | 106<br>107 | 106 | 108 |
| Tumbler-washer | E. E. Murphy | 723,009 | Mar. 17 | 2515 | 564<br>565 | 103 | 563 |
| Tumbling apparatus | G. A. Curtis | 721,027 | Feb. 17 | 2996 | 689 | 102 | 1484 |
| Tumbling apparatus | G. A. Curtis | 726,511 | Apr. 28 | 3897 | 882 | 103 | 2031 |
| Tumbling-barrel | J. H. Conkling and F. S. Chase | 717,814 | Jan. 6 | 560 | 125 | 102 | 121 |
| Tumbling mill or barrel | J. W. Fuller | 730,900 | June 16 | 2508 | 557 | 104 | 1685 |
| Tuning mechanism for stringed instruments | A. Lang | 726,706 | Apr. 28 | 4264 | 964 | 103 | 2106 |
| Tuning-pin | A. J. Clevenger and C. C. Field | 727,589 | May 12 | 1433 | 322 | 104 | 326 |
| Tunnel-boring machinery | J. Price | 741,829 | Oct. 20 | 2762 | 615<br>616 | 106 | 1870 |
| Tunnel construction | J. W. Reno | 723,307 | Mar. 24 | 3071 | 691 | 103 | 693 |
| Tunnel construction | D. L. Hough | 727,799 | May 12 | 1861 | 414 | 104 | 414 |
| Tunnel construction | D. L. Hough | 734,265 | July 21 | 2901 | 678<br>679 | 105 | 649 |
| Tunnel construction | D. Phillips | 737,466 | Aug. 25 | 4553 | 1020<br>1021 | 105 | 2004 |
| Tunnel construction | J. F. O'Rourke | 742,220 | Oct. 27 | 3575 | 798<br>799 | 106 | 2049 |
| Tunnel construction | J. F. O'Rourke | 742,221 | Oct. 27 | 3576 | 799 | 106 | 2049 |
| Tunnel construction | J. F. O'Rourke | 742,222 | Oct. 27 | 3578 | 799<br>800 | 106 | 2049 |
| Tunnel construction. Apparatus for facilitating | J. V. Davies | 735,718 | Aug. 11 | 1312 | 282 | 105 | 1277 |
| Tunnel construction. Subaqueous | T. K. Thomson | 718,173 | Jan. 13 | 1212 | 268 | 102 | 276 |
| Tunnel construction. Subaqueous | S. Lake | 730,134 | June 2 | 1098 | 246<br>247 | 104 | 1351 |
| Tunnel-section | H. F. Dunham | 736,507 | Aug. 18 | 2747 | 601 | 105 | 1604 |
| Tunnel-shield | C. H. Bonnett | 745,954 | Dec. 1 | 1179 | 264 | 107 | 1351 |
| Tunnel. Subaqueous | I. A. Braddock | 725,029 | Apr. 14 | 1140 | 257<br>258 | 103 | 1428 |
| Tunnel. Subaqueous | D. D. McBean | 745,456 | Dec. 1 | 275 | 66 | 107 | 1158 |
| Tunnel. Subaqueous | D. D. McBean | 745,457 | Dec. 1 | 278 | 68 | 107 | 1158 |
| Tunnel-support | P. E. Young | 739,960 | Sept. 29 | 4689 | 1054 | 106 | 1069 |
| Tunnel-ventilating apparatus. Railway | C. F. Diether | 728,685 | May 19 | 3523 | 783 | 104 | 787 |
| Tunnels. Building subaqueous | S. Lake | 730,135 | June 2 | 1103 | 247<br>248 | 104 | 1352 |
| Tunneling | J. C. Meem | 731,198 | June 16 | 3066 | 680 | 104 | 1797 |
| Tunneling-machine | P. Unanue | 732,326 | June 30 | 5215 | 1158<br>1159 | 104 | 2273 |
| Tunneling-machine | J. P. Karns | 744,763 | Nov. 24 | 3804 | 820 | 107 | 859 |
| Tunneling-shield | T. Cooper | 724,666 | Apr. 7 | 461 | 111 | 103 | 1268 |
| Tunneling. Submarine | H. A. Carson | 723,986 | Mar. 31 | 4362 | 980<br>981 | 103 | 975 |
| Turbine | J. Mercer | 726,179 | Apr. 21 | 3232 | 732<br>733 | 103 | 1883 |
| Turbine | A. Schenck | 727,698 | May 12 | 1640 | 372 | 104 | 371 |
| Turbine | G. Zahikjanz | 731,009 | June 16 | 2712 | 604<br>605 | 104 | 1728 |
| Turbine | O. Junggren | 735,107 | Aug. 4 | 110 | 25 | 105 | 1007 |
| Turbine | A. W. and Z. W. Daw | 742,972 | Nov. 3 | 263 | 58<br>59<br>60 | 107 | 57 |
| Turbine | H. de Walden and H. Knudsen | 745,268 | Nov. 24 | 4775 | 1043 | 107 | 1060 |
| Turbine | G. Zahikjanz | 745,409 | Dec. 1 | 180 | 40, 41 | 107 | 1138 |
| Turbine | H. Holzwarth | 745,496 | Dec. 1 | 350 | 81 | 107 | 1174 |
| Turbine | G. Zahikjanz | 748,137 | Dec. 29 | 5281 | 1199<br>1200 | 107 | 2339 |
| Turbine actuated by steam | J. W. Graydon | 737,734 | Sept. 1 | 326 | 69 | 106 | 74 |
| Turbine-bucket-cutting tool | H. Geisenhöner | 730,362 | June 9 | 1524 | 338 | 104 | 1455 |
| Turbine-bucket. Detachable | H. Geisenhöner | 730,363 | June 9 | 1526 | 338 | 104 | 1455 |
| Turbine-bucket. Detachable | H. G. Reist | 746,162 | Dec. 8 | 1562 | 350 | 107 | 1454 |
| Turbine-bucket. Detachable | H. G. Reist | 746,163 | Dec. 8 | 1563 | 350 | 107 | 1454 |

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| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Turbine-buckets to wheels. Means for attaching | H. G. Reist | 746,161 | Dec. 8 | 1560 | 349 | 107 | 1453 |
| Turbine. Compound | R. Schulz | 725,880 | Apr. 21 | 2711 | 617 | 103 | 1776 |
| Turbine. Compound | G. C. Davison | 733,818 | July 14 | 2015 | 474, 475 | 105 | 441 |
| Turbine. Compound steam- | H. F. Fullagar | 720,415 | Feb. 10 | 1842 | 420, 421 | 102 | 1229 |
| Turbine. Compound steam- | W. E. Shepard | 741,940 | Oct. 20 | 2978 | 663 | 106 | 1914 |
| Turbine. Duplex steam- | A. W. Case | 725,673 | Apr. 21 | 2342 | 529 | 103 | 1695 |
| Turbine. Elastic-fluid | T. G. E. Lindmark | 717,876 | Jan. 6 | 689 | 154 | 102 | 147 |
| Turbine. Elastic-fluid | C. G. Curtis | 726,032 | Apr. 21 | 2968 | 675 | 103 | 1858 |
| Turbine. Elastic-fluid | C. G. Curtis | 727,912 | May 12 | 2063 | 460 | 104 | 473 |
| Turbine. Elastic-fluid | L. Wilson | 733,105 | July 7 | 724 | 176, 177 | 105 | 152 |
| Turbine. Elastic-fluid | O. Junggren | 735,110 | Aug. 4 | 120 | 26 | 105 | 1008 |
| Turbine. Elastic-fluid | T. G. E. Lindmark | 737,121 | Aug. 25 | 3888 | 863 | 105 | 1861 |
| Turbine. Elastic-fluid | J. Wilkinson | 739,965 | Sept. 29 | 4677 | 1052, 1053 | 106 | 1067 |
| Turbine. Elastic-fluid | J. Wilkinson | 745,270 | Nov. 24 | 4778 | 1043, 1044 | 107 | 1061 |
| Turbine. Elastic-fluid | C. G. Curtis | 745,575 | Dec. 1 | 476 | 113, 114 | 107 | 1198 |
| Turbine. Elastic-fluid | W. L. R. Emmet | 746,938 | Dec. 15 | 2991 | 688, 689 | 107 | 1789 |
| Turbine. Elastic-fluid | C. G. Curtis | 747,857 | Dec. 22 | 4697 | 1061 | 107 | 2190 |
| Turbine-engine | J. A. Groshon | 725,439 | Apr. 14 | 1891 | 423, 424 | 103 | 1585 |
| Turbine-engine | S. Lount | 733,722 | July 14 | 1815 | 430 | 105 | 400 |
| Turbine-engine | F. J. MacKenzie | 748,294 | Dec. 29 | 5553 | 1267 | 107 | 2397 |
| Turbine. Fluid-pressure | D. F. Asbury | 719,294 | Jan. 27 | 3365 | 751, 752 | 102 | 756 |
| Turbine. Fluid-pressure | H. F. Fullagar | 746,061 | Dec. 8 | 1379 | 309 | 107 | 1412 |
| Turbine governing mechanism | J. Wilkinson | 741,426 | Oct. 13 | 1970 | 436 | 106 | 1686 |
| Turbine governing mechanism | J. Wilkinson | 743,125 | Nov. 3 | 588 | 127 | 107 | 123 |
| Turbine governor. Elastic-fluid- | O. Junggren | 743,727 | Nov. 10 | 1828 | 385, 386 | 107 | 407 |
| Turbine-governor. Electric | W. L. R. Emmet and O. Junggren | 742,300 | Oct. 27 | 3732 | 834, 835 | 106 | 2083 |
| Turbine-motor | J. E. Sheriff | 729,513 | May 26 | 4982 | 1105 | 104 | 1105 |
| Turbine-motor | B. Stevens | 748,228 | Dec. 29 | 5437 | 1239 | 107 | 2372 |
| Turbine. Multicellular | A. C. E. Rateau and G. Sautter | 748,216 | Dec. 29 | 5415 | 1232, 1233 | 107 | 2367 |
| Turbine regulating device. Steam- | J. Stumpf | 728,041 | May 12 | 2293 | 510 | 104 | 505 |
| Turbine regulator. Steam- | P. J. Hedlund | 742,422 | Oct. 27 | 3952 | 886 | 106 | 2126 |
| Turbine. Steam- | R. Schulz | 718,661 | Jan. 20 | 2173 | 475, 476 | 102 | 494 |
| Turbine. Steam- | L. E. Crespin | 718,918 | Jan. 20 | 2654 | 595 | 102 | 593 |
| Turbine. Steam- | W. L. Webster | 725,184 | Apr. 14 | 1427 | 323 | 103 | 1486 |
| Turbine. Steam- | T. G. E. Lindmark | 726,315 | Apr. 28 | 3508 | 794 | 103 | 1955 |
| Turbine. Steam- | F. D. Shepherd | 728,138 | May 12 | 2470 | 549, 550 | 104 | 544 |
| Turbine. Steam- | C. A. Parsons | 729,215 | May 26 | 4478 | 986, 987 | 104 | 999 |
| Turbine. Steam- | J. Stumpf | 730,982 | June 16 | 2656 | 591 | 104 | 1716 |
| Turbine. Steam- | J. Stumpf | 730,983 | June 16 | 2658 | 592 | 104 | 1716 |
| Turbine. Steam- | D. F. Asbury | 733,119 | July 7 | 749 | 181, 182 | 105 | 158 |
| Turbine. Steam- | E. F. Cameron | 735,341 | Aug. 4 | 575 | 118 | 105 | 1104 |
| Turbine. Steam- | T. G. E. Lindmark | 735,889 | Aug. 11 | 1635 | 350 | 105 | 1349 |
| Turbine. Steam- | H. Richter | 738,574 | Sept. 8 | 2056 | 448 | 106 | 457 |
| Turbine. Steam- | P. Kugel and V. Gelpke | 739,191 | Sept. 15 | 3213 | 710 | 106 | 718 |
| Turbine. Steam- | J. Stumpf | 740,332 | Sept. 29 | 5355 | 1206 | 106 | 1208 |
| Turbine. Steam- | J. Richards | 740,780 | Oct. 6 | 750 | 169 | 106 | 1405 |
| Turbine. Steam- | A. J. Taplin | 740,945 | Oct. 6 | 1025 | 232, 233 | 106 | 1465 |
| Turbine. Steam- | E. C. Terry | 741,385 | Oct. 13 | 1908 | 422 | 106 | 1674 |
| Turbine. Steam- | P. J. Hedlund | 741,491 | Oct. 13 | 2114 | 471 | 106 | 1717 |
| Turbine. Steam- | P. J. Hedlund | 742,423 | Oct. 27 | 3953 | 887 | 106 | 2127 |
| Turbine. Steam- | G. Zahikjanz | 745,410 | Dec. 1 | 182 | 41 | 107 | 1138 |
| Turbine. Steam- | T. Scheffler | 746,388 | Dec. 8 | 1968 | 450 | 107 | 1539 |
| Turbine. Steam or gas | J. Stumpf | 730,416 | June 9 | 1620 | 363 | 104 | 1474 |
| Turbine. Triple-expansion fluid-pressure | D. F. Asbury | 719,295 | Jan. 27 | 3369 | 752 | 102 | 757 |
| Turbine vane or blade | T. Parker | 729,889 | June 2 | 679 | 150 | 104 | 1267 |
| Turbine wheel. Elastic-fluid- | P. J. Hedlund | 743,869 | Nov. 10 | 2088 | 445 | 107 | 461 |
| Turbine wheel. Elastic-fluid- | J. Wilkinson | 747,523 | Dec. 22 | 4078 | 917 | 107 | 2049 |
| Turbine wheel. Steam- | H. Zoelly | 748,139 | Dec. 29 | 5285 | 1201 | 107 | 2340 |
| Turbines. Means for improving the efficiency of | A. R. Dodge | 741,776 | Oct. 20 | 2672 | 596, 597 | 106 | 1850 |
| Turbines. Means for improving the efficiency of | A. R. Dodge | 744,727 | Nov. 24 | 3747 | 808 | 107 | 847 |
| Turbines. Means for separating moisture from vapor in | W. L. R. Emmet | 745,045 | Nov. 24 | 4334 | 937 | 107 | 969 |
| Turbines. Simultaneously-adjustable nozzle and intermediate for | O. Junggren | 735,109 | Aug. 4 | 117 | 26 | 105 | 1008 |
| Turbines. Support for intermediate buckets in | A. R. Dodge | 741,775 | Oct. 20 | 2670 | 596 | 106 | 1850 |
| Turn-table for cranes or the like | R. Wilke | 748,328 | Dec. 29 | 5599 | 1276 | 107 | 2407 |
| Turn-table for transferring casks from one chute or rolling-track to another. | E. Hoffmann | 733,584 | July 14 | 1588 | 378 | 105 | 353 |
| Turn-table-operating mechanism | J. T. McGrath | 738,564 | Sept. 8 | 2043 | 445 | 106 | 454 |
| Turnbuckle-strain | L. Steinberger | 732,599 | June 30 | 5750 | 1276 | 104 | 2387 |
| Turning and boring apparatus | G. Nardin | 738,471 | Sept. 8 | 1870 | 407 | 106 | 416 |
| Turning machine. Automatic wood- | R. W. Barker | 723,809 | Mar. 31 | 3995 | 901 | 103 | 898 |
| Turning machine. Wood- | L. D. Bullock | 722,486 | Mar. 10 | 1558 | 342 | 103 | 349 |
| Turning machine. Wood- | W. G. Cooper and J. T. Bradley | 742,840 | Nov. 3 | 39 | 10 | 107 | 11 |
| Turnstiles. Machine for registering at a distance admissions by | A. Marsh | 735,279 | Aug. 4 | 474 | 95 | 105 | 1082 |
| Turpentine. Apparatus for collecting crude | C. H. Herty | 719,798 | Feb. 3 | 707 | 165 | 102 | 673 |
| Turpentine. Apparatus for the manufacture of | C. W. Bilfinger and C. F. Hallock | 737,994 | Sept. 1 | 882 | 193 | 106 | 192 |

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| Invention. | Name. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | | Spec. | Dr'g. | Vol. | Page. |
| Turpentine-box | R. L. Gaylord | 730,750 | June 9 | 2235 | 497 | 104 | 1610 |
| Turpentine-pocket | A. G. Geiger | 742,625 | Oct. 27 | 4317 | 972 | 105 | 2205 |
| Tweezers and magnifying-glass. Combined | F. J. Boehm | 718,748 | Jan. 20 | 2346 | 518 | 102 | 529 |
| Twine | G. H. Ellis | 722,960 | Mar. 17 | 2429 | 543 | 103 | 546 |
| Twine, &c. Cover or holder for balls of | A. Shedlock | 724,623 | Apr. 7 | 389 | 92 | 103 | 1252 |
| Twine-cutter | E. F. Knowles and A. G. Dickson | 720,158 | Feb. 10 | 1372 | 315 | 102 | 1132 |
| Twine-cutter | G. E. Banton | 745,994 | Dec. 8 | 1258 | 283 | 107 | 1385 |
| Twine-cutting device | J. W. Moss | 724,915 | Apr. 7 | 916 | 210 | 103 | 1366 |
| Twine-holder | C. J. Lippold | 721,055 | Feb. 17 | 3047 | 699 | 102 | 1496 |
| Twine-holder | J. A. Thompson | 724,061 | Mar. 31 | 4504 | 1014 | 103 | 1002 |
| Twine-holder | C. L. Peterson and M. O. Thompson. | 737,957 | Sept. 1 | 800 | 175 | 106 | 176 |
| Twine-holder | A. J. Seckner | 741,074 | Oct. 13 | 1268 | 287 | 106 | 1538 |
| Twine-holder | F. P. Jarrett | 743,643 | Nov. 10 | 1687 | 355 | 107 | 376 |
| Twine holder and cutter | S. R. Earnest | 725,232 | Apr. 14 | 1521 | 345 | 103 | 1507 |
| Twine-making machine. Grass- | T. W. Jerrems | 745,625 | Dec. 1 | 568 | 132, 133 | 107 | 1219 |
| Twine or cord. Ball or cop of | J. Good | 731,888 | June 23 | 4353 | 971 | 104 | 2083 |
| Twist or like drill | J., W., and H. Platt | 719,860 | Feb. 3 | 807 | 180 | 102 | 993 |
| Twister thread-guide | J. R. O'Neil | 721,828 | Mar. 3 | 310 | 68 | 103 | 68 |
| Twisting and winding machine stop-motion | H. and J. W. Collins | 718,912 | Jan. 20 | 2646 | 593 | 102 | 591 |
| Twisting-head | A. Tasté | 721,527 | Feb. 24 | 3969 | 904 | 102 | 1708 |
| Twisting-machine | G. B. and E. Dennis | 722,821 | Mar. 17 | 2198 | 490 | 103 | 499 |
| Twisting-machine stop-motion | G. I. Fiske | 740,638 | Oct. 6 | 483 | 106 | 106 | 1350 |
| Twisting-machine thread-retaining bar | W. A. Mackie | 741,518 | Oct. 13 | 2162 | 482 | 106 | 1728 |
| Twitch | D. J. Friesen | 719,579 | Feb. 3 | 308 | 71 | 102 | 887 |
| Twyer | J. W. Miller and M. Webb | 725,742 | Apr. 21 | 2467 | 558 | 103 | 1724 |
| Twyer. Blast-furnace | O. S. Garretson | 726,422 | Apr. 28 | 3696 | 838 | 103 | 1994 |
| Twyer for cupola-furnaces | S. Watt | 722,062 | Mar. 3 | 751 | 167 | 103 | 162 |
| Twyers. Cap and peep-hole for blast-furnace | G. R. Johnson | 728,111 | May 12 | 2417 | 539 | 104 | 533 |
| Type | M. F. Benton | 720,314 | Feb. 10 | 1674 | 380 | 102 | 1193 |
| Type | F. W. Weeks | 744,836 | Nov. 24 | 3938 | 849 | 107 | 887 |
| Type-bar bearing | L. Myers | 740,682 | Oct. 6 | 551 | 123 | 106 | 1366 |
| Type-bar hanger | C. Spiro | 744,253 | Nov. 17 | 2880 | 617 | 107 | 644 |
| Type-bar-making machine | M. Reid | 721,389 | Feb. 24 | 3720 | 845, 846 | 102 | 1656 |
| Type carrier and selecting mechanism | H. Hill | 728,711 | May 19 | 3566 | 792, 793 | 104 | 796 |
| Type casting and composing machines. Mechanical controller for automatic | J. Pinel | 744,230 | Nov. 17 | 2841 | 608 | 107 | 636 |
| Type casting and setting machines. Device for casting justifying-spaces in combined | C. Rozar | 717,763 | Jan. 6 | 457 | 106, 107 | 102 | 99 |
| Type-casting-machine pump | F. E. Peacock | 734,597 | July 28 | 3514 | 820 | 105 | 792 |
| Type-casting-machine type-controlling device | F. Wicks | 727,046 | May 5 | 441 | 93 | 104 | 97 |
| Type-casting matrix | T. Cleghorn | 732,395 | June 30 | 5367 | 1188 | 104 | 2306 |
| Type. Clamp for pages of | W. H. Francis | 719,321 | Jan. 27 | 3125 | 764 | 102 | 770 |
| Type-distributing apparatus | A. A. Low and J. Breakey | 747,196 | Dec. 15 | 3473 | 787 | 107 | 1898 |
| Type-distributing device | F. Winkler | 738,269 | Sept. 8 | 1454 | 313, 314 | 106 | 329 |
| Type-expander | J. J. Cain | 736,684 | Aug. 18 | 3094 | 632 | 105 | 1674 |
| Type-finishing machine | W. J. Huston and C. W. Smith | 732,560 | June 30 | 5684 | 1262, 1263 | 104 | 2373 |
| Type-holder | H. S. Folger | 723,665 | Mar. 24 | 3735 | 838 | 103 | 826 |
| Type-holder | F. W. Weeks | 744,837 | Nov. 24 | 3940 | 849 | 107 | 888 |
| Type-holding clamp | J. A. Handiboe | 718,622 | Jan. 20 | 2103 | 457 | 102 | 481 |
| Type-justifying means | C. H. Cochrane | 731,666 | June 23 | 3956 | 880 | 104 | 1997 |
| Type-line-justifying machine | B. F. Bellows | 727,267 | May 5 | 823 | 177, 178, 179 | 104 | 177 |
| Type-machine matrix-centering mechanism | J. S. Bancroft | 725,653 | Apr. 21 | 2316 | 522 | 103 | 1689 |
| Type-machine matrix-centering mechanism | J. M. Dove | 745,800 | Dec. 1 | 872 | 197 | 107 | 1286 |
| Type-mold | F. H. Pierpont | 720,736 | Feb. 17 | 2475 | 570 | 102 | 1374 |
| Type-page binder-frame | W. H. Francis | 734,166 | July 21 | 2709 | 638 | 105 | 607 |
| Type-setting machine | E. A. Adcock | 717,960 | Jan. 6 | 824 | 186 | 102 | 177 |
| Type-setting machine | G. E. Kenney | 742,671 | Oct. 27 | 4399 | 992 | 106 | 2222 |
| Type-setting-machine keyboard | C. Rozár | 719,375 | Jan. 27 | 3533 | 788 | 102 | 793 |
| Type-space and means for coöperating therewith for justifying lines of type. | C. H. Cochrane | 740,537 | Oct. 6 | 299 | 61 | 106 | 1308 |
| Type under pressure. Apparatus for forming | G. G. Little and E. A. Reed | 745,208 | Nov. 24 | 4674 | 1018 | 107 | 1039 |
| Type-writer | C. S. Booth | 719,079 | Jan. 27 | 2967 | 663 | 102 | 673 |
| Type-writer | G. H. Lillie | 719,346 | Jan. 27 | 3476 | 774 | 102 | 780 |
| Type-writer | A. C. Ferguson | 722,291 | Mar. 10 | 1186 | 262 | 103 | 268 |
| Type-writer | J. Alexander | 724,772 | Apr. 7 | 661 | 153, 154, 155, 156 | 103 | 1310 |
| Type-writer | S. J. Seifried | 725,493 | Apr. 14 | 2001 | 451, 452 | 103 | 1609 |
| Type-writer | W. F. Loyd | 725,855 | Apr. 21 | 2667 | 607, 608 | 103 | 1767 |
| Type-writer | C. J. Paulson | 727,552 | May 5 | 1350 | 304, 305 | 104 | 290 |
| Type-writer | C. Wasmuth | 728,340 | May 19 | 2884 | 636 | 104 | 652 |
| Type-writer | N. L. Anderson | 732,498 | June 30 | 5563 | 1233, 1234 | 104 | 2344 |
| Type-writer | C. F. Hopkins | 733,042 | July 7 | 606 | 148 | 105 | 129 |
| Type-writer | R. D. Stackpole | 733,087 | July 7 | 694 | 169 | 105 | 147 |
| Type-writer | A. Kempf | 735,271 | Aug. 4 | 463 | 92 | 105 | 1079 |
| Type-writer | C. Wasmuth | 736,324 | Aug. 11 | 2405 | 525 | 105 | 1516 |
| Type-writer | W. Baxter, Jr | 736,477 | Aug. 18 | 4688 | 590 | 105 | 1591 |
| Type-writer | E. Nowák | 737,457 | Aug. 25 | 4537 | 1017 | 105 | 2001 |
| Type-writer | C. J. Paulson | 738,235 | Sept. 8 | 1363 | 295 | 106 | 310 |
| Type-writer | A. Halstrick | 740,126 | Sept. 29 | 4972 | 1115 | 106 | 1130 |
| Type-writer | G. W. Donning | 745,163 | Nov. 24 | 4595 | 997 | 107 | 1022 |
| Type-writer | R. W. Walker | 747,667 | Dec. 22 | 4344 | 981 | 107 | 2109 |
| Type-writer actions. Support for links of | O. C. Kavle | 737,742 | Sept. 1 | 346 | 73 | 106 | 78 |

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| Type-writer-actuating mechanism | G. W. Donning | 745,095 | Nov. 24 | 4446 | 961, 962, 963 | 107 | 991 |
| Type-writer attachment | W. V. King | 724,297 | Mar. 31 | 4993 | 1117 | 103 | 1101 |
| Type-writer attachment | W. E. Benson | 726,132 | Apr. 21 | 3139 | 710 | 103 | 1864 |
| Type-writer attachment | G. A. Danielson | 727,595 | May 12 | 1441 | 323 | 104 | 328 |
| Type-writer attachment | C. J. Bellamy | 734,660 | July 28 | 3622 | 849 | 105 | 815 |
| Type-writer-bar movement | J. Alexander | 724,773 | Apr. 7 | 669 | 157 | 103 | 1311 |
| Type-writer cabinet | G. J. Barrett | 719,419 | Feb. 3 | 12 | 3 | 102 | 829 |
| Type-writer cabinet | F. W. Tobey | 726,482 | Apr. 28 | 3824 | 864 | 103 | 2019 |
| Type-writer cabinet | F. W. Tobey | 730,319 | June 9 | 1446 | 319 | 104 | 1439 |
| Type-writer cabinet | P. E. Whiting | 747,309 | Dec. 15 | 3695 | 833 | 107 | 1948 |
| Type-writer carriage | L. S. Burridge | 720,219 | Feb. 10 | 1498 | 343, 344 | 102 | 1155 |
| Type-writer carriage-feed mechanism | E. S. Shimer | 739,728 | Sept. 22 | 4216 | 943 | 106 | 952 |
| Type-writer-carriage-operating mechanism | W. W. Baer | 738,273 | Sept. 8 | 1463 | 316 | 106 | 330 |
| Type-writer-carriage paper-guide | C. Spiro | 744,254 | Nov. 17 | 2883 | 618 | 107 | 644 |
| Type-writer-carriage retarding device | A. W. Steiger | 744,424 | Nov. 17 | 3192 | 684, 685 | 107 | 712 |
| Type-writer carriage-shifter | J. S. Parmenter | 722,884 | Mar. 17 | 2314 | 516 | 103 | 522 |
| Type-writer-carriage shifting mechanism | R. T. Gillespie | 735,243 | Aug. 4 | 400 | 78, 79 | 105 | 1066 |
| Type-writer chair | F. I. Chichester | 730,875 | June 16 | 2444 | 540 | 104 | 1672 |
| Type-writer. Cipher | F. Sedgwick | 727,213 | May 5 | 737 | 158 | 104 | 159 |
| Type-writer connecting-rod | J. E. Molle | 744,931 | Nov. 24 | 4097 | 883 | 107 | 920 |
| Type-writer copy-holder | F. E. Williamson | 724,982 | Apr. 7 | 1042 | 238, 239 | 103 | 1391 |
| Type-writer copy-holder | R. J. Wood | 728,646 | May 19 | 3453 | 767 | 104 | 773 |
| Type-writer copy-holder | I. H. P. Colleen | 742,395 | Oct. 27 | 3894 | 875, 876 | 106 | 2116 |
| Type-writer desk | F. H. Howe | 740,434 | Oct. 6 | 100 | 21 | 106 | 1268 |
| Type-writer. Electric | G. H. Ennis | 734,526 | July 28 | 3375 | 789, 790 | 105 | 761 |
| Type-writer escapement | J. G. Peterson | 727,553 | May 5 | 1358 | 305 | 104 | 293 |
| Type-writer escapement mechanism | W. R. Fox and G. J. Barrett | 727,340 | May 5 | 969 | 211 | 104 | 209 |
| Type-writer heading-holder attachment | J. G. Ambrose | 739,277 | Sept. 22 | 3383 | 753 | 106 | 771 |
| Type-writer inking appliance | S. W. Turner | 728,050 | May 12 | 2319 | 515 | 104 | 511 |
| Type-writer-key cap | B. C. Fox | 722,006 | Mar. 3 | 660 | 146 | 103 | 143 |
| Type-writer. Music | I. F. Badeau | 730,508 | June 9 | 1803 | 402, 403 | 104 | 1514 |
| Type-writer paper-carriage | S. J. Seifried | 725,492 | Apr. 14 | 1999 | 451 | 103 | 1609 |
| Type-writer paper-guide | A. Swindlehurst | 726,591 | Apr. 28 | 4056 | 916 | 103 | 2063 |
| Type-writer platen | C. E. Peterson | 720,062 | Feb. 10 | 1195 | 274 | 102 | 1094 |
| Type-writer platen | G. W. Donning | 742,609 | Oct. 27 | 4284 | 966 | 106 | 2197 |
| Type-writer-ribbon-actuating mechanism | J. D. Daugherty | 718,824 | Jan. 20 | 2470 | 549 | 102 | 554 |
| Type-writer ribbon-guide holder | E. F. Kunath | 733,975 | July 21 | 2330 | 547 | 105 | 523 |
| Type-writer ribbon mechanism | J. Alexander | 720,992 | Feb. 17 | 2929 | 671 | 102 | 1470 |
| Type-writer ribbon-reversing mechanism | W. F. Helmond | 740,651 | Oct. 6 | 501 | 110 | 106 | 1354 |
| Type-writer ribbon-reversing mechanism | L. Myers | 748,208 | Dec. 29 | 5403 | 1229 | 107 | 2364 |
| Type-writer shift-key | C. Spiro | 744,255 | Nov. 17 | 2885 | 618 | 107 | 645 |
| Type-writer shift-key mechanism | E. J. Manning and O. C. Kavle | 734,727 | July 28 | 3763 | 878 | 105 | 841 |
| Type-writer. Shifting-keyboard | A. C. Ferguson | 718,333 | Jan. 13 | 1515 | 336, 337 | 102 | 340 |
| Type-writer. Shipper's | W. W. Frantz | 723,855 | Mar. 31 | 4089 | 922, 923 | 103 | 917 |
| Type-writer silent-key mechanism | W. F. Helmond and O. C. Kavle | 730,456 | June 9 | 1711 | 383 | 104 | 1494 |
| Type-writer table | F. W. Hillard | 726,920 | May 5 | 163 | 38, 39 | 104 | 38 |
| Type-writer table and cabinet | M. S. Eylar | 727,922 | May 12 | 2090 | 464, 465 | 104 | 464 |
| Type-writer table. Book- | F. W. Hillard | 726,921 | May 5 | 164 | 39 | 104 | 38 |
| Type-writer table. Book- | F. W. Hillard | 726,922 | May 5 | 166 | 40 | 104 | 39 |
| Type-writer tabulating device | A. Halstrick | 735,367 | Aug. 4 | 620 | 127 | 105 | 1113 |
| Type-writer tabulating device | L. Myers | 740,680 | Oct. 6 | 549 | 123 | 106 | 1365 |
| Type-writer tabulating-stop | H. L. Wagner | 738,961 | Sept. 15 | 2810 | 623 | 106 | 635 |
| Type-writer telegraphic transmitting attachment | A. E. Morelock | 743,011 | Nov. 3 | 366 | 79, 80 | 107 | 77 |
| Type-writer type-bar | J. J. Green | 735,247 | Aug. 4 | 407 | 80 | 105 | 1067 |
| Type-writer type-bar | J. A. Smith | 736,887 | Aug. 18 | 3472 | 770 | 105 | 1753 |
| Type-writer type-bar basket | L. Myers | 748,207 | Dec. 29 | 5402 | 1228 | 107 | 2364 |
| Type-writer word-counting attachment | J. G. Coleman and L. Wilhite | 735,468 | Aug. 4 | 836 | 178 | 105 | 1158 |
| Type-writers, &c. Copy-holder for carriages of | I. H. P. Colleen | 748,047 | Dec. 29 | 5102 | 1153 | 107 | 2299 |
| Type-writers, &c. Type-bar guide for | C. D. Rice | 735,152 | Aug. 4 | 210 | 42 | 105 | 1027 |
| Type-writing and computing machine. Combined | H. Marshall | 743,904 | Nov. 10 | 2154 | 464, 465 | 107 | 475 |
| Type-writing attachment | W. E. Benson | 726,133 | Apr. 21 | 3141 | 710 | 103 | 1864 |
| Type-writing machine | G. C. Blickensderfer | 717,732 | Jan. 6 | 372 | 91, 92, 93 | 102 | 80 |
| Type-writing machine | C. Gabrielson | 717,741 | Jan. 6 | 408 | 96 | 102 | 89 |
| Type-writing machine | F. H. Armstrong | 717,794 | Jan. 6 | 523 | 117 | 102 | 112 |
| Type-writing machine | C. Gabrielson | 717,837 | Jan. 6 | 619 | 137 | 102 | 133 |
| Type-writing machine | A. C. Schuman | 718,390 | Jan. 13 | 1609 | 354 | 102 | 360 |
| Type-writing machine | P. F. Nilson | 718,505 | Jan. 13 | 1867 | 410 | 102 | 418 |
| Type-writing machine | J. S. Harrison and H. Hill | 718,929 | Jan. 20 | 2670 | 599, 600 | 102 | 596 |
| Type-writing machine | D. Briggs and S. H. Farnham | 719,300 | Jan. 27 | 3378 | 754, 755 | 102 | 759 |
| Type-writing machine | G. B. Webb | 720,302 | Feb. 10 | 1647 | 376, 377 | 102 | 1187 |
| Type-writing machine | F. W. Hillard | 720,520 | Feb. 10 | 2036 | 468 | 102 | 1268 |
| Type-writing machine | C. W. Walker | 720,762 | Feb. 17 | 2512 | 580 | 102 | 1382 |
| Type-writing machine | C. W. Walker | 720,763 | Feb. 17 | 2517 | 580 | 102 | 1383 |
| Type-writing machine | J. A. Smith | 721,102 | Feb. 17 | 3144 | 722, 723 | 102 | 1519 |
| Type-writing machine | W. C. Richardson | 721,392 | Feb. 24 | 3725 | 847, 848 | 102 | 1657 |
| Type-writing machine | G. Podlich | 722,625 | Mar. 10 | 1793 | 399 | 103 | 401 |
| Type-writing machine | J. D. White | 723,567 | Mar. 24 | 3564 | 797 | 103 | 790 |

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| Type-writing machine | H. Cross and G. J. Griffiths | 724,671 | Apr. 7 | 468 | 113, 114 | 103 | 1269 |
| Type-writing machine | W. J. Barron | 725,919 | Apr. 21 | 2775 | 632 | 103 | 1789 |
| Type-writing machine | J. E. Neahr | 726,560 | Apr. 28 | 3985 | 902, 903 | 103 | 2048 |
| Type-writing machine | C. H. Shepard | 727,001 | May 5 | 353 | 76, 77 | 104 | 76 |
| Type-writing machine | C. H. Shepard | 727,216 | May 5 | 746 | 159, 160 | 104 | 160 |
| Type-writing machine | C. F. Hopkins | 727,951 | May 12 | 2144 | 478 | 104 | 475 |
| Type-writing machine | A. de Cayron | 728,671 | May 19 | 3502 | 778 | 104 | 783 |
| Type-writing machine | P. T. Dodge | 730,520 | June 9 | 1827 | 407 | 104 | 1519 |
| Type-writing machine | H. J. Halle | 731,564 | June 23 | 3764 | 839, 840 | 104 | 1959 |
| Type-writing machine | F. F. Anderson | 731,834 | June 23 | 4262 | 948 | 104 | 2062 |
| Type-writing machine | H. Cross and G. J. Griffiths | 732,340 | June 30 | 5254 | 1166 | 104 | 2282 |
| Type-writing machine | W. C. Farnum | 732,533 | June 30 | 5629 | 1248 | 104 | 2360 |
| Type-writing machine | F. W. Hillard | 732,557 | June 30 | 5676 | 1259, 1260, 1261 | 104 | 2371 |
| Type-writing machine | M. S. Eylar | 732,840 | July 7 | 261 | 65 | 105 | 58 |
| Type-writing machine | L. C. Neff | 733,258 | July 7 | 1000 | 241 | 105 | 209 |
| Type-writing machine | J. L. Cantelo | 734,044 | July 21 | 2474 | 578, 579 | 105 | 555 |
| Type-writing machine | J. J. Green | 735,090 | Aug. 4 | 76 | 20 | 105 | 998 |
| Type-writing machine | J. J. Green | 735,091 | Aug. 4 | 80 | 20 | 105 | 999 |
| Type-writing machine | R. W. Uhlig | 735,179 | Aug. 4 | 264 | 53, 54, 55, 56 | 105 | 1040 |
| Type-writing machine | R. D. Stackpole | 736,646 | Aug. 18 | 3007 | 664 | 105 | 1656 |
| Type-writing machine | C. H. Shepard | 737,163 | Aug. 25 | 3958 | 880 | 105 | 1877 |
| Type-writing machine | R. D. Stackpole | 737,168 | Aug. 25 | 3968 | 882 | 105 | 1879 |
| Type-writing machine | C. H. Shepard | 737,786 | Sept. 1 | 425 | 92 | 106 | 93 |
| Type-writing machine | J. H. Hotson | 738,194 | Sept. 8 | 1298 | 281, 282 | 106 | 296 |
| Type-writing machine | W. J. Barron and H. W. Merritt | 739,576 | Sept. 22 | 3932 | 879, 880 | 106 | 890 |
| Type-writing machine | B. C. Stickney | 739,622 | Sept. 22 | 4012 | 896, 897 | 106 | 906 |
| Type-writing machine | G. F. Stillman | 739,623 | Sept. 22 | 4020 | 897 | 106 | 909 |
| Type-writing machine | C. W. Walker | 739,626 | Sept. 22 | 4026 | 898 | 106 | 910 |
| Type-writing machine | J. Felbel | 740,836 | Oct. 6 | 851 | 190, 191 | 106 | 1427 |
| Type-writing machine | H. W. Merritt | 740,890 | Oct. 6 | 932 | 209 | 106 | 1445 |
| Type-writing machine | E. Thürey | 741,739 | Oct. 20 | 2599 | 578 | 106 | 1835 |
| Type-writing machine | L. S. Burridge | 746,787 | Dec. 15 | 2683 | 619 | 107 | 1718 |
| Type-writing machine | F. K. Camp | 746,788 | Dec. 15 | 2685 | 620 | 107 | 1718 |
| Type-writing machine | A. W. Steiger | 747,259 | Dec. 15 | 3590 | 811, 812 | 107 | 1922 |
| Type-writing machine | C. Gabrielson | 747,545 | Dec. 22 | 4115 | 924 | 107 | 2058 |
| Type-writing machine | L. S. Burridge | 747,589 | Dec. 22 | 4192 | 943 | 107 | 2075 |
| Type-writing machine | C. F. Hopkins | 747,712 | Dec. 22 | 4425 | 996 | 107 | 2128 |
| Type-writing machine | F. W. Hillard | 747,915 | Dec. 22 | 4812 | 1088 | 107 | 2214 |
| Type-writing machine | C. Gabrielson | 748,062 | Dec. 29 | 5136 | 1161 | 107 | 2307 |
| Type-writing machine | C. H. Shepard | 748,111 | Dec. 29 | 5228 | 1185 | 107 | 2327 |
| Type-writing-machine adding attachment | A. C. Schuman | 731,958 | June 23 | 4476 | 999 | 104 | 2109 |
| Type-writing-machine billing-platen | J. A. Smith | 737,877 | Sept. 1 | 647 | 138, 139 | 106 | 142 |
| Type-writing-machine card-controlling attachment | R. K. Slaughter | 724,401 | Mar. 31 | 5200 | 1165, 1166 | 103 | 1145 |
| Type-writing-machine card-holding platen | G. W. Singleton | 731,076 | June 16 | 2836 | 630 | 104 | 1753 |
| Type-writing-machine card or sheet holder | H. J. Halle | 737,735 | Sept. 1 | 329 | 69, 70, 71 | 106 | 75 |
| Type-writing-machine card or sheet holder | H. J. Halle | 737,885 | Sept. 1 | 528 | 116, 117 | 106 | 118 |
| Type-writing-machine card or sheet platen | H. F. Eckert | 737,721 | Sept. 1 | 295 | 62 | 106 | 67 |
| Type-writing-machine carriage | A. K. Williams, Jr. | 743,366 | Nov. 3 | 1085 | 230, 231, 232 | 107 | 230 |
| Type-writing-machine carriage-escapement | G. W. Singleton | 738,365 | Sept. 8 | 1667 | 361 | 106 | 375 |
| Type-writing-machine carriage mechanism | H. Hill | 732,555 | June 30 | 5670 | 1258 | 104 | 2369 |
| Type-writing-machine cleaner | C. H. Reese | 745,238 | Nov. 24 | 4722 | 1031 | 107 | 1049 |
| Type-writing-machine copy-holder | S. L. Engel | 719,205 | Jan. 27 | 3200 | 714 | 102 | 721 |
| Type-writing-machine copy-holder | H. L. Lanphear | 722,365 | Mar. 10 | 1317 | 292 | 103 | 296 |
| Type-writing-machine copy-holder | E. C. Price | 728,613 | May 19 | 3395 | 752 | 104 | 760 |
| Type-writing-machine driving mechanism | H. Hill | 732,556 | June 30 | 5672 | 1259 | 104 | 2370 |
| Type-writing machine. Electrical | W. E. Roberts | 747,485 | Dec. 22 | 4002 | 900, 901 | 107 | 2033 |
| Type-writing machine. Electrically-operated | J. S. Harrison | 718,758 | Jan. 20 | 2360 | 523 | 102 | 532 |
| Type-writing-machine extensible platen | H. J. Halle | 740,426 | Oct. 6 | 78 | 17, 18 | 106 | 1263 |
| Type-writing machine for the blind | H. H. Hodgson | 727,141 | May 5 | 618 | 133 | 104 | 134 |
| Type-writing-machine indicating device | F. X. Wagner | 736,038 | Aug. 11 | 1915 | 408, 409 | 105 | 1409 |
| Type-writing-machine individualized keyboard | H. C. Stanton | 726,107 | Apr. 21 | 3079 | 699 | 103 | 1852 |
| Type-writing machine inking mechanism | R. W. Uhlig | 726,235 | Apr. 21 | 3334 | 757 | 103 | 1903 |
| Type-writing-machine key-action | R. J. Fisher | 727,607 | May 12 | 1458 | 327, 328 | 104 | 332 |
| Type-writing machine. Key-wheel | W. Wendt | 747,105 | Dec. 15 | 3304 | 752 | 107 | 1863 |
| Type-writing-machine line marking-type attachment. | A. B. Vance | 745,935 | Dec. 1 | 1140 | 256 | 107 | 1342 |
| Type-writing-machine margin paper-guide | L. Myers | 738,927 | Sept. 15 | 2756 | 609 | 106 | 623 |
| Type-writing machine paper-clamp | F. W. Hillard | 747,916 | Dec. 22 | 4814 | 1088, 1089 | 107 | 2215 |
| Type-writing machine paper-feeding device | A. A. Hill | 746,631 | Dec. 8 | 2393 | 548 | 107 | 1634 |
| Type-writing machine paper-release device | J. C. McLaughlin | 739,102 | Sept. 15 | 3062 | 679 | 106 | 686 |

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| Type-writing-machine printing or type-bar mechanism. | F. X. Wagner | 731,528 | June 23 | 3703 | 824, 825 | 104 | 1947 |
| Type-writing-machine ribbon feeding and controlling mechanism. | J. A. Smith | 723,936 | Mar. 31 | 4253 | 957, 958 | 103 | 953 |
| Type-writing-machine ribbon-feeding mechanism | W. H. Pike, Jr. | 738,935 | Sept. 15 | 2766 | 612, 613 | 106 | 626 |
| Type-writing-machine ribbon-guide and paper-holder. | R. Koch | 733,851 | July 14 | 2080 | 492 | 105 | 453 |
| Type-writing-machine ribbon guiding, guarding, and shifting mechanism. | C. F. Laganke and J. A. Smith | 723,884 | Mar. 31 | 4139 | 933, 934 | 103 | 928 |
| Type-writing-machine ribbon mechanism | F. X. Wagner | 729,815 | June 2 | 541 | 119 | 104 | 1239 |
| Type-writing-machine ribbon-movement | F. W. Hillard | 747,917 | Dec. 22 | 4818 | 1090, 1091 | 107 | 2216 |
| Type-writing-machine ribbon-reverse mechanism | L. Myers | 739,100 | Sept. 15 | 3058 | 678, 679 | 106 | 685 |
| Type-writing-machine ruling attachment | C. C. W. Peck | 734,937 | July 28 | 4153 | 966 | 105 | 922 |
| Type-writing-machine spacing mechanism | L. Schlesinger | 738,492 | Sept. 8 | 1912 | 418, 419 | 106 | 425 |
| Type-writing-machine tabulating attachment | T. Oliver | 731,386 | June 16 | 3413 | 762, 763 | 104 | 1869 |
| Type-writing-machine tabulating device | F. X. Wagner | 729,457 | May 26 | 4892 | 1084 | 104 | 1086 |
| Type-writing-machine tabulating mechanism | J. A. Smith | 723,937 | Mar. 31 | 4263 | 958, 959 | 103 | 956 |
| Type-writing-machine tabulating mechanism | C. A. Joerissen | 728,170 | May 12 | 2581 | 563, 564 | 104 | 555 |
| Type-writing-machine work clamp or guard | R. J. Fisher | 747,958 | Dec. 29 | 4916 | 1112, 1113 | 107 | 2259 |
| Type-writing-machine work-guard | H. F. Eckert | 747,953 | Dec. 29 | 4906 | 1111 | 107 | 2257 |
| Type-writing or similar machine and apparatus for use in connection therewith. | J. Lagarde | 729,873 | June 2 | 653 | 144 | 104 | 1262 |
| Types, &c. Mechanism for sorting | L. K. Johnson | 747,183 | Dec. 15 | 3443 | 780 | 107 | 1893 |
| Umbrella | C. S. Gurney | 722,229 | Mar. 10 | 1070 | 235 | 103 | 243 |
| Umbrella | J. H. Sprague | 728,035 | May 12 | 2280 | 507 | 104 | 503 |
| Umbrella | J. A. Hollenberger | 728,715 | May 19 | 3575 | 794 | 104 | 799 |
| Umbrella | W. W. Climenson | 735,033 | July 28 | 4327 | 1005 | 105 | 958 |
| Umbrella | J. Clegg | 735,711 | Aug. 11 | 1302 | 279 | 105 | 1275 |
| Umbrella | G. Kaltenecker | 735,776 | Aug. 11 | 1412 | 303 | 105 | 1299 |
| Umbrella | J. Lingel | 738,554 | Sept. 8 | 2030 | 441 | 106 | 452 |
| Umbrella | T. Pachali | 740,988 | Oct. 6 | 1111 | 250 | 106 | 1483 |
| Umbrella | T. Pachali | 740,989 | Oct. 6 | 1112 | 250 | 106 | 1483 |
| Umbrella | B. R. Myers and C. A. Jacoby | 742,049 | Oct. 20 | 3212 | 718 | 106 | 1962 |
| Umbrella | J. F. Flad | 742,177 | Oct. 27 | 3490 | 779 | 106 | 2032 |
| Umbrella | T. W. Ford | 743,476 | Nov. 10 | 1368 | 280 | 107 | 307 |
| Umbrella | W. A. Schonfeld and A. Stenhouse | 744,415 | Nov. 17 | 3178 | 681 | 107 | 709 |
| Umbrella | O. L. Fogle | 748,359 | Dec. 29 | 5652 | 1289 | 107 | 2419 |
| Umbrella and cane rack | C. J. Monfort | 741,811 | Oct. 20 | 2736 | 609 | 106 | 1864 |
| Umbrella attachment | H. P. Ferroussat | 734,311 | July 21 | 3001 | 706, 707 | 105 | 668 |
| Umbrella-cover fastener | W. J. Slyder | 719,269 | Jan. 27 | 3317 | 742 | 102 | 746 |
| Umbrella drip-cup | P. J. Flynn | 722,573 | Mar. 10 | 1709 | 380 | 103 | 383 |
| Umbrella drip-receiver | R. S. Johnson | 739,494 | Sept. 22 | 3785 | 847 | 106 | 859 |
| Umbrella. Folding | W. L. McComb | 739,437 | Sept. 22 | 3695 | 822 | 106 | 839 |
| Umbrella. Folding | M. B. Burgess | 744,476 | Nov. 17 | 3288 | 706 | 107 | 732 |
| Umbrella-geat | R. Reininger | 732,781 | July 7 | 151 | 40 | 105 | 36 |
| Umbrella-geat | J. Rose | 732,782 | July 7 | 153 | 40 | 105 | 37 |
| Umbrella-handle | L. Sievert | 730,577 | June 9 | 1928 | 428 | 104 | 1542 |
| Umbrella-handle. Adjustable | F. M. Sears | 721,331 | Feb. 24 | 3610 | 820 | 102 | 1633 |
| Umbrella-holder | R. E. Bradbury | 735,454 | Aug. 4 | 809 | 172 | 105 | 1152 |
| Umbrella notch-piece | C. H. Schaeffer | 719,144 | Jan. 27 | 3101 | 689 | 102 | 700 |
| Umbrella rib and stretcher-joint | A. S. Venen | 720,537 | Feb. 10 | 2081 | 480 | 102 | 1276 |
| Umbrella runner and holder | J. H. Shepherd | 737,787 | Sept. 1 | 431 | 92 | 106 | 95 |
| Umbrella-stand | G. D. Hinman | 733,963 | July 21 | 2306 | 542 | 105 | 519 |
| Umbrella-stand lock | W. Holl | 739,180 | Sept. 15 | 3193 | 706 | 106 | 714 |
| Umbrella-stick | J. Rose | 741,978 | Oct. 20 | 3072 | 686 | 106 | 1933 |
| Umbrella-support | W. M. Feazell | 736,373 | Aug. 18 | 2489 | 547 | 105 | 1550 |
| Umbrella-tip | J. M. Laube | 748,082 | Dec. 29 | 5171 | 1169 | 107 | 2315 |
| Uncoupling device. Automatic safety | J. T. Lindqvist | 746,535 | Dec. 8 | 2219 | 509 | 107 | 1594 |
| Underclothing | C. M. and J. E. Mackenzie | 746,349 | Dec. 8 | 1906 | 436 | 107 | 1525 |
| Underdrawers | A. G. Velasko | 747,809 | Dec. 22 | 4607 | 1039 | 107 | 2169 |
| Undergarment | A. G. Velasko | 744,885 | Nov. 24 | 4019 | 867 | 107 | 904 |
| Undergarment | G. A. Frisbie | 746,060 | Dec. 8 | 1379 | 308, 309 | 107 | 1412 |
| Undergarment. Union | J. Pennington | 723,913 | Mar. 31 | 4203 | 946, 947 | 103 | 943 |
| Underwaist | E. H. Horwood | 727,367 | May 5 | 1016 | 221 | 104 | 219 |
| Undercut gate | F. V. Hetzel | 720,428 | Feb. 10 | 1871 | 425, 426 | 102 | 1235 |
| Undercutter | J. Pierce | 747,083 | Dec. 15 | 3265 | 743 | 107 | 1853 |
| Underreamer | E. Strickland | 730,415 | June 9 | 1618 | 362, 363 | 104 | 1474 |
| Underreamer | E. Double | 734,833 | July 28 | 3980 | 930, 931 | 105 | 886 |
| Underreamer | E. Double | 748,054 | Dec. 29 | 5118 | 1156, 1157 | 107 | 2302 |
| Universal coupling | H. B. Brazier | 730,604 | June 9 | 1974 | 439 | 104 | 1552 |
| Universal joint | F. E. Bocorselski | 719,411 | Jan. 27 | 3601 | 806 | 102 | 807 |
| Universal joint | A. Poidatz | 731,495 | June 23 | 3634 | 811 | 104 | 1933 |
| Universal joint | F. E. Bocorselski | 739,642 | Sept. 22 | 4055 | 905 | 106 | 916 |
| Universal joint Double | H. D. Williams | 724,068 | Mar. 31 | 4516 | 1017 | 103 | 1005 |
| Universal joint or shaft-coupling | W. O. Worth | 734,490 | July 21 | 3306 | 776 | 105 | 730 |
| Unloading apparatus | C. Campbell | 725,406 | Apr. 14 | 1823 | 408 | 103 | 1570 |
| Unloading apparatus | C. P. Martin | 742,125 | Oct. 20 | 3391 | 757 | 106 | 1996 |
| Unloading device | T. S. Miller | 721,317 | Feb. 24 | 3578 | 814 | 102 | 1627 |
| Unloading vehicles, &c. Mechanism for | V. R. Browning | 720,557 | Feb. 17 | 2133 | 493 | 102 | 1304 |
| Upholstering device | J. L. Heffner | 743,505 | Nov. 10 | 1425 | 298 | 107 | 321 |
| Upholstering-machine | D. W. Hyman and C. D. Orcutt | 721,804 | Mar. 3 | 265 | 59 | 103 | 59 |

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| Upholstery-spring | F. P. O'Brien | 720,956 | Feb. 17 | 2862 | 654 | 102 | 1456 |
| Upholstery-spring | W. K. Parker | 728,496 | May 19 | 3155 | 698 | 104 | 709 |
| Upholstery-spring support | A. Hirsh | 748,072 | Dec. 20 | 5154 | 1166 | 107 | 2311 |
| Upholstery-spring support | A. Hirsh | 748,073 | Dec. 29 | 5156 | 1166 | 107 | 2312 |
| Upright boiler | C. R. Smith | 738,853 | Sept. 15 | 2629 | 580 | 106 | 596 |
| Upsetting-machine | R. G. Beker | 733,898 | July 14 | 2161 | 510 | 105 | 471 |
| Urinal flushing and ventilating apparatus | J. Le Reau, dit L'Heureux | 743,528 | Nov. 10 | 1470 | 307 | 107 | 331 |
| Urinal. Sanitary | J. Seidel | 741,173 | Oct. 13 | 1457 | 331 | 106 | 1576 |
| Urinal-trap | J. H. Brady | 730,227 | June 9 | 1279 | 283 | 104 | 1403 |
| Vaccinating-needle | O. Thomas | 724,522 | Apr. 7 | 192 | 47 | 103 | 1210 |
| Vaccination or other tumors. Shield for | E. S. Oliver | 728,493 | May 19 | 3151 | 697 | 104 | 708 |
| Vaccination-shield | R. W. Johnson | 720,812 | Feb. 17 | 2590 | 598 | 102 | 1398 |
| Vaccine and preparing same | L. R. Parsons | 737,656 | Sept. 1 | 181 | | 106 | 42 |
| Vaccine-shield | A. B. Dorman | 729,293 | May 26 | 4626 | 1023 | 104 | 1030 |
| Vaccine-tube | W. H. Chandler | 741,886 | Oct. 20 | 2867 | 640 | 106 | 1892 |
| Vacuum-pan | J. Lang, M. Blake, and R. H. Smart | 722,519 | Mar. 10 | 1616 | 357 | 103 | 363 |
| Vacuum-pan | E. Passburg | 726,742 | Apr. 28 | 4329 | 976 | 103 | 2120 |
| Vacuum-pan | N. Gerber | 734,228 | July 21 | 2826 | 663 | 105 | 632 |
| Vacuum-pan | E. N. Trump | 743,351 | Nov. 3 | 1042 | 224 | 107 | 221 |
| Vacuum-pan drum | M. Ekenberg | 727,317 | May 5 | 921 | 200 | 104 | 198 |
| Vacuum. System for production of | F. Fanta | 719,772 | Feb. 3 | 666 | 153, 154 | 102 | 963 |
| Vacuum-tube. Adjustable | M. H. Branin | 732,823 | July 7 | 233 | 59 | 105 | 52 |
| Vacuumizing and double-seaming machine | E. Norton and J. G. Hodgson | 727,675 | May 12 | 1599 | 362, 363, 364, 365 | 104 | 361 |
| Vacuumizing and double-seaming machine | E. Norton | 737,009 | Aug. 25 | 3706 | 822, 823 | 105 | 1823 |
| Valve | H. Ritter | 717,927 | Jan. 6 | 771 | 173 | 102 | 165 |
| Valve | J. S. Stevens | 719,528 | Feb. 3 | 205 | 48 | 102 | 867 |
| Valve | H. M. Ware | 719,539 | Feb. 3 | 224 | 52 | 102 | 870 |
| Valve | F. E. Collins | 719,750 | Feb. 3 | 619 | 139 | 102 | 952 |
| Valve | W. J. Poole | 720,477 | Feb. 10 | 1952 | 446 | 102 | 1251 |
| Valve | J. N. Sanborn | 721,748 | Mar. 3 | 165 | 38 | 103 | 37 |
| Valve | F. Palm | 722,322 | Mar. 10 | 1239 | 276 | 103 | 280 |
| Valve | E. Deruntz | 723,445 | Mar. 24 | 3336 | 748 | 103 | 745 |
| Valve | E. H. Foster | 724,000 | Mar. 31 | 4399 | 988 | 103 | 982 |
| Valve | H. F. Shaw | 724,212 | Mar. 31 | 4812 | 1078, 1079 | 103 | 1065 |
| Valve | T. A. Knickerbacker | 724,887 | Apr. 7 | 872 | 200 | 103 | 1355 |
| Valve | C. E. Tetley and N. Petersen | 725,378 | Apr. 14 | 1767 | 397 | 103 | 1559 |
| Valve | W. N. Wemmer | 725,640 | Apr. 14 | 2276 | 514 | 103 | 1667 |
| Valve | J. Rothchild | 726,575 | Apr. 28 | 4024 | 910 | 103 | 2056 |
| Valve | W. P. Wallis, Jr., and G. G. Straub | 727,236 | May 5 | 779 | 167 | 104 | 168 |
| Valve | F. Strnad | 727,484 | May 5 | 1228 | 272, 273 | 104 | 265 |
| Valve | A. S. Tuttle | 728,336 | May 19 | 2878 | 635 | 104 | 651 |
| Valve | W. G. Wilson | 729,027 | May 26 | 4148 | 919 | 104 | 931 |
| Valve | N. P. Pratt | 730,796 | June 9 | 2292 | 509 | 104 | 1620 |
| Valve | F. L. Waaser | 730,988 | June 16 | 2671 | 595 | 104 | 1719 |
| Valve | R. A. Quin | 731,220 | June 16 | 3101 | 688 | 104 | 1804 |
| Valve | E. Walther | 732,669 | June 30 | 5882 | 1305 | 104 | 2415 |
| Valve | W. W. Spinney | 733,758 | July 14 | 1885 | 445 | 105 | 415 |
| Valve | C. E. Mack | 734,186 | July 21 | 2749 | 645 | 105 | 614 |
| Valve | W. C. McKeown | 734,351 | July 21 | 3064 | 722 | 105 | 682 |
| Valve | J. O'Meara | 735,039 | July 28 | 4339 | 1008 | 105 | 960 |
| Valve | P. Settino | 735,162 | Aug. 4 | 222 | 45 | 105 | 1030 |
| Valve | L. N. Davis | 735,719 | Aug. 11 | 1313 | 282 | 105 | 1278 |
| Valve | W. Cooper | 735,950 | Aug. 11 | 1743 | 373 | 105 | 1372 |
| Valve | O. M. Jones | 737,414 | Aug. 25 | 4457 | 1000 | 105 | 1983 |
| Valve | J. B. Waring | 737,681 | Sept. 1 | 223 | 48 | 106 | 51 |
| Valve | H. J. Schmitt | 738,362 | Sept. 8 | 1663 | 360 | 106 | 374 |
| Valve | S. H. Moore | 739,334 | Sept. 22 | 3476 | 776 | 106 | 791 |
| Valve | F. Mertsheimer | 740,157 | Sept. 29 | 5027 | 1129, 1130 | 106 | 1141 |
| Valve | J. B. Waring | 740,494 | Oct. 6 | 216 | 43 | 106 | 1292 |
| Valve | W. F. Singer | 740,704 | Oct. 6 | 586 | 131 | 106 | 1373 |
| Valve | J. H. Clune | 740,807 | Oct. 6 | 797 | 179 | 106 | 1415 |
| Valve | L. W. Neubling | 741,267 | Oct. 13 | 1642 | 370 | 106 | 1616 |
| Valve | J. Erwood | 741,641 | Oct. 20 | 2406 | 539 | 106 | 1795 |
| Valve | C. E. Huxley | 743,511 | Nov. 10 | 1437 | 301 | 107 | 323 |
| Valve | J. F. McElroy | 743,745 | Nov. 10 | 1861 | 393 | 107 | 414 |
| Valve | C. W. A. Koelkebeck | 743,985 | Nov. 10 | 2315 | 495 | 107 | 514 |
| Valve | L. and J. S. Swenson | 744,433 | Nov. 17 | 3209 | 688 | 107 | 716 |
| Valve | A. C. Fambrough | 745,099 | Nov. 24 | 4456 | 964 | 107 | 994 |
| Valve | W. Kuhlmann | 745,501 | Dec. 1 | 358 | 83 | 107 | 1176 |
| Valve | E. B. Hack | 745,827 | Dec. 1 | 946 | 212 | 107 | 1301 |
| Valve | S. Mertens | 746,545 | Dec. 8 | 2235 | 512, 513 | 107 | 1598 |
| Valve | A. Sharp | 746,884 | Dec. 15 | 2878 | 665 | 107 | 1763 |
| Valve | L. O. Goodwin | 746,955 | Dec. 15 | 3027 | 694 | 107 | 1797 |
| Valve | W. Wright | 747,339 | Dec. 15 | 3752 | 845 | 107 | 1959 |
| Valve | J. W. Nethery | 747,468 | Dec. 22 | 3974 | 894 | 107 | 2025 |
| Valve | J. E. Kordick and E. Sulgrove | 747,982 | Dec. 29 | 4974 | 1123 | 107 | 2272 |
| Valve | J. Knowles | 748,192 | Dec. 29 | 5373 | 1221, 1222 | 107 | 2358 |
| Valve. Acid- | J. Koch | 740,762 | Oct. 6 | 718 | 161 | 106 | 1399 |
| Valve. Adjustable rotary | J. Pearce | 728,808 | May 19 | 3748 | 836 | 104 | 833 |
| Valve. Air- | G. Schneider | 728,810 | May 19 | 3752 | 837 | 104 | 834 |
| Valve. Air-brake-system controlling- | W. F. Kneh | 733,051 | July 7 | 618 | 151 | 105 | 132 |
| Valve. Air-inlet | H. S. Renton | 718,657 | Jan. 20 | 2165 | 474 | 102 | 493 |
| Valve. Alarm safety- | L. Robison and J. Shafer | 722,047 | Mar. 3 | 728 | 162 | 103 | 157 |
| Valve and brake system. Check- | P. Whiting | 723,709 | Mar. 24 | 3912 | 880, 881 | 103 | 865 |
| Valve and door. Gate- | L. P. Lowe | 744,214 | Nov. 17 | 2816 | 601 | 107 | 630 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Valve and faucet-coupling. Bushing- | B. C. Anderson | 725,912 | Apr. 21 | 2766 | 630 | 103 | 1787 |
| Valve and faucet-coupling. Bushing- | B. C. Anderson | 725,913 | Apr. 21 | 2768 | 630 | 103 | 1788 |
| Valve and igniter. Combined exhaust- | J. Tracy | 722,544 | Mar. 10 | 1654 | 364 | 103 | 371 |
| Valve and igniting gear for explosive or internal-combustion engines. | F. M. Rites | 741,164 | Oct. 13 | 1435 | 328 | 106 | 1571 |
| Valve and igniting gear for explosive or internal-combustion engines. | F. M. Rites | 741,165 | Oct. 13 | 1438 | 328<br>329 | 106 | 1572 |
| Valve and implement for attaching same. Detachable | R. W. Sampson | 736,025 | Aug. 11 | 1889 | 404 | 105 | 1403 |
| Valve and means for actuating same | E. Morterud | 732,879 | July 7 | 327 | 81 | 105 | 72 |
| Valve and operating means | C. H. Peck | 727,430 | May 5 | 1128 | 248 | 104 | 243 |
| Valve and operating means | F. J. Platt and J. Ratchford | 746,149 | Dec. 8 | 1538 | 344 | 107 | 1449 |
| Valve and system. Alarm | E. L. Thompson | 743,049 | Nov. 3 | 440 | 96 | 107 | 92 |
| Valve and valve-operating mechanism | C. E. Cook | 722,832 | Mar. 31 | 4038 | 912 | 103 | 906 |
| Valve and valve-seat | W. S. McLeod | 730,559 | June 9 | 1885 | 421 | 104 | 1532 |
| Valve. Antifreezing compression- | P. Haas | 720,022 | Feb. 10 | 1122 | 256<br>257 | 102 | 1078 |
| Valve arrangement for locomotive or other engines. Relief- | A. Spencer | 720,499 | Feb. 10 | 1987 | 454<br>455<br>456<br>457 | 102 | 1258 |
| Valve arrangement for steam-engine cylinders. Slide- | A. J. Balkwill | 746,776 | Dec. 15 | 2667 | 615<br>616 | 107 | 1714 |
| Valve attachment for oil-cans. Automatic | E. A. Young | 733,109 | July 7 | 731 | 178 | 105 | 155 |
| Valve. Automatic | C. B. Shaw | 746,393 | Dec. 8 | 1977 | 451<br>452 | 107 | 1541 |
| Valve. Automatic | A. L. Richards | 747,769 | Dec. 22 | 4525 | 1020 | 107 | 2151 |
| Valve. Automatic choke- | F. W. Edwards | 726,414 | Apr. 28 | 3682 | 835 | 103 | 1991 |
| Valve. Automatic choke- | F. W. Edwards | 726,415 | Apr. 28 | 3684 | 835 | 103 | 1992 |
| Valve. Automatic choke- | F. W. Edwards | 735,074 | Aug. 4 | 44 | 13 | 105 | 991 |
| Valve. Automatic closing- | J. Knoche | 735,671 | Aug. 4 | 1216 | 258 | 105 | 1239 |
| Valve. Automatic dry-pipe | L. D. Chandler | 725,541 | Apr. 14 | 2085 | 472 | 103 | 1626 |
| Valve. Automatic expansion-controlling | E. F. Osborne | 740,170 | Sept. 29 | 5055 | 1137 | 106 | 1147 |
| Valve. Automatic flushing- | C. and F. A. Schossow | 720,965 | June 2 | 818 | 183 | 104 | 1294 |
| Valve. Automatic oil feed and check | B. Ivor and J. S. Ward | 723,211 | Mar. 17 | 2894 | 649 | 103 | 643 |
| Valve. Automatic self-balancing | T. M. Henderson | 731,363 | June 16 | 3357 | 751 | 104 | 1857 |
| Valve. Automatic shut-off | N. C. Locke | 746,640 | Dec. 8 | 2413 | 551<br>552 | 107 | 1639 |
| Valve. Automatic telescope- | H. B. Sæter | 745,527 | Dec. 1 | 401 | 92 | 107 | 1184 |
| Valve. Back-pressure relief- | C. A. Cunningham | 747,238 | Dec. 22 | 4104 | 921 | 107 | 2055 |
| Valve. Balanced | S. Martin | 722,733 | Mar. 17 | 2025 | 453 | 103 | 464 |
| Valve. Balanced | D. C. Prescott | 730,099 | June 9 | 2142 | 476 | 104 | 1588 |
| Valve. Balanced slide- | J. Clayton | 721,356 | Feb. 24 | 3655 | 832 | 102 | 1642 |
| Valve. Balanced slide- | J. T. Wilson | 724,363 | Mar. 31 | 5112 | 1144<br>1145 | 103 | 1125 |
| Valve. Balanced slide- | G. A. Janicke | 725,255 | Apr. 14 | 1555 | 353 | 103 | 1514 |
| Valve. Balanced slide- | J. T. Wilson | 730,428 | June 9 | 1645 | 368<br>369 | 104 | 1480 |
| Valve. Balanced slide- | B. W. Schenebeck | 742,501 | Oct. 27 | 4088 | 919<br>920 | 106 | 2156 |
| Valve. Balanced slide- | G. L. Wackerow | 747,023 | Dec. 15 | 3145 | 720 | 107 | 1824 |
| Valve. Blow-off | E. H. Lunken | 721,453 | Feb. 24 | 3831 | 871 | 102 | 1678 |
| Valve. Bottle- | J. H. Dieringer and C. L. Du Rocher | 744,504 | Nov. 17 | 3336 | 718 | 107 | 743 |
| Valve. Brake- | F. E. Schmitt and L. E. Moore | 733,429 | July 14 | 1316 | 311 | 105 | 295 |
| Valve. Bucket-bottom | W. F. Norman and J. H. Berghauser. | 724,605 | Apr. 7 | 349 | 85 | 103 | 1244 |
| Valve-bushing | J. A. McMillen | 739,614 | Sept. 22 | 4000 | 892 | 106 | 903 |
| Valve. Check- | W. B. M. Bashlin | 720,100 | Feb. 10 | 1281 | 293 | 102 | 1112 |
| Valve. Check- | W. J. Taube | 745,742 | Dec. 1 | 763 | 174 | 107 | 1261 |
| Valve. Collapsible piston- | W. G. Sinnamon | 723,052 | Mar. 17 | 2589 | 584 | 103 | 580 |
| Valve. Combined hand and automatic shut-off | N. C. Locke | 740,882 | Oct. 6 | 918 | 206 | 106 | 1442 |
| Valve construction | L. Schutte | 740,186 | Sept. 29 | 5082 | 1142 | 106 | 1153 |
| Valve controller. Cut-off- | G. H. Clover | 717,812 | Jan. 6 | 557 | 124<br>125 | 102 | 120 |
| Valve. Controlling- | T. Reuter | 732,588 | June 30 | 5734 | 1273 | 104 | 2384 |
| Valve-controlling apparatus. Electromagnetic | I. G. Waterman | 724,528 | Apr. 7 | 204 | 50 | 103 | 1213 |
| Valve-coupling. Air-brake train-pipe | A. Oleson | 729,790 | June 2 | 490 | 109 | 104 | 1228 |
| Valve-cushioning device. Steam- | L. D. Lovekin | 731,193 | June 16 | 3059 | 679 | 104 | 1795 |
| Valve. Cut-off | J. W. Melling | 742,703 | Oct. 27 | 4450 | 1005<br>1006 | 106 | 2233 |
| Valve. Cut-out or isolating | I. Mayer and J. Hübner | 745,874 | Dec. 1 | 1041 | 235 | 107 | 1321 |
| Valve. Cylinder- | P. Whiting | 723,768 | Mar. 24 | 3911 | 880 | 103 | 864 |
| Valve. Cylinder relief- | M. R. Zehnder | 725,015 | Apr. 7 | 1107 | 251<br>252 | 103 | 1405 |
| Valve. Cylinder relief- | A. J. G. E. Berg | 730,085 | June 2 | 1021 | 228 | 104 | 1335 |
| Valve. Cylinder relief- | C. L. Presnell | 741,828 | Oct. 20 | 2761 | 615 | 106 | 1870 |
| Valve device | C. J. Diederich | 735,831 | July 28 | 3977 | 930 | 105 | 885 |
| Valve device | C. H. Watters | 743,356 | Nov. 3 | 1056 | 226 | 107 | 225 |
| Valve. Differential high-pressure direct-pass | O. Abeling | 723,803 | Mar. 31 | 3977 | 897 | 103 | 895 |
| Valve-disks. Tool-holder for machines for cutting. | F. L. Smith | 738,854 | Sept. 15 | 2629 | 580 | 106 | 596 |
| Valve. Drain- | C. A. Dunham | 735,733 | Aug. 11 | 1333 | 288 | 105 | 1281 |
| Valve-dressing tool | J. T. Fuhrmann | 722,222 | Mar. 10 | 1058 | 232 | 103 | 241 |
| Valve. Dry | J. K. S. Ray and W. D. McNeill | 719,259 | Jan. 27 | 3302 | 739 | 102 | 742 |
| Valve. Dry-pipe | C. B. Garrett | 723,264 | Mar. 24 | 2995 | 673 | 103 | 677 |
| Valve. Dry-pipe | P. Evans | 731,877 | June 23 | 4330 | 967 | 104 | 2077 |
| Valve. Dry-pipe | F. H. Rice | 740,467 | Oct. 6 | 162 | 32 | 106 | 1280 |
| Valve. Electrically-controlled | O. Junggren | 746,337 | Dec. 8 | 1882 | 429 | 107 | 1520 |
| Valve. Electrohydraulic | C. Engberg and J. Erickson | 719,768 | Feb. 3 | 657 | 151 | 102 | 961 |
| Valve. Electropneumatic | F. L. Dodgson | 733,315 | July 7 | 1098 | 262 | 105 | 231 |
| Valve. Engine- | F. H. Sleeper | 725,885 | Apr. 21 | 2720 | 619 | 103 | 1778 |
| Valve. Engine- | M. W. Hibbard and W. S. Barrows | 726,919 | May 5 | 157 | 38 | 104 | 36 |
| Valve. Engine- | O. M. Carlton | 731,161 | June 16 | 3003 | 666 | 104 | 1785 |
| Valve. Engine- | O. W. Young | 740,729 | Oct. 6 | 636 | 143<br>144 | 106 | 1384 |
| Valve. Engine reversing- | R. S. Furman | 744,062 | Nov. 17 | 2506 | 537 | 107 | 563 |
| Valve. Engineer's | W. H. Nightingale | 743,022 | Nov. 3 | 392 | 85 | 107 | 82 |

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| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Valve. Engineer's air-brake-controlling | J. Lipkowski | 724,302 | Mar. 31 | 5000 | 1119 | 103 | 1102 |
| Valve. Engineer's brake- | R. C. Augur and H. F. Bickel | 725,020 | Apr. 14 | 1119 | 253, 254 | 103 | 1426 |
| Valve. Engineer's brake- | M. Corrington | 729,044 | May 26 | 4178 | 924, 925 | 104 | 937 |
| Valve. Engineer's brake- | P. Ackermann | 745,983 | Dec. 8 | 1235 | 279 | 107 | 1381 |
| Valve. Equalizing and by-pass | E. Sarver | 736,302 | Aug. 11 | 2369 | 515 | 105 | 1508 |
| Valve. Equalizing-discharge brake- | G. H. Fraser and J. N. Weikly | 729,153 | May 26 | 4370 | 964 | 104 | 975 |
| Valve. Exhaust relief- | F. McCarthy | 737,446 | Aug. 25 | 4517 | 1012, 1013 | 105 | 1995 |
| Valve. Explosion-engine mixing- | M. Pivert | 724,328 | Mar. 31 | 5048 | 1130 | 103 | 1112 |
| Valve. Explosive-engine starting- | H. M. McCall | 718,574 | Jan. 13 | 2014 | 439 | 102 | 448 |
| Valve-extractor | C. Goodrich | 722,694 | Mar. 17 | 1966 | 439 | 103 | 452 |
| Valve. Filling- | A. Schneider | 717,628 | Jan. 6 | 190 | 48 | 102 | 41 |
| Valve. Filling- | A. Schneider | 728,307 | May 19 | 2814 | 623 | 104 | 638 |
| Valve-float | B. F. Lockwood | 726,317 | Apr. 28 | 3514 | 796 | 103 | 1956 |
| Valve. Float- | E. Benson | 740,515 | Oct. 6 | 260 | 52 | 106 | 1302 |
| Valve. Float- | T. L. Valerius | 742,758 | Oct. 27 | 4536 | 1028 | 106 | 2252 |
| Valve. Float-controlled | A. Caron | 721,938 | Mar. 3 | 538 | 118 | 103 | 119 |
| Valve. Float-operated | J. W. Keddington | 741,343 | Oct. 13 | 1837 | 406 | 106 | 1659 |
| Valve. Fluid-compressor | F. D. Holdsworth | 744,916 | Nov. 24 | 4071 | 877 | 107 | 915 |
| Valve. Fluid-controlling | G. C. Savage | 732,010 | June 23 | 4598 | 1026 | 104 | 2133 |
| Valve. Fluid-pressure-engine rotating | W. and J. Vivian | 725,516 | Apr. 14 | 2037 | 461 | 103 | 1616 |
| Valve. Fluid-pressure-regulating | J. L. Chapman | 718,694 | Jan. 20 | 2240 | 490 | 102 | 507 |
| Valve. Flush- | C. W. Lendh | 743,895 | Nov. 10 | 2143 | 461 | 107 | 472 |
| Valve. Flush- | L. T. Dery | 746,044 | Dec. 8 | 1350 | 302 | 107 | 1406 |
| Valve. Flush-tank | W. Taylor | 727,491 | May 5 | 1239 | 275 | 104 | 267 |
| Valve. Flushing- | L. B. Smith | 718,225 | Jan. 13 | 1309 | 289, 290 | 102 | 296 |
| Valve. Flushing- | H. Wehner | 727,240 | May 5 | 785 | 168 | 104 | 169 |
| Valve. Foot- | J. C. Loucks | 743,006 | Nov. 3 | 357 | 77 | 107 | 75 |
| Valve for air-brakes. Motorman's | J. Shourek | 740,375 | Sept. 29 | 5434 | 1222, 1223 | 106 | 1225 |
| Valve for air-brakes. Triple | N. A. Christensen | 718,911 | Jan. 20 | 2642 | 592, 593 | 102 | 591 |
| Valve for air-brakes. Triple | D. M. Robinson | 737,022 | Aug. 25 | 3730 | 828 | 105 | 1829 |
| Valve for barrels, &c. Double-acting combination-lock | W. H. Baker | 743,134 | Nov. 3 | 606 | 131 | 107 | 126 |
| Valve for beer-vats. Double-acting | J. H. Schmahl and A. Zimmermann | 725,782 | Apr. 21 | 2541 | 577 | 103 | 1740 |
| Valve for boiler and pump connections | F. A. Reynolds | 737,273 | Aug. 25 | 4185 | 932 | 105 | 1923 |
| Valve for boilers. Combined filling and blow-off | W. H. Davis | 734,675 | July 28 | 3653 | 857 | 105 | 820 |
| Valve for compressed-air motors. Reversing- | J. Keller | 722,179 | Mar. 3 | 957 | 212 | 103 | 202 |
| Valve for explosive-engines. Vaporizing- | W. Readle | 726,191 | Apr. 21 | 3254 | 739 | 103 | 1887 |
| Valve for hot-water systems. Check- | J. J. Lawler | 723,286 | Mar. 24 | 3032 | 682 | 103 | 685 |
| Valve for hydraulic air-compressors | J. C. Schneider | 741,172 | Oct. 13 | 1456 | 331 | 106 | 1575 |
| Valve for hydraulic engines or machinery | A. Patterson | 738,730 | Sept. 8 | 2359 | 518 | 106 | 520 |
| Valve for hydraulic engines or machinery | A. Patterson | 738,731 | Sept. 8 | 2360 | 518 | 106 | 520 |
| Valve for hydraulic engines or machinery | A. Patterson | 738,732 | Sept. 8 | 2361 | 519 | 106 | 520 |
| Valve for hydraulic machinery | A. Patterson | 738,697 | Sept. 8 | 2313 | 508 | 106 | 510 |
| Valve for hydraulic rams. Compensating | P. B. Clarke | 722,676 | Mar. 17 | 1929 | 429, 430 | 103 | 445 |
| Valve for hydraulic speed-regulators. Distributing- | R. Thomann | 734,285 | July 21 | 2947 | 688 | 105 | 658 |
| Valve for rain conductor-pipes. Automatic gate- | J. Keller | 725,451 | Apr. 14 | 1914 | 428 | 103 | 1590 |
| Valve for regenerative furnaces. Water-sealed reversing- | H. Prentice and F. J. Deemer | 738,236 | Sept. 8 | 1366 | 296, 297 | 106 | 311 |
| Valve for sanitary apparatus. Flushing- | N. Curtis | 748,265 | Dec. 29 | 5503 | 1254 | 107 | 2387 |
| Valve for syringes, atomizers, &c | S. Schwerin | 723,042 | Mar. 17 | 2566 | 577 | 103 | 575 |
| Valve for tank-cars, &c. Discharge- | C. O. Rowley | 723,409 | Mar. 24 | 3275 | 734 | 103 | 731 |
| Valve for traps. Back-pressure | W. R. Bonnell | 729,996 | June 2 | 877 | 195 | 104 | 1306 |
| Valve for valves and fire-hydrants. Automatic drain- | W. W. Corey. (Reissue) | 12,123 | June 16 | 3484 | 778 | 104 | 1883 |
| Valve for water-heaters | L. A. Krah | 737,744 | Sept. 1 | 349 | 73 | 106 | 79 |
| Valve for water-heaters. Automatic | G. A. Mentel and J. B. Paul | 733,861 | July 14 | 2098 | 495 | 105 | 457 |
| Valve for water-heaters. Gas and water regulating | J. W. and G. H. Ewart | 743,846 | Nov. 10 | 2048 | 435 | 107 | 453 |
| Valve. Gas-engine | E. E. Arnold | 718,299 | Jan. 13 | 1448 | 322 | 102 | 327 |
| Valve. Gas-engine | L. F. Burger | 722,672 | Mar. 17 | 1922 | 427 | 103 | 443 |
| Valve. Gas-engine rotary | S. H. Dyer | 727,917 | May 12 | 2080 | 462 | 104 | 462 |
| Valve. Gas or other pipe | E. S. Root and C. S. Demarest | 727,205 | May 5 | 715 | 153 | 104 | 155 |
| Valve. Gate- | J. A. Anderson | 723,974 | Mar. 31 | 4333 | 972 | 103 | 970 |
| Valve. Gate- | A. Smith | 724,346 | Mar. 31 | 5083 | 1138 | 103 | 1118 |
| Valve. Gate- | O. B. Kaiser | 726,434 | Apr. 28 | 3720 | 843 | 103 | 1998 |
| Valve. Gate- | S. S. Jacobsen | 729,181 | May 26 | 4416 | 974 | 104 | 986 |
| Valve. Gate- | S. S. Jacobsen | 729,766 | June 2 | 449 | 101 | 104 | 1219 |
| Valve-gate | M. La Londe | 729,609 | June 2 | 156 | 37 | 104 | 1159 |
| Valve-gear | F. Feldhaus | 721,790 | Mar. 3 | 243 | 54 | 103 | 54 |
| Valve-gear | G. Howard and G. Gibbs | 724,291 | Mar. 31 | 4979 | 1115 | 103 | 1098 |
| Valve-gear | J. T. Fenton | 729,313 | May 26 | 4653 | 1028 | 104 | 1035 |
| Valve-gear | P. S. Bostwick | 729,998 | June 2 | 882 | 197 | 104 | 1307 |
| Valve-gear | H. Lentz | 732,570 | June 30 | 5704 | 1267 | 104 | 2377 |
| Valve-gear | F. W. Jarvis | 744,202 | Nov. 17 | 2793 | 596, 597, 598 | 107 | 624 |
| Valve-gear | F. A. Neuhaus and M. Hochwald | 745,231 | Nov. 24 | 4708 | 1027, 1028 | 107 | 1046 |
| Valve-gear. Cut-off | J. F. Van Tuyl | 729,244 | May 26 | 4533 | 998 | 104 | 1009 |
| Valve-gear. Engine | A. D. Baker | 721,994 | Mar. 3 | 641 | 142 | 103 | 139 |
| Valve-gear. Explosive-engine | A. Krebs | 733,220 | July 7 | 926 | 223 | 105 | 193 |
| Valve-gear. Explosive-engine | W. H. Jones | 734,562 | July 28 | 3444 | 803, 804 | 105 | 777 |
| Valve-gear. Explosive-engine | G. W. Starr and J. H. Cogswell | 741,848 | Oct. 20 | 2796 | 622 | 106 | 1878 |
| Valve-gear. Explosive-engine | W. J. McVicker | 743,915 | Nov. 10 | 2169 | 468 | 107 | 478 |
| Valve-gear. [illegible] | E. P. Coleman | 733,157 | July 7 | 807 | 195 | 105 | 170 |
| Valve-gear. Fluid-compressor | F. M. Rites | 746,745 | Dec. 15 | 2605 | 599 | 107 | 1702 |
| Valve-gear for compound locomotive-engines | W. M. Smith | 736,889 | Aug. 18 | 3475 | 772 | 105 | 1754 |

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| | | | | Spec. | Dr'g. | Vol. | Page. |
| Valve-gear for explosive and internal-combustion engines. | F. M. Rites | 741,977 | Oct. 20 | 3069 | 686 | 106 | 1932 |
| Valve-gear for explosive or internal-combustion engines. | F. M. Rites | 741,166 | Oct. 13 | 1443 | 329 | 106 | 1573 |
| Valve-gear for fluid-operated motors | H. B. Watson and T. C. Billetop | 727,515 | May 5 | 1281 | 285<br>286 | 104 | 276 |
| Valve-gear for hydrocarbon traction-engines | F. A. and H. F. Klocksiem | 748,509 | Dec. 29 | 5951 | 1350 | 107 | 2485 |
| Valve-gear for motive-fluid engines. Trip-expansion | G. Thornley | 733,686 | July 14 | 1752 | 415 | 105 | 386 |
| Valve-gear. Gas-engine | J. C. White | 718,064 | Jan. 6 | 1013 | 226 | 102 | 218 |
| Valve gear. Reversing- | A. B. Brown | 743,615 | Nov. 10 | 1648 | 345<br>346 | 107 | 368 |
| Valve-gear. Steam-engine | J. T. Thompson | 721,620 | Feb. 24 | 4164 | 946 | 102 | 1752 |
| Valve-gear. Steam-engine | R. L. Campbell | 728,364 | May 19 | 2919 | 644 | 104 | 659 |
| Valve-gear. Steam-engine | J. W. Sargent, R. H. Rice, and W. O. Tourgee. | 737,495 | Aug. 25 | 4609 | 1032 | 105 | 2017 |
| Valve-gear. Steam-engine Corliss | W. Wright | 747,109 | Dec. 15 | 3310 | 753<br>754 | 107 | 1864 |
| Valve gear. Steam-engine slide- | S. S. Younghusband | 724,987 | Apr. 7 | 1054 | 241 | 103 | 1393 |
| Valve gear. Steam-engine slide- | S. S. Younghusband | 724,988 | Apr. 7 | 1055 | 241 | 103 | 1394 |
| Valve gear. Steam-engine slide- | S. S. Younghusband | 724,989 | Apr. 7 | 1056 | 241 | 103 | 1394 |
| Valve gear. Steam-engine slide- | S. S. Younghusband | 724,990 | Apr. 7 | 1057 | 241<br>242 | 103 | 1394 |
| Valve. Hopper-closet | R. N. Gill | 738,026 | Sept. 1 | 935 | 207 | 106 | 204 |
| Valve-indicator | E. F. Osborne | 741,363 | Oct. 13 | 1865 | 412 | 106 | 1665 |
| Valve. Lever-operated | G. G. Wickson | 743,787 | Nov. 10 | 1945 | 412 | 107 | 431 |
| Valve. Load-regulated | W. B. Mann | 730,828 | Feb. 17 | 2614 | 604 | 102 | 1403 |
| Valve lock and adjuster | A. B. Loomis | 739,015 | Sept. 15 | 2889 | 641 | 106 | 652 |
| Valve locking and operating device | F. T. Whiteley | 726,206 | Apr. 21 | 3274 | 743 | 103 | 1891 |
| Valve. Locomotive- | C. E. H. Lincoln | 738,115 | Sept. 1 | 1112 | 246 | 106 | 240 |
| Valve-lubricating device. Slide- | A. Kohn | 745,630 | Dec. 1 | 578 | 134 | 107 | 1221 |
| Valve mechanism | C. B. Edwards and R. H. Allen | 717,559 | Jan. 6 | 69 | 17<br>18<br>19 | 102 | 17 |
| Valve mechanism | J. T. Fenton | 727,772 | May 12 | 1814 | 405 | 104 | 405 |
| Valve mechanism | T. Simpson | 734,978 | July 28 | 4235 | 984 | 105 | 938 |
| Valve mechanism. Air-brake | E. G. Shortt | 731,234 | June 16 | 3121 | 692<br>693<br>694 | 104 | 1808 |
| Valve mechanism and connected parts | C. C. and E. A. Riotte | 717,623 | Jan. 6 | 179 | 45 | 102 | 39 |
| Valve mechanism. Engine | H. J. Wessinger | 737,687 | Sept. 1 | 235 | 50 | 106 | 54 |
| Valve mechanism. Engine | H. Nielsen | 746,565 | Dec. 8 | 2267 | 519<br>520 | 107 | 1605 |
| Valve mechanism. Engine | R. L. Dutcher | 746,934 | Dec. 15 | 2985 | 686 | 107 | 1788 |
| Valve mechanism. Explosion-engine regulator- | J. Ellis | 743,845 | Nov. 10 | 2047 | 435 | 107 | 452 |
| Valve mechanism. Fluid-pressure-engine | M. N. Forney | 735,742 | Aug. 11 | 1355 | 291<br>292 | 105 | 1287 |
| Valve mechanism for flushing closets. Automatic | H. Dixon, Jr. | 746,471 | Dec. 8 | 2107 | 484<br>485 | 107 | 1569 |
| Valve mechanism for hydraulic motors | E. H. Weatherhead | 737,685 | Sept. 1 | 232 | 50 | 106 | 54 |
| Valve mechanism for rock-drills | T. Officer | 738,229 | Sept. 8 | 1354 | 293 | 106 | 308 |
| Valve mechanism. Gas-engine | W. J. Wright | 742,142 | Oct. 20 | 3421 | 763 | 106 | 2002 |
| Valve mechanism. Steam-engine | C. Schmid | 739,449 | Sept. 22 | 3711 | 826 | 106 | 842 |
| Valve mechanism. Steam-trap | G. P. Stocker | 734,144 | July 21 | 2673 | 629 | 105 | 598 |
| Valve mechanism. Time | A. W. Knox | 724,888 | Apr. 7 | 873 | 1103 | 103 | 1086 |
| Valve-motion | P. L'Orange | 731,699 | June 23 | 4015 | 896 | 104 | 2008 |
| Valve-motions of different constructions. Mechanism illustrating steam-engine | H. F. Colvin | 718,193 | Jan. 13 | 1251 | 274 | 102 | 285 |
| Valve. Motor relief- | C. S. Cole | 724,262 | Mar. 31 | 4927 | 562 | 103 | 561 |
| Valve-movement. Steam-engine | W. C. Brown | 746,667 | Dec. 15 | 2477 | 566 | 107 | 1673 |
| Valve. Multiported balanced | C. A. Daigh | 737,211 | Aug. 25 | 4059 | 900 | 105 | 1897 |
| Valve. Operating- | C. L. Moore | 723,002 | Mar. 17 | 2501 | 200 | 103 | 1356 |
| Valve operating and controlling mechanism | H. V. Conrad | 746,032 | Dec. 8 | 1330 | 298 | 107 | 1400 |
| Valve-operating device. Steam-generator | J. E. Baldwin | 747,843 | Dec. 22 | 4665 | 1054<br>1055 | 107 | 2183 |
| Valve-operating mechanism | J. Bissing | 726,622 | Apr. 28 | 4112 | 928 | 103 | 2073 |
| Valve-operating mechanism. Automatic | T. Denoyer | 732,927 | July 7 | 410 | 99 | 105 | 89 |
| Valve or cut-off for tanks | P. J. Leithauser | 737,941 | Sept. 1 | 766 | 168 | 106 | 168 |
| Valve or faucet. Tap | S. S. Bromhead | 721,500 | Feb. 24 | 3917 | 891 | 102 | 1696 |
| Valve or similar structure. Piston- | C. Reeves | 738,237 | Sept. 8 | 1368 | 297 | 106 | 311 |
| Valve or tap | J. Stott | 746,896 | Dec. 15 | 2904 | 670 | 107 | 1769 |
| Valve. Oscillating | G. L. Wackerow | 728,787 | May 19 | 3706 | 827 | 104 | 823 |
| Valve. Pipe-line | C. E. Fowler | 736,513 | Aug. 18 | 2760 | 603<br>604 | 105 | 1608 |
| Valve. Plug- | R. C. Blake | 745,316 | Dec. 1 | 8 | 2 | 107 | 1102 |
| Valve. Pop safety- | J. Collis | 736,820 | Aug. 18 | 3358 | 741 | 105 | 1729 |
| Valve. Pressure-controlling | A. S. Comstock | 720,000 | Feb. 10 | 1066 | 247 | 102 | 1065 |
| Valve. Pressure-regulating | J. C. Schaefer | 726,355 | Apr. 28 | 3585 | 813 | 103 | 1972 |
| Valve. Pressure-regulating | C. L. Bastian | 737,057 | Aug. 25 | 3779 | 839 | 105 | 1838 |
| Valve. Pressure-regulating | H. Strater | 745,402 | Dec. 1 | 165 | 38 | 107 | 1135 |
| Valve. Pressure-regulating | J. W. Nethery | 748,091 | Dec. 29 | 5188 | 1173 | 107 | 2319 |
| Valve. Pressure-relief | J. Nageldinger | 720,375 | Feb. 10 | 1784 | 404 | 102 | 1217 |
| Valve. Pressure-retaining | W. H. Washington | 731,249 | June 16 | 3147 | 699 | 104 | 1813 |
| Valve. Pressure-retaining | F. P. Skeffington | 747,656 | Dec. 22 | 4327 | 978 | 107 | 2106 |
| Valve. Quick-closing balanced and non-return | J. E. Martin | 744,777 | Nov. 24 | 3829 | 826 | 107 | 864 |
| Valve. Reciprocating-engine | J. H. Allen | 719,714 | Feb. 3 | 550 | 125 | 102 | 939 |
| Valve. Reducing- | L. Brennan | 721,499 | Feb. 24 | 3915 | 891 | 102 | 1696 |
| Valve. Reducing- | S. M. Vauclain | 722,058 | Mar. 3 | 744 | 166 | 103 | 161 |
| Valve. Reducing- | P. E. Cain | 722,355 | Mar. 10 | 1299 | 288 | 103 | 292 |
| Valve. Reducing- | J. B. Waring | 737,682 | Sept. 1 | 226 | 48, 49 | 106 | 52 |
| Valve. Reducing- | J. B. Waring | 740,495 | Oct. 6 | 218 | 43 | 106 | 1292 |
| Valve. Reducing- | S. Munson | 740,898 | Oct. 6 | 944 | 212 | 106 | 1448 |
| Valve. Regulating- | C. O. Myers | 721,821 | Mar. 3 | 294 | 65 | 103 | 65 |
| Valve regulator. Needle- | H. C. Howells, Jr., and F. A. Johnson | 721,447 | Feb. 24 | 3821 | 869 | 102 | 1676 |
| Valve. Relief- | F. Schreidt | 730,167 | June 2 | 1152 | 259 | 104 | 1362 |
| Valve. Relief- | H. Lemp | 732,871 | July 7 | 311 | 78 | 105 | 69 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Valve. Relief- | W. D. Wood | 744,662 | Nov. 17 | 3587 | 773 | 107 | 795 |
| Valve ring. Piston- | A. Dobson | 732,837 | July 7 | 257 | 64 | 105 | 57 |
| Valve. Rotary | F. R. Pleasonton | 726,568 | Apr. 28 | 4009 | 908 | 103 | 2053 |
| Valve. Rotary | J. C. Lyons and D. H. Brown | 734,908 | July 28 | 4110 | 958 | 105 | 913 |
| Valve. Rotary | D. W. Rantine | 746,574 | Dec. 8 | 2286 | 524 | 107 | 1609 |
| Valve. Rotary cut-off | W. J. Francke | 726,419 | Apr. 28 | 3689 | 836 | 103 | 1993 |
| Valve. Rotary-engine cut-off | S. S. Whitaker | 739,566 | Sept. 22 | 3903 | 875 | 106 | 883 |
| Valve. Rotary-engine reversing- | F. J. Waters | 735,181 | Aug. 4 | 291 | 57 | 105 | 1043 |
| Valve. Rotary-engine steam-controlling | C. D. Fenelon and J. B. Erwin | 744,182 | Nov. 17 | 2758 | 587 | 107 | 616 |
| Valve. Rotating steam or water | H. E. Parson | 731,942 | June 23 | 4447 | 992 | 104 | 2102 |
| Valve. Safety- | L. Devers and C. E. Dunn | 745,002 | Nov. 24 | 4228 | 916 | 107 | 947 |
| Valve-seat and packing-ring. Combined | C. Sutton | 746,402 | Dec. 8 | 1991 | 454 | 107 | 1544 |
| Valve-seat-dressing device | W. Hagspiel | 742,313 | Oct. 27 | 3759 | 842 | 106 | 2088 |
| Valve-seat for explosive-engines | W. M. Harvey | 717,990 | Jan. 6 | 887 | 198 | 102 | 191 |
| Valve. Steam- | H. Berg | 726,620 | Apr. 28 | 4109 | 927 | 103 | 2073 |
| Valve. Steam- | C. White | 733,888 | July 14 | 2143 | 506 | 105 | 467 |
| Valve. Steam- | T. J. Kiernan | 734,885 | July 28 | 4070 | 949 | 105 | 904 |
| Valve. Steam- | T. J. Kiernan | 734,886 | July 28 | 4071 | 949 | 105 | 904 |
| Valve. Steam-actuated engine- | S. Lundquist | 733,985 | July 21 | 2351 | 552 | 105 | 528 |
| Valve. Steam-cylinder drain- | H. W. McCombs. (Reissue) | 12,136 | July 28 | 4358 | 1013 | 105 | 963 |
| Valve. Steam-engine | H. W. Germiner | 722,970 | Mar. 17 | 2449 | 548<br>549 | 103 | 550 |
| Valve. Steam-engine | J. F. Van Tuyl | 724,526 | Apr. 7 | 199 | 48 | 103 | 1212 |
| Valve. Steam-engine | P. B. Belches | 728,838 | May 26 | 3812 | 849<br>850 | 104 | 863 |
| Valve. Steam-engine | D. C. Prescott | 745,520 | Dec. 1 | 386 | 89 | 107 | 1182 |
| Valve. Steam-engine | C. P. Altmann | 745,756 | Dec. 1 | 782 | 179 | 107 | 1265 |
| Valve. Steam-feed | W. C. Trout | 731,633 | June 23 | 3900 | 869 | 104 | 1985 |
| Valve. Steam-reducing | L. B. Fulton | 738,608 | Sept. 8 | 2122 | 465 | 106 | 472 |
| Valve. Stock-watering-tank | P. Tiffany | 735,918 | Aug. 11 | 1688 | 360 | 105 | 1359 |
| Valve. Straightway | E. M. Erdman | 720,012 | Feb. 10 | 1099 | 253 | 102 | 1073 |
| Valve. Straightway | E. M. Erdman | 733,905 | July 14 | 2184 | 514 | 105 | 475 |
| Valve. Straightway | E. S. Brady | 745,774 | Dec. 1 | 822 | 186 | 107 | 1274 |
| Valve. Supply- | E. A. Marsh | 723,698 | Mar. 24 | 3786 | 850 | 103 | 837 |
| Valve. Supply- | W. T. Nichols | 741,534 | Oct. 13 | 2204 | 490 | 106 | 1736 |
| Valve. Tapping- | L. W. Gates | 747,547 | Dec. 22 | 4117 | 924<br>925 | 107 | 2058 |
| Valve. Throttle- | H. H. Vaughan | 718,550 | Jan. 13 | 1962 | 429 | 102 | 437 |
| Valve. Throttle- | K. Rushton | 723,734 | Mar. 24 | 3857 | 867 | 103 | 852 |
| Valve. Throttle- | J. B. Michael | 723,894 | Mar. 31 | 4164 | 938 | 103 | 934 |
| Valve. Throttle- | J. S. Chambers | 733,006 | July 7 | 540 | 132 | 105 | 116 |
| Valve. Throttle- | J. S. Chambers | 737,706 | Sept. 1 | 264 | 56 | 106 | 60 |
| Valve. Trap controlling- | R. G. McAuley | 724,318 | Mar. 31 | 5025 | 1126 | 103 | 1107 |
| Valve. Triple | P. Synnestvedt | 730,315 | June 9 | 1440 | 317 | 104 | 1437 |
| Valve-truing mechanism | H. H. E. Nemitz | 722,134 | Mar. 3 | 869 | 194 | 103 | 186 |
| Valve. Water-cooled | C. P. Byrnes | 723,582 | Mar. 24 | 3594 | 803 | 103 | 796 |
| Valve. Water-cooled | N. McConnell | 734,081 | July 21 | 2547 | 594 | 105 | 573 |
| Valve. Water-gage | J. C. F. Jones | 735,104 | Aug. 4 | 106 | 24 | 105 | 1006 |
| Valve. Water-supply-pipe drain- | J. J. May | 731,063 | June 16 | 2809 | 626 | 104 | 1747 |
| Valve-wrench | L. R. Sack | 729,672 | June 2 | 266 | 61 | 104 | 1183 |
| Valves. Apparatus for manipulating slide- | W. R. Herring | 745,278 | Nov. 24 | 4796 | 1047 | 107 | 1064 |
| Valves for piston or valve movements of any kind. Device for actuating shut-off | C. Nielsen | 722,656 | Mar. 10 | 1848 | 412 | 103 | 413 |
| Valves. Glass seat for ball- | L. W. Eggleston | 728,380 | May 19 | 2946 | 650 | 104 | 665 |
| Valves. Lifting-gear for spring-pressure safety- | J. E. Lonergan | 724,304 | Mar. 31 | 5002 | 1120 | 103 | 1102 |
| Valves of explosive-engines. Regulator for suction- | A. Clément | 732,830 | July 7 | 247 | 61 | 105 | 55 |
| Valves on explosive-engines. Mechanism for automatically operating exhaust- | J. E. Jones | 723,160 | Mar. 17 | 2787 | 629 | 103 | 620 |
| Valves or dampers. Indicator for thermo-electric regulators for | W. E. Mack | 738,557 | Sept. 8 | 2033 | 442<br>443 | 106 | 452 |
| Valved appliance | J. J. Sullivan | 726,369 | Apr. 28 | 3609 | 818<br>819 | 103 | 1976 |
| Vamp-stay | A. W. Rockwood | 721,393 | Feb. 24 | 3726 | 848 | 102 | 1657 |
| Van. Moving- | A. B. Yetter | 740,350 | Sept. 29 | 5383 | 1214 | 106 | 1215 |
| Vapor-burner | W. Wahlberg | 719,537 | Feb. 3 | 220 | 52 | 102 | 870 |
| Vapor-burner | W. Mitchell | 722,430 | Mar. 10 | 1432 | 317<br>318 | 103 | 321 |
| Vapor-burner | C. F. Jenkins | 731,370 | June 16 | 3367 | 752<br>753 | 104 | 1859 |
| Vapor-burner | J. P. Newbold | 731,384 | June 16 | 3411 | 762 | 104 | 1869 |
| Vapor-burner | G. F. Nolte | 733,075 | July 7 | 668 | 160 | 105 | 142 |
| Vapor-burner | H. S. Thornton | 734,201 | July 21 | 2771 | 650 | 105 | 619 |
| Vapor-burner | W. L. Dunham and F. H. Hough | 735,073 | Aug. 4 | 42 | 12 | 105 | 991 |
| Vapor-burner | E. Thomson | 735,683 | Aug. 4 | 1239 | 263 | 105 | 1244 |
| Vapor-burner | E. W. Pritchard | 736,013 | Aug. 11 | 1869 | 399 | 105 | 1399 |
| Vapor-burner | J. J. Atkins | 738,511 | Sept. 8 | 1954 | 426 | 106 | 434 |
| Vapor-burner | J. Lawson and J. E. Daniels | 738,922 | Sept. 15 | 2746 | 607 | 106 | 622 |
| Vapor-burner | H. P. Fish | 746,808 | Dec. 15 | 2725 | 628 | 107 | 1729 |
| Vapor-burner. Incandescent | L. Denayrouze | 727,535 | May 5 | 1320 | 294 | 104 | 284 |
| Vapor-burner. Incandescent | G. A. Bonelli | 748,342 | Dec. 29 | 5623 | 1282 | 107 | 2412 |
| Vapor-burner reservoir | W. Mitchell | 723,780 | Mar. 24 | 3939 | 888 | 103 | 870 |
| Vapor-generator | C. F. Hitchcock | 737,738 | Sept. 1 | 340 | 72 | 106 | 77 |
| Vapor-generator | F. H. Bates | 746,914 | Dec. 15 | 2929 | 676 | 107 | 1774 |
| Vapor-generator regulator | E. Thomson | 739,564 | Sept. 22 | 3892 | 873 | 105 | 881 |
| Vapor-generators. Draft apparatus for portable | H. Howard | 721,195 | Feb. 24 | 3352 | 766 | 102 | 1580 |
| Vaporizer | J. H. Valentine | 729,019 | May 26 | 4135 | 916 | 104 | 929 |
| Vaporizer | G. Beaumont | 741,996 | Oct. 20 | 3111 | 694 | 106 | 1940 |
| Vaporizer | H. Harris | 743,866 | Nov. 10 | 2084 | 443 | 107 | 460 |
| Vaporizer. Crude-oil | F. G. Hobart | 735,376 | Aug. 4 | 637 | 132 | 105 | 1117 |
| Vaporizing water. Means for | H. F. Wallmann | 724,763 | Apr. 7 | 639 | 150<br>151 | 103 | 1305 |
| Varnish and method of compounding | D. Brazell | 732,514 | June 30 | 5594 | ..... | 104 | 2352 |
| Varnish composition for removing | J. E. Miller | 725,002 | Apr. 7 | 1085 | ..... | 103 | 1401 |
| Varnish, &c. Composition of matter for removing. | T. M. Stack and W. R. Peck | 747,898 | Dec. 22 | 4783 | ..... | 107 | 2208 |
| Varnish composition. Quick- | G. Tüschel | 731,723 | June 23 | 4053 | ..... | 104 | 2016 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|---|
| | | | | Spec. | Drg. | Vol. | Page. |
| Varnish. Manufacturing oil- | W. Traine | 744,263 | Nov. 17 | 2898 | ..... | 107 | 648 |
| Varnish or color cup | R. L. S. Doggett | 718,436 | Jan. 13 | 1693 | 373 | 102 | 377 |
| Varnish or color cup | R. L. S. Doggett | 748,052 | Dec. 29 | 5112 | 1155 | 107 | 2301 |
| Varnishes. Manufacturing | W. T. Scheele | 744,413 | Nov. 17 | 3176 | ..... | 107 | 709 |
| Vase | D. Moriarty | 719,835 | Feb. 3 | 768 | 180 | 102 | 986 |
| Vat: *See* Acid-vat. Milk or cream vat. | | | | | | | |
| Vat | W. Griesser | 733,191 | July 7 | 866 | 210 | 105 | 182 |
| Vat. Self-emptying | T. L. Valerius | 742,757 | Oct. 27 | 4535 | 1027 | 106 | 2252 |
| Vault. Burial- | A. J. Bright | 718,420 | Jan. 13 | 1666 | 368 | 102 | 372 |
| Vault. Burial- | H. E. Goodwin | 719,323 | Jan. 27 | 3427 | 765 | 102 | 770 |
| Vault. Burial- | B. F. Van Camp | 728,337 | May 19 | 2879 | 635 | 104 | 651 |
| Vault. Burial- | G. Bolser | 729,262 | May 26 | 4560 | 1006 | 104 | 1015 |
| Vault. Burial- | E. W. Hoyt | 734,711 | July 28 | 3726 | 871, 872 | 105 | 835 |
| Vault. Burial- | C. F. Surface | 741,384 | Oct. 13 | 1907 | 421 | 106 | 1674 |
| Vault construction | J. J. Walter | 721,260 | Feb. 24 | 3497 | 795 | 102 | 1609 |
| Vault-cover | G. W. Shade and P. S. Knapp | 742,075 | Oct. 20 | 3308 | 737 | 106 | 1980 |
| Vault. Grave- | E. C. Hodges | 747,424 | Dec. 22 | 3900 | 878 | 107 | 2010 |
| Vault-light construction | W. L. Caldwell | 741,010 | Oct. 13 | 1157 | 261, 262 | 106 | 1513 |
| Vault. Portable burial- | B. F. Lockwood | 720,163 | Feb. 10 | 1381 | 316 | 102 | 1134 |
| Vault. Portable grave- | L. Vosburgh | 719,911 | Feb. 3 | 893 | 210 | 102 | 1013 |
| Vault-trap | N. A. Stephens | 722,925 | Mar. 17 | 2376 | 531, 532 | 103 | 535 |
| Vaults. Internal mold for burial- | T. R. Millison | 723,477 | Mar. 24 | 3423 | 765 | 103 | 762 |
| Vaults. Means for excluding dampness from | H. L. Kubbernuss | 741,679 | Oct. 20 | 2474 | 553 | 106 | 1808 |
| Vegetable-blanching machine | F. A. Blackmon | 727,271 | May 5 | 841 | 180 | 104 | 181 |
| Vegetable-crusher | M. Warren | 731,986 | June 23 | 4532 | 1011 | 104 | 2120 |
| Vegetable-cutter | G. M. Burnett | 747,933 | Dec. 29 | 4870 | 1099 | 107 | 2249 |
| Vegetable cutter or slicer | J. Y. Kline | 719,944 | Feb. 3 | 944 | 220 | 102 | 1024 |
| Vegetable or meat cutter | W. F. Wagner | 739,270 | Sept. 15 | 3365 | 747 | 106 | 752 |
| Vegetables, &c. Machine for cleaning and scalding | J. Baker | 731,092 | June 16 | 2867 | 637 | 104 | 1760 |
| Vegetation-destroying apparatus. Floating- | J. D. Austin | 733,360 | July 14 | 1191 | 283 | 105 | 267 |
| Vehicle | J. P. and T. E. Murdock | 721,319 | Feb. 24 | 3581 | 815 | 102 | 1628 |
| Vehicle | C. W. Hunt | 721,705 | Mar. 3 | 99 | 21 | 103 | 22 |
| Vehicle | H. M. Pope | 725,766 | Apr. 21 | 2510 | 570 | 103 | 1733 |
| Vehicle | F. Stratton | 726,590 | Apr. 28 | 4054 | 915 | 103 | 2062 |
| Vehicle | J. Cummings | 728,872 | May 26 | 3873 | 861 | 104 | 874 |
| Vehicle | A. L. Prescott | 735,816 | Aug. 11 | 1494 | 320 | 105 | 1318 |
| Vehicle | E. Lohsand | 737,852 | Sept. 1 | 569 | 125, 126 | 106 | 126 |
| Vehicle | S. W. Rowell | 739,347 | Sept. 22 | 3495 | 781 | 106 | 794 |
| Vehicle | C. Smith | 740,051 | Sept. 29 | 4848 | 1088 | 106 | 1104 |
| Vehicle | H. L. Call | 747,937 | Dec. 29 | 4875 | 1101 | 107 | 2251 |
| Vehicle air-pump mechanism. Motor- | R. H. White | 734,028 | July 21 | 2444 | 571 | 105 | 549 |
| Vehicle-alarm | J. M. Justen | 722,587 | Mar. 10 | 1733 | 386 | 103 | 387 |
| Vehicle and connections therefor. Trail- | F. L. Norton | 719,129 | Jan. 27 | 3080 | 685 | 102 | 696 |
| Vehicle antivibration device | J. M. M. Truffault | 743,995 | Nov. 10 | 2335 | 499 | 107 | 518 |
| Vehicle-apron | J. B. Cretors | 732,716 | July 7 | 38 | 9, 10 | 105 | 11 |
| Vehicle blanket-holding attachment | J. Burton | 739,286 | Sept. 22 | 3396 | 756 | 106 | 774 |
| Vehicle-bodies to the frames thereof. Means for attaching the sides and ends of | F. J. Junginger | 746,845 | Dec. 15 | 2801 | 646 | 107 | 1746 |
| Vehicle-bodies. Weight-indicating sliding and spring support for | O. T. Dougherty | 745,718 | Dec. 1 | 726 | 166 | 107 | 1253 |
| Vehicle-body | J. P. Johnson | 719,007 | Jan. 27 | 2823 | 633 | 102 | 644 |
| Vehicle-body | H. McLoughlin | 722,611 | Mar. 10 | 1770 | 394 | 103 | 395 |
| Vehicle-body | L. Priest | 733,676 | July 14 | 1740 | 411, 412 | 105 | 383 |
| Vehicle-body | G. E. Elsey | 735,688 | Aug. 4 | 1255 | 266 | 105 | 1248 |
| Vehicle-body | A. O. Very | 737,887 | Sept. 1 | 667 | 142 | 106 | 146 |
| Vehicle-body | C. J. Moore | 740,895 | Oct. 6 | 940 | 211 | 106 | 1447 |
| Vehicle-body | W. G. Dorland | 741,893 | Oct. 20 | 2877 | 642 | 106 | 1894 |
| Vehicle-body | F. P. Conrad | 742,167 | Oct. 27 | 3469 | 775, 776 | 106 | 2029 |
| Vehicle-body | J. Vollman | 747,810 | Dec. 22 | 4609 | 1040 | 107 | 2170 |
| Vehicle-body corner construction | H. P. Wells | 730,423 | June 9 | 1633 | 366 | 104 | 1477 |
| Vehicle-body corner-iron | G. E. Elsey | 739,484 | Sept. 22 | 3770 | 843 | 106 | 856 |
| Vehicle-body raiser | J. Cryderman | 742,292 | Oct. 27 | 3719 | 831 | 106 | 2080 |
| Vehicle bolster and truck mechanism | S. Otis | 730,688 | June 9 | 2124 | 471, 472 | 104 | 1585 |
| Vehicle-box corner-fastening | E. L. Phipps | 731,946 | June 23 | 4458 | 994 | 104 | 2104 |
| Vehicle-brake | W. L. Post | 720,965 | Feb. 17 | 2881 | 660 | 102 | 1460 |
| Vehicle-brake | L. House | 721,446 | Feb. 24 | 3818 | 869 | 102 | 1675 |
| Vehicle-brake | E. Kepp | 727,379 | May 5 | 1035 | 225 | 104 | 223 |
| Vehicle-brake | J. T. Hovis | 728,394 | May 19 | 2966 | 653 | 104 | 669 |
| Vehicle-brake | W. M. Mason | 728,949 | May 26 | 4004 | 891 | 104 | 901 |
| Vehicle-brake | H. Appler | 730,507 | June 9 | 1799 | 402 | 104 | 1513 |
| Vehicle-brake | M. Kurz and A. Beiser | 730,829 | June 9 | 2351 | 520 | 104 | 1633 |
| Vehicle-brake | G. H. Bardsly | 730,861 | June 16 | 2414 | 534 | 104 | 1665 |
| Vehicle-brake | J. W. Rowe | 732,783 | July 7 | 154 | 40, 41 | 105 | 37 |
| Vehicle-brake | H. O. Benedict | 734,115 | July 21 | 2618 | 616 | 105 | 587 |
| Vehicle-brake | M. F. and H. C. Hartman | 735,253 | Aug. 4 | 421 | 82 | 105 | 1070 |
| Vehicle-brake | J. T. Burton | 745,779 | Dec. 1 | 828 | 188 | 107 | 1275 |
| Vehicle-brake | H. Schwenck | 746,391 | Dec. 8 | 1974 | 451 | 107 | 1541 |
| Vehicle-brake | C. E. Roberts | 748,016 | Dec. 29 | 5043 | 1139 | 107 | 2288 |
| Vehicle brake and coaster for cycles, &c | W. Robinson | 724,739 | Apr. 7 | 604 | 142 | 103 | 1297 |
| Vehicle-brake. Automatic | J. A. Beyer | 718,903 | Jan. 20 | 2631 | 590 | 102 | 588 |
| Vehicle-brake. Electric | C. J. Specht and C. R. Krueger | 720,978 | Feb. 17 | 2903 | 665 | 102 | 1464 |
| Vehicle-brake. Electric | J. N. Mahoney. (Reissue) | 12,098 | Mar. 10 | 1856 | 414, 415 | 103 | 415 |
| Vehicle brake mechanism | F. B. Townsend | 735,844 | Aug. 11 | 1547 | 331 | 105 | 1330 |
| Vehicle brake mechanism | O. Minton | 743,908 | Nov. 10 | 2162 | 466 | 107 | 476 |
| Vehicle brake. Motor road- | F. Charron and L. Girardot | 731,753 | June 23 | 4114 | 918 | 104 | 2028 |
| Vehicle brake or lock | L. Levin | 725,853 | Apr. 21 | 2665 | 607 | 103 | 1726 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Vehicle chafe-iron. Antifriction | C. E. Crofford | 726,407 | Apr. 28 | 3671 | 832 | 103 | 1989 |
| Vehicle construction. Motor- | A. G. Ronan | 744,011 | Nov. 10 | 2397 | 515 | 107 | 527 |
| Vehicle controlling device. Motor- | W. O. Worth | 724,767 | Apr. 7 | 647 | 151, 152 | 103 | 1307 |
| Vehicle controlling device. Motor- | J. Sachs | 741,837 | Oct. 20 | 2773 | 619 | 106 | 1873 |
| Vehicle controlling-gear. Motor- | J. Q. Chase | 720,404 | Feb. 10 | 1824 | 416 | 102 | 1226 |
| Vehicle controlling means. Motor- | D. E. Johnson | 719,806 | Feb. 3 | 721 | 169 | 102 | 975 |
| Vehicle controlling mechanism. Motor- | F. O. Farwell | 727,923 | May 12 | 2092 | 465 | 104 | 464 |
| Vehicle cooler. Motor- | R. E. Olds | 745,654 | Dec. 1 | 617 | 143 | 107 | 1230 |
| Vehicle-coupling | D. A. Dickinson | 726,146 | Apr. 21 | 3159 | 715 | 103 | 1868 |
| Vehicle-coupling | W. Neumeier, Jr | 744,875 | Nov. 24 | 4003 | 863 | 107 | 901 |
| Vehicle covering or awning | S. W. Wortley | 733,526 | July 14 | 1489 | 354 | 105 | 332 |
| Vehicle door and seat. Combined | L. S. Chadwick | 740,396 | Oct. 6 | 20 | 5 | 106 | 1248 |
| Vehicle draft attachment | E. N. Clink | 722,084 | Mar. 3 | 784 | 175 | 103 | 170 |
| Vehicle draft attachment | A. P. Speed | 722,639 | Mar. 10 | 1822 | 405 | 103 | 407 |
| Vehicle draft attachment | W. D. Carson | 724,803 | Apr. 7 | 724 | 169 | 103 | 1325 |
| Vehicle draft attachment | C. J. Bolte | 727,886 | May 12 | 2010 | 447 | 104 | 445 |
| Vehicle draft attachment | C. E. Akers and F. Wilson | 731,331 | June 16 | 3310 | 738 | 104 | 1848 |
| Vehicle draft attachment | H. M. Zimmerman | 731,411 | June 16 | 3461 | 774 | 104 | 1879 |
| Vehicle draft connection | W. M. Ricketts | 744,236 | Nov. 17 | 2851 | 610 | 107 | 638 |
| Vehicle driving-gear | M. W. Talen, C. F. Pearson, E. B. Christopher, G. E. Johnson, and L. A. Lindberg. | 736,172 | Aug. 11 | 2143 | 461 | 105 | 1456 |
| Vehicle driving-gear. Motor- | E. E. Wright | 736,909 | Aug. 18 | 3510 | 780 | 105 | 1762 |
| Vehicle driving mechanism | P. Synnestvedt | 729,010 | May 26 | 4120 | 913 | 104 | 925 |
| Vehicle driving mechanism | P. Synnestvedt | 736,459 | Aug. 18 | 2639 | 580 | 105 | 1581 |
| Vehicle driving mechanism | P. Synnestvedt | 737,883 | Sept. 1 | 662 | 141 | 106 | 145 |
| Vehicle driving mechanism | P. Synnestvedt | 744,434 | Nov. 17 | 3210 | 689 | 107 | 716 |
| Vehicle driving mechanism. Motor- | F. Küpper and A. E. Vorreiter | 739,687 | Sept. 22 | 4141 | 924 | 106 | 935 |
| Vehicle driving mechanism. Motor- | F. D. Howe | 740,656 | Oct. 6 | 510 | 112 | 106 | 1356 |
| Vehicle driving mechanism. Self-propelled- | P. J. Collins | 725,675 | Apr. 21 | 2346 | 530 | 103 | 1697 |
| Vehicle. Dumping- | T. Hill | 742,427 | Oct. 27 | 3960 | 889 | 106 | 2128 |
| Vehicle dumping-box | D. T. White | 738,863 | Sept. 15 | 2643 | 582, 583 | 106 | 600 |
| Vehicle dust-guard | N. Kutz | 730,929 | June 16 | 2552 | 568 | 104 | 1694 |
| Vehicle exhaust-relief. Steam- | A. A. Ball, Jr | 747,927 | Dec. 29 | 4860 | 1097 | 107 | 2247 |
| Vehicle fender or safety device | C. E. B. Helbig | 722,579 | Mar. 10 | 1718 | 382 | 103 | 385 |
| Vehicle fender. Street- | E. Munte | 746,357 | Dec. 8 | 1918 | 438 | 107 | 1528 |
| Vehicle foot-rest | D. H. Morrison | 748,402 | Dec. 29 | 5729 | 1308 | 107 | 2436 |
| Vehicle foot-scraper attachment | J. K. Hunter | 721,044 | Feb. 17 | 3035 | 696 | 102 | 1494 |
| Vehicle for transportation of animal-bodies | W. Renger | 719,372 | Jan. 27 | 3528 | 786 | 102 | 792 |
| Vehicle-frame and driving-axle gear | G. R. Boulding | 732,510 | June 30 | 5587 | 1237, 1238 | 104 | 2350 |
| Vehicle-gear | A. P. McLellan | 724,921 | Apr. 7 | 924 | 212 | 103 | 1368 |
| Vehicle-gear | A. L. McGregor | 732,428 | June 30 | 5424 | 1204 | 104 | 2318 |
| Vehicle-gear | L. E. Hickok and C. T. McCue | 734,706 | July 28 | 3718 | 870 | 105 | 833 |
| Vehicle-gear | L. E. Hickok and C. T. McCue | 734,707 | July 28 | 3719 | 870 | 105 | 833 |
| Vehicle-gear | F. E. Wilcox | 734,786 | July 28 | 3877 | 904 | 105 | 863 |
| Vehicle-gear | F. E. Wilcox | 734,787 | July 28 | 3878 | 904 | 105 | 864 |
| Vehicle-gear | F. E. Wilcox | 734,788 | July 28 | 3879 | 904 | 105 | 864 |
| Vehicle-gear | F. E. Wilcox | 738,384 | Sept. 8 | 1701 | 370 | 106 | 381 |
| Vehicle-gear | F. E. Wilcox | 746,219 | Dec. 8 | 1666 | 370 | 107 | 1476 |
| Vehicle guiding apparatus | A. J. Thomure | 723,077 | Mar. 17 | 2641 | 595 | 103 | 591 |
| Vehicle. Hand-actuated | E. C. Smith | 726,001 | Apr. 21 | 2922 | 664 | 103 | 1819 |
| Vehicle heating apparatus | G. F. Ray | 736,633 | Aug. 18 | 2988 | 657 | 105 | 1653 |
| Vehicle heating system. Motor- | W. O. Worth and W. R. Donaldson | 728,430 | May 19 | 3031 | 666 | 104 | 683 |
| Vehicle-hubs. Means for attaching brake-drums to | W. A. Cornell | 746,466 | Dec. 8 | 2096 | 482 | 107 | 1566 |
| Vehicle. Ice- | I. N. Henness | 734,552 | July 28 | 3430 | 800 | 105 | 774 |
| Vehicle. Ice- | C. Anderson | 744,853 | Nov. 24 | 3968 | 855 | 107 | 894 |
| Vehicle-jack | H. P. F. Reppenhagen | 729,415 | May 26 | 4822 | 1069 | 104 | 1060 |
| Vehicle-jack | A. O. Pence | 733,992 | July 21 | 2363 | 553 | 105 | 530 |
| Vehicle-jack | E. H. Ryan | 741,414 | Oct. 13 | 1953 | 443 | 106 | 1683 |
| Vehicle. Knockdown drop-body | A. G. North | 717,903 | Jan. 6 | 731 | 163 | 102 | 156 |
| Vehicle. Land and water | A. Piller | 728,758 | May 19 | 3651 | 812 | 104 | 814 |
| Vehicle lantern-holder | A. C. S. Rue | 734,432 | July 21 | 3202 | 754 | 105 | 710 |
| Vehicle lantern-holder | G. F. Kibling | 736,404 | Aug. 18 | 2544 | 558 | 105 | 1561 |
| Vehicle. Lever- | J. Scott | 728,811 | May 19 | 3753 | 837 | 104 | 834 |
| Vehicle life-guard | A. Hardy and D. Voss | 728,910 | May 26 | 3938 | 875 | 104 | 887 |
| Vehicle life-guard or obstruction-remover | A. Hudson and J. Bowring | 737,630 | Sept. 1 | 131 | 28, 29 | 106 | 31 |
| Vehicle life-guard. Road- | A. Hudson | 720,809 | Feb. 17 | 2587 | 596, 597 | 102 | 1397 |
| Vehicle life-saving device | K. Mooring | 740,299 | Sept. 29 | 5294 | 1192 | 106 | 1196 |
| Vehicle. Mechanically-propelled | D. M. Dearing | 747,860 | Dec. 22 | 4704 | 1062 | 107 | 2192 |
| Vehicle. Motor- | C. Crompton | 718,097 | Jan. 13 | 1081 | 240 | 102 | 247 |
| Vehicle. Motor- | O. H. Schildback | 718,161 | Jan. 13 | 1191 | 264, 265 | 102 | 272 |
| Vehicle. Motor- | W. Norris | 718,213 | Jan. 13 | 1292 | 284 | 102 | 292 |
| Vehicle. Motor- | W. E. Whitbread | 718,231 | Jan. 13 | 1321 | 292 | 102 | 299 |
| Vehicle. Motor- | L. T. Bassett | 718,303 | Jan. 13 | 1453 | 323 | 102 | 328 |
| Vehicle. Motor- | S. S. and A. Lewis | 719,822 | Feb. 3 | 748 | 175 | 102 | 981 |
| Vehicle. Motor- | C. L. Haase, Jr | 720,241 | Feb. 10 | 1534 | 351 | 102 | 1163 |
| Vehicle. Motor- | C. A. Lieb | 720,713 | Feb. 17 | 2437 | 558 | 102 | 1365 |
| Vehicle. Motor- | R. Stone | 722,262 | Mar. 10 | 1130 | 250 | 103 | 256 |
| Vehicle. Motor- | G. J. Scott | 722,916 | Mar. 17 | 2364 | 528, 529 | 103 | 533 |
| Vehicle. Motor- | A. N. Locke | 725,574 | Apr. 14 | 2139 | 484 | 103 | 1639 |
| Vehicle. Motor- | C. W. Hunt | 725,713 | Apr. 21 | 2410 | 546, 547 | 103 | 1710 |
| Vehicle. Motor- | H. Gilchrist | 726,672 | Apr. 28 | 4193 | 946, 947 | 103 | 2091 |
| Vehicle. Motor- | R. J. Urquhart | 727,231 | May 5 | 770 | 164 | 104 | 166 |
| Vehicle. Motor- | T. L. Boyle | 727,276 | May 5 | 848 | 182 | 104 | 182 |
| Vehicle. [illegible] | B. V. Covert | 727,910 | May 12 | 2060 | 458, 459 | 104 | 456 |
| Vehicle. Motor- | J. C. Reuter | 728,499 | May 19 | 3158 | 699 | 104 | 709 |
| Vehicle. Motor- | J. D. Harp | 729,579 | June 2 | 109 | 28 | 104 | 1149 |

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|---|---|---|---|---|---|---|---|
| Vehicle. Motor- | P. J. Collins | 729,737 | June 2 | 394 | 88 | 104 | 1209 |
| Vehicle. Motor- | P. J. Collins | 731,022 | June 16 | 2736 | 610 | 104 | 1733 |
| Vehicle. Motor- | C. B. Titus | 731,086 | June 16 | 2852 | 633 | 104 | 1756 |
| Vehicle. Motor- | J. B. Ewer | 732,283 | June 30 | 5152 | 1144 | 104 | 2261 |
| Vehicle. Motor- | C. A. Hider | 732,553 | June 30 | 5665 | 1257, 1258 | 104 | 2368 |
| Vehicle. Motor- | D. M. Pfautz | 734,283 | July 21 | 2942 | 687 | 105 | 657 |
| Vehicle. Motor- | R. H. Hassler | 735,370 | Aug. 4 | 628 | 130 | 105 | 1114 |
| Vehicle. Motor- | H. Vanderbeek | 736,176 | Aug. 11 | 2149 | 462, 463 | 105 | 1458 |
| Vehicle. Motor- | W. S. Rogers | 738,241 | Sept. 8 | 1379 | 298 | 106 | 314 |
| Vehicle. Motor- | H. M. Pope | 739,924 | Sept. 29 | 4608 | 1035 | 106 | 1052 |
| Vehicle. Motor- | W. Decker | 739,993 | Sept. 29 | 4736 | 1065 | 106 | 1079 |
| Vehicle. Motor- | D. P. Sanders | 740,591 | Oct. 6 | 409 | 86, 87, 88 | 106 | 1333 |
| Vehicle. Motor- | J. H. MacAlman | 740,896 | Oct. 6 | 941 | 211 | 106 | 1448 |
| Vehicle. Motor- | A. W. Sandell | 741,931 | Oct. 20 | 2962 | 660 | 106 | 1911 |
| Vehicle. Motor- | J. W. Grubbs | 742,413 | Oct. 27 | 3935 | 884 | 106 | 2124 |
| Vehicle. Motor- | E. G. Hoffmann | 746,834 | Dec. 15 | 2785 | 642 | 107 | 1742 |
| Vehicle. Motor- | H. Ford | 747,909 | Dec. 22 | 4801 | 1086 | 107 | 2212 |
| Vehicle. Motor- | S. E. Freeman | 748,275 | Dec. 29 | 5525 | 1259, 1260 | 107 | 2392 |
| Vehicle. Motor-propelled | F. W. Lanchester | 722,116 | Mar. 3 | 843 | 188 | 103 | 181 |
| Vehicle. Motor-propelled | J. Munden | 736,866 | Aug. 18 | 3440 | 762 | 105 | 1747 |
| Vehicle. Motor road- | N. Cernatesco | 731,545 | June 23 | 3735 | 832 | 104 | 1953 |
| Vehicle. Motor road- | H. Cauzard | 732,710 | July 7 | 33 | 8 | 105 | 10 |
| Vehicle. Motor road- | E. H. Meden | 741,587 | Oct. 13 | 2303 | 515, 516 | 106 | 1756 |
| Vehicle mud-guard. Wheeled- | C. W. Brown | 726,398 | Apr. 28 | 3657 | 829 | 103 | 1986 |
| Vehicle or movable-structure guarding apparatus | I. Frank and J. Hutchinson | 734,227 | July 21 | 2821 | 662, 663 | 105 | 630 |
| Vehicle oscillating body-support | C. N. Conlee | 740,809 | Oct. 6 | 799 | 180 | 106 | 1415 |
| Vehicle. Pleasure- | L. A. Thompson | 723,074 | Mar. 17 | 2634 | 594 | 103 | 590 |
| Vehicle power-drum | C. E. Duryea | 725,616 | Apr. 14 | 2215 | 500, 501 | 103 | 1656 |
| Vehicle power-transmitting mechanism. Motor- | R. Symmonds, Jr | 723,758 | Mar. 24 | 3892 | 876 | 103 | 860 |
| Vehicle propeller-wheel | C. H. O. Hamann | 724,857 | Apr. 7 | 826 | 190 | 103 | 1345 |
| Vehicle propelling device | J. P. Lange | 742,683 | Oct. 27 | 4419 | 998 | 106 | 2227 |
| Vehicle propelling device. Ice- | I. N. Henness | 729,935 | June 2 | 747 | 166 | 104 | 1280 |
| Vehicle propelling means | W. Flynn | 747,959 | Dec. 29 | 4922 | 1113 | 107 | 2260 |
| Vehicle rack. Rubber-tired- | J. J. Allen | 731,651 | June 23 | 3934 | 876 | 104 | 1992 |
| Vehicle reach or coupling-pole | J. Preuitt and C. W. F. Glander | 735,585 | Aug. 4 | 1059 | 225 | 105 | 1206 |
| Vehicle reflector attachment | H. P. Brown | 718,309 | Jan. 13 | 1461 | 324, 325 | 102 | 330 |
| Vehicle reservoir. Motor- | F. Charron and L. Girardot | 736,494 | Aug. 18 | 2723 | 597 | 105 | 1599 |
| Vehicle. Road- | E. G. Hoffmann | 729,586 | June 2 | 118 | 30 | 104 | 1151 |
| Vehicle. Road- | A. Beurrier | 739,280 | Sept. 22 | 3387 | 754 | 106 | 772 |
| Vehicle rub-iron | J. B. Erhart | 738,990 | Sept. 15 | 2850 | 632 | 106 | 644 |
| Vehicle-runner. Attachable | A. C. White | 744,841 | Nov. 24 | 3948 | 851 | 107 | 889 |
| Vehicle runner attachment | H. Rinehardt | 734,612 | July 28 | 3533 | 827 | 105 | 797 |
| Vehicle runner. Wheeled- | S. J. and J. D. Phillips | 736,439 | Aug. 18 | 2609 | 573 | 105 | 1575 |
| Vehicle running-gear | A. S. Baldwin | 718,072 | Jan. 13 | 1036 | 231 | 102 | 236 |
| Vehicle running-gear | R. D'Unger | 718,108 | Jan. 13 | 1103 | 243 | 102 | 253 |
| Vehicle running-gear | E. L. Farris | 723,519 | Mar. 24 | 3489 | 780 | 103 | 774 |
| Vehicle running-gear | J. S. Layton | 728,252 | May 19 | 2689 | 601, 602 | 104 | 612 |
| Vehicle running-gear | H. B. Atkins | 729,031 | May 26 | 4153 | 920 | 104 | 982 |
| Vehicle running-gear | H. L. Warner | 730,991 | June 16 | 2676 | 596 | 104 | 1720 |
| Vehicle running-gear | H. M. Glenn | 731,174 | June 16 | 3023 | 672 | 104 | 1788 |
| Vehicle running-gear | G. H. Condict | 731,755 | June 23 | 4118 | 918 | 104 | 2030 |
| Vehicle running-gear | R. A. Moore | 731,803 | June 23 | 4209 | 938 | 104 | 2050 |
| Vehicle running-gear | J. H. Ferguson | 745,338 | Dec. 1 | 39 | 8 | 107 | 1118 |
| Vehicle running-gear | J. C. Boyd | 747,581 | Dec. 22 | 4093 | 919 | 107 | 2053 |
| Vehicle running-gear | J. Krauss | 748,080 | Dec. 29 | 5169 | 1168 | 107 | 2315 |
| Vehicle running-gear and brake | C. C. Schmand | 740,048 | Sept. 29 | 4844 | 1087 | 106 | 1103 |
| Vehicle running-gear. Motor- | J. W. Packard and W. A. Hatcher | 721,912 | Mar. 3 | 469 | 102, 103 | 103 | 103 |
| Vehicle-seat | R. L. Fetters | 738,020 | Sept. 1 | 928 | 206 | 106 | 203 |
| Vehicle-seat | G. W. Darling | 748,349 | Dec. 29 | 5636 | 1284 | 107 | 2415 |
| Vehicle-seat. Adjustable | T. H. Smith | 741,077 | Oct. 13 | 1274 | 291 | 106 | 1539 |
| Vehicle-seat-supporting brace | G. W. Vinson | 734,379 | July 21 | 3108 | 731 | 105 | 691 |
| Vehicle. Self-propelled | M. Crawford | 725,222 | Apr. 14 | 1501 | 342 | 103 | 1503 |
| Vehicle. Self-propelled | H. Lemp | 732,870 | July 7 | 308 | 77, 78 | 105 | 68 |
| Vehicle. Self-propelling | A. A. Ball, Jr | 725,394 | Apr. 14 | 1800 | 404 | 103 | 1565 |
| Vehicle shifting-rail | W. B. Fletcher | 736,081 | Aug. 11 | 1995 | 424 | 105 | 1426 |
| Vehicle side-dumping body | W. L. Chessrown | 726,638 | Apr. 28 | 4137 | 933 | 103 | 2078 |
| Vehicle speed-changing and clutch mechanism. Motor- | L. Renault | 725,482 | Apr. 14 | 1973 | 444, 445 | 103 | 1602 |
| Vehicle-spring | T. G. Stevens | 721,107 | Feb. 17 | 3153 | 725 | 102 | 1521 |
| Vehicle-spring | S. H. Frost and G. W. Southwick | 721,175 | Feb. 24 | 3316 | 758 | 102 | 1572 |
| Vehicle-spring | A. Armstrong | 724,421 | Apr. 7 | 8 | 2 | 103 | 1172 |
| Vehicle-spring | F. Bosch | 733,940 | July 21 | 2255 | 530 | 105 | 509 |
| Vehicle-spring | J. Cummings | 742,114 | Oct. 20 | 3374 | 753 | 106 | 1993 |
| Vehicle-spring | F. L. Smith | 743,402 | Nov. 3 | 1156 | 215 | 107 | 245 |
| Vehicle-spring | C. L. Thomas | 744,259 | Nov. 17 | 2893 | 619 | 107 | 647 |
| Vehicle-spring | F. O. Farwell | 745,809 | Dec. 1 | 895 | 202 | 107 | 1290 |
| Vehicle-spring | J. Facer and T. G. Stevens | 746,941 | Dec. 15 | 3003 | 690 | 107 | 1792 |
| Vehicle. Steam motor- | F. E. Stanley | 730,307 | June 9 | 1428 | 314, 315 | 104 | 1435 |
| Vehicle steering apparatus | H. J. Elsner | 718,440 | Jan. 13 | 1698 | 374 | 102 | 378 |
| Vehicle steering apparatus. Motor- | A. Janssens | 739,420 | Sept. 22 | 3663 | 814 | 106 | 832 |
| Vehicle steering apparatus. Motor- | B. A. Stewart | 745,401 | Dec. 1 | 164 | 37 | 107 | 1135 |
| Vehicle steering-check | H. Lemp | 725,457 | Apr. 14 | 1929 | 432, 433 | 103 | 1593 |
| Vehicle steering device. Motor- | F. J. Tromble | 734,202 | July 21 | 2772 | 650 | 105 | 619 |
| Vehicle steering-gear | J. and J. Field | 724,836 | Apr. 7 | 787 | 182 | 103 | 1338 |

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|---|---|---|---|---|---|---|---|
| | | | | Spec. | Drg. | Vol. | Page. |
| Vehicle steering-gear | J. L. McDowell | 732,025 | June 23 | 4625 | 1034 | 104 | 2139 |
| Vehicle steering-gear | A. L. Waugh | 743,357 | Nov. 3 | 1058 | 226 | 107 | 226 |
| Vehicle steering-gear. Motor- | F. Lamplough | 722,723 | Mar. 17 | 2013 | 449 | 103 | 461 |
| Vehicle steering mechanism | F. A. Law | 720,936 | Feb. 17 | 2818 | 646<br>647 | 102 | 1446 |
| Vehicle steering mechanism | A. A. Ball, Jr | 723,975 | Mar. 31 | 4335 | 972<br>973 | 103 | 970 |
| Vehicle steering mechanism | A. A. Ball, Jr | 723,976 | Mar. 31 | 4339 | 973<br>974 | 103 | 971 |
| Vehicle steering mechanism. Motor- | H. Austin | 719,171 | Jan. 27 | 3147 | 700 | 102 | 709 |
| Vehicle steering mechanism. Motor- | R. Watson | 723,090 | Mar. 17 | 2661 | 599 | 103 | 595 |
| Vehicle steering mechanism. Motor- | T. W. Barber | 736,192 | Aug. 11 | 2180 | 468 | 105 | 1465 |
| Vehicle steering mechanism. Motor-driven- | E. Haynes, R. Wiley, and H. Murden. | 738,997 | Sept. 15 | 2858 | 635 | 106 | 645 |
| Vehicle storage-brake | H. Edeline | 721,031 | Feb. 17 | 3001 | 689<br>690 | 102 | 1485 |
| Vehicle storm-apron | A. D. Bayles | 718,413 | Jan. 13 | 1649 | 364 | 102 | 369 |
| Vehicle storm-curtain | B. S. D. S. Martin | 741,265 | Oct. 13 | 1638 | 369 | 106 | 1615 |
| Vehicle storm-shield | A. E. Metzger | 726,323 | Apr. 28 | 3521 | 797 | 103 | 1958 |
| Vehicle storm-shield | I. O. Denman | 727,598 | May 12 | 1445 | 324 | 104 | 329 |
| Vehicle storm-shield attachment | J. J. Russell | 727,844 | May 12 | 1936 | 431 | 104 | 430 |
| Vehicle storm-window | J. Krauss | 740,286 | Sept. 29 | 5274 | 1188 | 106 | 1192 |
| Vehicle strut. Two-wheeled- | H. Edeline | 745,803 | Dec. 1 | 882 | 199 | 107 | 1288 |
| Vehicle-support. Elastic | A. Pulbrook | 720,966 | Feb. 17 | 2883 | 660 | 102 | 1460 |
| Vehicle-top | W. F. Lawrenz and W. C. Kauth | 720,710 | Feb. 17 | 2433 | 556<br>557 | 102 | 1364 |
| Vehicle-top | L. Brockmeyer | 721,007 | Feb. 17 | 2957 | 680 | 102 | 1475 |
| Vehicle-top | J. H. Sprague | 723,749 | Mar. 24 | 3877 | 872 | 103 | 856 |
| Vehicle-top | G. W. Kernodle | 725,722 | Apr. 21 | 2428 | 550<br>551 | 103 | 1714 |
| Vehicle-top | A. W. Kavel | 736,974 | Aug. 25 | 3643 | 807 | 105 | 1810 |
| Vehicle-top | A. Bancroft | 747,356 | Dec. 22 | 3792 | 853 | 107 | 1985 |
| Vehicle-top. Folding | W. T. and E. Y. Temple | 727,492 | May 5 | 1240 | 276 | 104 | 268 |
| Vehicle-top. Folding | T. A. Loftus | 745,022 | Nov. 24 | 4272 | 925 | 107 | 956 |
| Vehicle-top prop-block | R. C. Schemmel | 720,625 | Feb. 17 | 2279 | 523 | 102 | 1331 |
| Vehicle-top shifting-rail fastener | F. H. Delker | 731,287 | June 16 | 3231 | 719 | 104 | 1831 |
| Vehicle-top support | T. R. Campbell | 737,705 | Sept. 1 | 263 | 56 | 106 | 60 |
| Vehicle-tops. Resilient rest for | T. F. Gensmer | 738,609 | Sept. 8 | 2123 | 465 | 106 | 473 |
| Vehicle transmission device. Motor- | C. Jenatzy, Fils | 732,944 | July 7 | 437 | 108 | 105 | 94 |
| Vehicle transmission-gear. Motor- | A. L. Riker | 725,629 | Apr. 14 | 2240 | 507<br>508 | 103 | 1661 |
| Vehicle transmission-gearing. Motor- | F. J. Porter and E. D. Stevenson | 740,777 | Oct. 6 | 744 | 167<br>168 | 106 | 1404 |
| Vehicle. Water- | H. A. Hansen | 738,436 | Sept. 8 | 1800 | 391 | 106 | 402 |
| Vehicle-wheel | L. J. Cook | 718,096 | Jan. 13 | 1080 | 239 | 102 | 247 |
| Vehicle-wheel | B. Jones | 718,468 | Jan. 13 | 1770 | 392 | 102 | 392 |
| Vehicle-wheel | C. Miller | 719,023 | Jan. 27 | 2849 | 640 | 102 | 649 |
| Vehicle-wheel | J. S. Layton | 719,818 | Feb. 3 | 742 | 174 | 102 | 980 |
| Vehicle-wheel | W. R. Wood | 719,970 | Feb. 3 | 995 | 231 | 102 | 1034 |
| Vehicle-wheel | R. E. Jeffery | 720,253 | Feb. 10 | 1556 | 357 | 102 | 1169 |
| Vehicle-wheel | J. B. Boulicault | 721,002 | Feb. 17 | 2952 | 678 | 102 | 1474 |
| Vehicle-wheel | R. L. Morgan | 721,380 | Feb. 24 | 3701 | 842 | 102 | 1652 |
| Vehicle-wheel | J. G. Westover | 725,014 | Apr. 7 | 1105 | 251 | 103 | 1405 |
| Vehicle-wheel | M. J. Clark | 725,410 | Apr. 14 | 1830 | 410 | 103 | 1571 |
| Vehicle-wheel | F. Mesnard | 726,557 | Apr. 28 | 3980 | 901 | 103 | 2048 |
| Vehicle-wheel | H. M. O'Malley | 728,494 | May 19 | 3152 | 697 | 104 | 708 |
| Vehicle-wheel | W. Morrison | 729,385 | May 26 | 4769 | 1055 | 104 | 1059 |
| Vehicle-wheel | N. G. Moore | 729,634 | June 2 | 201 | 46 | 104 | 1169 |
| Vehicle-wheel | J. M. Alderfer | 730,073 | June 2 | 1004 | 225 | 104 | 1332 |
| Vehicle-wheel | J. F. Barnett, Jr | 733,935 | July 21 | 2238 | 526<br>527 | 105 | 505 |
| Vehicle-wheel | R. O. Wilcox | 735,329 | Aug. 4 | 558 | 114 | 105 | 1100 |
| Vehicle-wheel | E. H. Phipps | 735,812 | Aug. 11 | 1484 | 318 | 105 | 1315 |
| Vehicle-wheel | N. A. Newton | 737,007 | Aug. 25 | 3703 | 822 | 105 | 1823 |
| Vehicle-wheel | L. Biava | 739,053 | Sept. 15 | 2962 | 656 | 106 | 667 |
| Vehicle-wheel | A. B. Kern | 739,188 | Sept. 15 | 3207 | 709 | 106 | 717 |
| Vehicle-wheel | G. B. Dryden | 739,658 | Sept. 22 | 4089 | 911 | 106 | 924 |
| Vehicle-wheel | A. Turkington | 741,193 | Oct. 13 | 1509 | 341 | 106 | 1589 |
| Vehicle-wheel | W. Laatsch | 743,734 | Nov. 10 | 1841 | 388 | 107 | 409 |
| Vehicle-wheel | C. W. Boykin | 743,815 | Nov. 10 | 1997 | 423 | 107 | 442 |
| Vehicle-wheel | J. Lauth | 744,969 | Nov. 24 | 4173 | 902 | 107 | 935 |
| Vehicle-wheel | H. Pace | 745,893 | Dec. 1 | 1070 | 241 | 107 | 1326 |
| Vehicle-wheel | J. W. Gray | 746,071 | Dec. 8 | 1395 | 312 | 107 | 1415 |
| Vehicle-wheel | H. G. Grier | 746,693 | Dec. 15 | 2516 | 578 | 107 | 1682 |
| Vehicle-wheel | J. R. Snyder | 746,754 | Dec. 15 | 2622 | 602<br>603 | 107 | 1706 |
| Vehicle-wheel | F. H. Turner | 746,902 | Dec. 15 | 2914 | 673 | 107 | 1771 |
| Vehicle-wheel and bearing therefor | W. L. Martin | 734,918 | July 28 | 4121 | 960 | 105 | 916 |
| Vehicle-wheel antiskidding device | S. Butler | 739,826 | Sept. 29 | 4400 | 987 | 106 | 1010 |
| Vehicle-wheel antiskidding device | W. D. Sainsbury | 740,184 | Sept. 29 | 5078 | 1142 | 106 | 1152 |
| Vehicle-wheel brake | W. Fraser | 719,578 | Feb. 3 | 307 | 71 | 102 | 886 |
| Vehicle-wheel dust-cap | E. S. Becraft | 742,562 | Oct. 27 | 4203 | 946 | 106 | 2179 |
| Vehicle wheel. Road- | G. S. Ogilvie | 718,275 | Jan. 13 | 1409 | 314 | 102 | 318 |
| Vehicle-wheel. Spring | J. Jackson | 743,289 | Nov. 3 | 919 | 199<br>200 | 107 | 197 |
| Vehicle-wheels. Antiskidding device for | S. Butler | 736,683 | Aug. 18 | 3093 | 681<br>682 | 105 | 1674 |
| Vehicle-window mechanism for canopy-tops | J. L. Lawrence | 747,888 | Dec. 22 | 4761 | 1076 | 107 | 2204 |
| Vehicle with electromotive power | O. Lasche | 718,639 | Jan. 20 | 2128 | 465 | 102 | 486 |
| Vehicles. Adjustable seat for two-wheeled | A. Johnston | 720,524 | Feb. 10 | 2044 | 469 | 102 | 1270 |
| Vehicles by means of springs with compressed air. Device for the suspension of | A. Stocquart | 721,475 | Feb. 24 | 3880 | 882 | 102 | 1688 |
| Vehicles. Change-gear for motor road- | A. de Dion and G. Bouton | 722,089 | Mar. 3 | 797 | 177<br>178 | 103 | 172 |
| Vehicles. Collector for use on electrically propelled or lighted | B. H. Bedell | 728,659 | May 19 | 3484 | 773 | 104 | 779 |
| Vehicles. Differential gear for motor- | M. G. De Simone | 728,420 | May 19 | 3017 | 663 | 104 | 680 |

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| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Vehicles. Equalizing-brace for spring- | P. Hebert | 737,622 | Sept. 1 | 119 | 26 | 106 | 28 |
| Vehicles. Foldable hood for wheeled | J. Mutch | 732,873 | Mar. 17 | 2282 | 510, 511, 512 | 103 | 515 |
| Vehicles for inspection and repair. Apparatus for raising | W. R. Webb | 745,545 | Dec. 1 | 434 | 102 | 107 | 1190 |
| Vehicles. Heating and igniting attachment for steam-propelled | C. I. Dangler | 726,875 | May 5 | 76 | 19,20 | 104 | 19 |
| Vehicles. Means for controlling the movements of | F. E. Kinsman | 735,527 | Aug. 4 | 946 | 201, 202 | 105 | 1182 |
| Vehicles. Means for driving traction- | C. M. Dissosway | 745,161 | Nov. 24 | 4593 | 996 | 107 | 1021 |
| Vehicles. Means for locking the steering mechanism of motor- | E. Devlin | 718,324 | Jan. 13 | 1498 | 333 | 102 | 337 |
| Vehicles. Means for operating motor- | C. J. Coleman | 745,157 | Nov. 24 | 4584 | 994, 995 | 107 | 1018 |
| Vehicles. Means for supplying current to electric- | R. A. E. Huber | 737,240 | Aug. 25 | 4125 | 916, 917 | 105 | 1911 |
| Vehicles on loop-tracks. Steering apparatus for | C. M. Smith | 727,222 | May 5 | 757 | 162 | 104 | 163 |
| Vehicles. Self-starting chock for | A. H. Minney | 719,353 | Jan. 27 | 3492 | 777 | 102 | 784 |
| Vehicles. Shaft-connecting gear for motor road- | F. Charron and L. Girardot | 727,289 | May 5 | 868 | 187 | 104 | 186 |
| Vehicles. Spark advancing and retarding mechanism for explosive-engine | L. P. Mooers | 721,066 | Feb. 17 | 3063 | 704 | 102 | 1500 |
| Vehicles. Speed regulating and controlling mechanism for self-propelled | A. W. Sandell | 718,531 | Jan. 13 | 1918 | 421 | 102 | 428 |
| Vehicles. System of control for electrically-propelled | W. B. Potter | 725,767 | Apr. 21 | 2512 | 570 | 103 | 1733 |
| Vehicles with air-tires. Supporting-shoe for | L. Combrun | 718,244 | Jan. 13 | 1341 | 297 | 102 | 303 |
| Veil-holder | P. Till | 730,490 | June 9 | 1769 | 396 | 104 | 1507 |
| Velocipede | E. R. Estep | 719,770 | Feb. 3 | 663 | 152, 153 | 102 | 962 |
| Velocipede-frame | E. G. Latta | 736,527 | Aug. 18 | 2782 | 609 | 105 | 1612 |
| Velocipede-harness | J. N. Patten | 742,800 | Oct. 27 | 4608 | 1044 | 106 | 2268 |
| Velocipede. Railway- | F. Brady | 734,491 | July 21 | 3307 | 776 | 105 | 730 |
| Velocipede steering mechanism | B. F. S. Baden-Powell | 722,171 | Mar. 3 | 940 | 209 | 103 | 200 |
| Velocipede. Water- | N. R. Dungee | 738,171 | Sept. 8 | 1255 | 272 | 106 | 287 |
| Velocipedes, motor-cycles, &c. Two-speed gear for | L. Lecarme | 745,632 | Dec. 1 | 581 | 135 | 107 | 1221 |
| Velocity-meter | G. Dettmar | 744,909 | Nov. 24 | 4056 | 874 | 107 | 912 |
| Vender. Mechanical | L. H. Jennings | 733,845 | July 14 | 2062 | 487 | 105 | 450 |
| Vending apparatus | L. J. Smith and S. J. Brown | 717,721 | Jan. 6 | 354 | 86,87 | 102 | 76 |
| Vending apparatus | M. S. Cody | 725,317 | Apr. 14 | 1660 | 374, 375 | 103 | 1536 |
| Vending apparatus | R. C. Kelly, R. Stroppel, and P. F. Wyjack. | 726,938 | May 5 | 198 | 46,47 | 104 | 44 |
| Vending apparatus | J. J. Reed | 728,412 | May 19 | 2997 | 659, 660 | 104 | 676 |
| Vending apparatus | E. G. Matthewson | 732,766 | July 7 | 121 | 33 | 105 | 29 |
| Vending apparatus | J. B. Hurd | 739,417 | Sept. 22 | 3656 | 813 | 106 | 830 |
| Vending apparatus | J. B. Hurd | 739,418 | Sept. 22 | 3658 | 813, 814 | 106 | 830 |
| Vending apparatus | G. W. MacKenzie | 744,377 | Nov. 17 | 3107 | 668 | 107 | 694 |
| Vending apparatus. Coin-controlled | C. W. Platt | 742,732 | Oct. 27 | 4496 | 1017, 1018 | 106 | 2243 |
| Vending-cabinet | J. M. Shelton | 741,939 | Oct. 20 | 2974 | 662 | 106 | 1913 |
| Vending-machine | F. C. Connor | 717,815 | Jan. 6 | 561 | 125, 126 | 102 | 121 |
| Vending-machine | F. E. Huxley | 718,765 | Jan. 20 | 2379 | 527 | 102 | 536 |
| Vending-machine | H. L. Shafer and G. M. Howe | 721,971 | Mar. 3 | 595 | 133 | 103 | 130 |
| Vending-machine | W. Webber | 723,345 | Mar. 24 | 3143 | 707 | 103 | 706 |
| Vending-machine | J. A. Joyce | 724,187 | Mar. 31 | 4763 | 1068 | 103 | 1054 |
| Vending-machine | G. W. Peter | 725,867 | Apr. 21 | 2691 | 612 | 103 | 1772 |
| Vending-machine | J. M. Jacobs | 726,934 | May 5 | 190 | 44,45 | 104 | 43 |
| Vending-machine | W. J. Rush | 727,207 | May 5 | 720 | 154 | 104 | 156 |
| Vending-machine | L. W. Baldwin | 727,260 | May 5 | 811 | 175 | 104 | 175 |
| Vending-machine | W. W. Rosenfield | 728,619 | May 19 | 3404 | 754 | 104 | 762 |
| Vending-machine | E. Shaw | 728,774 | May 19 | 3675 | 817, 818, 819, 820, 821 | 104 | 818 |
| Vending-machine | D. James and L. D. Rusher | 729,938 | June 2 | 750 | 167, 168 | 104 | 1281 |
| Vending-machine | A. A. Caille | 730,232 | June 9 | 1289 | 284 | 104 | 1405 |
| Vending-machine | L. W. Rubrecht | 730,707 | June 9 | 2154 | 478 | 104 | 1591 |
| Vending-machine | C. M. Mitchell | 731,593 | June 23 | 3824 | 851, 852 | 104 | 1970 |
| Vending-machine | M. C. Clemons | 732,337 | June 30 | 5235 | 1162 | 104 | 2278 |
| Vending-machine | E. S. Scheble | 732,786 | July 7 | 162 | 42 | 105 | 38 |
| Vending-machine | S. A. Webber and W. J. Davis | 733,523 | July 14 | 1481 | 352, 353 | 105 | 330 |
| Vending-machine | E. Wüstner | 734,647 | July 28 | 3594 | 841 | 105 | 809 |
| Vending-machine | H. S. Mills | 735,398 | Aug. 4 | 680 | 145, 146 | 105 | 1125 |
| Vending-machine | J. Jonson | 736,110 | Aug. 11 | 2039 | 434, 435 | 105 | 1435 |
| Vending-machine | J. D. Kneedler | 736,980 | Aug. 25 | 3661 | 811, 812 | 105 | 1814 |
| Vending-machine | E. Shaw | 737,503 | Aug. 25 | 4625 | 1037, 1038, 1039 | 105 | 2021 |
| Vending-machine | G. Rupley | 737,665 | Sept. 1 | 195 | 41,42 | 106 | 45 |
| Vending-machine | J. R. Williams | 738,386 | Sept. 8 | 1704 | 370, 371 | 106 | 382 |
| Vending-machine | W. L. Halloway | 738,613 | Sept. 8 | 2130 | 467 | 106 | 474 |
| Vending-machine | D. James | 738,685 | Sept. 8 | 2286 | 503 | 106 | 505 |
| Vending-machine | C. A. Brewer | 739,979 | Sept. 29 | 4712 | 1060 | 106 | 1073 |

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| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Vending-machine | H. S. Mills | 740,159 | Sept. 29 | 5031 | 1130, 1131 | 106 | 1143 |
| Vending-machine | H. J. Shaller | 740,374 | Sept. 29 | 5431 | 1222 | 106 | 1224 |
| Vending-machine | J. A. Williams | 740,998 | Oct. 6 | 1130 | 255 | 106 | 1486 |
| Vending-machine | J. B. Hurd | 741,667 | Oct. 20 | 2448 | 548, 549 | 106 | 1803 |
| Vending-machine | F. F. Pulver | 742,063 | Oct. 20 | 3242 | 726 | 106 | 1968 |
| Vending-machine | H. J. Davis | 742,295 | Oct. 27 | 3724 | 832 | 106 | 2081 |
| Vending-machine | F. M. Trainer | 742,527 | Oct. 27 | 4150 | 932, 933 | 106 | 2168 |
| Vending-machine | G. Rupley | 742,804 | Oct. 27 | 4614 | 1045, 1046 | 106 | 2269 |
| Vending-machine | L. Pedersen | 743,750 | Nov. 10 | 1868 | 394, 395 | 107 | 416 |
| Vending-machine | E. S. Scheble | 744,412 | Nov. 17 | 3175 | 681 | 107 | 708 |
| Vending-machine | I. C. Woodward | 745,707 | Dec. 1 | 711 | 162 | 107 | 1249 |
| Vending-machine | O. E., E. E., and W. L. Clark | 746,028 | Dec. 8 | 1323 | 296, 297 | 107 | 1398 |
| Vending-machine | C. J. Neth | 746,134 | Dec. 8 | 1510 | 338 | 107 | 1443 |
| Vending-machine | W. W. Munger | 746,356 | Dec. 8 | 1916 | 438 | 107 | 1527 |
| Vending-machine | J. J. Sleeper | 747,248 | Dec. 15 | 3569 | 808 | 107 | 1918 |
| Vending-machine | T. N. Goffe | 747,414 | Dec. 22 | 3881 | 873, 874 | 107 | 2005 |
| Vending-machine | R. M. Green | 748,065 | Dec. 29 | 5140 | 1162, 1163 | 107 | 2308 |
| Vending-machine. Automatic | R. P. Elliott | 730,624 | June 9 | 2004 | 445 | 104 | 1559 |
| Vending-machine. Automatic | F. C. Hutchinson | 733,395 | July 14 | 1256 | 297, 298 | 105 | 282 |
| Vending-machine. Coin | C. R. Smith | 740,935 | Oct. 6 | 1004 | 227, 228 | 106 | 1461 |
| Vending-machine. Coin-controlled | J. Gabel | 737,217 | Aug. 25 | 4072 | 904, 905 | 105 | 1900 |
| Vending-machine. Coin-controlled | W. M. Cram | 740,244 | Sept. 29 | 5199 | 1169 | 106 | 1176 |
| Vending-machine. Coin-controlled | F. G. Hartell | 740,563 | Oct. 6 | 343 | 72 | 106 | 1319 |
| Vending-machine. Coin-controlled | F. J. Rowse | 743,037 | Nov. 3 | 420 | 91 | 107 | 88 |
| Vending-machine. Coin-controlled | F. J. Rowse | 744,410 | Nov. 17 | 3170 | 680 | 107 | 708 |
| Vending-machine. Coin-controlled | M. S. Tyler | 744,824 | Nov. 24 | 3919 | 842, 843 | 107 | 882 |
| Vending-machine coin-controlled device | S. A. Webber and W. J. Davis | 733,924 | July 14 | 2219 | 520, 521 | 105 | 481 |
| Vending machine. Coin-controlled liquid- | J. Anderson | 747,835 | Dec. 22 | 4648 | 1050 | 107 | 2179 |
| Vending-machine coin-drawer | C. L. Hurd | 723,776 | Mar. 24 | 3931 | 886, 887 | 103 | 868 |
| Vending-machine. Coin-freed | J. W. Pearson | 737,464 | Aug. 25 | 4547 | 1019, 1020 | 105 | 2003 |
| Vending-machine. Coin-operated | L. W. Baldwin | 726,617 | Apr. 28 | 4103 | 926, 927 | 103 | 2072 |
| Vending-machine. Coin-operated | J. B. Fender | 741,022 | Oct. 13 | 1176 | 266 | 106 | 1517 |
| Vending-machine for newspapers, magazines, &c. Coin-controlled | C. H. Balsley | 744,673 | Nov. 17 | 3606 | 777, 778 | 107 | 799 |
| Vending-machine fraud-preventive device | W. Sloan and J. E. Robinson | 746,183 | Dec. 8 | 1598 | 357 | 107 | 1462 |
| Vending mechanism | H. G. Sweeney | 740,202 | Sept. 29 | 5116 | 1149, 1150 | 106 | 1159 |
| Veneer coiling and nailing machine | M. J. Bartlett | 743,425 | Nov. 10 | 1244 | 256 | 107 | 282 |
| Veneer-cutter | J. Wolfinger | 747,827 | Dec. 22 | 4636 | 1047 | 107 | 2176 |
| Veneer-cutting machine | C. R. Traxler | 739,565 | Sept. 22 | 3896 | 873, 874 | 106 | 882 |
| Veneer-drier controlling mechanism | A. S. Nichols | 717,708 | Jan. 6 | 335 | 81, 82 | 102 | 73 |
| Veneer-drier controlling mechanism | N. Windsor | 717,730 | Jan. 6 | 368 | 90, 91 | 102 | 79 |
| Veneer-edging machine | W. C. Calhoun and D. E. Meyer | 726,403 | Apr. 28 | 3665 | 831 | 103 | 1988 |
| Veneer or covering for wood or canvas, &c. Composition of matter used as | A. A. Turner | 748,235 | Dec. 29 | 5449 | ..... | 107 | 2375 |
| Veneer-package machine | W. J. Ott | 744,876 | Nov. 24 | 4004 | 863 | 107 | 902 |
| Veneer plates, &c. Producing ornamentations for and upon | M. Harrass | 739,861 | Sept. 29 | 4465 | 1002 | 106 | 1022 |
| Veneered molding or the like. Manufacture of | O. Liepmann | 734,423 | July 21 | 3184 | 748 | 105 | 706 |
| Veneering columns | E. Tyden | 720,760 | Feb. 17 | 2510 | 579 | 102 | 1381 |
| Veneering. Wall or ceiling | R. P. Andersen | 718,593 | Jan. 20 | 2061 | 448 | 102 | 473 |
| Vent and indicator for storage-casks. Self-closing | J. G. F. Hieber | 718,761 | Jan. 20 | 2370 | 524 | 102 | 534 |
| Vent-controller | A. G. Powers | 736,012 | Aug. 11 | 1868 | 399 | 105 | 1399 |
| Vent controller for barrels. Air- | E. R. Charles | 739,058 | Sept. 15 | 2971 | 659 | 106 | 669 |
| Vent-controlling device | C. W. Winther | 725,189 | Apr. 14 | 1435 | 325 | 103 | 1488 |
| Ventilating and chimney cowl | A. Ashworth | 718,186 | Jan. 13 | 1240 | 273 | 102 | 283 |
| Ventilating and cooling apparatus | J. H. McConnell | 739,438 | Sept. 22 | 3696 | 823 | 106 | 839 |
| Ventilating apparatus | J. S. Roake | 735,823 | Aug. 11 | 1509 | 323 | 105 | 1321 |
| Ventilating brick buildings. Means for | T. Darlington | 718,823 | Jan. 20 | 2469 | 548 | 102 | 554 |
| Ventilating-cap for cellar-doors, skylights, &c | H. E. Thompson | 719,961 | Feb. 3 | 982 | 227, 228 | 102 | 1032 |
| Ventilating device. House- | F. B. Moore | 742,470 | Oct. 27 | 4024 | 903 | 106 | 2142 |
| Ventilation of rooms or buildings | S. Timoshovitsch | 720,755 | Feb. 17 | 2502 | 577 | 102 | 1380 |
| Ventilator: | | | | | | | |
| *See* Car-ventilator. Car-motor ventilator. Electrothermic ventilator. Floor and wall ventilator. Grain-bin ventilator. Hay-shock ventilator. Locomotive-cab ventilator. Mine-ventilator. Oven-ventilator. Pipe-ventilator. Refrigerator-car ventilator. Ship-ventilator. Suction-ventilator. Water-closet ventilator. Window-ventilator. | | | | | | | |
| Ventilator | W. Edwards | 721,683 | Mar. 3 | 66 | 13 | 103 | 15 |
| Ventilator | F. C. Foos and T. G. Muir | 728,387 | May 19 | 2955 | 651 | 104 | 667 |
| Ventilator | T. A. Frame | 732,290 | June 30 | 5161 | 1146 | 104 | 2262 |

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| Invention. | Name. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|---|
| | | | | Spec. | Dr'g. | Vol. | Page. |
| Ventilator | E. J. Glackin | 733,956 | July 21 | 2289 | 538, 539 | 105 | 516 |
| Ventilator | W. F. Slack | 740,598 | Oct. 6 | 419 | 90 | 106 | 1336 |
| Ventilator | E. P. Oliver | 743,987 | Nov. 10 | 2318 | 495 | 107 | 514 |
| Ventilator | F. G. Bate | 745,313 | Dec. 1 | 4 | 1 | 107 | 1101 |
| Ventilator | W. G. Gagné | 746,064 | Dec. 8 | 1385 | 310 | 107 | 1413 |
| Ventilator | T. Hough | 747,427 | Dec. 22 | 3902 | 879 | 107 | 2010 |
| Ventilator | G. E. Stevens | 747,658 | Dec. 22 | 4329 | 978 | 107 | 2103 |
| Ventilator | W. J. Schumacher | 748,315 | Dec. 29 | 5581 | 1273 | 107 | 2406 |
| Ventilator-head | E. T. Klein | 725,452 | Apr. 14 | 1916 | 429 | 103 | 1590 |
| Vermin-destroyer | J. M. Phillips | 720,282 | Feb. 10 | 1617 | 370 | 102 | 1180 |
| Vermin-exterminator | S. W. and S. R. Macy | 736,282 | Aug. 11 | 2338 | 508 | 105 | 1501 |
| Vermin on poultry, birds, &c. Apparatus for destroying | L. F. Mills | 744,781 | Nov. 24 | 3836 | 827 | 107 | 868 |
| Vertical underfeed-furnace | H. G. Cox | 745,573 | Dec. 1 | 474 | 112 | 107 | 1198 |
| Vessel | W. G. Jamieson | 743,171 | Nov. 3 | 677 | 148 | 107 | 142 |
| Vessel air-ejecting apparatus | G. Quanonne | 725,137 | Apr. 14 | 1340 | 302 | 103 | 1469 |
| Vessel-bottoms. Device for cleaning | E. S. Willey | 721,347 | Feb. 24 | 3639 | 827, 828 | 102 | 1639 |
| Vessel. Cargo-transport | W. G. Clark | 725,219 | Apr. 14 | 1495 | 340, 341 | 103 | 1501 |
| Vessel charging or discharging apparatus | H. Shoosmith | 734,974 | July 28 | 4223 | 981, 982 | 105 | 936 |
| Vessel-crane | D. F. Macdonald | 746,120 | Dec. 8 | 1487 | 332 | 107 | 1438 |
| Vessel hawser attachment | R. C. Reavley | 721,465 | Feb. 24 | 3858 | 878 | 102 | 1684 |
| Vessel-hull | H. N. Whittelsey | 735,637 | Aug. 4 | 1153 | 244, 245 | 105 | 1226 |
| Vessel. Life-saving | F. and B. E. Terwilleger | 731,394 | June 16 | 3431 | 765, 766 | 104 | 1873 |
| Vessel-loading apparatus | E. Holbrook | 726,685 | Apr. 28 | 4221 | 954 | 103 | 2097 |
| Vessel-loading apparatus | C. J. Ingard | 743,167 | Nov. 3 | 672 | 145, 146 | 107 | 140 |
| Vessel-loading device | F. Honeck and R. H. Hopkins | 717,682 | Jan. 6 | 286 | 71,72 | 102 | 62 |
| Vessel loading or unloading apparatus | W. J. Selleck | 719,517 | Feb. 3 | 181 | 42 | 102 | 862 |
| Vessel loading or unloading apparatus | B. J. Harris | 742,023 | Oct. 20 | 3162 | 706 | 106 | 1951 |
| Vessel loading or unloading apparatus | G. H. Airey | 747,923 | Dec. 29 | 4849 | 1095 | 107 | 2244 |
| Vessel. Marine | J. McMillan | 727,827 | May 12 | 1901 | 424 | 104 | 423 |
| Vessel. Marine | C. H. Lee | 741,512 | Oct. 13 | 2149 | 479 | 106 | 1725 |
| Vessel or diving apparatus. Submarine | R. Sinclair | 728,031 | May 12 | 2275 | 506 | 104 | 502 |
| Vessel safety-alarm device. Marine | M. Shepard | 743,939 | Nov. 10 | 2212 | 477 | 107 | 487 |
| Vessel. Semisubmergible | S. Lake | 738,206 | Sept. 8 | 1321 | 286 | 106 | 302 |
| Vessel-skylight | W. B. Stearns | 731,138 | June 16 | 2958 | 657 | 104 | 1776 |
| Vessel ventilating-port | J. W. Atlee | 719,416 | Feb. 3 | 6 | 2 | 102 | 827 |
| Vessels and torpedoes from a distance. Appliance for electrically operating | L. Wilson | 719,405 | Jan. 27 | 3583 | 801 | 102 | 803 |
| Vessels. Apparatus for extracting stranded | J. Arbuckle | 721,851 | Mar. 3 | 354 | 78,79 | 103 | 78 |
| Vessels. Apparatus for increasing speed of | J. K. Ross and L. Singer | 744,622 | Nov. 17 | 3517 | 759 | 107 | 779 |
| Vessels. Apparatus for recording speed of | J. S. Briggs | 748,159 | Dec. 29 | 5314 | 1207 | 107 | 2346 |
| Vessels. Apparatus for relieving grounded | G. E. Balch | 727,059 | May 5 | 463 | 97,98 | 104 | 101 |
| Vessels. Determining the nautical bearing of navigable | H. W. Ladd | 733,910 | July 14 | 2192 | 515 | 105 | 476 |
| Vessels. Drag for salving sunken | B. P. Vance, C. F. Jones, and R. Chamberlain. | 747,102 | Dec. 15 | 3298 | 750 | 107 | 1862 |
| Vessels. Grounding-preventer for marine | C. Dornfeld | 721,677 | Mar. 3 | 52 | 11 | 103 | 13 |
| Vessels. Hatch-cover for marine | W. W. Dawley | 746,929 | Dec. 15 | 2977 | 684, 685 | 107 | 1787 |
| Vessels' hatchways. Cover for | E. W. De Rusett | 722,215 | Mar. 10 | 1046 | 230 | 103 | 238 |
| Vessels or the like from one water-level to another in waterways. Conveying | F. Schnapp | 737,968 | Sept. 1 | 824 | 180, 181 | 106 | 180 |
| Vessels. Propelling | C. F. Sautter | 745,910 | Dec. 1 | 1098 | 245 | 107 | 1333 |
| Vessel bottom. Metallic | D. A. Lisk | 733,979 | July 21 | 2337 | 548 | 105 | 525 |
| Vessel-caps. Means for securing | J. M. Hicks | 746,331 | Dec. 8 | 1875 | 427 | 107 | 1519 |
| Vessel edges. Machine for attaching metallic strips to | W. G. Haas | 732,849 | July 7 | 273 | 68,69 | 105 | 61 |
| Vessel. Food-containing | W. J. Ablett | 733,111 | July 7 | 733 | 178 | 105 | 155 |
| Vessel for containing varnish, &c | H. Rosenberg | 747,644 | Dec. 22 | 4301 | 967 | 107 | 2100 |
| Vessel. Metallic shipping | C. M. Nelson and J. A. Christianson | 720,277 | Feb. 10 | 1610 | 369 | 102 | 1179 |
| Vessel-neck and sealing-cap for same | J. M. Hicks | 746,329 | Dec. 8 | 1873 | 427 | 107 | 1518 |
| Vessel or container | W. S. Mellen | 743,180 | Nov. 3 | 692 | 152 | 107 | 145 |
| Vessels. Closure for storing and dispensing | H. C. Emrich | 717,560 | Jan. 6 | 72 | 19 | 102 | 18 |
| Vessels in vacuum. Apparatus for closing | E. G. Howe | 725,967 | Apr. 21 | 2862 | 649 | 103 | 1808 |
| Vessels. Treating metallic | J. A. Brooks | 720,660 | Feb. 17 | 2343 | 536 | 102 | 1345 |
| Vest and shirt. Combined | J. D. Van Fleet | 737,978 | Sept. 1 | 845 | 185 | 106 | 184 |
| Vest. Lady's | M. E. Langham | 738,045 | Sept. 1 | 961 | 214 | 106 | 209 |
| Vest. Skeleton | C. G. Funk | 739,166 | Sept. 15 | 3170 | 701 | 106 | 709 |
| Veterinary dental float | J. R. Mahaffy | 741,519 | Oct. 13 | 2164 | 482 | 106 | 1728 |
| Veterinary dental instrument | J. M. Phillips | 735,580 | Aug. 4 | 1052 | 223 | 105 | 1204 |
| Veterinary forceps | G. Anderson | 733,114 | July 7 | 740 | 179 | 105 | 156 |
| Veterinary forceps | W. B. Stevens | 739,453 | Sept. 22 | 3718 | 828 | 106 | 844 |
| Veterinary surgical instrument | G. H. Summerfeldt | 737,293 | Aug. 25 | 4227 | 941 | 105 | 1933 |
| Vibrating screen | F. W. Rogers, R. K. Humphrey, and J. W. Nesmith. | 738,485 | Sept. 8 | 1900 | 415, 416 | 106 | 422 |
| Vibrator-engine | W. Lewis | 738,209 | Sept. 8 | 1327 | 287 | 106 | 303 |
| Vibratory motor. Electrical | C. S. Whitney | 743,603 | Nov. 10 | 1619 | 338, 339 | 107 | 362 |
| View outfit | R. R. Whiting | 720,204 | Feb. 10 | 1458 | 333 | 102 | 1148 |
| Vignetter | M. V. Carter | 745,324 | Dec. 1 | 19 | 4 | 107 | 1105 |
| Vignetting-tool | F. J. M. Gerland | 719,106 | Jan. 27 | 3036 | 675 | 102 | 687 |
| Vinegar-generator | R. Douglas | 726,883 | May 5 | 101 | 24 | 104 | 25 |
| Vinegar-generators. Automatic feeder for | H. Frings, Jr | 728,895 | May 26 | 3909 | 869 | 104 | 882 |
| Violin-bow | M. B. Roark | 738,945 | Sept. 15 | 2780 | 615 | 106 | 629 |
| Violin-bow | M. E. Verdier | 739,459 | Sept. 22 | 3726 | 829 | 106 | 846 |
| Violin-bow attachment | W. J. Keast | 748,286 | Dec. 29 | 5540 | 1263 | 107 | 2394 |
| Violin-bridge | W. E. McWhirter | 719,604 | Feb. 3 | 344 | 80 | 102 | 894 |
| Violin sound-beam | J. Bunch | 722,561 | Mar. 10 | 1690 | 377 | 103 | 378 |
| Violin sound-post | H. Unger | 735,428 | Aug. 4 | 757 | 161 | 105 | 1141 |

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| Viscosimeter | S. Grand | 722,576 | Mar. 10 | 1713 | 381 | 103 | 384 |
| Vise | E. B. Hanna | 718,120 | Jan. 13 | 1119 | 247, 248 | 102 | 256 |
| Vise | J. R. Long | 719,348 | Jan. 27 | 3485 | 775 | 102 | 782 |
| Vise | C. W. Orvis | 723,905 | Mar. 31 | 4179 | 942 | 103 | 936 |
| Vise | E. W. Fulton | 727,343 | May 5 | 975 | 211 | 104 | 211 |
| Vise | C. W. Orvis | 727,679 | May 12 | 1610 | 366 | 104 | 364 |
| Vise | E. H. Byer | 728,858 | May 26 | 3850 | 856 | 104 | 870 |
| Vise | J. R. Long | 732,757 | July 7 | 106 | 29, 30 | 105 | 27 |
| Vise | J. R. Long | 732,761 | July 7 | 112 | 31 | 105 | 28 |
| Vise | J. Hübner | 733,044 | July 7 | 609 | 150 | 105 | 130 |
| Vise | C. Frantz | 734,534 | July 28 | 3400 | 794 | 105 | 767 |
| Vise | C. J. Haggstrom | 740,271 | Sept. 29 | 5241 | 1179 | 106 | 1185 |
| Vise | G. A. Baumann | 747,033 | Dec. 15 | 3160 | 724 | 107 | 1827 |
| Vise | J. Jacobson | 747,433 | Dec. 22 | 3915 | 882 | 107 | 2013 |
| Vise. Bench- | F. J. Wermes | 721,630 | Feb. 24 | 4197 | 954 | 102 | 1760 |
| Vise. Bench- | B. L. Williamson | 727,246 | May 5 | 793 | 170 | 104 | 171 |
| Vise. Bench- | D. L. Smith | 732,013 | June 23 | 4604 | 1027 | 104 | 2134 |
| Vise. Bench- | J. R. Long | 742,096 | Oct. 20 | 3343 | 746 | 106 | 1987 |
| Vise. Bench- | J. A. Blake | 742,281 | Oct. 27 | 3700 | 826 | 106 | 2077 |
| Vise. Bench- | J. M. Coffield | 745,001 | Nov. 24 | 4226 | 915 | 107 | 946 |
| Vise. Carpenter's | G. W. Drew | 729,741 | June 2 | 400 | 90 | 104 | 1210 |
| Vise. Folding | M. D. Colt | 748,048 | Dec. 29 | 5104 | 1153 | 107 | 2300 |
| Vise. Foot- | E. B. Newnam | 738,055 | Sept. 1 | 980 | 218 | 106 | 213 |
| Vise. Machine- | J. W. Crippen and H. F. Keliemen. | 722,677 | Mar. 17 | 1932 | 430 | 103 | 445 |
| Vise. Machine-tool | B. Nadall | 725,760 | Apr. 21 | 2498 | 567, 568 | 103 | 1731 |
| Vise. Pipe- | J. R. Long | 732,758 | July 7 | 107 | 30 | 105 | 27 |
| Vise. Pipe- | J. R. Long | 732,759 | July 7 | 109 | 30 | 105 | 27 |
| Vise. Pipe- | J. R. Long | 732,760 | July 7 | 111 | 30, 31 | 105 | 27 |
| Vise. Pipe- | W. J. Grinden | 743,072 | Nov. 3 | 489 | 106, 107 | 107 | 102 |
| Vise. Quick-acting | E. R. Cook | 720,895 | Feb. 17 | 2735 | 630 | 102 | 1428 |
| Vise. Quick-acting | C. A. Herriman | 742,647 | Oct. 27 | 4355 | 979 | 106 | 2212 |
| Vise. Woodworker's | E. Wright | 723,966 | Mar. 31 | 4317 | 969 | 103 | 967 |
| Vises. Manufacturing | J. L. Ware | 745,746 | Dec. 1 | 769 | 176 | 107 | 1262 |
| Vision-testing apparatus | R. K. Grove | 739,670 | Sept. 22 | 4112 | 917 | 106 | 929 |
| Volt-ampere meter | L. M. Pignolet | 725,765 | Apr. 21 | 2507 | 569 | 103 | 1732 |
| Volt-ampere meter | M. C. Rypinski and J. L. Davis | 729,422 | May 26 | 4832 | 1071 | 104 | 1072 |
| Voltage-regulating apparatus | J. S. Peck and H. R. Stuart | 740,173 | Sept. 29 | 5061 | 1138 | 106 | 1148 |
| Voltage-regulator | C. E. Skinner | 734,438 | July 21 | 3213 | 757 | 105 | 712 |
| Voltage-regulator | A. Le Blanc | 744,771 | Nov. 24 | 3818 | 823 | 107 | 862 |
| Voltages. Means for varying delta-connected | A. H. Armstrong and J. E. Woodbridge. | 726,391 | Apr. 28 | 3645 | 826 | 103 | 1984 |
| Voltaic cell | M. E. Conrad | 719,752 | Feb. 3 | 623 | | 102 | 953 |
| Voltaic cell | C. T. Richmond and M. H. Moffett. | 733,751 | July 14 | 1874 | 442 | 105 | 412 |
| Voltameter for the electrolysis of water | P. Garuti and R. Pompili | 724,842 | Apr. 7 | 795 | 184 | 103 | 1339 |
| Voltmeters or similar instruments. Mounting for the coils of | C. W. Farquharson and O. F. Adelman. | 745,046 | Nov. 24 | 4339 | 937, 938 | 107 | 970 |
| Vote-recording and voter's-number-registering machine. | J. T. Hood | 737,238 | Aug. 25 | 4119 | 914, 915 | 105 | 1910 |
| Voting apparatus for use with balls | W. T. Odhner | 226,452 | Apr. 28 | 3753 | 850 | 103 | 2006 |
| Voting-booth | T. E. Barrow and W. H. Bowers | 727,735 | May 12 | 1730 | 389 | 104 | 389 |
| Voting-machine | J. Boma | 723,357 | Mar. 24 | 3167 | 711, 712, 713, 714, 715 | 103 | 711 |
| Voting-machine | E. E. Ritchie | 723,923 | Mar. 31 | 4222 | 949, 950, 951 | 103 | 947 |
| Voting-machine | A. McKenzie | 726,183 | Apr. 21 | 3239 | 734, 735 | 103 | 1884 |
| Voting-machine | A. M. Spaulding | 726,779 | Apr. 28 | 4400 | 989 | 103 | 2134 |
| Voting-machine | W. A. Swaren | 728,045 | May 12 | 2302 | 512 | 104 | 507 |
| Voting-machine | A. A. Farwell | 728,218 | May 19 | 2621 | 586 | 104 | 596 |
| Voting-machine | A. McKenzie | 730,788 | June 9 | 2282 | 507 | 104 | 1618 |
| Voting-machine | C. E. Turner and W. T. Anderson | 736,463 | Aug. 18 | 2648 | 582 | 105 | 1583 |
| Voting-machine | G. Johnson | 737,412 | Aug. 25 | 4450 | 999 | 105 | 1981 |
| Voting-machine | A. F. Bardwell | 742,273 | Oct. 27 | 3677 | 822, 823 | 106 | 2071 |
| Voting-machine | A. F. Bardwell | 742,274 | Oct. 27 | 3682 | 823, 824 | 106 | 2072 |
| Voting-machine | A. F. Bardwell | 742,275 | Oct. 27 | 3685 | 824 | 106 | 2073 |
| Voting-machine | A. F. Bardwell | 742,277 | Oct. 27 | 3687 | 825 | 106 | 2074 |
| Voting-machine | A. F. Bardwell | 742,278 | Oct. 27 | 3691 | 825 | 106 | 2075 |
| Voting-machine | N. Prince | 746,572 | Dec. 8 | 2281 | 523 | 107 | 1608 |
| Voting-machine | L. W. Luellen | 747,455 | Dec. 22 | 3950 | 888 | 107 | 2020 |
| Voting-machine booth construction | A. F. Bardwell | 742,276 | Oct. 27 | 3686 | 824 | 106 | 2073 |
| Voting-machine independent-vote mechanism | F. X. St. Louis and A. M. Jackson | 740,057 | Sept. 29 | 4860 | 1089 | 106 | 1106 |
| Voting-machine interlocking mechanism | F. X. St. Louis and A. M. Jackson | 740,059 | Sept. 29 | 4862 | 1090 | 106 | 1106 |
| Voting-machine straight-ticket mechanism | F. X. St. Louis and A. M. Jackson | 740,058 | Sept. 29 | 4861 | 1089 | 106 | 1106 |
| Vulcanization | W. H. Roberts | 736,386 | Aug. 11 | 2424 | 529 | 105 | 1520 |
| Vulcanizer | H. C. Frost and G. M. Stadelman | 744,327 | Nov. 17 | 3015 | 647 | 107 | 674 |
| Vulcanizer. Time-controlled | W. H. Becroft | 739,578 | Sept. 22 | 3941 | 880 | 106 | 892 |
| Vulcanizing apparatus | W. R. Smith | 720,631 | Feb. 17 | 2291 | 525 | 102 | 1334 |
| Vulcanizing apparatus | B. W. Wittenberg, E. Brock, and E. Koch. | 734,489 | July 21 | 3304 | 775 | 105 | 730 |
| Vulcanizing-apparatus rack or holder | W. R. Smith | 727,856 | May 12 | 1963 | 437 | 104 | 435 |
| Wall-paper. Machine for cutting | H. H. Hungerford | 724,578 | Apr. 7 | 299 | 73 | 103 | 1232 |
| Washboiler | Q. Crane | 746,033 | Dec. 8 | 1332 | 298, 299 | 107 | 1400 |
| Wagon | L. K. Davis | 718,921 | Jan. 20 | 2659 | 596 | 102 | 594 |
| Wagon | J. D. Whitney | 725,307 | Apr. 14 | 1634 | 369, 370 | 103 | 1531 |
| Wagon | W. Maasch | 725,733 | Apr. 21 | 2444 | 554 | 103 | 1717 |

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| Wagon | S. H. Boone and C. W. Staples | 740,798 | Oct. 6 | 779 | 176 | 106 | 1411 |
| Wagon | O. E. Casey | 742,162 | Oct. 27 | 3456 | 771 | 106 | 2026 |
| Wagon | H. T. Ray | 744,980 | Nov. 24 | 4190 | 906 | 107 | 939 |
| Wagon attachment | T. Hanrahan | 746,698 | Dec. 15 | 2525 | 580 | 107 | 1683 |
| Wagon attachment. Lumber- | D. W. Patterson | 748,212 | Dec. 29 | 5410 | 1230 | 107 | 2366 |
| Wagon-bed attachment | W. Whitlock | 738,710 | Sept. 8 | 2328 | 511 | 106 | 513 |
| Wagon-body | J. H. Anderson | 722,478 | Mar. 10 | 1540 | 338 | 103 | 345 |
| Wagon-body | J. P. Johnson | 723,391 | Mar. 24 | 3250 | 728 | 103 | 726 |
| Wagon-body | C. W. Behrens | 731,534 | June 23 | 3715 | 827<br>828 | 104 | 1949 |
| Wagon-body | W. Leppert | 734,422 | July 21 | 3182 | 747<br>748 | 105 | 706 |
| Wagon-body | J. T. Swan and C. K. Shelhamer | 747,266 | Dec. 15 | 3612 | 815 | 107 | 1928 |
| Wagon-body | W. Leppert. (Reissue) | 12,187 | Dec. 29 | 6074 | 1376 | 107 | 2514 |
| Wagon-body and hay-rack. Combined | H. S. Cunningham | 722,678 | Mar. 17 | 1933 | 430 | 103 | 446 |
| Wagon-body hoist | M. Plummer | 721,832 | Mar. 3 | 317 | 69 | 103 | 70 |
| Wagon-body. Knockdown | F. G. Tallerday | 733,347 | July 7 | 1161 | 275 | 105 | 245 |
| Wagon-body lifter | H. B. Bolen | 725,400 | Apr. 14 | 1809 | 405<br>406 | 103 | 1567 |
| Wagon-bolster hay-rack attachment | A. Hagemeister | 721,696 | Mar. 3 | 86 | 18 | 103 | 19 |
| Wagon-box | F. Fisher | 717,979 | Jan. 6 | 870 | 194 | 102 | 187 |
| Wagon-box and end-gate | W. Ellis | 727,920 | May 12 | 2087 | 463<br>464 | 104 | 463 |
| Wagon box. Dumping- | M. B. and C. L. Todd and E. H. Neff | 747,510 | Dec. 22 | 4057 | 912 | 107 | 2045 |
| Wagon-box elevator and dumper | A. Olsen and J. Folda | 732,107 | June 30 | 4790 | 1068<br>1069 | 104 | 2186 |
| Wagon-box or hay-rack lifter | L. Paul | 736,004 | Aug. 11 | 1858 | 397 | 105 | 1397 |
| Wagon. Boy's- | J. Weber | 734,783 | July 28 | 3872 | 903 | 105 | 862 |
| Wagon-brake | W. N. Secord | 724,057 | Mar. 31 | 4498 | 1013 | 103 | 1001 |
| Wagon-brake | I. Sartain | 724,509 | Apr. 7 | 164 | 40 | 103 | 1205 |
| Wagon-brake | W. H. Loper and M. Halley | 724,900 | Apr. 7 | 893 | 204 | 103 | 1360 |
| Wagon-brake | J. Young and C. Wolfe | 727,049 | May 5 | 445 | 93, 94 | 104 | 98 |
| Wagon-brake | C. M. McCoy | 731,117 | June 16 | 2917 | 648 | 104 | 1768 |
| Wagon-brake | C. H. Gunn | 737,098 | Aug. 25 | 3853 | 856 | 105 | 1853 |
| Wagon-brake | R. Love | 739,192 | Sept. 15 | 3214 | 711 | 106 | 718 |
| Wagon-brake | W. A. Williams | 739,767 | Sept. 22 | 4269 | 957 | 106 | 964 |
| Wagon-brake | C. E. Sherman | 740,595 | Oct. 6 | 416 | 89 | 106 | 1335 |
| Wagon-brake | F. Hayden | 746,831 | Dec. 15 | 2779 | 640 | 107 | 1741 |
| Wagon-brake. Automatic | W. H. Beard | 727,737 | May 12 | 1734 | 389 | 104 | 390 |
| Wagon-brake. Automatic | C. Garver | 728,897 | May 26 | 3912 | 869 | 104 | 882 |
| Wagon-brake. Automatic | J. A. Manor | 735,124 | Aug. 4 | 149 | 33 | 105 | 1014 |
| Wagon brake-block | P. L. Jones | 720,814 | Feb. 17 | 2591 | 598 | 102 | 1398 |
| Wagon. Coal- | L. Kreutler and H. Manger | 725,095 | Apr. 14 | 1261 | 284<br>285 | 103 | 1452 |
| Wagon. Coaster- | F. V. Eavenson | 733,019 | July 7 | 561 | 137 | 105 | 120 |
| Wagon. Delivery- | J. V. Macdonald | 727,817 | May 12 | 1886 | 421 | 104 | 419 |
| Wagon-discharging apparatus | W. P. Gibson | 726,903 | May 5 | 136 | 32 | 104 | 31 |
| Wagon. Dump- | F. L. Nicoulin | 724,033 | Mar. 31 | 4459 | 1004 | 103 | 993 |
| Wagon. Dump- | H. S. Hoy | 736,260 | Aug. 11 | 2291 | 495 | 105 | 1489 |
| Wagon. Dump- | N. L. Phillips | 742,350 | Oct. 27 | 3818 | 855 | 106 | 2101 |
| Wagon. Dump- | H. C. Tripp | 747,808 | Dec. 22 | 4605 | 1039 | 107 | 2169 |
| Wagon. Dumping- | J. Thompson | 719,533 | Feb. 3 | 215 | 50 | 102 | 868 |
| Wagon. Dumping- | A. Tufani | 719,535 | Feb. 3 | 217 | 51 | 102 | 869 |
| Wagon. Dumping- | A. Carey | 719,644 | Feb. 3 | 417 | 95 | 102 | 909 |
| Wagon. Dumping- | E. M. Sandy | 720,183 | Feb. 10 | 1425 | 326 | 102 | 1141 |
| Wagon. Dumping- | A. C. Lemon | 721,901 | Mar. 3 | 450 | 99 | 103 | 100 |
| Wagon. Dumping- | C. Pullar | 722,896 | Mar. 17 | 2336 | 522<br>523 | 103 | 527 |
| Wagon. Dumping- | G. W. Roberts | 726,989 | May 5 | 327 | 71, 72 | 104 | 71 |
| Wagon. Dumping- | W. E. Currie and H. J. Conn | 728,207 | May 19 | 2595 | 580 | 104 | 592 |
| Wagon. Dumping- | J. T. Droste | 728,687 | May 19 | 3526 | 784 | 104 | 788 |
| Wagon. Dumping- | E. A. Godfrey | 728,705 | May 19 | 3554 | 790 | 104 | 794 |
| Wagon. Dumping- | V. Brown | 730,607 | June 9 | 1978 | 440 | 104 | 1553 |
| Wagon. Dumping- | A. J. Koob | 739,325 | Sept. 22 | 3463 | 773 | 106 | 788 |
| Wagon. Dumping- | A. H. Randolph | 739,715 | Sept. 22 | 4190 | 937 | 106 | 946 |
| Wagon. Dumping- | J. T. Hope | 748,075 | Dec. 29 | 5158 | 1167 | 107 | 2312 |
| Wagon. Dumping- | T. W. Jinkens | 748,190 | Dec. 29 | 5370 | 1220<br>1221 | 107 | 2357 |
| Wagon-dumping mechanism | J. Grundler | 726,051 | Apr. 21 | 2996 | 681 | 103 | 1834 |
| Wagon. Dust- | F. Loos | 732,422 | June 30 | 5417 | 1201<br>1202 | 104 | 2317 |
| Wagon for oil, &c. Road tank- | T. Davies | 732,397 | June 30 | 5369 | 1189 | 104 | 2307 |
| Wagon for street-cleaning or other purposes. Push- | C. E. Hadley | 734,543 | July 28 | 3417 | 798 | 105 | 771 |
| Wagon-gear | S. W. Taber | 719,531 | Feb. 3 | 211 | 49 | 102 | 868 |
| Wagon-gear. Short-turn | T. Sandstrom | 728,809 | May 19 | 3750 | 837 | 104 | 834 |
| Wagon-jack | E. Prescott | 737,016 | Aug. 25 | 3719 | 825 | 105 | 1827 |
| Wagon-jack | J. Heritage | 738,682 | Sept. 8 | 2280 | 501 | 106 | 503 |
| Wagon-jack | S. Shreffler | 742,917 | Nov. 3 | 168 | 39 | 107 | 37 |
| Wagon-jack and end-gate | W. R. Buchanan | 741,765 | Oct. 20 | 2652 | 593 | 106 | 1845 |
| Wagon-loading attachment. Automatic | T. W. Moore | 747,748 | Dec. 22 | 4478 | 1010 | 107 | 2140 |
| Wagon. Lumber- | O. C. Nickerson | 728,406 | May 19 | 2991 | 658 | 104 | 675 |
| Wagon mechanism. Tip- | A. Mansfield | 746,541 | Dec. 8 | 2227 | 511 | 107 | 1596 |
| Wagon. Merchandise-weighing delivery- | J. J. Cahill | 729,841 | June 2 | 591 | 130 | 104 | 1249 |
| Wagon. Milk- | G. W. Evans | 733,176 | July 7 | 846 | 205 | 105 | 178 |
| Wagon-rack. Convertible | I. W. Snow | 728,316 | May 19 | 2838 | 627<br>628 | 104 | 643 |
| Wagon running-gear | L. A. Wheeler | 727,043 | May 5 | 437 | 92 | 104 | 96 |
| Wagon running-gear | J. E. Bennett | 736,674 | Aug. 18 | 3075 | 677<br>678 | 105 | 1670 |
| Wagon. Sprinkling- | E. D. Eastman | 748,058 | Dec. 29 | 5131 | 1160 | 107 | 2306 |
| Wagon-stake standard | J. H. Gressom | 739,542 | Sept. 22 | 3860 | 865 | 106 | 874 |
| Wagon-standard | W. J. Donnell | 735,350 | Aug. 4 | 589 | 121 | 105 | 1107 |
| Wagon storm apron or curtain | H. W. Schlosser | 729,677 | June 2 | 274 | 63 | 104 | 1185 |
| Wagon-top | C. E. Parish | 741,367 | Oct. 13 | 1879 | 414 | 106 | 1668 |
| Wagon-top | J. Pohlig | 742,733 | Oct. 27 | 4499 | 1018 | 106 | 2243 |
| Wagon-top | J. Pohlig | 745,904 | Dec. 1 | 1092 | 244 | 107 | 1331 |

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| Wagon. Truck- | E. H. Tyler | 717,951 | Jan. 6 | 808 | 183 | 102 | 173 |
| Wagon-unloading device | B. Limberg | 726,713 | Apr. 28 | 4277 | 966 | 103 | 2109 |
| Wagon. Weighing- | C. Skidmore | 732,228 | June 30 | 5044 | 1122 | 104 | 2239 |
| Wagon-wheel | J. McCallum | 727,825 | May 12 | 1899 | 424 | 104 | 422 |
| Wagon wrench and jack | D. Clary | 724,437 | Apr. 7 | 33 | 9 | 103 | 1177 |
| Wagons. Door and apparatus therefor for use upon hopper- | G. H. Sheffield and J. D. Twinbertow. | 748,221 | Dec. 29 | 5426 | 1235, 1236, 1237 | 107 | 2370 |
| Wagons or cars. Device for deadening or minimizing shocks to | I. D. Georgiewitz-Weitzer and M. Pozzo. | 745,592 | Dec. 1 | 516 | 121 | 107 | 1206 |
| Waist and skirt retaining band. Combination dress. | D. A. Seligman | 745,245 | Nov. 24 | 4735 | 1033 | 107 | 1052 |
| Waist and supporter | S. Vischer | 722,472 | Mar. 10 | 1530 | 336 | 103 | 343 |
| Waist-brace and belt-holder. Combined | C. Bremer | 743,235 | Nov. 3 | 808 | 176 | 107 | 169 |
| Waist-fastener and skirt-supporter | S. L. Feathers | 735,230 | Aug. 4 | 381 | 74 | 105 | 1062 |
| Waist-former | F. S. Boedefeld | 727,273 | May 5 | 844 | 181 | 104 | 181 |
| Waists. Attachment for men's or boys' | H. Saum | 722,049 | Mar. 3 | 731 | 163 | 103 | 158 |
| Waistband | L. P. Kleiderer | 717,868 | Jan. 6 | 676 | 150 | 102 | 144 |
| Waistband | M. Oppenheim | 719,851 | Feb. 3 | 790 | 185 | 102 | 990 |
| Waistband | M. Koppelman | 729,072 | May 26 | 4226 | 934 | 104 | 946 |
| Walking-beams and samson-posts. Center-iron for. | L. C. Sands, Jr | 744,624 | Nov. 17 | 3520 | 760 | 107 | 780 |
| Wall | J. G. F. Lund | 722,237 | Mar. 10 | 1094 | 241 | 103 | 249 |
| Wall | W. N. Wight | 734,289 | July 21 | 2955 | 689 | 105 | 659 |
| Wall and concrete block for same. Building- | O. U. Miracle and W. L. Dow | 730,780 | June 9 | 2267 | 504 | 104 | 1615 |
| Wall-block. Double | G. F. Hagerman | 739,858 | Sept. 29 | 4461 | 1001 | 106 | 1021 |
| Wall-cleaner | E. Hilker | 740,756 | Oct. 6 | 708 | 159 | 106 | 1397 |
| Wall. Concrete building- | A. I. Dexter | 748,352 | Dec. 29 | 5641 | 1286 | 107 | 2417 |
| Wall construction | W. H. Fisher | 736,375 | Aug. 18 | 2491 | 547, 548 | 105 | 1550 |
| Wall construction. Building- | M. Garvey | 744,185 | Nov. 17 | 2763 | 588 | 107 | 617 |
| Wall decorations, &c. Composition of matter for the manufacture of | J. Thame | 717,944 | Jan. 6 | 799 | ..... | 102 | 170 |
| Wall-mold core | A. T. Boise | 746,445 | Dec. 8 | 2063 | 476 | 107 | 1559 |
| Wall or ceiling. Reflective | L. Bartelstone | 718,302 | Jan. 13 | 1452 | 323 | 102 | 328 |
| Wall or ceiling. Sectional | J. A. Carter | 739,646 | Sept. 22 | 4062 | 906 | 106 | 918 |
| Wall or chimney construction | J. F. Lyman | 719,679 | Feb. 3 | 474 | 108 | 102 | 922 |
| Wall-plug | H. M. Mottu | 742,714 | Oct. 27 | 4466 | 1010 | 106 | 2236 |
| Wall. Provisional or permanent | J. Kulhánek | 728,472 | May 19 | 3123 | 690 | 104 | 702 |
| Wall-register | P. S. Stauffer | 739,795 | Sept. 22 | 4334 | 970, 971 | 106 | 979 |
| Wall-register | L. J. Mueller | 746,355 | Dec. 8 | 1915 | 437 | 107 | 1527 |
| Wall-tie | R. C. Taft | 717,638 | Jan. 6 | 205 | 51 | 102 | 44 |
| Walls and partitions. Construction of | J. F. Golding | 719,580 | Feb. 3 | 309 | 71 | 102 | 887 |
| Walls and partitions for buildings, &c. Construction of | W. F. Walker | 727,234 | May 5 | 776 | 166 | 104 | 168 |
| Walls. Construction of | A. Lugino | 744,374 | Nov. 17 | 3102 | 667 | 107 | 693 |
| Walls or ceilings. Covering | F. R. A. Sundell | 748,542 | Dec. 29 | 6027 | ..... | 107 | 2503 |
| Walls. Wind-box for bridge- | E. J. Gordon | 723,597 | Mar. 24 | 2621 | 809 | 103 | 802 |
| Walnut hulling and washing machine | G. F. Maiers | 733,060 | July 7 | 643 | 156 | 105 | 136 |
| Wardrobe | J. O. Clay | 728,673 | May 19 | 3505 | 779, 780 | 104 | 783 |
| Wardrobe-hook | W. A. Williamson | 725,906 | Apr. 21 | 2754 | 627 | 103 | 1784 |
| Warehousing apparatus. Automatic | R. Baggaley | 746,248 | Dec. 8 | 1716 | 384, 385 | 107 | 1486 |
| Warehousing-machine. Automatic | R. Baggaley | 746,247 | Dec. 8 | 1714 | 384 | 107 | 1485 |
| Warm-air furnace | O. L. Badger | 742,146 | Oct. 27 | 3433 | 765 | 106 | 2021 |
| Warm-air furnace | O. L. Badger | 742,147 | Oct. 27 | 3437 | 766 | 106 | 2022 |
| Warp-let-off motion | W. W. Uhlinger | 744,440 | Nov. 17 | 3222 | 691 | 107 | 719 |
| Warp stop-motion | F. A. Whitmore | 727,728 | May 12 | 1718 | 385, 386 | 104 | 387 |
| Warp stop-motion | A. P. S. Macquisten | 740,672 | Oct. 6 | 534 | 118, 119 | 106 | 1361 |
| Warp-stop-motion apparatus | H. W. Owen and J. T. Kirk | 743,748 | Nov. 10 | 1864 | 394 | 107 | 415 |
| Warp-stop-motion mechanism | G. A. Collins | 724,381 | Mar. 31 | 5163 | 1158 | 103 | 1137 |
| Warp-stop-motion mechanism | C. H. Draper | 724,448 | Apr. 7 | 47 | 12 | 103 | 1180 |
| Warp-stop-motion mechanism | J. V. Cunniff | 748,168 | Dec. 29 | 5332 | 1212 | 107 | 2350 |
| Warps. Harness-finding machine for use in manually drawing in | C. E. Smith | 732,229 | June 30 | 5045 | 1122 | 104 | 2239 |
| Warping and beaming machine. Combined | H. Van Winkle | 726,007 | Apr. 21 | 2929 | 666 | 103 | 1820 |
| Warping-reel | R. J. Chowen and W. Hartly | 744,293 | Nov. 17 | 2964 | 634 | 107 | 662 |
| Warping-reel | R. J. Chowen and W. Hartly | 744,294 | Nov. 17 | 2967 | 634, 635 | 107 | 663 |
| Washbench and ironing-board. Combined | A. J. Reinhardt | 732,585 | June 30 | 5730 | 1272 | 104 | 2383 |
| Washboard | T. W. Woolley | 722,394 | Mar. 10 | 1368 | 303 | 103 | 307 |
| Washboard | C. Hardwick | 726,680 | Apr. 28 | 4212 | 952 | 103 | 2095 |
| Washboard | J. Opp | 735,801 | Aug. 11 | 1458 | 314 | 105 | 1309 |
| Washboard | M. Zemelman | 741,950 | Oct. 20 | 3006 | 667 | 106 | 1921 |
| Washboard | B. Tanner | 743,111 | Nov. 3 | 560 | 120 | 107 | 117 |
| Washboard | J. Yuhász | 747,030 | Dec. 15 | 3157 | 723 | 107 | 1826 |
| Washboard | J. L. Conner | 748,164 | Dec. 29 | 5326 | 1209 | 107 | 2348 |
| Washboard attachment | D. E. Van Gilder | 720,506 | Feb. 10 | 2002 | 460 | 102 | 1262 |
| Washboard-holder | B. N. Merrill | 719,022 | Jan. 27 | 2848 | 639 | 102 | 649 |
| Washboard rubbing-surface | F. Martin, Jr | 726,082 | Apr. 21 | 3039 | 690 | 103 | 1843 |
| Washboiler | E. Burns | 724,800 | Apr. 7 | 720 | 167 | 103 | 1324 |
| Washboiler | A. Shaw | 732,968 | July 7 | 473 | 118 | 105 | 102 |
| Washboiler | A. McLeod | 737,763 | Sept. 1 | 383 | 82 | 106 | 85 |
| Washboiler | J. C. Bliemeister | 737,820 | Sept. 1 | 503 | 110 | 106 | 113 |
| Washboiler and water-distilling apparatus. Combined | J. T. Van Ausdal | 725,182 | Apr. 14 | 1425 | 322 | 103 | 1486 |
| Washboiler attachment | H. Achilles | 730,071 | June 2 | 1002 | 224 | 104 | 1331 |
| Washboiler attachment | J. F. Daab | 746,036 | Dec. 8 | 1336 | 299 | 107 | 1401 |
| Wash-cabinet. Portable | J. G. Muehl | 734,348 | July 21 | 3060 | 721 | 105 | 681 |
| Washstand | J. B. Wheatley | 736,655 | Aug. 18 | 3019 | 667 | 105 | 1659 |
| Washtub | G. V. Blackstone | 732,507 | June 30 | 5583 | 1236 | 104 | 2349 |
| Washtub | G. Loeb, Jr | 741,351 | Oct. 13 | 1849 | 408 | 106 | 1662 |
| Washtub. Stationary | J. Reid and L. M. Hooper | 725,365 | Apr. 14 | 1746 | 393 | 103 | 1554 |
| Washing apparatus | W. Forger | 729,055 | May 26 | 4202 | 929 | 104 | 942 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Washing apparatus | W. A. and O. M. Huffman | 745,620 | Dec. 1 | 559 | 130 | 107 | 1217 |
| Washing device | H. Graham | 721,179 | Feb. 24 | 3321 | 759 | 102 | 1573 |
| Washing device. Steam | M. Glass | 744,531 | Nov. 17 | 3375 | 727 | 107 | 752 |
| Washing-machine | S. Hayes | 717,849 | Jan. 6 | 644 | 142, 143 | 102 | 137 |
| Washing-machine | W. G. Gibbins | 718,754 | Jan. 20 | 2354 | 520, 521 | 102 | 531 |
| Washing-machine | G. V. Cesinger | 719,185 | Jan. 27 | 3167 | 705 | 102 | 714 |
| Washing-machine | A. N. Verdin | 721,110 | Feb. 17 | 3158 | 727 | 102 | 1522 |
| Washing-machine | J. Gladwin | 721,793 | Mar. 3 | 248 | 55 | 103 | 55 |
| Washing-machine | F. H. Wiard | 721,929 | Mar. 3 | 519 | 114 | 103 | 115 |
| Washing-machine | J. Vining | 722,167 | Mar. 3 | 935 | 207 | 103 | 199 |
| Washing-machine | S. Walter | 722,168 | Mar. 3 | 936 | 207 | 103 | 199 |
| Washing-machine | F. Warbritton | 722,169 | Mar. 3 | 938 | 208 | 103 | 199 |
| Washing-machine | M. L. Stoddard | 723,420 | Mar. 24 | 3296 | 737 | 103 | 735 |
| Washing-machine | C. P. Lancaster | 723,537 | Mar. 24 | 3514 | 786 | 103 | 780 |
| Washing-machine | A. A. Casler | 723,648 | Mar. 24 | 3709 | 831 | 103 | 820 |
| Washing-machine | J. Mackenzie | 724,026 | Mar. 31 | 4450 | 1000, 1001 | 103 | 990 |
| Washing-machine | N. Densler | 724,446 | Apr. 7 | 45 | 12 | 103 | 1179 |
| Washing-machine | M. J. Dunn | 724,558 | Apr. 7 | 252 | 61, 62 | 103 | 1224 |
| Washing-machine | T. E. Barrow | 725,022 | Apr. 14 | 1129 | 254, 255 | 103 | 1426 |
| Washing-machine | T. Henry | 725,248 | Apr. 14 | 1546 | 351 | 103 | 1512 |
| Washing-machine | M. J. Kremer | 725,260 | Apr. 14 | 1562 | 354 | 103 | 1515 |
| Washing-machine | C. Garver | 725,333 | Apr. 14 | 1693 | 381, 382 | 103 | 1544 |
| Washing-machine | D. Hawley | 725,443 | Apr. 14 | 1903 | 426 | 103 | 1587 |
| Washing-machine | G. H. Rhodes | 726,827 | Apr. 28 | 4492 | 1013, 1014 | 103 | 2153 |
| Washing-machine | F. C. Fette | 727,120 | May 5 | 574 | 123, 124 | 104 | 125 |
| Washing-machine | J. G. L. Myers | 727,409 | May 5 | 1084 | 238 | 104 | 234 |
| Washing-machine | D. S. and L. D. Tyler | 727,497 | May 5 | 1249 | 278 | 104 | 269 |
| Washing-machine | O. H. Larson | 728,587 | May 19 | 3354 | 743 | 104 | 751 |
| Washing-machine | N. G. Nunn | 729,087 | May 26 | 4248 | 939 | 104 | 950 |
| Washing-machine | I. Marks | 729,373 | May 26 | 4748 | 1050 | 104 | 1055 |
| Washing-machine | S. J. Harding | 729,930 | June 2 | 737 | 165 | 104 | 1278 |
| Washing-machine | J. F. Smith | 730,170 | June 2 | 1156 | 260 | 104 | 1363 |
| Washing-machine | J. Hofmann | 730,538 | June 9 | 1850 | 413 | 104 | 1525 |
| Washing-machine | O. E. Peterson | 730,694 | June 9 | 2135 | 474 | 104 | 1587 |
| Washing-machine | G. E. Muth | 730,952 | June 16 | 2603 | 579 | 104 | 1705 |
| Washing-machine | T. Gray | 731,356 | June 16 | 3345 | 747 | 104 | 1855 |
| Washing-machine | R. J. Bailey | 731,840 | June 23 | 4271 | 951 | 104 | 2064 |
| Washing-machine | W. W. Murphey | 732,105 | June 30 | 4788 | 1068 | 104 | 2185 |
| Washing-machine | P. N. Andresen | 732,913 | July 7 | 388 | 94 | 105 | 84 |
| Washing-machine | E. L. Bullock | 733,139 | July 7 | 781 | 189 | 105 | 165 |
| Washing-machine | C. Garver | 733,182 | July 7 | 854 | 207 | 105 | 179 |
| Washing-machine | F. E. Hoover | 733,201 | July 7 | 886 | 214 | 105 | 186 |
| Washing-machine | A. A. Johnston | 733,211 | July 7 | 913 | 220 | 105 | 191 |
| Washing-machine | M. Holman | 733,481 | July 14 | 1404 | 331 | 105 | 314 |
| Washing-machine | W. S. Barager | 734,154 | July 21 | 2690 | 633 | 105 | 602 |
| Washing-machine | Z. Gaillard | 734,845 | July 28 | 4004 | 935 | 105 | 891 |
| Washing-machine | M. J. Lawler | 736,410 | Aug. 18 | 2551 | 560 | 105 | 1562 |
| Washing-machine | F. E. Waldby | 736,803 | Aug. 18 | 3315 | 735 | 105 | 1720 |
| Washing-machine | T. Y. Hughlett | 737,631 | Sept. 1 | 132 | 29 | 106 | 31 |
| Washing-machine | W. S. Miller | 738,560 | Sept. 8 | 2038 | 444 | 106 | 453 |
| Washing-machine | J. M. Lemmon | 739,093 | Sept. 15 | 3041 | 673 | 106 | 683 |
| Washing-machine | P. R. Ensminger | 740,259 | Sept. 29 | 5219 | 1174 | 106 | 1180 |
| Washing-machine | E. A. and H. M. Griffin | 740,269 | Sept. 29 | 5236 | 1178 | 106 | 1183 |
| Washing-machine | L. E. Pollard | 741,542 | Oct. 13 | 2220 | 494 | 106 | 1739 |
| Washing-machine | W. A. S. Murphy | 742,716 | Oct. 27 | 4469 | 1011 | 106 | 2236 |
| Washing-machine | J. S. Trimble | 742,754 | Oct. 27 | 4531 | 1026 | 106 | 2251 |
| Washing-machine | T. E. Blanchard | 742,960 | Nov. 3 | 244 | 55 | 107 | 53 |
| Washing-machine | I. J. D. Fairhurst | 744,962 | Nov. 24 | 4163 | 900 | 107 | 933 |
| Washing-machine | J. P. Pfeiffer | 745,660 | Dec. 1 | 628 | 146 | 107 | 1232 |
| Washing-machine | E. Evans | 746,481 | Dec. 8 | 2125 | 488 | 107 | 1573 |
| Washing-machine | H. A. Bierley | 747,849 | Dec. 22 | 4681 | 1058 | 107 | 2187 |
| Washing-machine gearing | I. S. Diehl | 717,974 | Jan. 6 | 859 | 192 | 102 | 185 |
| Washing-machine journal | J. A. Meese | 746,641 | Dec. 8 | 2416 | 552 | 107 | 1639 |
| Washing-machine motor | G. E. Averill | 747,352 | Dec. 22 | 3779 | 850 | 107 | 1981 |
| Washing-machine operating means | J. R. Carter | 724,431 | Apr. 7 | 22 | 7 | 103 | 1175 |
| Washer: *See* Axle-washer. Ball-bearing washer. Barrel-washer. Bottle-washer. Can-washer. Clothes-washer. Cork washer. Dish-washer. Hinge-washer. Journal-bearing washer. Lock-washer. Locking-washer. Nut-locking washer. Ore-washer. Ore or coal washer. Photographic-print washer. Street-washer. Tumbler-washer. | | | | | | | |
| Washer | E. H. Krebs | 733,487 | July 14 | 1411 | 333 | 105 | 316 |
| Washer | M. S. Brigham | 746,006 | Dec. 8 | 1283 | 288 | 107 | 1390 |
| Washer-manufacturing machine | G. Fraser | 727,931 | May 12 | 2109 | 469 | 104 | 467 |
| Washers. Machine for making spiral | J. E. Wilson | 718,409 | Jan. 13 | 1641 | 361, 362 | 102 | 367 |
| Waste and overflow fixture | L. Kosiol | 729,360 | May 26 | 4731 | 1045 | 104 | 1051 |
| Waste and vent system | J. L. Fruin | 740,412 | Oct. 6 | 45 | 10 | 106 | 1254 |
| Waste. Bath or basin | H. M. Weaver | 729,710 | June 2 | 326 | 75 | 104 | 1195 |
| Watch alarm-receptacle | R. B. Hemming | 741,036 | Oct. 13 | 1193 | 270 | 106 | 1521 |
| Watch-barrel | L. A. Erickson | 730,103 | June 2 | 1049 | 235 | 104 | 1341 |
| Watch-barrel | R. S. Settle | 732,321 | June 30 | 5207 | 1156 | 104 | 2272 |
| Watch-fob | W. H. Lamb | 736,606 | Aug. 18 | 2946 | 646 | 105 | 1644 |

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| Invention. | Name. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|---|
| | | | | Spec. | Dr'g. | Vol. | Page. |
| Watch-glass tray or drawer | E. U. Kinsey | 722,180 | Mar. 3 | 959 | 213 | 103 | 203 |
| Watch-guard | W. F. Martin | 744,582 | Nov. 17 | 3456 | 745 | 107 | 767 |
| Watch guard or protector | W. C. Locherty | 737,429 | Aug. 25 | 4488 | 1006 | 105 | 1989 |
| Watch-holder | F. W. Messer | 727,402 | May 5 | 1072 | 233 | 104 | 231 |
| Watch-holder | R. K. Hohmann and A. Rosenfeld | 742,029 | Oct. 20 | 3175 | 709 | 106 | 1954 |
| Watch-holder | C. P. Nicholson | 744,933 | Nov. 24 | 4100 | 884 | 107 | 921 |
| Watch-holding case | J. Counter | 734,403 | July 21 | 3154 | 741 | 105 | 700 |
| Watch-movement boxes, &c. Holder for | C. J. Olney, Jr | 724,926 | Apr. 7 | 934 | 214 | 103 | 1370 |
| Watch-movement holder | C. H. Jenkins | 738,543 | Sept. 8 | 2011 | 437 | 106 | 447 |
| Watch-protector | D. Summa | 718,399 | Jan. 13 | 1626 | 357 | 102 | 364 |
| Watch-protector | C. R. Tetzner | 736,460 | Aug. 18 | 2642 | 580 | 105 | 1582 |
| Watch-regulator | O. F. Engwall | 721,361 | Feb. 24 | 3665 | 834, 835 | 102 | 1644 |
| Watch-regulator | R. Lange | 736,117 | Aug. 11 | 2051 | 437 | 105 | 1437 |
| Watch roller and hands remover | O. O. Aune | 734,211 | July 21 | 2788 | 654 | 105 | 623 |
| Watch-safeguard | H. M. Willis | 728,816 | May 19 | 3761 | 840 | 104 | 837 |
| Watch. Stem-winding | A. Aune | 723,123 | Mar. 17 | 2722 | 612 | 103 | 607 |
| Watch. Stem-winding | E. Koehn | 731,789 | June 23 | 4178 | 931, 932 | 104 | 2042 |
| Watch. Stem-winding | W. E. Porter | 737,474 | Aug. 25 | 4562 | 1023 | 105 | 2006 |
| Watch. Stem winding and setting | C. Kuenzel | 720,258 | Feb. 10 | 1565 | 358 | 102 | 1171 |
| Watch. Stem winding and setting | C. Kuenzel | 720,259 | Feb. 10 | 1567 | 358 | 102 | 1172 |
| Watch. Stem winding and setting | W. W. Dudley | 728,090 | May 12 | 2390 | 531 | 104 | 526 |
| Watch. Stem winding and setting | E. Kuhn | 736,270 | Aug. 11 | 2307 | 499 | 105 | 1493 |
| Watch. Stem winding and setting | C. Kuenzel | 739,089 | Sept. 15 | 3029 | 671 | 106 | 680 |
| Watch. Stem winding and setting | J. M. Bachner | 741,092 | Oct. 13 | 1302 | 299 | 106 | 1545 |
| Watch. Stop- | O. F. Ostergren | 717,606 | Jan. 6 | 152 | 39 | 102 | 34 |
| Watch winding-indicator | F. E. Mistrot | 724,028 | Mar. 31 | 4452 | 1001 | 103 | 991 |
| Watchcase | A. Bilat | 736,574 | Aug. 18 | 2861 | 626 | 105 | 1628 |
| Watchcase-centers, &c. Machine for making | C. H. Field | 718,613 | Jan. 20 | 2088 | 554, 555 | 102 | 478 |
| Watchcase-spring | C. Nobs, Jr | 724,604 | Apr. 7 | 348 | 84 | 103 | 1243 |
| Watchmaker's cabinet | P. C. Hall | 727,938 | May 12 | 2118 | 471 | 104 | 469 |
| Watchmaker's gage | C. H. Jenkins | 738,723 | Sept. 8 | 2346 | 515 | 106 | 517 |
| Watchmaker's pliers | A. F. Boylan and E. C. Chamberlin | 747,852 | Dec. 22 | 4685 | 1059 | 107 | 2188 |
| Water. Apparatus for separating oil from | E. Pravicha and E. Douillet | 745,519 | Dec. 1 | 385 | 88, 89 | 107 | 1181 |
| Water. Apparatus for softening or otherwise chemically treating, filtering, and storing | F. B. Leopold | 731,468 | June 23 | 3587 | 799 | 104 | 1923 |
| Water. Apparatus for the removal of sulfuric acid from | H. Reisert | 748,308 | Dec. 29 | 5573 | 1271 | 107 | 2402 |
| Water-arch | I. M. Riles | 728,762 | May 19 | 3657 | 814 | 104 | 815 |
| Water-bag | T. Gregory | 718,053 | Jan. 6 | 993 | 222 | 102 | 214 |
| Water-bag | H. E. Peterson | 747,634 | Dec. 22 | 4281 | 963 | 107 | 2096 |
| Water-boiler, skimmer, and oil-separator | W. H. Johnson | 726,167 | Apr. 21 | 3189 | 721 | 103 | 1874 |
| Water by electrolysis. Apparatus for decomposing | W. F. M. McCarty | 721,068 | Feb. 17 | 3067 | 704 | 102 | 1501 |
| Water by electrolysis. Decomposing | W. F. M. McCarty | 736,868 | Aug. 18 | 3442 | 763 | 105 | 1747 |
| Water-closet | P. A. Allen | 717,651 | Jan. 6 | 225 | 57 | 102 | 49 |
| Water-closet | G. W. Becker | 718,971 | Jan. 27 | 2757 | 617 | 102 | 630 |
| Water-closet | P. Haas | 720,021 | Feb. 10 | 1119 | 256 | 102 | 1077 |
| Water-closet | H. O. Krakow | 723,612 | Mar. 24 | 3645 | 816 | 103 | 806 |
| Water-closet | R. W. Miller | 725,268 | Apr. 14 | 1572 | 356 | 103 | 1518 |
| Water-closet | F. Schun | 728,624 | May 19 | 3415 | 756 | 104 | 765 |
| Water-closet | W. E. O'Hara | 232,955 | July 7 | 454 | 113 | 105 | 98 |
| Water-closet | G. W. Knapp and C. H. Rollins | 740,662 | Oct. 6 | 518 | 114 | 106 | 1358 |
| Water-closet | P. J. Madden | 741,919 | Oct. 20 | 2942 | 656 | 106 | 1907 |
| Water-closet | A. Ek | 742,014 | Oct. 20 | 3143 | 701, 702 | 106 | 1947 |
| Water-closet | P. K. Hardin | 742,866 | Nov. 3 | 81 | 19 | 107 | 19 |
| Water-closet and apparatus connection | G. F. Ryan | 728,985 | May 26 | 4066 | 903 | 104 | 914 |
| Water-closet attachment | R. L. White | 719,925 | Feb. 3 | 913 | 214 | 102 | 1017 |
| Water-closet attachment | P. H. Bacon | 737,814 | Sept. 1 | 486 | 108 | 106 | 109 |
| Water-closet bend or pipe connection | E. and A. Fleming | 718,444 | Jan. 13 | 1721 | 382 | 102 | 382 |
| Water-closet bowl | J. J. Donovan | 721,786 | Mar. 3 | 230 | 50 | 103 | 51 |
| Water-closet bowls or washbasins. Mechanism for temporarily locking | E. Woodruff | 733,787 | July 14 | 1939 | 457 | 105 | 426 |
| Water-closet covers. Mechanism for temporarily locking | E. Woodruff | 735,927 | Aug. 11 | 1707 | 363 | 105 | 1364 |
| Water-closet flush-tanks. Ball-cock for | W. O. Foss | 748,492 | Dec. 29 | 5917 | 1344 | 107 | 2478 |
| Water-closet flush-valve | M. Hogan | 722,106 | Mar. 3 | 826 | 184 | 103 | 178 |
| Water-closet flushing apparatus | A. Kulhánek | 728,470 | May 19 | 3120 | 690 | 104 | 702 |
| Water-closet flushing apparatus | J. A. Vogel | 737,796 | Sept. 1 | 447 | 96 | 106 | 99 |
| Water-closet flushing apparatus | W. U. Griffiths | 745,724 | Dec. 1 | 735 | 168 | 107 | 1255 |
| Water-closet flushing apparatus | W. U. Griffiths | 745,823 | Dec. 1 | 937 | 211 | 107 | 1298 |
| Water-closet flushing-tank | E. G. Watrous | 744,139 | Nov. 17 | 2647 | 565 | 107 | 593 |
| Water-closet flushing-tank attachment | J. D. Rockwell | 724,209 | Mar. 31 | 4808 | 1077, 1078 | 103 | 1064 |
| Water-closet. Non-freezing | B. A. Buge | 734,811 | July 28 | 3946 | 920 | 105 | 879 |
| Water-closet seat | C. Sudbrink | 722,465 | Mar. 10 | 1513 | 333 | 103 | 333 |
| Water-closet seat. Automatic | W. S. Johnson | 734,336 | July 21 | 3039 | 716 | 105 | 677 |
| Water-closet-seat protector | J. A. G. Power | 723,021 | Mar. 17 | 2536 | 569 | 103 | 569 |
| Water-closet. Siphon | W. G. Newton | 745,651 | Dec. 1 | 612 | 142 | 107 | 1228 |
| Water-closet valve mechanism | M. C. Gholson | 747,413 | Dec. 22 | 3880 | 873 | 107 | 2005 |
| Water-closet ventilating device | A. Drouillard | 747,389 | Dec. 22 | 3843 | 865 | 107 | 1995 |
| Water-closet ventilator | A. Drouillard and J. M. Teahen | 725,425 | Apr. 14 | 1853 | 414 | 103 | 1577 |
| Water-closets, &c. Flushing-reservoir for | A. M. Morrison | 747,628 | Dec. 22 | 4269 | 960 | 107 | 2094 |
| Water-closets or other structures. Flushing-tank for | W. U. Griffiths | 736,516 | Aug. 18 | 2766 | 605 | 105 | 1609 |
| Water-column | W. McComb | 748,515 | Dec. 29 | 5962 | 1352 | 107 | 2488 |
| Water-containing vessels. Alarm for | J. O'Connor and C. A. Turner | 742,319 | Oct. 27 | 3573 | 798 | 106 | 2048 |
| Water controller. Automatic cistern- | A. P. Hummel | 726,063 | Apr. 21 | 3010 | 685 | 103 | 1838 |
| Water-controlling device | E. J. Markel | 736,754 | Aug. 18 | 3218 | 711 | 105 | 1700 |
| Water-cut-off and piston | J. S. Klein | 730,924 | June 16 | 2546 | 567 | 104 | 1693 |
| Water-cooler | Z. F. Bowman | 734,792 | Apr. 7 | 698 | 164 | 103 | 1318 |
| Water-cooler | H. C. Price | 735,295 | Aug. 4 | 501 | 100 | 105 | 1087 |
| Water-cooler and filter | C. E. McPherson | 745,889 | Dec. 1 | 1064 | 240 | 107 | 1325 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Water-cooler equipment | J. T. Cole | 738,712 | Sept. 8 | 2333 | 512 | 106 | 514 |
| Water-cooler equipment | J. T. Cole | 745,571 | Dec. 1 | 470 | 111 | 107 | 1197 |
| Water cooler or heater | J. H. Rose | 725,145 | Apr. 14 | 1359 | 306 | 103 | 1473 |
| Water-cooling tower | A. M. Schreuder | 727,461 | May 5 | 1185 | 261, 262 | 104 | 256 |
| Water-current-driven motor | T. A. MacDonald | 737,256 | Aug. 25 | 4157 | 925 | 105 | 1918 |
| Water-elevator | F. B. Van Cleave | 723,427 | Mar. 24 | 3307 | 741 | 103 | 738 |
| Water-elevator | C. E. Harris | 730,260 | June 9 | 1347 | 295, 296 | 104 | 1417 |
| Water-elevator | E. P. House | 743,163 | Nov. 3 | 665 | 144 | 107 | 139 |
| Water-elevator | J. L. Brown | 744,288 | Nov. 17 | 2952 | 632 | 107 | 660 |
| Water-elevator. Pneumatic | J. Johnson and B. Picker | 745,626 | Dec. 1 | 571 | 133 | 107 | 1219 |
| Water-elevator. Windlass | W. Lipps | 729,618 | June 2 | 169 | 40, 41 | 104 | 1161 |
| Water from cellars. Apparatus for expelling | W. U. Griffiths | 745,824 | Dec. 1 | 940 | 211 | 107 | 1299 |
| Water-gage | J. McCormick | 719,842 | Feb. 3 | 776 | 181 | 102 | 988 |
| Water-gage | L. Parker | 719,854 | Feb. 3 | 797 | 186 | 102 | 992 |
| Water-gage | C. Wehner, C. Maltner, and F. Bansen. | 721,763 | Mar. 3 | 185 | 43 | 103 | 40 |
| Water-gage | H. G. Brooks | 734,040 | July 21 | 2468 | 577 | 105 | 554 |
| Water-gage | M. Hering | 736,518 | Aug. 18 | 2771 | 606 | 105 | 1610 |
| Water-gage | W. R. Malcolm | 741,972 | Oct. 20 | 3060 | 683 | 106 | 1930 |
| Water-gage guard and mirror | R. S. Mears | 743,178 | Nov. 3 | 689 | 151 | 107 | 144 |
| Water-gage. Self-recording | O. C. Patton | 723,725 | Mar. 24 | 3841 | 864 | 103 | 849 |
| Water-gage shield | T. Barnes | 744,710 | Nov. 24 | 3721 | 803 | 107 | 842 |
| Water-gate | W. D. Wilson | 720,207 | Feb. 10 | 1464 | 333 | 102 | 1149 |
| Water-gate | L. Winans | 734,385 | July 21 | 3121 | 734 | 105 | 694 |
| Water-gate | J. H. Martin and D. Ormand | 739,755 | Sept. 22 | 4254 | 953 | 106 | 961 |
| Water-gate. Irrigating | W. H. Kiler | 725,093 | Apr. 14 | 1258 | 284 | 103 | 1452 |
| Water-heater | J. McCartney | 719,356 | Jan. 27 | 3497 | 778 | 102 | 785 |
| Water-heater | D. E. Smoak | 720,497 | Feb. 10 | 1983 | 454 | 102 | 1257 |
| Water-heater | W. F. Cushman, L. O. Evans, and G. B. Cushman. | 721,941 | Mar. 3 | 542 | 119 | 103 | 119 |
| Water-heater | A. Haug and R. Brown | 722,703 | Mar. 17 | 1978 | 441 | 103 | 455 |
| Water-heater | J. Davie | 726,219 | Apr. 21 | 3295 | 747 | 103 | 1896 |
| Water-heater | Z. E. Williamson | 726,834 | Apr. 28 | 4502 | 1016 | 103 | 2155 |
| Water-heater | H. S. Powell | 729,793 | June 2 | 494 | 109 | 104 | 1229 |
| Water-heater | J. F. Haley and H. F. Dreyer | 730,532 | June 9 | 1841 | 411 | 104 | 1523 |
| Water-heater | H. F. Gabel | 730,756 | June 9 | 2230 | 495 | 104 | 1608 |
| Water-heater | T. E. Leach | 731,921 | June 23 | 4414 | 984 | 104 | 2095 |
| Water-heater | M. I. Cohen | 733,011 | July 7 | 549 | 135 | 105 | 118 |
| Water-heater | J. P. Ihart | 733,209 | July 7 | 909 | 219 | 105 | 190 |
| Water-heater | W. Damm | 735,069 | Aug. 4 | 38 | 11 | 105 | 990 |
| Water-heater | W. E. Vanstone | 736,800 | Aug. 18 | 3308 | 733, 734 | 105 | 1718 |
| Water-heater | J. Summerfield | 737,525 | Aug. 25 | 4670 | 1048 | 105 | 2032 |
| Water-heater | L. M. Rehnquist | 737,771 | Sept. 1 | 400 | 85 | 106 | 88 |
| Water-heater | G. J. Sebald and C. F. Schmidt | 737,784 | Sept. 1 | 422 | 91 | 106 | 92 |
| Water-heater | R. Smith | 739,938 | Sept. 29 | 4636 | 1040 | 106 | 1058 |
| Water-heater | M. Henkle | 743,719 | Nov. 10 | 1815 | 383 | 107 | 404 |
| Water-heater | W. B. Allen | 745,712 | Dec. 1 | 717 | 164 | 107 | 1251 |
| Water-heater and coffee-urn | H. F. Hankins | 738,187 | Sept. 8 | 1288 | 279 | 106 | 294 |
| Water heater and condenser. Combined | W. Tate and M. L. Cable | 728,782 | May 19 | 3697 | 826 | 104 | 822 |
| Water-heater and washing-machine. Combined | B. Lungren | 718,778 | Jan. 20 | 2396 | 532 | 102 | 540 |
| Water-heater. Balanced | T. Regan | 731,072 | June 16 | 2828 | 628, 629 | 104 | 1752 |
| Water-heater. Combined solar and artificial heat | F. Walker | 735,321 | Aug. 4 | 544 | 111 | 105 | 1097 |
| Water-heater. Downdraft | W. J. Haddock | 742,633 | Oct. 27 | 4330 | 974 | 106 | 2208 |
| Water-heater. Electric | J. W. Ewart | 738,607 | Sept. 8 | 2121 | 464, 465 | 106 | 472 |
| Water-heater. Electric | W. E. Heal | 739,176 | Sept. 15 | 3186 | 704 | 106 | 713 |
| Water-heater. Electrical | H. M. Hill | 727,360 | May 5 | 1002 | 218 | 104 | 216 |
| Water-heater. Electrical | H. M. Hill | 727,361 | May 5 | 1004 | 218 | 104 | 217 |
| Water-heater. Electrical | M. H. Shoenberg | 745,682 | Dec. 1 | 664 | 154 | 107 | 1239 |
| Water-heater, food-warmer, and drying-rack. Combined | C. H. Asling | 731,531 | June 23 | 3709 | 826 | 104 | 1949 |
| Water heating and purifying device | D. Cochrane | 719,749 | Feb. 3 | 616 | 138, 139 | 102 | 952 |
| Water-heating apparatus | S. H. Human | 747,072 | Dec. 15 | 3247 | 739 | 107 | 1849 |
| Water-hoisting apparatus | W. Hubartt | 743,285 | Nov. 3 | 912 | 198 | 107 | 195 |
| Water. Hydraulic plant and vessel or reservoir for containing | C. Coda | 740,808 | Oct. 6 | 798 | 180 | 106 | 1415 |
| Water-jacket | F. Klepetko | 743,731 | Nov. 10 | 1838 | 387 | 107 | 409 |
| Water-level-indicating apparatus | M. Gehre | 738,315 | Sept. 8 | 1574 | 340 | 106 | 355 |
| Water-level indicator | J. Dewrance | 727,599 | May 12 | 1447 | 324 | 104 | 329 |
| Water-level indicator | F. E. Stanley | 728,512 | May 19 | 3180 | 704 | 104 | 714 |
| Water-level indicator | J. Dewrance and G. H. Wall | 739,994 | Sept. 29 | 4738 | 1065, 1066 | 106 | 1079 |
| Water-level indicator | W. Peters | 746,147 | Dec. 8 | 1535 | 343 | 107 | 1448 |
| Water-level indicator, recorder, and alarm. Electrical | J. R. Flood, W. E. Sayer, and A. D. Campbell. | 733,711 | July 14 | 1795 | 425 | 105 | 395 |
| Water-level regulator | R. L. Short | 743,108 | Nov. 3 | 553 | 119 | 107 | 115 |
| Water-lifting device | J. W. Beck | 718,414 | Jan. 13 | 1650 | 364 | 102 | 369 |
| Water-lifts. Continuous power-chain of | G. A. Crofutt | 741,631 | Oct. 20 | 2389 | 535, 536 | 106 | 1790 |
| Water-meter | F. Lambert | 724,718 | Apr. 7 | 564 | 135 | 103 | 1289 |
| Water-meter | J. G. Potter and E. C. Swank | 739,215 | Sept. 15 | 3254 | 721 | 106 | 727 |
| Water-meter | F. Lambert | 741,251 | Oct. 13 | 1613 | 364 | 106 | 1611 |
| Water-meter | F. Lambert | 741,252 | Oct. 13 | 1614 | 364 | 106 | 1611 |
| Water-meter | F. Lambert | 741,253 | Oct. 13 | 1616 | 365 | 106 | 1611 |
| Water-meter | F. Lambert | 741,254 | Oct. 13 | 1617 | 365 | 106 | 1611 |
| Water-meter | C. C. Worthington | 742,947 | Nov. 3 | 219 | 50 | 107 | 48 |
| Water-meter and boxing | H. V. Garretson | 721,295 | Feb. 24 | 3542 | 805 | 102 | 1619 |
| Water-meter. Rotary | F. L. Northrop | 738,836 | Sept. 15 | 2595 | 573 | 106 | 588 |
| Water-motor | W. B. Alford | 718,967 | Jan. 27 | 2753 | 616 | 102 | 629 |
| Water-motor | B. B. Bower | 721,661 | Mar. 3 | 18 | 4 | 103 | 6 |
| Water-motor | F. A. Bradway | 729,917 | June 2 | 718 | 160 | 104 | 1275 |

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| Invention. | Name. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|---|
| | | | | Spec. | Dr'g. | Vol. | Page. |
| Water-motor | C. A. Arnsberger | 731,835 | June 23 | 4262 | 949 | 104 | 2062 |
| Water-motor | F. J. Humphrey | 738,806 | Sept. 15 | 2537 | 558 | 106 | 576 |
| Water-motor | J. W. Brooks | 741,762 | Oct. 20 | 2648 | 592, 593 | 106 | 1845 |
| Water-motor | L. E. Boqvist | 743,055 | Nov. 3 | 457 | 100 | 107 | 95 |
| Water-motor. Current | W. H. Trenchard and F. Heath | 742,529 | Oct. 27 | 4153 | 933, 934 | 106 | 2169 |
| Water-motor. Impact | S. Rawlings | 740,919 | Oct. 6 | 979 | 220 | 106 | 1456 |
| Water-motor. Oscillating | L. R. Phillips | 718,153 | Jan. 13 | 1177 | 261, 262 | 102 | 269 |
| Water of dams or reservoirs. Means for purifying the | T. Lydon | 719,240 | Jan. 27 | 3272 | 731 | 102 | 736 |
| Water or grain elevator | B. Holcomb and S. Austin | 745,439 | Dec. 1 | 241 | 56 | 107 | 1151 |
| Water or sewage. Apparatus for the purification of | J. N. McClintock | 719,357 | Jan. 27 | 3499 | 778, 779 | 102 | 785 |
| Water-power apparatus | J. F. Williams | 745,945 | Dec. 1 | 1158 | 260, 261 | 107 | 1346 |
| Water-purification apparatus | S. S. Pridham | 735,817 | Aug. 11 | 1495 | 320, 321 | 105 | 1318 |
| Water-purification apparatus | F. S. Hammond | 744,193 | Nov. 17 | 2775 | 592 | 107 | 619 |
| Water-purifier | J. Johnson | 718,935 | Jan. 20 | 2693 | 602 | 102 | 602 |
| Water-purifier | E. Kaiser | 719,471 | Feb. 3 | 107 | 26 | 102 | 848 |
| Water-purifier | G. M. Davidson | 729,286 | May 26 | 4610 | 1019, 1020 | 104 | 1026 |
| Water-purifier | E. Delmouly | 731,346 | June 16 | 3328 | 742, 743 | 104 | 1851 |
| Water-purifier | C. L. Kennicott | 732,357 | June 30 | 5290 | 1173 | 104 | 2289 |
| Water-purifier | O. M. R. Möller | 741,690 | Oct. 20 | 2504 | 558 | 106 | 1815 |
| Water purifier and heater | J. C. Forbes and N. Weber | 719,319 | Jan. 27 | 3421 | 764 | 102 | 769 |
| Water-purifier. Electrolytic | G. W. Frazier | 741,322 | Oct. 13 | 1763 | 393 | 106 | 1639 |
| Water purifier. Rain- | G. Ritter | 748,102 | Dec. 29 | 5211 | 1179 | 107 | 2324 |
| Water. Purifying | W. M. Jewell | 718,465 | Jan. 13 | 1765 | ------ | 102 | 392 |
| Water. Purifying | J. E. C. I. Putzeys | 736,444 | Aug. 18 | 2616 | 574 | 105 | 1576 |
| Water purifying and softening apparatus | S. H. Hodgkin | 731,902 | June 23 | 4376 | 975, 976 | 104 | 2087 |
| Water-purifying apparatus | H. M. Livor | 718,485 | Jan. 13 | 1797 | 400 | 102 | 398 |
| Water-purifying apparatus | A. Sorge, Jr | 739,758 | Sept. 22 | 4258 | 954 | 106 | 962 |
| Water-purifying apparatus | J. Anderson | 742,954 | Nov. 3 | 237 | 53 | 107 | 51 |
| Water-regulator | R. H. White | 737,984 | Sept. 1 | 856 | 188 | 106 | 187 |
| Water. Removing oil or oily matter from | A. E. Krause | 729,775 | June 2 | 461 | 103 | 104 | 1222 |
| Water-repellent. Machine for treating fabrics for rendering them | C. Lichtenstadt | 736,413 | Aug. 18 | 2555 | 561, 562 | 105 | 1563 |
| Water screen and filter | S. Stout | 748,230 | Dec. 29 | 5440 | 1240 | 107 | 2373 |
| Water. Separating oily or similar impurities from | H. T. Davis and E. Perrett | 744,171 | Nov. 17 | 2718 | 580 | 107 | 607 |
| Water. Softening | F. Breyer | 717,536 | Jan. 6 | 24 | ------ | 102 | 8 |
| Water-softening apparatus | W. Boby | 729,121 | May 26 | 4307 | 952 | 104 | 962 |
| Water softening, filtering, and purifying apparatus | T. Waite | 731,111 | Feb. 17 | 3160 | 727 | 102 | 1522 |
| Water-stopper. Masonry | D. D. McBean | 741,589 | Oct. 13 | 2307 | 516 | 106 | 1757 |
| Water-supply apparatus | R. Baggaley | 746,242 | Dec. 8 | 1706 | 380 | 107 | 1484 |
| Water-supply system | O. T. Hungerford | 745,351 | Dec. 1 | 62 | 14 | 107 | 1114 |
| Water-supply systems. Drainage means for | R. F. Lindsay | 746,115 | Dec. 8 | 1473 | 330, 331 | 107 | 1434 |
| Water-tank mold | P. Mansan | 720,371 | Feb. 10 | 1778 | 403 | 102 | 1216 |
| Water-tight power doors or hatches. Apparatus for operating | W. B. Cowles | 743,252 | Nov. 3 | 843 | 184 | 107 | 176 |
| Water to washstand-basins, &c. Electrical control of the flow of | I. G. Waterman | 724,587 | Apr. 7 | 200 | 49 | 103 | 1212 |
| Water-tower and fire-escape. Portable | H. H. Gorter | 718,965 | Jan. 20 | 2747 | 614 | 102 | 614 |
| Water-towers or the like. Automatic pneumatic balance for | H. H. Gorter | 731,889 | June 23 | 4354 | 972 | 104 | 2083 |
| Water-trap | J. S. Conwell and M. E. Chamness | 725,318 | Apr. 14 | 1664 | 375 | 103 | 1537 |
| Water-trap for waste-pipes | F. B. Charrion | 736,688 | Aug. 18 | 3100 | 684 | 105 | 1675 |
| Water-trough | C. C. Knobel | 724,299 | Mar. 31 | 4996 | 1118 | 103 | 1101 |
| Water-tube boiler | J. T. Smith | 717,636 | Jan. 6 | 203 | 50, 51 | 102 | 44 |
| Water-tube boiler | H. E. Penney | 717,913 | Jan. 6 | 746 | 167 | 102 | 159 |
| Water-tube boiler | W. M. Jackson | 720,356 | Feb. 10 | 1754 | 398 | 102 | 1211 |
| Water-tube boiler | F. M. Faber | 724,560 | Apr. 7 | 254 | 62 | 103 | 1224 |
| Water-tube boiler | J. P. Sneddon | 725,600 | Apr. 14 | 2184 | 494 | 103 | 1650 |
| Water-tube boiler | D. Roberts | 725,875 | Apr. 21 | 2703 | 615 | 103 | 1775 |
| Water-tube boiler | G. J. d'Almeida and H. D. Guimaraës | 729,112 | May 26 | 4292 | 948, 949 | 104 | 959 |
| Water-tube boiler | J. Cowan | 729,738 | June 2 | 395 | 89 | 104 | 1209 |
| Water-tube boiler | G. Hansen | 730,765 | June 9 | 2246 | 498 | 104 | 1612 |
| Water-tube boiler | J. J. O'Brien | 731,211 | June 16 | 3089 | 685 | 104 | 1801 |
| Water-tube boiler | W. R. Cummins | 735,067 | Aug. 4 | 34 | 10, 11 | 105 | 989 |
| Water-tube boiler | G. Silvestri | 736,451 | Aug. 18 | 2629 | 577 | 105 | 1579 |
| Water-tube boiler | F. R. Tibbitts | 738,377 | Sept. 8 | 1688 | 365, 366 | 106 | 379 |
| Water-tube boiler | W. J. Dugan | 742,847 | Nov. 3 | 51 | 12 | 107 | 13 |
| Water-tube boiler | W. C. Temple | 742,930 | Nov. 3 | 187 | 43 | 107 | 41 |
| Water-tube boiler | J. F. Hottman, Jr | 745,616 | Dec. 1 | 553 | 129 | 107 | 1215 |
| Water-tube boiler | J. F., Sr., and J. F. Hottman, Jr | 745,851 | Dec. 1 | 994 | 224 | 107 | 1311 |
| Water-tube boiler | H. Lawson | 746,533 | Dec. 8 | 2215 | 508 | 107 | 1593 |
| Water-tube boiler | J. Miyabara | 747,080 | Dec. 15 | 3262 | 742, 743 | 107 | 1852 |
| Water wheel and elevator. Combined | L. Oliver | 745,233 | Nov. 24 | 4711 | 1029 | 107 | 1047 |
| Water-wheel-balancing device | F. Trump | 743,595 | Nov. 10 | 1602 | 335 | 107 | 358 |
| Water-wheel bucket | G. J. Henry, Jr | 728,230 | May 19 | 2658 | 594 | 104 | 604 |
| Water-wheel. Current | E. A. Speegle | 720,750 | Feb. 17 | 2493 | 575 | 102 | 1378 |
| Water-wheel. Feathering | M. F. McDonald | 744,786 | Nov. 24 | 3846 | 828 | 107 | 868 |
| Water-wheel. Turbine | W. O. Crocker | 734,673 | July 28 | 3649 | 856 | 105 | 820 |
| Water-wheels. Water-nozzle for impact | G. J. Henry, Jr | 731,570 | June 23 | 3785 | 842, 843 | 104 | 1963 |
| Waterer. Automatic hog- | B. F. Booth | 740,972 | Oct. 6 | 1079 | 244 | 106 | 1476 |
| Waterer. Stock- | F. Horwart | 733,966 | July 21 | 2312 | 544 | 105 | 520 |
| Waterer. Stock- | F. S. Seymour | 741,557 | Oct. 13 | 2245 | 500 | 106 | 1746 |

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| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Drg. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Watering apparatus | J. R. Goodwin and W. C. Browne | 725,557 | Apr. 14 | 2108 | 477 | 103 | 1631 |
| Watering apparatus. Automatic stock- | J. J. McCourt | 730,144 | June 2 | 1118 | 251 | 104 | 1354 |
| Watering device. Automatic | J. M. Day | 727,597 | May 12 | 1444 | 324 | 104 | 329 |
| Watering pool. Stock- | B. F. Hudson | 718,932 | Jan. 20 | 2688 | 601 | 102 | 601 |
| Watering tank. Stock- | F. E. and C. E. Richards | 728,133 | May 12 | 2461 | 548 | 104 | 541 |
| Watering-trough. Automatic | J. A. Brown | 738,768 | Sept. 15 | 2453 | 539 | 106 | 557 |
| Waterproof construction | H. Bolze | 739,820 | Sept. 29 | 4392 | 985 | 106 | 1008 |
| Waterproof covers or tarpaulins. Dressing for | M. G. Peters and J. A. Shepherd | 719,502 | Feb. 3 | 162 | ------ | 102 | 858 |
| Waterproof fabric | A. Müller-Jacobs | 742,212 | Oct. 27 | 3560 | ------ | 106 | 2045 |
| Waterproof garment | J. Kipp | 743,174 | Nov. 3 | 684 | 150 | 107 | 143 |
| Waterproof material and preparing same | C. I. Goessmann | 721,558 | Feb. 24 | 4018 | ------ | 102 | 1718 |
| Waterproofing and rotproofing textile fabrics | J. Williams | 731,002 | June 16 | 2698 | ------ | 104 | 1725 |
| Waterproofing or preservative purposes. Treating surfaces for | E. M. Caffall | 747,935 | Dec. 29 | 4871 | 1100 | 107 | 2250 |
| Waterproofing textile fabrics. Apparatus for | F. Rushworth | 718,527 | Jan. 13 | 1911 | 419, 420 | 102 | 427 |
| Waterway. Pleasure- | A. Pusterla | 724,040 | Mar. 31 | 4466 | 1006 | 103 | 994 |
| Waterway. Pleasure- | H. Roltair | 728,303 | May 19 | 2809 | 622 | 104 | 637 |
| Waterways. Structure in or adjacent to | G. L. Monchel | 738,346 | Sept. 8 | 1632 | 353, 354 | 106 | 367 |
| Waterworks. Pneumatic | E. L. Canon | 739,150 | Sept. 15 | 3144 | 695 | 106 | 703 |
| Wattmeter for three-wire systems. Prepayment- | G. G. Tilden | 732,139 | June 30 | 4863 | 1082 | 104 | 2200 |
| Wave energy. Utilizing | R. A. Fessenden | 731,029 | June 16 | 2747 | 612 | 104 | 1734 |
| Wave-motor | F. H. Reed | 721,090 | Feb. 17 | 3123 | 717, 718 | 102 | 1514 |
| Wave-motor | G. Noblé-Todd | 730,560 | June 9 | 1886 | 421, 422 | 104 | 1533 |
| Wave-motor | W. S. Jacobs | 731,780 | June 23 | 4161 | 928 | 104 | 2038 |
| Wave-motor | J. C. Hergenhan and C. C. Von der Ahe. | 735,510 | Aug. 4 | 915 | 195 | 105 | 1177 |
| Wave-motor | F. J. Hagen | 738,996 | Sept. 15 | 2856 | 634 | 106 | 645 |
| Wave-motor | W. L. Walter | 741,084 | Oct. 13 | 1288 | 294, 295 | 106 | 1542 |
| Wave or tide motor | C. Caille | 721,501 | Feb. 24 | 3918 | 891 | 102 | 1696 |
| Wax. Artificial | J. Lewy | 735,538 | Aug. 4 | 972 | ------ | 105 | 1187 |
| Wax-pad | C. C. Bonar | 737,066 | Aug. 25 | 3799 | 842 | 105 | 1842 |
| Way-bill | W. F. Mullahy | 738,832 | Sept. 15 | 2589 | 572 | 106 | 587 |
| Weaner and udder-protector. Calf or colt | W. M. Cunningham and W. H. Spear. | 745,419 | Dec. 1 | 200 | 46 | 107 | 1141 |
| Weaner. Calf- | G. M. Loftiss | 722,119 | Mar. 3 | 848 | 189 | 103 | 182 |
| Weaner. Calf- | G. C. Birmingham | 723,637 | Mar. 24 | 3694 | 828 | 103 | 817 |
| Weaner. Calf | C. J. and C. C. Quinn | 723,919 | Mar. 31 | 4211 | 948 | 103 | 944 |
| Weaner. Calf- | A. T. Keech | 729,352 | May 26 | 4721 | 1043 | 104 | 1049 |
| Weaner. Calf- | C. B. Wagner, Jr | 741,856 | Oct. 20 | 2806 | 624 | 106 | 1880 |
| Weaner. Colt or calf | B. Earl | 726,657 | Apr. 28 | 4167 | 940 | 103 | 2085 |
| Weaner. Cow or calf | M. S. Quiggle | 728,291 | May 19 | 2782 | 617 | 104 | 632 |
| Weaning device. Calf- | A. N. Bender | 731,424 | June 23 | 3496 | 781 | 104 | 1904 |
| Wear-compensating device | L. Parish | 732,887 | July 7 | 342 | 83 | 105 | 75 |
| Weather-strip | C. Vose | 717,641 | Jan. 6 | 210 | 52 | 102 | 45 |
| Weather-strip | E. Gauron | 718,926 | Jan. 20 | 2666 | 598 | 102 | 596 |
| Weather-strip | W. Savitz | 719,377 | Jan. 27 | 3537 | 789 | 102 | 794 |
| Weather-strip | J. D. Grover and G. M. Armstrong | 719,657 | Feb. 3 | 435 | 99 | 102 | 913 |
| Weather-strip | L. A. Bartel | 722,352 | Mar. 10 | 1296 | 287 | 103 | 291 |
| Weather-strip | R. H. Whitted | 724,067 | Mar. 31 | 4515 | 1017 | 103 | 1005 |
| Weather-strip | S. E. Moore | 724,726 | Apr. 7 | 582 | 139 | 103 | 1293 |
| Weather-strip | W. C. Dillon | 725,052 | Apr. 14 | 1173 | 265 | 103 | 1435 |
| Weather-strip | A. J. Kitson | 728,244 | May 19 | 2679 | 599 | 104 | 609 |
| Weather-strip | E. Donden and A. B. Robb | 728,686 | May 19 | 3525 | 784 | 104 | 787 |
| Weather-strip | J. N. McGriff | 733,071 | July 7 | 660 | 159 | 105 | 140 |
| Weather-strip | S. S. Stites | 733,295 | July 7 | 1072 | 255 | 105 | 226 |
| Weather-strip | J. B. A. La Jeunesse | 733,488 | July 14 | 1412 | 333 | 105 | 316 |
| Weather-strip | J. B. A. La Jeunesse | 733,489 | July 14 | 1415 | 333 | 105 | 317 |
| Weather-strip | W. A. Scott | 735,913 | Aug. 11 | 1681 | 358 | 105 | 1358 |
| Weather-strip | J. W. Henry | 736,392 | Aug. 18 | 2526 | 554 | 105 | 1558 |
| Weather-strip | W. C. Zimmermann | 746,910 | Dec. 15 | 2924 | 675 | 107 | 1773 |
| Weather-strip. Door | H. M. Luchia | 719,599 | Feb. 3 | 336 | 78 | 102 | 892 |
| Weather-strip. Door | L. B. Rolph | 723,029 | Mar. 17 | 2549 | 573 | 103 | 571 |
| Weather-strip. Door | C. E. Meeker | 736,286 | Aug. 11 | 2344 | 509 | 105 | 1502 |
| Weather-strip. Door | W. F. Veber | 746,416 | Dec. 8 | 2013 | 459 | 107 | 1549 |
| Weather-strip for windows, doors, or other structures. | P. L. Hedberg | 732,852 | July 7 | 280 | 70 | 105 | 62 |
| Weather-strip. Metal | H. E. Kenny | 719,472 | Feb. 3 | 110 | 26 | 102 | 848 |
| Weather-strip. Metal | J. C. McMahon | 733,991 | July 21 | 2362 | 554 | 105 | 530 |
| Weather-strip. Sash | J. E. Scott | 739,931 | Sept. 29 | 4624 | 1037 | 106 | 1056 |
| Weather-strip. Window-sash | J. F. Schupp | 741,415 | Oct. 13 | 1954 | 433 | 106 | 1683 |
| Weather-vane | R. Wilson | 721,348 | Feb 24 | 3640 | 828, 829 | 102 | 1639 |
| Weaving initials, names, monograms, &c | J. Lucas and C. Vorsteher | 744,579 | Nov. 17 | 3453 | 744 | 107 | 767 |
| Weaving. Machine for manufacturing metallic leashes used in | E. Guinet | 730,113 | June 2 | 1065 | 239 | 104 | 1344 |
| Web-roll shaft | F. Meisel | 728,486 | May 19 | 3141 | 695 | 104 | 706 |
| Wedge-grip | W. E. Spencer | 739,511 | Sept. 22 | 3810 | 853 | 106 | 865 |
| Weed-cutting and soil-stirring device | H. D. Clayton | 719,189 | Jan. 27 | 3175 | 707, 708 | 102 | 715 |
| Weed-cutting machine | J. C. Walter | 736,320 | Aug. 11 | 2400 | 523 | 105 | 1515 |
| Weed-destroyer | J. Bondurant | 723,129 | Mar. 17 | 2732 | 613 | 103 | 609 |
| Weed-exterminator | B. Smith | 728,312 | May 19 | 2828 | 625 | 104 | 641 |
| Weed-puller | R. Russell | 722,048 | Mar. 3 | 729 | 162 | 103 | 157 |
| Weeder | J. H. Baker | 718,187 | Jan. 13 | 1241 | 273 | 102 | 283 |
| Weeder | F. J. Kelly | 727,804 | May 12 | 1867 | 416 | 104 | 415 |
| Weeder | E. G. and A. E. Quickel | 731,219 | June 16 | 3100 | 687 | 104 | 1804 |
| Weeder. Beet- | J. B. Strehl | 725,296 | Apr. 14 | 1618 | 366 | 103 | 1528 |
| Weeder-teeth or the like. Securing device for | H. M. Burdick | 746,919 | Dec. 15 | 2939 | 678 | 107 | 1777 |
| Weeder-tooth | L. D. Austin | 718,070 | Jan. 13 | 1033 | 230 | 102 | 228 |
| Weeder-tooth | A. J. Patton | 738,477 | Sept. 8 | 1885 | 410 | 106 | 419 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Weeder. Wheel- | S. Fuller | 724,175 | Mar. 31 | 4736 | 1061 | 103 | 1050 |
| Weeding apparatus | B. F. Conkle and J. T. Hall | 730,095 | June 2 | 1036 | 232 | 104 | 1338 |
| Weeding implement | G. Q. Palmer | 717,908 | Jan. 6 | 740 | 165 | 102 | 158 |
| Weeding implement | R. Hoodless | 718,571 | Jan. 13 | 2009 | 437 | 102 | 446 |
| Weeding-machine | O. S. Fellows | 732,180 | June 30 | 4940 | 1098 | 104 | 2217 |
| Weeding-tool | A. P. Prevost | 725,768 | Apr. 21 | 2520 | 571 | 103 | 1735 |
| Weevil. Apparatus for extermination of boll- | J. T. Taylor | 738,083 | Sept. 1 | 1022 | 228 | 106 | 222 |
| Weft-fork | J. H. Foster | 724,563 | Apr. 7 | 264 | 64 | 103 | 1226 |
| Weft-fork | T. Pickles and B. Blakey | 748,096 | Dec. 29 | 5198 | 1175 | 107 | 2321 |
| Weft-fork mechanism | A. Dubé | 731,868 | June 23 | 4307 | 961 | 104 | 2072 |
| Weigher. Automatic | J. R. Harrison | 720,248 | Feb. 10 | 1546 | 355 | 102 | 1166 |
| Weigher. Grain- | C. Sherman | 719,700 | Feb. 3 | 511 | 15 | 102 | 930 |
| Weigher. Grain- | B. M. Steele | 747,258 | Dec. 15 | 3586 | 810, 811 | 107 | 1921 |
| Weighing apparatus | A. L. Buckland | 721,934 | Mar. 3 | 533 | 117 | 103 | 118 |
| Weighing apparatus | L. E. Cowey | 727,299 | May 5 | 881 | 191, 192 | 104 | 189 |
| Weighing apparatus | E. G. Thomas | 746,201 | Dec. 8 | 1634 | 364 | 107 | 1469 |
| Weighing apparatus. Automatic | K. V. Berglund | 727,268 | May 5 | 838 | 179 | 104 | 180 |
| Weighing apparatus. Automatic | A. R. Leitch and T. A. Drummond | 738,336 | Sept. 8 | 1606 | 349 | 106 | 361 |
| Weighing attachment for refrigerators | W. H. Mitchell | 748,297 | Dec. 29 | 5560 | 1268 | 107 | 2399 |
| Weighing cotton, &c., in bulk. Apparatus for | F. L. Dyer | 719,446 | Feb. 3 | 62 | 114 | 102 | 889 |
| Weighing device. Automatic electric | N. Newman | 741,975 | Oct. 20 | 3063 | 684, 685 | 106 | 1931 |
| Weighing-machine | G. A. Moore | 718,500 | Jan. 13 | 1857 | 408 | 102 | 416 |
| Weighing-machine | J. Marshall | 720,042 | Feb. 10 | 1161 | 265, 266 | 102 | 1086 |
| Weighing-machine | F. F. Meyer | 720,945 | Feb. 17 | 2833 | 649, 650 | 102 | 1450 |
| Weighing-machine | H. A. Danne | 727,302 | May 5 | 896 | 194 | 104 | 193 |
| Weighing-machine | L. Hachenberg | 728,569 | May 19 | 3300 | 731, 732 | 104 | 738 |
| Weighing-machine | L. Hachenberg | 744,067 | Nov. 17 | 2515 | 539 | 107 | 565 |
| Weighing-machine | M. L. Small | 744,420 | Nov. 17 | 3185 | 683 | 107 | 711 |
| Weighing-machine. Automatic | E. Schenck | 721,469 | Feb. 24 | 3866 | 879 | 102 | 1685 |
| Weighing-machine. Automatic | A. H. Canning | 726,858 | May 5 | 40 | 9, 10, 11 | 104 | 11 |
| Weighing-machine. Automatic | S. S. Blaisdell | 731,845 | June 23 | 4276 | 952, 953 | 104 | 2065 |
| Weighing-machine. Automatic | F. N. Magee | 733,059 | July 7 | 641 | 155 | 105 | 136 |
| Weighing-machine. Automatic | A. A. Meyer | 733,066 | July 7 | 650 | 157 | 105 | 138 |
| Weighing-machine. Automatic | W. D. Tyler | 733,096 | July 7 | 710 | 173 | 105 | 150 |
| Weighing-machine. Automatic | E. F. Delery | 733,462 | July 14 | 1375 | 325 | 105 | 307 |
| Weighing-machine. Automatic | G. Hoepner | 735,979 | Aug. 11 | 1802 | 385, 386 | 105 | 1385 |
| Weighing-machine. Automatic | G. Prokofiew | 739,216 | Sept. 15 | 3255 | 721, 722, 723 | 106 | 727 |
| Weighing-machine. Automatic | C. T. Brown | 744,162 | Nov. 17 | 2698 | 575, 576 | 107 | 604 |
| Weighing-machine. Automatic | E. G. Thomas | 746,200 | Dec. 8 | 1629 | 363 | 107 | 1469 |
| Weighing-machine. Coin-controlled | J. T. Witek | 724,364 | Mar. 31 | 5114 | 1145 | 103 | 1126 |
| Weighing-machine. Coin-controlled | J. T. Witek | 724,365 | Mar. 31 | 5115 | 1146 | 103 | 1126 |
| Weighing-machine. Coin-controlled | S. Williamson | 741,204 | Oct. 13 | 1529 | 345, 346 | 106 | 1593 |
| Weighing-machine. Coin-controlled | F. Verplast | 746,418 | Dec. 8 | 2020 | 462 | 107 | 1550 |
| Weighing-machine. Coin-operated | J. Morgenthan | 728,275 | May 19 | 2750 | 611 | 104 | 626 |
| Weighing-machine. Coin-operated | G. E. Van Guysling and J. G. W. Romans. | 731,823 | June 23 | 4241 | 944, 945 | 104 | 2058 |
| Weighing machine. Pressure- | S. G. Reed | 748,010 | Dec. 29 | 5025 | 1134, 1135 | 107 | 2284 |
| Weighing-machine. Rotary automatic | G. H. Froggatt | 744,740 | Nov. 24 | 3771 | 812 | 107 | 852 |
| Weighing-machines. Registering means for coin-controlled | G. F. W. Schultze | 725,371 | Apr. 14 | 1757 | 395 | 103 | 1556 |
| Weighing mechanism for barrow-trucks | V. Weidlinger | 717,785 | Jan. 6 | 512 | 114 | 102 | 110 |
| Weighing or packaging machine | W. H. Doble | 720,008 | Feb. 10 | 1081 | 249, 250, 251, 252 | 102 | 1069 |
| Weighing or packaging machines. Uniform-feed mechanism for | G. F. Turner | 746,410 | Dec. 8 | 2006 | 457 | 107 | 1547 |
| Weighing-scoop | J. S. Alexander | 734,653 | July 28 | 3609 | 845 | 105 | 812 |
| Weighing-scoop. Automatic | W. Maxwell | 733,411 | July 14 | 1283 | 303 | 105 | 288 |
| Weighing tea, &c. Apparatus for | J. P. and G. M. Stubbs | 729,007 | May 26 | 4108 | 911, 912 | 104 | 923 |
| Weighing tea, &c. Apparatus for | G. H. Driver and J. P. K. Clark | 748,055 | Dec. 29 | 5121 | 1157, 1158, 1159 | 107 | 2304 |
| Weight-supporting device | G. F. Bush | 744,477 | Nov. 17 | 3289 | 706 | 107 | 732 |
| Weir. Automatic | E. O. Mawson | 720,721 | Feb. 17 | 2451 | 560, 561 | 102 | 1368 |
| Welding | F. E. Canda | 726,026 | Apr. 21 | 2960 | 673 | 103 | 1827 |
| Welding apparatus. Ring- | G. W. La Voo | 740,149 | Sept. 29 | 5015 | 1127 | 106 | 1139 |
| Welding compound | M. P. Shafer | 729,428 | May 26 | 4840 | ..... | 104 | 1074 |
| Welding compounds. Manufacturing | P. Vervaet | 720,300 | Feb. 10 | 1645 | ..... | 102 | 1186 |
| Welding die. Link- | W. N. Gourley | 724,568 | Apr. 7 | 272 | 66 | 103 | 1227 |
| Welding. Electric | J. Schurek and F. V. Giesler | 728,023 | May 12 | 2264 | 503 | 104 | 499 |
| Welding machine | C. H. Clayton | 731,665 | June 23 | 3954 | 880 | 104 | 1996 |
| Welding machine. Automatic electric chain- | C. A. Leuenberger | 728,119 | May 12 | 2434 | 542, 543 | 104 | 536 |
| Welding-machine clamp device. Electric- | A. F. Rietzel | 719,508 | Feb. 3 | 168 | 39 | 102 | 856 |
| Welding-machine. Electric | G. Baehr | 747,354 | Dec. 22 | 3781 | 851 | 107 | 1982 |
| Welding. Metal- | H. Goldschmidt | 735,244 | Aug. 4 | 403 | 79 | 105 | 1067 |
| Well agitator. Oil- | A. B. Gahagan | 726,899 | May 5 | 125 | 30 | 104 | 30 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. | | Official Gazette. | |
|---|---|---|---|---|---|---|---|
| | | | | Spec. | Dr'g. | Vol. | Page. |
| Well-bailing apparatus. Oil- | H. B. Martin | 730,940 | June 16 | 2571 | 572, 573 | 104 | 1699 |
| Well-borer | R. E. Brown | 736,201 | Aug. 11 | 2193 | 472 | 105 | 1467 |
| Well-boring and rock-drilling machine. Combined. | S. H. Powers | 738,843 | Sept. 15 | 2611 | 576 | 106 | 592 |
| Well-boring-apparatus gripping device | H. G. Johnston | 718,937 | Jan. 20 | 2696 | 603 | 102 | 609 |
| Well-boring drill | W. H. Clark and F. J. Currier | 724,160 | Mar. 31 | 4707 | 1056, 1057 | 103 | 1043 |
| Well-boring machine | A. Kopperud | 730,272 | June 9 | 1366 | 300 | 104 | 1421 |
| Well-boring machine | D. A. Harmon | 739,860 | Sept. 29 | 4463 | 1002 | 106 | 1022 |
| Well-boring machine | E. W. Briggs | 747,126 | Dec. 15 | 3336 | 759 | 107 | 1870 |
| Well-cap | W. F. Shutt | 738,126 | Sept. 1 | 1130 | 251 | 106 | 244 |
| Well-casing-elevating device | W. F. Hale and B. L. Wigton | 748,183 | Dec. 29 | 5361 | 1217 | 107 | 2356 |
| Well casing-head. Oil- | J. Cochran | 738,001 | Sept. 1 | 899 | 197 | 106 | 196 |
| Well-casing sections. Machine for screwing or unscrewing | W. H. Downing | 719,766 | Feb. 3 | 653 | 149, 150 | 102 | 960 |
| Well-casing spear | R. I. Henderson | 737,101 | Aug. 25 | 3858 | 857 | 105 | 1854 |
| Well cleaner. Oil- | R. J. Hoffman | 719,004 | Jan. 27 | 2818 | 632 | 102 | 643 |
| Well construction | M. D. Rochford | 731,130 | June 16 | 2944 | 654, 655 | 104 | 1774 |
| Well cup. Oil- | M. Wert | 723,096 | Mar. 17 | 2667 | 601 | 103 | 597 |
| Well-derrick | J. C. Knupp | 731,109 | June 16 | 2899 | 643 | 104 | 1765 |
| Well-drill | M. M. Long | 741,150 | Oct. 13 | 1410 | 323 | 106 | 1566 |
| Well drill and reamer. Deep- | P. Higgins | 738,327 | Sept. 8 | 1591 | 344, 345 | 106 | 358 |
| Well drill. Driven- | M. Ziegenfus | 719,290 | Jan. 27 | 3360 | 750 | 102 | 755 |
| Well drill. Oil- | H. R. Decker | 732,925 | July 7 | 404 | 98 | 105 | 87 |
| Well-drilling apparatus | H. Kelly | 736,267 | Aug. 11 | 2303 | 499 | 105 | 1492 |
| Well-drilling apparatus | L. D. Shryock | 737,505 | Aug. 25 | 4631 | 1039 | 105 | 2023 |
| Well-drilling apparatus | C. S. Wright | 737,545 | Aug. 25 | 4700 | 1054, 1055 | 105 | 2039 |
| Well-drilling apparatus. Pneumatic | H. W. Rank | 719,371 | Jan. 27 | 3527 | 786 | 102 | 791 |
| Well-drilling machine | H. H. Everhard | 718,112 | Jan. 13 | 1106 | 244 | 102 | 254 |
| Well-drilling machine | J. R. Lewis | 726,174 | Apr. 21 | 3205 | 726 | 103 | 1877 |
| Well-drilling machine | C. Butterfield | 730,340 | June 9 | 1478 | 327 | 104 | 1445 |
| Well-drilling machine | G. D. Loomis | 731,313 | June 16 | 3281 | 729, 730 | 104 | 1842 |
| Well-drilling machine | D. B. Martin | 732,206 | June 30 | 4991 | 1110 | 104 | 2228 |
| Well-drilling machine | G. D. Loomis | 733,980 | July 21 | 2338 | 549 | 105 | 525 |
| Well-drilling machine | W. N. Dufford | 735,222 | Aug. 4 | 367 | 70 | 105 | 1059 |
| Well-drilling machine | I. S. and D. S. Ausherman | 735,694 | Aug. 11 | 1272 | 272 | 105 | 1269 |
| Well-drilling machine | R. D. Patterson | 735,898 | Aug. 11 | 1652 | 353 | 105 | 1352 |
| Well-drilling machine | F. R. and E. E. McKee | 748,517 | Dec. 29 | 5966 | 1353, 1354 | 107 | 2489 |
| Well-drilling-machine coupling | H. G. Johnston | 725,568 | Apr. 14 | 2123 | 481 | 103 | 1635 |
| Well-drilling machinery | G. A. Gilborne | 736,716 | Aug. 18 | 3155 | 696 | 105 | 1688 |
| Well-drilling-tool wire-rope socket | E. Double and F. J. Karten | 727,759 | May 12 | 1769 | 398 | 104 | 397 |
| Well-drilling. Water-supply device for | W. H. Ladley | 742,451 | Oct. 27 | 3993 | 897 | 106 | 2135 |
| Well-driving hammer | T. D. Westbrook | 740,497 | Oct. 6 | 224 | 44 | 106 | 1294 |
| Well fishing implement. Oil- | W. Smith and L. Piggott | 720,078 | Feb. 10 | 1226 | 282 | 102 | 1099 |
| Well-inlet | D. H. Maury. (Reissue) | 12,107 | Apr. 28 | 4520 | 1017, 1018 | 103 | 2160 |
| Well jack. Oil- | J. Barrett | 739,812 | Sept. 29 | 4380 | 982 | 106 | 1005 |
| Well-lining | J. W. Beaumont | 731,742 | June 23 | 4094 | 914, 915 | 104 | 2024 |
| Well-machine | A. Cameron | 734,510 | July 28 | 3347 | 783, 784 | 105 | 756 |
| Well or cistern cleaner | D. B. Jackson | 747,974 | Dec. 29 | 4958 | 1120 | 107 | 2268 |
| Well packer. Deep- | C. M. and C. C. Heeter | 747,321 | Dec. 15 | 3717 | 838 | 107 | 1952 |
| Well partition-plug. Oil- | C. S. Little | 733,492 | July 14 | 1422 | 334 | 105 | 318 |
| Well-pipe puller | J. A. De Vore | 719,444 | Feb. 3 | 60 | 13 | 102 | 838 |
| Well points. Protective covering for drive- | C. H. Redfield | 746,378 | Dec. 8 | 1951 | 446 | 107 | 1535 |
| Well reamer. Deep- | P. Higgins | 735,770 | Aug. 11 | 1402 | 301, 302 | 105 | 1297 |
| Well reamer. Oil or Artesian | P. Higgins | 738,325 | Sept. 8 | 1588 | 343 | 106 | 358 |
| Well-rigs. Casing or drive-pipe screwer for | R. S. Oiler | 741,925 | Oct. 20 | 2950 | 658 | 106 | 1909 |
| Well-rod extractor | W. W. French | 743,854 | Nov. 10 | 2062 | 439 | 107 | 455 |
| Well sand-screen | S. Jackson and N. Thompson | 718,464 | Jan. 13 | 1764 | 392 | 102 | 391 |
| Well-screen | G. J. Karsch | 746,096 | Dec. 8 | 1439 | 323 | 107 | 1426 |
| Well-strainer | J. Morris | 725,117 | Apr. 14 | 1305 | 294 | 103 | 1462 |
| Well-strainers. Means for clearing | M. J. Clark | 736,219 | Aug. 11 | 2220 | 478 | 105 | 1474 |
| Well swivel-wrench. Oil- | J. Barrett | 748,153 | Dec. 29 | 5306 | 1205 | 107 | 2344 |
| Well-tube | E. P. Fox | 726,418 | Apr. 28 | 3688 | 836 | 103 | 1992 |
| Well-tube perforator | J. J. Brinkman | 726,625 | Apr. 28 | 4116 | 929 | 103 | 2074 |
| Wells and for collecting oil therefrom. Device for extinguishing burning oil- | F. N. Bell | 739,377 | Sept. 22 | 3553 | 793 | 106 | 807 |
| Wells. Apparatus for raising liquids from | T. F. Moran and F. J. Moser | 735,557 | Aug. 4 | 1015 | 214 | 105 | 1195 |
| Wells. Apparatus for removing drill-tools from | F. G. Irvine and J. B. Braden | 730,460 | June 9 | 1718 | 384 | 104 | 1496 |
| Wells. Combined cable and rotary rig for drilling deep | L. C. Sands, Jr | 732,785 | July 7 | 160 | 41, 42 | 105 | 38 |
| Wells. Device for raising liquids from | T. F. Moran | 721,594 | Feb. 24 | 4104 | 934 | 102 | 1739 |
| Wells. Flowing liquids from | T. F. Moran and F. J. Moser | 746,980 | Dec. 15 | 3069 | 703 | 107 | 1806 |
| Wells. Means for operating | P. C. Connors | 743,249 | Nov. 3 | 835 | 183 | 107 | 174 |
| Wells or like purposes. Apparatus for drilling | G. H. Spaulding | 723,555 | Mar. 24 | 3544 | 793 | 103 | 786 |
| Wells. Portable rig for pulling oil- | F. W. Pennell | 738,353 | Sept. 8 | 1647 | 356, 357 | 106 | 370 |
| Wells. Underreamer for drilling oil- | M. H. Dunn | 739,743 | June 2 | 402 | 91 | 104 | 1211 |
| Wells. Wall-packer for oil- | H. Smith and W. Wright | 746,184 | Dec. 8 | 1602 | 358 | 107 | 1462 |
| Welsbach or other burner | T. Wilson and V. H. Slinack | 742,543 | Oct. 27 | 4175 | 939 | 106 | 2173 |
| Welt-beating and inseam-trimming machine | C. L. Eaton | 731,167 | June 16 | 3011 | 668 | 104 | 1787 |
| Welt-butting machine | C. L. Eaton | 724,828 | Apr. 7 | 772 | 179 | 103 | 1855 |
| Welt-cutting machine | W. B. Arnold | 728,532 | May 19 | 3218 | 714 | 104 | 721 |
| Welt-knife | H. Karpenstein | 738,214 | July 7 | 917 | 221 | 105 | 192 |
| Welt-slitting machine | H. Lyon | 737,430 | Aug. 25 | 4489 | 1007 | 105 | 1990 |
| Welt-slitting machine | H. Lyon | 745,965 | Dec. 1 | 1199 | 269 | 107 | 1356 |
| Welt-support | G. D. Clapp | 734,820 | July 28 | 3959 | 924 | 105 | 881 |
| Wheat-pitching machine | W. H. Milton | 726,326 | Apr. 28 | 3529 | 799 | 103 | 1960 |

*Alphabetical list of inventions*—Continued.

| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Wheel: | | | | | | | |
| *See* Amusement-wheel. Music-box star-wheel. | | | | | | | |
| Antifriction-wheel. Paddle-wheel. | | | | | | | |
| Automobile steering-wheel. Planter-wheel. | | | | | | | |
| Bicycle-wheel. Plow-wheel. | | | | | | | |
| Brake-wheel. Polishing-wheel. | | | | | | | |
| Buffer-wheel. Potter's wheel. | | | | | | | |
| Car-wheel. Printing-wheel. | | | | | | | |
| Cast-steel wheel. Propeller-wheel. | | | | | | | |
| Cushion-wheel. Rotatably-mounted wheel. | | | | | | | |
| Cushion-tired wheel. Rubber-tired wheel. | | | | | | | |
| Cycle-wheel. Self-oiling wheel. | | | | | | | |
| Driving-wheel. Spring-wheel. | | | | | | | |
| Elastic wheel. Sprocket-wheel. | | | | | | | |
| Engine-wheel. Star-wheel. | | | | | | | |
| Engine steering-wheel. Tanning-wheel. | | | | | | | |
| Fifth-wheel. Toy wheel. | | | | | | | |
| Fly-wheel. Toy wind-wheel. | | | | | | | |
| Gear-wheel. Traction-wheel. | | | | | | | |
| Gluing-wheel. Trolley-wheel. | | | | | | | |
| Guide-wheel. Truck-wheel. | | | | | | | |
| Impulse-wheel. Turbine-wheel. | | | | | | | |
| Indicator-wheel. Vehicle-wheel. | | | | | | | |
| Metal wheel. Vehicle propeller-wheel. | | | | | | | |
| Metallic wheel. Wagon-wheel. | | | | | | | |
| Motor-wheel. Water-wheel. | | | | | | | |
| | Wind or water wheel. | | | | | | |
| Wheel | C. Miller | 720,043 | Feb. 10 | 1172 | 268 | 102 | 1068 |
| Wheel | W. N. Haring | 721,038 | Feb. 17 | 3018 | 692, 693 | 102 | 1490 |
| Wheel | W. H. Lasswell | 724,895 | Apr. 7 | 884 | 203 | 103 | 1359 |
| Wheel | A. Russell | 727,456 | May 5 | 1176 | 260 | 104 | 254 |
| Wheel | W. H. Hendricks | 729,068 | May 26 | 4220 | 933 | 104 | 945 |
| Wheel | E. W. Mackenzie-Hughes | 730,548 | June 9 | 1869 | 418 | 104 | 1529 |
| Wheel | W. P. Yancey | 731,648 | June 23 | 3929 | 874 | 104 | 1991 |
| Wheel | R. S. Bryant | 734,254 | July 21 | 2883 | 674 | 105 | 644 |
| Wheel | C. Miller | 734,588 | July 28 | 3495 | 816 | 105 | 788 |
| Wheel | H. H. Porter, Jr | 734,609 | July 28 | 3530 | 826 | 105 | 796 |
| Wheel | C. Miller | 734,731 | July 28 | 3771 | 880 | 105 | 843 |
| Wheel | D. Best | 741,877 | Oct. 20 | 2852 | 637 | 106 | 1889 |
| Wheel | L. B. Seeds | 742,503 | Oct. 27 | 4091 | 921 | 106 | 2156 |
| Wheel | J. M. Crosby | 742,841 | Nov. 3 | 40 | 11 | 107 | 11 |
| Wheel | C. L. Votaw | 743,117 | Nov. 3 | 571 | 123 | 107 | 119 |
| Wheel | W. B. Roberts | 743,197 | Nov. 3 | 726 | 159 | 107 | 152 |
| Wheel | W. Dewar | 744,959 | Nov. 24 | 4158 | 899 | 107 | 932 |
| Wheel and axle coupling | F. G. Hughes | 745,852 | Dec. 1 | 997 | 224, 225 | 107 | 1311 |
| Wheel and casting same or other metal objects | J. Slattery | 725,999 | Apr. 21 | 2918 | 663 | 103 | 1818 |
| Wheel and crank fastening | J. V. Pugh | 738,065 | Sept. 1 | 992 | 221 | 106 | 216 |
| Wheel and lever stand | J. P. Coleman | 746,793 | Dec. 15 | 2696 | 622 | 107 | 1721 |
| Wheel and rail brake. Combination | J. Redmond | 728,130 | May 12 | 2458 | 547 | 104 | 541 |
| Wheel and wheel-rim | F. Philips | 743,098 | Nov. 3 | 537 | 116 | 107 | 113 |
| Wheel-attaching device | W. Runge | 722,909 | Mar. 17 | 2354 | 526 | 103 | 531 |
| Wheel attachment. Traction- | L. Blumstein | 734,803 | July 28 | 3935 | 918 | 105 | 876 |
| Wheel-balance. Apparatus for testing | C. J. A. Heise | 736,096 | Aug. 11 | 2017 | 430 | 105 | 1431 |
| Wheel-box | L. E. Waterman | 740,341 | Sept. 29 | 5368 | 1209 | 106 | 1211 |
| Wheel-box | L. E. Waterman | 740,342 | Sept. 29 | 5369 | 1210 | 106 | 1212 |
| Wheel-chair and hammock. Combined | L. C. Bullock, Jr | 728,082 | May 12 | 2371 | 527 | 104 | 522 |
| Wheel-fastener and axle-protector | G. Wood | 730,429 | June 9 | 1648 | 369 | 104 | 1480 |
| Wheel-fender | B. F. Schmoldt and F. C. Walter | 723,927 | Mar. 31 | 4237 | 953 | 103 | 950 |
| Wheel-fender | D. Boothe | 729,263 | May 26 | 4562 | 1007 | 104 | 1016 |
| Wheel-fender | C. H. E. Schenck | 741,171 | Oct. 13 | 1454 | 331 | 106 | 1575 |
| Wheel for cars, &c. Self-locking loose | C. J. Gustafson | 717,742 | Jan. 6 | 413 | 97 | 102 | 91 |
| Wheel-gage | J. P. Graber | 747,603 | Dec. 22 | 4215 | 948 | 107 | 2081 |
| Wheel guard and sander | W. Lintern | 746,116 | Dec. 8 | 1481 | 331 | 107 | 1437 |
| Wheel holder or support | W. Terry | 747,101 | Dec. 15 | 3296 | 750 | 107 | 1861 |
| Wheel-holding machine | J. D. Smith | 721,613 | Feb. 24 | 4154 | 944 | 102 | 1750 |
| Wheel-nave cap | F. Charron and L. Girardot | 739,830 | Sept. 29 | 4405 | 989 | 106 | 1011 |
| Wheel-nave. Metal | E. P. Dignan | 738,010 | Sept. 1 | 913 | 201 | 106 | 200 |
| Wheel or gear tooth. Sprocket | J. M. Dodge | 738,012 | Sept. 1 | 916 | 202 | 106 | 200 |
| Wheel or pulley | C. H. Smith | 747,250 | Dec. 15 | 3571 | 808 | 107 | 1918 |
| Wheel-rim attachment. Traction- | G. A. Lavender | 724,896 | Apr. 7 | 885 | 203 | 103 | 1359 |
| Wheel rim. Vehicle- | H. Harris | 741,401 | Oct. 13 | 1938 | 429 | 106 | 1680 |
| Wheel-scraper | L. F. Rogalla, B. J. Narloch, and H. C. De Puy. | 748,218 | Dec. 29 | 5421 | 1234 | 107 | 2368 |
| Wheel scraper. Wagon- | J. W. Mann | 746,723 | Dec. 15 | 2565 | 590 | 107 | 1693 |
| Wheel-securing device | W. E. Ayres | 745,989 | Dec. 8 | 1244 | 281 | 107 | 1383 |
| Wheel-stand | G. H. Pfeil | 739,344 | Sept. 22 | 3491 | 781 | 106 | 794 |
| Wheel support. Rubber-tired | W. Schulze | 719,615 | Feb. 3 | 363 | 84 | 102 | 898 |
| Wheel-tempering apparatus | A. F. Howe | 736,103 | Aug. 11 | 2028 | 432 | 105 | 1433 |
| Wheel-tensioning device | S. B. Whiteside | 732,017 | June 23 | 4610 | 1028 | 104 | 2135 |
| Wheel-tightener | S. G. Klotz | 726,542 | Apr. 28 | 3948 | 892 | 103 | 2042 |
| Wheels and pulleys. Manufacture of | A. Theyskens | 718,677 | Jan. 20 | 2204 | 483 | 102 | 500 |
| Wheels and pulleys. Manufacture of | E. Roemer | 736,551 | Aug. 18 | 2821 | 617 | 105 | 1621 |
| Wheels. Manufacturing | H. Ehrhardt | 730,355 | June 9 | 1516 | 336 | 104 | 1453 |
| Wheelbarrow | C. A. Baker | 721,931 | Mar. 3 | 523 | 115 | 103 | 116 |
| Wheelbarrow | E. F. Hull | 726,931 | May 5 | 187 | 43 | 104 | 42 |
| Wheelbarrow | E. M. Cummins | 736,697 | Aug. 18 | 3117 | 687 | 105 | 1679 |
| [illegible]row | C. A. Baker | 740,214 | Sept. 29 | 5141 | 1154 | 106 | 1164 |
| [illegible]row. Dumping- | E. F. Braucher | 719,428 | Feb. 3 | 33 | 7 | 102 | 832 |
| [illegible]. Self-cooling | F. Reissmann | 734,137 | July 21 | 2665 | 627 | 105 | 597 |
| [illegible] | C. Highers | 718,457 | Jan. 13 | 1744 | 388 | 102 | 387 |
| Whiffletree | D. L. Mayo | 726,722 | Apr. 28 | 4288 | 968 | 103 | 2111 |
| Whiffletree | T. Lynch | 727,165 | May 5 | 657 | 141 | 104 | 142 |
| Whiffletree | C. T. Stephens | 732,015 | June 23 | 4607 | 1028 | 104 | 2135 |

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| Invention. | Name. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| Whiffletree | A. C. Scarr | 732,320 | June 30 | 5205 | 1156 | 104 | 2272 |
| Whiffletree | D. A. Morrison | 735,558 | Aug. 4 | 1018 | 215 | 105 | 1196 |
| Whiffletree | J. Kitzmiller | 745,730 | Dec. 1 | 744 | 170 | 107 | 1257 |
| Whiffletree-clip | T. J. Bullock | 719,431 | Feb. 3 | 39 | 8 | 102 | 833 |
| Whiffletree-clip | E. B. Welles | 720,866 | Feb. 17 | 2681 | 619 | 102 | 1418 |
| Whiffletree-clip | W. R. Ayer | 734,798 | July 28 | 3926 | 916 | 105 | 874 |
| Whiffletree-clip | T. J. Bullock | 738,405 | Sept. 8 | 1740 | 378 | 106 | 390 |
| Whiffletree-connector for traces | R. J. Lay | 738,551 | Sept. 8 | 2026 | 440 | 106 | 451 |
| Whiffletree-hook | E. K. Bray and R. H. Seegar | 720,556 | Feb. 17 | 2132 | 493 | 102 | 1304 |
| Whiffletree-hook | W. Wainright | 725,183 | Apr. 14 | 1426 | 323 | 103 | 1486 |
| Whiffletree-hook | J. E. Cooper | 725,934 | Apr. 21 | 2812 | 638 | 103 | 1796 |
| Whiffletree-hook | A. R. Otterman | 726,231 | Apr. 21 | 3319 | 753 | 103 | 1901 |
| Whiffletree-hook | W. D. Sutton | 737,793 | Sept. 1 | 443 | 95 | 106 | 98 |
| Whiffletree-hook | J. E. Taylor | 740,606 | Oct. 6 | 441 | 96 | 106 | 1341 |
| Whiffletree-hook | L. F. Hughes | 748,280 | Dec. 29 | 5533 | 1261 | 107 | 2393 |
| Whip | H. F. Moore | 725,004 | Apr. 7 | 1089 | 247 | 103 | 1401 |
| Whip | L. H. Beals | 732,917 | July 7 | 394 | 95 | 105 | 85 |
| Whip | J. W. Veit | 733,687 | July 14 | 1754 | 415 | 105 | 386 |
| Whip | A. J. Schmidt | 739,351 | Sept. 22 | 3501 | 783 | 106 | 796 |
| Whip | M. O. Felker | 743,847 | Nov. 10 | 2050 | 436 | 107 | 453 |
| Whip | H. Polak | 744,401 | Nov. 17 | 3153 | 677 | 107 | 704 |
| Whip. Drover's | C. R. Lockwood | 733,227 | July 7 | 935 | 226 | 105 | 196 |
| Whip-load | A. J. Cook | 737,352 | Aug. 25 | 4331 | 965 | 105 | 1955 |
| Whip-rack | D. G. Bonderson | 725,207 | Apr. 14 | 1473 | 335 | 103 | 1496 |
| Whip-socket | I. D. Cady | 721,283 | Feb. 24 | 3526 | 802 | 102 | 1616 |
| Whip-socket. Locking | F. R. Dever and M. Gardner | 722,088 | Mar. 3 | 795 | 177 | 103 | 172 |
| Whip-stand. Portable and revolving | C. J. Abbe | 739,275 | Sept. 22 | 3379 | 751 | 106 | 771 |
| Whips. Means for uniting parts of | M. O. Felker | 721,686 | Mar. 3 | 71 | 15 | 103 | 16 |
| Whisking, mixing, or similar machine | W. K. and G. S. Baker | 722,664 | Mar. 17 | 1885 | 419<br>420 | 103 | 435 |
| Whist case. Duplicate- | A. L. Beard | 744,280 | Nov. 17 | 2939 | 628 | 107 | 657 |
| Whist tray. Duplicate | G. M. Pierce | 742,728 | Oct. 27 | 4492 | 1016 | 106 | 2242 |
| Whist tray. Duplicate- | G. M. Pierce | 742,729 | Oct. 27 | 4493 | 1016 | 106 | 2242 |
| Whist tray. Duplicate- | G. M. Pierce | 742,730 | Oct. 27 | 4494 | 1017 | 106 | 2242 |
| Whistle. Chime- | I. Anderson | 742,375 | Oct. 27 | 3862 | 868 | 106 | 2110 |
| Wick. Lamp- | R. Guild | 733,581 | July 14 | 1585 | 377 | 105 | 353 |
| Wick. Lamp- | F. Limper | 738,210 | Sept. 8 | 1329 | 287 | 106 | 303 |
| Wick-raiser | C. E. Wirth | 733,106 | July 7 | 727 | 177 | 105 | 154 |
| Wick-raiser | W. H. Wilder | 733,447 | July 14 | 1348 | 318 | 105 | 302 |
| Wick-raiser. Adjustable | C. E. Wirth | 733,107 | July 7 | 729 | 177 | 105 | 154 |
| Wick-raiser. Adjustable | W. W. Bradley | 733,132 | July 7 | 770 | 186 | 105 | 163 |
| Wicks. Manufacture of slow-burning | R. Eschè | 722,091 | Mar. 3 | 800 | ------ | 103 | 173 |
| Wicker-work. Machine for making | A. Pohorzeleck | 726,188 | Apr. 21 | 3248 | 737<br>738 | 103 | 1886 |
| Wigs. Manufacturing | W. Schubbert | 737,780 | Sept. 1 | 415 | ------ | 106 | 91 |
| Winch-head. Reversible | J. G. Delaney | 725,417 | Apr. 14 | 1839 | 412 | 103 | 1574 |
| Wind instrument | L. M. Ellis | 745,804 | Dec. 1 | 884 | 199<br>200 | 107 | 1288 |
| Wind-instrument mute | J. J. Neumann | 738,472 | Sept. 8 | 1872 | 408 | 106 | 416 |
| Wind-motor | L. Soria y Hernandez | 717,939 | Jan. 6 | 793 | 178 | 102 | 169 |
| Wind-motor | C. E. Field | 733,710 | July 14 | 1789 | 424<br>425 | 105 | 394 |
| Wind-motor | A. Gran | 744,065 | Nov. 17 | 2511 | 538 | 107 | 564 |
| Wind-motor | E. A. Lawver | 746,851 | Dec. 15 | 2811 | 648 | 107 | 1748 |
| Wind-motor governor | F. W. Hedgeland | 728,462 | May 19 | 3103 | 686 | 104 | 698 |
| Wind or water wheel | J. Handel | 739,413 | Sept. 22 | 3650 | 811 | 106 | 829 |
| Wind-power. Mechanism for utilizing | T. R. Timby | 741,389 | Oct. 13 | 1917 | 424 | 106 | 1676 |
| Windmill | J. Henderson | 720,427 | Feb. 10 | 1869 | 425 | 102 | 1235 |
| Windmill | J. J. Pearson | 721,227 | Feb. 24 | 3439 | 781 | 102 | 1596 |
| Windmill | J. D. Huson | 721,565 | Feb. 24 | 4035 | 916 | 102 | 1723 |
| Windmill | J. P. F. Flaig | 722,686 | Mar. 17 | 1947 | 433<br>434<br>435 | 103 | 448 |
| Windmill | J. J. Middlesworth | 723,293 | Mar. 24 | 3050 | 686 | 103 | 689 |
| Windmill | O. S. Church | 723,988 | Mar. 31 | 4367 | 981 | 103 | 976 |
| Windmill | A. Morrisson | 724,914 | Apr. 7 | 915 | 209 | 103 | 1365 |
| Windmill | R. Decker | 725,829 | Apr. 21 | 2627 | 598 | 103 | 1757 |
| Windmill | J. Tompkins | 726,376 | Apr. 28 | 3624 | 822 | 103 | 1979 |
| Windmill | G. B. Edgar | 727,762 | May 12 | 1786 | 401 | 104 | 401 |
| Windmill | W. F. Kerr | 728,468 | May 19 | 3118 | 689 | 104 | 701 |
| Windmill | G. S. Lowell | 728,481 | May 19 | 3135 | 693 | 104 | 705 |
| Windmill | W. M. Cherry | 729,845 | June 2 | 598 | 131 | 104 | 1250 |
| Windmill | J. Coates | 733,009 | July 7 | 546 | 134 | 105 | 117 |
| Windmill | E. H. Benedict | 733,799 | July 14 | 1961 | 462 | 105 | 431 |
| Windmill | H. B. Smith | 737,788 | Sept. 1 | 433 | 93 | 106 | 95 |
| Windmill | J. T. Ham | 738,675 | Sept. 8 | 2270 | 499 | 106 | 501 |
| Windmill | J. M. Crow | 739,394 | Sept. 22 | 3588 | 802 | 106 | 814 |
| Windmill | A. W. Thompson | 739,948 | Sept. 29 | 4653 | 1044 | 106 | 1062 |
| Windmill | T. W. Lowe | 741,515 | Oct. 13 | 2154 | 480 | 106 | 1726 |
| Windmill | L. C. Hamel | 741,660 | Oct. 20 | 2433 | 546 | 106 | 1800 |
| Windmill | W. Curtis | 748,485 | Dec. 29 | 5901 | 1341 | 107 | 2474 |
| Windmill adjustable foot-gear | J. D. Downie | 730,524 | June 9 | 1833 | 408 | 104 | 1521 |
| Windmill attachment | J. P. Müller | 731,935 | June 23 | 4432 | 988 | 104 | 2099 |
| Windmill attachment | C. S. Aitken | 734,494 | July 28 | 3325 | 779 | 105 | 751 |
| Windmill-governor | P. I. Storvik | 723,332 | Mar. 24 | 3114 | 701 | 103 | 702 |
| Windmill mechanism | J. M. Smith | 718,667 | Jan. 20 | 2186 | 478<br>479 | 102 | 496 |
| Windmill motion-changing gear | J. Alston | 741,005 | Oct. 13 | 1147 | 260 | 106 | 1511 |
| Windmill-pump rods. Swinging guide for | G. Schneider | 742,911 | Nov. 3 | 159 | 37 | 107 | 35 |
| Windmill regulating attachment | S. Brice | 740,224 | Sept. 29 | 5162 | 1159<br>1160 | 106 | 1168 |
| Windmill-regulator | K. K. Lerol, Jr | 719,821 | Feb. 3 | 746 | 178 | 102 | 981 |
| Windmill-regulator | M. E. Lawrence | 720,161 | Feb. 10 | 1376 | 316 | 102 | 1133 |
| Windmill-regulator | W. H. Riggs | 721,328 | Feb. 24 | 3605 | 820 | 102 | 1632 |
| Windmill-regulator | G. E. Steenrod | 728,513 | May 19 | 3181 | 704<br>705 | 104 | 714 |

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| Windmill-regulator | E. Wuerfel | 732,250 | June 30 | 5083 | 1130<br>1131 | 104 | 2247 |
| Windmill-regulator | J. M. Lowe | 733,056 | July 7 | 635 | 154 | 105 | 135 |
| Windmill-regulator. Automatic | P. A. Anderson | 717,521 | Jan. 6 | 1 | 1 | 102 | 3 |
| Windmill starting or stopping mechanism | T. W. Wheeler | 722,547 | Mar. 10 | 1660 | 366 | 103 | 372 |
| Windmill-tower | H. C. Will | 725,308 | Apr. 14 | 1639 | 370 | 103 | 1532 |
| Windmill-tower | S. B. Martin | 742,885 | Nov. 3 | 114 | 26 | 107 | 26 |
| Windmills. Means for adjusting strokes of | L. Williams | 737,541 | Aug. 25 | 4695 | 1052 | 105 | 2037 |
| Winder. Bobbin- | W. J. Milne | 744,089 | Nov. 17 | 2554 | 547 | 107 | 573 |
| Winder. Thread- | M. V. Palmer | 731,609 | June 23 | 3854 | 859 | 104 | 1976 |
| Winding and printing machine | W. F. Marresford | 747,623 | Dec. 22 | 4256 | 957<br>958 | 107 | 2090 |
| Winding-drum. Collapsible | A. C. Mills | 720,169 | Feb. 10 | 1392 | 318 | 102 | 1135 |
| Winding-form | J. W. Lundskog | 733,232 | July 7 | 946 | 238<br>239 | 105 | 198 |
| Winding indicator | A. Anderson | 738,971 | Sept. 15 | 2824 | 626 | 106 | 638 |
| Winding-machine | C. Anderson | 736,472 | Aug. 18 | 2672 | 588 | 105 | 1588 |
| Winding-machine | S. W. Wardwell | 739,796 | Sept. 22 | 4336 | 971<br>972<br>973 | 106 | 979 |
| Winding-machine | S. W. Wardwell | 740,958 | Oct. 6 | 1052 | 240 | 106 | 1471 |
| Winding machine. Ball- | G. C. Worthington | 740,348 | Sept. 29 | 5379 | 1213 | 106 | 1214 |
| Winding machine. Ball or cop | J. Good | 730,635 | June 9 | 2019 | 449 | 104 | 1563 |
| Winding-machine cleaner | W. H. Sheridan | 737,164 | Aug. 25 | 3963 | 881 | 105 | 1878 |
| Winding-machine stop-motion | T. H. Rushton | 728,983 | May 26 | 4063 | 902 | 104 | 913 |
| Winding machine. Thread- | T. Hansen | 719,330 | Jan. 27 | 3439 | 767 | 102 | 773 |
| Winding machine. Thread- | J. F. Schenck | 747,238 | Dec. 15 | 3547 | 804<br>805 | 107 | 1913 |
| Winding machine. Thread- | G. W. Foster | 747,404 | Dec. 22 | 3867 | 870<br>871 | 107 | 2002 |
| Winding-machine thread-guide | J. O. McKean | 748,300 | Dec. 29 | 5563 | 1269 | 107 | 2399 |
| Winding mechanism. Ball- | F. W. Worrill | 736,809 | Aug. 18 | 3325 | 737 | 105 | 1722 |
| Winding spindles. Stop-motion for twine- | B. B. Bowers | 727,888 | May 12 | 2013 | 448 | 104 | 446 |
| Windlass | M. F. Cahill | 725,405 | Apr. 14 | 1822 | 408 | 103 | 1570 |
| Windlass | J. O. Toole | 743,774 | Nov. 10 | 1919 | 406 | 107 | 426 |
| Windlass and winch. Combined | H. D. Van Doorn | 720,197 | Feb. 10 | 1447 | 330 | 102 | 1145 |
| Window | A. W. Cooper | 717,816 | Jan. 6 | 563 | 126 | 102 | 121 |
| Window | F. Voigtmann and S. H. Pomeroy | 718,403 | Jan. 13 | 1632 | 358<br>359 | 102 | 365 |
| Window | P. Bertges | 718,596 | Jan. 20 | 2063 | 448<br>449 | 102 | 473 |
| Window | F. Nentwich | 722,533 | Mar. 10 | 1640 | 361<br>362 | 103 | 368 |
| Window | W. Schaar | 723,038 | Mar. 17 | 2561 | 576 | 103 | 574 |
| Window | P. O. Hultmark | 723,530 | Mar. 24 | 3505 | 784 | 103 | 778 |
| Window | H. C. Smith | 724,135 | Mar. 31 | 4663 | 1049 | 103 | 1035 |
| Window | H. C. Smith | 724,136 | Mar. 31 | 4665 | 1049 | 103 | 1035 |
| Window | H. C. Smith | 724,137 | Mar. 31 | 4669 | 1050 | 103 | 1036 |
| Window | P. O. Hultmark | 725,000 | Apr. 7 | 1078 | 246 | 103 | 1398 |
| Window | P. J. Hasselquist | 727,135 | May 5 | 605 | 130 | 104 | 131 |
| Window | J. Horsfield | 727,366 | May 5 | 1015 | 220 | 104 | 219 |
| Window | C. Bickel | 727,882 | May 12 | 2003 | 446 | 104 | 444 |
| Window | F. Voigtmann and S. H. Pomeroy | 729,814 | June 2 | 539 | 118 | 104 | 1238 |
| Window | D. G. Ednie | 730,243 | June 9 | 1309 | 288<br>289 | 104 | 1409 |
| Window | W. A. Brackett | 730,867 | June 16 | 2423 | 536 | 104 | 1667 |
| Window | J. Wolfensperger | 731,006 | June 16 | 2705 | 602<br>603 | 104 | 1727 |
| Window | T. Sulikx | 731,969 | June 23 | 4496 | 1003 | 104 | 2113 |
| Window | B. F. Stark | 732,456 | June 30 | 5482 | 1216 | 104 | 2329 |
| Window | J. Neff, Sr | 733,416 | July 14 | 1292 | 305 | 105 | 290 |
| Window | J. H. McIlroy | 735,999 | Aug. 11 | 1846 | 395<br>396 | 105 | 1394 |
| Window | C. Vose | 737,534 | Aug. 25 | 4684 | 1050<br>1051 | 105 | 2035 |
| Window | W. Eccles and J. L. Robson | 738,424 | Sept. 8 | 1771 | 385 | 106 | 396 |
| Window | O. M. Edwards | 739,404 | Sept. 22 | 3627 | 808 | 106 | 824 |
| Window | E. H. Lunken | 739,430 | Sept. 22 | 3682 | 819 | 106 | 836 |
| Window | E. H. Lunken | 739,431 | Sept. 22 | 3685 | 820 | 106 | 837 |
| Window | A. Weingaertner | 739,960 | Sept. 29 | 4670 | 1050 | 106 | 1065 |
| Window | F. J. and H. G. Carl | 741,457 | Oct. 13 | 2029 | 451 | 106 | 1698 |
| Window | A. C. Hendricks | 747,173 | Dec. 15 | 3426 | 776<br>777 | 107 | 1888 |
| Window and screen. Combined | P. M. Barnes | 741,441 | Oct. 13 | 1997 | 442<br>443 | 106 | 1692 |
| Window and shutter operating device | E. Van Noorden | 740,953 | Oct. 6 | 1041 | 237<br>238 | 106 | 1468 |
| Window attachment | W. S. Hill | 739,871 | Sept. 29 | 4510 | 1014 | 106 | 1030 |
| Window-bead fastener | G. H. Parker | 735,143 | Aug. 4 | 197 | 40 | 105 | 1024 |
| Window-bead lock | I. A. Brown | 744,469 | Nov. 17 | 3279 | 704 | 107 | 730 |
| Window. Casement- | H. C. Smith | 741,560 | Oct. 13 | 2251 | 501<br>502<br>503 | 106 | 1747 |
| Window casing and screen | F. C. and A. G. Eastman | 724,683 | Apr. 7 | 496 | 118<br>119 | 103 | 1275 |
| Window-cleaner | A. Roberts, F. Young, and J. C. Smith | 725,287 | Apr. 44 | 1601 | 362 | 103 | 1524 |
| Window-cleaner | F. W. Wille | 730,183 | June 2 | 1179 | 264 | 104 | 1368 |
| Window-cleaner | W. H. Cattelle | 731,338 | June 16 | 3319 | 740 | 104 | 1849 |
| Window-cleaner | W. Mable | 732,205 | June 30 | 4989 | 1110 | 104 | 2228 |
| Window-cleaner | W. H. Cattelle | 742,590 | Oct. 27 | 4250 | 957 | 106 | 2189 |
| Window-cleaner | G. A. W. McNerney | 747,566 | Dec. 22 | 4149 | 932 | 107 | 2066 |
| Window-cleaner's safety-support | H. K. Whitner. (Reissue) | 12,146 | Aug. 11 | 2433 | 531<br>532 | 105 | 1521 |
| Window-cleaning apparatus | S. C. Lawlor | 724,590 | Apr. 7 | 322 | 79 | 103 | 1237 |
| Window-cleaning chair | J. H. Hanavan | 737,924 | Sept. 1 | 733 | 158 | 106 | 160 |
| Window-cleaning device | C. M. R. Sy | 724,059 | Mar. 31 | 4501 | 1014 | 103 | 1001 |

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| Window-cleaning device | H. E. Bayer | 724,534 | Apr. 7 | 210 | 51 | 103 | 1214 |
| Window-cleaning device | E. Maske | 736,989 | Aug. 25 | 3672 | 815 | 105 | 1816 |
| Window-cleaning device | M. Anderson | 743,801 | Nov. 10 | 1970 | 419 | 107 | 436 |
| Window-cleaning safety-chair | C. Buckel | 724,799 | Apr. 7 | 719 | 167 | 103 | 1324 |
| Window corner-post, transom-bar, or mullion | P. Ebner | 738,885 | May 26 | 3893 | 865 | 104 | 878 |
| Window-drier | J. G. Rostek | 730,843 | June 9 | 2374 | 525 | 104 | 1637 |
| Window dust and air guard | J. T. Guleser | 727,936 | May 12 | 2115 | 471 | 104 | 469 |
| Window dust-guard | F. R. Simms | 739,115 | Sept. 15 | 3087 | 684 | 106 | 691 |
| Window-fastener | J. M. McVoy and J. W. Sullivan | 720,462 | Feb. 10 | 1930 | 441 | 102 | 1246 |
| Window-fastener | W. D. Watson | 742,090 | Oct. 20 | 3336 | 744 | 106 | 1985 |
| Window-fastener | O. C. Little | 742,882 | Nov. 3 | 108 | 25 | 107 | 25 |
| Window-fastener | E. A. Klages | 746,709 | Dec. 15 | 2542 | 584 | 107 | 1688 |
| Window-fastener. Adjustable burglar-proof | N. S. Hillyard | 743,283 | Nov. 3 | 903 | 196 | 107 | 192 |
| Window fastener. Storm- | F. D. Rumford | 741,721 | Oct. 20 | 2576 | 573 | 106 | 1830 |
| Window-fastening device | L. Mouat, Jr | 748,205 | Dec. 29 | 5399 | {1227 1228 | 107 | 2363 |
| Window-fixture | W. Labelle | 734,129 | July 21 | 2645 | 624 | 105 | 592 |
| Window-fixture | G. Wolfe | 740,610 | Oct. 6 | 450 | 98 | 106 | 1343 |
| Window fly-screen | W. Thompson | 733,606 | July 14 | 1621 | 384 | 105 | 360 |
| Window-frame. Adjustable | E. F. Pangburn | 722,037 | Mar. 3 | 713 | 158 | 103 | 154 |
| Window frame and sash | R. B. Browne | 718,975 | Jan. 27 | 2766 | 620 | 102 | 631 |
| Window frame and sash | W. and A. Shrivell | 726,362 | Apr. 7 | 3597 | 816 | 103 | 1974 |
| Window frame and sash | J. C. McMahon | 731,600 | June 23 | 3837 | 855 | 104 | 1973 |
| Window frame and sash | C. B. Schilling | 738,491 | Sept. 8 | 1910 | 417 | 106 | 424 |
| Window frame and sash. Metallic | H. C. Smith | 724,133 | Mar. 31 | 4655 | 1047 | 103 | 1033 |
| Window frame and sash. Metallic | H. C. Smith | 724,134 | Mar. 31 | 4658 | 1048 | 103 | 1034 |
| Window frame and sash. Metallic | C. McSherry | 729,885 | June 2 | 672 | 148 | 104 | 1265 |
| Window frame and sash. Metallic | J. Eberle | 746,477 | Dec. 8 | 2120 | 487 | 107 | 1572 |
| Window-frame-assembling machine | H. C. Smith | 745,299 | Nov. 24 | 4842 | {1055 1056 1057 | 107 | 1074 |
| Window-frame. Metal | H. C. Smith | 724,139 | Mar. 31 | 4675 | 1051 | 103 | 1038 |
| Window-frame. Metal | W. J. Klemm | 742,999 | Nov. 3 | 342 | 74 | 107 | 72 |
| Window-frame. Sheet-metal | C. Harris | 722,101 | Mar. 3 | 820 | 182 | 103 | 177 |
| Window insect-guard | E. P. Doty | 722,499 | Mar. 10 | 1584 | 350 | 103 | 356 |
| Window-jamb pockets. Tool for cutting | F. H. Borden | 728,843 | May 26 | 3826 | 852 | 104 | 866 |
| Window-lift | C. E. Haring | 737,402 | Aug. 25 | 4433 | 992 | 105 | 1978 |
| Window-lock | H. Hubsch | 719,593 | Feb. 3 | 330 | 77 | 102 | 891 |
| Window-lock | G. B. Hannan and F. N. Lucas | 724,466 | Apr. 14 | 87 | 22 | 103 | 1188 |
| Window-lock | J. E. Crawford | 725,046 | Apr. 28 | 1165 | 263 | 103 | 1433 |
| Window-lock | H. F. Woodard and B. J. Dolphin | 744,848 | Nov. 24 | 3957 | 853 | 107 | 891 |
| Window-lock | E. Foster | 747,403 | Dec. 22 | 3866 | 870 | 107 | 2001 |
| Window. Metal | H. C. Smith | 724,138 | Mar. 31 | 4673 | {1050 1051 | 103 | 1038 |
| Window. Metallic revolving | L. Christenson | 722,675 | Mar. 17 | 1928 | 428 | 103 | 444 |
| Window-opener | J. Leonius, alias N. Leclerc | 743,527 | Nov. 10 | 1468 | 307 | 107 | 330 |
| Window-operating device | H. W. Horst and C. J. Weber | 731,185 | June 16 | 3043 | 676 | 104 | 1791 |
| Window or door screen | A. S. Winn | 737,307 | Aug. 25 | 4252 | 946 | 105 | 1937 |
| Window or other frames. Means for securing glass in | E. Fabry | 729,148 | May 26 | 4354 | 961 | 104 | 972 |
| Window. Pivoted | E. Hipolito | 740,015 | Sept. 29 | 4777 | 1075 | 106 | 1087 |
| Window. Pivoted | O. A. Essig | 744,733 | Nov. 24 | 3758 | {810 811 | 107 | 849 |
| Window-platform | W. S. Sherwood | 735,915 | Aug. 11 | 1684 | 359 | 105 | 1358 |
| Window putty-protector | M. F. Stadtmuller | 740,055 | Sept. 29 | 4856 | 1089 | 106 | 1105 |
| Window. Revolving metallic | P. O. Hultmark | 722,305 | Mar. 10 | 1218 | 270 | 103 | 275 |
| Window. Revolving metallic | L. Christenson | 743,828 | Nov. 10 | 2017 | 428 | 107 | 446 |
| Window. Roof ventilating | W. Dreÿer | 719,203 | Jan. 27 | 3197 | 713 | 102 | 720 |
| Window-screen | W. C. Hildebrand | 719,111 | Jan. 27 | 3048 | 678 | 102 | 690 |
| Window-screen | D. G. Elges | 720,120 | Feb. 10 | 1316 | 301 | 102 | 1119 |
| Window-screen | T. D. Ruth | 722,653 | Mar. 10 | 1841 | 411 | 103 | 412 |
| Window-screen | B. S. Bullis | 723,824 | Mar. 31 | 4021 | 906 | 103 | 904 |
| Window-screen | F. C. and A. G. Eastman | 724,682 | Apr. 7 | 494 | 118 | 103 | 1274 |
| Window-screen | E. B. Crocker | 725,319 | Apr. 14 | 1665 | 376 | 103 | 1537 |
| Window-screen | M. Kolf | 725,725 | Apr. 21 | 2433 | 552 | 103 | 1715 |
| Window-screen | F. Lind, Jr | 725,854 | Apr. 21 | 2666 | 607 | 103 | 1767 |
| Window-screen | J. Birmelin | 726,851 | May 5 | 27 | 7 | 104 | 9 |
| Window-screen | A. M. Scheurle | 727,209 | May 5 | 725 | 156 | 104 | 157 |
| Window-screen | E. L. Lloyd | 728,121 | May 12 | 2442 | 544 | 104 | 538 |
| Window-screen | H. Lange | 729,498 | May 26 | 4953 | 1098 | 104 | 1099 |
| Window-screen | J. Q. Adams | 732,693 | July 7 | 3 | 2 | 105 | 3 |
| Window-screen | H. D. Mills | 733,246 | July 7 | 976 | 235 | 105 | 204 |
| Window-screen | L. J. R. de Vries | 733,774 | July 14 | 1916 | 451 | 105 | 421 |
| Window-screen | W. C. Hiering | 735,976 | Aug. 11 | 1791 | {383 384 | 105 | 1382 |
| Window-screen | J. W. Adams | 736,919 | Aug. 25 | 3537 | 785 | 105 | 1787 |
| Window-screen | G. H. Henkel | 738,108 | Sept. 1 | 1092 | 242 | 106 | 236 |
| Window-screen | E. S. Giles | 738,899 | Sept. 15 | 2705 | 597 | 106 | 613 |
| Window-screen | F. A. Mansell | 739,553 | Sept. 22 | 3875 | 869 | 106 | 878 |
| Window-screen | J. E. Elmendorf | 739,592 | Sept. 22 | 3963 | 884 | 106 | 896 |
| Window-screen | H. L. Peters | 740,587 | Oct. 6 | 399 | 84 | 106 | 1331 |
| Window-screen | J. Pastallé | 743,324 | Nov. 3 | 978 | 212 | 107 | 209 |
| Window-screen | H. M. Kreh and R. Parsons | 745,201 | Nov. 24 | 4665 | 1016 | 107 | 1037 |
| Window-screen | D. J. La Due | 745,731 | Dec. 1 | 745 | 171 | 107 | 1257 |
| Window-screen | E. C. Linck | 746,347 | Dec. 8 | 1904 | 435 | 107 | 1525 |
| Window-screen | S. U. Tarney | 746,403 | Dec. 8 | 1992 | 454 | 107 | 1544 |
| Window-screen. Adjustable | E. S. Giles | 724,691 | Apr. 7 | 510 | 121 | 103 | 1278 |
| Window-screen. Adjustable | B. C. Rockwell | 729,419 | May 26 | 4826 | 1070 | 104 | 1070 |
| Window-screen. Adjustable rolling | J. C. Bowe | 744,953 | Nov. 24 | 4148 | 896 | 107 | 930 |
| Window-screen hanger | W. H. Fishburn | 721,125 | Feb. 17 | 3215 | 735 | 102 | 1537 |
| Window-screen mechanism | C. Bimel | 740,517 | Oct. 6 | 262 | 52 | 106 | 1302 |
| Window-screen. Roller | J. S. McNamara | 740,033 | Sept. 29 | 4822 | 1082 | 106 | 1099 |
| Window-shelf bracket | F. M. Hazzard | 720,583 | Feb. 17 | 2184 | 506 | 102 | 1313 |
| Window-sill | C. L. Edmonds | 736,588 | Aug. 18 | 2892 | 631 | 105 | 1634 |
| Window. Sliding and swinging sash | G. Hayes | 742,869 | Nov. 3 | 86 | 20, 21 | 107 | 20 |
| Window. Storm- | C. O. Dodge | 724,556 | Apr. 7 | 250 | 61 | 103 | 1223 |

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| Invention. | Name. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | | Spec. | Drg. | Vol. | Page. |
| Window-strip. Revolving | H. E. Essig | 728,690 | May 19 | 3531 | 785 | 104 | 789 |
| Window. Swinging | E. Van Noorden | 740,954 | Oct. 6 | 1043 | 238 | 106 | 1469 |
| Window-ventilator | N. M. Miller | 718,140 | Jan. 13 | 1156 | 257 | 102 | 264 |
| Window-ventilator | T. T. Doll | 728,447 | May 19 | 3059 | 674 | 104 | 690 |
| Window-ventilator | L. Zborowski | 732,809 | July 7 | 213 | 53 | 105 | 48 |
| Window ventilator and weather-shield combined | S. D. Lewis and H. M. Fessenden | 720,712 | Feb. 17 | 2436 | 557 | 102 | 1364 |
| Window-washing apparatus | S. C. Lawlor | 744,013 | Nov. 10 | 2400 | 516 | 107 | 527 |
| Windows. Device for opening swinging | M. Prior | 741,830 | Oct. 20 | 2763 | 617 | 106 | 1871 |
| Windows, fan-lights, &c. Fastening for casement- | C. Rosenheim | 747,776 | Dec. 22 | 4541 | 1023 | 107 | 2156 |
| Windows. Means for glazing | A. Diat, dit Diaz | 734,829 | July 28 | 3975 | 929 | 105 | 885 |
| Windows. Means for keeping frost from | J. S. Henderson and A. H. Lewis | 738,034 | Sept. 1 | 945 | 210 | 106 | 206 |
| Windows, &c. Protector for | J. N. Ferguson | 720,124 | Feb. 10 | 1322 | 302 | 102 | 1121 |
| Windows. Transparent panel for glazed | F. A. Jumeau | 722,847 | Mar. 17 | 2245 | 503 | 103 | 508 |
| Wine-cooler | C. P. Gliem | 747,548 | Dec. 22 | 4121 | 925 | 107 | 2060 |
| Wine-press | J. Szafka | 734,774 | July 28 | 3858 | 899 | 105 | 860 |
| Wine-press | L. Perotti | 734,939 | July 28 | 4157 | 967 | 105 | 923 |
| Winker-brace fastener | E. Carroll | 732,617 | June 30 | 5785 | 1282 | 104 | 2396 |
| Wire-and-slat-weaving machine | W. C. Pratt | 725,989 | Apr. 21 | 2899 | 658 | 103 | 1814 |
| Wire articles. Machine for making | G. W. Whittington | 718,940 | Jan. 20 | 2701 | 604, 605 | 102 | 604 |
| Wire-bender | C. M. McFatridge | 734,350 | July 21 | 3064 | 721 | 105 | 682 |
| Wire-bending machine | A. C. Campbell and E. L. Bronson | 737,339 | Aug. 25 | 4306 | 957, 958, 959 | 105 | 1949 |
| Wire-bending machine | C. H. Coombs | 740,241 | Sept. 29 | 5194 | 1167, 1168 | 106 | 1175 |
| Wire-breaking tool | W. G. Coffin | 717,735 | Jan. 6 | 401 | 94 | 102 | 88 |
| Wire-cable-cutting device | C. T. Mapes | 729,951 | June 2 | 782 | 174 | 104 | 1287 |
| Wire-clamp | D. Lockhart | 734,580 | July 28 | 3474 | 812 | 105 | 783 |
| Wire-clamp | J. E. Dusang | 744,730 | Nov. 24 | 3754 | 810 | 107 | 849 |
| Wire-clamping device | S. S. Withington | 738,387 | Sept. 8 | 1707 | 371 | 106 | 382 |
| Wire clenching-nail | G. A. Curtis | 734,163 | July 21 | 2703 | 636 | 105 | 605 |
| Wire clip | G. W. McGill | 735,566 | Aug. 4 | 1031 | 218 | 105 | 1199 |
| Wire-cloth holder | H. M. Keim and J. A. Prather | 723,678 | Mar. 24 | 3752 | 842 | 103 | 829 |
| Wire-cloth. Loom for making | I. J. Neracher | 747,630 | Dec. 22 | 4274 | 960, 961 | 107 | 2094 |
| Wire-connector | F. P. Fuller and J. J. Walsh | 741,480 | Oct. 13 | 2097 | 466 | 106 | 1714 |
| Wire-core machine | T. A. Aiton | 742,551 | Oct. 27 | 4187 | 942 | 106 | 2175 |
| Wire-cover | H. C. Boyle and J. Maum | 737,328 | Aug. 25 | 4293 | 954 | 105 | 1946 |
| Wire-cover | H. C. Boyle and J. Maum | 744,467 | Nov. 17 | 3277 | 703 | 107 | 730 |
| Wire-coverer | H. C. Boyle and J. Maum | 746,447 | Dec. 8 | 2067 | 476 | 107 | 1560 |
| Wire. Covering | R. Varley | 736,178 | Aug. 11 | 2155 | 463 | 105 | 1460 |
| Wire-cutting machine | G. M. Depew and J. N. Parsons | 717,553 | Jan. 6 | 59 | 14, 15 | 102 | 15 |
| Wire-cutting machine | G. V. Willson | 717,649 | Jan. 6 | 220 | 56 | 102 | 48 |
| Wire-drawing block | E. H. Carroll | 729,541 | June 2 | 40 | 10 | 104 | 1135 |
| Wire-drawing die | J. Howe | 723,873 | Mar. 31 | 4120 | 930 | 103 | 924 |
| Wire-drawing machine | J. H. O'Donnell | 725,472 | Apr. 14 | 1955 | 439, 440 | 103 | 1599 |
| Wire-drawing machine | D. J. McMahon | 733,072 | July 7 | 661 | 159 | 105 | 140 |
| Wire-drawing machine | J. H. O'Donnell | 738,932 | Sept. 15 | 2762 | 610, 611 | 106 | 625 |
| Wire-drawing machine | J. H. O'Donnell | 738,933 | Sept. 15 | 2763 | 611 | 106 | 625 |
| Wire-drawing machine | J. A. Horton | 742,987 | Nov. 3 | 294 | 66, 67 | 107 | 64 |
| Wire-drawing-machine drawing roll or head | J. H. O'Donnell | 725,473 | Apr. 14 | 1957 | 440 | 103 | 1596 |
| Wire-drawing-machine stop mechanism | J. H. O'Donnell | 732,370 | June 30 | 5311 | 1177 | 104 | 2294 |
| Wire-drawing machines. Frame for | M. Reid | 717,622 | Jan. 6 | 177 | 45 | 102 | 39 |
| Wire. Envelop for coiled | H. C. Boyle and J. Maum | 739,644 | Sept. 22 | 4060 | 905 | 106 | 917 |
| Wire fabric | V. Hoxie and W. F. Truman | 741,580 | Oct. 13 | 2290 | 512 | 106 | 1754 |
| Wire-fabric-making machine | P. A. Reid, J. Kelley, and W. V. Reid. | 721,605 | Feb. 24 | 4128 | 939, 940, 941 | 102 | 1743 |
| Wire-fabric-making machine | G. Langer | 736,118 | Aug. 11 | 2052 | 437, 438, 439 | 105 | 1438 |
| Wire fabric to frames. Device for securing | S. W. Peregrine | 739,342 | Sept. 22 | 3489 | 780 | 106 | 793 |
| Wire-fastener | J. Dickson | 737,592 | Sept. 1 | 67 | 13 | 106 | 17 |
| Wire-feeding mechanism | A. C. Campbell | 737,340 | Aug. 25 | 4310 | 959 | 105 | 1950 |
| Wire-forming machine | A. C. Campbell | 728,201 | May 19 | 2586 | 577, 578 | 104 | 590 |
| Wire gaging and cutting machine | F. W., A. G., and E. A. Hoefer | 729,864 | June 2 | 636 | 139, 140 | 104 | 1258 |
| Wire-grip | J. C. Logue | 733,855 | July 14 | 2085 | 493 | 105 | 454 |
| Wire-grip | H. D. Hazard | 740,130 | Sept. 29 | 4978 | 1117 | 106 | 1131 |
| Wire-handling device | D. H. Steel | 740,328 | Sept. 29 | 5347 | 1204 | 106 | 1207 |
| Wire-holder | C. L. Packer | 729,212 | May 26 | 4473 | 984 | 104 | 998 |
| Wire-holder | J. Sharp | 745,918 | Dec. 1 | 1113 | 249 | 107 | 1336 |
| Wire-hoop-making machine | A. J. Bates | 746,442 | Dec. 8 | 2057 | 474, 475 | 107 | 1558 |
| Wire-hoop-stretching machine | J. P. Mitchell | 748,399 | Dec. 29 | 5724 | 1307, 1308 | 107 | 2435 |
| Wire instrument. Hot- | M. C. Rypinski | 730,405 | June 9 | 1600 | 357 | 104 | 1470 |
| Wire-loom selvaging device | J. McFethries | 745,230 | Nov. 24 | 4706 | 1027 | 107 | 1046 |
| Wire machine. Barb- | E. Williams | 739,244 | Sept. 15 | 3318 | 735, 736, 737 | 106 | 742 |
| Wire machine. Barb- | N. J. Billstrom | 740,220 | Sept. 29 | 5156 | 1158 | 106 | 1167 |
| Wire machine. Barbed- | H. E. Schnabel | 727,210 | May 5 | 727 | 157 | 104 | 158 |
| Wire. Machine for cleaning, straightening, and reinsulating old | F. W. Henninger | 717,574 | Jan. 6 | 93 | 23 | 102 | 22 |
| Wire. Machine for forming twisted joints with | G. M. Depew | 717,551 | Jan. 6 | 56 | 14 | 102 | 286 |
| Wire-netting machine | J. Rady | 726,342 | Apr. 28 | 3557 | 806 | 103 | 1969 |
| Wire-netting machine | H. S. Combs | 743,248 | Nov. 3 | 828 | 180, 181, 182 | 107 | 173 |
| Wire or like cutter | E. Baartmans | 740,612 | Oct. 6 | 452 | 98 | 106 | 1343 |

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|---|---|---|---|---|---|---|---|
| Wire-pay-out reel | J. P. Delphey | 718,194 | Jan. 13 | 1253 | 275 | 102 | 286 |
| Wire-pay-out reel | J. P. Delphey | 732,835 | July 7 | 254 | 63 | 105 | 57 |
| Wire-pay-out reel | J. P. Delphey | 742,296 | Oct. 27 | 3725 | 832 | 106 | 2082 |
| Wire-reeling apparatus | J. W. Brooks | 726,855 | May 5 | 35 | 8 | 104 | 10 |
| Wire-reeling tool | J. G. Eberle, Jr. | 739,403 | Sept. 22 | 3625 | 807 | 106 | 823 |
| Wire-rod-treating apparatus | F. H. Daniels | 737,361 | Aug. 25 | 4346 | 969 | 105 | 1958 |
| Wire-rod-treating apparatus | F. H. Daniels | 737,362 | Aug. 25 | 4348 | 969 | 105 | 1959 |
| Wire-rope-fastening device | M. am Ende | 728,689 | May 19 | 3530 | 785 | 104 | 788 |
| Wire-rope-making machine | S. W. Coriasco | 727,751 | May 12 | 1754 | 394 | 104 | 394 |
| Wire screen-cloth to doors. Machine for applying | S. W. Peregrine | 739,343 | Sept. 22 | 3490 | 780 | 106 | 793 |
| Wire screening for cutting off pieces. Cabinet for storing, supporting, and unrolling | L. K. Wynn | 733,310 | July 7 | 1090 | 260 | 105 | 230 |
| Wire-spiraling machine | G. M. Depew | 717,552 | Jan. 6 | 58 | 14 | 102 | 15 |
| Wire splice and producing same | C. M. Lamb | 741,347 | Oct. 13 | 1843 | 407 | 106 | 1660 |
| Wire-stay-making machine | J. Kelley and P. A. Reid | 721,567 | Feb. 24 | 4038 | 917, 918 | 102 | 1723 |
| Wire-stay-making machine | J. Kelley, W. V. and P. A. Reid | 721,568 | Feb. 24 | 4049 | 918, 919, 920 | 102 | 1726 |
| Wire-stitching-machine feed device | W. Shafer | 745,917 | Dec. 1 | 1112 | 249 | 107 | 1336 |
| Wire-straightening machine | F. W. Mallett | 730,549 | June 9 | 1870 | 418 | 104 | 1530 |
| Wire-strainer | J. Brown | 728,198 | May 19 | 2582 | 576 | 104 | 589 |
| Wire-stretcher | J. E. Price | 717,616 | Jan. 6 | 168 | 42 | 102 | 38 |
| Wire-stretcher | M. Matheson | 721,716 | Mar. 3 | 118 | 25 | 103 | 26 |
| Wire-stretcher | J. A. Foster | 721,946 | Mar. 3 | 552 | 121 | 103 | 121 |
| Wire-stretcher | C. L. Cox and J. W. Southerland | 723,244 | Mar. 24 | 2962 | 665 | 103 | 671 |
| Wire-stretcher | S. L. Harris | 724,284 | Mar. 31 | 4969 | 1112 | 103 | 1096 |
| Wire-stretcher | C. J. Fox | 726,668 | Apr. 28 | 4188 | 945 | 103 | 2090 |
| Wire-stretcher | J. V. Anderson | 730,331 | June 9 | 1464 | 324 | 104 | 1442 |
| Wire-stretcher | J. E. Howell | 733,842 | July 14 | 2058 | 486 | 105 | 449 |
| Wire-stretcher | H. S. Workman | 734,388 | July 21 | 3129 | 735, 736 | 105 | 696 |
| Wire-stretcher | W. F. Jennings | 737,846 | Sept. 1 | 561 | 122 | 106 | 125 |
| Wire-stretcher | P. M. Darst | 740,630 | Oct. 6 | 472 | 104 | 106 | 1348 |
| Wire-stretcher | W. S. Reed | 742,903 | Nov. 3 | 148 | 34 | 107 | 33 |
| Wire-stretcher | J. H. Heisey | 745,013 | Nov. 24 | 4242 | 920 | 107 | 950 |
| Wire-stretcher | L. A. Preston | 745,662 | Dec. 1 | 630 | 146 | 107 | 1232 |
| Wire stretcher and clamp | M. R. Barnhill | 725,918 | Apr. 21 | 2773 | 632 | 103 | 1789 |
| Wire stretcher and cutter | H. E. Herrick | 721,442 | Feb. 24 | 3814 | 867 | 102 | 1674 |
| Wire-stretcher and lifting-jack | F. E. Morehouse | 746,123 | Dec. 8 | 1490 | 333 | 107 | 1438 |
| Wire-stretcher and wire-splicing tongs | C. Stoolfire | 732,972 | July 7 | 481 | 119 | 105 | 104 |
| Wire-stretcher clamp | R. Socks and F. P. Smith | 736,453 | Aug. 18 | 2632 | 578 | 105 | 1580 |
| Wire-stretcher. Gate | J. M. Reiterman | 724,940 | Apr. 7 | 955 | 220 | 103 | 1373 |
| Wire-stretching device | H. W. Fisher | 742,302 | Oct. 27 | 3738 | 836 | 106 | 2084 |
| Wire-stretching machine | J. B. Wilson | 721,849 | Mar. 3 | 350 | 77 | 103 | 76 |
| Wire-stringing apparatus | E. E. Salisbury | 728,768 | May 19 | 3666 | 816 | 104 | 817 |
| Wire structure | G. W. Murray | 742,475 | Oct. 27 | 4031 | 904 | 106 | 2144 |
| Wire support. Coiled- | K. Dodge | 726,147 | Apr. 21 | 3160 | 715 | 103 | 1868 |
| Wire-suspending device | H. E. Stevens and B. Gellatly | 741,563 | Oct. 13 | 2255 | 504 | 106 | 1748 |
| Wire tie. Cross- | A. N. Edeburn | 721,433 | Feb. 24 | 3801 | 865 | 102 | 1672 |
| Wire-tie-fastening tool | A. N. Edeburn | 721,434 | Feb. 24 | 3802 | 865 | 102 | 1672 |
| Wire-tightener | G. Robinson | 728,764 | May 19 | 3658 | 814 | 104 | 816 |
| Wire to other objects. Rigidly securing | E. P. Lehmann | 728,118 | May 12 | 2431 | 541, 542 | 104 | 536 |
| Wire twisting and weaving machine | C. Pfeiffer | 742,230 | Oct. 27 | 3593 | 803, 804 | 106 | 2053 |
| Wire-twisting machine | G. V. Willson | 717,650 | Jan. 6 | 223 | 57 | 102 | 49 |
| Wire-weaving loom | I. J. Neracher | 742,053 | Oct. 20 | 3218 | 720, 721 | 106 | 1963 |
| Wire. Winding flat | R. Varley | 733,609 | July 14 | 1627 | 385 | 105 | 361 |
| Wire-winding machine | P. V. Austin | 734,797 | July 28 | 3924 | 915 | 105 | 874 |
| Wire-winding machine | J. G. Bauer | 743,136 | Nov. 3 | 610 | 132 | 107 | 128 |
| Wire-working machine | A. C. Mills | 720,170 | Feb. 10 | 1393 | 318 | 102 | 1136 |
| Wire-working tool | J. H. Major | 738,050 | Sept. 1 | 969 | 216 | 106 | 211 |
| Wire-working tool | C. Stoolfire | 739,455 | Sept. 22 | 3720 | 828 | 106 | 845 |
| Wire-working tool | P. Broadbooks | 740,739 | Oct. 6 | 657 | 149 | 106 | 1388 |
| Wire-working tool | W. Liechty | 743,738 | Nov. 10 | 1848 | 390 | 107 | 411 |
| Wire-working tool | J. W. Alkire | 745,984 | Dec. 8 | 1238 | 279 | 107 | 1382 |
| Wires, cords, &c. Machine for covering | J. H. Scott | 742,913 | Nov. 3 | 161 | 37 | 107 | 36 |
| Wires. Die for tying intersecting | S. S. Withington | 747,286 | Dec. 15 | 3651 | 826 | 107 | 1937 |
| Wires. Means for preventing bending strains in | J. J. Shickluna | 733,755 | July 14 | 1880 | 443 | 105 | 413 |
| Wiring-machine | A. O. Wilson and J. S. Brown | 730,427 | June 9 | 1643 | 368 | 104 | 1479 |
| Wireless-communication receiver | G. Morin | 746,557 | Dec. 8 | 2255 | 517 | 107 | 1602 |
| Wolfram and lead. Making articles of | E. Polte | 735,293 | Aug. 4 | 499 | ------ | 105 | 1087 |
| Wood-bending machine | W. B. Hicks | 734,327 | July 21 | 3025 | 712 | 105 | 674 |
| Wood-bending press | F. H. Bancroft | 723,573 | Mar. 24 | 3576 | 799 | 103 | 792 |
| Wood-carving machine | B. W. Storey | 721,108 | Feb. 17 | 3154 | 725, 726 | 102 | 1521 |
| Wood-carving machine | L. S. H. Charrier | 723,772 | Mar. 24 | 3918 | 822, 823, 824 | 103 | 866 |
| Wood-carving machine | A. W. H. Raettig | 733,744 | July 14 | 1851 | 437, 438 | 105 | 407 |
| Wood-chipping-machine feed-box | J. H. Baker | 733,691 | July 14 | 1758 | 417 | 105 | 387 |
| Wood cleaner and renovator | E. Wilding and A. H. Stott | 734,485 | July 21 | 3298 | ------ | 105 | 728 |
| Wood cutting machine. Fern or other | A. A. Bartlett | 732,916 | July 7 | 393 | 95 | 105 | 85 |
| Wood-fiber-cutting machine | G. E. Le Clair | 745,204 | Nov. 24 | 4668 | 1017 | 107 | 1038 |
| Wood-fiber-cutting machine | F. D. Sweet | 747,337 | Dec. 15 | 3749 | 844, 845 | 107 | 1959 |
| Wood-holder | W. J. Best | 732,036 | June 30 | 4655 | 1039 | 104 | 2159 |
| Wood-impregnating apparatus | J. L. Ferrell | 727,928 | May 12 | 2103 | 468 | 104 | 466 |
| Wood-impregnating device | W. Angus | 748,033 | Dec. 29 | 5068 | 1146 | 107 | 2293 |
| Wood impregnating or staining apparatus | J. Pfister | 735,019 | July 28 | 4306 | 1001 | 105 | 954 |
| Wood. Obtaining impregnated | G. F. Lebioda | 729,362 | May 26 | 4733 | ------ | 104 | 1052 |
| Wood. Ornamenting | G. C. Vachon | 723,948 | Mar. 31 | 4286 | 962 | 103 | 961 |

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| Invention. | Name. | No. | Date. | Monthly volume. Spec. | Monthly volume. Dr'g. | Official Gazette. Vol. | Official Gazette. Page. |
|---|---|---|---|---|---|---|---|
| Wood pipe | I. D. Smead | 717,635 | Jan. 6 | 202 | 50 | 102 | 44 |
| Wood plates. Making | F. A. Manuel | 722,999 | Mar. 17 | 2494 | 560 | 103 | 559 |
| Wood-preservative | H. W. Gander | 736,838 | Aug. 18 | 3388 | | 105 | 1736 |
| Wood preserving and creosoting apparatus | L. Hanson | 722,505 | Mar. 10 | 1594 | 351 | 103 | 358 |
| Wood-scraper | L. F. Deffaulx | 723,143 | Mar. 17 | 2756 | 619 | 103 | 614 |
| Wood-splitting device | G. Eiden | 720,010 | Feb. 10 | 1097 | 252 | 102 | 1072 |
| Wood-splitting machine | O. E. Cheesebrough | 748,162 | Dec. 29 | 5320 | 1208 | 107 | 2347 |
| Wood-steaming apparatus | C. W. Stanton | 735,608 | Aug. 4 | 1099 | 234 | 105 | 1214 |
| Wood stopper | S. Ruffin | 718,659 | Jan. 20 | 2169 | 475 | 102 | 494 |
| Wood-strip-feeding apparatus | P. J. Joecken | 730,920 | June 16 | 2539 | 565 | 104 | 1691 |
| Wood surfaces. Implement for filling | L. W. Nelson | 747,891 | Dec. 22 | 4770 | 1077 | 107 | 2206 |
| Wood, &c. Treating comminuted | A. Classen | 726,029 | Apr. 21 | 2964 | | 103 | 1827 |
| Wooden corks. Making | L. Le Franc | 721,958 | Mar. 3 | 573 | 127 | 103 | 125 |
| Woodworking-machine | L. Morin | 726,968 | May 5 | 273 | 61, 62, 63 | 104 | 59 |
| Woodworking-machine cutter-guard | F. L. Forster | 727,536 | May 5 | 1321 | 294 | 104 | 284 |
| Woodworking-machine gaging and counting attachment. | H. O. Fry | 741,479 | Oct. 13 | 2093 | 465, 466 | 106 | 1713 |
| Woodworking-machine guide | F. L. Forster | 727,337 | May 5 | 965 | 209 | 104 | 208 |
| Woodworking-tool | J. J. Blandford and J. MacGregor | 736,575 | Aug. 18 | 2862 | 627 | 105 | 1628 |
| Wool fabrics. Making | J. Tourigny | 720,857 | Feb. 17 | 2664 | 615 | 102 | 1414 |
| Wool lubricant and making same | G. B. Holden | 720,922 | Feb. 17 | 2799 | | 102 | 1442 |
| Wool-scouring mechanism | F. L. Whitney | 718,282 | Jan. 13 | 1324 | 293 | 102 | 300 |
| Wool-washing apparatus. Raw- | A. Haas and E. Baruch | 729,333 | May 26 | 4691 | 1036 | 104 | 1043 |
| Wool-washing machine | H. S. Frank | 735,359 | Aug. 4 | 603 | 124 | 105 | 1110 |
| Wool-washing suds. Treating | C. Shepherd | 730,305 | June 9 | 1426 | | 104 | 1435 |
| Work and tool holder | C. J. Rowe | 748,018 | Dec. 29 | 5047 | 1140 | 107 | 2289 |
| Work-box | J. Watson | 718,804 | Jan. 20 | 2441 | 541 | 102 | 549 |
| Work-box | L. R. Lane | 740,288 | Sept. 29 | 5276 | 1188 | 106 | 1192 |
| Work-box | R. G. McDowell | 742,719 | Oct. 27 | 4474 | 1012 | 106 | 2237 |
| Work-clamp | D. C. Fisher | 724,091 | Mar. 31 | 4561 | 1026 | 103 | 1014 |
| Work-support | A. L. Nettles and H. S. Glenn | 743,656 | Nov. 10 | 1712 | 362 | 107 | 381 |
| Worsted-box | G. M. Wooster | 736,808 | Aug. 18 | 3324 | 737 | 105 | 1722 |
| Wort. Accelerating the production of | V. Lapp | 719,480 | Feb. 3 | 123 | 28 | 102 | 851 |
| Wort and producing same. Concentrated hopped | H. A. Hobson | 718,253 | Jan. 13 | 1354 | | 102 | 306 |
| Wort. Producing | V. Lapp | 734,899 | July 28 | 4092 | 954 | 105 | 909 |
| Wort-separator | M. Henius | 724,100 | Mar. 31 | 4572 | 1029 | 103 | 1017 |
| Woven fabric | C. H. L. Hanson | 729,161 | May 26 | 4384 | 967 | 104 | 978 |
| Woven fabric | H. J. Mackintosh and R. R. Tweed | 738,218 | Sept. 8 | 1338 | 289 | 106 | 305 |
| Woven fabric | N. H. Merriam | 742,468 | Oct. 27 | 4022 | 902 | 106 | 2142 |
| Woven fabric | M. G. Collins | 746,465 | Dec. 8 | 2095 | 482 | 107 | 1566 |
| Woven fabric and producing same | W. Rumpf | 736,635 | Aug. 18 | 2993 | 660 | 105 | 1654 |
| Woven fabrics. Apparatus for preventing production of reed-stripes in | N. and J. Chaize | 728,366 | May 19 | 2921 | 645 | 104 | 660 |
| Wrapping and labeling machine pasting mechanism | C. Owens | 735,405 | Aug. 4 | 694 | 148, 149 | 105 | 1128 |
| Wrapping-machine | A. Bernauer | 718,747 | Jan. 20 | 2341 | 517, 518 | 102 | 528 |
| Wrapping-machine | S. J. Hicks | 719,410 | Jan. 27 | 3594 | 803, 804, 805, 806 | 102 | 805 |
| Wrapping-machine | L. Bonnefoi | 724,538 | Apr. 7 | 217 | 53, 54 | 103 | 1215 |
| Wrapping-machine | T. Stebbins | 726,474 | Apr. 28 | 3793 | 858, 859, 860 | 103 | 2013 |
| Wrapping-machine | J. H. Felmlee | 727,927 | May 12 | 2099 | 466, 467, 468 | 104 | 465 |
| Wrapping-machine | O. Tyberg | 729,454 | May 26 | 4882 | 1082 | 104 | 1083 |
| Wrapping-machine | T. G. McGirr | 740,457 | Oct. 6 | 140 | 28, 29 | 106 | 1276 |
| Wrapping-machine | G. P. Davis | 740,818 | Oct. 6 | 819 | 184 | 106 | 1420 |
| Wrapping-machine | J. H. Felmlee | 745,810 | Dec. 1 | 897 | 202, 203 | 107 | 1291 |
| Wrapping machine. Box- | F. Henry | 740,852 | Oct. 6 | 874 | 195 | 106 | 1432 |
| Wrapping machine. Package- | E. E. Miles | 724,485 | Apr. 7 | 119 | 29, 30, 31 | 103 | 1194 |
| Wrapping material | C. N. Paver | 732,889 | July 7 | 344 | 84 | 105 | 75 |
| Wrapping pamphlets, &c. Machine for | E. P. Sheldon | 718,735 | Jan. 20 | 2314 | 511, 512 | 102 | 522 |
| Wrecking device | W. J. and H. G. Cummings and R. Chamberlain. | 748,484 | Dec. 29 | 5899 | 1341 | 107 | 2474 |
| Wrench: *See* Adjustable wrench. Chain wrench. Fire-hose wrench. Interchangeable wrench. Jar-wrench. Jar-top wrench. Monkey-wrench. Nut-wrench. Nut or pipe wrench. Pipe-wrench. Pipe and nut wrench. Power-wrench. Quick-acting wrench. Quick-action wrench. Ratchet-wrench. Ratchet cylinder-wrench. Sliding-jaw wrench. Socket-wrench. Spanner-wrench. Threshing-machine-cylinder wrench. Tire-bolt wrench. Valve-wrench. Wagon-wrench. Well swivel-wrench. | | | | | | | |
| Wrench | T. E. Campbell | 717,734 | Jan. 6 | 399 | 94 | 102 | 87 |
| Wrench | J. Pederson and M. Giswold | 718,872 | Jan. 20 | 2571 | 573 | 102 | 576 |
| Wrench | J. L. Bovee | 719,299 | Jan. 27 | 3377 | 754 | 102 | 759 |
| Wrench | R. H. Hearn | 719,590 | Feb. 3 | 325 | 75 | 102 | 890 |
| Wrench | J. T. Neely | 719,845 | Feb. 3 | 781 | 183 | 102 | 989 |
| Wrench | N. Larsen | 720,530 | Feb. 10 | 2056 | 474 | 102 | 1273 |

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| Invention. | Name. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| | | | | Spec. | Dr'g. | Vol. | Page. |
| Wrench | M. L. Cochran | 720,784 | Feb. 17 | 2547 | 587 | 102 | 1389 |
| Wrench | L. Coes | 720,785 | Feb. 17 | 2548 | 587 | 102 | 1389 |
| Wrench | J. H. Hobson | 721,444 | Feb. 24 | 3816 | 868 | 102 | 1675 |
| Wrench | J. A. Boyd | 722,483 | Mar. 10 | 1554 | 341 | 103 | 348 |
| Wrench | M. Barber | 722,665 | Mar. 17 | 1887 | 420 | 103 | 435 |
| Wrench | E. C. Smith | 722,920 | Mar. 17 | 2370 | 530 | 103 | 534 |
| Wrench | F. G. Wetterstein and G. R. Lynch | 723,958 | Mar. 31 | 4299 | 965 | 103 | 963 |
| Wrench | J. Hoffman | 724,865 | Apr. 7 | 836 | 192 | 103 | 1347 |
| Wrench | R. J. Lockhart | 725,103 | Apr. 14 | 1277 | 288 | 103 | 1456 |
| Wrench | R. J. Northam | 725,124 | Apr. 14 | 1314 | 296 | 103 | 1464 |
| Wrench | T. A. Weston | 725,306 | Apr. 14 | 1633 | 369 | 103 | 1531 |
| Wrench | N. B. Stone | 726,782 | Apr. 28 | 4409 | 993 | 103 | 2135 |
| Wrench | C. H. Spaulding | 727,012 | May 5 | 385 | 81 | 104 | 84 |
| Wrench | W. King | 727,153 | May 5 | 637 | 137 | 104 | 138 |
| Wrench | W. H. Preston | 728,007 | May 12 | 2240 | 498 | 104 | 494 |
| Wrench | J. J. Quinlan | 728,410 | May 19 | 2995 | 659 | 104 | 675 |
| Wrench | C. F. Doebler | 728,554 | May 19 | 3272 | 725 | 104 | 732 |
| Wrench | C. S. Bonney | 728,842 | May 26 | 3825 | 851 | 104 | 866 |
| Wrench | M. J. Fitzgerald | 729,316 | May 26 | 4657 | 1030 | 104 | 1036 |
| Wrench | G. McKercher | 729,504 | May 26 | 4963 | 1100 | 104 | 1101 |
| Wrench | F. von Cawenburgh | 729,544 | June 2 | 45 | 11 | 104 | 1136 |
| Wrench | J. H. Flanigan | 729,747 | June 2 | 409 | 92 | 104 | 1212 |
| Wrench | T. L. Kennedy | 730,269 | June 9 | 1362 | 299 | 104 | 1420 |
| Wrench | J. B. Tupper | 730,587 | June 9 | 1942 | 432 | 104 | 1545 |
| Wrench | A. Newell | 730,957 | June 16 | 2610 | 581 | 104 | 1706 |
| Wrench | H. S. Worden | 731,260 | June 16 | 3164 | 704, 705 | 104 | 1817 |
| Wrench | C. F. Folsom | 731,880 | June 23 | 4337 | 968 | 104 | 2079 |
| Wrench | J. C. Osborne | 732,108 | June 30 | 4791 | 1069 | 104 | 2186 |
| Wrench | J. H. Shepherd | 732,126 | June 30 | 4828 | 1076 | 104 | 2194 |
| Wrench | C. C. Longard | 732,306 | June 30 | 5182 | 1151 | 104 | 2267 |
| Wrench | D. F. Detamore | 732,677 | June 30 | 5896 | 1308 | 104 | 2418 |
| Wrench | L. Kules | 732,752 | July 7 | 99 | 28 | 105 | 25 |
| Wrench | D. H. Irland | 732,858 | July 7 | 290 | 73 | 105 | 64 |
| Wrench | M. E. Worden | 733,525 | July 14 | 1486 | 354 | 105 | 331 |
| Wrench | W. J. M. Hames | 733,582 | July 14 | 1585 | 378 | 105 | 353 |
| Wrench | W. P. Thompson | 734,376 | July 21 | 3104 | 730 | 105 | 690 |
| Wrench | H. G. Dunston | 734,408 | July 21 | 3160 | 743 | 105 | 701 |
| Wrench | J. Horlacher | 734,872 | July 28 | 4049 | 945 | 105 | 900 |
| Wrench | R. P. Hart | 735,504 | Aug. 4 | 904 | 192 | 105 | 1174 |
| Wrench | C. C. English | 735,734 | Aug. 11 | 1335 | 288 | 105 | 1282 |
| Wrench | D. E. Painter | 736,143 | Aug. 11 | 2100 | 450 | 105 | 1447 |
| Wrench | J. G. Campbell | 736,912 | Aug. 18 | 3517 | 782 | 105 | 1763 |
| Wrench | C. E. Bonner | 737,199 | Aug. 25 | 4035 | 894 | 105 | 1893 |
| Wrench | W. H. Meiss | 737,433 | Aug. 25 | 4492 | 1007 | 105 | 1990 |
| Wrench | O. J. Riedmiller | 737,483 | Aug. 25 | 4583 | 1027 | 105 | 2011 |
| Wrench | A. P. Miller | 737,645 | Sept. 1 | 157 | 34 | 106 | 37 |
| Wrench | W. A. Cumbie | 738,003 | Sept. 1 | 901 | 197 | 106 | 197 |
| Wrench | G. W. Sprague | 738,082 | Sept. 1 | 1020 | 228 | 106 | 221 |
| Wrench | J. La Burt | 738,457 | Sept. 8 | 1841 | 400 | 106 | 411 |
| Wrench | W. A. McGuire and T. D. Cobedesh | 738,565 | Sept. 8 | 2045 | 446 | 106 | 455 |
| Wrench | A. J. Mayer | 738,728 | Sept. 8 | 2356 | 517 | 106 | 519 |
| Wrench | H. E. Ercanbrack | 739,068 | Sept. 15 | 2994 | 663 | 106 | 674 |
| Wrench | H. R. Ashby | 739,252 | Sept. 15 | 3334 | 740 | 106 | 745 |
| Wrench | A. B. Green | 739,490 | Sept. 22 | 3779 | 845 | 106 | 858 |
| Wrench | J. E. Melcher | 739,895 | Sept. 29 | 4553 | 1022 | 106 | 1039 |
| Wrench | E. F. Davis | 740,251 | Sept. 29 | 5208 | 1171 | 106 | 1178 |
| Wrench | J. J. A. Miller | 741,155 | Oct. 13 | 1420 | 324 | 106 | 1568 |
| Wrench | J. Bystrom | 741,394 | Oct. 13 | 1925 | 425 | 106 | 1678 |
| Wrench | H. Scheffer | 741,841 | Oct. 20 | 2781 | 620 | 106 | 1875 |
| Wrench | A. P. Hartzell | 741,906 | Oct. 20 | 2920 | 651 | 106 | 1902 |
| Wrench | L. Coes | 742,006 | Oct. 20 | 3132 | 699 | 106 | 1945 |
| Wrench | J. Litschge | 742,043 | Oct. 20 | 3202 | 715 | 106 | 1960 |
| Wrench | S. Ondrey | 742,055 | Oct. 20 | 3221 | 721 | 106 | 1963 |
| Wrench | W. E. Seanor | 742,240 | Oct. 27 | 3621 | 810 | 106 | 2060 |
| Wrench | F. A. Biehn | 743,227 | Nov. 3 | 794 | 172 | 107 | 166 |
| Wrench | I. Weisnek | 743,359 | Nov. 3 | 1062 | 227 | 107 | 226 |
| Wrench | M. Wenger | 743,360 | Nov. 3 | 1064 | 227 | 107 | 227 |
| Wrench | R. H. A. Geistert | 743,482 | Nov. 10 | 1382 | 283 | 107 | 310 |
| Wrench | J. H. Shepherd | 744,120 | Nov. 17 | 2616 | 559 | 107 | 587 |
| Wrench | J. H. Adams | 744,271 | Nov. 17 | 2912 | 623 | 107 | 651 |
| Wrench | C. D. Dutcher | 744,515 | Nov. 17 | 3350 | 722 | 107 | 745 |
| Wrench | I. Martin | 744,869 | Nov. 24 | 3994 | 861 | 107 | 899 |
| Wrench | B. McNiel | 745,369 | Dec. 1 | 101 | 24 | 107 | 1122 |
| Wrench | G. R. Cheesman | 746,023 | Dec. 8 | 1311 | 294 | 107 | 1396 |
| Wrench | C. S. Leland | 746,113 | Dec. 8 | 1465 | 329 | 107 | 1432 |
| Wrench | H. A. Kerslake | 746,339 | Dec. 8 | 1887 | 430 | 107 | 1521 |
| Wrench | J. A. Hardy and E. L. Goodykoontz | 746,504 | Dec. 8 | 2164 | 497 | 107 | 1581 |
| Wrench | W. L. Jackson | 746,516 | Dec. 8 | 2182 | 501 | 107 | 1585 |
| Wrench | I. Shoop | 746,590 | Dec. 8 | 2318 | 530 | 107 | 1617 |
| Wrench | J. T. Myers | 746,643 | Dec. 8 | 2417 | 552 | 107 | 1640 |
| Wrench | G. C. Bultman | 747,130 | Dec. 15 | 3348 | 761 | 107 | 1872 |
| Wrench | D. Sterne | 747,261 | Dec. 15 | 3595 | 812 | 107 | 1923 |
| Wrench | J. C. Davison | 747,385 | Dec. 22 | 3837 | 863 | 107 | 1994 |
| Wrench | C. Miller and M. Jacobs | 747,624 | Dec. 22 | 4259 | 958 | 107 | 2091 |
| Wrench | C. F. Bliss | 747,679 | Dec. 22 | 4361 | 985 | 107 | 2113 |
| Wrench | F. A. Moore | 747,747 | Dec. 22 | 4477 | 1009 | 107 | 2139 |
| Wrench | W. C. Blair | 747,851 | Dec. 22 | 4684 | 1059 | 107 | 2188 |
| Wrench | J. E. Peterson | 748,527 | Dec. 29 | 5983 | 1357 | 107 | 2491 |
| Wrench and thread-cutter. Combined | C. Benesh | 720,554 | Feb. 17 | 2130 | 493 | 102 | 1303 |
| Wrench attachment | W. S. Lenhart | 717,872 | Jan. 6 | 682 | 152 | 102 | 145 |
| Wrench attachment. Drill- | E. C. Miller | 725,267 | Apr. 14 | 1571 | 356 | 103 | 1517 |
| Wrench for cylinder-teeth | W. H. George | 731,886 | June 23 | 4350 | 971 | 104 | 2082 |
| Wrench or spanner | J. H. Morgan | 718,501 | Jan. 13 | 1860 | 408, 409 | 102 | 417 |

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| Invention. | Name. | No. | Date. | Monthly volume. | | Official Gazette. | |
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| Wringer:<br>*See* Clothes-wringer. Mop-wringer.<br>Clothes or mop wringer. | | | | | | | |
| Wringer | G. D. Leedle | 725,727 | Apr. 21 | 2434 | 552<br>553 | 103 | 1715 |
| Wringer | P. Kibby | 741,911 | Oct. 20 | 2930 | 653<br>654 | 106 | 1904 |
| Wringer attachment | J. D. Hiss | 748,074 | Dec. 29 | 5158 | 1167 | 107 | 2312 |
| Wrist-plate lock | H. Weber | 720,540 | Feb. 10 | 2085 | 481 | 102 | 1277 |
| Writing and adding machine. Combined | L. Maybaum | 726,959 | May 5 | 244 | 56<br>57<br>58 | 104 | 52 |
| Writing apparatus. Cipher- | G. W. Dudley | 727,915 | May 12 | 2067 | 460<br>461 | 104 | 458 |
| Writing board. Hand- | C. J. Bellamy | 732,700 | July 7 | 14 | 4 | 105 | 6 |
| Writing-cabinet | L. and J. M. Jones | 746,093 | Dec. 8 | 1432 | 322 | 107 | 1424 |
| Writing-machine | H. C. Hess | 726,222 | Apr. 21 | 3301 | 749 | 103 | 1898 |
| Writing-machine type-bars. Tool for applying type to | E. F. Kunath | 734,719 | July 28 | 3743 | 875 | 105 | 838 |
| Writing-machines, &c. Ribbon-reversing mechanism for | C. F. Hopkins | 743,162 | Nov. 3 | 664 | 143 | 107 | 138 |
| Wurtzilite for paints, varnishes, &c. Treating | S. R. Whitall | 734,482 | July 21 | 3292 | ------ | 105 | 728 |
| Wurtzilite, rubber, &c. Composition of | S. R. Whitall | 734,483 | July 21 | 3295 | ------ | 105 | 728 |
| X-ray apparatus | E. W. Caldwell | 720,888 | Feb. 17 | 2723 | 628 | 102 | 1426 |
| X-ray apparatus, &c. Desk for | H. R. Smith | 725,499 | Apr. 14 | 2013 | 454 | 103 | 1612 |
| X-ray apparatus for treating diseases | H. E. Waite | 719,915 | Feb. 3 | 900 | 211 | 102 | 1014 |
| X-ray tracer | F. Moritz | 720,599 | Feb. 17 | 2212 | 513 | 102 | 1319 |
| X-ray tube | T. Friedlander | 725,331 | Apr. 14 | 1690 | 381 | 103 | 1543 |
| X-ray tube | T. Friedlander | 726,044 | Apr. 21 | 2985 | 678 | 103 | 1832 |
| X-ray tube | J. O. Heinze, Jr | 729,166 | May 26 | 4392 | 969 | 104 | 980 |
| X-ray tube | R. Friedlander | 736,086 | Aug. 11 | 2003 | 426 | 105 | 1429 |
| X-ray tube | J. O. Heinze, Jr | 743,718 | Nov. 10 | 1814 | 382 | 107 | 404 |
| X-ray-tube shield | R. Friedlander | 731,767 | June 23 | 4140 | 923 | 104 | 2033 |
| X-ray tubes. Automatic regulator for | W. S. Andrews | 720,095 | Feb. 10 | 1272 | 291 | 102 | 1109 |
| Yarn-chain-unwrapping mechanism | W. Baxter | 745,993 | Dec. 8 | 1255 | 283 | 107 | 1384 |
| Yarn-chains. Unwrapping mechanism for | S. Pearce | 732,439 | June 30 | 5449 | 1210 | 104 | 2323 |
| Yarn drying and conditioning apparatus | J. Keith and W. W. Wardle | 718,770 | Jan. 20 | 2386 | 529 | 102 | 537 |
| Yarn. Manufacturing cotton | H. W. Kearns | 738,040 | Sept. 1 | 956 | ------ | 106 | 208 |
| Yarns or threads from short fibers. Apparatus for manufacturing | M. Müller | 747,465 | Dec. 22 | 3970 | 892 | 107 | 2024 |
| Yarns, &c., with volatile liquids. Treating | J. E. Prestwich | 740,778 | Oct. 6 | 747 | 168 | 106 | 1405 |
| Yeast. Apparatus for the treatment of | C. Hagenmüller | 726,052 | Apr. 21 | 2998 | 681 | 103 | 1835 |
| Yeast-coating composition | M. Schmitz | 725,370 | Apr. 14 | 1756 | ------ | 103 | 1556 |
| Yeast for use in the manufacture of yeast by the aeration or clear-wort process. Production of seed- | H. Jansen | 724,293 | Mar. 31 | 4985 | ------ | 103 | 1100 |
| Yeast. Preparation of | G. Jacquemin | 736,401 | Aug. 18 | 2540 | ------ | 105 | 1560 |
| Yeast. Preparing | G. Jacquemin | 736,402 | Aug. 18 | 2541 | ------ | 105 | 1561 |
| Yoke and pole connection. Neck- | E. C. Rishel | 724,738 | Apr. 7 | 601 | 142 | 103 | 1296 |
| Yoke. Animal- | W. M. Landers | 727,976 | May 12 | 2183 | 486<br>487 | 104 | 483 |
| Yoke. Animal- | J. J. Ingram | 744,349 | Nov. 17 | 3059 | 657 | 107 | 683 |
| Yoke attachment. Neck- | L. T. Briscoe | 730,088 | June 2 | 1025 | 230 | 104 | 1336 |
| Yoke attachment. Neck- | S. Pearson | 736,146 | Aug. 11 | 2104 | 451 | 105 | 1448 |
| Yoke attachment. Neck- | D. N. Luse | 748,388 | Dec. 29 | 5701 | 1301 | 107 | 2430 |
| Yoke counter-stop for artillery-carriages. Neck- | F. Wenke | 736,182 | Aug. 11 | 2159 | 464 | 105 | 1461 |
| Yoke fastener. Neck- | A. L. Reinke | 739,508 | Sept. 22 | 3807 | 853 | 106 | 864 |
| Yoke. Neck- | G. T. Hyde | 720,696 | Feb. 17 | 2408 | 550 | 102 | 1359 |
| Yoke. Neck- | C. Stadler | 726,585 | Apr. 28 | 4043 | 913 | 103 | 2060 |
| Yoke. Neck- | R. W. Sparks | 728,083 | May 12 | 2277 | 506 | 104 | 502 |
| Yoke. Neck- | H. F. Bundy | 734,398 | July 21 | 3145 | 739 | 105 | 699 |
| Yoke. Neck- | R. Jones | 736,109 | Aug. 11 | 2038 | 434 | 105 | 1435 |
| Yoke. Neck- | H. C. F. Loptien | 741,263 | Oct. 13 | 1635 | 369 | 106 | 1615 |
| Yoke. Neck- | A. S. Lewis | 742,042 | Oct. 20 | 3201 | 715 | 106 | 1959 |
| Yoke wear-plate. Neck- | E. C. Rishel | 735,154 | Aug. 4 | 213 | 42 | 105 | 1028 |
| Zinc and chromium hydrates. Making | I. L. Roberts | 738,239 | Sept. 8 | 1376 | ------ | 106 | 313 |
| Zinc and copper. Treating ores for recovery of | A. M. Beam | 737,060 | Aug. 25 | 3789 | ------ | 105 | 1840 |
| Zinc-box. Precipitating | J. B. and W. L. Truitt and W. O. Temple. | 737,046 | Aug. 25 | 3761 | 836 | 105 | 1835 |
| Zinc-dust-producing apparatus | G. G. Convers and A. B. de Saulles. | 727,297 | May 5 | 879 | 190<br>191 | 104 | 188 |
| Zinc-dust-producing apparatus | G. G. Convers and A. B. de Saulles. | 727,298 | May 5 | 880 | 191 | 104 | 188 |
| Zinc. Electrolytic refining of | H. Paweck | 745,378 | Dec. 1 | 117 | 27 | 107 | 1125 |
| Zinc. Extracting | W. G. Waring | 718,554 | Jan. 13 | 1971 | 431 | 102 | 438 |
| Zinc from copper slag. Obtaining sulfid of | F. Brünjes | 733,000 | July 7 | 530 | ------ | 105 | 113 |
| Zinc from its ores. Extracting | C. G. P. de Laval | 736,611 | Aug. 18 | 2954 | 647 | 105 | 1646 |
| Zinc from its oxids, &c. Reducing | W. Schulte | 718,222 | Jan. 13 | 1305 | ------ | 102 | 295 |
| Zinc from sulfid ores, &c. Extracting | C. Rogers | 740,372 | Sept. 29 | 5429 | ------ | 106 | 1224 |
| Zinc from sulfid ores. Recovering | P. Danckwardt | 746,798 | Dec. 15 | 2701 | 623 | 107 | 1722 |
| Zinc, lead, and silver sulfids from their ores. Extraction of | G. D. Delprat | 735,071 | Aug. 4 | 40 | 12 | 105 | 990 |
| Zinc. Obtaining | E. H. Hopkins | 731,184 | June 16 | 3042 | 676 | 104 | 1794 |
| Zinc or other ores. Treatment of | W. B. Middleton | 735,894 | Aug. 11 | 1647 | 352 | 105 | 1351 |
| Zinc ores. Manufacturing spelter from | O. H. Picher | 735,903 | Aug. 11 | 1661 | 354 | 105 | 1351 |
| Zinc ores. Treating | C. V. Petraeus | 735,902 | Aug. 11 | 1660 | ------ | 105 | 1353 |
| Zinc ores. Treatment of | C. V. Petraeus | 736,008 | Aug. 11 | 1864 | ------ | 105 | 1398 |
| Zinc oxids. Smelting | C. V. Petraeus | 736,010 | Aug. 11 | 1865 | ------ | 105 | 1398 |
| Zinc peroxid. Making | F. Elias | 740,832 | Oct. 6 | 847 | ------ | 106 | 1426 |
| Zinc-spelter-refining apparatus | T. Jones | 726,432 | Apr. 28 | 3715 | 432 | 103 | 1997 |
| Zinc. Treating complex ores of | W. C. Wetherill | 724,637 | Apr. 7 | 406 | ------ | 103 | 1256 |
| Zinc, &c. Treatment of ores containing | C. V. Petraeus | 736,009 | Aug. 11 | 1864 | ------ | 105 | 1398 |
| Zincing objects by electrolysis | I. Szirmay | 736,565 | Aug. 18 | 2843 | ------ | 105 | 1625 |
| Zither | W. H. Banks | 718,962 | Jan. 20 | 2743 | 613 | 102 | 613 |
| Zither | G. Huber | 732,078 | June 30 | 4729 | 1056 | 104 | 2173 |
| Zither tailpiece and bridge | F. Reinhard | 718,383 | Jan. 13 | 1599 | 352 | 102 | 358 |

# ALPHABETICAL LIST OF DESIGNS.

| Design. | Name. | No. | Date. | Official Gazette. Volume. | Page. |
|---|---|---|---|---|---|
| Adding-machine stand. Metal | H. Poesche | 36,437 | July 14 | 105 | 486 |
| Advertising-clock case | R. S. Wiesenfeld | 36,319 | May 12 | 104 | 564 |
| Alphabet | A. Blonde | 36,549 | Sept. 8 | 106 | 534 |
| Ammeter-cover | W. A. Price | 36,398 | June 30 | 104 | 2429 |
| Ash-receiver | H. R. Towne | 36,414 | July 7 | 105 | 252 |
| Automobile-body | L. B. Gaylor | 36,508 | Aug. 18 | 105 | 1768 |
| Back-bar fixture | J. Ehrenpreis | 36,675 | Dec. 8 | 107 | 1647 |
| Badge | J. A. Caron | 36,190 | Jan. 13 | 102 | 459 |
| Badge | E. E. Bower | 36,254 | Mar. 31 | 103 | 1152 |
| Badge | G. G. Greenburg | 36,341 | June 2 | 104 | 1381 |
| Badge | Q. Berninghaus | 36,407 | July 7 | 105 | 251 |
| Badge | H. E. Promnitz | 36,408 | July 7 | 105 | 251 |
| Badge | H. E. Promnitz | 36,409 | July 7 | 105 | 251 |
| Badge | C. C. Penfold | 36,410 | July 7 | 105 | 251 |
| Badge | J. O'Callahan | 36,417 | July 14 | 105 | 483 |
| Badge | S. Goodman | 36,469 | Aug. 4 | 105 | 1249 |
| Badge | K. Melrose | 36,495 | Aug. 18 | 105 | 1766 |
| Badge | J. C. Irvine | 36,514 | Aug. 25 | 105 | 2046 |
| Badge or similar article | H. F. Blogg | 36,314 | May 12 | 104 | 563 |
| Badge or similar article | R. M. Crawford | 36,496 | Aug. 18 | 105 | 1766 |
| Bank. Savings- | H. A. Haugan | 36,678 | Dec. 15 | 107 | 1963 |
| Basin. Wash- | J. Zipp | 36,574 | Oct. 6 | 106 | 1490 |
| Basin. Wash- | J. Zipp | 36,575 | Oct. 6 | 106 | 1490 |
| Basin. Wash- | J. Zipp | 36,576 | Oct. 6 | 106 | 1490 |
| Basin. Wash- | J. Zipp | 36,577 | Oct. 6 | 106 | 1490 |
| Basket | A. P. Marshall | 36,673 | Dec. 8 | 107 | 1647 |
| Bath fixture. Shower- | J. H. Gavin | 36,719 | Dec. 29 | 107 | 2518 |
| Bedstead end frame | F. G. Woodruff | 36,606 | Oct. 27 | 106 | 2278 |
| Bedstead head or foot section | C. S. Boll | 36,191 | Jan. 13 | 102 | 459 |
| Billiard-table | J. Ehrenpreis | 36,662 | Dec. 1 | 107 | 1365 |
| Book and paper cutter | O. Cohen | 36,465 | July 28 | 105 | 966 |
| Book-cover | W. M. Rhoads | 36,192 | Jan. 20 | 102 | 615 |
| Border for vessels, &c | E. H. Goetze | 36,427 | July 14 | 105 | 485 |
| Bottle | F. Schilling | 36,226 | Feb. 10 | 102 | 1284 |
| Bottle | F. Schilling | 36,227 | Feb. 10 | 102 | 1284 |
| Bottle | C. C. Bonnert | 36,262 | Mar. 31 | 103 | 1154 |
| Bottle | C. B. Garwood | 36,373 | June 23 | 104 | 2141 |
| Bottle | J. Farnan | 36,395 | June 30 | 104 | 2428 |
| Bottle | C. Hitzl | 36,431 | July 14 | 105 | 485 |
| Bottle | T. A. Kochs | 36,455 | July 21 | 105 | 736 |
| Bottle | L. F. Richards | 36,479 | Aug. 4 | 105 | 1251 |
| Bottle | C. B. Gordon | 36,480 | Aug. 4 | 105 | 1251 |
| Bottle | J. Alland | 36,493 | Aug. 11 | 105 | 1523 |
| Bottle | J. W. Wood | 36,573 | Oct. 6 | 106 | 1490 |
| Bottle | A. N. Ritz | 36,656 | Dec. 1 | 107 | 1364 |
| Bottle | J. F. McGuire | 36,672 | Dec. 8 | 107 | 1647 |
| Box | K. M. Chapman | 36,621 | Nov. 10 | 107 | 531 |
| Box. Candy- | F. L. Daggett | 36,432 | July 14 | 105 | 486 |
| Box. Candy- | F. L. Daggett | 36,433 | July 14 | 105 | 486 |
| Box. Candy- | F. L. Daggett | 36,434 | July 14 | 105 | 486 |
| Box. Candy- | F. L. Daggett | 36,435 | July 14 | 105 | 486 |
| Box. Candy- | F. L. Daggett | 36,436 | July 14 | 105 | 486 |
| Box-cover | H. L. Croll | 36,317 | May 12 | 104 | 564 |
| Box-covering | F. L. Daggett | 36,457 | July 21 | 105 | 736 |
| Box. Paper | P. B. Myers | 36,396 | June 30 | 104 | 2428 |
| Box. Paper | P. B. Myers | 36,458 | July 21 | 105 | 736 |
| Box. Plant or flower | F. Hinderer | 36,679 | Dec. 15 | 107 | 1963 |
| Boxes, &c. Cover for puff- | T. W. Foster | 36,491 | Aug. 11 | 105 | 1523 |
| Bracket | M. G. Priore | 36,246 | Mar. 17 | 103 | 651 |
| Bracket. Window-shelf | W. H. Kohr | 36,375 | June 23 | 104 | 2141 |
| Braid | H. P. von Nostitz | 36,188 | Jan. 6 | 102 | 221 |
| Braid | H. P. von Nostitz | 36,189 | Jan. 6 | 102 | 221 |
| Braid | C. Schwarcz | 36,509 | Aug. 18 | 105 | 1768 |
| Braid | J. P. Swift | 36,609 | Oct. 27 | 106 | 2278 |
| Brooch-bar | E. H. Clarkson | 36,610 | Nov. 3 | 107 | 258 |
| Brooch, button, or buckle plate, &c | S. A. Keller | 36,485 | Aug. 11 | 105 | 1522 |
| Brooch, button, or buckle plate, &c | C. M. Wendelstein | 36,568 | Oct. 6 | 106 | 1489 |
| Brooch, button, or buckle plate or similar article | S. A. Keller | 36,649 | Dec. 1 | 107 | 1363 |
| Brooch, button, or buckle plate or similar article | S. A. Keller | 36,650 | Dec. 1 | 107 | 1363 |
| Brooch, button, or buckle plate or similar article | S. A. Keller | 36,666 | Dec. 8 | 107 | 1646 |
| Brooch or buckle plate or similar article | P. O. Dickinson | 36,351 | June 9 | 104 | 1644 |
| Brooch or buckle plate or similar article | P. O. Dickinson | 36,352 | June 9 | 104 | 1644 |
| Brooch or buckle plate or similar article | P. O. Dickinson | 36,411 | July 7 | 105 | 252 |
| Brooch or similar article | F. M. Welch | 36,582 | Oct. 13 | 106 | 1767 |
| Brooch-plate or similar article | E. F. Rueckert | 36,648 | Dec. 1 | 107 | 1363 |
| Broom holder. Whisk- | M. A. Skall | 36,430 | July 14 | 105 | 485 |
| Brushes, &c. Back for | O. Leigh | 36,222 | Feb. 10 | 102 | 1283 |
| Brushes, &c. Back for | P. O. Dickinson and O. Leigh | 36,223 | Feb. 10 | 102 | 1283 |
| Brushes, &c. Back for hair- | T. W. Foster | 36,489 | Aug. 11 | 105 | 1523 |
| Brushes, mirrors, &c. Back for | H. Hillbom | 36,447 | July 21 | 105 | 734 |
| Brushes, mirrors, &c. Back for | L. C. Hiller | 36,490 | Aug. 11 | 105 | 1523 |
| Brushes, mirrors, or similar articles. Back for | O. Leigh and P. O. Dickinson | 36,390 | June 30 | 104 | 2427 |

*Alphabetical list of designs*—Continued.

| Design. | Name. | No. | Date. | Official Gazette. Vol. | Page. |
|---|---|---|---|---|---|
| Brushes, mirrors, or similar articles. Back for | O. Leigh and P. O. Dickinson | 36,391 | June 30 | 104 | 2427 |
| Brushes, mirrors, or similar articles. Back for | P. O. Dickinson | 36,392 | June 30 | 104 | 2428 |
| Brushes, mirrors, or similar articles. Back for | P. O. Dickinson | 36,393 | June 30 | 104 | 2428 |
| Brushes or similar articles. Back for | S. O. Bigney | 36,245 | Mar. 17 | 103 | 651 |
| Brushes or similar articles. Back for | O. Leigh | 36,372 | June 23 | 104 | 2141 |
| Brushes or similar articles. Back for | H. A. Weihman | 36,473 | Aug. 4 | 105 | 1250 |
| Brushes or similar articles. Back for | H. A. Weihman | 36,474 | Aug. 4 | 105 | 1250 |
| Brushes or similar toilet articles. Back for | T. K. Benton | 36,475 | Aug. 4 | 105 | 1250 |
| Brushes or similar toilet articles. Back for | T. K. Benton | 36,476 | Aug. 4 | 105 | 1251 |
| Buckle. Belt- | L. L. Prahar | 36,486 | Aug. 11 | 105 | 1522 |
| Buckle. Belt- | L. L. Prahar | 36,487 | Aug. 11 | 105 | 1523 |
| Buckle or brooch plate | J. Catlow | 36,248 | Mar. 24 | 103 | 878 |
| Button. Emblematic | J. L. Thornton | 36,611 | Nov. 3 | 107 | 258 |
| Button. Emblematic | J. L. Thornton | 36,612 | Nov. 3 | 107 | 258 |
| Button-hooks, &c. Handle for | O. Leigh | 36,221 | Feb. 10 | 102 | 1283 |
| Button-hooks, &c. Handle for | T. W. Foster | 36,488 | Aug. 11 | 105 | 1523 |
| Button or similar article | C. A. L. Totten | 36,255 | Mar. 31 | 103 | 1153 |
| Cabinet | C. Ruppel | 36,195 | Jan. 20 | 102 | 615 |
| Candelabrum | A. H. Heisey | 36,500 | Aug. 18 | 105 | 1767 |
| Candelabrum | A. C. Miller | 36,588 | Oct 13 | 106 | 1768 |
| Candlestick | G. L. Crowell, Jr | 36,187 | Jan. 6 | 102 | 221 |
| Candlestick | E. Bächle | 36,231 | Feb. 17 | 102 | 1544 |
| Card back. Playing- | M. H. Davis and S. R. Atwell | 36,580 | Oct. 6 | 106 | 1491 |
| Card-mount | H. H. Collins, Jr | 36,562 | Sept. 22 | 106 | 986 |
| Card-mount | H. H. Collins, Jr | 36,563 | Sept. 22 | 106 | 987 |
| Carpet | L. H. Brown | 36,445 | July 14 | 105 | 488 |
| Ceiling border-plate | D. H. Wagner | 36,701 | Dec. 22 | 107 | 2225 |
| Ceiling center plate | D. H. Wagner | 36,699 | Dec. 22 | 107 | 2224 |
| Ceiling corner-plate | D. H. Wagner | 36,700 | Dec. 22 | 107 | 2225 |
| Ceiling sheet-metal border-plate | D. H. Wagner | 36,702 | Dec. 22 | 107 | 2225 |
| Ceilings and molding therefor. Sheet-metal field-plate for | D. H. Wagner | 36,703 | Dec. 22 | 107 | 2225 |
| Chain or similar article. Fob- | G. E. Homer | 36,623 | Nov. 17 | 107 | 822 |
| Chair | J. E. Teall | 36,663 | Dec. 1 | 107 | 1365 |
| Chair bar-rest. Morris- | E. A. Gay | 36,597 | Oct. 20 | 106 | 2004 |
| Chair. Rocking- | E. L. Brown | 36,224 | Feb. 10 | 102 | 1283 |
| Chandelier | H. E Watkins | 36,194 | Jan. 20 | 102 | 615 |
| Chandelier | G. H. Ullman | 36,326 | May 12 | 104 | 566 |
| Chandelier | G. H. Ullman | 36,327 | May 12 | 104 | 566 |
| Chandelier-trimming | E. Gothberg | 36,374 | June 23 | 104 | 2141 |
| Coal-hod | F. T. Brosi | 36,459 | July 21 | 105 | 736 |
| Coffee-mill name-plate | J. M. Navarro | 36,710 | Dec. 29 | 107 | 2516 |
| Coffee-pot or similar article | E. Piepenbring | 36,429 | July 14 | 105 | 485 |
| Coffee-urn hot-water jacket | E. Kronman | 36,286 | Apr. 14 | 103 | 1672 |
| Coffin-trimming | W. E. Stevens | 36,219 | Feb. 3 | 102 | 1042 |
| Collar | A. M. Weber | 36,677 | Dec. 15 | 107 | 1963 |
| Collar | F. Edelmann | 36,684 | Dec. 22 | 107 | 2222 |
| Comb | E. B. Kingman | 36,682 | Dec. 22 | 107 | 2221 |
| Comb | E. B. Kingman | 36,683 | Dec. 22 | 107 | 2221 |
| Comb. Pompadour dip-puff | B. W. Doyle | 36,670 | Dec. 8 | 107 | 1646 |
| Comb. Pompadour-puff | J. E. Lowe | 36,693 | Dec. 22 | 107 | 2223 |
| Couch-frame | D. Pepper | 36,206 | Jan. 27 | 102 | 810 |
| Couch-frame | D. Pepper | 36,207 | Jan. 27 | 102 | 811 |
| Couch-frame | D. Pepper | 36,208 | Jan. 27 | 102 | 811 |
| Crumb-scrapers, &c. Handle for | E. H. Goetze | 36,425 | July 14 | 105 | 484 |
| Crumb-scrapers, &c. Handle for | E. Bächle | 36,448 | July 21 | 105 | 735 |
| Cup | R. L. Johnson | 36,330 | May 19 | 104 | 843 |
| Cup | M. A. Haley | 36,550 | Sept. 15 | 106 | 755 |
| Cup | M. Van Gelder | 36,711 | Dec. 29 | 107 | 2516 |
| Cyclometer-casing | J. Alexander | 36,657 | Dec. 1 | 107 | 1364 |
| Decalcomania transfer-sheet | R. Whyte | 36,282 | Apr. 7 | 103 | 1408 |
| Desk and seat support or standard | J. Dux | 36,506 | Aug. 18 | 105 | 1768 |
| Dish | G. C. Thiesen | 36,259 | Mar. 31 | 103 | 1153 |
| Dish | M. A. Haley | 36,553 | Sept. 15 | 106 | 755 |
| Dish. Covered | R. L. Johnson | 36,331 | May 19 | 104 | 843 |
| Dish. Covered | A. J. Meakin | 36,467 | July 28 | 105 | 966 |
| Dish. Covered | M. A. Haley | 36,554 | Sept. 15 | 106 | 756 |
| Dish. Metal | S. Stohr | 36,354 | June 9 | 104 | 1644 |
| Dish or plate or similar article | A. J. Fondeville | 36,243 | Mar. 10 | 103 | 419 |
| Dish or similar article. Almond- | C. A. Bennett | 36,539 | Sept. 8 | 106 | 533 |
| Dish or similar article. Almond- | C. A. Bennett | 36,540 | Sept. 8 | 106 | 533 |
| Dish or similar article. Almond- | C. A. Bennett | 36,541 | Sept. 8 | 106 | 533 |
| Dish or similar article. Almond- | C. A. Bennett | 36,542 | Sept. 8 | 106 | 533 |
| Dish or similar article. Almond- | C. A. Bennett | 36,543 | Sept. 8 | 106 | 533 |
| Dish or similar article. Almond- | C. A. Bennett | 36,544 | Sept. 8 | 106 | 534 |
| Dish or similar article. Almond- | C. A. Bennett | 36,545 | Sept. 8 | 106 | 534 |
| Dish or similar article. Covered | C. J. Ahrenfeldt | 36,257 | Mar. 31 | 103 | 1153 |
| Dish or similar article. Covered | A. Mountford | 36,279 | Apr. 7 | 103 | 1408 |
| Dish or similar article. Covered | C. J. Ahrenfeldt | 36,307 | May 5 | 104 | 299 |
| Dish. Salad- | G. C. Thiesen | 36,258 | Mar. 31 | 103 | 1153 |
| Dishes. Mount for | R. R. Kintz | 36,492 | Aug. 11 | 105 | 1523 |
| Dishes, &c. Mounting for | S. H. Leavenworth | 36,454 | July 21 | 105 | 736 |
| Dishes. Mounting for metal | S. H. Leavenworth | 36,280 | Apr. 7 | 103 | 1408 |
| Display-fixture for stores | H. G. Roth | 36,267 | Mar. 31 | 103 | 1155 |
| Display-fixture for stores | H. G. Roth | 36,268 | Mar. 31 | 103 | 1155 |
| Display-fixture for stores | H. G. Roth | 36,269 | Mar. 31 | 103 | 1155 |
| Display-fixture for stores | H. G. Roth | 36,270 | Mar. 31 | 103 | 1155 |
| Display-fixture for stores | H. G. Roth | 36,271 | Mar. 31 | 103 | 1155 |
| Display-fixture for stores | H. G. Roth | 36,631 | Nov. 17 | 107 | 823 |
| Display-fixture for stores | H. G. Roth | 36,632 | Nov. 17 | 107 | 823 |
| Display-fixture for stores | H. G. Roth | 36,633 | Nov. 17 | 107 | 824 |
| Display-fixture for stores | H. G. Roth | 36,634 | Nov. 17 | 107 | 824 |
| Display-frame | O. W. Kennedy | 36,285 | Apr. 14 | 103 | 1671 |
| Display-rack | M. R. Botkin | 36,438 | July 14 | 105 | 487 |
| Divan-frame | D. Pepper | 36,199 | Jan. 27 | 102 | 809 |
| Divan-frame | D. Pepper | 36,200 | Jan. 27 | 102 | 810 |
| Divan-frame | D. Pepper | 36,201 | Jan. 27 | 102 | 810 |

*Alphabetical list of designs*—Continued.

| Design. | Name. | No. | Date. | Official Gazette. Vol. | Page. |
|---|---|---|---|---|---|
| Divan-frame | D. Pepper | 36,202 | Jan. 27 | 102 | 810 |
| Divan-frame | D. Pepper | 36,203 | Jan. 27 | 102 | 810 |
| Divan-frame | D. Pepper | 36,204 | Jan. 27 | 102 | 810 |
| Divan-frame | D. Pepper | 36,205 | Jan. 27 | 102 | 810 |
| Divan-frame | D. Pepper | 36,328 | May 12 | 104 | 566 |
| Doily or similar article | J. W. Catty | 36,510 | Aug. 18 | 105 | 1769 |
| Doily or similar article | J. W. Catty | 36,511 | Aug. 18 | 105 | 1769 |
| Doily or similar article | J. W. Catty | 36,686 | Dec. 22 | 107 | 2222 |
| Doll | C. E. Schultze | 36,564 | Sept. 22 | 106 | 987 |
| Dress ornament. Fancy | L. M. Keigher | 36,664 | Dec. 1 | 107 | 1365 |
| Easel | S. G. Doherty | 36,644 | Nov. 24 | 107 | 1086 |
| Electric-light fixture | H. G. Willard | 36,592 | Oct. 20 | 106 | 2004 |
| Electric-light fixture | H. G. Willard | 36,593 | Oct. 20 | 106 | 2004 |
| Electric-motor cabinet-stand | J. A. Reade, Jr., and C. F. Birtman | 36,608 | Oct. 27 | 106 | 2278 |
| Fabric | W. A. O'Brien | 36,209 | Jan. 27 | 102 | 811 |
| Fabric | W. A. O'Brien | 36,210 | Jan. 27 | 102 | 811 |
| Fabric | F. A. Arbenz | 36,218 | Feb. 3 | 102 | 1042 |
| Fabric | G. H. Buckland | 36,241 | Mar. 3 | 103 | 216 |
| Fabric | A. J. Bendix | 36,291 | Apr. 14 | 103 | 1672 |
| Fabric. Decorative | H. Giebel | 36,513 | Aug. 18 | 105 | 1769 |
| Fabric. Textile | C. Sackman | 36,329 | May 12 | 104 | 566 |
| File clamps. Member for paper- | W. C. Codman | 36,643 | Nov. 24 | 107 | 1085 |
| Finger-ring | G. H. Horth | 36,484 | Aug. 11 | 105 | 1522 |
| Finger-ring | C. T. Wittstein | 36,619 | Nov. 10 | 107 | 531 |
| Finger-ring or similar article | C. H. Eldredge | 36,418 | July 14 | 105 | 483 |
| Fire-alarm box | W. L. Denio | 36,548 | Sept. 8 | 106 | 534 |
| Flag or banner | W. B. Stevens | 36,273 | Apr. 7 | 103 | 1407 |
| Floor or wall covering | A. H. Commins | 36,546 | Sept. 8 | 106 | 534 |
| Floor or wall covering | T. J. Anson | 36,547 | Sept. 8 | 106 | 534 |
| Floor or wall covering | F. D. White | 36,559 | Sept. 15 | 106 | 757 |
| Flooring. Tile | L. L. Silvers | 36,676 | Dec. 8 | 107 | 1648 |
| Foot for vessels, ornaments, &c | E. H. Goetze | 36,428 | July 14 | 105 | 485 |
| Furniture panel or upright | J. Keppler | 36,253 | Mar. 24 | 103 | 879 |
| Furniture pedestal or leg | J. Keppler | 36,238 | Feb. 24 | 102 | 1770 |
| Furniture-support | J. Fay | 36,401 | June 30 | 104 | 2429 |
| Furniture-support | J. Fay | 36,402 | June 30 | 104 | 2429 |
| Furniture-support | J. Fay | 36,403 | June 30 | 104 | 2430 |
| Furniture support and back | J. Keppler | 36,235 | Feb. 24 | 102 | 1769 |
| Furniture support and leg | J. Keppler | 36,236 | Feb. 24 | 102 | 1769 |
| Furniture support and upright | J. Keppler | 36,237 | Feb. 24 | 102 | 1769 |
| Furniture support or bracket | J. Keppler | 36,251 | Mar. 24 | 103 | 878 |
| Furniture upright or support | J. Keppler | 36,252 | Mar. 24 | 103 | 879 |
| Game-chip | S. A. Cohen | 36,242 | Mar. 10 | 103 | 418 |
| Gem-setting | C. T. Wittstein | 36,622 | Nov. 17 | 107 | 822 |
| Glass. Plate- | A. D. Brogan and A. M. Malloch | 36,444 | July 14 | 105 | 488 |
| Glass. Plate- | T. J. Woodward | 36,635 | Nov. 17 | 107 | 824 |
| Glass. Plate- | T. J. Woodward | 36,636 | Nov. 17 | 107 | 824 |
| Glass vessel | W. Eggington | 36,233 | Feb. 24 | 102 | 1768 |
| Glass vessel. Cut- | W. C. Anderson | 36,275 | Apr. 7 | 103 | 1407 |
| Glass vessel. Cut- | W. Marrett | 36,276 | Apr. 7 | 103 | 1407 |
| Glass vessel. Cut- | W. Marrett | 36,277 | Apr. 7 | 103 | 1407 |
| Glass vessel. Cut- | W. Marrett | 36,278 | Apr. 7 | 103 | 1407 |
| Glass vessel. Cut- | J. Wilson | 36,696 | Dec. 22 | 107 | 2224 |
| Glass. Window- | T. M. Farmiloe | 36,349 | June 2 | 104 | 1383 |
| Glove | F. Schmidt | 36,665 | Dec. 1 | 107 | 1365 |
| Glove | F. Schmidt | 36,685 | Dec. 22 | 107 | 2222 |
| Glove | F. Schmidt | 36,722 | Dec. 29 | 107 | 2518 |
| Go-cart body | M. B. Lloyd | 36,598 | Oct. 20 | 106 | 2005 |
| Grave-mark | E. T. Whelan | 36,560 | Sept. 15 | 106 | 757 |
| Grave-marker | A. J. Schafer | 36,416 | July 7 | 105 | 252 |
| Hair ornament | C. H. Howe | 36,628 | Nov. 17 | 107 | 823 |
| Hair ornament | C. H. Howe | 36,629 | Nov. 17 | 107 | 823 |
| Hammock-body | I. E. Palmer | 36,468 | July 28 | 105 | 967 |
| Hammock-body | I. E. Palmer | 36,616 | Nov. 3 | 107 | 259 |
| Hammock fabric | I. E. Palmer | 36,617 | Nov. 3 | 107 | 259 |
| Hammock fabric | I. E. Palmer | 36,618 | Nov. 3 | 107 | 259 |
| Handkerchief | A. H. Broadway | 36,581 | Oct. 6 | 106 | 1491 |
| Handkerchief | E. Bendheim | 36,620 | Nov. 10 | 107 | 531 |
| Handle for cups or other receptacles or vessels | S. G. Wilkes | 36,605 | Oct. 27 | 106 | 2278 |
| Handle for nail-files, &c | P. O. Dickinson | 36,463 | July 28 | 105 | 966 |
| Handle for nail-files, &c | O. Leigh | 36,464 | July 28 | 105 | 966 |
| Handle for vessels, &c | E. H. Goetze | 36,426 | July 14 | 105 | 485 |
| Handle for vessels, &c | E. Bächle | 36,450 | July 21 | 105 | 735 |
| Handle for vessels, &c | E. Bächle | 36,451 | July 21 | 105 | 735 |
| Harmonica | H. Hohner | 36,692 | Dec. 22 | 107 | 2223 |
| Hat-holder standard | N. Simmer | 36,333 | May 19 | 104 | 843 |
| Heater casing. Gas- | J. J. Lawler | 36,698 | Dec. 22 | 107 | 2224 |
| Ink-receptacle | L. A. Brown | 36,694 | Dec. 22 | 107 | 2223 |
| Inkstand | D. C. Cahalane | 36,318 | May 12 | 104 | 564 |
| Knives or similar articles. Handle for | H. Hillbom | 36,384 | June 30 | 104 | 2426 |
| Knives or similar articles. Handle for paper- | M. C. Day | 36,524 | Aug. 25 | 105 | 2048 |
| Knives or similar articles. Handle for paper- | M. C. Day | 36,525 | Aug. 25 | 105 | 2048 |
| Lamp-body | C. W. Beck | 36,197 | Jan. 27 | 102 | 809 |
| Lamp-body | R. H. Welles | 36,671 | Dec. 8 | 107 | 1647 |
| Lamp body. Gas- | L. B. London | 36,531 | Sept. 1 | 106 | 254 |
| Lamp body. Gas- | L. B. London | 36,532 | Sept. 1 | 106 | 254 |
| Lamp. Gas- | A. H. Humphrey | 36,332 | May 19 | 104 | 843 |
| Lamp. Illuminating- | W. De Freitas | 36,320 | May 12 | 104 | 564 |
| Lamp-shade | R. D. Chandler | 36,293 | Apr. 21 | 103 | 1904 |
| Lamp-shade | R. D. Chandler | 36,294 | Apr. 21 | 103 | 1904 |
| Lamp-shade | G. W. Blair | 36,591 | Oct. 20 | 106 | 2003 |
| Lamp-shade | J. Vanderbilt | 36,713 | Dec. 29 | 107 | 2516 |
| Lamp-shade | H. F. Avery | 36,714 | Dec. 29 | 107 | 2517 |
| Lamp-shade | H. F. Avery | 36,715 | Dec. 29 | 107 | 2517 |
| Lamp-shade | H. F. Avery | 36,716 | Dec. 29 | 107 | 2517 |
| Lavatory | W. C. Peet | 36,594 | Oct. 20 | 106 | 2004 |

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| Design. | Name. | No. | Date. | Official Gazette. Vol. | Page. |
|---|---|---|---|---|---|
| Lavatory | W. C. Peet | 36,595 | Oct. 20 | 106 | 2004 |
| Lavatory | F. J. Torrance and J. F. Whitehead | 36,647 | Nov. 24 | 107 | 1086 |
| Letter-head or similar article | C. P. Bruch | 36,369 | June 16 | 104 | 1885 |
| Lighting-fixture shell | H. E. Watkins | 36,501 | Aug. 18 | 105 | 1767 |
| Lighting-fixture shell | H. E. Watkins | 36,502 | Aug. 18 | 105 | 1767 |
| Lighting-fixture shell | H. E. Watkins | 36,503 | Aug. 18 | 105 | 1767 |
| Lighting-fixture shell | H. E. Watkins | 36,504 | Aug. 18 | 105 | 1768 |
| Match-safe | B. M. Ward | 36,478 | Aug. 4 | 105 | 1251 |
| Match-scraper | A. B. Risley | 36,309 | May 5 | 104 | 299 |
| Medal or similar article | S. R. Earnest | 36,211 | Feb. 3 | 102 | 1041 |
| Medallion | W. A. Malliet | 36,232 | Feb. 24 | 102 | 1768 |
| Medallion | W. A. Malliet | 36,376 | June 30 | 104 | 2426 |
| Medallion | W. A. Malliet | 36,377 | June 30 | 104 | 2426 |
| Medallion | W. A. Malliet | 36,378 | June 30 | 104 | 2426 |
| Medallion or similar article | J. E. Straker, Jr | 36,689 | Dec. 22 | 107 | 2222 |
| Metal border | H. Hillbom | 36,244 | Mar. 10 | 103 | 419 |
| Mirror or similar article. Pendent | A. Harris | 36,557 | Sept. 15 | 106 | 756 |
| Mirrors, brushes, or similar articles. Back for | W. Turton | 36,627 | Nov. 17 | 107 | 823 |
| Mirrors or similar articles. Back for | E. Goetze | 36,413 | July 7 | 105 | 251 |
| Mirrors or similar articles. Back for | T. F. Pryor, Jr | 36,424 | July 14 | 105 | 484 |
| Mirrors or similar articles. Back for hand- | Z. Freund | 36,365 | June 16 | 104 | 1885 |
| Monument | F. E. Twiss | 36,239 | Feb. 24 | 102 | 1770 |
| Musical-instrument body. Stringed- | C. E. Brown | 36,308 | May 5 | 104 | 299 |
| Nail-cleaners, &c. Handle for | W. H. Saart | 36,423 | July 14 | 105 | 484 |
| Ornament | K. M. Chapman | 36,614 | Nov. 3 | 107 | 259 |
| Ornament for vessels, &c | E. Bächle | 36,449 | July 21 | 105 | 735 |
| Ornament for vessels, &c | E. Bächle | 36,470 | Aug. 4 | 105 | 1249 |
| Ornaments. Font of | T. M. Cleland | 36,368 | June 16 | 104 | 1885 |
| Oven. Portable | W. H. Dahman | 36,680 | Dec. 15 | 107 | 1963 |
| Oven. Portable | W. H. Dahman | 36,681 | Dec. 15 | 107 | 1963 |
| Paper. Wall- | I. Leroy | 36,720 | Dec. 29 | 107 | 2518 |
| Paper. Wall- | I. Leroy | 36,721 | Dec. 29 | 107 | 2518 |
| Partition. Ornamental | C. F. Kade | 36,289 | Apr. 14 | 103 | 1672 |
| Photograph-mount | F. E. Housh | 36,530 | Aug. 25 | 105 | 2048 |
| Photographs, pictures, and illustrative matter. Panel border for | E. F. Eberle | 36,712 | Dec. 29 | 107 | 2516 |
| Piano-case | G. Brunninghausen | 36,599 | Oct. 20 | 106 | 2005 |
| Pianos. Casing for players for | C. L. Emmons | 36,565 | Sept. 22 | 106 | 987 |
| Pianos. Casing for players for | C. L. Emmons | 36,566 | Sept. 22 | 106 | 987 |
| Picture-frame | R. Benziger | 36,256 | Mar. 31 | 103 | 1153 |
| Picture-frame | C. D. Golden | 36,456 | July 21 | 105 | 736 |
| Picture-frame | H. L. Meyer | 36,477 | Aug. 4 | 105 | 1251 |
| Picture-frame | S. Balinski | 36,529 | Aug. 25 | 105 | 2048 |
| Picture-frame | H. L. Ashton | 36,690 | Dec. 22 | 107 | 2223 |
| Pictures, mirrors, &c. Frame for | E. Oldenbusch | 36,691 | Dec. 22 | 107 | 2223 |
| Pillow cover. Sofa- | N. Y. Hamilton | 36,272 | Mar. 31 | 103 | 1155 |
| Pillow cover. Sofa- | C. M. Draper | 36,483 | Aug. 4 | 105 | 1252 |
| Pipe. Indian peace- | A. S. Speirs | 36,669 | Dec. 8 | 107 | 1646 |
| Pipe-rack | D. M. Wunschow | 36,527 | Aug. 25 | 105 | 2048 |
| Plate | A. J. Meakin | 36,466 | July 28 | 105 | 966 |
| Plate | G. R. West | 36,538 | Sept. 8 | 106 | 533 |
| Plate | M. A. Haley | 36,552 | Sept. 15 | 106 | 755 |
| Plate, dish, or similar article | C. E. Haviland | 36,505 | Aug. 18 | 105 | 1768 |
| Plate or similar article | C. A. May | 36,193 | Jan. 20 | 102 | 615 |
| Plate or similar article | C. J. Ahrenfeldt | 36,250 | Mar. 24 | 103 | 878 |
| Plate or similar article | G. C. Thiesen | 36,260 | Mar. 31 | 103 | 1153 |
| Plate or similar article | C. J. Ahrenfeldt | 36,261 | Mar. 31 | 103 | 1154 |
| Plate or similar article | C. A. May | 36,353 | June 9 | 104 | 1644 |
| Plate or similar article | A. Léger | 36,363 | June 16 | 104 | 1885 |
| Radiator | J. R. Wotherspoon | 36,355 | June 9 | 104 | 1644 |
| Radiator | E. V. Seeler | 36,507 | Aug. 18 | 105 | 1768 |
| Radiator | E. P. Waggoner | 36,589 | Oct. 13 | 106 | 1768 |
| Radiator | C. M. Woolley | 36,607 | Oct. 27 | 106 | 2278 |
| Radiator-section | R. K. Story | 36,400 | June 30 | 104 | 2429 |
| Range | G. W. Cope and W. L. Bertram | 36,311 | May 5 | 104 | 299 |
| Range | G. W. Cope and W. L. Bertram | 36,334 | May 12 | 104 | 565 |
| Range. Cooking- | A. F. Harter | 36,310 | May 5 | 104 | 299 |
| Receptacle-handle | E. Bächle | 36,452 | July 21 | 105 | 735 |
| Receptacle-spout | E. Bächle | 36,453 | July 21 | 105 | 735 |
| Reflector for artificial lights | O. A. Mygatt | 36,214 | Feb. 3 | 102 | 1041 |
| Reflector for artificial lights | O. A. Mygatt | 36,215 | Feb. 3 | 102 | 1042 |
| Register case. Hotel- | H. K. Greenman | 36,299 | Apr. 28 | 103 | 2161 |
| Register-plate | E. C. Fox | 36,578 | Oct. 6 | 106 | 1490 |
| Rein-guide | J. W. Brooker | 36,590 | Oct. 13 | 106 | 1768 |
| Rein-holder | S. A. Harrell | 36,674 | Dec. 8 | 107 | 1647 |
| Rheostat or controller cover | W. A. Price | 36,399 | June 30 | 104 | 2429 |
| Ring | J. C. Miller | 36,274 | Apr. 7 | 103 | 1407 |
| Rug | E. T. Brundage | 36,334 | May 26 | 104 | 1109 |
| Rug | E. T. Brundage | 36,335 | May 26 | 104 | 1109 |
| Rug | E. T. Brundage | 36,336 | May 26 | 104 | 1109 |
| Rug | E. T. Brundage | 36,337 | May 26 | 104 | 1109 |
| Rug | E. T. Brundage | 36,338 | May 26 | 104 | 1110 |
| Rug | E. T. Brundage | 36,339 | May 26 | 104 | 1110 |
| Saucer | M. A. Haley | 36,551 | Sept. 15 | 106 | 755 |
| Show-case | C. Gantert | 36,371 | June 16 | 104 | 1886 |
| Sign-box | J. N. Early | 36,217 | Feb. 3 | 102 | 1042 |
| Silverware-mounting | A. C. Miller | 36,603 | Oct. 27 | 106 | 2277 |
| Silverware, &c. Mounting for | C. A. Bennett | 36,298 | Apr. 28 | 103 | 2160 |
| Silverware or similar articles. Handle for | H. Weber | 36,520 | Aug. 25 | 105 | 2047 |
| Silverware or similar articles. Handle for | H. Weber | 36,521 | Aug. 25 | 105 | 2047 |
| Silverware or similar articles. Handle for | H. Weber | 36,652 | Dec. 1 | 107 | 1363 |
| Silverware or similar articles. Handle for | H. Weber | 36,653 | Dec. 1 | 107 | 1364 |
| Silverware or similar articles. Lip for | H. Weber | 36,655 | Dec. 1 | 107 | 1364 |
| Silverware or similar articles. Spout for | H. Weber | 36,519 | Aug. 25 | 105 | 2047 |
| Silverware or similar articles. Spout for | H. Weber | 36,651 | Dec. 1 | 107 | 1363 |
| Silverware or similar articles. Tip for | H. Weber | 36,654 | Dec. 1 | 107 | 1364 |

*Alphabetical list of designs*—Continued.

| Design. | Name. | No. | Date. | Official Gazette. Vol. | Page. |
|---|---|---|---|---|---|
| Silverware or similar articles. Trimming for | H. Weber | 36,522 | Aug. 25 | 105 | 2047 |
| Silverware or similar articles. Trimming for | H. Weber | 36,523 | Aug. 25 | 105 | 2047 |
| Smoke-ring maker | E. Nahr | 36,526 | Aug. 25 | 105 | 2048 |
| Smokers' articles. Holder for | D. M. Wunschow | 36,528 | Aug. 25 | 105 | 2048 |
| Soap cake | E. Ross | 36,287 | Apr. 14 | 103 | 1672 |
| Spoon | G. G. Greenburg | 36,342 | June 2 | 104 | 1381 |
| Spoon | C. R. Boas | 36,613 | Nov. 3 | 107 | 258 |
| Spoon, fork, or similar article. Handle for a | G. L. Crowell, Jr | 36,240 | Mar. 3 | 103 | 216 |
| Spoon or fork handle | P. B. Ball | 36,420 | July 14 | 105 | 483 |
| Spoon or fork handle | F. Habensack | 36,422 | July 14 | 105 | 484 |
| Spoon or similar article | C. B. Shepard | 36,567 | Sept. 22 | 106 | 987 |
| Spoon. Souvenir- | P. A. Haberl | 36,249 | Mar. 24 | 103 | 878 |
| Spoons, forks, &c. Handle for | W. C. Codman | 36,196 | Jan. 27 | 102 | 809 |
| Spoons, forks, &c. Handle for | J. Clulee | 36,284 | Apr. 14 | 103 | 1671 |
| Spoons, forks, &c. Handle for | S. A. Keller | 36,292 | Apr. 21 | 103 | 1903 |
| Spoons, forks, or similar articles. Handle for | H. Hillbom | 36,379 | June 30 | 104 | 2426 |
| Spoons, forks, or similar articles. Handle for | H. Hillbom | 36,380 | June 30 | 104 | 2426 |
| Spoons, forks, or similar articles. Handle for | H. Hillbom | 36,381 | June 30 | 104 | 2426 |
| Spoons, forks, or similar articles. Handle for | H. Hillbom | 36,382 | June 30 | 104 | 2426 |
| Spoons, forks, or similar articles. Handle for | H. Hillbom | 36,383 | June 30 | 104 | 2426 |
| Spoons, forks, or similar articles. Handle for | F. E. Pretat | 36,389 | June 30 | 104 | 2427 |
| Spoons, forks, or similar articles. Handle for | C. A. Bennett | 36,412 | July 7 | 105 | 251 |
| Spoons, forks, or similar articles. Handle for | W. C. Codman | 36,421 | July 14 | 105 | 484 |
| Spoons, forks, or similar articles. Handle for | W. R. Stocking | 36,498 | Aug. 18 | 105 | 1766 |
| Spoons, forks, or similar articles. Handle for | E. Crees and C. S. Court | 36,515 | Aug. 25 | 105 | 2046 |
| Spoons, forks, or similar articles. Handle for | E. Crees and C. S. Court | 36,516 | Aug. 25 | 105 | 2046 |
| Spoons, forks, or similar articles. Handle for | S. A. Keller | 36,518 | Aug. 25 | 105 | 2047 |
| Spoons, forks, or similar articles. Handle for | E. Crees and C. S. Court | 36,535 | Sept. 8 | 106 | 532 |
| Spoons, forks, or similar articles. Handle for | E. Crees and C. S. Court | 36,536 | Sept. 8 | 106 | 532 |
| Spoons, forks, or similar articles. Handle for | J. E. Straker, Jr | 36,561 | Sept. 22 | 106 | 986 |
| Spoons, forks, or similar articles. Handle for | P. J. Chéron | 36,569 | Oct. 6 | 106 | 1489 |
| Spoons, forks, or similar articles. Handle for | E. Crees and C. S. Court | 36,570 | Oct. 6 | 106 | 1489 |
| Spoons, forks, or similar articles. Handle for | E. Crees and C. S. Court | 36,571 | Oct. 6 | 106 | 1489 |
| Spoons, forks, or similar articles. Handle for | E. Crees and C. S. Court | 36,572 | Oct. 6 | 106 | 1489 |
| Spoons, forks, or similar articles. Handle for | E. Crees and C. S. Court | 36,583 | Oct. 13 | 106 | 1768 |
| Spoons, forks, or similar articles. Handle for | E. Crees and C. S. Court | 36,584 | Oct. 13 | 106 | 1768 |
| Spoons, forks, or similar articles. Handle for | E. Crees and C. S. Court | 36,585 | Oct. 13 | 106 | 1768 |
| Spoons, forks, or similar articles. Handle for | E. Crees and C. S. Court | 36,586 | Oct. 13 | 106 | 1768 |
| Spoons, forks, or similar articles. Handle for | E. Crees and C. S. Court | 36,587 | Oct. 13 | 106 | 1768 |
| Spoons, forks, or similar articles. Handle for | E. Crees and C. S. Court | 36,604 | Oct. 27 | 106 | 2278 |
| Spoons, forks, or similar articles. Handle for | E. Crees and C. S. Court | 36,624 | Nov. 17 | 107 | 822 |
| Spoons, forks, or similar articles. Handle for | E. Crees and C. S. Court | 36,625 | Nov. 17 | 107 | 822 |
| Spoons, forks, or similar articles. Handle for | E. Crees and C. S. Court | 36,626 | Nov. 17 | 107 | 822 |
| Spoons, forks, or similar articles. Handle for | E. Crees and C. S. Court | 36,637 | Nov. 24 | 107 | 1085 |
| Spoons, forks, or similar articles. Handle for | E. Crees and C. S. Court | 36,638 | Nov. 24 | 107 | 1085 |
| Spoons, forks, or similar articles. Handle for | E. Crees and C. S. Court | 36,639 | Nov. 24 | 107 | 1085 |
| Spoons, forks, or similar articles. Handle for | E. Crees and C. S. Court | 36,640 | Nov. 24 | 107 | 1085 |
| Spoons, forks, or similar articles. Handle for | E. Crees and C. S. Court | 36,641 | Nov. 24 | 107 | 1085 |
| Spoons, forks, or similar articles. Handle for | E. Crees and C. S. Court | 36,642 | Nov. 24 | 107 | 1085 |
| Spoons, forks, or similar articles. Handle for | E. Crees and C. S. Court | 36,667 | Dec. 8 | 107 | 1646 |
| Spoons, forks, or similar articles. Handle for | E. Crees and C. S. Court | 36,668 | Dec. 8 | 107 | 1646 |
| Spoons, forks, or similar articles. Handle for | E. Crees and C. S. Court | 36,687 | Dec. 22 | 107 | 2222 |
| Spoons, forks, or similar articles. Handle for | J. E. Straker, Jr | 36,688 | Dec. 22 | 107 | 2222 |
| Spoons, forks, or similar articles. Handle for | F. Habensack | 36,708 | Dec. 29 | 107 | 2515 |
| Spoons, forks, or similar articles. Handle for | J. H. Hobson | 36,709 | Dec. 29 | 107 | 2516 |
| Spoons, &c. Handle for | E. Crees and C. S. Court | 36,220 | Feb. 10 | 102 | 1282 |
| Spoons, &c. Handle for | E. Crees and C. S. Court | 36,229 | Feb. 17 | 102 | 1543 |
| Spoons, &c. Handle for | E. Crees and C. S. Court | 36,230 | Feb. 17 | 102 | 1544 |
| Spoons or similar articles. Handle for | E. Crees and C. S. Court | 36,295 | Apr. 28 | 103 | 2160 |
| Spoons or similar articles. Handle for | E. Crees and C. S. Court | 36,296 | Apr. 28 | 103 | 2161 |
| Spoons or similar articles. Handle for | E. Crees and C. S. Court | 36,303 | May 5 | 104 | 298 |
| Spoons or similar articles. Handle for | E. Crees and C. S. Court | 36,304 | May 5 | 104 | 298 |
| Spoons or similar articles. Handle for | E. Crees and C. S. Court | 36,305 | May 5 | 104 | 298 |
| Spoons or similar articles. Handle for | E. Crees and C. S. Court | 36,315 | May 12 | 104 | 563 |
| Spoons or similar articles. Handle for | E. Crees and C. S. Court | 36,316 | May 12 | 104 | 564 |
| Spoons or similar articles. Handle for | E. Crees and C. S. Court | 36,360 | June 16 | 104 | 1884 |
| Spoons or similar articles. Handle for | E. Crees and C. S. Court | 36,361 | June 16 | 104 | 1884 |
| Spoons or similar articles. Handle for | J. E. Straker, Jr | 36,362 | June 16 | 104 | 1884 |
| Spoons or similar articles. Handle for | E. Crees and C. S. Court | 36,385 | June 30 | 104 | 2427 |
| Spoons or similar articles. Handle for | E. Crees and C. S. Court | 36,386 | June 30 | 104 | 2427 |
| Spoons or similar articles. Handle for | E. Crees and C. S. Court | 36,387 | June 30 | 104 | 2427 |
| Spoons or similar articles. Handle for | J. E. Straker, Jr | 36,388 | June 30 | 104 | 2427 |
| Spoons or similar articles. Handle for | J. E. Straker, Jr | 36,419 | July 14 | 105 | 483 |
| Spoons or similar articles. Handle for | E. Crees and C. S. Court | 36,471 | Aug. 4 | 105 | 1250 |
| Spoons or similar articles. Handle for | J. E. Straker, Jr | 36,472 | Aug. 4 | 105 | 1250 |
| Spoons or similar articles. Handle for | E. Crees and C. S. Court | 36,499 | Aug. 18 | 105 | 1767 |
| Spoons or similar articles. Handle for | J. E. Straker, Jr | 36,517 | Aug. 25 | 105 | 2046 |
| Stand | G. D. Chisholm | 36,481 | Aug. 4 | 105 | 1251 |
| Statuette | E. Denivelle and J. Cosgrove | 36,212 | Feb. 3 | 102 | 1041 |
| Statuette | E. Denivelle and J. Cosgrove | 36,213 | Feb. 3 | 102 | 1041 |
| Statuette | R. F. Outcault | 36,302 | May 5 | 104 | 298 |
| Stone. Cut | A., M., and I. Tolkowsky | 36,340 | June 2 | 104 | 1381 |
| Stone. Cut | H. Cooper | 36,359 | June 16 | 104 | 1884 |
| Stone. Cut | A., M., and I. Tolkowsky | 36,600 | Oct. 27 | 106 | 2277 |
| Stool | C. D. Orcutt | 36,263 | Mar. 31 | 103 | 1154 |
| Stool | C. D. Orcutt | 36,264 | Mar. 31 | 103 | 1154 |
| Stool | C. D. Orcutt | 36,265 | Mar. 31 | 103 | 1154 |
| Stool | C. D. Orcutt | 36,266 | Mar. 31 | 103 | 1154 |
| Stool-leg | C. D. Orcutt | 36,281 | Apr. 7 | 103 | 1403 |
| Stool-leg | C. D. Orcutt | 36,288 | Apr. 14 | 103 | 1672 |
| Stove | S. Boal | 36,198 | Jan. 27 | 102 | 809 |
| Stove | E. Ambrose | 36,290 | Apr. 14 | 103 | 1672 |
| Stove | T. R. Kennedy and E. J. King | 36,439 | July 14 | 105 | 487 |
| Stove | W. L. Mersfelder | 36,494 | Aug. 11 | 105 | 1523 |
| Stove | T. R. Kennedy and E. J. King | 36,596 | Oct. 20 | 106 | 2004 |
| Stove | O. D. and B. Hunt | 36,658 | Dec. 1 | 107 | 1364 |

*Alphabetical list of designs*—Continued.

| Design. | Name. | No. | Date. | Official Gazette. | |
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| | | | | Vol. | Page. |
| Stove | W. W. Woods | 36,697 | Dec. 22 | 107 | 2224 |
| Stove-burner drum. Oil- | W. H. Silver | 36,441 | July 14 | 105 | 487 |
| Stove. Cooking- | A. F. Harter | 36,321 | May 12 | 104 | 564 |
| Stove. Cooking- | A. F. Harter | 36,322 | May 12 | 104 | 565 |
| Stove. Gas- | J. F. and F. O. Adams | 36,533 | Sept. 1 | 106 | 255 |
| Stove. Gas- | W. M. Crane | 36,556 | Sept. 15 | 106 | 756 |
| Stove. Heating- | G. W. Cope and W. L. Bertram | 36,312 | May 5 | 104 | 300 |
| Stove. Heating- | A. F. Harter | 36,323 | May 12 | 104 | 565 |
| Stove. Oil- | W. H. Wilder | 36,216 | Feb. 3 | 102 | 1042 |
| Stove. Oil or gas | C. H. Boeck | 36,443 | July 14 | 105 | 487 |
| Stove or range | J. Magee | 36,440 | July 14 | 105 | 487 |
| Stove or range. Cooking | R. Thiem | 36,301 | Apr. 28 | 103 | 2160 |
| Stove ornament | F. E. Lee | 36,325 | May 12 | 104 | 565 |
| Stove-plates, &c. Rim for | J. Magee | 36,615 | Nov. 3 | 107 | 259 |
| Stove-ranges. Connected bracket and high shelf for | W. A. Spicer | 36,415 | July 7 | 105 | 252 |
| Stove top plate and rim. Oil- | W. H. Silver | 36,442 | July 14 | 105 | 487 |
| Table-cloth | J. A. Steinau | 36,512 | Aug. 18 | 105 | 1769 |
| Table-mat | R. Stock | 36,350 | June 2 | 104 | 1383 |
| Talking-machine cabinet | L. F. Douglass | 36,717 | Dec. 29 | 107 | 2517 |
| Talking-machine cabinet | L. F. Douglass | 36,718 | Dec. 29 | 107 | 2517 |
| Teapot | A. F. Jackson | 36,297 | Apr. 28 | 103 | 2161 |
| Teapot | M. A. Haley | 36,555 | Sept. 15 | 106 | 756 |
| Teapot or similar article | C. J. Ahrenfeldt | 36,306 | May 5 | 104 | 298 |
| Teapot or similar article | E. Goetze | 36,394 | June 30 | 104 | 2428 |
| Teapot or similar article | A. F. Jackson | 36,537 | Sept. 8 | 106 | 532 |
| Teething-ring | C. A. Dunn | 36,283 | Apr. 14 | 103 | 1671 |
| Textile fabric | W. S. Friedlander | 36,405 | June 30 | 104 | 2430 |
| Tile covering for floors or other surfaces | J. K. Sierer | 36,247 | Mar. 17 | 103 | 651 |
| Tile covering for floors, walls, &c | J. K. Sierer | 36,234 | Feb. 24 | 102 | 1769 |
| Tile covering for floors, walls, or other surfaces | B. P. Leslie | 36,370 | June 16 | 104 | 1886 |
| Tile. Facing- | T. Woodward | 36,646 | Nov. 24 | 107 | 1086 |
| Tiling | T. F. Furness | 36,313 | May 5 | 104 | 300 |
| Tiling | T. F. Furness | 36,343 | June 2 | 104 | 1381 |
| Tiling | T. F. Furness | 36,344 | June 2 | 104 | 1381 |
| Tiling | T. F. Furness | 36,345 | June 2 | 104 | 1382 |
| Tiling | T. F. Furness | 36,346 | June 2 | 104 | 1382 |
| Tiling | T. F. Furness | 36,347 | June 2 | 104 | 1382 |
| Tiling | M. C. Boyer | 36,348 | June 2 | 104 | 1382 |
| Tiling | O. Bergstrom | 36,356 | June 9 | 104 | 1645 |
| Tiling | A. W. Koch | 36,404 | June 30 | 104 | 2430 |
| Tiling | W. W. Henry | 36,460 | July 21 | 105 | 737 |
| Tiling | A. A. Spadone | 36,482 | Aug. 4 | 105 | 1252 |
| Tiling | R. L. Chipman | 36,558 | Sept. 15 | 106 | 757 |
| Toy money-bank case | A. H. Kimberling | 36,579 | Oct. 6 | 106 | 1491 |
| Tray | G. F. Kolb | 36,695 | Dec. 22 | 107 | 2224 |
| Trunk-pad | J. B. La Rock | 36,300 | Apr. 28 | 103 | 2161 |
| Type. Font of | W. Evans | 36,358 | June 9 | 104 | 1645 |
| Type. Font of | L. S. Ipsen | 36,366 | June 16 | 104 | 1885 |
| Type. Font of | L. S. Ipsen | 36,367 | June 16 | 104 | 1885 |
| Type. Font of | H. Uhlenburg | 36,406 | June 30 | 104 | 2430 |
| Type. Font of | W. F. Capitain | 36,461 | July 21 | 105 | 737 |
| Type. Font of printing- | B. Nadall | 36,357 | June 9 | 104 | 1645 |
| Vase. Wall- | E. Elliott | 36,630 | Nov. 17 | 107 | 823 |
| Vehicle-body | A. L. Riker | 36,225 | Feb. 10 | 102 | 1283 |
| Vehicle-body | W. Dieter | 36,534 | Sept. 1 | 106 | 255 |
| Vessels or similar articles. Metal border for | S. Stohr | 36,364 | June 16 | 104 | 1885 |
| Wagon-body | G. H. Barschow | 36,659 | Dec. 1 | 107 | 1364 |
| Wagon-body | G. H. Barschow | 36,660 | Dec. 1 | 107 | 1364 |
| Wagon-body | G. H. Barschow | 36,661 | Dec. 1 | 107 | 1365 |
| Wagon-body | G. H. Barschow | 36,705 | Dec. 22 | 107 | 2225 |
| Wagon-body | G. H. Barschow | 36,706 | Dec. 22 | 107 | 2226 |
| Wagon-body | G. H. Barschow | 36,707 | Dec. 22 | 107 | 2226 |
| Wall-plate. Sheet-metal | D. H. Wagner | 36,704 | Dec. 22 | 107 | 2225 |
| Watch-charm | J. C. Miller | 36,446 | July 21 | 105 | 734 |
| Watch-charm or similar article | J. A. Browne | 36,462 | July 28 | 105 | 966 |
| Watch-charm or similar article | F. L. Schmalz | 36,497 | Aug. 18 | 105 | 1766 |
| Watchcase | L. C. Calame | 36,228 | Feb. 17 | 102 | 1543 |
| Watchcase | O. M. Freeman | 36,601 | Oct. 27 | 106 | 2277 |
| Watchcase | O. M. Freeman | 36,602 | Oct. 27 | 106 | 2277 |
| Water-bag | E. E. Menges | 36,397 | June 30 | 104 | 2428 |
| Weighing-machine casing | M. Daab, Jr. | 36,645 | Nov. 24 | 107 | 1086 |

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| Title. | Name. | No. | Date. | Official Gazette. Volume. | Page. |
|---|---|---|---|---|---|
| Abrasive material. Carborundum | Carborundum Company | 40,220 | Apr. 28 | 103 | 2167 |
| Abrasive tools, wheels, and materials | Safety Emery Wheel Company | 41,268 | Oct. 6 | 106 | 1498 |
| Adhesive compounds. Certain named | V. C. & C. V. King Co | 39,868 | Mar. 3 | 103 | 218 |
| Advertising novelties and devices made wholly or in part of pyroxylin or its compounds. | F. F. Pulver Company | 41,029 | Sept. 1 | 106 | 257 |
| Air, &c. Mechanism for regulating or controlling supply of moisture to the | Johnson Service Company | 40,125 | Apr. 14 | 103 | 1676 |
| Ale, beer, and porter | Boston Beer Company | 41,365 | Oct. 27 | 106 | 2280 |
| Ale. Ginger- | Hagan and Dodd Co | 41,617 | Dec. 8 | 107 | 1652 |
| Ale, lemon-soda, and sarsaparilla. Ginger- | T. P. Luck | 40,620 | June 16 | 104 | 1891 |
| Alteratives | M. A. Wheeler | 41,705 | Dec. 22 | 107 | 2228 |
| Anesthetics | E. Ritsert | 41,356 | Oct. 27 | 106 | 2280 |
| Anesthetics. Certain named | J. B. Bengué | 40,904 | Aug. 11 | 105 | 1526 |
| Anesthetics. Certain named | J. B. Bengué | 40,905 | Aug. 11 | 105 | 1526 |
| Antipyretics, narcotics, and soporifics | F. A. Luyties | 39,816 | Feb. 17 | 102 | 1546 |
| Antipyretics, narcotics, and soporifics | J. O. Hunicke | 40,361 | May 12 | 104 | 573 |
| Antiseptic and antimoth fabrics | J. S. Bernheimer & Bro | 40,403 | May 19 | 104 | 846 |
| Antiseptic and antirheumatic. Internal | Schieffelin & Co | 40,760 | July 14 | 105 | 490 |
| Antiseptic and astringent powders | Geo. A. Newman Co | 41,296 | Oct. 13 | 106 | 1771 |
| Antiseptic and disinfectant | Oakland Chemical Co | 40,998 | Aug. 25 | 105 | 2052 |
| Antiseptic and disinfecting compound | Telephonine Company of America | 40,961 | Aug. 18 | 105 | 1774 |
| Antiseptic and germicidal preparations | Provo Chemical Co | 41,695 | Dec. 22 | 107 | 2228 |
| Antiseptic and germicide preparation | Keimol Chemical Company | 40,256 | May 5 | 104 | 303 |
| Antiseptic and germicide solutions | Nelson, Baker & Co | 41,780 | Dec. 29 | 107 | 2523 |
| Antiseptic and uric-acid solvent. Internal | Knoll & Co | 40,632 | June 23 | 104 | 2142 |
| Antiseptic compounds | Mu-Col Company | 40,479 | June 2 | 104 | 1385 |
| Antiseptic fluid for internal and external use | Mülhens & Kropff | 40,672 | June 30 | 104 | 2432 |
| Antiseptic, germ, insect, and worm destroyer | National Medical Co | 40,257 | May 5 | 104 | 303 |
| Antiseptic in powdered and liquid form | J. Bockar | 40,731 | July 7 | 105 | 254 |
| Antiseptic internal injectors | Kutnow Bros | 39,917 | Mar. 10 | 103 | 422 |
| Antiseptic. Intestinal | Farbenfabriken of Elberfeld Co | 40,859 | Aug. 4 | 105 | 1254 |
| Antiseptic mouth-wash and gargle | Dentists Pharmacal Company | 39,740 | Feb. 3 | 102 | 1046 |
| Antiseptic or disinfectant compound | Quin Sharpe Drug Co | 41,567 | Dec. 1 | 107 | 1368 |
| Antiseptic powder | Sharp & Dohme | 41,295 | Oct. 13 | 106 | 1771 |
| Antiseptic powders. Certain named | E. D. Swenk | 40,436 | May 26 | 104 | 1112 |
| Antiseptic preparations | Larimore and Co | 39,979 | Mar. 24 | 103 | 883 |
| Antiseptic preparations for mouth and nose washes | Crandall Pharmacal Company | 41,517 | Nov. 24 | 107 | 1088 |
| Antiseptics | F. A. Kummer | 40,155 | Apr. 21 | 103 | 1907 |
| Antiseptics | Columbus Pharmacal Co | 40,608 | June 16 | 104 | 1890 |
| Antiseptics | C. Zoller & Co | 41,251 | Oct. 6 | 106 | 1497 |
| Antiseptics. Certain named | W. H. Metcalf | 39,815 | Feb. 17 | 102 | 1546 |
| Antiseptics, disinfectants, germicides, and insecticides | J. Baxeres de Alzugaray | 41,781 | Dec. 29 | 107 | 2523 |
| Antitoxic serums | Ichthyol Gesellschaft, Cordes, Hermanni & Co. | 40,562 | June 9 | 104 | 1650 |
| Antitubercular and expectorant | Schieffelin & Co | 40,759 | July 14 | 105 | 490 |
| Apparel. Certain named wearing- | S. Rosenthal & Bros | 39,897 | Mar. 3 | 103 | 220 |
| Apparel. Certain named wearing- | Rose Mfg. Co | 39,995 | Mar. 31 | 103 | 1156 |
| Apparel. Certain named wearing- | Wetzel | 39,996 | Mar. 31 | 103 | 1156 |
| Apples. Dried or evaporated | F. Ducasse | 40,648 | June 23 | 104 | 2144 |
| Artificial table-waters | W. T. Wagner's Sons | 40,742 | July 7 | 105 | 255 |
| Asphalt | Commercial Asphalt Co | 40,503 | June 2 | 104 | 1387 |
| Asphalt and asphalt compositions | G. C. Warren | 40,319 | May 12 | 104 | 569 |
| Asphalt and products derived therefrom | Orinoco Asphalt, Gesellschaft mit Beschränkter Haftung. | 40,057 | Apr. 7 | 103 | 1411 |
| Asphaltic cements | Barber Asphalt Paving Co | 41,529 | Nov. 24 | 107 | 1089 |
| Asphaltic cements | Barber Asphalt Paving Co | 41,530 | Nov. 24 | 107 | 1089 |
| Asphaltic cements | Barber Asphalt Paving Co | 41,531 | Nov. 24 | 107 | 1089 |
| Asphaltic cements | Barber Asphalt Paving Co | 41,532 | Nov. 24 | 107 | 1089 |
| Asphaltic cements | Barber Asphalt Paving Co | 41,533 | Nov. 24 | 107 | 1090 |
| Asphaltic cements | Barber Asphalt Paving Co | 41,534 | Nov. 24 | 107 | 1090 |
| Asphaltum for paving purposes. Refined | H. Brown | 40,713 | June 30 | 104 | 2436 |
| Astringent solutions for topical application | Norwich Pharmacal Company | 40,258 | May 5 | 104 | 303 |
| Automobiles and motor-cycles and their component parts | Birmingham Small Arms Co | 41,269 | Oct. 6 | 106 | 1498 |
| Automobiles and motor-cycles and their component parts | Birmingham Small Arms Co | 41,270 | Oct. 6 | 106 | 1498 |
| Automobiles and parts thereof | Pan American Motor Co | 39,707 | Jan. 27 | 102 | 816 |
| Automobiles or motor-vehicles and parts thereof | V. G. Apple | 41,502 | Nov. 17 | 107 | 828 |
| Axes and hatchets | Hockaday Hardware Company | 41,340 | Oct. 20 | 106 | 2009 |
| Bait. Spoon- | G. M. Skinner | 39,702 | Jan. 27 | 102 | 815 |
| Baking-powder | J. C. Grant Chemical Company | 40,709 | June 30 | 104 | 2435 |
| Baking-powder | F. B. Chamberlain Commission Co | 40,874 | Aug. 4 | 105 | 1255 |
| Baking-powder | Auburn Extract Company | 41,086 | Sept. 8 | 106 | 537 |
| Baking-powder | W. E. Thompson | 41,515 | Nov. 24 | 107 | 1088 |
| Baking-powder | J. C. Grant Chemical Company | 41,577 | Dec. 1 | 107 | 1369 |
| Baking-powders. Acid ingredients for | Layton Pure Food Company | 39,779 | Feb. 10 | 102 | 1288 |
| Bath-tubs | T. G. Knight | 39,948 | Mar. 17 | 103 | 654 |
| Batteries and electrical appliances for treating nervous diseases. | Wireless Sun Glow Cyllindrode Battery Co. | 39,735 | Feb. 3 | 102 | 1045 |
| Batteries, carbons, and agglomerates for electrical purposes. | Société Anonyme le Carbone | 39,923 | Mar. 10 | 103 | 422 |
| Batteries, carbons, and agglomerates for electrical purposes. | Société Anonyme le Carbone | 39,924 | Mar. 10 | 103 | 422 |
| Batteries, carbons, and agglomerates for electrical purposes. | Soc. Anonyme Le Carbone | 41,342 | Oct. 20 | 106 | 2010 |
| Battery-cells | American Hard Rubber Co | 40,406 | May 19 | 104 | 847 |
| Bay-rum | S. Pollak | 41,109 | Sept. 15 | 106 | 759 |

*Alphabetical list of trade-marks*—Continued.

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|---|---|---|---|---|---|
| Beans, either as a food or as a seed | S. M. Isbell & Co | 39,683 | Jan. 27 | 102 | 813 |
| Beef extracts and beverages made therefrom | American Soda Fountain Company | 41,450 | Nov. 10 | 107 | 535 |
| Beer | Davenport Malting Co | 40,441 | May 26 | 104 | 1113 |
| Beer | George A. Bohrer Brewing Co | 40,915 | Aug. 11 | 105 | 1527 |
| Beer | Wm. J. Lemp Brewing Co | 40,948 | Aug. 18 | 105 | 1773 |
| Beer | Wm. J. Lemp Brewing Co | 40,949 | Aug. 18 | 105 | 1773 |
| Beer | Oshkosh Brewing Company | 40,988 | Aug. 25 | 105 | 2050 |
| Beer | M. B. Foster & Sons | 41,303 | Oct. 13 | 106 | 1771 |
| Beer | M. B. Foster & Sons | 41,304 | Oct. 13 | 106 | 1772 |
| Beer | G. Pierce | 41,405 | Nov. 3 | 107 | 261 |
| Beer | C. A. Lammers Bottling Company | 41,760 | Dec. 29 | 107 | 2521 |
| Beer, ale, porter, stout, and malt extract | Kamm & Schellinger Brewing Co | 40,544 | June 9 | 104 | 1648 |
| Beer and malt extract | Birk Bros. Brewing Co | 40,198 | Apr. 28 | 103 | 2164 |
| Beer and root-beer. Birch- | D. Wahlers | 41,664 | Dec. 15 | 107 | 1965 |
| Beer, barley-stout, ale, and barley and malt extracts | Keeley Brewing Company | 41,575 | Dec. 1 | 107 | 1369 |
| Beer. Lager- | Pabst Brewing Company | 40,066 | Apr. 7 | 103 | 1412 |
| Beer. Lager- | Bellingham Bay Brewery | 41,366 | Oct. 27 | 106 | 2281 |
| Beer. Lager- | Fred Hollender & Co | 41,446 | Nov. 10 | 107 | 534 |
| Beer. Lager and bottled | Terre Haute Brewing Co | 39,906 | Mar. 10 | 103 | 420 |
| Belting. Elastic | C. A. Edgarton Mfg. Company | 39,666 | Jan. 20 | 102 | 618 |
| Belts and belting. Machine | Fleming, Birkby & Goodall | 41,550 | Dec. 1 | 107 | 1366 |
| Belts and suspenders. Combined | Wechsler Bros | 40,132 | Apr. 21 | 103 | 1905 |
| Belts. Electric | Dr. McLaughlin Company | 40,808 | July 21 | 105 | 740 |
| Belts. Ladies' | H. A. Austin & Co | 39,691 | Jan. 27 | 102 | 814 |
| Belts. Wearing-apparel | A. C. Knothe | 40,627 | June 23 | 104 | 2142 |
| Beverage. Carbonated | L. Goulding | 41,036 | Sept. 1 | 106 | 258 |
| Beverage. Certain named | Sociedad Vinicola, S. & L. Durlacher. | 39,939 | Mar. 17 | 103 | 653 |
| Beverage. Certain named | F. S. Doud | 40,349 | May 12 | 104 | 572 |
| Beverage for certain named purposes | Midnight Mineral Water Company | 40,950 | Aug. 18 | 105 | 1773 |
| Beverages. Certain named | W. A. Megrath | 40,440 | May 26 | 104 | 1113 |
| Beverages. Certain named carbonated | Gruel & Otto | 40,394 | May 19 | 104 | 845 |
| Beverages or tonics containing whisky | A. M. Hellman & Co | 40,769 | July 14 | 105 | 491 |
| Beverages. Tonic | Kalola Company | 39,938 | Mar. 17 | 103 | 653 |
| Bicycles, tricycles, and parts thereof | Aurora Automatic Machinery Company. | 39,990 | Mar. 24 | 103 | 884 |
| Binders. Loose-leaf | Chicago Shipping & Receipt Book Co. | 40,214 | Apr. 28 | 103 | 2166 |
| Biscuits | Huntley & Palmers | 39,653 | Jan. 20 | 102 | 617 |
| Biscuits and cakes | Huntley & Palmers | 39,971 | Mar. 24 | 103 | 882 |
| Biscuits and cakes | Huntley & Palmers | 39,972 | Mar. 24 | 103 | 882 |
| Bitters | E. Martinazzi & Co | 40,439 | May 26 | 104 | 1113 |
| Bitters | W. A. Dozier | 40,767 | July 14 | 105 | 490 |
| Bitters. Stomach- | H. E. Schwab | 39,660 | Jan. 20 | 102 | 618 |
| Bituminous composition or cement | Warren Brothers Company | 39,976 | Mar. 24 | 103 | 882 |
| Bituminous composition or cement | Warren Brothers Company | 40,320 | May 12 | 104 | 569 |
| Blackberry-plants | F. T. Worman | 41,452 | Nov. 10 | 107 | 535 |
| Blacking, dressing, and polish. Shoe | Whittemore Bro's. and Co | 41,331 | Oct. 20 | 106 | 2008 |
| Blankets for household use | N. O'Donnell | 41,654 | Dec. 15 | 107 | 1964 |
| Bleaching-powder | St. Louis Chemical Co | 40,612 | June 16 | 104 | 1890 |
| Blouses, coats, overalls, and pants | Standard Mfg. Co | 40,928 | Aug. 18 | 105 | 1770 |
| Blowers and forges | Champion Blower & Forge Co | 39,829 | Feb. 17 | 102 | 1548 |
| Bluing | Sawyer Crystal Blue Company | 40,026 | Mar. 31 | 103 | 1159 |
| Bluing | L. Cobb | 40,279 | May 5 | 104 | 305 |
| Bluing | Troy Laundry Machinery Co | 40,536 | June 9 | 104 | 1648 |
| Bluing | M. C. O'Neill | 41,571 | Dec. 1 | 107 | 1369 |
| Boiler composition for preventing incrustation and corrosion. | J. S. Lang | 40,697 | June 30 | 104 | 2434 |
| Boiler-tubes | Worth, Baily & Co | 40,838 | July 28 | 105 | 970 |
| Boilers. Hot-water and steam | Wm. H. Page Boiler Co | 41,346 | Oct. 20 | 106 | 2010 |
| Bookcases and filing-cabinets. Sectional | Yawman & Erbe Mfg. Co | 40,325 | May 12 | 104 | 570 |
| Books | R. S. & A. B. Lacey | 41,657 | Dec. 15 | 107 | 1965 |
| Books and illustrated souvenirs. Guide- | Pacific Coast Steamship Company | 41,658 | Dec. 15 | 107 | 1965 |
| Books. Blank- | Salmon & Tredway | 41,028 | Sept. 1 | 103 | 257 |
| Boot and shoe leather soles | L. C. Bliss & Co | 39,645 | Jan. 20 | 102 | 616 |
| Boots and shoes and leather for same. Leather | Regal Shoe Company | 39,902 | Mar. 10 | 103 | 420 |
| Boots and shoes. Certain named | Jordan Marsh Company | 40,183 | Apr. 28 | 103 | 2162 |
| Boots and shoes for men and boys. Leather | Chase Merritt Co | 41,071 | Sept. 8 | 106 | 536 |
| Boots and shoes. Ladies' leather | H. E. Guptill | 40,303 | May 12 | 104 | 568 |
| Boots and shoes. Leather | S. E. Carr | 39,633 | Jan. 13 | 102 | 460 |
| Boots and shoes. Leather | F. E. Mistrot | 39,634 | Jan. 13 | 102 | 460 |
| Boots and shoes. Leather | F. W. Slater | 39,635 | Jan. 13 | 102 | 461 |
| Boots and shoes. Leather | C. A. Stern & Co | 39,833 | Feb. 24 | 102 | 1771 |
| Boots and shoes. Leather | C. A. Stern & Co | 39,834 | Feb. 24 | 102 | 1771 |
| Boots and shoes. Leather | C. A. Stern & Co | 39,835 | Feb. 24 | 102 | 1771 |
| Boots and shoes. Leather | J. E. Tilt Shoe Co | 39,900 | Mar. 10 | 103 | 420 |
| Boots and shoes. Leather | A. Newman & Co | 39,901 | Mar. 10 | 103 | 420 |
| Boots and shoes. Leather | Utz & Dunn | 39,958 | Mar. 24 | 103 | 880 |
| Boots and shoes. Leather | H. Koch | 40,043 | Apr. 7 | 103 | 1410 |
| Boots and shoes. Leather | Bay State Shoe & Leather Co | 40,184 | Apr. 28 | 103 | 2162 |
| Boots and shoes. Leather | International Shoe Co | 40,185 | Apr. 28 | 103 | 2162 |
| Boots and shoes. Leather | International Shoe Co | 40,186 | Apr. 28 | 103 | 2162 |
| Boots and shoes. Leather | J. A. & W. Bird & Co | 40,364 | May 12 | 104 | 573 |
| Boots and shoes. Leather | Guthmann, Carpenter & Telling | 40,432 | May 26 | 104 | 1112 |
| Boots and shoes. Leather | Illinois Shoe Co | 40,752 | July 14 | 105 | 489 |
| Boots and shoes. Leather | Lynchburg Shoe Co | 40,785 | July 21 | 105 | 738 |
| Boots and shoes. Leather | P. W. Minor & Son | 40,815 | July 28 | 105 | 968 |
| Boots and shoes. Leather | J. J. Costigan | 40,842 | Aug. 4 | 105 | 1253 |
| Boots and shoes. Leather | Utz & Dunn | 40,843 | Aug. 4 | 105 | 1253 |
| Boots and shoes. Leather | Green-Wheeler Shoe Company | 40,844 | Aug. 4 | 105 | 1253 |
| Boots and shoes. Leather | Green-Wheeler Shoe Company | 40,845 | Aug. 4 | 105 | 1253 |
| Boots and shoes. Leather | Green-Wheeler Shoe Company | 40,846 | Aug. 4 | 105 | 1253 |
| Boots and shoes. Leather | Green-Wheeler Shoe Company | 40,847 | Aug. 4 | 105 | 1253 |
| Boots and shoes. Leather | Forster Bros | 41,102 | Sept. 15 | 106 | 758 |
| Boots and shoes. Leather | Minnesota Shoe Company | 41,103 | Sept. 15 | 106 | 758 |
| Boots and shoes. Leather | Edmonston & Co | 41,592 | Dec. 8 | 107 | 1649 |

*Alphabetical list of trade-marks*—Continued.

| Title. | Name. | No. | Date. | Official Gazette. Vol. | Page. |
|---|---|---|---|---|---|
| Boots and shoes. Leather | Alden, Walker and Wilde | 41,593 | Dec. 8 | 107 | 1649 |
| Boots and shoes. Leather | Alden, Walker and Wilde | 41,594 | Dec. 8 | 107 | 1649 |
| Boots and shoes. Leather | Baltimore Boot and Shoe Mfg. Co | 41,744 | Dec. 29 | 107 | 2520 |
| Boots and shoes. Leather | H. C. Jenney | 41,745 | Dec. 29 | 107 | 2520 |
| Boots and shoes. Leather, kid, or vici | Sanger Bros | 39,805 | Feb. 17 | 102 | 1545 |
| Boots and shoes. Women's leather | C. W. Porter | 41,069 | Sept. 8 | 106 | 535 |
| Boots, shoes, and slippers. Certain named | C. W. Strohbeck | 40,236 | May 5 | 104 | 301 |
| Boots, shoes, and slippers. Leather | C. M. Clapp Co | 39,758 | Feb. 10 | 102 | 1285 |
| Boots, shoes, and slippers. Leather | J. W. Gibbs | 39,759 | Feb. 10 | 102 | 1285 |
| Boots, shoes, and slippers. Leather | Parker, Holmes & Co | 39,867 | Mar. 3 | 103 | 217 |
| Boots, shoes, and slippers. Leather | W. M. Halbach | 41,353 | Oct. 27 | 106 | 2279 |
| Boots, shoes, slippers, and sandals. Leather | Witchell Sons & Company | 41,169 | Sept. 29 | 106 | 1231 |
| Boots, shoes, slippers, and ties made wholly or partly of leather. | Taplan & Goldsoll | 41,276 | Oct. 13 | 106 | 1769 |
| Bracelets, lockets, and brooches | Wightman & Hough Co | 39,689 | Jan. 27 | 102 | 814 |
| Braids | Guthman, Solomons & Co | 41,692 | Dec. 22 | 107 | 2227 |
| Brake-shoes | American Brake Shoe and Foundry Co. | 40,124 | Apr. 14 | 103 | 1676 |
| Brake-shoes | American Brake Shoe Co | 40,780 | July 14 | 105 | 492 |
| Brake-shoes | American Brake Shoe Co | 40,810 | July 21 | 105 | 740 |
| Bread | M. Brunner | 40,770 | July 14 | 105 | 491 |
| Bread and biscuits | J. Graham | 40,984 | Aug. 25 | 105 | 2050 |
| Bread and cakes | A. Gisler | 40,158 | Apr. 21 | 103 | 1907 |
| Bread, biscuit, and cakes | Stewart Bread Company | 40,802 | July 21 | 105 | 740 |
| Bread, biscuits, cakes, crackers, and pies | W. J. Meikleham | 41,362 | Oct. 27 | 106 | 2280 |
| Bread or dough mixers or kneaders | Landers, Frary & Clark | 41,683 | Dec. 15 | 107 | 1968 |
| Brick and refractory lining. Fire | Asbestine Manufacturing Co | 40,718 | June 30 | 104 | 2436 |
| Bricks | G. A. Wagner | 41,162 | Sept. 22 | 106 | 991 |
| Bricks. Certain named building | H. Huennekes & Co | 40,922 | Aug. 11 | 105 | 1528 |
| Broadcloth | Lloyd L. Jackson Co | 40,700 | June 30 | 104 | 2434 |
| Broadcloth | Sullivan, Vail & Co | 41,504 | Nov. 24 | 107 | 1087 |
| Bronze-powders | S. Gallinger | 39,810 | Feb. 17 | 102 | 1546 |
| Brooms | Joseph Lay Company | 40,285 | May 5 | 104 | 306 |
| Brooms and brushes | Joseph Lay Company | 40,074 | Apr. 7 | 103 | 1413 |
| Brooms and brushes | J. S. Barron & Co | 40,508 | June 2 | 104 | 1388 |
| Broths and soups. Stocks for | Vicera-Celerybroth and Food Co | 39,838 | Feb. 24 | 102 | 1772 |
| Brushes for toilet purposes | Florence Manufacturing Co | 40,105 | Apr. 14 | 103 | 1675 |
| Brushes. Fountain bath | Allen Manufacturing Co | 40,880 | Aug. 4 | 105 | 1256 |
| Brushes. Toilet | Martin & Bowne Co | 40,106 | Apr. 14 | 103 | 1675 |
| Brushes. Tooth, nail, and flesh | Martin & Bowne Co | 41,040 | Sept. 1 | 106 | 258 |
| Brushes. Tooth, nail, hair, and flesh | Martin & Bowne Co | 41,076 | Sept. 8 | 106 | 536 |
| Brushes. Tooth, nail, hair, and manicure | D. M. Clapp | 41,636 | Dec. 8 | 107 | 1654 |
| Buffer-springs | Indianapolis Bolster Spring Company. | 40,292 | May 5 | 104 | 306 |
| Butter | Cook & Brady | 40,103 | Apr. 14 | 103 | 1675 |
| Butter | Queen City Creamery Co | 40,104 | Apr. 14 | 103 | 1675 |
| Butter | E. J. McBride | 40,386 | May 19 | 104 | 845 |
| Butter | McDermott-Bunger Dairy Co | 40,909 | Aug. 11 | 105 | 1526 |
| Butter | Hanford-Hazelwood Cream Company. | 40,953 | Aug. 18 | 105 | 1773 |
| Butter | J. R. Denman | 40,954 | Aug. 18 | 105 | 1773 |
| Butter | F. H. Denman | 41,180 | Sept. 29 | 106 | 1231 |
| Butter | F. H. Denman | 41,181 | Sept. 29 | 106 | 1231 |
| Butter-print | McCanna & Fraser Co | 40,650 | June 23 | 104 | 2144 |
| Butter-receptacles | F. W. Wateridge | 39,986 | Mar. 24 | 103 | 883 |
| Butter-workers | M. T. Wilkins | 40 463 | May 26 | 104 | 1116 |
| Buttons | H. A. Austin & Co | 39,690 | Jan. 27 | 102 | 814 |
| Buttons | Scovill Manufacturing Company | 40,133 | Apr. 21 | 103 | 1905 |
| Buttons and hoof buttons. Horn | Griffin Button Company | 41,253 | Oct. 6 | 106 | 1497 |
| Buttons. Certain named | United Button Co | 39,932 | Mar. 17 | 103 | 652 |
| Buttons. Certain named | United Button Co | 39,953 | Mar. 24 | 103 | 880 |
| Buttons. Collar | Capron and Co | 40,723 | July 7 | 105 | 253 |
| Cakes and biscuits. Sweet cereal | Cero-Fruito Food Co | 40,771 | July 14 | 105 | 491 |
| Calcium carbid | Union Carbide Company | 41,245 | Oct. 6 | 106 | 1496 |
| Calculating instruments | Keuffel & Esser Co | 40,714 | June 30 | 104 | 2436 |
| Calomel. Colloidal | Chemische Fabrik von Heyden, Aktiengesellschaft. | 41,075 | Sept. 8 | 106 | 536 |
| Cameras | Seneca Camera Company | 40,243 | May 5 | 104 | 302 |
| Cameras. Photographic | Firm of C. Zeiss | 40,139 | Apr. 21 | 103 | 1906 |
| Candies | G. W. Schwille | 40,444 | May 26 | 104 | 1113 |
| Candies | J. Minor | 40,490 | June 2 | 104 | 1386 |
| Candies. Breath-perfuming | L. Hesselroth | 41,408 | Nov. 3 | 107 | 261 |
| Candies, chocolates, and candied productions | James A. McClurg & Sons, Inc | 40,943 | Aug. 18 | 105 | 1772 |
| Candy | P. J. Alexander | 40,382 | May 19 | 104 | 844 |
| Candy | Reymer & Brothers | 40,869 | Aug. 4 | 105 | 1255 |
| Candy | Reymer & Brothers | 40,870 | Aug. 4 | 105 | 1255 |
| Candy | Reymer & Brothers | 40,871 | Aug. 4 | 105 | 1255 |
| Candy | Reymer & Brothers | 40,872 | Aug. 4 | 105 | 1255 |
| Candy | Reymer & Brothers | 41,148 | Sept. 22 | 106 | 989 |
| Candy | Finley Acker Co | 41,149 | Sept. 22 | 106 | 990 |
| Candy | Darby Candy Company | 41,573 | Dec. 1 | 107 | 1369 |
| Candy and bonbons | M. S. Balduff | 40,271 | May 5 | 104 | 304 |
| Candy. Certain named | Theopold, Morris & Company | 41,032 | Sept. 1 | 106 | 257 |
| Candy. Chocolate | Salt Lake Candy Co | 40,098 | Apr. 14 | 103 | 1674 |
| Candy kisses. Molasses taffy | Robert F. Mackenzie Co | 41,407 | Nov. 3 | 107 | 261 |
| Candy. Nut | Calhoun & Witherbee | 41,572 | Dec. 1 | 107 | 1369 |
| Candles | De Roubaix, Oedenkoven & Co | 41,094 | Sept. 8 | 106 | 538 |
| Candles | De Roubaix, Oedenkoven & Co | 41,112 | Sept. 15 | 106 | 759 |
| Candles | De Roubaix, Oedenkoven & Co | 41,113 | Sept. 15 | 106 | 759 |
| Candles | De Roubaix, Oedenkoven & Co | 41,234 | Oct. 6 | 106 | 1495 |
| Candles | De Roubaix, Oedenkoven & Co | 41,512 | Nov. 24 | 107 | 1088 |
| Canned and packaged fruits and vegetables | Griggs, Cooper and Company | 40,688 | June 30 | 104 | 2433 |
| Canned and packaged fruits and vegetables | Griggs, Cooper and Company | 40,689 | June 30 | 104 | 2433 |
| Canned and preserved fish | Tallant Grant Packing Company | 41,179 | Sept. 29 | 106 | 1231 |
| Canned fish | J. Frye & Co | 39,671 | Jan. 27 | 102 | 812 |
| Canned fish | J. Frye & Co | 39,672 | Jan. 27 | 102 | 812 |

*Alphabetical list of trade-marks*—Continued.

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|---|---|---|---|---|---|
| Canned fruits and vegetables | Arbuckles & Co | 39,682 | Jan. 27 | 102 | 813 |
| Canned fruits and vegetables | H. C. Baxter & Bro | 39,821 | Feb. 17 | 102 | 1547 |
| Canned fruits and vegetables | J. & M. Schwabacher | 40,202 | Apr. 28 | 103 | 2164 |
| Canned fruits and vegetables | H. C. Baxter & Bro | 40,390 | May 19 | 104 | 845 |
| Canned fruits and vegetables | J. C. Ainsley Packing Co | 40,391 | May 19 | 104 | 845 |
| Canned fruits and vegetables | J. C. Ainsley Packing Co | 40,392 | May 19 | 104 | 845 |
| Canned fruits and vegetables | A. Reiter & Co | 40,499 | June 2 | 104 | 1387 |
| Canned fruits and vegetables | W. R. Roach & Co | 41,402 | Nov. 3 | 107 | 261 |
| Canned goods. Certain named | Acker, Merrall & Condit Co | 40,388 | May 19 | 104 | 845 |
| Canned goods. Certain named | H. C. Baxter & Bro | 40,446 | May 26 | 104 | 1113 |
| Canned or packaged fruits and vegetables | J. C. Ergood Co | 40,203 | Apr. 28 | 103 | 2164 |
| Canned or packaged fruits and vegetables | J. C. Ergood Co | 40,204 | Apr. 28 | 103 | 2165 |
| Canned, pickled, preserved, or evaporated fruits and vegetables. | R. I. Sherman Mfg. Co | 41,403 | Nov. 3 | 107 | 261 |
| Canned vegetables | Baxter Bros. Co | 40,981 | Aug. 25 | 105 | 2049 |
| Canned vegetables and canned fruits | W. T. Reynolds & Co | 41,092 | Sept. 8 | 106 | 538 |
| Canned vegetables and fruits | H. C. Baxter & Bro | 39,822 | Feb. 17 | 102 | 1547 |
| Canned vegetables and fruits | Portland Packing Co | 40,000 | Mar. 31 | 103 | 1157 |
| Canned vegetables and fruits | W. T. Reynolds & Co | 40,500 | June 2 | 104 | 1387 |
| Canned vegetables and fruits | Hornby, Nichols, Parker Company | 41,031 | Sept. 1 | 106 | 257 |
| Cantaloups | W. F. Allen | 41,759 | Dec. 29 | 107 | 2521 |
| Capsules containing liquid or solid medicines. Gelatinous elastic | Hance Bros. & White | 39,941 | Mar. 17 | 103 | 653 |
| Caramels, chocolates, bonbons, and favors | Hill-Warner-Fitch Co | 41,574 | Dec. 1 | 107 | 1369 |
| Carbon-blacks and lampblacks | Peerless Carbon Black Company | 41,481 | Nov. 17 | 107 | 827 |
| Carbonating-powder | Church & Dwight Co | 40,647 | June 23 | 104 | 2144 |
| Carding, spinning, and weaving, and parts thereof. Machines and appliances for | H. F. Livermore | 41,168 | Sept. 22 | 106 | 992 |
| Cards. Playing- | New York Consolidated Card Company. | 40,749 | July 14 | 105 | 489 |
| Cards. Playing- | E. H. Roy | 41,027 | Sept. 1 | 106 | 257 |
| Cards. Playing- | H. E. Gavitt | 41,506 | Nov. 24 | 107 | 1087 |
| Cards. Playing- | C. Cortada y Guell | 41,507 | Nov. 24 | 107 | 1087 |
| Carpet-sweepers | Bissell Carpet Sweeper Co | 39,919 | Mar. 10 | 103 | 422 |
| Carpet-sweepers | Bissell Carpet Sweeper Co | 39,920 | Mar. 10 | 103 | 422 |
| Carpet-sweepers | Bissell Carpet Sweeper Co | 39,921 | Mar. 10 | 103 | 422 |
| Carpet-sweepers | Bissell Carpet Sweeper Co | 40,744 | July 7 | 105 | 255 |
| Carpet-sweepers | National Sweeper Company | 41,649 | Dec. 8 | 107 | 1656 |
| Carpet-sweepers | National Sweeper Company | 41,650 | Dec. 8 | 107 | 1656 |
| Carpets and rugs | Kent-Costikyan | 39,967 | Mar. 24 | 103 | 881 |
| Carpets, rugs, and like fabrics. Cleaning compound for cleaning | C. W. Mabey | 40,613 | June 16 | 104 | 1891 |
| Carpets, rugs, mats, and art squares | American Grass Twine Company | 41,177 | Sept. 29 | 106 | 1231 |
| Cars. Heating apparatus for | Consolidated Car Heating Co | 40,513 | June 2 | 104 | 1388 |
| Cash and autographic registers | National Cash Register Company | 41,421 | Nov. 3 | 107 | 262 |
| Catsup | Berdan & Co | 39,619 | Jan. 6 | 102 | 222 |
| Cement for certain named purposes | E. F. Edgecombe | 41,001 | Aug. 25 | 105 | 2052 |
| Cement for uniting rubber or leather surfaces. Waterproof. | Ohio Rubber Co | 40,322 | May 12 | 104 | 569 |
| Cement. Hydraulic | Hudson Portland Cement Co | 41,002 | Aug. 25 | 105 | 2052 |
| Cement or composition and paper. Certain named | Hercules Pulley Covering Company. | 40,215 | Apr. 28 | 103 | 2166 |
| Cement. Portland | W. H. Meserole | 40,282 | May 5 | 104 | 305 |
| Cement. Portland | Illinois Steel Company | 40,321 | May 12 | 104 | 569 |
| Cement. Portland | Sandusky Portland Cement Co | 40,412 | May 19 | 104 | 847 |
| Cement. Portland | Mitteldeutsche Portland-Cement-Fabrik Prüssing & Co. in Schönebeck/Elbe Commanditgesellschaft auf Actien. | 41,329 | Oct. 20 | 106 | 2008 |
| Cement. Portland | Alma Cement Company | 41,723 | Dec. 22 | 107 | 2230 |
| Cement preparation for coating metals, &c | Toch Brothers | 40,281 | May 5 | 104 | 305 |
| Cement. Sand-filled Portland | J. R. Patterson | 41,454 | Nov. 10 | 107 | 535 |
| Chains. Drive- | Michigan Sprocket Chain Co | 41,014 | Aug. 25 | 105 | 2054 |
| Chairs | C. F. Streit Mfg. Co | 39,890 | Mar. 3 | 103 | 219 |
| Chalk | J. & E. Sturge | 41,306 | Oct. 13 | 106 | 1772 |
| Champagne or sparkling wine | J. S. Hamilton | 40,197 | Apr. 28 | 103 | 2164 |
| Charcoal | L. S. Brown | 41,095 | Sept. 8 | 106 | 538 |
| Cheese | Société des Caves et des Producteurs Réunis de Roquefort, (Aveyron.) | 40,060 | Apr. 7 | 103 | 1411 |
| Cheese | Société des Caves et des Producteurs Réunis de Roquefort, (Aveyron.) | 40,159 | Apr. 21 | 103 | 1907 |
| Cheese | F. Grunert | 40,983 | Aug. 25 | 105 | 2050 |
| Cheese | F. A. Kielsmeier | 41,085 | Sept. 8 | 106 | 537 |
| Chemical compound poison for insects | E. L. Downey | 41,049 | Sept. 1 | 106 | 259 |
| Chemical compounds. Certain named | Preservaline Manufacturing Co | 41,674 | Dec. 15 | 107 | 1967 |
| Chemical compounds for certain named purposes | O. Porsch Chemical Company | 39,765 | Feb. 10 | 102 | 1286 |
| Chemical eradicators | C. Wigg & Co | 40,056 | Apr. 7 | 103 | 1411 |
| Chemical for certain named purposes. Powdered | Coalite Company | 41,582 | Dec. 1 | 107 | 1370 |
| Chemical or medical preparation for certain named purposes. Liquid | Lambert Pharmacal Company | 41,413 | Nov. 3 | 107 | 262 |
| Chemical product. Certain named | E. Merck | 40,115 | Apr. 14 | 103 | 1676 |
| Chemical substance. Effervescent | Alfred Bishop, Limited | 39,776 | Feb. 10 | 102 | 1286 |
| Chemical substance. Effervescent | Alfred Bishop, Limited | 39,777 | Feb. 10 | 102 | 1286 |
| Chemical substances. Certain named | Société Chimique des Usines du Rhone Anct. Gilliard, P. Monnet & Cartier. | 39,977 | Mar. 24 | 103 | 883 |
| Chimney-cowls | E. A. Sanders | 40,123 | Apr. 14 | 103 | 1676 |
| China and porcelain ware for certain named purposes | F. W. Jenkins | 41,535 | Nov. 24 | 107 | 1090 |
| Chisels | A. E. Meyer | 41,307 | Oct. 13 | 106 | 1772 |
| Chlorid of lime | Brookman Brothers | 41,528 | Nov. 24 | 107 | 1089 |
| Chlorids and formaldehydes. Compounds of | Shoemaker & Busch | 40,213 | Apr. 28 | 103 | 2166 |
| Chocolate | Huyler's | 39,905 | Mar. 10 | 103 | 420 |
| Chocolate | Société Anonyme des Chocolats au Lait F. L. Cailler. | 40,269 | May 5 | 104 | 304 |
| Chocolate, cocoa, and preparation of chocolate and cocoa | L. A. Roberts & Co | 40,010 | Mar. 31 | 103 | 1158 |

*Alphabetical list of trade-marks*—Continued.

| Title. | Name. | No. | Date. | Official Gazette. Vol. | Page. |
|---|---|---|---|---|---|
| Cigarettes | Société Anonyme le Khédive | 39,933 | Mar. 17 | 103 | 652 |
| Cigarettes | I. Moguleski | 40,212 | Apr. 28 | 103 | 2166 |
| Cigarettes | National Cigarette Co | 41,222 | Oct. 6 | 106 | 1493 |
| Cigarettes | Abdulla & Co | 41,614 | Dec. 8 | 107 | 1652 |
| Cigarettes. Paper | Sphinx Turkish Cigarette Company | 40,261 | May 5 | 104 | 303 |
| Cigars | R. Alvarez y Rivas | 40,063 | Apr. 7 | 103 | 1412 |
| Cigars | Heymann & Co | 40,262 | May 5 | 104 | 304 |
| Cigars | Heymann & Co | 40,263 | May 5 | 104 | 304 |
| Cigars | I. H. Skellie | 40,695 | June 30 | 104 | 2434 |
| Cigars | J. J. Duffy & Co | 40,768 | July 14 | 105 | 490 |
| Cigars | F. E. Fonseca | 40,825 | July 28 | 105 | 969 |
| Cigars | F. E. Fonseca | 40,826 | July 28 | 105 | 969 |
| Cigars | L. K. Pope | 40,865 | Aug. 4 | 105 | 1255 |
| Cigars | Raub Cigar Co | 40,980 | Aug. 25 | 105 | 2049 |
| Cigars | F. Reichard | 41,305 | Oct. 13 | 106 | 1772 |
| Cigars | M. Lopez | 41,325 | Oct. 20 | 106 | 2008 |
| Cigars | Havana Commercial Co | 41,473 | Nov. 17 | 107 | 826 |
| Cigars | S. Levyn | 41,615 | Dec. 8 | 107 | 1652 |
| Cigars | Hood and Mead | 41,616 | Dec. 8 | 107 | 1652 |
| Cigars and cheroots | E. Sprungli | 40,442 | May 26 | 104 | 1113 |
| Cigars and cheroots | Havanna Cigar Manufacturing Co. | 41,104 | Sept. 15 | 106 | 758 |
| Cigars and stogies | Crusader Stogie Company | 40,864 | Aug. 4 | 105 | 1255 |
| Cigars and stogies | Crusader Stogie Company | 40,917 | Aug. 11 | 105 | 1527 |
| Cigars. Antisepticized | J. S. Ammon | 40,486 | June 2 | 104 | 1386 |
| Cigars, cheroots, and all-tobacco cigarettes | American Cigar Company | 41,576 | Dec. 1 | 107 | 1369 |
| Cigars, cheroots, and cigarettes | E. Sprüngli | 39,749 | Feb. 3 | 102 | 1046 |
| Cigars, cheroots, and cigarettes | E. Sprüngli | 39,750 | Feb. 3 | 102 | 1046 |
| Cigars. Plaster for repairing | A. Kauffmann & Cie | 40,827 | July 28 | 105 | 969 |
| Cigars, stogies, cheroots, and little cigars | P. G. Crocov | 41,445 | Nov. 10 | 107 | 534 |
| Clam preparations. Certain named | Rosenstein Brothers | 40,001 | Mar. 31 | 103 | 1157 |
| Clay. English china | John Richardson Company | 41,255 | Oct. 6 | 106 | 1497 |
| Clay pigeons | W. S. Dickey | 40,970 | Aug. 18 | 105 | 1775 |
| Cleaner. Certain named liquid | Modoc Soap Co | 40,797 | July 21 | 105 | 739 |
| Cleaning agent for wood, metal, and other articles | A. Davin et Cie | 40,318 | May 12 | 104 | 569 |
| Cleaning and polishing preparation | Finola Manufacturing Company | 40,277 | May 5 | 104 | 305 |
| Cleaning and polishing preparations for certain named purposes. | Morris, Murch & Butler | 41,033 | Sept. 1 | 106 | 258 |
| Cleaning compound. Cream-colored | McLeod & Froom Grocery Co | 40,964 | Aug. 18 | 105 | 1775 |
| Cleaning, polishing, and preserving preparations. Certain named | F. Schulz, Jun., Aktienges | 41,453 | Nov. 10 | 107 | 535 |
| Cleaning preparation. Certain named | Williams & Sanders Mfg. Co | 40,342 | May 12 | 104 | 571 |
| Cleaning preparations for certain named purposes | India Alkali Works | 39,687 | Jan. 27 | 102 | 814 |
| Cleaning smooth surfaces. Preparations for | M. Peryer | 41,111 | Sept. 15 | 106 | 759 |
| Cleansing enamel surfaces. Compound for | W. W. Sykes | 40,407 | May 19 | 104 | 847 |
| Cleansing preparation. Certain named | M. S. Knob | 39,974 | Mar. 24 | 103 | 882 |
| Cloaks. Ladies' | Hart & Shepard | 39,993 | Mar. 31 | 103 | 1156 |
| Clocks | American El. Nov. & Mf'g. Co | 40,566 | June 9 | 104 | 1651 |
| Clocks | Wm. L. Gilbert Clock Co | 40,586 | June 16 | 104 | 1888 |
| Clocks. Electric | H. Reisinger | 39,918 | Mar. 10 | 103 | 422 |
| Cloth used for linings | Saratoga Victory Manufacturing Company. | 40,852 | Aug. 4 | 105 | 1254 |
| Cloths and stuffs of wool, worsted, or hair | Wm. Fulton & Sons | 40,368 | May 12 | 104 | 574 |
| Cloths. Woolen and worsted | H. Rebhan & Co | 41,503 | Nov. 24 | 107 | 1087 |
| Clothing. Certain named | Standard Manufacturing Company | 40,040 | Apr. 7 | 103 | 1409 |
| Clothing. Certain named | J. M. Robinson, Norton & Co | 41,590 | Dec. 8 | 107 | 1649 |
| Clothing. Certain named articles of | Tabor & Wertheimer | 40,576 | June 16 | 104 | 1887 |
| Clothing. Certain named outer | Levi Strauss & Co | 40,181 | Apr. 28 | 103 | 2162 |
| Coal | Kentucky Block Cannel Coal Company. | 41,096 | Sept. 8 | 106 | 538 |
| Coal | Monongahela River Consolidated Coal & Coke Company. | 41,543 | Nov. 24 | 107 | 1090 |
| Coal. Bituminous | Handy Brothers Mining Co | 40,286 | May 5 | 104 | 306 |
| Coal. Bituminous | War Eagle Fuel Co | 41,097 | Sept. 8 | 106 | 538 |
| Coats, pants, vests, and overcoats | Mertz and Mertz Co | 41,394 | Nov. 3 | 107 | 260 |
| Coats, trousers, and overalls. Men's | Morotock Mfg. Co | 40,365 | May 12 | 104 | 574 |
| Coats, vests, and trousers | Pardridge & Blackwell | 41,690 | Dec. 22 | 107 | 2227 |
| Coats, vests, pants, and overcoats | L. Greif & Bro | 40,376 | May 19 | 104 | 844 |
| Coats, vests, pants, and overcoats | Brill Brothers | 41,100 | Sept. 15 | 106 | 758 |
| Cocks and valves. Stop, waste, and ball | W. H. Rawe | 41,058 | Sept. 1 | 106 | 260 |
| Cocoa and chocolate | Seeman Bros | 41,762 | Dec. 29 | 107 | 2521 |
| Coffee | Berdan & Co | 39,617 | Jan. 6 | 102 | 223 |
| Coffee | Berdan & Co | 39,618 | Jan. 6 | 102 | 223 |
| Coffee | Whitman Grocery Co | 39,969 | Mar. 24 | 103 | 882 |
| Coffee | P. M. Ayvad | 40,270 | May 5 | 104 | 304 |
| Coffee | C. H. Conrad | 40,350 | May 12 | 104 | 572 |
| Coffee | S. J. Vlasto | 40,646 | June 23 | 104 | 2143 |
| Coffee | W. W. Bruner | 40,694 | June 30 | 104 | 2434 |
| Coffee | T. C. Edwards | 40,830 | July 28 | 105 | 969 |
| Coffee | Stahl, Eidman & Co | 41,363 | Oct. 27 | 106 | 2280 |
| Coffee | A. Braun | 41,364 | Oct. 27 | 106 | 2280 |
| Coffee | W. T. Reynolds & Co | 41,711 | Dec. 22 | 107 | 2229 |
| Coffee | W. T. Reynolds & Co | 41,712 | Dec. 22 | 107 | 2229 |
| Coffee | J. J. O'Donohue's Sons | 41,772 | Dec. 29 | 107 | 2522 |
| Coffee. Cereal | Postum Cereal Co | 41,090 | Sept. 8 | 106 | 537 |
| Coffee. Cereal | Eastern Cereal Coffee Co | 41,225 | Oct. 6 | 106 | 1493 |
| Coffee. Cereal substitute for | F. C. Busha | 41,404 | Nov. 3 | 107 | 261 |
| Coffee, coffee surrogate, and coffee additions | O. E. Weber | 39,970 | Mar. 24 | 103 | 882 |
| Coffee compositions. Cereal | Central City Cereal Coffee Co | 40,199 | Apr. 28 | 103 | 2164 |
| Coffee. Roasted | Levering Coffee Co | 41,474 | Nov. 17 | 107 | 826 |
| Coffee. Roasted | Levering Coffee Co | 41,763 | Dec. 29 | 107 | 2521 |
| Coffee. Roasted | Levering Coffee Co | 41,764 | Dec. 29 | 107 | 2521 |
| Coffee. Roasted | Levering Coffee Co | 41,765 | Dec. 29 | 107 | 2522 |
| Coffee. Roasted | Levering Coffee Co | 41,766 | Dec. 29 | 107 | 2522 |
| Coffee. Roasted | Levering Coffee Co | 41,767 | Dec. 29 | 107 | 2522 |
| Coffee. Roasted | Levering Coffee Co | 41,768 | Dec. 29 | 107 | 2522 |
| Coffee. Roasted | Levering Coffee Co | 41,769 | Dec. 29 | 107 | 2522 |

*Alphabetical list of trade-marks*—Continued.

| Title. | Name. | No. | Date. | Official Gazette. Vol. | Page. |
|---|---|---|---|---|---|
| Coffee. Roasted | Levering Coffee Co | 41,770 | Dec. 29 | 107 | 2522 |
| Coffee. Roasted | Levering Coffee Co | 41,771 | Dec. 29 | 107 | 2522 |
| Coffee substitute | Lindon Cereal Company | 41,475 | Nov. 17 | 107 | 826 |
| Coffee substitutes | E. E. Koch | 41,226 | Oct. 6 | 106 | 1494 |
| Cognac | I. Sauvion | 40,012 | Mar. 31 | 103 | 1158 |
| Cold-cream | R. Hudnut | 39,743 | Feb. 3 | 102 | 1046 |
| Colic and kidney cure for mules and horses | E. H. Dunlap Mfg. Co | 40,765 | July 14 | 105 | 490 |
| Colic cure | Pratt Food Co | 41,247 | Oct. 6 | 106 | 1496 |
| Collars and cuffs. Detachable laundered | Emigh & Straub | 41,136 | Sept. 22 | 106 | 988 |
| Collars. Boys' and girls' | I. Frank & Co | 41,546 | Dec. 1 | 107 | 1366 |
| Collars. Shirt- | G. P. Ide & Co | 39,997 | Mar. 31 | 103 | 1156 |
| Combs | Johnson, Hayward & Piper | 41,190 | Sept. 29 | 106 | 1232 |
| Complexion preparations | A. & F. Pears | 40,589 | June 16 | 104 | 1888 |
| Compound for certain named purposes | R. L. Odom | 40,959 | Aug. 18 | 105 | 1774 |
| Compound for cure of dyspepsia. Liquid | St. Jacobs Oil | 40,253 | May 5 | 104 | 303 |
| Compounds for certain named purposes | H. B. Wiggin's Sons Company | 41,330 | Oct. 20 | 106 | 2008 |
| Compounds used for headache, neuralgia, and similar complaints. Proprietary | E. Lautenbach | 40,560 | June 9 | 104 | 1650 |
| Confectionery | W. F. Schrafft & Sons | 40,272 | May 5 | 104 | 304 |
| Confectionery | Hazen Confectionery Company | 40,346 | May 12 | 104 | 572 |
| Confectionery | J. A. Dowie | 40,347 | May 12 | 104 | 572 |
| Confectionery | Brandle & Smith | 40,489 | June 2 | 104 | 1386 |
| Confectionery | Borden's Condensed Milk Co | 40,691 | June 30 | 104 | 2434 |
| Confectionery | New England Confectionery Co | 40,867 | Aug. 4 | 105 | 1255 |
| Confectionery | New England Confectionery Co | 40,868 | Aug. 4 | 105 | 1255 |
| Confectionery | New England Confectionery Co | 40,912 | Aug. 11 | 105 | 1527 |
| Confectionery | New England Confectionery Co | 41,085 | Sept. 8 | 106 | 537 |
| Confectionery | John Mackintosh, Ltd | 41,228 | Oct. 6 | 106 | 1494 |
| Confectionery. Certain named | G. W. Loft | 39,872 | Mar. 3 | 103 | 218 |
| Confectionery-coating machinery | Confectioners' Machinery and Manufacturing Co. | 41,797 | Dec. 29 | 107 | 2524 |
| Confections. Certain named | Russ, Suchard and Company | 40,008 | Mar. 31 | 103 | 1158 |
| Confections. Chocolate | F. H. Dow & Company | 39,679 | Jan. 27 | 102 | 813 |
| Confections. Chocolate | H. D. Foss & Co | 39,935 | Mar. 17 | 103 | 652 |
| Containers for certain named articles | American Oyster Carrier Co | 41,500 | Nov. 17 | 107 | 828 |
| Cookies | Wayne Biscuit Company | 40,061 | Apr. 7 | 103 | 1412 |
| Cooking and heating apparatus. Certain named | E. H. Huenefeld | 39,927 | Mar. 10 | 103 | 422 |
| Cooking utensils | C. C. Overton | 40,287 | May 5 | 104 | 306 |
| Cooking utensils. Certain named | Manning, Bowman & Company | 41,585 | Dec. 1 | 107 | 1370 |
| Cooking utensils. Earthen | Kildow & Lowry | 40,075 | Apr. 7 | 103 | 1431 |
| Cooking utensils. Earthenware | F. S. Lowry | 40,122 | Apr. 14 | 103 | 1676 |
| Coolers. Certain named | Cordley & Hayes | 41,680 | Dec. 15 | 107 | 1967 |
| Cooling apparatus. Certain named | Polar Creamery Co | 40,574 | June 9 | 104 | 1652 |
| Cordage | Hooper Sons' Manufacturing Company. | 39,629 | Jan. 13 | 102 | 460 |
| Core compound | American Glutrose Co | 41,205 | Sept. 29 | 106 | 1234 |
| Core compound | H. A. Bubb | 41,377 | Oct. 27 | 106 | 2282 |
| Corn cures | A. C. P. Lutzahn | 40,145 | Apr. 21 | 103 | 1906 |
| Corn-starch or corn-flour | Independent Starch Co | 40,618 | June 16 | 104 | 1891 |
| Cornmeal | E. Thomas & Co | 39,639 | Jan. 13 | 102 | 461 |
| Corset-covers. Ladies' | Imperial Underwear Co | 40,626 | June 23 | 104 | 2142 |
| Corsets | Weingarten Bros | 39,802 | Feb. 17 | 102 | 1545 |
| Corsets | Royal Worcester Corset Co | 39,803 | Feb. 17 | 102 | 1545 |
| Corsets | A. M. Donshea | 39,863 | Mar. 3 | 103 | 217 |
| Corsets | J. Siegel & Company | 39,956 | Mar. 24 | 103 | 880 |
| Corsets | Newcomb, Endicott & Co | 40,234 | May 5 | 104 | 301 |
| Corsets | Royal Worcester Corset Co | 40,379 | May 19 | 104 | 844 |
| Corsets | Kops Bros | 40,528 | June 9 | 104 | 1647 |
| Corsets | W. Fitch | 40,529 | June 9 | 104 | 1647 |
| Corsets | Royal Worcester Corset Co | 41,426 | Nov. 10 | 107 | 532 |
| Corsets | Royal Worcester Corset Co | 41,427 | Nov. 10 | 107 | 532 |
| Corsets | American Lady Corset Co | 41,467 | Nov. 17 | 107 | 825 |
| Corsets | Pandora Corset Co | 41,589 | Dec. 8 | 107 | 1648 |
| Corsets | Kops Bros | 41,691 | Dec. 22 | 107 | 2227 |
| Corsets | American Lady Corset Co | 41,741 | Dec. 29 | 107 | 2519 |
| Corsets and corset-waists | Brown, Durrell & Co | 40,977 | Aug. 25 | 105 | 2049 |
| Corsets, corset-waists, and underwaists | De Bevoise Waist Co | 40,298 | May 12 | 104 | 567 |
| Corsets. Women's | M. C. Whelan | 40,849 | Aug. 4 | 105 | 1253 |
| Corundum | Canada Corundum Company | 41,642 | Dec. 8 | 107 | 1655 |
| Cosmetics | C. Collins | 41,779 | Dec. 29 | 107 | 2523 |
| Cotton-cloth buff-wheels | Williamsville Manufacturing Co | 41,791 | Dec. 29 | 107 | 2524 |
| Cotton ducks, drillings, and sheetings | J. Spencer Turner Co | 41,137 | Sept. 22 | 106 | 988 |
| Cotton fabrics | Manchester Mills | 41,065 | Sept. 8 | 106 | 535 |
| Cotton fabrics | Newmarket Mfg. Co | 41,315 | Oct. 20 | 106 | 2007 |
| Cotton fabrics, woven and knit | A. O. Meyer | 41,471 | Nov. 17 | 107 | 826 |
| Cotton fabrics, woven or knit | A. O. Meyer | 41,020 | Sept. 1 | 106 | 256 |
| Cotton fabrics, woven or knit | A. O. Meyer | 41,021 | Sept. 1 | 106 | 256 |
| Cotton fabrics, woven or knit | A. O. Meyer | 41,022 | Sept. 1 | 106 | 256 |
| Cotton fabrics, woven or knit | A. O. Meyer | 41,023 | Sept. 1 | 106 | 256 |
| Cotton goods | Burton Bros. & Co | 40,624 | June 23 | 104 | 2142 |
| Cotton goods. Brown, bleached, and printed | American Trading Company | 40,756 | July 14 | 105 | 489 |
| Cotton goods. Certain named | W. R. Grace & Co | 39,999 | Mar. 31 | 103 | 1156 |
| Cotton goods. Certain named | Fearon, Daniel & Co | 40,465 | June 2 | 104 | 1384 |
| Cotton goods. Certain named | Fearon, Daniel & Co | 40,466 | June 2 | 104 | 1384 |
| Cotton goods. Certain named | Fearon, Daniel & Co | 40,467 | June 2 | 104 | 1384 |
| Cotton goods. Certain named | Fearon, Daniel & Co | 40,468 | June 2 | 104 | 1384 |
| Cotton goods. Gray and bleached | Baronian & Co | 39,710 | Feb. 3 | 102 | 1043 |
| Cotton piece goods | Smith & Schipper | 39,861 | Mar. 3 | 103 | 217 |
| Cotton piece goods | Smith & Schipper | 39,862 | Mar. 3 | 103 | 217 |
| Cotton piece goods | C. Schmitz & Co | 39,962 | Mar. 24 | 103 | 881 |
| Cotton piece goods | C. Schmitz & Co | 39,963 | Mar. 24 | 103 | 881 |
| Cotton piece goods | C. Schmitz & Co | 39,964 | Mar. 24 | 103 | 881 |
| Cotton piece goods | Arnhold, Karberg & Co | 40,886 | Aug. 11 | 105 | 1524 |
| Cotton piece goods. Certain named | W. R. Grace Co | 41,693 | Dec. 22 | 107 | 2227 |
| Cotton piece goods. Certain named woven | Meyer & Goetze | 41,274 | Oct. 13 | 106 | 1769 |
| Cotton yarns | Shaw, Jardine & Co | 41,207 | Oct. 6 | 106 | 1492 |

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|---|---|---|---|---|---|
| Cough-syrup | S. Lasser | 41,288 | Oct. 13 | 106 | 1770 |
| Cough tablets and drops | W. I. Nichols | 40,819 | July 28 | 105 | 968 |
| Crates and packing-cases | G. W. Peck | 39,667 | Jan. 20 | 102 | 618 |
| Cravats and silk for same | L. Auerbach | 40,851 | Aug. 4 | 105 | 1254 |
| Crayons and pencils | Binney & Smith Co | 40,217 | Apr. 28 | 103 | 2166 |
| Crayons and pencils | Binney & Smith Co | 40,506 | June 2 | 104 | 1388 |
| Crayons, pencils, and marking substances | Binney & Smith Co | 40,814 | July 28 | 105 | 968 |
| Cream, canned milk, condensed milk, and evaporated cream. Canned | St. Charles Condensing Co | 40,707 | June 30 | 104 | 2435 |
| Cream. Evaporated | Van Camp Condensed Milk Company. | 41,773 | Dec. 29 | 107 | 2522 |
| Cream. Evaporated | Van Camp Condensed Milk Company. | 41,774 | Dec. 29 | 107 | 2522 |
| Cream-separators | National Dairy Machine Co | 39,922 | Mar. 10 | 103 | 422 |
| Crushing and pulverizing machines | Williams Patent Crusher and Pulverizer Co. | 41,583 | Dec. 1 | 107 | 1370 |
| Curlers. Hair- | Magic Curler Co | 41,464 | Nov. 17 | 107 | 825 |
| Curlers. Hair- | Magic Curler Co | 41,465 | Nov. 17 | 107 | 825 |
| Currants | Graeco-American Currant & Supply Co. | 41,622 | Dec. 8 | 107 | 1653 |
| Currants. Dried | U. H. Dudley & Co | 41,114 | Sept. 15 | 106 | 759 |
| Current transformer. Alternating- | General Electric Company | 40,745 | July 7 | 105 | 255 |
| Cutlery. Certain named | Burgon & Ball | 41,495 | Nov. 17 | 107 | 828 |
| Dairy products. Certain named | McDermott Bunger Dairy Co | 40,445 | May 26 | 104 | 1113 |
| Dairy products. Certain named | Borden's Condensed Milk Co | 41,709 | Dec. 22 | 107 | 2229 |
| Damiana compound | Astropathic Institute | 39,912 | Mar. 10 | 103 | 421 |
| Decolorizing substances. Certain named | Manufacture Lyonnaise de Matières Colorantes. | 41,641 | Dec. 8 | 107 | 1655 |
| Decorative sheets for application to panes of glass and other surfaces. | H. Malz | 41,436 | Nov. 10 | 107 | 533 |
| Delftware and chinaware | Aktieselskabet Aluminia | 40,572 | June 9 | 104 | 1651 |
| Dental burs | G. Scharmann | 40,918 | Aug. 11 | 105 | 1527 |
| Dental filling and remedy. Antiseptic | E. W. Dodez | 40,353 | May 12 | 104 | 573 |
| Dental preparations. Certain named | T. L. Hill | 40,352 | May 12 | 104 | 572 |
| Dentifrice | J. M. Rosenthal | 41,437 | Nov. 10 | 107 | 533 |
| Dentifrices | Hall & Ruckel | 40,307 | May 12 | 104 | 568 |
| Devices. Certain named | Yawman & Erbe Mfg. Co | 41,053 | Sept. 1 | 106 | 260 |
| Dietetic preparations | A. C. A. Holzapfel | 40,344 | May 12 | 104 | 571 |
| Diorthoöxydibenzalaceton. Salts of | Vereinigte Chininfabriken Zimmer & Co., Ges. mit Beschränkter Haftung. | 40,117 | Apr. 14 | 103 | 1676 |
| Dips and washes for animals | Bone Phosphate and Chemical Company. | 40,766 | July 14 | 105 | 490 |
| Disinfectant | Edson Manufacturing Co | 40,962 | Aug. 18 | 105 | 1774 |
| Disinfectant and germicide | Cyphers Incubator Co | 40,306 | May 12 | 104 | 568 |
| Disinfectant, antiseptic, and deodorant | Auro Chemical Company | 41,252 | Oct. 6 | 106 | 1497 |
| Disinfectants | Jenkins Bros | 40,609 | June 16 | 104 | 1890 |
| Disinfectants | West Disinfecting Co | 40,795 | July 21 | 105 | 739 |
| Disinfectants | Mexican Disinfectant Company | 40,862 | Aug. 4 | 105 | 1254 |
| Disinfectants | A. R. Stark | 41,297 | Oct. 13 | 106 | 1771 |
| Diuretics | Nelson, Baker & Co | 40,790 | July 21 | 105 | 739 |
| Doll-heads | A. Heller | 40,179 | Apr. 28 | 103 | 2162 |
| Dolls | Strobel & Wilken Co | 40,134 | Apr. 21 | 103 | 1905 |
| Drafting-scales | Keuffel & Esser Co | 40,583 | June 16 | 104 | 1888 |
| Draperies for furnishing | Brown, Durrell & Co | 40,978 | Aug. 25 | 105 | 2049 |
| Drawing-knives or spokeshaves | J. F. Fuchs | 41,496 | Nov. 17 | 107 | 828 |
| Drawing-tools | Keuffel & Esser Co | 40,584 | June 16 | 104 | 1888 |
| Drawing-tools | Keuffel & Esser Co | 40,665 | June 30 | 104 | 2431 |
| Dress and shirting textiles | M. J. Warner | 41,470 | Nov. 17 | 107 | 826 |
| Dress goods. Woolen | O. Seyd | 41,395 | Nov. 3 | 107 | 260 |
| Dress-shields | Canfield Rubber Company | 40,366 | May 12 | 104 | 574 |
| Dress shields or protectors | Omo Manufacturing Company | 40,038 | Apr. 7 | 103 | 1409 |
| Dressings | D. Lyman | 41,360 | Oct. 27 | 106 | 2280 |
| Dressings | D. Lyman | 41,491 | Nov. 17 | 107 | 828 |
| Dry goods. Certain named | Dawson, Halliwell & Company | 39,647 | Jan. 20 | 102 | 616 |
| Dry goods. Certain named | Dawson, Halliwell & Company | 39,711 | Feb. 3 | 102 | 1043 |
| Dry-plates | Standard Dry Plate Co | 40,138 | Apr. 21 | 103 | 1906 |
| Duplicating-machines and parts thereof | A. B. Dick Company | 41,536 | Nov. 24 | 107 | 1090 |
| Dust-pans | G. A. McIntire & Co | 39,728 | Feb. 3 | 102 | 1044 |
| Dusters. Feather | S. Levy | 40,030 | Mar. 31 | 103 | 1160 |
| Dyeing and printing textiles. Chemical preparations for use in | H. A. Metz & Co | 39,908 | Mar. 10 | 103 | 421 |
| Dyestuff | Badische Anilin & Soda Fabrik | 40,614 | June 16 | 104 | 1891 |
| Dyestuff or coloring mixture for leather | Stamford Manufacturing Company | 40,341 | May 12 | 104 | 571 |
| Dyspepsia cure | C. E. White | 41,246 | Oct. 6 | 106 | 1496 |
| Ear-protectors | C. Greenwood | 40,527 | June 9 | 104 | 1647 |
| Earthenware, pottery, and ceramic articles | Acheson Company | 39,882 | Mar. 3 | 103 | 219 |
| Eggs | F. W. Blankenbuhler | 40,538 | June 9 | 104 | 1648 |
| Eggs | Debow & Co | 40,649 | June 23 | 104 | 2144 |
| Eggs | Chillicothe Packing Company | 40,832 | July 28 | 105 | 970 |
| Elastic bands, braids, and webbing | A. Steinhardt & Bro | 41,737 | Dec. 29 | 107 | 2519 |
| Electric generators and parts and attachments therefor | Motsinger Device Manufacturing Company. | 41,167 | Sept. 22 | 106 | 992 |
| Electric-light support | F. H. Stewart | 39,786 | Feb. 10 | 102 | 1289 |
| Electric lighting fittings. Incandescent | Marshall-Sanders Co | 39,729 | Feb. 3 | 102 | 1044 |
| Electrical appliances. Certain named | Hart Manufacturing Co | 39,856 | Feb. 24 | 102 | 1773 |
| Electrical batteries and their parts | Société Anonyme Le Carbone | 40,809 | July 21 | 105 | 740 |
| Electrical-conductor conduits and coverings | Am. Circular Loom Co | 39,625 | Jan. 6 | 102 | 224 |
| Electrical conductors. Covered | General Electric Company | 41,497 | Nov. 17 | 107 | 828 |
| Electrical conductors or wires. Certain named | Okonite Co | 40,226 | Apr. 28 | 103 | 2168 |
| Electrical supplies. Certain named | Société Anonyme Le Carbone | 39,624 | Jan. 6 | 102 | 223 |
| Electrical transformers | W. D. & J. W. Packard | 41,538 | Nov. 24 | 107 | 1090 |
| Electrotherapeutic apparatus | M. N. Clarke | 41,099 | Sept. 8 | 106 | 538 |
| Embalming fluid | C. C. Howard | 40,639 | June 23 | 104 | 2143 |
| Embroidery-threads | T. Buettner & Co | 39,899 | Mar. 10 | 103 | 420 |
| Enameled iron and steel ware | New England Enameling Co | 41,499 | Nov. 17 | 107 | 828 |

*Alphabetical list of trade-marks*—Continued.

| Title. | Name. | No. | Date. | Official Gazette. Vol. | Page. |
|---|---|---|---|---|---|
| Enameled steel ware | Rothschild, Meyers & Co | 41,681 | Dec. 15 | 107 | 1967 |
| Enameled steel ware | Rothschild, Meyers & Co | 41,682 | Dec. 15 | 107 | 1968 |
| Enameled ware. Household utensils of | Manning, Bowman & Co | 39,985 | Mar. 24 | 103 | 883 |
| Engines. Governors for pressure-fluid | Gardner Governor Company | 41,166 | Sept. 22 | 106 | 992 |
| Engines, including turbine-motors. Fluid-pressure motor- | S. C. Davidson | 40,884 | Aug. 4 | 105 | 1256 |
| Envelops | United States Envelope Co | 40,924 | Aug. 18 | 105 | 1770 |
| Envelops | Outlook Envelope Company | 41,751 | Dec. 29 | 107 | 2520 |
| Erasers | F. L. Landers | 39,853 | Feb. 24 | 102 | 1773 |
| Exploders. Electrical | Masurite Explosive Company | 41,420 | Nov. 3 | 107 | 262 |
| Explosive-engines | W. P. Callahan & Co | 41,732 | Dec. 22 | 107 | 2232 |
| Explosive liquids non-explosive. Compound adapted to render | Non-Explosive Caps Company | 40,798 | July 21 | 105 | 739 |
| Explosives | Lindener Zündhütchen-und Thonwaaren-Fabrik. | 41,378 | Oct. 27 | 106 | 2282 |
| Explosives | Lindener Zündhütchen-und Thonwaaren-Fabrik. | 41,379 | Oct. 27 | 106 | 2282 |
| Extracts and perfumes | E. B. Norton | 40,044 | Apr. 7 | 103 | 1410 |
| Extracts. Lemon and vanilla flavoring | Royal Remedy & Extract Co | 40,987 | Aug. 25 | 105 | 2050 |
| Extracts of cereals and vegetables | L. J. Wilson | 39,722 | Feb. 3 | 102 | 1044 |
| Extracts of fruits | L. Erba | 41,367 | Oct. 27 | 106 | 2281 |
| Extracts of fruits | L. Erba | 41,368 | Oct. 27 | 106 | 2281 |
| Extracts of fruits | L. Erba | 41,369 | Oct. 27 | 106 | 2281 |
| Eyeglass and spectacle frames or mountings | American Optical Co | 39,751 | Feb. 10 | 102 | 1285 |
| Eyeglass and spectacle frames or mountings | American Optical Co | 40,669 | June 30 | 104 | 2432 |
| Eyelets | E. L. Sibley | 41,056 | Sept. 1 | 106 | 260 |
| Eyelets. Press or machine for setting and removing | E. L. Sibley | 41,057 | Sept. 1 | 106 | 260 |
| Fabric piece goods. Certain named | C. C. Rettger | 39,646 | Jan. 20 | 102 | 616 |
| Fabrics. Certain named | Gribbon Brothers | 39,698 | Jan. 27 | 102 | 815 |
| Fabrics. Certain named | Gribbon Brothers | 39,830 | Feb. 24 | 102 | 1771 |
| Fabrics. Certain named | R. Kron | 40,625 | June 23 | 104 | 2142 |
| Fabrics. Woolen | E. Sprungli | 39,832 | Feb. 24 | 102 | 1771 |
| Face-cream | L. G. Rogers | 39,742 | Feb. 3 | 102 | 1046 |
| Facial massage-cream and skin-food | Cleopatra Manufacturing Company. | 40,022 | Mar. 31 | 103 | 1159 |
| Facial massage-cream and skin-food | Apollo Chemical Company | 41,108 | Sept. 15 | 106 | 759 |
| Fans and blowers | S. C. Davidson | 40,840 | July 28 | 105 | 970 |
| Fasteners. Certain named metallic | Linderman & Binz | 40,459 | May 26 | 104 | 1115 |
| Fat or grease. Vegetable | M. Duché & Sons | 41,152 | Sept. 22 | 106 | 990 |
| Fats and lard. Cooking | Sherman Oil & Cotton Company | 39,824 | Feb. 17 | 102 | 1547 |
| Fats and lard. Cooking | Sherman Oil & Cotton Company | 39,894 | Mar. 3 | 103 | 220 |
| Fats and mixtures thereof used as food or as ingredients in food. | Loders & Nucoline | 40,705 | June 30 | 104 | 2435 |
| Fatty, oleaginous, or unctuous substances. Prepared | Wesson Company | 40,004 | Mar. 31 | 103 | 1157 |
| Feed. Chicken- | Ross Brothers | 41,716 | Dec. 22 | 107 | 2229 |
| Feed for stock. Corn and oat | Dock & Coal Co | 39,685 | Jan. 27 | 102 | 813 |
| Feed-water heaters | Warren Webster & Co | 40,230 | Apr. 28 | 103 | 2168 |
| Felts | Nelson-Dedicke Felt Co | 39,648 | Jan. 20 | 102 | 616 |
| Fence. Wire | Advance Fence Co | 41,541 | Nov. 24 | 107 | 1090 |
| Fence. Wire | Keystone Fence Company | 41,542 | Nov. 24 | 107 | 1090 |
| Fences. Wire | Hockaday Hardware Company | 41,261 | Oct. 6 | 106 | 1497 |
| Ferromanganese | Midvale Mining & Man'f'g Co | 39,850 | Feb. 24 | 102 | 1773 |
| Fertilizer | Federal Chemical Company | 41,722 | Dec. 22 | 107 | 2230 |
| Fertilizers | Swift Fertilizer Works | 40,434 | May 26 | 104 | 1112 |
| Fertilizers. Manufactured | Swift Fertilizer Works | 40,329 | May 12 | 104 | 570 |
| Fertilizers. Manufactured | Swift Fertilizer Works | 40,330 | May 12 | 104 | 570 |
| Fertilizers. Manufactured | Swift Fertilizer Works | 40,331 | May 12 | 104 | 570 |
| Fertilizers. Manufactured | Swift Fertilizer Works | 40,332 | May 12 | 104 | 570 |
| Fertilizers. Manufactured | Swift Fertilizer Works | 40,333 | May 12 | 104 | 570 |
| Fertilizers. Manufactured | Swift Fertilizer Works | 40,334 | May 12 | 104 | 570 |
| Fertilizers. Manufactured | Swift Fertilizer Works | 40,335 | May 12 | 104 | 570 |
| Fertilizers. Manufactured | Swift Fertilizer Works | 40,336 | May 12 | 104 | 570 |
| Fertilizers. Manufactured | Swift Fertilizer Works | 40,337 | May 12 | 104 | 570 |
| Figs | Protopazzi Bros | 40,831 | July 28 | 105 | 970 |
| Figs | A. Hamparzum | 40,942 | Aug. 18 | 105 | 1772 |
| Files | Melchior, Armstrong & Dessau | 40,974 | Aug. 18 | 105 | 1776 |
| Files | D. B. Murphy File Company | 41,539 | Nov. 24 | 107 | 1090 |
| Fillers | Tripod Paint Company | 40,174 | Apr. 21 | 103 | 1909 |
| Filters. Portable and stationary | Celler Filter Werke G. M. B. H | 39,988 | Mar. 24 | 103 | 884 |
| Fire-extinguisher. Dry-powder | Swan Dry Powder Fire Extinguisher Company. | 40,643 | June 23 | 104 | 2143 |
| Fire-extinguishers. Certain named | Harris Safety Company | 40,177 | Apr. 21 | 103 | 1910 |
| Fire-extinguishers. Chemical | Western Fire Appliance Co | 41,128 | Sept. 15 | 106 | 760 |
| Fire-extinguishers. Chemical | J. T. Hair | 41,728 | Dec. 22 | 107 | 2231 |
| Firearms. Double weldless barrels for | P. E. Hennequin | 40,883 | Aug. 4 | 105 | 1256 |
| Fireproof materials and constructions. Certain named | Franke-Jenner Fireproof Flooring Co. | 39,889 | Mar. 3 | 103 | 219 |
| Fireproofing or fire-resisting preparation | W. B. Price | 40,615 | June 16 | 104 | 1891 |
| Fireproofing or fire-resisting starch | W. B. Price | 40,616 | June 16 | 104 | 1891 |
| Fish. Dried, pickled, or otherwise preserved | Rosenstein Brothers | 41,718 | Dec. 22 | 107 | 2230 |
| Fish. Dried, pickled, or otherwise preserved | Rosenstein Brothers | 41,719 | Dec. 22 | 107 | 2230 |
| Fishing-tackle | Supplee Hardware Company | 41,586 | Dec. 1 | 107 | 1370 |
| Flannel piece goods | J. C. Milne | 40,424 | May 26 | 104 | 1111 |
| Flannel piece goods | J. C. Milne | 40,425 | May 26 | 104 | 1111 |
| Flannel piece goods | J. C. Milne | 40,426 | May 26 | 104 | 1111 |
| Flavoring extracts | Greever-Lotspeich Mfg. Co | 40,273 | May 5 | 104 | 305 |
| Flavoring extracts | Auburn Extract Company | 41,145 | Sept. 22 | 106 | 989 |
| Flavoring extracts for soda-fountain syrup and beverages made therefrom. | Morgan & Brehaut | 41,186 | Sept. 29 | 106 | 1232 |
| Flavoring preparation for carbonated drinks | W. B. Douglass | 41,227 | Oct. 6 | 106 | 1494 |
| Flour | Bunker Hill Milling Company | 40,201 | Apr. 28 | 103 | 2164 |
| Flour | T. H. Thompson Milling Co | 40,451 | May 26 | 104 | 1114 |
| Flour | Alva Roller Mills | 40,497 | June 2 | 104 | 1387 |
| Flour | Chinese American Commercial Company. | 40,539 | June 9 | 104 | 1648 |
| Flour | Oklahoma City Mill & Elevator Co. | 40,738 | July 7 | 105 | 254 |
| Flour | Oklahoma City Mill & Elevator Co. | 40,739 | July 7 | 105 | 255 |

*Alphabetical list of trade-marks*—Continued.

| Title. | Name. | No. | Date. | Official Gazette. Vol. | Page. |
|---|---|---|---|---|---|
| Flour | Hecker-Jones-Jewell Milling Company. | 40,937 | Aug. 18 | 105 | 1771 |
| Flour | Topeka Milling Company | 41,088 | Sept. 8 | 106 | 537 |
| Flour | Hunter Brothers Milling Company. | 41,300 | Oct. 13 | 106 | 1771 |
| Flour | Hunter Brothers Milling Company. | 41,301 | Oct. 13 | 106 | 1771 |
| Flour | Hunter Brothers Milling Company. | 41,479 | Nov. 17 | 107 | 826 |
| Flour | Hunter Brothers Milling Company. | 41,714 | Dec. 22 | 107 | 2229 |
| Flour | Hunter Brothers Milling Company. | 41,715 | Dec. 22 | 107 | 2229 |
| Flour. Certain named | F. B. Chamberlain Company | 40,938 | Aug. 18 | 105 | 1771 |
| Flour made from wheat | Pillsbury-Washburn Flour Mills Company. | 41,668 | Dec. 15 | 107 | 1966 |
| Flour made from wheat | Pillsbury-Washburn Flour Mills Company. | 41,669 | Dec. 15 | 107 | 1966 |
| Flour. Rye | L. M. Paschall | 40,772 | July 14 | 105 | 491 |
| Flour. Wheat | Bay State Milling Co | 39,640 | Jan. 13 | 102 | 461 |
| Flour. Wheat | Listman Mill Company | 39,652 | Jan. 20 | 102 | 617 |
| Flour. Wheat | Dock & Coal Co | 39,684 | Jan. 27 | 102 | 813 |
| Flour. Wheat | F. G. Atkinson | 40,910 | Aug. 11 | 105 | 1526 |
| Flour. Wheat | L. M. Paschall | 40,936 | Aug. 18 | 105 | 1771 |
| Flour. Wheat | Duluth-Superior Milling Co | 41,030 | Sept. 1 | 106 | 257 |
| Flour. Wheat | McCloskey Brothers | 41,089 | Sept. 8 | 106 | 537 |
| Flour. Wheat | McCloskey Brothers | 41,449 | Nov. 10 | 107 | 534 |
| Flour. Wheat | George Urban Milling Co | 41,578 | Dec. 1 | 107 | 1369 |
| Flour. Wheat | George Urban Milling Co | 41,579 | Dec. 1 | 107 | 1369 |
| Flour. Wheat | George Urban Milling Co | 41,580 | Dec. 1 | 107 | 1369 |
| Flour. Wheat | F. G. Atkinson | 41,776 | Dec. 29 | 107 | 2522 |
| Flowering pips | Stumpp & Walter Co | 41,721 | Dec. 22 | 107 | 2230 |
| Fluid-compressors and compressor parts | Gardner Governor Company | 41,731 | Dec. 22 | 107 | 2231 |
| Fly-paper. Sticky | R. Wilson | 40,579 | June 16 | 104 | 1887 |
| Food and medicine in powdered form. Horse, cattle, and poultry | Herb Medicine Co | 40,007 | Mar. 31 | 103 | 1157 |
| Food and remedies. Poultry | G. L. Harding | 40,956 | Aug. 18 | 105 | 1774 |
| Food. Breakfast | Ready Bits Company | 41,514 | Nov. 24 | 107 | 1088 |
| Food. Candied cereal | A. M. Lawrence | 41,147 | Sept. 22 | 106 | 989 |
| Food. Certain named animal | Blood Molasses Feed Company of America. | 39,873 | Mar. 3 | 103 | 218 |
| Food. Certain named breakfast | B. Macfadden | 39,781 | Feb. 10 | 102 | 1288 |
| Food composed of wheat, oats, and barley malted | Twin City Nut Food Co | 40,005 | Mar. 31 | 103 | 1157 |
| Food. Flaked wheat | Hygienic Food Company | 39,780 | Feb. 10 | 102 | 1288 |
| Food for animals. Prepared tonic | W. J. Morris | 41,556 | Dec. 1 | 107 | 1367 |
| Food for goldfish | N. A. Anderson | 40,736 | July 7 | 105 | 254 |
| Food for invalids | Maltova, Limited | 40,737 | July 7 | 105 | 254 |
| Food for stock and other animals | Molassine Company | 39,686 | Jan. 27 | 102 | 813 |
| Food made from cereals. Flaked | Southern Flaked Food Company | 40,493 | June 2 | 104 | 1386 |
| Food made from fish and other ingredients. Prepared | A. W. Marshall | 40,706 | June 30 | 104 | 2435 |
| Food made from wheat | Nature's Breakfast Food Company | 39,738 | Feb. 3 | 102 | 1045 |
| Food. Malted wheat-flake | R. T. Davis Mill & Mfg. Co | 40,006 | Mar. 31 | 103 | 1157 |
| Food. Milk | Lacto-Globulin Co., Ltd | 41,775 | Dec. 29 | 107 | 2522 |
| Food. Preparation for seasoning all varieties of | E. Meinrath | 40,875 | Aug. 4 | 105 | 1255 |
| Food preparations for animals. Aromatic | H. M. Griffin | 40,878 | Aug. 4 | 105 | 1256 |
| Food preparations. Malt nut | Huff and Wedge | 41,478 | Nov. 17 | 107 | 826 |
| Food. Prepared cereal | American Cereal Co | 40,496 | June 2 | 104 | 1387 |
| Food prepared from certain named articles | Sanitas Nut Food Co | 40,494 | June 2 | 104 | 1387 |
| Food. Prepared or mixed poultry | C. W. Hugo | 40,276 | May 5 | 104 | 305 |
| Food products. Potato | Concentrated Flaked Potato Co | 41,516 | Nov. 24 | 107 | 1088 |
| Food. Stock | D. Roberts | 41,093 | Sept. 8 | 106 | 538 |
| Food substances. Oleaginous or unctuous | Schwarzschild & Sulzberger Company. | 40,317 | May 12 | 104 | 569 |
| Food substances. Prepared fatty, oleaginous, or unctuous | N. K. Fairbank Company | 39,673 | Jan. 27 | 102 | 812 |
| Food substances. Prepared fatty, oleaginous, or unctuous | Wesson Company | 40,210 | Apr. 28 | 103 | 2165 |
| Foods. Breakfast | H-O (Hornby's Oatmeal) Company | 40,200 | Apr. 28 | 103 | 2164 |
| Foods. Breakfast | Ready Bits Corporation | 40,447 | May 26 | 104 | 1113 |
| Foods. Breakfast | Ready Bits Corporation | 40,448 | May 26 | 104 | 1114 |
| Foods. Breakfast cereal | Topeka Milling Company | 41,087 | Sept. 8 | 106 | 537 |
| Foods. Cereal breakfast | Genesee Pure Food Co | 40,384 | May 19 | 104 | 845 |
| Foods. Cereal breakfast | Postum Cereal Co | 40,911 | Aug. 11 | 105 | 1527 |
| Foods. Certain named | A. von Cotzhausen | 41,370 | Oct. 27 | 106 | 2281 |
| Foods. Certain named prepared cereal | Veana Food Co | 40,449 | May 26 | 104 | 1114 |
| Foods. Certain named prepared cereal | Veana Food Co | 40,450 | May 26 | 104 | 1114 |
| Foods. Flaked cereal | Price Cereal Food Co | 40,316 | May 12 | 104 | 569 |
| Foods for live stock. Prepared | Gold Coin Stock Food Company | 41,623 | Dec. 8 | 107 | 1653 |
| Foods. Prepared cereal and breakfast | Battle Creek Food Co | 39,818 | Feb. 17 | 102 | 1547 |
| Foods. Prepared cereal and breakfast | Battle Creek Food Co | 39,819 | Feb. 17 | 102 | 1547 |
| Foods. Prepared cereal and breakfast | Battle Creek Food Co | 39,820 | Feb. 17 | 102 | 1547 |
| Foods. Stock and poultry | H-T Stock Food Co | 39,973 | Mar. 24 | 103 | 882 |
| Formaldehyde compounds | P. W. Squire | 40,561 | June 9 | 104 | 1650 |
| Fruit-juices | Russell Mfg. Co | 41,761 | Dec. 29 | 107 | 2521 |
| Fruit preparations and extracts | Crown Cordial & Extract Co | 41,302 | Oct. 13 | 106 | 1771 |
| Fruit preparations. Certain named | Sunland Orchard Co | 41,115 | Sept. 15 | 106 | 759 |
| Fruit preserves | Martin Wagner Co. of Baltimore City. | 41,327 | Oct. 20 | 106 | 2008 |
| Fruits and vegetables in packages | Havey, Lockie & Co | 40,935 | Aug. 18 | 105 | 1771 |
| Fruits. Certain named | Bevan & Co | 40,205 | Apr. 28 | 103 | 2165 |
| Fruits. Certain named | Bevan & Co | 40,206 | Apr. 28 | 103 | 2165 |
| Fruits. Dried | Hornby, Nichols, Parker Company | 40,690 | June 30 | 104 | 2434 |
| Fruits. Evaporated | Arbuckles & Co | 39,681 | Jan. 27 | 102 | 813 |
| Fruits. Fresh, dry, and conserved | A. Morando | 41,326 | Oct. 20 | 106 | 2008 |
| Fruits. Green and dried | Garcia & Maggini | 40,160 | Apr. 21 | 103 | 1908 |
| Fruits. Preserved | Acker, Merrall & Condit Co | 40,389 | May 19 | 104 | 845 |
| Fuel. Artificial | H. P. Brown | 40,120 | Apr. 14 | 103 | 1676 |
| Fuel. Manufactured | Coaleo Fuel Manufacturing Company. | 41,758 | Dec. 29 | 107 | 2521 |
| Fur garments | Steele Brothers | 40,235 | May 5 | 104 | 301 |
| Fur garments | Kohn & Baer | 40,526 | June 9 | 104 | 1647 |
| Fur garments | Kohn & Baer | 41,019 | Sept. 1 | 106 | 256 |
| Furniture and floor polish | M. Lange | 41,524 | Nov. 24 | 107 | 1089 |

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| Title. | Name. | No. | Date. | Official Gazette. Vol. | Page. |
|---|---|---|---|---|---|
| Furniture. Certain named household | Estey Manufacturing Company | 40,229 | Apr. 28 | 103 | 2168 |
| Game articles | Brist Company | 40,421 | May 26 | 104 | 1111 |
| Game. Certain named | G. S. Mumford | 40,374 | May 12 | 104 | 574 |
| Game. Certain named parlor | E. Denton | 40,750 | July 14 | 105 | 489 |
| Game of amusement. Certain named scientific | J. H. Loss | 41,393 | Nov. 3 | 107 | 260 |
| Game of cards | J. M. Haddock | 40,034 | Apr. 7 | 103 | 1409 |
| Games | D. Gailey | 40,242 | May 5 | 104 | 302 |
| Games | P. D. Bird | 41,392 | Nov. 3 | 107 | 260 |
| Games. Ball-propelling | Strauss Manufacturing Company | 40,293 | May 12 | 104 | 567 |
| Games. Card | Pit Publishing Co | 40,812 | July 28 | 105 | 968 |
| Games. Card | Flinch Card Co | 41,004 | Aug. 25 | 105 | 2053 |
| Games. Card | Pit Publishing Company | 41,748 | Dec. 29 | 107 | 2520 |
| Games played with cards | Parker Bros | 40,889 | Aug. 11 | 105 | 1524 |
| Garment-supporter clasp | Hirsh Brothers | 41,055 | Sept. 1 | 106 | 260 |
| Garment-supporters | Wheeler & Baldwin | 40,378 | May 19 | 104 | 844 |
| Garment-supporters | H. N. Northrop | 41,734 | Dec. 29 | 107 | 2519 |
| Garments. Certain named | Bliss, Painter & Co | 41,018 | Sept. 1 | 106 | 256 |
| Gas-burners, gas-lamps, and mantles for same | Matchless Manufacturing Co | 39,623 | Jan. 6 | 102 | 223 |
| Gas-fixtures and mantles and parts thereof | Central Lighting Company | 41,678 | Dec. 15 | 107 | 1967 |
| Gas, gasolene, and oil engines | Samson Iron Works | 39,926 | Mar. 10 | 103 | 422 |
| Gas generators. Acetylene- | Monarch Acetylene Gas Co | 40,419 | May 19 | 104 | 848 |
| Gas-mantles. Incandescent | Liberty Mantle Manufacturing Company. | 39,826 | Feb. 17 | 102 | 1548 |
| Gas mantles. Incandescent | W. Weickert | 40,458 | May 26 | 104 | 1115 |
| Gelatin | Whitman Grocery Co | 40,059 | Apr. 7 | 103 | 1411 |
| Gelatin | Swampscott Gelatine Company | 40,944 | Aug. 18 | 105 | 1772 |
| Gelatin made from moss | A. L. Martin | 40,097 | Apr. 14 | 103 | 1674 |
| Gelatin. Prepared | Whitman Grocery Company | 40,345 | May 12 | 104 | 571 |
| Gems, jewels, and precious stones and imitations thereof | Raystone Jewel Company | 39,992 | Mar. 31 | 103 | 1156 |
| Germicide. Antiseptic | A. A. Kleinschmidt | 40,055 | Apr. 7 | 103 | 1411 |
| Germicide for external use | Perdo Remedy Company | 39,881 | Mar. 3 | 103 | 219 |
| Glass. Certain named substitute for stained | McCaw, Stevenson & Orr | 41,462 | Nov. 17 | 107 | 825 |
| Glass. Cut and engraved | T. G. Hawkes & Co | 39,883 | Mar. 3 | 103 | 219 |
| Glass. Engraved and cut | T. G. Hawkes & Co | 39,884 | Mar. 3 | 103 | 219 |
| Glass jars | Hemingray Glass Co | 39,727 | Feb. 3 | 102 | 1044 |
| Glass surfaces against the action of vapors or moisture. Plastic composition for shielding | W. V. P. Gush | 39,764 | Feb. 10 | 102 | 1286 |
| Glassware. Certain named | Gebr. Putzler Glashütten-Werke, Gesellschaft mit Beschränkter Haftung. | 41,219 | Oct. 6 | 106 | 1493 |
| Gloves | J. A. Wolf | 39,755 | Feb. 10 | 102 | 1285 |
| Gloves | F. W. Larom | 40,039 | Apr. 7 | 103 | 1409 |
| Gloves | Carson Glove Co | 40,130 | Apr. 21 | 103 | 1905 |
| Gloves | Carson Glove Co | 40,131 | Apr. 21 | 103 | 1905 |
| Gloves | Carson Glove Co | 40,233 | May 5 | 104 | 301 |
| Gloves | A. Perroud | 41,349 | Oct. 27 | 106 | 2279 |
| Gloves | A. Perroud | 41,350 | Oct. 27 | 106 | 2279 |
| Gloves | A. Perroud | 41,351 | Oct. 27 | 106 | 2279 |
| Gloves and mittens. Knit | Progressive Knitting Mills | 41,651 | Dec. 15 | 107 | 1964 |
| Gloves. Certain named | P. Centemeri & Co | 39,954 | Mar. 24 | 103 | 880 |
| Gloves. Certain named | P. Centemeri & Co | 39,955 | Mar. 24 | 103 | 880 |
| Gloves. Kid | F. Schmidt | 40,751 | July 14 | 105 | 489 |
| Gloves. Kid | W. Locke | 41,545 | Dec. 1 | 107 | 1366 |
| Goods. Certain named piece | G. W. MacCutcheon | 41,740 | Dec. 29 | 107 | 2519 |
| Grape-juice. Unfermented | Battle Creek Grape Juice Co | 39,638 | Jan. 13 | 102 | 461 |
| Grates. Fireplace- | Aldine Grate & Mantle Co | 41,679 | Dec. 15 | 107 | 1967 |
| Grease and harness-dressing. Oleaginous compound used as an axle- | J. W. Russell | 40,696 | June 30 | 104 | 2434 |
| Gum. Chewing- | J. Minor | 40,443 | May 26 | 104 | 1113 |
| Gum. Chewing- | Royal Remedy & Extract Co | 40,913 | Aug. 11 | 105 | 1527 |
| Gun-barrels | Martin Fire Arms Co | 41,013 | Aug. 25 | 105 | 2054 |
| Gutta-percha tissue. Tailors' prepared | F. D. Scott | 41,738 | Dec. 29 | 107 | 2519 |
| Hair and scalp preparation | J. Weber | 40,047 | Apr. 7 | 103 | 1410 |
| Hair and scalp. Tonic and shampoo preparations for the | Shepherd Mfg. Co | 40,143 | Apr. 21 | 103 | 1906 |
| Hair cleansers and tonics | L. S. Carroll | 41,236 | Oct. 6 | 106 | 1495 |
| Hair fastening and supporting articles. Certain named | E. F. Blodgett | 40,925 | Aug. 18 | 105 | 1770 |
| Hair-grower and dandruff cure | Younglove and Singer | 41,044 | Sept. 1 | 106 | 259 |
| Hair-lotions | A. Cornioley | 40,397 | May 19 | 104 | 846 |
| Hair preparation | R. G. Edwards | 40,308 | May 12 | 104 | 568 |
| Hair. Preparations for treatment of the | Vail Brothers | 40,764 | July 14 | 105 | 490 |
| Hair-restoratives | B. F. Kerr | 40,107 | Apr. 14 | 103 | 1675 |
| Hair-restorer | Schön Chemical Co | 39,940 | Mar. 17 | 103 | 653 |
| Hair-tonic | M. E. Waite | 40,247 | May 5 | 104 | 302 |
| Hair-tonic | W. McCormack | 40,550 | June 9 | 104 | 1649 |
| Hair-tonic | W. O. Myers | 40,991 | Aug. 25 | 105 | 2051 |
| Hair-tonic compound | J. A. Wanous | 40,108 | Apr. 14 | 103 | 1675 |
| Hair tonic or renewer | Fountain of Youth Company | 41,411 | Nov. 3 | 107 | 261 |
| Hair-tonic. Quinine and cantharides | Weaver's Pharmacy | 40,787 | July 21 | 105 | 738 |
| Hair-tonics | M. E. Ellis | 40,683 | June 30 | 104 | 2433 |
| Hair-tonics | Henry Meier & Co | 41,518 | Nov. 24 | 107 | 1088 |
| Hair-tonics and dandruff cures | Cherokee Indian Medicine Co | 41,235 | Oct. 6 | 106 | 1495 |
| Hair wavers and curlers | A. Dreés | 40,735 | July 7 | 105 | 254 |
| Ham and bacon | A. E. Jordan | 41,328 | Oct. 20 | 106 | 2008 |
| Ham and breakfast-bacon | Charles Wolff Packing Co | 40,876 | Aug. 4 | 105 | 1256 |
| Ham and breakfast-bacon | Charles Wolff Packing Co | 40,877 | Aug. 4 | 105 | 1256 |
| Hammocks | Z. L. Chadbourne | 40,578 | June 16 | 104 | 1887 |
| Handkerchiefs | E. Bendheim | 41,469 | Nov. 17 | 107 | 826 |
| Harmonicas. Mouth- | M. Hohner | 40,569 | June 9 | 104 | 1651 |
| Harness-saddles, harness-straps, bridles, and halters | W. T. Wroe & Sons | 40,969 | Aug. 18 | 105 | 1775 |
| Harness-webbing | Russell Manufacturing Co | 39,904 | Mar. 10 | 103 | 420 |
| Harrows | Roderick Lean Manufacturing Co | 41,125 | Sept. 15 | 106 | 760 |
| Hat-linings | G. Leerburger | 39,697 | Jan. 27 | 102 | 815 |
| Hats | Rothschild Bros. Hat Co | 41,271 | Oct. 13 | 106 | 1769 |
| Hats and bonnets | Warren Featherbone Co | 40,428 | May 26 | 104 | 1112 |
| Hats and caps | Knox Hat Manufacturing Company | 41,272 | Oct. 13 | 106 | 1769 |
| Hats and caps | Knox Hat Manufacturing Company | 41,466 | Nov. 17 | 107 | 825 |

*Alphabetical list of trade-marks*—Continued.

| Title. | Name. | No. | Date. | Official Gazette. Vol. | Page. |
|---|---|---|---|---|---|
| Hats and caps. Soft and stiff felt | John B. Stetson Company | 40,975 | Aug. 25 | 105 | 2049 |
| Hats. Certain named | C. W. Dempster & Co | 40,659 | June 30 | 104 | 2431 |
| Hats for women and children | E. V. Rosemond | 40,083 | Apr. 14 | 103 | 1673 |
| Hats. Stiff and soft felt | Price & Vogt | 41,310 | Oct. 20 | 106 | 2006 |
| Hats. Stiff and soft felt | Price & Vogt | 41,311 | Oct. 20 | 106 | 2006 |
| Hats. Straw | Duke, Montague & Gillet Company | 40,927 | Aug. 18 | 105 | 1770 |
| Hatchets made entirely of metal | W. McArthur | 40,077 | Apr. 7 | 103 | 1413 |
| Hay-carriers, tracks therefor, and hay-forks | Rock River Hay Tool Co | 41,684 | Dec. 15 | 107 | 1968 |
| Headache cures | J. D. Sutton | 40,957 | Aug. 18 | 105 | 1774 |
| Headwear. Children's | Piebes & Co | 40,850 | Aug. 4 | 105 | 1253 |
| Healing balms for wounds | K. A. Marschat | 40,146 | Apr. 21 | 103 | 1906 |
| Heaters. Hot-water and steam | Abendroth Bros | 39,828 | Feb. 17 | 102 | 1548 |
| Heating and drying apparatus. Certain named | S. C. Davidson | 41,015 | Aug. 25 | 105 | 2054 |
| Heating apparatus | Gurney Heater Mfg. Co | 39,925 | Mar. 10 | 103 | 422 |
| Heels and soles for boots and shoes. Elastic or cushion | F. W. Whitcher | 40,469 | June 2 | 104 | 1384 |
| Hematogenic or blood-forming iron compounds | A. Gude & Co., Chemische Fabrik | 41,484 | Nov. 17 | 107 | 827 |
| Hematogenic or blood-forming iron compounds | A. Gude & Co., Chemische Fabrik | 41,706 | Dec. 22 | 107 | 2228 |
| Hides, leather, and cut leather | J. M. Delaney & Co | 39,700 | Jan. 27 | 102 | 815 |
| Homeopathic preparations | Enk Medicine Co | 39,913 | Mar. 10 | 103 | 421 |
| Hominy | Acker, Merrall & Condit Co | 41,230 | Oct. 6 | 106 | 1494 |
| Hooks and eyes | No-Vex Hook and Eye Mfg. Co | 41,189 | Sept. 29 | 106 | 1232 |
| Hops. Bohemian and Bavarian | C. Zoller & Co | 41,143 | Sept. 22 | 106 | 989 |
| Hops. Bohemian and Bavarian | C. Zoller & Co | 41,144 | Sept. 22 | 106 | 989 |
| Horseradish | J. C. Vogt | 40,207 | Apr. 28 | 103 | 2165 |
| Horseshoe-nails | Standard Horse Nail Company | 41,202 | Sept. 29 | 106 | 1233 |
| Horseshoes | A. G. Jennings | 40,882 | Aug. 4 | 105 | 1256 |
| Horseshoes | Master Horseshoers' National Protective Association of America. | 41,540 | Nov. 24 | 107 | 1090 |
| Horseshoes. Rubber | Calumet Tire Rubber Co | 40,575 | June 9 | 104 | 1652 |
| Hosiery | G. C. Wallace & Co | 39,712 | Feb. 3 | 102 | 1043 |
| Hosiery | Lord & Taylor | 39,866 | Mar. 3 | 103 | 217 |
| Hosiery | Lord & Taylor | 40,085 | Apr. 14 | 103 | 1673 |
| Hosiery | Lord & Taylor | 40,299 | May 12 | 104 | 567 |
| Hosiery | Lord & Taylor | 40,300 | May 12 | 104 | 567 |
| Hosiery | Lord & Taylor | 40,301 | May 12 | 104 | 567 |
| Hosiery | Lord & Taylor | 40,302 | May 12 | 104 | 567 |
| Hosiery | G. G. Guenther | 41,064 | Sept. 8 | 106 | 535 |
| Hosiery | Richardson, Roberts Dry Goods Co | 41,209 | Oct. 6 | 106 | 1492 |
| Hosiery | York Knitting Mills Co | 41,273 | Oct. 13 | 106 | 1769 |
| Hosiery | Mascot Knitting Mills | 41,429 | Nov. 10 | 107 | 532 |
| Hosiery | Sachs Bros & Co | 41,591 | Dec. 8 | 107 | 1649 |
| Hosiery for men, women, and children | Tibbs, Hutchings & Co | 40,182 | Apr. 28 | 103 | 2162 |
| Hot-water bags and ice-bags and stoppers for same | Meinecke & Co | 40,405 | May 19 | 104 | 846 |
| Hydrocarbon-burners | Herz Manufacturing Company | 39,704 | Jan. 27 | 102 | 815 |
| Hypnotic | Farbenfabriken of Elberfeld Co | 41,157 | Sept. 22 | 106 | 990 |
| Hypophosphites. Preparation of | Fellows Medical M'f'g Co | 41,626 | Dec. 8 | 107 | 1653 |
| Ice-cream freezers | Dana & Co | 39,642 | Jan. 13 | 102 | 462 |
| Ice-cream freezers | Dana & Co | 39,643 | Jan. 13 | 102 | 462 |
| Ice-cream freezers | Dana & Company | 41,122 | Sept. 15 | 106 | 760 |
| Incandescent mantles and burners | American El. Nov. & Mf'g. Co | 40,567 | June 9 | 104 | 1651 |
| Incubators and brooders | Geo. Ertel Co | 40,082 | Apr. 7 | 103 | 1414 |
| Incubators and brooders | J. W. Miller Co | 40,420 | May 19 | 104 | 848 |
| Ink | Paul's Ink Co | 41,753 | Dec. 29 | 107 | 2520 |
| Ink. Bronze printing | T. Riessner | 40,218 | Apr. 28 | 103 | 2167 |
| Ink. Duplicating | A. B. Dick Company | 41,662 | Dec. 15 | 107 | 1965 |
| Ink. Duplicating | Neostyle Company | 41,663 | Dec. 15 | 107 | 1965 |
| Inks. Printing | S. Ullman Co | 41,081 | Sept. 8 | 106 | 536 |
| Insect-powders | C. E. Whitehurst | 40,305 | May 12 | 104 | 568 |
| Insecticide | L. Dreyfus | 41,438 | Nov. 10 | 107 | 533 |
| Insecticide. Certain named | M. A. Hunolt | 40,906 | Aug. 11 | 105 | 1526 |
| Insecticides | Peerless Manufacturing Co | 40,435 | May 26 | 104 | 1112 |
| Insecticides | G. R. Bigler | 40,794 | July 21 | 105 | 739 |
| Insecticides | F. A. Carlson | 41,355 | Oct. 27 | 106 | 2280 |
| Insecticides | Leach Insecticide Company of Baltimore City. | 41,419 | Nov. 3 | 107 | 262 |
| Insecticides | W. J. Bush Co | 41,490 | Nov. 17 | 107 | 827 |
| Insoles | B. I. Wiener | 41,595 | Dec. 8 | 107 | 1649 |
| Insulating compound | R. D. Upham | 41,161 | Sept. 22 | 106 | 991 |
| Insulating liquids | Dielectric Mfg. Co | 40,170 | Apr. 21 | 103 | 1909 |
| Insulating preparations for electrical machinery and apparatus. | Massachusetts Chemical Company | 41,523 | Nov. 24 | 107 | 1089 |
| Ironing machines. Collar and cuff | Nelson & Kreuter | 39,989 | Mar. 24 | 103 | 884 |
| Jars. Glass | J. A. Landsberger | 41,790 | Dec. 29 | 107 | 2524 |
| Jelly | Genesee Pure Food Co | 40,383 | May 19 | 104 | 844 |
| Jewelry. Certain named | Rodenberg & Dunn | 41,216 | Oct. 6 | 106 | 1493 |
| Jewelry. Certain named | Rodenberg & Dunn | 41,217 | Oct. 6 | 106 | 1493 |
| Kitchen utensils made of porcelain or chinaware | R. Frugier et Cie | 39,984 | Mar. 24 | 103 | 883 |
| Knit goods. Certain named | H. Schiff | 39,696 | Jan. 27 | 102 | 815 |
| Knit goods. Certain named | William Carter Co | 41,505 | Nov. 24 | 107 | 1087 |
| Knit or woven underwear | Brown, Durrell & Co | 41,063 | Sept. 8 | 106 | 535 |
| Knives | Washington Cutlery Co | 41,648 | Dec. 8 | 107 | 1655 |
| Knives, belt-knives, and leather-knives. Machine | Bailey & Blendinger Mfg. Co | 40,972 | Aug. 18 | 105 | 1776 |
| Knives. Bread and cake | Clark & Parsons Company | 40,804 | July 21 | 105 | 740 |
| Knives. Certain named | A. O. Meyer | 41,341 | Oct. 20 | 106 | 2009 |
| Knot-tying implements | Barber & Colman | 40,081 | Apr. 7 | 103 | 1414 |
| Laces. Leather shoe | L. E. Goldstein | 41,396 | Nov. 3 | 107 | 260 |
| Lamp-chimneys | G. A. Young | 40,699 | June 30 | 104 | 2434 |
| Lamp mantles. Gas | H. Barna | 40,071 | Apr. 7 | 103 | 1413 |
| Lamp mantles. Incandescent-gas | C. R. Lindsay, Jr | 39,886 | Mar. 3 | 103 | 219 |
| Lamp sockets and rosettes. Electric | Norden-Bittner Electric Co | 39,855 | Feb. 24 | 102 | 1773 |
| Lamp sockets. Electric | H. T. Paiste Co | 40,290 | May 5 | 104 | 306 |
| Lamps and their parts | Deutsche Gasglühlicht Actiengesellschaft. | 41,121 | Sept. 15 | 106 | 760 |
| Lamps and tubes for treatment of certain named diseases | R. Schneider | 41,361 | Oct. 27 | 106 | 2280 |
| Lamps. Certain named | F. E. Baldwin | 39,885 | Mar. 3 | 103 | 219 |
| Lamps. Hydrocarbon | W. S. Traill | 39,626 | Jan. 6 | 102 | 224 |

*Alphabetical list of trade-marks*—Continued.

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|---|---|---|---|---|---|
| Lamps. Incandescent | Pettingell-Andrews Company | 40,227 | Apr. 28 | 103 | 2168 |
| Lamps. Incandescent electric | Independent Incandescent Lamp Co. | 39,946 | Mar. 17 | 103 | 654 |
| Lamps. Incandescent electric | J. H. Bunnell & Co | 40,324 | May 12 | 104 | 570 |
| Lamps. Incandescent electric | Bryan-Marsh Company | 41,343 | Oct. 20 | 106 | 2010 |
| Lamps. Incandescent electric | W. D. & J. W. Packard | 41,456 | Nov. 10 | 107 | 535 |
| Lamps, lamp-globes, and shades. Certain named | Chandler Specialty Manufacturing Company. | 40,289 | May 5 | 104 | 306 |
| Lamps. Night- | Silver & Co | 40,568 | June 9 | 104 | 1651 |
| Lampblack | Wegelin & Wilckes Black Mfg. Co | 40,642 | June 23 | 104 | 2143 |
| Lampblack | Hyde Carbon Black Company | 40,999 | Aug. 25 | 105 | 2052 |
| Lard | J. Vogel & Son | 40,208 | Apr. 28 | 103 | 2165 |
| Lard | Cudahy Packing Co | 40,209 | Apr. 28 | 103 | 2165 |
| Lard | Continental Packing Co | 40,274 | May 5 | 104 | 305 |
| Lard | Continental Packing Co | 40,275 | May 5 | 104 | 305 |
| Lard | T. M. Sinclair & Co | 41,400 | Nov. 3 | 107 | 260 |
| Lard compound | Southern Cotton Oil Co | 40,982 | Aug. 25 | 105 | 2050 |
| Lard. Refined | G. W. Hazel | 41,182 | Sept. 29 | 106 | 1231 |
| Lard substitute | Schwarzschild & Sulzberger Company. | 40,491 | June 2 | 104 | 1386 |
| Laxative aromatic compound | Sharp & Dohme | 41,294 | Oct. 13 | 106 | 1771 |
| Laxatives | Foster-Milburn Company | 40,857 | Aug. 4 | 105 | 1254 |
| Lead, dry or ground in oil. White | Chadwick-Boston Lead Co | 41,526 | Nov. 24 | 107 | 1089 |
| Lead. White | Tripod Paint Company | 40,118 | Apr. 14 | 103 | 1676 |
| Leather | A. C. Lawrence Leather Co | 41,140 | Sept. 22 | 106 | 989 |
| Leather | A. C. Lawrence Leather Co | 41,141 | Sept. 22 | 106 | 989 |
| Leather | M. Beadenkopf | 41,431 | Nov. 10 | 107 | 532 |
| Leather | Creese & Cook Co | 41,656 | Dec. 15 | 107 | 1964 |
| Leather and boots and shoes. Certain named preparations for use on | Whittemore Bro's and Co | 39,761 | Feb. 10 | 102 | 1286 |
| Leather and boots and shoes made of leather | Rice & Hutchins | 41,026 | Sept. 1 | 106 | 257 |
| Leather and leather and canvas shoes | Hirschman Shoe Co | 40,660 | June 30 | 104 | 2431 |
| Leather. Artificial | National Artificial Leather Company. | 41,007 | Aug. 25 | 105 | 2053 |
| Leather-board and leather | Hideite Leather Co | 41,073 | Sept. 8 | 106 | 536 |
| Leather. Certain named | Trenckmann & Co | 41,072 | Sept. 8 | 106 | 536 |
| Leather. Certain named | American Leather Co | 41,742 | Dec. 29 | 107 | 2519 |
| Leather-dressing. Liquid | International Shoe Co | 40,219 | Apr. 28 | 103 | 2167 |
| Leather for certain named purposes | Scheffer & Rossum | 40,630 | June 23 | 104 | 2142 |
| Leather. Imitation | Marokene Co | 40,931 | Aug. 18 | 105 | 1771 |
| Leather, patent-leather shoes and slippers. Patent- | H. F. Sommer & Co | 40,628 | June 23 | 104 | 2142 |
| Leather, patent-leather shoes and slippers. Patent- | H. F. Sommer & Co | 40,629 | June 23 | 104 | 2142 |
| Leather. Picking- | James H. Billington Co | 40,363 | May 12 | 104 | 573 |
| Leather. Tanned | Leas & McVitty | 39,760 | Feb. 10 | 102 | 1286 |
| Leather waterproof dressing | J. Hartigan | 39,806 | Feb. 17 | 102 | 1545 |
| Leggings and overgaiters | Perfection Overgaiter Company | 41,172 | Sept. 29 | 106 | 1231 |
| Lens instruments | Firm of C. Zeiss | 40,140 | Apr. 21 | 103 | 1906 |
| Lice-killer | Pratt Food Co | 41,250 | Oct. 6 | 106 | 1496 |
| Lifting-jacks | Templeton, Kenly & Co | 40,032 | Mar. 31 | 103 | 1160 |
| Lime. Ground white | Rockland-Rockport Lime Company. | 39,909 | Mar. 10 | 103 | 421 |
| Liniment | J. S. Burton | 39,739 | Feb. 3 | 102 | 1045 |
| Liniment | J. Lauro | 39,770 | Feb. 10 | 102 | 1287 |
| Liniment | E. Bach | 39,944 | Mar. 17 | 103 | 654 |
| Liniment | King-K Medicine Company | 40,404 | May 19 | 104 | 846 |
| Liniment | W. H. Rullman | 40,607 | June 16 | 104 | 1890 |
| Liniment | Shields Croup Liniment Co | 40,861 | Aug. 4 | 105 | 1254 |
| Liniment | J. E. Cagwin | 41,418 | Nov. 3 | 107 | 262 |
| Liniment | C. H. Milversted | 41,566 | Dec. 1 | 107 | 1368 |
| Liniments | Pratt Food Co | 41,248 | Oct. 6 | 106 | 1496 |
| Liniments for external and internal uses | G. B. Russell | 40,638 | June 23 | 104 | 2143 |
| Linings | Burton Bros. & Co | 40,888 | Aug. 11 | 105 | 1524 |
| Linings and dress goods. Certain named | Bradford Dyers' Association | 41,208 | Oct. 6 | 106 | 1492 |
| Liqueurs | Nuyens & Co | 41,513 | Nov. 24 | 107 | 1088 |
| Liquid and paste composition for certain named purposes | A. H. Andrews Company | 41,525 | Nov. 24 | 107 | 1089 |
| Liquids for certain named purposes. Mixed | L. S. Van Westrum | 40,967 | Aug. 18 | 105 | 1775 |
| Liquors. Certain named malt | J. & P. Baltz Brewing Co | 40,011 | Mar. 31 | 103 | 1158 |
| Liquors containing eucalyptus oil or essence | Societa Agricola delle Tre Fontane | 39,893 | Mar. 3 | 103 | 220 |
| Listing and adding machines. Combined | Felt & Tarrant Manufacturing Co | 40,417 | May 19 | 104 | 848 |
| Lithium and sodium. Chemical combination of double salt of | Lith-Alkin Chemical Company | 40,796 | July 21 | 105 | 739 |
| Liver-regulators | Kihoma Medicine Co | 40,049 | Apr. 7 | 103 | 1410 |
| Locks | D. K. Miller Lock Co | 39,705 | Jan. 27 | 102 | 815 |
| Long-cloth | Sherman, Reid & Co | 41,024 | Sept. 1 | 106 | 257 |
| Lotions | Auditorium Pharmacy Company | 40,144 | Apr. 21 | 103 | 1906 |
| Lotions | Cosmetique Oriental Zibai | 41,077 | Sept. 8 | 106 | 536 |
| Lotions | Blackmarr & Mandeville | 41,155 | Sept. 22 | 106 | 990 |
| Lotions, creams, cosmetics, and pastes | M. E. Hinchman | 39,776 | Feb. 10 | 102 | 1287 |
| Lubricant liquid | Foote, Pierson & Co | 41,257 | Oct. 6 | 106 | 1497 |
| Lubricants | R. N. Nason & Co | 40,411 | May 19 | 104 | 847 |
| Lubricating compound | A. Cook's Sons | 39,725 | Feb. 3 | 102 | 1044 |
| Lubricating-greases | J. R. Wise | 39,808 | Feb. 17 | 102 | 1546 |
| Lubricating substances | Snowdon Sons & Co | 41,256 | Oct. 6 | 106 | 1497 |
| Lumber. Manufactured | Refined Wood Company | 41,388 | Oct. 27 | 106 | 2284 |
| Lunch-boxes. Portable | Union Luncheon Box Company | 41,008 | Aug. 25 | 105 | 2053 |
| Machines. Certain named | Disser Syndicate | 40,031 | Mar. 31 | 103 | 1160 |
| Machines, looms, apparatus, and devices for certain named purposes. | R. Kron | 40,328 | May 12 | 104 | 570 |
| Mackintoshes and rubber coats | Hodgman Rubber Company | 40,041 | Apr. 7 | 103 | 1409 |
| Magazine. Monthly | Hill Publishing Company | 39,709 | Feb. 3 | 102 | 1043 |
| Magazines | Southern Pacific Company | 41,214 | Oct. 6 | 106 | 1492 |
| Magazines. Printed | Massachusetts Society for the Prevention of Cruelty to Animals. | 39,708 | Feb. 3 | 102 | 1043 |
| Magnesium dioxid | Biogen Company | 41,050 | Sept. 1 | 106 | 259 |
| Malt-extract compounds | B. Bockar | 41,224 | Oct. 6 | 106 | 1493 |
| Malt spirit | Booth's Distillery | 39,968 | Mar. 24 | 103 | 882 |

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|---|---|---|---|---|---|
| Malted-wheat flakes | Bourdeau Food Co | 39,840 | Feb. 24 | 102 | 1772 |
| Margarin | China Export-, Import- and Bank-Compagnie. | 40,385 | May 19 | 104 | 845 |
| Marking substances and crayons and pencils in which such are used. | Binney & Smith Co | 40,720 | July 7 | 105 | 253 |
| Marmalades, honey-fruit marmalades, and marmalade-tablets. | Deutsche Honig-Frucht-Marmeladen-Fabrik Henirich Adolf Behrendt. | 40,985 | Aug. 25 | 105 | 2050 |
| Match boxes and cases | "Jupiter" Gesellschaft mit Beschränkter Haftung. | 41,386 | Oct. 27 | 106 | 2283 |
| Match-boxes. Certain named | James E. Blake Co | 40,370 | May 12 | 104 | 574 |
| Matches. Friction- | Ohio Match Co | 41,596 | Dec. 8 | 107 | 1650 |
| Matches. Friction- | Ohio Match Co | 41,597 | Dec. 8 | 107 | 1650 |
| Matches. Friction- | Ohio Match Co | 41,598 | Dec. 8 | 107 | 1650 |
| Matches. Friction- | Ohio Match Co | 41,599 | Dec. 8 | 107 | 1650 |
| Matches. Friction- | Ohio Match Co | 41,600 | Dec. 8 | 107 | 1650 |
| Matches. Friction- | Ohio Match Co | 41,601 | Dec. 8 | 107 | 1650 |
| Matches. Friction- | Ohio Match Co | 41,602 | Dec. 8 | 107 | 1650 |
| Matches. Friction- | Ohio Match Co | 41,603 | Dec. 8 | 107 | 1650 |
| Matches. Friction- | Ohio Match Co | 41,604 | Dec. 8 | 107 | 1651 |
| Matches. Friction- | Ohio Match Co | 41,605 | Dec. 8 | 107 | 1651 |
| Matches. Friction- | Ohio Match Co | 41,606 | Dec. 8 | 107 | 1651 |
| Matches. Friction- | Ohio Match Co | 41,607 | Dec. 8 | 107 | 1651 |
| Matches. Friction- | Ohio Match Co | 41,608 | Dec. 8 | 107 | 1651 |
| Matches. Friction- | Ohio Match Co | 41,609 | Dec. 8 | 107 | 1651 |
| Matches. Friction- | Ohio Match Co | 41,610 | Dec. 8 | 107 | 1651 |
| Matches. Friction- | Ohio Match Co | 41,611 | Dec. 8 | 107 | 1651 |
| Matches. Friction- | Ohio Match Co | 41,612 | Dec. 8 | 107 | 1652 |
| Matches. Friction- | Ohio Match Co | 41,613 | Dec. 8 | 107 | 1652 |
| Matches. Friction- | Ohio Match Co | 41,671 | Dec. 15 | 107 | 1966 |
| Matches. Safety- | H. Hochberg | 40,963 | Aug. 18 | 105 | 1775 |
| Mattress-shields | C. F. Hallam | 41,068 | Sept. 8 | 106 | 535 |
| Mattresses | Newark Spring Mattress Co | 40,369 | May 12 | 104 | 574 |
| Mattresses | Newark Spring Mattress Co | 40,533 | June 9 | 104 | 1647 |
| Mattresses | T. B. Burnett | 41,746 | Dec. 29 | 107 | 2520 |
| Mattresses, bolsters, pillows, and cushions | W. H. Robinson | 41,385 | Oct. 27 | 106 | 2283 |
| Measuring-tapes | Lufkin Rule Co | 40,470 | June 2 | 104 | 1384 |
| Measuring-tapes | Keuffel & Esser Co | 40,663 | June 30 | 104 | 2431 |
| Meat extracts and concentrated meats | Ox-Beef Company of America | 39,839 | Feb. 24 | 102 | 1772 |
| Meat, fruit, vegetables, and the like. Preserving material for | J. L. Sausaman | 40,280 | May 5 | 104 | 305 |
| Meat-preserving compounds | National Mfg. & Supply Co | 41,233 | Oct. 6 | 106 | 1495 |
| Meats. Certain named | Cudahy Packing Co | 41,778 | Dec. 29 | 107 | 2523 |
| Meats. Certain named cured | M. Zimmermann Company | 39 654 | Jan. 20 | 102 | 617 |
| Meats. Cured | Cudahy Bros. Co | 40,003 | Mar. 31 | 103 | 1157 |
| Meats. Cured | Geo. A. Hormel & Co | 41,178 | Sept. 29 | 106 | 1231 |
| Meats. Cured | J. C. Hutton | 41,720 | Dec. 22 | 107 | 2230 |
| Meats. Fresh and cured | Dunlevy and Brother | 40,452 | May 26 | 104 | 1114 |
| Meats. Smoked and canned | Cudahy Packing Co | 40.617 | June 16 | 104 | 1891 |
| Medals, pins, and badges | Chas. M. Robbins Co | 39,951 | Mar. 24 | 103 | 880 |
| Medical compound. Certain named | E. V. Feller | 41,242 | Oct. 6 | 106 | 1495 |
| Medical compound for certain named diseases | Schön Chemical Co | 39,942 | Mar. 17 | 103 | 653 |
| Medical compound for cure of certain named diseases | W. F. West | 40,252 | May 5 | 104 | 303 |
| Medical compound for cure of certain named diseases | Weaver's Pharmacy | 40,554 | June 9 | 104 | 1650 |
| Medical compound for external use | E. V. Feller | 40.016 | Mar. 31 | 103 | 1158 |
| Medical compound for the cure of coughs and colds | B. V. Howe | 40.858 | Aug. 4 | 105 | 1254 |
| Medical compound to be used as a hæmostatic | Knoll & Co | 40,633 | June 23 | 104 | 2142 |
| Medical compounds. Certain named | Alden Chemical Company | 41,704 | Dec. 22 | 107 | 2228 |
| Medical compounds for certain named purposes | Porter-Ryerson-Hoobler Company | 40,594 | June 16 | 104 | 1889 |
| Medical compounds for certain named purposes | Porter-Ryerson-Hoobler Company | 40,595 | June 16 | 104 | 1889 |
| Medical compounds for heart stimulants, diuretics, and eliminants. | E. P. Bordas | 40,249 | May 5 | 104 | 302 |
| Medical preparation. Certain named | H. Green | 41,672 | Dec. 15 | 107 | 1966 |
| Medical preparation or compound for treatment of deafness | L. Bloomer | 41,243 | Oct. 6 | 106 | 1496 |
| Medical tonic | G. W. Leach | 40,477 | June 2 | 104 | 1385 |
| Medicated cough-drops | W. C. Enck | 41,195 | Sept. 29 | 106 | 1233 |
| Medicated foods | J. H. Brown | 39,877 | Mar. 3 | 103 | 218 |
| Medicated plasters for cure of rheumatism. Adhesive | Magic Foot Draft Co | 40,733 | July 7 | 105 | 254 |
| Medicated tablets for la grippe and its after effects | Ewell & Everett | 41,336 | Oct. 20 | 106 | 2009 |
| Medicinal and chemical preparations for prevention and cure of diseases. | Dr. D. Jayne & Son | 41,627 | Dec. 8 | 107 | 1653 |
| Medicinal and toilet preparation for the complexion | A. L. Mattison | 41,194 | Sept. 29 | 106 | 1233 |
| Medicinal bitters | Kirk, Geary & Co | 40,990 | Aug. 25 | 105 | 2051 |
| Medicinal compounds for treatment of croup and whooping-cough. | C. J. Müller | 39,658 | Jan. 20 | 102 | 617 |
| Medicinal drinking-water | J. F. Christian | 40,546 | June 9 | 104 | 1649 |
| Medicinal food. Certain named | Internationale Heil-u. Nährmittel Compagnie, G. M. B. H. | 41,150 | Sept. 22 | 106 | 990 |
| Medicinal food. Certain named | Internationale Heil-u. Nährmittel Compagnie, G. M. B. H. | 41,151 | Sept. 22 | 106 | 990 |
| Medicinal foods, tonics, and cordials | C. Keefe, Jr | 41,337 | Oct. 20 | 106 | 2009 |
| Medicinal preparation for certain named diseases | Madison Medicine Co | 40,191 | Apr. 28 | 103 | 2163 |
| Medicinal preparation for cure of certain named diseases | Houchens Medicine Company | 40,311 | May 12 | 104 | 568 |
| Medicinal preparation for cure of certain named diseases | Eimer & Amend | 40,359 | May 12 | 104 | 573 |
| Medicinal preparation for treatment of dyspepsia and loss of appetite. | Dr. Pinet Co | 41,564 | Dec. 1 | 107 | 1368 |
| Medicinal preparation in tablet form | Dr. Parker Med. Co | 40,398 | May 19 | 104 | 846 |
| Medicinal preparations. Certain named | A. J. Krehbiel | 39,813 | Feb. 17 | 102 | 1546 |
| Medicinal preparations. Certain named | F. J. Smith | 39,914 | Mar. 10 | 103 | 421 |
| Medicinal preparations. Certain named | I. Radam | 40,552 | June 9 | 104 | 1649 |
| Medicinal preparations for certain named diseases | J. D. Riedel | 41,440 | Nov. 10 | 107 | 533 |
| Medicinal preparations for diseases of the blood and skin | E. J. Molloy | 40.995 | Aug. 25 | 105 | 2051 |
| Medicinal preparations for the cure of certain named diseases | Fitchmul Company | 40,357 | May 12 | 104 | 573 |
| Medicinal preparations for treatment of catarrh | F. A. Luyties | 41,673 | Dec. 15 | 107 | 1967 |
| Medicinal preparations for treatment of certain named diseases. | O. G. Stolz | 40,728 | July 7 | 105 | 254 |
| Medicinal preparations for treatment of skin diseases. Liquid | Norwich Pharmacal Company | 40,254 | May 5 | 104 | 303 |

*Alphabetical list of trade-marks*—Continued.

| Title. | Name. | No. | Date. | Official Gazette. Vol. | Page. |
|---|---|---|---|---|---|
| Medicinal preparations or compounds for the nerves and nervous diseases. | D. D. Richardson | 41,239 | Oct. 6 | 106 | 1495 |
| Medicinal salts and tablets made therefrom | Medical Lake Salt Mfg. Co | 39,637 | Jan. 13 | 102 | 461 |
| Medicinal tonic | Gorah Co | 40,014 | Mar. 31 | 103 | 1158 |
| Medicinal tonic for malaria, chills, and fevers | Gannaway Drug Co | 41,557 | Dec. 1 | 107 | 1367 |
| Medicinal use. Malt extracts for | M. J. Breitenbach Co | 39,713 | Feb. 3 | 102 | 1043 |
| Medicine. Cancer | J. F. Morrison | 39,814 | Feb. 17 | 102 | 1546 |
| Medicine. Certain named proprietary | J. Moffet | 39,982 | Mar. 24 | 103 | 883 |
| Medicine. Certain named proprietary | C. W. Sawyer | 40,193 | Apr. 28 | 103 | 2163 |
| Medicine. Cough | J. Kalish | 41,565 | Dec. 1 | 107 | 1368 |
| Medicine. Cough | Neptuna Co | 41,700 | Dec. 22 | 107 | 2228 |
| Medicine for blood and liver diseases | A. E. Broga | 40,190 | Apr. 28 | 103 | 2163 |
| Medicine for certain named diseases | S. T. Lee & Co | 39,718 | Feb. 3 | 102 | 1044 |
| Medicine for certain named diseases | Anasarcin Chemical Company | 39,943 | Mar. 17 | 103 | 653 |
| Medicine for certain named diseases | Swift Specific Co | 40,050 | Apr. 7 | 103 | 1410 |
| Medicine for certain named diseases | J. J. Vetter | 40,151 | Apr. 21 | 103 | 1907 |
| Medicine for certain named diseases | Claflin Chemical Co | 41,483 | Nov. 17 | 107 | 827 |
| Medicine for certain named diseases. Proprietary | F. Hobart | 41,416 | Nov. 3 | 107 | 262 |
| Medicine for certain named purposes. Proprietary | Salo-Sedatus Chemical Company | 41,196 | Sept. 29 | 106 | 1233 |
| Medicine for cure of certain named diseases | J. A. Christiansen | 39,772 | Feb. 10 | 102 | 1287 |
| Medicine for cure of indigestion and constipation | F. J. Standard | 40,153 | Apr. 21 | 103 | 1907 |
| Medicine for cure of kidney and bladder troubles | A. R. Smith | 40,758 | July 14 | 105 | 490 |
| Medicine for digestion and diseases of the stomach | C. F. York | 40,593 | June 16 | 104 | 1889 |
| Medicine for liver and kidney complaints | Ferrell Kellam Drug Company of Baltimore City. | 41,080 | Sept. 8 | 106 | 536 |
| Medicine for malaria and kindred diseases | C. J. Murphy | 40,051 | Apr. 7 | 103 | 1410 |
| Medicine for nerve, blood, and skin diseases | F. Jacobson | 40,592 | June 16 | 104 | 1888 |
| Medicine for poultry | Chickicura Company | 41,624 | Dec. 8 | 107 | 1653 |
| Medicine for prevention of seasickness | D. Landauer | 40,152 | Apr. 21 | 103 | 1907 |
| Medicine for the cure of nervous diseases | L. R. Williams | 40,674 | June 30 | 104 | 2432 |
| Medicine for treatment of certain named diseases of horses | Bradbury Equalizer Co | 40,402 | May 19 | 104 | 846 |
| Medicine for treatment of fevers | T. H. Forgan | 40,149 | Apr. 21 | 103 | 1906 |
| Medicine in tablet form. Tonic | W. S. Evans | 41,439 | Nov. 10 | 107 | 533 |
| Medicine. Laxative | McKesson & Robbins | 39,844 | Feb. 24 | 102 | 1772 |
| Medicine. Liquid | I. P. Sprague | 40,312 | May 12 | 104 | 568 |
| Medicine. Pain-allaying | OiliO Chemical Company | 41,703 | Dec. 22 | 107 | 2228 |
| Medicine to cure headaches and neuralgia | Radical Remedy Co | 41,699 | Dec. 22 | 107 | 2228 |
| Medicine to prevent seasickness | W. Fred. Steinmetz Co | 40,673 | June 30 | 104 | 2432 |
| Medicine. Tonic and reconstructive | Bendiner & Schlesinger | 40,591 | June 16 | 104 | 1888 |
| Medicine. Whooping-cough | J. Kalish | 41,415 | Nov. 3 | 107 | 262 |
| Medicines. Certain named | T. F. E. Fagan | 40,438 | May 26 | 104 | 1113 |
| Medicines. Certain named | A. P. Sawyer | 40,856 | Aug. 4 | 105 | 1254 |
| Medicines. Dyspepsia | M. D. Batchelder | 40,437 | May 26 | 104 | 1112 |
| Medicines for bust development | L. Laing | 40,553 | June 9 | 104 | 1649 |
| Medicines for certain named diseases | E. H. Stolz | 39,719 | Feb. 3 | 102 | 1044 |
| Medicines for certain named diseases | G. E. Dunton | 40,704 | June 30 | 104 | 2435 |
| Medicines for cure of alcoholic habits. Proprietary | Orrine Company | 40,112 | Apr. 14 | 103 | 1675 |
| Medicines for cure of certain named diseases | C. Weschcke | 40,953 | Aug. 18 | 105 | 1774 |
| Medicines for cure of chills | Paris Medicine Company | 40,189 | Apr. 28 | 103 | 2163 |
| Medicines for external treatment of diseases and irritations of skin, scalp, and face. | M. M. Harris | 39,769 | Feb. 10 | 102 | 1287 |
| Medicines for pulmonary and bronchial affections | J. E. Fitzgerald | 40,017 | Mar. 31 | 103 | 1159 |
| Medicines for purification of the blood | A. Balaguer | 40,996 | Aug. 25 | 105 | 2051 |
| Medicines for the treatment of certain named diseases | D. J. Johnston | 40,898 | Aug. 11 | 105 | 1525 |
| Medicines for treatment of certain named diseases. Proprietary | D. A. Himadi | 41,291 | Oct. 13 | 106 | 1771 |
| Medicines. Headache and stomach | Ohio Chemical Co | 39,714 | Feb. 3 | 102 | 1043 |
| Medicines. Malarial or fever and ague | F. B. & A. M. Tyler & Co | 40,114 | Apr. 14 | 103 | 1675 |
| Medicines. Tonic | Vin-Morrhol Chemical Co | 40,111 | Apr. 14 | 103 | 1675 |
| Metal and articles made therefrom. Antifriction | Vim Metal Company | 40,121 | Apr. 14 | 103 | 1676 |
| Metal art novelties. Cast, spun, or pressed | National Lead Co | 40,698 | June 30 | 104 | 2434 |
| Metal. Certain named special | T. H. Symington Co | 40,515 | June 2 | 104 | 1388 |
| Metal, glass, and woodwork. Cleaning and polishing composition for | M. K. Brigstocke | 40,822 | July 28 | 105 | 969 |
| Metal, glass, &c. Cleaning compounds for cleaning and polishing | C. H. Petry | 41,643 | Dec. 8 | 107 | 1655 |
| Metal-polishes | Geddes & Harkleroad | 39,975 | Mar. 24 | 103 | 882 |
| Metal-polishing compound | W. G. Day | 41,755 | Dec. 29 | 107 | 2521 |
| Metals. Readily-fusible | B. H. Seabury | 40,460 | May 26 | 104 | 1115 |
| Metals. White paste for polishing | Société Générale des Cirages Français. | 40,821 | July 28 | 105 | 969 |
| Metallic plates | American Pressed Steel Co | 39,796 | Feb. 10 | 102 | 1290 |
| Milk. Condensed | Helvetia Milk Condensing Co | 39,936 | Mar. 17 | 103 | 653 |
| Milk. Condensed | Helvetia Milk Condensing Co | 39,937 | Mar. 17 | 103 | 653 |
| Milk. Condensed | Cold Process Co | 40,009 | Mar. 31 | 103 | 1158 |
| Milk. Condensed | Wisconsin Condensed Milk Co | 40,952 | Aug. 18 | 105 | 1773 |
| Milk. Condensed | Wisconsin Condensed Milk Co | 41,667 | Dec. 15 | 107 | 1966 |
| Milk, condensed milk, cream, and evaporated cream | Borden's Condensed Milk Co | 41,619 | Dec. 8 | 107 | 1653 |
| Milk, condensed milk, cream, and evaporated cream | Borden's Condensed Milk Co | 41,620 | Dec. 8 | 107 | 1653 |
| Milk, condensed milk, cream, and evaporated cream | Borden's Condensed Milk Co | 41,621 | Dec. 8 | 107 | 1653 |
| Milk, cream, and buttermilk | Hazelwood Company | 40,829 | July 28 | 105 | 969 |
| Milk, malted milk, and food-product milk | Borden's Condensed Milk Co | 40,692 | June 30 | 104 | 2434 |
| Milk. Solid | J. McIntyre | 39,616 | Jan. 6 | 102 | 222 |
| Mineral water | Deerfield Water Company | 39,874 | Mar. 3 | 103 | 218 |
| Mineral water | Berry Hill Mineral Spring Co. of Va. | 40,741 | July 7 | 105 | 255 |
| Mineral water | Berry Hill Mineral Spring Co. of Va. | 40,914 | Aug. 11 | 105 | 1527 |
| Mineral water. Chalybeate | J. N. Horne | 40,268 | May 5 | 104 | 304 |
| Mineral waters and crystallized mineral waters | Kalola Company | 39,784 | Feb. 10 | 102 | 1288 |
| Molding or printing and starch machines | Confectioners' Machinery and Manufacturing Company. | 41,796 | Dec. 29 | 107 | 2524 |
| Motors and generators. Direct-current | General Electric Company | 40,514 | June 2 | 104 | 1388 |
| Mowers. Lawn- | Supplee Hardware Co | 39,668 | Jan. 20 | 102 | 618 |
| Mowers. Lawn- | Supplee Hardware Co | 39,797 | Feb. 10 | 102 | 1290 |
| Mowers. Lawn- | Hockaday Hardware Company | 41,262 | Oct. 6 | 106 | 1498 |
| Mushroom relish or sauce. Table | G. L. Jacquin | 39,778 | Feb. 10 | 102 | 1288 |
| Music-rolls for automatic musical instruments. Perforated. | Perforated Music Roll Co | 40,245 | May 5 | 104 | 302 |

*Alphabetical list of trade-marks*—Continued.

| Title. | Name. | No. | Date. | Official Gazette. Vol. | Page. |
|---|---|---|---|---|---|
| Music. Sheet- | Howley, Haviland & Dresser | 40,035 | Apr. 7 | 103 | 1409 |
| Music. Sheet- | Howley, Haviland & Dresser | 40,092 | Apr. 14 | 103 | 1674 |
| Music. Sheet- | J. V. Braun | 40,423 | May 26 | 104 | 1111 |
| Musical boxes | Lyon & Healy | 41,119 | Sept. 15 | 106 | 760 |
| Musical comedy in book form | C. Crawford | 40,091 | Apr. 14 | 103 | 1673 |
| Musical instruments and bows therefor. Certain named | Wm. R. Gratz Company | 41,391 | Nov. 3 | 107 | 260 |
| Musical instruments. Certain named | F. Gretsch | 41,054 | Sept. 1 | 106 | 260 |
| Musical instruments, comprising a banjo and harmonica. Combination | Harp-O-Chord Co | 40,805 | July 21 | 105 | 740 |
| Needle and thread fasteners. Combined | F. W. Whitcher | 41,555 | Dec. 1 | 107 | 1367 |
| Needles | Henry Milward & Sons | 39,851 | Feb. 24 | 102 | 1773 |
| Needles | Henry Milward & Sons | 39,852 | Feb. 24 | 102 | 1773 |
| Needlework and art linen pieces. Fancy | T. Buettner & Co | 41,655 | Dec. 15 | 107 | 1964 |
| Nettings. Fish- | American Net and Twine Co | 40,661 | June 30 | 104 | 2431 |
| Neuralgia and headache cures | F. R. Crist | 40,590 | June 16 | 104 | 1888 |
| Night-robes and pajamas | G. A. Ford | 41,653 | Dec. 15 | 107 | 1964 |
| Noodles, macaroni, and vermicelli | W. Boehm | 41,401 | Nov. 3 | 107 | 261 |
| Oatmeals and rolled oats | R. Robinson & Sons | 41,231 | Oct. 6 | 106 | 1494 |
| Oats. Rolled | Jacob Beck & Son | 40,687 | June 30 | 104 | 2433 |
| Oil and medicinal preparations into which cod-liver oil enters. Cod-liver | Southall Bros. & Barclay | 40,148 | Apr. 21 | 103 | 1906 |
| Oil and varnishes. Linseed- | W. H. Starbuck | 40,058 | Apr. 7 | 103 | 1411 |
| Oil-cloths. Certain named | Standard Table Oil Cloth Company | 39,965 | Mar. 24 | 103 | 881 |
| Oil-cloths. Certain named | Standard Table Oil Cloth Company | 39,966 | Mar. 24 | 103 | 881 |
| Oil. Cod-liver | P. Devold | 40,681 | June 30 | 104 | 2433 |
| Oil. Concentrated product of the active principles of cod-liver | Merck & Co | 41,298 | Oct. 13 | 106 | 1771 |
| Oil. Cooking- | Glenn-Armstrong Co | 39,655 | Jan. 20 | 102 | 617 |
| Oil emulsion. Olive- | Ehmann Olive Co | 41,486 | Nov. 17 | 107 | 827 |
| Oil for certain named diseases. Curative | A. Marble | 40,791 | July 21 | 105 | 739 |
| Oil. Lubricating- | C. J. Manix | 39,848 | Feb. 24 | 102 | 1773 |
| Oil. Lubricating- | W. P. Fuller & Co | 40,640 | June 23 | 104 | 2143 |
| Oil. Olive- | J. Devoto | 40,908 | Aug. 11 | 105 | 1526 |
| Oil. Olive- | Akerman & Tuffley | 41,183 | Sept. 29 | 106 | 1231 |
| Oil. Olive- | C. P. Grogan | 41,448 | Nov. 10 | 107 | 534 |
| Oil. Olive- | H. Kienzler | 41,717 | Dec. 22 | 107 | 2230 |
| Oil preparations and tonic medicines. Cod-liver- | Morrhistinol Manufacturing Company. | 40,476 | June 2 | 104 | 1385 |
| Oil preparations and tonic medicines. Cod-liver- | M. Casper | 40,893 | Aug. 11 | 105 | 1525 |
| Oils and compounds. Lubricating | Ironsides Company | 39,807 | Feb. 17 | 102 | 1545 |
| Oils and seed products. Seed- | Procter & Gamble Co | 39,723 | Feb. 3 | 102 | 1044 |
| Oils and seed products. Seed- | Procter & Gamble Co | 39,763 | Feb. 10 | 102 | 1286 |
| Oils. Cacao- | Rocca, Tassy & De Roux | 39,762 | Feb. 10 | 102 | 1286 |
| Oils for certain named purposes | Kay & Ess Co | 39,870 | Mar. 3 | 103 | 218 |
| Oils. Lubricating- | Columbia Lubricants Company of New York. | 40,339 | May 12 | 104 | 571 |
| Oils. Lubricating and similar | J. L. Fannon | 41,756 | Dec. 29 | 107 | 2521 |
| Oils. Petroleum- | Gulf Refining Company | 40,173 | Apr. 21 | 103 | 1909 |
| Oils. Petroleum- | Gulf Refining Company | 41,670 | Dec. 15 | 107 | 1966 |
| Ointment | J. P. Lambert | 40,109 | Apr. 14 | 103 | 1675 |
| Ointment | C. P. J. Bryant | 40,563 | June 9 | 104 | 1650 |
| Ointment | C. P. J. Bryant | 40,564 | June 9 | 104 | 1650 |
| Ointment and plasters | Medical Lake Salt Mfg. Co | 41,786 | Dec. 29 | 107 | 2523 |
| Ointment and tablets for certain named diseases | J. Kean | 39,945 | Mar. 17 | 103 | 654 |
| Ointment. Certain named | H. Goldwater | 41,568 | Dec. 1 | 107 | 1368 |
| Ointment. Cosmetic | A. A. Baldner | 41,696 | Dec. 22 | 107 | 2228 |
| Ointment or salve | Hodges and Bro | 39,621 | Jan. 6 | 102 | 223 |
| Ointments | Pratt Food Co | 41,249 | Oct. 6 | 106 | 1496 |
| Ointments and lotions for certain named purposes | Léhealol Preparation Co | 41,519 | Nov. 24 | 107 | 1088 |
| Ointments. Certain named | W. E. Moore | 40,997 | Aug. 25 | 105 | 2052 |
| Optical systems consisting of one or several lenses | Firm of C. Zeiss | 40,141 | Apr. 21 | 103 | 1906 |
| Oranges | W. E. Connor | 39,649 | Jan. 20 | 102 | 616 |
| Ore-roasters or oxidizing-furnaces | S. V. Trent | 40,126 | Apr. 14 | 103 | 1676 |
| Overalls and pants | John S. Brittain Dry Goods Co | 40,813 | July 28 | 105 | 968 |
| Overalls, blouses, coats, and pants | Standard Mfg. Co | 40,429 | May 26 | 104 | 1112 |
| Overalls, coats, and pants | Brown, Durrell & Co | 41,016 | Sept. 1 | 106 | 256 |
| Oxygen preparations for external use | L. F. Neirath | 41,782 | Dec. 20 | 107 | 2523 |
| Oxygen preparations for internal use | L. F. Neirath | 41,199 | Sept. 29 | 106 | 1233 |
| Oysters | Toke Point Oyster Company | 40,002 | Mar. 31 | 103 | 1157 |
| Packing and gaskets. Sheet-rubber | Republic Rubber Company | 40,816 | July 28 | 105 | 968 |
| Packing. Braided flax | Greene, Tweed & Company | 41,319 | Oct. 20 | 106 | 2007 |
| Packing. Braided flax | Greene, Tweed & Company | 41,320 | Oct. 20 | 106 | 2007 |
| Packing. Certain named pliable metallic | American Metallic Packing Co | 40,076 | Apr. 7 | 103 | 1413 |
| Packing. Machinery- | C. A. Daniel | 40,416 | May 19 | 104 | 848 |
| Packing material for steam, water, and gas joints | C. Hudson | 40,778 | July 14 | 105 | 492 |
| Packing. Metallic | Larkin Metallic Packing Company | 40,222 | Apr. 28 | 103 | 2167 |
| Packing. Self-lubricating | Greene, Tweed & Company | 41,258 | Oct. 6 | 106 | 1497 |
| Packing. Self-lubricating | Greene, Tweed & Company | 41,259 | Oct. 6 | 106 | 1497 |
| Packing. Sheet and piston | Charleston Metallic Packing Co | 41,321 | Oct. 20 | 106 | 2007 |
| Packings. Certain named | Turner Brothers | 40,433 | May 26 | 104 | 1112 |
| Pads or padding | G. Goldman | 41,025 | Sept. 1 | 106 | 257 |
| Paint | J. G. Newcomb | 40,711 | June 30 | 104 | 2435 |
| Paint | J. G. Newcomb | 40,712 | June 30 | 104 | 2436 |
| Paint | Day-Galpin Mfg. Co | 40,824 | July 28 | 105 | 969 |
| Paint and varnish remover | H. K. Sidle | 40,410 | May 19 | 104 | 847 |
| Paint. Certain named | Muralo Company | 40,710 | June 30 | 104 | 2435 |
| Paint. Cold and hot water | J. G. Newcomb | 41,581 | Dec. 1 | 107 | 1370 |
| Paint. Cold-water | Western Roofing & Supply Co | 39,871 | Mar. 3 | 103 | 218 |
| Paint. House- | J. I. Jenkins | 40,800 | July 21 | 105 | 740 |
| Paint. Mixed | J. G. Newcomb | 40,502 | June 2 | 104 | 1387 |
| Paint. Ready-mixed | J. W. Keller | 40,119 | Apr. 14 | 103 | 1676 |
| Paint-remover | G. Whigelt | 40,221 | Apr. 28 | 103 | 2167 |
| Paint. Roof- | Pannill Paint and Paint Solder Manufacturing Company. | 40,283 | May 5 | 104 | 306 |
| Paints | American Paint Works | 41,397 | Nov. 3 | 107 | 260 |
| Paints and colors | Hockaday Hardware Company | 41,260 | Oct. 6 | 106 | 1497 |

*Alphabetical list of trade-marks*—Continued.

| Title. | Name. | No. | Date. | Official Gazette. Vol. | Page. |
|---|---|---|---|---|---|
| Paints for certain named purposes. Pigments for | Krebs Pigment & Chemical Co | 40,774 | July 14 | 105 | 491 |
| Paints. Mixed | Nicoll Enamel Paint Company of Baltimore City. | 39,892 | Mar. 3 | 103 | 220 |
| Paints, painters' varnishes, and painters' oils | J. N. Hoff | 40,338 | May 12 | 104 | 571 |
| Paints. Prepared and mixed liquid | Jewell & Vinson | 40,409 | May 19 | 104 | 847 |
| Pajamas and night-robes | Janowitz-Maxwell Co | 39,752 | Feb. 10 | 102 | 1285 |
| Pajamas and night-robes | Janowitz-Maxwell Co | 39,753 | Feb. 10 | 102 | 1285 |
| Pamphlets, books, charts, and maps of useful information | A. E. Horton | 41,286 | Oct. 13 | 106 | 1770 |
| Pants, overalls, coats, and vests | Richardson, Roberts Dry Goods Co. | 40,849 | Aug. 4 | 105 | 1253 |
| Paper. All kinds of writing- | Sir Isaac Pitman & Sons | 41,318 | Oct. 20 | 106 | 2007 |
| Paper and bags. Wrapping | H. Barnett | 41,287 | Oct. 13 | 106 | 1770 |
| Paper and envelops. Certain named | William Mann Company | 39,898 | Mar. 10 | 103 | 420 |
| Paper and envelops. Writing- | Marcus Ward Company | 40,702 | June 30 | 104 | 2435 |
| Paper and envelops. Writing- | J. C. Blair Co | 41,749 | Dec. 29 | 107 | 2520 |
| Paper and envelops. Writing- | J. C. Blair Co | 41,750 | Dec. 29 | 107 | 2520 |
| Paper and film. Sensitized photographic | Anthony & Scovill Company | 41,689 | Dec. 22 | 107 | 2227 |
| Paper bags | Union Bag & Paper Co | 39,837 | Feb. 24 | 102 | 1771 |
| Paper bags | Union Bag and Pager Co | 40,095 | Apr. 14 | 103 | 1674 |
| Paper bags | Union Bag and Paper Co | 40,096 | Apr. 14 | 103 | 1674 |
| Paper bags | Union Bag & Paper Co | 40,129 | Apr. 21 | 103 | 1905 |
| Paper bags | H. E. Westervelt | 41,317 | Oct. 20 | 106 | 2007 |
| Paper. Blotting- | Standard Paper Manufacturing Company. | 41,213 | Oct. 6 | 106 | 1492 |
| Paper. Blue-print | Keuffel & Esser Co | 40,523 | June 9 | 104 | 1646 |
| Paper. Blue-print | Keuffel & Esser Co | 40,581 | June 16 | 104 | 1887 |
| Paper. Carbon- | L. N. Cooper | 40,580 | June 16 | 104 | 1887 |
| Paper. Carbon- | F. S. Webster Company | 41,463 | Nov. 17 | 107 | 825 |
| Paper. Carbon- | Dyett & Co | 41,660 | Dec. 15 | 107 | 1965 |
| Paper. Carbon- | A. P. Little | 41,687 | Dec. 22 | 107 | 2227 |
| Paper. Certain named | International Paper Company | 41,688 | Dec. 22 | 107 | 2227 |
| Paper-clips | Bailey & Parkinson | 41,725 | Dec. 22 | 107 | 2231 |
| Paper. Drawing- | Keuffel & Esser Co | 40,516 | June 9 | 104 | 1646 |
| Paper. Drawing- | Keuffel & Esser Co | 40,517 | June 9 | 104 | 1646 |
| Paper. Drawing- | Keuffel & Esser Co | 40,518 | June 9 | 104 | 1646 |
| Paper. Drawing- | Keuffel & Esser Co | 40,519 | June 9 | 104 | 1646 |
| Paper. Drawing- | Keuffel & Esser Co | 40,668 | June 30 | 104 | 2431 |
| Paper. Drawing- | Keuffel & Esser Co | 40,782 | July 21 | 105 | 738 |
| Paper. Fine writing- | Mittineague Paper Co | 40,093 | Apr. 14 | 103 | 1674 |
| Paper. Fine writing- | Mittineague Paper Co | 40,094 | Apr. 14 | 103 | 1674 |
| Paper for type-writers. Manifold- | A. P. Little | 41,212 | Oct. 6 | 106 | 1492 |
| Paper in sheets, strips, and rolls | C. E. Perry | 41,640 | Dec. 8 | 107 | 1655 |
| Paper. Ledger- | Annandale & Son | 40,854 | Aug. 4 | 105 | 1254 |
| Paper. Manifold or copying | A. P. Little | 41,435 | Nov. 10 | 107 | 533 |
| Paper. Photographic | Autotype Co | 40,244 | May 5 | 104 | 302 |
| Paper. Photographic-printing | Eastman Kodak Co | 40,701 | June 30 | 104 | 2435 |
| Paper. Stencil- | Neostyle Company | 41,639 | Dec. 8 | 107 | 1655 |
| Paper. Stencil- | A. B. Dick Company | 41,661 | Dec. 15 | 107 | 1965 |
| Paper. Substitute for wall- | A. V. Kirkeby | 40,070 | Apr. 7 | 103 | 1413 |
| Paper. Toilet- | Scott Paper Co | 40,128 | Apr. 21 | 103 | 1905 |
| Paper. Toilet- | Scott Paper Co | 40,216 | Apr. 28 | 103 | 2166 |
| Paper. Toilet- | Scott Paper Co | 40,651 | June 23 | 104 | 2144 |
| Paper. Toilet- | Scott Paper Co | 40,652 | June 23 | 104 | 2144 |
| Paper. Toilet- | Scott Paper Co | 40,653 | June 23 | 104 | 2144 |
| Paper. Toilet- | Scott Paper Co | 40,783 | July 21 | 105 | 738 |
| Paper. Toilet- | Scott Paper Co | 41,508 | Nov. 24 | 107 | 1087 |
| Paper. Toilet- | Scott Paper Co | 41,509 | Nov. 24 | 107 | 1087 |
| Paper. Toilet- | Scott Paper Co | 41,510 | Nov. 24 | 107 | 1087 |
| Paper. Toilet- | Scott Paper Co | 41,637 | Dec. 8 | 107 | 1654 |
| Paper. Toilet | A. H. Scott | 41,638 | Dec. 8 | 107 | 1654 |
| Paper. Tracing- | Keuffel & Esser Co | 40,520 | June 9 | 104 | 1646 |
| Paper. Tracing- | Keuffel & Esser Co | 40,521 | June 9 | 104 | 1646 |
| Paper. Tracing- | Keuffel & Esser Co | 40,522 | June 9 | 104 | 1646 |
| Paper. Tracing- | Keuffel & Esser Co | 40,582 | June 16 | 104 | 1887 |
| Paper. Wall- | Standard Wall Paper Co | 41,005 | Aug. 25 | 105 | 2053 |
| Paper. Wall- | Standard Wall Paper Co | 41,006 | Aug. 25 | 105 | 2053 |
| Papers. Carbon- | Mittag & Volger | 40,703 | June 30 | 104 | 2435 |
| Papers. Certain named | Keuffel & Esser Co | 40,666 | June 30 | 104 | 2431 |
| Papers. Certain named | Keuffel & Esser Co | 40,667 | June 30 | 104 | 2431 |
| Papers. Cover- | Mittineague Paper Co | 40,855 | Aug. 4 | 105 | 1254 |
| Paprika | M. Herskovits | 40,101 | Apr. 14 | 103 | 1674 |
| Pastils for treatment of maladies of the respiratory organs | H. Canonne | 41,487 | Nov. 17 | 107 | 827 |
| Peanut butter | C. M. Taylor & Co | 40,102 | Apr. 14 | 103 | 1674 |
| Peanuts. Salted | Bosman & Lohman Company | 41,229 | Oct. 6 | 106 | 1494 |
| Pellets for cure of kidney diseases | Bole Drug Co | 41,158 | Sept. 22 | 106 | 991 |
| Pen-filling devices. Certain named fountain- | Beekman Novelty Company | 40,297 | May 12 | 104 | 567 |
| Pens | Esterbrook Steel Pen Manufacturing Co. | 39,950 | Mar. 24 | 103 | 880 |
| Pens | F. Doane | 40,239 | May 5 | 104 | 301 |
| Pens | F. Doane | 40,240 | May 5 | 104 | 301 |
| Pens | F. Doane | 40,241 | May 5 | 104 | 301 |
| Pens | Ormiston & Glass | 41,380 | Oct. 27 | 106 | 2283 |
| Pens. Fountain- | Guiterman, Rosenfeld & Co | 39,612 | Jan. 6 | 102 | 223 |
| Pens. Fountain- | E. Todd, Jr | 40,296 | May 12 | 104 | 567 |
| Pens. Fountain- | Armeny & Marion | 41,432 | Nov. 10 | 107 | 532 |
| Pens. Fountain- | Aiken, Lambert & Co | 41,433 | Nov. 10 | 107 | 532 |
| Pens. Metallic | Esterbrook Steel Pen Mfg. Co | 41,752 | Dec. 29 | 107 | 2520 |
| Pens. Steel | Ormiston & Glass | 41,381 | Oct. 27 | 106 | 2283 |
| Pens. Writing- | W. C. Robertson | 40,890 | Aug. 11 | 105 | 1524 |
| Pencils | G. Schwanhäuser | 39,799 | Feb. 17 | 102 | 1545 |
| Pencils | G. Schwanhäuser | 41,215 | Oct. 6 | 106 | 1492 |
| Pencils. Certain named | Bleistiftfabrik vormals Johann Faber Actien Gesellschaft. | 41,130 | Sept. 22 | 106 | 988 |
| Pencils. Certain named | Bleistiftfabrik vormals Johann Faber Actien Gesellschaft. | 41,131 | Sept. 22 | 106 | 988 |
| Pencils. Certain named | Bleistiftfabrik vormals Johann Faber Actien Gesellschaft. | 41,132 | Sept. 22 | 106 | 988 |
| Pencils. Lead- | American Lead Pencil Company | 40,090 | Apr. 14 | 103 | 1673 |

*Alphabetical list of trade-marks*—Continued.

| Title. | Name. | No. | Date. | Official Gazette. Vol. | Page. |
|---|---|---|---|---|---|
| Perfumed preparations. Certain named | Batcheller Importing Company | 40,863 | Aug. 4 | 105 | 1255 |
| Perfumed preparations in powdered, paste, solid, and liquid forms. | Batcheller Importing Company | 39,811 | Feb. 17 | 102 | 1546 |
| Perfumed preparations in powdered, paste, solid, and liquid forms. | V. Klotz | 40,045 | Apr. 7 | 103 | 1410 |
| Perfumed preparations in powdered, paste, solid, and liquid forms. | V. Klotz | 40,046 | Apr. 7 | 103 | 1410 |
| Perfumery | Frederick Stearns & Co | 39,812 | Feb. 17 | 102 | 1546 |
| Perfumery | Frederick Stearns & Co | 40,021 | Mar. 31 | 103 | 1159 |
| Perfumery | Colgate & Co | 41,042 | Sept. 1 | 106 | 258 |
| Perfumery | Frederick Stearns & Co | 41,191 | Sept. 29 | 106 | 1232 |
| Perfumery | Haarmann-de Laire-Schaefer Co | 41,631 | Dec. 8 | 107 | 1654 |
| Perfumery and flavoring products | Haarmann-de Laire-Schaefer Co | 41,630 | Dec. 8 | 107 | 1654 |
| Perfumes | R. Hudnut | 39,744 | Feb. 3 | 102 | 1046 |
| Perfumes | R. Hudnut | 39,745 | Feb. 3 | 102 | 1046 |
| Perfumes | R. Hudnut | 39,746 | Feb. 3 | 102 | 1046 |
| Perfumes | R. Hudnut | 39,747 | Feb. 3 | 102 | 1046 |
| Perfumes | R. Hudnut | 39,748 | Feb. 3 | 102 | 1046 |
| Perfumes | P. Westphal | 40,891 | Aug. 11 | 105 | 1524 |
| Perfumes | P. Westphal | 40,892 | Aug. 11 | 105 | 1524 |
| Periodical or magazine | Bobbett and Kegrize | 40,422 | May 26 | 104 | 1111 |
| Periodicals | Arkell Company | 40,662 | June 30 | 104 | 2431 |
| Petroleum and its distillates | W. S. Dubbs | 41,106 | Sept. 15 | 106 | 758 |
| Petticoats. Ladies' | M. Bernstein | 40,430 | May 26 | 104 | 1112 |
| Pharmaceutical compounds used as a tonic | C. H. Howells & Co | 41,293 | Oct. 13 | 106 | 1771 |
| Pharmaceutical products composed of salicylic acid and acetic acid. | Société Chimique des Usines du Rhone Anct. Gilliard, P. Monnet & Cartier. | 39,978 | Mar. 24 | 103 | 883 |
| Pharmaceutical products containing organic arsenic and phosphorus. | A. Mouneyrat | 41,676 | Dec. 15 | 107 | 1967 |
| Pharmaceutical products for nervous diseases | P. C. Saul | 40,250 | May 5 | 104 | 302 |
| Phonographs and parts of phonographs | National Phonograph Company | 41,659 | Dec. 15 | 107 | 1965 |
| Photographic baths. Chemicals for | Chemische Fabrik Helfenberg A. G. vorm. Eugen Dieterich. | 40,027 | Mar. 31 | 103 | 1159 |
| Photographic developers | Actien-Gesellschaft für Anilin-Fabrikation. | 41,254 | Oct. 6 | 106 | 1497 |
| Photographic developing preparation | Farbwerke, vormals Meister, Lucius & Brüning. | 40,259 | May 5 | 104 | 303 |
| Photographic films and plates | Eastman Kodak Co | 40,719 | July 7 | 105 | 253 |
| Photographic films and wrappers therefor. Certain named | Leipziger Buchbinderei-Actien-gesellschaft vorm. Gustav Fritzsche. | 41,285 | Oct. 13 | 106 | 1770 |
| Photographic films, pictures, views, and kinematographic series of pictures. | G. Méliès | 39,860 | Mar. 3 | 103 | 217 |
| Photographic goods. Certain named | Chemische Fabrik auf Actien, (vorm. E. Schering.) | 40,137 | Apr. 21 | 103 | 1906 |
| Photographic plates. Preparation for treatment of | J. Florian | 41,522 | Nov. 24 | 107 | 1088 |
| Piano and orchestrion. Automatic | Rudolph Wurlitzer Company | 41,677 | Dec. 15 | 107 | 1967 |
| Piano-players. Mechanical | Aeolian Company | 41,010 | Aug. 25 | 105 | 2053 |
| Piano-players. Mechanical | Aeolian Company | 41,011 | Aug. 25 | 105 | 2053 |
| Pianos | J. H. Becker | 39,891 | Mar. 3 | 103 | 219 |
| Pianos | Christman & Son | 40,587 | June 16 | 104 | 1888 |
| Pianos | Goetz and Co | 40,588 | June 16 | 104 | 1888 |
| Pianos, automatic piano-players, attachments and parts | Wulschner Music Company | 39,793 | Feb. 10 | 102 | 1289 |
| Pickles | Glaser, Kohn & Co | 40,537 | June 9 | 104 | 1648 |
| Picks | H. H. Fuller & Co | 41,458 | Nov. 10 | 107 | 535 |
| Picture apparatus. Moving | American Mutoscope & Biograph Co. | 40,073 | Apr. 7 | 103 | 1413 |
| Picture films. Life-moving | S. Lubin | 39,622 | Jan. 6 | 102 | 222 |
| Pigments. Coloring-matters for production of | H. A. Metz & Co | 40,175 | Apr. 21 | 103 | 1909 |
| Pills and pellets for certain named diseases | F. W. Gregg | 40,018 | Mar. 31 | 103 | 1159 |
| Pills. Certain named | S. D. Mercer | 39,661 | Jan. 20 | 102 | 618 |
| Pills for certain named diseases | G. B. Regar | 41,628 | Dec. 8 | 107 | 1654 |
| Pills. Liver | Dr. Tutt M'f'g. Co | 40,606 | June 16 | 104 | 1890 |
| Pins | Rheinische Nadelfabriken | 41,120 | Sept. 15 | 106 | 760 |
| Pipe-covering. Certain named | Chicago Fire Proof Covering Co | 39,795 | Feb. 10 | 102 | 1290 |
| Pipe-fittings | Pasteur-Chamberland Filter Co | 39,827 | Feb. 17 | 102 | 1548 |
| Pipes and cigar and cigarette tubes | Adolph Frankau & Compy | 40,135 | Apr. 21 | 103 | 1905 |
| Pipes and fittings for same. Soil | Abendroth Bros | 41,165 | Sept. 22 | 106 | 992 |
| Pistols | H. M. Kolb | 40,743 | July 7 | 105 | 255 |
| Pitch and rosin | C. Zoller & Co | 41,398 | Nov. 3 | 107 | 260 |
| Plant food | Oriental Plant Food Co | 40,801 | July 21 | 105 | 740 |
| Planters. Corn | Belcher & Taylor Ag'l Tool Co | 39,732 | Feb. 3 | 102 | 1045 |
| Plaster. Certain named | V. C. & C. V. King Co | 41,051 | Sept. 1 | 106 | 259 |
| Plasters for cure of rheumatism. Adhesive | Magic Foot Draft Co | 40,732 | July 7 | 105 | 254 |
| Plows | Ground Hog Plow & Foundry Co | 39,706 | Jan. 27 | 102 | 816 |
| Plows for certain named purposes | A. B. Farquhar & Co | 40,717 | June 30 | 104 | 2436 |
| Poisons for rodents | Bakteriologisk Laboratorium, Neumann & Co., i Aalborg. | 41,787 | Dec. 29 | 107 | 2524 |
| Polishing preparation for certain named purposes | Ever-Brite Co | 40,965 | Aug. 18 | 105 | 1775 |
| Pomade and skin-food | Tabler Chemical Co | 40,901 | Aug. 11 | 105 | 1525 |
| Pomades | F. Toscano | 41,410 | Nov. 3 | 107 | 261 |
| Porcelain and china ware | Kristal-Glas-en Aardewerk Fabrieken De Sphinx Voorheen Petrus Regout & Co. | 41,316 | Oct. 20 | 106 | 2007 |
| Porcelain, earthenware, pottery, and crockery | De Naamlooze Vennootschap Koninklijke Porcelein en Aardewerkfabriek Rozenburg. | 41,052 | Sept. 1 | 106 | 260 |
| Potatoes. Sweet and Irish | Eastern Shore of Virginia Produce Exchange. | 40,934 | Aug. 18 | 105 | 1771 |
| Poultry | Clarinda Poultry, Butter & Egg Co | 41,451 | Nov. 10 | 107 | 535 |
| Poultry. Certain named | A. Silz | 40,232 | Apr. 28 | 103 | 2168 |
| Poultry. Crushed shell for | Boepple Button Company | 40,955 | Aug. 18 | 105 | 1773 |
| Powder. Antiseptic astringent | L. Feeser | 40,960 | Aug. 18 | 105 | 1774 |
| Powder. Blasting | Laflin & Rand Powder Co | 39,734 | Feb. 3 | 102 | 1045 |
| Powder. Blasting | Forcite Powder Company | 41,206 | Sept. 29 | 106 | 1234 |

*Alphabetical list of trade-marks*—Continued.

| Title. | Name. | No. | Date. | Official Gazette. Vol. | Page. |
|---|---|---|---|---|---|
| Powder. Foot- | Marshall & Co | 40,481 | June 2 | 104 | 1385 |
| Powder for horses, cattle, and poultry. Condition- | R. Stoddard | 40,670 | June 30 | 104 | 2432 |
| Powder for use in surgical dressings | Dermogen Co | 41,045 | Sept. 1 | 106 | 259 |
| Powder. Manicure- | S. A. Devlin | 39,845 | Feb. 24 | 102 | 1772 |
| Powder. Stomach- | D. von Engel | 40,475 | June 2 | 104 | 1385 |
| Powder. Talcum | G. F. Govin | 41,299 | Oct. 13 | 106 | 1771 |
| Powder. Toilet- | G. M. McKinney | 39,741 | Feb. 3 | 102 | 1046 |
| Powder. Toilet- | C. A. M. Wells | 41,634 | Dec. 8 | 107 | 1654 |
| Powder. Tooth- | Radical Remedy Co | 41,698 | Dec. 22 | 107 | 2228 |
| Powders. Complexion or face | Michieli Chemical Company | 40,309 | May 12 | 104 | 568 |
| Powders. Face- | J. F. Koelling | 39,777 | Feb. 10 | 102 | 1288 |
| Powders for cancer cure | J. L. Veronneau | 41,244 | Oct. 6 | 106 | 1496 |
| Powders. Toilet and sachet | M. F. Drudy | 40,482 | June 2 | 104 | 1385 |
| Practice apparatus. Certain named | Sub-Target Gun Co | 40,415 | May 19 | 104 | 847 |
| Preparations for cure of certain named diseases | Fitchmul Company | 40,551 | June 9 | 104 | 1649 |
| Preparations for treating the face. Liquid | I. Cassidy | 39,876 | Mar. 3 | 103 | 218 |
| Press-board | Rogers Paper M'f'g. Co | 40,654 | June 23 | 104 | 2144 |
| Publication. Serial | Francis Brothers | 40,375 | May 19 | 104 | 844 |
| Publications. Certain named | P. F. Collier & Son | 39,991 | Mar. 31 | 103 | 1156 |
| Publications. Medical | Electro-Chemic Institute | 39,644 | Jan. 20 | 102 | 616 |
| Pulleys or blocks | Boston & Lockport Block Co | 40,971 | Aug. 18 | 105 | 1776 |
| Pumps | S. C. Davidson | 40,921 | Aug. 11 | 105 | 1528 |
| Pumps and pump parts | Gardner Governor Company | 41,730 | Dec. 22 | 107 | 2231 |
| Purgative syrup | California Fig Syrup Co | 41,338 | Oct. 20 | 106 | 2009 |
| Purgative syrup | California Fig Syrup Co | 41,339 | Oct. 20 | 106 | 2009 |
| Puzzles. Sliding-block | J. Bigham | 41,211 | Oct. 6 | 106 | 1492 |
| Quilts | Sherman, Reid & Co | 40,979 | Aug. 25 | 105 | 2049 |
| Quinin and phenetidin. Combinations of | Vereinigte Chininfabriken Zimmer & Co., Ges. mit Beschränkter Haftung. | 40,116 | Apr. 14 | 103 | 1676 |
| Razor-hones | S. R. Droescher | 40,136 | Apr. 21 | 103 | 1905 |
| Razor-hones | S. R. Droescher | 40,323 | May 12 | 104 | 569 |
| Razor-strops | E. B. Gibford | 41,384 | Oct. 27 | 106 | 2283 |
| Razors | W. J. Klauberg | 39,628 | Jan. 13 | 102 | 460 |
| Razors | J. H. Becker | 39,787 | Feb. 10 | 102 | 1289 |
| Razors | H. Boker & Co | 39,788 | Feb. 10 | 102 | 1289 |
| Razors | S. Rahaim & Co | 39,789 | Feb. 10 | 102 | 1289 |
| Razors | S. R. Droescher | 40,456 | May 26 | 104 | 1115 |
| Razors | S. R. Droescher | 40,457 | May 26 | 104 | 1115 |
| Razors | Kraut & Dohnal | 40,509 | June 2 | 104 | 1388 |
| Razors | Kraut & Dohnal | 40,510 | June 2 | 104 | 1388 |
| Razors | P. Khouri | 40,776 | July 14 | 105 | 491 |
| Razors | W. H. Williams & Co | 40,803 | July 21 | 105 | 740 |
| Razors | S. Elias & T. Abdoo | 41,267 | Oct. 6 | 106 | 1498 |
| Razors | Bannister & Clark | 41,494 | Nov. 17 | 107 | 828 |
| Razors and razor-blades. Safety- | Kampfe Bros | 39,383 | Mar. 24 | 103 | 883 |
| Razors and razor-blades. Safety- | J. Reichard | 40,836 | July 28 | 105 | 970 |
| Razors and razor-blades. Safety- | J. Reichard | 41,201 | Sept. 29 | 106 | 1233 |
| Razors and razor parts. Cases for | Kampfe Bros | 40,777 | July 14 | 105 | 491 |
| Razors. Safety- | J. Curley & Brother | 39,854 | Feb. 24 | 102 | 1773 |
| Razors. Safety- | Griffon Cutlery Company | 41,382 | Oct. 27 | 106 | 2283 |
| Razors. Safety- | Gem Cutlery Co | 41,383 | Oct. 27 | 106 | 2283 |
| Refractory materials and articles made thereof | Acheson Company | 39,887 | Mar. 3 | 103 | 219 |
| Relish. Certain named | Seville Packing Co | 40,100 | Apr. 14 | 103 | 1674 |
| Relishes. Certain named | Lutz & Schramm Co | 40,941 | Aug. 18 | 105 | 1772 |
| Remedies. Blood and nerve | Powers Manufacturing Company | 40,793 | July 21 | 105 | 739 |
| Remedies. Brain and nerve | G. J. Remaly | 41,289 | Oct. 13 | 106 | 1770 |
| Remedies. Catarrhal | Pineoleum Manufacturing Company. | 40,248 | May 5 | 104 | 302 |
| Remedies. Chemical and pharmaceutical internal | M. R. Zaegel | 41,675 | Dec. 15 | 107 | 1967 |
| Remedies. Cholera | M. E. Davis | 40,052 | Apr. 7 | 103 | 1411 |
| Remedies. Cough | W. Chubbuck | 39,915 | Mar. 10 | 103 | 421 |
| Remedies. Eye | J. B. & G. W. McFatrich | 40,899 | Aug. 11 | 105 | 1525 |
| Remedies for blood and skin diseases | C. B. Knox | 40,792 | July 21 | 105 | 739 |
| Remedies for catarrh and bronchial troubles | Hargrave Iodoform Vapor Co | 39,659 | Jan. 20 | 102 | 617 |
| Remedies for certain named diseases | Pheno-Bromate Chemical Company. | 39,879 | Mar. 3 | 103 | 219 |
| Remedies for certain named diseases | Dad Chemical Co | 39,880 | Mar. 3 | 103 | 219 |
| Remedies for certain named diseases | Iodol Medicine Company | 39,980 | Mar. 24 | 103 | 883 |
| Remedies for certain named diseases | G. W. Conklin | 40,015 | Mar. 31 | 103 | 1158 |
| Remedies for certain named diseases | Sperry Medicine Co | 40,192 | Apr. 28 | 103 | 2163 |
| Remedies for certain named diseases | E. S. Staley | 40,251 | May 5 | 104 | 302 |
| Remedies for certain named diseases | Rio Chemical Co | 40,400 | May 19 | 104 | 846 |
| Remedies for certain named diseases | J. Krone | 40,555 | June 9 | 104 | 1650 |
| Remedies for certain named diseases | T. P. Van Ness | 40,762 | July 14 | 105 | 490 |
| Remedies for certain named diseases | Churchill Chemical Co | 40,993 | Aug. 25 | 105 | 2051 |
| Remedies for certain named diseases | H. C. Martin | 41,048 | Sept. 1 | 106 | 259 |
| Remedies for certain named diseases | F. E. Chamberlain | 41,417 | Nov. 3 | 107 | 262 |
| Remedies for certain named diseases | G. J. Rothan | 41,783 | Dec. 29 | 107 | 2523 |
| Remedies for certain named diseases of swine | W. B. Higgason | 39,715 | Feb. 3 | 102 | 1043 |
| Remedies for cure of certain named diseases | L. Rosenthal | 41,559 | Dec. 1 | 107 | 1367 |
| Remedies for cure of goiter | J. M. Boyle | 39,717 | Feb. 3 | 102 | 1044 |
| Remedies for cure of rheumatism and similar diseases | M. H. McMahon | 41,702 | Dec. 22 | 107 | 2228 |
| Remedies for diseases of stock and poultry | Vincent Manufacturing Company. | 39,911 | Mar. 10 | 103 | 421 |
| Remedies for diseases of the eye | Eye-Fix Remedy Company | 41,047 | Sept. 1 | 106 | 259 |
| Remedies for diseases of the nerves or nervous system | E. C. De Witt & Co | 41,290 | Oct. 13 | 106 | 1770 |
| Remedies for diseases of the skin | Churchill Chemical Co | 40,992 | Aug. 25 | 105 | 2051 |
| Remedies for diseases of the skin and scalp | A. F. Richardson | 40,679 | June 30 | 104 | 2432 |
| Remedies for diseases of the skin and scalp, hair-food, and hair-tonics. | A. F. Richardson | 40,599 | June 16 | 104 | 1889 |
| Remedies for diseases of the skin and scalp, hair-food, and hair-tonics. | A. F. Richardson | 40,600 | June 16 | 104 | 1889 |
| Remedies for diseases of the skin and scalp, hair-food, and hair-tonics. | A. F. Richardson | 40,601 | June 16 | 104 | 1889 |
| Remedies for diseases of the stomach and bowels | Home Medicine Company | 40,605 | June 16 | 104 | 1890 |

*Alphabetical list of trade-marks*—Continued.

| Title. | Name. | No. | Date. | Official Gazette. Vol. | Page. |
|---|---|---|---|---|---|
| Remedies for diseases of the stomach and intestines. Internal | McConnon & Company | 40,637 | June 23 | 104 | 2143 |
| Remedies for diseases of the throat and chest | Terpinol Tablet Co | 40,604 | June 16 | 104 | 1890 |
| Remedies for diseases of the throat and lungs | A. B. Morrison | 40,994 | Aug. 25 | 105 | 2051 |
| Remedies for indigestion | W. B. Nichols | 40,399 | May 19 | 104 | 846 |
| Remedies for indigestion and dyspepsia | F. L. Webster | 41,563 | Dec. 1 | 107 | 1368 |
| Remedies for kidney diseases in tablet form | Wells & Richardson Co | 40,675 | June 30 | 104 | 2432 |
| Remedies for kidney, liver, and bladder troubles | A. F. Richardson | 40,636 | June 23 | 104 | 2143 |
| Remedies for malaria | F. Bisleri & Co | 40,472 | June 2 | 104 | 1385 |
| Remedies for pulmonary and similar diseases | A. F. Richardson | 40,603 | June 16 | 104 | 1890 |
| Remedies for seasickness | M. A. Gillespie | 40,763 | July 14 | 105 | 490 |
| Remedies for skin diseases | Knoll & Co | 40,634 | June 23 | 104 | 2142 |
| Remedies for throat and lung diseases | A. F. Richardson | 40,602 | June 16 | 104 | 1889 |
| Remedies for throat and lung diseases | A. F. Richardson | 40,635 | June 23 | 104 | 2142 |
| Remedies for tuberculous and catarrhal complaints | R. Schneider | 40,895 | Aug. 11 | 105 | 1525 |
| Remedies. Headache | R. W. Nix | 39,916 | Mar. 10 | 103 | 421 |
| Remedies. Headache | N. Lodor | 40,896 | Aug. 11 | 105 | 1525 |
| Remedies. Headache | N. Lodor | 40,897 | Aug. 11 | 105 | 1525 |
| Remedies. Nerve, muscles, and blood | Bakst Bros | 41,240 | Oct. 6 | 106 | 1495 |
| Remedies. Throat | J. H. Kolb | 40,147 | Apr. 21 | 103 | 1906 |
| Remedy against gall-stone | H. Rosenberg | 41,441 | Nov. 10 | 107 | 533 |
| Remedy and blood-tonic. Anemic | Carssow Pharmaceutical Co | 41,241 | Oct. 6 | 106 | 1495 |
| Remedy. Certain named internal | R. W. Gardner | 41,784 | Dec. 29 | 107 | 2523 |
| Remedy for animals. External | A. B. Young | 41,788 | Dec. 29 | 107 | 2524 |
| Remedy for asthma, catarrh, hay-fever, and consumption | E. T. Smith | 40,310 | May 12 | 104 | 568 |
| Remedy for certain named diseases | Ricord Mfg. Co | 39,774 | Feb. 10 | 102 | 1287 |
| Remedy for certain named diseases | P. Baldwin | 40,471 | June 2 | 104 | 1385 |
| Remedy for certain named diseases | A. J. Shilling | 40,474 | June 2 | 104 | 1385 |
| Remedy for certain named diseases | Chemische Fabrik von Heyden Aktien-Gesellschaft. | 40,597 | June 16 | 104 | 1889 |
| Remedy for certain named diseases | I. L. Rosendorf | 40,677 | June 30 | 104 | 2432 |
| Remedy for certain named diseases | Satyria Chemical Co | 41,159 | Sept. 22 | 106 | 991 |
| Remedy for certain named diseases | M. Leprince | 41,358 | Oct. 27 | 106 | 2280 |
| Remedy for certain named diseases. Internal | W. C. Alpers | 40,255 | May 5 | 104 | 303 |
| Remedy for certain named diseases. Internal | White Herb Medicine Company | 40,903 | Aug. 11 | 105 | 1526 |
| Remedy for certain named diseases of hogs | A. L. Severin | 40,157 | Apr. 21 | 103 | 1907 |
| Remedy for certain named purposes | Chemical Works formerly Sandoz. | 40,596 | June 16 | 104 | 1889 |
| Remedy for certain named venereal diseases | H. W. Dicker | 40,678 | June 30 | 104 | 2432 |
| Remedy for constipation. Tea used as a | J. Stuchlik | 40,187 | Apr. 28 | 103 | 2163 |
| Remedy for coughs and colds and affections of the throat | Sharp & Dohme | 41,334 | Oct. 20 | 106 | 2009 |
| Remedy for coughs, colds, and bronchial troubles | G. W. Burch | 41,414 | Nov. 3 | 107 | 262 |
| Remedy for coughs, colds, and lung troubles | M. S. Knee | 40,900 | Aug. 11 | 105 | 1525 |
| Remedy for cure of certain named diseases | Kraus Medicine Co | 40,150 | Apr. 21 | 103 | 1907 |
| Remedy for cure of certain named diseases | Lomolo Remedy Company | 40,730 | July 7 | 105 | 254 |
| Remedy for cure of eczema and other skin diseases | Zema-Cura Company | 40,598 | June 16 | 104 | 1889 |
| Remedy for diseases of head, throat, and lungs | I. B. Everett | 40,358 | May 12 | 104 | 573 |
| Remedy for disorders of the spine and nerves and general disabilities. | F. W. Gregg | 40,820 | July 28 | 105 | 968 |
| Remedy for dyspepsia, indigestion, and stomach complaints | A. K. Schauf | 41,562 | Dec. 1 | 107 | 1368 |
| Remedy for eczema and other skin diseases | Carbo Chemical Company | 41,701 | Dec. 22 | 107 | 2228 |
| Remedy for headache, neuralgia, and nervousness | J. G. Munson | 41,482 | Nov. 17 | 107 | 827 |
| Remedy for hog-cholera and other swine diseases | J. B. McCallum | 41,160 | Sept. 22 | 106 | 991 |
| Remedy for indigestion | M. J. Ginter | 40,473 | June 2 | 104 | 1385 |
| Remedy for nervous affections and a blood-purifier | A. K. Schauf | 41,560 | Dec. 1 | 107 | 1367 |
| Remedy for parasites. External | H. E. Bowles | 40,902 | Aug. 11 | 105 | 1526 |
| Remedy for piles | D. Weeks & Co | 40,401 | May 19 | 104 | 846 |
| Remedy for promoting the growth of hair | G. Watzek & E. François | 41,107 | Sept. 15 | 106 | 758 |
| Remedy for rheumatism | C. Hurley | 40,557 | June 9 | 104 | 1650 |
| Remedy for rheumatism and diseases of the blood | "G. R. C." Co | 41,442 | Nov. 10 | 107 | 533 |
| Remedy for sore throat | Berg Medicine Co | 40,556 | June 9 | 104 | 1650 |
| Remedy for stomach disorders | R. R. Smith | 41,335 | Oct. 20 | 106 | 2009 |
| Remedy for stomachic disturbances | Kalle & Company | 40,680 | June 30 | 104 | 2433 |
| Remedy for tapeworm and similar parasitic ailments | C. F. Boehringer & Soehne | 40,558 | June 9 | 104 | 1650 |
| Remedy for the cure of certain named diseases | Miller and Stone | 40,894 | Aug. 11 | 105 | 1525 |
| Remedy for the cure of whooping-cough | H. Bauer | 40,113 | Apr. 14 | 103 | 1675 |
| Remedy for treatment of kidney and rheumatic ailments. Internal | F. M. Oliver | 41,197 | Sept. 29 | 106 | 1233 |
| Remedy for treatment of the hair and scalp | Altenheim Medical Dispensary | 39,716 | Feb. 3 | 102 | 1043 |
| Remedy for venereal diseases | C. I. Bickum | 40,559 | June 9 | 104 | 1650 |
| Remedy in liquid form for certain named diseases | J. F. Bledsoe | 39,636 | Jan. 13 | 102 | 461 |
| Remedy. Internal headache | Presto Manufacturing Company | 40,188 | Apr. 28 | 103 | 2163 |
| Remedy. Rheumatic | F. W. Fletcher | 39,773 | Feb. 10 | 102 | 1287 |
| Remedy. Rheumatic | Winthrop Drug and Chemical Works. | 40,729 | July 7 | 105 | 254 |
| Remedy. Uric-acid | L. S. Nicholson | 40,676 | June 30 | 104 | 2432 |
| Respirators | Respirator Medication Co | 41,553 | Dec. 1 | 107 | 1367 |
| Rheumatism and like ills. Apparatus for curing | Sytonic Company | 41,443 | Nov. 10 | 107 | 533 |
| Ribbons | C. M. Offray | 39,630 | Jan. 13 | 102 | 460 |
| Ribbons | E. & H. Levy | 39,756 | Feb. 10 | 102 | 1285 |
| Ribbons | Wells & Strauss | 40,036 | Apr. 7 | 103 | 1409 |
| Ribbons | Wells & Strauss | 40,037 | Apr. 7 | 103 | 1409 |
| Ribbons | Brown, Durrell & Co | 40,932 | Aug. 18 | 105 | 1771 |
| Ribbons | Sachs Bros. & Co | 41,544 | Dec. 1 | 107 | 1366 |
| Ribbons. Satin-back velvet | Abegg & Rusch | 40,380 | May 19 | 104 | 844 |
| Rice | Dolan Mercantile Co | 41,713 | Dec. 22 | 107 | 2229 |
| Rice. Wild | L. Axman | 41,118 | Sept. 15 | 106 | 760 |
| Rock-crushers | J. Scholl & Company | 40,231 | Apr. 28 | 103 | 2168 |
| Roofing compositions | C. E. Hetzel | 40,775 | July 14 | 105 | 491 |
| Roofing-felt and roofing-paper | Flintkote Manufacturing Co | 39,785 | Feb. 10 | 102 | 1289 |
| Roofing materials | C. B. Jameson | 40,413 | May 19 | 104 | 847 |
| Roofing-plates. Sheet-metal | C. B. Edwards | 41,685 | Dec. 15 | 107 | 1968 |
| Roofing. Sheet- | H. M. Reynolds Roofing Co | 41,551 | Dec. 1 | 107 | 1367 |
| Roofing. Sheet- | H. M. Reynolds Roofing Co | 41,552 | Dec. 1 | 107 | 1367 |
| Rubber belting | Gibbens and Stream | 41,322 | Oct. 20 | 106 | 2007 |
| Rubber boots and shoes | Shawmut Rubber Company | 39,903 | Mar. 10 | 103 | 420 |
| Rubber boots and shoes | Hood Rubber Co | 41,210 | Oct. 6 | 106 | 1492 |

*Alphabetical list of trade-marks*—Continued.

| Title. | Name. | No. | Date. | Official Gazette. Vol. | Page. |
|---|---|---|---|---|---|
| Rubber boots and shoes | Hood Rubber Company | 41,472 | Nov. 17 | 107 | 826 |
| Rubber cement. Plastic | C. O. Tingley | 40,746 | July 7 | 105 | 255 |
| Rubber fabrics. Certain named | Tredair Rubber Co. | 41,739 | Dec. 29 | 107 | 2519 |
| Rubber heels for boots and shoes | P. W. Minor & Son | 41,074 | Sept. 8 | 106 | 536 |
| Rubber hose | Capen Belting & Rubber Company | 40,246 | May 5 | 104 | 302 |
| Rum | A. A. Baker & Co | 40,989 | Aug. 25 | 105 | 2050 |
| Rum | Felton & Son | 41,223 | Oct. 6 | 106 | 1493 |
| Rupture cure | Gonyea and Perodeau | 39,878 | Mar. 3 | 103 | 218 |
| Sad-irons | Stockwell & Ensor | 40,462 | May 26 | 104 | 1115 |
| Saddlery hardware. Certain named | Eberhard Manufacturing Co | 41,455 | Nov. 10 | 107 | 535 |
| Saddlery hardware. Certain named | Eberhard Manufacturing Co | 41,726 | Dec. 22 | 107 | 2231 |
| Safes, vault-doors, and safe-deposit boxes. Fire and burglar proof | Hall's Safe Company | 41,794 | Dec. 29 | 107 | 2524 |
| Salt | H. C. Baker | 39,641 | Jan. 13 | 102 | 461 |
| Salt | W. B. Price | 40,740 | July 7 | 105 | 255 |
| Salt | Colonial Salt Company | 41,371 | Oct. 27 | 106 | 2281 |
| Salt. Table- | Ohio Salt Co | 40,387 | May 19 | 104 | 845 |
| Salt. Table- | Carey Salt Company | 40,501 | June 2 | 104 | 1387 |
| Salt. Table- | Iron Table Salt Co | 41,372 | Oct. 27 | 106 | 2281 |
| Salve | Zorgo Salve Co | 40,053 | Apr. 7 | 103 | 1411 |
| Salve | J. B. Ford | 40,355 | May 12 | 104 | 573 |
| Salve | J. A. & J. T. Potter Co | 41,105 | Sept. 15 | 106 | 758 |
| Salve | Wilson Company | 41,521 | Nov. 24 | 107 | 1088 |
| Salve | Radical Remedy Co | 41,697 | Dec. 22 | 107 | 2228 |
| Salve for certain named purposes | Dodge Bros | 41,198 | Sept. 29 | 106 | 1233 |
| Salve for certain named purposes | D. Gearon | 41,570 | Dec. 1 | 107 | 1369 |
| Salve or ointment | Sharp & Dohme | 40,480 | June 2 | 104 | 1385 |
| Salve. Pile- | Texas Drug Co | 39,662 | Jan. 20 | 102 | 618 |
| Salve. Proprietary vegetable healing- | T. McGuire | 39,896 | Mar. 3 | 103 | 220 |
| Salves | E. H. Ball | 41,488 | Nov. 17 | 107 | 827 |
| Salves, liniments, tonics, and bowel-regulating medicines | Dr. Blair Medical Company | 39,768 | Feb. 10 | 102 | 1286 |
| Salves or ointments for external application | Oelo Chemical Company | 41,569 | Dec. 1 | 107 | 1368 |
| Sarsaparilla | Cantrell & Cochrane | 39,674 | Jan. 27 | 102 | 812 |
| Sauces | E. Lazenby & Son | 40,986 | Aug. 25 | 105 | 2050 |
| Sauer-kraut | Saginaw Realty Company | 39,823 | Feb. 17 | 102 | 1547 |
| Sausages | P. H. Loewith & Co | 40,492 | June 2 | 104 | 1386 |
| Savings-boxes. Metal | Edmonds-Metzel Manufacturing Company. | 40,414 | May 19 | 104 | 847 |
| Saws | Shurly & Dietrich | 40,078 | Apr. 7 | 103 | 1413 |
| Saws | F. W. Clemson | 41,423 | Nov. 3 | 107 | 262 |
| Saws | G. N. Clemson | 41,588 | Dec. 1 | 107 | 1370 |
| Saws and parts thereof. Hand- | J. Campbell | 40,511 | June 2 | 104 | 1388 |
| Scalp and skin diseases. Solution used externally for all | J. F. Draper & Co | 40,356 | May 12 | 104 | 573 |
| Scrapers. Drag and wheeled | Smith & Sons Manufacturing Co | 40,622 | June 16 | 104 | 1892 |
| Screws | Rogers Screw Co | 41,587 | Dec. 1 | 107 | 1370 |
| Scrim and art-ticking | W. R. Morse | 39,831 | Feb. 24 | 102 | 1771 |
| Sedative. Uterine | Nelson, Baker & Co | 40,761 | July 14 | 105 | 490 |
| Seed hulls and mixed feed of cotton-seed meal and cotton-seed hulls. Cotton- | Southern Cotton Oil Company | 39,842 | Feb. 24 | 102 | 1772 |
| Seeds. Bird- | J. W. Whittall & Co | 40,686 | June 30 | 104 | 2483 |
| Seeds. Certain named | Wood, Stubbs & Co | 40,866 | Aug. 4 | 105 | 1255 |
| Sensitized cloth | Lusterine Manufacturing Company. | 41,354 | Oct. 27 | 106 | 2279 |
| Serum | Frederick Stearns & Co | 40,860 | Aug. 4 | 105 | 1254 |
| Sewing-machines | L. F. Fales | 41,012 | Aug. 25 | 105 | 2053 |
| Sewing-machines | Domestic Sewing Machine Company. | 41,308 | Oct. 13 | 106 | 1772 |
| Sewing-machines and accessories. Dry-thread | New Home Sewing Machine Company. | 41,795 | Dec. 29 | 107 | 2524 |
| Sewing-machines and parts thereof | Hockaday Hardware Company | 41,263 | Oct. 6 | 106 | 1498 |
| Sewing-machines and sewing-machine attachments | Davis Sewing Machine Co | 39,663 | Jan. 20 | 102 | 618 |
| Sewing-machines and sewing-machine attachments | Davis Sewing Machine Co | 39,664 | Jan. 20 | 102 | 618 |
| Sewing-machines and sewing-machine attachments | Davis Sewing Machine Co | 39,665 | Jan. 20 | 102 | 618 |
| Sewing-machines and sewing-machine attachments and parts thereof. | Singer Manufacturing Co | 39,791 | Feb. 10 | 102 | 1289 |
| Sewing-machines, attachments, and parts thereof | Singer Manufacturing Company | 40,288 | May 5 | 104 | 306 |
| Sewing-machines, sewing-machine attachments, and parts thereof. | Singer Manu'f'g Co | 40,807 | July 21 | 105 | 740 |
| Shaft-hangers | T. B. Wood's Sons | 40,748 | July 7 | 105 | 256 |
| Sheet-holding devices and temporary binders. Loose- | Sieber & Trussell Mfg. Company | 40,507 | June 2 | 104 | 1388 |
| Sheetings and drills. Cotton | K. Iwahara | 39,961 | Mar. 24 | 103 | 881 |
| Sheetings. Cotton | Hunter Manufacturing and Commission Company. | 41,468 | Nov. 17 | 107 | 825 |
| Shirt-waists | National Waist & Skirt Company | 39,613 | Jan. 6 | 102 | 222 |
| Shirts | J. M. Robinson, Norton & Co | 40,377 | May 19 | 104 | 844 |
| Shirts | Standard Mfg. Co | 40,754 | July 14 | 105 | 489 |
| Shirts | Richardson, Roberts Dry Goods Co | 40,929 | Aug. 18 | 105 | 1770 |
| Shirts | Brown, Durrell & Co | 41,101 | Sept. 15 | 106 | 758 |
| Shirts | M. Phillips & Son | 41,133 | Sept. 22 | 106 | 988 |
| Shirts | M. Phillips & Son | 41,134 | Sept. 22 | 106 | 988 |
| Shirts | M. Phillips & Son | 41,135 | Sept. 22 | 106 | 988 |
| Shirts | Columbus Merchandise Company | 41,652 | Dec. 15 | 107 | 1964 |
| Shirts, collars, and cuffs | Bloch & Neuburger | 39,754 | Feb. 10 | 102 | 1285 |
| Shirts, collars, and cuffs | Rouse, Hempstone & Co | 41,017 | Sept. 1 | 106 | 256 |
| Shirts, collars, cuffs, and men's shirt-waists | G. P. Ide & Co | 39,931 | Mar. 17 | 103 | 652 |
| Shirts, collars, cuffs, and men's shirt-waists. Dress- | G. P. Ide & Co | 39,930 | Mar. 17 | 103 | 652 |
| Shoe-insoles | J. Dawson | 40,530 | June 9 | 104 | 1647 |
| Shoe-lifts or shoe-horns | J. L. Sommer | 41,275 | Oct. 13 | 106 | 1769 |
| Shoe-polish | American Chemical Manufacturing & Mining Co. | 41,082 | Sept. 8 | 106 | 537 |
| Shoe-polish | P. A. Blichert Mfg. Co | 41,154 | Sept. 22 | 106 | 990 |
| Shoe-polish | Boyer & Company | 41,629 | Dec. 8 | 107 | 1654 |
| Shoe-polish and leather-dressings | Whittemore Bro's. & Co | 41,083 | Sept. 8 | 106 | 536 |
| Shoe-polish paste | F. F. Dalley Co. of Hamilton | 41,374 | Oct. 27 | 106 | 2282 |
| Shoes for men, women, and children. Leather | Noyes Norman Shoe Co | 39,699 | Jan. 27 | 102 | 815 |
| Shoes. Ladies' and misses' leather | G. H. Weber | 40,727 | July 7 | 105 | 253 |

*Alphabetical list of trade-marks*—Continued.

| Title. | Name. | No. | Date. | Official Gazette. Vol. | Page. |
|---|---|---|---|---|---|
| Shoes. Leather | A. Jones | 39,957 | Mar. 24 | 103 | 880 |
| Shoes. Leather | Wertheimer Swarts Shoe Co | 40,042 | Apr. 7 | 103 | 1409 |
| Shoes. Leather | Ballin and Laventall | 40,086 | Apr. 14 | 103 | 1673 |
| Shoes. Leather | Patapsco Shoe Co | 40,087 | Apr. 14 | 103 | 1673 |
| Shoes. Leather | G. Baker & Sons | 40,237 | May 5 | 104 | 301 |
| Shoes. Leather | Goodfellow-Brookes Shoe Company | 40,531 | June 9 | 104 | 1647 |
| Shoes. Leather | Siegel-Cooper Company | 40,885 | Aug. 11 | 105 | 1524 |
| Shoes. Leather | Siegel-Cooper Company | 40,930 | Aug. 18 | 105 | 1770 |
| Shoes. Leather | Williams-Marvin Co | 41,352 | Oct. 27 | 106 | 2279 |
| Shoes. Leather | Baltimore Boot and Shoe Mfg. Co | 41,743 | Dec. 29 | 107 | 2520 |
| Shoes. Misses' and children's leather | Dorothy Dodd Shoe Company | 39,632 | Jan. 13 | 102 | 460 |
| Shoes. Misses' and children's leather | O. P. Ramsdell Sweet & Co | 40,088 | Apr. 14 | 103 | 1673 |
| Shoes. Women's leather | C. W. Porter | 41,070 | Sept. 8 | 106 | 535 |
| Shovels | A. O. Meyer | 41,424 | Nov. 3 | 107 | 262 |
| Shovels | A. O. Meyer | 41,425 | Nov. 3 | 107 | 262 |
| Shovels, spades, and scoops | Brown-Hurley Hardware Company | 40,779 | July 14 | 105 | 492 |
| Shovels, spades, and scoops | Supplee Hardware Co | 40,835 | July 28 | 105 | 970 |
| Sifters. Ash- | J. P. Hill | 39,947 | Mar. 17 | 103 | 654 |
| Silk and silk-mixed dress goods and linings | Burton Bros. & Co | 40,887 | Aug. 11 | 105 | 1524 |
| Silk and silk piece goods | Duncan & Stenz | 41,314 | Oct. 20 | 106 | 2006 |
| Silk fabrics | Stirling Silk Mfg. Co | 39,801 | Feb. 17 | 102 | 1545 |
| Silk fabrics | York Silk Manufacturing Company. | 41,066 | Sept. 8 | 106 | 535 |
| Silk fabrics | York Silk Manufacturing Company. | 41,067 | Sept. 8 | 106 | 535 |
| Silk linings and silk fabrics for dress goods | Burton Bros. & Co | 41,694 | Dec. 22 | 107 | 2227 |
| Silk products. Certain named | Société Anonyme pour la Fabrication de la Soie de Chardonnet. | 41,175 | Sept. 29 | 106 | 1231 |
| Silk products imitating hair | Société Anonyme pour la Fabrication de la Soie de Chardonnet. | 41,176 | Sept. 29 | 106 | 1231 |
| Silk. Spun | Industrie-Gesellschaft für Schappe | 39,757 | Feb. 10 | 102 | 1285 |
| Silk. Thread and cloth made from artificial | Société Anonyme pour la Fabrication de la Soie de Chardonnet. | 41,174 | Sept. 29 | 106 | 1231 |
| Silverware. Certain named | W. B. Kerr & Co | 40,926 | Aug. 18 | 105 | 1770 |
| Skin application. Substance and salve for | Lauderdale Chemical Company | 41,520 | Nov. 24 | 107 | 1088 |
| Skin-bleaching preparation | Rose Manufacturing Company | 41,332 | Oct. 20 | 106 | 2008 |
| Skin-bleaching preparation | Rose Manufacturing Company | 41,333 | Oct. 20 | 106 | 2009 |
| Skin cream preparation | Brown & Allen | 41,412 | Nov. 3 | 107 | 261 |
| Skin. External applications for affections of the | E. J. Molloy | 39,843 | Feb. 24 | 102 | 1772 |
| Skin-lotion | Derm Aseptic Company | 41,489 | Nov. 17 | 107 | 827 |
| Skin preparations | C. J. Amelung | 41,632 | Dec. 8 | 107 | 1654 |
| Skin-toning effect. Liquid having a | J. P. Stratton | 40,549 | June 9 | 104 | 1649 |
| Skins. Chamois- | Keystone Chamois Company | 39,701 | Jan. 27 | 102 | 815 |
| Skirt-edge protector | Hensel Colladay Co | 39,694 | Jan. 27 | 102 | 814 |
| Skirt fastener and supporter. Combined | Dinsmoor Novelty Co | 39,952 | Mar. 24 | 103 | 880 |
| Slates. School- | National School Slate Company | 40,721 | July 7 | 105 | 253 |
| Slates. School- | National School Slate Company | 40,722 | July 7 | 105 | 253 |
| Slippers and shoes. Certain named | McFarlan & Co | 39,804 | Feb. 17 | 102 | 1545 |
| Slippers for housewear. Felt | Blum Shoe Company | 39,836 | Feb. 24 | 102 | 1771 |
| Smoke. Liquid extract of | Hison Remedy Company | 40,684 | June 30 | 104 | 2433 |
| Soap | F. A. Richter | 39,724 | Feb. 3 | 102 | 1044 |
| Soap | G. M. Chute | 39,895 | Mar. 3 | 103 | 220 |
| Soap | A. M. Capen's Sons | 40,454 | May 26 | 104 | 1114 |
| Soap | Colgate & Co | 41,043 | Sept. 1 | 106 | 259 |
| Soap | Eddystone Manufacturing Co | 41,192 | Sept. 29 | 106 | 1232 |
| Soap | O'Rourke and Hurley | 41,373 | Oct. 27 | 106 | 2282 |
| Soap and soap-powder | Davis & Marston | 41,754 | Dec. 29 | 107 | 2521 |
| Soap and soap-powders. Scouring | Floridine Mf'g Co | 39,809 | Feb. 17 | 102 | 1546 |
| Soap. Certain named | Aug. Luhn & Co., Gesellschaft mit Beschränkter Haftung. | 39,656 | Jan. 20 | 102 | 617 |
| Soap. Certain named | Pioneer Tar Soap Co | 39,846 | Feb. 24 | 102 | 1772 |
| Soap. Certain named | Aug. Luhn & Co., Gesellschaft mit Beschränkter Haftung. | 40,610 | June 16 | 104 | 1890 |
| Soap for polishing metals | Société Générale des Cirages Français. | 41,110 | Sept. 15 | 106 | 759 |
| Soap for use in shaving. Substitute for | E. L. Mayo | 40,023 | Mar. 31 | 103 | 1159 |
| Soap in liquid and solid form. Toilet | G. A. Schmidt | 41,193 | Sept. 29 | 106 | 1232 |
| Soap. Laundry | Troy Laundry Machinery Co | 40,535 | June 9 | 104 | 1647 |
| Soap-powder and laundry soap | Lewis Bros | 40,025 | Mar. 31 | 103 | 1159 |
| Soap. Scouring- | Bon Ami Company | 40,611 | June 16 | 104 | 1890 |
| Soap. Scouring and polishing | Lever Brothers | 39,620 | Jan. 6 | 102 | 223 |
| Soap. Toilet | Medical Lake Salt Mfg. Co | 41,633 | Dec. 8 | 107 | 1654 |
| Soap. Washing- | R. H. L. Talcott | 40,773 | July 14 | 105 | 491 |
| Soap. Washing-fluid | F. Cash | 41,399 | Nov. 3 | 107 | 260 |
| Soap. White laundry | W. G. Crane | 40,024 | Mar. 31 | 103 | 1159 |
| Soaps | J. C. Siemon | 40,483 | June 2 | 104 | 1385 |
| Soaps. Toilet and laundry | Maple City Soap Works | 39,847 | Feb. 24 | 102 | 1773 |
| Soda. Baking- | Plunkett-Jarrell Grocer Co | 41,232 | Oct. 6 | 106 | 1494 |
| Soda-water and carbonation. Flavoring-syrup for | Ferro-Phos Co | 41,477 | Nov. 17 | 107 | 826 |
| Soda-water and mineral waters | Andrew Lohr Bottling Co | 40,645 | June 23 | 104 | 2143 |
| Soda-water flavoring-syrup | C. D. Bradham | 40,619 | June 16 | 104 | 1891 |
| Soldering and cleansing metals. Solution for | Brumer Bros | 40,172 | Apr. 21 | 103 | 1909 |
| Soldering-flux | Fres-Ko Chemical Co | 39,910 | Mar. 10 | 103 | 421 |
| Soluble receptacles | J. Schmidt | 41,079 | Sept. 8 | 106 | 536 |
| Soluble receptacles. Certain named | J. Schmidt | 41,046 | Sept. 1 | 106 | 259 |
| Sound-records | American Graphophone Co | 40,072 | Apr. 7 | 103 | 1413 |
| Spavin cure | A. T. Heberling | 40,156 | Apr. 21 | 103 | 1907 |
| Speech and sound producing machines and their parts | J. M. Tourtel | 41,647 | Dec. 8 | 107 | 1655 |
| Spices | Smith, Lichty & Hillman Co | 41,666 | Dec. 15 | 107 | 1965 |
| Spindle and mule banding | James H. Billington Co | 40,362 | May 12 | 104 | 573 |
| Spittoons. Certain named | Cordley & Hayes | 41,554 | Dec. 1 | 107 | 1367 |
| Spool and skein silk | Nonotuck Silk Company | 40,089 | Apr. 14 | 103 | 1673 |
| Spool-cotton | A. King & Co | 40,381 | May 19 | 104 | 844 |
| Spool-cotton, thread, and sewing-cotton | American Thread Company | 39,692 | Jan. 27 | 102 | 814 |
| Spool-cotton, thread, and sewing-cotton | American Thread Company | 39,693 | Jan. 27 | 102 | 814 |
| Spool-cotton, thread, and sewing-cotton | American Thread Company | 40,524 | June 9 | 104 | 1646 |

*Alphabetical list of trade-marks*—Continued.

| Title. | Name. | No. | Date. | Official Gazette. Vol. | Page. |
|---|---|---|---|---|---|
| Spool-cotton, thread, and sewing-cotton | American Thread Company | 40,525 | June 9 | 104 | 1646 |
| Spool-cotton, thread, and sewing-cotton | American Thread Company | 41,138 | Sept. 22 | 106 | 989 |
| Spool-cotton, thread, sewing-cotton, and machine-thread | American Thread Company | 41,139 | Sept. 22 | 106 | 989 |
| Spoons. Baby- | Reed & Barton Corporation | 41,278 | Oct. 13 | 106 | 1769 |
| Spoons. Baby- | Reed & Barton Corporation | 41,279 | Oct. 13 | 106 | 1769 |
| Spoons. Baby- | Reed & Barton Corporation | 41,280 | Oct. 13 | 106 | 1770 |
| Spoons. Baby- | Reed & Barton Corporation | 41,281 | Oct. 13 | 106 | 1770 |
| Spoons. Baby- | Reed & Barton Corporation | 41,282 | Oct. 13 | 106 | 1770 |
| Spoons. Baby- | Reed & Barton Corporation | 41,283 | Oct. 13 | 106 | 1770 |
| Spoons. Baby- | Reed & Barton Corporation | 41,284 | Oct. 13 | 106 | 1770 |
| Spoons, forks, knives, and ladles. Silver | Oneida Community | 40,069 | Apr. 7 | 103 | 1412 |
| Stains from textile fabrics. Preparations for removing | Masury, Young & Co | 40,455 | May 26 | 104 | 1115 |
| Starch | Troy Laundry Machinery Co | 40,343 | May 12 | 104 | 571 |
| Starch and starch compounds | A. F. Lahusen | 39,841 | Feb. 24 | 102 | 1772 |
| Starch. Laundry | Keever Starch Mnfg. Co | 39,782 | Feb. 10 | 102 | 1288 |
| Starch. Laundry | Gold Leaf Baking Powder Company | 40,453 | May 26 | 104 | 1114 |
| Stationery. Certain named | Dovewreath Card Co | 39,928 | Mar. 17 | 103 | 652 |
| Stationery. Certain named | Earl Thompson Company | 39,929 | Mar. 17 | 103 | 652 |
| Stationery. Certain named | White & Wyckoff Mfg. Co | 41,347 | Oct. 27 | 106 | 2279 |
| Stationery. Certain named | Theo. Schmidtman's Sons Company | 41,511 | Nov. 24 | 107 | 1087 |
| Steam and gas engines and their parts and accessories | Crest Manufacturing Co | 39,627 | Jan. 6 | 102 | 224 |
| Steam-boilers. Certain named attachments for | E. H. Hovey | 39,669 | Jan. 20 | 102 | 618 |
| Steel. High-speed cutting- | Firth-Sterling Steel Company | 41,459 | Nov. 10 | 107 | 535 |
| Steel. High-speed cutting- | Firth-Sterling Steel Company | 41,460 | Nov. 10 | 107 | 536 |
| Steel in bars, rods, and wire. Cast- | Marsh Brothers Co | 39,888 | Mar. 3 | 103 | 219 |
| Steel in certain named forms | National Tool Company | 40,623 | June 16 | 104 | 1892 |
| Steel in certain named forms | Jonas & Colver | 41,733 | Dec. 22 | 107 | 2232 |
| Steel. Sheet- | American Sheet Steel Company | 39,703 | Jan. 27 | 102 | 815 |
| Steel. Tool- | Crucible Steel Company of America. | 39,792 | Feb. 10 | 102 | 1289 |
| Steel. Tool- | Braeburn Steel Co | 40,716 | June 30 | 104 | 2436 |
| Steel. Tool- | Crucible Steel Company of America. | 40,841 | July 28 | 105 | 970 |
| Steel. Tool- | Sanderson Brothers Steel Co | 41,060 | Sept. 1 | 106 | 260 |
| Steel. Tool- | Crucible Steel Company of America. | 41,163 | Sept. 22 | 106 | 991 |
| Steel. Tool- | Crucible Steel Company of America. | 41,164 | Sept. 22 | 106 | 991 |
| Steel. Tool- | Crucible Steel Company of America. | 41,265 | Oct. 6 | 106 | 1498 |
| Steel. Tool- | Crucible Steel Company of America. | 41,266 | Oct. 6 | 106 | 1498 |
| Stencil duplicating-machines and parts thereof | Neostyle Company | 40,920 | Aug. 11 | 105 | 1528 |
| Sterilizing and preserving apparatus | G. van Eyck | 41,493 | Nov. 17 | 107 | 828 |
| Stockings | Cornell Stocking Corporation | 40,431 | May 26 | 104 | 1112 |
| Stomach, bladder, and kidney cures | Columbia Drug Comp | 39,775 | Feb. 10 | 102 | 1287 |
| Stomach-drops | H. C. Lemke | 40,360 | May 12 | 104 | 573 |
| Stone for certain named purposes. Artificial | J. Nebinger | 41,123 | Sept. 15 | 106 | 760 |
| Stone. Roofing and other building material from artificial | L. Hatschek | 41,389 | Oct. 27 | 106 | 2284 |
| Stove and metal polishes | C. H. Gerbig | 40,966 | Aug. 18 | 105 | 1775 |
| Stovepipes and pipe-elbows | Canonsburg Iron and Steel Company. | 40,656 | June 23 | 104 | 2144 |
| Stove-polish | J. L. Prescott & Co | 41,375 | Oct. 27 | 106 | 2282 |
| Stoves | C. Schmidt | 39,790 | Feb. 10 | 102 | 1289 |
| Stoves and ranges | Anchor Stove & Range Co | 40,837 | July 28 | 105 | 970 |
| Stoves and ranges | Hockaday Hardware Company | 41,264 | Oct. 6 | 106 | 1498 |
| Stoves. Heating and cooking | Joliet Stove Works | 39,987 | Mar. 24 | 103 | 884 |
| Stoves. Heating and cooking | Joliet Stove Works | 41,387 | Oct. 27 | 106 | 2283 |
| Stoves, ranges, and furnaces. Cook and heating | A. Baldwin & Co | 39,670 | Jan. 20 | 102 | 618 |
| Stoves, ranges, and ovens | American Stove Company | 40,228 | Apr. 28 | 103 | 2168 |
| Stoves, ranges, furnaces, and heaters | Standard Stove & Range Co | 41,457 | Nov. 10 | 107 | 535 |
| Studs. Shirt- | Horton Angell Company | 40,565 | June 9 | 104 | 1650 |
| Sugar and syrup. Maple | H. Y. Scanlon | 41,091 | Sept. 8 | 106 | 538 |
| Suits for boys and children | I. Frank & Co | 41,312 | Oct. 20 | 106 | 2006 |
| Suits for boys and children | I. Frank & Co | 41,348 | Oct. 27 | 106 | 2279 |
| Suppositories for prevention of certain named diseases | J. B. Hawes | 39,720 | Feb. 3 | 102 | 1044 |
| Surgical appliance for the cure of rheumatism | S. M. Watson | 41,492 | Nov. 17 | 107 | 828 |
| Surgical dressings | W. S. Douglas | 41,409 | Nov. 3 | 107 | 261 |
| Surveying instruments | Keuffel & Esser Co | 40,664 | June 30 | 104 | 2431 |
| Suspenders | Knothe Brothers | 39,614 | Jan. 6 | 102 | 222 |
| Suspenders | Knothe Brothers | 39,615 | Jan. 6 | 102 | 222 |
| Suspenders | Royal Suspender Co | 39,631 | Jan. 13 | 102 | 460 |
| Suspenders | Consolidated Manhattan Suspender Co. | 39,695 | Jan. 27 | 102 | 814 |
| Suspenders | Lobel, Coleman & Marcus | 39,998 | Mar. 31 | 103 | 1156 |
| Suspensories | Ohio Truss Co | 40,532 | June 9 | 104 | 1647 |
| Suspensories | J. U. Adams | 41,789 | Dec. 29 | 107 | 2524 |
| Syringes | J. Graham | 40,304 | May 12 | 104 | 568 |
| Syringes or douches of rubber | Meinecke & Co | 39,817 | Feb. 17 | 102 | 1547 |
| Syrup | Corn Products Company | 41,117 | Sept. 15 | 106 | 759 |
| Syrup and beverages. Certain named | A. J. Amelotte | 40,161 | Apr. 21 | 103 | 1908 |
| Syrup and carbonated beverage made therefrom. Certain named | G. S. Preston | 40,395 | May 19 | 104 | 846 |
| Syrup. Concentrated | Crown Cordial & Extract Co | 39,657 | Jan. 20 | 102 | 617 |
| Syrup for beverages. Flavoring- | W. H. Beasley | 40,708 | June 30 | 104 | 2435 |
| Syrup. Fruit- | L. Prange | 40,099 | Apr. 14 | 103 | 1674 |
| Syrup. Soda-fountain | M. L. Eppstein | 41,185 | Sept. 29 | 106 | 1232 |
| Syrups | Towle Syrup Co | 41,476 | Nov. 17 | 107 | 826 |
| Syrups | F. N. Johnson Co | 41,665 | Dec. 15 | 107 | 1965 |
| Syrups and molasses | Towle Syrup Company | 41,116 | Sept. 15 | 106 | 759 |
| Syrups and molasses. Table | Towle Syrup Company | 39,680 | Jan. 27 | 102 | 813 |
| Syrups. Fruit- | Royal Remedy & Extract Co | 40,315 | May 12 | 104 | 569 |
| Tablets. Anodyne | Fraser Tablet Company | 40,020 | Mar. 31 | 103 | 1159 |
| Tablets. Dyspepsia- | United Drug Company | 40,019 | Mar. 31 | 103 | 1159 |
| Tablets. Laxative | Wright & Wade | 40,110 | Apr. 14 | 103 | 1675 |
| Tablets. Writing and spelling | J. A. Marsh | 40,294 | May 12 | 104 | 567 |

*Alphabetical list of trade-marks*—Continued.

| Title. | Name. | No. | Date. | Official Gazette. Vol. | Page. |
|---|---|---|---|---|---|
| Tableware. Plated | American Silver Company | 40,371 | May 12 | 104 | 574 |
| Tableware. Plated articles of | Housatonic Manufacturing Company. | 40,725 | July 7 | 105 | 253 |
| Tableware. Silver and plated articles of | Wm. Hutton & Sons | 40,657 | June 23 | 104 | 2144 |
| Tableware. Silver and plated articles of | American Silver Company | 40,724 | July 7 | 105 | 253 |
| Talking-machines and records | Universal Talking Machine Mfg. Co. | 40,570 | June 9 | 104 | 1651 |
| Talking-machines and talking-machine parts | Victor Talking Machine Co | 40,223 | Apr. 28 | 103 | 2167 |
| Talking-machines and talking-machine parts | Victor Talking Machine Co | 40,224 | Apr. 28 | 103 | 2167 |
| Talking-machines and talking-machine parts | Victor Talking Machine Co | 40,225 | Apr. 28 | 103 | 2167 |
| Talking-machines. Certain named | Ohio Talking Machine Co | 41,584 | Dec. 1 | 107 | 1370 |
| Tanning extract and cutch | Island Trading Syndicate | 39,869 | Mar. 3 | 103 | 218 |
| Tanning extract. Leather | Stamford Manufacturing Company | 40,641 | June 23 | 104 | 2143 |
| Tanning extracts and liquors | L. Prenzlau | 39,849 | Feb. 24 | 102 | 1779 |
| Tanning material for leather. Vegetable | Stamford Manufacturing Company | 40,340 | May 12 | 104 | 571 |
| Tapioca. Prepared | Whitman Grocery Company | 40,495 | June 2 | 104 | 1387 |
| Tea | Gustin, Cook & Buckley | 39,678 | Jan. 27 | 102 | 812 |
| Tea | C. H. Peters | 39,721 | Feb. 3 | 102 | 1043 |
| Tea | S. Crooks & Co | 40,162 | Apr. 21 | 103 | 1908 |
| Tea | Compressed (Whole Leaf) Tea Syndicate. | 40,393 | May 19 | 104 | 845 |
| Tea | A. A. Pozzi | 40,693 | June 30 | 104 | 2434 |
| Tea | Robinson & Woodworth | 40,951 | Aug. 18 | 105 | 1773 |
| Tea | Loudon & Johnson | 41,034 | Sept. 1 | 106 | 258 |
| Tea | O. Shepard & Company | 41,184 | Sept. 29 | 106 | 1231 |
| Tea | Society for Tea Trade. W. Wissotzky & Co. | 41,710 | Dec. 22 | 107 | 2229 |
| Teas. Mixed | Preston & Stauffer | 40,067 | Apr. 7 | 103 | 1412 |
| Teas. Mixed | Preston & Stauffer | 40,068 | Apr. 7 | 103 | 1412 |
| Telephones | R. Held | 40,585 | June 16 | 104 | 1888 |
| Telephones | Waldberg & Co., Gesellschaft mit Beschränkter Haftung. | 40,655 | June 23 | 104 | 2144 |
| Telephones and telephone-annunciators | Electric Gas Lighting Company | 40,919 | Aug. 11 | 105 | 1528 |
| Telephones mounted on folding holders | Chicago Writing Machine Co | 41,009 | Aug. 25 | 105 | 2053 |
| Telephonic apparatus | Electric Gas Lighting Company | 39,794 | Feb. 10 | 102 | 1284 |
| Thermometer-tubes | Buffalo Dental Manufacturing Co | 41,724 | Dec. 22 | 107 | 2231 |
| Thread for sewing and embroidering. Silk | Richardson Silk Company | 40,238 | May 5 | 104 | 301 |
| Thread of any fibrous material | Nonotuck Silk Company | 40,180 | Apr. 28 | 103 | 2162 |
| Thread-yarn | Elizabeth Mill Co | 39,959 | Mar. 24 | 103 | 881 |
| Tickets. Rebate | H. H. Morse | 40,127 | Apr. 21 | 103 | 1905 |
| Tires for vehicles. Rubber | Buckeye Rubber Company | 40,079 | Apr. 7 | 103 | 1413 |
| Tires. Pneumatic | Continental-Caoutchouc- und Gutta-Percha-Compagnie. | 41,422 | Nov. 3 | 107 | 262 |
| Tires. Rubber vehicle | Springfield Rubber Tire Company | 40,747 | July 7 | 105 | 256 |
| Tires. Solid and pneumatic | Goodyear Tire & Rubber Company | 41,344 | Oct. 20 | 106 | 2010 |
| Titanium preparations for leather-dyeing | C. Dreher | 40,534 | June 9 | 104 | 1647 |
| Tobacco and cigarettes made therefrom. Smoking | American Tobacco Co | 41,142 | Sept. 22 | 106 | 989 |
| Tobacco and cigarettes. Smoking | A. Levy | 41,220 | Oct. 6 | 106 | 1493 |
| Tobacco and cigarettes. Smoking | A. Levy | 41,221 | Oct. 6 | 106 | 1493 |
| Tobacco and cigarettes. Smoking | A. Levy | 41,324 | Oct. 20 | 106 | 2007 |
| Tobacco. Chewing | Bendixen Tobacco Co | 40,828 | July 28 | 105 | 969 |
| Tobacco for chewing and smoking. Scrap | B. Duwel & Bros | 40,169 | Apr. 21 | 103 | 1909 |
| Tobacco for pipes and cigarettes. Cut | K. K. General-Direction der Tabak-Regie in Wien. | 41,777 | Dec. 29 | 107 | 2522 |
| Tobacco. Leaf | T. D. Luckett | 40,211 | Apr. 28 | 103 | 2166 |
| Tobacco. Plug | Moore & Calvi | 41,444 | Nov. 10 | 107 | 534 |
| Tobacco. Plug and twist | Flournoy Tobacco Co | 40,260 | May 5 | 104 | 303 |
| Tobacco. Plug chewing | Gilbert, Son & Co | 39,650 | Jan. 20 | 102 | 616 |
| Tobacco. Smoking | G. B. Lobravico | 40,064 | Apr. 7 | 103 | 1412 |
| Tobacco. Smoking | British-American Tobacco Co | 40,396 | May 19 | 104 | 846 |
| Tobacco. Smoking | British-American Tobacco Co | 40,487 | June 2 | 104 | 1386 |
| Tobacco. Smoking | Imperial Tobacco Company | 40,540 | June 9 | 104 | 1648 |
| Tobacco. Smoking | Imperial Tobacco Company | 40,541 | June 9 | 104 | 1648 |
| Tobacco. Smoking | Imperial Tobacco Company | 40,542 | June 9 | 104 | 1648 |
| Tobacco. Smoking | Imperial Tobacco Company | 40,543 | June 9 | 104 | 1648 |
| Tobacco. Smoking | American Tobacco Co | 41,323 | Oct 20 | 106 | 2007 |
| Toilet cream | Adair Manufacturing Company | 41,041 | Sept. 1 | 106 | 258 |
| Toilet creams and lotions | A. F. Wood | 40,354 | May 12 | 104 | 573 |
| Toilet lotions | Klement & Spaeth | 40,734 | July 7 | 105 | 254 |
| Toilet preparation. Certain named | O. F. Woodward | 40,818 | July 28 | 105 | 968 |
| Toilet preparations for the skin | M. Petersen | 40,142 | Apr. 21 | 103 | 1906 |
| Tonic | Bios Laboratory Co | 39,875 | Mar. 3 | 103 | 218 |
| Tonic | Alfalfa Remedy Co | 40,351 | May 12 | 104 | 572 |
| Tonic | G. Citro | 40,788 | July 21 | 105 | 738 |
| Tonic | J. Sahlmark | 40,789 | July 21 | 105 | 739 |
| Tonic | Berard Chemical Company | 41,078 | Sept. 8 | 106 | 536 |
| Tonic | G. W. Caldwell | 41,156 | Sept. 22 | 106 | 991 |
| Tonic | B. P. Yocum | 41,558 | Dec. 1 | 107 | 1367 |
| Tonic and blood-purifier | A. L. Smith | 40,048 | Apr. 7 | 103 | 1410 |
| Tonic and laxative | R. R. Stoner | 41,292 | Oct. 13 | 106 | 1771 |
| Tonic. Blood | L. H. Harris | 39,798 | Feb. 10 | 102 | 1290 |
| Tonic cordials | Nelson, Baker & Co | 41,707 | Dec. 22 | 107 | 2229 |
| Tonic for stomach, kidneys, liver, and bladder | A. K. Schauf | 41,561 | Dec. 1 | 107 | 1368 |
| Tonic. General | J. E. Ingrim | 40,478 | June 2 | 104 | 1385 |
| Tonic laxative and stomachic for man | G. H. Smith | 40,631 | June 23 | 104 | 2142 |
| Tonic laxatives | Paracamph Company | 40,154 | Apr. 21 | 103 | 1907 |
| Tonic. Malt | Pabst Brewing Company | 40,314 | May 12 | 104 | 569 |
| Tonic preparations. General | S. R. Feil Co | 40,313 | May 12 | 104 | 568 |
| Tonic, stimulating, and reconstructive medicinal preparations. | E. T. Pearson | 41,237 | Oct. 6 | 106 | 1495 |
| Tonic, stimulating, and reconstructive medicinal preparations. | E. T. Pearson | 41,238 | Oct. 6 | 106 | 1495 |
| Tonics | Vinamox Medical Company | 40,194 | Apr. 28 | 103 | 2163 |
| Tonics | G. L. Wilson | 40,547 | June 9 | 104 | 1649 |
| Tonics | J. Milhau's Son | 40,548 | June 9 | 104 | 1649 |
| Tonics | Fairchild Bros. & Foster | 41,625 | Dec. 8 | 107 | 1653 |
| Tonics and laxative tablets | Kohna Medicine Co | 41,785 | Dec. 29 | 107 | 2523 |

*Alphabetical list of trade-marks*—Continued.

| Title. | Name. | No. | Date. | Official Gazette. Vol. | Page. |
|---|---|---|---|---|---|
| Tonics. Nerve- | Peru Cin-Cone Company | 39,981 | Mar. 24 | 103 | 883 |
| Tonics. Nerve- | A. K. Schauf | 41,485 | Nov. 17 | 107 | 827 |
| Tools. Certain named | Walworth Manufacturing Company. | 40,291 | May 5 | 104 | 306 |
| Tools. Certain named pneumatic | Philadelphia Pneumatic Tool Company. | 40,461 | May 26 | 104 | 1115 |
| Tools having a cutting edge operating by a shaving cut. Machine- | Jonas & Colver | 41,792 | Dec. 29 | 107 | 2524 |
| Tooth-paste and a tooth-powder | W. A. Dumas | 41,635 | Dec. 8 | 107 | 1654 |
| Tooth-wash, tooth-powder, and tooth-paste | E. F. Morris | 40,685 | June 30 | 104 | 2433 |
| Toy building-blocks formed of artificial stone | American Art Stone & Manufacturing Company. | 41,537 | Nov. 24 | 107 | 1090 |
| Toy building-blocks of artificial stone | American Art Stone & Manufacturing Company. | 41,646 | Dec. 8 | 107 | 1655 |
| Toy puzzles | A. W. Ellis | 41,277 | Oct. 13 | 106 | 1769 |
| Toys | Geo. Borgfeldt & Co | 40,505 | June 2 | 104 | 1388 |
| Toys | F. M. Osgood | 41,003 | Aug. 25 | 105 | 2052 |
| Trees and pears produced therefrom. Pear- | Timmer and Diehl | 41,204 | Sept. 29 | 106 | 1234 |
| Trees. Fruit- | Oregon Nursery Company | 41,203 | Sept. 29 | 106 | 1233 |
| Trousers | L. Levine | 39,865 | Mar. 3 | 103 | 217 |
| Trousers | Frederick H. Sprague Company | 40,726 | July 7 | 105 | 253 |
| Trousers | Richman, Sumberg & Co | 40,784 | July 21 | 105 | 738 |
| Trousers | W. C. Mertz | 41,313 | Oct. 20 | 106 | 2006 |
| Trousers, coats, and vests. Men's | S. Kirschbaum | 39,864 | Mar. 3 | 103 | 217 |
| Trousers-hangers | F. H. Cowles | 41,434 | Nov. 10 | 107 | 532 |
| Trunks | N. Drucker & Co | 39,733 | Feb. 3 | 102 | 1045 |
| Trunks, traveling-bags, and dress-suit cases | Stoelting & Dunn | 40,571 | June 9 | 104 | 1651 |
| Trusses | J. U. Adams | 41,200 | Sept. 29 | 106 | 1233 |
| Trusses and other orthopedic bandages and appliances. Hernial | C. A. Delbret-Claverie | 41,708 | Dec. 22 | 107 | 2229 |
| Type casting and composing machines and supplies therefor | Lanston Monotype Machine Co | 40,715 | June 30 | 104 | 2436 |
| Type-writer and stamping ribbons | Indeliba Manufacturing Company | 40,817 | July 28 | 105 | 968 |
| Type-writer attachments for holding books | Visible Typewriters Company | 39,730 | Feb. 3 | 102 | 1045 |
| Type-writer ribbons | American Ribbon & Carbon Co | 41,686 | Dec. 22 | 107 | 2227 |
| Type-writer ribbons | R. W. Booth | 41,735 | Dec. 29 | 107 | 2519 |
| Type-writers and type-writer parts | Underwood Typewriter Company | 40,806 | July 21 | 105 | 740 |
| Type-writing machines | R. C. Cox | 39,857 | Feb. 24 | 102 | 1773 |
| Type-writing machines | L. C. Smith & Bros. Typewriter Company. | 40,834 | July 28 | 105 | 970 |
| Umbrellas | Worcester Umbrella Company | 40,786 | July 21 | 105 | 738 |
| Umbrellas and parasols | L. Schuller | 41,309 | Oct. 20 | 106 | 2006 |
| Undergarments. Women's woven | Dielhenn Mfg. Co | 39,994 | Mar. 31 | 103 | 1156 |
| Undershirts | Elmira Knitting Mills | 40,084 | Apr. 14 | 103 | 1673 |
| Undershirts and drawers | Union Mills | 40,755 | July 14 | 105 | 489 |
| Underwaists. Ladies' | A. Vischer & Co | 40,976 | Aug. 25 | 105 | 2049 |
| Underwear. Certain named | Root Manufacturing Company | 41,170 | Sept. 29 | 106 | 1231 |
| Underwear. Certain named | Sachs Bros. & Co | 41,428 | Nov. 10 | 107 | 532 |
| Underwear. Ladies', misses', and children's muslin | Brown, Durell & Co | 41,171 | Sept. 29 | 106 | 1231 |
| Vaccine virus | N. Crank | 39,771 | Feb. 10 | 102 | 1287 |
| Varnish | Glidden Varnish Co | 40,799 | July 21 | 105 | 739 |
| Varnish and hard-oil finish | Spokane Paint & Oil Co | 40,968 | Aug. 18 | 105 | 1775 |
| Varnish and paint | Tabor, Trego & Co., (1902) | 41,644 | Dec. 8 | 107 | 1655 |
| Varnish and paint | Tabor, Trego & Co., (1902) | 41,645 | Dec. 8 | 107 | 1655 |
| Varnish. Certain named | Interior Hardwood Company | 39,726 | Feb. 3 | 102 | 1044 |
| Varnish compositions | G. Tüschel | 41,376 | Oct. 27 | 106 | 2282 |
| Varnish. Copal | Berry Brothers | 41,000 | Aug. 25 | 105 | 2052 |
| Varnish. Fluid for removing | J. Seymour | 40,028 | Mar. 31 | 103 | 1160 |
| Varnishes | Tousey Varnish Co | 40,029 | Mar. 31 | 103 | 1160 |
| Varnishes and japans | Stewart-Mowry Company | 40,284 | May 5 | 104 | 306 |
| Varnishes and japans | J. G. Newcomb | 40,879 | Aug. 4 | 105 | 1256 |
| Vehicle-aprons, vehicle-top hoods, and vehicle storm-fronts. | Vehicle Apron & Hood Co | 39,731 | Feb. 3 | 102 | 1045 |
| Vehicle-wheels. Metallic rims for | Cincher Automobile Tire Manufacturers Association. | 40,973 | Aug. 18 | 105 | 1776 |
| Vehicles and machines therefor. Certain named | Daimler-Motoren-Gesellschaft | 41,126 | Sept. 15 | 106 | 760 |
| Vehicles and machines therefor. Certain named | Daimler-Motoren-Gesellschaft | 41,127 | Sept. 15 | 106 | 760 |
| Vehicles and parts thereof. Certain named | Gibbs Engineering & Manufacturing Company. | 41,729 | Dec. 22 | 107 | 2231 |
| Vehicles and parts thereof. Motor-propelled | Aurora Automatic Machinery Company. | 40,080 | Apr. 7 | 103 | 1414 |
| Vehicles. Certain named | Mitchell, Lewis & Staver Co | 41,345 | Oct. 20 | 106 | 2010 |
| Vehicles. Draft wheeled | Studebaker Brothers Manufacturing Company. | 40,178 | Apr. 21 | 103 | 1910 |
| Vehicles. Motor- | Autocar Company | 40,781 | July 14 | 105 | 492 |
| Vehicles. Self-propelled | Buckmobile Company | 40,033 | Mar. 31 | 103 | 1160 |
| Velvets. Silk | Salt's Textile Mfg. Co | 39,960 | Mar. 24 | 103 | 881 |
| Velvets, velveteens, and corduroys | A. Wimpfheimer & Bro | 41,430 | Nov. 10 | 107 | 532 |
| Velvets, velveteens, and plush goods | H. O. Brandt & Co | 41,548 | Dec. 1 | 107 | 1366 |
| Velvets, velveteens, and plush goods | H. O. Brandt & Co | 41,549 | Dec. 1 | 107 | 1366 |
| Vermin. Paste for destroying | H. Ehrensing | 40,907 | Aug. 11 | 105 | 1526 |
| Veterinary medicine to be used internally | G. R. Bigler | 40,671 | June 30 | 104 | 2432 |
| Veterinary remedies. Certain named | Taylor & Reith | 40,054 | Apr. 7 | 103 | 1411 |
| Vulneraries | Nelson, Baker & Co | 40,658 | June 23 | 104 | 2144 |
| Wash for tender or sore feet | W. J. Govan | 40,682 | June 30 | 104 | 2433 |
| Washing compound | G. B. Holden | 40,171 | Apr. 21 | 103 | 1909 |
| Washing compounds | P. J. O'Neil | 40,484 | June 2 | 104 | 1386 |
| Washing compounds | J. Pyle & Sons | 40,823 | July 28 | 105 | 969 |
| Washing compounds | T. H. Tabor | 41,039 | Sept. 1 | 106 | 258 |
| Washing-machines | Capt. M. C. Randleman & Sons | 40,418 | May 19 | 104 | 848 |
| Washing-machines | Benbow-Brammer Manufacturing Company. | 40,833 | July 28 | 105 | 970 |
| Washing-machines. Hand-operated | Horton Manufacturing Company | 40,326 | May 12 | 104 | 570 |
| Washing-powder | Dufur-Banzhaf Mfg. Co | 40,278 | May 5 | 104 | 305 |
| Washing-powders | Knott, Cochran & Company | 41,153 | Sept. 22 | 106 | 990 |
| Washing-powders | J. D. Green | 41,480 | Nov. 17 | 107 | 827 |
| Washing solution. Clothes- | J. E. Craig | 40,408 | May 19 | 104 | 847 |
| Watchcases | W. Konovitz | 40,504 | June 2 | 104 | 1388 |

*Alphabetical list of trade-marks*—Continued.

| Title. | Name. | No. | Date. | Official Gazette. Vol. | Page. |
|---|---|---|---|---|---|
| Watches | C. F. York | 40,811 | July 28 | 105 | 968 |
| Watches and clocks | Kingoro Ezawa | 41,218 | Oct. 6 | 106 | 1493 |
| Watches and parts of watches | Georges Favre-Jacot & Co | 41,747 | Dec. 29 | 107 | 2520 |
| Watches and watch-movements | Elgin National Watch Company | 40,372 | May 12 | 104 | 574 |
| Watches and watch-movements | Elgin National Watch Company | 40,373 | May 12 | 104 | 574 |
| Watches, including movements and cases | L. Manheimer & Bros | 39,688 | Jan. 27 | 102 | 814 |
| Water-closet bowls | Hitchcock Supply Co | 40,572 | June 9 | 104 | 1651 |
| Water-closets | J. F. Johnston | 41,793 | Dec. 29 | 107 | 2524 |
| Water-closets and water-closet fittings | G. Helbling & Co | 41,061 | Sept. 1 | 106 | 260 |
| Water-closets, closet-tanks, seats, and bowls | Columbia Pottery & Mfg. Company | 41,390 | Oct. 27 | 106 | 2284 |
| Water-colors and oil-colors | Redeker & Hennis | 40,295 | May 12 | 104 | 567 |
| Water. Compounds for purifying | Fort Wayne Steam Specialty Company. | 40,485 | June 2 | 104 | 1386 |
| Water. Natural-spring | A. A. Low | 40,545 | June 9 | 104 | 1649 |
| Water or mineral water. Natural-spring | Stuart & McEnnery | 41,035 | Sept. 1 | 106 | 258 |
| Water. Potable | F. G. Kuné | 39,783 | Feb. 10 | 102 | 1288 |
| Water-supply tanks | Staples Valve Co | 40,839 | July 28 | 105 | 970 |
| Waters. Table | Oak Grove | 40,163 | Apr. 21 | 103 | 1908 |
| Waters. Table | Oak Grove | 40,164 | Apr. 21 | 103 | 1908 |
| Waterproof fabrics and articles made therefrom. Certain named | H. M. Sawyer & Son | 40,367 | May 12 | 104 | 574 |
| Waterproof fabrics and articles made therefrom. Certain named | H. M. Sawyer & Son | 41,736 | Dec. 29 | 107 | 2519 |
| Waterproof sheetings and fabrics | Hospital Sheeting Co | 41,547 | Dec. 1 | 107 | 1366 |
| Wax. Apparatus for melting sealing | Dennison Manufacturing Co | 39,825 | Feb. 17 | 102 | 1547 |
| Wheat-flakes | Seeman Bros | 40,939 | Aug. 18 | 105 | 1771 |
| Whiskies | Wood & Bolton | 40,264 | May 5 | 104 | 304 |
| Whiskies and brandies | J. C. Marks Liquor Co | 41,618 | Dec. 8 | 107 | 1652 |
| Whiskies, brandies, and cognacs | A. Neurad | 41,447 | Nov. 10 | 107 | 534 |
| Whiskies. Certain named | F. Chevalier Co | 40,644 | June 23 | 104 | 2143 |
| Whiskies. Rye and Bourbon | Tillmann & Bendell | 40,488 | June 2 | 104 | 1386 |
| Whisky | Tanqueray, Gordon & Co | 39,651 | Jan. 20 | 102 | 617 |
| Whisky | A. D. Newman | 39,675 | Jan. 27 | 102 | 812 |
| Whisky | Stitzel Distilling Company | 39,676 | Jan. 27 | 102 | 812 |
| Whisky | Edward and John Burke, Ltd | 40,013 | Mar. 31 | 103 | 1158 |
| Whisky | McLean & Shaffer | 40,065 | Apr. 7 | 103 | 1412 |
| Whisky | J. Buchanan | 40,166 | Apr. 21 | 103 | 1908 |
| Whisky | M. T. Jones | 40,167 | Apr. 21 | 103 | 1908 |
| Whisky | Straus, Gunst & Co | 40,168 | Apr. 21 | 103 | 1909 |
| Whisky | Straus, Gunst & Co | 40,195 | Apr. 28 | 103 | 2163 |
| Whisky | Cook & Bernheimer Co | 40,265 | May 5 | 104 | 304 |
| Whisky | Smith Bros | 40,266 | May 5 | 104 | 304 |
| Whisky | E. A. Lackey | 40,621 | June 16 | 104 | 1892 |
| Whisky | W. J. Smith Co | 40,945 | Aug. 18 | 105 | 1772 |
| Whisky | W. J. Smith Co | 40,946 | Aug. 18 | 105 | 1772 |
| Whisky | W. J. Smith Co | 40,947 | Aug. 18 | 105 | 1772 |
| Whisky | D. Leffingwell | 41,038 | Sept. 1 | 106 | 258 |
| Whisky | Bokel McKenney Co | 41,129 | Sept. 15 | 106 | 760 |
| Whisky | Stitzel Distilling Company | 41,187 | Sept. 29 | 106 | 1232 |
| Whisky | Stitzel Distilling Company | 41,188 | Sept. 29 | 106 | 1232 |
| Whisky | Distillers Company | 41,406 | Nov. 3 | 107 | 261 |
| Whisky. Scotch | P. Dawson | 40,916 | Aug. 11 | 105 | 1527 |
| Windmills | Stover Manufacturing Company | 40,464 | May 26 | 104 | 1116 |
| Wine | J. S. Hamilton | 40,196 | Apr. 28 | 103 | 2164 |
| Wine | Carmel Wine Co | 40,348 | May 12 | 104 | 572 |
| Wines | H. J. Woollacott | 39,677 | Jan. 27 | 102 | 812 |
| Wines | Morten & Company | 39,907 | Mar. 10 | 103 | 421 |
| Wines | A. De Luze & Fils | 41,037 | Sept. 1 | 106 | 258 |
| Wines. Still and sparkling | C. F. E. M. Rauch | 40,165 | Apr. 21 | 103 | 1908 |
| Wire and slat receptacles. Certain named woven | Iama Hamper Co | 40,176 | Apr. 21 | 103 | 1910 |
| Wire fabric | National Spring Bed Co | 41,498 | Nov. 17 | 107 | 828 |
| Wire-netting | Verkaufsstelle der Vereinigten Deutschen Drahtgeflecht-Fabrikanten Gesellschaft mit Beschränkter Haftung. | 41,727 | Dec. 22 | 107 | 2231 |
| Wire rope | Macomber & Whyte Rope Company. | 41,059 | Sept. 1 | 106 | 260 |
| Wire rope | H. Channon Company | 41,124 | Sept. 15 | 106 | 760 |
| Wire, wire fencing, and rope | Pacific Steel and Wire Co | 41,461 | Nov. 10 | 107 | 536 |
| Woolen goods | Belleville Woolen Mills | 40,427 | May 26 | 104 | 1111 |
| Worsted dress goods | Manchester Mills | 41,173 | Sept. 29 | 106 | 1231 |
| Wrappers. Ladies' | Brown, Durrell & Co | 41,062 | Sept. 8 | 106 | 535 |
| Wrenches | C. E. Bonner | 40,512 | June 2 | 104 | 1388 |
| Wringers | American Wringer Co | 39,859 | Feb. 24 | 102 | 1774 |
| Wringing-machines | American Wringer Co | 39,858 | Feb. 24 | 102 | 1774 |
| Yarns | Wm. H. Horstmann Company | 40,757 | July 14 | 105 | 489 |
| Yarns | Brown, Durrell & Co | 40,933 | Aug. 18 | 105 | 1771 |
| Yeast | Aktienbrauerei Zum Löwenbräu | 39,736 | Feb. 3 | 102 | 1045 |
| Yeast | Aktienbrauerei Zum Löwenbräu | 39,737 | Feb. 3 | 102 | 1045 |
| Yeast | S. Porter | 40,062 | Apr. 7 | 103 | 1412 |
| Yeast | A. J. Priest | 40,940 | Aug. 18 | 105 | 1772 |
| Yeast-cakes | Mrs. McCullough Yeast Co | 39,934 | Mar. 17 | 103 | 652 |
| Yeast-cakes | H. B. Strait | 40,498 | June 2 | 104 | 1387 |
| Yeast-cakes | Peerless Yeast Co | 40,873 | Aug. 4 | 105 | 1255 |

# ALPHABETICAL LIST OF LABELS.

| Title. | Name | No. | Date. | Official Gazette. Volume. | Page. |
|---|---|---|---|---|---|
| "A Delightful Face Powder. A Perfect Baby Powder." (For Toilet Powder.) | C. L. Cotton Perfume & Extract Co. | 10,181 | July 14 | 105 | 493 |
| "A Firemans Discovery." (For Medicines) | B. Brady | 9,879 | Apr. 7 | 103 | 1415 |
| "A Little Straight." (For Whisky) | J. Blank & Co | 10,450 | Oct. 27 | 106 | 2285 |
| "A-Mon-Da-Mi-Na." (For a Cleaning Preparation for the Hands, &c.) | M. S. Knob | 9,812 | Mar. 17 | 103 | 655 |
| "A. J. Bargahiser's Chick-Hen Cholera Cure." (For Cholera Cure.) | A. J. Bargahiser | 10,245 | Aug. 11 | 105 | 1529 |
| "A. J. Bargahiser's Egg Food." (For Poultry-Food) | A. J. Bargahiser | 9,694 | Jan. 20 | 102 | 619 |
| "A. L. Fahnestock's Sure Pop Liniment." (For Medical Compound.) | A. L. Fahnestock | 10,214 | Aug. 4 | 105 | 1257 |
| "A. N. Barson." (For Cigarettes) | A. N. Barson | 9,894 | Apr. 14 | 103 | 1677 |
| "Adams' Kitchen Spice Bags." (For Spice-Bags) | J. L. Adams | 10,134 | June 30 | 104 | 2437 |
| "Adirondack Novelties." (For Indian Souvenirs, Goods, and Curios.) | T. L. Freeman | 10,026 | May 26 | 104 | 1117 |
| "Agitator." (For Cigars) | C. B. Henschel Mfg. Co | 10,192 | July 21 | 105 | 741 |
| "Airedale Fabric." (For Dry Goods) | A. Merritt | 10,547 | Dec. 1 | 107 | 1371 |
| "Alittle Whiskey." (For Whisky) | Lissberger & Jacobs | 10,493 | Nov. 10 | 107 | 537 |
| "Allen W. Ward's Pills." (For Medicine) | A. W. Ward | 10,289 | Aug. 25 | 105 | 2055 |
| "Alpha Oil." (For Medicinal Oil) | Alpha Drug Company | 10,411 | Oct. 13 | 106 | 1773 |
| "Always Ready Lowney's Sweet Chocolate Powder." (For Sweet Chocolate Powder.) | Walter M. Lowney Co | 9,988 | May 12 | 104 | 575 |
| "American Federation." (For Cigars) | Schmidt & Co | 10,029 | May 26 | 104 | 1117 |
| "American Hulled Beans." (For Hulled Beans) | American Hulled Bean Co | 9,720 | Jan. 27 | 102 | 817 |
| "Americuba." (For Cigars) | C. D. Gitt | 10,352 | Sept. 15 | 106 | 761 |
| "Anchor." (For Condensed Milk) | American Condensed Milk Co | 10,300 | Aug. 25 | 105 | 2055 |
| "Andrea Delsarto." (For Cigars) | Landfield Bros. & Company | 9,807 | Mar. 17 | 103 | 655 |
| "Angel." (For Pens) | Braham Pen Company | 10,445 | Oct. 27 | 106 | 2285 |
| "Anti-Nerve Kaughphy." (For Coffee Compound) | S. S. Pierce Co | 9,957 | May 5 | 104 | 307 |
| "Antiexplo." (For Non-Explosive Compound) | Skimin Chemical Compound Co | 10,366 | Sept. 15 | 106 | 761 |
| "Antikolin." (For Medicine) | J. W. Hightower | 10,635 | Dec. 29 | 107 | 2525 |
| "Antiques." (For Antiques) | J. Fay | 10,135 | June 30 | 104 | 2437 |
| "Ap-O-ton-iko." (For Medicine) | Ap-O-Rheuma Co | 9,963 | May 5 | 104 | 307 |
| "Aqua Oculi." (For Medicine) | J. J. Westerkamp | 10,502 | Nov. 10 | 107 | 537 |
| "Arabalene Face Enamel." (For Skin Preparations) | C. D. Evans | 10,610 | Dec. 15 | 107 | 1969 |
| "Argon Lotion." (For Toilet Preparation) | G. Sattler | 10,212 | Aug. 4 | 105 | 1257 |
| "Arizola." (For Cigars) | Schmidt & Co | 9,659 | Jan. 6 | 102 | 225 |
| "Asthma Cure." (For a Medicine) | North American Medical Specialty Mfg. Co. | 10,286 | Aug. 25 | 105 | 2055 |
| "Astoria Knitted Table Felt." (For Knitted Table-Felt) | F. A. Foster & Co | 10,028 | May 26 | 104 | 1117 |
| "Atomized Electric Fire Powder." (For a Fire-Extinguisher.) | A. C. Rowe | 9,676 | Jan. 6 | 102 | 225 |
| "Aunt Betsy's Cordial." (For Medicinal Cordial) | A. L. Champlin | 10,621 | Dec. 22 | 107 | 2233 |
| "Aunt Sue's Clothes Cleaner." (For Clothes-Cleaning Compound.) | H. H. Cannon | 10,330 | Sept. 8 | 106 | 539 |
| "Auritone D. & D." (For Medicine) | Dinet & Delfosse | 10,013 | May 19 | 104 | 849 |
| "Auto-Chocolates." (For Confectionery) | R. A. Johnston Co | 10,571 | Dec. 8 | 107 | 1657 |
| "Autocratia, Dr. J. D. Maxson's Remedies." (For Medicine) | M. J. Knapp and S. E. Munger | 10,453 | Oct. 27 | 106 | 2285 |
| "Avila." (For Cigars) | Schmidt & Co | 9,945 | Apr. 28 | 103 | 2169 |
| "B. F. Laughlin's Cholera Cure." (For a Medicine) | B. F. Laughlin | 9,674 | Jan. 6 | 102 | 225 |
| "B B S." (For Medicine) | W. N. Bailey | 10,256 | Aug. 18 | 105 | 1777 |
| "B. B. S. Salve." (For Salve) | S. Bridwell | 10,611 | Dec. 15 | 107 | 1969 |
| "Baby's Bath Toilet Soap." (For Soap) | Liberty Soap Co | 9,811 | Mar. 17 | 103 | 655 |
| "Bader's Infallible Hair Grower." (For Hair-Grower) | H. F. Bader | 10,553 | Dec. 1 | 107 | 1371 |
| "Bailey's Standard Gloves." (For Gloves) | C. Bailey & Sons | 10,613 | Dec. 22 | 107 | 2233 |
| "Bailey's Standard Gloves, Assorted Sizes." (For Gloves) | Bailey Knitting Mills | 10,612 | Dec. 22 | 107 | 2233 |
| "Baker's Pure Extract Vanilla." (For Extract Vanilla) | Baker Extract Company | 10,203 | July 28 | 105 | 971 |
| "Balsam Sanitissue." (For Toilet-Paper) | A. H. Scott | 10,117 | June 16 | 104 | 1893 |
| "Bankers Union." (For Cigars) | Schmidt & Co | 10,434 | Oct. 20 | 106 | 2011 |
| "Bannerette." (For Cigars) | Schmidt & Co | 10,465 | Nov. 3 | 107 | 263 |
| "Banquet." (For Hams) | Western Packing Company | 10,308 | Aug. 25 | 105 | 2055 |
| "Banquet Leaf Lard." (For Lard) | Western Packing Company | 10,238 | Aug. 11 | 105 | 1529 |
| "Banquets." (For Crackers) | W. H. Faxon | 10,225 | Aug. 4 | 105 | 1257 |
| "Barberie's Furniture Polish." (For Furniture-Polish) | J. J. Barberie | 10,261 | Aug. 18 | 105 | 1777 |
| "Barley Brew." (For Beverage) | W. J. Bush & Co | 10,218 | Aug. 4 | 105 | 1257 |
| "'Baroda' Ceylon Tea." (For Tea) | Allen, Slade & Co | 10,128 | June 23 | 104 | 2145 |
| "Baron's Welsh Rabbit." (For Welsh Rabbit) | S. Baron | 10,388 | Sept. 29 | 106 | 1235 |
| "Bartholomew's Hot Wave." (For Medicine) | J. Bartholomew | 9,906 | Apr. 14 | 103 | 1677 |
| "Battle Ship." (For Clothing) | A. Kory & Sons | 10,591 | Dec. 15 | 107 | 1969 |
| "Bay Rum." (For Bay-Rum) | Randolph Box and Label Co | 9,830 | Mar. 24 | 103 | 885 |
| "Bear Facts." (For Cigars) | Schmidt & Co | 10,525 | Nov. 24 | 107 | 1091 |
| "Bebe." (For Cigars) | J. Bels | 9,858 | Mar. 31 | 103 | 1161 |
| "Belle of Japan." (For Tea) | Firm of W. J. Buttfield | 10,148 | June 30 | 104 | 2437 |
| "Belle of Williamson." (For Flour) | Diamond Roller Mills | 10,132 | June 23 | 104 | 2145 |
| "Belt Shield." (For Compounds for Preserving Belts) | Ironsides Company | 9,912 | Apr. 14 | 103 | 1677 |
| "Bender's Idealbandage." (For Bandages) | E. Bender | 10,213 | Aug. 4 | 105 | 1257 |
| "Bender's Liquid Antiseptic Soap Perfumed." (For Liquid Antiseptic Soap.) | L. C. Funk & Co | 10,362 | Sept. 15 | 106 | 761 |
| "Benj. B. Miller's Cholera Remedy." (For a Medicine) | B. B. Miller | 9,802 | Mar. 17 | 103 | 655 |
| "Best." (For Chewing-Gum) | Best Gum Company | 9,984 | May 12 | 104 | 575 |
| "Best American Make Pearl Buttons." (For Pearl Buttons) | Keystone Pearl Button Co | 10,548 | Dec. 1 | 107 | 1371 |
| "Big Game." (For Cigars) | Schmidt & Co | 10,382 | Sept. 29 | 106 | 1235 |

*Alphabetical list of labels*—Continued.

| Title. | Name. | No. | Date. | Official Gazette. Vol. | Page. |
|---|---|---|---|---|---|
| "Big Sandy Sorghum." (For Sorghum) | Illinois Sugar Refining Co | 10,505 | Nov. 17 | 107 | 829 |
| "Black Beauty." (For Hosiery) | Johnston & Larimer D. G. Co | 9,842 | Mar. 31 | 103 | 1161 |
| "Black & Blue Clothes." (For Clothing) | Loeb & Marks Co | 10,322 | Sept. 8 | 106 | 539 |
| "Black Cat Stove Polish." (For Stove-Polish) | W. B. Eden & Sons | 10,092 | June 9 | 104 | 1653 |
| "Black Duck." (For Cigars) | Schmidt & Co | 9,663 | Jan. 6 | 102 | 225 |
| "Black Seal." (For Cigars) | Schmidt & Co | 10,235 | Aug. 4 | 105 | 1257 |
| "'Black Tiger' Bedbug Destroyer." (For Insecticides) | C. P. B. Medlenka | 9,785 | Mar. 10 | 103 | 423 |
| "Black's Poultry Food." (For Poultry-Food) | J. A. Black | 10,032 | May 26 | 104 | 1117 |
| "Black's Stock Food." (For Stock-Food) | J. A. Black | 10,033 | May 26 | 104 | 1117 |
| "Blaisdell's Wonderful Remedy." (For Medicine) | H. W. B. Proctor | 10,342 | Sept. 15 | 106 | 761 |
| "Blome's 34." (For Cigars) | H. Hoklas & Sons | 10,153 | June 30 | 104 | 2437 |
| "Blue Bell." (For Condensed Milk) | American Condensed Milk Co | 10,297 | Aug. 25 | 105 | 2055 |
| "Blue Label Coffee." (For Coffee) | Seyms & Company | 9,773 | Feb. 24 | 102 | 1775 |
| "Blue Lick Natural Mineral Water." (For Mineral Water) | W. P. Strader | 9,949 | Apr. 28 | 103 | 2169 |
| "Blue Ribbon." (For Cigars) | E. Marrion | 10,558 | Dec. 1 | 107 | 1371 |
| "Blue Ribbon Pepsin Gum." (For Chewing-Gum) | G. J. Hardway | 10,570 | Dec. 8 | 107 | 1657 |
| "Blue Ribbon Tomato Catsup." (For Tomato-Catsup) | C. Raab | 9,796 | Mar. 10 | 103 | 423 |
| "Bob White." (For Flour) | Advance Flour Mill Company | 10,530 | Nov. 24 | 107 | 1091 |
| "Bok Ale." (For Non-Alcoholic Beverages) | W. J. Bush & Co | 10,315 | Sept. 1 | 106 | 261 |
| "Bolin's Magic Cure." (For Medicine) | N. C. Bolin | 9,968 | May 5 | 104 | 307 |
| "Bolin's Pile Cure." (For Medicine) | N. C. Bolin | 9,969 | May 5 | 104 | 307 |
| "Bommerlunder Cherry Cordial." (For Cherry Cordial) | H. Jensen | 10,242 | Aug. 11 | 105 | 1529 |
| "Bon Ton Brand." (For Olives) | C. Gulden | 10,440 | Oct. 20 | 106 | 2011 |
| "Boro-Methylate." (For Germicide) | Jacobus Pharmacal Co | 10,394 | Sept. 29 | 106 | 1235 |
| "Boyce's Crystal Dandruff Cure and Hair Restorative." (For Dandruff Cure, &c.) | A. M. Boyce | 10,393 | Sept. 29 | 106 | 1235 |
| "Bozone." (For Medicine) | Bozone Company | 9,964 | May 5 | 104 | 307 |
| "Braig's Preference." (For Cigars) | J. L. Braig | 10,052 | June 2 | 104 | 1389 |
| "Breininger's 5 Brothers." (For Cigars) | C. Breininger | 9,895 | Apr. 14 | 103 | 1677 |
| "Bright Shear Blue." (For Horse-Nails) | Standard Horse Nail Co | 10,281 | Aug. 18 | 105 | 1777 |
| "Brighton's W. O. W." (For a Medicine) | Brighton Medicine Company | 9,778 | Mar. 3 | 103 | 221 |
| "Brownie's One Night Roach Powder." (For an Insecticide) | W. Roschen | 10,124 | June 23 | 104 | 2145 |
| "Brownsville Fruit Distilling Co." (For Brandy) | Brownsville Fruit Distilling Co | 9,737 | Feb. 10 | 102 | 1291 |
| "Buckeye Carpet Tacks." (For Carpet-Tacks) | Ironton Tack Co | 9,824 | Mar. 24 | 103 | 885 |
| "Buffalo Brand." (For Baking-Soda) | Buffalo Mfg. Co | 9,792 | Mar. 10 | 103 | 423 |
| "Bug Axe." (For Insect-Exterminator) | W. H. Whitcomb | 10,000 | May 12 | 104 | 575 |
| "Bunker Hill." (For Matches) | Ohio Match Company | 10,423 | Oct. 13 | 106 | 1773 |
| "Burt's Capsules." (For Medicine) | B. H. Bentley | 10,480 | Nov. 3 | 107 | 263 |
| "Butter Ball." (For Cigars) | Cole Lithographing Co | 9,993 | May 12 | 104 | 575 |
| "Butter Thins." (For Crackers) | W. H. Faxon | 10,226 | Aug. 4 | 105 | 1257 |
| "C. N. R. Plaster Preventive of Car and Sea Sickness." (For Plasters.) | C. N. Reed | 10,629 | Dec. 22 | 107 | 2233 |
| "Califig." (For Proprietary Medicine) | California Fig Syrup Co | 10,096 | June 16 | 104 | 1893 |
| "Calumet." (For Coffee) | Hornby, Nichols, Parker Co | 9,989 | May 12 | 104 | 575 |
| "Calumet." (For Tea) | Hornby, Nichols, Parker Co | 10,456 | Nov. 3 | 107 | 263 |
| "Cameo." (For Condensed Milk) | American Condensed Milk Co | 10,509 | Nov. 17 | 107 | 829 |
| "Cap Sheaf." (For Whisky) | Schwartz Bros | 10,557 | Dec. 1 | 107 | 1371 |
| "Capital." (For Gas-Lamp Mantles) | H. Barna | 9,721 | Jan. 27 | 102 | 817 |
| "Carbonaris." (For Mineral Water) | W. A. Megrath | 9,898 | Apr. 14 | 103 | 1677 |
| "Carbonigrol." (For Horse-Liniment) | Eureka Drug Co | 10,412 | Oct. 13 | 106 | 1773 |
| "Carrie Mell." (For Cigars) | C. B. Henschel Mfg. Co | 9,874 | Apr. 7 | 103 | 1415 |
| "Carvel." (For Whisky) | J. A. Bokel Company of Baltimore City. | 10,576 | Dec. 8 | 107 | 1657 |
| "Casey's Rheumatic Cure." (For Medicine) | J. H. Casey | 10,588 | Dec. 8 | 107 | 1657 |
| "Castle Haven Brand Tomatoes." (For Canned Tomatoes) | Johnson & Radcliffe | 10,266 | Aug. 18 | 105 | 1777 |
| "Catawba Chief Corn Whiskey." (For Whisky) | J. C. Somers & Co | 9,782 | Mar. 3 | 103 | 221 |
| "Celery Nerve Chewing Gum." (For Chewing-Gum) | Celery Gum Co | 9,985 | May 12 | 104 | 575 |
| "Celia Thaxter." (For Cigars) | C. B. Henschel Mfg. Co | 9,888 | Apr. 14 | 103 | 1677 |
| "Cennum." (For a Medicine) | A. E. Poulsen | 9,740 | Feb. 10 | 102 | 1291 |
| "Century Club." (For Cigars) | McCart-Christy Co | 9,927 | Apr. 21 | 103 | 1911 |
| "Champagne Gum." (For Chewing-Gum) | Buttles & Co | 10,078 | June 9 | 104 | 1653 |
| "Charles Darwin." (For Cigars) | C. B. Henschel Mfg. Co | 9,889 | Apr. 14 | 103 | 1677 |
| "Chas. M. Russell." (For Cigars) | C. Gies | 9,703 | Jan. 27 | 102 | 817 |
| "Chautauqua & Erie Grape Co." (For Grapes) | D. C. Ayres | 9,670 | Jan. 6 | 102 | 225 |
| "Chave's Cholera Cure." (For Medicine) | T. T. Chave | 10,258 | Aug. 18 | 105 | 1777 |
| "Cheese Wafers." (For Crackers) | W. H. Faxon | 10,224 | Aug. 4 | 105 | 1257 |
| "Chere-Amie." (For a Medicine) | Associated Drug Co | 9,741 | Feb. 10 | 102 | 1291 |
| "Cherokee Spring Water." (For Medicinal Water) | W. A. Morgan | 9,779 | Mar. 3 | 103 | 221 |
| "Chief Swenie." (For Cigars) | Schmidt & Co | 10,168 | July 7 | 105 | 257 |
| "Chinese Pigtails." (For Licorice) | National Licorice Co | 10,561 | Dec. 1 | 107 | 1371 |
| "Chlorodyne Plaster." (For Medical Plasters) | J. S. Angeny, Jr | 10,123 | June 23 | 104 | 2145 |
| "Chocolate Wafers." (For Cakes) | W. H. Faxon | 10,221 | Aug. 4 | 105 | 1257 |
| "Choice Cuban Cigars." (For Cigars) | G. H. Gillett | 10,599 | Dec. 15 | 107 | 1969 |
| "Cholene." (For a Medicine) | W. E. Myers | 9,722 | Feb. 3 | 102 | 1047 |
| "Christie." (For Sugar Wafers) | Importers & Traders Biscuit Co | 9,794 | Mar. 10 | 103 | 423 |
| "Christie." (For Fruit Sandwiches) | Importers & Traders Biscuit Co | 9,795 | Mar. 10 | 103 | 423 |
| "Circle 'A' Brand." (For Ginger-Ale) | Artesian M'f'g & Bottling Co | 10,202 | July 28 | 105 | 971 |
| "Clark's Absorbent Odorless Dress-Shield." (For Dress-Shields.) | J. H. Clark | 10,201 | July 28 | 105 | 971 |
| "Clark's' 'Ball Tip' Hold Back Spring Hinge Quick Acting." (For Hinges.) | K. V. Clark | 9,981 | May 12 | 104 | 575 |
| "Cleanamel." (For Chemical Compound) | W. W. Sykes | 10,545 | Nov. 24 | 107 | 1091 |
| "Climax Corn Syrup." (For Corn-Syrup) | Illinois Sugar Refining Co | 10,418 | Oct. 13 | 106 | 1773 |
| "Climax Corn Syrup." (For Corn-Syrup) | Illinois Sugar Refining Co | 10,419 | Oct. 13 | 106 | 1773 |
| "Cloretol." (For an Antiseptic) | W. R. Bartgis | 10,541 | Nov. 24 | 107 | 1091 |
| "Club." (For Cigars) | Schmidt & Co | 9,660 | Jan. 6 | 102 | 225 |
| "Club Lithia." (For Lithia-Water) | Artesian Manufacturing & Bottling Company. | 9,956 | May 5 | 104 | 307 |
| "Colcin." (For Medicine) | B. T. Davis | 10,198 | July 21 | 105 | 741 |
| "Colonel Bill." (For Cigars) | S. Levyn | 10,559 | Dec. 1 | 107 | 1371 |
| "Colonial Tea." (For Tea) | G. L. Parker | 10,575 | Dec. 8 | 107 | 1657 |
| "Columbia." (For Teas) | B. Fischer & Co | 9,934 | Apr. 21 | 103 | 1911 |
| "Columbia Phonograph Co. Columbia Record." (For Sound-Records.) | Columbia Phonograph Co | 9,823 | Mar. 24 | 103 | 885 |
| "Columbian Axminster." (For Axminster Carpets) | McCleary, Wallin & Crouse | 10,487 | Nov. 10 | 107 | 537 |
| "Common Sense Pile Cure." (For Medicine) | H. G. Case | 10,540 | Nov. 24 | 107 | 1091 |

*Alphabetical list of labels*—Continued.

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|---|---|---|---|---|---|
| "Compliments of the Season." (For Cigars) | American Lithographic Company | 10,292 | Aug. 25 | 105 | 2055 |
| "Conqueror Brand Tomatoes." (For Canned Tomatoes) | D. Morris & Son | 10,359 | Sept. 15 | 106 | 761 |
| "Cool Temperature." (For Lager-Beer) | Stroudsburg Brewing Company | 9,855 | Mar. 31 | 103 | 1161 |
| "Corene." (For Cereal Food) | Maizene Food Co | 9,952 | Apr. 28 | 103 | 2169 |
| "Cough Chaser." (For Cough Medicine) | J. W. Langham | 10,605 | Dec. 15 | 107 | 1969 |
| "Courage Pills." (For Medicine) | L. J. Barker | 10,327 | Sept. 8 | 106 | 539 |
| "Creamola Furniture Polish." (For Furniture-Polish) | H. J. Rawlinson | 10,470 | Nov. 3 | 107 | 263 |
| "Crema Vuelta." (For Cigars) | Schmidt & Co | 10,489 | Nov. 10 | 107 | 537 |
| "Cremo." (For Baking-Powder) | National Grocery and Jobbers Supply Co. | 10,594 | Dec. 15 | 107 | 1969 |
| "Creole Comfort." (For Coffee) | Reily, Taylor & Co | 10,081 | June 9 | 104 | 1653 |
| "Crescent Cereal." (For Cereal Food) | Lake Odessa Malted Cereal Company. | 10,115 | June 16 | 104 | 1893 |
| "Crescent Corn Syrup." (For Syrup) | Illinois Sugar Refining Co | 10,129 | June 23 | 104 | 2145 |
| "Crescent Wheat Flakes." (For Cereal Food) | Lake Odessa Malted Cereal Company. | 10,040 | June 2 | 104 | 1389 |
| "Crouch's Ammoniated Soap." (For Soap) | Crouch Chemical Co | 9,929 | Apr. 21 | 103 | 1911 |
| "Crusader Port." (For Port-Wine) | J. S. Hamilton | 9,897 | Apr. 14 | 103 | 1677 |
| "Crystal." (For Thread) | E. J. Currie | 10,397 | Oct. 6 | 106 | 1499 |
| "Crystal Chimney." (For an Inhaler) | J. N. Steiner | 9,698 | Jan. 27 | 102 | 817 |
| "Cuba Citrus Culture." (For Citrus Fruits) | G. H. Gillett | 10,232 | Aug. 4 | 105 | 1257 |
| "Cubadura." (For Cigars) | Schmidt & Co | 10,521 | Nov. 24 | 107 | 1091 |
| "Cuban Bloom." (For Cigars) | Schmidt & Co | 9,946 | Apr. 28 | 103 | 2169 |
| "Cuban Clippings." (For Cigars) | Schmidt & Co | 10,384 | Sept. 29 | 106 | 1235 |
| "Cubanas Cigarros." (For Cigars) | Central Lithograph Co | 10,170 | July 7 | 105 | 267 |
| "Cubanos Cigarros." (For Cigars) | Central Litho. Co | 10,248 | Aug. 11 | 105 | 1529 |
| "Cube Crystal Gloss Starch." (For Starch) | Illinois Sugar Refining Co | 9,724 | Feb. 3 | 102 | 1047 |
| "Cupidor." (For a Hair Tonic and Restorer) | L. Altmann | 10,001 | May 12 | 104 | 575 |
| "Cura de un Minuto." (For Medicine) | J. J. Warren | 10,503 | Nov. 10 | 107 | 537 |
| "D. W. Plymouth Rock Brand." (For Eggs) | D. Wieghorst | 9,693 | Jan. 20 | 102 | 619 |
| "Daggett's Chocolate Peppermints." (For Confectionery) | F. L. Daggett & Co | 9,872 | Apr. 7 | 103 | 1415 |
| "Daggett's Chocolates." (For Confectionery) | F. L. Daggett & Co | 9,871 | Apr. 7 | 103 | 1415 |
| "Daggett's Chocolates." (For Confectionery) | F. L. Daggett Co | 10,596 | Dec. 15 | 107 | 1969 |
| "Daggett's Chocolates." (For Confectionery) | F. L. Daggett Co | 10,597 | Dec. 15 | 107 | 1969 |
| "Dairy Maid." (For Condensed Milk) | American Condensed Milk Co | 10,299 | Aug. 25 | 105 | 2055 |
| "Daisy Flower Extract." (For Medicine) | C. Napoli | 9,965 | May 5 | 104 | 307 |
| "Dan-Do-Line." (For Hair-Tonic) | A. N. Jumel | 10,584 | Dec. 8 | 107 | 1657 |
| "Dawson's in America—New York." (For Scotch Whisky) | Colonial Advertising Co | 10,107 | June 16 | 104 | 1893 |
| "Dawson's in France—Paris." (For Scotch Whisky) | Colonial Advertising Co | 10,109 | June 16 | 104 | 1893 |
| "Dawson's in Germany." (For Scotch Whisky) | Colonial Advertising Co | 10,111 | June 16 | 104 | 1893 |
| "Dawson's in Holland." (For Scotch Whisky) | Colonial Advertising Co | 10,110 | June 16 | 104 | 1893 |
| "Dawson's in Japan." (For Scotch Whisky) | Colonial Advertising Co | 10,106 | June 16 | 104 | 1893 |
| "Dawson's in the Desert." (For Scotch Whisky) | Colonial Advertising Co | 10,108 | June 16 | 104 | 1893 |
| "Defiance." (For Teas) | B. Fischer & Co | 9,933 | Apr. 21 | 103 | 1911 |
| "Delorge & Jenning's Tiger Rheumatic Cure." (For a Medicine.) | Delorge and Jennings | 9,786 | Mar. 10 | 103 | 423 |
| "Demi Tasse Heavy Bodied Turkish Coffee." (For Coffee) | W. H. Montanye & Co | 10,334 | Sept. 8 | 106 | 539 |
| "Dermo." (For Antiseptic Germicides) | Dermo Chemical Co | 10,320 | Sept. 1 | 106 | 261 |
| "Diadem." (For Coffee) | Bleecker & Simons | 10,404 | Oct. 6 | 106 | 1499 |
| "Diamond Ring Brand Confections." (For Candies and Confections.) | S. L. Friedman | 10,313 | Sept. 1 | 106 | 261 |
| "Diamondo Rocko." (For a Water and Fire Proof Solution) | F. Brugger | 10,043 | May 26 | 104 | 1117 |
| "Dixie Wafer." (For Crackers) | Wholesale Grocers' and Tobacconists' Association of Tidewater Va. | 10,361 | Sept. 15 | 106 | 761 |
| "Doctor Twig's Remedy for Catarrh." (For Medicine) | J. W. Smith | 9,877 | Apr. 7 | 103 | 1415 |
| "Donna Sanche." (For Cigars) | Schmidt & Co | 10,466 | Nov. 3 | 107 | 263 |
| "Dr. Boston's Catarrh Cream." (For Medicine) | L. P. A. Dorion | 10,142 | June 30 | 104 | 2437 |
| "Dr. Caldwell's Femitone." (For Medicine) | G. W. Caldwell | 10,257 | Aug. 18 | 105 | 1777 |
| "Dr. E. P. Robinson's Facial Soap." (For Soap) | E. P. Robinson | 10,053 | June 2 | 104 | 1389 |
| "Dr. Gordon's Cough Balsam." (For Medicine) | Phenic Oil Company | 9,751 | Feb. 17 | 102 | 1549 |
| "Dr. Gordon's Laxative Campho Quinine." (For Medicine) | Gordon Remedy Co | 10,288 | Aug. 25 | 105 | 2055 |
| "Dr. Gordon's Somagen." (For Medicine) | Gordon Remedy Co | 10,287 | Aug. 25 | 105 | 2055 |
| "Dr. James English Cooling Powder & Remedy Co." (For Powders.) | Dr. James English Cooling Powder & Remedy Co. | 10,243 | Aug. 11 | 105 | 1529 |
| "Dr. James English Cooling Powders." (For Powders) | Dr. James English Cooling Powder & Remedy Co. | 10,205 | July 28 | 105 | 971 |
| "Dr. John Stolze's Dinner Powder." (For Medicine) | J. Stolze | 10,328 | Sept. 8 | 106 | 539 |
| "Dr. Keith's Liquor Cure." (For a Liquor Cure) | H. C. Keith | 10,343 | Sept. 15 | 106 | 761 |
| "Dr. Keith's Tobacco and Cigarette Cure." (For Tobacco and Cigarette Cure.) | H. C. Keith | 10,344 | Sept. 15 | 106 | 761 |
| "Dr. Lung's Uterine Balsam." (For Medicine) | Guarantee Medicine Company | 10,585 | Dec. 8 | 107 | 1657 |
| "Dr. Lyons Footine Powders." (For Foot-Powders) | Lyons Foot Remedy Co | 10,003 | May 12 | 104 | 575 |
| "Dr. Mill's Asthma Powder." (For a Medicine) | L. G. B. Erb | 9,827 | Mar. 24 | 103 | 885 |
| "Dr. Mills' Pile Suppositories." (For a Medicine) | L. G. B. Erb | 9,941 | Apr. 28 | 103 | 2169 |
| "Dr. Parker's Tonetic Tablets." (For Medicine) | Dr. Parker Medical Co | 9,942 | Apr. 28 | 103 | 2169 |
| "Dr. Rewalt's R. Q. R." (For a Medicine) | Dr. Rewalt Medicine Co | 9,843 | Mar. 31 | 103 | 1161 |
| "Dr. S. Liebling's 'Loyal' Tooth Powder." (For Tooth-Powder.) | S. Liebling | 10,609 | Dec. 15 | 107 | 1969 |
| "Dr. Shannon's Dent-Aseptic Tooth Paste." (For Tooth-Paste.) | G. H. Shannon | 9,905 | Apr. 14 | 103 | 1677 |
| "Dr. Thuest Universal Health Drops." (For Medicine) | Brinkmann & Co | 9,750 | Feb. 17 | 102 | 1549 |
| "Dr. W. H. Alexander's Healing Oil." (For Healing-Oils) | W. H. Alexander | 10,426 | Oct. 20 | 106 | 2011 |
| "Dr. Winston's Mountain Root Pills." (For a Medicine) | B. T. Davis | 9,881 | Apr. 7 | 103 | 1415 |
| "Dr. Yaentzer's Cock-Sure Remedies Always Cure." (For Medicine.) | I. J. Rigelhaupt | 10,143 | June 30 | 104 | 2437 |
| "Dr. Z. Hand's Antiseptic Dental Powder." (For Dental Powder.) | Z. Hand | 10,608 | Dec. 15 | 107 | 1969 |
| "Dragon Carbon Paper." (For Carbon-Paper) | Carter's Ink Co | 9,745 | Feb. 17 | 102 | 1549 |
| "Dragon Typewriter Ribbon." (For Type-Writer Ribbons) | Carter's Ink Co | 9,746 | Feb. 17 | 102 | 1549 |
| "Dropsy Wine." (For Medicine) | J. L. Dezeabault & Co | 10,549 | Dec. 1 | 107 | 1371 |
| "Duché's Original Flexible Licorice." (For Licorice) | T. M. Duché & Sons | 10,408 | Oct. 6 | 106 | 1499 |
| "Duesseldorfer Beer." (For Beer) | A. Lieber | 9,686 | Jan. 20 | 102 | 619 |
| "Dunn's Diamond Edge Oil." (For Oil for Strops and Hones) | W. H. Dunn | 10,042 | May 26 | 104 | 1117 |
| "Duplex Oil." (For Machine-Oil) | A. E. Poulsen | 9,763 | Feb. 17 | 102 | 1549 |
| "E. Poncelli & Cia." (For Vermouth) | J. Clavel Wine & Cordial Co | 10,125 | June 23 | 104 | 2145 |

*Alphabetical list of labels*—Continued.

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|---|---|---|---|---|---|
| "E-Z-B Antiseptic Foot Powder." (For Foot-Powder) | E-Z-B Antiseptic Co | 10,485 | Nov. 3 | 107 | 263 |
| "Eagle." (For Flour) | Diamond Roller Mills | 10,113 | June 16 | 104 | 1893 |
| "Eagle Brand Hand Knit Socks." (For Hosiery) | Adler & Company | 9,822 | Mar. 24 | 103 | 885 |
| "Eagle Corn Syrup." (For Syrup) | Illinois Sugar Refining Co | 10,355 | Sept. 15 | 106 | 761 |
| "Eagle Rye Whiskey." (For Whisky) | W. H. Tallmadge | 10,451 | Oct. 27 | 106 | 2285 |
| "Eastern Biscuit Co." (For Crackers and Biscuits) | Eastern Biscuit Co | 10,416 | Oct. 13 | 106 | 1773 |
| "Eclipse." (For Cigars) | Schmidt & Co | 9,711 | Jan. 27 | 102 | 817 |
| "Economy Cleaner." (For a Cleaning Preparation) | Bloss-Ellermann-Muhly Manufacturing Company. | 9,814 | Mar. 17 | 103 | 655 |
| "Ed. Jedlička." (For Phonograph-Records) | E. Jedlička | 10,027 | May 26 | 104 | 1117 |
| "Edam." (For Cheese Wafers) | Importers & Traders Biscuit Co | 9,793 | Mar. 10 | 103 | 423 |
| "Edison Records Echo All Over the World." (For Phonograph-Records.) | National Phonograph Co | 10,136 | June 30 | 104 | 2437 |
| "Edmond About." (For Cigars) | C. B. Henschel Mfg. Co | 10,336 | Sept. 8 | 106 | 539 |
| "Egg Skin Balm." (For an Emollient) | Eastarling Print Shop | 10,583 | Dec. 8 | 107 | 1657 |
| "Egyptian Cream." (For a Toilet Preparation) | National Toilet Co | 10,535 | Nov. 24 | 107 | 1091 |
| "Egyptian Food." (For Cereal Food) | Egyptian Food Co | 10,593 | Dec. 15 | 107 | 1969 |
| "Egyptian Furniture, Piano, and Hardwood Polish. (For Polish.) | S. E. L. Wootton | 10,055 | June 2 | 104 | 1389 |
| "El Caribe." (For Cigarettes, Cigars, and Cheroots) | Stecher Litho Co | 9,994 | May 12 | 104 | 575 |
| "El Friar." (For Cigars) | G. H. Crouss | 10,432 | Oct. 20 | 106 | 2011 |
| "El Genio." (For Cigars) | C. B. Henschel Mfg. Co | 10,431 | Oct. 20 | 106 | 2011 |
| "El Provost." (For Cigars) | Schmidt & Co | 9,891 | Apr. 14 | 103 | 1677 |
| "El Refinado." (For Cigars) | A. C. Henschel & Co | 10,085 | June 9 | 104 | 1653 |
| "El Sol Vencedor." (For Cigars) | Schmidt & Co | 9,730 | Feb. 3 | 102 | 1047 |
| "El Speako." (For Cigars) | Schmidt & Co | 10,234 | Aug. 4 | 105 | 1257 |
| "El Trado." (For Cigars) | Schmidt & Co | 10,278 | Aug. 18 | 105 | 1777 |
| "Electro Benzine Clearing Powder." (For Benzine Clearing Powder.) | A. W. Neumann | 9,904 | Apr. 14 | 103 | 1677 |
| "Electronaris Table Water." (For Water) | Electro Sterilizing Co | 9,852 | Mar. 31 | 103 | 1161 |
| "Elegant." (For Sheathing-Paper) | Tuttle Company | 10,592 | Dec. 15 | 107 | 1969 |
| "Elegantes Cigarros." (For Cigars) | Central Litho. Co | 10,249 | Aug. 11 | 105 | 1529 |
| "Elgin Valley." (For Butter) | Beatrice Creamery Co | 10,595 | Dec. 15 | 107 | 1969 |
| "Elk Bitters." (For Bitters) | A. Drew | 10,031 | May 26 | 104 | 1117 |
| "Elk Grove Creamery." (For Dairy Products) | Chapin and Sacks | 10,050 | June 2 | 104 | 1389 |
| "Elk's Home Brand Tomatoes." (For Canned Tomatoes) | H. M. Johnston | 10,267 | Aug. 18 | 105 | 1777 |
| "Emile Zola." (For Cigars) | W. Kauder | 9,736 | Feb. 10 | 102 | 1291 |
| "Empire State Condensed Milk." (For Condensed Milk) | United States Condensed Milk Co | 9,691 | Jan. 20 | 102 | 619 |
| "Empress Grand." (For Cigars) | Schmidt & Co | 10,154 | June 30 | 104 | 2437 |
| "Enamel Pointed Pen." (For Pens) | H. A. Hill | 10,280 | Aug. 18 | 105 | 1777 |
| "English Punch." (For Punch or Liquor) | A. Hoffmann | 10,166 | July 7 | 105 | 257 |
| "Essex Sauce." (For Sauce) | B. Beinecke, Jr | 10,378 | Sept. 22 | 106 | 993 |
| "Excelsior Washing Fluid." (For Washing Fluid) | C. Raab | 9,798 | Mar. 10 | 103 | 423 |
| "Exquisitos Cigarros." (For Cigars) | Central Litho. Co | 10,250 | Aug. 11 | 105 | 1529 |
| "Extrait d'Absinthe." (For Absinthe) | G. Gempp-Pernod | 10,167 | July 7 | 105 | 257 |
| "F. Garcia & Bros." (For Cigars) | F. Garcia & Bros | 10,293 | Aug. 25 | 105 | 2055 |
| "F. Garcia & Bros. Fabricantes De Tabacos Habana." (For Cigars.) | F. Garcia & Bros | 10,275 | Aug. 18 | 105 | 1777 |
| "F. P. C. Wax." (For Wax) | Flame-Proof Co | 9,867 | Mar. 31 | 103 | 1161 |
| "Fac Ease Elsinore." (For Skin-Food and Massage-Cream) | L. G. Fixen | 10,146 | June 30 | 104 | 2437 |
| "Fast Bind—Fast Find." (For Velvets and Other Pile Fabrics.) | L. Whitman & Co | 10,631 | Dec. 29 | 107 | 2525 |
| "Ferro-China." (For a Tonic) | V. Blotte & Company | 10,542 | Nov. 24 | 107 | 1091 |
| "Ferro China-Milano." (For Tonic) | S. Piana | 9,767 | Feb. 24 | 102 | 1775 |
| "Ferro-China-Tipo-Bislery." (For Tonic) | V. Blotto & Company | 10,452 | Oct. 27 | 106 | 2285 |
| "Fibre Rope Shield." (For Lubricating Compounds for Fiber Rope.) | Ironsides Company | 9,915 | Apr. 14 | 103 | 1677 |
| "Fine Macaroons." (For Macaroons) | E. H. Josselyn | 10,417 | Oct. 13 | 106 | 1773 |
| "Fine Old Raboit Foot." (For Whisky) | Jacobs Pharmacy Company | 9,683 | Jan. 20 | 102 | 619 |
| "Fine Selection Vanilla Compound." (For Vanilla Compound.) | F. E. Boehncke | 9,837 | Mar. 24 | 103 | 885 |
| "First American." (For Condensed Milk) | American Condensed Milk Co | 10,562 | Dec. 1 | 107 | 1371 |
| "Fitchmul." (For Medicine) | Fitchmul Company | 9,688 | Jan. 20 | 102 | 619 |
| "Flashing Beauty." (For Canned Fish) | Acker, Merrall & Condit Co | 10,020 | May 19 | 104 | 849 |
| "Fleur de Lis French Dressing." (For Shoe-Polish) | Boyer & Co | 10,317 | Sept. 1 | 106 | 261 |
| "Fleur de Lis French Dressing." (For Shoe-Polish) | Boyer & Co | 10,318 | Sept. 1 | 106 | 261 |
| "Flexible Licorice Can You Braid My Pigtail?" (For Licorice.) | National Licorice Co | 10,598 | Dec. 15 | 107 | 1969 |
| "Floral Cologne." (For Toilet Water) | Randolph Box and Label Co | 9,834 | Mar. 24 | 103 | 885 |
| "Florida Water." (For Toilet Water) | Randolph Box and Label Co | 9,833 | Mar. 24 | 103 | 885 |
| "Florida Water." (For Florida Water) | Manhattan Laboratories | 10,634 | Dec. 29 | 107 | 2525 |
| "For Your Liver's Sake Podophylets Take." (For Medicine.) | M. C. Stephens | 10,012 | May 19 | 104 | 849 |
| "Forest Park Bouquet Perfume." (For Perfumery) | R. & F. Schweickhardt | 10,399 | Oct. 6 | 106 | 1499 |
| "Formosa Oolong." (For Tea) | Acker, Merrall & Condit Company | 10,390 | Sept. 29 | 106 | 1235 |
| "Foxhall." (For Cigars) | Seeman Brothers | 10,253 | Aug. 11 | 105 | 1529 |
| "Foxy Grandpa Transfer Pictures." (For Decalcomania-Transfers.) | B. Illfelder & Co | 10,022 | May 26 | 104 | 1117 |
| "Franz Hals." (For Cigars) | C. B. Henschel Mfg. Co | 9,771 | Feb. 24 | 102 | 1775 |
| "Freeman's Face Powder." (For Face-Powder) | W. D. Freeman | 9,809 | Mar. 17 | 103 | 655 |
| "Freeman's Medicated Face Powder." (For Face-Powder) | W. D. Freeman | 9,973 | May 5 | 104 | 307 |
| "Fruitatives." (For Medicine) | A. Rogers | 10,538 | Nov. 24 | 107 | 1091 |
| "Geneva Natural Spring Water." (For Spring-Water) | M. Kraemer | 10,346 | Sept. 15 | 106 | 761 |
| "German Puffs." (For Cigars) | C. B. Henschel Mfg. Co | 9,729 | Feb. 3 | 102 | 1047 |
| "Geyser." (For Hair-Tonic) | Beringer & Schaich | 9,765 | Feb. 24 | 102 | 1775 |
| "Gibson Musical String Co's Columbia Brand Steel Strings." (For Musical Strings.) | Gibson Musical String Co | 10,005 | May 19 | 104 | 849 |
| "Gilberts Self Packing Gauge Glass Preserver." (For Gage Glass Preservers.) | R. F. Morse | 10,006 | May 19 | 104 | 849 |
| "Ginger Wafers." (For Cakes) | W. H. Faxon | 10,220 | Aug. 4 | 105 | 1257 |
| "Girard." (For Lawn-Mowers) | Supplee Hardware Co | 10,048 | June 2 | 104 | 1389 |
| "Gold Belt." (For Beer) | Neef Bros. Brewing Co | 9,727 | Feb. 3 | 102 | 1047 |
| "Gold Label." (For Baking-Powder) | R. Hardesty Mfg. Co | 10,377 | Sept. 22 | 106 | 993 |
| "Gold Leaf Brand Vermont Maple Sap Syrup." (For Syrup) | H. T. Daniels | 10,079 | June 9 | 104 | 1653 |
| "Golden Crown Corn Syrup." (For Syrup) | Illinois Sugar Refining Co | 10,356 | Sept. 15 | 106 | 761 |
| "Golden Crown Tomato Catsup." (For Tomato-Catsup) | C. Raab | 9,797 | Mar. 10 | 103 | 423 |

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|---|---|---|---|---|---|
| "Golden Dwarf Celery Tonic." (For Tonic) | D. Bahr | 9,738 | Feb. 10 | 102 | 1291 |
| "Golden Grain Fancy Table Syrup." (For Syrup) | Illinois Sugar Refining Co | 10,130 | June 23 | 104 | 2145 |
| "Golden Hair Remedy." (For Hair Remedy) | H. M. Van Etten | 10,097 | June 16 | 104 | 1893 |
| "Golden Horn." (For Whisky) | T. L. Smith & Sons | 10,458 | Nov. 3 | 107 | 263 |
| "Golden Rod." (For Medicine) | O. Berger | 10,606 | Dec. 15 | 107 | 1969 |
| "Golden Rule Compound Quinine Hair Tonic." (For Hair-Tonic.) | Citizens' Wholesale Supply Co | 10,484 | Nov. 3 | 107 | 263 |
| "Golden Rule Hair Restorative." (For Hair-Restorative) | Citizens' Wholesale Supply Co | 10,284 | Aug. 25 | 105 | 2055 |
| "Golden Rule Shampooing Liquid." (For Shampooing Liquid.) | Citizens' Wholesale Supply Co | 10,483 | Nov. 3 | 107 | 263 |
| "Goldenrod." (For a Confection) | Pflugradt Co | 9,987 | May 12 | 104 | 575 |
| "Goldwater's Mosquito Cure." (For an Ointment) | H. Goldwater | 10,478 | Nov. 3 | 107 | 263 |
| "Gov. Bob Taylor." (For Cigars) | Fabian & Chases | 10,156 | June 30 | 104 | 2437 |
| "Graham Biscuits." (For Biscuits) | Ontario Biscuit Co | 10,619 | Dec. 22 | 107 | 2233 |
| "Graham Wafers." (For Crackers) | W. H. Faxon | 10,222 | Aug. 4 | 105 | 1257 |
| "Grand Vizier." (For Cigars) | Josephson Bros | 10,177 | July 14 | 105 | 493 |
| "Grandma's." (For Baking-Powder) | Auburn Extract Company | 10,189 | July 21 | 105 | 741 |
| "Grant Pear." (For Pear-Trees) | C. Pelmulder | 10,546 | Dec. 1 | 107 | 1371 |
| "Grape Fruit Tablets." (For Medicine) | Grape Fruit Tablet Company of Baltimore City. | 9,753 | Feb. 17 | 102 | 1549 |
| "Grape Vino." (For Beverages) | James McIntosh Company | 10,083 | June 9 | 104 | 1653 |
| "Graphoid." (For Paint, &c) | L. M. Stern | 9,954 | May 5 | 104 | 307 |
| "Gray's Remedy." (For Medicine) | H. I. Gray | 10,162 | July 7 | 105 | 257 |
| "Green Valley Rye." (For Whisky) | Casey Bros | 10,350 | Sept. 15 | 106 | 761 |
| "Greenough's Quick Cure." (For Veterinary Medicines) | C. J. Greenough | 10,628 | Dec. 22 | 107 | 2233 |
| "Grippura." (For Medicine) | A. Crichton | 10,197 | July 21 | 105 | 741 |
| "Grunilda." (For Cigars) | J. H. Stiles | 10,179 | July 14 | 105 | 493 |
| "Hair Tonic and Dandruff Cure." (For Hair-Tonic and Dandruff Cure.) | Randolph Box and Label Co | 9,829 | Mar. 24 | 103 | 885 |
| "Hamadala Chips." (For Medicinal Preparations or Confections.) | M. Petersen | 9,962 | May 5 | 104 | 307 |
| "Hambro." (For Whisky) | Hambro Distilling and Distributing Co. | 9,896 | Apr. 14 | 103 | 1677 |
| "Hand Made Hosiery." (For Hosiery) | Adler & Company | 9,821 | Mar. 24 | 103 | 885 |
| "Hannasse & Fils Cognac." (For Cognac Brandies) | I. Sauvion | 9,713 | Jan. 27 | 102 | 817 |
| "Hardesty's Challenge." (For Flavoring Extracts) | R. Hardesty Mfg. Co | 10,376 | Sept. 22 | 106 | 993 |
| "Hardesty's Extract of Nine Bark." (For Medicine) | C. E. Hardesty | 10,076 | June 9 | 104 | 1653 |
| "Harrington & Co.'s New Method of Cutting Blanks." (For Leather Soles and Taps.) | Harrington & Co | 10,339 | Sept. 15 | 106 | 761 |
| "Harrington Directions for Shoe Repairing." (For Leather Soles and Taps.) | Harrington & Co | 10,211 | Aug. 4 | 105 | 1257 |
| "Harrington's Air Tight Package." (For Leather Soles and Taps.) | Harrington & Co | 10,210 | Aug. 4 | 105 | 1257 |
| "Harrington's Strictly Pure Extracts, Essences and Preparations." (For Extracts, Essences, and Preparations.) | Schlotterbeck & Foss Company | 10,017 | May 19 | 104 | 849 |
| "Harris' New Blood Tonic." (For Blood-Tonic) | L. H. Harris | 9,748 | Feb. 17 | 102 | 1549 |
| "Headquarters." (For Confectionery) | S. G. Bradley | 9,950 | Apr. 28 | 103 | 2169 |
| "Healio Salve." (For a Salve) | Healio Medicine Company | 9,700 | Jan. 27 | 102 | 817 |
| "Heim's Eagle's Cream." (For Bottled Beer) | Ferd. Heim Brewing Company | 9,772 | Feb. 24 | 102 | 1775 |
| "Heirloom Rye Whisky." (For Whisky) | H. Wheaton & Sons | 10,437 | Oct. 20 | 106 | 2011 |
| "Helmon's 'B' Sugar." (For Medicine) | P. Helmon | 10,246 | Aug. 11 | 105 | 1529 |
| "Hentz's Curative Bitters." (For a Medicinal Preparation) | Hentz's Bitters Company | 10,122 | June 23 | 104 | 2145 |
| "Herbas." (For Medicine) | C. H. Julius | 10,500 | Nov. 10 | 107 | 537 |
| "Herlihy's Black-No-More." (For Cosmetic) | J. A. Herlihy | 10,059 | June 2 | 104 | 1389 |
| "Hickory Nut Mountain." (For Whisky) | Jacobs Pharmacy Company | 9,685 | Jan. 20 | 102 | 619 |
| "High Altitude." (For Cigars) | Schmidt & Co | 10,383 | Sept. 29 | 106 | 1235 |
| "High Life." (For Beer) | Fred. Miller Brewing Co | 10,164 | July 7 | 105 | 257 |
| "Hilda's Lithagogue." (For Medicine) | H. Van Buren | 10,329 | Sept. 8 | 106 | 539 |
| "Hive-R-Honey Kiss Pure and Sweet." (For a Confection) | L. F. Jordan | 9,986 | May 12 | 104 | 575 |
| "Hollister's Rocky Mountain Tea Nuggets." (For Medicine.) | Hollister Drug Co | 10,625 | Dec. 22 | 107 | 2233 |
| "Holly Mount." (For Whisky) | J. F. Meenehan | 10,051 | June 2 | 104 | 1389 |
| "Homokura." (For Medicine) | J. Wemer | 10,290 | Aug. 25 | 105 | 2055 |
| "Honest Tom." (For Cigars) | S. A. Soper & Bros | 10,178 | July 14 | 105 | 493 |
| "Honeysuckle." (For Leaf-Lard) | Western Packing Company | 9,835 | Mar. 24 | 103 | 885 |
| "Honeysuckle." (For Breakfast-Bacon) | Western Packing Company | 10,306 | Aug. 25 | 105 | 2055 |
| "Honeysuckle." (For Hams) | Western Packing Company | 10,307 | Aug. 25 | 105 | 2055 |
| "Honeysuckle." (For Leaf-Lard) | Western Packing Company | 10,310 | Aug. 25 | 105 | 2055 |
| "Household Enamel." (For Enamel) | J. H. Weber & Co | 10,643 | Dec. 29 | 107 | 2525 |
| "Howard's Freckle Cream." (For a Toilet Preparation) | H. E. Howard | 10,398 | Oct. 6 | 106 | 1499 |
| "Howard's Hygienic Healing Flesh Soap." (For Soap) | J. E. Howard | 10,240 | Aug. 11 | 105 | 1529 |
| "Hoxie." (For Toilet Cream) | Hoxie Chemical Co | 10,498 | Nov. 10 | 107 | 537 |
| "Hoya Nueva." (For Cigars) | American Lithographic Co | 10,370 | Sept. 22 | 106 | 993 |
| "Hoya Nueva." (For Cigars) | American Lithographic Co | 10,371 | Sept. 22 | 106 | 993 |
| "Hume Brand." (For Canned Salmon) | R. D. Hume | 10,527 | Nov. 24 | 107 | 1091 |
| "Hunter Brand." (For Prunes) | Willamette Valley Prune Association. | 10,231 | Aug. 4 | 105 | 1257 |
| "I O A." (For Cigars) | Schmidt & Co | 9,710 | Jan. 27 | 102 | 817 |
| "Iando Fancy Sorghum." (For Sorghum) | Illinois Sugar Refining Co | 10,506 | Nov. 17 | 107 | 829 |
| "Ideal Breakfast Cocoa Absolutely Pure and Soluble." (For Cocoa.) | The Ideal Cocoa and Chocolate Company. | 10,314 | Sept. 1 | 106 | 261 |
| "Il Re Dei Tabacchi." (For Tobacco) | G. B. Lobravico | 9,839 | Mar. 24 | 103 | 885 |
| "Imperial." (For Fire-Clay) | Jenkins & Reynolds Company | 10,044 | May 26 | 104 | 1117 |
| "Imperial Tycoon Cigars." (For Cigars) | Galvin, La Prette & Fitzgerald | 9,789 | Mar. 10 | 103 | 423 |
| "Indian Head Cape Cod Cranberries." (For Cranberries) | H. J. Thayer | 10,268 | Aug. 18 | 105 | 1777 |
| "Indian Oil." (For Medicinal Oil) | L. W. Leithhead Drug Co | 10,476 | Nov. 3 | 107 | 263 |
| "Infinito." (For Cigars) | Schmidt & Co | 10,385 | Sept. 29 | 106 | 1235 |
| "Iodo-Nuclein, D. & D." (For Medicine) | Dinet & Delfosse Pharmacal Co | 10,074 | June 9 | 104 | 1653 |
| "Iodo-Nucleoid." (For Medicine) | Dinet & Delfosse | 10,159 | July 7 | 105 | 257 |
| "Ironsides Abba Paint." (For Paints) | Ironsides Company | 9,910 | Apr. 14 | 103 | 1677 |
| "Ironsides Abba Paints." (For Samples with Paints Applied.) | Ironsides Company | 9,909 | Apr. 14 | 103 | 1677 |
| "Ironsides Boiler Scale Solvent Shield." (For Boiler-Scale Solvents.) | Ironsides Company | 9,908 | Apr. 14 | 103 | 1677 |
| "Ironsides Fibre Rope Shield." (For Fiber-Rope Compounds) | Ironsides Company | 9,916 | Apr. 14 | 103 | 1677 |

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|---|---|---|---|---|---|
| "Ironsides Fibre Rope Shield-Filler." (For Fiber-Rope Compounds.) | Ironsides Company | 9,914 | Apr. 14 | 103 | 1677 |
| "Ironsides Fibre Rope Shield-Filler." (For Fiber-Rope Compounds.) | Ironsides Company | 9,917 | Apr. 14 | 103 | 1677 |
| "Ironsides Gear Shield." (For Lubricating Compounds) | Ironsides Company | 9,911 | Apr. 14 | 103 | 1677 |
| "Ironsides Gear Shield." (For Lubricating Compounds for Gears.) | Ironsides Company | 9,913 | Apr. 14 | 103 | 1677 |
| "Ironsides Wire Rope Shield." (For Wire-Rope-Lubricating Compounds.) | Ironsides Company | 9,919 | Apr. 14 | 103 | 1677 |
| "Ironsides Wire Rope Shield-Filler." (For Wire-Rope Compounds.) | Ironsides Company | 9,920 | Apr. 14 | 103 | 1677 |
| "Ironsides Wire Rope Shield-Filler." (For Lubricating and Preserving Compounds for Wire Ropes.) | Ironsides Company | 9,921 | Apr. 14 | 103 | 1677 |
| "Iroquois." (For Flour) | George Urban Milling Co | 10,415 | Oct. 13 | 106 | 1773 |
| "Ish-Allah." (For Coffee) | M. Horovitz | 10,270 | Aug. 18 | 105 | 1777 |
| "Ish-Allah Coffee." (For Coffee) | J. Kurzban | 10,271 | Aug. 18 | 105 | 1777 |
| "It Reaches the Right Spot." (For Medicine) | A. Crichton | 10,516 | Nov. 17 | 107 | 829 |
| "J. Gilbert Holland." (For Cigars) | C. B. Henschel M'f'g Co | 10,155 | June 30 | 104 | 2437 |
| "J. Sterling Morton." (For Cigars) | Schmidt & Co | 9,784 | Mar. 3 | 103 | 221 |
| "J-B." (For Ammonia) | Jenkins Bros | 10,544 | Nov. 24 | 107 | 1091 |
| "J. B. Actress's Obesity-Wine for Corpulency." (For Medicine.) | J. L. Dezeabault & Co | 10,184 | July 14 | 105 | 493 |
| "J. B. Eads." (For Cigars) | Schmidt & Co | 10,386 | Sept. 29 | 106 | 1235 |
| "J. H. Small." (For Cigars) | L. Roses, Sons & Co | 10,620 | Dec. 22 | 107 | 2233 |
| "Jaborandine Dandruff Cure." (For Hair Medicine) | M. W. H. Hafemeister | 10,058 | June 2 | 104 | 1389 |
| "Jack Rose." (For Whisky) | A. Forbes | 10,195 | July 21 | 105 | 741 |
| "Jackson Park." (For Canned Fruits and Vegetables) | F. C. Weber & Co | 10,332 | Sept. 8 | 106 | 539 |
| "Janitor." (For Brooms) | Lee Broom & Duster Co | 10,422 | Oct. 13 | 106 | 1773 |
| "Jaxon." (For Condensed Milk) | American Condensed Milk Co | 10,298 | Aug. 25 | 105 | 2055 |
| "Jewt." (For Toilet-Paper) | Scott Paper Co | 10,188 | July 21 | 105 | 741 |
| "John Mitchell." (For Cigars) | Schmidt & Co | 10,088 | June 9 | 104 | 1653 |
| "John P. Altgeld." (For Cigars) | Schmidt & Co | 9,708 | Jan. 27 | 102 | 817 |
| "John Richard Green." (For Cigars) | C. B. Henshel Mfg. Co | 9,886 | Apr. 14 | 103 | 1677 |
| "Jossi's Red Clover Brand Full Cream Cheese." (For Cheese.) | J. Jossi | 9,901 | Apr. 14 | 103 | 1677 |
| "Just Fun." (For Polish) | A. H. Olwin | 10,090 | June 9 | 104 | 1653 |
| "Kaw Valley Brand." (For Mince-Meat) | Charles Wolff Packing Co | 9,983 | May 12 | 104 | 575 |
| "Kellum's Sure Cure." (For Medicine) | Kellum Med. Co | 10,428 | Oct. 20 | 106 | 2011 |
| "Kentucky Leaf." (For Tobacco) | I. F. Tabb | 10,459 | Nov. 3 | 107 | 263 |
| "Kerr's Cough Drops." (For Cough-Drops) | H. B. Kerr | 9,846 | Mar. 31 | 103 | 1161 |
| "Keynon's Wonderful Spasmodic Colic Cure for Beasts." (For Medicine.) | W. D. Keynon | 10,200 | July 21 | 105 | 741 |
| "Ki Ki." (For Smoking-Tobacco) | S. T. Nowlin | 9,859 | Mar. 31 | 103 | 1161 |
| "Kieckhefer's Certified Milk." (For Purified Milk) | F. A. W. Kieckhefer | 10,405 | Oct. 6 | 106 | 1499 |
| "Kildare." (For Irish Jams) | Acker, Merrall & Condit Company | 10,574 | Dec. 8 | 107 | 1657 |
| "Kimalena." (For Medicine) | Kimalena Company | 10,482 | Nov. 3 | 107 | 263 |
| "Kindel's Liver Regulator." (For Medicines) | Kindel Drug Co | 9,702 | Jan. 27 | 102 | 817 |
| "King Edward." (For Tonsorial Balm) | J. F. De Zeabault & Co | 9,923 | Apr. 21 | 103 | 1911 |
| "King of Kings Cure." (For a Medicine) | F. J. Dill | 9,801 | Mar. 17 | 103 | 655 |
| "Klein's Ylang Ylang Cold Cream." (For Cold-Cream) | P. C. Klein | 9,699 | Jan. 27 | 102 | 817 |
| "Klenezy." (For Cleaning Preparation) | G. W. Wheeler | 10,100 | June 16 | 104 | 1893 |
| "Knickerbocker Sweet Chocolate." (For Chocolate) | Runkel Brothers | 10,389 | Sept. 29 | 106 | 1235 |
| "Ko-Kel Krystal Kleanser." (For a Preparation for Cleaning and Polishing Lenses.) | W. T. Georgen Co | 10,099 | June 16 | 104 | 1893 |
| "Kola Celery and Pepsin." (For Kola Tonic Wine) | E. J. Cobean | 10,196 | July 21 | 105 | 741 |
| "Krause's Phosphorets." (For Medicine) | Norman Lichty Mfg. Co | 10,035 | May 26 | 104 | 1117 |
| "Kyffhäuser Lager Beer." (For Bottled Beer) | Ferd Heim Brewing Company | 10,127 | June 23 | 104 | 2145 |
| "La Calinda." (For Cigars) | A. L. Cohen | 10,233 | Aug. 4 | 105 | 1257 |
| "La Corrida de Toros." (For Cigars) | Schmidt & Co | 10,279 | Aug. 18 | 105 | 1777 |
| "La Domo." (For Cigars) | M. H. Mayer's Sons | 9,677 | Jan. 13 | 102 | 463 |
| "La Favorita." (For Cigars) | Las Dos Naciones Cigar Co | 10,461 | Nov. 3 | 107 | 263 |
| "La Favorita." (For Cigars) | Las Dos Naciones Cigar Co | 10,462 | Nov. 3 | 107 | 263 |
| "La Favorita." (For Cigars) | Las Dos Naciones Cigar Co | 10,463 | Nov. 3 | 107 | 263 |
| "La Favorita." (For Cigars) | Las Dos Naciones Cigar Co | 10,464 | Nov. 3 | 107 | 263 |
| "La Flor De Batt." (For Cigars) | S. Batt & Co | 10,512 | Nov. 17 | 107 | 829 |
| "La Grata." (For Cigars) | S. C. Herbst Importing Company | 9,735 | Feb. 10 | 102 | 1291 |
| "La Isla." (For Cigars) | Schmidt & Co | 9,706 | Jan. 27 | 102 | 817 |
| "La Palmera Imperial Prunes." (For Prunes) | J. Gallegos | 10,641 | Dec. 29 | 107 | 2525 |
| "Labor's Choice Whiskey." (For Whisky) | Hamburger Company | 10,016 | May 19 | 104 | 849 |
| "Lachryne." (For a Preparation for Improving the Sight) | W. T. Georgen Co | 10,098 | June 16 | 104 | 1893 |
| "Ladd & Co." (For Hats) | Austin, Drew & Co | 10,367 | Sept. 22 | 106 | 993 |
| "Lady Alice." (For Cigars) | Schmidt & Co | 9,666 | Jan. 6 | 102 | 225 |
| "Lake Helen Palm Comptie Starch." (For Starch) | Lake Helen Mfg. Co | 10,316 | Sept. 1 | 106 | 261 |
| "Lana Oil Complexion Cream and Skin Food." (For Cosmetics.) | Graham Bros. & Co | 10,039 | May 26 | 104 | 1117 |
| "Lancaster County Renovated Butter." (For Butter) | Beatrice Creamery Co | 10,507 | Nov. 17 | 107 | 829 |
| "Land of Promise Wine." (For Wines) | S. Elias | 9,757 | Feb. 17 | 102 | 1549 |
| "Lartius." (For Cigars) | C. B. Henschel Mfg. Co | 10,372 | Sept. 22 | 106 | 993 |
| "Laxative Flour." (For Flour) | Fair Brothers | 9,869 | Apr. 7 | 103 | 1415 |
| "Laxative Grapes." (For Medicine) | F. A. Weck Co | 10,075 | June 9 | 104 | 1653 |
| "Le Momi's Wonderful Healer." (For a Medicine) | J. G. Le Momi & Co | 9,673 | Jan. 6 | 102 | 225 |
| "Leader." (For Flour) | Advance Flour Mill Company | 10,529 | Nov. 24 | 107 | 1091 |
| "Lee's Chill Cure." (For Medicine) | C. H. Baugh | 9,999 | May 12 | 104 | 575 |
| "Lemonette." (For Substitute for Lemon-Juice) | Lemonette Co | 9,780 | Mar. 3 | 103 | 221 |
| "Liberty." (For Flour) | George Urban Milling Co | 10,414 | Oct. 13 | 106 | 1773 |
| "Liberty Bell." (For Teas) | B. Fischer & Co | 9,936 | Apr. 21 | 103 | 1911 |
| "Life." (For Cereal Food) | Hanscom Bros | 10,564 | Dec. 1 | 107 | 1371 |
| "Life." (For Cereal Flaked Foods) | Voigt Cereal Food Co | 10,569 | Dec. 8 | 107 | 1657 |
| "Life Preserver Highest Patent Pure Winter Wheat Flour." (For Flour.) | D. Daniel | 10,508 | Nov. 17 | 107 | 829 |
| "Lightning Tapioca." (For Tapioca) | W. S. Hurd | 10,019 | May 19 | 104 | 849 |
| "Liliskin." (For a Toilet Preparation) | Croswell Company | 10,555 | Dec. 1 | 107 | 1371 |
| "Lilley's Pick Me Up. P. M. U." (For Medicine) | R. M. Lilley, Sr., and R. M. Lilley, Jr. | 10,014 | May 19 | 104 | 849 |
| "Lincoln Brand Separator Creamery Butter." (For Butter) | Beatrice Creamery Company | 10,171 | July 7 | 105 | 257 |

*Alphabetical list of labels*—Continued.

| Title. | Name. | No. | Date. | Official Gazette. Vol. | Page. |
|---|---|---|---|---|---|
| "Lion Lithia." (For Lithia-Water) | Swineford Arsenic Lithia Water Company. | 10,217 | Aug. 4 | 105 | 1257 |
| "Lithia Selters." (For Water) | C. H. Schultz | 10,163 | July 7 | 105 | 257 |
| "Lititz Little Bretzels." (For Bretzels) | Lititz Little Bretzel Co | 10,455 | Nov. 3 | 107 | 263 |
| "Little Jury Box." (For Cigars) | H. O. Wegener | 9,928 | Apr. 21 | 103 | 1911 |
| "Little Tudor." (For Children's Outer Garments) | D. R. Jones, Jr | 10,116 | June 16 | 104 | 1893 |
| "Little W. J. D." (For Cigars) | Detor Bros | 10,087 | June 9 | 104 | 1653 |
| "Live Oak." (For Prunes) | Stecher Litho. Co | 10,448 | Oct. 27 | 106 | 2285 |
| "Lockyer's Chili Peka Seasoning." (For Seasonings) | F. H. Lockyer | 9,851 | Mar. 31 | 103 | 1161 |
| "Lord Derby." (For Cigars) | E. M. Schwarz & Co | 10,578 | Dec. 8 | 107 | 1657 |
| "Lord Jeffrey." (For Cigars) | C. B. Henschel Mfg. Co | 10,373 | Sept. 22 | 106 | 993 |
| "Lord Varrick." (For Cigars) | S. Levyn, (Incorporated) | 10,469 | Nov. 3 | 107 | 263 |
| "Lorithia." (For Mineral Water) | Andrew Lohr Bottling Company | 10,272 | Aug. 18 | 105 | 1777 |
| "Lotio Retardo." (For Medicine) | F. H. Blackmarr and P. Mandeville | 10,073 | June 9 | 104 | 1653 |
| "Lotus." (For Flour) | George Urban Milling Co | 10,442 | Oct. 20 | 106 | 2011 |
| "Love Blend." (For Tea and Coffee) | A. Levaur | 9,931 | Apr. 21 | 103 | 1911 |
| "Lowney's Confectioners' Chocolate Powder." (For Chocolate Powder.) | Walter M. Lowney Co | 10,312 | Sept. 1 | 106 | 261 |
| "Lowney's Gold Medal Chocolate Powder." (For Chocolate Powder.) | Walter M. Lowney Company | 10,269 | Aug. 18 | 105 | 1777 |
| "Lung Tonic." (For Medicine) | W. B. Hopkins | 10,550 | Dec. 1 | 107 | 1371 |
| "Luz de Oro." (For Cigars) | American Lithographic Company | 10,169 | July 7 | 105 | 257 |
| "Luzianne." (For Coffee) | Reily, Taylor & Co | 10,082 | June 9 | 104 | 1653 |
| "M. S. M." (For Clothing) | D. J. Kaufman | 9,977 | May 12 | 104 | 575 |
| "Main Issue." (For Cigars) | Main Issue Cigar Co | 10,351 | Sept. 15 | 106 | 761 |
| "Major Lark." (For Cigars) | J. Mendel & Co | 10,276 | Aug. 18 | 105 | 1777 |
| "Mallory's Scalp Treatment." (For Preparations for the Hair.) | W. D. Mallory | 9,972 | May 5 | 104 | 307 |
| "Maloney's Pilgrim." (For Cigars) | Schmidt & Co | 9,662 | Jan. 6 | 102 | 225 |
| "Malt Elixir." (For Malt Extract) | A. Wilmanns | 10,491 | Nov. 10 | 107 | 537 |
| "Maltopeptine Gum." (For Chewing-Gum) | J. W. Morrison, Jr | 9,788 | Mar. 10 | 103 | 423 |
| "Maltopeptine Gum." (For Chewing-Gum) | J. W. Morrison, Jr | 9,815 | Mar. 17 | 103 | 655 |
| "Mandarin." (For Teas) | B. Fischer & Co | 9,935 | Apr. 21 | 103 | 1911 |
| "Mann's Vegetable Canker Cure." (For Medicine) | T. Dyer | 10,144 | June 30 | 104 | 2437 |
| "Manusos Assorted Chocolates." (For Confectionery) | P. J. Manusos | 10,640 | Dec. 29 | 107 | 2525 |
| "Manusos High Grade Chocolates and Fruits." (For Confectionery and Fruits.) | P. J. Manusos | 10,639 | Dec. 29 | 107 | 2525 |
| "Marshall's Dead-Shot for Chills and Fever." (For a Medicine.) | T. P. Marshall | 9,878 | Apr. 7 | 103 | 1415 |
| "Mayflower." (For Bacon) | Acker, Merrall & Condit Co | 10,360 | Sept. 15 | 106 | 761 |
| "McKinley Brand." (For Spool-Cotton) | M. Waisman | 10,187 | July 21 | 105 | 741 |
| "McNamee's Sanitary Mesh-Knit Underwear." (For Underwear.) | J. McNamee | 10,007 | May 19 | 104 | 849 |
| "Medalla de Prima Clase." (For Cigars) | Schmidt & Co | 10,524 | Nov. 24 | 107 | 1091 |
| "Mederine Ointment. (For an Ointment) | L. W. Leithhead Drug Co | 10,477 | Nov. 3 | 107 | 263 |
| "Mederine Soap." (For Soap) | L. W. Leithhead Drug Co | 10,473 | Nov. 3 | 107 | 263 |
| "Medicated Charcoal Old Bourbon Whiskey." (For Whisky.) | L. Stern & Co | 10,294 | Aug. 25 | 105 | 2055 |
| "Meister Bräu." (For Beer and Malt Extract) | A. Wilmanns | 10,638 | Dec. 29 | 107 | 2525 |
| "Mentho-Lyptol." (For Medicine) | Universal Home Treatment Co | 10,586 | Dec. 8 | 107 | 1657 |
| "Mercerized Paint." (For Paints) | J. J. Pearson | 9,743 | Feb. 10 | 102 | 1291 |
| "Merchants' Court." (For Cigars) | Schmidt & Co | 9,944 | Apr. 28 | 103 | 2169 |
| "Merry Bell." (For Chewing-Gum) | Royal Remedy & Extract Co | 10,241 | Aug. 11 | 105 | 1529 |
| "Merry Christmas." (For Cigars) | Schmidt & Co | 9,731 | Feb. 3 | 102 | 1047 |
| "Merry Christmas and Happy New Year." (For Cigars) | Schmidt & Co | 10,523 | Nov. 24 | 107 | 1091 |
| "Mexican Disinfectant, Deodorizer & Germicide." (For Disinfectant, Deodorizer, and Germicide.) | Mexican Disinfectant Company | 10,206 | July 28 | 105 | 971 |
| "Mi Luisa." (For Cigars) | Balasguide & Co | 9,758 | Feb. 17 | 102 | 1549 |
| "Michel's Celebrated Stomach Bitters." (For Stomach-Bitters.) | G. Michel | 10,392 | Sept. 29 | 106 | 1235 |
| "Milk Biscuits." (For Crackers) | W. H. Faxon | 10,223 | Aug. 4 | 105 | 1257 |
| "Milk Lunch." (For Crackers) | W. H. Faxon | 10,227 | Aug. 4 | 105 | 1257 |
| "Millard Fillmore." (For Cigars) | S. Levyn, (Incorporated) | 10,433 | Oct. 20 | 106 | 2011 |
| "Miller's X Rays Soap." (For Soap) | H. F. Miller | 10,054 | June 2 | 104 | 1389 |
| "Millionaire Punch." (For Punch) | J. C. Maloney | 10,151 | June 30 | 104 | 2437 |
| "Milwaukee Leader." (For Cigars) | Schmidt & Co | 9,709 | Jan. 27 | 102 | 817 |
| "Miracle Yeast." (For Dry Hop Yeast) | G. A. Lord | 9,774 | Feb. 24 | 102 | 1775 |
| "Miss Liberty Glories." (For Cigars) | Schmidt & Co | 9,667 | Jan. 6 | 102 | 225 |
| "Miss White." (For Cigars) | Schmidt & Co | 9,665 | Jan. 6 | 102 | 225 |
| "Mister Skeeter." (For a Preparation to Keep Away Mosquitoes.) | P. C. Bilisoly | 10,207 | July 28 | 105 | 971 |
| "Mme. A Drees' The Alberta Hair Waver and Curler." (For Hair Wavers and Curlers.) | A. Dreés | 10,121 | June 23 | 104 | 2145 |
| "Mme. Baldwin's Imperial Hair Restorative." (For a Hair-Restorative.) | M. M. Baldwin | 9,828 | Mar. 24 | 103 | 885 |
| "Mochoette." (For Cereal Coffee) | Maizene Food Co | 9,930 | Apr. 21 | 103 | 1911 |
| "Mocon." (For Cereal Coffee) | Central City Cereal Coffee Co | 9,781 | Mar. 3 | 103 | 221 |
| "Mohawk Ointment." (For an Ointment) | A. C. Adams | 9,764 | Feb. 24 | 102 | 1775 |
| "Molly Pitcher." (For Thread) | E. J. Currie | 10,396 | Oct. 6 | 106 | 1499 |
| "Monarch Wall Size." (For Liquid Size) | W. R. Leigh | 10,495 | Nov. 10 | 107 | 537 |
| "Monarch Wild Cherry Bitters." (For Bitters) | W. H. Dunn | 9,996 | May 12 | 104 | 575 |
| "Monastery Pile Cure." (For Medicine) | J. Broadhead | 10,481 | Nov. 3 | 107 | 263 |
| "Money Back Pile Cure." (For Medicine) | Levinger Drug Co | 10,247 | Aug. 11 | 105 | 1529 |
| "Monopole Brand." (For Canned Strawberries) | Wadhams & Kerr Bros | 9,850 | Mar. 31 | 103 | 1161 |
| "Moor Rye Whiskey." (For Whisky) | T. F. Donahue Co | 10,457 | Nov. 3 | 107 | 263 |
| "Morro Castle Habana." (For Cigars, Cigarettes, and Manufactured Tobacco.) | Calixto Lopez & Co | 10,157 | June 30 | 104 | 2437 |
| "Morro Castle Habana." (For Cigarettes) | Calixto Lopez & Co | 10,158 | June 30 | 104 | 2437 |
| "Mother Gilberts Baby Comfort." (For a Medicinal Preparation.) | U. G. Ruff | 10,094 | June 16 | 104 | 1893 |
| "Mother's Brand." (For Canned Tomatoes) | Hearn Co | 10,406 | Oct. 6 | 106 | 1499 |
| "Mountain Sage Bitters." (For Medicine) | Mountain Sage Malt Tonic Co | 10,624 | Dec. 22 | 107 | 2233 |
| "Mountain Sage Malt Tonic." (For Malt Tonic) | Mountain Sage Malt Tonic Co | 10,603 | Dec. 15 | 107 | 1969 |
| "Mrs. Olive Saunders' Blood Purifying Compound." (For Medicine.) | E. L. Libby | 10,340 | Sept. 15 | 106 | 761 |
| "Munson's Ye-Ti-Va Remedy." (For Medicines) | J. G. Munson | 9,689 | Jan. 20 | 102 | 619 |

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| Title. | Name. | No. | Date. | Official Gazette. Vol. | Page. |
|---|---|---|---|---|---|
| "Murphy's Rheumatic Cure." (For Medicine) | D. J. Murphy | 10,036 | May 26 | 104 | 1117 |
| "Muskerry Club Old Rye Whiskey." (For Whisky) | J. W. O'Connor | 9,991 | May 12 | 104 | 575 |
| "Mutual." (For Groceries) | Mutual Grocery Corporation | 10,264 | Aug. 18 | 105 | 1777 |
| "Napoleon the Great." (For Cigars) | F. X. J. Rochon | 9,680 | Jan. 20 | 102 | 619 |
| "Nara-Mattah." (For Hair-Tonic) | E. Savage | 9,723 | Feb. 3 | 102 | 1047 |
| "National M. C. R. Brand." (For Roofing-Felt) | C. B. Jameson | 9,980 | May 12 | 104 | 575 |
| "Natural Leaf Tea." (For Tea) | Citizens' Wholesale Supply Co | 9,726 | Feb. 3 | 102 | 1047 |
| "Negaiwas Salve." (For Salve) | M. P. Adams | 10,215 | Aug. 4 | 105 | 1257 |
| "Neptune's Spa." (For Mineral Water) | White Sulphur Springs Company | 10,150 | June 30 | 104 | 2437 |
| "Nerva." (For a Non-Alcoholic Carbonated Beverage) | New England Bottling Co | 10,103 | June 16 | 104 | 1893 |
| "Nerveritis." (For a Medicine) | S. E. Cook | 9,826 | Mar. 24 | 103 | 885 |
| "Nervo-Tablets." (For Medicine for Nervous Diseases) | L. W Leithhead Drug Co | 10,474 | Nov. 3 | 107 | 263 |
| "Nervo Tablets." (For Medicine) | L. W. Leithhead Drug Co | 10,607 | Dec. 15 | 107 | 1969 |
| "Nervorina." (For a Medicine) | E. E. Holt | 9,844 | Mar. 31 | 103 | 1161 |
| "Neustadter Vogelgesang." (For Wine) | Paul Schmidt Co | 10,126 | June 23 | 104 | 2145 |
| "Nevadoe." (For Cigars) | Schmidt & Co | 10,277 | Aug. 18 | 105 | 1777 |
| "New England 'Breathe Easy' Asthma Cure." (For a Medicine.) | New England Asthma Remedy Co. | 9,787 | Mar. 10 | 103 | 423 |
| "New Harlem Past and Present." (For a Book) | New Harlem Publishing Company | 10,326 | Sept. 8 | 106 | 539 |
| "New Wonder." (For Cigars) | Seeman Brothers | 10,254 | Aug. 11 | 105 | 1529 |
| "No-Bald." (For Hair-Tonic) | Croswell Company | 10,554 | Dec. 1 | 107 | 1371 |
| "No More Sore Backs." (For Animal-Pads) | American Interlaced Horse Collar Co. | 9,825 | Mar. 24 | 103 | 885 |
| "No-pa-ine." (For Medicine) | M. T. Fulcher | 10,140 | June 30 | 104 | 2437 |
| "No. 227,887 Rheumatic Mixture." (For Medicine) | C. E. Kessler | 10,587 | Dec. 8 | 107 | 1657 |
| "Noako Pile Cure." (For a Medicine) | F. F. Jewett | 9,675 | Jan. 6 | 102 | 225 |
| "'Nojar' Rubber Heels." (For Rubber Heels) | F. W. Whitcher | 10,009 | May 19 | 104 | 849 |
| "Nokorode." (For Soldering-Paste) | M. W. Dunton & Co | 10,101 | June 16 | 104 | 1893 |
| "Nomorepain." (For Medicine) | C. G. F. Richter | 9,752 | Feb. 17 | 102 | 1549 |
| "Non-Corrosible Tube Dry Powder Fire Extinguisher." (For Fire-Extinguishers.) | Non-Corrosible Tube Dry Powder Fire Extinguisher Co. | 9,820 | Mar. 17 | 103 | 655 |
| "Nonpareil." (For Teas) | B. Fischer & Co | 9,937 | Apr. 21 | 103 | 1911 |
| "Norheumatism." (For Medicine) | A. E. Herr | 10,380 | Sept. 22 | 106 | 993 |
| "O'Donnell's Roach Meal." (For an Insecticide) | P. V. O'Donnell & Son | 10,444 | Oct. 27 | 106 | 2285 |
| "O-Mie." (For Wall-Paper and Fresco Cleansers) | Sanitary Chemical Co | 9,762 | Feb. 17 | 102 | 1549 |
| "Oak Orchard Apples." (For Apples) | Orleans County Canning Company | 9,819 | Mar. 17 | 103 | 655 |
| "Oberto." (For Cigars) | H. T. Scholey | 10,519 | Nov. 24 | 107 | 1091 |
| "Old Belt." (For Smoking-Tobacco) | T. E. Roberts Tobo. Co | 10,374 | Sept. 22 | 106 | 993 |
| "Old Colony Club Ale." (For Ale) | Old Colony Brewing Co | 10,349 | Sept. 15 | 106 | 761 |
| "Old Colony Sparkling Lager." (For Ale) | Old Colony Brewing Co | 10,347 | Sept. 15 | 106 | 761 |
| "Old Danton." (For Whisky) | J. P. Daut | 10,492 | Nov. 10 | 107 | 537 |
| "Old English Varnishes." (For Varnish) | Norton Paint & Hdw. Co | 10,260 | Aug. 18 | 105 | 1777 |
| "Old Fashioned Treacle Toffee." (For Confectionery) | John Mackintosh, Ltd | 9,900 | Apr. 14 | 103 | 1677 |
| "Old Jamestown Ter Centenary Rye Whiskey." (For Whisky.) | White Bros | 9,804 | Mar. 17 | 103 | 655 |
| "Old Napley." (For Whisky) | Schwartz Bros | 10,402 | Oct. 6 | 106 | 1499 |
| "Old Smoke-House." (For Hams) | Trousdale & Reily | 10,229 | Aug. 4 | 105 | 1257 |
| "Old Stock Beer." (For Lager-Beer) | Stroudsburg Brewing Company | 9,854 | Mar. 31 | 103 | 1161 |
| "Old Wheel." (For Cigars) | A. C. Henschel & Co | 9,884 | Apr. 14 | 103 | 1677 |
| "Ole Bull Pure Rye Whiskey." (For Whisky) | E. C. Armstrong | 9,790 | Mar. 10 | 103 | 423 |
| "Olivene." (For Medicine) | Coxon and Roberts | 10,501 | Nov. 10 | 107 | 537 |
| "Olympia." (For Cigars) | E. Delgado | 10,089 | June 9 | 104 | 1653 |
| "Once—Always." (For Groceries) | Mutual Grocery Corporation | 10,263 | Aug. 18 | 105 | 1777 |
| "$100 Puzzle." (For Puzzles) | $100 Puzzle Co | 10,045 | June 2 | 104 | 1389 |
| "One Kip Chamois Skins." (For Chamois-Skins) | Drueding Bros | 9,922 | Apr. 21 | 103 | 1911 |
| "Ontario Biscuit Co." (For Biscuits) | Ontario Biscuit Co | 10,618 | Dec. 22 | 107 | 2233 |
| "Ontario Malt Biscuits." (For Biscuits) | Ontario Biscuit Co | 10,617 | Dec. 22 | 107 | 2233 |
| "Opti-Mo-Jav." (For Coffee) | Reily, Taylor & Co | 10,080 | June 9 | 104 | 1653 |
| "Ori-Na-Si." (For Nose and Mouth Wash) | T. S. Booth | 9,687 | Jan. 20 | 102 | 619 |
| "Our American Beauty." (For Beer) | Salt Lake City Brewing Co | 10,420 | Oct. 13 | 106 | 1773 |
| "Our Baby's Bath Toilet Soap." (For Soap) | Liberty Soap Co | 9,810 | Mar. 17 | 103 | 655 |
| "Our Soap." (For Soap) | M. Escher | 10,331 | Sept. 8 | 106 | 539 |
| "Ozonized Ox Marrow." (For Hair-Tonic) | Ozonized Ox Marrow Co | 10,037 | May 26 | 104 | 1117 |
| "P. & S. Rye." (For Whisky) | Power & Stalter | 9,728 | Feb. 3 | 102 | 1047 |
| "Padgett's Seven Year Old Huntus Rye Whiskey." (For Whisky.) | A. P. Padgett | 10,295 | Aug. 25 | 105 | 2055 |
| "Palmiter's Gall Liniment." (For Liniment) | A. Palmiter | 10,479 | Nov. 3 | 107 | 263 |
| "Panama." (For Cigars) | J. Williams & Bros | 10,581 | Dec. 8 | 107 | 1657 |
| "Panama Ship-Canal Puzzle." (For a Puzzle-Box) | A. Kinnicutt | 10,071 | June 9 | 104 | 1653 |
| "Pansy Soap." (For Soap) | M. Escher | 10,471 | Nov. 3 | 107 | 263 |
| "Pareve Crackers." (For Crackers) | H. Baldinger | 9,848 | Mar. 31 | 103 | 1161 |
| "Paride's Compound." (For a Medicine) | P. Grasso | 10,056 | June 2 | 104 | 1389 |
| "Paride's Compound Ointment." (For Ointment) | P. Grasso | 10,057 | June 2 | 104 | 1389 |
| "Pasteurized Milk." (For a Preparation of Milk) | Sir Joseph Causton & Sons | 10,533 | Nov. 24 | 107 | 1091 |
| "Peach Mellow." (For a Beverage) | Blumenthal Bros | 10,637 | Dec. 29 | 107 | 2525 |
| "Peach Mellow Flavor." (For Extract) | Blumenthal Bros | 10,573 | Dec. 8 | 107 | 1657 |
| "Peacock Pure Paint." (For Paints) | Allegany Paint Company | 10,425 | Oct. 20 | 106 | 2011 |
| "Peak Fine." (For Cigars) | A. C. Henschel & Co | 9,857 | Mar. 31 | 103 | 1161 |
| "Pearl Brand." (For Canned Oysters) | J. Messina | 9,760 | Feb. 17 | 102 | 1549 |
| "Pearl's Tincture of Life." (For Medicine) | Pearl Medical Co | 10,341 | Sept. 15 | 106 | 761 |
| "Peerless Black." (For Carbon-Blacks and Lampblacks) | Peerless Carbon Black Co | 10,364 | Sept. 15 | 106 | 761 |
| "Peerless Black." (For Carbon-Blacks and Lampblacks) | Peerless Carbon Black Co | 10,365 | Sept. 15 | 106 | 761 |
| "Pepjulime." (For Medicine) | Associated Drug Co | 10,072 | June 9 | 104 | 1653 |
| "Peptorene." (For a Medicine) | Battle Creek Health Tablet Company. | 9,880 | Apr. 7 | 103 | 1415 |
| "Pes Paca." (For Foot-Powder) | J. Rovane, Sr | 10,552 | Dec. 1 | 107 | 1371 |
| "Peter Dawson's Scotch Whiskies." (For Scotch Whisky) | Colonial Advertising Co | 10,105 | June 16 | 104 | 1893 |
| "Peter's Swiss Milk-Chocolate." (For Milk-Chocolate) | D. Peter | 9,714 | Jan. 27 | 102 | 817 |
| "Peter's Swiss Milk-Chocolate." (For Milk-Chocolate) | D. Peter | 9,725 | Feb. 3 | 102 | 1047 |
| "Peter's The Original Milk-Chocolate." (For a Food Preparation.) | D. Peter | 9,671 | Jan. 6 | 102 | 225 |
| "Peter's The Original Milk-Chocolate." (For Milk-Chocolate.) | D. Peter | 9,715 | Jan. 27 | 102 | 817 |
| "Peter's The Original Milk-Chocolate." (For Milk-Chocolate.) | D. Peter | 9,716 | Jan. 27 | 102 | 817 |
| "Pharaoh." (For Canned Goods) | Stecher Litho. Co | 10,488 | Nov. 10 | 107 | 537 |

*Alphabetical list of labels*—Continued.

| Title. | Name. | No. | Date. | Official Gazette. Vol. | Page. |
|---|---|---|---|---|---|
| "Pheasant Brand." (For Prunes) | Willamette Valley Prune Association. | 10,230 | Aug. 4 | 105 | 1257 |
| "Pheasant Brand Splits." (For Mineral Water) | T. F. Mackmiller | 9,853 | Mar. 31 | 103 | 1161 |
| "Photoco." (For Cigars) | Schmidt & Co | 9,661 | Jan. 6 | 102 | 225 |
| "Phryne." (For Toilet Preparations) | T. H. Gause | 10,536 | Nov. 24 | 107 | 1091 |
| "Phynest." (For Toilet-Paper) | Scott Paper Co | 10,118 | June 16 | 104 | 1893 |
| "Piccadilly." (For Cigars) | American Lithographic Company | 9,768 | Feb. 24 | 102 | 1775 |
| "Pie Flour." (For Flour) | George Urban Milling Co | 10,441 | Oct. 20 | 106 | 2011 |
| "Pilules St. Anne." (For Pills) | F. X. Beaulieu | 10,543 | Nov. 24 | 107 | 1091 |
| "Pin Ball Space." (For a Game) | G. H. Bailey | 10,311 | Sept. 1 | 106 | 261 |
| "Pine Tree Liniment." (For Liniment) | A. R. Armstrong | 9,970 | May 5 | 104 | 307 |
| "Piney Ridge Pure Rye." (For Whisky) | C. Lange & Co | 9,990 | May 12 | 104 | 575 |
| "Ping Pong Wafers With a Spoon." (For Wafers) | Rifkin & Getzoff | 10,173 | July 7 | 105 | 257 |
| "Pink of Perfection." (For Water) | Bonita Water Co | 10,149 | June 30 | 104 | 2437 |
| "Plain People." (For Cigars) | S. Levyn | 10,560 | Dec. 1 | 107 | 1371 |
| "Please." (For Cigars) | Schmidt & Co | 10,522 | Nov. 24 | 107 | 1091 |
| "Plumed Knight." (For Cigars) | Adams & Powell | 9,893 | Apr. 14 | 103 | 1677 |
| "Plump's Enterprise Fly Wrapper." (For Wrapping-Paper.) | H. F. Plump | 10,632 | Dec. 29 | 107 | 2525 |
| "Pomona." (For Unfermented Fruit-Juice) | O. Carqué | 10,333 | Sept. 8 | 106 | 539 |
| "Ponquaee Wrinkle Remover." (For a Toilet Preparation) | Le Grande Mfg. Co | 9,847 | Mar. 31 | 103 | 1161 |
| "Popularis." (For Medicine) | Associated Drug Co | 10,183 | July 14 | 105 | 493 |
| "Post Sugar." (For Sugar) | Postum Cereal Co | 10,302 | Aug. 25 | 105 | 2055 |
| "Post's Candy." (For Candy) | Postum Cereal Co | 10,303 | Aug. 25 | 105 | 2055 |
| "Post's Chocolates." (For Chocolates) | Postum Cereal Co | 10,304 | Aug. 25 | 105 | 2055 |
| "Power." (For Cereal Food Products) | Ready Bits Corporation | 9,958 | May 5 | 104 | 307 |
| "'Power' Extracts and Colors." (For Extracts and Colors) | Blumenthal Bros | 10,572 | Dec. 8 | 107 | 1657 |
| "Pratt's Liver Root No. 8." (For Medicines) | Royal Queen Remedy Co | 10,095 | June 16 | 104 | 1893 |
| "Pratt's Motor Car Spirits." (For Naphtha) | Deutz Lithographing Co | 10,494 | Nov. 10 | 107 | 537 |
| "Pratt's White Mountain Spruce Pine Tolu and Honey." (For Medicine.) | Royal Queen Remedy Co | 10,141 | June 30 | 104 | 2437 |
| "Premium." (For Flour) | Norfolk Flour Co | 9,777 | Mar. 3 | 103 | 221 |
| "Preservola." (For Hair-Tonic) | P. J. P. Schumacher | 10,499 | Nov. 10 | 107 | 537 |
| "Pride of Carrollton." (For Flour) | Advance Flour Mill Company | 10,531 | Nov. 24 | 107 | 1091 |
| "Prime Choice." (For Cigars) | American Lithographic Company | 9,805 | Mar. 17 | 103 | 655 |
| "Prime Crop." (For Cigars) | Schmidt & Co | 10,191 | July 21 | 105 | 741 |
| "Primrose." (For Sugar-Cured Hams) | Coffin-Fletcher Packing Co | 9,902 | Apr. 14 | 103 | 1677 |
| "Princess Louise-Francoise." (For Cigars) | L. Powell & Co | 10,580 | Dec. 8 | 107 | 1657 |
| "Prof. Pozzoni's Mountain Sage Malt Tonic." (For Tonic) | Mountain Sage Malt Tonic Co | 10,345 | Sept. 15 | 106 | 761 |
| "Prof. Smith's Hair Grower and Dandruff Cure." (For Medicine.) | Rosebud Perfume Company | 10,409 | Oct. 13 | 106 | 1773 |
| "Prosit." (For Table-Water) | Oak Grove | 9,755 | Feb. 17 | 102 | 1549 |
| "Protection Pure Rye Whiskey." (For Whisky) | L. Stern & Co | 9,783 | Mar. 3 | 103 | 221 |
| "Purina Cream Graham." (For Cereal Products) | Ralston-Purina Co | 10,265 | Aug. 18 | 105 | 1777 |
| "Purina Health Cocoa." (For Cocoa and Chocolate Products.) | Ralston Purina Co | 10,239 | Aug. 11 | 105 | 1529 |
| "Purity." (For Wine) | G. W. Perry | 10,600 | Dec. 15 | 107 | 1969 |
| "Purity." (For Whisky) | G. W. Perry | 10,601 | Dec. 15 | 107 | 1969 |
| "Pyrollin." (For Disinfectant and Cleanser) | Southern Oil and Chemical Co | 10,401 | Oct. 6 | 106 | 1499 |
| "Queen Alexandria of Judea Lotus Balm." (For Toilet Preparation.) | J. L. Dezeabault & Co | 9,876 | Apr. 7 | 103 | 1415 |
| "Queen City Polish." (For Polish) | Queen City Star Polish Company | 10,091 | June 9 | 104 | 1653 |
| "Queen Louise Face Massage Cream." (For Complexion-Cream.) | N. Lopard & Co | 10,622 | Dec. 22 | 107 | 2233 |
| "Queen Quality." (For Teas) | B. Fischer & Co | 9,932 | Apr. 21 | 103 | 1911 |
| "Queen Quality." (For Coffee) | B. Fischer & Co | 10,439 | Oct. 20 | 106 | 2011 |
| "Queen's Crown." (For Cigars) | Schmidt & Co | 10,467 | Nov. 3 | 107 | 263 |
| "Ralston Baking Powder." (For Baking-Powder) | Ralston Purina Co | 9,836 | Mar. 24 | 103 | 885 |
| "Ralston Cereal Coffee." (For Cereal Coffee) | Ralston-Purina Co | 9,791 | Mar. 10 | 103 | 423 |
| "Ralston Crisps." (For Cereal Food) | Ralston Purina Co | 9,870 | Apr. 7 | 103 | 1415 |
| "Ralston Gelatine." (For Gelatin) | Ralston Purina Co | 9,951 | Apr. 28 | 103 | 2169 |
| "Ralston Purina Pan Kake Syrup." (For Syrups) | Ralston Purina Co | 10,301 | Aug. 25 | 105 | 2055 |
| "Rat Paint." (For Disinfectant) | A. H. Tryon | 10,496 | Nov 10 | 107 | 537 |
| "Razor Strop Dressing Powder." (For Dressing for Razor-Strops.) | R. D. Smith | 10,041 | May 26 | 104 | 1117 |
| "Red Dandies." (For Cigars) | Schmidt & Co | 10,520 | Nov. 24 | 107 | 1091 |
| "Red Lion Kidney Pills." (For Kidney-Pills) | W. T. Ballagh | 9,799 | Mar. 17 | 103 | 655 |
| "Red Raven." (For Shoes) | Fleishman, Morris & Co | 10,614 | Dec. 22 | 107 | 2233 |
| "Red Warrior." (For Smoking-Tobacco) | T. E. Roberts Tobo. Co | 10,375 | Sept. 22 | 106 | 993 |
| "Regal Shirt Waist." (For Shirt-Waists) | I. Brod & Co | 10,338 | Sept. 15 | 106 | 761 |
| "Reliance." (For Flour) | George Urban Milling Co | 10,413 | Oct. 13 | 106 | 1773 |
| "Reliance Angora Tam O'Shanter." (For Soft Woolen Caps.) | S. Cohen & Co | 10,446 | Oct. 27 | 106 | 2285 |
| "Reliance Mills." (For Hosiery, Underwear, and Knit Goods.) | W. C. Gallagher | 10,447 | Oct. 27 | 106 | 2285 |
| "Remarkable Old Scotch Whiskey." (For Whisky) | J. Gillon & Co | 9,856 | Mar. 31 | 103 | 1161 |
| "Republica Emblematica." (For Cigars) | Schmidt & Co | 9,658 | Jan. 6 | 102 | 225 |
| "Revelation." (For Cigars) | C. B. Henschel Mfg. Co | 10,430 | Oct. 20 | 106 | 2011 |
| "Rex." (For Lemon-Soda) | W. A. Megrath | 9,861 | Mar. 31 | 103 | 1161 |
| "Rex." (For Lemon-Soda) | W. A. Megrath | 9,862 | Mar. 31 | 103 | 1161 |
| "Rex." (For Sarsaparilla) | W. A. Megrath | 9,863 | Mar. 31 | 103 | 1161 |
| "Rex." (For Sarsaparilla) | W. A. Megrath | 9,864 | Mar. 31 | 103 | 1161 |
| "Rex." (For Ginger-Ale) | W. A. Megrath | 9,865 | Mar. 31 | 103 | 1161 |
| "Rex." (For Ginger-Ale) | W. A. Megrath | 9,866 | Mar. 31 | 103 | 1161 |
| "Rex Fancy Table Syrup." (For Syrup) | Illinois Sugar Refining Co | 10,131 | June 23 | 104 | 2145 |
| "Rex Soap." (For Soap) | M. Escher | 10,472 | Nov. 3 | 107 | 263 |
| "Rheumatol for all Rheumatism." (For Medicine) | Canton Drug & Chemical Company | 10,161 | July 7 | 105 | 257 |
| "Rheumeo." (For Medicine) | J. R. Dillingham | 10,589 | Dec. 8 | 107 | 1657 |
| "Rim Standardized by the Clincher Automobile Tire Manufacturers Association." (For Wheel-Rims.) | Clincher Automobile Tire Manufacturers Association. | 10,282 | Aug. 18 | 105 | 1777 |
| "Rippen's Mixture." (For Smoking and Chewing Tobacco) | H. Rippen | 9,860 | Mar. 31 | 103 | 1161 |
| "River Nile Club Pure Rye Whiskey." (For Whisky) | P. A. Breglio & Co | 10,602 | Dec. 15 | 107 | 1969 |
| "Riverside Gloss Starch." (For Starch) | Douglas & Company | 10,077 | June 9 | 104 | 1653 |
| "Rodriguez Lopez Co." (For Cigarettes) | Rodriguez Lopez Co | 9,704 | Jan. 27 | 102 | 817 |
| "Roever's Blue-Naptha." (For Soap) | H. Roever Co | 9,961 | May 5 | 104 | 307 |
| "Roland Braid Buttons." (For Buttons) | Rolffes & Co | 10,323 | Sept. 8 | 106 | 539 |

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|---|---|---|---|---|---|
| "Roller Tray Trunks." (For Trunks and Traveling-Bags) | H. W. Rountree & Brother Trunk & Bag Co. | 9,744 | Feb. 17 | 102 | 1549 |
| "Rose's Medicinal Malt Whiskey." (For Whisky) | R. M. Rose Company | 9,803 | Mar. 17 | 103 | 655 |
| "Royal Bengal Metal Polish." (For Metal-Polish) | Faulhaber Chemical Company | 10,363 | Sept. 15 | 106 | 761 |
| "Royal Crown Maryland Pure Rye." (For Whisky) | Quirin & Duhaime | 9,712 | Jan. 27 | 102 | 817 |
| "Royal Foot Wash." (For a Preparation for the Feet) | W. J. Govan | 10,004 | May 12 | 104 | 575 |
| "Royal Gem." (For Cigars) | American Lithographic Company | 10,291 | Aug. 25 | 105 | 2055 |
| "Royal Seal." (For Cigars) | American Lithographic Company | 9,873 | Apr. 7 | 103 | 1415 |
| "Royal Victor." (For Cigars) | A. C. Henschel & Co | 9,885 | Apr. 14 | 103 | 1677 |
| "Royalton Woolen Co." (For Uniform-Cloths) | Royalton Woolen Co | 9,652 | Jan. 6 | 102 | 225 |
| "Ruff's Pimpl-Cura." (For a Medicinal Preparation) | U. G. Ruff | 10,093 | June 16 | 104 | 1893 |
| "Ryena." (For Food Product) | Battle Creek Ryena Food Co | 10,018 | May 19 | 104 | 849 |
| "Sager Special Chemical Process Axe." (For Axes) | Warren Axe & Tool Co | 9,882 | Apr. 7 | 103 | 1415 |
| "Saharet." (For Cigars) | E. Mandelbaum | 10,084 | June 9 | 104 | 1653 |
| "Salim Milan Blue Bells." (For Cigarettes) | S. Milan | 10,460 | Nov. 3 | 107 | 263 |
| "Salome." (For a Medicine) | E. S. Frank | 10,427 | Oct. 20 | 106 | 2011 |
| "Samaritan Grape Juice." (For Grape-Juice) | Deutz Lithographing Co | 9,669 | Jan. 6 | 102 | 225 |
| "Samuel Smiles." (For Cigars) | C. B. Henschel Mfg. Co | 9,887 | Apr. 14 | 103 | 1677 |
| "Sana-Dermal Talcum." (For Talcum Powder) | Schmidt & Co | 10,002 | May 12 | 104 | 575 |
| "Sand Springs." (For Orange-Cider and Bottled Water) | Sand Springs Bottling Works | 10,104 | June 16 | 104 | 1893 |
| "Sanitas Puritas." (For Milk for Infants and Invalids) | Sanitas Condensed Milk Co | 10,319 | Sept. 1 | 106 | 261 |
| "Satinola." (For a Toilet Preparation) | National Toilet Co | 10,534 | Nov. 24 | 107 | 1091 |
| "Sawyer's Crystal Blue." (For Washing-Blue) | Sawyer Crystal Blue Co | 10,566 | Dec. 1 | 107 | 1371 |
| "Sawyer's Crystal Blue." (For Washing-Blue) | Sawyer Crystal Blue Co | 10,567 | Dec. 1 | 107 | 1371 |
| "Scallop Cocktails." (For a Beverage) | Wilmington Shell Fish Co | 9,756 | Feb. 17 | 102 | 1549 |
| "Scalpine." (For Dandruff Cure) | R. M. Ferguson and M. M. Atherton | 10,454 | Oct. 27 | 106 | 2285 |
| "Schaffer's Wonder Full Liniment." (For Liniment) | D. Schaffer | 9,907 | Apr. 14 | 103 | 1677 |
| "Scheetz's Celebrated Bitter Cordial." (For a Medicine) | P. R. Hentz & Co | 9,739 | Feb. 10 | 102 | 1291 |
| "Schmidt Bread." (For Bread) | B. Schmidt | 10,237 | Aug. 11 | 105 | 1529 |
| "Schollian's No. 1." (For Cigars) | Smith, Lichty & Hillman Company | 10,435 | Oct. 20 | 106 | 2011 |
| "Scotty's Milwaukee Sweaters." (For Sweaters) | W. Lisle | 9,940 | Apr. 28 | 103 | 2169 |
| "Sea Island." (For Coffee) | T. A. Eckert | 10,403 | Oct. 6 | 106 | 1499 |
| "Seawall Brand." (For Preserved Figs) | S. S. Metzler & Son | 10,504 | Nov. 17 | 107 | 829 |
| "Security Gall Cure." (For a Gall Cure) | F. B. Dennie | 10,216 | Aug. 4 | 105 | 1257 |
| "Security Matches." (For Matches) | L. Hilfer | 9,840 | Mar. 24 | 103 | 885 |
| "Security Stock Food Glutenized." (For Stock-Food) | F. B. Dennie | 9,761 | Feb. 17 | 102 | 1549 |
| "Self-Rising Pan Cake Flour." (For Pancake-Flour) | Igleheart Brothers | 9,776 | Mar. 3 | 103 | 221 |
| "Senilets." (For a Medicine) | Senilet Drug Co | 9,924 | Apr. 21 | 103 | 1911 |
| "Sensation." (For Cigars) | Schmidt & Co | 10,252 | Aug. 11 | 105 | 1529 |
| "Shawmut Sure Cure for Rheumatism." (For Medicine) | H. N. Burch & Co | 10,199 | July 21 | 105 | 741 |
| "Shell to Dish." (For a Preparation for Treating Turkeys) | National Turkey-Lene Co | 9,903 | Apr. 14 | 103 | 1677 |
| "Shepard's Lung Food." (For Medicine) | J. C. Shepard | 10,626 | Dec. 22 | 107 | 2233 |
| "Sheridan." (For Cigars) | A. A. Johnson | 10,421 | Oct. 13 | 106 | 1773 |
| "Silkweed Tonic." (For Medicine) | F. A. Goodwin | 10,400 | Oct. 6 | 106 | 1499 |
| "Silver Star Tomatoes." (For Tomatoes) | Orleans County Canning Company | 9,818 | Mar. 17 | 103 | 655 |
| "Simon's Aromatic Stomach Bitters." (For Stomach-Bitters.) | S. B. Schein | 9,845 | Mar. 31 | 103 | 1161 |
| "Sip Sap." (For Wafers) | Lafayette Cracker & Confectionery Co. | 9,816 | Mar. 17 | 103 | 655 |
| "Sister Cuba." (For Cigars) | R. Markovitz | 9,947 | Apr. 28 | 103 | 2169 |
| "64." (For Tablets) | C. E. Abraham | 10,582 | Dec. 8 | 107 | 1657 |
| "Smack of Goodness." (For Groceries) | E. Kanaley | 10,175 | July 14 | 105 | 493 |
| "Smith's Hair Tonic." (For Hair-Tonic) | J. B. Smith | 10,038 | May 26 | 104 | 1117 |
| "Smith's Trust Puzzle." (For Puzzles) | E. M. Smith | 9,974 | May 12 | 104 | 575 |
| "Smith's White Mixture." (For Medicine) | T. E. Smith | 9,967 | May 5 | 104 | 307 |
| "Smith's Wonder Worker." (For a Medicine) | W. K. Smith | 10,627 | Dec. 22 | 107 | 2233 |
| "Smokers Protection." (For Cigars) | M. Neff | 10,255 | Aug. 11 | 105 | 1529 |
| "Smoky City Cleaner." (For a Cleaning Preparation) | Sanitary Chemical Co | 9,813 | Mar. 17 | 103 | 655 |
| "Sneeze-No-More." (For Medicine) | J. H. Barnfield | 10,285 | Aug. 25 | 105 | 2055 |
| "Snpepsia." (For Medicine) | S. H. Brewton | 10,539 | Nov. 24 | 107 | 1091 |
| "Soapex." (For Washing Compound) | W. R. Hollingshead Company | 10,642 | Dec. 29 | 107 | 2525 |
| "Solar Fancy Table Syrup." (For Syrup) | Illinois Sugar Refining Co | 10,357 | Sept. 15 | 106 | 761 |
| "Soma Osmatine." (For Bath Fluid) | A. Rhu | 10,515 | Nov. 17 | 107 | 829 |
| "Sopagus." (For Cleaning and Polishing Preparation) | Hercules Mfg. Co | 10,379 | Sept. 22 | 106 | 993 |
| "Spurgin's Double-Quick Index." (For an Index) | Spurgin Manufacturing Co | 10,325 | Sept. 8 | 106 | 539 |
| "Spurlock's Southern Laundry Washing Blue." (For Washing-Blue.) | Webb Manufacturing Company | 10,102 | June 16 | 104 | 1893 |
| "St. George Water." (For Spring-Water) | B. A. Bryon | 10,180 | July 14 | 105 | 493 |
| "Stamp." (For Condensed Milk) | American Condensed Milk Co | 10,563 | Dec. 1 | 107 | 1371 |
| "Star." (For Snuff) | C. J. Bachmann | 10,013 | May 19 | 104 | 849 |
| "Star Coin." (For Cigars) | Schmidt & Co | 9,656 | Jan. 6 | 102 | 225 |
| "Stars and Stripes." (For Beer) | Willow Springs Brewing Co | 10,436 | Oct. 20 | 106 | 2011 |
| "Steamer Basket Card." (For Steamer-Baskets) | T. Martin & Co | 9,953 | May 5 | 104 | 307 |
| "Stock Cigar." (For Cigars) | Schmidt & Co | 10,354 | Sept. 15 | 106 | 761 |
| "Stop-Ache." (For a Medicine) | J. H. Hafer | 9,925 | Apr. 21 | 103 | 1911 |
| "Strengthene." (For Ale) | Old Colony Brewing Co | 10,348 | Sept. 15 | 106 | 761 |
| "Sugar of Milk." (For Infant-Food) | Lehn & Fink | 10,145 | June 30 | 104 | 2347 |
| "Sughrue & Johnson U. C. T." (For Cigars) | Sughrue & Johnson | 9,955 | May 5 | 104 | 307 |
| "Sunnybrook Creamery Butter." (For Butter) | Helmet Creamery Company | 10,616 | Dec. 22 | 107 | 2233 |
| "Sunoleum." (For Washing Compound) | Sunoleum Mfg. Co | 10,443 | Oct. 20 | 106 | 2011 |
| "Sunshine Condensed Milk." (For Condensed Milk) | United States Condensed Milk Co | 10,615 | Dec. 22 | 107 | 2233 |
| "Sunshine Metal Polish." (For Metal-Polish) | Sunshine Polish Co | 10,021 | May 19 | 104 | 849 |
| "Sunshine Old Reserve Rye." (For Whisky) | L. Sonnenschein | 9,992 | May 12 | 104 | 575 |
| "Superior Pocket Cutlery." (For Pocket Cutlery) | Napanoch Knife Co | 10,381 | Sept. 22 | 106 | 993 |
| "Sure Pop." (For Shelled Popcorn) | C. H. White | 10,172 | July 7 | 105 | 257 |
| "Susette." (For Cigars) | Charles B. Perkins & Co | 10,579 | Dec. 8 | 107 | 1657 |
| "Svensk Toddy Cognac." (For Cognac) | B. Lindqvist & Co | 9,875 | Apr. 7 | 103 | 1415 |
| "Swallow Whiskey." (For Whisky) | J. R. and C. H. Stonebraker | 10,030 | May 26 | 104 | 1117 |
| "Sweet Erin." (For Cigars) | American Lithographic Company | 9,806 | Mar. 17 | 103 | 655 |
| "Swift's Specific." (For Medicine) | Swift Specific Company | 10,034 | May 26 | 104 | 1117 |
| "Sydney Smith." (For Cigars) | C. B. Henschel Mfg. Co | 9,769 | Feb. 24 | 102 | 1775 |
| "T. & Co., Specially Selected Silk." (For Silk Goods) | Trumplette & Co | 10,568 | Dec. 8 | 107 | 1657 |
| "T B C Triple Bi-Carbonate Deerfield Water." (For Mineral Water.) | Deerfield Water Company | 9,948 | Apr. 28 | 103 | 2169 |
| "Tamazula." (For Hair-Tonic) | L. E. Warner | 10,623 | Dec. 22 | 107 | 2233 |
| "Tampa Trade." (For Cigars) | Schmidt & Co | 9,678 | Jan. 13 | 102 | 463 |

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| Title. | Name. | No. | Date. | Official Gazette. Vol. | Page. |
|---|---|---|---|---|---|
| "Tetlow's Favorite Bath Powder." (For Bath-Powder) | Tetlow Manufacturing Co | 10,497 | Nov. 10 | 107 | 537 |
| "That Settles It." (For a Coffee-Settler) | C. E. Weeks | 9,690 | Jan. 20 | 102 | 619 |
| "The Beer of Quality." (For Lager-Beer) | A. von Cotzhausen | 10,273 | Aug. 18 | 105 | 1777 |
| "The C. G. Smith Tender Feet Shoes." (For Shoes) | C. G. Smith | 10,236 | Aug. 11 | 105 | 1529 |
| "The Calendar Broom." (For Brooms) | L. D. Lawrence | 9,732 | Feb. 10 | 102 | 1291 |
| "The Cigar for the People Chicago Barbers Protective Union." (For Cigars.) | Chicago Barbers Protective Union. | 9,838 | Mar. 24 | 103 | 885 |
| "The Clipper Clip." (For Clips) | Clipper Manufacturing Company | 10,324 | Sept. 8 | 106 | 539 |
| "The Coutrai Lockstitch Thread." (For Sewing-Machine Thread) | H. Fawcett | 10,368 | Sept. 22 | 106 | 993 |
| "The 'Diva' Proprietary Medicines." (For Proprietary Medicines.) | M. E. Kendrick | 10,410 | Oct. 13 | 106 | 1773 |
| "The Eareck Homoeopathic Medicines." (For Medicines) | T. W. Eareckson | 9,998 | May 12 | 104 | 575 |
| "The Famous Queen of Comfort Shoemakers." (For Boots and Shoes.) | A. Newman & Co | 9,979 | May 12 | 104 | 575 |
| "The Gold Bond Hat." (For Hats) | M. H. Lambert | 10,395 | Oct. 6 | 106 | 1499 |
| "The Grafter." (For Cigars) | Schmidt & Co | 10,353 | Sept. 15 | 106 | 761 |
| "The Harvest." (For Cigars) | Schmidt & Co | 9,707 | Jan. 27 | 102 | 817 |
| "The Hindoos Rheumatic Remedy." (For a Medicine) | J. Littlejohn | 9,926 | Apr. 21 | 103 | 1911 |
| "The Illinois Boiler Cleaning Compound." (For Boiler-Cleaning Compound.) | W. Rice | 10,262 | Aug. 18 | 105 | 1777 |
| "The Lion Dry Battery." (For Dry-Battery Cells) | Lion Dry Battery Co | 10,139 | June 30 | 104 | 2437 |
| "The Monarch Brand Fancy Creamery Butter." (For Butter.) | Laabs Brothers | 9,754 | Feb. 17 | 102 | 1549 |
| "The 'Ounce of Prevention.'" (For Medicine) | M. T. Fulcher | 10,259 | Aug. 18 | 105 | 1777 |
| "The Phœbus." (For Certain Manufactured Tobacco) | P. G. Crocov | 10,490 | Nov. 10 | 107 | 537 |
| "The Poplars." (For Cigars) | American Lithographic Company | 9,759 | Feb. 17 | 102 | 1549 |
| "The Reporter." (For Cigars) | C. B. Henschel Mfg. Co | 9,770 | Feb. 24 | 102 | 1775 |
| "The Royal Reina." (For Cigars) | J. Glackner | 10,449 | Oct. 27 | 106 | 2285 |
| "The Skarabee." (For Cigarettes) | Mavro Brothers | 10,193 | July 21 | 105 | 741 |
| "The So-Safe Intestinal Remedy." (For Medicine) | J. Reed and Z. P. Fletcher | 9,966 | May 5 | 104 | 307 |
| "The Speaker." (For Cigars) | Schmidt & Co | 10,190 | July 21 | 105 | 741 |
| "The Sphinx." (For Cigars) | McGinnis & Kennedy | 10,511 | Nov. 17 | 107 | 829 |
| "The Sun." (For Candy and Ice-Cream) | C. Polycarpos | 9,692 | Jan. 20 | 102 | 619 |
| "The Very Best." (For Cigars) | American Lithographic Company | 10,251 | Aug. 11 | 105 | 1529 |
| "The Warren Axe." (For Axes) | Warren Axe & Tool Co | 9,883 | Apr. 7 | 103 | 1415 |
| "The 'Winona' Scratcher." (For Stockings) | Columbia Hosiery Co | 10,424 | Oct. 20 | 106 | 2011 |
| "The World's Fair—St. Louis—1904—Louisiana Purchase Exposition Cup." (For Cups.) | Rothschild, Meyers & Co | 9,938 | Apr. 28 | 103 | 2169 |
| "Thomas Nelson." (For Cigars) | H. J. Scholey | 9,890 | Apr. 14 | 103 | 1677 |
| "Thor Rye." (For Whisky) | D. Leffingwell | 10,438 | Oct. 20 | 106 | 2011 |
| "Thurston's Adamantine Special Pattern Makers' Shellac." (For Shellac.) | F. W. Thurston | 9,672 | Jan. 6 | 102 | 225 |
| "Thyrazine." (For a Medicine) | Thyrazine Chemical Company | 9,701 | Jan. 27 | 102 | 817 |
| "Tickler." (For Cigars) | Anderson & Bullard | 9,679 | Jan. 20 | 102 | 619 |
| "Tickler." (For Cigars) | O. W. Bullard | 10,335 | Sept. 8 | 106 | 539 |
| "Tiger Lily." (For Codfish) | Davis Bros | 10,407 | Oct. 6 | 106 | 1499 |
| "Tishu." (For Toilet-Paper) | Scott Paper Co | 10,119 | June 16 | 104 | 1893 |
| "Tobacco Italiano." (For Smoking and Chewing Tobacco) | H. Rippen | 9,995 | May 12 | 104 | 575 |
| "Tom Barrett." (For Cigars) | H. J. Cohn | 9,808 | Mar. 17 | 103 | 655 |
| "Tonini's Brilliant Stove Polish." (For Stove-Polish) | A. Tonini & Son | 9,775 | Feb. 24 | 102 | 1775 |
| "Top-Round Groceries." (For Groceries) | E. Kanaley | 9,982 | May 12 | 104 | 575 |
| "Topsy Puzzle." (For Puzzles) | Topsy Puzzle Company | 10,486 | Nov. 10 | 107 | 537 |
| "Tread-Well." (For Boots and Shoes) | Washington Shoe Mfg. Co | 9,978 | May 12 | 104 | 575 |
| "Tri-Avena." (For Prepared Food) | Tri-Avena Meat Co | 9,733 | Feb. 10 | 102 | 1291 |
| "Trib." (For Medical Compound) | W. C. Cutler | 10,604 | Dec. 15 | 107 | 1969 |
| "Trip-L-Body White." (For White Lead and Paint) | Benjamin Moore & Company | 10,186 | July 14 | 105 | 493 |
| "True Blue Bluing." (For Bluing) | True Blue Mfg. Co | 10,565 | Dec. 1 | 107 | 1371 |
| "True Heart." (For Spirituous Liquors) | W. J. Smith Co | 10,204 | July 28 | 105 | 971 |
| "Trylyta." (For Incandescent Mantles) | Raritan Mantle Co | 10,047 | June 2 | 104 | 1389 |
| "Tuberose." (For Fish) | Davis Bros | 10,391 | Sept. 29 | 106 | 1235 |
| "Turnwell." (For Leather Belts) | S. Rauh & Company | 9,975 | May 12 | 104 | 575 |
| "Turpentine Soap." (For Soap) | Our Soap Co | 10,526 | Nov. 24 | 107 | 1091 |
| "12 Piece Secretary's Outfit Fine Writing Utensils." (For Writing Utensils.) | N. Shure Co | 9,939 | Apr. 28 | 103 | 2169 |
| "U-Chu-M Pepsin Gum." (For Confection-Gum) | L. F. Jordan | 9,718 | Jan. 27 | 102 | 817 |
| "U Need M Cream Co-Coa Nut Candy." (For a Confection) | L. F. Jordan | 9,717 | Jan. 27 | 102 | 817 |
| "U Want M Old Crow Hand Picked." (For Peanuts) | L. F. Jordan | 9,719 | Jan. 27 | 102 | 817 |
| "Ubero Selected Coffee." (For Coffee) | Consolidated Ubero Plantations Company. | 9,899 | Apr. 14 | 103 | 1677 |
| "Umatilla." (For Canned Plums) | Oregon Packing Company | 9,849 | Mar. 31 | 103 | 1161 |
| "Uncle Remus." (For Whisky) | Jacobs Pharmacy Company | 9,684 | Jan. 20 | 102 | 619 |
| "Uneeda Cigarette." (For Cigarettes) | C. Kramer | 9,943 | Apr. 28 | 103 | 2169 |
| "Union." (For Wearing-Apparel) | Standard Mfg Co | 10,133 | June 30 | 104 | 2437 |
| "Union Buttons." (For Cigars) | Moeller & Kolb | 10,337 | Sept. 8 | 106 | 539 |
| "Union Central." (For Cigars) | Central Cigar M'f'g Co | 9,734 | Feb. 10 | 102 | 1291 |
| "Union Cigar Band." (For Cigars) | S. L. Brown | 10,369 | Sept. 22 | 106 | 993 |
| "Union Health Shoes." (For Shoes) | W. J. Josey | 10,517 | Nov. 24 | 107 | 1091 |
| "Union Made." (For Beer, Ale, and Porter) | International Union of the United Brewery Workmen of America. | 10,165 | July 7 | 105 | 257 |
| "Union Plane." (For Planes) | Union Manufacturing Company | 10,518 | Nov. 24 | 107 | 1091 |
| "Union Self Opening." (For Paper Bags) | Union Bag and Paper Co | 10,023 | May 26 | 104 | 1117 |
| "Union Self Opening." (For Paper Bags) | Union Bag and Paper Co | 10,024 | May 26 | 104 | 1117 |
| "Union Self Opening." (For Paper Bags) | Union Bag and Paper Co | 10,025 | May 26 | 104 | 1117 |
| "United Brand." (For Canned Tomatoes) | Webster, Ford & Co | 10,305 | Aug. 25 | 105 | 2055 |
| "United Cloth Hat & Cap Makers of Central Pa.—Union Made—Hats—Caps." (For Hats and Caps.) | United Cloth Hat & Cap Makers of Central Pennsylvania. | 10,590 | Dec. 15 | 107 | 1969 |
| "United Silk Workers Association of America Union Label." (For Silk or Silk-Mixed Woven Fabrics.) | United Silk Workers Association of America. | 10,120 | June 23 | 104 | 2145 |
| "Universal Fancy Table Syrup." (For Syrup) | Illinois Sugar Refining Co | 10,358 | Sept. 15 | 106 | 761 |
| "Universal Zonophone Record." (For Sound-Records) | Universal Talking Machine Manufacturing Company. | 10,137 | June 30 | 104 | 2437 |
| "Universal Zonophone Record." (For Sound-Records) | Universal Talking Machine Manufacturing Company. | 10,138 | June 30 | 104 | 2437 |
| "Unsweetened Nectar Milk." (For Condensed Milk) | H. Nestle | 10,219 | Aug. 4 | 105 | 1257 |
| "Up to Date." (For Flour) | Advance Flour Mill Company | 10,532 | Nov. 24 | 107 | 1091 |

*Alphabetical list of labels*—Continued.

| Title. | Name. | No. | Date. | Official Gazette. Vol. | Page. |
|---|---|---|---|---|---|
| "Valentine's Benz-ol Capsules." (For Medicine) | N. L. Shouse | 10,160 | July 7 | 105 | 257 |
| "Vanine Tonic Laxative." (For a Medicine) | T. S. Booth | 9,800 | Mar. 17 | 103 | 655 |
| "Velvet Rubber Heels." (For Rubber Heels) | F. W. Whitcher | 10,010 | May 19 | 104 | 849 |
| "Velvet-Skin Cream." (For Cosmetic) | A. F. Wood | 10,011 | May 19 | 104 | 849 |
| "Velvet Whole Heels." (For Rubber Heels) | F. W. Whitcher | 10,008 | May 19 | 104 | 849 |
| "Veribest." (For Canned Meats) | W. T. Jefferson | 9,696 | Jan. 20 | 102 | 619 |
| "Veribest." (For Hats) | J. Marshall | 10,209 | Aug. 4 | 105 | 1257 |
| "Vermintene." (For an Insect-Exterminator) | H. Gellner | 9,747 | Feb. 17 | 102 | 1549 |
| "Viche-Fiz." (For Medicine) | S. F. Croft | 10,636 | Dec. 29 | 107 | 2525 |
| "Victor." (For Brooms) | Lee Broom & Duster Co | 10,174 | July 7 | 105 | 257 |
| "Victoria." (For Tea) | Acker, Merrall & Condit Co | 10,147 | June 30 | 104 | 2437 |
| "Vigor Vito Capsules." (For Medicines) | J. H. Stauter | 9,749 | Feb. 17 | 102 | 1549 |
| "Vigoralis." (For Cigars) | Schmidt & Co | 9,682 | Jan. 20 | 102 | 619 |
| "Villena." (For Cigars) | Schmidt & Co | 10,468 | Nov. 3 | 107 | 263 |
| "Vim." (For a Food Preparation) | Theo. Poehler Mercantile Co | 9,817 | Mar. 17 | 103 | 655 |
| "Vin Erba." (For Medicine) | J. D. Gibbs | 9,766 | Feb. 24 | 102 | 1775 |
| "Vinita Artesian Water, Chief Mineral Water of the Indian Territory." (For Artesian Water.) | Shanahan & Mitchell | 10,296 | Aug. 25 | 105 | 2055 |
| "Vino Vermouth." (For Liqueur) | J. B. Roche | 10,556 | Dec. 1 | 107 | 1371 |
| "Violet Ammonia." (For Toilet Water) | Randolph Box and Label Co | 9,831 | Mar. 24 | 103 | 885 |
| "Violet Emollient Skin Tonic and Massage Cream." (For Massage-Cream.) | C. Friedgen | 10,514 | Nov. 17 | 107 | 829 |
| "Violet Water." (For Toilet Water) | Randolph Box and Label Co | 9,832 | Mar. 24 | 103 | 885 |
| "Virginius Rufus." (For Cigars) | C. Stutz | 9,668 | Jan. 6 | 102 | 225 |
| "Vista De Paleta." (For Cigars) | Schmidt & Co | 9,892 | Apr. 14 | 103 | 1677 |
| "Vista Grande." (For Cigars) | Schmidt & Co | 9,705 | Jan. 27 | 102 | 817 |
| "Vista Orada." (For Cigars) | Schmidt & Co | 9,657 | Jan. 6 | 102 | 225 |
| "Vistas." (For Cigars) | Schmidt & Co | 9,664 | Jan. 6 | 102 | 225 |
| "Vita-Foda." (For Cereal Food) | Lake Odessa Malted Cereal Company. | 10,114 | June 16 | 104 | 1893 |
| "Wabash Special." (For Whisky) | Auerbach and Schneider | 10,513 | Nov. 17 | 107 | 829 |
| "Wakega Medical Co." (For Medicine) | Wakega Medical Co | 10,429 | Oct. 20 | 106 | 2011 |
| "Wang." (For Cigars) | Bendixen Tobacco Co | 10,176 | July 14 | 105 | 493 |
| "Water Thins." (For Crackers) | W. H. Faxon | 10,228 | Aug. 4 | 105 | 1257 |
| "Watermelon Jelly, Natures Palatable Specific." (For Medicine.) | H. W. Wilder Co | 10,244 | Aug. 11 | 105 | 1529 |
| "Wau-Kis-Ko." (For Toilet Powder) | Wau-Kis-Ko Health Powder Co | 10,040 | May 26 | 104 | 1117 |
| "Wawa Lithia Spring Water." (For Lithia-Spring Water) | C. W. Dunyon | 10,194 | July 21 | 105 | 741 |
| "Wearbest." (For Hats) | J. Marshall | 10,208 | Aug. 4 | 105 | 1257 |
| "Weather Proof Liquid Paint." (For Paints) | Hecht & Zummach | 9,695 | Jan. 20 | 102 | 619 |
| "Well Made, Good Value." (For Caps) | L. Sable | 10,070 | June 9 | 104 | 1653 |
| "Welmaid." (For Toilet-Paper) | Scott Paper Co | 10,537 | Nov. 24 | 107 | 1091 |
| "Western Union." (For Cigars) | G. C. Williams | 10,086 | June 9 | 104 | 1653 |
| "Westfield." (For Thread) | W. Warren Thread Works | 9,697 | Jan. 27 | 102 | 817 |
| "White Eagle." (For Cigars) | American Lithographic Company | 10,387 | Sept. 29 | 106 | 1235 |
| "White Elk Shoe." (For Shoes) | L. Wolfson | 10,046 | June 2 | 104 | 1389 |
| "White House." (For Cigars) | Schmidt & Co | 9,681 | Jan. 20 | 102 | 619 |
| "White House Pure Cream Baking Powder." (For Baking-Powder.) | Whitehouse Supply Co | 9,960 | May 5 | 104 | 307 |
| "White Oak High Patent Flour." (For Flour) | G. Thierwechter and C. C. Zimmerman. | 9,959 | May 5 | 104 | 307 |
| "White Pansy." (For Condensed Milk) | American Condensed Milk Co | 10,510 | Nov. 17 | 107 | 829 |
| "White Plume." (For Flour) | Diamond Roller Mills | 10,112 | June 16 | 104 | 1893 |
| "White Plume." (For Lard) | Western Packing Company | 10,309 | Aug. 25 | 105 | 2055 |
| "White Rose." (For Lime) | Saginaw Lime & Lumber Company | 10,630 | Dec. 22 | 107 | 2233 |
| "White Swan." (For Wall-Plaster) | Garden City Sand Company | 9,841 | Mar. 24 | 103 | 885 |
| "White's Boro Paper for the Toilet." (For Toilet-Paper) | C. C. White | 10,633 | Dec. 29 | 107 | 2525 |
| "Whitworth Red Bottle." (For Medicine) | Whitehead & Co | 9,997 | May 12 | 104 | 575 |
| "Wilson's Freckle Cure." (For Salve) | I. R. Wilson & Co | 9,971 | May 5 | 104 | 307 |
| "Winner Brand." (For Canned Salmon) | R. D. Hume | 10,528 | Nov. 24 | 107 | 1091 |
| "Winthrop's Bitters." (For Medicine) | Winthrop Drug and Chemical Works. | 10,068 | June 2 | 104 | 1389 |
| "Winthrop's Blood Poison Tablets." (For Medicine) | Winthrop Drug and Chemical Works. | 10,064 | June 2 | 104 | 1389 |
| "Winthrop's Blood Purifier." (For Medicine) | Winthrop Drug and Chemical Works. | 10,060 | June 2 | 104 | 1389 |
| "Winthrop's Cough Mixture." (For Medicine) | Winthrop Drug and Chemical Works. | 10,067 | June 2 | 104 | 1389 |
| "Winthrop's Health Biscuit." (For Medicine) | Winthrop Drug & Chem. Wks | 10,321 | Sept. 1 | 106 | 261 |
| "Winthrop's Kidney Tea." (For Medicine) | Winthrop Drug and Chemical Works. | 10,061 | June 2 | 104 | 1389 |
| "Winthrop's Laxative Pills." (For Medicine) | Winthrop Drug and Chemical Works. | 10,065 | June 2 | 104 | 1389 |
| "Winthrop's Liniment." (For Medicine) | Winthrop Drug and Chemical Works. | 10,063 | June 2 | 104 | 1389 |
| "Winthrop's Neuralgia Tablets." (For Medicine) | Winthrop Drug and Chemical Works. | 10,066 | June 2 | 104 | 1389 |
| "Winthrop's Ointment." (For Medicine) | Winthrop Drug and Chemical Works. | 10,069 | June 2 | 104 | 1389 |
| "Winthrop's U-Ric-Sol-Vent." (For Medicine) | Winthrop Drug and Chemical Works. | 10,062 | June 2 | 104 | 1389 |
| "Wire Rope Shield." (For Lubricating Compounds for Wire Rope.) | Ironsides Company | 9,918 | Apr. 14 | 103 | 1677 |
| "Witch Hazel (Gould)." (For Witch-Hazel) | Gould Witch Hazel Company | 9,742 | Feb. 10 | 102 | 1291 |
| "Wolcott's Vegetable Balm." (For Liniment) | A. L. Wolcott | 10,185 | July 14 | 105 | 493 |
| "Wootton's Menthol Cough Syrup." (For Cough-Syrup) | F. W. Wootton | 10,551 | Dec. 1 | 107 | 1371 |
| "Worm Chocolates for Children." (For Worm Medicine) | L. W. Leithhead Drug Co | 10,475 | Nov. 3 | 107 | 263 |
| "Wranglers." (For Cigars) | Schmidt & Co | 9,655 | Jan. 6 | 102 | 225 |
| "Yankee Baby Powder." (For Toilet Powder) | Seabury & Johnson | 10,182 | July 14 | 105 | 493 |
| "Yankee Homespun." (For Dry Goods) | F. Almy | 9,976 | May 12 | 104 | 575 |
| "Ye Olde King Cole Rye." (For Whisky) | W. G. Cole | 10,152 | June 30 | 104 | 2437 |
| "Yeast Queen." (For Dry Hop Yeast) | Peerless Yeast Company | 9,868 | Apr. 7 | 103 | 1415 |
| "Yellow Key Stone." (For Whisky) | J. D. O'Connor | 10,577 | Dec. 8 | 107 | 1657 |
| "Yu-Uzit." (For a Silk Fabric) | Cozzens, Elbers & Prankard | 10,283 | Aug. 25 | 105 | 2055 |

# PRINTS.

| Title. | Name. | No. | Date. | Official Gazette. Volume. | Page. |
|---|---|---|---|---|---|
| "A Carrom Board Makes a Happy Home." (For Game Boards and Apparatus.) | Carrom-Archarena Co | 616 | Feb. 17 | 102 | 1549 |
| "A Good Eye Opener." (For Metal) | Frictionless Metal Co | 835 | Oct. 6 | 106 | 1499 |
| "A Life Saver." (For Porous Plasters) | American Lithographic Company | 618 | Feb. 17 | 102 | 1549 |
| "A Pair of Fast Trotters." (For Whisky) | S. P. Haller | 848 | Nov. 3 | 107 | 263 |
| "A Popular Brand." (For Tea) | Firm of W. J. Buttfield | 754 | June 30 | 104 | 2437 |
| "A Word to You, Young Man." (For Furniture) | M. Goldenberg | 633 | Mar. 24 | 103 | 885 |
| "American Indian Souvenir Playing Cards." (For Playing-Cards.) | P. Lazarus & Co | 717 | June 2 | 104 | 1389 |
| "American Leghorn." (For a Poultry Journal) | F. E. Murphy | 625 | Mar. 17 | 103 | 655 |
| "America's Best Flour." (For Flour) | Hezel Milling Company | 651 | Apr. 14 | 103 | 1678 |
| "Application of Induced Draft." (For Mechanical Draft Apparatus.) | Buffalo Forge Company | 791 | July 21 | 105 | 742 |
| "Application to Scotch Marine Boilers." (For Mechanical Draft Apparatus.) | Buffalo Forge Company | 779 | July 21 | 105 | 741 |
| "Aristoform." (For Medicine) | L. J. Barker | 856 | Nov. 24 | 107 | 1091 |
| "At the Anvil." (For Clothing) | Oppenheimer, Seasongood & Co | 719 | June 2 | 104 | 1389 |
| "At the Fountain." (For Cigarettes) | W. H. Butler | 613 | Feb. 3 | 102 | 1047 |
| "Autocratia, Dr. J. D. Maxson's Remedies." (For Medicine) | M. J. Knapp and S. E. Munger | 847 | Oct. 27 | 106 | 2285 |
| "Banjo Conductor." (For Banjo-Conductors for Milk-Cooling Outfits.) | Star Milk Cooler Company | 655 | Apr. 21 | 103 | 1911 |
| "Birthstones." (For Imitation Stones) | G. Brunswick | 721 | June 2 | 104 | 1389 |
| "Blue Cross." (For Tea and Coffee) | Grand Central Tea & Coffee Co | 866 | Dec. 1 | 107 | 1371 |
| "Bon Ami." (For Tea) | Firm of W. J. Buttfield | 753 | June 30 | 104 | 2437 |
| "Boston Belting Co., The Original Rubber Man." (For Mechanical Rubber Goods.) | Boston Belting Company | 734 | June 9 | 104 | 1653 |
| "Botanic Blood Balm." (For Medicine) | Gray Lithograph Co | 722 | June 2 | 104 | 1389 |
| "Bridge of Health." (For a Medicine) | United Drug Company | 674 | May 5 | 104 | 307 |
| "Brotherhood Handkerchief." (For Handkerchiefs) | E. Bendheim | 814 | Sept. 1 | 106 | 261 |
| "Brotherhood Handkerchief." (For Handkerchiefs) | E. Bendheim | 829 | Sept. 29 | 106 | 1235 |
| "Buster Brown." (For Shoes) | Brown Shoe Co | 845 | Oct. 20 | 106 | 2011 |
| "Butter and Eggs." (For Butter and Eggs) | H. Vogeler | 840 | Oct. 13 | 106 | 1773 |
| "Cantripum." (For Overalls) | Hooker, Corser & Mitchell Co | 711 | May 26 | 104 | 1117 |
| "Captives of Dyspepsia." (For a Medicine) | United Drug Company | 672 | May 5 | 104 | 307 |
| "Carpet Magic." (For Carpets) | Coe & Brandt | 677 | May 12 | 104 | 575 |
| "Carter's Ideal Typewriter Ribbons and Carbon Papers." (For Type-Writer Ribbons and Carbon-Papers.) | Carter's Ink Co | 762 | July 7 | 105 | 257 |
| "Carter's Photolibrary Paste." (For Adhesive Paste) | Carter's Ink Co | 763 | July 7 | 105 | 257 |
| "Cere Vita." (For Wheat Food) | Superior Food Co | 767 | July 21 | 105 | 741 |
| "Cero-Fruto." (For Food Preparation) | Cero-Fruto Food Company | 863 | Dec. 1 | 107 | 1371 |
| "Choice Flower Seeds." (For Flower-Seeds) | Stecher Litho. Co | 611 | Feb. 3 | 102 | 1047 |
| "College Styles." (For Men's Winter Apparel) | David Adler & Sons Clothing Co | 806 | Aug. 18 | 105 | 1777 |
| "Contrasted Costumes, No. 1." (For Clothing) | J. Vogel and Vogel Brothers | 678 | May 12 | 104 | 575 |
| "Cream of the Crop." (For Tea) | Firm of W. J. Buttfield | 748 | June 30 | 104 | 2437 |
| "Crescent Chop." (For Tea) | Firm of W. J. Buttfield | 746 | June 30 | 104 | 2437 |
| "Crown Brand." (For Butter) | C. H. Weaver & Co | 861 | Nov. 24 | 107 | 1091 |
| "Cost Curves Plates." (For Mechanical Draft Apparatus) | Buffalo Forge Company | 786 | July 21 | 105 | 741 |
| "Cotton Belt Route Playing-Cards." (For Playing-Cards) | St. Louis Southwestern Railway Co. | 729 | June 9 | 104 | 1653 |
| "Di-Ges-To." (For Medicine) | G. R. Hess | 809 | Aug. 25 | 105 | 2055 |
| "Discovery of the Mississippi by Marquette, A. D. 1673." (For Sewing-Machines.) | Singer Manufacturing Co | 859 | Nov. 24 | 107 | 1091 |
| "Don't Scratch." (For Talking-Machines) | A. Gratz | 795 | July 28 | 105 | 971 |
| "Dr. James English Cooling Powders for Teething Babies." (For Powders.) | Dr. James English Cooling Powder & Remedy Co. | 803 | Aug. 11 | 105 | 1529 |
| "Dr. Pierce's Golden Medical Discovery." (For Medicine) | World's Dispensary Medical Association. | 870 | Dec. 22 | 107 | 2233 |
| "Dr. Pierce's Golden Medical Discovery and Dr. Pierce's Favorite Prescription." (For Medicine.) | World's Dispensary Medical Association. | 871 | Dec. 22 | 107 | 2233 |
| "Dressing for Dinner." (For Salad-Dressing) | H. A. Thomas & Wylie Lithographing Co. | 639 | Mar. 31 | 103 | 1161 |
| "Dust Collecting System." (For Blowpipes and Dust-Collectors.) | United States Blow Pipe & Hydraulic Works. | 798 | Aug. 4 | 105 | 1257 |
| "Effect of Resistance." (For Mechanical Draft Apparatus) | Buffalo Forge Company | 772 | July 21 | 105 | 741 |
| "Egyptian Palms." (For Cigarettes) | Oriental Tobacco Co | 668 | May 5 | 104 | 307 |
| "Electrified Extract of Beef." (For Extract of Beef) | R. D'Unger | 804 | Aug. 11 | 105 | 1529 |
| "Erdman's German Herb Cure." (For a Medicine) | Erdman & Co | 608 | Jan. 27 | 102 | 817 |
| "Erdman's German Herb Cure." (For Medicine) | Erdman & Co | 769 | July 21 | 105 | 741 |
| "Everright." (For Clothing) | Davidson & Finkelbrand | 819 | Sept. 8 | 106 | 539 |
| "$500 Reward." (For Medicine) | World's Dispensary Medical Association. | 681 | May 12 | 104 | 575 |
| "Floor Cylinder." (For Floor-Cylinders for Milk-Cooling Outfits.) | Star Milk Cooler Company | 654 | Apr. 21 | 103 | 1911 |
| "Forced Draft Plant." (For Mechanical Draft Apparatus) | Buffalo Forge Company | 784 | July 21 | 105 | 741 |
| "Friend Overcoats." (For Men's Winter Apparel) | Friend Bros. Clothing Co | 844 | Oct. 20 | 106 | 2011 |
| "Friend Suits." (For Men's Winter Apparel) | Friend Bros. Clothing Co | 843 | Oct. 20 | 106 | 2011 |
| "Funnel and Conductor." (For Funnels and Conductors for Milk-Cooling Outfits.) | Star Milk Cooler Company | 656 | Apr. 21 | 103 | 1911 |
| "General Orders." (For a Medicine) | United Drug Company | 673 | May 5 | 104 | 307 |
| "Gents' and Children's Apparel." (For Men's and Children's Apparel.) | W. C. Both | 709 | May 26 | 104 | 1117 |
| "Gilt Edge." (For Tea) | W. J. Buttfield | 726 | June 2 | 104 | 1389 |

*Alphabetical list of prints*—Continued.

| Title. | Name. | No. | Date. | Official Gazette. Vol. | Page. |
|---|---|---|---|---|---|
| "Gold Anchor." (For Tea) | Firm of W. J. Buttfield | 751 | June 30 | 104 | 2437 |
| "Golden Rule Hair Restorative." (For Hair-Restorative) | Citizens' Wholesale Supply Co | 808 | Aug. 25 | 105 | 2055 |
| "Golden Tips." (For Tea) | Firm of W. J. Buttfield | 749 | June 30 | 104 | 2437 |
| "Gräfin Übermut." (For Lager-Beer) | A. von Cotzhausen | 631 | Mar. 24 | 103 | 885 |
| "Graphic Base Ball." (For a Game) | C. E. Varney | 872 | Dec. 29 | 107 | 2525 |
| "Grippura Cures Grippe." (For Medicine) | A. Crichton | 644 | Apr. 7 | 103 | 1415 |
| "Guarantee Certificate." (For Solid-Gold Tubes Filled with Composition Metal.) | Rodenberg & Dunn | 720 | June 2 | 104 | 1389 |
| "Hail to the King." (For Medicine) | B. H. Bacon Co | 825 | Sept. 15 | 106 | 761 |
| "Hasn't Scratched Yet." (For Soap) | Bon Ami Company | 623 | Mar. 3 | 103 | 221 |
| "Hasn't Scratched Yet." (For Soap) | Bon Ami Company | 624 | Mar. 3 | 103 | 221 |
| "Hasn't Scratched Yet." (For Scouring-Soap) | Bon Ami Company | 841 | Oct. 13 | 106 | 1773 |
| "Hasn't Scratched Yet." (For Scouring-Soap) | Bon Ami Company | 842 | Oct. 13 | 106 | 1773 |
| "He Makes It Known to Every Zone." (For Baking-Powder.) | Chapman & Smith Company | 619 | Feb. 17 | 102 | 1549 |
| "He Makes It Known to Every Zone." (For Food Products) | Chapman & Smith Company | 812 | Aug. 25 | 105 | 2055 |
| "He Takes Your Measure We Do the Rest." (For Clothing.) | Desbecker-Block Tailoring Co | 603 | Jan. 6 | 102 | 225 |
| "Hennepin at the Falls of St. Anthony, A. D. 1680." (For Sewing-Machines.) | Singer Manufacturing Co | 860 | Nov. 24 | 107 | 1091 |
| "Highest Quality." (For Tea) | W. J. Buttfield | 727 | June 2 | 104 | 1389 |
| "Holland, Kaatje and Moorish Backs Congress Playing Cards." (For Playing-Cards.) | United States Playing Card Company. | 799 | Aug. 4 | 105 | 1257 |
| "Holly Congress Playing Cards." (For Playing-Cards) | United States Playing Card Company. | 828 | Sept. 29 | 106 | 1235 |
| "Horizontal Tandem Arrangement of Fans." (For Mechanical Draft Apparatus.) | Buffalo Forge Company | 777 | July 21 | 105 | 741 |
| "Horizontal Tandem Full Housing Fans." (For Mechanical Draft Apparatus.) | Buffalo Forge Company | 783 | July 21 | 105 | 741 |
| "Hot Stuff." (For Table-Sauce) | C. Singler & Co | 630 | Mar. 24 | 103 | 885 |
| "Hot Stuff." (For Coal) | J. F. Glutting | 855 | Nov. 17 | 107 | 829 |
| "Humpty Dumpty's Circus." (For Toys) | A. Schoenhut Company | 857 | Nov. 24 | 107 | 1091 |
| "Humpty Dumpty's Greatest Show on Earth." (For Toys) | A. Schoenhut Company | 652 | Apr. 21 | 103 | 1911 |
| "I Am Coming." (For Artificial Flowers and Perpetuated Plants.) | F. Netschert, (a Firm) | 661 | Apr. 28 | 103 | 2169 |
| "Imperial Calisaya, Hops and Port Wine." (For Medicine) | Imperial Wine & Medicine Co | 669 | May 5 | 104 | 307 |
| "India Relish." (For a Relish or Sauce for Meat) | H. J. Heinz Co | 816 | Sept. 1 | 106 | 261 |
| "Induced Draft." (For Mechanical Draft Apparatus) | Buffalo Forge Company | 780 | July 21 | 105 | 741 |
| "Induced Draft." (For Mechanical Draft Apparatus) | Buffalo Forge Company | 787 | July 21 | 105 | 741 |
| "Induced Draft." (For Mechanical Draft Apparatus) | Buffalo Forge Company | 789 | July 21 | 105 | 742 |
| "Induced Draft." (For Mechanical Draft Apparatus) | Buffalo Forge Company | 790 | July 21 | 105 | 742 |
| "Induced Draft Plant." (For Mechanical Draft Apparatus) | Buffalo Forge Company | 781 | July 21 | 105 | 741 |
| "Induced Draft Plant." (For Mechanical Draft Apparatus) | Buffalo Forge Company | 782 | July 21 | 105 | 741 |
| "Induced Draft Plant." (For Mechanical Draft Apparatus) | Buffalo Forge Company | 785 | July 21 | 105 | 741 |
| "Induced Draft Plant." (For Mechanical Draft Apparatus) | Buffalo Forge Company | 793 | July 21 | 105 | 742 |
| "Influence of the Temperature of Air." (For Mechanical Draft Apparatus.) | Buffalo Forge Company | 776 | July 21 | 105 | 741 |
| "Jet-a-Lac." (For an Enamel) | John Wahl Paint & Color Co | 641 | Mar. 31 | 103 | 1161 |
| "Kite Time and Spring Backs No. 606 Congress Playing Cards." (For Playing-Cards.) | United States Playing Card Company. | 800 | Aug. 4 | 105 | 1257 |
| "Kornol." (For Paint for Corns) | C. Lytle | 607 | Jan. 20 | 102 | 619 |
| "La Grange Diuretic Mineral Water." (For Mineral Water) | P. L. Schirmann | 756 | June 30 | 104 | 2437 |
| "La Salle at the Mouth of the Mississippi, A. D. 1682." (For Sewing-Machines.) | Singer Manufacturing Co | 861 | Nov. 24 | 107 | 1091 |
| "La Salle Leaving Fort St. Louis of Texas, A. D. 1687." (For Sewing-Machines.) | Singer Manufacturing Co | 858 | Nov. 24 | 107 | 1091 |
| "Ladies' Apparel." (For Ladies' Apparel) | Meyer-Both Co | 638 | Mar. 31 | 103 | 1161 |
| "Ladies' Apparel." (For Ladies' Apparel) | Meyer-Both Co | 708 | May 26 | 104 | 1117 |
| "Ladies Apparel." (For Ladies' Apparel) | Meyer-Both Co | 833 | Oct. 6 | 106 | 1499 |
| "Ladies' Attire." (For Ladies' Clothing) | Meyer-Both Co | 662 | Apr. 28 | 103 | 2169 |
| "Le Coiffeur." (For Hair-Dressing Implements) | V. Govignon | 849 | Nov. 10 | 107 | 537 |
| "Le Valley Vitae Carbon Brush." (For Carbon Brushes) | Le Valley Vitae Carbon Brush Co | 818 | Sept. 8 | 106 | 539 |
| "Library & Dining Combination Billiard & Pool Tables." (For Billiard and Pool Tables.) | Carrom-Archarena Co | 617 | Feb. 17 | 102 | 1549 |
| "Locomobile Back Bicycle Playing Cards." (For Playing-Cards.) | United States Playing Card Company. | 801 | Aug. 4 | 105 | 1257 |
| "Magic Yeast Key to Success." (For Yeast) | Northwestern Yeast Co | 650 | Apr. 14 | 103 | 1678 |
| "Male Attire." (For Men's Apparel) | W. C. Both | 667 | May 5 | 104 | 307 |
| "Malin Coil Wire." (For Coil-Wire) | Malin & Co | 832 | Sept. 29 | 106 | 1235 |
| "Malta-Vita." (For Food Product) | J. Walter Thompson Co | 724 | June 2 | 104 | 1389 |
| "McCormick Harvesting Machines." (For Harvesting-Machines.) | International Harvester Company of America. | 735 | June 9 | 104 | 1653 |
| "Melrose Paté." (For Melrose Paté) | Libby, McNeill & Libby | 629 | Mar. 24 | 103 | 885 |
| "Mennen's Borated Talcum Powder." (For Talcum Powder.) | J. Walter Thompson Co | 723 | June 2 | 104 | 1389 |
| "Men's Apparel." (For Clothing) | Cahn, Wampold & Company | 614 | Feb. 10 | 102 | 1291 |
| "Men's Apparel." (For Men's Apparel) | W. C. Both | 621 | Feb. 24 | 102 | 1775 |
| "Men's Apparel." (For Clothing) | Cahn, Wampold & Co | 730 | June 9 | 104 | 1653 |
| "Men's Apparel." (For Men's Apparel) | W. C. Both | 821 | Sept. 15 | 106 | 761 |
| "Men's Winter Apparel." (For Men's Apparel) | David Adler & Sons Clothing Co | 710 | May 26 | 104 | 1117 |
| "Milk Funnel and Lid." (For Milk-Funnels and Lids for Milk-Cooling Outfits.) | Star Milk Cooler Company | 657 | Apr. 21 | 103 | 1911 |
| "Mistletoe Congress Playing Cards." (For Playing-Cards) | United States Playing Card Company. | 846 | Oct. 20 | 106 | 2011 |
| "Modern Styles of Hair Cutting." (For a Hair Preparation) | Theo. A. Kochs Company | 869 | Dec. 15 | 107 | 1969 |
| "Mosquito Quits." (For Insect-Eradicator) | L. D. Cooley | 640 | Mar. 31 | 103 | 1161 |
| "Mosquitokill." (For Insecticides) | Culecide Co | 712 | May 26 | 104 | 1117 |
| "Mountain Herbs Infallible Dropsy Cure." (For Medicine) | Fish & Co | 797 | Aug. 4 | 105 | 1257 |
| "Mum(m)'s the Word." (For Liquors) | Keller, Loomis & Co | 768 | July 21 | 105 | 741 |
| "Naples Back No. 606 Congress Playing Cards." (For Playing-Cards.) | United States Playing Card Company. | 705 | May 26 | 104 | 1117 |
| "New Crop Vegetable Seeds." (For Vegetable-Seeds) | Stecher Litho. Co | 612 | Feb. 3 | 102 | 1047 |
| "New Harlem Past and Present." (For a Book) | New Harlem Publishing Company | 817 | Sept. 8 | 106 | 539 |
| "New Home." (For Sewing-Machines) | New Home Sewing Machine Co | 604 | Jan. 6 | 102 | 225 |
| "New Home." (For Sewing-Machines) | New Home Sewing Machine Co | 605 | Jan. 6 | 102 | 225 |
| "New Styles for Fall." (For Men's Apparel) | David Adler & Sons Clothing Co | 765 | July 14 | 105 | 493 |

*Alphabetical list of prints*—Continued.

| Title. | Name. | No. | Date. | Official Gazette. Vol. | Page. |
|---|---|---|---|---|---|
| "Newport Sack." (For Sack Suits) | Kuh, Nathan & Fischer Company | 646 | Apr. 14 | 103 | 1678 |
| "Niestlie's Compound Syrup of Tar, Honey, Rum & Wild Cherry Old Time Plantation Remedy." (For a Medicine.) | W. Niestlie | 632 | Mar. 24 | 103 | 885 |
| "No Work, No Heat, Just Cream, Then Eat." (For Food Product.) | J. Walter Thompson Co | 725 | June 2 | 104 | 1389 |
| "Nu-lectric." (For Medicine) | Nu-lectric Chemical Co | 770 | July 21 | 105 | 741 |
| "Nu-Life." (For Cereal Food) | Standard Food Co | 868 | Dec. 15 | 107 | 1939 |
| "Only First Class Goods Make Trade Lively." (For Tea) | Great Atlantic & Pacific Tea Company. | 606 | Jan. 13 | 102 | 463 |
| "Oriental, Italy and The Cavalier Backs No. 606 Congress Playing Cards." (For Playing-Cards.) | United States Playing Card Company. | 718 | June 2 | 104 | 1389 |
| "Osaka Water Works." (For Mechanical Draft Apparatus) | Buffalo Forge Company | 788 | July 21 | 105 | 742 |
| "Our Bright Light." (For Smoking-Tobacco) | Henderson Lithographing Co | 642 | Apr. 7 | 103 | 1415 |
| "Paine's Celery Compound." (For Medicine) | Wells, Richardson & Co | 830 | Sept. 29 | 106 | 1235 |
| "Peggy from Paris." (For Hosiery) | O. McCormick | 836 | Oct. 13 | 106 | 1773 |
| "Performance of Steel Plate Exhausters." (For Mechanical Draft Apparatus.) | Buffalo Forge Company | 773 | July 21 | 105 | 741 |
| "Picking Gillies Coffees." (For Coffees) | E. J. Gillies & Co | 647 | Apr. 14 | 103 | 1678 |
| "Pratt's Foods." (For Animal and Poultry Foods) | Pratt Food Co | 820 | Sept. 8 | 106 | 539 |
| "Premium Victor." (For Talking-Machines and Accessories) | Victor Talking Machine Co | 610 | Jan. 27 | 102 | 817 |
| "Prize Winner." (For Horse-Nails) | Gray Lithograph Co | 827 | Sept. 22 | 106 | 993 |
| "Prof. Pozzoni's Mountain Sage Malt Tonic." (For Tonic) | Mountain Sage Malt Tonic Company. | 837 | Oct. 13 | 106 | 1773 |
| "Prune Juice." (For Smoking and Chewing Tobacco) | Hill & Mayers | 620 | Feb. 17 | 102 | 1549 |
| "Prussian Stock Food." (For Stock-Food) | Prussian Remedy Co | 796 | July 28 | 105 | 971 |
| "Pure Breakfast Cocoa." (For Cocoa) | American Lithographic Company | 854 | Nov. 17 | 107 | 829 |
| "Purity Did It." (For Beer) | A. von Cotzhausen | 615 | Feb. 10 | 102 | 1291 |
| "Pyrol Wood Preservative." (For Wood-Preservative) | Southern Oil & Chemical Company | 867 | Dec. 8 | 107 | 1657 |
| "Rainier." (For Beer) | Henderson Lithographing Co | 653 | Apr. 21 | 103 | 1911 |
| "Red Cross." (For Tea and Coffee) | Grand Central Tea & Coffee Co | 864 | Dec. 1 | 107 | 1371 |
| "Red Cross Absorbent Cotton." (For Absorbent Cotton) | Johnson & Johnson | 761 | July 7 | 105 | 257 |
| "Regal Mirrorgraph." (For Boots and Shoes) | Regal Shoe Co | 626 | Mar. 17 | 103 | 655 |
| "Report of Private Arrowhead." (For a Medicine) | United Drug Company | 671 | May 5 | 104 | 307 |
| "Report of Private Chang." (For a Medicine) | United Drug Company | 670 | May 5 | 104 | 307 |
| "Revelation Brand." (For Carbon-Paper) | General Manifold Company | 802 | Aug. 11 | 105 | 1529 |
| "Right Label." (For Rye Whisky) | Furth Company | 757 | June 30 | 104 | 2437 |
| "Rocky Ford Cantaloupes." (For Cantaloups) | Gray Lithograph Co | 745 | June 23 | 104 | 2145 |
| "Russian." (For Vests) | F. H. Sprague Company | 759 | June 30 | 104 | 2437 |
| "Schmidt's Kloster Bräu." (For Beer) | A. Schmidt | 824 | Sept. 15 | 106 | 761 |
| "Scottish Co-Operative Society's Junction Mills Works." (For Mechanical Draft Apparatus.) | Buffalo Forge Company | 792 | July 21 | 105 | 742 |
| "See That Shoulder." (For Clothing) | Mossler Co | 807 | Aug. 25 | 105 | 2055 |
| "See The Bottle." (For Ginger-Ale) | Gosman Ginger Ale Co | 704 | May 19 | 104 | 849 |
| "Silver Eagle." (For Tea) | Firm of W. J. Buttfield | 766 | July 14 | 105 | 493 |
| "So-lah." (For a Game) | E. Denton | 794 | July 28 | 105 | 971 |
| "Sporty Bill Gay." (For Decorative Enamels) | Gerstendorfer Bros | 628 | Mar. 24 | 103 | 885 |
| "Star Absorbent Cotton Strainer." (For Strainers) | Star Milk Cooler Company | 736 | June 16 | 104 | 1893 |
| "Star All Metal Table." (For Bottle-Filler Tables) | Star Milk Cooler Company | 675 | May 5 | 104 | 307 |
| "Star Band Carriers." (For Dairy-Plant Equipment) | Star Milk Cooler Company | 695 | May 12 | 104 | 576 |
| "Star Bottle Rinser." (For Dairy-Plant Equipment) | Star Milk Cooler Company | 697 | May 12 | 104 | 576 |
| "Star Bottle Washing Outfit." (For Dairy-Plant Equipment.) | Star Milk Cooler Company | 688 | May 12 | 104 | 576 |
| "Star Can Rinser." (For Dairy-Plant Equipment) | Star Milk Cooler Company | 740 | June 16 | 104 | 1893 |
| "Star Can Wash Sinks." (For Dairy-Plant Equipment) | Star Milk Cooler Company | 744 | June 16 | 104 | 1893 |
| "Star Car Truck." (For Sterilizing Outfits) | Star Milk Cooler Company | 686 | May 12 | 104 | 576 |
| "Star Cream Bottle Filler." (For Cream-Bottle Fillers) | Star Milk Cooler Company | 665 | Apr. 28 | 103 | 2169 |
| "Star Family of Carriers." (For Dairy-Plant Equipment) | Star Milk Cooler Company | 687 | May 12 | 104 | 576 |
| "Star Galvanized Bottle Boxes." (For Dairy-Plant Equipment.) | Star Milk Cooler Company | 698 | May 12 | 104 | 576 |
| "Star Galvanized Bottle Boxes." (For Dairy-Plant Equipment.) | Star Milk Cooler Company | 699 | May 12 | 104 | 576 |
| "Star Lock Angle Carriers." (For Dairy-Plant Equipment.) | Star Milk Cooler Company | 690 | May 12 | 104 | 576 |
| "Star Lock Angle Carriers." (For Dairy-Plant Equipment.) | Star Milk Cooler Company | 691 | May 12 | 104 | 576 |
| "Star Lock Angle Carriers." (For Dairy-Plant Equipment.) | Star Milk Cooler Company | 692 | May 12 | 104 | 576 |
| "Star Lock Band Carriers." (For Dairy-Plant Equipment) | Star Milk Cooler Company | 693 | May 12 | 104 | 576 |
| "Star Lock Band Carriers." (For Dairy-Plant Equipment) | Star Milk Cooler Company | 694 | May 12 | 104 | 576 |
| "Star Lock Band Carriers." (For Dairy-Plant Equipment) | Star Milk Cooler Company | 696 | May 12 | 104 | 576 |
| "Star Metal Spacers." (For Dairy-Plant Equipment) | Star Milk Cooler Company | 700 | May 12 | 104 | 576 |
| "Star Metal Wash Sinks with Bottle Rinsers." (For Wash-Sinks.) | Star Milk Cooler Company | 738 | June 16 | 104 | 1893 |
| "Star Milk Collecting Tank." (For Milk-Collecting Tanks for Milk-Cooling Outfits.) | Star Milk Cooler Company | 658 | Apr. 21 | 103 | 1911 |
| "Star Milk Collecting Vats." (For Dairy-Plant Equipment) | Star Milk Cooler Company | 741 | June 16 | 104 | 1893 |
| "Star Milk Coolers and Ice Water Sections." (For Milk-Coolers.) | Star Milk Cooler Company | 737 | June 16 | 104 | 1893 |
| "Star Milk Receiving Tank." (For Milk-Tanks for Milk-Cooling Outfits.) | Star Milk Cooler Company | 659 | Apr. 21 | 103 | 1911 |
| "Star Milk Receiving Vats." (For Dairy-Plant Equipment) | Star Milk Cooler Company | 742 | June 16 | 104 | 1893 |
| "Star Milk Trucks." (For Dairy-Plant Equipment) | Star Milk Cooler Company | 743 | June 16 | 104 | 1893 |
| "Star Reversing Racks." (For Dairy-Plant Equipment) | Star Milk Cooler Company | 701 | May 12 | 104 | 576 |
| "Star Reversing Racks." (For Dairy-Plant Equipment) | Star Milk Cooler Company | 702 | May 12 | 104 | 576 |
| "Star Sanitary Dairy Apparatus." (For Dairy-Plant Equipment.) | Star Milk Cooler Company | 739 | June 16 | 104 | 1893 |
| "Star Side Bar Filler." (For Bottle-Fillers) | Star Milk Cooler Company | 666 | Apr. 28 | 103 | 2169 |
| "Star Sterilizer Cars, Style A." (For Sterilizing Outfits) | Star Milk Cooler Company | 682 | May 12 | 104 | 575 |
| "Star Sterilizer Cars, Styles B and C." (For Sterilizing Outfits.) | Star Milk Cooler Company | 684 | May 12 | 104 | 576 |
| "Star Sterilizer Cars, Styles D E and F." (For Sterilizing Outfits.) | Star Milk Cooler Company | 683 | May 12 | 104 | 575 |
| "Star Sterilizer Cars, Styles G and H." (For Sterilizing Outfits.) | Star Milk Cooler Company | 685 | May 12 | 104 | 576 |
| "Star Stone Wash Sinks." (For Dairy-Plant Equipment) | Star Milk Cooler Company | 689 | May 12 | 104 | 576 |
| "Sterling Merit." (For Tea) | Firm of W. J. Buttfield | 752 | June 30 | 104 | 2437 |

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| Title. | Name. | No. | Date. | Official Gazette. | |
|---|---|---|---|---|---|
| | | | | Vol. | Page. |
| "Stick 'Em." (For Sticky Fly-Paper) | Grand Rapids Sticky Fly Paper Co. | 764 | July 7 | 105 | 257 |
| "Sure Winner." (For Tea) | Firm of W. J. Buttfield | 750 | June 30 | 104 | 2437 |
| "Temperature Curves." (For Mechanical Draft Apparatus.) | Buffalo Forge Company | 775 | July 21 | 105 | 741 |
| "Temperature Diagram." (For Mechanical Draft Apparatus.) | Buffalo Forge Company | 771 | July 21 | 105 | 741 |
| "The Adler Fall Fashions." (For Winter Apparel) | David Adler & Sons Clothing Co | 805 | Aug. 18 | 105 | 1777 |
| "The Basin Oil Co." (For Oil or Petroleum) | Basin Oil Company | 680 | May 12 | 104 | 575 |
| "The Best American Make." (For Buttons) | Keystone Pearl Button Co | 822 | Sept. 15 | 106 | 761 |
| "The Bread Winner." (For Flour) | G. F. Wright | 813 | Aug. 25 | 105 | 2055 |
| "The Comfort Passenger Car—In Fall." (For Passenger-Cars.) | Hermann Romünder | 713 | May 26 | 104 | 1117 |
| "The Comfort Passenger Car—In Spring." (For Passenger-Cars.) | Hermann Romünder | 714 | May 26 | 104 | 1117 |
| "The Comfort Passenger Car—In Summer." (For Passenger-Cars.) | Hermann Romünder | 716 | May 26 | 104 | 1117 |
| "The Comfort Passenger Car—In Winter." (For Passenger-Cars.) | Hermann Romünder | 715 | May 26 | 104 | 1117 |
| "The Fall and Winter Fashions." (For Men's Winter Apparel.) | David Adler & Sons Clothing Co | 760 | July 7 | 105 | 257 |
| "The Farmer's Tribune." (For a Newspaper) | Minnesota Tribune Company | 706 | May 26 | 104 | 1117 |
| "The High Grade Mirror Candies." (For Candy) | Gray Lithograph Co | 703 | May 19 | 104 | 849 |
| "The Hoffman House." (For Cigars) | Seiter & Kappes | 810 | Aug. 25 | 105 | 2055 |
| "The Hoffman House Little Cigars." (For Cigars) | Seiter & Kappes | 811 | Aug. 25 | 105 | 2055 |
| "The Lily Skirt." (For Skirt-Patterns) | Royal Pattern Co | 663 | Apr. 28 | 103 | 2169 |
| "The Little Baker." (For Bread) | P. Cox | 664 | Apr. 28 | 103 | 2169 |
| "The Merchants Home Baked Beans." (For Baked Beans) | G. W. Sawyer | 834 | Oct. 6 | 106 | 1499 |
| "The Miller Varnish & Paint Remover Paste." (For a Paint and Varnish Remover.) | Barrett-Lindeman Co | 732 | June 9 | 104 | 1653 |
| "The Miller Varnish Remover." (For a Varnish-Remover) | Barrett-Lindeman Co | 733 | June 9 | 104 | 1653 |
| "The New Game of Diamonds." (For Games) | Stecher Litho Co | 850 | Apr. 14 | 103 | 1678 |
| "The New Raffia Embroidery No. 1154." (For Mats) | C. E. Bentley Co | 645 | Nov. 10 | 107 | 537 |
| "The New Raffia Embroidery No. 1155." (For Mats) | C. E. Bentley Co | 852 | Nov. 10 | 107 | 537 |
| "The New Raffia Embroidery No. 1156." (For Mats) | C. E. Bentley Co | 851 | Nov. 10 | 107 | 537 |
| "The New Raffia Embroidery No. 1162." (For Mats) | C. E. Bentley Co | 853 | Nov. 10 | 107 | 537 |
| "The New Star." (For Filing-Cabinets) | E. L. Krag | 676 | May 5 | 704 | 307 |
| "The Real Thing." (For Whisky) | Ritterman & Kraemer | 839 | Oct. 13 | 106 | 1773 |
| "The Shoe of All Nations." (For Shoes) | Seiter & Kappes | 731 | June 9 | 104 | 1653 |
| "The Tribune." (For a Newspaper) | Minnesota Tribune Company | 707 | May 26 | 104 | 1117 |
| "The Vulcan." (For Steam-Shovels) | Vulcan Iron Works Co | 758 | June 30 | 104 | 2437 |
| "The World's Fare." (For Extract of Beef) | Armour & Co | 831 | Sept. 29 | 106 | 1235 |
| "Thermal Efficiency Curves." (For Mechanical Draft Apparatus.) | Buffalo Forge Company | 774 | July 21 | 105 | 741 |
| "Toboggan Congress Playing Cards." (For Playing-Cards) | United States Playing Card Company. | 823 | Sept. 15 | 106 | 761 |
| "Too Strong to Break." (For Spool-Silk) | Nonotuck Silk Company | 627 | Mar. 24 | 103 | 885 |
| "Trap Cloth Strainer." (For Milk-Strainers) | Star Milk Cooler Company | 660 | Apr. 21 | 103 | 1911 |
| "Triumph." (For Tea) | Firm of W. J. Buttfield | 747 | June 30 | 104 | 2437 |
| "Type of Apparatus." (For Mechanical Draft Apparatus) | Buffalo Forge Company | 778 | July 21 | 105 | 741 |
| "Uncle Sam." (For Tea) | Firm of W. J. Buttfield | 755 | June 30 | 104 | 2437 |
| "Vicereo." (For Cereal Food) | A. von Cotzhausen | 622 | Feb. 24 | 102 | 1775 |
| "Victor IV." (For Talking-Machines and Accessories) | Victor Talking Machine Co | 609 | Jan. 27 | 102 | 817 |
| "Watching a Good Thing." (For Beer) | American Brewing Co | 815 | Sept. 1 | 106 | 261 |
| "What Did He Say?" (For Whisky) | W. C. McCaleb | 838 | Oct. 13 | 106 | 1773 |
| "Which is the Larger." (For Food Preparation) | Strength Food Company | 648 | Apr. 14 | 103 | 1678 |
| "White Cross." (For Tea and Coffee) | Grand Central Tea & Coffee Co | 865 | Dec. 1 | 107 | 1371 |
| "Wiltbonco Standard Internally Fired Boiler, Double Furnace Type." (For Steam-Boilers.) | W. T. Bonner | 637 | Mar. 24 | 103 | 885 |
| "Wiltbonco Standard Internally Fired Boiler, Double Furnace Type with Butman Fronts." (For Steam-Boilers.) | W. T. Bonner | 635 | Mar. 24 | 103 | 885 |
| "Wiltbonco Standard Internally Fired Boiler, Double Furnace Type with Morison Fronts." (For Steam-Boilers.) | W. T. Bonner | 634 | Mar. 24 | 103 | 885 |
| "Wiltbonco Standard Internally Fired Boiler, Single Furnace Type." (For Steam-Boilers.) | W. T. Bonner | 636 | Mar. 24 | 103 | 885 |
| "Wizard Belt Stick." (For Belt-Dressing) | F. L. Jobson | 679 | May 12 | 104 | 575 |
| "World's Choice." (For Tea) | W. J. Buttfield | 728 | June 2 | 104 | 1389 |
| "Yacht Congress Playing Cards." (For Playing-Cards) | United States Playing Card Company. | 826 | Sept. 22 | 106 | 993 |
| "Yeager." (For Bathing-Suits) | Henderson Lithographing Co | 643 | Apr. 7 | 103 | 1415 |
| "Yeast Foam Key to Success." (For Yeast) | Northwestern Yeast Co | 649 | Apr. 14 | 103 | 1678 |

# DISCLAIMERS.

| Invention. | Patentee. | No. of patent. | Date of patent. | Disclaimer filed. | Official Gazette. | |
|---|---|---|---|---|---|---|
| | | | | | Volume. | Page. |
| Beer-pasteurizing apparatus | E. Wagner | 607,304 | July 12, 1898 | Oct. 23, 1903 | 106 | 2019 |
| Bowling-alley | E. Reisky | 599,477 | Feb. 22, 1898 | Dec. 29, 1902 | 102 | 1 |
| Log hauling and loading machine | T. S. Miller and J. H. Dickinson | 726,325 | Apr. 28, 1903 | Sept. 11, 1903 | 106 | 769 |
| Means for locking the steering mechanism of motor-vehicles. | Edward Devlin | 718,324 | Jan. 13, 1903 | July 11, 1903 | 105 | 501 |
| Photographic shutter | Rudolph Klein | 695,564 | Mar. 18, 1902 | Nov. 11, 1903 | 107 | 836 |
| Synchronism-indicator | J. F. Begole | 712,174 | Oct. 28, 1902 | Mar. 30, 1903 | 103 | 1422 |
| Testing device | L. F. Nafis | 684,850 | Oct. 21, 1901 | June 8, 1903 | 104 | 1661 |


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